

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-102

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1253 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011
Submit one copy to appropriate
District Office

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-42701	² Pool Code 96144	³ Pool Name Carlsbad; Bone Spring, East
⁴ Property Code 39822	⁵ Property Name LONE TREE DRAW 13 STATE	⁶ Well Number 10H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3193.6

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	21 S	27 E		150	NORTH	900	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	21 S	27 E		330	SOUTH	400	WEST	EDDY

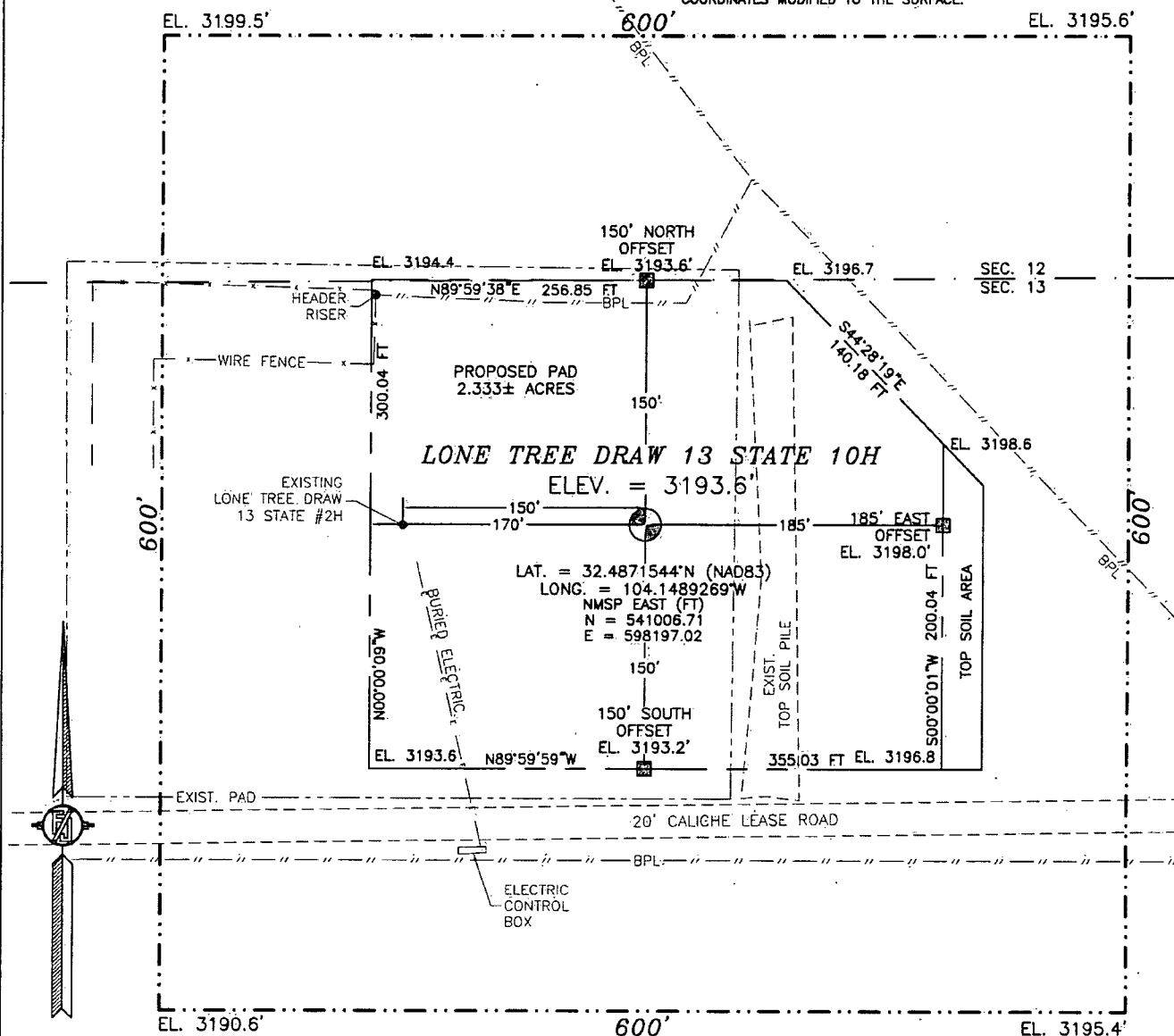
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

N89°39'54"E 2683.58 FT 900' 150' SURFACE LOCATION NW CORNER SEC. 13 LAT. = 32.4875567°N LONG. = 104.1518461°W NMSP EAST (FT) N = 541151.55 E = 597296.67 W/4 CORNER SEC. 13 LAT. = 32.4802575°N LONG. = 104.1518272°W NMSP EAST (FT) N = 538496.13 E = 597307.02 SW CORNER SEC. 13 LAT. = 32.4729692°N LONG. = 104.1517858°W NMSP EAST (FT) N = 535844.67 E = 597324.30 400' BOTTOM OF HOLE 589°08'22"W 2678.50 FT		N89°38'05"E 2685.30 FT N/4 CORNER SEC. 13 LAT. = 32.4875870°N LONG. = 104.1431449°W NMSP EAST (FT) N = 541167.23 E = 599979.56 NE CORNER SEC. 13 LAT. = 32.4876206°N LONG. = 104.1344381°W NMSP EAST (FT) N = 541184.34 E = 602664.16 E/4 CORNER SEC. 13 LAT. = 32.4803887°N LONG. = 104.1344261°W NMSP EAST (FT) N = 538553.42 E = 602672.77 SE CORNER SEC. 13 LAT. = 32.4731637°N LONG. = 104.1344163°W NMSP EAST (FT) N = 535924.99 E = 602680.71 589°08'32"W 2679.80 FT		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Linda Good</i> 10/1/2014 Signature Date Linda Good Printed Name linda.good@dm.com E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JANUARY 10, 2014 Date of Survey <i>FILIPON F. JARAMILLO</i> Signature and Seal of Professional Surveyor Certificate Number: FILIPON F. JARAMILLO, PLS 12797 SURVEY NO. 2499
---	--	---	--	---

SECTION 13, TOWNSHIP 21 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP RD.) AND SR 200 (GEORGE SHOUP RELIEF ROUTE) GO NORTH ON CR 206 1.3 MILES TO CR 600 (RAINS ROAD) ON THE RIGHT GO EAST ON CR 600 2.1 MILES (RAMBO BOOSTER) PAVEMENT ENDS CONTINUE EAST 0.25 MILES TURN RIGHT ON CALICHE LEASE RD. ACROSS FROM BORROW PIT GO EAST 2.75 MILES ROAD BENDS NORTH PAST CATTLE GUARD GO 0.2 MILES SITE IS ON LEFT ABOUT 150 FT.

