



Project: Lea County, NM (NAD-83)
 Site: Thistle Unit
 Well: 96H
 Wellbore: OH
 Design: Plan #1



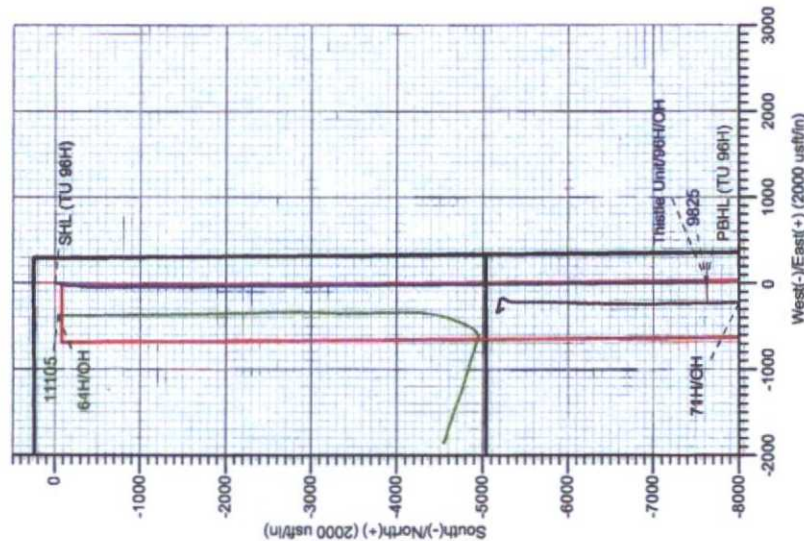
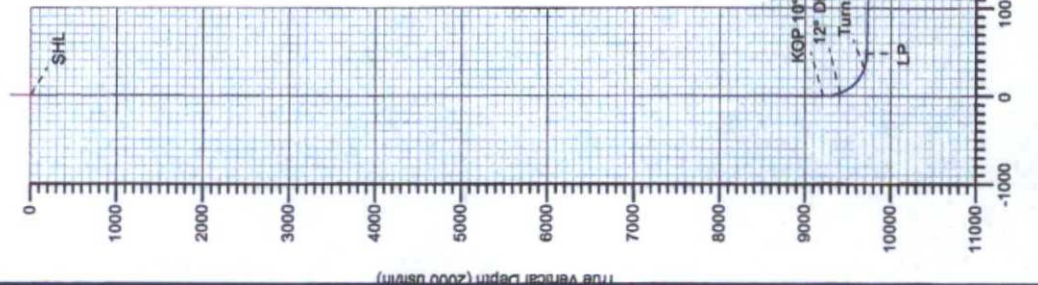
Azimuths to Grid North
 True North: -0.42°
 Magnetic North: 6.78°
 Magnetic Field
 Strength: 48212.0nT
 Dip Angle: 60.21°
 Date: 12/17/2015
 Model: BGGM2015



DESIGN TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Northing
SHL (TU 96H)	0.00	0.00	0.00	472574.59
PBHL (TU 96H)	9825.00	-7624.19	7.32	464950.40
				782569.15

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9212.93	0.00	0.00	9212.93	0.00	0.00	0.00	0.00	0.00	
9412.93	20.00	186.90	9406.89	-34.30	-4.15	10.00	186.90	34.27	
9825.00	70.00	186.90	9694.26	-317.60	-38.43	12.00	0.00	317.30	
10000.40	89.20	179.56	9725.00	-484.45	-47.52	12.00	-21.40	484.07	
17141.05	89.20	179.56	9825.00	-7624.19	7.32	0.00	0.00	7624.02	

PROJECT DETAILS: Lea County, NM (NAD-83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

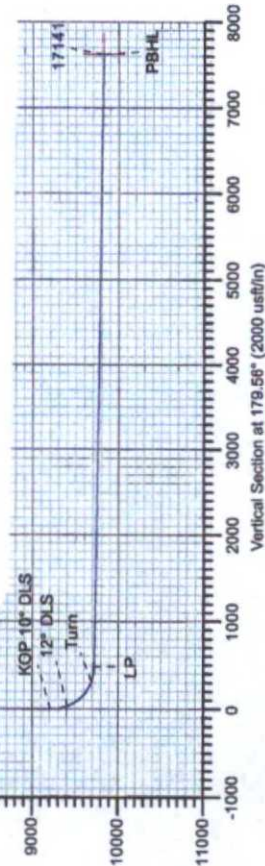
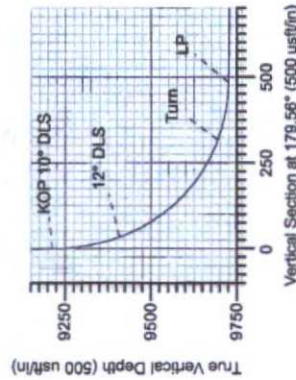


LEGEND

- 71H, OH, OH V0
- 64H, OH, OH V0
- Plan #1

Target Line:

TL#1: 9725' TVD @ LP, 9825' TVD @ TD
 Target Window = 10' Up AND Down
 Target Box = 20' Left AND Right



DEC 21 2015



DEVON ENERGY

Lea County, NM (NAD-83)

Thistle Unit

96H

OH

Plan: Plan #1

Standard Planning Report

17 December, 2015



**LEAM Drilling Systems LLC**

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	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	Thistle Unit		
Site Position:		Northing:	488,026.90 usft
From:	Map	Easting:	780,722.56 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 17' 3.494 N
		Longitude:	103° 33' 31.335 W
		Grid Convergence:	0.41 °

Well	96H		
Well Position	+N/-S	4,547.69 usft	Northing:
	+E/-W	1,839.27 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,731.30 usft
		Latitude:	32° 17' 48.362 N
		Longitude:	103° 33' 9.525 W
		Ground Level:	3,706.30 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2015	12/17/2015	7.20
			Dip Angle (°)
			60.21
			Field Strength (nT)
			48,212

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 (°)
			179.56

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Buidl 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	
9,212.93	0.00	0.00	9,212.93	0.00	0.00	0.00	0.00	0.00	0.00	
9,412.93	20.00	186.90	9,408.89	-34.30	-4.15	10.00	10.00	0.00	186.90	
9,829.60	70.00	186.90	9,694.26	-317.60	-38.43	12.00	12.00	0.00	0.00	
10,000.40	89.20	179.56	9,725.00	-484.45	-47.52	12.00	11.24	-4.30	-21.40	
17,141.05	89.20	179.56	9,825.00	-7,624.19	7.32	0.00	0.00	0.00	0.00	PBHL (TU 96H)



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	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
SHL (TU 96H)									
100.00	0.00	0.00	100.00	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
300.00	0.00	0.00	300.00	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
500.00	0.00	0.00	500.00	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
700.00	0.00	0.00	700.00	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
900.00	0.00	0.00	900.00	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
1,100.00	0.00	0.00	1,100.00	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
1,300.00	0.00	0.00	1,300.00	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
1,500.00	0.00	0.00	1,500.00	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
1,700.00	0.00	0.00	1,700.00	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
1,900.00	0.00	0.00	1,900.00	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
2,100.00	0.00	0.00	2,100.00	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
2,300.00	0.00	0.00	2,300.00	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
2,500.00	0.00	0.00	2,500.00	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
2,700.00	0.00	0.00	2,700.00	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
2,900.00	0.00	0.00	2,900.00	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
3,100.00	0.00	0.00	3,100.00	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
3,300.00	0.00	0.00	3,300.00	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
3,500.00	0.00	0.00	3,500.00	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
3,700.00	0.00	0.00	3,700.00	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
3,900.00	0.00	0.00	3,900.00	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
4,100.00	0.00	0.00	4,100.00	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
4,300.00	0.00	0.00	4,300.00	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
4,500.00	0.00	0.00	4,500.00	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
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
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



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	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)
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
5,300.00	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
6,300.00	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
7,700.00	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
8,300.00	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
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,212.93	0.00	0.00	9,212.93	0.00	0.00	0.00	0.00	0.00	0.00
KOP 10° DLS									
9,250.00	3.71	186.90	9,249.97	-1.19	-0.14	1.19	10.00	10.00	0.00
9,300.00	8.71	186.90	9,299.67	-6.56	-0.79	6.55	10.00	10.00	0.00
9,350.00	13.71	186.90	9,348.70	-16.20	-1.96	16.18	10.00	10.00	0.00
9,400.00	18.71	186.90	9,396.69	-30.05	-3.84	30.02	10.00	10.00	0.00
9,412.93	20.00	186.90	9,408.89	-34.30	-4.15	34.27	10.00	10.00	0.00
12° DLS									
9,425.00	21.45	186.90	9,420.18	-38.54	-4.66	38.51	12.00	12.00	0.00
9,450.00	24.45	186.90	9,443.20	-48.22	-5.84	48.17	12.00	12.00	0.00



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	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)	
9,475.00	27.45	186.90	9,465.68	-59.08	-7.15	59.02	12.00	12.00	0.00	
9,500.00	30.45	186.90	9,487.55	-71.09	-8.60	71.02	12.00	12.00	0.00	
9,525.00	33.45	186.90	9,508.78	-84.22	-10.19	84.14	12.00	12.00	0.00	
9,550.00	36.45	186.90	9,529.25	-98.44	-11.91	98.34	12.00	12.00	0.00	
9,575.00	39.45	186.90	9,548.96	-113.70	-13.76	113.59	12.00	12.00	0.00	
9,600.00	42.45	186.90	9,567.84	-129.96	-15.73	129.84	12.00	12.00	0.00	
9,625.00	45.45	186.90	9,585.84	-147.18	-17.81	147.04	12.00	12.00	0.00	
9,650.00	48.45	186.90	9,602.91	-165.32	-20.01	165.16	12.00	12.00	0.00	
9,675.00	51.45	186.90	9,618.99	-184.31	-22.30	184.14	12.00	12.00	0.00	
9,700.00	54.45	186.90	9,634.05	-204.12	-24.70	203.92	12.00	12.00	0.00	
9,725.00	57.45	186.90	9,648.05	-224.68	-27.19	224.46	12.00	12.00	0.00	
9,750.00	60.45	186.90	9,660.94	-245.94	-29.76	245.70	12.00	12.00	0.00	
9,775.00	63.45	186.90	9,672.70	-267.84	-32.41	267.58	12.00	12.00	0.00	
9,800.00	66.45	186.90	9,683.28	-290.32	-35.13	290.04	12.00	12.00	0.00	
9,825.00	69.45	186.90	9,692.67	-313.32	-37.92	313.02	12.00	12.00	0.00	
9,829.60	70.00	186.90	9,694.26	-317.61	-38.43	317.30	11.99	11.99	0.00	
Turn										
9,850.00	72.28	185.96	9,700.86	-336.79	-40.60	336.47	12.00	11.19	-4.60	
9,875.00	75.08	184.85	9,707.88	-360.67	-42.85	360.33	12.00	11.21	-4.47	
9,900.00	77.89	183.76	9,713.72	-384.91	-44.68	384.56	12.00	11.23	-4.35	
9,925.00	80.70	182.69	9,718.36	-409.43	-46.06	409.07	12.00	11.25	-4.26	
9,950.00	83.52	181.64	9,721.79	-434.18	-46.99	433.80	12.00	11.26	-4.19	
9,975.00	86.33	180.61	9,724.01	-459.07	-47.48	458.69	12.00	11.27	-4.15	
10,000.40	89.20	179.56	9,725.00	-484.45	-47.52	484.07	12.00	11.27	-4.12	
LP										
10,100.00	89.20	179.56	9,726.39	-584.04	-46.75	583.66	0.00	0.00	0.00	
10,200.00	89.20	179.56	9,727.79	-684.02	-45.98	683.65	0.00	0.00	0.00	
10,300.00	89.20	179.56	9,729.19	-784.01	-45.22	783.64	0.00	0.00	0.00	
10,400.00	89.20	179.56	9,730.59	-884.00	-44.45	883.63	0.00	0.00	0.00	
10,500.00	89.20	179.56	9,731.99	-983.98	-43.68	983.62	0.00	0.00	0.00	
10,600.00	89.20	179.56	9,733.39	-1,083.97	-42.91	1,083.61	0.00	0.00	0.00	
10,700.00	89.20	179.56	9,734.79	-1,183.96	-42.14	1,183.60	0.00	0.00	0.00	
10,800.00	89.20	179.56	9,736.19	-1,283.95	-41.38	1,283.59	0.00	0.00	0.00	
10,900.00	89.20	179.56	9,737.59	-1,383.93	-40.61	1,383.58	0.00	0.00	0.00	
11,000.00	89.20	179.56	9,738.99	-1,483.92	-39.84	1,483.57	0.00	0.00	0.00	
11,100.00	89.20	179.56	9,740.40	-1,583.91	-39.07	1,583.56	0.00	0.00	0.00	
11,200.00	89.20	179.56	9,741.80	-1,683.90	-38.30	1,683.55	0.00	0.00	0.00	
11,300.00	89.20	179.56	9,743.20	-1,783.88	-37.54	1,783.54	0.00	0.00	0.00	
11,400.00	89.20	179.56	9,744.60	-1,883.87	-36.77	1,883.53	0.00	0.00	0.00	
11,500.00	89.20	179.56	9,746.00	-1,983.86	-36.00	1,983.52	0.00	0.00	0.00	
11,600.00	89.20	179.56	9,747.40	-2,083.84	-35.23	2,083.51	0.00	0.00	0.00	
11,700.00	89.20	179.56	9,748.80	-2,183.83	-34.46	2,183.50	0.00	0.00	0.00	
11,800.00	89.20	179.56	9,750.20	-2,283.82	-33.70	2,283.49	0.00	0.00	0.00	
11,900.00	89.20	179.56	9,751.60	-2,383.81	-32.93	2,383.48	0.00	0.00	0.00	
12,000.00	89.20	179.56	9,753.00	-2,483.79	-32.16	2,483.47	0.00	0.00	0.00	
12,100.00	89.20	179.56	9,754.40	-2,583.78	-31.39	2,583.46	0.00	0.00	0.00	
12,200.00	89.20	179.56	9,755.80	-2,683.77	-30.63	2,683.45	0.00	0.00	0.00	
12,300.00	89.20	179.56	9,757.20	-2,783.75	-29.86	2,783.44	0.00	0.00	0.00	
12,400.00	89.20	179.56	9,758.60	-2,883.74	-29.09	2,883.43	0.00	0.00	0.00	
12,500.00	89.20	179.56	9,760.00	-2,983.73	-28.32	2,983.42	0.00	0.00	0.00	
12,600.00	89.20	179.56	9,761.40	-3,083.72	-27.55	3,083.41	0.00	0.00	0.00	
12,700.00	89.20	179.56	9,762.80	-3,183.70	-26.79	3,183.40	0.00	0.00	0.00	



