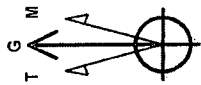
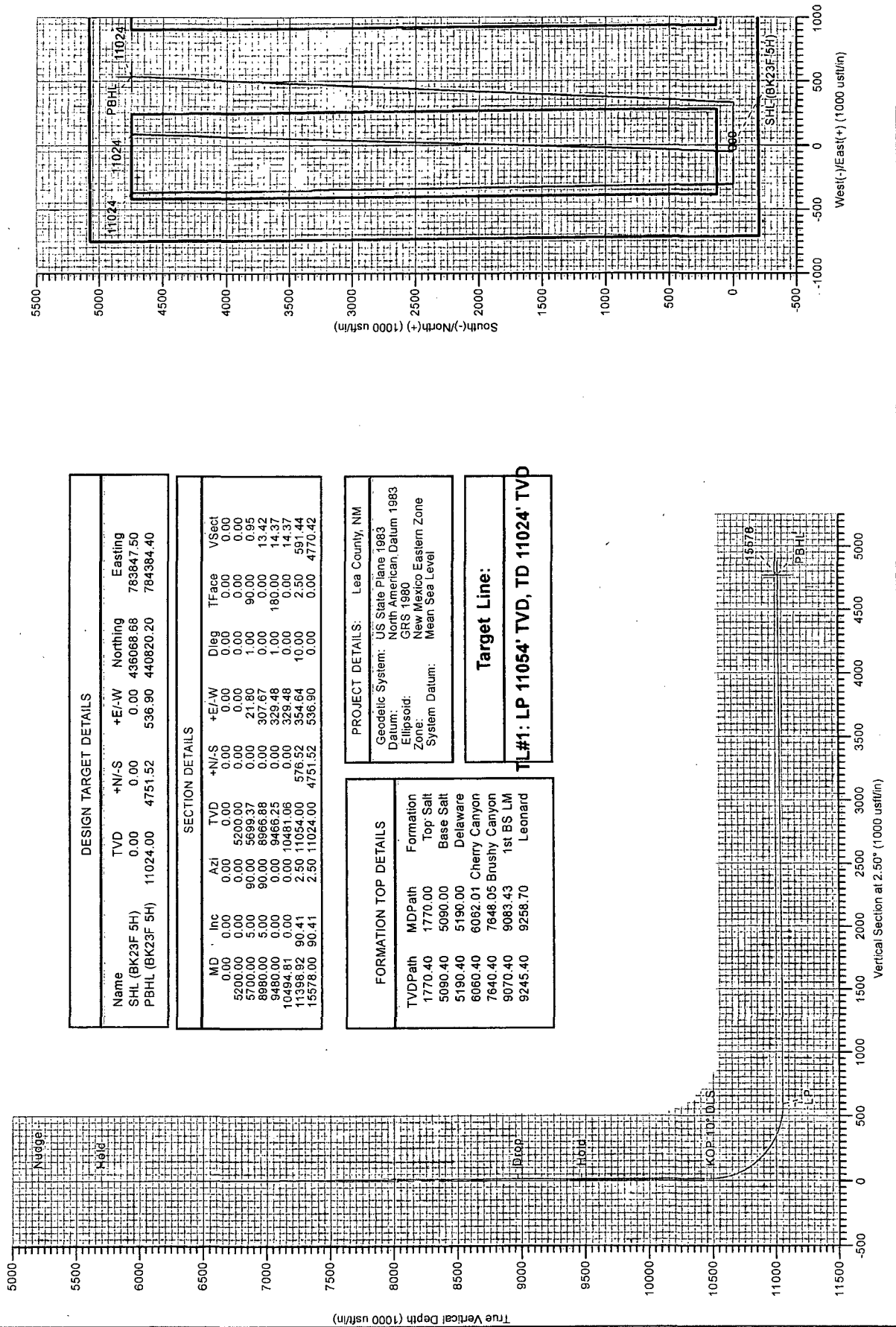




Project: Lea County, NM (NAD-83)
Site: Blue Krait 23 Fed
Well: 5H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.42°
Magnetic North: 6.85°
Magnetic Field
Strength: 48155.1snT
Dip Angle: 60.06°
Date: 5/15/2015
Model: BGGW2014



DESIGN TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	North/Easting
SHL (BK23F 5H)	0.00	0.00	0.00	436068.88 783847.50
PBHL (BK23F 5H)	11024.00	4751.52	536.90	440820.20 784384.40

SECTION DETAILS				
MD	Inc	Azi	TVD	V-Sect
0.00	0.00	0.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00
5700.00	5.00	90.00	5699.37	0.00
8980.00	5.00	90.00	8986.88	0.00
9480.00	0.00	0.00	9486.25	0.00
10484.81	0.00	0.00	10481.06	0.00
11396.92	90.41	2.50	11034.00	576.52
15578.00	90.41	2.50	11024.00	4751.52

FORMATION TOP DETAILS		PROJECT DETAILS: Lea County, NM	
Geologic System:	US State Plane 1983	Datum:	North American Datum 1983
Ellipsoid:	GRS 1980	Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level		

FORMATION TOP DETAILS		Target Line:	
TVDPath	MDPath	Formation	
1770.40	1770.00	Top Salt	
5090.40	5090.00	Base Salt	
5190.40	5190.00	Delaware	
6060.40	6062.01	Cherry Canyon	
7640.40	7648.05	Brushy Canyon	
9070.40	9083.43	1st BS LM	
9245.40	9258.70	Leonard	

TL#1: LP 11054' TVD, TD 11024' TVD



DEVON ENERGY

Lea County, NM (NAD-83)

Blue Krait 23 Fed

5H

OH

Plan: Plan #1

Standard Planning Report

12 October, 2015





LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 5H
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County NM (NAD-83)	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	5H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

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

Well:	5H, Leonard					
Well Position	+N/-S	0.35 usft	Northing:	436,068.68 usft	Latitude:	32° 11' 47.039 N
	+E/-W	50.02 usft	Easting:	783,847.50 usft	Longitude:	103° 32' 57.652 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	3,575.90 usft	Ground Level:	3,550.90 usft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	5/15/2015	7.27	60.06	48,155

Design:	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	2.50

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,700.00	5.00	90.00	5,699.37	0.00	21.80	1.00	1.00	0.00	90.00	
8,980.00	5.00	90.00	8,966.88	0.00	307.67	0.00	0.00	0.00	0.00	
9,480.00	0.00	0.00	9,466.25	0.00	329.48	1.00	-1.00	0.00	180.00	
10,494.81	0.00	0.00	10,481.06	0.00	329.48	0.00	0.00	0.00	0.00	
11,398.92	90.41	2.50	11,054.00	576.52	354.64	10.00	10.00	0.28	2.50	
15,578.01	90.41	2.50	11,024.00	4,751.52	536.90	0.00	0.00	0.00	0.00	PBHL (BK23F 5H)



LEAM Drilling Systems LLC

Planning Report



Database:	EDM: 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 5H
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County: NM (NAD:83)	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23/Fed	North Reference:	Grid
Well:	5H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (BK23F 5H)									
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
1,770.00	0.00	0.00	1,770.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 5H.
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County NM (NAD-83)	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	5H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned/Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,090.00	0.00	0.00	5,090.00	0.00	0.00	0.00	0.00	0.00	0.00	
Base Salt										
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,190.00	0.00	0.00	5,190.00	0.00	0.00	0.00	0.00	0.00	0.00	
Delaware										
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
Nudge										
5,300.00	1.00	90.00	5,300.00	0.00	0.87	0.04	1.00	1.00	0.00	
5,400.00	2.00	90.00	5,399.96	0.00	3.49	0.15	1.00	1.00	0.00	
5,500.00	3.00	90.00	5,499.86	0.00	7.85	0.34	1.00	1.00	0.00	
5,600.00	4.00	90.00	5,599.68	0.00	13.96	0.61	1.00	1.00	0.00	
5,700.00	5.00	90.00	5,699.37	0.00	21.80	0.95	1.00	1.00	0.00	
Hold										
5,800.00	5.00	90.00	5,798.99	0.00	30.52	1.33	0.00	0.00	0.00	
5,900.00	5.00	90.00	5,898.60	0.00	39.23	1.71	0.00	0.00	0.00	
6,000.00	5.00	90.00	5,998.22	0.00	47.95	2.09	0.00	0.00	0.00	
6,062.01	5.00	90.00	6,060.00	0.00	53.35	2.33	0.00	0.00	0.00	
Cherry Canyon										
6,100.00	5.00	90.00	6,097.84	0.00	56.67	2.47	0.00	0.00	0.00	
6,200.00	5.00	90.00	6,197.46	0.00	65.38	2.85	0.00	0.00	0.00	
6,300.00	5.00	90.00	6,297.08	0.00	74.10	3.23	0.00	0.00	0.00	
6,400.00	5.00	90.00	6,396.70	0.00	82.81	3.61	0.00	0.00	0.00	
6,500.00	5.00	90.00	6,496.32	0.00	91.53	3.99	0.00	0.00	0.00	
6,600.00	5.00	90.00	6,595.94	0.00	100.24	4.37	0.00	0.00	0.00	
6,700.00	5.00	90.00	6,695.56	0.00	108.96	4.75	0.00	0.00	0.00	
6,800.00	5.00	90.00	6,795.18	0.00	117.67	5.13	0.00	0.00	0.00	
6,900.00	5.00	90.00	6,894.80	0.00	126.39	5.51	0.00	0.00	0.00	
7,000.00	5.00	90.00	6,994.42	0.00	135.11	5.89	0.00	0.00	0.00	
7,100.00	5.00	90.00	7,094.04	0.00	143.82	6.27	0.00	0.00	0.00	
7,200.00	5.00	90.00	7,193.66	0.00	152.54	6.65	0.00	0.00	0.00	
7,300.00	5.00	90.00	7,293.28	0.00	161.25	7.03	0.00	0.00	0.00	
7,400.00	5.00	90.00	7,392.90	0.00	169.97	7.41	0.00	0.00	0.00	
7,500.00	5.00	90.00	7,492.52	0.00	178.68	7.79	0.00	0.00	0.00	
7,600.00	5.00	90.00	7,592.14	0.00	187.40	8.17	0.00	0.00	0.00	
7,648.05	5.00	90.00	7,640.00	0.00	191.59	8.36	0.00	0.00	0.00	
Brushy Canyon										
7,700.00	5.00	90.00	7,691.76	0.00	196.11	8.55	0.00	0.00	0.00	
7,800.00	5.00	90.00	7,791.37	0.00	204.83	8.93	0.00	0.00	0.00	
7,900.00	5.00	90.00	7,890.99	0.00	213.55	9.31	0.00	0.00	0.00	
8,000.00	5.00	90.00	7,990.61	0.00	222.26	9.69	0.00	0.00	0.00	
8,100.00	5.00	90.00	8,090.23	0.00	230.98	10.08	0.00	0.00	0.00	
8,200.00	5.00	90.00	8,189.85	0.00	239.69	10.46	0.00	0.00	0.00	
8,300.00	5.00	90.00	8,289.47	0.00	248.41	10.84	0.00	0.00	0.00	
8,400.00	5.00	90.00	8,389.09	0.00	257.12	11.22	0.00	0.00	0.00	
8,500.00	5.00	90.00	8,488.71	0.00	265.84	11.60	0.00	0.00	0.00	
8,600.00	5.00	90.00	8,588.33	0.00	274.55	11.98	0.00	0.00	0.00	
8,700.00	5.00	90.00	8,687.95	0.00	283.27	12.36	0.00	0.00	0.00	
8,800.00	5.00	90.00	8,787.57	0.00	291.99	12.74	0.00	0.00	0.00	
8,900.00	5.00	90.00	8,887.19	0.00	300.70	13.12	0.00	0.00	0.00	
8,980.00	5.00	90.00	8,966.88	0.00	307.67	13.42	0.00	0.00	0.00	
Drop										
9,000.00	4.80	90.00	8,986.81	0.00	309.38	13.50	1.00	-1.00	0.00	
9,083.43	3.97	90.00	9,070.00	0.00	315.76	13.77	1.00	-1.00	0.00	



