

Devon Energy

Lea County, NM (NAD-83)

Seawolf 1-12 Fed

92H

OH

Plan #1

HOBBS OCD

APR 26 2017

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Anticollision Report

23 January, 2017

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 92H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3318.2' GE + 21' KB @ 3339.20usft
Reference Site:	Seawolf 1-12 Fed	MD Reference:	3318.2' GE + 21' KB @ 3339.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	92H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	1/23/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	22,787.00	Plan #1 (OH)	LEAM MWD+HDGM	MWD+HDGM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Seawolf 1-12 Fed						
102H - OH - Plan #1	2,615.54	2,616.94	29.98	18.53	2.617 CC	
102H - OH - Plan #1	3,200.00	3,204.11	30.57	16.77	2.214 ES	
102H - OH - Plan #1	22,787.99	23,180.29	599.19	320.15	2.147 SF	
81H - OH - Plan #1	2,500.26	2,500.56	89.97	79.00	8.203 CC, ES	
81H - OH - Plan #1	22,787.99	22,566.23	1,368.47	1,040.45	4.172 SF	
82H - OH - Plan #1	2,500.00	2,500.40	60.01	49.04	5.472 CC, ES	
82H - OH - Plan #1	22,787.99	22,432.15	488.97	181.66	1.591 SF	
91H - OH - Plan #1	2,520.95	2,521.79	119.99	108.93	10.852 CC	
91H - OH - Plan #1	3,000.00	3,010.34	120.44	107.41	9.249 ES	
91H - OH - Plan #1	22,787.99	22,690.57	900.07	567.82	2.709 SF	

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)				Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	
0.00	0.00	0.80	0.80	0.00	0.00	-90.38	-0.20	-29.99	29.99			-0.20	-29.99	
100.00	100.00	100.80	100.80	0.09	0.09	-90.38	-0.20	-29.99	29.99	0.18	167.206	-0.20	-29.99	
200.00	200.00	200.80	200.80	0.31	0.32	-90.38	-0.20	-29.99	29.99	0.63	47.688	-0.20	-29.99	
300.00	300.00	300.80	300.80	0.54	0.54	-90.38	-0.20	-29.99	29.99	1.08	27.810	-0.20	-29.99	
400.00	400.00	400.80	400.80	0.76	0.76	-90.38	-0.20	-29.99	29.99	1.53	19.628	-0.20	-29.99	
500.00	500.00	500.80	500.80	0.99	0.99	-90.38	-0.20	-29.99	29.99	1.98	15.166	-0.20	-29.99	
600.00	600.00	600.80	600.80	1.21	1.21	-90.38	-0.20	-29.99	29.99	2.43	12.357	-0.20	-29.99	
700.00	700.00	700.80	700.80	1.44	1.44	-90.38	-0.20	-29.99	29.99	2.88	10.426	-0.20	-29.99	
800.00	800.00	800.80	800.80	1.66	1.66	-90.38	-0.20	-29.99	29.99	3.33	9.017	-0.20	-29.99	
900.00	900.00	900.80	900.80	1.89	1.89	-90.38	-0.20	-29.99	29.99	3.78	7.943	-0.20	-29.99	
1,000.00	1,000.00	1,000.80	1,000.80	2.11	2.11	-90.38	-0.20	-29.99	29.99	4.23	7.098	-0.20	-29.99	
1,100.00	1,100.00	1,100.80	1,100.80	2.34	2.34	-90.38	-0.20	-29.99	29.99	4.67	6.416	-0.20	-29.99	
1,200.00	1,200.00	1,200.80	1,200.80	2.56	2.56	-90.38	-0.20	-29.99	29.99	5.12	5.853	-0.20	-29.99	
1,300.00	1,300.00	1,300.80	1,300.80	2.79	2.79	-90.38	-0.20	-29.99	29.99	5.57	5.381	-0.20	-29.99	
1,400.00	1,400.00	1,400.80	1,400.80	3.01	3.01	-90.38	-0.20	-29.99	29.99	6.02	4.979	-0.20	-29.99	
1,500.00	1,500.00	1,500.80	1,500.80	3.24	3.24	-90.38	-0.20	-29.99	29.99	6.47	4.633	-0.20	-29.99	
1,600.00	1,600.00	1,600.80	1,600.80	3.46	3.46	-90.38	-0.20	-29.99	29.99	6.92	4.332	-0.20	-29.99	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 102H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
1,700.00	1,700.00	1,700.80	1,700.80	3.69	3.69	-90.38	-0.20	-29.99	29.99	22.62	7.37	4.068	
1,800.00	1,800.00	1,800.80	1,800.80	3.91	3.91	-90.38	-0.20	-29.99	29.99	22.17	7.82	3.834	
1,900.00	1,900.00	1,900.80	1,900.80	4.13	4.14	-90.38	-0.20	-29.99	29.99	21.72	8.27	3.626	
2,000.00	2,000.00	2,000.80	2,000.80	4.36	4.36	-90.38	-0.20	-29.99	29.99	21.27	8.72	3.439	
2,100.00	2,100.00	2,100.80	2,100.80	4.58	4.59	-90.38	-0.20	-29.99	29.99	20.82	9.17	3.271	
2,200.00	2,200.00	2,200.80	2,200.80	4.81	4.81	-90.38	-0.20	-29.99	29.99	20.37	9.62	3.118	
2,300.00	2,300.00	2,300.80	2,300.80	5.03	5.04	-90.38	-0.20	-29.99	29.99	19.92	10.07	2.978	
2,400.00	2,400.00	2,400.80	2,400.80	5.26	5.26	-90.38	-0.20	-29.99	29.99	19.47	10.52	2.851	
2,500.00	2,500.00	2,500.80	2,500.80	5.48	5.48	-90.38	-0.20	-29.99	29.99	19.02	10.97	2.734	
2,600.00	2,599.99	2,601.32	2,601.31	5.70	5.70	-172.26	-0.01	-29.11	29.98	18.59	11.39	2.632	
2,615.54	2,615.53	2,616.94	2,616.93	5.73	5.73	-172.22	0.05	-28.82	29.98	18.53	11.46	2.617 CC	
2,700.00	2,699.96	2,701.83	2,701.79	5.90	5.90	-171.90	0.54	-26.51	29.99	18.19	11.79	2.543	
2,800.00	2,799.86	2,802.35	2,802.21	6.10	6.11	-171.31	1.46	-22.19	30.01	17.81	12.19	2.461	
2,900.00	2,899.68	2,902.86	2,902.53	6.31	6.33	-170.49	2.74	-16.14	30.04	17.45	12.59	2.386	
3,000.00	2,999.37	3,003.37	3,002.72	6.53	6.54	-169.44	4.39	-8.38	30.11	17.11	12.99	2.317	
3,100.00	3,098.90	3,103.88	3,102.76	6.75	6.76	-168.16	6.41	1.11	30.20	16.80	13.39	2.255	
3,200.00	3,198.26	3,204.11	3,202.37	6.97	6.99	-166.82	8.73	12.03	30.57	16.77	13.81	2.214 ES	
3,300.00	3,297.40	3,304.09	3,301.70	7.20	7.22	-166.17	11.08	23.10	32.48	18.25	14.23	2.282	
3,400.00	3,396.30	3,404.02	3,401.00	7.45	7.46	-166.28	13.44	34.16	36.08	21.42	14.66	2.461	
3,500.00	3,494.93	3,503.88	3,500.21	7.70	7.69	-166.93	15.79	45.22	41.38	26.29	15.10	2.741	
3,600.00	3,593.41	3,603.69	3,599.38	7.97	7.94	-167.68	18.14	56.27	47.54	32.01	15.53	3.061	
3,700.00	3,691.89	3,703.50	3,698.54	8.24	8.18	-168.25	20.48	67.32	53.70	37.73	15.97	3.362	
3,800.00	3,790.37	3,803.30	3,797.71	8.52	8.43	-168.70	22.83	78.38	59.87	43.45	16.42	3.647	
3,900.00	3,888.85	3,903.11	3,896.88	8.81	8.68	-169.08	25.18	89.43	66.04	49.17	16.86	3.916	
4,000.00	3,987.33	4,002.92	3,996.05	9.10	8.93	-169.38	27.53	100.48	72.21	54.90	17.31	4.171	
4,100.00	4,085.82	4,102.73	4,095.21	9.39	9.18	-169.64	29.88	111.53	78.38	60.62	17.76	4.412	
4,200.00	4,184.30	4,202.54	4,194.38	9.70	9.44	-169.86	32.23	122.58	84.56	66.34	18.22	4.641	
4,300.00	4,282.78	4,302.35	4,293.55	10.00	9.70	-170.05	34.58	133.63	90.73	72.06	18.67	4.859	
4,400.00	4,381.26	4,402.16	4,392.71	10.31	9.96	-170.22	36.93	144.69	96.91	77.78	19.13	5.065	
4,500.00	4,479.74	4,501.97	4,491.88	10.62	10.22	-170.37	39.28	155.74	103.09	83.49	19.59	5.261	
4,600.00	4,578.22	4,601.77	4,591.05	10.94	10.48	-170.49	41.63	166.79	109.27	89.21	20.06	5.448	
4,700.00	4,676.70	4,701.58	4,690.22	11.25	10.75	-170.61	43.98	177.84	115.44	94.93	20.52	5.626	
4,800.00	4,775.18	4,801.39	4,789.38	11.57	11.01	-170.72	46.33	188.89	121.62	100.64	20.98	5.796	
4,900.00	4,873.66	4,901.20	4,888.55	11.90	11.28	-170.81	48.67	199.95	127.80	106.35	21.45	5.958	
5,000.00	4,972.14	5,001.01	4,987.72	12.22	11.55	-170.89	51.02	211.00	133.98	112.06	21.92	6.113	
5,100.00	5,070.62	5,100.82	5,086.88	12.55	11.81	-170.97	53.37	222.05	140.16	117.77	22.39	6.261	
5,200.00	5,169.10	5,200.63	5,186.05	12.88	12.08	-171.04	55.72	233.10	146.34	123.48	22.86	6.402	
5,300.00	5,267.58	5,300.44	5,285.22	13.21	12.35	-171.11	58.07	244.15	152.52	129.19	23.33	6.538	
5,400.00	5,366.07	5,400.24	5,384.39	13.54	12.63	-171.17	60.42	255.20	158.70	134.90	23.80	6.668	
5,500.00	5,464.55	5,500.05	5,483.55	13.87	12.90	-171.23	62.77	266.26	164.88	140.61	24.28	6.792	
5,600.00	5,563.03	5,599.86	5,582.72	14.21	13.17	-171.28	65.12	277.31	171.06	146.31	24.75	6.912	
5,700.00	5,661.51	5,699.67	5,681.89	14.54	13.44	-171.33	67.47	288.36	177.25	152.02	25.23	7.026	
5,800.00	5,759.99	5,799.48	5,781.05	14.88	13.72	-171.37	69.82	299.41	183.43	157.72	25.70	7.137	
5,900.00	5,858.47	5,899.29	5,880.22	15.22	13.99	-171.41	72.17	310.46	189.61	163.43	26.18	7.243	
6,000.00	5,956.95	5,999.10	5,979.39	15.56	14.27	-171.45	74.51	321.51	195.79	169.13	26.66	7.345	
6,100.00	6,055.43	6,098.90	6,078.56	15.90	14.54	-171.49	76.86	332.57	201.97	174.84	27.13	7.443	
6,200.00	6,153.91	6,198.71	6,177.72	16.24	14.82	-171.52	79.21	343.62	208.15	180.54	27.61	7.538	
6,300.00	6,252.39	6,298.52	6,276.89	16.59	15.09	-171.56	81.56	354.67	214.33	186.24	28.09	7.630	
6,400.00	6,350.87	6,398.33	6,376.06	16.93	15.37	-171.59	83.91	365.72	220.51	191.94	28.57	7.718	
6,500.00	6,449.35	6,498.14	6,475.22	17.27	15.65	-171.62	86.26	376.77	226.70	197.64	29.05	7.803	
6,600.00	6,547.83	6,597.95	6,574.39	17.62	15.92	-171.65	88.61	387.83	232.88	203.34	29.53	7.885	
6,700.00	6,646.32	6,697.76	6,673.56	17.96	16.20	-171.67	90.96	398.88	239.06	209.04	30.02	7.964	

