

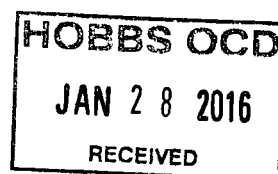


DEVON ENERGY

Lea County, NM (NAD-83)
Blue Krait 23 Fed
10H

OH

Plan: Plan #1



Standard Planning Report

12 October, 2015



FEB 01 2016



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Blue Krait 23 Fed		
Site Position:	Map	Northings:	436,068.33 usft
From:		Easting:	783,797.48 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 11' 47.039 N
		Longitude:	103° 32' 58.234 W
		Grid Convergence:	0.42 °

Well	10H		
Well Position	+N/-S	0.00 usft	Northings:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,576.30 usft
		Latitude:	32° 11' 47.039 N
		Longitude:	103° 32' 58.234 W
		Ground Level:	3,551.30 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2015	10/2/2015	7.22
			Dip Angle (°)
			60.12
			Field Strength (nT)
			48,175

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			1.63

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10,481.65	0.00	0.00	10,481.65	0.00	0.00	0.00	0.00	0.00	0.00	
11,385.85	90.42	1.63	11,054.59	576.92	16.40	10.00	10.00	0.00	1.63	
15,559.07	90.42	1.63	11,024.00	4,748.35	135.01	0.00	0.00	0.00	0.00	PBHL (BK23F 10H)



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Project:	Lea County, NM (NAD-83)	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (BK23F 10H)										
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,227.00	0.00	0.00	1,227.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler										
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,471.00	0.00	0.00	1,471.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt										
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



LEAM Drilling Systems LLC

Planning Report



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Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,240.00	0.00	0.00	5,240.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,233.00	0.00	0.00	6,233.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Can									
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,667.00	0.00	0.00	7,667.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Can									
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,268.00	0.00	0.00	8,268.00	0.00	0.00	0.00	0.00	0.00	0.00
Leonard Shale									
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,180.00	0.00	0.00	9,180.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring									



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Well:	10H	Survey Calculation Method:	Minimum Curvature:
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,193.00	0.00	0.00	10,193.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS SS									
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,481.65	0.00	0.00	10,481.65	0.00	0.00	0.00	0.00	0.00	0.00
KOP 10° DLS									
10,500.00	1.84	1.63	10,500.00	0.29	0.01	0.29	10.00	10.00	0.00
10,550.00	6.84	1.63	10,549.84	4.07	0.12	4.07	10.00	10.00	0.00
10,600.00	11.84	1.63	10,599.16	12.18	0.35	12.18	10.00	10.00	0.00
10,650.00	16.84	1.63	10,647.59	24.55	0.70	24.56	10.00	10.00	0.00
10,700.00	21.84	1.63	10,694.75	41.09	1.17	41.11	10.00	10.00	0.00
10,750.00	26.84	1.63	10,740.30	61.68	1.75	61.70	10.00	10.00	0.00
10,800.00	31.84	1.63	10,783.87	86.16	2.45	86.19	10.00	10.00	0.00
10,850.00	36.84	1.63	10,825.15	114.34	3.25	114.38	10.00	10.00	0.00
10,900.00	41.84	1.63	10,863.81	146.01	4.15	146.07	10.00	10.00	0.00
10,950.00	46.84	1.63	10,899.56	180.92	5.14	181.00	10.00	10.00	0.00
10,987.03	50.54	1.63	10,924.00	208.72	5.93	208.81	10.00	10.00	0.00
2nd BS SS									
11,000.00	51.84	1.63	10,932.13	218.82	6.22	218.91	10.00	10.00	0.00
11,050.00	56.84	1.63	10,961.27	259.42	7.38	259.52	10.00	10.00	0.00
11,100.00	61.84	1.63	10,986.76	302.39	8.60	302.52	10.00	10.00	0.00
11,150.00	66.84	1.63	11,008.41	347.43	9.88	347.57	10.00	10.00	0.00
11,200.00	71.84	1.63	11,026.05	394.18	11.21	394.34	10.00	10.00	0.00
11,250.00	76.84	1.63	11,039.55	442.29	12.58	442.46	10.00	10.00	0.00
11,300.00	81.84	1.63	11,048.80	491.39	13.97	491.59	10.00	10.00	0.00
11,350.00	86.84	1.63	11,053.73	541.11	15.39	541.33	10.00	10.00	0.00
11,385.85	90.42	1.63	11,054.59	576.92	16.40	577.16	10.00	10.00	0.00
LP									
11,400.00	90.42	1.63	11,054.49	591.07	16.81	591.31	0.00	0.00	0.00
11,500.00	90.42	1.63	11,053.75	691.03	19.65	691.31	0.00	0.00	0.00
11,600.00	90.42	1.63	11,053.02	790.98	22.49	791.30	0.00	0.00	0.00
11,700.00	90.42	1.63	11,052.29	890.94	25.33	891.30	0.00	0.00	0.00
11,800.00	90.42	1.63	11,051.56	990.90	28.17	991.30	0.00	0.00	0.00
11,900.00	90.42	1.63	11,050.82	1,090.85	31.02	1,091.30	0.00	0.00	0.00
12,000.00	90.42	1.63	11,050.09	1,190.81	33.86	1,191.29	0.00	0.00	0.00
12,100.00	90.42	1.63	11,049.36	1,290.77	36.70	1,291.29	0.00	0.00	0.00
12,200.00	90.42	1.63	11,048.62	1,390.73	39.54	1,391.29	0.00	0.00	0.00
12,300.00	90.42	1.63	11,047.89	1,490.68	42.38	1,491.28	0.00	0.00	0.00
12,400.00	90.42	1.63	11,047.16	1,590.64	45.23	1,591.28	0.00	0.00	0.00
12,500.00	90.42	1.63	11,046.42	1,690.60	48.07	1,691.28	0.00	0.00	0.00
12,600.00	90.42	1.63	11,045.69	1,790.55	50.91	1,791.28	0.00	0.00	0.00
12,700.00	90.42	1.63	11,044.96	1,890.51	53.75	1,891.27	0.00	0.00	0.00



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User, Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,800.00	90.42	1.63	11,044.23	1,990.47	56.60	1,991.27	0.00	0.00	0.00
12,900.00	90.42	1.63	11,043.49	2,090.42	59.44	2,091.27	0.00	0.00	0.00
13,000.00	90.42	1.63	11,042.76	2,190.38	62.28	2,191.27	0.00	0.00	0.00
13,100.00	90.42	1.63	11,042.03	2,290.34	65.12	2,291.26	0.00	0.00	0.00
13,200.00	90.42	1.63	11,041.29	2,390.29	67.96	2,391.26	0.00	0.00	0.00
13,300.00	90.42	1.63	11,040.56	2,490.25	70.81	2,491.26	0.00	0.00	0.00
13,400.00	90.42	1.63	11,039.83	2,590.21	73.65	2,591.26	0.00	0.00	0.00
13,500.00	90.42	1.63	11,039.09	2,690.17	76.49	2,691.25	0.00	0.00	0.00
13,600.00	90.42	1.63	11,038.36	2,790.12	79.33	2,791.25	0.00	0.00	0.00
13,700.00	90.42	1.63	11,037.63	2,890.08	82.17	2,891.25	0.00	0.00	0.00
13,800.00	90.42	1.63	11,036.89	2,990.04	85.02	2,991.24	0.00	0.00	0.00
13,900.00	90.42	1.63	11,036.16	3,089.99	87.86	3,091.24	0.00	0.00	0.00
14,000.00	90.42	1.63	11,035.43	3,189.95	90.70	3,191.24	0.00	0.00	0.00
14,100.00	90.42	1.63	11,034.70	3,289.91	93.54	3,291.24	0.00	0.00	0.00
14,200.00	90.42	1.63	11,033.96	3,389.86	96.38	3,391.23	0.00	0.00	0.00
14,300.00	90.42	1.63	11,033.23	3,489.82	99.23	3,491.23	0.00	0.00	0.00
14,400.00	90.42	1.63	11,032.50	3,589.78	102.07	3,591.23	0.00	0.00	0.00
14,500.00	90.42	1.63	11,031.76	3,689.73	104.91	3,691.23	0.00	0.00	0.00
14,600.00	90.42	1.63	11,031.03	3,789.69	107.75	3,791.22	0.00	0.00	0.00
14,700.00	90.42	1.63	11,030.30	3,889.65	110.59	3,891.22	0.00	0.00	0.00
14,800.00	90.42	1.63	11,029.56	3,989.61	113.44	3,991.22	0.00	0.00	0.00
14,900.00	90.42	1.63	11,028.83	4,089.56	116.28	4,091.21	0.00	0.00	0.00
15,000.00	90.42	1.63	11,028.10	4,189.52	119.12	4,191.21	0.00	0.00	0.00
15,100.00	90.42	1.63	11,027.37	4,289.48	121.96	4,291.21	0.00	0.00	0.00
15,200.00	90.42	1.63	11,026.63	4,389.43	124.80	4,391.21	0.00	0.00	0.00
15,300.00	90.42	1.63	11,025.90	4,489.39	127.65	4,491.20	0.00	0.00	0.00
15,400.00	90.42	1.63	11,025.17	4,589.35	130.49	4,591.20	0.00	0.00	0.00
15,500.00	90.42	1.63	11,024.43	4,689.30	133.33	4,691.20	0.00	0.00	0.00
15,559.07	90.42	1.63	11,024.00	4,748.35	135.01	4,750.27	0.00	0.00	0.00
TD - PBHL (BK23F 10H)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (BK23F 10H) - hit/miss target - Shape - Point	0.00	0.00	0.00	0.00	0.00	436,068.33	783,797.48	32° 11' 47.039 N	103° 32' 58.234 W
PBHL (BK23F 10H) - plan hits target center - Point	0.00	0.00	11,024.00	4,748.35	135.01	440,816.68	783,932.49	32° 12' 34.015 N	103° 32' 56.260 W

**LEAM Drilling Systems LLC**

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Project:	Lea County, NM (NAD:83)	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site:	Blue-Krait 23 Fed	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,227.00	1,227.00	Rustler		0.00		
1,471.00	1,471.00	Top Salt		0.00		
5,240.00	5,240.00	Base Salt		0.00		
6,233.00	6,233.00	Cherry Can		0.00		
7,667.00	7,667.00	Brushy Can		0.00		
8,268.00	8,268.00	Leonard Shale		0.00		
9,180.00	9,180.00	Bone Spring		0.00		
10,193.00	10,193.00	1st BS SS		0.00		
10,987.03	10,924.00	2nd BS SS		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N-S (usft)	+E-W (usft)	Comment	
10,481.65	10,481.65	0.00	0.00	KOP 10° DLS	
11,385.85	11,054.59	576.92	16.40	LP	
15,559.07	11,024.00	4,748.35	135.01	TD	