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User Db	Local/Co-ordinate Reference:	Well 5H
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County NM (NAD-83)	MDI Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23 Fed	North Reference:	Grid
Well:	5H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1st BS LM										
9,100.00	3.80	90.00	9,086.53	0.00	316.88	13.82	1.00	-1.00	0.00	
9,200.00	2.80	90.00	9,186.36	0.00	322.64	14.07	1.00	-1.00	0.00	
9,258.70	2.21	90.00	9,245.00	0.00	325.20	14.19	1.00	-1.00	0.00	
Leonard										
9,300.00	1.80	90.00	9,286.28	0.00	326.65	14.25	1.00	-1.00	0.00	
9,400.00	0.80	90.00	9,386.25	0.00	328.92	14.35	1.00	-1.00	0.00	
9,480.00	0.00	0.00	9,466.25	0.00	329.48	14.37	1.00	-1.00	-112.50	
Hold										
9,500.00	0.00	0.00	9,486.25	0.00	329.48	14.37	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,586.25	0.00	329.48	14.37	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,686.25	0.00	329.48	14.37	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,786.25	0.00	329.48	14.37	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,886.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,000.00	0.00	0.00	9,986.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,100.00	0.00	0.00	10,086.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,200.00	0.00	0.00	10,186.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,300.00	0.00	0.00	10,286.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,400.00	0.00	0.00	10,386.25	0.00	329.48	14.37	0.00	0.00	0.00	
10,494.81	0.00	0.00	10,481.06	0.00	329.48	14.37	0.00	0.00	0.00	
KOP 10° DLS										
10,500.00	0.52	2.50	10,486.25	0.02	329.48	14.40	10.00	10.00	0.00	
10,550.00	5.52	2.50	10,536.16	2.65	329.59	17.03	10.00	10.00	0.00	
10,600.00	10.52	2.50	10,585.66	9.62	329.90	24.00	10.00	10.00	0.00	
10,650.00	15.52	2.50	10,634.36	20.87	330.39	35.26	10.00	10.00	0.00	
10,700.00	20.52	2.50	10,681.89	36.32	331.06	50.72	10.00	10.00	0.00	
10,750.00	25.52	2.50	10,727.90	55.84	331.91	70.27	10.00	10.00	0.00	
10,800.00	30.52	2.50	10,772.02	79.30	332.94	93.75	10.00	10.00	0.00	
10,850.00	35.52	2.50	10,813.93	106.51	334.13	120.99	10.00	10.00	0.00	
10,900.00	40.52	2.50	10,853.31	137.27	335.47	151.77	10.00	10.00	0.00	
10,950.00	45.52	2.50	10,889.86	171.34	336.96	185.87	10.00	10.00	0.00	
11,000.00	50.52	2.50	10,923.29	208.46	338.58	223.03	10.00	10.00	0.00	
11,050.00	55.52	2.50	10,953.36	248.35	340.32	262.96	10.00	10.00	0.00	
11,100.00	60.52	2.50	10,979.83	290.71	342.17	305.36	10.00	10.00	0.00	
11,150.00	65.52	2.50	11,002.51	335.21	344.11	349.90	10.00	10.00	0.00	
11,200.00	70.52	2.50	11,021.22	381.52	346.13	396.25	10.00	10.00	0.00	
11,250.00	75.52	2.50	11,035.81	429.28	348.22	444.06	10.00	10.00	0.00	
11,300.00	80.52	2.50	11,046.19	478.13	350.35	492.95	10.00	10.00	0.00	
11,350.00	85.52	2.50	11,052.27	527.69	352.51	542.57	10.00	10.00	0.00	
11,398.92	90.41	2.50	11,054.00	576.52	354.64	591.44	10.00	10.00	0.00	
LP										
11,400.00	90.41	2.50	11,053.99	577.60	354.69	592.52	0.03	0.03	0.00	
11,500.00	90.41	2.50	11,053.28	677.50	359.05	692.52	0.00	0.00	0.00	
11,600.00	90.41	2.50	11,052.56	777.40	363.41	792.51	0.00	0.00	0.00	
11,700.00	90.41	2.50	11,051.84	877.31	367.77	892.51	0.00	0.00	0.00	
11,800.00	90.41	2.50	11,051.12	977.21	372.14	992.51	0.00	0.00	0.00	
11,900.00	90.41	2.50	11,050.41	1,077.11	376.50	1,092.51	0.00	0.00	0.00	
12,000.00	90.41	2.50	11,049.69	1,177.01	380.86	1,192.50	0.00	0.00	0.00	
12,100.00	90.41	2.50	11,048.97	1,276.91	385.22	1,292.50	0.00	0.00	0.00	
12,200.00	90.41	2.50	11,048.25	1,376.82	389.58	1,392.50	0.00	0.00	0.00	
12,300.00	90.41	2.50	11,047.53	1,476.72	393.94	1,492.50	0.00	0.00	0.00	
12,400.00	90.41	2.50	11,046.82	1,576.62	398.30	1,592.49	0.00	0.00	0.00	
12,500.00	90.41	2.50	11,046.10	1,676.52	402.66	1,692.49	0.00	0.00	0.00	



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 5H
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County, NM (NAD:83)	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23F Fed	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,600.00	90.41	2.50	11,045.38	1,776.43	407.02	1,792.49	0.00	0.00	0.00
12,700.00	90.41	2.50	11,044.66	1,876.33	411.39	1,892.49	0.00	0.00	0.00
12,800.00	90.41	2.50	11,043.94	1,976.23	415.75	1,992.48	0.00	0.00	0.00
12,900.00	90.41	2.50	11,043.23	2,076.13	420.11	2,092.48	0.00	0.00	0.00
13,000.00	90.41	2.50	11,042.51	2,176.03	424.47	2,192.48	0.00	0.00	0.00
13,100.00	90.41	2.50	11,041.79	2,275.94	428.83	2,292.48	0.00	0.00	0.00
13,200.00	90.41	2.50	11,041.07	2,375.84	433.19	2,392.47	0.00	0.00	0.00
13,300.00	90.41	2.50	11,040.35	2,475.74	437.55	2,492.47	0.00	0.00	0.00
13,400.00	90.41	2.50	11,039.64	2,575.64	441.91	2,592.47	0.00	0.00	0.00
13,500.00	90.41	2.50	11,038.92	2,675.55	446.28	2,692.47	0.00	0.00	0.00
13,600.00	90.41	2.50	11,038.20	2,775.45	450.64	2,792.46	0.00	0.00	0.00
13,700.00	90.41	2.50	11,037.48	2,875.35	455.00	2,892.46	0.00	0.00	0.00
13,800.00	90.41	2.50	11,036.76	2,975.25	459.36	2,992.46	0.00	0.00	0.00
13,900.00	90.41	2.50	11,036.05	3,075.16	463.72	3,092.46	0.00	0.00	0.00
14,000.00	90.41	2.50	11,035.33	3,175.06	468.08	3,192.45	0.00	0.00	0.00
14,100.00	90.41	2.50	11,034.61	3,274.96	472.44	3,292.45	0.00	0.00	0.00
14,200.00	90.41	2.50	11,033.89	3,374.86	476.80	3,392.45	0.00	0.00	0.00
14,300.00	90.41	2.50	11,033.18	3,474.76	481.16	3,492.45	0.00	0.00	0.00
14,400.00	90.41	2.50	11,032.46	3,574.67	485.53	3,592.44	0.00	0.00	0.00
14,500.00	90.41	2.50	11,031.74	3,674.57	489.89	3,692.44	0.00	0.00	0.00
14,600.00	90.41	2.50	11,031.02	3,774.47	494.25	3,792.44	0.00	0.00	0.00
14,700.00	90.41	2.50	11,030.30	3,874.37	498.61	3,892.43	0.00	0.00	0.00
14,800.00	90.41	2.50	11,029.59	3,974.28	502.97	3,992.43	0.00	0.00	0.00
14,900.00	90.41	2.50	11,028.87	4,074.18	507.33	4,092.43	0.00	0.00	0.00
15,000.00	90.41	2.50	11,028.15	4,174.08	511.69	4,192.43	0.00	0.00	0.00
15,100.00	90.41	2.50	11,027.43	4,273.98	516.05	4,292.42	0.00	0.00	0.00
15,200.00	90.41	2.50	11,026.71	4,373.88	520.41	4,392.42	0.00	0.00	0.00
15,300.00	90.41	2.50	11,026.00	4,473.79	524.78	4,492.42	0.00	0.00	0.00
15,400.00	90.41	2.50	11,025.28	4,573.69	529.14	4,592.42	0.00	0.00	0.00
15,500.00	90.41	2.50	11,024.56	4,673.59	533.50	4,692.41	0.00	0.00	0.00
15,578.00	90.41	2.50	11,024.00	4,751.52	536.90	4,770.41	0.00	0.00	0.00
TD - PBHL (BK23F 5H)									