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Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
6,800.00	6,744.80	6,797.57	6,772.73	18.31	16.48	-171.70	93.31	409.93	245.24	214.74	30.50	8.041			
6,900.00	6,843.28	6,897.37	6,871.89	18.66	16.76	-171.72	95.66	420.98	251.42	220.44	30.98	8.115			
7,000.00	6,941.76	6,997.18	6,971.06	19.00	17.04	-171.74	98.01	432.03	257.60	226.14	31.46	8.187			
7,100.00	7,040.24	7,096.99	7,070.23	19.35	17.32	-171.76	100.35	443.08	263.79	231.84	31.95	8.257			
7,200.00	7,138.72	7,196.80	7,169.39	19.70	17.60	-171.79	102.70	454.14	269.97	237.54	32.43	8.324			
7,300.00	7,237.20	7,296.61	7,268.56	20.05	17.88	-171.80	105.05	465.19	276.15	243.23	32.92	8.389			
7,400.00	7,335.68	7,396.42	7,367.73	20.40	18.16	-171.82	107.40	476.24	282.33	248.93	33.40	8.453			
7,500.00	7,434.16	7,496.23	7,466.89	20.75	18.44	-171.84	109.75	487.29	288.51	254.63	33.89	8.514			
7,600.00	7,532.64	7,596.04	7,566.06	21.10	18.72	-171.86	112.10	498.34	294.70	260.32	34.37	8.574			
7,700.00	7,631.12	7,695.84	7,665.23	21.45	19.00	-171.88	114.45	509.39	300.88	266.02	34.86	8.632			
7,800.00	7,729.60	7,795.65	7,764.40	21.80	19.28	-171.89	116.80	520.45	307.06	271.72	35.34	8.688			
7,900.00	7,828.09	7,895.46	7,863.56	22.15	19.56	-171.91	119.15	531.50	313.24	277.41	35.83	8.743			
8,000.00	7,926.57	7,995.27	7,962.73	22.50	19.84	-171.92	121.50	542.55	319.42	283.11	36.32	8.796			
8,100.00	8,025.05	8,095.08	8,061.90	22.85	20.13	-171.93	123.85	553.60	325.61	288.80	36.80	8.847			
8,200.00	8,123.53	8,194.89	8,161.06	23.21	20.41	-171.95	126.20	564.65	331.79	294.50	37.29	8.897			
8,300.00	8,222.01	8,294.70	8,260.23	23.56	20.69	-171.96	128.54	575.71	337.97	300.19	37.78	8.946			
8,400.00	8,320.49	8,394.50	8,359.40	23.91	20.97	-171.97	130.89	586.76	344.15	305.89	38.27	8.994			
8,500.00	8,418.97	8,494.31	8,458.57	24.26	21.25	-171.99	133.24	597.81	350.34	311.58	38.75	9.040			
8,600.00	8,517.45	8,594.12	8,557.73	24.62	21.54	-172.00	135.59	608.86	356.52	317.28	39.24	9.085			
8,700.00	8,615.93	8,693.93	8,656.90	24.97	21.82	-172.01	137.94	619.91	362.70	322.97	39.73	9.129			
8,800.00	8,714.41	8,793.74	8,756.07	25.33	22.10	-172.02	140.29	630.96	368.88	328.66	40.22	9.172			
8,900.00	8,812.89	8,893.55	8,855.23	25.68	22.38	-172.03	142.64	642.02	375.06	334.36	40.71	9.214			
9,000.00	8,911.37	8,993.36	8,954.40	26.03	22.67	-172.04	144.99	653.07	381.25	340.05	41.20	9.254			
9,100.00	9,009.85	9,093.17	9,053.57	26.39	22.95	-172.05	147.34	664.12	387.43	345.74	41.69	9.294			
9,200.00	9,108.34	9,192.97	9,152.74	26.74	23.23	-172.06	149.69	675.17	393.61	351.44	42.18	9.333			
9,300.00	9,206.82	9,292.78	9,251.90	27.10	23.52	-172.07	152.04	686.22	399.79	357.13	42.66	9.371			
9,400.00	9,305.30	9,392.59	9,351.07	27.45	23.80	-172.08	154.38	697.27	405.98	362.82	43.15	9.408			
9,500.00	9,403.78	9,492.40	9,450.24	27.81	24.09	-172.09	156.73	708.33	412.16	368.51	43.64	9.444			
9,600.00	9,502.26	9,592.21	9,549.40	28.16	24.37	-172.10	159.08	719.38	418.34	374.21	44.13	9.479			
9,700.00	9,600.74	9,692.02	9,648.57	28.52	24.65	-172.10	161.43	730.43	424.52	379.90	44.62	9.513			
9,800.00	9,699.22	9,791.83	9,747.74	28.88	24.94	-172.11	163.78	741.48	430.71	385.59	45.11	9.547			
9,880.00	9,778.00	9,871.67	9,827.07	29.16	25.16	-172.12	165.66	750.32	435.65	390.14	45.51	9.573			
9,900.00	9,797.70	9,891.64	9,846.91	29.22	25.22	-172.12	166.13	752.53	436.87	391.27	45.60	9.580			
10,000.00	9,896.29	9,991.48	9,946.11	29.49	25.51	-172.12	168.48	763.59	442.45	396.40	46.05	9.608			
10,100.00	9,995.02	10,091.37	10,045.36	29.76	25.79	-172.11	170.83	774.65	447.16	400.66	46.50	9.617			
10,200.00	10,093.88	10,191.29	10,144.64	30.01	26.07	-172.08	173.18	785.71	451.02	404.07	46.95	9.607			
10,300.00	10,192.87	10,291.25	10,243.95	30.27	26.36	-172.03	175.54	796.78	454.00	406.61	47.39	9.579			
10,400.00	10,291.98	10,391.22	10,343.28	30.51	26.64	-171.97	177.89	807.85	456.13	408.29	47.84	9.534			
10,500.00	10,391.20	10,491.21	10,442.63	30.75	26.93	-171.89	180.24	818.92	457.39	409.10	48.29	9.473			
10,600.00	10,490.53	10,589.28	10,540.08	30.98	27.19	-171.80	182.53	829.68	457.90	409.18	48.72	9.399			
10,700.00	10,589.95	10,685.52	10,635.79	31.21	27.40	-171.72	184.62	839.54	458.26	409.15	49.11	9.331			
10,800.00	10,689.46	10,781.76	10,731.58	31.43	27.61	-171.65	186.55	848.62	458.59	409.09	49.50	9.265			
10,900.00	10,789.06	10,877.99	10,827.44	31.64	27.81	-171.58	188.31	856.90	458.87	408.99	49.88	9.199			
11,000.00	10,888.73	10,974.23	10,923.37	31.84	28.00	-171.51	189.91	864.40	459.11	408.85	50.26	9.135			
11,100.00	10,988.47	11,070.46	11,019.36	32.04	28.19	-171.46	191.34	871.11	459.31	408.68	50.63	9.072			
11,200.00	11,088.27	11,166.69	11,115.40	32.23	28.38	-171.41	192.59	877.03	459.46	408.46	51.00	9.010			
11,300.00	11,188.11	11,262.93	11,211.49	32.42	28.56	-171.36	193.69	882.17	459.57	408.21	51.36	8.949			
11,400.00	11,288.01	11,359.16	11,307.62	32.59	28.74	-171.32	194.61	886.51	459.64	407.93	51.71	8.888			
11,500.00	11,387.94	11,455.39	11,403.78	32.77	28.91	-171.29	195.36	890.07	459.67	407.60	52.06	8.829			
11,600.00	11,487.89	11,551.63	11,499.98	32.93	29.08	-171.27	195.95	892.83	459.65	407.24	52.41	8.771			
11,700.00	11,587.87	11,647.86	11,596.19	33.09	29.24	-171.25	196.37	894.80	459.59	406.84	52.75	8.713			
11,800.00	11,687.87	11,744.10	11,692.42	33.24	29.40	-171.24	196.62	895.99	459.48	406.40	53.08	8.656			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 102H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
11,880.00	11,767.87	11,821.09	11,769.41	33.36	29.52	-89.23	196.70	896.36	459.37	406.02	53.35	8.611	
11,900.00	11,787.87	11,840.35	11,788.67	33.39	29.56	-89.23	196.71	896.38	459.35	405.94	53.42	8.600	
12,000.00	11,887.87	11,940.35	11,888.67	33.55	29.73	-89.23	196.71	896.38	459.35	405.54	53.81	8.537	
12,100.00	11,987.87	12,040.35	11,988.67	33.72	29.92	-89.23	196.71	896.38	459.35	405.14	54.21	8.473	
12,200.00	12,087.87	12,140.35	12,088.67	33.88	30.11	-89.23	196.71	896.38	459.35	404.74	54.61	8.411	
12,247.39	12,135.26	12,187.74	12,136.06	33.96	30.20	-89.23	196.71	896.38	459.35	404.55	54.80	8.382	
12,250.00	12,137.87	12,190.35	12,138.67	33.97	30.20	90.77	196.71	896.38	459.35	404.54	54.81	8.380	
12,300.00	12,187.79	12,240.28	12,188.59	34.04	30.29	91.07	196.71	896.38	459.39	404.37	55.02	8.350	
12,350.00	12,237.32	12,289.80	12,238.12	34.10	30.39	91.88	196.71	896.38	459.57	404.32	55.25	8.319	
12,400.00	12,286.07	12,338.55	12,286.87	34.16	30.48	93.17	196.71	896.38	460.07	404.57	55.50	8.290	
12,450.00	12,333.67	12,386.15	12,334.47	34.22	30.57	94.86	196.71	896.38	461.19	405.41	55.78	8.268	
12,500.00	12,379.76	12,432.25	12,380.56	34.27	30.66	96.85	196.71	896.38	463.34	407.23	56.11	8.258	
12,550.00	12,423.99	12,476.48	12,424.79	34.31	30.74	99.00	196.71	896.38	466.97	410.50	56.48	8.268	
12,600.00	12,466.03	12,518.51	12,466.83	34.36	30.82	101.19	196.71	896.38	472.60	415.71	56.90	8.306	
12,650.00	12,505.54	12,558.03	12,506.34	34.40	30.89	103.27	196.71	896.38	480.74	423.37	57.37	8.380	
12,700.00	12,542.24	12,594.72	12,543.04	34.43	30.96	105.08	196.71	896.38	491.82	433.95	57.88	8.498	
12,750.00	12,575.84	12,628.32	12,576.64	34.47	31.03	106.50	196.71	896.38	506.24	447.83	58.41	8.667	
12,800.00	12,606.09	12,678.07	12,626.35	34.52	31.11	109.09	194.99	896.38	523.75	464.76	58.99	8.878	
12,850.00	12,632.75	12,738.67	12,686.40	34.56	31.20	112.20	187.12	896.38	543.31	483.89	59.42	9.143	
12,900.00	12,655.63	12,810.35	12,755.88	34.62	31.30	115.70	169.70	896.38	564.30	504.77	59.53	9.480	
12,950.00	12,674.55	12,898.47	12,837.46	34.68	31.40	119.75	136.62	896.38	585.87	526.77	59.10	9.913	
13,000.00	12,689.36	13,011.27	12,932.86	34.76	31.51	124.40	76.75	896.37	606.72	548.84	57.88	10.483	
13,050.00	12,699.96	13,159.73	13,037.21	34.85	31.64	129.24	-28.25	896.37	624.79	569.00	55.80	11.198	
13,100.00	12,706.26	13,351.42	13,126.24	34.96	31.88	133.06	-197.00	896.36	637.01	583.08	53.92	11.813	
13,143.71	12,708.20	13,536.21	13,155.00	35.07	32.31	134.15	-378.73	896.36	640.25	585.64	54.61	11.725	
13,200.00	12,708.56	13,592.50	13,155.00	35.23	32.49	134.13	-435.02	896.36	640.00	584.95	55.04	11.627	
13,300.00	12,709.21	13,692.50	13,155.00	35.58	32.88	134.09	-535.02	896.35	639.56	583.65	55.91	11.440	
13,400.00	12,709.85	13,792.50	13,155.00	36.00	33.34	134.05	-635.02	896.35	639.11	582.24	56.87	11.238	
13,500.00	12,710.49	13,892.49	13,155.00	36.49	33.89	134.01	-735.02	896.35	638.67	580.74	57.93	11.024	
13,600.00	12,711.14	13,992.49	13,155.00	37.05	34.50	133.96	-835.01	896.34	638.23	579.14	59.09	10.801	
13,700.00	12,711.78	14,092.49	13,155.00	37.67	35.19	133.92	-935.01	896.34	637.79	577.45	60.33	10.571	
13,800.00	12,712.42	14,192.49	13,155.00	38.36	35.93	133.88	-1,035.01	896.34	637.35	575.68	61.66	10.336	
13,900.00	12,713.06	14,292.49	13,155.00	39.11	36.74	133.84	-1,135.01	896.33	636.91	573.84	63.07	10.099	
14,000.00	12,713.71	14,392.48	13,155.00	39.91	37.60	133.80	-1,235.01	896.33	636.47	571.92	64.55	9.860	
14,100.00	12,714.35	14,492.48	13,155.00	40.76	38.51	133.75	-1,335.00	896.33	636.02	569.93	66.10	9.622	
14,200.00	12,714.99	14,592.48	13,155.00	41.66	39.47	133.71	-1,435.00	896.32	635.59	567.87	67.71	9.387	
14,300.00	12,715.64	14,692.48	13,155.00	42.61	40.47	133.67	-1,535.00	896.32	635.15	565.76	69.39	9.154	
14,400.00	12,716.28	14,792.47	13,155.00	43.60	41.51	133.63	-1,635.00	896.32	634.71	563.59	71.12	8.925	
14,500.00	12,716.92	14,892.47	13,155.00	44.62	42.59	133.58	-1,734.99	896.31	634.27	561.37	72.90	8.701	
14,600.00	12,717.56	14,992.47	13,155.00	45.69	43.70	133.54	-1,834.99	896.31	633.83	559.10	74.73	8.481	
14,700.00	12,718.21	15,092.47	13,155.00	46.78	44.85	133.50	-1,934.99	896.31	633.39	556.78	76.61	8.268	
14,800.00	12,718.85	15,192.47	13,155.00	47.91	46.02	133.46	-2,034.99	896.30	632.95	554.42	78.53	8.060	
14,900.00	12,719.49	15,292.46	13,155.00	49.06	47.23	133.41	-2,134.99	896.30	632.52	552.03	80.49	7.858	
15,000.00	12,720.14	15,392.46	13,155.00	50.25	48.45	133.37	-2,234.98	896.30	632.08	549.59	82.49	7.663	
15,100.00	12,720.78	15,492.46	13,155.00	51.46	49.71	133.33	-2,334.98	896.29	631.64	547.12	84.52	7.473	
15,200.00	12,721.42	15,592.46	13,155.00	52.69	50.98	133.29	-2,434.98	896.29	631.21	544.62	86.59	7.290	
15,300.00	12,722.06	15,692.46	13,155.00	53.94	52.27	133.24	-2,534.98	896.28	630.77	542.09	88.68	7.113	
15,400.00	12,722.71	15,792.45	13,155.00	55.21	53.58	133.20	-2,634.98	896.28	630.33	539.53	90.81	6.941	
15,500.00	12,723.35	15,892.45	13,155.00	56.50	54.91	133.16	-2,734.97	896.28	629.90	536.94	92.96	6.776	
15,600.00	12,723.99	15,992.45	13,155.00	57.81	56.26	133.11	-2,834.97	896.27	629.46	534.33	95.14	6.616	
15,700.00	12,724.64	16,092.45	13,155.00	59.14	57.62	133.07	-2,934.97	896.27	629.03	531.69	97.34	6.462	
15,800.00	12,725.28	16,192.45	13,155.00	60.48	58.99	133.03	-3,034.97	896.27	628.60	529.03	99.56	6.314	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 102H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDCM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,900.00	12,725.92	16,292.44	13,155.00	61.83	60.38	132.98	-3,134.97	896.26	628.16	526.35	101.81	6.170		
16,000.00	12,726.56	16,392.44	13,155.00	63.20	61.78	132.94	-3,234.96	896.26	627.73	523.66	104.07	6.032		
16,100.00	12,727.21	16,492.44	13,155.00	64.58	63.19	132.90	-3,334.96	896.26	627.30	520.94	106.36	5.898		
16,200.00	12,727.85	16,592.44	13,155.00	65.97	64.61	132.85	-3,434.96	896.25	626.86	518.20	108.66	5.769		
16,300.00	12,728.49	16,692.44	13,155.00	67.37	66.04	132.81	-3,534.96	896.25	626.43	515.45	110.98	5.645		
16,400.00	12,729.14	16,792.43	13,155.00	68.79	67.48	132.77	-3,634.96	896.25	626.00	512.69	113.31	5.525		
16,500.00	12,729.78	16,892.43	13,155.00	70.21	68.93	132.72	-3,734.95	896.24	625.57	509.91	115.66	5.409		
16,600.00	12,730.42	16,992.43	13,155.00	71.64	70.39	132.68	-3,834.95	896.24	625.14	507.11	118.03	5.297		
16,700.00	12,731.07	17,092.43	13,155.00	73.08	71.85	132.64	-3,934.95	896.24	624.70	504.30	120.41	5.188		
16,800.00	12,731.71	17,192.43	13,155.00	74.53	73.32	132.59	-4,034.95	896.23	624.27	501.48	122.80	5.084		
16,900.00	12,732.35	17,292.42	13,155.00	75.98	74.80	132.55	-4,134.95	896.23	623.84	498.64	125.20	4.983		
17,000.00	12,732.99	17,392.42	13,155.00	77.45	76.28	132.50	-4,234.94	896.23	623.41	495.80	127.62	4.885		
17,100.00	12,733.64	17,492.42	13,155.00	78.92	77.77	132.46	-4,334.94	896.22	622.98	492.94	130.05	4.791		
17,200.00	12,734.28	17,592.42	13,155.00	80.39	79.27	132.42	-4,434.94	896.22	622.56	490.07	132.48	4.699		
17,300.00	12,734.92	17,692.42	13,155.00	81.87	80.77	132.37	-4,534.94	896.22	622.13	487.19	134.93	4.611		
17,400.00	12,735.57	17,792.41	13,155.00	83.36	82.28	132.33	-4,634.93	896.21	621.70	484.30	137.39	4.525		
17,500.00	12,736.21	17,892.41	13,155.00	84.85	83.79	132.28	-4,734.93	896.21	621.27	481.41	139.86	4.442		
17,600.00	12,736.85	17,992.41	13,155.00	86.35	85.31	132.24	-4,834.93	896.21	620.84	478.50	142.34	4.362		
17,700.00	12,737.49	18,092.41	13,155.00	87.85	86.83	132.19	-4,934.93	896.20	620.42	475.58	144.83	4.284		
17,800.00	12,738.14	18,192.40	13,155.00	89.36	88.35	132.15	-5,034.93	896.20	619.99	472.66	147.33	4.208		
17,900.00	12,738.78	18,292.40	13,155.00	90.87	89.88	132.11	-5,134.92	896.20	619.56	469.73	149.83	4.135		
18,000.00	12,739.42	18,392.40	13,155.00	92.39	91.41	132.06	-5,234.92	896.19	619.14	466.79	152.35	4.064		
18,100.00	12,740.07	18,492.40	13,155.00	93.91	92.95	132.02	-5,334.92	896.19	618.71	463.84	154.87	3.995		
18,200.00	12,740.71	18,592.40	13,155.00	95.43	94.48	131.97	-5,434.92	896.19	618.29	460.89	157.40	3.928		
18,300.00	12,741.35	18,692.39	13,155.00	96.96	96.03	131.93	-5,534.92	896.18	617.86	457.92	159.94	3.863		
18,400.00	12,741.99	18,792.39	13,155.00	98.49	97.57	131.88	-5,634.91	896.18	617.44	454.95	162.48	3.800		
18,500.00	12,742.64	18,892.39	13,155.00	100.02	99.12	131.84	-5,734.91	896.18	617.01	451.98	165.03	3.739		
18,600.00	12,743.28	18,992.39	13,155.00	101.56	100.67	131.79	-5,834.91	896.17	616.59	449.00	167.59	3.679		
18,700.00	12,743.92	19,092.39	13,155.00	103.10	102.22	131.75	-5,934.91	896.17	616.16	446.01	170.16	3.621		
18,800.00	12,744.57	19,192.38	13,155.00	104.64	103.78	131.70	-6,034.91	896.17	615.74	443.01	172.73	3.565		
18,900.00	12,745.21	19,292.38	13,155.00	106.19	105.34	131.66	-6,134.90	896.16	615.32	440.01	175.30	3.510		
19,000.00	12,745.85	19,392.38	13,155.00	107.74	106.90	131.61	-6,234.90	896.16	614.90	437.01	177.89	3.457		
19,100.00	12,746.49	19,492.38	13,155.00	109.29	108.46	131.57	-6,334.90	896.16	614.47	434.00	180.48	3.405		
19,200.00	12,747.14	19,592.38	13,155.00	110.84	110.02	131.52	-6,434.90	896.15	614.05	430.98	183.07	3.354		
19,300.00	12,747.78	19,692.37	13,155.00	112.40	111.59	131.48	-6,534.90	896.15	613.63	427.96	185.68	3.305		
19,400.00	12,748.42	19,792.37	13,155.00	113.96	113.16	131.43	-6,634.89	896.15	613.21	424.93	188.28	3.257		
19,500.00	12,749.07	19,892.37	13,155.00	115.51	114.73	131.39	-6,734.89	896.14	612.79	421.90	190.89	3.210		
19,600.00	12,749.71	19,992.37	13,155.00	117.08	116.30	131.34	-6,834.89	896.14	612.37	418.86	193.51	3.164		
19,700.00	12,750.35	20,092.37	13,155.00	118.64	117.87	131.29	-6,934.89	896.14	611.95	415.81	196.14	3.120		
19,800.00	12,750.99	20,192.36	13,155.00	120.21	119.45	131.25	-7,034.89	896.13	611.53	412.77	198.76	3.077		
19,900.00	12,751.64	20,292.36	13,155.00	121.77	121.02	131.20	-7,134.88	896.13	611.11	409.71	201.40	3.034		
20,000.00	12,752.28	20,392.36	13,155.00	123.34	122.60	131.16	-7,234.88	896.12	610.69	406.66	204.04	2.993		
20,100.00	12,752.92	20,492.36	13,155.00	124.91	124.18	131.11	-7,334.88	896.12	610.28	403.60	206.68	2.953		
20,200.00	12,753.57	20,592.36	13,155.00	126.49	125.76	131.07	-7,434.88	896.12	609.86	400.53	209.33	2.913		
20,300.00	12,754.21	20,692.35	13,155.00	128.06	127.35	131.02	-7,534.88	896.11	609.44	397.46	211.98	2.875		
20,400.00	12,754.85	20,792.35	13,155.00	129.64	128.93	130.97	-7,634.87	896.11	609.02	394.39	214.64	2.837		
20,500.00	12,755.49	20,892.35	13,155.00	131.21	130.51	130.93	-7,734.87	896.11	608.61	391.31	217.30	2.801		
20,600.00	12,756.14	20,992.35	13,155.00	132.79	132.10	130.88	-7,834.87	896.10	608.19	388.22	219.97	2.765		
20,700.00	12,756.78	21,092.34	13,155.00	134.37	133.69	130.84	-7,934.87	896.10	607.78	385.14	222.64	2.730		
20,800.00	12,757.42	21,192.34	13,155.00	135.95	135.28	130.79	-8,034.86	896.10	607.36	382.05	225.32	2.696		
20,900.00	12,758.07	21,292.34	13,155.00	137.53	136.87	130.74	-8,134.86	896.09	606.95	378.95	228.00	2.662		
21,000.00	12,758.71	21,392.34	13,155.00	139.12	138.46	130.70	-8,234.86	896.09	606.53	375.85	230.68	2.629		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 102H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
21,100.00	12,759.35	21,492.34	13,155.00	140.70	140.05	130.65	-8,334.86	896.09	606.12	372.75	233.37	2.597	
21,200.00	12,760.00	21,592.33	13,155.00	142.29	141.64	130.60	-8,434.86	896.08	605.70	369.64	236.06	2.566	
21,300.00	12,760.64	21,692.33	13,155.00	143.87	143.23	130.56	-8,534.85	896.08	605.29	366.53	238.76	2.535	
21,400.00	12,761.28	21,792.33	13,155.00	145.46	144.83	130.51	-8,634.85	896.08	604.88	363.42	241.46	2.505	
21,500.00	12,761.92	21,892.33	13,155.00	147.05	146.42	130.46	-8,734.85	896.07	604.46	360.30	244.16	2.476	
21,600.00	12,762.57	21,992.33	13,155.00	148.64	148.02	130.42	-8,834.85	896.07	604.05	357.18	246.87	2.447	
21,700.00	12,763.21	22,092.32	13,155.00	150.23	149.62	130.37	-8,934.85	896.07	603.64	354.05	249.59	2.419	
21,800.00	12,763.85	22,192.32	13,155.00	151.82	151.21	130.32	-9,034.84	896.06	603.23	350.92	252.30	2.391	
21,900.00	12,764.50	22,292.32	13,155.00	153.41	152.81	130.28	-9,134.84	896.06	602.82	347.79	255.03	2.364	
22,000.00	12,765.14	22,392.32	13,155.00	155.01	154.41	130.23	-9,234.84	896.06	602.41	344.66	257.75	2.337	
22,100.00	12,765.78	22,492.32	13,155.00	156.60	156.01	130.18	-9,334.84	896.05	602.00	341.52	260.48	2.311	
22,200.00	12,766.42	22,592.31	13,155.00	158.20	157.61	130.13	-9,434.84	896.05	601.59	338.38	263.21	2.286	
22,300.00	12,767.07	22,692.31	13,155.00	159.79	159.21	130.09	-9,534.83	896.05	601.18	335.23	265.95	2.261	
22,400.00	12,767.71	22,792.31	13,155.00	161.39	160.82	130.04	-9,634.83	896.04	600.77	332.08	268.69	2.236	
22,500.00	12,768.35	22,892.31	13,155.00	162.99	162.42	129.99	-9,734.83	896.04	600.36	328.93	271.43	2.212	
22,600.00	12,769.00	22,992.31	13,155.00	164.59	164.02	129.94	-9,834.83	896.04	599.95	325.77	274.18	2.188	
22,700.00	12,769.64	23,092.30	13,155.00	166.18	165.63	129.90	-9,934.83	896.03	599.55	322.62	276.93	2.165	
22,787.39	12,770.20	23,179.69	13,155.00	167.31	167.03	129.86	-10,022.21	896.03	599.19	320.16	279.03	2.147	
22,787.99	12,770.20	23,180.29	13,155.00	167.31	167.04	129.86	-10,022.81	896.03	599.19	320.15	279.04	2.147 SF	

