

Project: Lea County, NM (NAD-83)
 Site: Thistle Unit Sec 22-27 Trac Pad
 Well: Thistle Unit 96H
 Wellbore: OH
 Design: Plan #2

3707.6' GE +23.5' KB @ 3731.10usft
 Ground Level: 3707.60

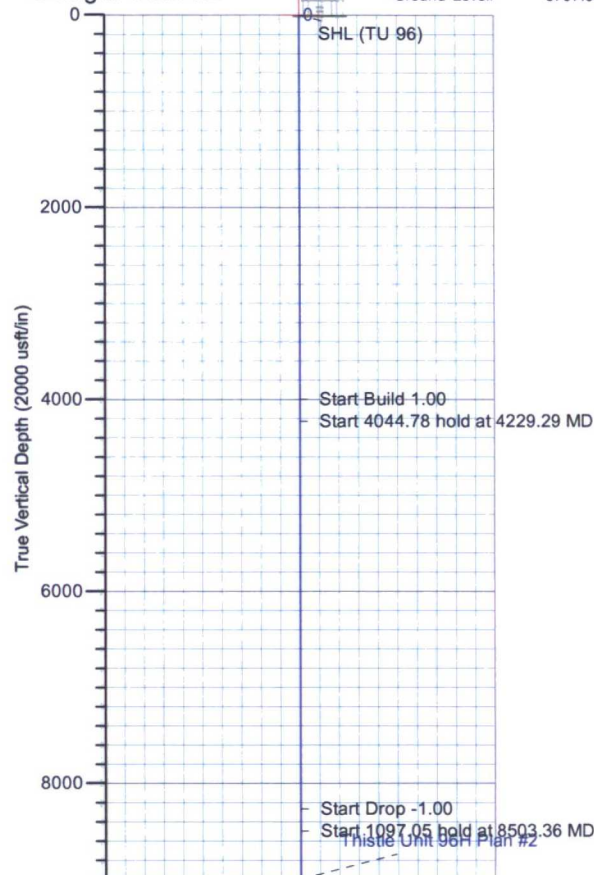


Azimuths to Grid North
 True North: -0.42°
 Magnetic North: 6.42°

Magnetic Field
 Strength: 48166.0nT
 Dip Angle: 60.12°
 Date: 9/20/2017
 Model: HDGM

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

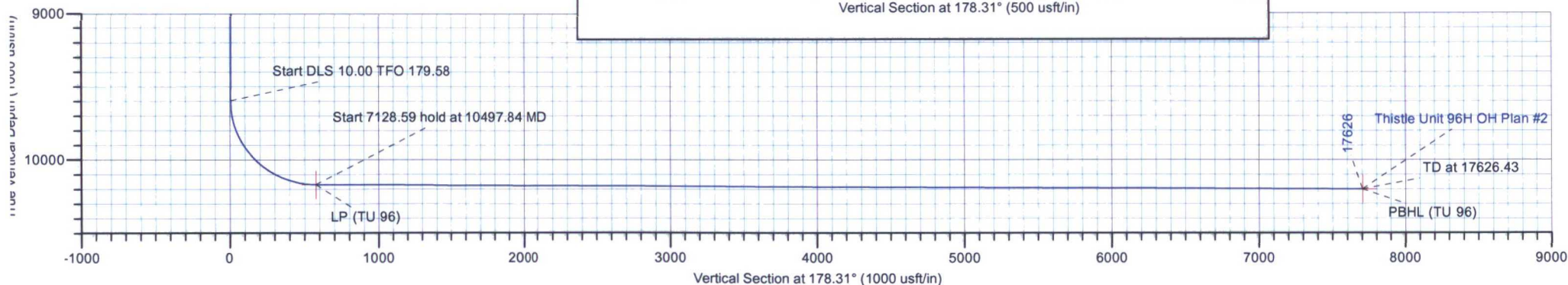
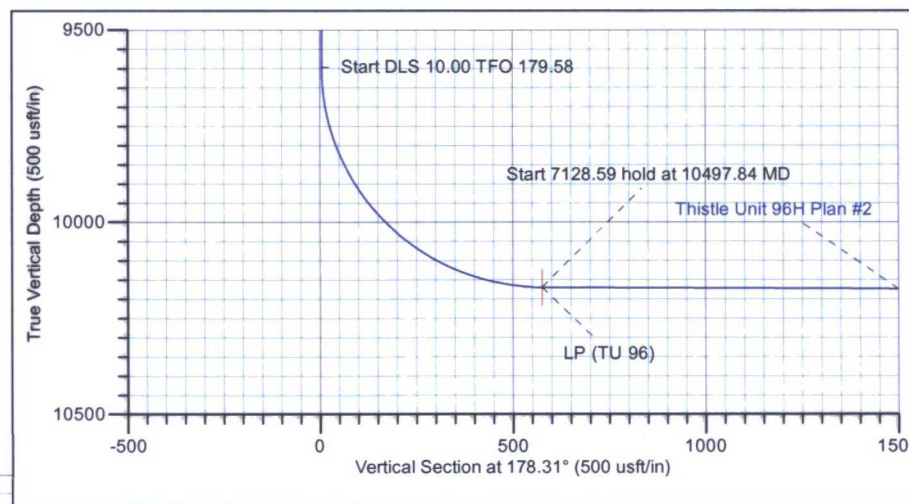


SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.00
4229.29	2.29	90.00	4229.23	0.00	4.59	1.00	90.00	0.14	Start 4044.78 hold at 4229.29 MD
8274.07	2.29	90.00	8270.77	0.00	166.41	0.00	0.00	4.92	Start Drop -1.00
8503.36	0.00	0.00	8500.00	0.00	171.00	1.00	180.00	5.05	Start 1097.05 hold at 8503.36 MD
9600.41	0.00	0.00	9597.05	0.00	171.00	0.00	0.00	5.05	Start DLS 10.00 TFO 179.58
10497.84	89.74	179.58	10170.00	-570.37	175.19	10.00	179.58	575.30	Start 7128.59 hold at 10497.84 MD
17626.43	89.74	179.58	10202.00	-7698.70	227.57	0.00	0.00	7702.06	TD at 17626.43

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (TU 96)	10170.00	-570.37	175.19	32° 17' 42.8837 N	103° 33' 11.0256 W
PBHL (TU 96)	10202.00	-7698.70	227.57	32° 16' 32.3448 N	103° 33' 11.0195 W
SHL (TU 96)	0.00	0.00	0.00	32° 17' 48.5402 N	103° 33' 13.0182 W



LEAM DRILLING SYSTEMS LLC
 2010 East Davis, Conroe, Texas 77301

Plan: Plan #2 (Thistle Unit 96H/OH)
 Thistle Unit Sec 22-27 Trac Pad
 Created By: Dustin Ault
 Date: 16:32, September 20 2017

Devon Energy

Project: Lea County, NM (NAD-83)
Site: Thistle Unit Sec 22-27 Trac Pad
Well: Thistle Unit 96H
Wellbore: OH
Design: Plan #2



Azimuths to Grid North
True North: -0.42°
Magnetic North: 6.42°

Magnetic Field
Strength: 48166.0snT
Dip Angle: 60.12°
Date: 9/20/2017
Model: HDGM

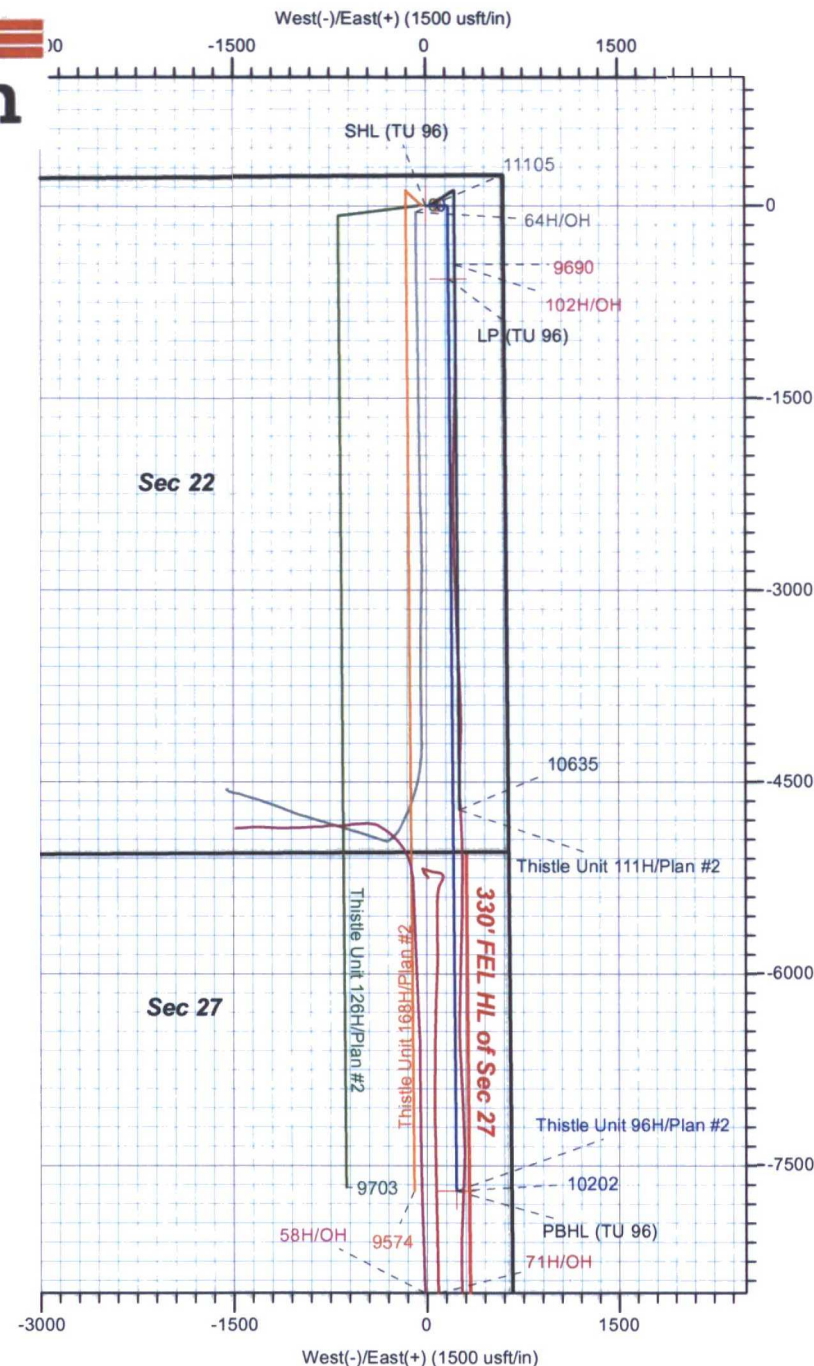
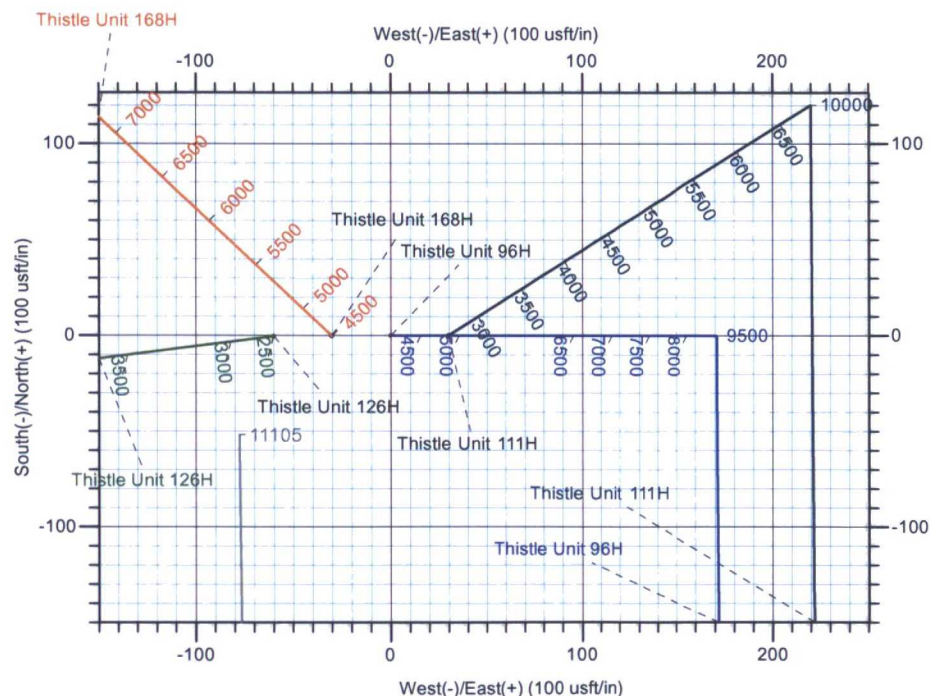
PROJECT DETAILS: Lea County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone



MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	
4229.29	2.29	90.00	4229.23	0.00	4.59	1.00	90.00	0.14	
8274.07	2.29	90.00	8270.77	0.00	166.41	0.00	0.00	4.92	
8503.36	0.00	0.00	8500.00	0.00	171.00	1.00	180.00	5.05	
9600.41	0.00	0.00	9597.05	0.00	171.00	0.00	0.00	5.05	
10497.84	89.74	179.58	10170.00	-570.37	175.19	10.00	179.58	575.30	
17626.43	89.74	179.58	10202.00	-7698.70	227.57	0.00	0.00	7702.06	PBHL (TU 96)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (TU 96)	10170.00	-570.37	175.19	472020.07	782437.04	32° 17' 42.8837 N	103° 33' 11.0256 W
PBHL (TU 96)	10202.00	-7698.70	227.57	464891.74	782489.42	32° 16' 32.3448 N	103° 33' 11.0195 W
SHL (TU 96)	0.00	0.00	0.00	472590.44	782261.85	32° 17' 48.5402 N	103° 33' 13.0182 W



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301

Plan: Plan #2 (Thistle Unit 96H/OH)
Thistle Unit Sec 22-27 Trac Pad
Created By: Dustin Ault
Date: 16:40, September 20 2017

Devon Energy

Lea County, NM (NAD-83)

Thistle Unit Sec 22-27 Trac Pad

Thistle Unit 96H

OH

Plan: Plan #2

Standard Planning Report

20 September, 2017

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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 Sec 22-27 Trac Pad			
Site Position:		Northing:	472,548.43 usft	Latitude:	32° 17' 48.4331 N
From:	Map	Easting:	777,932.69 usft	Longitude:	103° 34' 3.4563 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Thistle Unit 96H					
Well Position	+N/-S	42.01 usft	Northing:	472,590.44 usft	Latitude:	32° 17' 48.5402 N
	+E/-W	4,329.16 usft	Easting:	782,261.85 usft	Longitude:	103° 33' 13.0182 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,707.60 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/20/2017	6.83	60.12	48,166

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	178.31

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	
4,000.00	0.00	0.01	4,000.00	0.00	0.00	0.00	0.00	0.00	0.01	
4,229.29	2.29	90.00	4,229.23	0.00	4.59	1.00	1.00	0.00	90.00	
8,274.07	2.29	90.00	8,270.77	0.00	166.41	0.00	0.00	0.00	0.00	
8,503.36	0.00	0.01	8,500.00	0.00	171.00	1.00	-1.00	0.00	180.00	
9,600.41	0.00	0.01	9,597.05	0.00	171.00	0.00	0.00	0.00	0.01	
10,497.84	89.74	179.58	10,170.00	-570.37	175.19	10.00	10.00	20.01	179.58	
17,626.43	89.74	179.58	10,202.00	-7,698.70	227.57	0.00	0.00	0.00	0.00	PBHL (TU 96)

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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 96)									
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
Start Build 1.00									
4,100.00	1.00	90.00	4,100.00	0.00	0.87	0.03	1.00	1.00	0.00
4,200.00	2.00	90.00	4,199.96	0.00	3.49	0.10	1.00	1.00	0.00
4,229.29	2.29	90.00	4,229.23	0.00	4.59	0.14	1.00	1.00	0.00
Start 4044.78 hold at 4229.29 MD									
4,300.00	2.29	90.00	4,299.88	0.00	7.42	0.22	0.00	0.00	0.00
4,400.00	2.29	90.00	4,399.80	0.00	11.42	0.34	0.00	0.00	0.00
4,500.00	2.29	90.00	4,499.72	0.00	15.42	0.46	0.00	0.00	0.00
4,600.00	2.29	90.00	4,599.64	0.00	19.42	0.57	0.00	0.00	0.00
4,700.00	2.29	90.00	4,699.56	0.00	23.42	0.69	0.00	0.00	0.00
4,800.00	2.29	90.00	4,799.48	0.00	27.42	0.81	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
4,900.00	2.29	90.00	4,899.40	0.00	31.42	0.93	0.00	0.00	0.00
5,000.00	2.29	90.00	4,999.32	0.00	35.42	1.05	0.00	0.00	0.00
5,100.00	2.29	90.00	5,099.24	0.00	39.42	1.16	0.00	0.00	0.00
5,200.00	2.29	90.00	5,199.16	0.00	43.42	1.28	0.00	0.00	0.00
5,300.00	2.29	90.00	5,299.08	0.00	47.42	1.40	0.00	0.00	0.00
5,400.00	2.29	90.00	5,399.00	0.00	51.43	1.52	0.00	0.00	0.00
5,500.00	2.29	90.00	5,498.92	0.00	55.43	1.64	0.00	0.00	0.00
5,600.00	2.29	90.00	5,598.84	0.00	59.43	1.76	0.00	0.00	0.00
5,700.00	2.29	90.00	5,698.76	0.00	63.43	1.87	0.00	0.00	0.00
5,800.00	2.29	90.00	5,798.68	0.00	67.43	1.99	0.00	0.00	0.00
5,900.00	2.29	90.00	5,898.60	0.00	71.43	2.11	0.00	0.00	0.00
6,000.00	2.29	90.00	5,998.52	0.00	75.43	2.23	0.00	0.00	0.00
6,100.00	2.29	90.00	6,098.44	0.00	79.43	2.35	0.00	0.00	0.00
6,200.00	2.29	90.00	6,198.36	0.00	83.43	2.47	0.00	0.00	0.00
6,300.00	2.29	90.00	6,298.28	0.00	87.43	2.58	0.00	0.00	0.00
6,400.00	2.29	90.00	6,398.20	0.00	91.43	2.70	0.00	0.00	0.00
6,500.00	2.29	90.00	6,498.12	0.00	95.43	2.82	0.00	0.00	0.00
6,600.00	2.29	90.00	6,598.04	0.00	99.44	2.94	0.00	0.00	0.00
6,700.00	2.29	90.00	6,697.96	0.00	103.44	3.06	0.00	0.00	0.00
6,800.00	2.29	90.00	6,797.88	0.00	107.44	3.17	0.00	0.00	0.00
6,900.00	2.29	90.00	6,897.80	0.00	111.44	3.29	0.00	0.00	0.00
7,000.00	2.29	90.00	6,997.72	0.00	115.44	3.41	0.00	0.00	0.00
7,100.00	2.29	90.00	7,097.64	0.00	119.44	3.53	0.00	0.00	0.00
7,200.00	2.29	90.00	7,197.56	0.00	123.44	3.65	0.00	0.00	0.00
7,300.00	2.29	90.00	7,297.48	0.00	127.44	3.77	0.00	0.00	0.00
7,400.00	2.29	90.00	7,397.40	0.00	131.44	3.88	0.00	0.00	0.00
7,500.00	2.29	90.00	7,497.32	0.00	135.44	4.00	0.00	0.00	0.00
7,600.00	2.29	90.00	7,597.24	0.00	139.44	4.12	0.00	0.00	0.00
7,700.00	2.29	90.00	7,697.16	0.00	143.45	4.24	0.00	0.00	0.00
7,800.00	2.29	90.00	7,797.08	0.00	147.45	4.36	0.00	0.00	0.00
7,900.00	2.29	90.00	7,897.00	0.00	151.45	4.47	0.00	0.00	0.00
8,000.00	2.29	90.00	7,996.92	0.00	155.45	4.59	0.00	0.00	0.00
8,100.00	2.29	90.00	8,096.84	0.00	159.45	4.71	0.00	0.00	0.00
8,200.00	2.29	90.00	8,196.76	0.00	163.45	4.83	0.00	0.00	0.00
8,274.07	2.29	90.00	8,270.77	0.00	166.41	4.92	0.00	0.00	0.00
Start Drop -1.00									
8,300.00	2.03	90.00	8,296.68	0.00	167.39	4.95	1.00	-1.00	0.00
8,400.00	1.03	90.00	8,396.64	0.00	170.07	5.02	1.00	-1.00	0.00
8,503.36	0.00	0.01	8,500.00	0.00	171.00	5.05	1.00	-1.00	0.00
Start 1097.05 hold at 8503.36 MD									
8,600.00	0.00	0.00	8,596.64	0.00	171.00	5.05	0.00	0.00	0.00
8,700.00	0.00	0.00	8,696.64	0.00	171.00	5.05	0.00	0.00	0.00
8,800.00	0.00	0.00	8,796.64	0.00	171.00	5.05	0.00	0.00	0.00
8,900.00	0.00	0.00	8,896.64	0.00	171.00	5.05	0.00	0.00	0.00
9,000.00	0.00	0.00	8,996.64	0.00	171.00	5.05	0.00	0.00	0.00
9,100.00	0.00	0.00	9,096.64	0.00	171.00	5.05	0.00	0.00	0.00
9,200.00	0.00	0.00	9,196.64	0.00	171.00	5.05	0.00	0.00	0.00
9,300.00	0.00	0.00	9,296.64	0.00	171.00	5.05	0.00	0.00	0.00
9,400.00	0.00	0.00	9,396.64	0.00	171.00	5.05	0.00	0.00	0.00
9,500.00	0.00	0.00	9,496.64	0.00	171.00	5.05	0.00	0.00	0.00
9,600.41	0.00	0.00	9,597.05	0.00	171.00	5.05	0.00	0.00	0.00
Start DLS 10.00 TFO 179.58									
9,650.00	4.96	179.58	9,646.58	-2.14	171.02	7.20	10.00	10.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
9,700.00	9.96	179.58	9,696.14	-8.63	171.06	13.68	10.00	10.00	0.00
9,750.00	14.96	179.58	9,744.95	-19.42	171.14	24.46	10.00	10.00	0.00
9,800.00	19.96	179.58	9,792.63	-34.41	171.25	39.46	10.00	10.00	0.00
9,850.00	24.96	179.58	9,838.82	-53.51	171.39	58.55	10.00	10.00	0.00
9,900.00	29.96	179.58	9,883.17	-76.55	171.56	81.59	10.00	10.00	0.00
9,950.00	34.96	179.58	9,925.35	-103.38	171.76	108.41	10.00	10.00	0.00
10,000.00	39.96	179.58	9,965.03	-133.78	171.98	138.80	10.00	10.00	0.00
10,050.00	44.96	179.58	10,001.90	-167.52	172.23	172.54	10.00	10.00	0.00
10,100.00	49.96	179.58	10,035.70	-204.35	172.50	209.36	10.00	10.00	0.00
10,150.00	54.96	179.58	10,066.15	-243.98	172.79	248.98	10.00	10.00	0.00
10,200.00	59.96	179.58	10,093.04	-286.12	173.10	291.11	10.00	10.00	0.00
10,250.00	64.96	179.58	10,116.15	-330.43	173.43	335.41	10.00	10.00	0.00
10,300.00	69.96	179.58	10,135.31	-376.60	173.77	381.57	10.00	10.00	0.00
10,350.00	74.96	179.58	10,150.38	-424.26	174.12	429.22	10.00	10.00	0.00
10,400.00	79.96	179.58	10,161.23	-473.05	174.48	478.00	10.00	10.00	0.00
10,450.00	84.96	179.58	10,167.79	-522.60	174.84	527.54	10.00	10.00	0.00
10,497.84	89.74	179.58	10,170.00	-570.37	175.19	575.30	10.00	10.00	0.00
Start 7128.59 hold at 10497.84 MD - LP (TU 96)									
10,500.00	89.74	179.58	10,170.01	-572.53	175.21	577.46	0.00	0.00	0.00
10,600.00	89.74	179.58	10,170.46	-672.53	175.94	677.43	0.00	0.00	0.00
10,700.00	89.74	179.58	10,170.91	-772.52	176.68	777.41	0.00	0.00	0.00
10,800.00	89.74	179.58	10,171.36	-872.52	177.41	877.38	0.00	0.00	0.00
10,900.00	89.74	179.58	10,171.81	-972.52	178.15	977.36	0.00	0.00	0.00
11,000.00	89.74	179.58	10,172.26	-1,072.51	178.88	1,077.33	0.00	0.00	0.00
11,100.00	89.74	179.58	10,172.71	-1,172.51	179.62	1,177.30	0.00	0.00	0.00
11,200.00	89.74	179.58	10,173.15	-1,272.51	180.35	1,277.28	0.00	0.00	0.00
11,300.00	89.74	179.58	10,173.60	-1,372.50	181.09	1,377.25	0.00	0.00	0.00
11,400.00	89.74	179.58	10,174.05	-1,472.50	181.82	1,477.23	0.00	0.00	0.00
11,500.00	89.74	179.58	10,174.50	-1,572.49	182.55	1,577.20	0.00	0.00	0.00
11,600.00	89.74	179.58	10,174.95	-1,672.49	183.29	1,677.18	0.00	0.00	0.00
11,700.00	89.74	179.58	10,175.40	-1,772.49	184.02	1,777.15	0.00	0.00	0.00
11,800.00	89.74	179.58	10,175.85	-1,872.48	184.76	1,877.12	0.00	0.00	0.00
11,900.00	89.74	179.58	10,176.30	-1,972.48	185.49	1,977.10	0.00	0.00	0.00
12,000.00	89.74	179.58	10,176.74	-2,072.48	186.23	2,077.07	0.00	0.00	0.00
12,100.00	89.74	179.58	10,177.19	-2,172.47	186.96	2,177.05	0.00	0.00	0.00
12,200.00	89.74	179.58	10,177.64	-2,272.47	187.70	2,277.02	0.00	0.00	0.00
12,300.00	89.74	179.58	10,178.09	-2,372.46	188.43	2,377.00	0.00	0.00	0.00
12,400.00	89.74	179.58	10,178.54	-2,472.46	189.17	2,476.97	0.00	0.00	0.00
12,500.00	89.74	179.58	10,178.99	-2,572.46	189.90	2,576.95	0.00	0.00	0.00
12,600.00	89.74	179.58	10,179.44	-2,672.45	190.64	2,676.92	0.00	0.00	0.00
12,700.00	89.74	179.58	10,179.89	-2,772.45	191.37	2,776.89	0.00	0.00	0.00
12,800.00	89.74	179.58	10,180.34	-2,872.45	192.11	2,876.87	0.00	0.00	0.00
12,900.00	89.74	179.58	10,180.78	-2,972.44	192.84	2,976.84	0.00	0.00	0.00
13,000.00	89.74	179.58	10,181.23	-3,072.44	193.58	3,076.82	0.00	0.00	0.00
13,100.00	89.74	179.58	10,181.68	-3,172.44	194.31	3,176.79	0.00	0.00	0.00
13,200.00	89.74	179.58	10,182.13	-3,272.43	195.05	3,276.77	0.00	0.00	0.00
13,300.00	89.74	179.58	10,182.58	-3,372.43	195.78	3,376.74	0.00	0.00	0.00
13,400.00	89.74	179.58	10,183.03	-3,472.42	196.52	3,476.71	0.00	0.00	0.00
13,500.00	89.74	179.58	10,183.48	-3,572.42	197.25	3,576.69	0.00	0.00	0.00
13,600.00	89.74	179.58	10,183.93	-3,672.42	197.98	3,676.66	0.00	0.00	0.00
13,700.00	89.74	179.58	10,184.38	-3,772.41	198.72	3,776.64	0.00	0.00	0.00
13,800.00	89.74	179.58	10,184.82	-3,872.41	199.45	3,876.61	0.00	0.00	0.00
13,900.00	89.74	179.58	10,185.27	-3,972.41	200.19	3,976.59	0.00	0.00	0.00
14,000.00	89.74	179.58	10,185.72	-4,072.40	200.92	4,076.56	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
14,100.00	89.74	179.58	10,186.17	-4,172.40	201.66	4,176.53	0.00	0.00	0.00
14,200.00	89.74	179.58	10,186.62	-4,272.39	202.39	4,276.51	0.00	0.00	0.00
14,300.00	89.74	179.58	10,187.07	-4,372.39	203.13	4,376.48	0.00	0.00	0.00
14,400.00	89.74	179.58	10,187.52	-4,472.39	203.86	4,476.46	0.00	0.00	0.00
14,500.00	89.74	179.58	10,187.97	-4,572.38	204.60	4,576.43	0.00	0.00	0.00
14,600.00	89.74	179.58	10,188.42	-4,672.38	205.33	4,676.41	0.00	0.00	0.00
14,700.00	89.74	179.58	10,188.86	-4,772.38	206.07	4,776.38	0.00	0.00	0.00
14,800.00	89.74	179.58	10,189.31	-4,872.37	206.80	4,876.36	0.00	0.00	0.00
14,900.00	89.74	179.58	10,189.76	-4,972.37	207.54	4,976.33	0.00	0.00	0.00
15,000.00	89.74	179.58	10,190.21	-5,072.36	208.27	5,076.30	0.00	0.00	0.00
15,100.00	89.74	179.58	10,190.66	-5,172.36	209.01	5,176.28	0.00	0.00	0.00
15,200.00	89.74	179.58	10,191.11	-5,272.36	209.74	5,276.25	0.00	0.00	0.00
15,300.00	89.74	179.58	10,191.56	-5,372.35	210.48	5,376.23	0.00	0.00	0.00
15,400.00	89.74	179.58	10,192.01	-5,472.35	211.21	5,476.20	0.00	0.00	0.00
15,500.00	89.74	179.58	10,192.46	-5,572.35	211.95	5,576.18	0.00	0.00	0.00
15,600.00	89.74	179.58	10,192.90	-5,672.34	212.68	5,676.15	0.00	0.00	0.00
15,700.00	89.74	179.58	10,193.35	-5,772.34	213.42	5,776.12	0.00	0.00	0.00
15,800.00	89.74	179.58	10,193.80	-5,872.34	214.15	5,876.10	0.00	0.00	0.00
15,900.00	89.74	179.58	10,194.25	-5,972.33	214.88	5,976.07	0.00	0.00	0.00
16,000.00	89.74	179.58	10,194.70	-6,072.33	215.62	6,076.05	0.00	0.00	0.00
16,100.00	89.74	179.58	10,195.15	-6,172.32	216.35	6,176.02	0.00	0.00	0.00
16,200.00	89.74	179.58	10,195.60	-6,272.32	217.09	6,276.00	0.00	0.00	0.00
16,300.00	89.74	179.58	10,196.05	-6,372.32	217.82	6,375.97	0.00	0.00	0.00
16,400.00	89.74	179.58	10,196.50	-6,472.31	218.56	6,475.94	0.00	0.00	0.00
16,500.00	89.74	179.58	10,196.94	-6,572.31	219.29	6,575.92	0.00	0.00	0.00
16,600.00	89.74	179.58	10,197.39	-6,672.31	220.03	6,675.89	0.00	0.00	0.00
16,700.00	89.74	179.58	10,197.84	-6,772.30	220.76	6,775.87	0.00	0.00	0.00
16,800.00	89.74	179.58	10,198.29	-6,872.30	221.50	6,875.84	0.00	0.00	0.00
16,900.00	89.74	179.58	10,198.74	-6,972.29	222.23	6,975.82	0.00	0.00	0.00
17,000.00	89.74	179.58	10,199.19	-7,072.29	222.97	7,075.79	0.00	0.00	0.00
17,100.00	89.74	179.58	10,199.64	-7,172.29	223.70	7,175.77	0.00	0.00	0.00
17,200.00	89.74	179.58	10,200.09	-7,272.28	224.44	7,275.74	0.00	0.00	0.00
17,300.00	89.74	179.58	10,200.53	-7,372.28	225.17	7,375.71	0.00	0.00	0.00
17,400.00	89.74	179.58	10,200.98	-7,472.28	225.91	7,475.69	0.00	0.00	0.00
17,500.00	89.74	179.58	10,201.43	-7,572.27	226.64	7,575.66	0.00	0.00	0.00
17,600.00	89.74	179.58	10,201.88	-7,672.27	227.38	7,675.64	0.00	0.00	0.00
17,626.43	89.74	179.58	10,202.00	-7,698.70	227.57	7,702.06	0.00	0.00	0.00
TD at 17626.43 - PBHL (TU 96)									