DEVON ENERGY PRODUCTION COMPANY, L.P.
LONE TREE DRAW 13 STATE 10H
LOCATED 150 FT. FROM THE NORTH LINE
AND 900 FT. FROM THE WEST LINE OF
SECTION 13, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JANUARY 10, 2014

SURVEY NO. 2499

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

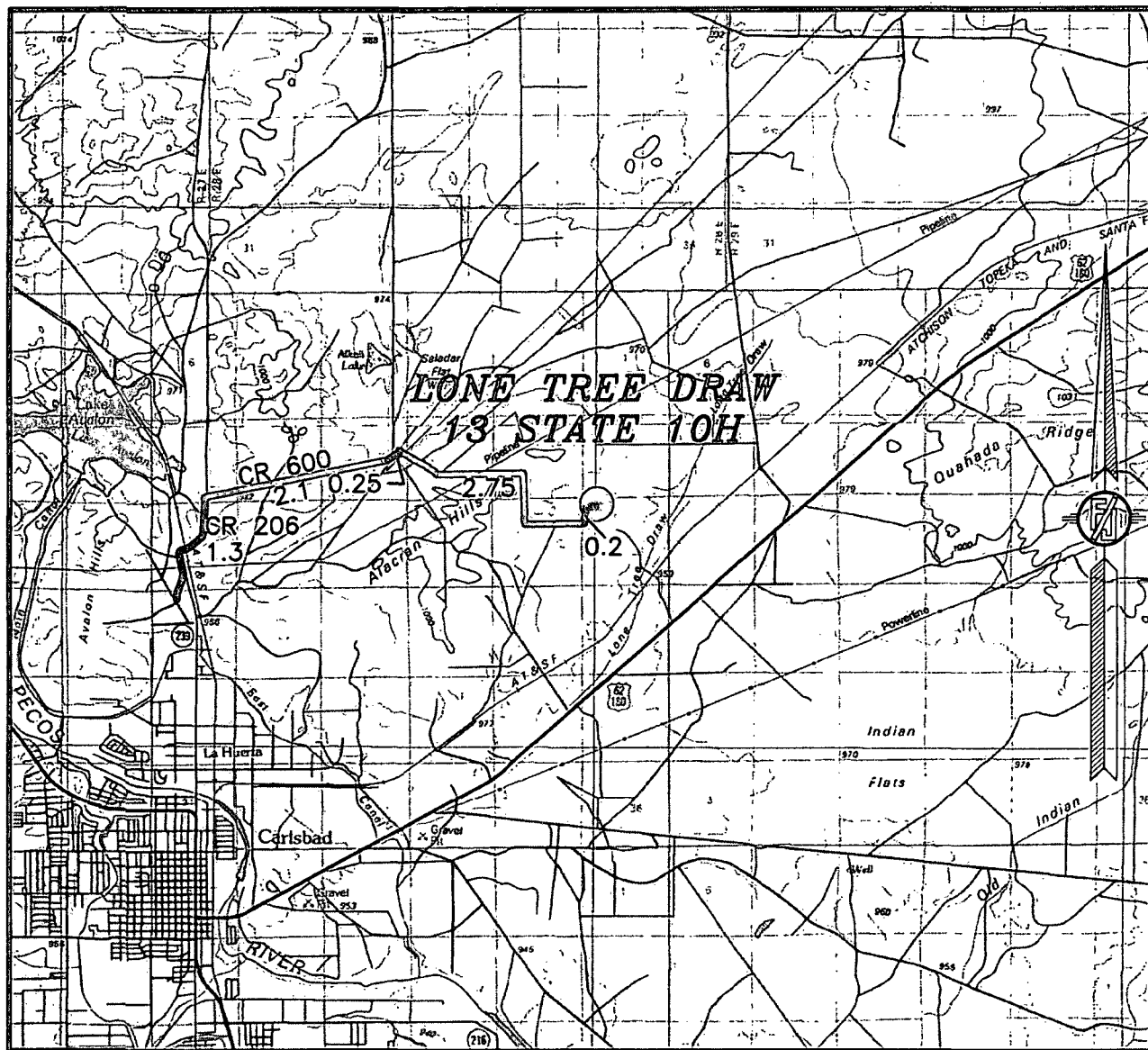
[illegible]

NOT TO SCALE

JANUARY 10, 2014

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO

SECTION 13, TOWNSHIP 21 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP RD.) AND SR 200 (GEORGE SHOUP RELIEF ROUTE) GO NORTH ON CR 206 1.3 MILES TO CR 600 (RAINS ROAD) ON THE RIGHT GO EAST ON CR 600 2.1 MILES (RAMBO BOOSTER) PAVEMENT ENDS CONTINUE EAST 0.25 MILES TURN RIGHT ON CALICHE LEASE RD. ACROSS FROM BORROW PIT GO EAST 2.75 MILES ROAD BENDS NORTH PAST CATTLE GUARD GO 0.2 MILES SITE IS ON LEFT ABOUT 150 FT.

DEVON ENERGY PRODUCTION COMPANY, L.P.

LONE TREE DRAW 13 STATE 10H

LOCATED 150 FT. FROM THE NORTH LINE
AND 900 FT. FROM THE WEST LINE OF
SECTION 13, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