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 81H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)				Between Centres (usft)	Between Ellipses (usft)	
0.00	0.00	0.30	0.30	0.00	0.00	-90.44	-0.69	-89.97	89.97					
100.00	100.00	100.30	100.30	0.09	0.09	-90.44	-0.69	-89.97	89.97	0.18		504.785		
200.00	200.00	200.30	200.30	0.31	0.31	-90.44	-0.69	-89.97	89.97	0.63		143.321		
300.00	300.00	300.30	300.30	0.54	0.54	-90.44	-0.69	-89.97	89.97	1.08		83.517		
400.00	400.00	400.30	400.30	0.76	0.76	-90.44	-0.69	-89.97	89.97	1.53		58.928		
500.00	500.00	500.30	500.30	0.99	0.99	-90.44	-0.69	-89.97	89.97	1.98		45.524		
600.00	600.00	600.30	600.30	1.21	1.21	-90.44	-0.69	-89.97	89.97	2.43		37.088		
700.00	700.00	700.30	700.30	1.44	1.44	-90.44	-0.69	-89.97	89.97	2.88		31.290		
800.00	800.00	800.30	800.30	1.66	1.66	-90.44	-0.69	-89.97	89.97	3.32		27.060		
900.00	900.00	900.30	900.30	1.89	1.89	-90.44	-0.69	-89.97	89.97	3.77		23.837		
1,000.00	1,000.00	1,000.30	1,000.30	2.11	2.11	-90.44	-0.69	-89.97	89.97	4.22		21.300		
1,100.00	1,100.00	1,100.30	1,100.30	2.34	2.34	-90.44	-0.69	-89.97	89.97	4.67		19.251		
1,200.00	1,200.00	1,200.30	1,200.30	2.56	2.56	-90.44	-0.69	-89.97	89.97	5.12		17.562		
1,300.00	1,300.00	1,300.30	1,300.30	2.79	2.79	-90.44	-0.69	-89.97	89.97	5.57		16.145		
1,400.00	1,400.00	1,400.30	1,400.30	3.01	3.01	-90.44	-0.69	-89.97	89.97	6.02		14.940		
1,500.00	1,500.00	1,500.30	1,500.30	3.24	3.24	-90.44	-0.69	-89.97	89.97	6.47		13.902		
1,600.00	1,600.00	1,600.30	1,600.30	3.46	3.46	-90.44	-0.69	-89.97	89.97	6.92		13.000		
1,700.00	1,700.00	1,700.30	1,700.30	3.69	3.69	-90.44	-0.69	-89.97	89.97	7.37		12.207		
1,800.00	1,800.00	1,800.30	1,800.30	3.91	3.91	-90.44	-0.69	-89.97	89.97	7.82		11.505		
1,900.00	1,900.00	1,900.30	1,900.30	4.13	4.14	-90.44	-0.69	-89.97	89.97	8.27		10.880		
2,000.00	2,000.00	2,000.30	2,000.30	4.36	4.36	-90.44	-0.69	-89.97	89.97	8.72		10.319		
2,100.00	2,100.00	2,100.30	2,100.30	4.58	4.58	-90.44	-0.69	-89.97	89.97	9.17		9.813		
2,200.00	2,200.00	2,200.30	2,200.30	4.81	4.81	-90.44	-0.69	-89.97	89.97	9.62		9.354		
2,300.00	2,300.00	2,300.30	2,300.30	5.03	5.03	-90.44	-0.69	-89.97	89.97	10.07		8.937		
2,400.00	2,400.00	2,400.30	2,400.30	5.26	5.26	-90.44	-0.69	-89.97	89.97	10.52		8.555		
2,500.00	2,500.00	2,500.30	2,500.30	5.48	5.48	-90.44	-0.69	-89.97	89.97	10.97		8.204		
2,500.26	2,500.26	2,500.56	2,500.56	5.48	5.48	-90.44	-0.69	-89.97	89.97	10.97		8.203 CC, ES		
2,600.00	2,599.99	2,601.01	2,601.01	5.70	5.71	-172.01	0.11	-89.57	90.44	11.40		7.931		
2,700.00	2,699.96	2,701.68	2,701.64	5.90	5.93	-170.75	2.48	-88.38	91.87	11.83		7.769		
2,800.00	2,799.86	2,802.27	2,802.13	6.10	6.16	-168.75	6.44	-86.40	94.35	12.25		7.702		
2,900.00	2,899.68	2,902.74	2,902.41	6.31	6.38	-166.12	11.97	-83.64	98.01	12.68		7.732		
3,000.00	2,999.37	3,003.04	3,002.39	6.53	6.61	-163.03	19.05	-80.10	102.98	13.11		7.857		
3,100.00	3,098.90	3,102.67	3,101.64	6.75	6.83	-160.13	26.81	-76.22	109.65	13.54		8.097		
3,200.00	3,198.26	3,202.21	3,200.80	6.97	7.06	-157.88	34.56	-72.34	118.17	13.98		8.451		
3,300.00	3,297.40	3,301.62	3,299.84	7.20	7.29	-156.24	42.31	-68.47	128.44	14.43		8.902		
3,400.00	3,396.30	3,400.87	3,398.72	7.45	7.52	-155.13	50.04	-64.60	140.36	14.88		9.434		
3,500.00	3,494.93	3,499.94	3,497.41	7.70	7.75	-154.46	57.76	-60.74	153.88	15.33		10.037		
3,600.00	3,593.41	3,598.91	3,596.00	7.97	7.99	-154.09	65.47	-56.89	168.20	15.79		10.651		
3,700.00	3,691.89	3,697.87	3,694.58	8.24	8.22	-153.77	73.18	-53.03	182.52	16.25		11.229		
3,800.00	3,790.37	3,796.84	3,793.17	8.52	8.46	-153.49	80.89	-49.18	196.84	16.72		11.771		
3,900.00	3,888.85	3,895.80	3,891.76	8.81	8.70	-153.26	88.60	-45.32	211.17	17.19		12.282		
4,000.00	3,987.33	3,994.76	3,990.35	9.10	8.94	-153.05	96.31	-41.47	225.51	17.67		12.762		
4,100.00	4,085.82	4,093.73	4,088.94	9.39	9.18	-152.87	104.02	-37.61	239.84	18.15		13.215		
4,200.00	4,184.30	4,192.69	4,187.53	9.70	9.42	-152.71	111.73	-33.76	254.18	18.63		13.642		
4,300.00	4,282.78	4,291.66	4,286.11	10.00	9.66	-152.56	119.44	-29.90	268.51	19.12		14.045		
4,400.00	4,381.26	4,390.62	4,384.70	10.31	9.91	-152.44	127.15	-26.05	282.85	19.61		14.427		
4,500.00	4,479.74	4,489.59	4,483.29	10.62	10.15	-152.32	134.86	-22.19	297.20	20.10		14.788		
4,600.00	4,578.22	4,588.55	4,581.88	10.94	10.39	-152.21	142.57	-18.34	311.54	20.59		15.130		
4,700.00	4,676.70	4,687.52	4,680.47	11.25	10.64	-152.12	150.28	-14.48	325.88	21.09		15.454		
4,800.00	4,775.18	4,786.13	4,778.74	11.57	10.83	-152.10	157.59	-10.83	340.28	21.53		15.802		
4,900.00	4,873.66	4,884.70	4,877.04	11.90	11.03	-152.22	164.15	-7.55	354.77	21.97		16.145		
5,000.00	4,972.14	4,983.23	4,975.35	12.22	11.21	-152.46	169.94	-4.66	369.38	22.41		16.481		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 81H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toothface (')	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.00	5,070.62	5,081.68	5,073.65	12.55	11.40	-152.81	174.97	-2.14	384.11	361.26	22.85	16.811		
5,200.00	5,169.10	5,180.06	5,171.91	12.88	11.59	-153.26	179.25	0.00	398.97	375.69	23.28	17.138		
5,300.00	5,267.58	5,278.35	5,270.12	13.21	11.78	-153.79	182.77	1.76	413.98	390.27	23.71	17.461		
5,400.00	5,366.07	5,376.53	5,368.25	13.54	11.96	-154.40	185.53	3.14	429.16	405.03	24.13	17.783		
5,500.00	5,464.55	5,474.58	5,466.28	13.87	12.14	-155.07	187.53	4.14	444.53	419.98	24.55	18.105		
5,600.00	5,563.03	5,572.50	5,564.19	14.21	12.32	-155.80	188.79	4.77	460.11	435.14	24.97	18.428		
5,700.00	5,661.51	5,670.27	5,661.95	14.54	12.50	-156.58	189.30	5.02	475.92	450.55	25.38	18.753		
5,800.00	5,759.99	5,768.61	5,760.29	14.88	12.70	-157.38	189.31	5.03	491.94	466.12	25.82	19.056		
5,900.00	5,858.47	5,867.09	5,858.77	15.22	12.91	-158.13	189.31	5.03	508.05	481.79	26.26	19.345		
6,000.00	5,956.95	5,965.57	5,957.25	15.56	13.12	-158.84	189.31	5.03	524.24	497.53	26.71	19.628		
6,100.00	6,055.43	6,064.05	6,055.73	15.90	13.33	-159.50	189.31	5.03	540.50	513.34	27.16	19.903		
6,200.00	6,153.91	6,162.53	6,154.21	16.24	13.55	-160.12	189.31	5.03	556.82	529.22	27.61	20.170		
6,300.00	6,252.39	6,261.01	6,252.69	16.59	13.76	-160.71	189.31	5.03	573.21	545.16	28.06	20.431		
6,400.00	6,350.87	6,359.49	6,351.17	16.93	13.97	-161.27	189.31	5.03	589.66	561.15	28.51	20.685		
6,500.00	6,449.35	6,457.97	6,449.65	17.27	14.19	-161.80	189.31	5.03	606.15	577.19	28.96	20.932		
6,600.00	6,547.83	6,556.45	6,548.13	17.62	14.40	-162.29	189.31	5.03	622.70	593.28	29.41	21.172		
6,700.00	6,646.32	6,654.93	6,646.62	17.96	14.61	-162.77	189.31	5.03	639.28	609.42	29.86	21.407		
6,800.00	6,744.80	6,753.41	6,745.10	18.31	14.83	-163.22	189.31	5.03	655.91	625.59	30.32	21.635		
6,900.00	6,843.28	6,851.90	6,843.58	18.66	15.04	-163.64	189.31	5.03	672.57	641.80	30.77	21.857		
7,000.00	6,941.76	6,950.38	6,942.06	19.00	15.26	-164.05	189.31	5.03	689.27	658.04	31.23	22.073		
7,100.00	7,040.24	7,048.86	7,040.54	19.35	15.47	-164.43	189.31	5.03	706.00	674.32	31.68	22.283		
7,200.00	7,138.72	7,147.34	7,139.02	19.70	15.69	-164.80	189.31	5.03	722.76	690.62	32.14	22.488		
7,300.00	7,237.20	7,245.82	7,237.50	20.05	15.90	-165.16	189.31	5.03	739.55	706.96	32.60	22.688		
7,400.00	7,335.68	7,344.30	7,335.98	20.40	16.12	-165.49	189.31	5.03	756.37	723.31	33.05	22.882		
7,500.00	7,434.16	7,442.78	7,434.46	20.75	16.33	-165.81	189.31	5.03	773.21	739.69	33.51	23.072		
7,600.00	7,532.64	7,541.26	7,532.94	21.10	16.55	-166.12	189.31	5.03	790.07	756.10	33.97	23.257		
7,700.00	7,631.12	7,639.74	7,631.42	21.45	16.76	-166.42	189.31	5.03	806.95	772.52	34.43	23.437		
7,800.00	7,729.60	7,738.22	7,729.90	21.80	16.98	-166.70	189.31	5.03	823.85	788.96	34.89	23.612		
7,900.00	7,828.09	7,836.70	7,828.39	22.15	17.20	-166.97	189.31	5.03	840.78	805.42	35.35	23.784		
8,000.00	7,926.57	7,935.18	7,926.87	22.50	17.41	-167.24	189.31	5.03	857.72	821.90	35.81	23.950		
8,100.00	8,025.05	8,033.66	8,025.35	22.85	17.63	-167.49	189.31	5.03	874.67	838.40	36.27	24.113		
8,200.00	8,123.53	8,132.15	8,123.83	23.21	17.85	-167.73	189.31	5.03	891.64	854.91	36.74	24.272		
8,300.00	8,222.01	8,230.63	8,222.31	23.56	18.06	-167.96	189.31	5.03	908.63	871.43	37.20	24.427		
8,400.00	8,320.49	8,329.11	8,320.79	23.91	18.28	-168.18	189.31	5.03	925.63	887.97	37.66	24.579		
8,500.00	8,418.97	8,427.59	8,419.27	24.26	18.50	-168.40	189.31	5.03	942.65	904.52	38.12	24.726		
8,600.00	8,517.45	8,526.07	8,517.75	24.62	18.71	-168.61	189.31	5.03	959.67	921.09	38.59	24.871		
8,700.00	8,615.93	8,624.55	8,616.23	24.97	18.93	-168.81	189.31	5.03	976.71	937.66	39.05	25.012		
8,800.00	8,714.41	8,723.03	8,714.71	25.33	19.15	-169.00	189.31	5.03	993.76	954.25	39.51	25.149		
8,900.00	8,812.89	8,821.51	8,813.19	25.68	19.36	-169.19	189.31	5.03	1,010.82	970.84	39.98	25.284		
9,000.00	8,911.37	8,919.99	8,911.67	26.03	19.58	-169.37	189.31	5.03	1,027.89	987.45	40.44	25.415		
9,100.00	9,009.85	9,018.47	9,010.15	26.39	19.80	-169.55	189.31	5.03	1,044.97	1,004.06	40.91	25.544		
9,200.00	9,108.34	9,116.95	9,108.64	26.74	20.02	-169.72	189.31	5.03	1,062.06	1,020.69	41.37	25.669		
9,300.00	9,206.82	9,215.43	9,207.12	27.10	20.23	-169.88	189.31	5.03	1,079.16	1,037.32	41.84	25.792		
9,400.00	9,305.30	9,313.91	9,305.60	27.45	20.45	-170.04	189.31	5.03	1,096.27	1,053.96	42.31	25.912		
9,500.00	9,403.78	9,412.40	9,404.08	27.81	20.67	-170.20	189.31	5.03	1,113.38	1,070.61	42.77	26.030		
9,600.00	9,502.26	9,510.88	9,502.56	28.16	20.89	-170.35	189.31	5.03	1,130.51	1,087.27	43.24	26.145		
9,700.00	9,600.74	9,609.36	9,601.04	28.52	21.10	-170.49	189.31	5.03	1,147.64	1,103.93	43.71	26.257		
9,800.00	9,699.22	9,707.84	9,699.52	28.88	21.32	-170.63	189.31	5.03	1,164.77	1,120.60	44.17	26.367		
9,880.00	9,778.00	9,786.62	9,778.30	29.16	21.50	-170.74	189.31	5.03	1,178.49	1,133.94	44.55	26.454		
9,900.00	9,797.70	9,806.32	9,798.00	29.22	21.54	-170.77	189.31	5.03	1,181.90	1,137.26	44.64	26.477		
10,000.00	9,896.29	9,904.91	9,896.59	29.49	21.76	-170.91	189.31	5.03	1,198.45	1,153.39	45.07	26.593		
10,100.00	9,995.02	10,003.63	9,995.32	29.76	21.98	-171.05	189.31	5.03	1,214.16	1,168.67	45.49	26.689		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 81H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N-S (usft)	+E-W (usft)						
10,200.00	10,093.88	10,102.50	10,094.18	30.01	22.20	-171.17	189.31	5.03	1,229.03	1,183.11	45.92	26.766		
10,300.00	10,192.87	10,201.49	10,193.17	30.27	22.42	-171.28	189.31	5.03	1,243.04	1,196.70	46.34	26.823		
10,400.00	10,291.98	10,300.60	10,292.28	30.51	22.64	-171.38	189.31	5.03	1,256.20	1,209.44	46.77	26.862		
10,500.00	10,391.20	10,399.82	10,391.50	30.75	22.86	-171.47	189.31	5.03	1,268.51	1,221.32	47.19	26.882		
10,600.00	10,490.53	10,499.14	10,490.83	30.98	23.08	-171.56	189.31	5.03	1,279.97	1,232.36	47.61	26.885		
10,700.00	10,589.95	10,598.57	10,590.25	31.21	23.30	-171.64	189.31	5.03	1,290.57	1,242.54	48.03	26.871		
10,800.00	10,689.46	10,698.08	10,689.76	31.43	23.52	-171.71	189.31	5.03	1,300.31	1,251.86	48.45	26.840		
10,900.00	10,789.06	10,797.68	10,789.36	31.64	23.74	-171.77	189.31	5.03	1,309.19	1,260.33	48.86	26.793		
11,000.00	10,888.73	10,897.35	10,889.03	31.84	23.96	-171.82	189.31	5.03	1,317.22	1,267.94	49.28	26.730		
11,100.00	10,988.47	10,997.09	10,988.77	32.04	24.18	-171.87	189.31	5.03	1,324.38	1,274.69	49.69	26.652		
11,200.00	11,088.27	11,096.88	11,088.57	32.23	24.40	-171.92	189.31	5.03	1,330.68	1,280.58	50.10	26.559		
11,300.00	11,188.11	11,196.73	11,188.41	32.42	24.63	-171.95	189.31	5.03	1,336.13	1,285.61	50.51	26.451		
11,400.00	11,288.01	11,296.62	11,288.31	32.59	24.85	-171.99	189.31	5.03	1,340.70	1,289.78	50.92	26.329		
11,500.00	11,387.94	11,396.55	11,388.24	32.77	25.07	-172.01	189.31	5.03	1,344.42	1,293.09	51.33	26.193		
11,600.00	11,487.89	11,496.51	11,488.19	32.93	25.29	-172.03	189.31	5.03	1,347.27	1,295.54	51.73	26.043		
11,700.00	11,587.87	11,596.49	11,588.17	33.09	25.51	-172.04	189.31	5.03	1,349.26	1,297.12	52.13	25.880		
11,800.00	11,687.87	11,696.48	11,688.17	33.24	25.74	-172.05	189.31	5.03	1,350.38	1,297.85	52.53	25.704		
11,880.00	11,767.87	11,776.48	11,768.17	33.36	25.91	-90.05	189.31	5.03	1,350.66	1,297.80	52.86	25.553		
11,900.00	11,787.87	11,796.48	11,788.17	33.39	25.96	-90.05	189.31	5.03	1,350.66	1,297.72	52.94	25.514		
12,000.00	11,887.87	11,896.48	11,888.17	33.55	26.18	-90.05	189.31	5.03	1,350.66	1,297.30	53.36	25.313		
12,100.00	11,987.87	11,996.48	11,988.17	33.72	26.40	-90.05	189.31	5.03	1,350.66	1,296.88	53.78	25.116		
12,101.64	11,989.51	11,998.12	11,989.81	33.72	26.41	-90.05	189.31	5.03	1,350.66	1,296.87	53.78	25.113		
12,200.00	12,087.87	12,096.00	12,087.52	33.88	26.59	-90.22	185.26	5.03	1,350.67	1,296.51	54.15	24.941		
12,247.39	12,135.26	12,142.07	12,133.00	33.96	26.66	-90.53	177.97	5.03	1,350.72	1,296.42	54.30	24.874		
12,250.00	12,137.87	12,144.57	12,135.45	33.97	26.66	89.45	177.47	5.03	1,350.72	1,296.41	54.31	24.870		