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well Thistle Unit 96H
Company:	Devon Energy	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site:	Thistle Unit Sec 22-27 Trac Pad	North Reference:	Grid
Well:	Thistle Unit 96H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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 96)	0.00	0.00	0.00	0.00	0.00	472,590.44	782,261.85	32° 17' 48.5402 N	103° 33' 13.0182 W
- plan hits target center									
- Point									
LP (TU 96)	0.00	0.00	10,170.00	-570.37	175.19	472,020.07	782,437.04	32° 17' 42.8837 N	103° 33' 11.0256 W
- plan hits target center									
- Point									
PBHL (TU 96)	0.00	0.00	10,202.00	-7,698.70	227.57	464,891.74	782,489.42	32° 16' 32.3448 N	103° 33' 11.0195 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
4,000.00	4,000.00	0.00	0.00	Start Build 1.00
4,229.29	4,229.23	0.00	4.59	Start 4044.78 hold at 4229.29 MD
8,274.07	8,270.77	0.00	166.41	Start Drop -1.00
8,503.36	8,500.00	0.00	171.00	Start 1097.05 hold at 8503.36 MD
9,600.41	9,597.05	0.00	171.00	Start DLS 10.00 TFO 179.58
10,497.84	10,170.00	-570.37	175.19	Start 7128.59 hold at 10497.84 MD
17,626.43	10,202.00	-7,698.70	227.57	TD at 17626.43

Devon Energy

Lea County, NM (NAD-83)

Thistle Unit Sec 22-27 Trac Pad

Thistle Unit 96H

OH

Plan #2

Anticollision Report

20 September, 2017

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
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	9/20/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	10,516.33	Plan #2 (OH)	LEAM MWD+HDGM	MWD+HDGM	
10,516.33	17,626.38	Plan #2 (OH)	MWD+IFR1+MS	MWD + IFR1 + Multi-Station Correction	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Thistle Unit						
102H - OH - OH	10,800.00	23,820.89	450.65	330.75	3.759	SF
102H - OH - OH	14,616.57	20,013.86	419.51	308.07	3.765	CC, ES
64H - OH - OH	14,889.19	10,289.35	519.59	456.69	8.260	CC, ES, SF
Thistle Unit (Offsets)						
58H - OH - OH	14,749.31	10,317.53	676.89	617.05	11.313	CC, ES
58H - OH - OH	14,800.00	10,318.07	678.79	618.61	11.281	SF
71H - OH - OH	15,241.52	10,161.43	113.70	52.63	1.862	CC, ES, SF
Thistle Unit Sec 22-27 Trac Pad						
Thistle Unit 111H - OH - Plan #2	2,500.00	2,499.80	30.00	19.04	2.737	CC, ES
Thistle Unit 111H - OH - Plan #2	2,600.00	2,599.35	30.74	19.34	2.696	SF
Thistle Unit 126H - OH - Plan #2	2,415.92	2,418.12	60.00	49.41	5.667	CC
Thistle Unit 126H - OH - Plan #2	2,500.00	2,502.18	60.00	49.04	5.472	ES
Thistle Unit 126H - OH - Plan #2	2,600.00	2,601.14	60.90	49.50	5.344	SF
Thistle Unit 168H - OH - Plan #2	4,000.00	4,001.40	30.01	12.30	1.695	CC, ES, SF

Thistle Unit - 102H - OH - OH											Offset Site Error: 0.00 usft		
Survey Program: 115-LEAM MWD+HDGM, 10311-MWD+IFR1+MS, 24246-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	
0.00	0.00	24,246.00	9,616.65	0.00	109.21	154.36	-462.29	221.85	9,703.90				
100.00	100.00	24,246.00	9,616.65	0.09	109.21	154.36	-462.29	221.85	9,604.05	9,489.95	114.10	84.175	
200.00	200.00	24,246.00	9,616.65	0.31	109.21	154.36	-462.29	221.85	9,504.19	9,390.19	114.00	83.372	
300.00	300.00	24,246.00	9,616.65	0.54	109.21	154.36	-462.29	221.85	9,404.34	9,290.44	113.90	82.566	
400.00	400.00	24,246.00	9,616.65	0.76	109.21	154.36	-462.29	221.85	9,304.49	9,190.68	113.80	81.759	
500.00	500.00	24,246.00	9,616.65	0.99	109.21	154.36	-462.29	221.85	9,204.64	9,090.93	113.71	80.949	
600.00	600.00	24,246.00	9,616.65	1.21	109.21	154.36	-462.29	221.85	9,104.80	8,991.18	113.62	80.137	
700.00	700.00	24,246.00	9,616.65	1.43	109.21	154.36	-462.29	221.85	9,004.96	8,891.44	113.52	79.323	
800.00	800.00	24,246.00	9,616.65	1.66	109.21	154.36	-462.29	221.85	8,905.12	8,791.69	113.43	78.507	
900.00	900.00	24,246.00	9,616.65	1.88	109.21	154.36	-462.29	221.85	8,805.29	8,691.95	113.34	77.688	
1,000.00	1,000.00	24,246.00	9,616.65	2.11	109.21	154.36	-462.29	221.85	8,705.46	8,592.21	113.25	76.868	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit - 102H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 115-LEAM MWD+HDGM, 10311-MWD+IFR1+MS, 24246-Project												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,100.00	1,100.00	24,246.00	9,616.65	2.33	109.21	154.36	-462.29	221.85	8,605.64	8,492.47	113.16	76.045	
1,200.00	1,200.00	24,246.00	9,616.65	2.56	109.21	154.36	-462.29	221.85	8,505.82	8,392.74	113.08	75.221	
1,300.00	1,300.00	24,246.00	9,616.65	2.78	109.21	154.36	-462.29	221.85	8,406.00	8,293.01	112.99	74.395	
1,400.00	1,400.00	24,246.00	9,616.65	3.01	109.21	154.36	-462.29	221.85	8,306.19	8,193.28	112.91	73.566	
1,500.00	1,500.00	24,246.00	9,616.65	3.23	109.21	154.36	-462.29	221.85	8,206.38	8,093.56	112.83	72.735	
1,600.00	1,600.00	24,246.00	9,616.65	3.46	109.21	154.36	-462.29	221.85	8,106.58	7,993.84	112.74	71.903	
1,700.00	1,700.00	24,246.00	9,616.65	3.68	109.21	154.36	-462.29	221.85	8,006.78	7,894.12	112.66	71.068	
1,800.00	1,800.00	24,246.00	9,616.65	3.91	109.21	154.36	-462.29	221.85	7,906.99	7,794.41	112.59	70.231	
1,900.00	1,900.00	24,246.00	9,616.65	4.13	109.21	154.36	-462.29	221.85	7,807.20	7,694.70	112.51	69.392	
2,000.00	2,000.00	24,246.00	9,616.65	4.36	109.21	154.36	-462.29	221.85	7,707.42	7,594.99	112.43	68.551	
2,100.00	2,100.00	24,246.00	9,616.65	4.58	109.21	154.36	-462.29	221.85	7,607.65	7,495.29	112.36	67.707	
2,200.00	2,200.00	24,246.00	9,616.65	4.81	109.21	154.36	-462.29	221.85	7,507.88	7,395.59	112.29	66.861	
2,300.00	2,300.00	24,246.00	9,616.65	5.03	109.21	154.36	-462.29	221.85	7,408.11	7,295.89	112.22	66.013	
2,400.00	2,400.00	24,246.00	9,616.65	5.26	109.21	154.36	-462.29	221.85	7,308.36	7,196.20	112.16	65.162	
2,500.00	2,500.00	24,246.00	9,616.65	5.48	109.21	154.36	-462.29	221.85	7,208.61	7,096.51	112.09	64.309	
2,600.00	2,600.00	24,246.00	9,616.65	5.71	109.21	154.36	-462.29	221.85	7,108.86	6,996.83	112.03	63.453	
2,700.00	2,700.00	24,246.00	9,616.65	5.93	109.21	154.36	-462.29	221.85	7,009.13	6,897.15	111.98	62.595	
2,800.00	2,800.00	24,246.00	9,616.65	6.15	109.21	154.36	-462.29	221.85	6,909.40	6,797.48	111.92	61.733	
2,900.00	2,900.00	24,246.00	9,616.65	6.38	109.21	154.36	-462.29	221.85	6,809.68	6,697.81	111.87	60.869	
3,000.00	3,000.00	24,246.00	9,616.65	6.60	109.21	154.36	-462.29	221.85	6,709.97	6,598.14	111.83	60.002	
3,100.00	3,100.00	24,246.00	9,616.65	6.83	109.21	154.36	-462.29	221.85	6,610.27	6,498.48	111.79	59.131	
3,200.00	3,200.00	24,246.00	9,616.65	7.05	109.21	154.36	-462.29	221.85	6,510.57	6,398.82	111.75	58.258	
3,300.00	3,300.00	24,246.00	9,616.65	7.28	109.21	154.36	-462.29	221.85	6,410.89	6,299.16	111.72	57.381	
3,400.00	3,400.00	24,246.00	9,616.65	7.50	109.21	154.36	-462.29	221.85	6,311.21	6,199.51	111.70	56.501	
3,500.00	3,500.00	24,246.00	9,616.65	7.73	109.21	154.36	-462.29	221.85	6,211.55	6,099.87	111.68	55.618	
3,600.00	3,600.00	24,246.00	9,616.65	7.95	109.21	154.36	-462.29	221.85	6,111.89	6,000.23	111.67	54.732	
3,700.00	3,700.00	24,246.00	9,616.65	8.18	109.21	154.36	-462.29	221.85	6,012.25	5,900.59	111.66	53.842	
3,800.00	3,800.00	24,246.00	9,616.65	8.40	109.21	154.36	-462.29	221.85	5,912.62	5,800.96	111.66	52.950	
3,900.00	3,900.00	24,246.00	9,616.65	8.63	109.21	154.36	-462.29	221.85	5,813.01	5,701.33	111.67	52.054	
4,000.00	4,000.00	24,246.00	9,616.65	8.85	109.21	154.36	-462.29	221.85	5,713.40	5,601.72	111.69	51.155	
4,100.00	4,100.00	24,246.00	9,616.65	9.06	109.21	75.06	-462.29	221.85	5,613.79	5,502.08	111.71	50.254	
4,200.00	4,199.96	24,246.00	9,616.65	9.26	109.21	86.71	-462.29	221.85	5,514.14	5,402.41	111.74	49.350	
4,229.29	4,229.23	24,246.00	9,616.65	9.32	109.21	90.17	-462.29	221.85	5,484.95	5,373.21	111.75	49.085	
4,300.00	4,299.88	24,246.00	9,616.65	9.46	109.21	90.17	-462.29	221.85	5,414.50	5,302.73	111.77	48.444	
4,400.00	4,399.80	24,246.00	9,616.65	9.66	109.21	90.17	-462.29	221.85	5,314.87	5,203.06	111.81	47.536	
4,500.00	4,499.72	24,246.00	9,616.65	9.86	109.21	90.17	-462.29	221.85	5,215.26	5,103.40	111.85	46.626	
4,600.00	4,599.64	24,246.00	9,616.65	10.07	109.21	90.17	-462.29	221.85	5,115.66	5,003.75	111.91	45.714	
4,700.00	4,699.56	24,246.00	9,616.65	10.27	109.21	90.17	-462.29	221.85	5,016.08	4,904.11	111.96	44.801	
4,800.00	4,799.48	24,246.00	9,616.65	10.48	109.21	90.17	-462.29	221.85	4,916.51	4,804.48	112.03	43.887	
4,900.00	4,899.40	24,246.00	9,616.65	10.69	109.21	90.17	-462.29	221.85	4,816.96	4,704.87	112.10	42.972	
5,000.00	4,999.32	24,246.00	9,616.65	10.90	109.21	90.17	-462.29	221.85	4,717.43	4,605.26	112.17	42.056	
5,100.00	5,099.24	24,246.00	9,616.65	11.11	109.21	90.17	-462.29	221.85	4,617.93	4,505.68	112.25	41.140	
5,200.00	5,199.16	24,246.00	9,616.65	11.32	109.21	90.17	-462.29	221.85	4,518.44	4,406.11	112.33	40.224	
5,300.00	5,299.08	24,246.00	9,616.65	11.53	109.21	90.17	-462.29	221.85	4,418.98	4,306.56	112.42	39.307	
5,400.00	5,399.00	24,246.00	9,616.65	11.74	109.21	90.17	-462.29	221.85	4,319.54	4,207.02	112.51	38.392	
5,500.00	5,498.92	24,246.00	9,616.65	11.96	109.21	90.17	-462.29	221.85	4,220.13	4,107.52	112.61	37.476	
5,600.00	5,598.84	24,246.00	9,616.65	12.17	109.21	90.17	-462.29	221.85	4,120.74	4,008.03	112.71	36.562	
5,700.00	5,698.76	24,246.00	9,616.65	12.39	109.21	90.17	-462.29	221.85	4,021.39	3,908.58	112.81	35.648	
5,800.00	5,798.68	24,246.00	9,616.65	12.60	109.21	90.17	-462.29	221.85	3,922.07	3,809.16	112.91	34.735	
5,900.00	5,898.60	24,246.00	9,616.65	12.82	109.21	90.17	-462.29	221.85	3,822.78	3,709.76	113.02	33.824	
6,000.00	5,998.52	24,246.00	9,616.65	13.03	109.21	90.17	-462.29	221.85	3,723.54	3,610.41	113.13	32.914	
6,100.00	6,098.44	24,246.00	9,616.65	13.25	109.21	90.17	-462.29	221.85	3,624.33	3,511.09	113.24	32.006	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design												Thistle Unit - 102H - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 115-LEAM MWD+HDGM, 10311-MWD+HFR1+MS, 24246-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			
6,200.00	6,198.36	24,246.00	9,616.65	13.47	109.21	90.17	-462.29	221.85	3,525.17	3,411.82	113.35	31.099			
6,300.00	6,298.28	24,246.00	9,616.65	13.69	109.21	90.17	-462.29	221.85	3,426.06	3,312.60	113.47	30.195			
6,400.00	6,398.20	24,246.00	9,616.65	13.91	109.21	90.17	-462.29	221.85	3,327.00	3,213.42	113.58	29.293			
6,500.00	6,498.12	24,246.00	9,616.65	14.13	109.21	90.17	-462.29	221.85	3,228.00	3,114.31	113.69	28.393			
6,600.00	6,598.04	24,246.00	9,616.65	14.35	109.21	90.17	-462.29	221.85	3,129.07	3,015.26	113.80	27.495			
6,700.00	6,697.96	24,246.00	9,616.65	14.57	109.21	90.17	-462.29	221.85	3,030.20	2,916.28	113.92	26.600			
6,800.00	6,797.88	24,246.00	9,616.65	14.79	109.21	90.17	-462.29	221.85	2,931.41	2,817.38	114.03	25.708			
6,900.00	6,897.80	24,246.00	9,616.65	15.01	109.21	90.17	-462.29	221.85	2,832.71	2,718.57	114.13	24.820			
7,000.00	6,997.72	24,246.00	9,616.65	15.23	109.21	90.17	-462.29	221.85	2,734.09	2,619.86	114.23	23.934			
7,100.00	7,097.64	24,246.00	9,616.65	15.45	109.21	90.17	-462.29	221.85	2,635.59	2,521.26	114.33	23.052			
7,200.00	7,197.56	24,246.00	9,616.65	15.67	109.21	90.17	-462.29	221.85	2,537.20	2,422.78	114.42	22.174			
7,300.00	7,297.48	24,246.00	9,616.65	15.90	109.21	90.17	-462.29	221.85	2,438.94	2,324.43	114.51	21.299			
7,400.00	7,397.40	24,246.00	9,616.65	16.12	109.21	90.17	-462.29	221.85	2,340.83	2,226.25	114.58	20.429			
7,500.00	7,497.32	24,246.00	9,616.65	16.34	109.21	90.17	-462.29	221.85	2,242.89	2,128.25	114.64	19.564			
7,600.00	7,597.24	24,246.00	9,616.65	16.56	109.21	90.17	-462.29	221.85	2,145.13	2,030.45	114.69	18.704			
7,700.00	7,697.16	24,246.00	9,616.65	16.79	109.21	90.17	-462.29	221.85	2,047.60	1,932.88	114.71	17.850			
7,800.00	7,797.08	24,246.00	9,616.65	17.01	109.21	90.17	-462.29	221.85	1,950.31	1,835.60	114.71	17.001			
7,900.00	7,897.00	24,246.00	9,616.65	17.24	109.21	90.17	-462.29	221.85	1,853.31	1,738.63	114.69	16.160			
8,000.00	7,996.92	24,246.00	9,616.65	17.46	109.21	90.17	-462.29	221.85	1,756.65	1,642.03	114.62	15.326			
8,100.00	8,096.84	24,246.00	9,616.65	17.69	109.21	90.17	-462.29	221.85	1,660.38	1,545.88	114.51	14.500			
8,200.00	8,196.76	24,246.00	9,616.65	17.91	109.21	90.17	-462.29	221.85	1,564.58	1,450.26	114.33	13.685			
8,274.07	8,270.77	24,246.00	9,616.65	18.08	109.21	90.17	-462.29	221.85	1,493.98	1,379.83	114.15	13.088			
8,300.00	8,296.68	24,246.00	9,616.65	18.13	109.21	89.38	-462.29	221.85	1,469.35	1,355.27	114.07	12.881			
8,400.00	8,396.64	24,246.00	9,616.65	18.32	109.21	86.48	-462.29	221.85	1,374.79	1,261.09	113.71	12.091			
8,503.36	8,500.00	24,246.00	9,616.65	18.51	109.21	173.72	-462.29	221.85	1,277.98	1,164.79	113.18	11.291			
8,600.00	8,596.64	24,246.00	9,616.65	18.70	109.21	173.72	-462.29	221.85	1,188.48	1,075.97	112.52	10.563			
8,700.00	8,696.64	24,246.00	9,616.65	18.92	109.21	173.72	-462.29	221.85	1,097.16	985.57	111.59	9.832			
8,800.00	8,796.64	24,246.00	9,616.65	19.14	109.21	173.72	-462.29	221.85	1,007.48	897.16	110.32	9.133			
8,900.00	8,896.64	24,246.00	9,616.65	19.35	109.21	173.72	-462.29	221.85	919.93	811.37	108.56	8.474			
9,000.00	8,996.64	24,246.00	9,616.65	19.57	109.21	173.72	-462.29	221.85	835.18	729.06	106.12	7.870			
9,100.00	9,096.64	24,246.00	9,616.65	19.78	109.21	173.72	-462.29	221.85	754.18	651.49	102.69	7.345			
9,200.00	9,196.64	24,246.00	9,616.65	20.00	109.21	173.72	-462.29	221.85	678.27	580.45	97.81	6.934			
9,300.00	9,296.64	24,246.00	9,616.65	20.22	109.21	173.72	-462.29	221.85	609.35	518.46	90.89	6.704			
9,400.00	9,396.64	24,246.00	9,616.65	20.43	109.21	173.72	-462.29	221.85	550.06	468.85	81.20	6.774			
9,500.00	9,496.64	24,246.00	9,616.65	20.65	109.21	173.72	-462.29	221.85	503.81	435.42	68.38	7.368			
9,600.41	9,597.05	24,246.00	9,616.65	20.87	109.21	173.72	-462.29	221.85	474.34	420.49	53.86	8.808			
9,650.00	9,646.58	24,246.00	9,616.65	20.97	109.21	-5.95	-462.29	221.85	465.01	416.81	48.20	9.648			
9,700.00	9,696.14	24,246.00	9,616.65	21.06	109.21	-6.04	-462.29	221.85	456.53	410.50	46.03	9.918			
9,750.00	9,744.95	24,246.00	9,616.65	21.16	109.21	-6.12	-462.29	221.85	449.10	400.33	48.76	9.210			
9,800.00	9,792.63	24,246.00	9,616.65	21.25	109.21	-6.19	-462.29	221.85	442.83	387.51	55.32	8.005			
9,850.00	9,838.82	24,246.00	9,616.65	21.35	109.21	-6.25	-462.29	221.85	437.83	374.07	63.76	6.867			
9,900.00	9,883.17	24,246.00	9,616.65	21.45	109.21	-6.29	-462.29	221.85	434.17	361.35	72.82	5.962			
9,950.00	9,925.35	24,246.00	9,616.65	21.55	109.21	-6.31	-462.29	221.85	431.91	350.13	81.78	5.281			
10,000.00	9,965.03	24,246.00	9,616.65	21.66	109.21	-6.32	-462.29	221.85	431.11	340.88	90.23	4.778			
10,002.65	9,967.06	24,246.00	9,616.65	21.66	109.21	-6.32	-462.29	221.85	431.11	340.45	90.66	4.755			
10,050.00	10,001.90	24,246.00	9,616.65	21.78	109.21	-6.31	-462.29	221.85	431.76	333.88	97.88	4.411			
10,100.00	10,035.70	24,246.00	9,616.65	21.91	109.21	-6.29	-462.29	221.85	433.86	329.29	104.57	4.149			
10,150.00	10,066.15	24,246.00	9,616.65	22.05	109.21	-6.25	-462.29	221.85	437.37	327.19	110.18	3.970			
10,200.00	10,093.04	24,246.00	9,616.65	22.22	109.21	-6.20	-462.29	221.85	442.24	327.56	114.68	3.856			
10,250.00	10,116.15	24,246.00	9,616.65	22.41	109.21	-6.13	-462.29	221.85	448.37	330.30	118.08	3.797			
10,300.00	10,135.31	24,246.00	9,616.65	22.63	109.21	-6.05	-462.29	221.85	455.69	335.26	120.43	3.784			
10,350.00	10,150.38	24,231.97	9,618.26	22.87	109.21	-5.96	-476.22	222.16	463.85	342.33	121.52	3.817			