DEVON ENERGY

Lea County, NM (NAD-83)
Blue Krait 23 Fed
10H

OH
Plan #1

Anticollision Report

12 October, 2015





LEAM Drilling Systems LLC

Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single 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	10/12/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	15,558.34	Plan #1 (OH)	LEAM MWD-ADJ	MWD - Standard	

Summary		Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name	Offset Well - Wellbore - Design						
Blue Krait 23 Fed							
1H - OH - Plan #1		5,200.00	5,200.00	49.95	26.86	2.163	CC, ES, SF
5H - OH - Plan #1		5,200.00	5,199.60	50.02	26.93	2.166	CC, ES
5H - OH - Plan #1		5,300.00	5,298.73	50.88	27.35	2.163	SF

Offset Design											Blue Krait 23 Fed - 1H - OH - Plan #1		Offset Site Error: 0.00 usft	
Survey Program: 0-LEAMIMWD-ADJ											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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.37	-0.32	-49.95	49.95					
100.00	100.00	100.00	100.00	0.08	0.08	-90.37	-0.32	-49.95	49.95	49.78	0.17	298.314		
200.00	200.00	200.00	200.00	0.31	0.31	-90.37	-0.32	-49.95	49.95	49.33	0.62	80.813		
300.00	300.00	300.00	300.00	0.53	0.53	-90.37	-0.32	-49.95	49.95	48.88	1.07	46.786		
400.00	400.00	400.00	400.00	0.76	0.76	-90.37	-0.32	-49.95	49.95	48.43	1.52	32.924		
500.00	500.00	500.00	500.00	0.98	0.98	-90.37	-0.32	-49.95	49.95	47.98	1.97	25.398		
600.00	600.00	600.00	600.00	1.21	1.21	-90.37	-0.32	-49.95	49.95	47.53	2.42	20.673		
700.00	700.00	700.00	700.00	1.43	1.43	-90.37	-0.32	-49.95	49.95	47.09	2.87	17.430		
800.00	800.00	800.00	800.00	1.66	1.66	-90.37	-0.32	-49.95	49.95	46.64	3.32	15.067		
900.00	900.00	900.00	900.00	1.88	1.88	-90.37	-0.32	-49.95	49.95	46.19	3.76	13.268		
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	-90.37	-0.32	-49.95	49.95	45.74	4.21	11.853		
1,100.00	1,100.00	1,100.00	1,100.00	2.33	2.33	-90.37	-0.32	-49.95	49.95	45.29	4.66	10.710		
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-90.37	-0.32	-49.95	49.95	44.84	5.11	9.769		
1,300.00	1,300.00	1,300.00	1,300.00	2.78	2.78	-90.37	-0.32	-49.95	49.95	44.39	5.56	8.979		
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-90.37	-0.32	-49.95	49.95	43.94	6.01	8.308		
1,500.00	1,500.00	1,500.00	1,500.00	3.23	3.23	-90.37	-0.32	-49.95	49.95	43.49	6.46	7.730		
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-90.37	-0.32	-49.95	49.95	43.04	6.91	7.227		
1,700.00	1,700.00	1,700.00	1,700.00	3.68	3.68	-90.37	-0.32	-49.95	49.95	42.59	7.36	6.786		
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-90.37	-0.32	-49.95	49.95	42.14	7.81	6.395		
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	-90.37	-0.32	-49.95	49.95	41.69	8.26	6.047		
2,000.00	2,000.00	2,000.00	2,000.00	4.35	4.35	-90.37	-0.32	-49.95	49.95	41.24	8.71	5.735		
2,100.00	2,100.00	2,100.00	2,100.00	4.58	4.58	-90.37	-0.32	-49.95	49.95	40.79	9.16	5.454		
2,200.00	2,200.00	2,200.00	2,200.00	4.80	4.80	-90.37	-0.32	-49.95	49.95	40.34	9.61	5.198		
2,300.00	2,300.00	2,300.00	2,300.00	5.03	5.03	-90.37	-0.32	-49.95	49.95	39.89	10.06	4.966		

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0:00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0:00 usft	Output errors are at	2:00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Blue Krait 23 Fed - 1H -OH- Plan #1		Offset Site Error:		0.00 usft		
Survey Program: 0-LEAM MWD-ADJ																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						
2,400.00	2,400.00	2,400.00	2,400.00	5.25	5.25	-90.37	-0.32	-49.95	49.95	39.44	10.51	4.754						
2,500.00	2,500.00	2,500.00	2,500.00	5.48	5.48	-90.37	-0.32	-49.95	49.95	38.99	10.96	4.559						
2,600.00	2,600.00	2,600.00	2,600.00	5.70	5.70	-90.37	-0.32	-49.95	49.95	38.54	11.41	4.379						
2,700.00	2,700.00	2,700.00	2,700.00	5.93	5.93	-90.37	-0.32	-49.95	49.95	38.09	11.86	4.213						
2,800.00	2,800.00	2,800.00	2,800.00	6.15	6.15	-90.37	-0.32	-49.95	49.95	37.65	12.31	4.059						
2,900.00	2,900.00	2,900.00	2,900.00	6.38	6.38	-90.37	-0.32	-49.95	49.95	37.20	12.76	3.916						
3,000.00	3,000.00	3,000.00	3,000.00	6.60	6.60	-90.37	-0.32	-49.95	49.95	36.75	13.21	3.783						
3,100.00	3,100.00	3,100.00	3,100.00	6.83	6.83	-90.37	-0.32	-49.95	49.95	36.30	13.65	3.658						
3,200.00	3,200.00	3,200.00	3,200.00	7.05	7.05	-90.37	-0.32	-49.95	49.95	35.85	14.10	3.542						
3,300.00	3,300.00	3,300.00	3,300.00	7.28	7.28	-90.37	-0.32	-49.95	49.95	35.40	14.55	3.432						
3,400.00	3,400.00	3,400.00	3,400.00	7.50	7.50	-90.37	-0.32	-49.95	49.95	34.95	15.00	3.329						
3,500.00	3,500.00	3,500.00	3,500.00	7.73	7.73	-90.37	-0.32	-49.95	49.95	34.50	15.45	3.233						
3,600.00	3,600.00	3,600.00	3,600.00	7.95	7.95	-90.37	-0.32	-49.95	49.95	34.05	15.90	3.141						
3,700.00	3,700.00	3,700.00	3,700.00	8.18	8.18	-90.37	-0.32	-49.95	49.95	33.60	16.35	3.055						
3,800.00	3,800.00	3,800.00	3,800.00	8.40	8.40	-90.37	-0.32	-49.95	49.95	33.15	16.80	2.973						
3,900.00	3,900.00	3,900.00	3,900.00	8.63	8.63	-90.37	-0.32	-49.95	49.95	32.70	17.25	2.896						
4,000.00	4,000.00	4,000.00	4,000.00	8.85	8.85	-90.37	-0.32	-49.95	49.95	32.25	17.70	2.822						
4,100.00	4,100.00	4,100.00	4,100.00	9.07	9.07	-90.37	-0.32	-49.95	49.95	31.80	18.15	2.752						
4,200.00	4,200.00	4,200.00	4,200.00	9.30	9.30	-90.37	-0.32	-49.95	49.95	31.35	18.60	2.686						
4,300.00	4,300.00	4,300.00	4,300.00	9.52	9.52	-90.37	-0.32	-49.95	49.95	30.90	19.05	2.622						
4,400.00	4,400.00	4,400.00	4,400.00	9.75	9.75	-90.37	-0.32	-49.95	49.95	30.45	19.50	2.562						
4,500.00	4,500.00	4,500.00	4,500.00	9.97	9.97	-90.37	-0.32	-49.95	49.95	30.00	19.95	2.504						
4,600.00	4,600.00	4,600.00	4,600.00	10.20	10.20	-90.37	-0.32	-49.95	49.95	29.55	20.40	2.449						
4,700.00	4,700.00	4,700.00	4,700.00	10.42	10.42	-90.37	-0.32	-49.95	49.95	29.10	20.85	2.396						
4,800.00	4,800.00	4,800.00	4,800.00	10.65	10.65	-90.37	-0.32	-49.95	49.95	28.65	21.30	2.345						
4,900.00	4,900.00	4,900.00	4,900.00	10.87	10.87	-90.37	-0.32	-49.95	49.95	28.20	21.75	2.297						
5,000.00	5,000.00	5,000.00	5,000.00	11.10	11.10	-90.37	-0.32	-49.95	49.95	27.78	22.20	2.250						
5,100.00	5,100.00	5,100.00	5,100.00	11.32	11.32	-90.37	-0.32	-49.95	49.95	27.31	22.65	2.206						
5,166.67	5,166.67	5,166.67	5,166.67	11.47	11.47	-90.37	-0.32	-49.95	49.95	27.01	22.94	2.177						
5,200.00	5,200.00	5,200.00	5,200.00	11.55	11.55	-90.37	-0.32	-49.95	49.95	26.86	23.09	2.163	CC, ES, SF					
5,300.00	5,300.00	5,298.69	5,298.68	11.77	11.78	-90.36	-0.32	-51.22	51.24	27.72	23.53	2.178						
5,400.00	5,400.00	5,397.24	5,397.16	12.00	11.95	-90.33	-0.32	-55.04	55.12	31.17	23.95	2.302						
5,500.00	5,500.00	5,495.54	5,495.24	12.22	12.15	-90.30	-0.32	-61.38	61.56	37.20	24.36	2.527						
5,600.00	5,600.00	5,594.55	5,593.89	12.45	12.35	-90.26	-0.32	-68.82	70.09	45.30	24.78	2.828						
5,700.00	5,700.00	5,694.17	5,693.13	12.67	12.56	-90.23	-0.32	-78.50	78.80	53.60	25.21	3.126						
5,800.00	5,800.00	5,793.79	5,792.37	12.90	12.77	-90.21	-0.32	-87.19	87.52	61.89	25.63	3.415						
5,900.00	5,900.00	5,893.41	5,891.81	13.12	12.98	-90.19	-0.32	-95.87	96.23	70.18	26.06	3.693						
6,000.00	6,000.00	5,993.03	5,990.85	13.35	13.19	-90.18	-0.32	-104.55	104.95	78.47	26.48	3.963						
6,100.00	6,100.00	6,092.64	6,090.09	13.57	13.41	-90.16	-0.32	-113.23	113.67	86.76	26.91	4.224						
6,200.00	6,200.00	6,192.26	6,189.33	13.80	13.63	-90.15	-0.32	-121.91	122.38	95.05	27.34	4.477						
6,300.00	6,300.00	6,291.88	6,288.57	14.02	13.85	-90.14	-0.32	-130.60	131.10	103.33	27.76	4.722						
6,400.00	6,400.00	6,391.50	6,387.81	14.24	14.07	-90.13	-0.32	-139.28	139.81	111.62	28.19	4.959						
6,500.00	6,500.00	6,491.12	6,487.06	14.47	14.30	-90.12	-0.32	-147.96	148.53	119.90	28.62	5.189						
6,600.00	6,600.00	6,590.74	6,586.30	14.69	14.52	-90.12	-0.32	-156.64	157.24	128.19	29.05	5.412						
6,700.00	6,700.00	6,690.36	6,685.54	14.92	14.75	-90.11	-0.32	-165.33	165.96	136.47	29.49	5.628						
6,800.00	6,800.00	6,789.98	6,784.78	15.14	14.98	-90.11	-0.32	-174.01	174.67	144.75	29.92	5.838						
6,900.00	6,900.00	6,889.60	6,884.02	15.37	15.21	-90.10	-0.32	-182.69	183.39	153.04	30.35	6.042						
7,000.00	7,000.00	6,889.22	6,983.28	15.59	15.44	-90.10	-0.32	-191.37	192.11	161.32	30.79	6.240						
7,100.00	7,100.00	7,088.84	7,082.50	15.82	15.67	-90.09	-0.32	-200.06	200.82	169.60	31.22	6.432						
7,200.00	7,200.00	7,188.46	7,181.74	16.04	15.91	-90.09	-0.32	-208.74	209.54	177.88	31.66	6.619						
7,300.00	7,300.00	7,288.08	7,280.98	16.27	16.14	-90.08	-0.32	-217.42	218.25	186.16	32.09	6.801						
7,400.00	7,400.00	7,387.70	7,380.22	16.49	16.38	-90.08	-0.32	-226.10	226.97	194.44	32.53	6.977						