12,300.00	12,187.79	12,192.08	12,181.52	34.04	26.73	89.04	165.94	5.03	1,350.86	1,296.41	54.44	24.812		
12,350.00	12,237.32	12,238.87	12,225.82	34.10	26.78	88.64	150.89	5.03	1,351.06	1,296.49	54.56	24.762		
12,400.00	12,286.07	12,285.00	12,268.14	34.16	26.84	88.25	132.57	5.03	1,351.31	1,296.64	54.67	24.718		
12,450.00	12,333.67	12,330.51	12,308.31	34.22	26.89	87.88	111.22	5.02	1,351.62	1,296.85	54.77	24.678		
12,500.00	12,379.76	12,375.46	12,346.21	34.27	26.94	87.52	87.07	5.02	1,351.97	1,297.10	54.86	24.642		
12,550.00	12,423.99	12,419.90	12,381.70	34.31	26.99	87.18	60.35	5.02	1,352.35	1,297.39	54.96	24.608		
12,600.00	12,466.03	12,463.86	12,414.67	34.36	27.03	86.86	31.27	5.02	1,352.74	1,297.70	55.05	24.573		
12,650.00	12,505.54	12,507.41	12,445.04	34.40	27.07	86.57	0.07	5.01	1,353.15	1,298.00	55.15	24.537		
12,700.00	12,542.24	12,550.00	12,472.36	34.43	27.11	86.30	-32.58	5.01	1,353.56	1,298.31	55.25	24.498		
12,750.00	12,575.84	12,593.43	12,497.64	34.47	27.16	86.04	-67.88	5.01	1,353.95	1,298.58	55.37	24.452		
12,800.00	12,606.09	12,635.98	12,519.75	34.52	27.22	85.82	-104.22	5.01	1,354.33	1,298.82	55.50	24.400		
12,850.00	12,632.75	12,678.28	12,539.00	34.56	27.29	85.63	-141.88	5.00	1,354.67	1,299.01	55.65	24.341		
12,900.00	12,655.63	12,720.37	12,555.34	34.62	27.38	85.46	-180.65	5.00	1,354.97	1,299.15	55.82	24.272		
12,950.00	12,674.55	12,762.28	12,568.75	34.68	27.49	85.32	-220.36	5.00	1,355.23	1,299.21	56.01	24.194		
13,000.00	12,689.36	12,800.00	12,578.30	34.76	27.59	85.23	-256.84	4.99	1,355.44	1,299.23	56.21	24.116		
13,050.00	12,699.96	12,845.74	12,586.63	34.85	27.72	85.14	-301.80	4.99	1,355.58	1,299.11	56.47	24.007		
13,100.00	12,706.26	12,887.35	12,591.08	34.96	27.86	85.10	-343.16	4.99	1,355.67	1,298.94	56.73	23.897		
13,143.71	12,708.20	12,923.70	12,592.49	35.07	27.99	85.09	-379.48	4.98	1,355.69	1,298.72	56.98	23.793		
13,200.00	12,708.56	12,978.73	12,592.33	35.23	28.21	85.07	-434.50	4.98	1,355.75	1,298.35	57.39	23.622		
13,300.00	12,709.21	13,078.72	12,591.96	35.58	28.66	85.03	-534.50	4.97	1,355.84	1,297.57	58.27	23.267		
13,400.00	12,709.85	13,178.72	12,591.60	36.00	29.20	84.98	-634.49	4.96	1,355.94	1,296.63	59.32	22.860		
13,500.00	12,710.49	13,278.71	12,591.24	36.49	29.82	84.94	-734.49	4.95	1,356.04	1,295.53	60.52	22.408		
13,600.00	12,711.14	13,378.71	12,590.88	37.05	30.52	84.90	-834.48	4.95	1,356.14	1,294.28	61.86	21.921		
13,700.00	12,711.78	13,478.70	12,590.51	37.67	31.28	84.86	-934.48	4.94	1,356.24	1,292.89	63.35	21.409		
13,800.00	12,712.42	13,578.70	12,590.15	38.36	32.11	84.82	-1,034.47	4.93	1,356.34	1,291.38	64.96	20.878		
13,900.00	12,713.06	13,678.69	12,589.79	39.11	33.00	84.77	-1,134.46	4.92	1,356.45	1,289.75	66.70	20.337		
14,000.00	12,713.71	13,778.68	12,589.42	39.91	33.95	84.73	-1,234.46	4.91	1,356.55	1,288.01	68.54	19.791		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
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 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 81H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
14,100.00	12,714.35	13,878.68	12,589.06	40.76	34.94	84.69	-1,334.45	4.91	1,356.65	1,286.16	70.49	19.246	
14,200.00	12,714.99	13,978.67	12,588.70	41.66	35.99	84.65	-1,434.45	4.90	1,356.76	1,284.23	72.53	18.706	
14,300.00	12,715.64	14,078.67	12,588.34	42.61	37.07	84.60	-1,534.44	4.89	1,356.86	1,282.21	74.65	18.175	
14,400.00	12,716.28	14,178.66	12,587.97	43.60	38.19	84.56	-1,634.44	4.88	1,356.97	1,280.11	76.86	17.656	
14,500.00	12,716.92	14,278.66	12,587.61	44.62	39.36	84.52	-1,734.43	4.87	1,357.08	1,277.94	79.13	17.149	
14,600.00	12,717.56	14,378.65	12,587.25	45.69	40.55	84.48	-1,834.42	4.87	1,357.18	1,275.71	81.47	16.658	
14,700.00	12,718.21	14,478.65	12,586.88	46.78	41.77	84.44	-1,934.42	4.86	1,357.29	1,273.42	83.88	16.182	
14,800.00	12,718.85	14,578.64	12,586.52	47.91	43.02	84.39	-2,034.41	4.85	1,357.40	1,271.07	86.33	15.723	
14,900.00	12,719.49	14,678.64	12,586.16	49.06	44.30	84.35	-2,134.41	4.84	1,357.51	1,268.67	88.84	15.280	
15,000.00	12,720.14	14,778.63	12,585.79	50.25	45.59	84.31	-2,234.40	4.83	1,357.62	1,266.23	91.39	14.855	
15,100.00	12,720.78	14,878.63	12,585.43	51.46	46.91	84.27	-2,334.40	4.83	1,357.73	1,263.74	93.99	14.446	
15,200.00	12,721.42	14,978.62	12,585.07	52.69	48.25	84.22	-2,434.39	4.82	1,357.85	1,261.22	96.62	14.053	
15,300.00	12,722.06	15,078.62	12,584.71	53.94	49.61	84.18	-2,534.38	4.81	1,357.96	1,258.66	99.30	13.676	
15,400.00	12,722.71	15,178.61	12,584.34	55.21	50.98	84.14	-2,634.38	4.80	1,358.07	1,256.07	102.00	13.314	
15,500.00	12,723.35	15,278.61	12,583.98	56.50	52.37	84.10	-2,734.37	4.79	1,358.19	1,253.45	104.73	12.968	
15,600.00	12,723.99	15,378.60	12,583.62	57.81	53.77	84.06	-2,834.37	4.78	1,358.30	1,250.80	107.50	12.636	
15,700.00	12,724.64	15,478.60	12,583.25	59.14	55.18	84.01	-2,934.36	4.78	1,358.42	1,248.13	110.29	12.317	
15,800.00	12,725.28	15,578.59	12,582.89	60.48	56.61	83.97	-3,034.36	4.77	1,358.53	1,245.43	113.10	12.012	
15,900.00	12,725.92	15,678.59	12,582.53	61.83	58.04	83.93	-3,134.35	4.76	1,358.65	1,242.72	115.93	11.719	
16,000.00	12,726.56	15,778.58	12,582.17	63.20	59.49	83.89	-3,234.34	4.75	1,358.77	1,239.98	118.79	11.439	
16,100.00	12,727.21	15,878.58	12,581.80	64.58	60.95	83.85	-3,334.34	4.74	1,358.89	1,237.22	121.66	11.169	
16,200.00	12,727.85	15,978.57	12,581.44	65.97	62.41	83.80	-3,434.33	4.74	1,359.01	1,234.45	124.55	10.911	
16,300.00	12,728.49	16,078.57	12,581.08	67.37	63.89	83.76	-3,534.33	4.73	1,359.13	1,231.66	127.46	10.663	
16,400.00	12,729.14	16,178.56	12,580.71	68.79	65.37	83.72	-3,634.32	4.72	1,359.25	1,228.86	130.39	10.425	
16,500.00	12,729.78	16,278.56	12,580.35	70.21	66.86	83.68	-3,734.32	4.71	1,359.37	1,226.04	133.32	10.196	
16,600.00	12,730.42	16,378.55	12,579.99	71.64	68.35	83.63	-3,834.31	4.70	1,359.49	1,223.21	136.28	9.976	
16,700.00	12,731.07	16,478.55	12,579.63	73.08	69.85	83.59	-3,934.30	4.70	1,359.61	1,220.37	139.24	9.765	
16,800.00	12,731.71	16,578.54	12,579.26	74.53	71.36	83.55	-4,034.30	4.69	1,359.74	1,217.52	142.22	9.561	
16,900.00	12,732.35	16,678.54	12,578.90	75.98	72.87	83.51	-4,134.29	4.68	1,359.86	1,214.66	145.20	9.365	
17,000.00	12,732.99	16,778.53	12,578.54	77.45	74.39	83.47	-4,234.29	4.67	1,359.99	1,211.79	148.20	9.177	
17,100.00	12,733.64	16,878.53	12,578.17	78.92	75.91	83.42	-4,334.28	4.66	1,360.11	1,208.91	151.20	8.995	
17,200.00	12,734.28	16,978.52	12,577.81	80.39	77.44	83.38	-4,434.28	4.65	1,360.24	1,206.02	154.22	8.820	
17,300.00	12,734.92	17,078.52	12,577.45	81.87	78.97	83.34	-4,534.27	4.65	1,360.37	1,203.12	157.24	8.651	
17,400.00	12,735.57	17,178.51	12,577.09	83.36	80.50	83.30	-4,634.26	4.64	1,360.49	1,200.22	160.27	8.489	
17,500.00	12,736.21	17,278.51	12,576.72	84.85	82.04	83.26	-4,734.26	4.63	1,360.62	1,197.31	163.31	8.331	
17,600.00	12,736.85	17,378.50	12,576.36	86.35	83.59	83.21	-4,834.25	4.62	1,360.75	1,194.39	166.36	8.180	
17,700.00	12,737.49	17,478.50	12,576.00	87.85	85.13	83.17	-4,934.25	4.61	1,360.88	1,191.47	169.41	8.033	
17,800.00	12,738.14	17,578.49	12,575.63	89.36	86.68	83.13	-5,034.24	4.61	1,361.01	1,188.55	172.47	7.891	
17,900.00	12,738.78	17,678.49	12,575.27	90.87	88.23	83.09	-5,134.24	4.60	1,361.15	1,185.61	175.53	7.754	
18,000.00	12,739.42	17,778.48	12,574.91	92.39	89.79	83.05	-5,234.23	4.59	1,361.28	1,182.68	178.60	7.622	
18,100.00	12,740.07	17,878.48	12,574.54	93.91	91.35	83.00	-5,334.22	4.58	1,361.41	1,179.73	181.68	7.494	
18,200.00	12,740.71	17,978.47	12,574.18	95.43	92.91	82.96	-5,434.22	4.57	1,361.55	1,176.79	184.76	7.369	
18,300.00	12,741.35	18,078.47	12,573.82	96.96	94.47	82.92	-5,534.21	4.57	1,361.68	1,173.84	187.84	7.249	
18,400.00	12,741.99	18,178.46	12,573.46	98.49	96.04	82.88	-5,634.21	4.56	1,361.82	1,170.89	190.93	7.133	
18,500.00	12,742.64	18,278.46	12,573.09	100.02	97.61	82.84	-5,734.20	4.55	1,361.95	1,167.93	194.02	7.020	
18,600.00	12,743.28	18,378.45	12,572.73	101.56	99.18	82.79	-5,834.20	4.54	1,362.09	1,164.97	197.12	6.910	
18,700.00	12,743.92	18,478.45	12,572.37	103.10	100.75	82.75	-5,934.19	4.53	1,362.23	1,162.01	200.22	6.804	
18,800.00	12,744.57	18,578.44	12,572.00	104.64	102.32	82.71	-6,034.18	4.52	1,362.36	1,159.04	203.32	6.700	
18,900.00	12,745.21	18,678.44	12,571.64	106.19	103.90	82.67	-6,134.18	4.52	1,362.50	1,156.07	206.43	6.600	
19,000.00	12,745.85	18,778.43	12,571.28	107.74	105.47	82.63	-6,234.17	4.51	1,362.64	1,153.10	209.54	6.503	
19,100.00	12,746.49	18,878.43	12,570.92	109.29	107.05	82.59	-6,334.17	4.50	1,362.78	1,150.13	212.66	6.408	
19,200.00	12,747.14	18,978.42	12,570.55	110.84	108.64	82.54	-6,434.16	4.49	1,362.93	1,147.15	215.77	6.317	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 81H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
19,300.00	12,747.78	19,078.42	12,570.19	112.40	110.22	82.50	-6,534.16	4.48	1,363.07	1,144.18	218.89	6.227			
19,400.00	12,748.42	19,178.41	12,569.83	113.96	111.80	82.46	-6,634.15	4.48	1,363.21	1,141.20	222.01	6.140			
19,500.00	12,749.07	19,278.41	12,569.46	115.51	113.39	82.42	-6,734.14	4.47	1,363.35	1,138.22	225.14	6.056			
19,600.00	12,749.71	19,378.40	12,569.10	117.08	114.97	82.38	-6,834.14	4.46	1,363.50	1,135.24	228.26	5.973			
19,700.00	12,750.35	19,478.40	12,568.74	118.64	116.56	82.33	-6,934.13	4.45	1,363.64	1,132.25	231.39	5.893			
19,800.00	12,750.99	19,578.39	12,568.38	120.21	118.15	82.29	-7,034.13	4.44	1,363.79	1,129.27	234.52	5.815			
19,900.00	12,751.64	19,678.39	12,568.01	121.77	119.74	82.25	-7,134.12	4.44	1,363.93	1,126.28	237.65	5.739			
20,000.00	12,752.28	19,778.38	12,567.65	123.34	121.33	82.21	-7,234.12	4.43	1,364.08	1,123.30	240.79	5.665			
20,100.00	12,752.92	19,878.38	12,567.29	124.91	122.93	82.17	-7,334.11	4.42	1,364.23	1,120.31	243.92	5.593			
20,200.00	12,753.57	19,978.37	12,566.92	126.49	124.52	82.13	-7,434.10	4.41	1,364.38	1,117.32	247.06	5.522			
20,300.00	12,754.21	20,078.37	12,566.56	128.06	126.11	82.08	-7,534.10	4.40	1,364.53	1,114.33	250.20	5.454			
20,400.00	12,754.85	20,178.36	12,566.20	129.64	127.71	82.04	-7,634.09	4.39	1,364.68	1,111.34	253.34	5.387			
20,500.00	12,755.49	20,278.36	12,565.83	131.21	129.31	82.00	-7,734.09	4.39	1,364.83	1,108.35	256.48	5.321			
20,600.00	12,756.14	20,378.35	12,565.47	132.79	130.90	81.96	-7,834.08	4.38	1,364.98	1,105.36	259.62	5.258			
20,700.00	12,756.78	20,478.35	12,565.11	134.37	132.50	81.92	-7,934.08	4.37	1,365.13	1,102.37	262.77	5.195			
20,800.00	12,757.42	20,578.34	12,564.75	135.95	134.10	81.87	-8,034.07	4.36	1,365.28	1,099.37	265.91	5.134			
20,900.00	12,758.07	20,678.34	12,564.38	137.53	135.70	81.83	-8,134.06	4.35	1,365.44	1,096.38	269.06	5.075			
21,000.00	12,758.71	20,778.33	12,564.02	139.12	137.30	81.79	-8,234.06	4.35	1,365.59	1,093.39	272.20	5.017			
21,100.00	12,759.35	20,878.33	12,563.66	140.70	138.91	81.75	-8,334.05	4.34	1,365.75	1,090.39	275.35	4.960			
21,200.00	12,760.00	20,978.32	12,563.29	142.29	140.51	81.71	-8,434.05	4.33	1,365.90	1,087.40	278.50	4.904			
21,300.00	12,760.64	21,078.32	12,562.93	143.87	142.11	81.67	-8,534.04	4.32	1,366.06	1,084.41	281.65	4.850			
21,400.00	12,761.28	21,178.31	12,562.57	145.46	143.72	81.62	-8,634.04	4.31	1,366.22	1,081.41	284.80	4.797			
21,500.00	12,761.92	21,278.31	12,562.21	147.05	145.32	81.58	-8,734.03	4.31	1,366.37	1,078.42	287.95	4.745			
21,600.00	12,762.57	21,378.30	12,561.84	148.64	146.93	81.54	-8,834.02	4.30	1,366.53	1,075.43	291.11	4.694			
21,700.00	12,763.21	21,478.30	12,561.48	150.23	148.53	81.50	-8,934.02	4.29	1,366.69	1,072.43	294.26	4.645			
21,800.00	12,763.85	21,578.29	12,561.12	151.82	150.14	81.46	-9,034.01	4.28	1,366.85	1,069.44	297.41	4.596			
21,900.00	12,764.50	21,678.29	12,560.75	153.41	151.75	81.42	-9,134.01	4.27	1,367.01	1,066.45	300.57	4.548			
22,000.00	12,765.14	21,778.28	12,560.39	155.01	153.35	81.37	-9,234.00	4.26	1,367.18	1,063.45	303.72	4.501			
22,100.00	12,765.78	21,878.28	12,560.03	156.60	154.96	81.33	-9,334.00	4.26	1,367.34	1,060.46	306.88	4.456			
22,200.00	12,766.42	21,978.27	12,559.67	158.20	156.57	81.29	-9,433.99	4.25	1,367.50	1,057.47	310.03	4.411			
22,300.00	12,767.07	22,078.27	12,559.30	159.79	158.18	81.25	-9,533.98	4.24	1,367.66	1,054.48	313.19	4.367			
22,400.00	12,767.71	22,178.26	12,558.94	161.39	159.79	81.21	-9,633.98	4.23	1,367.83	1,051.49	316.34	4.324			
22,500.00	12,768.35	22,278.26	12,558.58	162.99	161.40	81.17	-9,733.97	4.22	1,367.99	1,048.49	319.50	4.282			
22,600.00	12,769.00	22,378.25	12,558.21	164.59	163.01	81.13	-9,833.97	4.22	1,368.16	1,045.50	322.66	4.240			
22,700.00	12,769.64	22,478.25	12,557.85	166.18	164.62	81.08	-9,933.96	4.21	1,368.33	1,042.51	325.81	4.200			
22,787.39	12,770.20	22,565.63	12,557.53	167.31	165.79	81.05	-10,021.35	4.20	1,368.47	1,040.46	328.01	4.172			
22,787.99	12,770.20	22,566.23	12,557.53	167.31	165.80	81.05	-10,021.94	4.20	1,368.47	1,040.45	328.03	4.172 SF			