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	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	89.20	179.56	9,764.20	-3,283.69	-26.02	3,283.39	0.00	0.00	0.00
12,900.00	89.20	179.56	9,765.60	-3,383.68	-25.25	3,383.38	0.00	0.00	0.00
13,000.00	89.20	179.56	9,767.00	-3,483.67	-24.48	3,483.37	0.00	0.00	0.00
13,100.00	89.20	179.56	9,768.41	-3,583.65	-23.71	3,583.36	0.00	0.00	0.00
13,200.00	89.20	179.56	9,769.81	-3,683.64	-22.95	3,683.36	0.00	0.00	0.00
13,300.00	89.20	179.56	9,771.21	-3,783.63	-22.18	3,783.35	0.00	0.00	0.00
13,400.00	89.20	179.56	9,772.61	-3,883.61	-21.41	3,883.34	0.00	0.00	0.00
13,500.00	89.20	179.56	9,774.01	-3,983.60	-20.64	3,983.33	0.00	0.00	0.00
13,600.00	89.20	179.56	9,775.41	-4,083.59	-19.87	4,083.32	0.00	0.00	0.00
13,700.00	89.20	179.56	9,776.81	-4,183.58	-19.11	4,183.31	0.00	0.00	0.00
13,800.00	89.20	179.56	9,778.21	-4,283.56	-18.34	4,283.30	0.00	0.00	0.00
13,900.00	89.20	179.56	9,779.61	-4,383.55	-17.57	4,383.29	0.00	0.00	0.00
14,000.00	89.20	179.56	9,781.01	-4,483.54	-16.80	4,483.28	0.00	0.00	0.00
14,100.00	89.20	179.56	9,782.41	-4,583.53	-16.03	4,583.27	0.00	0.00	0.00
14,200.00	89.20	179.56	9,783.81	-4,683.51	-15.27	4,683.26	0.00	0.00	0.00
14,300.00	89.20	179.56	9,785.21	-4,783.50	-14.50	4,783.25	0.00	0.00	0.00
14,400.00	89.20	179.56	9,786.61	-4,883.49	-13.73	4,883.24	0.00	0.00	0.00
14,500.00	89.20	179.56	9,788.01	-4,983.47	-12.96	4,983.23	0.00	0.00	0.00
14,600.00	89.20	179.56	9,789.41	-5,083.46	-12.19	5,083.22	0.00	0.00	0.00
14,700.00	89.20	179.56	9,790.81	-5,183.45	-11.43	5,183.21	0.00	0.00	0.00
14,800.00	89.20	179.56	9,792.21	-5,283.44	-10.66	5,283.20	0.00	0.00	0.00
14,900.00	89.20	179.56	9,793.61	-5,383.42	-9.89	5,383.19	0.00	0.00	0.00
15,000.00	89.20	179.56	9,795.01	-5,483.41	-9.12	5,483.18	0.00	0.00	0.00
15,100.00	89.20	179.56	9,796.42	-5,583.40	-8.35	5,583.17	0.00	0.00	0.00
15,200.00	89.20	179.56	9,797.82	-5,683.38	-7.59	5,683.16	0.00	0.00	0.00
15,300.00	89.20	179.56	9,799.22	-5,783.37	-6.82	5,783.15	0.00	0.00	0.00
15,400.00	89.20	179.56	9,800.62	-5,883.36	-6.05	5,883.14	0.00	0.00	0.00
15,500.00	89.20	179.56	9,802.02	-5,983.35	-5.28	5,983.13	0.00	0.00	0.00
15,600.00	89.20	179.56	9,803.42	-6,083.33	-4.51	6,083.12	0.00	0.00	0.00
15,700.00	89.20	179.56	9,804.82	-6,183.32	-3.75	6,183.11	0.00	0.00	0.00
15,800.00	89.20	179.56	9,806.22	-6,283.31	-2.98	6,283.10	0.00	0.00	0.00
15,900.00	89.20	179.56	9,807.62	-6,383.30	-2.21	6,383.09	0.00	0.00	0.00
16,000.00	89.20	179.56	9,809.02	-6,483.28	-1.44	6,483.08	0.00	0.00	0.00
16,100.00	89.20	179.56	9,810.42	-6,583.27	-0.67	6,583.07	0.00	0.00	0.00
16,200.00	89.20	179.56	9,811.82	-6,683.26	0.09	6,683.06	0.00	0.00	0.00
16,300.00	89.20	179.56	9,813.22	-6,783.24	0.86	6,783.05	0.00	0.00	0.00
16,400.00	89.20	179.56	9,814.62	-6,883.23	1.63	6,883.04	0.00	0.00	0.00
16,500.00	89.20	179.56	9,816.02	-6,983.22	2.40	6,983.03	0.00	0.00	0.00
16,600.00	89.20	179.56	9,817.42	-7,083.21	3.16	7,083.02	0.00	0.00	0.00
16,700.00	89.20	179.56	9,818.82	-7,183.19	3.93	7,183.01	0.00	0.00	0.00
16,800.00	89.20	179.56	9,820.22	-7,283.18	4.70	7,283.00	0.00	0.00	0.00
16,900.00	89.20	179.56	9,821.62	-7,383.17	5.47	7,382.99	0.00	0.00	0.00
17,000.00	89.20	179.56	9,823.02	-7,483.16	6.24	7,482.98	0.00	0.00	0.00
17,100.00	89.20	179.56	9,824.43	-7,583.14	7.00	7,582.97	0.00	0.00	0.00
17,141.05	89.20	179.56	9,825.00	-7,624.19	7.32	7,624.02	0.00	0.00	0.00

TD - PBHL (TU 96H)



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 96H
Company:	DEVON ENERGY	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site:	Thistle Unit	North Reference:	Grid
Well:	96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SHL (TU 96H) .	0.00	0.00	0.00	0.00	0.00	472,574.59	782,561.83	32° 17' 48.362 N	103° 33' 9.525 W
- plan hits target center									
- Point									
PBHL (TU 96H)	0.00	0.01	9,825.00	-7,624.19	7.32	464,950.40	782,569.15	32° 16' 32.919 N	103° 33' 10.086 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
9,212.93	9,212.93	0.00	0.00	KOP 10" DLS
9,412.93	9,408.89	-34.30	-4.15	12" DLS
9,829.60	9,694.26	-317.61	-38.43	Turn
10,000.40	9,725.00	-484.45	-47.52	LP
17,141.05	9,825.00	-7,624.19	7.32	TD



DEVON ENERGY

Lea County, NM (NAD-83)

Thistle Unit

96H

OH

Plan #1

Anticollision Report

17 December, 2015





LEAM Drilling Systems LLC
Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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	12/17/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	17,141.05	Plan #1 (OH)	LEAM MWD+HDGM	MWD+HDGM	

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						
Thistle Unit						
64H - OH - OH	14,457.97	9,908.17	612.18	507.92	5.872	CC, ES
64H - OH - OH	14,500.00	9,909.62	613.62	508.70	5.848	SF
71H - OH - OH	14,771.40	9,770.47	169.47	64.29	1.611	CC, ES, SF

Offset Design												Offset Site Error:	0.00 usft
Thistle Unit - 64H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 62-ISCWSA-GYRO-3, 1483-LEAM MWD-ADJ, 15937-Project													
Reference	Offset	Semi Major Axis		Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance 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)								
0.00	0.00	0.00	0.00	0.00	0.00	-157.98	-4,547.69	-1,839.27	4,905.57				
100.00	100.00	91.66	91.66	0.08	0.09	-157.98	-4,547.52	-1,839.45	4,905.46	4,905.29	0.17	N/A	
200.00	200.00	192.20	192.20	0.31	0.26	-157.97	-4,547.19	-1,839.87	4,905.31	4,904.74	0.57	8,613.973	
300.00	300.00	295.27	295.28	0.53	0.44	-157.96	-4,546.75	-1,840.43	4,905.12	4,904.15	0.97	5,035.238	
400.00	400.00	398.15	398.14	0.76	0.62	-157.95	-4,546.21	-1,841.06	4,904.87	4,903.49	1.38	3,557.418	
500.00	500.00	496.26	496.25	0.98	0.79	-157.94	-4,545.82	-1,841.79	4,904.59	4,902.81	1.78	2,762.998	
600.00	600.00	592.41	592.40	1.21	0.96	-157.93	-4,545.03	-1,842.72	4,904.39	4,902.22	2.17	2,262.166	
671.66	671.66	655.98	655.98	1.37	1.07	-157.92	-4,544.67	-1,843.42	4,904.30	4,901.86	2.44	2,009.844	
700.00	700.00	678.63	678.61	1.43	1.11	-157.92	-4,544.57	-1,843.69	4,904.32	4,901.78	2.54	1,928.249	
800.00	800.00	761.85	761.82	1.66	1.26	-157.91	-4,544.41	-1,844.78	4,904.63	4,901.71	2.91	1,683.478	
900.00	900.00	852.03	851.99	1.88	1.42	-157.89	-4,544.40	-1,846.18	4,905.20	4,901.91	3.30	1,488.490	
1,000.00	1,000.00	949.35	949.29	2.11	1.59	-157.87	-4,544.52	-1,847.70	4,905.90	4,902.21	3.69	1,329.584	
1,100.00	1,100.00	1,049.07	1,049.01	2.33	1.76	-157.86	-4,544.66	-1,849.23	4,906.61	4,902.53	4.09	1,200.091	
1,200.00	1,200.00	1,148.56	1,148.48	2.56	1.94	-157.84	-4,544.84	-1,850.73	4,907.34	4,902.86	4.49	1,093.718	
1,300.00	1,300.00	1,251.08	1,250.98	2.78	2.12	-157.83	-4,545.00	-1,852.26	4,908.06	4,903.17	4.89	1,003.588	
1,400.00	1,400.00	1,363.61	1,363.51	3.01	2.28	-157.81	-4,545.09	-1,853.84	4,908.66	4,903.39	5.28	930.170	
1,500.00	1,500.00	1,488.24	1,488.13	3.23	2.39	-157.80	-4,544.78	-1,855.08	4,908.79	4,903.18	5.61	874.855	
1,512.38	1,512.38	1,496.79	1,496.68	3.26	2.39	-157.80	-4,544.75	-1,855.12	4,908.79	4,903.15	5.64	870.095	
1,600.00	1,600.00	1,546.00	1,545.89	3.46	2.40	-157.79	-4,544.87	-1,855.26	4,909.10	4,903.25	5.85	839.245	
1,700.00	1,700.00	1,603.19	1,603.05	3.68	2.43	-157.81	-4,546.15	-1,854.18	4,910.40	4,904.31	6.09	805.748	
1,800.00	1,800.00	1,679.95	1,679.63	3.91	2.47	-157.87	-4,549.30	-1,850.04	4,912.21	4,905.85	6.36	772.578	
1,900.00	1,900.00	2,012.65	2,009.41	4.13	2.85	-158.38	-4,566.80	-1,812.02	4,914.56	4,907.58	8.97	704.945	