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Blue Krait 23 Fed - 1H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD-ADJ														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	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)					
7,500.00	7,500.00	7,487.32	7,479.46	16.72	16.62	-90.08	-0.32	-234.79	235.88	202.72	32.97	7.149			
7,600.00	7,600.00	7,590.60	7,582.38	16.94	16.86	-90.08	-0.32	-243.36	244.00	210.59	33.41	7.304			
7,700.00	7,700.00	7,697.33	7,688.93	17.17	17.07	-90.07	-0.32	-249.58	249.82	215.99	33.84	7.383			
7,800.00	7,800.00	7,804.33	7,795.87	17.39	17.28	-90.07	-0.32	-252.82	252.86	218.59	34.27	7.378			
7,900.00	7,900.00	7,908.46	7,900.00	17.62	17.48	-90.07	-0.32	-253.33	253.33	218.63	34.70	7.301			
8,000.00	8,000.00	8,008.46	8,000.00	17.84	17.70	-90.07	-0.32	-253.33	253.33	218.19	35.14	7.208			
8,100.00	8,100.00	8,108.46	8,100.00	18.07	17.92	-90.07	-0.32	-253.33	253.33	217.74	35.59	7.118			
8,200.00	8,200.00	8,208.46	8,200.00	18.29	18.13	-90.07	-0.32	-253.33	253.33	217.30	36.04	7.030			
8,300.00	8,300.00	8,308.46	8,300.00	18.52	18.35	-90.07	-0.32	-253.33	253.33	216.85	36.48	6.944			
8,400.00	8,400.00	8,408.46	8,400.00	18.74	18.57	-90.07	-0.32	-253.33	253.33	216.40	36.93	6.860			
8,500.00	8,500.00	8,508.46	8,500.00	18.96	18.79	-90.07	-0.32	-253.33	253.33	215.96	37.38	6.778			
8,600.00	8,600.00	8,608.46	8,600.00	19.19	19.01	-90.07	-0.32	-253.33	253.33	215.51	37.82	6.698			
8,700.00	8,700.00	8,708.46	8,700.00	19.41	19.23	-90.07	-0.32	-253.33	253.33	215.06	38.27	6.620			
8,800.00	8,800.00	8,808.46	8,800.00	19.64	19.44	-90.07	-0.32	-253.33	253.33	214.62	38.71	6.544			
8,900.00	8,900.00	8,908.46	8,900.00	19.88	19.66	-90.07	-0.32	-253.33	253.33	214.17	39.16	6.468			
9,000.00	9,000.00	9,008.46	9,000.00	20.09	19.88	-90.07	-0.32	-253.33	253.33	213.72	39.61	6.396			
9,100.00	9,100.00	9,108.46	9,100.00	20.31	20.10	-90.07	-0.32	-253.33	253.33	213.28	40.08	6.325			
9,200.00	9,200.00	9,208.46	9,200.00	20.54	20.32	-90.07	-0.32	-253.33	253.33	212.83	40.50	6.255			
9,300.00	9,300.00	9,308.46	9,300.00	20.76	20.54	-90.07	-0.32	-253.33	253.33	212.38	40.95	6.187			
9,400.00	9,400.00	9,408.46	9,400.00	20.99	20.78	-90.07	-0.32	-253.33	253.33	211.94	41.40	6.120			
9,500.00	9,500.00	9,508.46	9,500.00	21.21	20.98	-90.07	-0.32	-253.33	253.33	211.49	41.84	6.054			
9,600.00	9,600.00	9,608.46	9,600.00	21.44	21.20	-90.07	-0.32	-253.33	253.33	211.04	42.29	5.990			
9,700.00	9,700.00	9,708.46	9,700.00	21.66	21.42	-90.07	-0.32	-253.33	253.33	210.59	42.74	5.928			
9,800.00	9,800.00	9,808.46	9,800.00	21.89	21.64	-90.07	-0.32	-253.33	253.33	210.15	43.18	5.866			
9,900.00	9,900.00	9,908.46	9,900.00	22.11	21.86	-90.07	-0.32	-253.33	253.33	209.70	43.63	5.806			
10,000.00	10,000.00	10,008.46	10,000.00	22.34	22.08	-90.07	-0.32	-253.33	253.33	209.25	44.08	5.747			
10,100.00	10,100.00	10,108.46	10,100.00	22.56	22.30	-90.07	-0.32	-253.33	253.33	208.81	44.53	5.690			
10,200.00	10,200.00	10,208.46	10,200.00	22.79	22.52	-90.07	-0.32	-253.33	253.33	208.36	44.97	5.633			
10,300.00	10,300.00	10,308.46	10,300.00	23.01	22.74	-90.07	-0.32	-253.33	253.33	207.91	45.42	5.577			
10,400.00	10,400.00	10,408.46	10,400.00	23.24	22.96	-90.07	-0.32	-253.33	253.33	207.46	45.87	5.523			
10,454.24	10,454.24	10,462.69	10,454.24	23.36	23.08	-90.07	-0.32	-253.33	253.33	207.22	46.11	5.494			
10,481.65	10,481.65	10,490.10	10,481.65	23.42	23.14	-90.07	-0.32	-253.33	253.33	207.10	46.23	5.479			
10,500.00	10,500.00	10,508.36	10,499.90	23.46	23.18	-91.70	-0.01	-253.34	253.34	207.03	46.32	5.470			
10,550.00	10,549.84	10,558.09	10,549.47	23.57	23.29	-91.67	3.78	-253.39	253.50	206.97	46.53	5.448			
10,600.00	10,599.18	10,607.81	10,598.52	23.69	23.40	-91.64	11.85	-253.49	253.84	207.09	46.75	5.430			
10,650.00	10,647.59	10,657.54	10,648.88	23.80	23.51	-91.59	24.14	-253.66	254.36	207.40	46.96	5.417			
10,700.00	10,694.75	10,707.26	10,693.80	23.90	23.62	-91.53	40.56	-253.88	255.05	207.88	47.17	5.407			
10,750.00	10,740.30	10,756.99	10,738.92	24.01	23.73	-91.45	60.98	-254.15	255.91	208.53	47.38	5.401			
10,800.00	10,783.87	10,806.71	10,782.30	24.10	23.83	-91.37	85.25	-254.48	256.93	209.33	47.60	5.388			
10,850.00	10,825.15	10,856.44	10,823.42	24.22	23.94	-91.28	113.20	-254.85	258.11	210.28	47.83	5.396			
10,900.00	10,863.81	10,906.18	10,881.96	24.35	24.06	-91.17	144.61	-255.27	259.43	211.35	48.09	5.395			
10,950.00	10,899.56	10,955.92	10,897.84	24.48	24.18	-91.06	179.24	-255.74	260.89	212.53	48.37	5.394			
11,000.00	10,932.13	11,005.67	10,930.18	24.64	24.32	-90.94	216.85	-256.24	262.48	213.80	48.68	5.392			
11,050.00	10,961.27	11,055.44	10,959.35	24.81	24.48	-90.81	257.15	-256.78	264.17	215.15	49.03	5.388			
11,100.00	10,986.76	11,105.21	10,984.92	25.01	24.66	-90.68	299.83	-257.35	265.97	216.55	49.42	5.382			
11,150.00	11,008.41	11,155.00	11,006.69	25.22	24.87	-90.54	344.59	-257.95	267.85	217.99	49.86	5.372			
11,200.00	11,026.05	11,204.81	11,024.50	25.46	25.12	-90.40	391.08	-258.57	269.80	219.46	50.35	5.359			
11,250.00	11,039.55	11,254.84	11,038.22	25.73	25.39	-90.28	438.98	-259.22	271.81	220.93	50.88	5.342			
11,300.00	11,048.80	11,304.49	11,047.72	26.02	25.68	-90.11	487.88	-259.87	273.87	222.40	51.47	5.321			
11,350.00	11,053.73	11,354.36	11,052.94	26.33	26.00	-89.97	537.46	-260.54	275.95	223.85	52.10	5.297			
11,385.85	11,054.59	11,390.14	11,054.02	26.56	26.24	-89.86	573.21	-261.01	277.44	224.87	52.57	5.277			
11,400.00	11,054.49	11,404.27	11,053.93	26.66	26.34	-89.87	587.34	-261.20	278.03	225.26	52.77	5.269			