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit - 102H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 115-LEAM MWD+HDGM, 10311-MWD+IFR1+MS, 24246-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		
10,400.00	10,161.23	24,184.80	9,623.60	23.13	109.00	-5.93	-523.08	223.18	469.16	347.71	121.45	3.863		
10,450.00	10,167.79	24,138.97	9,628.39	23.41	108.66	-5.95	-568.65	223.96	470.54	349.28	121.27	3.880		
10,497.84	10,170.00	24,095.26	9,632.57	23.70	108.34	-6.03	-612.16	224.51	468.22	347.13	121.09	3.867		
10,500.00	10,170.01	24,093.30	9,632.74	23.71	108.32	-6.03	-614.11	224.53	468.04	346.95	121.09	3.865		
10,600.00	10,170.46	24,001.68	9,640.21	28.14	107.64	-6.18	-705.42	225.66	460.43	338.98	121.45	3.791		
10,700.00	10,170.91	23,909.72	9,646.28	28.23	106.96	-6.35	-797.17	227.03	454.40	333.72	120.68	3.765		
10,800.00	10,171.36	23,820.89	9,650.15	28.32	106.30	-6.54	-885.89	228.83	450.65	330.75	119.90	3.759 SF		
10,900.00	10,171.81	23,727.22	9,652.43	28.41	105.61	-6.65	-979.53	230.20	448.76	329.57	119.19	3.765		
11,000.00	10,172.26	23,632.17	9,653.39	28.51	104.90	-6.67	-1,074.56	230.94	448.20	329.67	118.53	3.781		
11,100.00	10,172.71	23,531.97	9,653.79	28.60	104.16	-6.45	-1,174.75	230.00	448.06	330.10	117.96	3.798		
11,200.00	10,173.15	23,432.29	9,654.02	28.70	103.43	-6.15	-1,274.42	228.34	448.01	330.59	117.42	3.815		
11,300.00	10,173.60	23,331.45	9,654.33	28.79	102.69	-5.73	-1,375.22	225.85	447.82	330.89	116.93	3.830		
11,400.00	10,174.05	23,228.27	9,654.85	28.89	101.93	-5.32	-1,478.38	223.32	447.47	330.97	116.50	3.841		
11,500.00	10,174.50	23,124.85	9,656.59	28.99	101.17	-4.84	-1,581.74	220.22	445.90	329.79	116.10	3.841		
11,600.00	10,174.95	23,025.22	9,658.35	29.09	100.44	-4.37	-1,681.31	217.19	444.28	328.59	115.70	3.840		
11,700.00	10,175.40	22,924.62	9,660.14	29.19	99.70	-3.84	-1,781.82	213.76	442.65	327.32	115.33	3.838		
11,800.00	10,175.85	22,826.24	9,661.94	29.29	98.98	-3.39	-1,880.15	210.88	441.05	326.08	114.98	3.836		
11,900.00	10,176.30	22,730.91	9,663.13	29.40	98.28	-3.24	-1,975.47	210.43	440.19	325.55	114.64	3.840		
11,922.11	10,176.40	22,709.99	9,663.24	29.42	98.13	-3.22	-1,996.38	210.36	440.16	325.59	114.57	3.842		
12,000.00	10,176.74	22,633.35	9,663.40	29.51	97.56	-3.08	-2,073.02	209.89	440.28	325.94	114.34	3.851		
12,100.00	10,177.19	22,532.32	9,663.53	29.61	96.82	-2.84	-2,174.05	208.79	440.51	326.41	114.09	3.861		
12,200.00	10,177.64	22,432.24	9,663.88	29.73	96.09	-2.62	-2,274.12	207.84	440.53	326.67	113.86	3.869		
12,300.00	10,178.09	22,332.56	9,664.23	29.84	95.36	-2.55	-2,373.80	208.03	440.60	326.96	113.64	3.877		
12,400.00	10,178.54	22,228.95	9,664.98	29.96	94.60	-2.73	-2,477.38	210.17	440.39	326.92	113.47	3.881		
12,500.00	10,178.99	22,119.40	9,667.79	30.08	93.79	-2.86	-2,586.88	211.87	438.29	324.97	113.32	3.868		
12,600.00	10,179.44	22,023.66	9,670.76	30.21	93.09	-2.95	-2,682.56	213.16	435.68	322.54	113.14	3.851		
12,700.00	10,179.89	21,931.12	9,671.96	30.35	92.41	-3.23	-2,775.06	215.93	434.93	321.97	112.96	3.850		
12,800.00	10,180.34	21,829.93	9,673.11	30.51	91.66	-3.60	-2,876.17	219.38	434.39	321.57	112.83	3.850		
12,843.76	10,180.53	21,788.11	9,673.48	30.59	91.36	-3.76	-2,917.97	220.93	434.29	321.53	112.77	3.851		
12,900.00	10,180.78	21,731.87	9,673.79	30.70	90.94	-4.00	-2,974.16	223.17	434.36	321.66	112.70	3.854		
13,000.00	10,181.23	21,631.15	9,674.72	30.95	90.20	-4.45	-3,074.79	227.26	434.12	321.54	112.59	3.856		
13,025.09	10,181.35	21,606.70	9,674.92	31.02	90.02	-4.56	-3,099.22	228.31	434.11	321.55	112.56	3.857		
13,100.00	10,181.68	21,532.83	9,675.36	31.26	89.48	-4.93	-3,173.02	231.63	434.23	321.75	112.48	3.861		
13,200.00	10,182.13	21,433.05	9,675.86	31.65	88.75	-5.45	-3,272.68	236.34	434.54	322.15	112.39	3.866		
13,300.00	10,182.58	21,330.44	9,676.51	32.09	88.00	-5.90	-3,375.20	240.48	434.68	322.38	112.30	3.871		
13,392.41	10,183.00	21,239.17	9,677.44	32.53	87.33	-6.16	-3,466.43	243.08	434.36	322.15	112.22	3.871		
13,400.00	10,183.03	21,231.91	9,677.50	32.56	87.28	-6.19	-3,473.69	243.38	434.37	322.16	112.21	3.871		
13,500.00	10,183.48	21,133.71	9,678.04	33.06	86.56	-6.75	-3,571.76	248.35	434.75	322.61	112.14	3.877		
13,600.00	10,183.93	21,033.10	9,678.53	33.57	85.82	-7.32	-3,672.24	253.43	435.24	323.16	112.08	3.883		
13,700.00	10,184.38	20,933.65	9,679.10	34.10	85.10	-7.86	-3,771.57	258.27	435.67	323.65	112.02	3.889		
13,800.00	10,184.82	20,833.10	9,679.70	34.64	84.36	-8.46	-3,871.98	263.64	436.18	324.21	111.97	3.896		
13,900.00	10,185.27	20,732.89	9,680.09	35.19	83.63	-8.77	-3,972.12	266.79	436.59	324.69	111.91	3.901		
14,000.00	10,185.72	20,629.01	9,680.32	35.74	82.88	-8.49	-4,075.98	265.40	436.50	324.69	111.82	3.904		
14,100.00	10,186.17	20,528.63	9,680.89	36.31	82.16	-8.21	-4,176.36	263.92	436.07	324.33	111.74	3.903		
14,200.00	10,186.62	20,419.31	9,682.40	36.89	81.37	-7.80	-4,285.63	261.46	434.75	323.14	111.61	3.895		
14,300.00	10,187.07	20,305.32	9,687.56	37.47	80.55	-7.19	-4,399.41	257.08	430.07	318.66	111.40	3.860		
14,400.00	10,187.52	20,210.60	9,693.27	38.06	79.87	-6.86	-4,493.92	254.66	424.15	312.77	111.38	3.808		
14,500.00	10,187.97	20,121.15	9,696.69	38.65	79.23	-6.99	-4,583.29	255.92	420.86	309.44	111.42	3.777		
14,600.00	10,188.42	20,029.02	9,698.86	39.26	78.56	-7.58	-4,675.26	260.71	419.53	308.10	111.43	3.765		
14,616.57	10,188.49	20,013.86	9,699.06	39.36	78.45	-7.69	-4,690.40	261.59	419.51	308.07	111.44	3.765 CC, ES		
14,700.00	10,188.86	19,933.98	9,699.46	39.86	77.87	-8.23	-4,770.15	266.19	420.03	308.60	111.43	3.769		
14,800.00	10,189.31	19,836.13	9,699.52	40.48	77.17	-8.80	-4,867.87	271.17	421.07	309.65	111.42	3.779		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit - 102H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 115-LEAM MWD+HDGM, 10311-MWD+IFR1+MS, 24246-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)		+N/-S (usft)	+E/-W (usft)					
14,900.00	10,189.76	19,736.90	9,698.60	41.10	76.46	-9.04	-4,967.06	273.92	422.74	311.35	111.39	3.795	
15,000.00	10,190.21	19,633.46	9,697.91	41.72	75.71	-9.13	-5,070.48	275.55	423.98	312.63	111.35	3.808	
15,100.00	10,190.66	19,534.26	9,697.69	42.35	75.00	-9.13	-5,169.67	276.38	424.65	313.34	111.31	3.815	
15,200.00	10,191.11	19,429.98	9,697.27	42.98	74.26	-8.98	-5,273.95	276.16	425.36	314.10	111.26	3.823	
15,260.50	10,191.38	19,369.67	9,697.54	43.37	73.83	-8.89	-5,334.26	275.94	425.25	314.02	111.23	3.823	
15,300.00	10,191.56	19,331.43	9,697.63	43.62	73.56	-8.87	-5,372.50	276.03	425.31	314.09	111.23	3.824	
15,400.00	10,192.01	19,233.45	9,697.35	44.26	72.86	-8.70	-5,470.47	275.64	425.87	314.67	111.20	3.830	
15,500.00	10,192.46	19,127.96	9,697.15	44.91	72.11	-8.26	-5,575.94	273.22	426.05	314.92	111.12	3.834	
15,548.57	10,192.67	19,081.52	9,697.26	45.22	71.79	-8.05	-5,622.36	271.99	425.92	314.81	111.12	3.833	
15,600.00	10,192.90	19,032.01	9,697.11	45.56	71.44	-7.82	-5,671.86	270.66	426.06	314.95	111.10	3.835	
15,700.00	10,193.35	18,931.23	9,696.68	46.21	70.73	-7.27	-5,772.58	267.35	426.40	315.34	111.06	3.839	
15,800.00	10,193.80	18,832.25	9,696.16	46.87	70.03	-6.71	-5,871.50	264.04	426.86	315.84	111.02	3.845	
15,900.00	10,194.25	18,732.56	9,695.70	47.52	69.33	-6.22	-5,971.15	261.20	427.37	316.38	110.99	3.851	
16,000.00	10,194.70	18,634.96	9,694.89	48.19	68.64	-5.90	-6,068.73	259.62	428.39	317.42	110.97	3.860	
16,100.00	10,195.15	18,533.62	9,693.94	48.85	67.93	-5.53	-6,170.05	257.76	429.51	318.58	110.94	3.872	
16,200.00	10,195.60	18,428.04	9,693.67	49.52	67.19	-5.10	-6,275.61	255.34	429.94	319.07	110.87	3.878	
16,300.00	10,196.05	18,324.08	9,694.98	50.19	66.47	-4.68	-6,379.52	252.84	428.86	318.04	110.82	3.870	
16,400.00	10,196.50	18,226.12	9,696.59	50.87	65.78	-4.76	-6,477.46	254.05	427.71	316.88	110.82	3.859	
16,500.00	10,196.94	18,129.45	9,697.67	51.54	65.10	-5.12	-6,574.05	257.44	427.29	316.44	110.85	3.855	
16,503.35	10,196.96	18,126.22	9,697.69	51.57	65.08	-5.13	-6,577.28	257.57	427.29	316.44	110.85	3.855	
16,600.00	10,197.39	18,031.73	9,698.18	52.22	64.42	-5.62	-6,671.67	261.91	427.57	316.70	110.87	3.857	
16,700.00	10,197.84	17,930.60	9,698.57	52.91	63.71	-6.18	-6,772.68	266.83	428.06	317.19	110.87	3.861	
16,800.00	10,198.29	17,830.96	9,699.26	53.59	63.02	-6.79	-6,872.17	272.14	428.34	317.45	110.89	3.863	
16,900.00	10,198.74	17,730.16	9,699.80	54.28	62.32	-7.25	-6,972.89	276.34	428.67	317.78	110.89	3.866	
17,000.00	10,199.19	17,621.89	9,701.49	54.96	61.57	-7.58	-7,081.09	279.49	427.84	317.02	110.82	3.861	
17,086.53	10,199.58	17,542.64	9,702.81	55.56	61.02	-7.87	-7,160.29	282.11	427.10	316.20	110.90	3.851	
17,100.00	10,199.64	17,530.00	9,702.91	55.65	60.93	-7.93	-7,172.92	282.62	427.11	316.21	110.91	3.851	
17,200.00	10,200.09	17,433.40	9,703.20	56.35	60.27	-8.33	-7,269.45	286.35	427.70	316.76	110.95	3.855	
17,300.00	10,200.53	17,336.51	9,702.42	57.04	59.60	-8.49	-7,366.31	288.46	429.15	318.17	110.97	3.867	
17,400.00	10,200.98	17,234.20	9,701.25	57.74	58.90	-8.34	-7,468.61	288.34	430.60	319.65	110.95	3.881	
17,500.00	10,201.43	17,132.94	9,700.24	58.43	58.22	-7.88	-7,569.83	285.81	431.57	320.64	110.93	3.890	
17,600.00	10,201.88	17,033.66	9,699.16	59.13	57.55	-7.37	-7,669.06	282.81	432.60	321.67	110.92	3.900	
17,626.43	10,202.00	17,007.26	9,698.85	59.32	57.37	-7.21	-7,695.44	281.89	432.89	321.97	110.92	3.903	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	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	
0.00	0.00	0.00	0.00	0.00	0.00	-161.36	-4,563.54	-1,539.29	4,816.18				
100.00	100.00	92.92	92.92	0.09	0.09	-161.36	-4,563.36	-1,539.48	4,816.05	4,815.88	0.17	N/A	
200.00	200.00	193.97	193.96	0.31	0.27	-161.35	-4,563.03	-1,539.90	4,815.87	4,815.30	0.57	8,391.786	
300.00	300.00	297.36	297.36	0.54	0.45	-161.34	-4,562.59	-1,540.46	4,815.64	4,814.66	0.98	4,917.158	
400.00	400.00	400.49	400.49	0.76	0.63	-161.33	-4,562.04	-1,541.10	4,815.34	4,813.95	1.38	3,478.031	
500.00	500.00	499.03	499.02	0.99	0.80	-161.32	-4,561.45	-1,541.84	4,815.01	4,813.23	1.78	2,702.795	
600.00	600.00	595.75	595.73	1.21	0.97	-161.31	-4,560.86	-1,542.78	4,814.74	4,812.57	2.18	2,213.347	
685.93	685.93	670.45	670.43	1.40	1.10	-161.30	-4,560.45	-1,543.61	4,814.61	4,812.11	2.50	1,926.613	
700.00	700.00	681.75	681.72	1.43	1.12	-161.30	-4,560.41	-1,543.75	4,814.61	4,812.06	2.55	1,887.788	
800.00	800.00	765.82	765.79	1.66	1.27	-161.29	-4,560.26	-1,544.85	4,814.86	4,811.94	2.92	1,647.608	
900.00	900.00	856.77	856.72	1.88	1.43	-161.27	-4,560.26	-1,546.28	4,815.36	4,812.05	3.31	1,456.554	
1,000.00	1,000.00	954.17	954.12	2.11	1.60	-161.25	-4,560.38	-1,547.79	4,815.98	4,812.28	3.70	1,301.399	
1,100.00	1,100.00	1,053.73	1,053.66	2.33	1.77	-161.24	-4,560.52	-1,549.32	4,816.61	4,812.51	4.10	1,175.082	
1,200.00	1,200.00	1,153.31	1,153.23	2.56	1.95	-161.22	-4,560.69	-1,550.82	4,817.26	4,812.76	4.50	1,071.120	
1,300.00	1,300.00	1,255.84	1,255.75	2.78	2.13	-161.20	-4,560.85	-1,552.37	4,817.89	4,812.99	4.90	983.047	
1,400.00	1,400.00	1,368.56	1,368.46	3.01	2.28	-161.19	-4,560.94	-1,553.92	4,818.41	4,813.13	5.28	911.964	
1,500.00	1,500.00	1,489.95	1,489.84	3.23	2.39	-161.17	-4,560.62	-1,555.09	4,818.46	4,812.85	5.61	858.240	
1,516.98	1,516.98	1,501.61	1,501.50	3.27	2.39	-161.17	-4,560.59	-1,555.18	4,818.46	4,812.80	5.65	852.120	
1,600.00	1,600.00	1,546.00	1,545.89	3.46	2.40	-161.17	-4,560.72	-1,555.28	4,818.77	4,812.92	5.85	823.556	
1,700.00	1,700.00	1,595.81	1,595.68	3.68	2.42	-161.18	-4,561.77	-1,554.43	4,820.16	4,814.07	6.09	791.143	
1,800.00	1,800.00	1,671.00	1,670.71	3.91	2.46	-161.24	-4,564.71	-1,550.66	4,822.25	4,815.89	6.35	759.025	
1,900.00	1,900.00	1,723.53	1,723.05	4.13	2.49	-161.29	-4,567.49	-1,547.11	4,825.10	4,818.49	6.61	729.876	
2,000.00	2,000.00	2,070.95	2,066.83	4.36	2.96	-161.86	-4,584.73	-1,502.15	4,825.24	4,817.93	7.31	659.892	
2,100.00	2,100.00	2,170.21	2,164.63	4.58	3.16	-162.06	-4,588.34	-1,485.60	4,823.52	4,815.78	7.74	623.515	
2,200.00	2,200.00	2,263.96	2,257.07	4.81	3.37	-162.24	-4,591.74	-1,470.35	4,821.96	4,813.79	8.17	590.225	
2,300.00	2,300.00	2,357.97	2,349.77	5.03	3.60	-162.43	-4,595.09	-1,455.09	4,820.41	4,811.78	8.63	558.414	
2,400.00	2,400.00	2,416.90	2,407.86	5.26	3.76	-162.55	-4,597.53	-1,445.46	4,819.46	4,810.44	9.02	534.503	
2,447.75	2,447.75	2,441.66	2,432.25	5.36	3.83	-162.60	-4,598.75	-1,441.38	4,819.35	4,810.15	9.19	524.239	
2,500.00	2,500.00	2,475.64	2,465.71	5.48	3.93	-162.67	-4,600.61	-1,435.74	4,819.47	4,810.06	9.41	512.362	
2,600.00	2,600.00	2,569.53	2,558.19	5.71	4.20	-162.86	-4,605.85	-1,420.45	4,819.98	4,810.08	9.90	486.850	
2,700.00	2,700.00	2,659.78	2,647.15	5.93	4.46	-163.04	-4,610.89	-1,406.09	4,820.66	4,810.27	10.39	463.967	
2,800.00	2,800.00	2,783.67	2,769.30	6.15	4.84	-163.29	-4,617.49	-1,386.44	4,821.17	4,810.18	10.99	438.642	
2,900.00	2,900.00	2,893.96	2,878.08	6.38	5.18	-163.50	-4,622.99	-1,369.10	4,821.46	4,809.90	11.56	417.192	
3,000.00	3,000.00	3,005.56	2,988.25	6.60	5.52	-163.71	-4,628.00	-1,352.03	4,821.45	4,809.32	12.13	397.574	
3,100.00	3,100.00	3,111.80	3,093.17	6.83	5.86	-163.91	-4,632.53	-1,335.96	4,821.32	4,808.64	12.68	380.135	
3,155.83	3,155.83	3,159.57	3,140.33	6.95	6.01	-164.00	-4,634.57	-1,328.65	4,821.26	4,808.30	12.96	372.015	
3,200.00	3,200.00	3,195.88	3,176.17	7.05	6.12	-164.07	-4,636.20	-1,323.07	4,821.30	4,808.13	13.17	365.962	
3,300.00	3,300.00	3,266.68	3,246.02	7.28	6.35	-164.21	-4,639.66	-1,312.04	4,821.76	4,808.13	13.63	353.785	
3,400.00	3,400.00	3,362.09	3,340.06	7.50	6.67	-164.40	-4,644.97	-1,296.81	4,822.80	4,808.63	14.17	340.340	
3,500.00	3,500.00	3,465.23	3,441.73	7.73	7.02	-164.61	-4,650.37	-1,280.31	4,823.59	4,808.85	14.74	327.251	
3,600.00	3,600.00	3,591.84	3,566.59	7.95	7.44	-164.86	-4,656.79	-1,260.36	4,824.37	4,808.98	15.39	313.561	
3,700.00	3,700.00	3,687.00	3,660.53	8.18	7.75	-165.04	-4,661.05	-1,245.75	4,824.71	4,808.79	15.92	302.982	
3,800.00	3,800.00	3,782.00	3,754.40	8.40	8.06	-165.21	-4,665.33	-1,231.78	4,825.30	4,808.84	16.45	293.244	
3,900.00	3,900.00	3,866.62	3,837.97	8.63	8.34	-165.37	-4,669.43	-1,219.17	4,826.19	4,809.23	16.96	284.639	
4,000.00	4,000.00	3,958.73	3,928.88	8.85	8.64	-165.54	-4,674.06	-1,205.12	4,827.24	4,809.76	17.48	276.082	
4,100.00	4,100.00	4,046.56	4,015.63	9.06	8.93	104.29	-4,678.56	-1,192.08	4,828.74	4,810.76	17.98	268.497	
4,200.00	4,199.96	4,132.57	4,100.56	9.26	9.22	104.13	-4,683.17	-1,179.33	4,830.96	4,812.50	18.47	261.628	
4,229.29	4,229.23	4,160.00	4,127.65	9.32	9.31	104.09	-4,684.69	-1,175.31	4,831.76	4,813.14	18.61	259.579	
4,300.00	4,299.88	4,211.18	4,178.19	9.46	9.48	104.01	-4,687.63	-1,167.79	4,833.86	4,814.94	18.92	255.428	
4,400.00	4,399.80	4,324.28	4,289.88	9.66	9.85	103.86	-4,694.35	-1,151.33	4,837.13	4,817.63	19.50	248.081	
4,500.00	4,499.72	4,430.37	4,394.84	9.86	10.19	103.72	-4,699.86	-1,136.92	4,839.89	4,819.85	20.04	241.529	
4,600.00	4,599.64	4,520.30	4,483.73	10.07	10.49	103.60	-4,704.77	-1,124.14	4,842.79	4,822.26	20.54	235.826	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	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		
4,700.00	4,699.56	4,608.59	4,570.77	10.27	10.80	103.47	-4,710.07	-1,110.36	4,845.93	4,824.89	21.05	230.263		
4,800.00	4,799.48	4,718.56	4,679.10	10.48	11.18	103.30	-4,716.87	-1,092.67	4,849.17	4,827.53	21.64	224.101		
4,900.00	4,899.40	4,804.65	4,763.95	10.69	11.49	103.17	-4,722.07	-1,079.14	4,852.39	4,830.24	22.15	219.110		
5,000.00	4,999.32	4,879.36	4,837.46	10.90	11.77	103.05	-4,727.03	-1,066.73	4,856.02	4,833.39	22.63	214.615		
5,100.00	5,099.24	4,957.03	4,913.65	11.11	12.07	102.91	-4,732.84	-1,052.79	4,860.21	4,837.08	23.13	210.120		
5,200.00	5,199.16	5,110.11	5,063.81	11.32	12.66	102.63	-4,744.14	-1,025.30	4,864.50	4,840.56	23.94	203.237		
5,300.00	5,299.08	5,230.72	5,182.54	11.53	13.10	102.44	-4,751.25	-1,005.31	4,867.53	4,842.95	24.58	198.051		
5,400.00	5,399.00	5,326.40	5,276.98	11.74	13.42	102.30	-4,756.52	-990.93	4,870.56	4,845.44	25.12	193.929		
5,500.00	5,498.92	5,436.71	5,385.81	11.96	13.81	102.14	-4,762.57	-973.92	4,873.52	4,847.81	25.71	189.566		
5,600.00	5,598.84	5,543.34	5,490.80	12.17	14.19	101.97	-4,768.43	-956.23	4,876.27	4,849.97	26.30	185.390		
5,700.00	5,698.76	5,656.96	5,602.70	12.39	14.60	101.79	-4,774.46	-937.50	4,878.91	4,851.99	26.92	181.211		
5,800.00	5,798.68	5,751.42	5,695.74	12.60	14.94	101.65	-4,779.31	-921.91	4,881.42	4,853.95	27.47	177.675		
5,900.00	5,898.60	5,876.44	5,818.97	12.82	15.38	101.46	-4,785.37	-901.73	4,883.74	4,855.61	28.13	173.621		
6,000.00	5,998.52	5,955.00	5,896.42	13.03	15.66	101.34	-4,789.15	-889.13	4,886.08	4,857.47	28.62	170.733		
6,100.00	6,098.44	6,071.36	6,011.13	13.25	16.07	101.16	-4,794.72	-870.42	4,888.42	4,859.18	29.24	167.169		
6,200.00	6,198.36	6,163.53	6,102.00	13.47	16.39	101.03	-4,799.13	-855.66	4,890.81	4,861.03	29.78	164.228		
6,300.00	6,298.28	15,937.00	11,089.45	13.69	82.96	171.75	-51.77	-77.54	4,809.78	4,765.39	44.39	108.354		
6,400.00	6,398.20	15,937.00	11,089.45	13.91	82.96	171.75	-51.77	-77.54	4,710.07	4,665.50	44.56	105.693		
6,500.00	6,498.12	15,937.00	11,089.45	14.13	82.96	171.75	-51.77	-77.54	4,610.37	4,565.63	44.74	103.041		
6,600.00	6,598.04	15,937.00	11,089.45	14.35	82.96	171.75	-51.77	-77.54	4,510.68	4,465.75	44.93	100.399		
6,700.00	6,697.96	15,937.00	11,089.45	14.57	82.96	171.75	-51.77	-77.54	4,411.01	4,365.89	45.12	97.768		
6,800.00	6,797.88	15,937.00	11,089.45	14.79	82.96	171.75	-51.77	-77.54	4,311.35	4,266.04	45.31	95.149		
6,900.00	6,897.80	15,937.00	11,089.45	15.01	82.96	171.75	-51.77	-77.54	4,211.71	4,166.20	45.51	92.542		
7,000.00	6,997.72	15,937.00	11,089.45	15.23	82.96	171.75	-51.77	-77.54	4,112.09	4,066.37	45.72	89.947		
7,100.00	7,097.64	15,937.00	11,089.45	15.45	82.96	171.75	-51.77	-77.54	4,012.48	3,966.56	45.93	87.365		
7,200.00	7,197.56	15,937.00	11,089.45	15.67	82.96	171.75	-51.77	-77.54	3,912.90	3,866.76	46.14	84.797		
7,300.00	7,297.48	15,937.00	11,089.45	15.90	82.96	171.75	-51.77	-77.54	3,813.34	3,766.97	46.37	82.243		
7,400.00	7,397.40	15,937.00	11,089.45	16.12	82.96	171.75	-51.77	-77.54	3,713.80	3,667.20	46.59	79.704		
7,500.00	7,497.32	15,937.00	11,089.45	16.34	82.96	171.75	-51.77	-77.54	3,614.28	3,567.45	46.83	77.179		
7,600.00	7,597.24	15,937.00	11,089.45	16.56	82.96	171.75	-51.77	-77.54	3,514.80	3,467.73	47.07	74.669		
7,700.00	7,697.16	15,937.00	11,089.45	16.79	82.96	171.75	-51.77	-77.54	3,415.34	3,368.02	47.32	72.175		
7,800.00	7,797.08	15,937.00	11,089.45	17.01	82.96	171.75	-51.77	-77.54	3,315.92	3,268.34	47.58	69.697		
7,900.00	7,897.00	15,937.00	11,089.45	17.24	82.96	171.75	-51.77	-77.54	3,216.53	3,168.69	47.84	67.234		
8,000.00	7,996.92	15,937.00	11,089.45	17.46	82.96	171.75	-51.77	-77.54	3,117.18	3,069.07	48.11	64.788		
8,100.00	8,096.84	15,937.00	11,089.45	17.69	82.96	171.75	-51.77	-77.54	3,017.88	2,969.48	48.40	62.359		
8,200.00	8,196.76	15,937.00	11,089.45	17.91	82.96	171.75	-51.77	-77.54	2,918.62	2,869.93	48.69	59.946		
8,274.07	8,270.77	15,937.00	11,089.45	18.08	82.96	171.75	-51.77	-77.54	2,845.13	2,796.22	48.91	58.170		
8,300.00	8,296.68	15,937.00	11,089.45	18.13	82.96	171.45	-51.77	-77.54	2,819.41	2,770.42	48.99	57.550		
8,400.00	8,396.64	15,937.00	11,089.45	18.32	82.96	170.09	-51.77	-77.54	2,720.10	2,670.80	49.29	55.181		
8,503.36	8,500.00	15,937.00	11,089.45	18.51	82.96	-101.77	-51.77	-77.54	2,617.29	2,567.69	49.60	52.763		
8,600.00	8,596.64	15,937.00	11,089.45	18.70	82.96	-101.77	-51.77	-77.54	2,521.13	2,471.23	49.90	50.526		
8,700.00	8,696.64	15,937.00	11,089.45	18.92	82.96	-101.77	-51.77	-77.54	2,421.66	2,371.45	50.21	48.229		
8,800.00	8,796.64	15,937.00	11,089.45	19.14	82.96	-101.77	-51.77	-77.54	2,322.23	2,271.69	50.54	45.950		
8,900.00	8,896.64	15,937.00	11,089.45	19.35	82.96	-101.77	-51.77	-77.54	2,222.86	2,171.98	50.88	43.689		
9,000.00	8,996.64	15,937.00	11,089.45	19.57	82.96	-101.77	-51.77	-77.54	2,123.54	2,072.31	51.24	41.446		
9,100.00	9,096.64	15,937.00	11,089.45	19.78	82.96	-101.77	-51.77	-77.54	2,024.30	1,972.68	51.61	39.221		
9,200.00	9,196.64	15,937.00	11,089.45	20.00	82.96	-101.77	-51.77	-77.54	1,925.13	1,873.12	52.01	37.014		
9,300.00	9,296.64	15,937.00	11,089.45	20.22	82.96	-101.77	-51.77	-77.54	1,826.05	1,773.62	52.43	34.827		
9,400.00	9,396.64	15,937.00	11,089.45	20.43	82.96	-101.77	-51.77	-77.54	1,727.07	1,674.19	52.88	32.658		
9,500.00	9,496.64	15,937.00	11,089.45	20.65	82.96	-101.77	-51.77	-77.54	1,628.23	1,574.86	53.37	30.508		
9,600.41	9,597.05	15,937.00	11,089.45	20.87	82.96	-101.77	-51.77	-77.54	1,529.12	1,475.22	53.90	28.369		
9,650.00	9,646.58	15,937.00	11,089.45	20.97	82.96	107.49	-51.77	-77.54	1,480.24	1,426.05	54.19	27.318		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