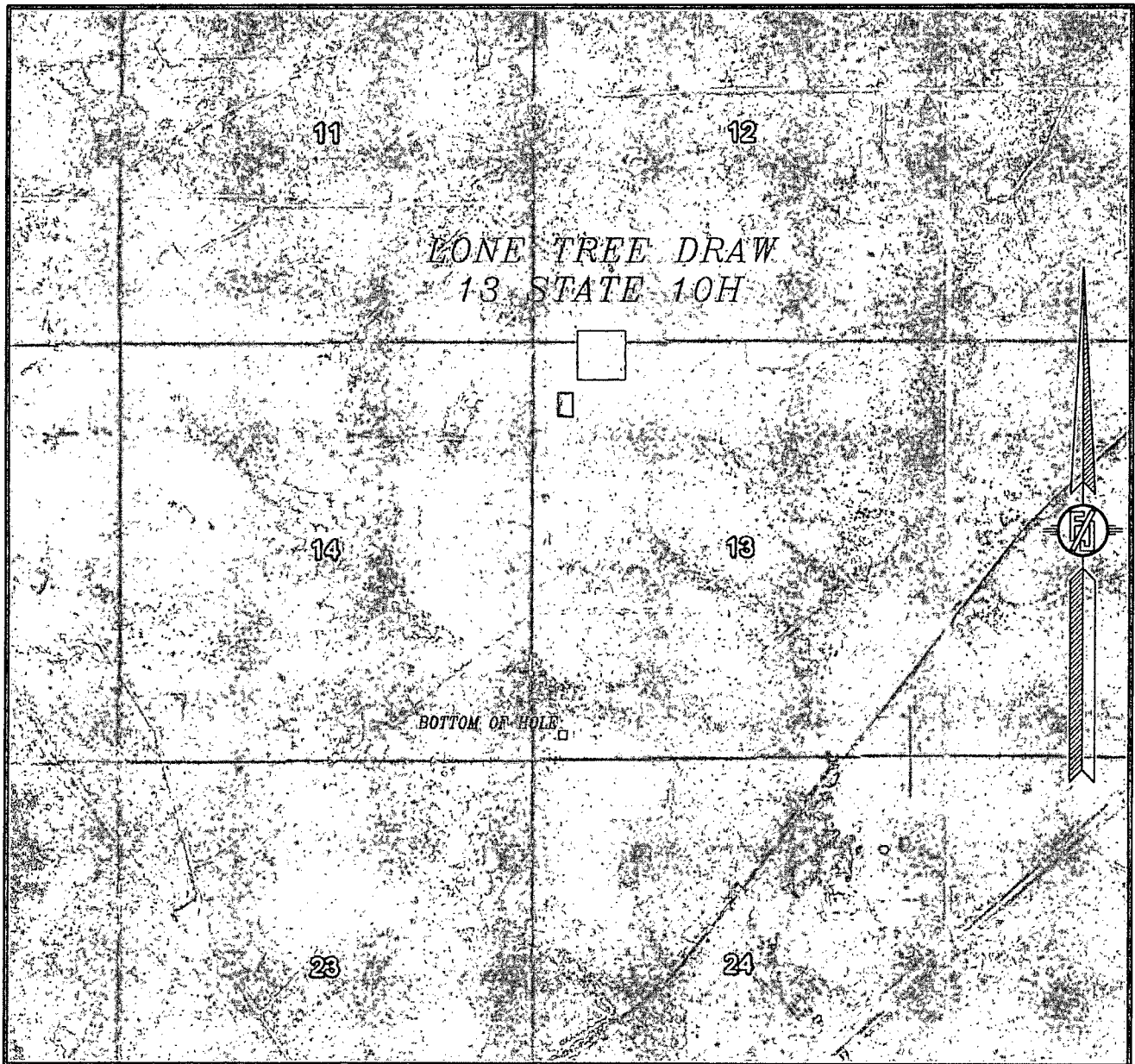
JANUARY 10, 2014

SURVEY NO. 2499

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 13, TOWNSHIP 21 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
APRIL 2013

DEVON ENERGY PRODUCTION COMPANY, L.P.
LONE TREE DRAW 13 STATE 10H
LOCATED 150 FT. FROM THE NORTH LINE
AND 900 FT. FROM THE WEST LINE OF
SECTION 13, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JANUARY 10, 2014

SURVEY NO. 2499

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

DRILLING PROGRAM

Devon Energy Production Company, L.P./Lone Tree Draw 13 State/10H

1. Pressure Control Equipment:

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line); **if an H&P rig drills this well. Otherwise no flex line is needed.** The line will be kept as straight as possible with minimal turns.

Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

2. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0 - 300'	13-3/8"	0 - 300'	48	STC	H-40	5.74	12.90	37.57
12-1/4"	300-2800'	9-5/8"	0-2800'	36	LTC	J-55	1.39	2.42	4.49
8-3/4"	2800-11445'	5-1/2"	0-11445'	17	BTC	P-110	2.64	3.27	4.91

Casing Notes:

- All casing is new and API approved

Maximum Lateral TVD: 6797'

3. Proposed mud Circulations System:

Depth	Mud Weight	Viscosity	Fluid Loss	Type System
0-300'	8.4-9.0	30-34	N/C	FW
300-2800'	10.0	28-32	N/C	Brine
2800-11445'	8.6-9.0	28-32	N/C	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

4. Cementing Table:

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8" Surface	370	13.5	9.07	1.72	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 2% bwoc CaCl ₂ + 70.8% Fresh Water
	180	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
9-5/8" Intermediate	810	12.9	9.81	1.85	Lead	(50:50) Class C Cement: Poz (Fly Ash): 10% BWOC Bentonite + 8 lb/sk Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	540	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
5-1/2" Production Casing	640	11.9	12.99	2.26	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water
	260	12.9	10.1	1.87	Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.3% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	800	14.5	5.48	1.22	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water

TOC for all Strings:

Surface @ 0'
 Intermediate @ 0'
 Production @ 2300'

Notes:

- Cement volumes Surface 100%, Intermediate 50%, Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data

DEVON ENERGY

Project: Eddy County, NM (NAD-83)
Site: Lone Tree Draw "13" State
Well: 10H
Wellbore: OH
Design: Plan #1 Draft 1



Azimuths to Grid North
True North: -0.10°
Magnetic North: 7.57°

Magnetic Field
Strength: 48421.7nT
Dip Angle: 60.25°
Date: 02/10/2014
Model: BGGM2013