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 82H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
0.00	0.00	0.40	0.40	0.00	0.00	-90.43	-0.45	-60.01	60.01	59.83	0.18	336.267			
100.00	100.00	100.40	100.40	0.09	0.09	-90.43	-0.45	-60.01	60.01	59.38	0.63	95.561			
200.00	200.00	200.40	200.40	0.31	0.31	-90.43	-0.45	-60.01	60.01	58.93	1.08	55.694			
300.00	300.00	300.40	300.40	0.54	0.54	-90.43	-0.45	-60.01	60.01	58.48	1.53	39.299			
400.00	400.00	400.40	400.40	0.76	0.76	-90.43	-0.45	-60.01	60.01	58.04	1.98	30.361			
500.00	500.00	500.40	500.40	0.99	0.99	-90.43	-0.45	-60.01	60.01	57.59	2.43	24.736			
600.00	600.00	600.40	600.40	1.21	1.21	-90.43	-0.45	-60.01	60.01	57.14	2.88	20.869			
700.00	700.00	700.40	700.40	1.44	1.44	-90.43	-0.45	-60.01	60.01	56.69	3.33	18.048			
800.00	800.00	800.40	800.40	1.66	1.66	-90.43	-0.45	-60.01	60.01	56.24	3.77	15.898			
900.00	900.00	900.40	900.40	1.89	1.89	-90.43	-0.45	-60.01	60.01	55.79	4.22	14.206			
1,000.00	1,000.00	1,000.40	1,000.40	2.11	2.11	-90.43	-0.45	-60.01	60.01	55.34	4.67	12.840			
1,100.00	1,100.00	1,100.40	1,100.40	2.34	2.34	-90.43	-0.45	-60.01	60.01	54.89	5.12	11.713			
1,200.00	1,200.00	1,200.40	1,200.40	2.56	2.56	-90.43	-0.45	-60.01	60.01	54.44	5.57	10.769			
1,300.00	1,300.00	1,300.40	1,300.40	2.79	2.79	-90.43	-0.45	-60.01	60.01	53.99	6.02	9.965			
1,400.00	1,400.00	1,400.40	1,400.40	3.01	3.01	-90.43	-0.45	-60.01	60.01	53.54	6.47	9.273			
1,500.00	1,500.00	1,500.40	1,500.40	3.24	3.24	-90.43	-0.45	-60.01	60.01	53.09	6.92	8.670			
1,600.00	1,600.00	1,600.40	1,600.40	3.46	3.46	-90.43	-0.45	-60.01	60.01	52.64	7.37	8.142			
1,700.00	1,700.00	1,700.40	1,700.40	3.69	3.69	-90.43	-0.45	-60.01	60.01	52.19	7.82	7.674			
1,800.00	1,800.00	1,800.40	1,800.40	3.91	3.91	-90.43	-0.45	-60.01	60.01	51.74	8.27	7.257			
1,900.00	1,900.00	1,900.40	1,900.40	4.13	4.14	-90.43	-0.45	-60.01	60.01	51.29	8.72	6.882			
2,000.00	2,000.00	2,000.40	2,000.40	4.36	4.36	-90.43	-0.45	-60.01	60.01	50.84	9.17	6.545			
2,100.00	2,100.00	2,100.40	2,100.40	4.58	4.59	-90.43	-0.45	-60.01	60.01	50.39	9.62	6.239			
2,200.00	2,200.00	2,200.40	2,200.40	4.81	4.81	-90.43	-0.45	-60.01	60.01	49.94	10.07	5.961			
2,300.00	2,300.00	2,300.40	2,300.40	5.03	5.03	-90.43	-0.45	-60.01	60.01	49.49	10.52	5.706			
2,400.00	2,400.00	2,400.40	2,400.40	5.26	5.26	-90.43	-0.45	-60.01	60.01	49.04	10.97	5.472 CC, ES			
2,500.00	2,500.00	2,500.40	2,500.40	5.48	5.48	-90.43	-0.45	-60.01	60.01	48.59	11.42	5.238			
2,600.00	2,599.99	2,600.39	2,600.39	5.70	5.71	-172.54	-0.45	-60.01	60.88	49.47	11.83	5.365			
2,700.00	2,699.96	2,700.36	2,700.36	5.90	5.93	-172.84	-0.45	-60.01	63.47	51.64	12.26	5.531			
2,800.00	2,799.86	2,800.27	2,800.27	6.10	6.16	-173.29	-0.45	-60.01	67.80	55.55	12.67	5.759			
2,900.00	2,899.68	2,901.37	2,901.37	6.31	6.37	-173.87	-0.45	-59.11	72.99	60.31	13.07	5.978			
3,000.00	2,999.37	3,002.57	3,002.53	6.53	6.57	-174.55	-0.45	-56.43	78.15	65.07	13.47	6.182			
3,100.00	3,098.90	3,103.85	3,103.71	6.75	6.78	-175.32	-0.45	-51.95	83.29	69.82	13.87	6.374			
3,200.00	3,198.26	3,205.23	3,204.89	6.97	6.98	-176.16	-0.45	-45.69	88.43	74.56	14.27	6.555			
3,300.00	3,297.40	3,306.69	3,306.03	7.20	7.20	-177.06	-0.45	-37.62	93.56	79.29	14.67	6.726			
3,400.00	3,396.30	3,408.25	3,407.10	7.45	7.42	-178.01	-0.45	-27.75	98.70	84.02	15.08	6.887			
3,500.00	3,494.93	3,509.71	3,507.89	7.70	7.64	-179.01	-0.45	-16.12	103.85	88.77	15.51	7.041			
3,600.00	3,593.41	3,609.55	3,606.99	7.97	7.87	-179.95	-0.45	-3.95	109.18	93.68	15.94	7.185			
3,700.00	3,691.89	3,709.39	3,706.09	8.24	8.10	-179.20	-0.45	8.22	114.55	98.61	16.38	7.322			
3,800.00	3,790.37	3,809.23	3,805.19	8.52	8.34	-178.43	-0.45	20.38	119.93	103.55	16.82	7.451			
3,900.00	3,888.85	3,909.08	3,904.29	8.81	8.58	-177.72	-0.45	32.55	125.34	108.52	17.27	7.573			
4,000.00	3,987.33	4,008.92	4,003.38	9.10	8.82	-177.07	-0.45	44.72	130.76	113.49	17.72	7.688			
4,100.00	4,085.82	4,108.76	4,102.48	9.39	9.07	-176.47	-0.45	56.89	136.20	118.48	18.17	7.796			
4,200.00	4,184.30	4,208.60	4,201.58	9.70	9.32	-175.92	-0.45	69.05	141.65	123.48	18.63	7.899			
4,300.00	4,282.78	4,308.45	4,300.68	10.00	9.57	-175.41	-0.45	81.22	147.11	128.49	19.08	7.995			
4,400.00	4,381.26	4,408.29	4,399.78	10.31	9.83	-174.94	-0.45	93.39	152.59	133.50	19.55	8.087			
4,500.00	4,479.74	4,508.13	4,498.88	10.62	10.09	-174.50	-0.45	105.56	158.07	138.53	20.01	8.174			
4,600.00	4,578.22	4,607.97	4,597.97	10.94	10.35	-174.09	-0.45	117.73	163.56	143.55	20.48	8.256			
4,700.00	4,676.70	4,707.81	4,697.07	11.25	10.61	-173.70	-0.45	129.89	169.07	148.59	20.95	8.334			
4,800.00	4,775.18	4,807.66	4,796.17	11.57	10.87	-173.34	-0.45	142.06	174.57	153.63	21.42	8.408			
4,900.00	4,873.66	4,907.50	4,895.27	11.90	11.14	-173.00	-0.45	154.23	180.09	158.67	21.89	8.478			
5,000.00	4,972.14	5,007.34	4,994.37	12.22	11.40	-172.68	-0.45	166.40	185.61	163.71	22.37	8.544			
5,100.00	5,070.62	5,107.18	5,093.46	12.55	11.67	-172.38	-0.45	178.56	191.13	168.76					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 82H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)				Between Centres (usft)	Between Ellipses (usft)
5,200.00	5,169.10	5,207.03	5,192.56	12.88	11.94	172.10	-0.45	190.73	196.66	173.82	8.608		
5,300.00	5,267.58	5,306.87	5,291.66	13.21	12.22	171.83	-0.45	202.90	202.20	178.87	8.668		
5,400.00	5,366.07	5,406.71	5,390.76	13.54	12.49	171.58	-0.45	215.07	207.74	183.93	8.725		
5,500.00	5,464.55	5,506.55	5,489.86	13.87	12.76	171.34	-0.45	227.23	213.28	188.99	8.780		
5,600.00	5,563.03	5,606.40	5,588.96	14.21	13.04	171.11	-0.45	239.40	218.83	194.05	8.832		
5,700.00	5,661.51	5,706.24	5,688.05	14.54	13.31	170.89	-0.45	251.57	224.38	199.12	8.882		
5,800.00	5,759.99	5,806.08	5,787.15	14.88	13.59	170.69	-0.45	263.74	229.93	204.18	8.930		
5,900.00	5,858.47	5,905.92	5,886.25	15.22	13.87	170.49	-0.45	275.91	235.49	209.25	8.975		
6,000.00	5,956.95	6,005.77	5,985.35	15.56	14.15	170.30	-0.45	288.07	241.05	214.32	9.018		
6,100.00	6,055.43	6,105.61	6,084.45	15.90	14.43	170.12	-0.45	300.24	246.61	219.39	9.060		
6,200.00	6,153.91	6,205.45	6,183.54	16.24	14.71	169.95	-0.45	312.41	252.17	224.46	9.100		
6,300.00	6,252.39	6,305.29	6,282.64	16.59	14.99	169.79	-0.45	324.58	257.74	229.53	9.138		
6,400.00	6,350.87	6,405.13	6,381.74	16.93	15.27	169.63	-0.45	336.74	263.30	234.60	9.174		
6,500.00	6,449.35	6,504.98	6,480.84	17.27	15.55	169.48	-0.45	348.91	268.87	239.68	9.209		
6,600.00	6,547.83	6,604.82	6,579.94	17.62	15.83	169.34	-0.45	361.08	274.44	244.75	9.243		
6,700.00	6,646.32	6,704.66	6,679.03	17.96	16.12	169.20	-0.45	373.25	280.02	249.83	9.275		
6,800.00	6,744.80	6,804.50	6,778.13	18.31	16.40	169.07	-0.45	385.42	285.59	254.90	9.306		
6,900.00	6,843.28	6,904.35	6,877.23	18.66	16.69	168.94	-0.45	397.58	291.17	259.98	9.336		
7,000.00	6,941.76	7,004.19	6,976.33	19.00	16.97	168.82	-0.45	409.75	296.74	265.06	9.365		
7,100.00	7,040.24	7,104.03	7,075.43	19.35	17.26	168.70	-0.45	421.92	302.32	270.14	9.393		
7,200.00	7,138.72	7,203.87	7,174.53	19.70	17.54	168.58	-0.45	434.09	307.90	275.22	9.420		
7,300.00	7,237.20	7,303.72	7,273.62	20.05	17.83	168.47	-0.45	446.25	313.48	280.29	9.445		
7,400.00	7,335.68	7,403.56	7,372.72	20.40	18.12	168.37	-0.45	458.42	319.07	285.37	9.470		
7,500.00	7,434.16	7,503.40	7,471.82	20.75	18.40	168.26	-0.45	470.59	324.65	290.45	9.494		
7,600.00	7,532.64	7,603.24	7,570.92	21.10	18.69	168.16	-0.45	482.76	330.23	295.53	9.517		
7,700.00	7,631.12	7,703.09	7,670.02	21.45	18.98	168.07	-0.45	494.92	335.82	300.61	9.539		
7,800.00	7,729.60	7,802.93	7,769.11	21.80	19.27	167.97	-0.45	507.09	341.40	305.70	9.561		
7,900.00	7,828.09	7,902.77	7,868.21	22.15	19.55	167.88	-0.45	519.26	346.99	310.78	9.582		
8,000.00	7,926.57	8,002.61	7,967.31	22.50	19.84	167.80	-0.45	531.43	352.58	315.86	9.602		
8,100.00	8,025.05	8,102.45	8,066.41	22.85	20.13	167.71	-0.45	543.60	358.17	320.94	9.621		
8,200.00	8,123.53	8,202.30	8,165.51	23.21	20.42	167.63	-0.45	555.76	363.76	326.02	9.640		
8,300.00	8,222.01	8,302.14	8,264.61	23.56	20.71	167.55	-0.45	567.93	369.35	331.11	9.658		
8,400.00	8,320.49	8,401.98	8,363.70	23.91	21.00	167.48	-0.45	580.10	374.94	336.19	9.676		
8,500.00	8,418.97	8,501.82	8,462.80	24.26	21.29	167.40	-0.45	592.27	380.53	341.27	9.693		
8,600.00	8,517.45	8,601.67	8,561.90	24.62	21.58	167.33	-0.45	604.43	386.12	346.35	9.710		
8,700.00	8,615.93	8,701.51	8,661.00	24.97	21.87	167.26	-0.45	616.60	391.71	351.44	9.726		
8,800.00	8,714.41	8,801.35	8,760.10	25.33	22.16	167.19	-0.45	628.77	397.31	356.52	9.742		
8,900.00	8,812.89	8,901.19	8,859.19	25.68	22.45	167.12	-0.45	640.94	402.90	361.61	9.757		
9,000.00	8,911.37	9,001.04	8,958.29	26.03	22.74	167.06	-0.45	653.11	408.49	366.69	9.772		
9,100.00	9,009.85	9,100.88	9,057.39	26.39	23.04	167.00	-0.45	665.27	414.09	371.77	9.786		
9,200.00	9,108.34	9,200.72	9,156.49	26.74	23.33	166.93	-0.45	677.44	419.68	376.86	9.800		
9,300.00	9,206.82	9,300.56	9,255.59	27.10	23.62	166.87	-0.45	689.61	425.28	381.94	9.813		
9,400.00	9,305.30	9,400.41	9,354.68	27.45	23.91	166.82	-0.45	701.78	430.87	387.03	9.827		
9,500.00	9,403.78	9,500.25	9,453.78	27.81	24.20	166.76	-0.45	713.94	436.47	392.11	9.839		
9,600.00	9,502.26	9,600.09	9,552.88	28.16	24.49	166.71	-0.45	726.11	442.07	397.20	9.852		
9,700.00	9,600.74	9,699.93	9,651.98	28.52	24.79	166.65	-0.45	738.28	447.67	402.28	9.864		
9,800.00	9,699.22	9,799.78	9,751.08	28.88	25.08	166.60	-0.45	750.45	453.26	407.37	9.876		
9,880.00	9,778.00	9,879.65	9,830.36	29.16	25.31	166.56	-0.45	760.18	457.74	411.43	9.885		
9,900.00	9,797.70	9,899.62	9,850.18	29.22	25.37	166.55	-0.45	762.61	458.84	412.44	9.888		
10,000.00	9,896.29	9,999.49	9,949.30	29.49	25.66	166.49	-0.45	774.79	463.85	416.98	9.897		
10,100.00	9,995.02	10,099.40	10,048.47	29.76	25.96	166.40	-0.45	786.96	468.01	420.68	9.888		
10,200.00	10,093.88	10,199.34	10,147.67	30.01	26.25	166.29	-0.45	799.14	471.32	423.52	9.861		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 82H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	10,192.87	10,299.30	10,246.88	30.27	26.54	166.15	-0.45	811.32	473.79	425.52	48.27	9.816	
10,400.00	10,291.98	10,398.75	10,345.59	30.51	26.83	165.99	-0.45	823.44	475.42	426.69	48.73	9.756	
10,500.00	10,391.20	10,495.03	10,441.21	30.75	27.05	165.84	-0.45	834.65	476.70	427.56	49.14	9.701	
10,600.00	10,490.53	10,591.30	10,536.92	30.98	27.26	165.70	-0.45	845.06	477.92	428.37	49.55	9.646	
10,700.00	10,589.95	10,687.57	10,632.70	31.21	27.47	165.57	-0.45	854.67	479.07	429.12	49.95	9.592	
10,800.00	10,689.46	10,783.83	10,728.57	31.43	27.67	165.45	-0.45	863.48	480.16	429.82	50.34	9.538	
10,900.00	10,789.06	10,880.10	10,824.50	31.64	27.87	165.34	-0.45	871.47	481.18	430.45	50.73	9.486	
11,000.00	10,888.73	10,976.35	10,920.49	31.84	28.06	165.25	-0.45	878.66	482.13	431.02	51.10	9.434	
11,100.00	10,988.47	11,072.61	11,016.53	32.04	28.25	165.17	-0.45	885.05	483.01	431.53	51.48	9.383	
11,200.00	11,088.27	11,168.86	11,112.62	32.23	28.44	165.10	-0.45	890.62	483.83	431.98	51.84	9.332	
11,300.00	11,188.11	11,265.11	11,208.75	32.42	28.62	165.04	-0.45	895.39	484.57	432.37	52.20	9.282	
11,400.00	11,288.01	11,361.36	11,304.92	32.59	28.79	165.00	-0.45	899.35	485.25	432.70	52.56	9.233	
11,500.00	11,387.94	11,457.60	11,401.11	32.77	28.97	164.96	-0.45	902.51	485.86	432.96	52.90	9.184	
11,600.00	11,487.89	11,553.85	11,497.32	32.93	29.13	164.94	-0.45	904.85	486.40	433.16	53.24	9.135	
11,700.00	11,587.87	11,650.08	11,593.55	33.09	29.29	164.93	-0.45	906.39	486.87	433.29	53.58	9.087	
11,800.00	11,687.87	11,746.32	11,689.78	33.24	29.45	164.93	-0.45	907.12	487.27	433.36	53.91	9.039	
11,880.00	11,767.87	11,824.81	11,768.27	33.36	29.59	-113.06	-0.45	907.18	487.47	433.29	54.19	8.996	
11,900.00	11,787.87	11,844.81	11,788.27	33.39	29.63	-113.06	-0.45	907.18	487.47	433.21	54.26	8.984	
12,000.00	11,887.87	11,944.81	11,888.27	33.55	29.81	-113.06	-0.45	907.18	487.47	432.82	54.66	8.919	
12,100.00	11,987.87	12,044.81	11,988.27	33.72	29.99	-113.06	-0.45	907.18	487.47	432.42	55.05	8.855	
12,103.69	11,991.55	12,048.49	11,991.95	33.72	30.00	-113.06	-0.45	907.18	487.47	432.41	55.06	8.853	
12,200.00	12,087.87	12,129.30	12,072.71	33.88	30.14	-113.27	-2.31	907.18	488.45	433.10	55.35	8.825	
12,247.39	12,135.26	12,164.40	12,107.59	33.96	30.20	-113.68	-6.20	907.18	490.56	435.08	55.47	8.843	
12,250.00	12,137.87	12,166.32	12,109.49	33.97	30.20	66.28	-6.47	907.18	490.71	435.23	55.48	8.845	
12,300.00	12,187.79	12,200.00	12,142.65	34.04	30.26	65.57	-12.32	907.18	493.36	437.82	55.54	8.883	
12,350.00	12,237.32	12,239.43	12,180.96	34.10	30.33	64.93	-21.62	907.18	495.56	439.91	55.65	8.905	
12,400.00	12,286.07	12,275.76	12,215.62	34.16	30.39	64.46	-32.51	907.19	497.31	441.63	55.68	8.932	
12,450.00	12,333.67	12,311.99	12,249.42	34.22	30.45	64.13	-45.54	907.19	498.56	442.89	55.67	8.956	
12,500.00	12,379.76	12,350.00	12,283.92	34.27	30.52	63.93	-61.46	907.19	499.30	443.63	55.68	8.968	
12,550.00	12,423.99	12,384.30	12,314.09	34.31	30.57	63.88	-77.77	907.19	499.51	443.93	55.57	8.988	
12,600.00	12,466.03	12,420.44	12,344.76	34.36	30.64	63.97	-96.88	907.19	499.18	443.68	55.50	8.994	
12,650.00	12,505.54	12,450.00	12,368.91	34.40	30.69	64.15	-113.92	907.19	498.39	443.16	55.24	9.023	
12,700.00	12,542.24	12,492.87	12,402.30	34.43	30.77	64.55	-140.79	907.19	496.97	441.63	55.34	8.981	
12,750.00	12,575.84	12,529.23	12,428.98	34.47	30.84	65.05	-165.48	907.20	495.11	439.85	55.27	8.958	
12,800.00	12,606.09	12,565.73	12,454.14	34.52	30.91	65.68	-191.93	907.20	492.80	437.58	55.22	8.924	
12,850.00	12,632.75	12,600.00	12,476.17	34.56	30.98	66.42	-218.16	907.20	490.08	434.94	55.14	8.888	
12,900.00	12,655.63	12,639.33	12,499.48	34.62	31.07	67.36	-249.83	907.20	486.97	431.73	55.24	8.815	
12,950.00	12,674.55	12,676.50	12,519.46	34.68	31.16	68.41	-281.16	907.21	483.56	428.24	55.32	8.741	
13,000.00	12,689.36	12,713.98	12,537.51	34.76	31.25	69.59	-314.00	907.21	479.90	424.44	55.46	8.653	
13,050.00	12,699.96	12,750.00	12,552.80	34.85	31.35	70.85	-346.61	907.21	476.08	420.47	55.61	8.561	
13,100.00	12,706.26	12,790.08	12,567.36	34.96	31.47	72.33	-383.94	907.22	472.15	416.22	55.93	8.442	
13,143.71	12,708.20	12,823.90	12,577.60	35.07	31.58	73.69	-416.17	907.22	468.72	412.50	56.22	8.337	
13,200.00	12,708.56	12,868.57	12,588.17	35.23	31.74	74.91	-459.56	907.22	465.11	408.48	56.63	8.213	
13,300.00	12,709.21	12,950.00	12,598.64	35.58	32.07	76.10	-540.25	907.23	462.04	404.77	57.26	8.069	
13,334.09	12,709.43	12,979.62	12,599.59	35.71	32.20	76.19	-569.85	907.23	461.83	404.34	57.49	8.033	
13,400.00	12,709.85	13,044.55	12,599.44	36.00	32.52	76.12	-634.78	907.24	461.96	403.88	58.09	7.953	
13,500.00	12,710.49	13,144.55	12,599.17	36.49	33.06	76.01	-734.77	907.24	462.18	403.02	59.16	7.812	
13,600.00	12,711.14	13,244.54	12,598.91	37.05	33.68	75.90	-834.77	907.25	462.39	402.01	60.38	7.658	
13,700.00	12,711.78	13,344.54	12,598.64	37.67	34.36	75.79	-934.76	907.26	462.61	400.87	61.74	7.493	
13,800.00	12,712.42	13,444.53	12,598.38	38.36	35.11	75.68	-1,034.76	907.27	462.83	399.61	63.22	7.321	
13,900.00	12,713.06	13,544.53	12,598.12	39.11	35.92	75.58	-1,134.76	907.28	463.05	398.22	64.82	7.143	
14,000.00	12,713.71	13,644.53	12,597.85	39.91	36.78	75.47	-1,234.75	907.29	463.27	396.73	66.54	6.963	