Design Targets									
Target Name	Hit/Miss (target)	Dip Angle (°)	Dip Dir (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Latitude Longitude
SHL (BK23F 5H)	- plan hits target center	0.00	0.00	0.00	0.00	0.00	436,068.68	783,847.50	32° 11' 47.039 N 103° 32' 57.652 W
	- Point								
PBHL (BK23F 5H)	- plan hits target center	0.00	0.00	11,024.00	4,751.52	536.90	440,820.20	784,384.40	32° 12' 34.018 N 103° 32' 51.000 W
	- Point								



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 5H
Company:	DEVON ENERGY	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Project:	Lea County NM (NAD-83)	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site:	Blue Krait 23 Feds	North Reference:	Gnd
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Direction (°)	
1,770.00	1,770.00	Top Salt		0.00		
5,090.00	5,090.00	Base Salt		0.00		
5,190.00	5,190.00	Delaware		0.00		
6,062.01	6,060.00	Cherry Canyon		0.00		
7,648.05	7,640.00	Brushy Canyon		0.00		
9,083.43	9,070.00	1st BS LM		0.00		
9,258.70	9,245.00	Leonard		0.00		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		N/S (usft)	E/W (usft)	
5,200.00	5,200.00	0.00	0.00	Nudge
5,700.00	5,699.37	0.00	21.80	Hold
8,980.00	8,966.88	0.00	307.67	Drop
9,480.00	9,466.25	0.00	329.48	Hold
10,494.81	10,481.06	0.00	329.48	KOP 10° DLS
11,398.92	11,054.00	576.52	354.64	LP
15,578.00	11,024.00	4,751.52	536.90	TD



DEVON ENERGY

Lea County, NM (NAD-83)

Blue Krait 23 Fed

5H

OH

Plan #1

Anticollision Report

12 October, 2015





LEAM Drilling Systems LLC
Anticollision Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well SH
Project:	Lea County NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site/Errors:	0.00 usft	North Reference:	Grid
Reference Well:	SH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey/Tool/Program	Date	10/12/2015
From (usft)	To (usft)	Survey (Wellbore)
0.00	15,578.01	Plan #1 (OH)
		Tool Name
		LEAM MWD-ADJ
		Description
		MWD - Standard

Summary								
Site Name	Offset Well	Wellbore	Design	Reference	Offset	Distance	Separation Factor	Warning
				Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)		
Blue Krait 23 Fed								
	10H - OH - Plan #1			5,200.00	5,200.40	50.02	26.93	2.166 CC, ES
	10H - OH - Plan #1			5,300.00	5,300.40	50.89	27.37	2.163 SF
	1H - OH - Plan #1			5,166.53	5,166.93	99.97	77.03	4.357 CC
	1H - OH - Plan #1			5,200.00	5,200.00	99.97	76.88	4.329 ES, SF

Offset Design	Blue Krait 23 Fed	10H - OH - Plan #1	Offset Site Error: 0.00 usft
Survey Program: LEAM MWD-ADJ			Offset Well Error: 0.00 usft
Reference	Offset	Seam Major Axis	Distance
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)
Reference Depth (usft)	Offset Depth (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	0.40	0.40
100.00	100.00	100.40	100.40
200.00	200.00	200.40	200.40
300.00	300.00	300.40	300.40
400.00	400.00	400.40	400.40
500.00	500.00	500.40	500.40
600.00	600.00	600.40	600.40
700.00	700.00	700.40	700.40
800.00	800.00	800.40	800.40
900.00	900.00	900.40	900.40
1,000.00	1,000.00	1,000.40	1,000.40
1,100.00	1,100.00	1,100.40	1,100.40
1,200.00	1,200.00	1,200.40	1,200.40
1,300.00	1,300.00	1,300.40	1,300.40
1,400.00	1,400.00	1,400.40	1,400.40
1,500.00	1,500.00	1,500.40	1,500.40
1,600.00	1,600.00	1,600.40	1,600.40
1,700.00	1,700.00	1,700.40	1,700.40
1,800.00	1,800.00	1,800.40	1,800.40
1,900.00	1,900.00	1,900.40	1,900.40
2,000.00	2,000.00	2,000.40	2,000.40
2,100.00	2,100.00	2,100.40	2,100.40
2,200.00	2,200.00	2,200.40	2,200.40