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 64H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 82-ISCWSA-GYRO-3, 1483-LEAM MWD-ADJ, 15937-Project													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)						
2,000.00	2,000.00	2,124.86	2,119.74	4.35	3.06	-158.58	-4,570.85	-1,793.14	4,911.88	4,904.44	7.41	662.566		
2,100.00	2,100.00	2,215.08	2,208.86	4.58	3.25	-158.76	-4,574.12	-1,778.24	4,909.20	4,901.37	7.83	627.032		
2,200.00	2,200.00	2,320.42	2,312.75	4.80	3.51	-158.96	-4,577.90	-1,761.19	4,908.67	4,898.36	8.31	590.734		
2,300.00	2,300.00	2,396.00	2,387.26	5.03	3.70	-159.10	-4,580.75	-1,748.86	4,904.33	4,895.60	8.73	561.819		
2,400.00	2,400.00	2,443.39	2,433.98	5.25	3.84	-159.20	-4,582.99	-1,741.07	4,902.82	4,893.73	9.09	539.816		
2,500.00	2,500.00	2,521.00	2,510.38	5.48	4.08	-159.36	-4,587.29	-1,728.29	4,902.13	4,892.60	9.53	514.337		
2,600.00	2,600.00	2,613.09	2,601.12	5.70	4.32	-159.54	-4,592.42	-1,713.44	4,901.88	4,891.86	10.02	489.124		
2,700.00	2,700.00	2,723.10	2,709.57	5.93	4.55	-159.76	-4,598.53	-1,695.98	4,901.38	4,890.79	10.57	463.516		
2,800.00	2,800.00	2,831.80	2,818.57	6.15	4.99	-159.97	-4,604.06	-1,678.88	4,900.72	4,889.59	11.13	440.312		
2,900.00	2,900.00	2,949.22	2,932.62	6.38	5.35	-160.19	-4,609.67	-1,660.57	4,899.89	4,888.17	11.72	418.127		
3,000.00	3,000.00	3,054.84	3,036.92	6.60	5.68	-160.38	-4,614.26	-1,644.58	4,898.86	4,886.59	12.27	399.255		
3,100.00	3,100.00	3,152.36	3,133.22	6.83	5.98	-160.58	-4,618.41	-1,629.74	4,897.77	4,884.97	12.80	382.632		
3,200.00	3,200.00	3,231.49	3,211.32	7.05	6.24	-160.71	-4,622.02	-1,617.53	4,896.96	4,883.89	13.28	368.829		
3,300.00	3,300.00	3,309.00	3,287.74	7.28	6.49	-160.86	-4,626.15	-1,605.29	4,896.76	4,883.00	13.75	356.001		
3,400.00	3,400.00	3,420.97	3,398.10	7.50	6.87	-161.08	-4,632.21	-1,587.35	4,896.65	4,882.30	14.35	341.161		
3,500.00	3,500.00	3,514.66	3,490.47	7.73	7.18	-161.27	-4,637.14	-1,572.47	4,896.51	4,881.82	14.89	328.889		
3,600.00	3,600.00	3,641.18	3,615.28	7.95	7.60	-161.51	-4,643.18	-1,552.69	4,896.01	4,880.48	15.53	315.261		
3,700.00	3,700.00	3,729.78	3,702.79	8.18	7.89	-161.67	-4,647.09	-1,539.36	4,895.45	4,879.40	16.04	305.156		
3,800.00	3,800.00	3,814.65	3,786.96	8.40	8.17	-161.82	-4,651.03	-1,526.99	4,895.28	4,878.74	16.54	295.953		
3,870.38	3,870.38	3,883.55	3,854.68	8.56	8.39	-161.95	-4,654.43	-1,516.53	4,895.26	4,878.34	16.92	289.269		
3,900.00	3,900.00	3,910.14	3,880.91	8.63	8.48	-162.00	-4,655.77	-1,512.44	4,895.27	4,878.19	17.08	286.657		
4,000.00	4,000.00	3,999.17	3,968.82	8.85	8.78	-162.17	-4,660.25	-1,499.10	4,895.46	4,877.86	17.59	278.235		
4,100.00	4,100.00	4,085.85	4,054.42	9.07	9.06	-162.33	-4,664.79	-1,486.21	4,895.92	4,877.81	18.10	270.446		
4,200.00	4,200.00	4,160.00	4,127.65	9.30	9.31	-162.46	-4,668.84	-1,475.29	4,896.71	4,878.14	18.57	263.681		
4,300.00	4,300.00	4,254.00	4,220.45	9.52	9.62	-162.64	-4,674.39	-1,461.41	4,897.93	4,878.83	19.11	256.360		
4,400.00	4,400.00	4,372.96	4,338.04	9.75	10.01	-162.85	-4,681.03	-1,444.69	4,899.12	4,879.40	19.71	248.539		
4,500.00	4,500.00	4,468.01	4,432.07	9.97	10.32	-163.01	-4,686.00	-1,431.71	4,900.12	4,879.88	20.24	242.140		
4,600.00	4,600.00	4,560.25	4,523.13	10.20	10.63	-163.18	-4,691.26	-1,418.02	4,901.27	4,880.50	20.77	236.022		
4,700.00	4,700.00	4,655.54	4,616.99	10.42	10.96	-163.37	-4,697.20	-1,402.66	4,902.61	4,881.29	21.32	229.941		
4,800.00	4,800.00	4,758.00	4,717.98	10.65	11.32	-163.57	-4,703.35	-1,388.52	4,903.91	4,882.01	21.90	223.909		
4,900.00	4,900.00	4,840.51	4,799.27	10.87	11.62	-163.74	-4,708.52	-1,373.30	4,905.44	4,883.02	22.42	218.839		
5,000.00	5,000.00	4,915.00	4,872.44	11.10	11.90	-163.90	-4,713.78	-1,360.39	4,907.43	4,884.52	22.91	214.162		
5,100.00	5,100.00	4,998.52	4,954.32	11.32	12.23	-164.09	-4,720.23	-1,345.21	4,909.89	4,886.43	23.46	209.272		
5,200.00	5,200.00	5,171.52	5,124.22	11.55	12.69	-164.47	-4,732.05	-1,314.86	4,911.69	4,887.37	24.32	201.926		
5,300.00	5,300.00	5,266.80	5,218.14	11.77	13.22	-164.66	-4,737.40	-1,299.74	4,912.91	4,888.03	24.88	197.497		
5,400.00	5,400.00	5,369.33	5,319.36	12.00	13.57	-164.85	-4,743.02	-1,284.43	4,914.29	4,888.85	25.44	193.148		
5,500.00	5,500.00	5,465.46	5,433.82	12.22	13.98	-165.08	-4,749.41	-1,265.85	4,915.47	4,889.40	26.07	188.551		
5,600.00	5,600.00	5,567.27	5,534.07	12.45	14.35	-165.28	-4,754.95	-1,249.01	4,916.51	4,889.85	26.65	184.453		
5,700.00	5,700.00	5,697.99	5,643.10	12.67	14.75	-165.51	-4,760.72	-1,230.63	4,917.37	4,890.11	27.27	180.334		
5,800.00	5,800.00	5,801.15	5,744.75	12.90	15.12	-165.71	-4,765.98	-1,213.89	4,918.30	4,890.45	27.85	176.588		
5,900.00	5,900.00	5,906.66	5,848.76	13.12	15.49	-165.92	-4,770.93	-1,196.94	4,918.89	4,890.45	28.44	172.958		
6,000.00	6,000.00	6,002.75	5,943.50	13.35	15.83	-166.10	-4,775.65	-1,181.48	4,919.79	4,890.80	29.00	169.874		
6,100.00	6,100.00	6,103.75	6,043.06	13.57	16.18	-166.30	-4,780.39	-1,165.19	4,920.52	4,890.95	29.57	166.415		
6,200.00	6,200.00	15,937.00	11,089.45	13.80	82.96	-95.44	-35.92	-377.52	4,919.79	4,833.63	86.16	57.101		
6,300.00	6,300.00	15,937.00	11,089.45	14.02	82.96	-95.44	-35.92	-377.52	4,820.09	4,733.71	86.38	55.799		
6,400.00	6,400.00	15,937.00	11,089.45	14.24	82.96	-95.44	-35.92	-377.52	4,720.41	4,633.80	86.61	54.503		
6,500.00	6,500.00	15,937.00	11,089.45	14.47	82.96	-95.44	-35.92	-377.52	4,620.74	4,533.91	86.83	53.214		
6,600.00	6,600.00	15,937.00	11,089.45	14.69	82.96	-95.44	-35.92	-377.52	4,521.09	4,434.03	87.06	51.932		
6,700.00	6,700.00	15,937.00	11,089.45	14.92	82.96	-95.44	-35.92	-377.52	4,421.45	4,334.16	87.28	50.657		
6,800.00	6,800.00	15,937.00	11,089.45	15.14	82.96	-95.44	-35.92	-377.52	4,321.82	4,234.31	87.51	49.388		
6,900.00	6,900.00	15,937.00	11,089.45	15.37	82.96	-95.44	-35.92	-377.52	4,222.22	4,134.48	87.73	48.126		