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Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 82H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
14,100.00	12,714.35	13,744.52	12,597.59	40.76	37.69	75.36	-1,334.75	907.30	463.49	395.14	68.35	6.781	
14,200.00	12,714.99	13,844.52	12,597.32	41.66	38.65	75.25	-1,434.74	907.30	463.72	393.46	70.26	6.600	
14,300.00	12,715.64	13,944.51	12,597.06	42.61	39.66	75.14	-1,534.74	907.31	463.94	391.69	72.25	6.421	
14,400.00	12,716.28	14,044.51	12,596.79	43.60	40.70	75.03	-1,634.73	907.32	464.17	389.85	74.33	6.245	
14,500.00	12,716.92	14,144.51	12,596.53	44.62	41.79	74.92	-1,734.73	907.33	464.40	387.93	76.47	6.073	
14,600.00	12,717.56	14,244.50	12,596.26	45.69	42.91	74.82	-1,834.72	907.34	464.63	385.95	78.68	5.905	
14,700.00	12,718.21	14,344.50	12,596.00	46.78	44.06	74.71	-1,934.72	907.35	464.87	383.92	80.95	5.743	
14,800.00	12,718.85	14,444.49	12,595.73	47.91	45.24	74.60	-2,034.72	907.35	465.10	381.83	83.27	5.585	
14,900.00	12,719.49	14,544.49	12,595.47	49.06	46.45	74.49	-2,134.71	907.36	465.34	379.69	85.64	5.433	
15,000.00	12,720.14	14,644.48	12,595.21	50.25	47.68	74.38	-2,234.71	907.37	465.58	377.51	88.06	5.277	
15,100.00	12,720.78	14,744.48	12,594.94	51.46	48.94	74.28	-2,334.70	907.38	465.82	375.29	90.52	5.146	
15,200.00	12,721.42	14,844.48	12,594.68	52.69	50.21	74.17	-2,434.70	907.39	466.06	373.04	93.02	5.010	
15,300.00	12,722.06	14,944.47	12,594.41	53.94	51.51	74.06	-2,534.69	907.40	466.30	370.75	95.55	4.880	
15,400.00	12,722.71	15,044.47	12,594.15	55.21	52.83	73.95	-2,634.69	907.41	466.55	368.43	98.12	4.755	
15,500.00	12,723.35	15,144.46	12,593.88	56.50	54.17	73.85	-2,734.68	907.41	466.79	366.08	100.71	4.635	
15,600.00	12,723.99	15,244.46	12,593.62	57.81	55.52	73.74	-2,834.68	907.42	467.04	363.71	103.33	4.520	
15,700.00	12,724.64	15,344.46	12,593.35	59.14	56.88	73.63	-2,934.68	907.43	467.29	361.31	105.98	4.409	
15,800.00	12,725.28	15,444.45	12,593.09	60.48	58.26	73.53	-3,034.67	907.44	467.54	358.90	108.64	4.304	
15,900.00	12,725.92	15,544.45	12,592.83	61.83	59.65	73.42	-3,134.67	907.45	467.79	356.47	111.33	4.202	
16,000.00	12,726.56	15,644.44	12,592.56	63.20	61.06	73.31	-3,234.66	907.46	468.05	354.02	114.03	4.104	
16,100.00	12,727.21	15,744.44	12,592.30	64.58	62.47	73.21	-3,334.66	907.46	468.31	351.55	116.76	4.011	
16,200.00	12,727.85	15,844.44	12,592.03	65.97	63.90	73.10	-3,434.65	907.47	468.56	349.07	119.50	3.921	
16,300.00	12,728.49	15,944.43	12,591.77	67.37	65.33	72.99	-3,534.65	907.48	468.82	346.57	122.25	3.835	
16,400.00	12,729.14	16,044.43	12,591.50	68.79	66.78	72.89	-3,634.64	907.49	469.08	344.07	125.01	3.752	
16,500.00	12,729.78	16,144.42	12,591.24	70.21	68.23	72.78	-3,734.64	907.50	469.35	341.55	127.79	3.673	
16,600.00	12,730.42	16,244.42	12,590.97	71.64	69.69	72.68	-3,834.63	907.51	469.61	339.03	130.58	3.596	
16,700.00	12,731.07	16,344.41	12,590.71	73.08	71.16	72.57	-3,934.63	907.52	469.88	336.50	133.38	3.523	
16,800.00	12,731.71	16,444.41	12,590.45	74.53	72.63	72.46	-4,034.63	907.52	470.14	333.95	136.19	3.452	
16,900.00	12,732.35	16,544.41	12,590.18	75.98	74.12	72.36	-4,134.62	907.53	470.41	331.41	139.01	3.384	
17,000.00	12,732.99	16,644.40	12,589.92	77.45	75.60	72.25	-4,234.62	907.54	470.68	328.85	141.83	3.319	
17,100.00	12,733.64	16,744.40	12,589.65	78.92	77.10	72.15	-4,334.61	907.55	470.96	326.29	144.66	3.256	
17,200.00	12,734.28	16,844.39	12,589.39	80.39	78.60	72.04	-4,434.61	907.56	471.23	323.73	147.50	3.195	
17,300.00	12,734.92	16,944.39	12,589.12	81.87	80.10	71.94	-4,534.60	907.57	471.51	321.16	150.35	3.136	
17,400.00	12,735.57	17,044.39	12,588.86	83.36	81.61	71.83	-4,634.60	907.57	471.78	318.58	153.20	3.080	
17,500.00	12,736.21	17,144.38	12,588.59	84.85	83.13	71.73	-4,734.59	907.58	472.06	316.01	156.05	3.025	
17,600.00	12,736.85	17,244.38	12,588.33	86.35	84.65	71.62	-4,834.59	907.59	472.34	313.43	158.91	2.972	
17,700.00	12,737.49	17,344.37	12,588.06	87.85	86.17	71.52	-4,934.59	907.60	472.62	310.85	161.78	2.921	
17,800.00	12,738.14	17,444.37	12,587.80	89.36	87.70	71.41	-5,034.58	907.61	472.91	308.26	164.64	2.872	
17,900.00	12,738.78	17,544.37	12,587.54	90.87	89.23	71.31	-5,134.58	907.62	473.19	305.68	167.51	2.825	
18,000.00	12,739.42	17,644.36	12,587.27	92.39	90.76	71.20	-5,234.57	907.63	473.48	303.09	170.39	2.779	
18,100.00	12,740.07	17,744.36	12,587.01	93.91	92.30	71.10	-5,334.57	907.63	473.77	300.50	173.26	2.734	
18,200.00	12,740.71	17,844.35	12,586.74	95.43	93.84	71.00	-5,434.56	907.64	474.06	297.91	176.14	2.691	
18,300.00	12,741.35	17,944.35	12,586.48	96.96	95.39	70.89	-5,534.56	907.65	474.35	295.32	179.02	2.650	
18,400.00	12,741.99	18,044.34	12,586.21	98.49	96.94	70.79	-5,634.55	907.66	474.64	292.74	181.90	2.609	
18,500.00	12,742.64	18,144.34	12,585.95	100.02	98.49	70.69	-5,734.55	907.67	474.93	290.15	184.79	2.570	
18,600.00	12,743.28	18,244.34	12,585.68	101.56	100.04	70.58	-5,834.55	907.68	475.23	287.56	187.67	2.532	
18,700.00	12,743.92	18,344.33	12,585.42	103.10	101.60	70.48	-5,934.54	907.68	475.53	284.97	190.56	2.495	
18,800.00	12,744.57	18,444.33	12,585.16	104.64	103.15	70.38	-6,034.54	907.69	475.83	282.38	193.44	2.460	
18,900.00	12,745.21	18,544.32	12,584.89	106.19	104.71	70.27	-6,134.53	907.70	476.13	279.80	196.33	2.425	
19,000.00	12,745.85	18,644.32	12,584.63	107.74	106.28	70.17	-6,234.53	907.71	476.43	277.21	199.22	2.392	
19,100.00	12,746.49	18,744.32	12,584.36	109.29	107.84	70.07	-6,334.52	907.72	476.73	274.63	202.10	2.359	
19,200.00	12,747.14	18,844.31	12,584.10	110.84	109.41	69.96	-6,434.52	907.73	477.04	272.05	204.99	2.327	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 82H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toothface (")	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
19,300.00	12,747.78	18,944.31	12,583.83	112.40	110.98	69.86	-6,534.51	907.73	477.34	269.47	207.88	2.296	
19,400.00	12,748.42	19,044.30	12,583.57	113.96	112.55	69.76	-6,634.51	907.74	477.65	266.89	210.76	2.266	
19,500.00	12,749.07	19,144.30	12,583.30	115.51	114.12	69.66	-6,734.51	907.75	477.96	264.31	213.65	2.237	
19,600.00	12,749.71	19,244.30	12,583.04	117.08	115.69	69.55	-6,834.50	907.76	478.27	261.74	216.53	2.209	
19,700.00	12,750.35	19,344.29	12,582.77	118.64	117.27	69.45	-6,934.50	907.77	478.58	259.17	219.42	2.181	
19,800.00	12,750.99	19,444.29	12,582.51	120.21	118.84	69.35	-7,034.49	907.78	478.90	256.60	222.30	2.154	
19,900.00	12,751.64	19,544.28	12,582.25	121.77	120.42	69.25	-7,134.49	907.79	479.21	254.03	225.19	2.128	
20,000.00	12,752.28	19,644.28	12,581.98	123.34	122.00	69.15	-7,234.48	907.79	479.53	251.46	228.07	2.103	
20,100.00	12,752.92	19,744.27	12,581.72	124.91	123.58	69.05	-7,334.48	907.80	479.85	248.90	230.95	2.078	
20,200.00	12,753.57	19,844.27	12,581.45	126.49	125.17	68.94	-7,434.47	907.81	480.17	246.34	233.83	2.054	
20,300.00	12,754.21	19,944.27	12,581.19	128.06	126.75	68.84	-7,534.47	907.82	480.49	243.79	236.70	2.030	
20,400.00	12,754.85	20,044.26	12,580.92	129.64	128.34	68.74	-7,634.47	907.83	480.82	241.24	239.58	2.007	
20,500.00	12,755.49	20,144.26	12,580.66	131.21	129.92	68.64	-7,734.46	907.84	481.14	238.69	242.45	1.984	
20,600.00	12,756.14	20,244.25	12,580.39	132.79	131.51	68.54	-7,834.46	907.84	481.47	236.14	245.33	1.963	
20,700.00	12,756.78	20,344.25	12,580.13	134.37	133.10	68.44	-7,934.45	907.85	481.79	233.60	248.20	1.941	
20,800.00	12,757.42	20,444.25	12,579.87	135.95	134.69	68.34	-8,034.45	907.86	482.12	231.06	251.07	1.920	
20,900.00	12,758.07	20,544.24	12,579.60	137.53	136.28	68.24	-8,134.44	907.87	482.45	228.52	253.93	1.900	
21,000.00	12,758.71	20,644.24	12,579.34	139.12	137.87	68.14	-8,234.44	907.88	482.79	225.99	256.80	1.880	
21,100.00	12,759.35	20,744.23	12,579.07	140.70	139.47	68.04	-8,334.43	907.89	483.12	223.46	259.66	1.861	
21,200.00	12,760.00	20,844.23	12,578.81	142.29	141.06	67.94	-8,434.43	907.90	483.45	220.93	262.52	1.842	
21,300.00	12,760.64	20,944.23	12,578.54	143.87	142.66	67.84	-8,534.43	907.90	483.79	218.41	265.38	1.823	
21,400.00	12,761.28	21,044.22	12,578.28	145.46	144.25	67.74	-8,634.42	907.91	484.13	215.89	268.24	1.805	
21,500.00	12,761.92	21,144.22	12,578.01	147.05	145.85	67.64	-8,734.42	907.92	484.47	213.37	271.09	1.787	
21,600.00	12,762.57	21,244.21	12,577.75	148.64	147.45	67.54	-8,834.41	907.93	484.81	210.86	273.95	1.770	
21,700.00	12,763.21	21,344.21	12,577.48	150.23	149.04	67.44	-8,934.41	907.94	485.15	208.36	276.80	1.753	
21,800.00	12,763.85	21,444.20	12,577.22	151.82	150.64	67.34	-9,034.40	907.95	485.50	205.85	279.64	1.736	
21,900.00	12,764.50	21,544.20	12,576.96	153.41	152.24	67.24	-9,134.40	907.95	485.84	203.35	282.49	1.720	
22,000.00	12,765.14	21,644.20	12,576.69	155.01	153.84	67.14	-9,234.39	907.96	486.19	200.86	285.33	1.704	
22,100.00	12,765.78	21,744.19	12,576.43	156.60	155.44	67.05	-9,334.39	907.97	486.54	198.37	288.17	1.688	
22,200.00	12,766.42	21,844.19	12,576.16	158.20	157.05	66.95	-9,434.38	907.98	486.89	195.88	291.01	1.673	
22,300.00	12,767.07	21,944.18	12,575.90	159.79	158.65	66.85	-9,534.38	907.99	487.24	193.40	293.84	1.658	
22,400.00	12,767.71	22,044.18	12,575.63	161.39	160.25	66.75	-9,634.38	908.00	487.59	190.92	296.67	1.644	
22,500.00	12,768.35	22,144.18	12,575.37	162.99	161.86	66.65	-9,734.37	908.01	487.94	188.44	299.50	1.629	
22,600.00	12,769.00	22,244.17	12,575.10	164.59	163.46	66.55	-9,834.37	908.01	488.30	185.97	302.32	1.615	
22,700.00	12,769.64	22,344.17	12,574.84	166.18	165.06	66.46	-9,934.36	908.02	488.66	183.51	305.15	1.601	
22,787.39	12,770.20	22,431.56	12,574.61	167.31	166.47	66.37	-10,021.75	908.03	488.97	181.67	307.30	1.591	
22,787.99	12,770.20	22,432.15	12,574.61	167.31	166.48	66.37	-10,022.35	908.03	488.97	181.66	307.31	1.591 SF	