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		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)						
9,700.00	9,696.14	15,937.00	11,089.45	21.06	82.96	129.19	-51.77	-77.54	1,431.23	1,376.74	54.49	26.266		
9,750.00	9,744.95	15,937.00	11,089.45	21.16	82.96	142.26	-51.77	-77.54	1,382.93	1,328.12	54.82	25.229		
9,800.00	9,792.63	15,937.00	11,089.45	21.25	82.96	150.13	-51.77	-77.54	1,335.81	1,280.65	55.17	24.214		
9,850.00	9,838.82	15,937.00	11,089.45	21.35	82.96	155.15	-51.77	-77.54	1,290.37	1,234.83	55.55	23.231		
9,900.00	9,883.17	15,937.00	11,089.45	21.45	82.96	158.54	-51.77	-77.54	1,247.16	1,191.20	55.96	22.287		
9,950.00	9,925.35	15,921.93	11,089.95	21.55	82.92	160.62	-66.84	-77.38	1,206.67	1,150.30	56.37	21.406		
10,000.00	9,965.03	15,890.23	11,091.00	21.66	82.84	161.91	-98.52	-77.05	1,168.86	1,112.14	56.72	20.609		
10,050.00	10,001.90	15,855.28	11,092.16	21.78	82.75	162.87	-133.44	-76.68	1,133.94	1,076.94	57.00	19.893		
10,100.00	10,035.70	15,817.35	11,093.42	21.91	82.66	163.59	-171.35	-76.29	1,102.18	1,044.85	57.33	19.226		
10,150.00	10,066.15	15,775.90	11,094.78	22.05	82.19	164.13	-212.78	-75.87	1,073.78	1,016.34	57.44	18.695		
10,200.00	10,093.04	15,731.66	11,096.16	22.22	81.49	164.53	-257.00	-75.49	1,048.92	991.53	57.39	18.278		
10,250.00	10,116.15	15,688.06	11,097.49	22.41	80.81	164.84	-300.57	-75.17	1,027.80	970.44	57.36	17.918		
10,300.00	10,135.31	15,645.17	11,098.93	22.63	80.14	165.07	-343.44	-74.87	1,010.74	953.39	57.35	17.625		
10,350.00	10,150.38	15,599.82	11,100.63	22.87	79.44	165.23	-388.76	-74.55	997.89	940.62	57.27	17.424		
10,400.00	10,161.23	15,551.06	11,102.54	23.13	78.67	165.33	-437.48	-74.14	989.22	932.12	57.10	17.325		
10,450.00	10,167.79	15,499.44	11,104.58	23.41	77.87	165.38	-489.06	-73.61	984.74	927.91	56.83	17.329		
10,481.17	10,169.69	15,464.91	11,105.84	23.60	77.33	165.40	-523.56	-73.20	983.97	927.38	56.59	17.387		
10,497.84	10,170.00	15,446.44	11,106.47	23.70	77.04	165.40	-542.02	-72.96	984.19	927.73	56.46	17.433		
10,500.00	10,170.01	15,444.04	11,106.55	23.71	77.00	165.41	-544.41	-72.93	984.25	927.81	56.44	17.439		
10,600.00	10,170.46	15,335.53	11,109.74	28.14	75.34	165.51	-652.86	-71.03	986.40	930.65	55.75	17.693		
10,700.00	10,170.91	15,237.78	11,112.47	28.23	73.83	165.63	-750.54	-68.65	988.25	933.22	55.02	17.961		
10,800.00	10,171.36	15,135.76	11,115.30	28.32	72.27	165.76	-852.50	-66.18	990.09	935.89	54.20	18.267		
10,900.00	10,171.81	15,041.25	11,117.97	28.41	70.85	165.85	-946.95	-64.51	992.13	938.43	53.70	18.475		
11,000.00	10,172.26	14,945.13	11,121.11	28.51	69.40	165.92	-1,043.01	-63.17	994.70	941.51	53.20	18.698		
11,100.00	10,172.71	14,838.30	11,124.25	28.60	67.80	166.00	-1,149.78	-61.69	996.95	944.55	52.40	19.025		
11,200.00	10,173.15	14,741.56	11,126.91	28.70	66.37	166.04	-1,246.48	-60.81	999.15	947.16	51.99	19.219		
11,300.00	10,173.60	14,645.36	11,129.86	28.79	64.98	166.09	-1,342.63	-59.90	1,001.64	950.01	51.63	19.402		
11,400.00	10,174.05	14,550.59	11,133.33	28.89	63.60	166.15	-1,437.33	-58.89	1,004.68	953.34	51.34	19.570		
11,500.00	10,174.50	14,441.76	11,137.45	28.99	62.01	166.23	-1,546.08	-57.52	1,007.82	957.17	50.65	19.899		
11,600.00	10,174.95	14,306.25	11,139.03	29.09	60.04	166.25	-1,681.57	-56.34	1,008.51	959.24	49.27	20.469		
11,700.00	10,175.40	14,204.92	11,138.07	29.19	58.63	166.24	-1,782.88	-55.43	1,007.10	958.16	48.94	20.578		
11,800.00	10,175.85	14,109.20	11,137.52	29.29	57.32	166.25	-1,878.60	-54.32	1,006.02	957.23	48.79	20.620		
11,900.00	10,176.30	14,013.18	11,137.66	29.40	56.03	166.33	-1,974.59	-52.12	1,005.35	956.72	48.63	20.675		
11,932.96	10,176.44	13,984.96	11,137.85	29.43	55.65	166.36	-2,002.80	-51.31	1,005.26	956.59	48.67	20.655		
12,000.00	10,176.74	13,928.62	11,138.64	29.51	54.89	166.42	-2,059.12	-49.97	1,005.62	956.83	48.79	20.610		
12,100.00	10,177.19	13,822.94	11,140.45	29.61	53.48	166.51	-2,164.76	-47.93	1,006.58	958.16	48.41	20.791		
12,200.00	10,177.64	13,721.46	11,141.69	29.73	52.14	166.60	-2,266.21	-45.80	1,007.01	958.83	48.18	20.901		
12,300.00	10,178.09	13,612.27	11,142.43	29.84	50.72	166.69	-2,375.37	-43.33	1,006.88	959.10	47.77	21.076		
12,400.00	10,178.54	13,511.69	11,142.46	29.96	49.48	166.77	-2,475.93	-41.03	1,006.11	958.49	47.63	21.125		
12,451.12	10,178.77	13,466.73	11,142.70	30.02	48.95	166.82	-2,520.87	-39.93	1,005.96	958.24	47.72	21.081		
12,500.00	10,178.99	13,422.34	11,143.21	30.08	48.42	166.87	-2,565.24	-38.77	1,006.08	958.31	47.77	21.061		
12,600.00	10,179.44	13,326.06	11,144.85	30.21	47.27	167.00	-2,661.47	-35.92	1,006.79	959.04	47.75	21.085		
12,700.00	10,179.89	13,222.05	11,146.37	30.35	46.04	167.10	-2,765.43	-33.54	1,007.43	959.85	47.58	21.173		
12,800.00	10,180.34	13,124.24	11,146.74	30.51	44.93	167.01	-2,863.23	-34.48	1,007.75	960.10	47.65	21.150		
12,900.00	10,180.78	13,034.71	11,147.64	30.70	43.95	166.86	-2,952.73	-36.63	1,008.99	961.05	47.94	21.048		
13,000.00	10,181.23	12,942.83	11,149.32	30.95	42.97	166.74	-3,044.58	-38.54	1,010.98	962.81	48.18	20.984		
13,100.00	10,181.68	12,851.12	11,152.13	31.26	42.01	166.64	-3,136.23	-40.15	1,014.09	965.67	48.42	20.942		
13,200.00	10,182.13	12,748.05	11,155.23	31.65	40.98	166.56	-3,239.25	-41.45	1,017.03	968.60	48.43	20.998		
13,300.00	10,182.58	12,655.95	11,158.35	32.09	40.11	166.48	-3,331.28	-42.88	1,020.43	971.74	48.70	20.955		
13,400.00	10,183.03	12,554.45	11,162.49	32.56	39.18	166.43	-3,432.69	-44.05	1,024.40	975.63	48.77	21.005		
13,500.00	10,183.48	12,443.55	11,165.98	33.06	38.22	166.39	-3,543.54	-44.60	1,027.30	978.61	48.68	21.101		
13,600.00	10,183.93	12,327.50	11,168.80	33.57	37.33	166.41	-3,659.55	-43.92	1,029.29	980.75	48.54	21.205		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.00	10,184.38	12,227.37	11,170.35	34.10	36.65	166.49	-3,759.65	-42.09	1,030.10	981.40	48.70	21.150	
13,800.00	10,184.82	12,133.14	11,172.18	34.64	36.05	166.55	-3,853.84	-40.57	1,031.34	982.36	48.99	21.053	
13,900.00	10,185.27	12,017.13	11,173.84	35.19	35.38	166.61	-3,969.83	-38.95	1,032.16	983.18	48.97	21.077	
14,000.00	10,185.72	10,276.66	10,171.67	35.74	29.40	89.72	-4,965.20	-312.27	1,029.79	967.59	62.20	16.556	
14,100.00	10,186.17	10,278.04	10,173.05	36.31	29.40	89.87	-4,965.22	-312.24	944.81	882.30	62.51	15.115	
14,200.00	10,186.62	10,279.43	10,174.44	36.89	29.40	90.02	-4,965.23	-312.22	863.05	800.22	62.83	13.736	
14,300.00	10,187.07	10,280.83	10,175.84	37.47	29.41	90.18	-4,965.24	-312.19	785.52	722.35	63.17	12.435	
14,400.00	10,187.52	10,282.25	10,177.26	38.06	29.41	90.34	-4,965.26	-312.16	713.60	650.10	63.50	11.238	
14,500.00	10,187.97	10,283.68	10,178.68	38.65	29.41	90.49	-4,965.27	-312.13	649.16	585.39	63.78	10.179	
14,600.00	10,188.42	10,285.12	10,180.12	39.26	29.41	90.65	-4,965.29	-312.10	594.63	530.72	63.92	9.303	
14,700.00	10,188.86	10,286.57	10,181.58	39.86	29.42	90.81	-4,965.30	-312.08	552.96	489.13	63.82	8.664	
14,800.00	10,189.31	10,288.04	10,183.04	40.48	29.42	90.97	-4,965.32	-312.05	527.19	463.75	63.44	8.311	
14,889.19	10,189.71	10,289.35	10,184.36	41.03	29.42	91.12	-4,965.33	-312.02	519.59	456.69	62.91	8.260	CC, ES, SF
14,900.00	10,189.76	10,289.51	10,184.52	41.10	29.42	91.14	-4,965.33	-312.02	519.70	456.87	62.84	8.271	
15,000.00	10,190.21	10,291.01	10,186.01	41.72	29.42	91.30	-4,965.35	-311.99	531.27	469.03	62.24	8.536	
15,100.00	10,190.66	10,292.51	10,187.52	42.35	29.43	91.47	-4,965.36	-311.96	560.72	498.87	61.85	9.066	
15,200.00	10,191.11	10,294.03	10,189.04	42.98	29.43	91.63	-4,965.38	-311.93	605.44	543.76	61.68	9.816	
15,300.00	10,191.56	10,295.56	10,190.57	43.62	29.43	91.80	-4,965.39	-311.90	662.35	600.68	61.67	10.740	
15,400.00	10,192.01	10,297.11	10,192.12	44.26	29.43	91.97	-4,965.41	-311.87	728.59	666.84	61.75	11.800	
15,500.00	10,192.46	10,298.67	10,193.68	44.91	29.44	92.15	-4,965.43	-311.84	801.86	740.00	61.86	12.962	
15,600.00	10,192.90	10,300.25	10,195.25	45.56	29.44	92.32	-4,965.44	-311.81	880.41	818.41	61.99	14.201	
15,700.00	10,193.35	10,301.84	10,196.84	46.21	29.44	92.50	-4,965.46	-311.78	962.93	900.80	62.14	15.497	
15,800.00	10,193.80	10,303.44	10,198.45	46.87	29.44	92.67	-4,965.48	-311.75	1,048.50	986.22	62.28	16.835	
15,900.00	10,194.25	10,305.06	10,200.06	47.52	29.45	92.85	-4,965.50	-311.71	1,136.43	1,074.00	62.43	18.204	
16,000.00	10,194.70	10,306.70	10,201.70	48.19	29.45	93.03	-4,965.51	-311.68	1,226.21	1,163.63	62.58	19.595	
16,100.00	10,195.15	10,308.35	10,203.35	48.85	29.45	93.21	-4,965.53	-311.65	1,317.46	1,254.73	62.73	21.003	
16,200.00	10,195.60	10,310.01	10,205.01	49.52	29.45	93.40	-4,965.55	-311.62	1,409.89	1,347.02	62.88	22.423	
16,300.00	10,196.05	10,311.69	10,206.69	50.19	29.46	93.58	-4,965.57	-311.58	1,503.29	1,440.27	63.03	23.851	
16,400.00	10,196.50	10,313.39	10,208.39	50.87	29.46	93.77	-4,965.59	-311.55	1,597.49	1,534.32	63.18	25.285	
16,500.00	10,196.94	10,315.10	10,210.10	51.54	29.46	93.96	-4,965.61	-311.52	1,692.36	1,629.03	63.33	26.723	
16,600.00	10,197.39	10,316.83	10,211.83	52.22	29.46	94.15	-4,965.63	-311.48	1,787.78	1,724.30	63.48	28.163	
16,700.00	10,197.84	10,318.53	10,213.53	52.91	29.47	94.33	-4,965.65	-311.45	1,883.67	1,820.04	63.63	29.603	
16,800.00	10,198.29	10,320.24	10,215.24	53.59	29.47	94.52	-4,965.67	-311.42	1,979.97	1,916.19	63.78	31.043	
16,900.00	10,198.74	10,321.95	10,216.95	54.28	29.47	94.71	-4,965.69	-311.38	2,076.62	2,012.69	63.93	32.482	
17,000.00	10,199.19	10,323.68	10,218.68	54.96	29.48	94.90	-4,965.71	-311.35	2,173.57	2,109.49	64.08	33.918	
17,100.00	10,199.64	10,325.41	10,220.41	55.65	29.48	95.09	-4,965.73	-311.32	2,270.79	2,206.55	64.23	35.352	
17,200.00	10,200.09	10,327.16	10,222.16	56.35	29.48	95.28	-4,965.75	-311.28	2,368.23	2,303.85	64.38	36.783	
17,300.00	10,200.53	10,328.91	10,223.91	57.04	29.48	95.47	-4,965.77	-311.25	2,465.88	2,401.34	64.53	38.210	
17,400.00	10,200.98	10,330.68	10,225.68	57.74	29.49	95.67	-4,965.79	-311.21	2,563.71	2,499.02	64.68	39.634	
17,500.00	10,201.43	10,332.46	10,227.45	58.43	29.49	95.86	-4,965.81	-311.18	2,661.70	2,596.86	64.84	41.053	
17,600.00	10,201.88	10,334.24	10,229.24	59.13	29.49	96.06	-4,965.83	-311.14	2,759.83	2,694.84	64.99	42.468	
17,626.43	10,202.00	10,334.72	10,229.71	59.32	29.49	96.11	-4,965.84	-311.13	2,785.79	2,720.76	65.03	42.841	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 58H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 1629-MWD-ISCWSA, 16290-Project													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		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		
0.00	0.00	1,535.00	1,534.97	0.00	0.00	-163.04	-4,865.97	-1,483.72	5,318.65					
100.00	100.00	1,535.00	1,534.97	0.09	0.00	-163.04	-4,865.97	-1,483.72	5,290.33	5,289.05	1.28	4,117.486		
200.00	200.00	1,535.00	1,534.97	0.31	0.00	-163.04	-4,865.97	-1,483.72	5,263.76	5,262.55	1.21	4,339.701		
300.00	300.00	1,535.00	1,534.97	0.54	0.00	-163.04	-4,865.97	-1,483.72	5,238.97	5,237.78	1.19	4,401.462		
400.00	400.00	1,535.00	1,534.97	0.76	0.00	-163.04	-4,865.97	-1,483.72	5,215.97	5,214.75	1.22	4,275.351		
500.00	500.00	1,535.00	1,534.97	0.99	0.00	-163.04	-4,865.97	-1,483.72	5,194.80	5,193.50	1.30	3,999.861		
600.00	600.00	1,535.00	1,534.97	1.21	0.00	-163.04	-4,865.97	-1,483.72	5,175.47	5,174.06	1.42	3,648.805		
700.00	700.00	1,535.00	1,534.97	1.43	0.00	-163.04	-4,865.97	-1,483.72	5,158.01	5,156.44	1.57	3,286.264		
800.00	800.00	1,535.00	1,534.97	1.66	0.00	-163.04	-4,865.97	-1,483.72	5,142.44	5,140.70	1.74	2,948.870		
900.00	900.00	1,535.00	1,534.97	1.88	0.00	-163.04	-4,865.97	-1,483.72	5,128.77	5,126.84	1.93	2,650.850		
1,000.00	1,000.00	1,535.00	1,534.97	2.11	0.00	-163.04	-4,865.97	-1,483.72	5,117.02	5,114.88	2.14	2,393.999		
1,100.00	1,100.00	1,535.00	1,534.97	2.33	0.00	-163.04	-4,865.97	-1,483.72	5,107.20	5,104.85	2.35	2,174.765		
1,200.00	1,200.00	1,535.00	1,534.97	2.56	0.00	-163.04	-4,865.97	-1,483.72	5,099.32	5,096.75	2.57	1,987.972		
1,300.00	1,300.00	1,535.00	1,534.97	2.78	0.00	-163.04	-4,865.97	-1,483.72	5,093.39	5,090.61	2.79	1,828.447		
1,400.00	1,400.00	1,535.00	1,534.97	3.01	0.00	-163.04	-4,865.97	-1,483.72	5,089.42	5,086.41	3.01	1,691.614		
1,500.00	1,500.00	1,535.00	1,534.97	3.23	0.00	-163.04	-4,865.97	-1,483.72	5,087.42	5,084.18	3.23	1,573.629		
1,600.00	1,600.00	1,788.31	1,787.59	3.46	0.55	-163.22	-4,863.97	-1,466.36	5,084.32	5,080.31	4.00	1,269.862		
1,700.00	1,700.00	1,885.04	1,883.73	3.68	0.82	-163.33	-4,863.03	-1,455.74	5,080.22	5,075.73	4.48	1,132.793		
1,800.00	1,800.00	1,992.54	1,990.58	3.91	1.11	-163.46	-4,862.13	-1,443.99	5,076.27	5,071.28	5.00	1,016.232		
1,900.00	1,900.00	2,151.60	2,148.32	4.13	1.60	-163.67	-4,860.32	-1,423.69	5,071.49	5,065.79	5.70	890.008		
2,000.00	2,000.00	2,251.60	2,247.40	4.36	1.90	-163.81	-4,858.76	-1,410.24	5,066.19	5,059.98	6.21	815.403		
2,100.00	2,100.00	2,324.43	2,319.61	4.58	2.12	-163.91	-4,857.69	-1,400.84	5,061.18	5,054.54	6.64	762.017		
2,200.00	2,200.00	2,383.00	2,377.72	4.81	2.28	-163.99	-4,857.18	-1,393.54	5,056.89	5,049.86	7.03	719.337		
2,300.00	2,300.00	2,468.71	2,462.80	5.03	2.53	-164.10	-4,856.84	-1,383.12	5,053.15	5,045.65	7.50	673.997		
2,400.00	2,400.00	2,565.37	2,558.79	5.26	2.81	-164.23	-4,856.55	-1,371.83	5,049.64	5,041.65	7.99	631.765		
2,500.00	2,500.00	2,666.00	2,658.82	5.48	3.09	-164.34	-4,855.94	-1,360.85	5,046.09	5,037.60	8.49	594.181		
2,600.00	2,600.00	2,761.00	2,753.31	5.71	3.35	-164.45	-4,855.33	-1,351.04	5,042.68	5,033.70	8.97	561.921		
2,700.00	2,700.00	2,839.49	2,831.43	5.93	3.56	-164.53	-4,854.96	-1,343.40	5,039.59	5,030.18	9.41	535.678		
2,800.00	2,800.00	2,962.05	2,953.39	6.15	3.89	-164.66	-4,854.28	-1,331.32	5,036.42	5,026.46	9.96	505.769		
2,900.00	2,900.00	3,044.00	3,034.75	6.38	4.12	-164.77	-4,854.29	-1,321.52	5,033.25	5,022.83	10.42	483.209		
3,000.00	3,000.00	3,128.89	3,118.92	6.60	4.38	-164.89	-4,854.79	-1,310.54	5,030.41	5,019.51	10.90	461.582		
3,100.00	3,100.00	3,219.25	3,208.57	6.83	4.65	-165.02	-4,855.42	-1,299.24	5,027.81	5,016.42	11.39	441.260		
3,200.00	3,200.00	3,329.96	3,318.50	7.05	4.98	-165.17	-4,855.99	-1,286.10	5,025.24	5,013.30	11.94	420.780		
3,300.00	3,300.00	3,440.23	3,428.07	7.28	5.29	-165.30	-4,856.09	-1,273.67	5,022.44	5,009.96	12.48	402.408		
3,400.00	3,400.00	3,541.01	3,528.31	7.50	5.57	-165.42	-4,855.76	-1,263.30	5,019.51	5,006.52	12.98	386.607		
3,500.00	3,500.00	3,626.56	3,613.42	7.73	5.81	-165.51	-4,855.57	-1,254.68	5,016.75	5,003.31	13.44	373.286		
3,600.00	3,600.00	3,710.06	3,696.41	7.95	6.04	-165.61	-4,855.86	-1,245.46	5,014.32	5,000.43	13.89	360.894		
3,700.00	3,700.00	3,804.25	3,789.88	8.18	6.31	-165.75	-4,856.71	-1,233.87	5,012.14	4,997.75	14.39	348.229		
3,800.00	3,800.00	3,918.29	3,902.99	8.40	6.65	-165.91	-4,857.62	-1,219.33	5,009.76	4,994.80	14.96	334.924		
3,900.00	3,900.00	4,000.93	3,985.03	8.63	6.90	-166.02	-4,858.24	-1,209.50	5,007.58	4,992.15	15.43	324.600		
4,000.00	4,000.00	4,110.86	4,094.19	8.85	7.22	-166.17	-4,859.10	-1,196.43	5,005.46	4,989.49	15.97	313.398		
4,100.00	4,100.00	4,221.75	4,204.14	9.06	7.55	103.70	-4,859.95	-1,182.06	5,003.31	4,986.80	16.51	302.976		
4,200.00	4,199.96	4,321.48	4,302.99	9.26	7.85	103.60	-4,860.66	-1,168.90	5,001.50	4,984.48	17.02	293.946		
4,229.29	4,229.23	4,349.80	4,331.08	9.32	7.94	103.57	-4,860.84	-1,165.29	5,001.06	4,983.90	17.16	291.450		
4,300.00	4,299.88	4,404.81	4,385.65	9.46	8.10	103.52	-4,861.23	-1,158.40	5,000.13	4,982.66	17.47	286.266		
4,400.00	4,399.80	4,485.40	4,465.62	9.66	8.34	103.44	-4,862.15	-1,148.44	4,999.26	4,981.35	17.91	279.137		
4,500.00	4,499.72	4,650.10	4,629.10	9.86	8.83	103.29	-4,863.41	-1,128.48	4,998.27	4,979.68	18.60	268.777		
4,600.00	4,599.64	4,766.52	4,744.63	10.07	9.18	103.18	-4,862.97	-1,114.17	4,995.98	4,976.84	19.14	261.011		
4,700.00	4,699.56	4,848.91	4,826.36	10.27	9.42	103.10	-4,862.89	-1,103.68	4,993.87	4,974.28	19.59	254.878		
4,800.00	4,799.48	4,979.47	4,955.80	10.48	9.82	102.97	-4,862.57	-1,086.59	4,991.56	4,971.36	20.19	247.191		
4,900.00	4,899.40	5,083.32	5,058.79	10.69	10.13	102.87	-4,861.81	-1,073.35	4,988.88	4,968.17	20.71	240.890		
5,000.00	4,999.32	5,157.27	5,132.27	10.90	10.35	102.81	-4,861.16	-1,064.98	4,986.41	4,965.28	21.13	235.956		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 58H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 1629-MWD-ISCWSA, 16290-Project												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,099.24	5,256.17	5,230.64	11.11	10.62	102.74	-4,860.51	-1,054.85	4,984.38	4,962.77	21.61	230.673	
5,200.00	5,199.16	5,343.26	5,317.34	11.32	10.85	102.69	-4,859.71	-1,046.64	4,982.30	4,960.24	22.05	225.913	
5,300.00	5,299.08	5,408.00	5,381.68	11.53	11.03	102.64	-4,859.77	-1,039.50	4,980.83	4,958.39	22.45	221.913	
5,400.00	5,399.00	5,494.06	5,467.10	11.74	11.28	102.56	-4,860.49	-1,029.06	4,979.87	4,956.96	22.91	217.369	
5,500.00	5,498.92	5,601.71	5,573.94	11.96	11.60	102.46	-4,861.48	-1,015.84	4,978.96	4,955.52	23.44	212.399	
5,600.00	5,598.84	5,790.45	5,761.21	12.17	12.16	102.28	-4,862.26	-992.48	4,977.98	4,953.77	24.21	205.611	
5,700.00	5,698.76	5,912.61	5,882.38	12.39	12.53	102.16	-4,860.72	-976.98	4,974.87	4,950.08	24.79	200.703	
5,800.00	5,798.68	6,016.64	5,985.58	12.60	12.84	102.07	-4,859.33	-963.91	4,971.76	4,946.45	25.31	196.427	
5,900.00	5,898.60	6,125.54	6,093.59	12.82	13.17	101.96	-4,857.48	-950.18	4,968.27	4,942.42	25.85	192.206	
6,000.00	5,998.52	6,210.42	6,177.78	13.03	13.43	101.88	-4,856.17	-939.42	4,964.97	4,938.65	26.32	188.656	
6,100.00	6,098.44	6,290.28	6,257.07	13.25	13.66	101.82	-4,855.09	-929.98	4,962.03	4,935.26	26.77	185.371	
6,200.00	6,198.36	6,373.75	6,340.01	13.47	13.90	101.75	-4,854.21	-920.69	4,959.52	4,932.30	27.22	182.180	
6,300.00	6,298.28	6,474.13	6,439.82	13.69	14.18	101.68	-4,853.11	-909.94	4,957.07	4,929.35	27.72	178.811	
6,400.00	6,398.20	6,562.32	6,527.35	13.91	14.44	101.60	-4,852.59	-899.25	4,954.84	4,926.64	28.20	175.715	
6,500.00	6,498.12	6,660.96	6,625.12	14.13	14.74	101.49	-4,852.25	-886.21	4,952.65	4,923.93	28.72	172.467	
6,600.00	6,598.04	6,746.81	6,710.24	14.35	15.00	101.41	-4,852.15	-875.04	4,950.73	4,921.53	29.20	169.544	
6,700.00	6,697.96	6,852.85	6,815.33	14.57	15.33	101.29	-4,852.04	-860.84	4,948.76	4,919.01	29.74	166.373	
6,800.00	6,797.88	6,933.57	6,895.42	14.79	15.57	101.22	-4,851.98	-850.82	4,947.03	4,916.82	30.21	163.758	
6,900.00	6,897.80	7,014.00	6,975.32	15.01	15.80	101.15	-4,852.04	-841.60	4,945.66	4,914.99	30.66	161.285	
7,000.00	6,997.72	7,108.00	7,068.75	15.23	16.07	101.07	-4,852.32	-831.30	4,944.61	4,913.45	31.15	158.724	
7,100.00	7,097.64	7,332.86	7,292.18	15.45	16.71	100.89	-4,851.79	-806.10	4,943.81	4,911.82	32.00	154.501	
7,200.00	7,197.56	7,440.22	7,398.71	15.67	17.02	100.79	-4,849.39	-792.98	4,940.04	4,907.51	32.53	151.853	
7,300.00	7,297.48	7,524.29	7,482.17	15.90	17.27	100.72	-4,847.67	-783.05	4,936.56	4,903.56	33.00	149.591	
7,400.00	7,397.40	7,610.97	7,568.27	16.12	17.52	100.65	-4,846.05	-773.10	4,933.33	4,899.85	33.47	147.378	
7,500.00	7,497.32	7,694.55	7,651.30	16.34	17.76	100.58	-4,844.76	-763.61	4,930.45	4,896.51	33.94	145.283	
7,600.00	7,597.24	7,769.00	7,725.29	16.56	17.97	100.53	-4,843.69	-755.49	4,927.81	4,893.43	34.37	143.365	
7,700.00	7,697.16	7,845.40	7,801.32	16.79	18.18	100.48	-4,842.81	-747.99	4,925.66	4,890.86	34.80	141.532	
7,800.00	7,797.08	7,958.00	7,913.36	17.01	18.48	100.40	-4,842.00	-736.91	4,923.90	4,888.58	35.33	139.380	
7,900.00	7,897.00	8,052.00	8,006.77	17.24	18.75	100.33	-4,841.38	-726.40	4,921.96	4,886.14	35.82	137.419	
8,000.00	7,996.92	8,107.25	8,061.65	17.46	18.91	100.28	-4,841.38	-719.95	4,920.57	4,884.36	36.21	135.896	
8,100.00	8,096.84	8,170.49	8,124.34	17.69	19.10	100.21	-4,842.10	-711.69	4,920.04	4,883.42	36.62	134.339	
8,149.10	8,145.90	8,210.05	8,163.55	17.80	19.22	100.17	-4,842.71	-706.50	4,919.99	4,883.14	36.86	133.490	
8,200.00	8,196.76	8,254.25	8,207.38	17.91	19.36	100.12	-4,843.45	-700.84	4,920.04	4,882.93	37.11	132.588	
8,274.07	8,270.77	8,461.62	8,413.01	18.08	19.99	99.91	-4,844.73	-674.16	4,919.69	4,881.78	37.90	129.790	
8,300.00	8,296.68	8,484.51	8,435.70	18.13	20.06	99.88	-4,844.52	-671.12	4,919.02	4,881.00	38.03	129.347	
8,400.00	8,396.64	8,565.93	8,516.41	18.32	20.31	99.76	-4,843.88	-660.48	4,916.47	4,878.00	38.47	127.796	
8,503.36	8,500.00	8,644.31	8,594.17	18.51	20.55	-170.37	-4,843.57	-650.58	4,914.02	4,875.11	38.91	126.304	
8,600.00	8,596.64	8,849.92	8,798.18	18.70	21.17	-170.66	-4,841.60	-625.15	4,911.49	4,871.79	39.70	123.719	
8,700.00	8,696.64	8,945.84	8,893.33	18.92	21.45	-170.79	-4,839.20	-613.29	4,907.00	4,866.80	40.20	122.062	
8,800.00	8,796.64	9,025.86	8,972.78	19.14	21.69	-170.90	-4,837.36	-603.93	4,902.85	4,862.19	40.66	120.594	
8,900.00	8,896.64	9,104.25	9,050.66	19.35	21.92	-171.00	-4,835.82	-595.16	4,899.13	4,858.03	41.10	119.196	
9,000.00	8,996.64	9,185.00	9,130.99	19.57	22.14	-171.09	-4,834.47	-586.98	4,895.87	4,854.33	41.54	117.847	
9,100.00	9,096.64	9,272.60	9,218.09	19.78	22.38	-171.19	-4,833.33	-577.80	4,892.95	4,850.95	42.00	116.488	
9,200.00	9,196.64	9,345.25	9,290.28	20.00	22.59	-171.29	-4,832.72	-569.62	4,890.39	4,847.97	42.43	115.263	
9,300.00	9,296.64	9,487.43	9,431.65	20.22	22.98	-171.46	-4,831.25	-554.60	4,887.80	4,844.77	43.04	113.574	
9,400.00	9,396.64	9,562.00	9,505.71	20.43	23.19	-171.56	-4,830.45	-545.89	4,884.98	4,841.52	43.47	112.381	
9,500.00	9,496.64	9,643.65	9,586.77	20.65	23.43	-171.67	-4,829.96	-536.13	4,882.63	4,838.70	43.93	111.153	
9,600.41	9,597.05	9,731.57	9,674.19	20.87	23.68	-171.78	-4,829.50	-526.80	4,880.56	4,836.17	44.39	109.939	
9,650.00	9,646.58	9,770.70	9,713.16	20.97	23.78	8.65	-4,829.28	-523.23	4,877.53	4,832.93	44.60	109.362	
9,700.00	9,696.14	9,806.21	9,748.53	21.06	23.88	8.73	-4,829.18	-520.05	4,870.33	4,825.54	44.79	108.741	
9,750.00	9,744.95	9,846.00	9,788.16	21.16	23.98	8.88	-4,829.18	-516.51	4,859.05	4,814.06	44.99	108.008	
9,800.00	9,792.63	9,891.65	9,833.62	21.25	24.10	9.11	-4,829.24	-512.36	4,843.67	4,798.47	45.20	107.157	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 58H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 1629-MWD-ISCWSA, 16290-Project												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,850.00	9,838.82	9,948.43	9,890.14	21.35	24.24	9.43	-4,829.30	-506.92	4,824.20	4,778.76	45.44	106.160	
9,900.00	9,883.17	10,052.65	9,993.81	21.45	24.52	9.85	-4,828.58	-496.23	4,800.41	4,754.60	45.81	104.792	
9,950.00	9,925.35	10,098.32	10,039.19	21.55	24.65	10.42	-4,828.05	-491.16	4,772.75	4,726.72	46.02	103.704	
10,000.00	9,965.03	10,140.20	10,080.78	21.66	24.77	11.17	-4,827.57	-486.26	4,741.58	4,695.36	46.22	102.579	
10,050.00	10,001.90	10,176.79	10,117.11	21.78	24.87	12.14	-4,827.14	-481.95	4,707.18	4,660.77	46.41	101.428	
10,100.00	10,035.70	10,210.25	10,150.34	21.91	24.97	13.42	-4,826.75	-478.03	4,669.81	4,623.23	46.58	100.254	
10,150.00	10,066.15	10,224.00	10,163.99	22.05	25.01	15.08	-4,826.59	-476.42	4,629.79	4,583.10	46.69	99.159	
10,200.00	10,093.04	10,248.45	10,188.27	22.22	25.08	17.37	-4,826.35	-473.54	4,587.43	4,540.60	46.83	97.966	
10,250.00	10,116.15	10,261.56	10,201.29	22.41	25.12	20.57	-4,826.26	-471.98	4,543.07	4,496.14	46.92	96.818	
10,300.00	10,135.31	10,272.50	10,212.15	22.63	25.15	25.26	-4,826.21	-470.66	4,497.02	4,450.01	47.01	95.665	
10,350.00	10,150.38	10,281.17	10,220.75	22.87	25.18	32.61	-4,826.19	-469.60	4,449.61	4,402.53	47.08	94.512	
10,400.00	10,161.23	10,287.47	10,227.01	23.13	25.20	44.95	-4,826.18	-468.83	4,401.19	4,354.05	47.14	93.367	
10,450.00	10,167.79	10,291.32	10,230.82	23.41	25.21	66.18	-4,826.18	-468.36	4,352.12	4,304.94	47.18	92.236	
10,497.84	10,170.00	10,292.64	10,232.14	23.70	25.21	95.10	-4,826.18	-468.20	4,304.90	4,257.68	47.22	91.170	
10,500.00	10,170.01	10,292.65	10,232.14	23.71	25.21	95.10	-4,826.18	-468.20	4,302.76	4,255.54	47.22	91.122	
10,600.00	10,170.46	10,292.97	10,232.47	28.14	25.21	95.12	-4,826.18	-468.16	4,204.04	4,150.97	53.07	79.220	
10,700.00	10,170.91	10,293.31	10,232.80	28.23	25.22	95.15	-4,826.18	-468.12	4,105.38	4,052.23	53.15	77.246	
10,800.00	10,171.36	10,293.65	10,233.14	28.32	25.22	95.18	-4,826.18	-468.07	4,006.78	3,953.56	53.23	75.279	
10,900.00	10,171.81	10,294.00	10,233.49	28.41	25.22	95.21	-4,826.18	-468.03	3,908.26	3,854.95	53.31	73.318	
11,000.00	10,172.26	10,294.36	10,233.85	28.51	25.22	95.24	-4,826.18	-467.99	3,809.81	3,756.42	53.39	71.364	
11,100.00	10,172.71	10,294.73	10,234.21	28.60	25.22	95.27	-4,826.18	-467.94	3,711.45	3,657.98	53.47	69.416	
11,200.00	10,173.15	10,295.10	10,234.58	28.70	25.22	95.30	-4,826.18	-467.89	3,613.17	3,559.62	53.55	67.476	
11,300.00	10,173.60	10,295.49	10,234.96	28.79	25.22	95.34	-4,826.18	-467.85	3,514.99	3,461.36	53.63	65.542	
11,400.00	10,174.05	10,295.88	10,235.35	28.89	25.22	95.37	-4,826.18	-467.80	3,416.92	3,363.21	53.71	63.616	
11,500.00	10,174.50	10,296.28	10,235.75	28.99	25.22	95.40	-4,826.18	-467.75	3,318.96	3,265.17	53.79	61.697	
11,600.00	10,174.95	10,296.69	10,236.16	29.09	25.23	95.44	-4,826.18	-467.70	3,221.13	3,167.25	53.88	59.786	
11,700.00	10,175.40	10,297.11	10,236.57	29.19	25.23	95.47	-4,826.18	-467.65	3,123.44	3,069.48	53.96	57.884	
11,800.00	10,175.85	10,297.54	10,237.00	29.29	25.23	95.51	-4,826.18	-467.59	3,025.89	2,971.85	54.04	55.989	
11,900.00	10,176.30	10,297.98	10,237.44	29.40	25.23	95.55	-4,826.18	-467.54	2,928.52	2,874.39	54.13	54.103	
12,000.00	10,176.74	10,298.44	10,237.89	29.51	25.23	95.59	-4,826.18	-467.48	2,831.32	2,777.11	54.21	52.226	
12,100.00	10,177.19	10,298.90	10,238.35	29.61	25.23	95.62	-4,826.18	-467.43	2,734.33	2,680.03	54.30	50.358	
12,200.00	10,177.64	10,299.37	10,238.82	29.73	25.23	95.66	-4,826.19	-467.37	2,637.56	2,583.17	54.38	48.500	
12,300.00	10,178.09	10,299.86	10,239.30	29.84	25.24	95.71	-4,826.19	-467.31	2,541.04	2,486.57	54.47	46.652	
12,400.00	10,178.54	10,300.36	10,239.80	29.96	25.24	95.75	-4,826.19	-467.24	2,444.80	2,390.25	54.55	44.814	
12,500.00	10,178.99	10,300.88	10,240.31	30.08	25.24	95.79	-4,826.19	-467.18	2,348.87	2,294.23	54.64	42.988	
12,600.00	10,179.44	10,301.40	10,240.83	30.21	25.24	95.84	-4,826.19	-467.12	2,253.30	2,198.58	54.73	41.173	
12,700.00	10,179.89	10,301.94	10,241.37	30.35	25.24	95.88	-4,826.19	-467.05	2,158.13	2,103.32	54.81	39.371	
12,800.00	10,180.34	10,302.50	10,241.92	30.51	25.24	95.93	-4,826.19	-466.98	2,063.42	2,008.52	54.90	37.583	
12,900.00	10,180.78	10,303.07	10,242.49	30.70	25.24	95.98	-4,826.19	-466.91	1,969.23	1,914.24	54.99	35.809	
13,000.00	10,181.23	10,303.66	10,243.07	30.95	25.25	96.03	-4,826.19	-466.84	1,875.64	1,820.56	55.08	34.050	
13,100.00	10,181.68	10,304.27	10,243.67	31.26	25.25	96.08	-4,826.19	-466.76	1,782.75	1,727.57	55.18	32.309	
13,200.00	10,182.13	10,304.89	10,244.29	31.65	25.25	96.13	-4,826.20	-466.68	1,690.67	1,635.39	55.28	30.586	
13,300.00	10,182.58	10,305.53	10,244.93	32.09	25.25	96.19	-4,826.20	-466.60	1,599.53	1,544.16	55.38	28.884	
13,400.00	10,183.03	10,306.19	10,245.58	32.56	25.25	96.24	-4,826.20	-466.52	1,509.53	1,454.04	55.48	27.206	
13,500.00	10,183.48	10,306.87	10,246.26	33.06	25.26	96.30	-4,826.20	-466.44	1,420.85	1,365.25	55.60	25.555	
13,600.00	10,183.93	10,307.57	10,246.95	33.57	25.26	96.36	-4,826.20	-466.35	1,333.79	1,278.06	55.73	23.935	
13,700.00	10,184.38	10,308.29	10,247.67	34.10	25.26	96.42	-4,826.20	-466.26	1,248.65	1,192.79	55.87	22.351	
13,800.00	10,184.82	10,309.04	10,248.41	34.64	25.26	96.48	-4,826.21	-466.17	1,165.89	1,109.86	56.03	20.810	
13,900.00	10,185.27	10,309.81	10,249.18	35.19	25.26	96.55	-4,826.21	-466.07	1,086.02	1,029.81	56.21	19.321	
14,000.00	10,185.72	10,310.61	10,249.97	35.74	25.27	96.62	-4,826.21	-465.97	1,009.75	953.32	56.43	17.895	
14,100.00	10,186.17	10,311.43	10,250.78	36.31	25.27	96.68	-4,826.21	-465.87	937.95	881.26	56.69	16.547	
14,200.00	10,186.62	10,312.28	10,251.63	36.89	25.27	96.76	-4,826.22	-465.76	871.72	814.72	57.00	15.295	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 58H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 1629-MWD-ISCWSA, 16290-Project													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,300.00	10,187.07	10,313.16	10,252.50	37.47	25.27	96.83	-4,826.22	-465.65	812.43	755.06	57.37	14.162	
14,400.00	10,187.52	10,314.07	10,253.41	38.06	25.28	96.91	-4,826.22	-465.54	761.70	703.90	57.80	13.177	
14,500.00	10,187.97	10,315.02	10,254.34	38.65	25.28	96.99	-4,826.23	-465.42	721.34	663.03	58.31	12.370	
14,600.00	10,188.42	10,316.00	10,255.31	39.26	25.28	97.07	-4,826.23	-465.30	693.16	634.27	58.89	11.770	
14,700.00	10,188.86	10,317.01	10,256.32	39.86	25.29	97.16	-4,826.24	-465.17	678.68	619.17	59.52	11.403	
14,749.31	10,189.09	10,317.53	10,256.83	40.17	25.29	97.20	-4,826.24	-465.11	676.89	617.05	59.84	11.313 CC, ES	
14,800.00	10,189.31	10,318.07	10,257.37	40.48	25.29	97.25	-4,826.24	-465.04	678.79	618.61	60.17	11.281 SF	
14,900.00	10,189.76	10,319.29	10,258.58	41.10	25.29	97.35	-4,826.25	-464.89	693.46	632.61	60.85	11.397	
15,000.00	10,190.21	10,320.55	10,259.83	41.72	25.30	97.46	-4,826.25	-464.73	721.82	660.40	61.41	11.753	
15,100.00	10,190.66	10,321.88	10,261.15	42.35	25.30	97.57	-4,826.26	-464.56	762.33	700.49	61.84	12.327	
15,200.00	10,191.11	10,323.26	10,262.52	42.98	25.31	97.69	-4,826.27	-464.38	813.19	751.06	62.13	13.088	
15,300.00	10,191.56	10,324.72	10,263.96	43.62	25.31	97.81	-4,826.28	-464.20	872.58	810.27	62.31	14.004	
15,400.00	10,192.01	10,326.24	10,265.47	44.26	25.31	97.94	-4,826.28	-464.01	938.89	876.48	62.41	15.044	
15,500.00	10,192.46	10,327.84	10,267.06	44.91	25.32	98.07	-4,826.29	-463.80	1,010.76	948.30	62.46	16.183	
15,600.00	10,192.90	10,329.52	10,268.72	45.56	25.32	98.22	-4,826.30	-463.59	1,087.08	1,024.61	62.48	17.400	
15,700.00	10,193.35	12,112.96	11,236.09	46.21	36.00	164.15	-5,772.47	-87.46	1,101.72	1,044.81	56.91	19.358	
15,800.00	10,193.80	12,220.24	11,236.69	46.87	36.99	164.34	-5,879.65	-82.86	1,100.84	1,042.52	58.32	18.877	
15,873.61	10,194.13	12,284.00	11,237.28	47.35	37.60	164.46	-5,943.35	-80.17	1,100.49	1,041.27	59.22	18.584	
15,900.00	10,194.25	12,304.80	11,237.63	47.52	37.80	164.50	-5,964.13	-79.27	1,100.55	1,041.03	59.52	18.490	
16,000.00	10,194.70	12,384.28	11,240.19	48.19	38.58	164.69	-6,043.48	-75.46	1,102.11	1,041.45	60.67	18.167	
16,100.00	10,195.15	12,518.32	11,242.59	48.85	40.01	164.96	-6,177.36	-69.61	1,102.29	1,039.92	62.37	17.674	
16,200.00	10,195.60	12,613.08	11,243.34	49.52	41.06	165.14	-6,272.02	-65.44	1,101.69	1,037.99	63.70	17.294	
16,221.12	10,195.69	12,631.81	11,243.60	49.66	41.27	165.18	-6,290.73	-64.56	1,101.67	1,037.70	63.97	17.222	
16,300.00	10,196.05	12,700.72	11,244.95	50.19	42.04	165.33	-6,359.54	-61.27	1,102.01	1,037.06	64.95	16.967	
16,400.00	10,196.50	12,789.74	11,247.50	50.87	43.07	165.51	-6,448.46	-57.65	1,103.50	1,037.27	66.23	16.663	
16,500.00	10,196.94	12,883.35	11,250.79	51.54	44.17	165.69	-6,541.93	-54.06	1,105.70	1,038.14	67.56	16.367	
16,600.00	10,197.39	12,987.29	11,254.25	52.22	45.43	165.77	-6,645.80	-52.54	1,108.32	1,039.26	69.06	16.048	
16,700.00	10,197.84	13,117.32	11,255.99	52.91	47.06	165.78	-6,775.82	-51.63	1,109.22	1,038.29	70.93	15.637	
16,800.00	10,198.29	13,228.00	11,254.63	53.59	48.49	165.70	-6,886.49	-52.04	1,107.83	1,035.21	72.63	15.254	
16,897.10	10,198.73	13,308.11	11,254.05	54.26	49.53	165.66	-6,966.59	-51.98	1,106.92	1,033.02	73.90	14.978	
16,900.00	10,198.74	13,310.40	11,254.06	54.28	49.56	165.66	-6,968.88	-51.96	1,106.92	1,032.98	73.94	14.971	
17,000.00	10,199.19	13,379.74	11,255.36	54.96	50.45	165.68	-7,038.20	-51.31	1,108.29	1,033.25	75.05	14.768	
17,100.00	10,199.64	13,456.88	11,259.11	55.65	51.46	165.74	-7,115.24	-50.41	1,112.38	1,036.15	76.23	14.593	
17,200.00	10,200.09	13,567.46	11,265.23	56.35	52.93	165.81	-7,225.65	-49.58	1,117.36	1,039.51	77.86	14.351	
17,300.00	10,200.53	13,692.10	11,269.17	57.04	54.66	165.85	-7,350.23	-48.65	1,119.95	1,040.24	79.71	14.051	
17,400.00	10,200.98	13,818.25	11,270.84	57.74	56.44	165.95	-7,476.33	-46.11	1,120.48	1,038.92	81.55	13.739	
17,500.00	10,201.43	13,929.19	11,270.06	58.43	58.05	165.99	-7,587.25	-44.18	1,119.09	1,035.87	83.23	13.446	
17,600.00	10,201.88	14,028.00	11,269.47	59.13	59.49	166.07	-7,686.03	-41.59	1,117.62	1,032.90	84.72	13.192	
17,626.43	10,202.00	14,055.10	11,269.30	59.32	59.89	166.09	-7,713.12	-40.86	1,117.22	1,032.10	85.12	13.125	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 71H - OH - OH													Offset Site Error: 0.00 usft	
Survey Program: 126-ISCSWA-GYRO-3													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		
0.00	0.00	0.00	0.00	0.00	0.00	179.92	-5,252.24	7.75	5,252.31					
100.00	100.00	71.12	71.12	0.09	0.06	179.92	-5,252.27	7.73	5,252.27	5,252.12	0.15	N/A		
200.00	200.00	179.52	179.52	0.31	0.20	179.92	-5,252.33	7.68	5,252.34	5,251.82	0.51	N/A		
300.00	300.00	299.62	299.61	0.54	0.41	179.92	-5,251.94	7.59	5,252.00	5,251.05	0.95	5,522.295		
400.00	400.00	385.61	385.61	0.76	0.56	179.92	-5,251.69	7.76	5,251.70	5,250.38	1.32	3,965.455		
500.00	500.00	489.15	489.14	0.99	0.74	179.91	-5,251.44	8.15	5,251.46	5,249.73	1.73	3,035.241		
600.00	600.00	589.53	589.53	1.21	0.92	179.91	-5,251.15	8.59	5,251.17	5,249.04	2.13	2,464.994		
700.00	700.00	685.93	685.93	1.43	1.09	179.90	-5,250.91	9.05	5,250.93	5,248.41	2.52	2,080.937		
800.00	800.00	780.01	780.01	1.66	1.25	179.90	-5,250.76	9.53	5,250.77	5,247.86	2.91	1,803.007		
885.48	885.48	860.38	860.38	1.85	1.39	179.89	-5,250.72	9.97	5,250.73	5,247.49	3.24	1,618.335		
900.00	900.00	874.26	874.25	1.88	1.42	179.89	-5,250.72	10.05	5,250.73	5,247.43	3.30	1,590.477		
1,000.00	1,000.00	967.44	967.43	2.11	1.58	179.88	-5,250.78	10.66	5,250.80	5,247.11	3.69	1,423.543		
1,100.00	1,100.00	1,064.49	1,064.48	2.33	1.75	179.88	-5,250.99	11.15	5,251.01	5,246.93	4.08	1,286.246		
1,200.00	1,200.00	1,207.98	1,207.96	2.56	2.00	179.87	-5,250.84	11.47	5,250.96	5,246.40	4.56	1,152.023		
1,300.00	1,300.00	1,309.81	1,309.79	2.78	2.18	179.88	-5,250.15	11.31	5,250.28	5,245.32	4.96	1,058.335		
1,400.00	1,400.00	1,403.50	1,403.48	3.01	2.34	179.88	-5,249.59	11.03	5,249.67	5,244.33	5.35	981.362		
1,500.00	1,500.00	1,547.00	1,546.97	3.23	2.59	179.89	-5,248.16	10.43	5,248.66	5,242.84	5.83	900.907		
1,600.00	1,600.00	1,636.00	1,635.96	3.46	2.75	179.89	-5,247.02	10.16	5,247.38	5,241.18	6.21	845.506		
1,700.00	1,700.00	1,708.67	1,708.64	3.68	2.88	179.89	-5,246.62	9.89	5,246.74	5,240.18	6.56	800.081		
1,800.00	1,800.00	1,836.03	1,835.99	3.91	3.10	179.90	-5,245.39	9.20	5,245.76	5,238.75	7.01	748.780		
1,900.00	1,900.00	1,926.38	1,926.32	4.13	3.26	179.91	-5,244.48	8.38	5,244.74	5,237.35	7.39	709.850		
2,000.00	2,000.00	2,059.39	2,059.31	4.36	3.49	179.92	-5,242.83	6.95	5,243.51	5,235.67	7.85	668.275		
2,100.00	2,100.00	2,181.40	2,181.29	4.58	3.70	179.94	-5,240.55	5.37	5,241.63	5,233.35	8.28	632.672		
2,200.00	2,200.00	2,280.92	2,280.79	4.81	3.88	179.96	-5,238.58	4.02	5,239.65	5,230.97	8.68	603.357		
2,300.00	2,300.00	2,392.65	2,392.47	5.03	4.08	179.97	-5,236.10	2.34	5,237.43	5,228.32	9.10	575.234		
2,400.00	2,400.00	2,474.93	2,474.73	5.26	4.22	179.99	-5,234.36	0.92	5,235.31	5,225.83	9.47	552.587		
2,500.00	2,500.00	2,566.42	2,566.19	5.48	4.38	-179.99	-5,232.82	-0.96	5,233.62	5,223.76	9.86	530.814		
2,600.00	2,600.00	2,679.69	2,679.40	5.71	4.58	-179.96	-5,230.57	-3.50	5,231.61	5,221.33	10.28	508.755		
2,700.00	2,700.00	2,763.11	2,762.79	5.93	4.73	-179.94	-5,229.01	-5.17	5,229.75	5,219.10	10.65	490.839		
2,800.00	2,800.00	2,875.97	2,875.61	6.15	4.93	-179.92	-5,227.11	-7.58	5,228.09	5,217.01	11.08	471.952		
2,900.00	2,900.00	3,011.31	3,010.88	6.38	5.17	-179.89	-5,223.95	-10.46	5,225.73	5,214.19	11.54	452.849		
3,000.00	3,000.00	3,115.26	3,114.78	6.60	5.35	-179.86	-5,221.20	-12.58	5,223.09	5,211.14	11.95	437.170		
3,100.00	3,100.00	3,237.28	3,236.70	6.83	5.57	-179.83	-5,217.74	-15.59	5,220.27	5,207.89	12.39	421.444		
3,200.00	3,200.00	3,368.33	3,367.64	7.05	5.81	-179.80	-5,213.13	-18.31	5,216.72	5,203.88	12.84	406.253		
3,300.00	3,300.00	3,465.29	3,464.53	7.28	5.98	-179.78	-5,209.62	-19.79	5,213.11	5,199.87	13.24	393.828		
3,400.00	3,400.00	3,569.84	3,568.99	7.50	6.17	-179.77	-5,205.74	-21.26	5,209.40	5,195.75	13.65	381.758		
3,500.00	3,500.00	3,655.34	3,654.44	7.73	6.32	-179.75	-5,202.62	-22.54	5,205.77	5,191.75	14.02	371.247		
3,600.00	3,600.00	3,758.44	3,757.46	7.95	6.51	-179.73	-5,199.13	-24.27	5,202.39	5,187.97	14.43	360.552		
3,700.00	3,700.00	3,854.83	3,853.78	8.18	6.68	-179.72	-5,195.73	-25.83	5,198.87	5,184.05	14.82	350.703		
3,800.00	3,800.00	3,952.94	3,951.83	8.40	6.86	-179.70	-5,192.38	-27.01	5,195.46	5,180.24	15.22	341.314		
3,900.00	3,900.00	4,030.72	4,029.56	8.63	7.00	-179.69	-5,189.88	-27.91	5,192.26	5,176.67	15.59	333.151		
4,000.00	4,000.00	4,111.63	4,110.43	8.85	7.14	-179.68	-5,187.62	-29.10	5,189.47	5,173.52	15.95	325.280		
4,100.00	4,100.00	4,197.43	4,196.19	9.06	7.30	90.37	-5,185.50	-30.26	5,187.01	5,170.70	16.32	317.901		
4,200.00	4,199.96	4,288.64	4,287.36	9.26	7.46	90.44	-5,183.45	-32.02	5,184.79	5,168.11	16.68	310.919		
4,229.29	4,229.23	4,318.00	4,316.71	9.32	7.51	90.46	-5,182.81	-32.62	5,184.17	5,167.38	16.79	308.839		
4,300.00	4,299.88	4,371.58	4,370.27	9.46	7.61	90.49	-5,181.74	-33.49	5,182.78	5,165.76	17.02	304.464		
4,400.00	4,399.80	4,434.07	4,432.75	9.66	7.72	90.53	-5,180.74	-33.85	5,181.27	5,163.93	17.33	298.893		
4,500.00	4,499.72	4,496.00	4,494.67	9.86	7.82	90.54	-5,180.44	-32.98	5,180.70	5,163.05	17.65	293.589		
4,518.30	4,518.01	4,496.00	4,494.67	9.90	7.82	90.54	-5,180.44	-32.98	5,180.67	5,162.99	17.68	292.970		
4,600.00	4,599.64	4,549.26	4,547.91	10.07	7.92	90.55	-5,180.61	-31.56	5,180.93	5,162.99	17.94	288.761		
4,700.00	4,699.56	4,643.90	4,642.51	10.27	8.08	90.56	-5,181.29	-28.58	5,181.65	5,163.34	18.31	282.971		
4,800.00	4,799.48	4,729.67	4,728.21	10.48	8.23	90.56	-5,181.89	-25.39	5,182.36	5,163.69	18.67	277.626		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 71H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3													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)						
4,900.00	4,899.40	4,802.02	4,800.44	10.69	8.36	90.55	-5,182.76	-21.31	5,183.55	5,164.55	19.00	272.834		
5,000.00	4,999.32	4,871.99	4,870.21	10.90	8.48	90.52	-5,184.00	-16.28	5,185.30	5,165.97	19.33	268.284		
5,100.00	5,099.24	4,943.00	4,940.97	11.11	8.60	90.49	-5,185.70	-10.52	5,187.65	5,168.00	19.66	263.883		
5,200.00	5,199.16	5,037.65	5,035.26	11.32	8.77	90.45	-5,188.30	-2.68	5,190.36	5,170.32	20.04	259.064		
5,300.00	5,299.08	5,176.09	5,173.30	11.53	9.01	90.40	-5,191.72	7.23	5,192.85	5,172.36	20.49	253.395		
5,400.00	5,399.00	5,251.51	5,248.58	11.74	9.15	90.38	-5,193.35	11.56	5,195.01	5,174.18	20.84	249.331		
5,500.00	5,498.92	5,354.47	5,351.38	11.96	9.33	90.37	-5,195.93	16.73	5,197.52	5,176.29	21.23	244.817		
5,600.00	5,598.84	5,469.02	5,465.74	12.17	9.53	90.36	-5,198.53	22.70	5,199.78	5,178.14	21.65	240.210		
5,700.00	5,698.76	5,589.19	5,585.70	12.39	9.75	90.34	-5,200.77	29.36	5,201.62	5,179.55	22.07	235.644		
5,800.00	5,798.68	5,720.82	5,717.13	12.60	9.98	90.32	-5,202.74	36.53	5,203.14	5,180.62	22.52	231.023		
5,900.00	5,898.60	5,815.02	5,811.19	12.82	10.14	90.30	-5,203.86	41.54	5,204.32	5,181.41	22.90	227.235		
6,000.00	5,998.52	5,934.05	5,930.05	13.03	10.35	90.29	-5,205.07	47.60	5,205.32	5,181.99	23.33	223.131		
6,100.00	6,098.44	6,042.00	6,037.86	13.25	10.54	90.27	-5,205.91	53.12	5,206.09	5,182.36	23.73	219.345		
6,200.00	6,198.36	6,136.86	6,132.60	13.47	10.70	90.26	-5,206.58	57.80	5,206.81	5,182.69	24.12	215.888		
6,300.00	6,298.28	6,236.64	6,232.27	13.69	10.88	90.26	-5,207.42	62.35	5,207.64	5,183.13	24.51	212.463		
6,400.00	6,398.20	6,342.10	6,337.63	13.91	11.06	90.25	-5,208.22	66.88	5,208.40	5,183.48	24.91	209.053		
6,500.00	6,498.12	6,436.00	6,431.46	14.13	11.23	90.25	-5,208.95	70.60	5,209.18	5,183.88	25.30	205.916		
6,600.00	6,598.04	6,553.33	6,548.70	14.35	11.43	90.26	-5,209.74	75.02	5,209.85	5,184.13	25.72	202.538		
6,700.00	6,697.96	6,661.96	6,657.27	14.57	11.62	90.26	-5,210.14	78.86	5,210.22	5,184.09	26.13	199.376		
6,800.00	6,797.88	6,767.63	6,762.87	14.79	11.81	90.27	-5,210.43	82.49	5,210.50	5,183.96	26.54	196.345		
6,900.00	6,897.80	6,870.97	6,866.15	15.01	11.99	90.28	-5,210.60	85.98	5,210.66	5,183.73	26.94	193.428		
7,000.00	6,997.72	6,970.55	6,965.68	15.23	12.16	90.28	-5,210.74	89.30	5,210.81	5,183.48	27.33	190.639		
7,100.00	7,097.64	7,047.99	7,043.08	15.45	12.29	90.29	-5,211.02	91.77	5,211.18	5,183.49	27.69	188.199		
7,200.00	7,197.56	7,140.53	7,135.56	15.67	12.46	90.30	-5,211.65	94.89	5,211.86	5,183.79	28.07	185.652		
7,300.00	7,297.48	7,228.97	7,223.94	15.90	12.61	90.30	-5,212.38	97.86	5,212.69	5,184.24	28.45	183.223		
7,400.00	7,397.40	7,329.00	7,323.93	16.12	12.79	90.31	-5,213.33	100.94	5,213.65	5,184.80	28.85	180.729		
7,500.00	7,497.32	7,418.00	7,412.88	16.34	12.94	90.32	-5,214.29	103.64	5,214.73	5,185.50	29.23	178.426		
7,600.00	7,597.24	7,524.55	7,519.37	16.56	13.13	90.33	-5,215.51	106.87	5,215.88	5,186.24	29.64	175.995		
7,700.00	7,697.16	7,626.39	7,621.16	16.79	13.31	90.34	-5,216.43	110.12	5,216.79	5,186.75	30.04	173.670		
7,800.00	7,797.08	7,711.53	7,706.25	17.01	13.46	90.35	-5,217.50	112.69	5,218.03	5,187.61	30.41	171.584		
7,900.00	7,897.00	7,817.17	7,811.86	17.24	13.64	90.37	-5,218.63	115.36	5,219.10	5,188.28	30.82	169.339		
8,000.00	7,996.92	7,896.72	7,891.38	17.46	13.78	90.39	-5,219.73	116.98	5,220.49	5,189.31	31.18	167.415		
8,100.00	8,096.84	7,981.46	7,976.09	17.69	13.93	90.41	-5,221.18	118.63	5,222.21	5,190.66	31.56	165.494		
8,200.00	8,196.76	8,067.70	8,062.30	17.91	14.08	90.43	-5,222.89	120.27	5,224.21	5,192.28	31.93	163.613		
8,274.07	8,270.77	8,133.05	8,127.63	18.08	14.20	90.44	-5,224.32	121.39	5,225.85	5,193.64	32.21	162.238		
8,300.00	8,296.68	8,168.08	8,162.64	18.13	14.26	90.46	-5,225.08	121.89	5,226.42	5,194.09	32.33	161.676		
8,400.00	8,396.64	8,262.52	8,257.06	18.32	14.43	90.50	-5,226.95	122.66	5,228.42	5,195.74	32.68	159.991		
8,503.36	8,500.00	8,341.78	8,336.29	18.51	14.57	-179.48	-5,228.94	123.34	5,231.00	5,197.99	33.01	158.476		
8,600.00	8,596.64	8,436.29	8,430.77	18.70	14.74	-179.49	-5,231.48	124.30	5,233.58	5,200.21	33.37	156.852		
8,700.00	8,696.64	8,543.23	8,537.66	18.92	14.93	-179.50	-5,234.34	125.49	5,236.25	5,202.48	33.77	155.061		
8,800.00	8,796.64	8,643.00	8,637.39	19.14	15.10	-179.51	-5,236.85	126.25	5,238.75	5,204.60	34.16	153.366		
8,900.00	8,896.64	8,740.84	8,735.20	19.35	15.28	-179.51	-5,239.39	126.52	5,241.35	5,206.81	34.54	151.730		
9,000.00	8,996.64	8,866.69	8,861.01	19.57	15.50	-179.52	-5,242.33	126.89	5,243.68	5,208.70	34.98	149.902		
9,100.00	9,096.64	8,958.82	8,953.13	19.78	15.66	-179.52	-5,244.36	127.09	5,245.88	5,210.52	35.36	148.372		
9,200.00	9,196.64	9,056.53	9,050.81	20.00	15.83	-179.52	-5,246.57	126.93	5,248.14	5,212.40	35.74	146.835		
9,300.00	9,296.64	9,143.41	9,137.66	20.22	15.98	-179.51	-5,248.64	126.52	5,250.53	5,214.43	36.11	145.414		
9,400.00	9,396.64	9,219.56	9,213.78	20.43	16.12	-179.51	-5,250.74	126.07	5,253.31	5,216.85	36.45	144.109		
9,500.00	9,496.64	9,294.00	9,288.18	20.65	16.25	-179.51	-5,253.16	125.67	5,256.55	5,219.76	36.80	142.853		
9,600.41	9,597.05	9,385.40	9,379.52	20.87	16.41	-179.50	-5,256.42	124.89	5,260.15	5,222.98	37.17	141.510		
9,650.00	9,646.58	9,441.04	9,435.12	20.97	16.51	0.93	-5,258.42	124.15	5,259.79	5,222.42	37.37	140.760		
9,700.00	9,696.14	9,489.41	9,483.45	21.06	16.59	0.95	-5,260.11	123.37	5,255.05	5,217.50	37.54	139.974		
9,750.00	9,744.95	9,527.31	9,521.32	21.16	16.66	0.97	-5,261.50	122.72	5,246.07	5,208.37	37.70	139.155		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 71H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,800.00	9,792.63	9,565.05	9,559.02	21.25	16.73	1.01	-5,262.96	122.05	5,232.94	5,195.08	37.85	138.238	
9,850.00	9,838.82	9,614.31	9,608.24	21.35	16.81	1.05	-5,264.91	121.29	5,215.69	5,177.66	38.03	137.151	
9,900.00	9,883.17	9,652.00	9,645.90	21.45	16.88	1.11	-5,266.38	120.88	5,194.41	5,156.23	38.18	136.054	
9,950.00	9,925.35	9,680.74	9,674.61	21.55	16.93	1.17	-5,267.57	120.62	5,169.37	5,131.06	38.31	134.937	
10,000.00	9,965.03	9,703.21	9,697.06	21.66	16.97	1.25	-5,268.59	120.40	5,140.81	5,102.38	38.42	133.792	
10,050.00	10,001.90	9,742.00	9,735.80	21.78	17.04	1.36	-5,270.53	120.00	5,108.97	5,070.41	38.56	132.481	
10,100.00	10,035.70	9,748.39	9,742.18	21.91	17.05	1.48	-5,270.87	119.93	5,073.90	5,035.27	38.64	131.316	
10,150.00	10,066.15	9,805.37	9,799.08	22.05	17.15	1.68	-5,273.74	119.15	5,035.86	4,997.06	38.80	129.789	
10,200.00	10,093.04	9,949.00	9,942.57	22.22	17.41	2.07	-5,278.70	115.43	4,994.49	4,955.38	39.11	127.697	
10,250.00	10,116.15	9,962.05	9,955.61	22.41	17.43	2.45	-5,279.00	114.93	4,950.76	4,911.58	39.18	126.359	
10,300.00	10,135.31	9,967.07	9,960.62	22.63	17.44	2.99	-5,279.14	114.73	4,905.18	4,865.95	39.23	125.047	
10,350.00	10,150.38	9,979.00	9,972.53	22.87	17.46	3.88	-5,279.54	114.25	4,858.06	4,818.78	39.28	123.681	
10,400.00	10,161.23	9,979.00	9,972.53	23.13	17.46	5.46	-5,279.54	114.25	4,809.66	4,770.35	39.30	122.375	
10,450.00	10,167.79	9,979.00	9,972.53	23.41	17.46	9.24	-5,279.54	114.25	4,760.37	4,721.05	39.32	121.067	
10,497.84	10,170.00	9,979.00	9,972.53	23.70	17.46	26.28	-5,279.54	114.25	4,712.72	4,673.39	39.33	119.821	
10,500.00	10,170.01	9,979.00	9,972.53	23.71	17.46	26.28	-5,279.54	114.25	4,710.56	4,671.23	39.33	119.762	
10,600.00	10,170.46	9,979.00	9,972.53	28.14	17.46	26.28	-5,279.54	114.25	4,610.67	4,565.04	45.63	101.045	
10,700.00	10,170.91	9,979.00	9,972.53	28.23	17.46	26.28	-5,279.54	114.25	4,510.78	4,465.06	45.72	98.652	
10,800.00	10,171.36	9,979.00	9,972.53	28.32	17.46	26.28	-5,279.54	114.25	4,410.90	4,365.08	45.82	96.267	
10,900.00	10,171.81	9,979.00	9,972.53	28.41	17.46	26.28	-5,279.54	114.25	4,311.02	4,265.10	45.92	93.890	
11,000.00	10,172.26	9,979.00	9,972.53	28.51	17.46	26.28	-5,279.54	114.25	4,211.15	4,165.14	46.01	91.520	
11,100.00	10,172.71	9,979.00	9,972.53	28.60	17.46	26.28	-5,279.54	114.25	4,111.28	4,065.17	46.11	89.157	
11,200.00	10,173.15	9,979.00	9,972.53	28.70	17.46	26.28	-5,279.54	114.25	4,011.42	3,965.21	46.21	86.803	
11,300.00	10,173.60	9,979.00	9,972.53	28.79	17.46	26.28	-5,279.54	114.25	3,911.57	3,865.26	46.31	84.457	
11,400.00	10,174.05	9,979.00	9,972.53	28.89	17.46	26.28	-5,279.54	114.25	3,811.73	3,765.31	46.42	82.118	
11,500.00	10,174.50	9,979.00	9,972.53	28.99	17.46	26.28	-5,279.54	114.25	3,711.89	3,665.37	46.52	79.788	
11,600.00	10,174.95	9,979.00	9,972.53	29.09	17.46	26.28	-5,279.54	114.25	3,612.07	3,565.44	46.63	77.467	
11,700.00	10,175.40	9,979.00	9,972.53	29.19	17.46	26.28	-5,279.54	114.25	3,512.25	3,465.52	46.73	75.154	
11,800.00	10,175.85	9,979.00	9,972.53	29.29	17.46	26.28	-5,279.54	114.25	3,412.45	3,365.60	46.84	72.849	
11,900.00	10,176.30	9,979.00	9,972.53	29.40	17.46	26.28	-5,279.54	114.25	3,312.65	3,265.70	46.95	70.553	
12,000.00	10,176.74	9,979.00	9,972.53	29.51	17.46	26.28	-5,279.54	114.25	3,212.87	3,165.81	47.06	68.266	
12,100.00	10,177.19	9,979.00	9,972.53	29.61	17.46	26.28	-5,279.54	114.25	3,113.10	3,065.93	47.18	65.988	
12,200.00	10,177.64	9,979.00	9,972.53	29.73	17.46	26.28	-5,279.54	114.25	3,013.35	2,966.06	47.29	63.719	
12,300.00	10,178.09	9,991.10	9,984.61	29.84	17.48	27.90	-5,280.11	113.73	2,913.48	2,866.07	47.41	61.454	
12,400.00	10,178.54	9,992.21	9,985.72	29.96	17.48	28.06	-5,280.18	113.68	2,813.73	2,766.21	47.53	59.203	
12,500.00	10,178.99	9,993.38	9,986.89	30.08	17.48	28.23	-5,280.25	113.63	2,714.01	2,666.36	47.65	56.962	
12,600.00	10,179.44	9,994.63	9,988.13	30.21	17.49	28.41	-5,280.32	113.57	2,614.30	2,566.53	47.77	54.730	
12,700.00	10,179.89	9,995.95	9,989.45	30.35	17.49	28.60	-5,280.41	113.51	2,514.61	2,466.72	47.89	52.508	
12,800.00	10,180.34	10,008.00	10,001.45	30.51	17.51	30.47	-5,281.30	112.96	2,415.05	2,367.04	48.01	50.300	
12,900.00	10,180.78	10,008.00	10,001.45	30.70	17.51	30.47	-5,281.30	112.96	2,315.38	2,267.24	48.14	48.097	
13,000.00	10,181.23	10,008.00	10,001.45	30.95	17.51	30.47	-5,281.30	112.96	2,215.73	2,167.46	48.27	45.904	
13,100.00	10,181.68	10,008.00	10,001.45	31.26	17.51	30.47	-5,281.30	112.96	2,116.12	2,067.72	48.40	43.720	
13,200.00	10,182.13	10,008.00	10,001.45	31.65	17.51	30.47	-5,281.30	112.96	2,016.55	1,968.02	48.54	41.547	
13,300.00	10,182.58	10,008.00	10,001.45	32.09	17.51	30.47	-5,281.30	112.96	1,917.02	1,868.35	48.68	39.383	
13,400.00	10,183.03	10,008.00	10,001.45	32.56	17.51	30.47	-5,281.30	112.96	1,817.55	1,768.73	48.82	37.230	
13,500.00	10,183.48	10,008.00	10,001.45	33.06	17.51	30.47	-5,281.30	112.96	1,718.13	1,669.17	48.97	35.087	
13,600.00	10,183.93	10,008.00	10,001.45	33.57	17.51	30.47	-5,281.30	112.96	1,618.79	1,569.67	49.12	32.955	
13,700.00	10,184.38	10,008.00	10,001.45	34.10	17.51	30.47	-5,281.30	112.96	1,519.54	1,470.25	49.28	30.833	
13,800.00	10,184.82	10,008.00	10,001.45	34.64	17.51	30.47	-5,281.30	112.96	1,420.39	1,370.93	49.45	28.722	
13,900.00	10,185.27	10,021.02	10,014.39	35.19	17.53	32.74	-5,282.53	112.29	1,321.14	1,271.54	49.60	26.635	
14,000.00	10,185.72	10,024.42	10,017.77	35.74	17.54	33.39	-5,282.91	112.09	1,222.14	1,172.36	49.78	24.551	
14,100.00	10,186.17	10,038.00	10,031.21	36.31	17.56	36.17	-5,284.60	111.23	1,123.40	1,073.47	49.94	22.496	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit (Offsets) - 71H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 126-ISCWSA-GYRO-3												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.00	10,186.62	10,038.00	10,031.21	36.89	17.56	36.17	-5,284.60	111.23	1,024.62	974.47	50.15	20.431	
14,300.00	10,187.07	10,038.00	10,031.21	37.47	17.56	36.17	-5,284.60	111.23	926.11	875.71	50.39	18.378	
14,400.00	10,187.52	10,038.00	10,031.21	38.06	17.56	36.17	-5,284.60	111.23	827.94	777.27	50.67	16.340	
14,500.00	10,187.97	10,049.24	10,042.30	38.65	17.59	38.78	-5,286.25	110.41	730.08	679.16	50.92	14.338	
14,600.00	10,188.42	10,056.63	10,049.57	39.26	17.60	40.65	-5,287.45	109.81	632.75	581.50	51.25	12.347	
14,700.00	10,188.86	10,068.00	10,060.71	39.86	17.62	43.80	-5,289.48	108.81	536.16	484.54	51.62	10.387	
14,800.00	10,189.31	10,075.97	10,068.49	40.48	17.64	46.22	-5,291.02	108.05	440.66	388.49	52.17	8.446	
14,900.00	10,189.76	10,088.86	10,081.03	41.10	17.66	50.50	-5,293.71	106.71	347.02	294.10	52.92	6.557	
15,000.00	10,190.21	10,103.53	10,095.20	41.72	17.69	55.93	-5,297.09	105.04	256.99	202.81	54.19	4.743	
15,100.00	10,190.66	10,121.42	10,112.31	42.35	17.73	63.32	-5,301.83	102.83	175.71	119.06	56.65	3.102	
15,200.00	10,191.11	10,147.45	10,136.81	42.98	17.78	75.13	-5,309.93	99.40	120.16	59.67	60.49	1.987	
15,241.52	10,191.30	10,161.43	10,149.79	43.25	17.81	81.70	-5,314.78	97.54	113.70	52.63	61.06	1.862 CC, ES, SF	
15,300.00	10,191.56	10,185.23	10,171.65	43.62	17.87	92.68	-5,323.69	94.51	125.87	66.12	59.76	2.106	
15,400.00	10,192.01	10,244.58	10,224.44	44.26	18.01	115.42	-5,349.94	88.07	182.91	124.72	58.19	3.143	
15,500.00	10,192.46	10,344.88	10,305.77	44.91	18.31	137.42	-5,408.07	82.87	250.62	190.49	60.13	4.168	
15,600.00	10,192.90	10,512.55	10,410.80	45.56	19.00	151.89	-5,537.68	81.58	307.19	242.78	64.41	4.769	
15,700.00	10,193.35	10,687.80	10,476.53	46.21	20.03	157.28	-5,699.37	83.64	342.35	275.23	67.11	5.101	
15,800.00	10,193.80	10,844.04	10,496.15	46.87	21.20	158.22	-5,854.10	83.14	353.16	284.71	68.44	5.160	
15,900.00	10,194.25	10,949.18	10,500.12	47.52	22.11	157.98	-5,959.14	80.87	357.32	287.99	69.33	5.154	
16,000.00	10,194.70	11,051.50	10,502.51	48.19	23.07	157.44	-6,061.36	77.21	360.71	290.47	70.24	5.135	
16,100.00	10,195.15	11,151.94	10,503.29	48.85	24.08	156.66	-6,161.69	72.44	363.15	291.96	71.19	5.101	
16,200.00	10,195.60	11,252.21	10,505.29	49.52	25.16	156.11	-6,261.86	68.69	366.36	294.20	72.16	5.077	
16,300.00	10,196.05	11,360.26	10,506.73	50.19	26.38	155.83	-6,369.89	67.10	368.07	294.87	73.20	5.028	
16,400.00	10,196.50	11,464.18	10,506.05	50.87	27.60	155.42	-6,473.79	65.51	367.99	293.74	74.25	4.956	
16,425.86	10,196.61	11,488.19	10,505.96	51.04	27.90	155.37	-6,497.79	65.41	367.92	293.41	74.51	4.938	
16,500.00	10,196.94	11,556.49	10,506.67	51.54	28.74	155.34	-6,566.10	65.50	368.51	293.28	75.23	4.898	
16,600.00	10,197.39	11,655.26	10,508.46	52.22	29.99	155.27	-6,664.84	65.14	370.20	293.93	76.28	4.853	
16,700.00	10,197.84	11,751.99	10,510.07	52.91	31.24	154.87	-6,761.52	62.45	372.79	295.42	77.36	4.819	
16,800.00	10,198.29	11,858.32	10,511.27	53.59	32.66	154.50	-6,867.81	60.17	374.63	296.04	78.59	4.767	
16,900.00	10,198.74	11,963.93	10,512.20	54.28	34.09	154.50	-6,973.42	60.73	375.11	295.34	79.77	4.702	
17,000.00	10,199.19	12,070.70	10,510.98	54.96	35.57	154.35	-7,080.18	61.24	373.78	292.77	81.01	4.614	
17,100.00	10,199.64	12,169.05	10,508.92	55.65	36.96	154.14	-7,178.50	61.71	371.60	289.41	82.19	4.521	
17,200.00	10,200.09	12,269.40	10,507.83	56.35	38.39	154.16	-7,278.84	63.29	369.86	286.48	83.38	4.436	
17,300.00	10,200.53	12,373.88	10,505.80	57.04	39.91	154.17	-7,383.27	65.36	367.16	282.53	84.63	4.339	
17,400.00	10,200.98	12,466.16	10,504.50	57.74	41.26	154.20	-7,475.53	67.09	365.00	279.26	85.74	4.257	
17,428.73	10,201.11	12,491.38	10,504.65	57.94	41.64	154.26	-7,500.74	67.63	364.85	278.83	86.03	4.241	
17,500.00	10,201.43	12,556.50	10,506.29	58.43	42.60	154.51	-7,565.82	69.24	365.63	278.91	86.73	4.216	
17,600.00	10,201.88	12,659.56	10,508.97	59.13	44.14	154.86	-7,668.82	71.41	367.00	279.08	87.92	4.174	
17,626.43	10,202.00	12,687.43	10,509.45	59.32	44.56	154.93	-7,696.68	71.95	367.17	278.92	88.25	4.161	