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3708.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3708.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 64H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 62-ISCWSA-GYRO-3, 1483-LEAM MWD-ADJ, 15937-Project													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)				
7,000.00	7,000.00	15,937.00	11,089.45	15.59	82.96	-95.44	-35.92	-377.52	4,122.63	4,034.67	87.98	46.871		
7,100.00	7,100.00	15,937.00	11,089.45	15.82	82.96	-95.44	-35.92	-377.52	4,023.07	3,934.88	88.18	45.622		
7,200.00	7,200.00	15,937.00	11,089.45	16.04	82.96	-95.44	-35.92	-377.52	3,923.52	3,835.12	88.41	44.380		
7,300.00	7,300.00	15,937.00	11,089.45	16.27	82.96	-95.44	-35.92	-377.52	3,824.00	3,735.37	88.63	43.145		
7,400.00	7,400.00	15,937.00	11,089.45	16.49	82.96	-95.44	-35.92	-377.52	3,724.51	3,635.65	88.86	41.918		
7,500.00	7,500.00	15,937.00	11,089.45	16.72	82.96	-95.44	-35.92	-377.52	3,625.04	3,535.96	89.08	40.694		
7,600.00	7,600.00	15,937.00	11,089.45	16.94	82.96	-95.44	-35.92	-377.52	3,525.61	3,436.30	89.31	39.478		
7,700.00	7,700.00	15,937.00	11,089.45	17.17	82.96	-95.44	-35.92	-377.52	3,426.20	3,336.67	89.53	38.269		
7,800.00	7,800.00	15,937.00	11,089.45	17.39	82.96	-95.44	-35.92	-377.52	3,326.84	3,237.08	89.76	37.066		
7,900.00	7,900.00	15,937.00	11,089.45	17.62	82.96	-95.44	-35.92	-377.52	3,227.51	3,137.53	89.98	35.869		
8,000.00	8,000.00	15,937.00	11,089.45	17.84	82.96	-95.44	-35.92	-377.52	3,128.22	3,038.02	90.20	34.679		
8,100.00	8,100.00	15,937.00	11,089.45	18.07	82.96	-95.44	-35.92	-377.52	3,028.99	2,938.56	90.43	33.498		
8,200.00	8,200.00	15,937.00	11,089.45	18.29	82.96	-95.44	-35.92	-377.52	2,929.80	2,839.14	90.65	32.318		
8,300.00	8,300.00	15,937.00	11,089.45	18.52	82.96	-95.44	-35.92	-377.52	2,830.67	2,739.79	90.88	31.148		
8,400.00	8,400.00	15,937.00	11,089.45	18.74	82.96	-95.44	-35.92	-377.52	2,731.60	2,640.50	91.10	29.983		
8,500.00	8,500.00	15,937.00	11,089.45	18.96	82.96	-95.44	-35.92	-377.52	2,632.61	2,541.28	91.33	28.826		
8,600.00	8,600.00	15,937.00	11,089.45	19.19	82.96	-95.44	-35.92	-377.52	2,533.69	2,442.14	91.55	27.674		
8,700.00	8,700.00	15,937.00	11,089.45	19.41	82.96	-95.44	-35.92	-377.52	2,434.87	2,343.09	91.78	26.530		
8,800.00	8,800.00	15,937.00	11,089.45	19.64	82.96	-95.44	-35.92	-377.52	2,336.14	2,244.13	92.00	25.392		
8,900.00	8,900.00	15,937.00	11,089.45	19.86	82.96	-95.44	-35.92	-377.52	2,237.52	2,145.29	92.23	24.261		
9,000.00	9,000.00	15,937.00	11,089.45	20.09	82.96	-95.44	-35.92	-377.52	2,139.04	2,046.58	92.45	23.137		
9,100.00	9,100.00	15,937.00	11,089.45	20.31	82.96	-95.44	-35.92	-377.52	2,040.70	1,948.02	92.68	22.019		
9,200.00	9,200.00	15,937.00	11,089.45	20.54	82.96	-95.44	-35.92	-377.52	1,942.53	1,849.63	92.90	20.909		
9,212.93	9,212.93	15,937.00	11,089.45	20.57	82.96	-95.44	-35.92	-377.52	1,929.85	1,836.92	92.93	20.766		
9,250.00	9,249.97	15,937.00	11,089.45	20.64	82.96	98.21	-35.92	-377.52	1,893.49	1,790.22	103.27	18.335		
9,300.00	9,299.87	15,937.00	11,089.45	20.72	82.96	118.33	-35.92	-377.52	1,844.61	1,743.93	100.88	18.322		
9,350.00	9,348.70	15,937.00	11,089.45	20.81	82.96	133.64	-35.92	-377.52	1,796.27	1,703.80	92.47	19.426		
9,400.00	9,396.89	15,937.00	11,089.45	20.89	82.96	143.46	-35.92	-377.52	1,748.90	1,664.26	84.84	20.653		
9,412.93	9,408.89	15,937.00	11,089.45	20.92	82.96	145.37	-35.92	-377.52	1,736.87	1,653.98	82.89	20.954		
9,425.00	9,420.18	15,937.00	11,089.45	20.94	82.96	147.29	-35.92	-377.52	1,725.73	1,644.67	81.06	21.290		
9,450.00	9,443.20	15,937.00	11,089.45	20.98	82.96	150.63	-35.92	-377.52	1,703.05	1,625.36	77.89	21.921		
9,475.00	9,465.88	15,937.00	11,089.45	21.02	82.96	153.30	-35.92	-377.52	1,680.95	1,606.12	74.83	22.465		
9,500.00	9,487.55	15,937.00	11,089.45	21.06	82.96	155.47	-35.92	-377.52	1,659.51	1,587.13	72.38	22.927		
9,525.00	9,508.76	15,937.00	11,089.45	21.10	82.96	157.24	-35.92	-377.52	1,638.82	1,568.53	70.29	23.316		
9,550.00	9,529.25	15,922.95	11,089.92	21.13	82.93	158.58	-49.97	-377.37	1,618.90	1,549.78	69.12	23.421		
9,575.00	9,548.96	15,907.06	11,090.45	21.17	82.88	159.73	-65.84	-377.20	1,599.75	1,531.62	68.13	23.481		
9,600.00	9,567.84	15,890.20	11,091.00	21.22	82.84	160.71	-82.69	-377.03	1,581.41	1,514.26	67.16	23.548		
9,625.00	9,585.84	15,872.42	11,091.59	21.27	82.80	161.57	-100.47	-376.84	1,563.94	1,497.84	66.10	23.659		
9,650.00	9,602.91	15,853.75	11,092.21	21.32	82.75	162.32	-119.12	-376.65	1,547.38	1,482.32	65.06	23.784		
9,675.00	9,618.99	15,834.26	11,092.86	21.38	82.70	162.98	-138.61	-376.44	1,531.77	1,467.37	64.00	23.784		
9,700.00	9,634.05	15,813.99	11,093.53	21.45	82.65	163.57	-158.86	-376.23	1,517.16	1,453.01	64.15	23.849		
9,725.00	9,648.05	15,792.53	11,094.24	21.52	82.45	164.09	-180.31	-376.01	1,503.59	1,439.91	63.68	23.813		
9,750.00	9,660.94	15,769.96	11,094.97	21.59	82.09	164.55	-202.87	-375.79	1,491.07	1,428.34	62.73	23.789		
9,775.00	9,672.70	15,746.77	11,095.70	21.67	81.73	164.97	-228.04	-375.59	1,479.85	1,417.85	61.80	23.943		
9,800.00	9,683.28	15,723.04	11,096.43	21.75	81.35	165.34	-249.76	-375.40	1,469.38	1,408.48	60.86	24.136		
9,825.00	9,692.67	15,700.50	11,097.10	21.84	81.00	165.67	-272.29	-375.24	1,460.22	1,400.24	59.98	24.343		
9,829.80	9,694.26	15,696.88	11,097.22	21.86	80.94	165.72	-276.11	-375.21	1,458.67	1,398.85	59.82	24.383		
9,850.00	9,700.86	15,679.54	11,097.78	21.94	80.58	165.96	-293.24	-375.09	1,452.32	1,392.99	59.33	24.478		
9,875.00	9,707.88	15,658.21	11,098.47	22.04	80.34	166.20	-314.56	-374.94	1,445.71	1,387.05	58.66	24.644		
9,900.00	9,713.72	15,636.59	11,099.24	22.15	80.01	166.41	-336.17	-374.79	1,440.41	1,382.47	57.94	24.862		

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 64H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 62-ISCWSA-GYRO-3, 1483-LEAM MWD-ADJ, 15937-Project														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)					
9,925.00	9,718.36	15,615.00	11,100.05	22.26	79.87	166.57	-357.74	-374.64	1,436.43	1,379.26	57.17	25.128			
9,950.00	9,721.79	15,590.19	11,101.01	22.38	79.29	166.70	-382.53	-374.46	1,433.76	1,377.43	56.33	25.451			
9,975.00	9,724.01	15,565.57	11,101.97	22.50	78.90	166.79	-407.13	-374.25	1,432.40	1,376.92	55.49	25.815			
9,988.81	9,724.99	15,552.14	11,102.50	22.57	78.69	166.82	-420.54	-374.13	1,432.21	1,377.19	55.02	26.031			
10,000.40	9,725.00	15,540.51	11,102.96	22.63	78.51	166.84	-432.16	-374.02	1,432.35	1,377.74	54.82	26.228			
10,100.00	9,726.39	15,426.04	11,107.07	23.20	76.76	166.88	-544.55	-372.69	1,434.46	1,380.48	53.98	26.576			
10,200.00	9,727.79	15,318.31	11,110.20	23.88	75.07	166.94	-654.22	-370.62	1,435.81	1,382.22	53.39	26.887			
10,300.00	9,729.19	15,220.86	11,112.96	24.64	73.57	167.02	-751.80	-368.20	1,436.62	1,383.69	52.94	27.137			
10,400.00	9,730.59	15,119.70	11,115.73	25.48	72.03	167.09	-852.89	-365.82	1,437.57	1,385.07	52.50	27.380			
10,500.00	9,731.99	15,027.19	11,118.40	26.40	70.64	167.14	-945.16	-364.29	1,438.82	1,386.62	52.20	27.566			
10,600.00	9,733.39	14,929.70	11,121.63	27.39	69.17	167.18	-1,042.58	-362.93	1,440.54	1,388.65	51.89	27.762			
10,700.00	9,734.79	14,822.47	11,124.67	28.44	67.56	167.21	-1,149.76	-361.49	1,441.80	1,390.26	51.55	27.971			
10,800.00	9,736.19	14,726.85	11,127.34	29.54	66.16	167.23	-1,245.33	-360.67	1,443.14	1,391.80	51.34	28.111			
10,900.00	9,737.59	14,633.09	11,130.28	30.89	64.80	167.25	-1,339.04	-359.75	1,444.79	1,393.62	51.17	28.238			
11,000.00	9,738.99	14,539.53	11,133.77	31.89	63.44	167.28	-1,432.54	-358.74	1,446.99	1,395.97	51.02	28.363			
11,100.00	9,740.40	14,418.56	11,138.07	33.12	61.67	167.32	-1,553.41	-357.27	1,449.07	1,398.38	50.69	28.589			
11,200.00	9,741.80	14,270.78	11,138.69	34.39	59.55	167.32	-1,701.18	-355.97	1,447.97	1,397.75	50.22	28.832			
11,300.00	9,743.20	14,175.13	11,137.83	35.66	58.22	167.30	-1,796.82	-355.17	1,445.71	1,395.56	50.15	28.825			
11,400.00	9,744.60	14,081.49	11,137.49	37.01	56.94	167.31	-1,890.45	-353.79	1,443.84	1,393.74	50.11	28.816			
11,500.00	9,746.00	13,990.95	11,137.80	38.36	55.73	167.37	-1,980.96	-351.46	1,442.42	1,392.35	50.07	28.808			
11,587.59	9,746.94	13,937.74	11,138.48	39.28	55.02	167.40	-2,034.15	-350.14	1,442.09	1,391.97	50.12	28.773			
11,600.00	9,747.40	13,910.96	11,138.99	39.73	54.66	167.42	-2,060.92	-349.80	1,442.16	1,392.03	50.13	28.767			
11,700.00	9,748.80	13,798.96	11,140.74	41.12	53.16	167.47	-2,172.88	-347.44	1,442.06	1,392.07	49.99	28.847			
11,800.00	9,750.20	13,693.94	11,141.98	42.53	51.78	167.52	-2,277.88	-345.16	1,441.54	1,391.63	49.91	28.884			
11,900.00	9,751.60	13,581.98	11,142.48	43.95	50.34	167.58	-2,389.80	-342.82	1,440.28	1,390.48	49.80	28.923			
12,000.00	9,753.00	13,468.15	11,142.55	45.39	49.20	167.63	-2,483.60	-340.45	1,438.66	1,388.83	49.83	28.971			
12,100.00	9,754.40	13,400.73	11,143.53	46.85	48.16	167.69	-2,570.99	-338.15	1,437.99	1,388.07	49.91	28.809			
12,200.00	9,755.80	13,303.06	11,145.24	48.31	46.99	167.77	-2,668.60	-335.25	1,437.86	1,387.94	49.93	28.796			
12,300.00	9,757.20	13,196.03	11,146.56	49.79	45.74	167.81	-2,775.81	-333.43	1,437.50	1,387.57	49.93	28.791			
12,400.00	9,758.60	13,104.75	11,146.85	51.27	44.71	167.72	-2,866.87	-334.88	1,436.96	1,386.85	50.12	28.672			
12,402.58	9,758.64	13,102.62	11,146.86	51.31	44.69	167.72	-2,869.00	-334.93	1,436.96	1,386.84	50.12	28.668			
12,500.00	9,760.00	13,017.00	11,147.91	52.77	43.76	167.61	-2,954.59	-337.02	1,437.44	1,387.09	50.36	28.546			
12,600.00	9,761.40	12,930.13	11,149.63	54.27	42.84	167.52	-3,041.42	-338.75	1,438.63	1,388.03	50.60	28.431			
12,700.00	9,762.80	12,837.33	11,152.58	55.78	41.87	167.44	-3,134.16	-340.34	1,440.88	1,390.08	50.82	28.354			
12,800.00	9,764.20	12,736.22	11,155.59	57.30	40.87	167.38	-3,235.22	-341.59	1,442.86	1,391.86	51.00	28.292			
12,900.00	9,765.60	12,646.82	11,158.70	58.83	40.03	167.31	-3,324.55	-343.00	1,445.40	1,394.13	51.26	28.195			
13,000.00	9,767.00	12,540.88	11,163.00	60.36	39.05	167.26	-3,430.60	-344.14	1,448.40	1,396.96	51.45	28.154			
13,100.00	9,768.41	12,427.88	11,166.43	61.90	38.09	167.23	-3,543.55	-344.59	1,450.24	1,398.64	51.80	28.103			
13,200.00	9,769.81	9,867.01	9,762.34	63.44	28.66	89.13	-4,944.90	-626.78	1,398.37	1,313.93	84.45	16.559			
13,300.00	9,771.21	9,870.13	9,765.45	64.99	28.87	89.42	-4,944.95	-626.62	1,309.25	1,223.24	86.01	15.222			
13,400.00	9,772.61	9,873.28	9,768.59	66.54	28.67	89.71	-4,945.01	-626.45	1,221.79	1,134.21	87.58	13.951			
13,500.00	9,774.01	9,876.45	9,771.78	68.10	28.88	90.00	-4,945.07	-626.28	1,136.40	1,047.25	89.15	12.747			
13,600.00	9,775.41	9,879.84	9,774.95	69.66	28.68	90.30	-4,945.14	-626.12	1,053.58	962.85	90.73	11.613			
13,700.00	9,776.81	9,882.86	9,778.17	71.22	28.69	90.60	-4,945.20	-625.95	973.97	881.67	92.30	10.552			
13,800.00	9,778.21	9,886.11	9,781.41	72.79	28.70	90.91	-4,945.26	-625.78	898.43	804.58	93.88	9.570			
13,900.00	9,779.61	9,889.39	9,784.68	74.36	28.70	91.21	-4,945.32	-625.61	828.09	732.63	95.48	8.675			
14,000.00	9,781.01	9,892.69	9,787.96	75.93	28.71	91.52	-4,945.39	-625.44	764.37	667.33	97.03	7.877			
14,100.00	9,782.41	9,896.02	9,791.30	77.51	28.72	91.83	-4,945.46	-625.26	709.05	610.44	98.81	7.190			
14,200.00	9,783.81	9,899.38	9,794.65	79.08	28.72	92.15	-4,945.52	-625.09	664.28	564.08	100.19	6.630			
14,300.00	9,785.21	9,902.76	9,798.03	80.67	28.73	92.46	-4,945.59	-624.91	632.21	530.44	101.77	6.212			
14,400.00	9,786.61	9,906.18	9,801.44	82.25	28.74	92.78	-4,945.66	-624.73	614.92	511.57	103.35	5.950			