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 91H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toothface (")	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)				Between Centres (usft)	Between Ellipses (usft)	
0.00	0.00	0.40	0.40	0.00	0.00	-90.42	-0.87	-119.99	119.99					
100.00	100.00	100.40	100.40	0.09	0.09	-90.42	-0.87	-119.99	119.99	119.81	0.18	672.364		
200.00	200.00	200.40	200.40	0.31	0.31	-90.42	-0.87	-119.99	119.99	119.37	0.63	191.073		
300.00	300.00	300.40	300.40	0.54	0.54	-90.42	-0.87	-119.99	119.99	118.92	1.08	111.360		
400.00	400.00	400.40	400.40	0.76	0.76	-90.42	-0.87	-119.99	119.99	118.47	1.53	78.578		
500.00	500.00	500.40	500.40	0.99	0.99	-90.42	-0.87	-119.99	119.99	118.02	1.98	60.707		
600.00	600.00	600.40	600.40	1.21	1.21	-90.42	-0.87	-119.99	119.99	117.57	2.43	49.459		
700.00	700.00	700.40	700.40	1.44	1.44	-90.42	-0.87	-119.99	119.99	117.12	2.88	41.727		
800.00	800.00	800.40	800.40	1.66	1.66	-90.42	-0.87	-119.99	119.99	116.67	3.33	36.086		
900.00	900.00	900.40	900.40	1.89	1.89	-90.42	-0.87	-119.99	119.99	116.22	3.77	31.789		
1,000.00	1,000.00	1,000.40	1,000.40	2.11	2.11	-90.42	-0.87	-119.99	119.99	115.77	4.22	28.406		
1,100.00	1,100.00	1,100.40	1,100.40	2.34	2.34	-90.42	-0.87	-119.99	119.99	115.32	4.67	25.674		
1,200.00	1,200.00	1,200.40	1,200.40	2.56	2.56	-90.42	-0.87	-119.99	119.99	114.87	5.12	23.421		
1,300.00	1,300.00	1,300.40	1,300.40	2.79	2.79	-90.42	-0.87	-119.99	119.99	114.42	5.57	21.532		
1,400.00	1,400.00	1,400.40	1,400.40	3.01	3.01	-90.42	-0.87	-119.99	119.99	113.97	6.02	19.925		
1,500.00	1,500.00	1,500.40	1,500.40	3.24	3.24	-90.42	-0.87	-119.99	119.99	113.52	6.47	18.541		
1,600.00	1,600.00	1,600.40	1,600.40	3.46	3.46	-90.42	-0.87	-119.99	119.99	113.07	6.92	17.336		
1,700.00	1,700.00	1,700.40	1,700.40	3.69	3.69	-90.42	-0.87	-119.99	119.99	112.62	7.37	16.279		
1,800.00	1,800.00	1,800.40	1,800.40	3.91	3.91	-90.42	-0.87	-119.99	119.99	112.17	7.82	15.343		
1,900.00	1,900.00	1,900.40	1,900.40	4.13	4.14	-90.42	-0.87	-119.99	119.99	111.72	8.27	14.509		
2,000.00	2,000.00	2,000.40	2,000.40	4.36	4.36	-90.42	-0.87	-119.99	119.99	111.27	8.72	13.761		
2,100.00	2,100.00	2,100.40	2,100.40	4.58	4.59	-90.42	-0.87	-119.99	119.99	110.82	9.17	13.087		
2,200.00	2,200.00	2,200.40	2,200.40	4.81	4.81	-90.42	-0.87	-119.99	119.99	110.37	9.62	12.475		
2,300.00	2,300.00	2,300.40	2,300.40	5.03	5.03	-90.42	-0.87	-119.99	119.99	109.92	10.07	11.918		
2,400.00	2,400.00	2,400.40	2,400.40	5.26	5.26	-90.42	-0.87	-119.99	119.99	109.48	10.52	11.409		
2,500.00	2,500.00	2,500.41	2,500.41	5.48	5.48	-90.42	-0.87	-119.99	119.99	109.03	10.97	10.941		
2,520.95	2,520.95	2,521.79	2,521.79	5.53	5.53	-172.41	-0.86	-119.95	119.99	108.93	11.06	10.852 CC		
2,600.00	2,599.99	2,602.44	2,602.44	5.70	5.70	-172.34	-0.59	-119.12	120.00	108.61	11.40	10.529		
2,700.00	2,699.96	2,704.48	2,704.44	5.90	5.91	-172.11	0.26	-116.52	120.05	108.24	11.80	10.171		
2,800.00	2,799.86	2,806.51	2,806.36	6.10	6.13	-171.74	1.66	-112.19	120.13	107.92	12.21	9.839		
2,900.00	2,899.68	2,908.53	2,908.19	6.31	6.35	-171.21	3.63	-106.14	120.25	107.64	12.61	9.533		
3,000.00	2,999.37	3,010.34	3,009.67	6.53	6.57	-170.55	6.15	-98.40	120.44	107.41	13.02	9.249 ES		
3,100.00	3,098.90	3,110.32	3,109.27	6.75	6.79	-169.92	8.84	-90.11	121.68	108.24	13.44	9.053		
3,200.00	3,198.26	3,210.27	3,208.84	6.97	7.01	-169.45	11.53	-81.82	124.66	110.79	13.86	8.991		
3,300.00	3,297.40	3,310.16	3,308.34	7.20	7.24	-169.15	14.22	-73.55	129.35	115.06	14.29	9.051		
3,400.00	3,396.30	3,409.95	3,407.76	7.45	7.47	-169.00	16.91	-65.27	135.76	121.04	14.72	9.222		
3,500.00	3,494.93	3,509.62	3,507.04	7.70	7.70	-169.00	19.59	-57.01	143.88	128.73	15.16	9.493		
3,600.00	3,593.41	3,609.21	3,606.26	7.97	7.93	-169.08	22.28	-48.76	152.86	137.26	15.59	9.803		
3,700.00	3,691.89	3,708.81	3,705.48	8.24	8.16	-169.15	24.96	-40.50	161.83	145.80	16.03	10.094		
3,800.00	3,790.37	3,808.41	3,804.70	8.52	8.40	-169.21	27.64	-32.25	170.80	154.33	16.48	10.367		
3,900.00	3,888.85	3,908.00	3,903.91	8.81	8.64	-169.26	30.32	-23.99	179.77	162.85	16.92	10.624		
4,000.00	3,987.33	4,007.60	4,003.13	9.10	8.87	-169.31	33.00	-15.73	188.75	171.38	17.37	10.867		
4,100.00	4,085.82	4,107.20	4,102.35	9.39	9.11	-169.35	35.69	-7.48	197.72	179.90	17.82	11.096		
4,200.00	4,184.30	4,206.79	4,201.57	9.70	9.36	-169.39	38.37	0.78	206.69	188.42	18.27	11.312		
4,300.00	4,282.78	4,306.39	4,300.78	10.00	9.60	-169.43	41.05	9.03	215.67	196.94	18.73	11.516		
4,400.00	4,381.26	4,405.99	4,400.00	10.31	9.84	-169.47	43.73	17.29	224.64	205.46	19.18	11.710		
4,500.00	4,479.74	4,505.58	4,499.22	10.62	10.09	-169.50	46.42	25.54	233.61	213.97	19.64	11.893		
4,600.00	4,578.22	4,605.18	4,598.44	10.94	10.33	-169.53	49.10	33.80	242.59	222.49	20.10	12.067		
4,700.00	4,676.70	4,704.78	4,697.65	11.25	10.58	-169.55	51.78	42.05	251.56	231.00	20.56	12.233		
4,800.00	4,775.18	4,804.37	4,796.87	11.57	10.82	-169.58	54.46	50.31	260.54	239.51	21.03	12.390		
4,900.00	4,873.66	4,903.97	4,896.09	11.90	11.07	-169.60	57.15	58.57	269.51	248.02	21.49	12.540		
5,000.00	4,972.14	5,003.57	4,995.31	12.22	11.32	-169.63	59.83	66.82	278.48	256.53	21.96	12.683		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 91H - OH - Plan #1														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,100.00	5,070.62	5,103.16	5,094.52	12.55	11.57	-169.65	62.51	75.08	287.46	265.03	22.42	12.819		
5,200.00	5,169.10	5,202.76	5,193.74	12.88	11.82	-169.67	65.19	83.33	296.43	273.54	22.89	12.949		
5,300.00	5,267.58	5,302.35	5,292.96	13.21	12.07	-169.68	67.88	91.59	305.40	282.04	23.36	13.073		
5,400.00	5,366.07	5,401.95	5,392.18	13.54	12.32	-169.70	70.56	99.84	314.38	290.55	23.83	13.192		
5,500.00	5,464.55	5,501.55	5,491.39	13.87	12.57	-169.72	73.24	108.10	323.35	299.05	24.30	13.305		
5,600.00	5,563.03	5,601.14	5,590.61	14.21	12.82	-169.73	75.92	116.35	332.33	307.55	24.77	13.414		
5,700.00	5,661.51	5,700.74	5,689.83	14.54	13.07	-169.75	78.61	124.61	341.30	316.05	25.25	13.519		
5,800.00	5,759.99	5,800.34	5,789.05	14.88	13.33	-169.76	81.29	132.87	350.28	324.56	25.72	13.619		
5,900.00	5,858.47	5,899.93	5,888.26	15.22	13.58	-169.78	83.97	141.12	359.25	333.06	26.19	13.715		
6,000.00	5,956.95	5,999.53	5,987.48	15.56	13.83	-169.79	86.65	149.38	368.22	341.55	26.67	13.807		
6,100.00	6,055.43	6,099.13	6,086.70	15.90	14.09	-169.80	89.33	157.63	377.20	350.05	27.14	13.896		
6,200.00	6,153.91	6,198.72	6,185.92	16.24	14.34	-169.81	92.02	165.89	386.17	358.55	27.62	13.981		
6,300.00	6,252.39	6,298.32	6,285.13	16.59	14.59	-169.82	94.70	174.14	395.15	367.05	28.10	14.064		
6,400.00	6,350.87	6,397.92	6,384.35	16.93	14.85	-169.83	97.38	182.40	404.12	375.55	28.57	14.143		
6,500.00	6,449.35	6,497.51	6,483.57	17.27	15.10	-169.84	100.06	190.65	413.09	384.04	29.05	14.219		
6,600.00	6,547.83	6,597.11	6,582.79	17.62	15.36	-169.85	102.75	198.91	422.07	392.54	29.53	14.293		
6,700.00	6,646.32	6,696.71	6,682.00	17.96	15.61	-169.86	105.43	207.17	431.04	401.03	30.01	14.364		
6,800.00	6,744.80	6,796.30	6,781.22	18.31	15.87	-169.87	108.11	215.42	440.02	409.53	30.49	14.432		
6,900.00	6,843.28	6,895.90	6,880.44	18.66	16.13	-169.88	110.79	223.68	448.99	418.02	30.97	14.499		
7,000.00	6,941.76	6,995.50	6,979.66	19.00	16.38	-169.89	113.48	231.93	457.97	426.52	31.45	14.563		
7,100.00	7,040.24	7,095.09	7,078.87	19.35	16.64	-169.89	116.16	240.19	466.94	435.01	31.93	14.625		
7,200.00	7,138.72	7,194.69	7,178.09	19.70	16.89	-169.90	118.84	248.44	475.91	443.51	32.41	14.684		
7,300.00	7,237.20	7,294.28	7,277.31	20.05	17.15	-169.91	121.52	256.70	484.89	452.00	32.89	14.742		
7,400.00	7,335.68	7,393.88	7,376.53	20.40	17.41	-169.92	124.21	264.95	493.86	460.49	33.37	14.799		
7,500.00	7,434.16	7,493.48	7,475.74	20.75	17.66	-169.92	126.89	273.21	502.84	468.98	33.85	14.853		
7,600.00	7,532.64	7,593.07	7,574.96	21.10	17.92	-169.93	129.57	281.47	511.81	477.48	34.34	14.906		
7,700.00	7,631.12	7,692.67	7,674.18	21.45	18.18	-169.94	132.25	289.72	520.79	485.97	34.82	14.957		
7,800.00	7,729.60	7,792.27	7,773.40	21.80	18.44	-169.94	134.94	297.98	529.76	494.46	35.30	15.007		
7,900.00	7,828.09	7,891.86	7,872.61	22.15	18.69	-169.95	137.62	306.23	538.73	502.95	35.78	15.055		
8,000.00	7,926.57	7,991.46	7,971.83	22.50	18.95	-169.95	140.30	314.49	547.71	511.44	36.27	15.102		
8,100.00	8,025.05	8,091.06	8,071.05	22.85	19.21	-169.96	142.98	322.74	556.68	519.93	36.75	15.147		
8,200.00	8,123.53	8,190.65	8,170.27	23.21	19.47	-169.96	145.67	331.00	565.66	528.42	37.24	15.191		
8,300.00	8,222.01	8,290.25	8,269.48	23.56	19.73	-169.97	148.35	339.25	574.63	536.91	37.72	15.234		
8,400.00	8,320.49	8,389.85	8,368.70	23.91	19.98	-169.97	151.03	347.51	583.61	545.40	38.20	15.276		
8,500.00	8,418.97	8,489.44	8,467.92	24.26	20.24	-169.98	153.71	355.77	592.58	553.89	38.69	15.316		
8,600.00	8,517.45	8,589.04	8,567.14	24.62	20.50	-169.98	156.39	364.02	601.56	562.38	39.17	15.356		
8,700.00	8,615.93	8,688.64	8,666.35	24.97	20.76	-169.99	159.08	372.28	610.53	570.87	39.66	15.394		
8,800.00	8,714.41	8,788.23	8,765.57	25.33	21.02	-169.99	161.76	380.53	619.50	579.36	40.14	15.432		
8,900.00	8,812.89	8,887.83	8,864.79	25.68	21.28	-170.00	164.44	388.79	628.48	587.85	40.63	15.468		
9,000.00	8,911.37	8,987.42	8,964.01	26.03	21.54	-170.00	167.12	397.04	637.45	596.34	41.12	15.504		
9,100.00	9,009.85	9,087.02	9,063.22	26.39	21.80	-170.00	169.81	405.30	646.43	604.83	41.60	15.538		
9,200.00	9,108.34	9,186.62	9,162.44	26.74	22.05	-170.01	172.49	413.55	655.40	613.31	42.09	15.572		
9,300.00	9,206.82	9,281.76	9,257.24	27.10	22.28	-170.02	174.96	421.16	664.67	622.12	42.54	15.623		
9,400.00	9,305.30	9,376.07	9,351.28	27.45	22.47	-170.05	177.17	427.98	674.69	631.72	42.98	15.700		
9,500.00	9,403.78	9,470.23	9,445.22	27.81	22.65	-170.11	179.15	434.04	685.49	642.09	43.40	15.795		
9,600.00	9,502.26	9,564.21	9,539.04	28.16	22.83	-170.19	180.88	439.37	697.06	653.24	43.82	15.908		
9,700.00	9,600.74	9,658.02	9,632.73	28.52	23.01	-170.28	182.36	443.95	709.39	665.16	44.23	16.038		
9,800.00	9,699.22	9,751.64	9,726.26	28.88	23.18	-170.39	183.61	447.79	722.49	677.84	44.64	16.183		
9,880.00	9,778.00	9,826.39	9,800.96	29.16	23.32	-170.49	184.44	450.34	733.52	688.55	44.97	16.311		
9,900.00	9,797.70	9,845.05	9,819.62	29.22	23.35	-170.52	184.63	450.91	736.34	691.29	45.05	16.346		
10,000.00	9,896.29	9,938.34	9,912.86	29.49	23.52	-170.67	185.40	453.29	750.37	704.96	45.41	16.524		
10,100.00	9,995.02	10,031.52	10,006.03	29.76	23.68	-170.82	185.94	454.96	764.32	718.55	45.77	16.700		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 91H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
10,200.00	10,093.88	10,124.62	10,099.12	30.01	23.84	-170.97	186.25	455.90	778.18	732.05	46.12	16.872	
10,300.00	10,192.87	10,218.76	10,193.27	30.27	24.01	-171.13	186.32	456.14	791.93	745.45	46.48	17.037	
10,400.00	10,291.98	10,317.87	10,292.38	30.51	24.19	-171.28	186.32	456.14	805.09	758.21	46.88	17.173	
10,500.00	10,391.20	10,417.10	10,391.60	30.75	24.39	-171.42	186.32	456.14	817.40	770.11	47.29	17.285	
10,600.00	10,490.53	10,516.42	10,490.93	30.98	24.59	-171.55	186.32	456.14	828.85	781.16	47.69	17.378	
10,700.00	10,589.95	10,615.85	10,590.35	31.21	24.79	-171.67	186.32	456.14	839.45	791.35	48.10	17.452	
10,800.00	10,689.46	10,715.36	10,689.86	31.43	24.99	-171.77	186.32	456.14	849.20	800.69	48.50	17.508	
10,900.00	10,789.06	10,814.96	10,789.46	31.64	25.19	-171.86	186.32	456.14	858.08	809.18	48.91	17.545	
11,000.00	10,888.73	10,914.63	10,889.13	31.84	25.39	-171.94	186.32	456.14	866.11	816.80	49.31	17.565	
11,100.00	10,988.47	11,014.36	10,988.87	32.04	25.59	-172.02	186.32	456.14	873.27	823.57	49.71	17.568	
11,200.00	11,088.27	11,114.16	11,088.67	32.23	25.79	-172.08	186.32	456.14	879.58	829.47	50.11	17.553	
11,300.00	11,188.11	11,214.01	11,188.51	32.42	25.99	-172.13	186.32	456.14	885.02	834.52	50.51	17.523	
11,400.00	11,288.01	11,313.90	11,288.41	32.59	26.20	-172.17	186.32	456.14	889.60	838.70	50.90	17.476	
11,500.00	11,387.94	11,413.83	11,388.34	32.77	26.40	-172.21	186.32	456.14	893.32	842.02	51.30	17.414	
11,600.00	11,487.89	11,513.79	11,488.29	32.93	26.60	-172.24	186.32	456.14	896.17	844.48	51.69	17.337	
11,700.00	11,587.87	11,613.77	11,588.27	33.09	26.81	-172.25	186.32	456.14	898.16	846.08	52.08	17.244	
11,800.00	11,687.87	11,713.76	11,688.27	33.24	27.01	-172.27	186.32	456.14	899.29	846.81	52.48	17.137	
11,880.00	11,767.87	11,793.76	11,768.27	33.36	27.18	-90.27	186.32	456.14	899.56	846.77	52.79	17.041	
11,900.00	11,787.87	11,813.76	11,788.27	33.39	27.22	-90.27	186.32	456.14	899.56	846.69	52.87	17.015	
12,000.00	11,887.87	11,913.76	11,888.27	33.55	27.42	-90.27	186.32	456.14	899.56	846.28	53.28	16.884	
12,100.00	11,987.87	12,013.76	11,988.27	33.72	27.63	-90.27	186.32	456.14	899.56	845.87	53.69	16.755	
12,200.00	12,087.87	12,113.76	12,088.27	33.88	27.83	-90.27	186.32	456.14	899.56	845.46	54.10	16.628	
12,205.18	12,093.04	12,118.94	12,093.44	33.89	27.84	-90.27	186.32	456.14	899.56	845.44	54.12	16.621	
12,247.39	12,135.26	12,161.10	12,135.60	33.96	27.93	-90.27	186.28	456.14	899.56	845.27	54.29	16.569	
12,250.00	12,137.87	12,163.69	12,138.19	33.97	27.93	89.73	186.25	456.14	899.56	845.26	54.30	16.566	
12,300.00	12,187.79	12,213.29	12,187.69	34.04	28.02	89.69	183.27	456.14	899.57	845.09	54.48	16.512	
12,350.00	12,237.32	12,262.84	12,236.70	34.10	28.10	89.66	176.05	456.14	899.57	844.93	54.63	16.465	
12,400.00	12,286.07	12,312.35	12,284.85	34.16	28.17	89.62	164.62	456.14	899.57	844.80	54.78	16.423	
12,450.00	12,333.67	12,361.82	12,331.80	34.22	28.24	89.59	149.10	456.14	899.58	844.67	54.91	16.384	
12,500.00	12,379.76	12,411.24	12,377.21	34.27	28.30	89.57	129.61	456.14	899.58	844.55	55.03	16.348	
12,550.00	12,423.99	12,460.64	12,420.73	34.31	28.35	89.54	106.29	456.14	899.58	844.44	55.14	16.314	
12,600.00	12,466.03	12,510.01	12,462.07	34.36	28.40	89.52	79.32	456.13	899.59	844.33	55.25	16.281	
12,650.00	12,505.54	12,559.35	12,500.91	34.40	28.45	89.51	48.92	456.13	899.59	844.22	55.37	16.248	
12,700.00	12,542.24	12,608.67	12,536.98	34.43	28.50	89.50	15.30	456.13	899.59	844.10	55.49	16.212	
12,750.00	12,575.84	12,657.98	12,570.02	34.47	28.55	89.49	-21.29	456.13	899.60	843.97	55.62	16.173	
12,800.00	12,606.09	12,707.29	12,599.78	34.52	28.60	89.48	-60.57	456.13	899.60	843.82	55.78	16.129	
12,850.00	12,632.75	12,756.58	12,626.06	34.56	28.66	89.48	-102.26	456.13	899.60	843.65	55.95	16.079	
12,900.00	12,655.63	12,805.88	12,648.66	34.62	28.73	89.48	-146.06	456.13	899.60	843.46	56.14	16.023	
12,950.00	12,674.55	12,855.19	12,667.41	34.68	28.81	89.49	-191.64	456.13	899.60	843.23	56.37	15.959	
13,000.00	12,689.36	12,904.50	12,682.18	34.76	28.91	89.50	-238.68	456.13	899.60	842.98	56.62	15.887	
13,050.00	12,699.96	12,953.84	12,692.85	34.85	29.02	89.51	-286.83	456.13	899.60	842.69	56.91	15.807	
13,100.00	12,706.26	13,003.19	12,699.35	34.96	29.16	89.53	-335.74	456.13	899.60	842.37	57.23	15.720	
13,143.71	12,708.20	13,046.36	12,701.56	35.07	29.30	89.55	-378.84	456.13	899.60	842.07	57.53	15.637	
13,145.42	12,708.21	13,048.05	12,701.58	35.08	29.31	89.55	-380.53	456.13	899.60	842.06	57.54	15.634	
13,200.00	12,708.56	13,102.59	12,701.88	35.23	29.51	89.55	-435.07	456.13	899.60	841.64	57.96	15.520	
13,300.00	12,709.21	13,202.59	12,702.41	35.58	29.94	89.54	-535.07	456.13	899.61	840.74	58.87	15.282	
13,400.00	12,709.85	13,302.59	12,702.93	36.00	30.46	89.53	-635.07	456.13	899.61	839.67	59.94	15.009	
13,500.00	12,710.49	13,402.59	12,703.46	36.49	31.06	89.53	-735.07	456.13	899.61	838.45	61.17	14.708	
13,600.00	12,711.14	13,502.59	12,703.99	37.05	31.74	89.52	-835.07	456.13	899.62	837.08	62.54	14.385	
13,700.00	12,711.78	13,602.59	12,704.52	37.67	32.48	89.51	-935.07	456.13	899.62	835.57	64.05	14.046	
13,800.00	12,712.42	13,702.59	12,705.05	38.36	33.29	89.50	-1,035.06	456.13	899.63	833.94	65.69	13.695	
13,900.00	12,713.06	13,802.59	12,705.58	39.11	34.16	89.50	-1,135.06	456.13	899.63	832.19	67.45	13.339	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 91H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,000.00	12,713.71	13,902.59	12,706.11	39.91	35.08	89.49	-1,235.06	456.13	899.64	830.32	69.31	12.979	
14,100.00	12,714.35	14,002.59	12,706.64	40.76	36.05	89.48	-1,335.06	456.13	899.64	828.36	71.28	12.621	
14,200.00	12,714.99	14,102.59	12,707.16	41.66	37.07	89.48	-1,435.06	456.13	899.64	826.30	73.34	12.267	
14,300.00	12,715.64	14,202.59	12,707.69	42.61	38.14	89.47	-1,535.06	456.13	899.65	824.16	75.49	11.918	
14,400.00	12,716.28	14,302.59	12,708.22	43.60	39.24	89.46	-1,635.05	456.13	899.65	821.94	77.71	11.577	
14,500.00	12,716.92	14,402.59	12,708.75	44.62	40.37	89.45	-1,735.05	456.13	899.66	819.65	80.01	11.245	
14,600.00	12,717.56	14,502.59	12,709.28	45.69	41.54	89.45	-1,835.05	456.13	899.66	817.29	82.37	10.923	
14,700.00	12,718.21	14,602.59	12,709.81	46.78	42.75	89.44	-1,935.05	456.13	899.67	814.88	84.79	10.611	
14,800.00	12,718.85	14,702.59	12,710.34	47.91	43.97	89.43	-2,035.05	456.13	899.67	812.40	87.27	10.310	
14,900.00	12,719.49	14,802.59	12,710.87	49.06	45.23	89.43	-2,135.05	456.13	899.67	809.88	89.79	10.019	
15,000.00	12,720.14	14,902.59	12,711.39	50.25	46.51	89.42	-2,235.05	456.13	899.68	807.31	92.37	9.740	
15,100.00	12,720.78	15,002.59	12,711.92	51.46	47.81	89.41	-2,335.04	456.13	899.68	804.70	94.98	9.472	
15,200.00	12,721.42	15,102.59	12,712.45	52.69	49.13	89.40	-2,435.04	456.13	899.69	802.05	97.64	9.215	
15,300.00	12,722.06	15,202.59	12,712.98	53.94	50.46	89.40	-2,535.04	456.13	899.69	799.36	100.33	8.967	
15,400.00	12,722.71	15,302.59	12,713.51	55.21	51.82	89.39	-2,635.04	456.13	899.70	796.64	103.05	8.730	
15,500.00	12,723.35	15,402.59	12,714.04	56.50	53.19	89.38	-2,735.04	456.13	899.70	793.89	105.81	8.503	
15,600.00	12,723.99	15,502.59	12,714.57	57.81	54.58	89.37	-2,835.04	456.13	899.71	791.11	108.59	8.285	
15,700.00	12,724.64	15,602.59	12,715.10	59.14	55.97	89.37	-2,935.04	456.13	899.71	788.31	111.40	8.076	
15,800.00	12,725.28	15,702.59	12,715.62	60.48	57.39	89.36	-3,035.03	456.13	899.72	785.48	114.24	7.876	
15,900.00	12,725.92	15,802.59	12,716.15	61.83	58.81	89.35	-3,135.03	456.13	899.72	782.62	117.10	7.684	
16,000.00	12,726.56	15,902.59	12,716.68	63.20	60.24	89.35	-3,235.03	456.13	899.72	779.75	119.97	7.499	
16,100.00	12,727.21	16,002.59	12,717.21	64.58	61.68	89.34	-3,335.03	456.13	899.73	776.86	122.87	7.322	
16,200.00	12,727.85	16,102.59	12,717.74	65.97	63.14	89.33	-3,435.03	456.13	899.73	773.95	125.79	7.153	
16,300.00	12,728.49	16,202.59	12,718.27	67.37	64.60	89.32	-3,535.03	456.13	899.74	771.02	128.72	6.990	
16,400.00	12,729.14	16,302.59	12,718.80	68.79	66.07	89.32	-3,635.03	456.13	899.74	768.07	131.67	6.833	
16,500.00	12,729.78	16,402.59	12,719.33	70.21	67.55	89.31	-3,735.02	456.13	899.75	765.12	134.63	6.683	
16,600.00	12,730.42	16,502.59	12,719.85	71.64	69.03	89.30	-3,835.02	456.13	899.75	762.14	137.61	6.538	
16,700.00	12,731.07	16,602.59	12,720.38	73.08	70.52	89.29	-3,935.02	456.13	899.76	759.16	140.60	6.399	
16,800.00	12,731.71	16,702.59	12,720.91	74.53	72.02	89.29	-4,035.02	456.12	899.76	756.16	143.60	6.266	
16,900.00	12,732.35	16,802.59	12,721.44	75.98	73.52	89.28	-4,135.02	456.12	899.77	753.15	146.61	6.137	
17,000.00	12,732.99	16,902.59	12,721.97	77.45	75.03	89.27	-4,235.02	456.12	899.77	750.13	149.64	6.013	
17,100.00	12,733.64	17,002.59	12,722.50	78.92	76.54	89.27	-4,335.02	456.12	899.78	747.10	152.67	5.894	
17,200.00	12,734.28	17,102.59	12,723.03	80.39	78.06	89.26	-4,435.01	456.12	899.78	744.07	155.71	5.778	
17,300.00	12,734.92	17,202.59	12,723.56	81.87	79.58	89.25	-4,535.01	456.12	899.79	741.02	158.77	5.667	
17,400.00	12,735.57	17,302.59	12,724.08	83.36	81.11	89.24	-4,635.01	456.12	899.79	737.96	161.83	5.560	
17,500.00	12,736.21	17,402.59	12,724.61	84.85	82.64	89.24	-4,735.01	456.12	899.80	734.90	164.90	5.457	
17,600.00	12,736.85	17,502.59	12,725.14	86.35	84.18	89.23	-4,835.01	456.12	899.80	731.83	167.97	5.357	
17,700.00	12,737.49	17,602.59	12,725.67	87.85	85.71	89.22	-4,935.01	456.12	899.80	728.75	171.05	5.260	
17,800.00	12,738.14	17,702.59	12,726.20	89.36	87.26	89.21	-5,035.01	456.12	899.81	725.67	174.14	5.167	
17,900.00	12,738.78	17,802.59	12,726.73	90.87	88.80	89.21	-5,135.00	456.12	899.81	722.57	177.24	5.077	
18,000.00	12,739.42	17,902.59	12,727.26	92.39	90.35	89.20	-5,235.00	456.12	899.82	719.48	180.34	4.990	
18,100.00	12,740.07	18,002.59	12,727.79	93.91	91.90	89.19	-5,335.00	456.12	899.82	716.37	183.45	4.905	
18,200.00	12,740.71	18,102.59	12,728.31	95.43	93.46	89.19	-5,435.00	456.12	899.83	713.27	186.56	4.823	
18,300.00	12,741.35	18,202.59	12,728.84	96.96	95.01	89.18	-5,535.00	456.12	899.83	710.15	189.68	4.744	
18,400.00	12,741.99	18,302.59	12,729.37	98.49	96.57	89.17	-5,635.00	456.12	899.84	707.03	192.81	4.667	
18,500.00	12,742.64	18,402.59	12,729.90	100.02	98.14	89.16	-5,734.99	456.12	899.84	703.91	195.93	4.593	
18,600.00	12,743.28	18,502.59	12,730.43	101.56	99.70	89.16	-5,834.99	456.12	899.85	700.78	199.07	4.520	
18,700.00	12,743.92	18,602.59	12,730.96	103.10	101.27	89.15	-5,934.99	456.12	899.85	697.65	202.20	4.450	
18,800.00	12,744.57	18,702.59	12,731.49	104.64	102.84	89.14	-6,034.99	456.12	899.86	694.52	205.34	4.382	
18,900.00	12,745.21	18,802.59	12,732.02	106.19	104.41	89.13	-6,134.99	456.12	899.86	691.38	208.49	4.316	
19,000.00	12,745.85	18,902.59	12,732.54	107.74	105.98	89.13	-6,234.99	456.12	899.87	688.23	211.64	4.252	
19,100.00	12,746.49	19,002.59	12,733.07	109.29	107.55	89.12	-6,334.99	456.12	899.87	685.09	214.79	4.190	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Reference Site: Seawolf 1-12 Fed
 Site Error: 0.00 usft
 Reference Well: 92H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
 TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Seawolf 1-12 Fed - 91H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
19,200.00	12,747.14	19,102.59	12,733.60	110.84	109.13	89.11	-6,434.98	456.12	899.88	681.94	217.94	4.129	
19,300.00	12,747.78	19,202.59	12,734.13	112.40	110.71	89.11	-6,534.98	456.12	899.88	678.78	221.10	4.070	
19,400.00	12,748.42	19,302.59	12,734.66	113.96	112.29	89.10	-6,634.98	456.12	899.89	675.63	224.26	4.013	
19,500.00	12,749.07	19,402.59	12,735.19	115.51	113.87	89.09	-6,734.98	456.12	899.89	672.47	227.43	3.957	
19,600.00	12,749.71	19,502.59	12,735.72	117.08	115.45	89.08	-6,834.98	456.12	899.90	669.30	230.60	3.902	
19,700.00	12,750.35	19,602.59	12,736.25	118.64	117.04	89.08	-6,934.98	456.12	899.90	666.14	233.77	3.850	
19,800.00	12,750.99	19,702.59	12,736.78	120.21	118.62	89.07	-7,034.98	456.12	899.91	662.97	236.94	3.798	
19,900.00	12,751.64	19,802.59	12,737.30	121.77	120.21	89.06	-7,134.97	456.12	899.92	659.80	240.11	3.748	
20,000.00	12,752.28	19,902.59	12,737.83	123.34	121.80	89.05	-7,234.97	456.12	899.92	656.63	243.29	3.699	
20,100.00	12,752.92	20,002.59	12,738.36	124.91	123.39	89.05	-7,334.97	456.12	899.93	653.45	246.47	3.651	
20,200.00	12,753.57	20,102.59	12,738.89	126.49	124.98	89.04	-7,434.97	456.12	899.93	650.28	249.65	3.605	
20,300.00	12,754.21	20,202.59	12,739.42	128.06	126.57	89.03	-7,534.97	456.12	899.94	647.10	252.84	3.559	
20,400.00	12,754.85	20,302.59	12,739.95	129.64	128.16	89.03	-7,634.97	456.12	899.94	643.92	256.03	3.515	
20,500.00	12,755.49	20,402.59	12,740.48	131.21	129.75	89.02	-7,734.97	456.12	899.95	640.73	259.21	3.472	
20,600.00	12,756.14	20,502.59	12,741.01	132.79	131.35	89.01	-7,834.96	456.12	899.95	637.55	262.40	3.430	
20,700.00	12,756.78	20,602.59	12,741.53	134.37	132.94	89.00	-7,934.96	456.12	899.96	634.36	265.60	3.388	
20,800.00	12,757.42	20,702.59	12,742.06	135.95	134.54	89.00	-8,034.96	456.11	899.96	631.17	268.79	3.348	
20,900.00	12,758.07	20,802.59	12,742.59	137.53	136.14	88.99	-8,134.96	456.11	899.97	627.98	271.99	3.309	
21,000.00	12,758.71	20,902.59	12,743.12	139.12	137.73	88.98	-8,234.96	456.11	899.97	624.79	275.18	3.270	
21,100.00	12,759.35	21,002.59	12,743.65	140.70	139.33	88.97	-8,334.96	456.11	899.98	621.60	278.38	3.233	
21,200.00	12,760.00	21,102.58	12,744.18	142.29	140.93	88.97	-8,434.96	456.11	899.98	618.40	281.58	3.196	
21,300.00	12,760.64	21,202.58	12,744.71	143.87	142.53	88.96	-8,534.95	456.11	899.99	615.20	284.78	3.160	
21,400.00	12,761.28	21,302.58	12,745.24	145.46	144.14	88.95	-8,634.95	456.11	899.99	612.01	287.99	3.125	
21,500.00	12,761.92	21,402.58	12,745.76	147.05	145.74	88.95	-8,734.95	456.11	900.00	608.81	291.19	3.091	
21,600.00	12,762.57	21,502.58	12,746.29	148.64	147.34	88.94	-8,834.95	456.11	900.01	605.61	294.40	3.057	
21,700.00	12,763.21	21,602.58	12,746.82	150.23	148.94	88.93	-8,934.95	456.11	900.01	602.40	297.61	3.024	
21,800.00	12,763.85	21,702.58	12,747.35	151.82	150.55	88.92	-9,034.95	456.11	900.02	599.20	300.82	2.992	
21,900.00	12,764.50	21,802.58	12,747.88	153.41	152.15	88.92	-9,134.95	456.11	900.02	596.00	304.03	2.960	
22,000.00	12,765.14	21,902.58	12,748.41	155.01	153.76	88.91	-9,234.94	456.11	900.03	592.79	307.24	2.929	
22,100.00	12,765.78	22,002.58	12,748.94	156.60	155.36	88.90	-9,334.94	456.11	900.03	589.58	310.45	2.899	
22,200.00	12,766.42	22,102.58	12,749.47	158.20	156.97	88.89	-9,434.94	456.11	900.04	586.38	313.66	2.869	
22,300.00	12,767.07	22,202.58	12,749.99	159.79	158.58	88.89	-9,534.94	456.11	900.04	583.17	316.88	2.840	
22,400.00	12,767.71	22,302.58	12,750.52	161.39	160.19	88.88	-9,634.94	456.11	900.05	579.96	320.09	2.812	
22,500.00	12,768.35	22,402.58	12,751.05	162.99	161.79	88.87	-9,734.94	456.11	900.05	576.75	323.31	2.784	
22,600.00	12,769.00	22,502.58	12,751.58	164.59	163.40	88.87	-9,834.94	456.11	900.06	573.53	326.53	2.756	
22,700.00	12,769.64	22,602.58	12,752.11	166.18	165.01	88.86	-9,934.93	456.11	900.07	570.32	329.74	2.730	
22,787.39	12,770.20	22,689.98	12,752.57	167.31	166.42	88.85	-10,022.32	456.11	900.07	567.83	332.24	2.709	
22,787.99	12,770.20	22,690.57	12,752.57	167.31	166.43	88.85	-10,022.92	456.11	900.07	567.82	332.25	2.709 SF	