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Blue Krait 23 Fed - 1H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD-ADJ														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	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)					
11,500.00	11,053.75	11,504.19	11,053.21	27.39	27.11	-89.87	687.24	-262.54	282.22	227.95	54.27	5.200			
11,600.00	11,053.02	11,604.10	11,052.49	28.23	27.97	-89.88	787.14	-263.88	286.40	230.43	55.96	5.118			
11,700.00	11,052.29	11,704.01	11,051.77	29.16	28.92	-89.88	887.05	-265.22	290.58	232.74	57.84	5.024			
11,800.00	11,051.56	11,803.92	11,051.05	30.16	29.96	-89.88	986.95	-266.56	294.76	234.88	59.88	4.923			
11,900.00	11,050.82	11,903.84	11,050.33	31.24	31.06	-89.89	1,086.85	-267.89	298.94	236.87	62.06	4.817			
12,000.00	11,050.09	12,003.75	11,049.61	32.39	32.24	-89.89	1,186.75	-269.23	303.12	238.73	64.38	4.708			
12,100.00	11,049.36	12,103.66	11,048.89	33.60	33.47	-89.90	1,286.65	-270.57	307.30	240.48	66.82	4.599			
12,200.00	11,048.62	12,203.57	11,048.17	34.86	34.75	-89.90	1,386.55	-271.91	311.48	242.11	69.37	4.490			
12,300.00	11,047.89	12,303.49	11,047.45	36.16	36.08	-89.90	1,486.45	-273.25	315.66	243.66	72.00	4.384			
12,400.00	11,047.16	12,403.40	11,046.74	37.51	37.46	-89.91	1,586.35	-274.58	319.84	245.11	74.73	4.280			
12,500.00	11,046.42	12,503.31	11,046.02	38.90	38.87	-89.91	1,686.25	-275.92	324.02	246.49	77.53	4.179			
12,600.00	11,045.69	12,603.22	11,045.30	40.33	40.31	-89.91	1,786.15	-277.26	328.20	247.81	80.40	4.082			
12,700.00	11,044.96	12,703.14	11,044.58	41.78	41.79	-89.92	1,886.06	-278.60	332.38	249.06	83.32	3.989			
12,800.00	11,044.23	12,803.05	11,043.86	43.26	43.29	-89.92	1,985.96	-279.94	336.56	250.25	86.31	3.900			
12,900.00	11,043.49	12,902.96	11,043.14	44.77	44.82	-89.92	2,085.86	-281.27	340.74	251.40	89.34	3.814			
13,000.00	11,042.76	13,002.88	11,042.42	46.29	46.36	-89.93	2,185.76	-282.61	344.92	252.51	92.42	3.732			
13,100.00	11,042.03	13,102.79	11,041.70	47.84	47.93	-89.93	2,285.66	-283.95	349.10	253.57	95.53	3.654			
13,200.00	11,041.29	13,202.70	11,040.98	49.41	49.52	-89.93	2,385.56	-285.29	353.28	254.60	98.69	3.580			
13,300.00	11,040.56	13,302.61	11,040.28	51.00	51.12	-89.93	2,485.46	-286.63	357.46	255.59	101.87	3.509			
13,400.00	11,039.83	13,402.53	11,039.54	52.60	52.74	-89.94	2,585.36	-287.97	361.65	256.55	105.09	3.441			
13,500.00	11,039.09	13,502.44	11,038.83	54.21	54.37	-89.94	2,685.26	-289.30	365.83	257.49	108.33	3.377			
13,600.00	11,038.36	13,602.35	11,038.11	55.83	56.01	-89.94	2,785.16	-290.64	370.01	258.40	111.60	3.315			
13,700.00	11,037.63	13,702.26	11,037.39	57.47	57.66	-89.95	2,885.07	-291.98	374.19	259.29	114.89	3.257			
13,800.00	11,036.89	13,802.18	11,036.67	59.12	59.33	-89.95	2,984.97	-293.32	378.37	260.16	118.21	3.201			
13,900.00	11,036.16	13,902.09	11,035.95	60.78	61.00	-89.95	3,084.87	-294.66	382.55	261.01	121.54	3.148			
14,000.00	11,035.43	14,002.00	11,035.23	62.45	62.68	-89.95	3,184.77	-295.99	386.73	261.84	124.89	3.097			
14,100.00	11,034.70	14,101.91	11,034.51	64.12	64.37	-89.96	3,284.67	-297.33	390.91	262.66	128.25	3.048			
14,200.00	11,033.96	14,201.83	11,033.79	65.80	66.07	-89.96	3,384.57	-298.67	395.09	263.46	131.63	3.001			
14,300.00	11,033.23	14,301.74	11,033.07	67.49	67.77	-89.96	3,484.47	-300.01	399.27	264.24	135.03	2.957			
14,400.00	11,032.50	14,401.65	11,032.35	69.19	69.49	-89.96	3,584.37	-301.35	403.45	265.02	138.43	2.914			
14,500.00	11,031.76	14,501.56	11,031.63	70.89	71.20	-89.96	3,684.27	-302.68	407.63	265.78	141.85	2.874			
14,600.00	11,031.03	14,601.48	11,030.92	72.60	72.92	-89.97	3,784.17	-304.02	411.81	266.53	145.28	2.835			
14,700.00	11,030.30	14,701.39	11,030.20	74.32	74.65	-89.97	3,884.08	-305.36	415.99	267.27	148.72	2.797			
14,800.00	11,029.56	14,801.30	11,029.48	76.03	76.38	-89.97	3,983.98	-306.70	420.17	268.00	152.17	2.761			
14,900.00	11,028.83	14,901.21	11,028.76	77.76	78.12	-89.97	4,083.88	-308.04	424.35	268.72	155.63	2.727			
15,000.00	11,028.10	15,001.13	11,028.04	79.49	79.86	-89.97	4,183.78	-309.38	428.53	269.43	159.10	2.693			
15,100.00	11,027.37	15,101.04	11,027.32	81.22	81.61	-89.98	4,283.68	-310.71	432.71	270.14	162.58	2.662			
15,200.00	11,026.63	15,200.95	11,026.60	82.95	83.35	-89.98	4,383.58	-312.05	436.90	270.84	166.06	2.631			
15,300.00	11,025.90	15,300.86	11,025.88	84.69	85.10	-89.98	4,483.48	-313.39	441.08	271.53	169.55	2.601			
15,400.00	11,025.17	15,400.78	11,025.16	86.43	86.86	-89.98	4,583.38	-314.73	445.26	272.21	173.04	2.573			
15,500.00	11,024.43	15,500.69	11,024.44	88.18	88.62	-89.98	4,683.28	-316.07	449.44	272.89	176.55	2.546			
15,559.07	11,024.00	15,559.71	11,024.02	89.03	89.66	-89.98	4,742.30	-316.86	451.91	273.47	178.43	2.533			

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Blue Krait 23 Fed - 5H - OH - Plan #1											Offset Site Error: 0.00 usft		
Survey Program: 0-LEAM MWD-ADJ											Offset Well Error: 0.00 usft		
Reference		Offset		Semi-Major Axis		Highside Toolface (°)	Distance				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)		Minimum Separation (usft)	Separation Factor
0.00	0.00	0.00	0.00	0.00	0.00	89.60	0.35	50.02	50.02				
100.00	100.00	99.60	99.60	0.08	0.08	89.60	0.35	50.02	50.02	49.85	0.17	297.325	
200.00	200.00	199.60	199.60	0.31	0.31	89.60	0.35	50.02	50.02	49.40	0.62	81.044	
300.00	300.00	299.60	299.60	0.53	0.53	89.60	0.35	50.02	50.02	48.95	1.07	46.892	
400.00	400.00	399.60	399.60	0.76	0.76	89.60	0.35	50.02	50.02	48.50	1.52	32.990	
500.00	500.00	499.60	499.60	0.98	0.98	89.60	0.35	50.02	50.02	48.06	1.97	25.448	
600.00	600.00	599.60	599.60	1.21	1.21	89.60	0.35	50.02	50.02	47.61	2.42	20.710	
700.00	700.00	699.60	699.60	1.43	1.43	89.60	0.35	50.02	50.02	47.16	2.86	17.460	
800.00	800.00	799.60	799.50	1.66	1.66	89.60	0.35	50.02	50.02	46.71	3.31	15.092	
900.00	900.00	899.60	899.60	1.88	1.88	89.60	0.35	50.02	50.02	46.26	3.78	13.290	
1,000.00	1,000.00	999.60	999.60	2.11	2.11	89.60	0.35	50.02	50.02	45.81	4.21	11.872	
1,100.00	1,100.00	1,099.60	1,099.60	2.33	2.33	89.60	0.35	50.02	50.02	45.36	4.68	10.727	
1,200.00	1,200.00	1,199.60	1,199.60	2.56	2.56	89.60	0.35	50.02	50.02	44.91	5.11	9.784	
1,300.00	1,300.00	1,299.60	1,299.60	2.78	2.78	89.60	0.35	50.02	50.02	44.46	5.58	8.993	
1,400.00	1,400.00	1,399.60	1,399.60	3.01	3.01	89.60	0.35	50.02	50.02	44.01	6.01	8.321	
1,500.00	1,500.00	1,499.60	1,499.60	3.23	3.23	89.60	0.35	50.02	50.02	43.56	6.48	7.742	
1,600.00	1,600.00	1,599.60	1,599.60	3.46	3.45	89.60	0.35	50.02	50.02	43.11	6.91	7.238	
1,700.00	1,700.00	1,699.60	1,699.60	3.68	3.68	89.60	0.35	50.02	50.02	42.66	7.36	6.796	
1,800.00	1,800.00	1,799.60	1,799.60	3.91	3.90	89.60	0.35	50.02	50.02	42.21	7.81	6.405	
1,900.00	1,900.00	1,899.60	1,899.60	4.13	4.13	89.60	0.35	50.02	50.02	41.76	8.28	6.056	
2,000.00	2,000.00	1,999.60	1,999.60	4.35	4.35	89.60	0.35	50.02	50.02	41.31	8.71	5.744	
2,100.00	2,100.00	2,099.60	2,099.60	4.58	4.58	89.60	0.35	50.02	50.02	40.86	9.18	5.462	
2,200.00	2,200.00	2,199.60	2,199.60	4.80	4.80	89.60	0.35	50.02	50.02	40.41	9.61	5.206	
2,300.00	2,300.00	2,299.60	2,299.60	5.03	5.03	89.60	0.35	50.02	50.02	39.96	10.06	4.974	
2,400.00	2,400.00	2,399.60	2,399.60	5.25	5.25	89.60	0.35	50.02	50.02	39.51	10.51	4.761	
2,500.00	2,500.00	2,499.60	2,499.60	5.48	5.48	89.60	0.35	50.02	50.02	39.06	10.96	4.565	
2,600.00	2,600.00	2,599.60	2,599.60	5.70	5.70	89.60	0.35	50.02	50.02	38.62	11.41	4.388	
2,700.00	2,700.00	2,699.60	2,699.60	5.93	5.93	89.60	0.35	50.02	50.02	38.17	11.86	4.219	
2,800.00	2,800.00	2,799.60	2,799.60	6.15	6.15	89.60	0.35	50.02	50.02	37.72	12.31	4.065	
2,900.00	2,900.00	2,899.60	2,899.60	6.38	6.38	89.60	0.35	50.02	50.02	37.27	12.75	3.922	
3,000.00	3,000.00	2,999.60	2,999.60	6.60	6.60	89.60	0.35	50.02	50.02	36.82	13.20	3.788	
3,100.00	3,100.00	3,099.60	3,099.60	6.83	6.83	89.60	0.35	50.02	50.02	36.37	13.65	3.664	
3,200.00	3,200.00	3,199.60	3,199.60	7.05	7.05	89.60	0.35	50.02	50.02	35.92	14.10	3.547	
3,300.00	3,300.00	3,299.60	3,299.60	7.28	7.28	89.60	0.35	50.02	50.02	35.47	14.55	3.437	
3,400.00	3,400.00	3,399.60	3,399.60	7.50	7.50	89.60	0.35	50.02	50.02	35.02	15.00	3.334	
3,500.00	3,500.00	3,499.60	3,499.60	7.73	7.73	89.60	0.35	50.02	50.02	34.57	15.45	3.237	
3,600.00	3,600.00	3,599.60	3,599.60	7.95	7.95	89.60	0.35	50.02	50.02	34.12	15.90	3.146	
3,700.00	3,700.00	3,699.60	3,699.60	8.18	8.17	89.60	0.35	50.02	50.02	33.67	16.35	3.059	
3,800.00	3,800.00	3,799.60	3,799.60	8.40	8.40	89.60	0.35	50.02	50.02	33.22	16.80	2.977	
3,900.00	3,900.00	3,899.60	3,899.60	8.63	8.62	89.60	0.35	50.02	50.02	32.77	17.25	2.900	
4,000.00	4,000.00	3,999.60	3,999.60	8.85	8.85	89.60	0.35	50.02	50.02	32.32	17.70	2.828	
4,100.00	4,100.00	4,099.60	4,099.60	9.07	9.07	89.60	0.35	50.02	50.02	31.87	18.15	2.758	
4,200.00	4,200.00	4,199.60	4,199.60	9.30	9.30	89.60	0.35	50.02	50.02	31.42	18.60	2.690	
4,300.00	4,300.00	4,299.60	4,299.60	9.52	9.52	89.60	0.35	50.02	50.02	30.97	19.05	2.626	
4,400.00	4,400.00	4,399.60	4,399.60	9.75	9.75	89.60	0.35	50.02	50.02	30.52	19.50	2.566	
4,500.00	4,500.00	4,499.60	4,499.60	9.97	9.97	89.60	0.35	50.02	50.02	30.07	19.95	2.508	
4,600.00	4,600.00	4,599.60	4,599.60	10.20	10.20	89.60	0.35	50.02	50.02	29.62	20.40	2.452	
4,700.00	4,700.00	4,699.60	4,699.60	10.42	10.42	89.60	0.35	50.02	50.02	29.18	20.85	2.400	
4,800.00	4,800.00	4,799.60	4,799.60	10.65	10.65	89.60	0.35	50.02	50.02	28.73	21.30	2.349	
4,900.00	4,900.00	4,899.60	4,899.60	10.87	10.87	89.60	0.35	50.02	50.02	28.28	21.75	2.300	
5,000.00	5,000.00	4,999.60	4,999.60	11.10	11.10	89.60	0.35	50.02	50.02	27.83	22.19	2.254	
5,100.00	5,100.00	5,099.60	5,099.60	11.32	11.32	89.60	0.35	50.02	50.02	27.38	22.64	2.209	