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 64H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 62-ISCWSA-GYRO-3, 1483-LEAM MWD-ADJ, 15937-Project													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		
14,457.97	9,787.42	9,908.17	9,803.43	83.17	28.74	92.97	-4,945.70	-824.63	612.18	507.92	104.26	5.872 CC, ES		
14,500.00	9,788.01	9,909.82	9,804.88	83.84	28.75	93.11	-4,945.73	-824.55	613.62	508.70	104.92	5.848 SF		
14,600.00	9,789.41	9,913.09	9,808.35	85.42	28.75	93.43	-4,945.80	-824.37	628.42	521.92	106.50	5.901		
14,700.00	9,790.81	9,916.80	9,811.85	87.01	28.76	93.76	-4,945.87	-824.19	658.24	550.16	108.07	6.091		
14,800.00	9,792.21	9,920.13	9,815.37	88.61	28.77	94.09	-4,945.95	-824.01	701.15	591.50	109.65	6.395		
14,900.00	9,793.61	9,923.89	9,818.93	90.20	28.77	94.42	-4,946.02	-823.83	754.93	643.71	111.22	6.788		
15,000.00	9,795.01	9,924.00	9,819.24	91.80	28.78	94.45	-4,946.03	-823.81	817.44	704.64	112.80	7.247		
15,100.00	9,796.42	9,924.00	9,819.24	93.39	28.78	94.45	-4,946.03	-823.81	886.85	772.45	114.40	7.752		
15,200.00	9,797.82	9,933.06	9,828.28	94.99	28.79	95.30	-4,946.22	-823.35	961.82	845.70	115.92	8.295		
15,300.00	9,799.22	9,936.07	9,831.29	96.59	28.80	95.58	-4,946.28	-823.19	1,040.64	923.15	117.49	8.858		
15,400.00	9,800.62	9,939.03	9,834.24	98.19	28.80	95.85	-4,946.34	-823.05	1,123.00	1,003.95	119.05	9.433		
15,500.00	9,802.02	9,941.94	9,837.16	99.80	28.81	96.13	-4,946.39	-822.90	1,208.02	1,087.41	120.51	10.016		
15,600.00	9,803.42	9,944.81	9,840.02	101.40	28.82	96.39	-4,946.45	-822.76	1,295.17	1,173.00	122.17	10.601		
15,700.00	9,804.82	9,947.64	9,842.84	103.00	28.82	96.66	-4,946.50	-822.62	1,384.06	1,260.32	123.73	11.186		
15,800.00	9,806.22	9,950.42	9,845.82	104.61	28.83	96.91	-4,946.55	-822.49	1,474.36	1,349.07	125.29	11.767		
15,900.00	9,807.62	9,953.16	9,848.35	106.22	28.83	97.17	-4,946.60	-822.35	1,565.84	1,438.99	126.85	12.344		
16,000.00	9,809.02	9,955.85	9,851.05	107.83	28.84	97.42	-4,946.65	-822.22	1,658.29	1,529.89	128.40	12.915		
16,100.00	9,810.42	9,958.51	9,853.70	109.44	28.84	97.67	-4,946.70	-822.10	1,751.57	1,621.61	129.96	13.478		
16,200.00	9,811.82	9,961.12	9,856.31	111.05	28.85	97.91	-4,946.75	-821.97	1,845.55	1,714.04	131.51	14.034		
16,300.00	9,813.22	9,963.70	9,858.88	112.66	28.85	98.15	-4,946.79	-821.85	1,940.13	1,807.07	133.06	14.581		
16,400.00	9,814.62	9,966.24	9,861.42	114.27	28.86	98.38	-4,946.84	-821.73	2,035.22	1,900.61	134.60	15.120		
16,500.00	9,816.02	9,968.74	9,863.92	115.88	28.86	98.62	-4,946.88	-821.62	2,130.75	1,994.60	136.15	15.650		
16,600.00	9,817.42	9,971.21	9,866.38	117.50	28.87	98.84	-4,946.92	-821.50	2,226.88	2,088.98	137.70	16.171		
16,700.00	9,818.82	9,973.64	9,868.81	119.11	28.87	99.07	-4,946.96	-821.39	2,322.94	2,183.71	139.24	16.683		
16,800.00	9,820.22	9,976.03	9,871.20	120.73	28.88	99.29	-4,947.00	-821.28	2,419.51	2,278.73	140.78	17.186		
16,900.00	9,821.62	9,978.39	9,873.56	122.34	28.88	99.51	-4,947.04	-821.17	2,516.34	2,374.02	142.32	17.681		
17,000.00	9,823.02	9,980.72	9,875.88	123.96	28.89	99.72	-4,947.08	-821.07	2,613.41	2,469.55	143.86	18.186		
17,100.00	9,824.43	9,983.01	9,878.17	125.58	28.89	99.93	-4,947.11	-820.97	2,710.69	2,565.29	145.40	18.643		
17,141.05	9,825.00	9,983.94	9,879.10	126.24	28.89	100.02	-4,947.13	-820.92	2,750.88	2,604.65	146.03	18.637		

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 71H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3, 9949-MWD-ISCWSA, 14979-Project														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)					
0.00	0.00	0.00	0.00	0.00	0.00	-178.81	-5,236.39	-292.23	5,244.60						
100.00	100.00	70.80	70.80	0.08	0.05	-178.81	-5,236.42	-292.25	5,244.57	5,244.43	0.13	N/A			
200.00	200.00	179.18	179.18	0.31	0.18	-178.81	-5,236.48	-292.30	5,244.84	5,244.15	0.49	N/A			
300.00	300.00	299.28	299.28	0.53	0.39	-178.80	-5,236.09	-292.39	5,244.30	5,243.38	0.93	5,869.490			
400.00	400.00	388.45	388.45	0.76	0.54	-178.81	-5,235.83	-292.22	5,244.00	5,242.89	1.30	4,027.090			
500.00	500.00	490.17	490.17	0.98	0.72	-178.81	-5,235.59	-291.82	5,243.74	5,242.03	1.71	3,069.795			
600.00	600.00	590.83	590.82	1.21	0.90	-178.81	-5,235.29	-291.38	5,243.42	5,241.31	2.11	2,486.876			
700.00	700.00	687.14	687.14	1.43	1.07	-178.82	-5,235.06	-290.92	5,243.15	5,240.85	2.50	2,095.741			
800.00	800.00	781.28	781.28	1.66	1.23	-178.82	-5,234.81	-290.44	5,242.96	5,240.07	2.89	1,813.622			
900.00	900.00	875.81	875.80	1.88	1.40	-178.83	-5,234.87	-289.92	5,242.90	5,239.61	3.28	1,598.195			
927.34	927.34	902.05	902.04	1.94	1.45	-178.83	-5,234.88	-289.75	5,242.89	5,239.50	3.39	1,547.824			
1,000.00	1,000.00	968.91	968.90	2.11	1.56	-178.84	-5,234.93	-289.31	5,242.92	5,239.28	3.67	1,429.549			
1,100.00	1,100.00	1,065.71	1,065.70	2.33	1.73	-178.84	-5,235.14	-288.83	5,243.11	5,239.05	4.06	1,291.099			
1,200.00	1,200.00	1,206.80	1,206.79	2.56	1.98	-178.85	-5,235.00	-288.51	5,243.04	5,238.51	4.53	1,156.913			
1,300.00	1,300.00	1,309.00	1,308.99	2.78	2.16	-178.84	-5,234.31	-288.87	5,242.37	5,237.44	4.94	1,062.185			
1,400.00	1,400.00	1,402.14	1,402.12	3.01	2.32	-178.84	-5,233.74	-288.94	5,241.78	5,236.46	5.32	984.722			
1,500.00	1,500.00	1,547.00	1,546.97	3.23	2.57	-178.83	-5,232.31	-289.55	5,240.81	5,235.01	5.80	903.366			
1,600.00	1,600.00	1,636.00	1,635.96	3.46	2.73	-178.83	-5,231.17	-289.82	5,239.55	5,233.37	6.18	847.554			
1,700.00	1,700.00	1,706.80	1,706.76	3.68	2.85	-178.83	-5,230.78	-290.08	5,238.92	5,232.39	6.53	802.211			
1,800.00	1,800.00	1,833.98	1,833.93	3.91	3.07	-178.82	-5,229.57	-290.77	5,237.98	5,231.00	6.98	750.836			
1,900.00	1,900.00	1,922.28	1,922.22	4.13	3.23	-178.81	-5,228.87	-291.56	5,237.01	5,229.65	7.36	711.800			
2,000.00	2,000.00	2,052.84	2,052.77	4.35	3.46	-178.79	-5,227.08	-292.95	5,235.87	5,228.08	7.81	670.331			
2,100.00	2,100.00	2,177.80	2,177.69	4.58	3.68	-178.77	-5,224.78	-294.57	5,234.09	5,225.83	8.25	634.067			
2,200.00	2,200.00	2,274.35	2,274.22	4.80	3.85	-178.76	-5,222.88	-295.86	5,232.18	5,223.53	8.65	604.952			
2,300.00	2,300.00	2,387.85	2,387.68	5.03	4.05	-178.74	-5,220.38	-297.57	5,230.06	5,220.98	9.07	578.447			
2,400.00	2,400.00	2,470.48	2,470.29	5.25	4.19	-178.72	-5,218.59	-298.98	5,228.02	5,218.58	9.44	553.855			
2,500.00	2,500.00	2,555.72	2,555.49	5.48	4.34	-178.70	-5,217.15	-300.71	5,226.44	5,216.62	9.82	532.382			
2,600.00	2,600.00	2,673.41	2,673.12	5.70	4.55	-178.67	-5,214.85	-303.35	5,224.59	5,214.34	10.25	509.785			
2,700.00	2,700.00	2,757.87	2,757.55	5.93	4.70	-178.65	-5,213.25	-305.04	5,222.82	5,212.20	10.62	491.709			
2,800.00	2,800.00	2,866.12	2,865.76	6.15	4.89	-178.62	-5,211.45	-307.35	5,221.30	5,210.28	11.04	473.063			
2,900.00	2,900.00	3,004.27	3,003.85	6.38	5.13	-178.59	-5,208.29	-310.29	5,219.12	5,207.82	11.50	453.848			
3,000.00	3,000.00	3,107.77	3,107.28	6.60	5.32	-178.57	-5,205.55	-312.40	5,216.80	5,204.69	11.91	437.930			
3,100.00	3,100.00	3,226.35	3,225.78	6.83	5.53	-178.53	-5,202.23	-315.30	5,213.96	5,201.82	12.35	422.320			
3,200.00	3,200.00	3,363.08	3,362.40	7.05	5.77	-178.50	-5,197.47	-318.20	5,210.59	5,197.77	12.81	406.687			
3,300.00	3,300.00	3,459.57	3,458.82	7.28	5.95	-178.48	-5,193.98	-319.69	5,207.07	5,193.86	13.21	394.280			
3,400.00	3,400.00	3,564.84	3,564.01	7.50	6.14	-178.46	-5,190.07	-321.17	5,203.44	5,189.83	13.62	382.114			
3,500.00	3,500.00	3,650.99	3,650.08	7.73	6.29	-178.44	-5,186.92	-322.45	5,199.89	5,185.90	13.99	371.575			
3,600.00	3,600.00	3,751.13	3,750.15	7.95	6.47	-178.42	-5,183.54	-324.12	5,196.63	5,182.23	14.40	360.985			
3,700.00	3,700.00	3,850.20	3,849.15	8.18	6.65	-178.40	-5,180.04	-325.75	5,193.20	5,178.41	14.80	351.003			
3,800.00	3,800.00	3,949.35	3,948.24	8.40	6.83	-178.39	-5,176.85	-326.95	5,189.87	5,174.67	15.19	341.556			
3,900.00	3,900.00	4,028.93	4,025.78	8.63	6.97	-178.37	-5,174.14	-327.83	5,186.72	5,171.16	15.56	333.418			
4,000.00	4,000.00	4,107.86	4,106.66	8.85	7.12	-178.36	-5,171.87	-329.03	5,184.01	5,168.08	15.92	325.556			
4,100.00	4,100.00	4,192.88	4,191.44	9.07	7.27	-178.35	-5,169.78	-330.16	5,181.81	5,165.31	16.30	317.833			
4,200.00	4,200.00	4,282.56	4,281.29	9.30	7.43	-178.33	-5,167.73	-331.87	5,179.47	5,162.79	16.68	310.500			
4,300.00	4,300.00	4,368.45	4,367.14	9.52	7.58	-178.31	-5,165.95	-333.44	5,177.52	5,160.47	17.06	303.540			
4,400.00	4,400.00	4,434.48	4,433.16	9.75	7.70	-178.30	-5,164.89	-333.82	5,176.00	5,158.60	17.40	297.511			
4,500.00	4,500.00	4,496.00	4,494.67	9.97	7.80	-178.31	-5,164.59	-332.96	5,175.35	5,157.62	17.73	291.904			
4,535.40	4,535.40	4,508.58	4,507.25	10.05	7.82	-178.31	-5,164.61	-332.65	5,175.31	5,157.48	17.83	290.242			
4,600.00	4,600.00	4,555.32	4,553.97	10.20	7.91	-178.33	-5,164.80	-331.36	5,175.46	5,157.40	18.06	286.814			
4,700.00	4,700.00	4,654.90	4,653.50	10.42	8.08	-178.36	-5,165.51	-328.20	5,175.97	5,157.51	18.45	280.468			
4,800.00	4,800.00	4,740.11	4,738.64	10.65	8.23	-178.40	-5,166.14	-324.86	5,176.47	5,157.64	18.83	274.944			