LEAM Drilling Systems LLC

Anticollision Report

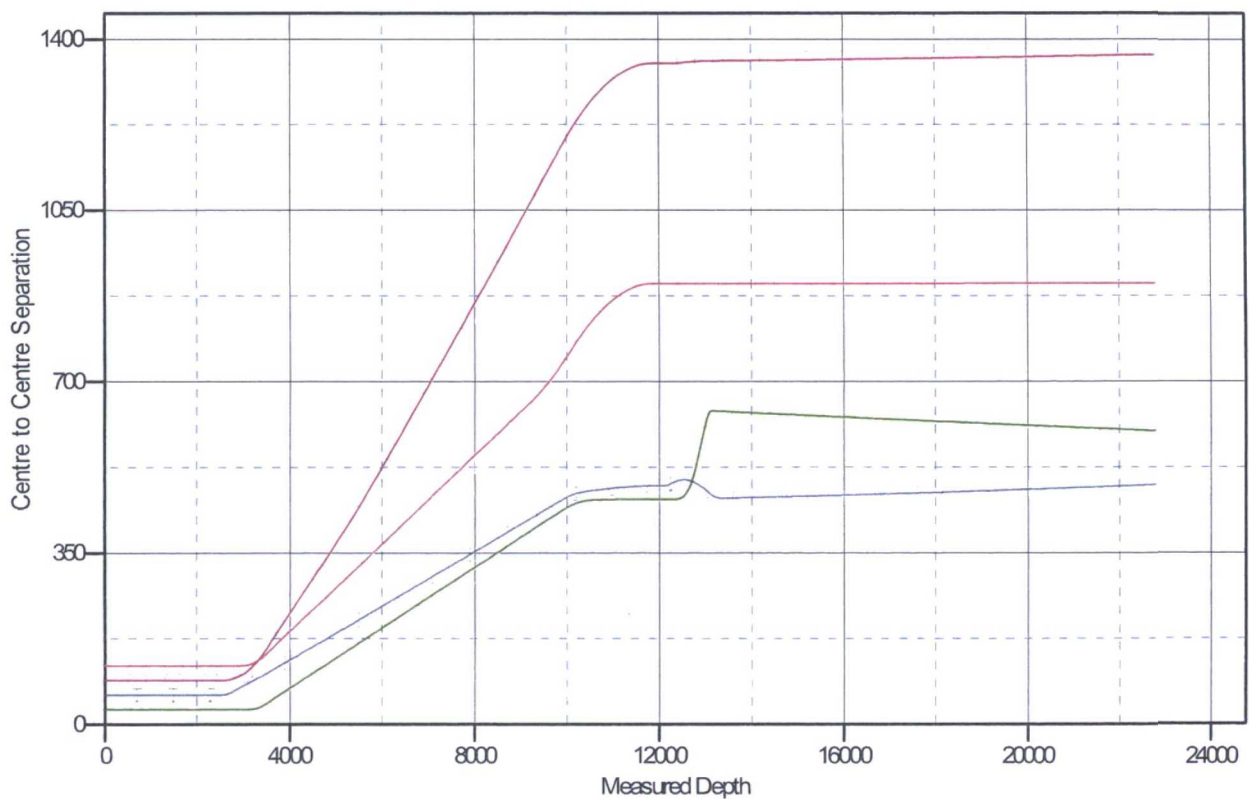
Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
Reference Well: 92H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 92H
TVD Reference: 3318.2' GE + 21' KB @ 3339.20usft
MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3318.2' GE + 21' KB @ 3339.20usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 92H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.43°

Ladder Plot



LEGEND

102H, OH, Plan#1 V0 82H, OH, Plan#1 V0
 81H, OH, Plan#1 V0 91H, OH, Plan#1 V0

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Anticollision Report

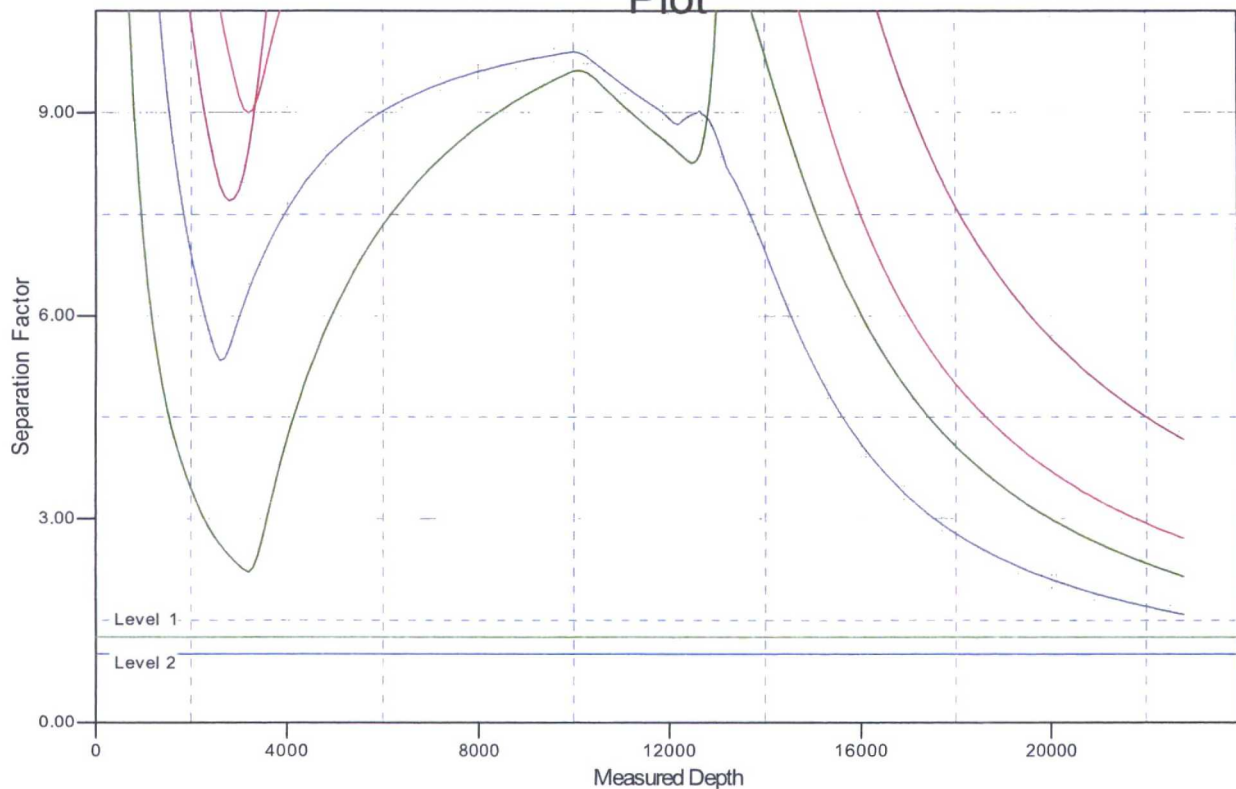
Company: Devon Energy
Project: Lea County, NM (NAD-83)
Reference Site: Seawolf 1-12 Fed
Site Error: 0.00 usft
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MD Reference: 3318.2' GE + 21' KB @ 3339.20usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3318.2' GE + 21' KB @ 3339.20usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 92H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.43°

Separation Factor Plot



LEGEND

102H, OH, Plan #1 V0 82H, OH, Plan #1 V0
81H, OH, Plan #1 V0 91H, OH, Plan #1 V0