devon

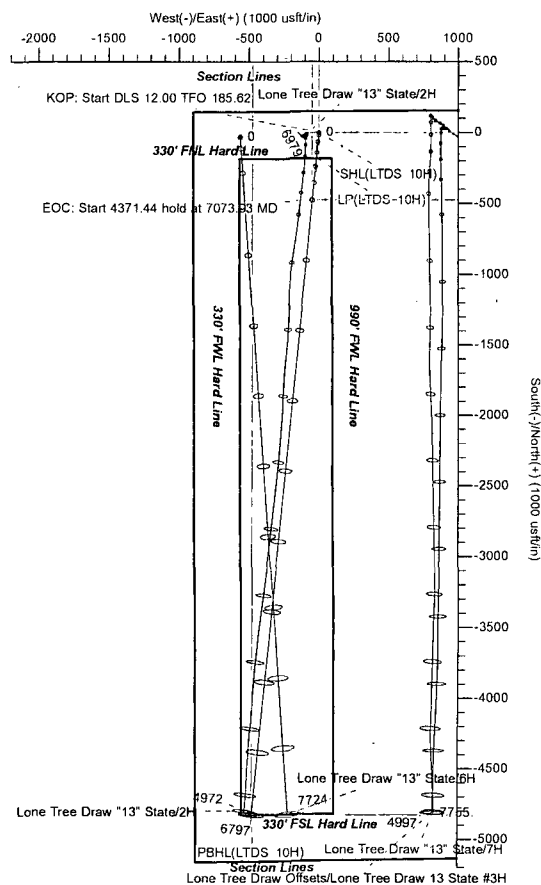
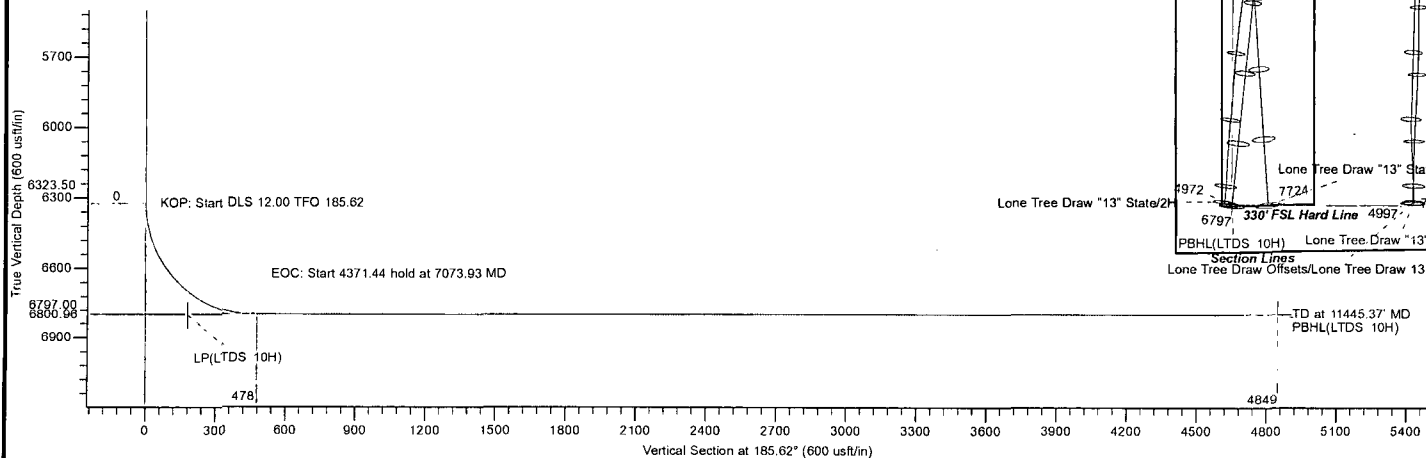
PROJECT DETAILS: Eddy County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(LTDS 10H)	0.00	0.00	0.00	541008.71	598197.02	32° 29' 13.756 N	104° 8' 56.137 W
PBHL(LTDS 10H)	6797.00	-4826.03	-474.90	536180.68	597722.12	32° 28' 26.007 N	104° 9' 1.778 W
LP(LTDS 10H)	6801.00	-179.99	-14.08	540826.72	598182.94	32° 29' 11.975 N	104° 8' 56.306 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	6323.50	0.00	0.00	6323.50	0.00	0.00	0.00	0.00	0.00	KOP: Start DLS 12.00 TFO 185.62
3	7073.93	90.05	185.62	6800.96	-475.60	-46.80	12.00	185.62	477.90	EOC: Start 4371.44 hold at 7073.93 MD
4	11445.37	90.05	185.62	6797.00	-4826.03	-474.90	0.00	0.00	4849.34	TD at 11445.37 MD



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax 936/756-7595

Plan: Plan #1 Draft 1 (10H/OH)
Lone Tree Draw "13" State
Created By: Heber Claros Date: 12/24, February 10 2014
Date: _____
Approved: _____ Date: _____

DEVON ENERGY

Eddy County, NM (NAD-83)

Lone Tree Draw "13" State

10H

OH

Plan: Plan #1 Draft 1

Standard Planning Report

10 February, 2014

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 10H
Company:	DEVON ENERGY	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 1		

Project:	Eddy 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:	Lone Tree Draw "13" State		
Site Position:		Northing:	541,005.87 usft
From:	Map	Easting:	598,047.12 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 29' 13.750 N
		Longitude:	104° 8' 57.887 W
		Grid Convergence:	0.10 °

Well	10H					
Well Position	+N/-S	0.84 usft	Northing:	541,006.71 usft	Latitude:	32° 29' 13.756 N
	+E/-W	149.90 usft	Easting:	598,197.02 usft	Longitude:	104° 8' 56.137 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,194.00 usft

Wellbore		OH			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	02/10/14	7.67	60.25	48,422

Design					Plan #1 Draft 1					
Audit Notes:										
Version:		Phase:		PROTOTYPE			Tie On Depth:		0.00	
Vertical Section:		Depth From (TVD)		+N/-S		+E/-W		Direction		
		(usft)		(usft)		(usft)		(°)		
		0.00		0.00		0.00		185.62		

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	
6,323.50	0.00	0.00	6,323.50	0.00	0.00	0.00	0.00	0.00	0.00	
7,073.93	90.05	185.62	6,800.96	-475.60	-46.80	12.00	12.00	-23.24	185.62	
11,445.37	90.05	185.62	6,797.00	-4,826.03	-474.90	0.00	0.00	0.00	0.00	PBHL(LTDS 10H)