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 111H - OH - Plan #2													Offset Site Error:	0.00 usft
Survey Program:		0-LEAM MWD+HDGM											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	89.68	0.17	30.00	30.00					
100.00	100.00	99.80	99.80	0.09	0.09	89.68	0.17	30.00	30.00	29.83	0.17	174.651		
200.00	200.00	199.80	199.80	0.31	0.31	89.68	0.17	30.00	30.00	29.38	0.62	48.308		
300.00	300.00	299.80	299.80	0.54	0.54	89.68	0.17	30.00	30.00	28.93	1.07	28.023		
400.00	400.00	399.80	399.80	0.76	0.76	89.68	0.17	30.00	30.00	28.48	1.52	19.736		
500.00	500.00	499.80	499.80	0.99	0.98	89.68	0.17	30.00	30.00	28.03	1.97	15.232		
600.00	600.00	599.80	599.80	1.21	1.21	89.68	0.17	30.00	30.00	27.58	2.42	12.401		
700.00	700.00	699.80	699.80	1.43	1.43	89.68	0.17	30.00	30.00	27.13	2.87	10.458		
800.00	800.00	799.80	799.80	1.66	1.66	89.68	0.17	30.00	30.00	26.68	3.32	9.041		
900.00	900.00	899.80	899.80	1.88	1.88	89.68	0.17	30.00	30.00	26.23	3.77	7.962		
1,000.00	1,000.00	999.80	999.80	2.11	2.11	89.68	0.17	30.00	30.00	25.78	4.22	7.114		
1,100.00	1,100.00	1,099.80	1,099.80	2.33	2.33	89.68	0.17	30.00	30.00	25.33	4.67	6.428		
1,200.00	1,200.00	1,199.80	1,199.80	2.56	2.56	89.68	0.17	30.00	30.00	24.88	5.12	5.864		
1,300.00	1,300.00	1,299.80	1,299.80	2.78	2.78	89.68	0.17	30.00	30.00	24.43	5.57	5.390		
1,400.00	1,400.00	1,399.80	1,399.80	3.01	3.01	89.68	0.17	30.00	30.00	23.99	6.02	4.987		
1,500.00	1,500.00	1,499.80	1,499.80	3.23	3.23	89.68	0.17	30.00	30.00	23.54	6.46	4.640		
1,600.00	1,600.00	1,599.80	1,599.80	3.46	3.46	89.68	0.17	30.00	30.00	23.09	6.91	4.339		
1,700.00	1,700.00	1,699.80	1,699.80	3.68	3.68	89.68	0.17	30.00	30.00	22.64	7.36	4.074		
1,800.00	1,800.00	1,799.80	1,799.80	3.91	3.91	89.68	0.17	30.00	30.00	22.19	7.81	3.840		
1,900.00	1,900.00	1,899.80	1,899.80	4.13	4.13	89.68	0.17	30.00	30.00	21.74	8.26	3.631		
2,000.00	2,000.00	1,999.80	1,999.80	4.36	4.36	89.68	0.17	30.00	30.00	21.29	8.71	3.443		
2,100.00	2,100.00	2,099.80	2,099.80	4.58	4.58	89.68	0.17	30.00	30.00	20.84	9.16	3.274		
2,200.00	2,200.00	2,199.80	2,199.80	4.81	4.81	89.68	0.17	30.00	30.00	20.39	9.61	3.121		
2,300.00	2,300.00	2,299.80	2,299.80	5.03	5.03	89.68	0.17	30.00	30.00	19.94	10.06	2.982		
2,400.00	2,400.00	2,399.80	2,399.80	5.26	5.26	89.68	0.17	30.00	30.00	19.49	10.51	2.854		
2,500.00	2,500.00	2,499.80	2,499.80	5.48	5.48	89.68	0.17	30.00	30.00	19.04	10.96	2.737 CC, ES		
2,600.00	2,600.00	2,599.35	2,599.34	5.71	5.70	88.83	0.63	30.73	30.74	19.34	11.40	2.696 SF		
2,700.00	2,700.00	2,698.84	2,698.80	5.93	5.91	86.50	2.01	32.92	32.99	21.16	11.83	2.788		
2,800.00	2,800.00	2,798.20	2,798.07	6.15	6.12	83.27	4.31	36.56	36.85	24.59	12.26	3.006		
2,900.00	2,900.00	2,898.01	2,897.73	6.38	6.34	80.11	7.16	41.07	41.74	29.04	12.70	3.287		
3,000.00	3,000.00	2,997.87	2,997.45	6.60	6.56	77.61	10.02	45.59	46.73	33.60	13.14	3.558		
3,100.00	3,100.00	3,097.72	3,097.16	6.83	6.78	75.60	12.87	50.11	51.80	38.23	13.57	3.816		
3,200.00	3,200.00	3,197.58	3,196.87	7.05	7.00	73.94	15.72	54.62	56.92	42.90	14.01	4.061		
3,300.00	3,300.00	3,297.44	3,296.59	7.28	7.22	72.56	18.58	59.14	62.07	47.62	14.46	4.294		
3,400.00	3,400.00	3,397.29	3,396.30	7.50	7.44	71.40	21.43	63.66	67.26	52.37	14.90	4.515		
3,500.00	3,500.00	3,497.15	3,496.02	7.73	7.66	70.40	24.28	68.18	72.47	57.13	15.34	4.725		
3,600.00	3,600.00	3,597.01	3,595.73	7.95	7.89	69.53	27.14	72.70	77.70	61.92	15.78	4.924		
3,700.00	3,700.00	3,696.87	3,695.44	8.18	8.11	68.77	29.99	77.22	82.95	66.72	16.23	5.112		
3,800.00	3,800.00	3,796.72	3,795.16	8.40	8.34	68.11	32.84	81.73	88.21	71.54	16.67	5.292		
3,900.00	3,900.00	3,896.58	3,894.87	8.63	8.57	67.52	35.70	86.25	93.48	76.36	17.11	5.462		
4,000.00	4,000.00	3,996.44	3,994.58	8.85	8.79	66.99	38.55	90.77	98.76	81.20	17.56	5.624		
4,100.00	4,100.00	4,096.33	4,094.33	9.06	9.02	-23.66	41.41	95.29	103.24	85.25	17.99	5.739		
4,200.00	4,199.96	4,196.27	4,194.13	9.26	9.25	-24.65	44.26	99.81	106.15	87.75	18.41	5.767		
4,229.29	4,229.23	4,225.55	4,223.37	9.32	9.32	-25.00	45.10	101.14	106.71	88.18	18.53	5.759		
4,300.00	4,299.88	4,296.22	4,293.94	9.46	9.48	-25.89	47.12	104.34	107.92	89.09	18.83	5.732		
4,400.00	4,399.80	4,396.18	4,393.76	9.66	9.71	-27.12	49.98	108.86	109.66	90.42	19.25	5.697		
4,500.00	4,499.72	4,496.14	4,493.57	9.86	9.94	-28.30	52.83	113.38	111.46	91.79	19.67	5.666		
4,600.00	4,599.64	4,596.10	4,593.39	10.07	10.17	-29.45	55.69	117.90	113.30	93.20	20.10	5.637		
4,700.00	4,699.56	4,696.05	4,693.20	10.27	10.40	-30.55	58.54	122.43	115.19	94.66	20.52	5.612		
4,800.00	4,799.48	4,796.01	4,793.01	10.48	10.63	-31.63	61.40	126.95	117.11	96.16	20.95	5.589		
4,900.00	4,899.40	4,895.97	4,892.83	10.69	10.87	-32.67	64.26	131.47	119.08	97.70	21.38	5.569		
5,000.00	4,999.32	4,995.93	4,992.64	10.90	11.10	-33.67	67.11	135.99	121.08	99.27	21.82	5.550		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 111H - OH - Plan #2												Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,099.24	5,095.89	5,092.46	11.11	11.33	-34.64	69.97	140.52	123.12	100.88	22.25	5.534	
5,200.00	5,199.16	5,195.84	5,192.27	11.32	11.56	-35.58	72.83	145.04	125.20	102.52	22.68	5.520	
5,300.00	5,299.08	5,295.80	5,292.09	11.53	11.80	-36.49	75.68	149.56	127.30	104.19	23.12	5.507	
5,400.00	5,399.00	5,395.76	5,391.90	11.74	12.03	-37.37	78.54	154.09	129.44	105.89	23.55	5.495	
5,500.00	5,498.92	5,495.72	5,491.72	11.96	12.26	-38.22	81.40	158.61	131.61	107.62	23.99	5.486	
5,600.00	5,598.84	5,595.67	5,591.53	12.17	12.50	-39.04	84.25	163.13	133.80	109.37	24.43	5.477	
5,700.00	5,698.76	5,695.63	5,691.35	12.39	12.73	-39.83	87.11	167.65	136.03	111.16	24.87	5.469	
5,800.00	5,798.68	5,795.59	5,791.16	12.60	12.96	-40.60	89.97	172.18	138.27	112.96	25.31	5.463	
5,900.00	5,898.60	5,895.55	5,890.97	12.82	13.20	-41.35	92.82	176.70	140.55	114.79	25.75	5.457	
6,000.00	5,998.52	5,995.51	5,990.79	13.03	13.43	-42.07	95.68	181.22	142.84	116.64	26.20	5.453	
6,100.00	6,098.44	6,095.46	6,090.60	13.25	13.67	-42.77	98.54	185.75	145.16	118.52	26.64	5.449	
6,200.00	6,198.36	6,195.42	6,190.42	13.47	13.90	-43.44	101.39	190.27	147.49	120.41	27.08	5.446	
6,300.00	6,298.28	6,295.38	6,290.23	13.69	14.14	-44.10	104.25	194.79	149.85	122.32	27.53	5.443	
6,400.00	6,398.20	6,395.34	6,390.05	13.91	14.37	-44.73	107.10	199.31	152.23	124.25	27.98	5.441	
6,500.00	6,498.12	6,495.29	6,489.86	14.13	14.61	-45.35	109.96	203.84	154.62	126.20	28.42	5.440	
6,600.00	6,598.04	6,595.25	6,589.68	14.35	14.84	-45.94	112.82	208.36	157.03	128.16	28.87	5.439	
6,700.00	6,697.96	6,695.21	6,689.49	14.57	15.08	-46.52	115.67	212.88	159.46	130.14	29.32	5.439	
6,800.00	6,797.88	6,797.86	6,792.03	14.79	15.29	-47.17	118.15	216.81	161.10	131.34	29.76	5.414	
6,900.00	6,897.80	6,900.62	6,894.75	15.01	15.48	-47.99	119.65	219.18	161.04	130.87	30.17	5.339	
7,000.00	6,997.72	7,003.32	6,997.45	15.23	15.66	-49.00	120.17	220.00	159.29	128.72	30.57	5.211	
7,100.00	7,097.64	7,103.31	7,097.44	15.45	15.85	-50.10	120.17	220.00	156.69	125.70	30.99	5.056	
7,200.00	7,197.56	7,203.23	7,197.36	15.67	16.07	-51.24	120.17	220.00	154.16	122.72	31.44	4.903	
7,300.00	7,297.48	7,303.15	7,297.28	15.90	16.28	-52.42	120.17	220.00	151.68	119.80	31.89	4.757	
7,400.00	7,397.40	7,403.07	7,397.20	16.12	16.50	-53.63	120.17	220.00	149.28	116.94	32.33	4.617	
7,500.00	7,497.32	7,502.99	7,497.12	16.34	16.71	-54.89	120.17	220.00	146.94	114.16	32.78	4.482	
7,600.00	7,597.24	7,602.91	7,597.04	16.56	16.93	-56.19	120.17	220.00	144.67	111.44	33.23	4.353	
7,700.00	7,697.16	7,702.83	7,696.96	16.79	17.14	-57.52	120.17	220.00	142.48	108.80	33.68	4.230	
7,800.00	7,797.08	7,802.75	7,796.88	17.01	17.36	-58.90	120.17	220.00	140.37	106.24	34.13	4.112	
7,900.00	7,897.00	7,902.67	7,896.80	17.24	17.57	-60.32	120.17	220.00	138.35	103.76	34.59	4.000	
8,000.00	7,996.92	8,002.59	7,996.72	17.46	17.79	-61.78	120.17	220.00	136.41	101.37	35.04	3.893	
8,100.00	8,096.84	8,102.51	8,096.64	17.69	18.01	-63.28	120.17	220.00	134.56	99.07	35.49	3.791	
8,200.00	8,196.76	8,202.43	8,196.56	17.91	18.22	-64.82	120.17	220.00	132.81	96.86	35.95	3.695	
8,274.07	8,270.77	8,276.44	8,270.57	18.08	18.39	-65.98	120.17	220.00	131.58	95.29	36.28	3.626	
8,300.00	8,296.68	8,302.35	8,296.48	18.13	18.44	-66.37	120.17	220.00	131.18	94.78	36.40	3.604	
8,400.00	8,396.64	8,402.32	8,396.44	18.32	18.66	-67.44	120.17	220.00	130.13	93.32	36.81	3.535	
8,503.36	8,500.00	8,505.67	8,499.80	18.51	18.88	22.18	120.17	220.00	129.78	92.54	37.23	3.485	
8,600.00	8,596.64	8,602.31	8,596.44	18.70	19.09	22.18	120.17	220.00	129.78	92.14	37.64	3.448	
8,700.00	8,696.64	8,702.31	8,696.44	18.92	19.31	22.18	120.17	220.00	129.78	91.70	38.07	3.409	
8,800.00	8,796.64	8,802.31	8,796.44	19.14	19.53	22.18	120.17	220.00	129.78	91.27	38.51	3.370	
8,900.00	8,896.64	8,902.31	8,896.44	19.35	19.75	22.18	120.17	220.00	129.78	90.83	38.94	3.332	
9,000.00	8,996.64	9,002.31	8,996.44	19.57	19.97	22.18	120.17	220.00	129.78	90.40	39.38	3.295	
9,100.00	9,096.64	9,102.31	9,096.44	19.78	20.19	22.18	120.17	220.00	129.78	89.96	39.82	3.259	
9,200.00	9,196.64	9,202.31	9,196.44	20.00	20.40	22.18	120.17	220.00	129.78	89.52	40.25	3.224	
9,300.00	9,296.64	9,302.31	9,296.44	20.22	20.62	22.18	120.17	220.00	129.78	89.09	40.69	3.189	
9,400.00	9,396.64	9,402.31	9,396.44	20.43	20.84	22.18	120.17	220.00	129.78	88.65	41.13	3.155	
9,500.00	9,496.64	9,502.31	9,496.44	20.65	21.06	22.18	120.17	220.00	129.78	88.21	41.56	3.122	
9,600.41	9,597.05	9,602.72	9,596.85	20.87	21.28	22.18	120.17	220.00	129.78	87.77	42.00	3.090	
9,650.00	9,646.58	9,652.25	9,646.38	20.97	21.39	-157.68	120.17	220.00	131.76	89.54	42.22	3.121	
9,700.00	9,696.14	9,701.81	9,695.94	21.06	21.50	-158.48	120.17	220.00	137.79	95.36	42.43	3.248	
9,750.00	9,744.95	9,750.62	9,744.75	21.16	21.60	-159.65	120.17	220.00	147.89	105.25	42.64	3.468	
9,800.00	9,792.63	9,798.30	9,792.43	21.25	21.71	-161.01	120.17	220.00	162.09	119.23	42.86	3.782	
9,850.00	9,838.82	9,844.49	9,838.62	21.35	21.81	-162.39	120.17	220.00	180.35	137.29	43.06	4.188	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 111H - OH - Plan #2													Offset Site Error: 0.00 usft	
Survey Program: O-LEAM MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,883.17	9,888.84	9,882.97	21.45	21.91	-163.66	120.17	220.00	202.60	159.33	43.27	4.683		
9,950.00	9,925.35	9,931.02	9,925.15	21.55	22.00	-164.75	120.17	220.00	228.70	185.24	43.46	5.263		
10,000.00	9,965.03	9,970.70	9,964.83	21.66	22.09	-165.61	120.17	220.00	258.45	214.82	43.63	5.923		
10,050.00	10,001.90	10,007.57	10,001.70	21.78	22.17	-166.22	120.17	220.00	291.63	247.83	43.80	6.659		
10,100.00	10,035.70	10,041.37	10,035.50	21.91	22.24	-166.55	120.17	220.00	327.98	284.03	43.95	7.463		
10,150.00	10,066.15	10,071.82	10,065.95	22.05	22.31	-166.57	120.17	220.00	367.20	323.12	44.08	8.330		
10,200.00	10,093.04	10,124.88	10,118.99	22.22	22.41	-167.51	118.98	220.01	408.64	364.48	44.16	9.253		
10,250.00	10,116.15	10,242.37	10,234.63	22.41	22.60	-170.22	99.48	220.15	448.44	405.10	43.34	10.347		
10,300.00	10,135.31	10,435.24	10,408.48	22.63	22.87	-172.75	18.09	220.75	482.41	442.90	39.50	12.212		
10,350.00	10,150.38	10,758.17	10,609.56	22.87	23.43	-174.24	-229.14	222.57	501.45	471.65	29.80	16.827		
10,400.00	10,161.23	11,010.15	10,654.91	23.13	24.46	-174.14	-475.00	224.38	496.40	469.72	26.68	18.607		
10,450.00	10,167.79	11,059.67	10,654.68	23.41	24.74	-174.13	-524.51	224.74	489.64	462.77	26.87	18.221		
10,497.84	10,170.00	11,107.43	10,654.45	23.70	25.01	-174.12	-572.28	225.09	487.22	460.16	27.06	18.004		
10,500.00	10,170.01	11,109.59	10,654.44	23.71	25.03	-174.12	-574.44	225.11	487.20	460.13	27.07	17.997		
10,600.00	10,170.46	11,209.59	10,653.97	28.14	25.68	-174.11	-674.43	225.85	486.29	458.98	27.31	17.808		
10,700.00	10,170.91	11,309.58	10,653.51	28.23	26.43	-174.10	-774.42	226.58	485.37	457.74	27.63	17.568		
10,800.00	10,171.36	11,409.58	10,653.04	28.32	27.25	-174.09	-874.41	227.32	484.46	456.43	28.03	17.284		
10,900.00	10,171.81	11,509.57	10,652.57	28.41	28.14	-174.08	-974.40	228.05	483.55	455.04	28.51	16.962		
11,000.00	10,172.26	11,609.57	10,652.10	28.51	29.10	-174.07	-1,074.40	228.79	482.63	453.57	29.06	16.609		
11,100.00	10,172.71	11,709.56	10,651.63	28.60	30.12	-174.05	-1,174.39	229.53	481.72	452.04	29.68	16.230		
11,200.00	10,173.15	11,809.56	10,651.16	28.70	31.19	-174.04	-1,274.38	230.26	480.81	450.44	30.37	15.833		
11,300.00	10,173.60	11,909.56	10,650.69	28.79	32.31	-174.03	-1,374.37	231.00	479.90	448.78	31.12	15.423		
11,400.00	10,174.05	12,009.55	10,650.22	28.89	33.47	-174.02	-1,474.36	231.73	478.98	447.06	31.92	15.005		
11,500.00	10,174.50	12,109.55	10,649.75	28.99	34.67	-174.01	-1,574.36	232.47	478.07	445.29	32.78	14.585		
11,600.00	10,174.95	12,209.54	10,649.29	29.09	35.90	-174.00	-1,674.35	233.20	477.16	443.47	33.69	14.165		
11,700.00	10,175.40	12,309.54	10,648.82	29.19	37.17	-173.99	-1,774.34	233.94	476.25	441.61	34.64	13.749		
11,800.00	10,175.85	12,409.54	10,648.35	29.29	38.46	-173.97	-1,874.33	234.68	475.33	439.70	35.63	13.339		
11,900.00	10,176.30	12,509.53	10,647.88	29.40	39.78	-173.96	-1,974.32	235.41	474.42	437.75	36.67	12.939		
12,000.00	10,176.74	12,609.53	10,647.41	29.51	41.12	-173.95	-2,074.32	236.15	473.51	435.77	37.73	12.548		
12,100.00	10,177.19	12,709.52	10,646.94	29.61	42.48	-173.94	-2,174.31	236.88	472.60	433.76	38.83	12.169		
12,200.00	10,177.64	12,809.52	10,646.47	29.73	43.87	-173.93	-2,274.30	237.62	471.68	431.72	39.96	11.803		
12,300.00	10,178.09	12,909.51	10,646.00	29.84	45.26	-173.91	-2,374.29	238.35	470.77	429.65	41.12	11.449		
12,400.00	10,178.54	13,009.51	10,645.53	29.96	46.68	-173.90	-2,474.28	239.09	469.86	427.56	42.30	11.107		
12,500.00	10,178.99	13,109.51	10,645.07	30.08	48.11	-173.89	-2,574.28	239.83	468.95	425.44	43.50	10.779		
12,600.00	10,179.44	13,209.50	10,644.60	30.21	49.55	-173.88	-2,674.27	240.56	468.03	423.30	44.73	10.464		
12,700.00	10,179.89	13,309.50	10,644.13	30.35	51.00	-173.87	-2,774.26	241.30	467.12	421.15	45.97	10.161		
12,800.00	10,180.34	13,409.49	10,643.66	30.51	52.47	-173.85	-2,874.25	242.03	466.21	418.97	47.23	9.870		
12,900.00	10,180.78	13,509.49	10,643.19	30.70	53.94	-173.84	-2,974.24	242.77	465.30	416.78	48.51	9.591		
13,000.00	10,181.23	13,609.48	10,642.72	30.95	55.43	-173.83	-3,074.24	243.50	464.38	414.58	49.80	9.324		
13,100.00	10,181.68	13,709.48	10,642.25	31.26	56.92	-173.82	-3,174.23	244.24	463.47	412.36	51.11	9.068		
13,200.00	10,182.13	13,809.48	10,641.78	31.65	58.42	-173.80	-3,274.22	244.98	462.56	410.13	52.43	8.823		
13,300.00	10,182.58	13,909.47	10,641.31	32.09	59.93	-173.79	-3,374.21	245.71	461.65	407.89	53.76	8.587		
13,400.00	10,183.03	14,009.47	10,640.85	32.56	61.44	-173.78	-3,474.20	246.45	460.73	405.63	55.10	8.361		
13,500.00	10,183.48	14,109.46	10,640.38	33.06	62.96	-173.77	-3,574.20	247.18	459.82	403.37	56.45	8.145		
13,600.00	10,183.93	14,209.46	10,639.91	33.57	64.49	-173.75	-3,674.19	247.92	458.91	401.09	57.82	7.938		
13,700.00	10,184.38	14,309.46	10,639.44	34.10	66.02	-173.74	-3,774.18	248.65	458.00	398.81	59.19	7.738		
13,800.00	10,184.82	14,409.45	10,638.97	34.64	67.56	-173.73	-3,874.17	249.39	457.09	396.52	60.56	7.547		
13,900.00	10,185.27	14,509.45	10,638.50	35.19	69.10	-173.72	-3,974.16	250.13	456.17	394.22	61.95	7.364		
14,000.00	10,185.72	14,609.44	10,638.03	35.74	70.64	-173.70	-4,074.16	250.86	455.26	391.92	63.34	7.187		
14,100.00	10,186.17	14,709.44	10,637.56	36.31	72.19	-173.69	-4,174.15	251.60	454.35	389.61	64.74	7.018		
14,200.00	10,186.62	14,809.43	10,637.10	36.89	73.75	-173.68	-4,274.14	252.33	453.44	387.29	66.15	6.855		
14,300.00	10,187.07	14,909.43	10,636.63	37.47	75.30	-173.67	-4,374.13	253.07	452.52	384.96	67.56	6.698		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 111H - OH - Plan #2												Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,400.00	10,187.52	15,009.43	10,636.16	38.06	76.87	-173.65	-4,474.12	253.80	451.61	382.63	68.98	6.547	
14,500.00	10,187.97	15,109.42	10,635.69	38.65	78.43	-173.64	-4,574.12	254.54	450.70	380.30	70.40	6.402	
14,600.00	10,188.42	15,209.42	10,635.22	39.26	80.00	-173.63	-4,674.11	255.28	449.79	377.96	71.83	6.262	
14,650.86	10,188.64	15,256.17	10,635.00	39.57	80.73	-173.62	-4,720.86	255.62	449.34	376.79	72.56	6.193	
14,700.00	10,188.86	15,256.17	10,635.00	39.86	80.73	-173.62	-4,720.86	255.62	452.02	378.95	73.08	6.186	
14,800.00	10,189.31	15,256.17	10,635.00	40.48	80.73	-173.62	-4,720.86	255.62	473.45	400.35	73.10	6.476	
14,900.00	10,189.76	15,256.17	10,635.00	41.10	80.73	-173.62	-4,720.86	255.62	513.79	441.74	72.06	7.130	
15,000.00	10,190.21	15,256.17	10,635.00	41.72	80.73	-173.62	-4,720.86	255.62	569.05	498.53	70.51	8.070	
15,100.00	10,190.66	15,256.17	10,635.00	42.35	80.73	-173.62	-4,720.86	255.62	635.33	566.41	68.92	9.218	
15,200.00	10,191.11	15,256.17	10,635.00	42.98	80.73	-173.62	-4,720.86	255.62	709.56	642.06	67.49	10.513	
15,300.00	10,191.56	15,256.17	10,635.00	43.62	80.73	-173.62	-4,720.86	255.62	789.49	723.19	66.30	11.907	
15,400.00	10,192.01	15,256.17	10,635.00	44.26	80.73	-173.62	-4,720.86	255.62	873.57	808.23	65.34	13.369	
15,500.00	10,192.46	15,256.17	10,635.00	44.91	80.73	-173.62	-4,720.86	255.62	960.71	896.13	64.58	14.876	
15,600.00	10,192.90	15,256.17	10,635.00	45.56	80.73	-173.62	-4,720.86	255.62	1,050.14	986.16	63.98	16.413	
15,700.00	10,193.35	15,256.17	10,635.00	46.21	80.73	-173.62	-4,720.86	255.62	1,141.32	1,077.81	63.51	17.970	
15,800.00	10,193.80	15,256.17	10,635.00	46.87	80.73	-173.62	-4,720.86	255.62	1,233.87	1,170.73	63.15	19.540	
15,900.00	10,194.25	15,256.17	10,635.00	47.52	80.73	-173.62	-4,720.86	255.62	1,327.51	1,264.64	62.86	21.118	
16,000.00	10,194.70	15,256.17	10,635.00	48.19	80.73	-173.62	-4,720.86	255.62	1,422.01	1,359.36	62.64	22.700	
16,100.00	10,195.15	15,256.17	10,635.00	48.85	80.73	-173.62	-4,720.86	255.62	1,517.21	1,454.73	62.48	24.283	
16,200.00	10,195.60	15,256.17	10,635.00	49.52	80.73	-173.62	-4,720.86	255.62	1,613.00	1,550.64	62.36	25.867	
16,300.00	10,196.05	15,256.17	10,635.00	50.19	80.73	-173.62	-4,720.86	255.62	1,709.27	1,647.00	62.27	27.449	
16,400.00	10,196.50	15,256.17	10,635.00	50.87	80.73	-173.62	-4,720.86	255.62	1,805.94	1,743.73	62.21	29.029	
16,500.00	10,196.94	15,256.17	10,635.00	51.54	80.73	-173.62	-4,720.86	255.62	1,902.96	1,840.78	62.18	30.605	
16,600.00	10,197.39	15,256.17	10,635.00	52.22	80.73	-173.62	-4,720.86	255.62	2,000.27	1,938.10	62.17	32.176	
16,700.00	10,197.84	15,256.17	10,635.00	52.91	80.73	-173.62	-4,720.86	255.62	2,097.83	2,035.66	62.17	33.743	
16,800.00	10,198.29	15,256.17	10,635.00	53.59	80.73	-173.62	-4,720.86	255.62	2,195.62	2,133.43	62.19	35.305	
16,900.00	10,198.74	15,256.17	10,635.00	54.28	80.73	-173.62	-4,720.86	255.62	2,293.59	2,231.37	62.22	36.862	
17,000.00	10,199.19	15,256.17	10,635.00	54.96	80.73	-173.62	-4,720.86	255.62	2,391.74	2,329.47	62.26	38.413	
17,100.00	10,199.64	15,256.17	10,635.00	55.65	80.73	-173.62	-4,720.86	255.62	2,490.03	2,427.71	62.32	39.958	
17,200.00	10,200.09	15,256.17	10,635.00	56.35	80.73	-173.62	-4,720.86	255.62	2,588.45	2,526.07	62.38	41.497	
17,300.00	10,200.53	15,256.17	10,635.00	57.04	80.73	-173.62	-4,720.86	255.62	2,686.98	2,624.54	62.45	43.030	
17,400.00	10,200.98	15,256.17	10,635.00	57.74	80.73	-173.62	-4,720.86	255.62	2,785.63	2,723.11	62.52	44.556	
17,500.00	10,201.43	15,256.17	10,635.00	58.43	80.73	-173.62	-4,720.86	255.62	2,884.36	2,821.76	62.60	46.076	
17,600.00	10,201.88	15,256.17	10,635.00	59.13	80.73	-173.62	-4,720.86	255.62	2,983.18	2,920.50	62.69	47.589	
17,626.43	10,202.00	15,256.17	10,635.00	59.32	80.73	-173.62	-4,720.86	255.62	3,009.32	2,946.61	62.71	47.988	