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 5H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00 usft	North Reference:	Gnd
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue Krait 23/Fed - 10H - OH - Plan #1											Offset Site Error: 0.00 usft		
Survey Program: (0) LEAM (MWD-ADJ)											Offset Well Error: 0.00 usft		
(Reference)		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Control		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)			
2,300.00	2,300.00	2,300.40	2,300.40	5.03	5.03	-90.40	-0.35	-50.02	50.02	39.96	10.06	4.973	
2,400.00	2,400.00	2,400.40	2,400.40	5.25	5.25	-90.40	-0.35	-50.02	50.02	39.51	10.51	4.760	
2,500.00	2,500.00	2,500.40	2,500.40	5.48	5.48	-90.40	-0.35	-50.02	50.02	39.06	10.96	4.565	
2,600.00	2,600.00	2,600.40	2,600.40	5.70	5.70	-90.40	-0.35	-50.02	50.02	38.61	11.41	4.385	
2,700.00	2,700.00	2,700.40	2,700.40	5.93	5.93	-90.40	-0.35	-50.02	50.02	38.16	11.86	4.219	
2,800.00	2,800.00	2,800.40	2,800.40	6.15	6.15	-90.40	-0.35	-50.02	50.02	37.71	12.31	4.065	
2,900.00	2,900.00	2,900.40	2,900.40	6.38	6.38	-90.40	-0.35	-50.02	50.02	37.26	12.76	3.921	
3,000.00	3,000.00	3,000.40	3,000.40	6.60	6.60	-90.40	-0.35	-50.02	50.02	36.82	13.21	3.788	
3,100.00	3,100.00	3,100.40	3,100.40	6.83	6.83	-90.40	-0.35	-50.02	50.02	36.37	13.66	3.663	
3,200.00	3,200.00	3,200.40	3,200.40	7.05	7.05	-90.40	-0.35	-50.02	50.02	35.92	14.10	3.546	
3,300.00	3,300.00	3,300.40	3,300.40	7.28	7.28	-90.40	-0.35	-50.02	50.02	35.47	14.55	3.437	
3,400.00	3,400.00	3,400.40	3,400.40	7.50	7.50	-90.40	-0.35	-50.02	50.02	35.02	15.00	3.334	
3,500.00	3,500.00	3,500.40	3,500.40	7.73	7.73	-90.40	-0.35	-50.02	50.02	34.57	15.45	3.237	
3,600.00	3,600.00	3,600.40	3,600.40	7.95	7.95	-90.40	-0.35	-50.02	50.02	34.12	15.90	3.145	
3,700.00	3,700.00	3,700.40	3,700.40	8.18	8.18	-90.40	-0.35	-50.02	50.02	33.67	16.35	3.059	
3,800.00	3,800.00	3,800.40	3,800.40	8.40	8.40	-90.40	-0.35	-50.02	50.02	33.22	16.80	2.977	
3,900.00	3,900.00	3,900.40	3,900.40	8.63	8.63	-90.40	-0.35	-50.02	50.02	32.77	17.25	2.899	
4,000.00	4,000.00	4,000.40	4,000.40	8.85	8.85	-90.40	-0.35	-50.02	50.02	32.32	17.70	2.826	
4,100.00	4,100.00	4,100.40	4,100.40	9.07	9.08	-90.40	-0.35	-50.02	50.02	31.87	18.15	2.756	
4,200.00	4,200.00	4,200.40	4,200.40	9.30	9.30	-90.40	-0.35	-50.02	50.02	31.42	18.60	2.689	
4,300.00	4,300.00	4,300.40	4,300.40	9.52	9.53	-90.40	-0.35	-50.02	50.02	30.97	19.05	2.626	
4,400.00	4,400.00	4,400.40	4,400.40	9.75	9.75	-90.40	-0.35	-50.02	50.02	30.52	19.50	2.565	
4,500.00	4,500.00	4,500.40	4,500.40	9.97	9.97	-90.40	-0.35	-50.02	50.02	30.07	19.95	2.507	
4,600.00	4,600.00	4,600.40	4,600.40	10.20	10.20	-90.40	-0.35	-50.02	50.02	29.62	20.40	2.452	
4,700.00	4,700.00	4,700.40	4,700.40	10.42	10.42	-90.40	-0.35	-50.02	50.02	29.17	20.85	2.399	
4,800.00	4,800.00	4,800.40	4,800.40	10.65	10.65	-90.40	-0.35	-50.02	50.02	28.72	21.30	2.349	
4,900.00	4,900.00	4,900.40	4,900.40	10.87	10.87	-90.40	-0.35	-50.02	50.02	28.27	21.75	2.300	
5,000.00	5,000.00	5,000.40	5,000.40	11.10	11.10	-90.40	-0.35	-50.02	50.02	27.82	22.20	2.254	
5,100.00	5,100.00	5,100.40	5,100.40	11.32	11.32	-90.40	-0.35	-50.02	50.02	27.38	22.65	2.209	
5,200.00	5,200.00	5,200.40	5,200.40	11.55	11.55	-90.40	-0.35	-50.02	50.02	26.93	23.10	2.166 CC, ES	
5,300.00	5,300.00	5,300.40	5,300.40	11.76	11.77	179.81	-0.35	-50.02	50.89	27.37	23.53	2.163 SF	
5,400.00	5,399.96	5,400.36	5,400.36	11.98	12.00	179.83	-0.35	-50.02	53.51	29.57	23.94	2.235	
5,500.00	5,499.86	5,500.26	5,500.26	12.16	12.22	179.65	-0.35	-50.02	57.87	33.53	24.34	2.377	
5,600.00	5,599.68	5,600.08	5,600.08	12.36	12.45	179.69	-0.35	-50.02	63.98	39.24	24.74	2.586	
5,700.00	5,699.37	5,699.77	5,699.77	12.56	12.67	179.72	-0.35	-50.02	71.82	46.69	25.13	2.858	
5,800.00	5,798.99	5,799.39	5,799.39	12.77	12.89	179.75	-0.35	-50.02	80.54	54.98	25.55	3.152	
5,900.00	5,898.60	5,899.00	5,899.00	12.98	13.12	179.77	-0.35	-50.02	89.25	63.28	25.98	3.436	
6,000.00	5,998.22	5,998.62	5,998.62	13.20	13.34	179.79	-0.35	-50.02	97.97	71.57	26.41	3.710	
6,100.00	6,097.84	6,098.24	6,098.24	13.41	13.57	179.81	-0.35	-50.02	106.69	79.85	26.83	3.978	
6,200.00	6,197.46	6,197.86	6,197.86	13.63	13.79	179.83	-0.35	-50.02	115.40	88.14	27.26	4.233	
6,300.00	6,297.08	6,297.48	6,297.48	13.85	14.01	179.84	-0.35	-50.02	124.12	96.43	27.69	4.483	
6,400.00	6,396.70	6,397.10	6,397.10	14.07	14.24	179.85	-0.35	-50.02	132.83	104.72	28.12	4.724	
6,500.00	6,496.32	6,496.72	6,496.72	14.29	14.46	179.86	-0.35	-50.02	141.55	113.00	28.55	4.958	
6,600.00	6,595.94	6,596.34	6,596.34	14.52	14.69	179.87	-0.35	-50.02	150.26	121.29	28.98	5.185	
6,700.00	6,695.56	6,695.96	6,695.96	14.75	14.91	179.87	-0.35	-50.02	158.98	129.57	29.41	5.408	
6,800.00	6,795.18	6,795.58	6,795.58	14.98	15.13	179.88	-0.35	-50.02	167.69	137.85	29.84	5.619	
6,900.00	6,894.80	6,895.20	6,895.20	15.21	15.36	179.89	-0.35	-50.02	176.41	146.13	30.28	5.827	
7,000.00	6,994.42	6,994.82	6,994.82	15.44	15.58	179.89	-0.35	-50.02	185.13	154.42	30.71	6.028	
7,100.00	7,094.04	7,094.44	7,094.44	15.67	15.81	179.90	-0.35	-50.02	193.84	162.70	31.14	6.224	
7,200.00	7,193.66	7,194.06	7,194.06	15.90	16.03	179.90	-0.35	-50.02	202.56	170.98	31.58	6.414	
7,300.00	7,293.28	7,293.68	7,293.68	16.14	16.25	179.90	-0.35	-50.02	211.27	179.26	32.02	6.599	
7,400.00	7,392.90	7,393.30	7,393.30	16.38	16.48	179.91	-0.35	-50.02	219.99	187.54	32.45	6.779	

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 5H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	5H	Survey/Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design										Blue Krait 23 Fed - 10H - OH - Plan #1		Offset Site Error		0.00 usft
Survey Program: D:\LEAM\MWD\ADJ												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)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,500.00	7,492.52	7,492.92	7,492.92	16.61	16.70	179.91	-0.35	-50.02	228.70	195.81	32.89	6.954		
7,600.00	7,592.14	7,592.54	7,592.54	16.85	16.92	179.92	-0.35	-50.02	237.42	204.09	33.33	7.124		
7,700.00	7,691.76	7,692.16	7,692.16	17.09	17.15	179.92	-0.35	-50.02	246.13	212.37	33.77	7.290		
7,800.00	7,791.37	7,791.77	7,791.77	17.33	17.37	179.92	-0.35	-50.02	254.85	220.65	34.20	7.451		
7,900.00	7,890.99	7,891.39	7,891.39	17.57	17.60	179.92	-0.35	-50.02	263.57	228.92	34.64	7.608		
8,000.00	7,990.61	7,991.01	7,991.01	17.82	17.82	179.93	-0.35	-50.02	272.28	237.20	35.08	7.761		
8,100.00	8,090.23	8,090.63	8,090.63	18.06	18.04	179.93	-0.35	-50.02	281.00	245.47	35.52	7.910		
8,200.00	8,189.85	8,190.25	8,190.25	18.31	18.27	179.93	-0.35	-50.02	289.71	253.75	35.96	8.056		
8,300.00	8,289.47	8,289.87	8,289.87	18.55	18.49	179.93	-0.35	-50.02	298.43	262.02	36.40	8.198		
8,400.00	8,389.09	8,389.49	8,389.49	18.80	18.72	179.93	-0.35	-50.02	307.14	270.30	36.85	8.336		
8,500.00	8,488.71	8,489.11	8,489.11	19.04	18.94	179.94	-0.35	-50.02	315.86	278.57	37.29	8.471		
8,600.00	8,588.33	8,588.73	8,588.73	19.29	19.16	179.94	-0.35	-50.02	324.57	286.85	37.73	8.603		
8,700.00	8,687.95	8,688.35	8,688.35	19.54	19.39	179.94	-0.35	-50.02	333.29	295.12	38.17	8.731		
8,800.00	8,787.57	8,787.97	8,787.97	19.79	19.61	179.94	-0.35	-50.02	342.01	303.39	38.61	8.857		
8,900.00	8,887.19	8,887.59	8,887.59	20.04	19.84	179.94	-0.35	-50.02	350.72	311.66	39.06	8.980		
8,980.00	8,966.88	8,967.28	8,967.28	20.24	20.01	179.94	-0.35	-50.02	357.69	318.28	39.41	9.076		
9,000.00	8,986.81	8,987.21	8,987.21	20.28	20.06	179.94	-0.35	-50.02	359.40	319.90	39.51	9.097		
9,100.00	9,086.53	9,086.93	9,086.93	20.49	20.28	179.95	-0.35	-50.02	366.90	326.94	39.96	9.182		
9,200.00	9,186.36	9,186.76	9,186.76	20.70	20.51	179.95	-0.35	-50.02	372.66	332.26	40.40	9.224		
9,300.00	9,286.28	9,286.68	9,286.68	20.89	20.73	179.95	-0.35	-50.02	376.67	335.84	40.83	9.225		
9,400.00	9,386.25	9,386.65	9,386.65	21.09	20.96	179.95	-0.35	-50.02	378.94	337.68	41.25	9.186		
9,480.00	9,466.25	9,466.65	9,466.65	21.23	21.14	-90.05	-0.35	-50.02	379.50	337.91	41.59	9.126		
9,500.00	9,486.25	9,486.65	9,486.65	21.27	21.18	-90.05	-0.35	-50.02	379.50	337.83	41.67	9.107		
9,600.00	9,586.25	9,586.65	9,586.65	21.48	21.41	-90.05	-0.35	-50.02	379.50	337.38	42.11	9.011		
9,700.00	9,686.25	9,686.65	9,686.65	21.70	21.63	-90.05	-0.35	-50.02	379.50	336.94	42.56	8.917		
9,800.00	9,786.25	9,786.65	9,786.65	21.91	21.86	-90.05	-0.35	-50.02	379.50	336.50	43.00	8.825		
9,900.00	9,886.25	9,886.65	9,886.65	22.12	22.08	-90.05	-0.35	-50.02	379.50	336.05	43.44	8.735		
10,000.00	9,986.25	9,986.65	9,986.65	22.33	22.31	-90.05	-0.35	-50.02	379.50	335.61	43.89	8.647		
10,100.00	10,086.25	10,086.65	10,086.65	22.55	22.53	-90.05	-0.35	-50.02	379.50	335.17	44.33	8.560		
10,200.00	10,186.25	10,186.65	10,186.65	22.76	22.76	-90.05	-0.35	-50.02	379.50	334.72	44.78	8.478		
10,300.00	10,286.25	10,286.65	10,286.65	22.97	22.98	-90.05	-0.35	-50.02	379.50	334.28	45.22	8.392		
10,400.00	10,386.25	10,386.65	10,386.65	23.19	23.21	-90.05	-0.35	-50.02	379.50	333.83	45.66	8.311		
10,494.81	10,481.06	10,481.46	10,481.46	23.39	23.42	-90.05	-0.35	-50.02	379.50	333.41	46.08	8.235		
10,500.00	10,486.25	10,486.75	10,486.75	23.40	23.43	-92.55	-0.33	-50.02	379.50	333.39	46.10	8.231		
10,550.00	10,536.16	10,537.74	10,537.65	23.51	23.54	-92.54	2.39	-49.94	379.54	333.21	46.33	8.193		
10,600.00	10,585.66	10,588.72	10,588.10	23.62	23.66	-92.51	9.62	-49.74	379.64	333.09	46.54	8.156		
10,650.00	10,634.36	10,639.69	10,637.69	23.73	23.77	-92.46	21.30	-49.40	379.80	333.04	46.76	8.123		
10,700.00	10,681.89	10,690.63	10,686.03	23.83	23.88	-92.40	37.33	-48.95	380.03	333.06	46.97	8.090		
10,750.00	10,727.90	10,741.55	10,732.72	23.94	23.99	-92.31	57.57	-48.37	380.32	333.13	47.19	8.059		
10,800.00	10,772.02	10,792.42	10,777.41	24.05	24.09	-92.20	81.85	-47.68	380.66	333.25	47.41	8.028		
10,850.00	10,813.93	10,843.25	10,819.72	24.16	24.20	-92.08	109.97	-46.88	381.06	333.41	47.65	7.997		
10,900.00	10,853.31	10,894.03	10,859.33	24.27	24.33	-91.94	141.70	-45.98	381.52	333.60	47.91	7.963		
10,950.00	10,899.86	10,944.75	10,895.95	24.39	24.47	-91.79	176.76	-44.98	382.02	333.82	48.20	7.926		
11,000.00	10,923.29	10,995.40	10,929.27	24.52	24.62	-91.62	214.87	-43.90	382.57	334.05	48.52	7.885		
11,050.00	10,953.36	11,045.99	10,959.07	24.67	24.80	-91.45	255.72	-42.74	383.16	334.29	48.88	7.839		
11,100.00	10,979.83	11,086.50	10,985.11	24.85	24.99	-91.26	298.97	-41.51	383.80	334.52	49.28	7.788		
11,150.00	11,002.51	11,146.94	11,007.20	25.05	25.21	-91.08	344.27	-40.22	384.48	334.73	49.73	7.731		
11,200.00	11,021.22	11,197.30	11,025.21	25.28	25.45	-90.85	391.27	-38.89	385.16	334.93	50.23	7.668		
11,250.00	11,035.81	11,247.58	11,038.99	25.54	25.71	-90.64	439.58	-37.51	385.88	335.10	50.77	7.600		
11,300.00	11,046.19	11,297.77	11,048.48	25.83	26.00	-90.43	488.83	-36.11	386.61	335.25	51.37	7.527		
11,350.00	11,052.27	11,347.88	11,053.61	26.15	26.31	-90.21	538.65	-34.69	387.36	335.36	52.00	7.449		
11,398.92	11,054.00	11,396.83	11,054.51	26.48	26.64	-90.01	587.55	-33.30	388.10	335.44	52.66	7.369		