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 71H - OH - OH													Offset Site Error:	0.00 usft	
Survey Program: 126-ISCWSA-GYRO-3, 9949-MWD-ISCWSA, 14979-Project													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)					
4,900.00	4,900.00	4,815.33	4,813.72	10.87	8.36	-178.45	-5,167.11	-320.41	5,177.40	5,158.21	19.18	289.898			
5,000.00	5,000.00	4,886.78	4,884.94	11.10	8.48	-178.51	-5,168.48	-315.10	5,178.84	5,159.31	19.53	265.147			
5,100.00	5,100.00	4,960.94	4,958.84	11.32	8.61	-178.58	-5,170.34	-308.99	5,180.85	5,160.98	19.89	260.526			
5,200.00	5,200.00	5,061.56	5,059.09	11.55	8.79	-178.67	-5,173.10	-300.77	5,183.12	5,162.83	20.29	255.491			
5,300.00	5,300.00	5,184.00	5,181.20	11.77	9.01	-178.77	-5,176.03	-292.26	5,185.11	5,164.39	20.73	250.177			
5,400.00	5,400.00	5,273.00	5,270.03	12.00	9.18	-178.82	-5,178.04	-287.33	5,187.06	5,165.96	21.11	245.759			
5,500.00	5,500.00	5,370.16	5,367.04	12.22	9.34	-178.88	-5,180.46	-282.45	5,189.27	5,167.77	21.50	241.346			
5,600.00	5,600.00	5,488.27	5,484.96	12.45	9.55	-178.95	-5,183.08	-278.24	5,191.21	5,169.28	21.93	236.684			
5,700.00	5,700.00	5,604.21	5,600.70	12.67	9.75	-177.02	-5,185.18	-269.79	5,192.72	5,170.38	22.38	232.222			
5,800.00	5,800.00	5,733.59	5,729.88	12.90	9.98	-177.10	-5,187.04	-262.77	5,193.88	5,171.07	22.81	227.680			
5,900.00	5,900.00	5,831.50	5,827.65	13.12	10.15	-177.16	-5,188.20	-257.58	5,194.81	5,171.60	23.21	223.836			
6,000.00	6,000.00	5,948.00	5,943.99	13.35	10.35	-177.22	-5,189.33	-251.67	5,195.52	5,171.89	23.64	219.810			
6,100.00	6,100.00	6,055.48	6,051.32	13.57	10.54	-177.28	-5,190.15	-246.18	5,196.04	5,171.99	24.05	216.061			
6,200.00	6,200.00	6,147.26	6,142.99	13.80	10.70	-177.33	-5,190.82	-241.69	5,196.54	5,172.10	24.43	212.677			
6,300.00	6,300.00	6,248.23	6,243.85	14.02	10.88	-177.38	-5,191.67	-237.12	5,197.17	5,172.33	24.84	209.267			
6,400.00	6,400.00	6,352.00	6,347.52	14.24	11.06	-177.43	-5,192.44	-232.68	5,197.72	5,172.48	25.24	205.922			
6,500.00	6,500.00	6,443.85	6,439.10	14.47	11.22	-177.47	-5,193.17	-229.09	5,198.34	5,172.71	25.63	202.853			
6,600.00	6,600.00	6,583.88	6,559.24	14.69	11.43	-177.52	-5,193.94	-224.58	5,198.81	5,172.75	26.08	199.488			
6,700.00	6,700.00	6,670.81	6,666.11	14.92	11.62	-177.57	-5,194.31	-220.81	5,199.01	5,172.54	26.47	196.397			
6,800.00	6,800.00	6,778.74	6,771.97	15.14	11.80	-177.61	-5,194.80	-217.18	5,199.14	5,172.25	26.88	193.410			
6,900.00	6,900.00	6,879.70	6,874.87	15.37	11.98	-177.64	-5,194.78	-213.70	5,199.15	5,171.87	27.29	190.546			
6,983.29	6,983.29	6,932.32	6,927.48	15.49	12.07	-177.66	-5,194.83	-211.91	5,199.15	5,171.68	27.50	189.081			
7,000.00	7,000.00	6,972.00	6,967.13	15.59	12.14	-177.68	-5,194.89	-210.63	5,199.17	5,171.50	27.67	187.892			
7,100.00	7,100.00	7,061.00	7,056.08	15.82	12.29	-177.71	-5,195.25	-207.79	5,199.44	5,171.39	28.05	185.356			
7,200.00	7,200.00	7,148.84	7,143.86	16.04	12.45	-177.74	-5,195.86	-204.79	5,199.99	5,171.58	28.43	182.909			
7,300.00	7,300.00	7,240.00	7,234.97	16.27	12.61	-177.78	-5,196.64	-201.79	5,200.71	5,171.89	28.81	180.495			
7,400.00	7,400.00	7,336.77	7,331.89	16.49	12.78	-177.81	-5,197.56	-198.79	5,201.53	5,172.33	29.21	178.068			
7,500.00	7,500.00	7,421.70	7,416.58	16.72	12.93	-177.84	-5,198.49	-196.23	5,202.51	5,172.93	29.58	175.873			
7,600.00	7,600.00	7,534.01	7,528.83	16.94	13.12	-177.88	-5,199.76	-192.81	5,203.53	5,173.53	30.00	173.437			
7,700.00	7,700.00	7,632.00	7,626.78	17.17	13.30	-177.91	-5,200.64	-189.69	5,204.32	5,173.92	30.40	171.202			
7,800.00	7,800.00	7,721.82	7,716.34	17.39	13.45	-177.94	-5,201.77	-187.00	5,205.46	5,174.68	30.78	169.116			
7,900.00	7,900.00	7,821.97	7,816.65	17.62	13.63	-177.97	-5,202.84	-184.52	5,206.44	5,175.25	31.18	166.975			
8,000.00	8,000.00	7,901.75	7,896.40	17.84	13.77	-177.99	-5,203.96	-182.90	5,207.78	5,176.22	31.55	165.089			
8,100.00	8,100.00	7,986.56	7,981.19	18.07	13.92	-178.01	-5,205.42	-181.25	5,209.42	5,177.50	31.92	163.210			
8,200.00	8,200.00	8,072.86	8,067.45	18.29	14.07	-178.02	-5,207.15	-179.62	5,211.35	5,179.05	32.29	161.370			
8,300.00	8,300.00	8,174.79	8,169.35	18.52	14.25	-178.04	-5,209.37	-178.01	5,213.48	5,180.78	32.70	159.446			
8,400.00	8,400.00	8,265.54	8,260.08	18.74	14.41	-178.05	-5,211.17	-177.30	5,215.45	5,182.37	33.08	157.660			
8,500.00	8,500.00	8,343.19	8,337.69	18.96	14.55	-178.08	-5,213.13	-176.63	5,217.92	5,184.48	33.44	156.036			
8,600.00	8,600.00	8,441.19	8,435.66	19.19	14.72	-178.07	-5,215.76	-175.63	5,220.57	5,186.73	33.84	154.289			
8,700.00	8,700.00	8,548.95	8,543.38	19.41	14.91	-178.09	-5,218.84	-174.43	5,223.20	5,188.95	34.25	152.507			
8,800.00	8,800.00	8,646.75	8,641.14	19.64	15.09	-178.09	-5,221.09	-173.71	5,225.89	5,191.04	34.64	150.839			
8,900.00	8,900.00	8,744.78	8,739.13	19.86	15.26	-178.10	-5,223.64	-173.45	5,228.28	5,193.24	35.04	149.213			
9,000.00	9,000.00	8,870.16	8,864.48	20.09	15.48	-178.10	-5,226.55	-173.08	5,230.58	5,195.10	35.48	147.418			
9,100.00	9,100.00	8,952.43	8,946.73	20.31	15.64	-178.11	-5,228.59	-172.88	5,232.78	5,196.91	35.87	145.895			
9,200.00	9,200.00	9,059.36	9,053.63	20.54	15.81	-178.11	-5,230.78	-173.06	5,235.05	5,198.79	36.26	144.377			
9,212.93	9,212.93	9,071.29	9,065.57	20.57	15.84	-178.10	-5,231.06	-173.10	5,235.35	5,199.04	36.31	144.188			
9,250.00	9,249.97	9,105.52	9,099.78	20.64	15.90	-5.01	-5,231.86	-173.26	5,235.03	5,198.60	36.43	143.713			
9,300.00	9,299.67	9,145.47	9,139.72	20.72	15.97	-5.05	-5,232.84	-173.47	5,230.87	5,194.40	36.47	143.415			
9,350.00	9,348.70	9,183.25	9,177.48	20.81	16.03	-5.13	-5,233.85	-173.69	5,222.51	5,186.06	36.45	143.291			
9,400.00	9,398.89	9,219.92	9,214.14	20.89	16.10	-5.25	-5,234.90	-173.91	5,210.01	5,173.66	36.35	143.316			