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 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)
6,323.50	0.00	0.00	6,323.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start DLS 12.00 TFO 185.62									
6,325.00	0.18	185.62	6,325.00	0.00	0.00	0.00	12.00	12.00	0.00
6,350.00	3.18	185.62	6,349.99	-0.73	-0.07	0.74	12.00	12.00	0.00
6,375.00	6.18	185.62	6,374.90	-2.76	-0.27	2.77	12.00	12.00	0.00
6,400.00	9.18	185.62	6,399.67	-6.09	-0.60	6.12	12.00	12.00	0.00
6,425.00	12.18	185.62	6,424.24	-10.70	-1.05	10.75	12.00	12.00	0.00
6,450.00	15.18	185.62	6,448.53	-16.58	-1.63	16.66	12.00	12.00	0.00
6,475.00	18.18	185.62	6,472.47	-23.72	-2.33	23.83	12.00	12.00	0.00
6,500.00	21.18	185.62	6,496.01	-32.10	-3.16	32.25	12.00	12.00	0.00
6,525.00	24.18	185.62	6,519.07	-41.69	-4.10	41.89	12.00	12.00	0.00
6,550.00	27.18	185.62	6,541.60	-52.47	-5.16	52.72	12.00	12.00	0.00
6,575.00	30.18	185.62	6,563.53	-64.41	-6.34	64.72	12.00	12.00	0.00
6,600.00	33.18	185.62	6,584.80	-77.47	-7.62	77.85	12.00	12.00	0.00
6,625.00	36.18	185.62	6,605.36	-91.63	-9.02	92.07	12.00	12.00	0.00
6,650.00	39.18	185.62	6,625.14	-106.83	-10.51	107.35	12.00	12.00	0.00
6,675.00	42.18	185.62	6,644.10	-123.05	-12.11	123.64	12.00	12.00	0.00
6,700.00	45.18	185.62	6,662.18	-140.23	-13.80	140.91	12.00	12.00	0.00
6,725.00	48.18	185.62	6,679.33	-158.33	-15.58	159.09	12.00	12.00	0.00
6,750.00	51.18	185.62	6,695.50	-177.30	-17.45	178.15	12.00	12.00	0.00
6,775.00	54.18	185.62	6,710.66	-197.08	-19.39	198.03	12.00	12.00	0.00
6,800.00	57.18	185.62	6,724.75	-217.63	-21.42	218.68	12.00	12.00	0.00
6,807.02	58.02	185.62	6,728.51	-223.53	-22.00	224.61	12.00	12.00	0.00
LP(LTDS 10H)									
6,825.00	60.18	185.62	6,737.74	-238.88	-23.51	240.03	12.00	12.00	0.00
6,850.00	63.18	185.62	6,749.60	-260.78	-25.66	262.04	12.00	12.00	0.00
6,875.00	66.18	185.62	6,760.29	-283.27	-27.87	284.63	12.00	12.00	0.00
6,900.00	69.18	185.62	6,769.79	-306.28	-30.14	307.76	12.00	12.00	0.00
6,925.00	72.18	185.62	6,778.06	-329.75	-32.45	331.35	12.00	12.00	0.00
6,950.00	75.18	185.62	6,785.08	-353.63	-34.80	355.34	12.00	12.00	0.00
6,975.00	78.18	185.62	6,790.84	-377.84	-37.18	379.66	12.00	12.00	0.00
7,000.00	81.18	185.62	6,795.32	-402.31	-39.59	404.25	12.00	12.00	0.00
7,025.00	84.18	185.62	6,798.50	-426.99	-42.02	429.05	12.00	12.00	0.00
7,050.00	87.18	185.62	6,800.39	-451.79	-44.46	453.97	12.00	12.00	0.00
7,073.93	90.05	185.62	6,800.96	-475.60	-46.80	477.90	12.00	12.00	0.00
EOC: Start 4371.44 hold at 7073.93 MD									
7,100.00	90.05	185.62	6,800.94	-501.54	-49.35	503.96	0.00	0.00	0.00
7,200.00	90.05	185.62	6,800.85	-601.06	-59.15	603.96	0.00	0.00	0.00
7,300.00	90.05	185.62	6,800.76	-700.58	-68.94	703.96	0.00	0.00	0.00
7,400.00	90.05	185.62	6,800.67	-800.10	-78.73	803.96	0.00	0.00	0.00
7,500.00	90.05	185.62	6,800.58	-899.62	-88.53	903.96	0.00	0.00	0.00
7,600.00	90.05	185.62	6,800.49	-999.14	-98.32	1,003.96	0.00	0.00	0.00
7,700.00	90.05	185.62	6,800.40	-1,098.66	-108.11	1,103.96	0.00	0.00	0.00
7,800.00	90.05	185.62	6,800.31	-1,198.18	-117.91	1,203.96	0.00	0.00	0.00
7,900.00	90.05	185.62	6,800.22	-1,297.70	-127.70	1,303.96	0.00	0.00	0.00
8,000.00	90.05	185.62	6,800.12	-1,397.22	-137.49	1,403.96	0.00	0.00	0.00
8,100.00	90.05	185.62	6,800.03	-1,496.74	-147.29	1,503.96	0.00	0.00	0.00
8,200.00	90.05	185.62	6,799.94	-1,596.25	-157.08	1,603.96	0.00	0.00	0.00
8,300.00	90.05	185.62	6,799.85	-1,695.77	-166.87	1,703.96	0.00	0.00	0.00
8,400.00	90.05	185.62	6,799.76	-1,795.29	-176.66	1,803.96	0.00	0.00	0.00
8,500.00	90.05	185.62	6,799.67	-1,894.81	-186.46	1,903.96	0.00	0.00	0.00

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single-User Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev).
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 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)
8,600.00	90.05	185.62	6,799.58	-1,994.33	-196.25	2,003.96	0.00	0.00	0.00
8,700.00	90.05	185.62	6,799.49	-2,093.85	-206.04	2,103.96	0.00	0.00	0.00
8,800.00	90.05	185.62	6,799.40	-2,193.37	-215.84	2,203.96	0.00	0.00	0.00
8,900.00	90.05	185.62	6,799.31	-2,292.89	-225.63	2,303.96	0.00	0.00	0.00
9,000.00	90.05	185.62	6,799.22	-2,392.41	-235.42	2,403.96	0.00	0.00	0.00
9,100.00	90.05	185.62	6,799.13	-2,491.93	-245.22	2,503.96	0.00	0.00	0.00
9,200.00	90.05	185.62	6,799.04	-2,591.45	-255.01	2,603.96	0.00	0.00	0.00
9,300.00	90.05	185.62	6,798.95	-2,690.97	-264.80	2,703.96	0.00	0.00	0.00
9,400.00	90.05	185.62	6,798.86	-2,790.49	-274.60	2,803.96	0.00	0.00	0.00
9,500.00	90.05	185.62	6,798.76	-2,890.01	-284.39	2,903.96	0.00	0.00	0.00
9,600.00	90.05	185.62	6,798.67	-2,989.52	-294.18	3,003.96	0.00	0.00	0.00
9,700.00	90.05	185.62	6,798.58	-3,089.04	-303.97	3,103.96	0.00	0.00	0.00
9,800.00	90.05	185.62	6,798.49	-3,188.56	-313.77	3,203.96	0.00	0.00	0.00
9,900.00	90.05	185.62	6,798.40	-3,288.08	-323.56	3,303.96	0.00	0.00	0.00
10,000.00	90.05	185.62	6,798.31	-3,387.60	-333.35	3,403.96	0.00	0.00	0.00
10,100.00	90.05	185.62	6,798.22	-3,487.12	-343.15	3,503.96	0.00	0.00	0.00
10,200.00	90.05	185.62	6,798.13	-3,586.64	-352.94	3,603.96	0.00	0.00	0.00
10,300.00	90.05	185.62	6,798.04	-3,686.16	-362.73	3,703.96	0.00	0.00	0.00
10,400.00	90.05	185.62	6,797.95	-3,785.68	-372.53	3,803.96	0.00	0.00	0.00
10,500.00	90.05	185.62	6,797.86	-3,885.20	-382.32	3,903.96	0.00	0.00	0.00
10,600.00	90.05	185.62	6,797.77	-3,984.72	-392.11	4,003.96	0.00	0.00	0.00
10,700.00	90.05	185.62	6,797.68	-4,084.24	-401.91	4,103.96	0.00	0.00	0.00
10,800.00	90.05	185.62	6,797.59	-4,183.76	-411.70	4,203.96	0.00	0.00	0.00
10,900.00	90.05	185.62	6,797.49	-4,283.28	-421.49	4,303.96	0.00	0.00	0.00
11,000.00	90.05	185.62	6,797.40	-4,382.79	-431.29	4,403.96	0.00	0.00	0.00
11,100.00	90.05	185.62	6,797.31	-4,482.31	-441.08	4,503.96	0.00	0.00	0.00
11,200.00	90.05	185.62	6,797.22	-4,581.83	-450.87	4,603.96	0.00	0.00	0.00
11,300.00	90.05	185.62	6,797.13	-4,681.35	-460.66	4,703.96	0.00	0.00	0.00
11,400.00	90.05	185.62	6,797.04	-4,780.87	-470.46	4,803.96	0.00	0.00	0.00
11,445.37	90.05	185.62	6,797.00	-4,826.03	-474.90	4,849.34	0.00	0.00	0.00