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed.	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue Krait 23 Fed - 5H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD-ADJ														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	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)					
5,200.00	5,200.00	5,199.80	5,199.80	11.55	11.55	89.80	0.35	50.02	50.02	26.93	23.09	2.166	CC, ES		
5,300.00	5,300.00	5,298.73	5,298.72	11.77	11.76	89.81	0.35	50.87	50.88	27.35	23.53	2.163	SF		
5,400.00	5,400.00	5,397.79	5,397.75	12.00	11.95	89.82	0.35	53.43	53.47	29.52	23.95	2.233			
5,500.00	5,500.00	5,496.74	5,496.61	12.22	12.15	89.65	0.35	57.70	57.78	33.41	24.37	2.371			
5,600.00	5,600.00	5,595.51	5,595.20	12.45	12.35	89.89	0.35	63.67	63.82	39.03	24.79	2.575			
5,700.00	5,700.00	5,694.05	5,693.44	12.67	12.55	89.72	0.35	71.31	71.57	46.37	25.21	2.839			
5,800.00	5,800.00	5,793.59	5,792.60	12.90	12.76	89.75	0.35	79.98	80.29	54.66	25.63	3.132			
5,900.00	5,900.00	5,893.21	5,891.84	13.12	12.97	89.77	0.35	88.66	89.00	62.95	26.06	3.416			
6,000.00	6,000.00	5,892.83	5,891.08	13.35	13.18	89.79	0.35	97.34	97.72	71.24	26.48	3.690			
6,100.00	6,100.00	6,092.45	6,090.32	13.57	13.40	89.81	0.35	106.03	106.43	79.53	26.91	3.956			
6,200.00	6,200.00	6,192.07	6,189.56	13.80	13.61	89.83	0.35	114.71	115.15	87.81	27.33	4.212			
6,300.00	6,300.00	6,291.69	6,288.80	14.02	13.83	89.84	0.35	123.39	123.88	96.10	27.76	4.461			
6,400.00	6,400.00	6,391.31	6,388.05	14.24	14.05	89.85	0.35	132.07	132.58	104.39	28.19	4.703			
6,500.00	6,500.00	6,490.93	6,487.29	14.47	14.27	89.86	0.35	140.76	141.29	112.67	28.62	4.936			
6,600.00	6,600.00	6,590.55	6,586.53	14.69	14.50	89.87	0.35	149.44	150.01	120.96	29.05	5.163			
6,700.00	6,700.00	6,690.17	6,685.77	14.92	14.72	89.87	0.35	158.12	158.73	129.24	29.49	5.383			
6,800.00	6,800.00	6,789.79	6,785.01	15.14	14.95	89.88	0.35	166.80	167.44	137.52	29.92	5.597			
6,900.00	6,900.00	6,889.41	6,884.25	15.37	15.18	89.89	0.35	175.49	176.16	145.81	30.35	5.804			
7,000.00	7,000.00	6,889.03	6,883.49	15.59	15.41	89.89	0.35	184.17	184.87	154.09	30.79	6.005			
7,100.00	7,100.00	7,088.65	7,082.73	15.82	15.64	89.90	0.35	192.85	193.59	162.37	31.22	6.201			
7,200.00	7,200.00	7,188.27	7,181.97	16.04	15.86	89.90	0.35	201.53	202.30	170.65	31.66	6.391			
7,300.00	7,300.00	7,287.89	7,281.21	16.27	16.11	89.90	0.35	210.22	211.02	178.93	32.09	6.576			
7,400.00	7,400.00	7,387.50	7,380.45	16.49	16.35	89.91	0.35	218.90	219.73	187.21	32.53	6.755			
7,500.00	7,500.00	7,487.12	7,479.69	16.72	16.58	89.91	0.35	227.58	228.45	195.49	32.96	6.930			
7,600.00	7,600.00	7,586.74	7,578.93	16.94	16.82	89.92	0.35	236.26	237.17	203.76	33.40	7.100			
7,700.00	7,700.00	7,686.36	7,678.17	17.17	17.06	89.92	0.35	244.95	245.88	212.04	33.84	7.266			
7,800.00	7,800.00	7,785.98	7,777.41	17.39	17.30	89.92	0.35	253.63	254.60	220.32	34.28	7.427			
7,900.00	7,900.00	7,885.60	7,876.65	17.62	17.54	89.92	0.35	262.31	263.31	228.60	34.72	7.584			
8,000.00	8,000.00	7,985.22	7,975.89	17.84	17.78	89.93	0.35	270.99	272.03	236.87	35.16	7.738			
8,100.00	8,100.00	8,084.84	8,075.13	18.07	18.02	89.93	0.35	279.68	280.74	245.15	35.60	7.887			
8,200.00	8,200.00	8,184.46	8,174.37	18.29	18.27	89.93	0.35	288.36	289.46	253.42	36.04	8.032			
8,300.00	8,300.00	8,284.08	8,273.61	18.52	18.51	89.93	0.35	297.04	298.18	261.70	36.48	8.174			
8,400.00	8,400.00	8,383.70	8,372.85	18.74	18.76	89.93	0.35	305.72	306.89	269.97	36.92	8.312			
8,500.00	8,500.00	8,483.32	8,472.09	18.96	19.00	89.94	0.35	314.41	315.61	278.25	37.36	8.447			
8,600.00	8,600.00	8,582.94	8,571.33	19.19	19.25	89.94	0.35	323.09	324.32	286.52	37.80	8.579			
8,700.00	8,700.00	8,682.56	8,670.57	19.41	19.50	89.94	0.35	331.77	333.04	294.79	38.25	8.708			
8,800.00	8,800.00	8,782.18	8,769.81	19.64	19.74	89.94	0.35	340.45	341.75	303.06	38.69	8.834			
8,900.00	8,900.00	8,881.80	8,869.05	19.86	19.99	89.94	0.35	349.13	350.47	311.34	39.13	8.956			
9,000.00	9,000.00	8,981.51	8,968.39	20.09	20.24	89.94	0.35	357.83	359.18	319.61	39.57	9.076			
9,100.00	9,100.00	9,081.96	9,074.51	20.31	20.47	89.95	0.35	366.09	366.95	326.94	40.01	9.172			
9,200.00	9,200.00	9,184.67	9,181.04	20.54	20.69	89.95	0.35	372.39	372.86	332.42	40.44	9.220			
9,300.00	9,300.00	9,301.59	9,287.87	20.76	20.90	89.95	0.35	376.72	376.90	336.03	40.87	9.222			
9,400.00	9,400.00	9,408.63	9,394.88	20.99	21.10	89.95	0.35	379.05	379.08	337.78	41.30	9.179			
9,500.00	9,500.00	9,513.35	9,499.60	21.21	21.30	89.95	0.35	379.50	379.50	337.77	41.73	9.094			
9,600.00	9,600.00	9,613.35	9,599.60	21.44	21.51	89.95	0.35	379.50	379.50	337.33	42.17	8.999			
9,700.00	9,700.00	9,713.35	9,699.60	21.66	21.72	89.95	0.35	379.50	379.50	336.86	42.61	8.905			
9,800.00	9,800.00	9,813.35	9,799.60	21.89	21.94	89.95	0.35	379.50	379.50	336.44	43.06	8.814			
9,900.00	9,900.00	9,913.35	9,899.60	22.11	22.15	89.95	0.35	379.50	379.50	336.00	43.50	8.724			
10,000.00	10,000.00	10,013.35	9,999.60	22.34	22.36	89.95	0.35	379.50	379.50	335.55	43.95	8.636			
10,100.00	10,100.00	10,113.35	10,099.60	22.56	22.58	89.95	0.35	379.50	379.50	335.11	44.39	8.549			
10,200.00	10,200.00	10,213.35	10,199.60	22.79	22.79	89.95	0.35	379.50	379.50	334.66	44.83	8.465			
10,300.00	10,300.00	10,313.35	10,299.60	23.01	23.00	89.95	0.35	379.50	379.50	334.22	45.28	8.382			