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 5H
Project:	Lea County, NM (NAD-83)	TVD/Reference:	3550.9' GL + 25'RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD/Reference:	3550.9' GL + 25'RKB @ 3575.90usft
Site Error:	0.00 usft	North/Reference:	Grid
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db.
Reference Design:	Plan #1	Offset TVD/Reference:	Offset Datum

Offset Design: Blue Krait 23 Fed - 10H - OH - Plan #1														Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM MWD ADJ														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
11,400.00	11,053.99	11,397.91	11,054.50	26.49	26.64	-90.01	588.63	-33.27	388.12	335.44	52.68	7.368			
11,500.00	11,053.28	11,497.90	11,053.77	27.24	27.38	-90.01	688.58	-30.43	389.64	335.46	54.19	7.191			
11,600.00	11,052.56	11,597.89	11,053.04	28.10	28.21	-90.01	788.52	-27.59	391.16	335.28	55.89	6.999			
11,700.00	11,051.84	11,697.87	11,052.30	29.04	29.14	-90.00	888.47	-24.75	392.68	334.92	57.77	6.798			
11,800.00	11,051.12	11,797.86	11,051.57	30.07	30.14	-90.00	988.41	-21.91	394.20	334.39	59.81	6.591			
11,900.00	11,050.41	11,897.85	11,050.84	31.16	31.22	-90.00	1,088.36	-19.06	395.72	333.73	62.00	6.383			
12,000.00	11,049.69	11,997.84	11,050.11	32.33	32.37	-90.00	1,188.30	-16.22	397.24	332.93	64.32	6.176			
12,100.00	11,048.97	12,097.83	11,049.37	33.55	33.57	-89.99	1,288.25	-13.38	398.76	332.01	66.75	5.974			
12,200.00	11,048.25	12,197.82	11,048.64	34.82	34.83	-89.99	1,388.19	-10.54	400.28	330.99	69.29	5.777			
12,300.00	11,047.53	12,297.81	11,047.91	36.13	36.14	-89.99	1,488.14	-7.70	401.80	329.87	71.93	5.586			
12,400.00	11,046.82	12,397.79	11,047.17	37.49	37.48	-89.99	1,588.08	-4.86	403.32	328.67	74.65	5.403			
12,500.00	11,046.10	12,497.78	11,046.44	38.89	38.87	-89.99	1,688.03	-2.01	404.84	327.40	77.44	5.228			
12,600.00	11,045.38	12,597.77	11,045.71	40.32	40.29	-89.98	1,787.97	0.83	406.36	326.06	80.31	5.060			
12,700.00	11,044.66	12,697.76	11,044.97	41.78	41.75	-89.98	1,887.92	3.67	407.88	324.65	83.23	4.901			
12,800.00	11,043.94	12,797.75	11,044.24	43.27	43.23	-89.98	1,987.87	6.51	409.40	323.20	86.20	4.749			
12,900.00	11,043.23	12,897.74	11,043.51	44.78	44.73	-89.98	2,087.81	9.35	410.92	321.69	89.23	4.605			
13,000.00	11,042.51	12,997.72	11,042.78	46.31	46.26	-89.98	2,187.76	12.19	412.44	320.14	92.30	4.469			
13,100.00	11,041.79	13,097.71	11,042.04	47.86	47.81	-89.97	2,287.70	15.04	413.96	318.55	95.41	4.339			
13,200.00	11,041.07	13,197.70	11,041.31	49.43	49.38	-89.97	2,387.65	17.88	415.48	316.93	98.55	4.216			
13,300.00	11,040.35	13,297.69	11,040.58	51.02	50.96	-89.97	2,487.59	20.72	417.00	315.27	101.73	4.099			
13,400.00	11,039.64	13,397.68	11,039.84	52.62	52.56	-89.97	2,587.54	23.56	418.52	313.58	104.94	3.988			
13,500.00	11,038.92	13,497.67	11,039.11	54.24	54.17	-89.97	2,687.48	26.40	420.04	311.87	108.17	3.883			
13,600.00	11,038.20	13,597.66	11,038.38	55.87	55.80	-89.96	2,787.43	29.24	421.56	310.13	111.43	3.783			
13,700.00	11,037.48	13,697.64	11,037.65	57.50	57.43	-89.96	2,887.37	32.09	423.08	308.37	114.72	3.688			
13,800.00	11,036.76	13,797.63	11,036.91	59.15	59.08	-89.96	2,987.32	34.93	424.60	306.58	118.02	3.598			
13,900.00	11,036.05	13,897.62	11,036.18	60.81	60.74	-89.96	3,087.26	37.77	426.12	304.78	121.34	3.512			
14,000.00	11,035.33	13,997.61	11,035.45	62.48	62.41	-89.96	3,187.21	40.61	427.64	302.96	124.68	3.430			
14,100.00	11,034.61	14,097.60	11,034.71	64.15	64.08	-89.95	3,287.16	43.45	429.16	301.13	128.03	3.352			
14,200.00	11,033.89	14,197.59	11,033.98	65.84	65.76	-89.95	3,387.10	46.30	430.68	299.28	131.40	3.278			
14,300.00	11,033.18	14,297.57	11,033.25	67.53	67.45	-89.95	3,487.05	49.14	432.20	297.41	134.79	3.207			
14,400.00	11,032.46	14,397.56	11,032.51	69.22	69.15	-89.95	3,586.99	51.98	433.72	295.54	138.18	3.139			
14,500.00	11,031.74	14,497.55	11,031.78	70.93	70.85	-89.95	3,686.94	54.82	435.24	293.65	141.59	3.074			
14,600.00	11,031.02	14,597.54	11,031.05	72.63	72.56	-89.94	3,786.88	57.66	436.76	291.75	145.01	3.012			
14,700.00	11,030.30	14,697.53	11,030.32	74.35	74.27	-89.94	3,886.83	60.50	438.28	289.84	148.44	2.953			
14,800.00	11,029.59	14,797.52	11,029.58	76.06	75.99	-89.94	3,986.77	63.35	439.80	287.92	151.88	2.896			
14,900.00	11,028.87	14,897.51	11,028.85	77.78	77.71	-89.94	4,086.72	66.19	441.32	285.99	155.33	2.841			
15,000.00	11,028.15	14,997.49	11,028.12	79.51	79.44	-89.94	4,186.66	69.03	442.84	284.06	158.79	2.789			
15,100.00	11,027.43	15,097.48	11,027.38	81.24	81.17	-89.94	4,286.61	71.87	444.36	282.11	162.25	2.739			
15,200.00	11,026.71	15,197.47	11,026.65	82.97	82.91	-89.93	4,386.55	74.71	445.88	280.16	165.72	2.691			
15,300.00	11,026.00	15,297.46	11,025.92	84.71	84.65	-89.93	4,486.50	77.55	447.40	278.20	169.20	2.644			
15,400.00	11,025.28	15,397.45	11,025.19	86.45	86.39	-89.93	4,586.44	80.40	448.92	276.24	172.69	2.600			
15,500.00	11,024.56	15,497.44	11,024.45	88.20	88.13	-89.93	4,686.39	83.24	450.44	274.27	176.18	2.557			
15,578.01	11,024.00	15,559.07	11,024.00	89.56	89.03	-89.93	4,748.00	84.99	451.92	273.49	178.43	2.533			