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 71H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3, 9649-MWD-ISCWSA, 14979-Project														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)							
9,412.93	9,408.89	9,229.10	9,223.32	20.92	16.11	-5.29	-5,235.18	-173.96	5,206.12	5,169.80	36.32	143.346			
9,425.00	9,420.18	9,237.61	9,231.82	20.94	16.13	-5.34	-5,235.45	-174.01	5,202.22	5,165.95	36.27	143.441			
9,450.00	9,443.20	9,255.00	9,249.21	20.98	16.16	-5.46	-5,236.00	-174.11	5,193.25	5,157.10	36.15	143.678			
9,475.00	9,465.88	9,272.03	9,266.23	21.02	16.19	-5.59	-5,236.56	-174.20	5,183.10	5,147.10	36.00	143.969			
9,500.00	9,487.55	9,294.00	9,288.18	21.06	16.23	-5.75	-5,237.31	-174.31	5,171.81	5,135.98	35.85	144.259			
9,525.00	9,508.76	9,307.14	9,301.31	21.10	16.25	-5.94	-5,237.77	-174.38	5,159.38	5,123.72	35.66	144.682			
9,550.00	9,529.25	9,326.13	9,320.29	21.13	16.28	-6.15	-5,238.44	-174.51	5,145.85	5,110.39	35.47	145.086			
9,575.00	9,548.96	9,344.48	9,338.62	21.17	16.32	-6.41	-5,239.09	-174.66	5,131.26	5,096.00	35.26	145.533			
9,600.00	9,567.84	9,362.11	9,356.25	21.22	16.35	-6.70	-5,239.73	-174.83	5,115.84	5,080.60	35.03	146.018			
9,625.00	9,585.84	9,379.00	9,373.12	21.27	16.38	-7.03	-5,240.34	-175.01	5,099.03	5,064.23	34.80	146.537			
9,650.00	9,602.91	9,397.57	9,391.68	21.32	16.41	-7.43	-5,241.02	-175.24	5,081.47	5,046.92	34.56	147.042			
9,675.00	9,618.99	9,416.21	9,410.31	21.38	16.44	-7.90	-5,241.69	-175.48	5,063.01	5,028.70	34.32	147.540			
9,700.00	9,634.05	9,433.74	9,427.82	21.45	16.47	-8.45	-5,242.31	-175.73	5,043.70	5,009.63	34.07	148.032			
9,725.00	9,648.05	9,450.11	9,444.18	21.52	16.50	-9.10	-5,242.89	-175.97	5,023.59	4,989.76	33.83	148.496			
9,750.00	9,660.94	9,465.27	9,459.33	21.59	16.53	-9.89	-5,243.42	-176.21	5,002.73	4,969.13	33.60	148.899			
9,775.00	9,672.70	9,473.00	9,467.05	21.67	16.54	-10.83	-5,243.69	-176.34	4,981.19	4,947.83	33.36	149.317			
9,800.00	9,683.28	9,486.24	9,480.29	21.75	16.57	-12.03	-5,244.15	-176.56	4,959.03	4,925.85	33.16	149.441			
9,825.00	9,692.67	9,494.24	9,488.27	21.84	16.58	-13.51	-5,244.44	-176.89	4,936.31	4,903.27	33.04	149.395			
9,829.80	9,694.28	9,495.81	9,489.84	21.86	16.58	-13.63	-5,244.48	-176.72	4,932.08	4,899.06	33.02	149.350			
9,850.00	9,700.86	9,501.33	9,495.36	21.94	16.59	-12.70	-5,244.69	-176.81	4,913.10	4,880.29	32.80	149.779			
9,875.00	9,707.86	9,507.52	9,501.55	22.04	16.60	-11.04	-5,244.92	-176.92	4,889.44	4,856.90	32.53	150.302			
9,900.00	9,713.72	9,512.81	9,506.84	22.15	16.61	-8.88	-5,245.11	-177.01	4,865.39	4,833.13	32.26	150.821			
9,925.00	9,718.36	9,517.18	9,511.20	22.26	16.62	-5.72	-5,245.27	-177.09	4,841.03	4,809.03	32.00	151.290			
9,950.00	9,721.79	9,520.61	9,514.82	22.38	16.63	-0.63	-5,245.40	-177.15	4,816.42	4,784.80	31.82	151.378			
9,975.00	9,724.01	9,523.08	9,517.09	22.50	16.63	9.21	-5,245.49	-177.19	4,791.82	4,759.47	32.15	149.056			
10,000.00	9,725.00	9,524.60	9,518.62	22.63	16.63	33.87	-5,245.55	-177.21	4,766.30	4,731.12	35.18	135.478			
10,100.00	9,726.39	9,528.65	9,522.66	23.20	16.64	34.32	-5,245.70	-177.29	4,666.91	4,631.28	35.62	131.009			
10,200.00	9,727.79	9,532.75	9,526.75	23.88	16.65	34.78	-5,245.86	-177.36	4,567.11	4,530.97	36.14	126.381			
10,300.00	9,729.19	9,536.88	9,530.88	24.64	16.66	35.26	-5,246.01	-177.43	4,467.31	4,430.59	36.72	121.649			
10,400.00	9,730.59	9,541.05	9,535.05	25.46	16.66	35.76	-5,246.17	-177.50	4,367.52	4,330.15	37.38	116.858			
10,500.00	9,731.99	9,545.26	9,539.25	26.40	16.67	36.27	-5,246.34	-177.58	4,267.74	4,229.85	38.09	112.039			
10,600.00	9,733.39	9,549.50	9,543.49	27.39	16.68	36.80	-5,246.50	-177.65	4,167.96	4,129.09	38.87	107.233			
10,700.00	9,734.79	9,553.79	9,547.78	28.44	16.68	37.34	-5,246.67	-177.73	4,068.19	4,028.48	39.70	102.469			
10,800.00	9,736.19	9,558.00	9,551.98	29.54	16.70	38.57	-5,247.03	-177.80	3,968.42	3,927.88	40.74	97.402			
10,900.00	9,737.59	9,563.00	9,556.98	30.69	16.70	38.57	-5,247.03	-177.90	3,868.66	3,827.11	41.55	93.117			
11,000.00	9,738.99	9,567.94	9,561.91	31.89	16.71	39.25	-5,247.23	-177.99	3,768.90	3,726.34	42.56	88.564			
11,100.00	9,740.40	9,573.54	9,567.51	33.12	16.72	40.05	-5,247.45	-178.08	3,669.15	3,625.51	43.64	84.082			
11,200.00	9,741.80	9,579.13	9,573.09	34.39	16.73	40.87	-5,247.67	-178.18	3,569.40	3,524.83	44.77	79.728			
11,300.00	9,743.20	9,584.71	9,578.67	35.68	16.74	41.71	-5,247.89	-178.27	3,469.66	3,423.71	45.95	75.510			
11,400.00	9,744.60	9,590.28	9,584.24	37.01	16.75	42.59	-5,248.11	-178.35	3,369.93	3,322.75	47.18	71.432			
11,500.00	9,746.00	9,595.85	9,589.80	38.36	16.76	43.49	-5,248.33	-178.44	3,270.20	3,221.75	48.45	67.498			
11,600.00	9,747.40	9,601.40	9,595.35	39.73	16.77	44.41	-5,248.55	-178.52	3,170.48	3,120.72	49.77	63.707			
11,700.00	9,748.80	9,606.95	9,600.89	41.12	16.78	45.37	-5,248.77	-178.59	3,070.77	3,019.84	51.13	60.060			
11,800.00	9,750.20	9,612.49	9,606.42	42.53	16.79	46.36	-5,248.99	-178.67	2,971.07	2,918.54	52.53	56.556			
11,900.00	9,751.60	9,618.02	9,611.95	43.95	16.80	47.37	-5,249.20	-178.74	2,871.38	2,817.40	53.98	53.193			
12,000.00	9,753.00	9,623.55	9,617.47	45.39	16.81	48.42	-5,249.42	-178.80	2,771.70	2,716.23	55.47	49.968			
12,100.00	9,754.40	9,629.08	9,622.98	46.85	16.82	49.50	-5,249.64	-178.87	2,672.04	2,615.04	57.00	46.878			
12,200.00	9,755.80	9,634.57	9,628.48	48.31	16.83	50.61	-5,249.85	-178.93	2,572.39	2,513.82	58.57	43.920			
12,300.00	9,757.20	9,640.06	9,633.97	49.79	16.84	51.76	-5,250.07	-178.98	2,472.76	2,412.57	60.18	41.089			
12,400.00	9,758.60	9,645.55	9,639.46	51.27	16.85	52.94	-5,250.28	-179.04	2,373.14	2,311.31	61.83	38.383			
12,500.00	9,760.00	9,651.03	9,644.93	52.77	16.86	54.16	-5,250.49	-179.09	2,273.55	2,210.03	63.51	35.797			