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	Local Co-ordinate Reference:	Well: 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM: 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue Krait 23 Fed - 5H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD-ADJ													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	
10,400.00	10,400.00	10,413.35	10,399.60	23.24	23.22	89.95	0.35	379.50	379.50	333.78	45.72	8.300	
10,454.37	10,454.37	10,467.72	10,453.97	23.36	23.33	89.95	0.35	379.50	379.50	333.53	45.96	8.257	
10,481.65	10,481.65	10,494.99	10,481.24	23.42	23.39	89.95	0.35	379.50	379.50	333.41	46.08	8.235	
10,500.00	10,500.00	10,512.82	10,499.07	23.45	23.43	88.32	0.63	379.51	379.50	333.34	46.16	8.221	
10,550.00	10,549.84	10,561.39	10,547.49	23.57	23.54	88.33	4.21	379.66	379.55	333.18	46.38	8.184	
10,600.00	10,599.16	10,609.97	10,595.45	23.69	23.64	88.35	11.87	380.00	379.87	333.08	46.59	8.149	
10,650.00	10,647.59	10,658.58	10,642.81	23.80	23.75	88.38	23.57	380.51	379.84	333.04	46.80	8.116	
10,700.00	10,694.75	10,707.21	10,688.83	23.90	23.85	88.43	39.23	381.19	380.07	333.07	47.01	8.085	
10,750.00	10,740.30	10,755.89	10,733.20	24.01	23.95	88.48	58.76	382.05	380.36	333.14	47.22	8.055	
10,800.00	10,783.87	10,804.82	10,775.99	24.10	24.06	88.55	82.01	383.08	380.71	333.27	47.44	8.025	
10,850.00	10,825.15	10,853.41	10,816.70	24.22	24.17	88.63	108.85	384.23	381.11	333.43	47.68	7.993	
10,900.00	10,883.81	10,902.26	10,855.03	24.35	24.28	88.72	139.09	385.55	381.56	333.62	47.93	7.960	
10,950.00	10,899.56	10,951.19	10,890.69	24.48	24.39	88.82	172.54	387.01	382.05	333.84	48.21	7.924	
11,000.00	10,932.13	11,000.00	10,923.29	24.64	24.52	88.93	208.81	388.60	382.60	334.07	48.53	7.884	
11,050.00	10,981.27	11,049.32	10,952.97	24.81	24.67	89.04	248.14	390.31	383.18	334.30	48.88	7.839	
11,100.00	10,986.76	11,098.53	10,979.11	25.01	24.84	89.16	289.78	392.13	383.81	334.53	49.28	7.789	
11,150.00	11,008.41	11,147.85	11,001.61	25.22	25.04	89.29	333.60	394.04	384.47	334.75	49.72	7.733	
11,200.00	11,026.05	11,197.27	11,020.30	25.46	25.26	89.43	379.30	396.04	385.16	334.95	50.21	7.671	
11,250.00	11,039.55	11,248.82	11,035.01	25.73	25.52	89.56	426.55	398.10	385.87	335.12	50.75	7.604	
11,300.00	11,048.80	11,298.48	11,045.60	26.02	25.81	89.70	475.01	400.22	386.60	335.27	51.33	7.531	
11,350.00	11,053.73	11,348.27	11,051.96	26.33	26.12	89.84	524.33	402.37	387.35	335.39	51.97	7.454	
11,385.85	11,054.59	11,382.05	11,053.88	26.56	26.36	89.95	580.01	403.93	387.89	335.45	52.45	7.396	
11,400.00	11,054.49	11,396.19	11,054.02	26.66	26.46	89.98	574.14	404.54	388.11	335.47	52.64	7.373	
11,500.00	11,053.75	11,496.18	11,053.30	27.39	27.21	89.99	674.03	408.91	389.63	335.49	54.14	7.197	
11,600.00	11,053.02	11,596.17	11,052.59	28.23	28.07	89.99	773.92	413.27	391.15	335.31	55.83	7.005	
11,700.00	11,052.29	11,696.16	11,051.87	29.16	29.01	89.99	873.82	417.63	392.67	334.96	57.71	6.804	
11,800.00	11,051.56	11,796.15	11,051.15	30.16	30.03	89.99	973.71	421.99	394.19	334.44	59.75	6.598	
11,900.00	11,050.82	11,896.13	11,050.43	31.24	31.12	90.00	1,073.60	426.35	395.71	333.78	61.93	6.390	
12,000.00	11,050.09	11,996.12	11,049.72	32.39	32.28	90.00	1,173.49	430.71	397.23	332.98	64.25	6.183	
12,100.00	11,049.36	12,096.11	11,049.00	33.60	33.50	90.00	1,273.38	435.07	398.75	332.07	66.68	5.980	
12,200.00	11,048.62	12,196.10	11,048.28	34.86	34.77	90.00	1,373.27	439.43	400.27	331.05	69.22	5.783	
12,300.00	11,047.89	12,296.09	11,047.56	36.16	36.08	90.00	1,473.16	443.79	401.79	329.94	71.85	5.592	
12,400.00	11,047.16	12,396.08	11,046.84	37.51	37.44	90.01	1,573.05	448.15	403.31	328.74	74.57	5.409	
12,500.00	11,046.42	12,496.06	11,046.13	38.90	38.84	90.01	1,672.94	452.51	404.83	327.47	77.36	5.233	
12,600.00	11,045.69	12,596.05	11,045.41	40.33	40.26	90.01	1,772.83	456.87	406.35	326.13	80.22	5.065	
12,700.00	11,044.96	12,696.04	11,044.69	41.78	41.72	90.01	1,872.72	461.23	407.87	324.73	83.14	4.908	
12,800.00	11,044.23	12,796.03	11,043.97	43.26	43.21	90.01	1,972.61	465.59	409.39	323.27	86.12	4.754	
12,900.00	11,043.49	12,896.02	11,043.25	44.77	44.72	90.02	2,072.50	469.95	410.91	321.77	89.14	4.610	
13,000.00	11,042.76	12,996.01	11,042.54	46.29	46.25	90.02	2,172.39	474.32	412.43	320.22	92.21	4.473	
13,100.00	11,042.03	13,095.99	11,041.82	47.84	47.80	90.02	2,272.29	478.68	413.95	318.83	95.32	4.343	
13,200.00	11,041.29	13,195.98	11,041.10	49.41	49.37	90.02	2,372.18	483.04	415.47	317.01	98.46	4.220	
13,300.00	11,040.56	13,295.97	11,040.38	51.00	50.96	90.02	2,472.07	487.40	416.99	315.35	101.84	4.103	
13,400.00	11,039.83	13,395.96	11,039.67	52.60	52.56	90.03	2,571.96	491.76	418.51	313.66	104.84	3.992	
13,500.00	11,039.09	13,495.95	11,038.95	54.21	54.17	90.03	2,671.85	496.12	420.03	311.95	108.08	3.886	
13,600.00	11,038.36	13,595.94	11,038.23	55.83	55.80	90.03	2,771.74	500.48	421.55	310.21	111.34	3.786	
13,700.00	11,037.63	13,695.93	11,037.51	57.47	57.44	90.03	2,871.63	504.84	423.07	308.45	114.62	3.691	
13,800.00	11,036.89	13,795.91	11,036.79	59.12	59.09	90.03	2,971.52	509.20	424.59	306.67	117.92	3.601	
13,900.00	11,036.16	13,895.90	11,036.06	60.78	60.74	90.04	3,071.41	513.56	426.11	304.87	121.24	3.515	
14,000.00	11,035.43	13,995.89	11,035.36	62.45	62.41	90.04	3,171.30	517.92	427.63	303.05	124.58	3.433	
14,100.00	11,034.70	14,095.88	11,034.64	64.12	64.09	90.04	3,271.19	522.28	429.15	301.21	127.93	3.354	
14,200.00	11,033.96	14,195.87	11,033.92	65.80	65.77	90.04	3,371.08	526.64	430.67	299.36	131.30	3.280	
14,300.00	11,033.23	14,295.86	11,033.21	67.49	67.46	90.04	3,470.97	531.00	432.19	297.50	134.69	3.209	

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	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue Krait 23 Fed - 5H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-LEAM/MWD-ADJ													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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,400.00	11,032.50	14,395.84	11,032.49	69.19	69.15	90.05	3,570.87	535.36	433.71	295.62	138.08	3.141		
14,500.00	11,031.76	14,495.83	11,031.77	70.89	70.85	90.05	3,670.76	539.72	435.23	293.74	141.49	3.076		
14,600.00	11,031.03	14,595.82	11,031.05	72.60	72.56	90.05	3,770.65	544.09	436.75	291.84	144.91	3.014		
14,700.00	11,030.30	14,695.81	11,030.33	74.32	74.27	90.05	3,870.54	548.45	438.27	289.93	148.34	2.954		
14,800.00	11,029.56	14,795.80	11,029.62	76.03	75.99	90.05	3,970.43	552.81	439.79	288.01	151.78	2.899		
14,900.00	11,028.83	14,895.79	11,028.90	77.76	77.71	90.05	4,070.32	557.17	441.31	286.08	155.23	2.843		
15,000.00	11,028.10	14,995.78	11,028.18	79.49	79.44	90.06	4,170.21	561.53	442.83	284.14	158.68	2.791		
15,100.00	11,027.37	15,095.76	11,027.46	81.22	81.17	90.06	4,270.10	565.89	444.35	282.20	162.15	2.740		
15,200.00	11,026.63	15,195.75	11,026.74	82.95	82.90	90.06	4,369.99	570.25	445.87	280.25	165.62	2.692		
15,300.00	11,025.90	15,295.74	11,026.03	84.69	84.64	90.06	4,469.88	574.61	447.39	278.29	169.10	2.646		
15,400.00	11,025.17	15,395.73	11,025.31	86.43	86.38	90.06	4,569.77	578.97	448.91	276.33	172.58	2.601		
15,500.00	11,024.43	15,495.72	11,024.59	88.18	88.12	90.06	4,669.66	583.33	450.43	274.36	176.07	2.558		
15,559.07	11,024.00	15,554.78	11,024.17	89.03	89.15	90.07	4,728.67	585.91	451.33	273.37	177.95	2.536		