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 5H
Project:	Lea County NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed:	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Blue Krait 23 Fed - 1H OH Plan #1												Offset Site Error:
Survey Program: LEAM MWD-ADJ												Offset Well Error:
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Between		Minimum	Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Reference (usft)	Offset (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
0.00	0.00	0.40	0.40	0.00	0.00	-90.38	-0.67	-99.97	99.97			
100.00	100.00	100.40	100.40	0.08	0.09	-90.38	-0.67	-99.97	99.97	99.80	0.17	589.898
200.00	200.00	200.40	200.40	0.31	0.31	-90.38	-0.67	-99.97	99.97	99.35	0.62	161.505
300.00	300.00	300.40	300.40	0.53	0.53	-90.38	-0.67	-99.97	99.97	98.90	1.07	93.560
400.00	400.00	400.40	400.40	0.76	0.76	-90.38	-0.67	-99.97	99.97	98.45	1.52	65.855
500.00	500.00	500.40	500.40	0.98	0.98	-90.38	-0.67	-99.97	99.97	98.00	1.97	50.809
600.00	600.00	600.40	600.40	1.21	1.21	-90.38	-0.67	-99.97	99.97	97.56	2.42	41.360
700.00	700.00	700.40	700.40	1.43	1.43	-90.38	-0.67	-99.97	99.97	97.11	2.87	34.874
800.00	800.00	800.40	800.40	1.66	1.66	-90.38	-0.67	-99.97	99.97	96.66	3.32	30.147
900.00	900.00	900.40	900.40	1.88	1.88	-90.38	-0.67	-99.97	99.97	96.21	3.77	26.548
1,000.00	1,000.00	1,000.40	1,000.40	2.11	2.11	-90.38	-0.67	-99.97	99.97	95.76	4.22	23.717
1,100.00	1,100.00	1,100.40	1,100.40	2.33	2.33	-90.38	-0.67	-99.97	99.97	95.31	4.66	21.431
1,200.00	1,200.00	1,200.40	1,200.40	2.56	2.56	-90.38	-0.67	-99.97	99.97	94.86	5.11	19.547
1,300.00	1,300.00	1,300.40	1,300.40	2.78	2.78	-90.38	-0.67	-99.97	99.97	94.41	5.56	17.968
1,400.00	1,400.00	1,400.40	1,400.40	3.01	3.01	-90.38	-0.67	-99.97	99.97	93.96	6.01	16.625
1,500.00	1,500.00	1,500.40	1,500.40	3.23	3.23	-90.38	-0.67	-99.97	99.97	93.51	6.46	15.469
1,600.00	1,600.00	1,600.40	1,600.40	3.46	3.46	-90.38	-0.67	-99.97	99.97	93.06	6.91	14.463
1,700.00	1,700.00	1,700.40	1,700.40	3.68	3.68	-90.38	-0.67	-99.97	99.97	92.61	7.36	13.580
1,800.00	1,800.00	1,800.40	1,800.40	3.91	3.91	-90.38	-0.67	-99.97	99.97	92.16	7.81	12.798
1,900.00	1,900.00	1,900.40	1,900.40	4.13	4.13	-90.38	-0.67	-99.97	99.97	91.71	8.26	12.102
2,000.00	2,000.00	2,000.40	2,000.40	4.35	4.36	-90.38	-0.67	-99.97	99.97	91.26	8.71	11.477
2,100.00	2,100.00	2,100.40	2,100.40	4.58	4.58	-90.38	-0.67	-99.97	99.97	90.81	9.16	10.914
2,200.00	2,200.00	2,200.40	2,200.40	4.80	4.81	-90.38	-0.67	-99.97	99.97	90.36	9.61	10.403
2,300.00	2,300.00	2,300.40	2,300.40	5.03	5.03	-90.38	-0.67	-99.97	99.97	89.91	10.06	9.938
2,400.00	2,400.00	2,400.40	2,400.40	5.25	5.25	-90.38	-0.67	-99.97	99.97	89.46	10.51	9.513
2,500.00	2,500.00	2,500.40	2,500.40	5.48	5.48	-90.38	-0.67	-99.97	99.97	89.01	10.96	9.123
2,600.00	2,600.00	2,600.40	2,600.40	5.70	5.70	-90.38	-0.67	-99.97	99.97	88.56	11.41	8.764
2,700.00	2,700.00	2,700.40	2,700.40	5.93	5.93	-90.38	-0.67	-99.97	99.97	88.11	11.86	8.431
2,800.00	2,800.00	2,800.40	2,800.40	6.15	6.15	-90.38	-0.67	-99.97	99.97	87.67	12.31	8.123
2,900.00	2,900.00	2,900.40	2,900.40	6.38	6.38	-90.38	-0.67	-99.97	99.97	87.22	12.76	7.837
3,000.00	3,000.00	3,000.40	3,000.40	6.60	6.60	-90.38	-0.67	-99.97	99.97	86.77	13.21	7.570
3,100.00	3,100.00	3,100.40	3,100.40	6.83	6.83	-90.38	-0.67	-99.97	99.97	86.32	13.66	7.321
3,200.00	3,200.00	3,200.40	3,200.40	7.05	7.05	-90.38	-0.67	-99.97	99.97	85.87	14.10	7.088
3,300.00	3,300.00	3,300.40	3,300.40	7.28	7.28	-90.38	-0.67	-99.97	99.97	85.42	14.55	6.869
3,400.00	3,400.00	3,400.40	3,400.40	7.50	7.50	-90.38	-0.67	-99.97	99.97	84.97	15.00	6.663
3,500.00	3,500.00	3,500.40	3,500.40	7.73	7.73	-90.38	-0.67	-99.97	99.97	84.52	15.45	6.469
3,600.00	3,600.00	3,600.40	3,600.40	7.95	7.95	-90.38	-0.67	-99.97	99.97	84.07	15.90	6.286
3,700.00	3,700.00	3,700.40	3,700.40	8.18	8.18	-90.38	-0.67	-99.97	99.97	83.62	16.35	6.114
3,800.00	3,800.00	3,800.40	3,800.40	8.40	8.40	-90.38	-0.67	-99.97	99.97	83.17	16.80	5.950
3,900.00	3,900.00	3,900.40	3,900.40	8.63	8.63	-90.38	-0.67	-99.97	99.97	82.72	17.25	5.795
4,000.00	4,000.00	4,000.40	4,000.40	8.85	8.85	-90.38	-0.67	-99.97	99.97	82.27	17.70	5.648
4,100.00	4,100.00	4,100.40	4,100.40	9.07	9.08	-90.38	-0.67	-99.97	99.97	81.82	18.15	5.508
4,200.00	4,200.00	4,200.40	4,200.40	9.30	9.30	-90.38	-0.67	-99.97	99.97	81.37	18.60	5.375
4,300.00	4,300.00	4,300.40	4,300.40	9.52	9.53	-90.38	-0.67	-99.97	99.97	80.92	19.05	5.248
4,400.00	4,400.00	4,400.40	4,400.40	9.75	9.75	-90.38	-0.67	-99.97	99.97	80.47	19.50	5.127
4,500.00	4,500.00	4,500.40	4,500.40	9.97	9.97	-90.38	-0.67	-99.97	99.97	80.02	19.95	5.011
4,600.00	4,600.00	4,600.40	4,600.40	10.20	10.20	-90.38	-0.67	-99.97	99.97	79.57	20.40	4.901
4,700.00	4,700.00	4,700.40	4,700.40	10.42	10.42	-90.38	-0.67	-99.97	99.97	79.12	20.85	4.795
4,800.00	4,800.00	4,800.40	4,800.40	10.65	10.65	-90.38	-0.67	-99.97	99.97	78.67	21.30	4.694
4,900.00	4,900.00	4,900.40	4,900.40	10.87	10.87	-90.38	-0.67	-99.97	99.97	78.23	21.75	4.597
5,000.00	5,000.00	5,000.40	5,000.40	11.10	11.10	-90.38	-0.67	-99.97	99.97	77.78	22.20	4.504
5,100.00	5,100.00	5,100.40	5,100.40	11.32	11.32	-90.38	-0.67	-99.97	99.97	77.33	22.65	4.415