TD at 11445.37' MD - PBHL(LTDS 10H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL(LTDS 10H)	0.00	0.00	0.00	0.00	0.00	541,006.71	598,197.02	32° 29' 13.756 N	104° 8' 56.137 W
- hit/miss target									
- Shape									
- plan misses target center by 6323.50usft at 6323.50usft MD (6323.50 TVD, 0.00 N, 0.00 E)									
- Point									
PBHL(LTDS 10H)	0.00	0.00	6,797.00	-4,826.03	-474.90	536,180.68	597,722.12	32° 28' 26.007 N	104° 9' 1.778 W
- plan hits target center									
- Point									
LP(LTDS 10H)	0.00	0.01	6,801.00	-179.99	-14.08	540,826.73	598,182.95	32° 29' 11.975 N	104° 8' 56.305 W
- plan misses target center by 84.93usft at 6807.02usft MD (6728.51 TVD, -223.53 N, -22.00 E)									
- Point									

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 10H
Company:	DEVON ENERGY	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,323.50	6,323.50	0.00	0.00	KOP: Start DLS 12.00 TFO 185.62
7,073.93	6,800.96	-475.60	-46.80	EOC: Start 4371.44 hold at 7073.93 MD
11,445.37	6,797.00	-4,826.03	-474.90	TD at 11445.37' MD

DEVON ENERGY

Eddy County, NM (NAD-83)

Lone Tree Draw "13" State

10H

OH

Plan #1 Draft 1

Anticollision Report

10 February, 2014

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Reference	Plan #1 Draft 1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 100.00usft
Depth Range:	0.00 to 11,445.37usft
Results Limited by:	Maximum center-center distance of 10,000.00 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program		Date	02/10/14		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,445.37	Plan #1 Draft 1 (OH)	LEAM MWD-ADJ	MWD - Standard	

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Lone Tree Draw "13" State						
13H - OH - Plan #1 Draft 1	10,987.41	11,246.07	4,032.28	3,867.15	24.420	CC
13H - OH - Plan #1 Draft 1	11,100.00	11,246.07	4,033.85	3,866.72	24.136	ES
13H - OH - Plan #1 Draft 1	11,445.37	11,246.07	4,058.20	3,884.91	23.419	SF
2H - OH - OH	4,343.94	4,342.66	98.68	78.62	4.919	CC, ES, SF
2H - Pilot - Pilot	6,019.73	6,018.62	87.26	60.63	3.277	CC
2H - Pilot - Pilot	6,100.00	6,098.52	87.43	60.51	3.248	ES
2H - Pilot - Pilot	6,200.00	6,197.97	88.16	60.92	3.236	SF
4H - OH - OH	3,352.30	3,338.44	2,073.85	2,060.60	156.587	CC
4H - OH - OH	4,380.01	4,369.00	2,074.40	2,057.14	120.244	ES
4H - OH - OH	11,445.37	9,454.54	3,457.42	3,301.92	22.234	SF
4H - Pilot - Pilot	4,976.75	4,961.88	2,069.40	2,049.54	104.232	CC
4H - Pilot - Pilot	6,300.00	6,276.99	2,072.71	2,047.72	82.944	ES
4H - Pilot - Pilot	11,445.37	6,780.60	5,469.51	5,369.10	54.469	SF
5H - OH - OH	1,801.24	1,771.28	3,470.24	3,463.46	511.715	CC
5H - OH - OH	3,300.00	3,257.20	3,471.35	3,458.61	272.393	ES
5H - OH - OH	11,445.37	9,483.88	4,502.61	4,333.62	26.644	SF
6H - OH - Plan #1 Draft 1	6,609.85	6,599.99	557.26	528.00	19.048	CC, ES
6H - OH - Plan #1 Draft 1	11,445.37	12,370.13	962.77	879.90	11.618	SF
7H - OH - OH	6,434.06	6,478.51	836.03	811.19	33.663	CC, ES
7H - OH - OH	11,445.37	12,456.00	1,615.77	1,471.16	11.173	SF
8H - OH - Plan #1	6,323.50	6,301.50	2,488.13	2,460.03	88.566	CC
8H - OH - Plan #1	6,350.00	6,327.99	2,488.20	2,460.01	88.244	ES
8H - OH - Plan #1	11,445.37	12,299.56	3,121.94	2,951.58	18.326	SF
9H - OH - Plan #1 Draft 1	6,323.50	6,281.50	4,140.44	4,112.39	147.617	CC
9H - OH - Plan #1 Draft 1	6,350.00	6,307.99	4,140.49	4,112.34	147.077	ES
9H - OH - Plan #1 Draft 1	11,445.37	12,187.37	4,421.20	4,251.43	26.043	SF
Lone Tree Draw Offsets						
Lone Tree #1 - OH - OH	9,592.52	6,763.75	1,346.79	1,276.17	19.071	CC
Lone Tree #1 - OH - OH	9,600.00	6,763.68	1,346.81	1,276.06	19.036	ES
Lone Tree #1 - OH - OH	10,000.00	6,759.95	1,407.08	1,329.33	18.097	SF
Lone Tree Draw 13 State #3H - OH - OH	4,715.34	4,713.14	874.18	853.46	42.205	CC, ES
Lone Tree Draw 13 State #3H - OH - OH	11,445.37	9,564.00	2,217.43	2,098.40	18.630	SF