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 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3708.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3708.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 Thistle Unit - 71H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3, 9949-MWD-ISCWSA, 14979-Project													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)				
12,800.00	9,781.40	9,852.00	9,845.90	54.27	16.86	54.37	-5,250.53	-179.10	2,173.98	2,109.11	64.87	33.514		
12,700.00	9,782.80	9,852.00	9,845.90	55.78	16.86	54.37	-5,250.53	-179.10	2,074.46	2,008.30	66.18	31.357		
12,800.00	9,784.20	9,853.33	9,857.22	57.30	16.85	57.02	-5,250.98	-179.20	1,974.94	1,908.51	66.42	28.863		
12,900.00	9,785.80	9,857.53	9,861.42	58.83	16.89	58.04	-5,251.16	-179.24	1,875.48	1,805.35	70.12	26.745		
13,000.00	9,787.00	9,871.83	9,865.72	60.36	16.89	59.11	-5,251.34	-179.28	1,776.06	1,704.20	71.86	24.716		
13,100.00	9,788.41	9,876.25	9,870.13	61.90	16.90	60.23	-5,251.52	-179.32	1,676.70	1,603.08	73.63	22.773		
13,200.00	9,789.81	9,880.77	9,874.65	63.44	16.91	61.41	-5,251.72	-179.36	1,577.41	1,501.98	75.43	20.913		
13,300.00	9,771.21	9,885.41	9,879.28	64.96	16.92	62.65	-5,251.92	-179.40	1,478.19	1,400.93	77.28	19.132		
13,400.00	9,772.61	9,890.17	9,884.04	66.54	16.93	63.94	-5,252.14	-179.45	1,379.07	1,299.94	79.13	17.428		
13,500.00	9,774.01	9,895.06	9,888.92	68.10	16.94	65.30	-5,252.36	-179.50	1,280.06	1,199.04	81.02	15.799		
13,600.00	9,775.41	9,900.08	9,893.93	69.66	16.94	66.73	-5,252.59	-179.55	1,181.19	1,098.25	82.94	14.242		
13,700.00	9,776.81	9,905.24	9,899.08	71.22	16.95	68.23	-5,252.83	-179.60	1,082.50	997.62	84.88	12.753		
13,800.00	9,778.21	9,910.53	9,904.37	72.79	16.96	69.80	-5,253.09	-179.65	984.05	897.21	86.84	11.332		
13,900.00	9,779.61	9,915.98	9,909.81	74.36	16.97	71.45	-5,253.35	-179.71	885.90	797.09	88.81	9.975		
14,000.00	9,781.01	9,921.57	9,915.40	75.93	16.98	73.17	-5,253.63	-179.77	788.18	697.39	90.79	8.682		
14,100.00	9,782.41	9,927.33	9,921.15	77.51	16.99	74.98	-5,253.92	-179.83	691.05	598.29	92.78	7.450		
14,200.00	9,783.81	9,933.26	9,927.07	79.08	17.00	76.87	-5,254.22	-179.89	594.81	500.08	94.73	6.279		
14,300.00	9,785.21	9,942.00	9,935.80	80.67	17.02	79.71	-5,254.68	-179.96	499.98	403.15	96.83	5.164		
14,400.00	9,786.61	9,945.95	9,939.74	82.25	17.03	81.01	-5,254.89	-180.03	407.51	308.91	98.60	4.133		
14,500.00	9,788.01	9,952.71	9,946.49	83.84	17.04	83.26	-5,255.25	-180.10	319.47	218.99	100.48	3.180		
14,600.00	9,789.41	9,959.35	9,953.12	85.42	17.05	85.48	-5,255.60	-180.18	240.77	138.50	102.28	2.354		
14,700.00	9,790.81	9,965.88	9,959.64	87.01	17.06	87.88	-5,255.93	-180.26	163.83	79.84	104.00	1.768		
14,771.40	9,791.81	9,970.47	9,964.22	88.15	17.07	89.23	-5,256.17	-180.32	169.47	84.29	105.18	1.611	CC, ES, SF	
14,800.00	9,792.21	9,972.29	9,966.05	88.61	17.07	89.84	-5,256.26	-180.35	171.85	86.22	105.64	1.627		
14,900.00	9,793.61	9,978.80	9,972.35	90.20	17.08	91.97	-5,256.58	-180.43	212.58	105.39	107.19	1.983		
15,000.00	9,795.01	9,984.80	9,978.54	91.80	17.10	94.05	-5,256.89	-180.52	284.19	175.53	108.98	2.615		
15,100.00	9,796.42	9,990.90	9,984.63	93.39	17.11	96.09	-5,257.19	-180.61	369.14	259.08	110.08	3.354		
15,200.00	9,797.82	9,996.90	9,990.62	94.99	17.12	98.07	-5,257.48	-180.70	460.09	348.73	111.37	4.131		
15,300.00	9,799.22	9,992.80	9,996.51	96.59	17.13	100.00	-5,257.77	-180.79	554.11	441.51	112.80	4.921		
15,400.00	9,800.62	9,998.80	9,992.31	98.19	17.14	101.88	-5,258.05	-180.88	649.85	536.09	113.78	5.712		
15,500.00	9,802.02	9,914.31	9,908.01	99.80	17.15	103.70	-5,258.32	-180.97	748.67	631.82	114.85	6.501		
15,600.00	9,803.42	11,071.81	10,502.77	101.40	22.64	163.19	-6,085.80	-223.67	757.27	696.12	61.16	12.362		
15,700.00	9,804.82	11,168.04	10,503.51	103.00	23.71	162.79	-6,161.91	-228.27	758.31	695.31	63.01	12.035		
15,800.00	9,806.22	11,270.72	10,505.68	104.61	24.86	162.51	-6,264.51	-231.63	760.21	695.40	64.81	11.730		
15,900.00	9,807.62	11,389.92	10,508.57	106.22	26.36	162.29	-6,383.69	-233.51	760.29	693.58	66.72	11.394		
16,000.00	9,809.02	11,488.85	10,509.96	107.83	27.65	162.11	-6,482.80	-234.57	758.93	690.45	68.48	11.082		
16,046.45	9,809.87	11,527.65	10,506.19	108.57	28.15	162.08	-6,521.41	-234.58	758.70	689.51	69.19	10.966		
16,100.00	9,810.42	11,575.65	10,507.06	109.44	28.77	162.07	-6,589.40	-234.41	758.96	688.96	70.00	10.842		
16,200.00	9,811.82	11,673.26	10,508.75	111.05	30.09	161.97	-6,668.99	-235.13	758.74	688.04	71.70	10.597		
16,300.00	9,813.22	11,772.55	10,510.37	112.66	31.48	161.71	-6,766.22	-238.19	761.16	687.53	73.63	10.338		
16,400.00	9,814.62	11,881.81	10,511.52	114.27	33.05	161.52	-6,875.46	-239.88	761.55	685.98	75.57	10.077		
16,500.00	9,816.02	11,996.25	10,512.09	115.88	34.75	161.49	-6,989.88	-239.04	760.72	683.35	77.38	9.831		
16,600.00	9,817.42	12,107.37	10,510.08	117.50	36.48	161.37	-7,100.99	-238.66	757.80	678.50	79.30	9.556		
16,700.00	9,818.82	12,200.97	10,508.52	119.11	37.89	161.30	-7,194.57	-237.91	754.88	673.87	81.01	9.319		
16,800.00	9,820.22	12,306.36	10,507.37	120.73	39.49	161.32	-7,299.93	-235.89	752.15	669.46	82.70	9.095		
16,900.00	9,821.62	12,406.50	10,505.12	122.34	41.05	161.31	-7,400.03	-234.03	748.35	663.95	84.40	8.866		
17,000.00	9,823.02	12,487.85	10,504.81	123.96	42.28	161.35	-7,481.36	-232.43	746.09	660.20	85.89	8.687		
17,028.88	9,823.40	12,508.26	10,504.91	124.39	42.59	161.37	-7,501.76	-231.95	745.98	659.73	86.25	8.649		
17,100.00	9,824.43	12,574.26	10,506.83	125.58	43.60	161.48	-7,567.72	-230.31	746.50	659.32	87.28	8.554		
17,141.05	9,825.00	12,617.51	10,508.02	126.24	44.28	161.53	-7,610.94	-229.38	746.94	659.03	87.91	8.497		

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



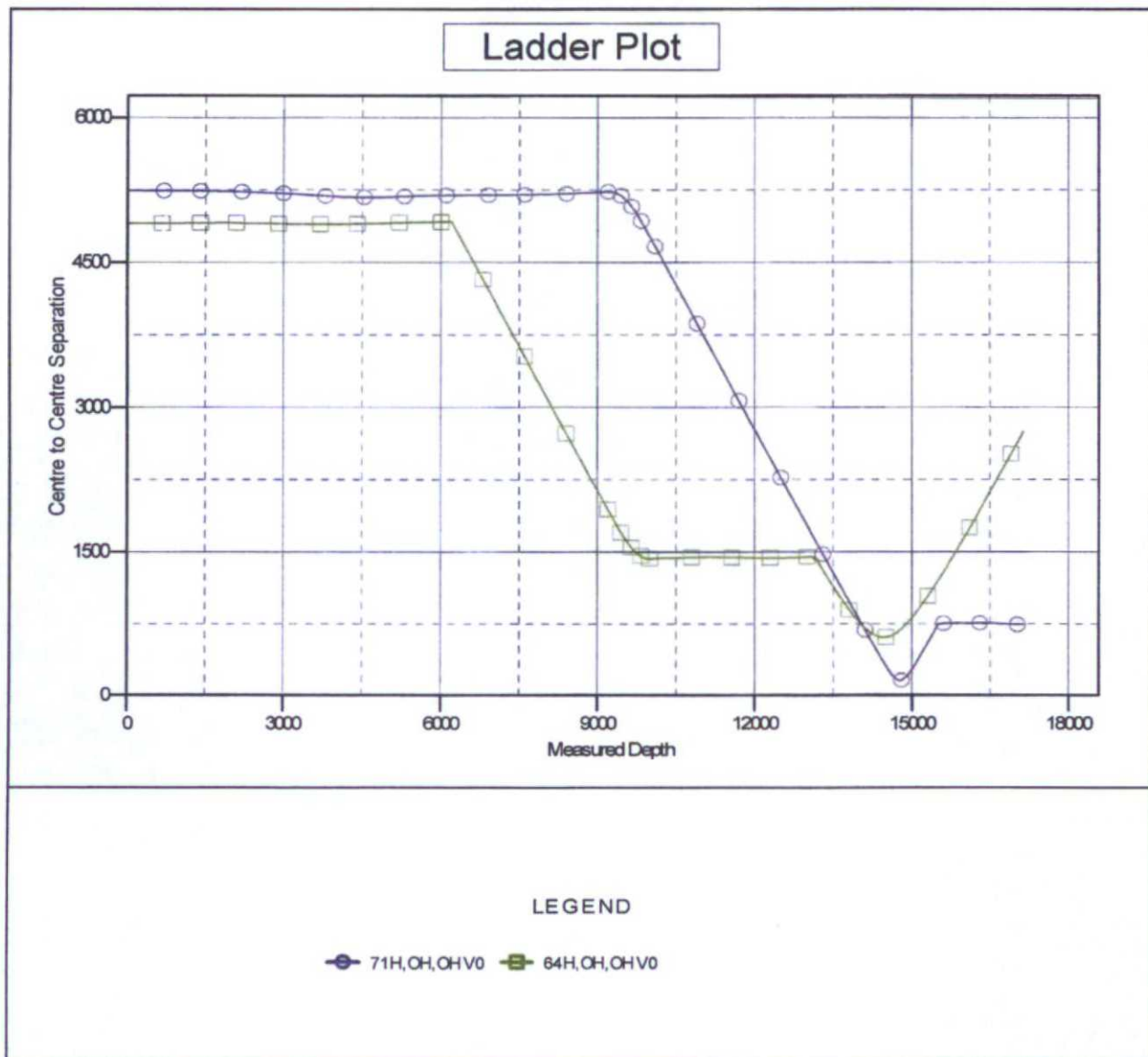
LEAM Drilling Systems LLC
Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 3706.3' GL + 25' RKB @ 3731.30usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 96H
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



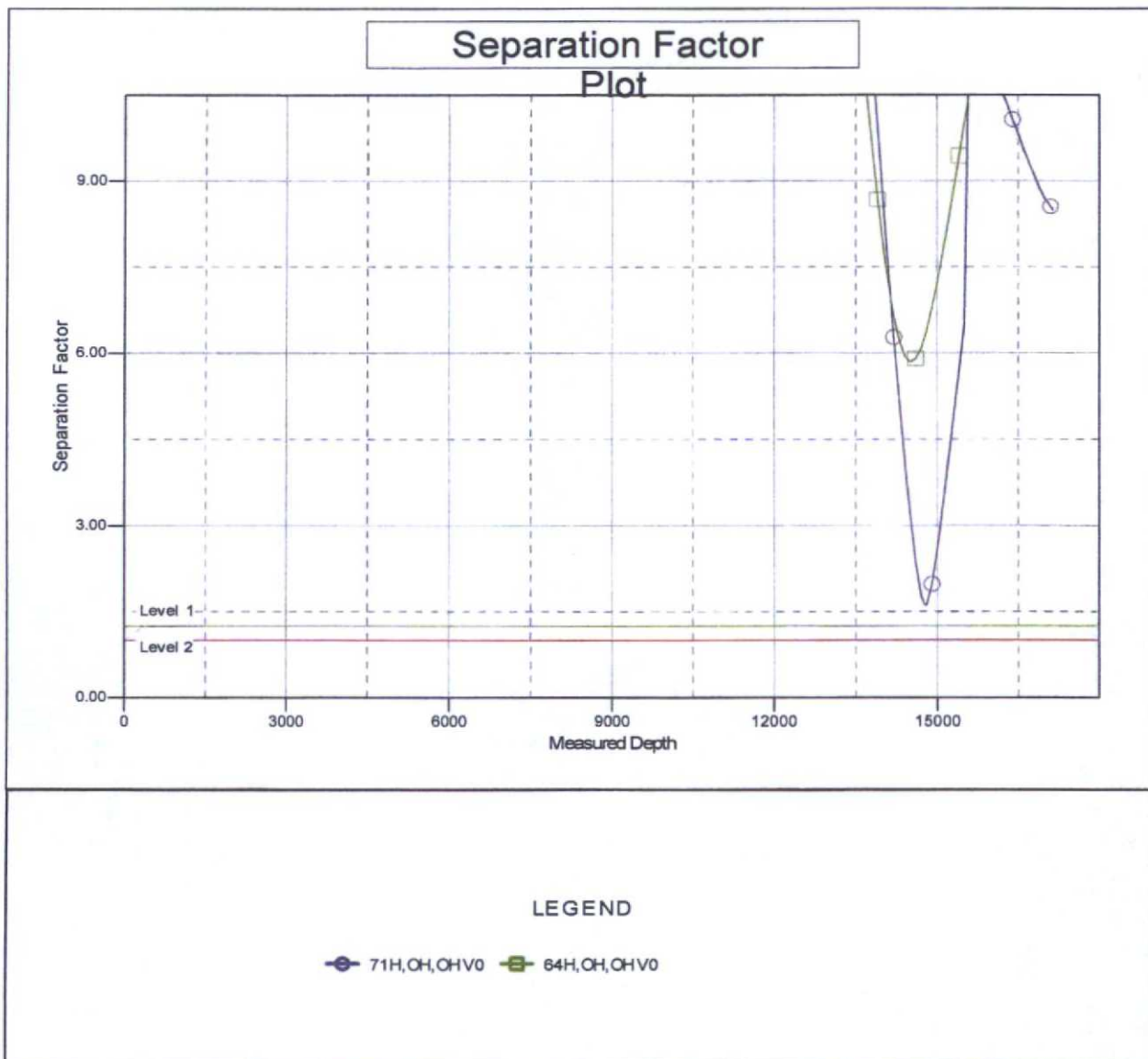
LEAM Drilling Systems LLC
Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Reference Site:	Thistle Unit	MD Reference:	3706.3' GL + 25' RKB @ 3731.30usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	96H	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 3706.3' GL + 25' RKB @ 3731.30usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 96H
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