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 5H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM-5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue/Krait 23 Fed - 1H - OH - Plan #1														Offset Site Error: 0.00 usft	
Survey Program: 0:LEAM MWD-ADJ														Offset Well Error: 0.00 usft	
Reference		Offset		Semi-Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Footage (ft)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
5,166.53	5,166.53	5,166.93	5,166.93	11.47	11.47	-90.38	-0.67	-99.97	99.97	77.03	22.95	4.357	CC		
5,200.00	5,200.00	5,200.00	5,200.00	11.55	11.55	-90.38	-0.67	-99.97	99.97	76.88	23.09	4.329	ES, SF		
5,300.00	5,300.00	5,297.79	5,297.78	11.76	11.75	179.62	-0.67	-101.22	102.13	78.62	23.51	4.345			
5,400.00	5,399.86	5,394.91	5,394.82	11.96	11.95	179.65	-0.67	-104.94	108.58	84.69	23.88	4.546			
5,500.00	5,499.86	5,491.45	5,491.17	12.16	12.14	179.68	-0.67	-111.08	119.28	95.03	24.25	4.918			
5,600.00	5,599.88	5,589.05	5,588.41	12.36	12.34	179.71	-0.67	-119.36	133.83	109.21	24.62	5.435			
5,700.00	5,699.37	5,687.67	5,686.66	12.56	12.55	179.74	-0.67	-127.96	150.33	125.35	24.98	6.017			
5,800.00	5,798.99	5,786.15	5,784.77	12.77	12.75	179.77	-0.67	-136.54	167.70	142.32	25.38	6.608			
5,900.00	5,898.60	5,884.64	5,882.88	12.98	12.96	179.79	-0.67	-145.12	185.06	159.29	25.78	7.180			
6,000.00	5,998.22	5,983.12	5,980.98	13.20	13.17	179.81	-0.67	-153.71	202.43	176.25	26.17	7.734			
6,100.00	6,097.84	6,081.60	6,079.09	13.41	13.39	179.82	-0.67	-162.29	219.79	193.22	26.58	8.270			
6,200.00	6,197.46	6,180.08	6,177.19	13.63	13.60	179.84	-0.67	-170.87	237.16	210.18	26.98	8.790			
6,300.00	6,297.08	6,278.56	6,275.30	13.85	13.82	179.85	-0.67	-179.46	254.52	227.14	27.38	9.295			
6,400.00	6,396.70	6,377.04	6,373.41	14.07	14.04	179.86	-0.67	-188.04	271.89	244.10	27.79	9.783			
6,500.00	6,496.32	6,475.52	6,471.51	14.29	14.26	179.87	-0.67	-196.62	289.25	261.05	28.20	10.258			
6,600.00	6,595.94	6,574.00	6,569.62	14.52	14.48	179.87	-0.67	-205.21	306.62	278.01	28.61	10.718			
6,700.00	6,695.56	6,672.48	6,667.72	14.75	14.71	179.88	-0.67	-213.79	323.98	294.96	29.02	11.164			
6,800.00	6,795.18	6,770.96	6,765.83	14.98	14.93	179.89	-0.67	-222.37	341.35	311.91	29.43	11.597			
6,900.00	6,894.80	6,869.44	6,863.94	15.21	15.16	179.89	-0.67	-230.95	358.71	328.86	29.85	12.018			
7,000.00	6,994.42	6,967.92	6,962.04	15.44	15.39	179.90	-0.67	-239.54	376.07	345.81	30.26	12.427			
7,100.00	7,094.04	7,066.40	7,060.15	15.67	15.62	179.90	-0.67	-248.12	393.44	362.76	30.68	12.824			
7,200.00	7,193.66	7,164.89	7,158.25	15.90	15.85	179.91	-0.67	-256.70	410.80	379.71	31.10	13.210			
7,300.00	7,293.28	7,263.37	7,256.36	16.14	16.08	179.91	-0.67	-265.29	428.17	396.65	31.52	13.585			
7,400.00	7,392.90	7,361.85	7,354.47	16.38	16.32	179.91	-0.67	-273.87	445.53	413.59	31.94	13.949			
7,500.00	7,492.52	7,460.33	7,452.57	16.61	16.55	179.92	-0.67	-282.45	462.90	430.54	32.36	14.304			
7,600.00	7,592.14	7,562.47	7,554.34	16.85	16.79	179.92	-0.67	-291.25	480.17	447.38	32.79	14.644			
7,700.00	7,691.76	7,675.79	7,667.41	17.09	17.03	179.92	-0.67	-298.58	495.32	462.09	33.23	14.907			
7,800.00	7,791.37	7,790.05	7,781.59	17.33	17.25	179.92	-0.67	-302.58	507.52	473.85	33.66	15.077			
7,900.00	7,890.99	7,889.85	7,891.39	17.57	17.46	179.93	-0.67	-303.35	516.90	482.81	34.09	15.164			
8,000.00	7,990.61	7,989.47	7,991.01	17.82	17.68	179.93	-0.67	-303.35	525.61	491.09	34.52	15.225			
8,100.00	8,090.23	8,089.09	8,090.63	18.08	17.90	179.93	-0.67	-303.35	534.33	499.37	34.96	15.284			
8,200.00	8,189.85	8,188.71	8,190.25	18.31	18.11	179.93	-0.67	-303.35	543.04	507.65	35.40	15.341			
8,300.00	8,289.47	8,288.33	8,289.87	18.55	18.33	179.93	-0.67	-303.35	551.76	515.92	35.84	15.397			
8,400.00	8,389.09	8,387.95	8,389.49	18.80	18.55	179.93	-0.67	-303.35	560.48	524.20	36.27	15.451			
8,500.00	8,488.71	8,487.57	8,489.11	19.04	18.76	179.93	-0.67	-303.35	569.19	532.48	36.71	15.504			
8,600.00	8,588.33	8,587.19	8,588.73	19.29	18.98	179.93	-0.67	-303.35	577.91	540.75	37.15	15.555			
8,700.00	8,687.95	8,686.81	8,688.35	19.54	19.20	179.93	-0.67	-303.35	586.62	549.03	37.59	15.605			
8,800.00	8,787.57	8,786.43	8,787.97	19.79	19.42	179.94	-0.67	-303.35	595.34	557.31	38.03	15.653			
8,900.00	8,887.19	8,886.05	8,887.59	20.04	19.64	179.94	-0.67	-303.35	604.05	565.58	38.47	15.701			
8,980.00	8,986.88	8,975.74	8,967.28	20.24	19.81	179.94	-0.67	-303.35	611.03	572.20	38.83	15.737			
9,000.00	8,986.81	8,995.67	8,987.21	20.28	19.85	179.94	-0.67	-303.35	612.73	573.81	38.92	15.743			
9,100.00	9,086.53	9,095.39	9,086.93	20.49	20.07	179.94	-0.67	-303.35	620.23	580.86	39.37	15.753			
9,200.00	9,186.36	9,195.22	9,186.76	20.70	20.29	179.94	-0.67	-303.35	625.99	586.17	39.81	15.723			
9,300.00	9,286.28	9,295.14	9,286.68	20.89	20.51	179.94	-0.67	-303.35	630.00	589.75	40.25	15.653			
9,400.00	9,386.25	9,395.11	9,386.65	21.09	20.73	179.94	-0.67	-303.35	632.27	591.60	40.67	15.546			
9,480.00	9,466.25	9,475.11	9,466.65	21.23	20.91	-90.06	-0.67	-303.35	632.83	591.82	41.01	15.433			
9,500.00	9,466.25	9,495.11	9,486.65	21.27	20.95	-90.06	-0.67	-303.35	632.83	591.74	41.09	15.401			
9,600.00	9,566.25	9,565.11	9,566.65	21.48	21.17	-90.06	-0.67	-303.35	632.83	591.30	41.53	15.238			
9,700.00	9,666.25	9,665.11	9,666.65	21.70	21.39	-90.06	-0.67	-303.35	632.83	590.86	41.97	15.078			
9,800.00	9,766.25	9,795.11	9,786.65	21.91	21.61	-90.06	-0.67	-303.35	632.83	590.42	42.41	14.921			
9,900.00	9,866.25	9,895.11	9,886.65	22.12	21.83	-90.06	-0.67	-303.35	632.83	589.98	42.85	14.767			
10,000.00	9,966.25	9,995.11	9,986.65	22.33	22.05	-90.06	-0.67	-303.35	632.83	589.53	43.29	14.617			