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 126H - OH - Plan #2												Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM, 9994-MWD+IFR1+MS												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.20	2.20	0.00	0.00	-90.32	-0.33	-60.00	60.00				
100.00	100.00	102.20	102.20	0.09	0.09	-90.32	-0.33	-60.00	60.00	59.82	0.18	339.197	
200.00	200.00	202.20	202.20	0.31	0.32	-90.32	-0.33	-60.00	60.00	59.37	0.63	95.783	
300.00	300.00	302.20	302.20	0.54	0.54	-90.32	-0.33	-60.00	60.00	58.92	1.08	55.765	
400.00	400.00	402.20	402.20	0.76	0.77	-90.32	-0.33	-60.00	60.00	58.48	1.53	39.332	
500.00	500.00	502.20	502.20	0.99	0.99	-90.32	-0.33	-60.00	60.00	58.03	1.98	30.380	
600.00	600.00	602.20	602.20	1.21	1.21	-90.32	-0.33	-60.00	60.00	57.58	2.42	24.747	
700.00	700.00	702.20	702.20	1.43	1.44	-90.32	-0.33	-60.00	60.00	57.13	2.87	20.877	
800.00	800.00	802.20	802.20	1.66	1.66	-90.32	-0.33	-60.00	60.00	56.68	3.32	18.053	
900.00	900.00	902.20	902.20	1.88	1.89	-90.32	-0.33	-60.00	60.00	56.23	3.77	15.902	
1,000.00	1,000.00	1,002.20	1,002.20	2.11	2.11	-90.32	-0.33	-60.00	60.00	55.78	4.22	14.209	
1,100.00	1,100.00	1,102.20	1,102.20	2.33	2.34	-90.32	-0.33	-60.00	60.00	55.33	4.67	12.842	
1,200.00	1,200.00	1,202.20	1,202.20	2.56	2.56	-90.32	-0.33	-60.00	60.00	54.88	5.12	11.715	
1,300.00	1,300.00	1,302.20	1,302.20	2.78	2.79	-90.32	-0.33	-60.00	60.00	54.43	5.57	10.770	
1,400.00	1,400.00	1,402.20	1,402.20	3.01	3.01	-90.32	-0.33	-60.00	60.00	53.98	6.02	9.966	
1,500.00	1,500.00	1,502.20	1,502.20	3.23	3.24	-90.32	-0.33	-60.00	60.00	53.53	6.47	9.273	
1,600.00	1,600.00	1,602.20	1,602.20	3.46	3.46	-90.32	-0.33	-60.00	60.00	53.08	6.92	8.671	
1,700.00	1,700.00	1,702.20	1,702.20	3.68	3.69	-90.32	-0.33	-60.00	60.00	52.63	7.37	8.142	
1,800.00	1,800.00	1,802.20	1,802.20	3.91	3.91	-90.32	-0.33	-60.00	60.00	52.18	7.82	7.674	
1,900.00	1,900.00	1,902.20	1,902.20	4.13	4.14	-90.32	-0.33	-60.00	60.00	51.73	8.27	7.257	
2,000.00	2,000.00	2,002.20	2,002.20	4.36	4.36	-90.32	-0.33	-60.00	60.00	51.28	8.72	6.882	
2,100.00	2,100.00	2,102.20	2,102.20	4.58	4.59	-90.32	-0.33	-60.00	60.00	50.83	9.17	6.545	
2,200.00	2,200.00	2,202.20	2,202.20	4.81	4.81	-90.32	-0.33	-60.00	60.00	50.38	9.62	6.239	
2,300.00	2,300.00	2,302.20	2,302.20	5.03	5.04	-90.32	-0.33	-60.00	60.00	49.93	10.07	5.960	
2,400.00	2,400.00	2,402.20	2,402.20	5.26	5.26	-90.32	-0.33	-60.00	60.00	49.48	10.52	5.706	
2,415.92	2,415.92	2,418.12	2,418.12	5.29	5.30	-90.32	-0.33	-60.00	60.00	49.41	10.59	5.667 CC	
2,500.00	2,500.00	2,502.18	2,502.18	5.48	5.48	-90.32	-0.33	-60.00	60.00	49.04	10.97	5.472 ES	
2,600.00	2,600.00	2,601.14	2,601.13	5.71	5.69	-90.42	-0.44	-60.89	60.90	49.50	11.39	5.344 SF	
2,700.00	2,700.00	2,700.00	2,699.96	5.93	5.88	-90.70	-0.78	-63.46	63.51	51.70	11.81	5.379	
2,800.00	2,800.00	2,798.82	2,798.68	6.15	6.08	-91.12	-1.33	-67.73	67.83	55.61	12.22	5.552	
2,900.00	2,900.00	2,897.42	2,897.11	6.38	6.28	-91.63	-2.09	-73.66	73.87	61.25	12.63	5.851	
3,000.00	3,000.00	2,995.79	2,995.17	6.60	6.48	-92.16	-3.07	-81.26	81.62	68.59	13.03	6.264	
3,100.00	3,100.00	3,093.87	3,092.81	6.83	6.69	-92.69	-4.26	-90.50	91.08	77.65	13.43	6.780	
3,200.00	3,200.00	3,192.74	3,191.09	7.05	6.91	-93.19	-5.63	-101.12	101.88	88.03	13.85	7.355	
3,300.00	3,300.00	3,292.14	3,289.90	7.28	7.14	-93.59	-7.02	-111.89	112.79	98.51	14.28	7.898	
3,400.00	3,400.00	3,391.54	3,388.70	7.50	7.36	-93.92	-8.40	-122.67	123.70	108.99	14.71	8.409	
3,500.00	3,500.00	3,490.94	3,487.51	7.73	7.60	-94.20	-9.79	-133.45	134.61	119.47	15.14	8.889	
3,600.00	3,600.00	3,590.34	3,586.31	7.95	7.83	-94.43	-11.18	-144.22	145.53	129.95	15.58	9.343	
3,700.00	3,700.00	3,689.74	3,685.12	8.18	8.07	-94.64	-12.57	-155.00	156.44	140.43	16.01	9.771	
3,800.00	3,800.00	3,789.14	3,783.92	8.40	8.31	-94.81	-13.96	-165.78	167.36	150.91	16.45	10.175	
3,900.00	3,900.00	3,888.54	3,882.73	8.63	8.56	-94.97	-15.34	-176.55	178.28	161.40	16.89	10.558	
4,000.00	4,000.00	3,987.94	3,981.53	8.85	8.80	-95.10	-16.73	-187.33	189.21	171.88	17.33	10.921	
4,100.00	4,100.00	4,087.24	4,080.24	9.06	9.05	174.79	-18.12	-198.09	200.99	183.24	17.75	11.323	
4,200.00	4,199.96	4,186.33	4,178.73	9.26	9.30	174.73	-19.50	-208.83	214.50	196.34	18.16	11.809	
4,229.29	4,229.23	4,215.30	4,207.53	9.32	9.38	174.72	-19.91	-211.98	218.79	200.50	18.29	11.964	
4,300.00	4,299.88	4,285.22	4,277.03	9.46	9.55	174.72	-20.88	-219.56	229.30	210.72	18.58	12.342	
4,400.00	4,399.80	4,384.11	4,375.33	9.66	9.81	174.71	-22.27	-230.28	244.18	225.18	18.99	12.855	
4,500.00	4,499.72	4,483.00	4,473.62	9.86	10.06	174.70	-23.65	-241.00	259.05	239.64	19.41	13.345	
4,600.00	4,599.64	4,581.89	4,571.92	10.07	10.32	174.70	-25.03	-251.72	273.93	254.10	19.83	13.813	
4,700.00	4,699.56	4,680.77	4,670.21	10.27	10.58	174.69	-26.41	-262.44	288.80	268.55	20.25	14.260	
4,800.00	4,799.48	4,779.66	4,768.51	10.48	10.84	174.69	-27.79	-273.16	303.68	283.00	20.68	14.688	
4,900.00	4,899.40	4,878.55	4,866.80	10.69	11.10	174.69	-29.17	-283.88	318.55	297.45	21.10	15.097	