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



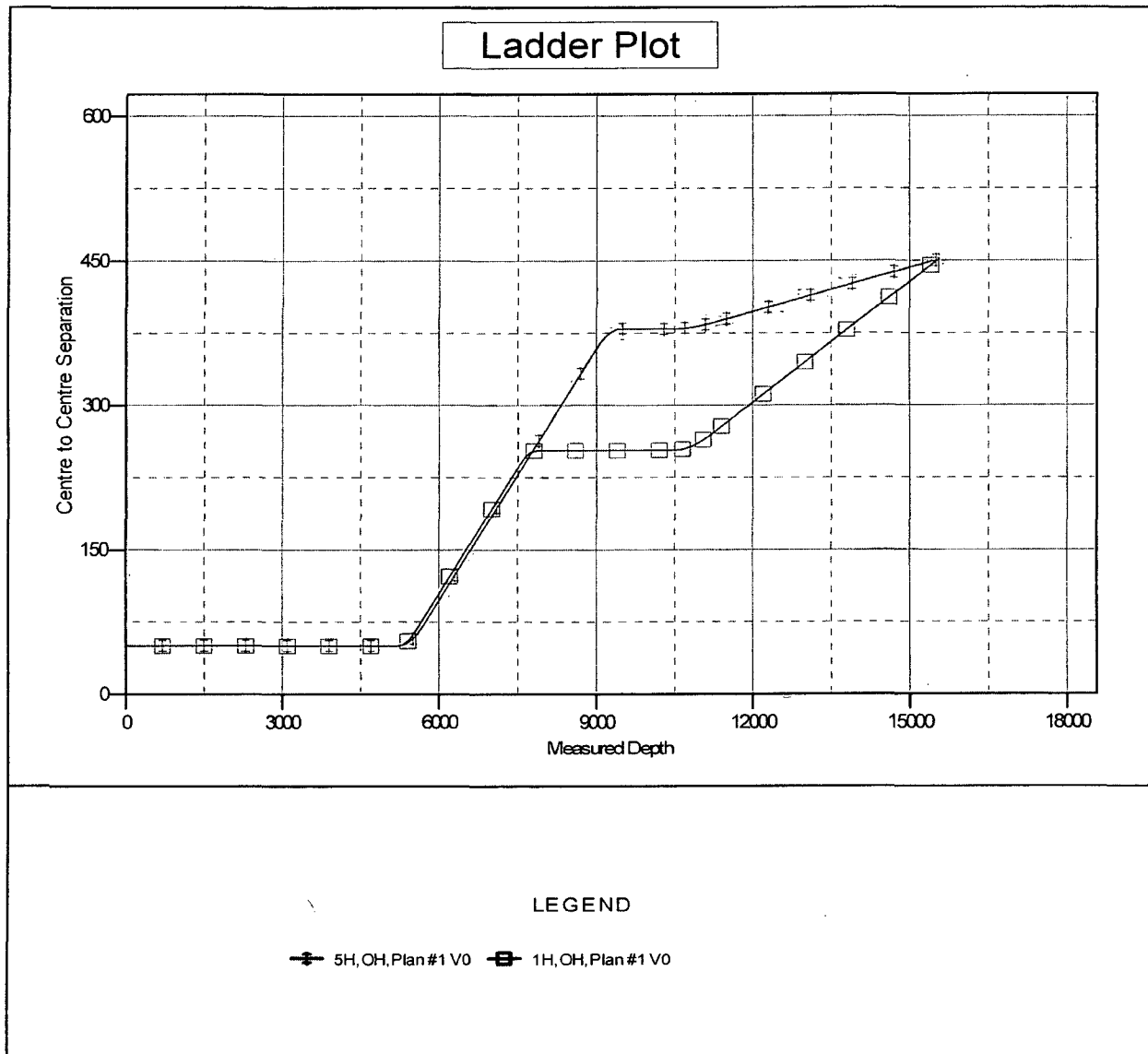
LEAM Drilling Systems LLC
Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0:00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0:00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3551.3' GL + 25' RKB @ 3576.30usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 10H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.42°



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



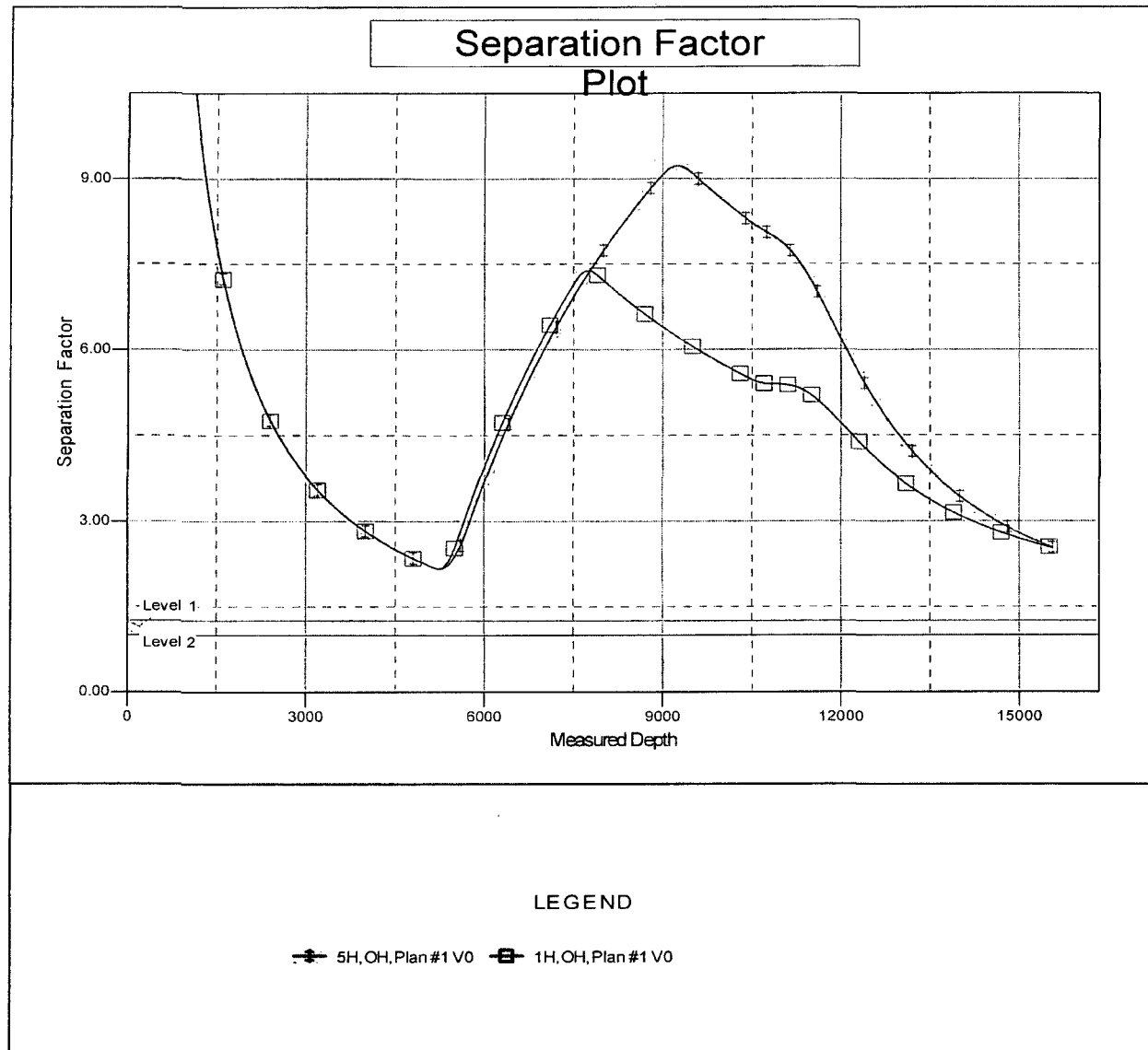
LEAM Drilling Systems LLC
Anticollision Report



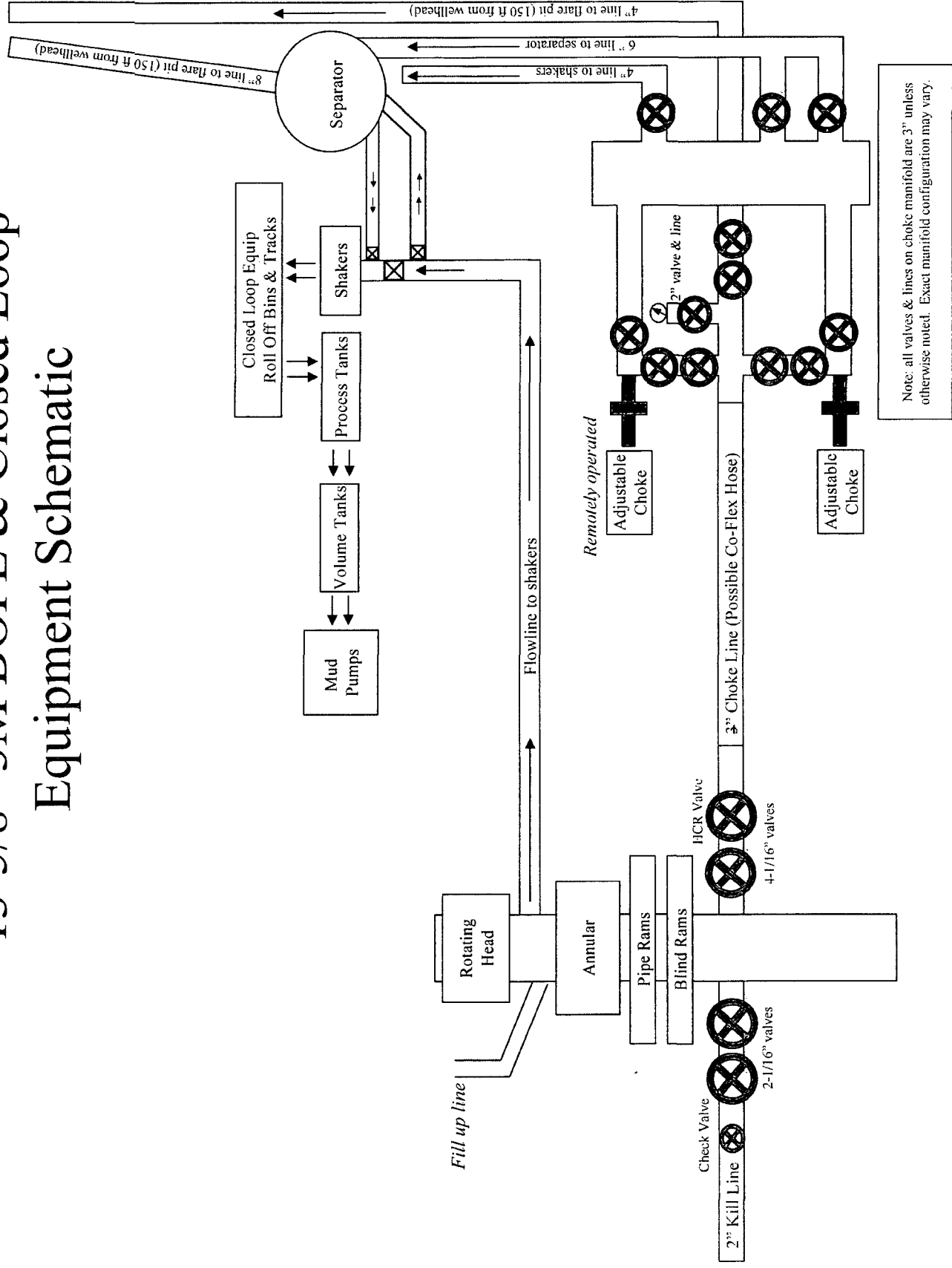
Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3551.3' GL + 25' RKB @ 3576.30usft
Site Error:	0:00.usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0:00.usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db.
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