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 13H - OH - Plan #1 Draft 1													Offset Site Error:
Survey Program: 0-LEAM MWD-ADJ													Offset Well Error:
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	42.00	0.00	0.00	92.38	-170.64	4,103.34	4,107.10				
100.00	100.00	58.00	100.00	0.08	0.05	92.38	-170.64	4,103.34	4,106.89	4,106.76	0.13	N/A	
200.00	200.00	158.00	200.00	0.31	0.21	92.38	-170.64	4,103.34	4,106.89	4,106.37	0.52	7,875.785	
300.00	300.00	258.00	300.00	0.53	0.44	92.38	-170.64	4,103.34	4,106.89	4,105.92	0.97	4,229.589	
400.00	400.00	358.00	400.00	0.76	0.66	92.38	-170.64	4,103.34	4,106.89	4,105.47	1.42	2,891.112	
500.00	500.00	458.00	500.00	0.98	0.89	92.38	-170.64	4,103.34	4,106.89	4,105.02	1.87	2,196.133	
600.00	600.00	558.00	600.00	1.21	1.11	92.38	-170.64	4,103.34	4,106.89	4,104.57	2.32	1,770.526	
700.00	700.00	658.00	700.00	1.43	1.34	92.38	-170.64	4,103.34	4,106.89	4,104.12	2.77	1,483.103	
800.00	800.00	758.00	800.00	1.66	1.56	92.38	-170.64	4,103.34	4,106.89	4,103.67	3.22	1,275.966	
900.00	900.00	858.00	900.00	1.88	1.79	92.38	-170.64	4,103.34	4,106.89	4,103.22	3.67	1,119.597	
1,000.00	1,000.00	958.00	1,000.00	2.11	2.01	92.38	-170.64	4,103.34	4,106.89	4,102.77	4.12	997.371	
1,100.00	1,100.00	1,058.00	1,100.00	2.33	2.24	92.38	-170.64	4,103.34	4,106.89	4,102.32	4.57	899.204	
1,200.00	1,200.00	1,158.00	1,200.00	2.56	2.46	92.38	-170.64	4,103.34	4,106.89	4,101.87	5.02	818.630	
1,300.00	1,300.00	1,258.00	1,300.00	2.78	2.69	92.38	-170.64	4,103.34	4,106.89	4,101.42	5.47	751.309	
1,400.00	1,400.00	1,358.00	1,400.00	3.01	2.91	92.38	-170.64	4,103.34	4,106.89	4,100.97	5.92	694.218	
1,500.00	1,500.00	1,458.00	1,500.00	3.23	3.14	92.38	-170.64	4,103.34	4,106.89	4,100.52	6.37	645.192	
1,600.00	1,600.00	1,558.00	1,600.00	3.45	3.36	92.38	-170.64	4,103.34	4,106.89	4,100.07	6.81	602.633	
1,700.00	1,700.00	1,658.00	1,700.00	3.68	3.59	92.38	-170.64	4,103.34	4,106.89	4,099.62	7.26	565.341	
1,800.00	1,800.00	1,758.00	1,800.00	3.90	3.81	92.38	-170.64	4,103.34	4,106.89	4,099.17	7.71	532.396	
1,900.00	1,900.00	1,858.00	1,900.00	4.13	4.03	92.38	-170.64	4,103.34	4,106.89	4,098.72	8.16	503.079	
2,000.00	2,000.00	1,958.00	2,000.00	4.35	4.26	92.38	-170.64	4,103.34	4,106.89	4,098.27	8.61	476.822	
2,100.00	2,100.00	2,058.00	2,100.00	4.58	4.48	92.38	-170.64	4,103.34	4,106.89	4,097.82	9.06	453.170	
2,200.00	2,200.00	2,158.00	2,200.00	4.80	4.71	92.38	-170.64	4,103.34	4,106.89	4,097.37	9.51	431.754	
2,300.00	2,300.00	2,258.00	2,300.00	5.03	4.93	92.38	-170.64	4,103.34	4,106.89	4,096.93	9.96	412.271	
2,400.00	2,400.00	2,358.00	2,400.00	5.25	5.16	92.38	-170.64	4,103.34	4,106.89	4,096.48	10.41	394.470	
2,500.00	2,500.00	2,458.00	2,500.00	5.48	5.38	92.38	-170.64	4,103.34	4,106.89	4,096.03	10.86	378.142	
2,600.00	2,600.00	2,558.00	2,600.00	5.70	5.61	92.38	-170.64	4,103.34	4,106.89	4,095.58	11.31	363.113	
2,700.00	2,700.00	2,658.00	2,700.00	5.93	5.83	92.38	-170.64	4,103.34	4,106.89	4,095.13	11.76	349.232	
2,800.00	2,800.00	2,758.00	2,800.00	6.15	6.06	92.38	-170.64	4,103.34	4,106.89	4,094.68	12.21	336.374	
2,900.00	2,900.00	2,858.00	2,900.00	6.38	6.28	92.38	-170.64	4,103.34	4,106.89	4,094.23	12.66	324.429	
3,000.00	3,000.00	2,958.00	3,000.00	6.60	6.51	92.38	-170.64	4,103.34	4,106.89	4,093.78	13.11	313.303	
3,100.00	3,100.00	3,058.00	3,100.00	6.83	6.73	92.38	-170.64	4,103.34	4,106.89	4,093.33	13.56	302.915	
3,200.00	3,200.00	3,158.00	3,200.00	7.05	6.96	92.38	-170.64	4,103.34	4,106.89	4,092.88	14.01	293.194	
3,300.00	3,300.00	3,258.00	3,300.00	7.28	7.18	92.38	-170.64	4,103.34	4,106.89	4,092.43	14.46	284.077	
3,400.00	3,400.00	3,358.00	3,400.00	7.50	7.41	92.38	-170.64	4,103.34	4,106.89	4,091.98	14.91	275.510	
3,500.00	3,500.00	3,458.00	3,500.00	7.73	7.63	92.38	-170.64	4,103.34	4,106.89	4,091.53	15.36	267.445	
3,600.00	3,600.00	3,558.00	3,600.00	7.95	7.86	92.38	-170.64	4,103.34	4,106.89	4,091.08	15.81	259.838	
3,700.00	3,700.00	3,658.00	3,700.00	8.17	8.08	92.38	-170.64	4,103.34	4,106.89	4,090.63	16.26	252.653	
3,800.00	3,800.00	3,758.00	3,800.00	8.40	8.31	92.38	-170.64	4,103.34	4,106.89	4,090.18	16.70	245.853	
3,900.00	3,900.00	3,858.00	3,900.00	8.62	8.53	92.38	-170.64	4,103.34	4,106.89	4,089.73	17.15	239.411	
4,000.00	4,000.00	3,958.00	4,000.00	8.85	8.75	92.38	-170.64	4,103.34	4,106.89	4,089.28	17.60	233.297	
4,100.00	4,100.00	4,058.00	4,100.00	9.07	8.98	92.38	-170.64	4,103.34	4,106.89	4,088.83	18.05	227.488	
4,200.00	4,200.00	4,158.00	4,200.00	9.30	9.20	92.38	-170.64	4,103.34	4,106.89	4,088.38	18.50	221.961	
4,300.00	4,300.00	4,258.00	4,300.00	9.52	9.43	92.38	-170.64	4,103.34	4,106.89	4,087.93	18.95	216.696	