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 126H - OH - Plan #2													Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM MWD+HDGM, 9994-MWD+IFR1+MS													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		
5,000.00	4,999.32	4,977.44	4,965.10	10.90	11.36	174.68	-30.55	-294.60	333.43	311.90	21.53	15.490		
5,100.00	5,099.24	5,076.32	5,063.39	11.11	11.63	174.68	-31.93	-305.32	348.30	326.35	21.95	15.866		
5,200.00	5,199.16	5,175.21	5,161.69	11.32	11.89	174.68	-33.31	-316.04	363.18	340.80	22.38	16.227		
5,300.00	5,299.08	5,274.10	5,259.98	11.53	12.15	174.67	-34.70	-326.76	378.05	355.24	22.81	16.573		
5,400.00	5,399.00	5,372.99	5,358.28	11.74	12.42	174.67	-36.08	-337.48	392.93	369.69	23.24	16.906		
5,500.00	5,498.92	5,471.87	5,456.57	11.96	12.69	174.67	-37.46	-348.20	407.80	384.13	23.67	17.225		
5,600.00	5,598.84	5,570.76	5,554.87	12.17	12.95	174.67	-38.84	-358.92	422.68	398.57	24.11	17.533		
5,700.00	5,698.76	5,669.65	5,653.16	12.39	13.22	174.67	-40.22	-369.64	437.55	413.01	24.54	17.829		
5,800.00	5,798.68	5,768.54	5,751.46	12.60	13.49	174.66	-41.60	-380.36	452.43	427.45	24.98	18.114		
5,900.00	5,898.60	5,867.42	5,849.75	12.82	13.76	174.66	-42.98	-391.08	467.30	441.89	25.41	18.388		
6,000.00	5,998.52	5,966.31	5,948.05	13.03	14.03	174.66	-44.36	-401.80	482.18	456.33	25.85	18.653		
6,100.00	6,098.44	6,065.20	6,046.34	13.25	14.30	174.66	-45.74	-412.53	497.05	470.77	26.29	18.908		
6,200.00	6,198.36	6,164.09	6,144.64	13.47	14.57	174.66	-47.12	-423.25	511.93	485.20	26.73	19.154		
6,300.00	6,298.28	6,262.97	6,242.93	13.69	14.84	174.66	-48.51	-433.97	526.80	499.64	27.17	19.392		
6,400.00	6,398.20	6,361.86	6,341.23	13.91	15.12	174.66	-49.89	-444.69	541.68	514.07	27.61	19.621		
6,500.00	6,498.12	6,460.75	6,439.52	14.13	15.39	174.65	-51.27	-455.41	556.55	528.51	28.05	19.843		
6,600.00	6,598.04	6,559.64	6,537.82	14.35	15.66	174.65	-52.65	-466.13	571.43	542.94	28.49	20.058		
6,700.00	6,697.96	6,658.52	6,636.11	14.57	15.94	174.65	-54.03	-476.85	586.30	557.37	28.93	20.266		
6,800.00	6,797.88	6,757.41	6,734.41	14.79	16.21	174.65	-55.41	-487.57	601.18	571.80	29.37	20.467		
6,900.00	6,897.80	6,856.30	6,832.70	15.01	16.48	174.65	-56.79	-498.29	616.05	586.24	29.82	20.661		
7,000.00	6,997.72	6,955.19	6,931.00	15.23	16.76	174.65	-58.17	-509.01	630.93	600.67	30.26	20.850		
7,100.00	7,097.64	7,054.07	7,029.29	15.45	17.03	174.65	-59.55	-519.73	645.80	615.10	30.70	21.033		
7,200.00	7,197.56	7,152.96	7,127.59	15.67	17.31	174.65	-60.94	-530.45	660.68	629.53	31.15	21.210		
7,300.00	7,297.48	7,251.85	7,225.88	15.90	17.58	174.65	-62.32	-541.17	675.55	643.96	31.60	21.382		
7,400.00	7,397.40	7,350.74	7,324.18	16.12	17.86	174.65	-63.70	-551.89	690.43	658.39	32.04	21.548		
7,500.00	7,497.32	7,449.62	7,422.47	16.34	18.14	174.65	-65.08	-562.61	705.30	672.82	32.49	21.710		
7,600.00	7,597.24	7,548.51	7,520.77	16.56	18.41	174.65	-66.46	-573.33	720.18	687.24	32.93	21.867		
7,700.00	7,697.16	7,647.40	7,619.06	16.79	18.69	174.64	-67.84	-584.05	735.05	701.67	33.38	22.020		
7,800.00	7,797.08	7,746.29	7,717.36	17.01	18.96	174.64	-69.22	-594.77	749.93	716.10	33.83	22.168		
7,900.00	7,897.00	7,845.17	7,815.65	17.24	19.24	174.64	-70.60	-605.49	764.80	730.53	34.28	22.313		
8,000.00	7,996.92	7,944.06	7,913.95	17.46	19.52	174.64	-71.98	-616.21	779.68	744.95	34.73	22.453		
8,100.00	8,096.84	8,042.95	8,012.24	17.69	19.80	174.64	-73.37	-626.94	794.55	759.38	35.17	22.589		
8,200.00	8,196.76	8,141.84	8,110.54	17.91	20.07	174.64	-74.75	-637.66	809.43	773.81	35.62	22.722		
8,274.07	8,270.77	8,215.08	8,183.34	18.08	20.28	174.64	-75.77	-645.60	820.45	784.49	35.96	22.818		
8,300.00	8,296.68	8,242.94	8,211.04	18.13	20.35	174.64	-76.16	-648.60	824.23	788.15	36.08	22.846		
8,400.00	8,396.64	8,358.99	8,326.55	18.32	20.61	174.65	-77.59	-659.71	836.53	799.99	36.54	22.893		
8,503.36	8,500.00	8,479.68	8,446.89	18.51	20.86	-95.36	-78.76	-668.81	845.30	808.31	37.00	22.849		
8,600.00	8,596.64	8,592.92	8,559.95	18.70	21.07	-95.37	-79.56	-675.05	850.67	813.25	37.42	22.733		
8,700.00	8,696.64	8,710.32	8,677.27	18.92	21.28	-95.38	-80.10	-679.19	854.22	816.36	37.86	22.562		
8,800.00	8,796.64	8,827.84	8,794.77	19.14	21.49	-95.39	-80.32	-680.94	855.72	817.43	38.29	22.349		
8,900.00	8,896.64	8,931.91	8,898.84	19.35	21.67	-95.39	-80.33	-681.00	855.78	817.07	38.71	22.109		
9,000.00	8,996.64	9,031.91	8,998.84	19.57	21.86	-95.39	-80.33	-681.00	855.78	816.65	39.13	21.871		
9,100.00	9,096.64	9,131.91	9,098.84	19.78	22.05	-95.39	-80.33	-681.00	855.78	816.23	39.55	21.638		
9,200.00	9,196.64	9,222.80	9,189.57	20.00	22.22	-95.65	-84.32	-680.97	856.18	816.23	39.95	21.430		
9,300.00	9,296.64	9,307.93	9,273.06	20.22	22.38	-96.73	-100.59	-680.85	858.16	817.82	40.33	21.277		
9,400.00	9,396.64	9,386.71	9,347.39	20.43	22.54	-98.45	-126.51	-680.66	862.54	821.86	40.68	21.202		
9,500.00	9,496.64	9,457.24	9,410.37	20.65	22.70	-100.52	-158.16	-680.43	870.50	829.54	40.96	21.251		
9,600.41	9,597.05	9,519.20	9,462.12	20.87	22.84	-102.72	-192.17	-680.18	883.31	842.18	41.14	21.472		
9,650.00	9,646.58	9,550.00	9,486.40	20.97	22.92	75.78	-211.11	-680.04	891.25	850.07	41.18	21.642		
9,700.00	9,696.14	9,575.83	9,505.96	21.06	22.99	74.08	-227.98	-679.92	899.61	858.44	41.17	21.853		
9,750.00	9,744.95	9,600.00	9,523.56	21.16	23.05	72.48	-244.55	-679.80	908.17	867.06	41.11	22.090		
9,800.00	9,792.63	9,631.90	9,545.68	21.25	23.14	70.72	-267.52	-679.63	916.74	875.64	41.10	22.304		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design												Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 126H - OH - Plan #2		Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM MWD+HDGM, 9994-MWD+IFR1+MS												Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
9,850.00	9,838.82	9,659.70	9,563.89	21.35	23.23	69.17	-288.52	-679.48	925.21	884.16	41.05	22.538			
9,900.00	9,883.17	9,687.37	9,580.98	21.45	23.32	67.73	-310.28	-679.32	933.42	892.43	40.99	22.769			
9,950.00	9,925.35	9,714.94	9,596.95	21.55	23.41	66.41	-332.75	-679.15	941.25	900.31	40.94	22.989			
10,000.00	9,965.03	9,750.00	9,615.66	21.66	23.53	65.07	-362.39	-678.94	948.64	907.68	40.97	23.157			
10,050.00	10,001.90	9,769.80	9,625.42	21.78	23.61	64.14	-379.62	-678.81	955.33	914.44	40.89	23.366			
10,100.00	10,035.70	9,800.00	9,639.14	21.91	23.73	63.17	-406.52	-678.61	961.39	920.47	40.92	23.494			
10,150.00	10,066.15	9,824.40	9,649.17	22.05	23.84	62.40	-428.76	-678.45	966.68	925.73	40.95	23.607			
10,200.00	10,093.04	9,850.00	9,658.68	22.22	23.95	61.75	-452.52	-678.28	971.15	930.12	41.03	23.669			
10,250.00	10,116.15	9,878.82	9,668.09	22.41	24.09	61.21	-479.75	-678.08	974.73	933.53	41.20	23.661			
10,300.00	10,135.31	9,900.00	9,674.13	22.63	24.20	60.85	-500.06	-677.93	977.42	936.06	41.36	23.632			
10,350.00	10,150.38	9,933.12	9,682.06	22.87	24.37	60.58	-532.21	-677.69	979.09	937.41	41.68	23.490			
10,400.00	10,161.23	9,950.00	9,685.38	23.13	24.46	60.48	-548.76	-677.57	979.92	937.97	41.95	23.357			
10,450.00	10,167.79	9,987.39	9,691.00	23.41	27.16	60.51	-585.71	-677.30	979.57	937.29	42.29	23.165			
10,497.84	10,170.00	10,013.35	9,693.48	23.70	28.23	60.68	-611.56	-677.11	978.41	935.83	42.58	22.977			
10,500.00	10,170.01	10,014.53	9,693.56	23.71	28.23	60.68	-612.73	-677.10	978.34	935.75	42.59	22.969			
10,571.52	10,170.33	10,054.29	9,695.00	26.45	28.26	60.75	-652.46	-676.81	977.21	934.40	42.82	22.824			
10,600.00	10,170.46	10,081.28	9,695.04	28.14	28.28	60.74	-679.45	-676.62	977.25	934.35	42.90	22.778			
10,700.00	10,170.91	10,181.28	9,695.18	28.23	28.36	60.73	-779.44	-675.88	977.41	934.43	42.98	22.743			
10,800.00	10,171.36	10,281.28	9,695.32	28.32	28.43	60.71	-879.44	-675.15	977.56	934.46	43.10	22.679			
10,900.00	10,171.81	10,381.28	9,695.46	28.41	28.51	60.70	-979.44	-674.42	977.71	934.43	43.28	22.588			
11,000.00	10,172.26	10,481.28	9,695.61	28.51	28.59	60.68	-1,079.44	-673.69	977.86	934.34	43.52	22.469			
11,100.00	10,172.71	10,581.28	9,695.75	28.60	28.68	60.66	-1,179.43	-672.96	978.02	934.21	43.81	22.325			
11,200.00	10,173.15	10,681.28	9,695.89	28.70	28.76	60.65	-1,279.43	-672.22	978.17	934.02	44.15	22.157			
11,300.00	10,173.60	10,781.28	9,696.03	28.79	28.85	60.63	-1,379.43	-671.49	978.32	933.78	44.54	21.966			
11,400.00	10,174.05	10,881.28	9,696.18	28.89	28.94	60.62	-1,479.42	-670.76	978.48	933.50	44.98	21.754			
11,500.00	10,174.50	10,981.28	9,696.32	28.99	29.04	60.60	-1,579.42	-670.03	978.63	933.16	45.47	21.525			
11,600.00	10,174.95	11,081.28	9,696.46	29.09	29.14	60.59	-1,679.42	-669.30	978.78	932.78	46.00	21.278			
11,700.00	10,175.40	11,181.28	9,696.60	29.19	29.24	60.57	-1,779.41	-668.56	978.93	932.36	46.58	21.017			
11,800.00	10,175.85	11,281.28	9,696.75	29.29	29.35	60.56	-1,879.41	-667.83	979.09	931.89	47.20	20.743			
11,900.00	10,176.30	11,381.28	9,696.89	29.40	29.46	60.54	-1,979.41	-667.10	979.24	931.38	47.86	20.459			
12,000.00	10,176.74	11,481.28	9,697.03	29.51	29.57	60.52	-2,079.40	-666.37	979.39	930.83	48.57	20.166			
12,100.00	10,177.19	11,581.28	9,697.17	29.61	29.70	60.51	-2,179.40	-665.64	979.55	930.24	49.31	19.866			
12,200.00	10,177.64	11,681.28	9,697.32	29.73	29.83	60.49	-2,279.40	-664.91	979.70	929.62	50.08	19.561			
12,300.00	10,178.09	11,781.28	9,697.46	29.84	29.96	60.48	-2,379.39	-664.17	979.85	928.96	50.90	19.252			
12,400.00	10,178.54	11,881.28	9,697.60	29.96	30.11	60.46	-2,479.39	-663.44	980.01	928.27	51.74	18.940			
12,500.00	10,178.99	11,981.27	9,697.74	30.08	30.27	60.45	-2,579.39	-662.71	980.16	927.54	52.62	18.628			
12,600.00	10,179.44	12,081.27	9,697.89	30.21	30.44	60.43	-2,679.38	-661.98	980.31	926.79	53.52	18.315			
12,700.00	10,179.89	12,181.27	9,698.03	30.35	30.64	60.42	-2,779.38	-661.25	980.47	926.01	54.46	18.004			
12,800.00	10,180.34	12,281.27	9,698.17	30.51	30.85	60.40	-2,879.38	-660.51	980.62	925.20	55.42	17.694			
12,900.00	10,180.78	12,381.27	9,698.31	30.70	31.09	60.38	-2,979.37	-659.78	980.78	924.37	56.41	17.387			
13,000.00	10,181.23	12,481.27	9,698.46	30.95	31.36	60.37	-3,079.37	-659.05	980.93	923.51	57.42	17.083			
13,100.00	10,181.68	12,581.27	9,698.60	31.26	31.66	60.35	-3,179.37	-658.32	981.08	922.63	58.46	16.783			
13,200.00	10,182.13	12,681.27	9,698.74	31.65	32.00	60.34	-3,279.36	-657.59	981.24	921.73	59.51	16.488			
13,300.00	10,182.58	12,781.27	9,698.88	32.09	32.37	60.32	-3,379.36	-656.85	981.39	920.80	60.59	16.197			
13,400.00	10,183.03	12,881.27	9,699.03	32.56	32.78	60.31	-3,479.36	-656.12	981.55	919.86	61.69	15.912			
13,500.00	10,183.48	12,981.27	9,699.17	33.06	33.21	60.29	-3,579.35	-655.39	981.70	918.90	62.80	15.632			
13,600.00	10,183.93	13,081.27	9,699.31	33.57	33.67	60.28	-3,679.35	-654.66	981.86	917.92	63.93	15.357			
13,700.00	10,184.38	13,181.27	9,699.45	34.10	34.16	60.26	-3,779.35	-653.93	982.01	916.93	65.08	15.088			
13,800.00	10,184.82	13,281.27	9,699.60	34.64	34.66	60.25	-3,879.34	-653.20	982.16	915.91	66.25	14.825			
13,900.00	10,185.27	13,381.27	9,699.74	35.19	35.18	60.23	-3,979.34	-652.46	982.32	914.89	67.43	14.568			
14,000.00	10,185.72	13,481.27	9,699.88	35.74	35.72	60.21	-4,079.34	-651.73	982.47	913.85	68.63	14.316			
14,100.00	10,186.17	13,581.27	9,700.02	36.31	36.27	60.20	-4,179.33	-651.00	982.63	912.79	69.83	14.071			

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 126H - OH - Plan #2												Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM MWD+HDGM, 9994-MWD+IFR1+MS												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
14,200.00	10,186.62	13,681.27	9,700.17	36.89	36.83	60.18	-4,279.33	-650.27	982.78	911.73	71.06	13.831	
14,300.00	10,187.07	13,781.27	9,700.31	37.47	37.40	60.17	-4,379.33	-649.54	982.94	910.65	72.29	13.597	
14,400.00	10,187.52	13,881.27	9,700.45	38.06	37.99	60.15	-4,479.32	-648.80	983.09	909.56	73.53	13.369	
14,500.00	10,187.97	13,981.27	9,700.59	38.65	38.58	60.14	-4,579.32	-648.07	983.25	908.46	74.79	13.147	
14,600.00	10,188.42	14,081.26	9,700.73	39.26	39.18	60.12	-4,679.32	-647.34	983.40	907.35	76.06	12.930	
14,700.00	10,188.86	14,181.26	9,700.88	39.86	39.78	60.11	-4,779.31	-646.61	983.56	906.23	77.33	12.719	
14,800.00	10,189.31	14,281.26	9,701.02	40.48	40.40	60.09	-4,879.31	-645.88	983.71	905.10	78.62	12.513	
14,900.00	10,189.76	14,381.26	9,701.16	41.10	41.02	60.08	-4,979.31	-645.14	983.87	903.96	79.91	12.312	
15,000.00	10,190.21	14,481.26	9,701.30	41.72	41.64	60.06	-5,079.31	-644.41	984.02	902.81	81.22	12.116	
15,100.00	10,190.66	14,581.26	9,701.45	42.35	42.27	60.05	-5,179.30	-643.68	984.18	901.65	82.53	11.926	
15,200.00	10,191.11	14,681.26	9,701.59	42.98	42.91	60.03	-5,279.30	-642.95	984.34	900.49	83.85	11.740	
15,300.00	10,191.56	14,781.26	9,701.73	43.62	43.55	60.01	-5,379.30	-642.22	984.49	899.32	85.17	11.559	
15,400.00	10,192.01	14,881.26	9,701.87	44.26	44.19	60.00	-5,479.29	-641.49	984.65	898.14	86.51	11.382	
15,500.00	10,192.46	14,981.26	9,702.02	44.91	44.84	59.98	-5,579.29	-640.75	984.80	896.96	87.85	11.210	
15,600.00	10,192.90	15,081.26	9,702.16	45.56	45.50	59.97	-5,679.29	-640.02	984.96	895.76	89.19	11.043	
15,700.00	10,193.35	15,181.26	9,702.30	46.21	46.15	59.95	-5,779.28	-639.29	985.11	894.57	90.55	10.880	
15,800.00	10,193.80	15,281.26	9,702.44	46.87	46.81	59.94	-5,879.28	-638.56	985.27	893.36	91.91	10.720	
15,900.00	10,194.25	15,381.26	9,702.59	47.52	47.48	59.92	-5,979.28	-637.83	985.43	892.16	93.27	10.565	
16,000.00	10,194.70	15,481.26	9,702.73	48.19	48.15	59.91	-6,079.27	-637.09	985.58	890.94	94.64	10.414	
16,100.00	10,195.15	15,581.26	9,702.87	48.85	48.82	59.89	-6,179.27	-636.36	985.74	889.72	96.02	10.266	
16,200.00	10,195.60	15,681.26	9,703.01	49.52	49.49	59.88	-6,279.27	-635.63	985.89	888.50	97.40	10.123	
16,300.00	10,196.05	15,781.26	9,703.16	50.19	50.17	59.86	-6,379.26	-634.90	986.05	887.27	98.78	9.982	
16,400.00	10,196.50	15,881.26	9,703.30	50.87	50.84	59.85	-6,479.26	-634.17	986.21	886.04	100.17	9.845	
16,500.00	10,196.94	15,981.26	9,703.44	51.54	51.53	59.83	-6,579.26	-633.43	986.36	884.80	101.56	9.712	
16,600.00	10,197.39	16,081.26	9,703.58	52.22	52.21	59.82	-6,679.25	-632.70	986.52	883.56	102.96	9.581	
16,700.00	10,197.84	16,181.26	9,703.73	52.91	52.90	59.80	-6,779.25	-631.97	986.68	882.31	104.36	9.454	
16,800.00	10,198.29	16,281.25	9,703.87	53.59	53.58	59.79	-6,879.25	-631.24	986.83	881.07	105.77	9.330	
16,900.00	10,198.74	16,381.25	9,704.01	54.28	54.28	59.77	-6,979.24	-630.51	986.99	879.81	107.18	9.209	
17,000.00	10,199.19	16,481.25	9,704.15	54.96	54.97	59.75	-7,079.24	-629.78	987.15	878.56	108.59	9.091	
17,100.00	10,199.64	16,581.25	9,704.30	55.65	55.66	59.74	-7,179.24	-629.04	987.30	877.30	110.01	8.975	
17,200.00	10,200.09	16,681.25	9,704.44	56.35	56.36	59.72	-7,279.23	-628.31	987.46	876.03	111.43	8.862	
17,300.00	10,200.53	16,781.25	9,704.58	57.04	57.06	59.71	-7,379.23	-627.58	987.62	874.77	112.85	8.752	
17,400.00	10,200.98	16,881.25	9,704.72	57.74	57.76	59.69	-7,479.23	-626.85	987.78	873.50	114.28	8.644	
17,500.00	10,201.43	16,981.25	9,704.87	58.43	58.46	59.68	-7,579.22	-626.12	987.93	872.23	115.70	8.538	
17,600.00	10,201.88	17,074.97	9,705.00	59.13	59.12	59.66	-7,672.94	-625.43	988.11	871.03	117.08	8.440	
17,626.43	10,202.00	17,074.97	9,705.00	59.32	59.12	59.66	-7,672.94	-625.43	988.67	871.48	117.20	8.436	