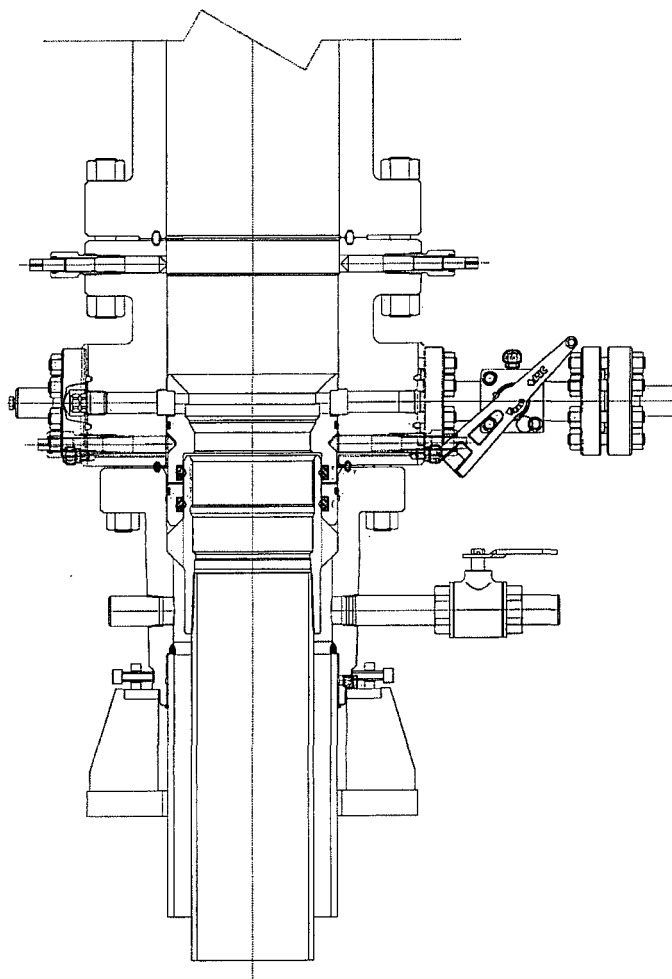
Reference Depths are relative to 3551.3' GL + 25' RKB @ 3576.30usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 10H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.42°



13-5/8" 3M BOPE & Closed Loop Equipment Schematic





PRIMARY MODE

DEVON ENERGY

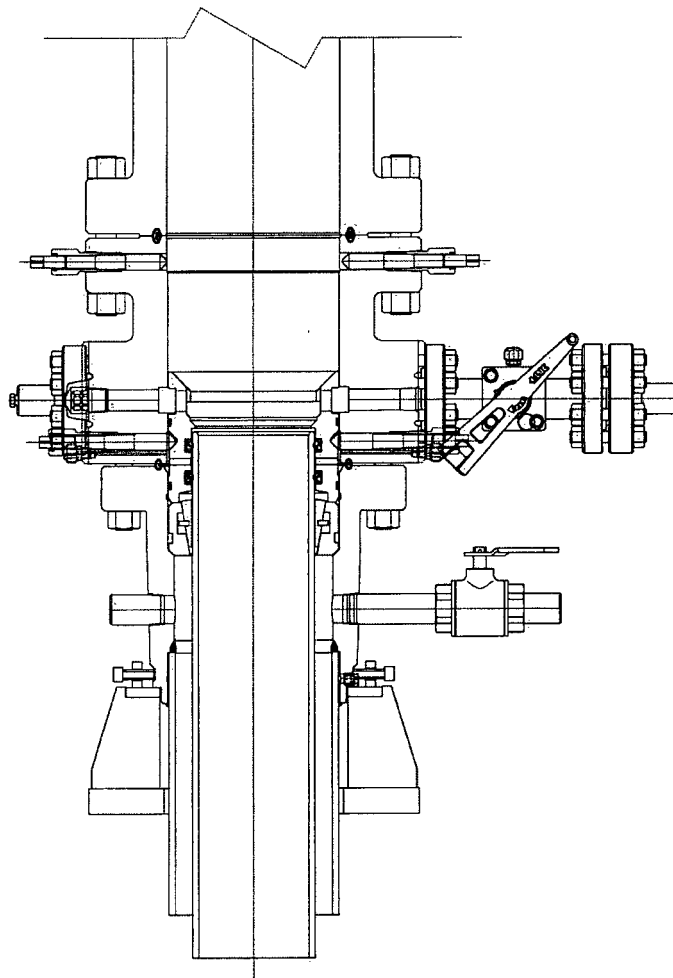
ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

PRIVATE AND CONFIDENTIAL THIS DOCUMENT AND ALL THE INFORMATION CONTAINED HEREIN ARE THE CONFIDENTIAL AND EXCLUSIVE PROPERTY OF FMC TECHNOLOGIES AND MAY NOT BE REPRODUCED, USED, DISCLOSED, OR MADE PUBLIC IN ANY MANNER PRIOR TO EXPRESS WRITTEN AUTHORIZATION BY FMC TECHNOLOGIES. THIS DOCUMENT IS ACCEPTED BY RECIPIENT PURSUANT TO AGREEMENT TO THE FOREGOING AND MUST BE RETURNED UPON DEMAND. MANUFACTURER AGREES THAT ARTICLES MADE IN ACCORDANCE WITH THIS DOCUMENT SHALL BE CONSIDERED FMC TECHNOLOGIES' DESIGN AND THAT IDENTICAL ARTICLES OR PARTS THEREOF SHALL NOT BE MANUFACTURED FOR THE USE OR SALE BY MANUFACTURER OR ANY OTHER PERSON WITHOUT THE PRIOR EXPRESS WRITTEN AUTHORIZATION BY FMC TECHNOLOGIES	REVISIONS		DESCRIPTION SURFACE WELLHEAD LAYOUT UNIHEAD, UH-1, SOW, DEVON ENERGY, ODESSA	DATE 05-08-13 05-08-13 05-08-13 05-08-13 05-08-13	BY K. VU Z. MARQUEZ K. TAHA R. HAMILTON	REVIEW DRAFTING REVIEW DESIGN REVIEW	DATE 05-08-13 05-08-13 05-08-13 05-08-13	DRAWING NUMBER DM100161771-2A
	A	05-08-13						
	B	1-22-14						
	C	5-13-14						



CONTINGENCY MODE

DEVON ENERGY

ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
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REF: DM100161737
DM100151315

PRIVATE AND CONFIDENTIAL		REVISIONS	DESCRIPTION			
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		B 1-22-14				
		C 5-13-14				
MANUFACTURER AGREES THAT ARTICLES MADE IN ACCORDANCE WITH THIS DOCUMENT SHALL BE CONSIDERED FMC TECHNOLOGIES' DESIGN AND THAT IDENTICAL ARTICLES OR PARTS THEREOF SHALL NOT BE MANUFACTURED FOR THE USE OR SALE BY MANUFACTURER OR ANY OTHER PERSON WITHOUT THE PRIOR EXPRESS WRITTEN AUTHORIZATION BY FMC TECHNOLOGIES				DRAFTING REVIEW Z. MARQUEZ	05-08-13	
				DESIGN REVIEW K. TAHA	05-08-13	DRAWING NUMBER DM100161771-2B
				APPROVED BY R. HAMILTON	05-08-13	



Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

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

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

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

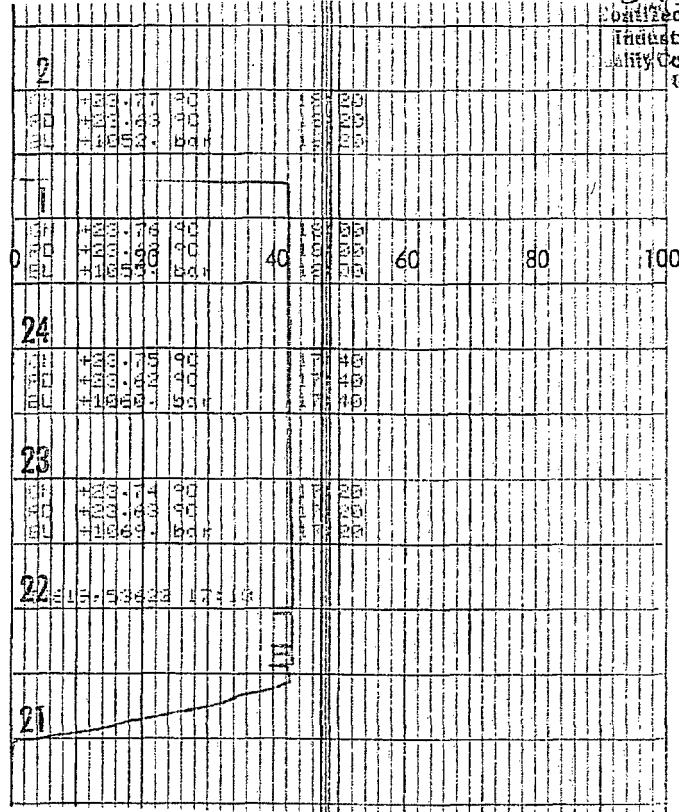
Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

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



HARTMANN &



Barth
 Tech Rubber
 Industrial Kft.
 Quality Control Dept.
 12

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