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 5H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	Oh	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Blue Krait 23 Fed - 1H OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: LEAM MWD ADJ														Offset Well Error:	0.00 usft
Reference		Offset		Semi-Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum		Separation	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)		N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Separation Factor	Warning	
10,100.00	10,086.25	10,095.11	10,086.65	22.55	22.27	-90.06		-0.67	-303.35	632.83	589.09	43.74	14.489		
10,200.00	10,186.25	10,195.11	10,186.65	22.76	22.49	-90.06		-0.67	-303.35	632.83	588.65	44.18	14.325		
10,300.00	10,286.25	10,295.11	10,286.65	22.97	22.71	-90.06		-0.67	-303.35	632.83	588.21	44.62	14.183		
10,400.00	10,386.25	10,395.11	10,386.65	23.19	22.93	-90.06		-0.67	-303.35	632.83	587.77	45.06	14.044		
10,463.07	10,449.32	10,458.18	10,449.72	23.32	23.07	-90.06		-0.67	-303.35	632.83	587.49	45.34	13.957		
10,494.81	10,481.06	10,489.91	10,481.45	23.39	23.14	-90.06		-0.67	-303.35	632.83	587.35	45.48	13.914		
10,500.00	10,486.25	10,495.03	10,486.57	23.40	23.15	-92.56		-0.64	-303.35	632.83	587.33	45.50	13.909		
10,550.00	10,536.16	10,544.36	10,535.82	23.51	23.26	-92.54		1.95	-303.39	632.98	587.28	45.72	13.846		
10,600.00	10,585.66	10,593.69	10,584.66	23.62	23.37	-92.51		8.77	-303.48	633.38	587.45	45.93	13.790		
10,650.00	10,634.36	10,643.02	10,632.73	23.73	23.48	-92.46		19.77	-303.63	634.02	587.88	46.14	13.741		
10,700.00	10,681.89	10,692.36	10,679.69	23.83	23.59	-92.38		34.86	-303.83	634.90	588.54	46.35	13.697		
10,750.00	10,727.90	10,741.70	10,725.18	23.94	23.69	-92.29		53.93	-304.08	636.01	589.44	46.57	13.658		
10,800.00	10,772.02	10,791.07	10,768.88	24.05	23.80	-92.18		76.86	-304.39	637.34	590.56	46.79	13.622		
10,850.00	10,813.93	10,840.45	10,810.46	24.16	23.91	-92.06		103.47	-304.75	638.89	591.87	47.02	13.587		
10,900.00	10,853.31	10,889.85	10,849.60	24.27	24.02	-91.91		133.58	-305.15	640.64	593.36	47.28	13.550		
10,950.00	10,899.86	10,939.28	10,886.03	24.39	24.14	-91.76		166.96	-305.60	642.58	595.02	47.56	13.511		
11,000.00	10,923.29	10,988.73	10,919.47	24.52	24.27	-91.59		203.38	-306.08	644.70	596.82	47.88	13.466		
11,050.00	10,953.36	11,038.22	10,949.66	24.67	24.42	-91.41		242.57	-306.61	646.97	598.74	48.23	13.415		
11,100.00	10,979.83	11,087.75	10,976.37	24.85	24.59	-91.21		284.26	-307.17	649.38	600.78	48.62	13.355		
11,150.00	11,002.51	11,137.32	10,999.41	25.05	24.80	-91.01		328.13	-307.78	651.91	602.85	49.07	13.286		
11,200.00	11,021.22	11,166.94	11,018.58	25.28	25.03	-90.81		373.87	-308.37	654.55	604.99	49.56	13.208		
11,250.00	11,035.81	11,236.61	11,033.74	25.54	25.29	-90.59		421.15	-309.00	657.27	607.17	50.10	13.120		
11,300.00	11,046.19	11,286.33	11,044.75	25.83	25.57	-90.38		469.62	-309.65	660.06	609.37	50.69	13.022		
11,350.00	11,052.27	11,336.12	11,051.53	26.15	25.88	-90.16		518.92	-310.31	662.88	611.56	51.32	12.916		
11,398.92	11,054.00	11,384.89	11,054.00	26.48	26.21	-89.94		567.81	-310.96	665.67	613.68	51.99	12.805		
11,400.00	11,053.99	11,385.96	11,054.01	26.49	26.22	-89.94		568.68	-310.98	665.73	613.73	52.00	12.802		
11,500.00	11,053.28	11,485.80	11,053.34	27.24	26.96	-89.95		668.51	-312.32	671.43	617.92	53.51	12.547		
11,600.00	11,052.56	11,585.63	11,052.62	28.10	27.81	-89.95		768.33	-313.65	677.13	621.91	55.22	12.263		
11,700.00	11,051.84	11,685.47	11,051.90	29.04	28.74	-89.95		868.16	-314.99	682.82	625.72	57.10	11.958		
11,800.00	11,051.12	11,785.31	11,051.18	30.07	29.76	-89.95		967.98	-316.33	688.52	629.37	59.15	11.640		
11,900.00	11,050.41	11,885.15	11,050.47	31.16	30.85	-89.95		1,067.81	-317.66	694.22	632.87	61.35	11.316		
12,000.00	11,049.69	11,984.98	11,049.75	32.33	32.01	-89.95		1,167.64	-319.00	699.92	636.24	63.88	10.991		
12,100.00	11,048.97	12,084.82	11,049.03	33.55	33.23	-89.95		1,267.46	-320.34	705.62	639.49	66.13	10.670		
12,200.00	11,048.25	12,184.66	11,048.31	34.82	34.51	-89.95		1,367.29	-321.67	711.32	642.84	68.88	10.356		
12,300.00	11,047.53	12,284.50	11,047.59	36.13	35.83	-89.95		1,467.11	-323.01	717.02	645.69	71.33	10.052		
12,400.00	11,046.82	12,384.33	11,046.87	37.49	37.19	-89.95		1,566.94	-324.35	722.72	648.65	74.07	9.758		
12,500.00	11,046.10	12,484.17	11,046.15	38.89	38.60	-89.95		1,666.77	-325.69	728.42	651.54	76.87	9.475		
12,600.00	11,045.38	12,584.01	11,045.44	40.32	40.03	-89.95		1,766.59	-327.02	734.11	654.36	79.75	9.205		
12,700.00	11,044.66	12,683.85	11,044.72	41.78	41.50	-89.95		1,866.42	-328.36	739.81	657.13	82.69	8.947		
12,800.00	11,043.94	12,783.68	11,044.00	43.27	43.00	-89.95		1,966.24	-329.70	745.51	659.84	85.68	8.702		
12,900.00	11,043.23	12,883.52	11,043.28	44.78	44.52	-89.95		2,066.07	-331.03	751.21	662.50	88.71	8.468		
13,000.00	11,042.51	12,983.36	11,042.56	46.31	46.06	-89.95		2,165.89	-332.37	756.91	665.11	91.80	8.245		
13,100.00	11,041.79	13,083.20	11,041.84	47.86	47.62	-89.95		2,265.72	-333.71	762.61	667.69	94.92	8.034		
13,200.00	11,041.07	13,183.03	11,041.12	49.43	49.20	-89.95		2,365.55	-335.05	768.31	670.23	98.08	7.834		
13,300.00	11,040.35	13,282.87	11,040.41	51.02	50.80	-89.95		2,465.37	-336.38	774.01	672.74	101.27	7.643		
13,400.00	11,039.64	13,382.71	11,039.69	52.62	52.41	-89.95		2,565.20	-337.72	779.70	675.22	104.49	7.462		
13,500.00	11,038.92	13,482.55	11,038.97	54.24	54.04	-89.95		2,665.02	-339.06	785.40	677.67	107.73	7.290		
13,600.00	11,038.20	13,582.38	11,038.25	55.87	55.68	-89.95		2,764.85	-340.39	791.10	680.10	111.01	7.127		
13,700.00	11,037.48	13,682.22	11,037.53	57.50	57.33	-89.95		2,864.68	-341.73	796.80	682.50	114.30	6.971		
13,800.00	11,036.76	13,782.06	11,036.81	59.15	58.99	-89.95		2,964.50	-343.07	802.50	684.89	117.61	6.823		
13,900.00	11,036.05	13,881.90	11,036.09	60.81	60.66	-89.95		3,064.33	-344.41	808.20	687.25	120.95	6.682		
14,000.00	11,035.33	13,981.73	11,035.38	62.48	62.34	-89.95		3,164.15	-345.74	813.90	689.60	124.30	6.548		

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: 5H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Reference Site:	Blue Krait 23 Fed	MD Reference:	3550.9' GL + 25' RKB @ 3575.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	5H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset (Design) Blue Krait 23 Fed - 1H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: LEAM MWD-ADU													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	
14,100.00	11,034.61	14,081.57	11,034.66	64.15	64.03	-89.95	3,263.98	-347.08	819.60	691.93	127.66	6.420		
14,200.00	11,033.89	14,181.41	11,033.94	65.84	65.72	-89.95	3,363.81	-348.42	825.29	694.25	131.04	6.298		
14,300.00	11,033.18	14,281.25	11,033.22	67.53	67.43	-89.95	3,463.63	-349.75	830.99	696.56	134.44	6.181		
14,400.00	11,032.46	14,381.08	11,032.50	69.22	69.13	-89.95	3,563.46	-351.09	836.69	698.85	137.84	6.070		
14,500.00	11,031.74	14,480.92	11,031.78	70.93	70.85	-89.95	3,663.28	-352.43	842.39	701.13	141.26	5.983		
14,600.00	11,031.02	14,580.76	11,031.06	72.63	72.57	-89.95	3,763.11	-353.77	848.09	703.40	144.69	5.861		
14,700.00	11,030.30	14,680.60	11,030.35	74.35	74.29	-89.95	3,862.94	-355.10	853.79	705.66	148.13	5.764		
14,800.00	11,029.59	14,780.43	11,029.63	76.06	76.02	-89.95	3,962.76	-356.44	859.49	707.91	151.58	5.670		
14,900.00	11,028.87	14,880.27	11,028.91	77.78	77.76	-89.95	4,062.59	-357.78	865.19	710.15	155.04	5.580		
15,000.00	11,028.15	14,980.11	11,028.19	79.51	79.49	-89.95	4,162.41	-359.11	870.88	712.38	158.50	5.494		
15,100.00	11,027.43	15,079.95	11,027.47	81.24	81.24	-89.95	4,262.24	-360.45	876.58	714.61	161.98	5.412		
15,200.00	11,026.71	15,179.78	11,026.75	82.97	82.98	-89.95	4,362.07	-361.79	882.28	716.82	165.46	5.332		
15,300.00	11,026.00	15,279.62	11,026.03	84.71	84.73	-89.95	4,461.89	-363.12	887.98	719.04	168.95	5.256		
15,400.00	11,025.28	15,379.46	11,025.32	86.45	86.48	-89.95	4,561.72	-364.46	893.68	721.24	172.44	5.183		
15,500.00	11,024.56	15,479.30	11,024.60	88.20	88.24	-89.95	4,661.54	-365.80	899.38	723.44	175.94	5.112		
15,578.01	11,024.00	15,557.17	11,024.04	89.56	89.61	-89.95	4,739.41	-366.84	903.82	725.15	178.67	5.059		

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