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 168H - OH - Plan #2													Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	1.40	1.40	0.00	0.00	-90.32	-0.17	-30.01	30.01					
100.00	100.00	101.40	101.40	0.09	0.09	-90.32	-0.17	-30.01	30.01	29.84	0.18	171.397		
200.00	200.00	201.40	201.40	0.31	0.31	-90.32	-0.17	-30.01	30.01	29.39	0.62	48.046		
300.00	300.00	301.40	301.40	0.54	0.54	-90.32	-0.17	-30.01	30.01	28.94	1.07	27.939		
400.00	400.00	401.40	401.40	0.76	0.76	-90.32	-0.17	-30.01	30.01	28.49	1.52	19.696		
500.00	500.00	501.40	501.40	0.99	0.99	-90.32	-0.17	-30.01	30.01	28.04	1.97	15.209		
600.00	600.00	601.40	601.40	1.21	1.21	-90.32	-0.17	-30.01	30.01	27.59	2.42	12.387		
700.00	700.00	701.40	701.40	1.43	1.44	-90.32	-0.17	-30.01	30.01	27.14	2.87	10.448		
800.00	800.00	801.40	801.40	1.66	1.66	-90.32	-0.17	-30.01	30.01	26.69	3.32	9.034		
900.00	900.00	901.40	901.40	1.88	1.89	-90.32	-0.17	-30.01	30.01	26.24	3.77	7.957		
1,000.00	1,000.00	1,001.40	1,001.40	2.11	2.11	-90.32	-0.17	-30.01	30.01	25.79	4.22	7.110		
1,100.00	1,100.00	1,101.40	1,101.40	2.33	2.34	-90.32	-0.17	-30.01	30.01	25.34	4.67	6.426		
1,200.00	1,200.00	1,201.40	1,201.40	2.56	2.56	-90.32	-0.17	-30.01	30.01	24.89	5.12	5.861		
1,300.00	1,300.00	1,301.40	1,301.40	2.78	2.79	-90.32	-0.17	-30.01	30.01	24.44	5.57	5.388		
1,400.00	1,400.00	1,401.40	1,401.40	3.01	3.01	-90.32	-0.17	-30.01	30.01	23.99	6.02	4.986		
1,500.00	1,500.00	1,501.40	1,501.40	3.23	3.24	-90.32	-0.17	-30.01	30.01	23.54	6.47	4.639		
1,600.00	1,600.00	1,601.40	1,601.40	3.46	3.46	-90.32	-0.17	-30.01	30.01	23.09	6.92	4.338		
1,700.00	1,700.00	1,701.40	1,701.40	3.68	3.69	-90.32	-0.17	-30.01	30.01	22.64	7.37	4.073		
1,800.00	1,800.00	1,801.40	1,801.40	3.91	3.91	-90.32	-0.17	-30.01	30.01	22.19	7.82	3.839		
1,900.00	1,900.00	1,901.40	1,901.40	4.13	4.13	-90.32	-0.17	-30.01	30.01	21.74	8.27	3.630		
2,000.00	2,000.00	2,001.40	2,001.40	4.36	4.36	-90.32	-0.17	-30.01	30.01	21.29	8.72	3.443		
2,100.00	2,100.00	2,101.40	2,101.40	4.58	4.58	-90.32	-0.17	-30.01	30.01	20.84	9.17	3.274		
2,200.00	2,200.00	2,201.40	2,201.40	4.81	4.81	-90.32	-0.17	-30.01	30.01	20.40	9.62	3.121		
2,300.00	2,300.00	2,301.40	2,301.40	5.03	5.03	-90.32	-0.17	-30.01	30.01	19.95	10.06	2.982		
2,400.00	2,400.00	2,401.40	2,401.40	5.26	5.26	-90.32	-0.17	-30.01	30.01	19.50	10.51	2.854		
2,500.00	2,500.00	2,501.40	2,501.40	5.48	5.48	-90.32	-0.17	-30.01	30.01	19.05	10.96	2.737		
2,600.00	2,600.00	2,601.40	2,601.40	5.71	5.71	-90.32	-0.17	-30.01	30.01	18.60	11.41	2.629		
2,700.00	2,700.00	2,701.40	2,701.40	5.93	5.93	-90.32	-0.17	-30.01	30.01	18.15	11.86	2.530		
2,800.00	2,800.00	2,801.40	2,801.40	6.15	6.16	-90.32	-0.17	-30.01	30.01	17.70	12.31	2.437		
2,900.00	2,900.00	2,901.40	2,901.40	6.38	6.38	-90.32	-0.17	-30.01	30.01	17.25	12.76	2.352		
3,000.00	3,000.00	3,001.40	3,001.40	6.60	6.61	-90.32	-0.17	-30.01	30.01	16.80	13.21	2.272		
3,100.00	3,100.00	3,101.40	3,101.40	6.83	6.83	-90.32	-0.17	-30.01	30.01	16.35	13.66	2.197		
3,200.00	3,200.00	3,201.40	3,201.40	7.05	7.06	-90.32	-0.17	-30.01	30.01	15.90	14.11	2.127		
3,300.00	3,300.00	3,301.40	3,301.40	7.28	7.28	-90.32	-0.17	-30.01	30.01	15.45	14.56	2.061		
3,400.00	3,400.00	3,401.40	3,401.40	7.50	7.51	-90.32	-0.17	-30.01	30.01	15.00	15.01	1.999		
3,500.00	3,500.00	3,501.40	3,501.40	7.73	7.73	-90.32	-0.17	-30.01	30.01	14.55	15.46	1.941		
3,600.00	3,600.00	3,601.40	3,601.40	7.95	7.96	-90.32	-0.17	-30.01	30.01	14.10	15.91	1.886		
3,700.00	3,700.00	3,701.40	3,701.40	8.18	8.18	-90.32	-0.17	-30.01	30.01	13.65	16.36	1.835		
3,800.00	3,800.00	3,801.40	3,801.40	8.40	8.41	-90.32	-0.17	-30.01	30.01	13.20	16.81	1.786		
3,900.00	3,900.00	3,901.40	3,901.40	8.63	8.63	-90.32	-0.17	-30.01	30.01	12.75	17.26	1.739		
4,000.00	4,000.00	4,001.40	4,001.40	8.85	8.85	-90.32	-0.17	-30.01	30.01	12.30	17.71	1.695 CC, ES, SF		
4,100.00	4,100.00	4,101.40	4,101.40	9.06	9.08	179.68	-0.17	-30.01	30.88	12.74	18.14	1.702		
4,200.00	4,199.96	4,201.36	4,201.36	9.26	9.30	179.71	-0.17	-30.01	33.50	14.94	18.56	1.805		
4,229.29	4,229.23	4,230.63	4,230.63	9.32	9.37	179.72	-0.17	-30.01	34.60	15.91	18.69	1.851		
4,300.00	4,299.88	4,301.28	4,301.28	9.46	9.53	179.74	-0.17	-30.01	37.43	18.44	18.99	1.971		
4,400.00	4,399.80	4,401.20	4,401.20	9.66	9.75	179.76	-0.17	-30.01	41.43	22.02	19.41	2.134		
4,500.00	4,499.72	4,501.12	4,501.12	9.86	9.98	179.79	-0.17	-30.01	45.43	25.59	19.83	2.290		
4,600.00	4,599.64	4,600.41	4,600.40	10.07	10.20	-179.50	0.44	-30.65	50.07	29.82	20.25	2.473		
4,700.00	4,699.56	4,699.54	4,699.50	10.27	10.41	-177.72	2.23	-32.53	56.01	35.35	20.66	2.711		
4,800.00	4,799.48	4,798.45	4,798.31	10.48	10.63	-175.28	5.19	-35.64	63.32	42.26	21.07	3.006		
4,900.00	4,899.40	4,897.26	4,896.94	10.69	10.84	-172.55	9.31	-39.96	72.09	50.62	21.47	3.357		
5,000.00	4,999.32	4,996.77	4,996.23	10.90	11.06	-170.16	13.85	-44.74	81.47	59.58	21.89	3.722		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 168H - OH - Plan #2													Offset Site Error: 0.00 usft	
Survey Program: O-LEAM MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,099.24	5,096.28	5,095.52	11.11	11.28	-168.27	18.40	-49.51	90.96	68.65	22.31	4.077		
5,200.00	5,199.16	5,195.78	5,194.81	11.32	11.50	-166.74	22.95	-54.29	100.53	77.80	22.73	4.423		
5,300.00	5,299.08	5,295.29	5,294.10	11.53	11.73	-165.48	27.50	-59.06	110.16	87.01	23.15	4.758		
5,400.00	5,399.00	5,394.80	5,393.39	11.74	11.95	-164.41	32.05	-63.84	119.84	96.26	23.58	5.083		
5,500.00	5,498.92	5,494.31	5,492.68	11.96	12.17	-163.51	36.59	-68.61	129.55	105.54	24.00	5.397		
5,600.00	5,598.84	5,593.82	5,591.97	12.17	12.40	-162.74	41.14	-73.39	139.29	114.85	24.43	5.701		
5,700.00	5,698.76	5,693.33	5,691.26	12.39	12.62	-162.06	45.69	-78.16	149.04	124.19	24.86	5.996		
5,800.00	5,798.68	5,792.83	5,790.55	12.60	12.85	-161.47	50.24	-82.94	158.82	133.53	25.29	6.280		
5,900.00	5,898.60	5,892.34	5,889.84	12.82	13.07	-160.94	54.78	-87.71	168.61	142.90	25.72	6.556		
6,000.00	5,998.52	5,991.85	5,989.13	13.03	13.30	-160.48	59.33	-92.49	178.42	152.27	26.15	6.823		
6,100.00	6,098.44	6,091.36	6,088.42	13.25	13.53	-160.06	63.88	-97.26	188.23	161.65	26.58	7.081		
6,200.00	6,198.36	6,190.87	6,187.71	13.47	13.76	-159.69	68.43	-102.04	198.06	171.04	27.01	7.332		
6,300.00	6,298.28	6,290.38	6,287.00	13.69	13.99	-159.34	72.98	-106.81	207.89	180.44	27.45	7.574		
6,400.00	6,398.20	6,389.88	6,386.29	13.91	14.22	-159.04	77.52	-111.59	217.73	189.85	27.88	7.809		
6,500.00	6,498.12	6,489.39	6,485.58	14.13	14.45	-158.75	82.07	-116.36	227.57	199.25	28.32	8.037		
6,600.00	6,598.04	6,588.90	6,584.87	14.35	14.68	-158.49	86.62	-121.14	237.42	208.67	28.75	8.257		
6,700.00	6,697.96	6,688.41	6,684.15	14.57	14.91	-158.25	91.17	-125.91	247.27	218.08	29.19	8.472		
6,800.00	6,797.88	6,787.92	6,783.44	14.79	15.14	-158.03	95.71	-130.69	257.13	227.51	29.63	8.679		
6,900.00	6,897.80	6,887.43	6,882.73	15.01	15.38	-157.83	100.26	-135.46	266.99	236.93	30.06	8.881		
7,000.00	6,997.72	6,986.93	6,982.02	15.23	15.61	-157.64	104.81	-140.24	276.86	246.35	30.50	9.077		
7,100.00	7,097.64	7,086.44	7,081.31	15.45	15.84	-157.46	109.36	-145.01	286.72	255.78	30.94	9.267		
7,200.00	7,197.56	7,189.02	7,183.69	15.67	16.06	-157.32	113.80	-149.68	296.28	264.89	31.39	9.440		
7,300.00	7,297.48	7,293.83	7,288.38	15.90	16.26	-157.30	117.13	-153.18	304.27	272.46	31.81	9.565		
7,400.00	7,397.40	7,398.89	7,393.41	16.12	16.44	-157.40	119.15	-155.29	310.55	278.33	32.22	9.637		
7,500.00	7,497.32	7,504.14	7,498.65	16.34	16.63	-157.63	119.83	-156.01	315.13	282.50	32.63	9.658		
7,600.00	7,597.24	7,604.13	7,598.64	16.56	16.83	-157.91	119.83	-156.01	318.83	285.78	33.05	9.648		
7,700.00	7,697.16	7,704.05	7,698.56	16.79	17.05	-158.17	119.83	-156.01	322.54	289.05	33.49	9.632		
7,800.00	7,797.08	7,803.97	7,798.48	17.01	17.27	-158.44	119.83	-156.01	326.26	292.33	33.93	9.616		
7,900.00	7,897.00	7,903.89	7,898.40	17.24	17.49	-158.69	119.83	-156.01	329.98	295.62	34.37	9.601		
8,000.00	7,996.92	8,003.81	7,998.32	17.46	17.71	-158.94	119.83	-156.01	333.71	298.91	34.81	9.587		
8,100.00	8,096.84	8,103.73	8,098.24	17.69	17.93	-159.18	119.83	-156.01	337.45	302.20	35.25	9.573		
8,200.00	8,196.76	8,203.65	8,198.16	17.91	18.15	-159.42	119.83	-156.01	341.19	305.50	35.69	9.560		
8,274.07	8,270.77	8,277.66	8,272.17	18.08	18.31	-159.60	119.83	-156.01	343.97	307.95	36.02	9.550		
8,300.00	8,296.68	8,303.58	8,298.08	18.13	18.37	-159.66	119.83	-156.01	344.89	308.76	36.13	9.546		
8,400.00	8,396.64	8,403.54	8,398.04	18.32	18.59	-159.82	119.83	-156.01	347.40	310.86	36.54	9.507		
8,503.36	8,500.00	8,506.89	8,501.40	18.51	18.82	-69.88	119.83	-156.01	348.27	311.31	36.96	9.422		
8,600.00	8,596.64	8,603.53	8,598.04	18.70	19.04	-69.88	119.83	-156.01	348.27	310.90	37.38	9.318		
8,700.00	8,696.64	8,703.53	8,698.04	18.92	19.26	-69.88	119.83	-156.01	348.27	310.46	37.81	9.210		
8,800.00	8,796.64	8,803.53	8,798.04	19.14	19.48	-69.88	119.83	-156.01	348.27	310.02	38.25	9.104		
8,900.00	8,896.64	8,903.53	8,898.04	19.35	19.70	-69.88	119.83	-156.01	348.27	309.58	38.69	9.001		
9,000.00	8,996.64	9,003.53	8,998.04	19.57	19.92	-69.88	119.83	-156.01	348.27	309.14	39.13	8.899		
9,100.00	9,096.64	9,117.08	9,111.45	19.78	20.15	-70.44	116.20	-155.98	347.28	307.72	39.56	8.779		
9,200.00	9,196.64	9,237.74	9,229.04	20.00	20.33	-74.58	90.16	-155.79	340.42	300.57	39.85	8.543		
9,300.00	9,296.64	9,343.64	9,325.79	20.22	20.48	-81.73	47.46	-155.48	331.08	290.85	40.23	8.230		
9,400.00	9,396.64	9,431.61	9,399.06	20.43	20.59	-90.19	-1.05	-155.13	326.13	285.46	40.67	8.018		
9,402.71	9,399.35	9,433.75	9,400.75	20.44	20.59	-90.42	-2.37	-155.12	326.13	285.45	40.68	8.017		
9,500.00	9,496.64	9,502.69	9,452.30	20.65	20.68	-98.40	-48.09	-154.79	332.48	291.77	40.72	8.166		
9,600.41	9,597.05	9,559.89	9,490.65	20.87	20.75	-105.54	-90.49	-154.48	354.61	314.71	39.90	8.887		
9,650.00	9,646.58	9,585.12	9,506.18	20.97	20.78	70.16	-110.37	-154.34	371.04	331.84	39.20	9.464		
9,700.00	9,696.14	9,610.51	9,520.92	21.06	20.82	65.48	-131.05	-154.19	389.83	351.44	38.39	10.155		
9,750.00	9,744.95	9,635.87	9,534.70	21.16	20.88	61.01	-152.33	-154.03	410.12	372.60	37.52	10.930		
9,800.00	9,792.63	9,661.20	9,547.52	21.25	20.94	56.82	-174.17	-153.87	431.28	394.64	36.64	11.770		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 168H - OH - Plan #2													Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
9,850.00	9,838.82	9,686.51	9,559.35	21.35	21.00	52.97	-196.54	-153.71	452.81	417.04	35.78	12.657		
9,900.00	9,883.17	9,711.80	9,570.17	21.45	21.08	49.49	-219.39	-153.54	474.29	439.34	34.95	13.571		
9,950.00	9,925.35	9,737.06	9,579.96	21.55	21.16	46.37	-242.68	-153.38	495.36	461.19	34.17	14.497		
10,000.00	9,965.03	9,762.32	9,588.72	21.66	21.25	43.61	-266.37	-153.20	515.74	482.28	33.46	15.415		
10,050.00	10,001.90	9,787.56	9,596.42	21.78	21.35	41.18	-290.40	-153.03	535.21	502.39	32.82	16.309		
10,100.00	10,035.70	9,812.79	9,603.05	21.91	21.45	39.07	-314.74	-152.85	553.57	521.31	32.26	17.162		
10,150.00	10,066.15	9,838.00	9,608.60	22.05	21.56	37.24	-339.34	-152.67	570.67	538.88	31.78	17.954		
10,200.00	10,093.04	9,863.22	9,613.06	22.22	21.68	35.66	-364.15	-152.49	586.37	554.96	31.41	18.670		
10,250.00	10,116.15	9,900.00	9,617.60	22.41	21.85	34.10	-400.64	-152.23	600.78	569.54	31.24	19.231		
10,300.00	10,135.31	9,913.62	9,618.69	22.63	21.92	33.18	-414.22	-152.13	613.17	582.22	30.95	19.812		
10,350.00	10,150.38	9,950.00	9,620.00	22.87	22.11	32.11	-450.57	-151.87	624.29	593.36	30.94	20.180		
10,400.00	10,161.23	9,971.48	9,619.90	23.13	22.24	31.43	-472.05	-151.71	633.21	602.27	30.94	20.467		
10,450.00	10,167.79	10,020.99	9,619.59	23.41	22.53	30.80	-521.55	-151.35	639.11	607.95	31.16	20.510		
10,497.84	10,170.00	10,068.75	9,619.30	23.70	22.84	30.58	-569.31	-151.00	641.27	609.80	31.46	20.380		
10,500.00	10,170.01	10,070.91	9,619.28	23.71	22.86	30.57	-571.47	-150.99	641.29	609.81	31.48	20.371		
10,600.00	10,170.46	10,170.90	9,618.66	28.14	23.57	30.53	-671.46	-150.26	642.21	610.20	32.01	20.063		
10,700.00	10,170.91	10,270.90	9,618.04	28.23	24.38	30.48	-771.45	-149.53	643.14	610.61	32.53	19.769		
10,800.00	10,171.36	10,370.89	9,617.42	28.32	25.26	30.43	-871.44	-148.81	644.06	610.92	33.14	19.434		
10,900.00	10,171.81	10,470.89	9,616.80	28.41	26.22	30.38	-971.43	-148.08	644.99	611.16	33.83	19.064		
11,000.00	10,172.26	10,570.88	9,616.18	28.51	27.24	30.34	-1,071.42	-147.35	645.92	611.32	34.60	18.669		
11,100.00	10,172.71	10,670.87	9,615.56	28.60	28.32	30.29	-1,171.41	-146.63	646.85	611.41	35.43	18.255		
11,200.00	10,173.15	10,770.87	9,614.94	28.70	29.45	30.24	-1,271.40	-145.90	647.78	611.44	36.34	17.827		
11,300.00	10,173.60	10,870.86	9,614.32	28.79	30.63	30.19	-1,371.39	-145.17	648.70	611.40	37.30	17.391		
11,400.00	10,174.05	10,970.86	9,613.69	28.89	31.84	30.15	-1,471.38	-144.45	649.63	611.31	38.32	16.953		
11,500.00	10,174.50	11,070.85	9,613.07	28.99	33.10	30.10	-1,571.37	-143.72	650.56	611.17	39.39	16.515		
11,600.00	10,174.95	11,170.85	9,612.45	29.09	34.39	30.05	-1,671.36	-142.99	651.49	610.98	40.51	16.081		
11,700.00	10,175.40	11,270.84	9,611.83	29.19	35.70	30.01	-1,771.35	-142.27	652.42	610.75	41.68	15.654		
11,800.00	10,175.85	11,370.83	9,611.21	29.29	37.04	29.96	-1,871.34	-141.54	653.35	610.47	42.88	15.235		
11,900.00	10,176.30	11,470.83	9,610.59	29.40	38.41	29.92	-1,971.33	-140.81	654.29	610.16	44.13	14.827		
12,000.00	10,176.74	11,570.82	9,609.97	29.51	39.79	29.87	-2,071.32	-140.09	655.22	609.81	45.41	14.430		
12,100.00	10,177.19	11,670.82	9,609.35	29.61	41.20	29.82	-2,171.31	-139.36	656.15	609.43	46.72	14.045		
12,200.00	10,177.64	11,770.81	9,608.73	29.73	42.62	29.78	-2,271.30	-138.63	657.08	609.02	48.06	13.672		
12,300.00	10,178.09	11,870.81	9,608.10	29.84	44.05	29.73	-2,371.29	-137.91	658.01	608.59	49.43	13.313		
12,400.00	10,178.54	11,970.80	9,607.48	29.96	45.50	29.69	-2,471.28	-137.18	658.95	608.13	50.82	12.967		
12,500.00	10,178.99	12,070.79	9,606.86	30.08	46.96	29.64	-2,571.27	-136.45	659.88	607.65	52.23	12.633		
12,600.00	10,179.44	12,170.79	9,606.24	30.21	48.44	29.60	-2,671.26	-135.73	660.82	607.14	53.67	12.312		
12,700.00	10,179.89	12,270.78	9,605.62	30.35	49.92	29.55	-2,771.25	-135.00	661.75	606.62	55.13	12.004		
12,800.00	10,180.34	12,370.78	9,605.00	30.51	51.41	29.51	-2,871.24	-134.27	662.69	606.08	56.60	11.708		
12,900.00	10,180.78	12,470.77	9,604.38	30.70	52.92	29.46	-2,971.23	-133.55	663.62	605.53	58.09	11.424		
13,000.00	10,181.23	12,570.77	9,603.76	30.95	54.43	29.42	-3,071.21	-132.82	664.56	604.96	59.60	11.151		
13,100.00	10,181.68	12,670.76	9,603.14	31.26	55.94	29.37	-3,171.20	-132.09	665.49	604.38	61.12	10.889		
13,200.00	10,182.13	12,770.75	9,602.51	31.65	57.47	29.33	-3,271.19	-131.37	666.43	603.78	62.65	10.638		
13,300.00	10,182.58	12,870.75	9,601.89	32.09	59.00	29.28	-3,371.18	-130.64	667.37	603.17	64.19	10.396		
13,400.00	10,183.03	12,970.74	9,601.27	32.56	60.53	29.24	-3,471.17	-129.92	668.30	602.56	65.75	10.165		
13,500.00	10,183.48	13,070.74	9,600.65	33.06	62.07	29.19	-3,571.16	-129.19	669.24	601.93	67.31	9.942		
13,600.00	10,183.93	13,170.73	9,600.03	33.57	63.62	29.15	-3,671.15	-128.46	670.18	601.29	68.89	9.729		
13,700.00	10,184.38	13,270.73	9,599.41	34.10	65.17	29.11	-3,771.14	-127.74	671.12	600.65	70.47	9.523		
13,800.00	10,184.82	13,370.72	9,598.79	34.64	66.72	29.06	-3,871.13	-127.01	672.06	600.00	72.06	9.326		
13,900.00	10,185.27	13,470.71	9,598.17	35.19	68.28	29.02	-3,971.12	-126.28	673.00	599.34	73.66	9.137		
14,000.00	10,185.72	13,570.71	9,597.55	35.74	69.84	28.98	-4,071.11	-125.56	673.94	598.67	75.26	8.954		
14,100.00	10,186.17	13,670.70	9,596.92	36.31	71.41	28.93	-4,171.10	-124.83	674.88	598.00	76.88	8.779		
14,200.00	10,186.62	13,770.70	9,596.30	36.89	72.98	28.89	-4,271.09	-124.10	675.82	597.32	78.49	8.610		

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 Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design Thistle Unit Sec 22-27 Trac Pad - Thistle Unit 168H - OH - Plan #2													Offset Site Error: 0.00 usft	
Survey Program: O-LEAM MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,300.00	10,187.07	13,870.69	9,595.68	37.47	74.55	28.85	-4,371.08	-123.38	676.76	596.64	80.12	8.447		
14,400.00	10,187.52	13,970.69	9,595.06	38.06	76.12	28.80	-4,471.07	-122.65	677.70	595.96	81.74	8.290		
14,500.00	10,187.97	14,070.68	9,594.44	38.65	77.70	28.76	-4,571.06	-121.92	678.64	595.26	83.38	8.139		
14,600.00	10,188.42	14,170.67	9,593.82	39.26	79.28	28.72	-4,671.05	-121.20	679.58	594.57	85.01	7.994		
14,700.00	10,188.86	14,270.67	9,593.20	39.86	80.86	28.67	-4,771.04	-120.47	680.53	593.87	86.65	7.853		
14,800.00	10,189.31	14,370.66	9,592.58	40.48	82.45	28.63	-4,871.03	-119.74	681.47	593.17	88.30	7.718		
14,900.00	10,189.76	14,470.66	9,591.96	41.10	84.03	28.59	-4,971.02	-119.02	682.41	592.46	89.95	7.587		
15,000.00	10,190.21	14,570.65	9,591.33	41.72	85.62	28.55	-5,071.01	-118.29	683.36	591.76	91.60	7.460		
15,100.00	10,190.66	14,670.64	9,590.71	42.35	87.21	28.50	-5,171.00	-117.56	684.30	591.05	93.25	7.338		
15,200.00	10,191.11	14,770.64	9,590.09	42.98	88.80	28.46	-5,270.99	-116.84	685.24	590.33	94.91	7.220		
15,300.00	10,191.56	14,870.63	9,589.47	43.62	90.40	28.42	-5,370.98	-116.11	686.19	589.62	96.57	7.106		
15,400.00	10,192.01	14,970.63	9,588.85	44.26	91.99	28.38	-5,470.97	-115.38	687.13	588.90	98.23	6.995		
15,500.00	10,192.46	15,070.62	9,588.23	44.91	93.59	28.34	-5,570.96	-114.66	688.08	588.18	99.90	6.888		
15,600.00	10,192.90	15,170.62	9,587.61	45.56	95.19	28.29	-5,670.95	-113.93	689.03	587.46	101.56	6.784		
15,700.00	10,193.35	15,270.61	9,586.99	46.21	96.79	28.25	-5,770.94	-113.20	689.97	586.74	103.23	6.684		
15,800.00	10,193.80	15,370.60	9,586.37	46.87	98.39	28.21	-5,870.93	-112.48	690.92	586.02	104.90	6.586		
15,900.00	10,194.25	15,470.60	9,585.74	47.52	99.99	28.17	-5,970.92	-111.75	691.87	585.29	106.57	6.492		
16,000.00	10,194.70	15,570.59	9,585.12	48.19	101.59	28.13	-6,070.91	-111.02	692.81	584.57	108.24	6.400		
16,100.00	10,195.15	15,670.59	9,584.50	48.85	103.20	28.09	-6,170.90	-110.30	693.76	583.84	109.92	6.312		
16,200.00	10,195.60	15,770.58	9,583.88	49.52	104.80	28.05	-6,270.89	-109.57	694.71	583.11	111.59	6.225		
16,300.00	10,196.05	15,870.58	9,583.26	50.19	106.41	28.01	-6,370.88	-108.84	695.66	582.39	113.27	6.142		
16,400.00	10,196.50	15,970.57	9,582.64	50.87	108.02	27.97	-6,470.86	-108.12	696.61	581.66	114.95	6.060		
16,500.00	10,196.94	16,070.56	9,582.02	51.54	109.63	27.93	-6,570.85	-107.39	697.55	580.93	116.63	5.981		
16,600.00	10,197.39	16,170.56	9,581.40	52.22	111.24	27.88	-6,670.84	-106.66	698.50	580.20	118.31	5.904		
16,700.00	10,197.84	16,270.55	9,580.78	52.91	112.85	27.84	-6,770.83	-105.94	699.45	579.47	119.99	5.829		
16,800.00	10,198.29	16,370.55	9,580.16	53.59	114.46	27.80	-6,870.82	-105.21	700.40	578.74	121.67	5.757		
16,900.00	10,198.74	16,470.54	9,579.53	54.28	116.07	27.76	-6,970.81	-104.48	701.35	578.01	123.35	5.686		
17,000.00	10,199.19	16,570.54	9,578.91	54.96	117.68	27.72	-7,070.80	-103.76	702.30	577.27	125.03	5.617		
17,100.00	10,199.64	16,670.53	9,578.29	55.65	119.29	27.68	-7,170.79	-103.03	703.26	576.54	126.71	5.550		
17,200.00	10,200.09	16,770.52	9,577.67	56.35	120.91	27.64	-7,270.78	-102.30	704.21	575.81	128.39	5.485		
17,300.00	10,200.53	16,870.52	9,577.05	57.04	122.52	27.60	-7,370.77	-101.58	705.16	575.08	130.08	5.421		
17,400.00	10,200.98	16,970.51	9,576.43	57.74	124.14	27.56	-7,470.76	-100.85	706.11	574.35	131.76	5.359		
17,500.00	10,201.43	17,070.51	9,575.81	58.43	125.75	27.53	-7,570.75	-100.12	707.06	573.62	133.45	5.298		
17,600.00	10,201.88	17,170.50	9,575.19	59.13	127.37	27.49	-7,670.74	-99.40	708.02	572.89	135.13	5.240		
17,626.43	10,202.00	17,196.93	9,575.02	59.32	127.80	27.48	-7,697.17	-99.21	708.27	572.69	135.58	5.224		

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3707.6' GE + 23.5' KB @ 3731.10usft

Offset Depths are relative to Offset Datum

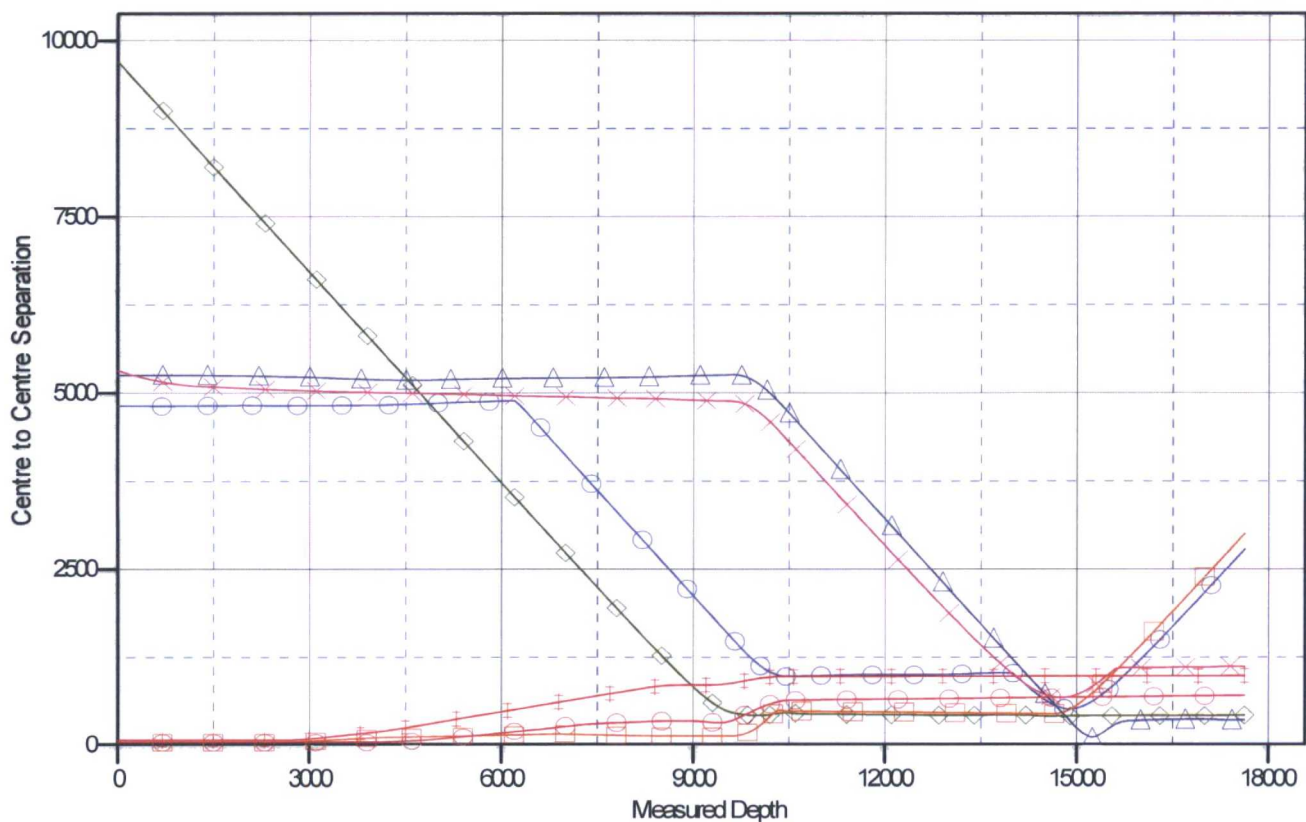
Central Meridian is 104° 19' 60.0000 W

Coordinates are relative to: Thistle Unit 96H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.42°

Ladder Plot



LEGEND

- 64H, OH, OH V0
- 102H, OH, OH V0
- Thistle Unit 126H, OH, Plan #2 V0
- Thistle Unit 111H, OH, Plan #2 V0
- Thistle Unit 168H, OH, Plan #2 V0
- 71H, OH, OH V0
- 58H, OH, OH V0

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Thistle Unit 96H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Reference Site:	Thistle Unit Sec 22-27 Trac Pad	MD Reference:	3707.6' GE + 23.5' KB @ 3731.10usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Thistle Unit 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 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3707.6' GE + 23.5' KB @ 3731.10usft

Offset Depths are relative to Offset Datum

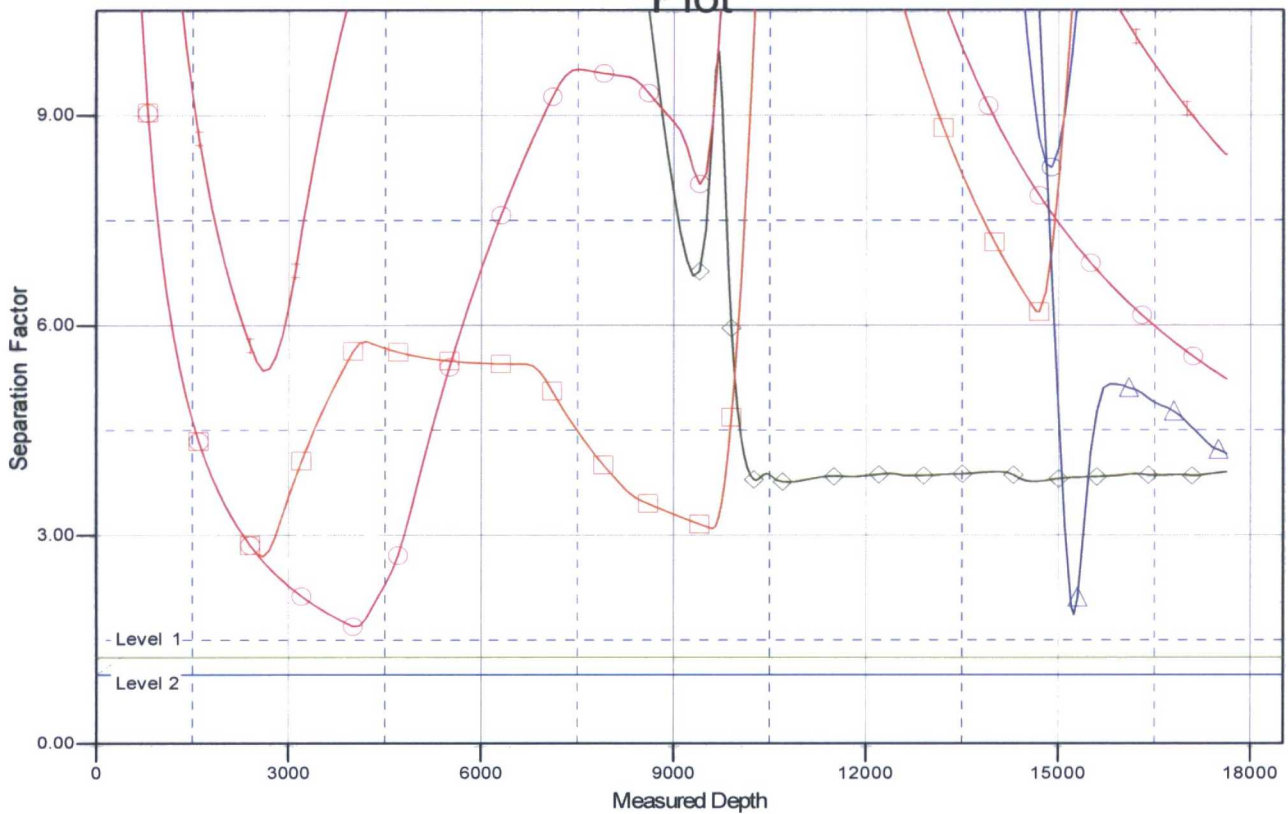
Central Meridian is 104° 19' 60.0000 W

Coordinates are relative to: Thistle Unit 96H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.42°

Separation Factor Plot



LEGEND

- 64H, OH, OH V0
- 102H, OH, OH V0
- Thistle Unit 111H, OH, Plan #2 V0
- Thistle Unit 126H, OH, Plan #2 V0
- Thistle Unit 168H, OH, Plan #2 V0
- 58H, OH, OH V0
- 71H, OH, OH V0