4,400.00	4,400.00	4,358.00	4,400.00	9.75	9.65	92.38	-170.64	4,103.34	4,106.89	4,087.48	19.40	211.675	
4,500.00	4,500.00	4,458.00	4,500.00	9.97	9.88	92.38	-170.64	4,103.34	4,106.89	4,087.04	19.85	206.882	
4,600.00	4,600.00	4,558.00	4,600.00	10.20	10.10	92.38	-170.64	4,103.34	4,106.89	4,086.59	20.30	202.301	
4,700.00	4,700.00	4,658.00	4,700.00	10.42	10.33	92.38	-170.64	4,103.34	4,106.89	4,086.14	20.75	197.918	
4,800.00	4,800.00	4,758.00	4,800.00	10.65	10.55	92.38	-170.64	4,103.34	4,106.89	4,085.69	21.20	193.722	
4,900.00	4,900.00	4,858.00	4,900.00	10.87	10.78	92.38	-170.64	4,103.34	4,106.89	4,085.24	21.65	189.699	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Lone Tree Draw "13" State - 13H - OH - Plan #1 Draft 1												Offset Well Error:	0.00 usft
Survey Program: O-LEAM MWD-ADJ													
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	Between Centres (usft)					
5,000.00	5,000.00	4,958.00	5,000.00	11.10	11.00	92.38	-170.64	4,103.34	4,106.89	4,084.79	22.10	185.840	
5,100.00	5,100.00	5,058.00	5,100.00	11.32	11.23	92.38	-170.64	4,103.34	4,106.89	4,084.34	22.55	182.135	
5,200.00	5,200.00	5,158.00	5,200.00	11.55	11.45	92.38	-170.64	4,103.34	4,106.89	4,083.89	23.00	178.575	
5,300.00	5,300.00	5,258.00	5,300.00	11.77	11.68	92.38	-170.64	4,103.34	4,106.89	4,083.44	23.45	175.152	
5,400.00	5,400.00	5,358.00	5,400.00	12.00	11.90	92.38	-170.64	4,103.34	4,106.89	4,082.99	23.90	171.857	
5,500.00	5,500.00	5,458.00	5,500.00	12.22	12.13	92.38	-170.64	4,103.34	4,106.89	4,082.54	24.35	168.684	
5,600.00	5,600.00	5,558.00	5,600.00	12.45	12.35	92.38	-170.64	4,103.34	4,106.89	4,082.09	24.80	165.626	
5,700.00	5,700.00	5,658.00	5,700.00	12.67	12.58	92.38	-170.64	4,103.34	4,106.89	4,081.64	25.25	162.677	
5,800.00	5,800.00	5,758.00	5,800.00	12.89	12.80	92.38	-170.64	4,103.34	4,106.89	4,081.19	25.70	159.831	
5,900.00	5,900.00	5,858.00	5,900.00	13.12	13.03	92.38	-170.64	4,103.34	4,106.89	4,080.74	26.14	157.082	
6,000.00	6,000.00	5,958.00	6,000.00	13.34	13.25	92.38	-170.64	4,103.34	4,106.89	4,080.29	26.59	154.427	
6,100.00	6,100.00	6,058.00	6,100.00	13.57	13.47	92.38	-170.64	4,103.34	4,106.89	4,079.84	27.04	151.860	
6,200.00	6,200.00	6,158.00	6,200.00	13.79	13.70	92.38	-170.64	4,103.34	4,106.89	4,079.39	27.49	149.377	
6,300.00	6,300.00	6,258.00	6,300.00	14.02	13.92	92.38	-170.64	4,103.34	4,106.89	4,078.94	27.94	146.974	
6,323.50	6,323.50	6,281.50	6,323.50	14.07	13.98	92.38	-170.64	4,103.34	4,106.89	4,078.84	28.05	146.421	
6,325.00	6,325.00	6,283.00	6,325.00	14.07	13.98	-93.24	-170.64	4,103.34	4,106.89	4,078.83	28.05	146.388	
6,350.00	6,349.99	6,307.99	6,349.99	14.12	14.04	-93.24	-170.64	4,103.34	4,106.93	4,078.78	28.15	145.884	
6,375.00	6,374.90	6,332.90	6,374.90	14.16	14.09	-93.26	-170.64	4,103.34	4,107.04	4,078.80	28.25	145.392	
6,400.00	6,399.87	6,370.42	6,412.41	14.20	14.16	-93.30	-171.12	4,103.29	4,107.22	4,078.86	28.36	144.829	
6,425.00	6,424.24	6,432.30	6,473.87	14.25	14.27	-93.36	-177.84	4,102.55	4,107.30	4,078.81	28.50	144.129	
6,450.00	6,448.53	6,494.66	6,534.42	14.29	14.38	-93.37	-192.56	4,100.93	4,107.24	4,078.60	28.64	143.433	
6,475.00	6,472.47	6,556.52	6,592.04	14.34	14.49	-93.33	-214.77	4,098.50	4,107.02	4,078.24	28.78	142.718	
6,500.00	6,496.01	6,616.91	6,645.07	14.38	14.59	-93.24	-243.41	4,095.35	4,106.66	4,077.73	28.93	141.946	
6,525.00	6,519.07	6,675.06	6,692.30	14.42	14.71	-93.12	-277.07	4,091.66	4,106.17	4,077.07	29.10	141.085	
6,550.00	6,541.60	6,730.41	6,733.12	14.47	14.87	-92.97	-314.19	4,087.58	4,105.57	4,076.27	29.30	140.102	
6,575.00	6,563.53	6,782.64	6,767.44	14.51	15.05	-92.80	-353.30	4,083.29	4,104.89	4,075.35	29.53	138.996	
6,600.00	6,584.80	6,831.65	6,795.55	14.55	15.26	-92.62	-393.17	4,078.91	4,104.13	4,074.34	29.79	137.775	
6,625.00	6,605.36	6,877.47	6,817.99	14.60	15.48	-92.43	-432.86	4,074.55	4,103.32	4,073.25	30.07	136.457	
6,650.00	6,625.14	6,920.27	6,835.40	14.66	15.73	-92.25	-471.71	4,070.29	4,102.47	4,072.10	30.38	135.060	
6,675.00	6,644.10	6,960.25	6,848.45	14.72	15.98	-92.07	-509.26	4,066.17	4,101.62	4,070.92	30.70	133.609	
6,700.00	6,662.18	6,997.67	6,857.75	14.80	16.25	-91.90	-545.28	4,062.21	4,100.76	4,069.72	31.04	132.132	
6,725.00	6,679.33	7,032.78	6,863.88	14.88	16.52	-91.73	-579.64	4,058.44	4,099.90	4,068.52	31.39	130.632	
6,750.00	6,695.50	7,065.83	6,867.31	14.97	16.78	-91.57	-612.31	4,054.86	4,099.07	4,067.33	31.74	129.131	
6,775.00	6,710.66	7,097.04	6,868.46	15.07	17.05	-91.42	-643.31	4,051.45	4,098.27	4,066.16	32.11	127.638	
6,800.00	6,724.75	7,117.96	6,868.52	15.17	17.25	-91.34	-664.10	4,049.17	4,097.52	4,065.11	32.41	126.418	
6,825.00	6,737.74	7,139.35	6,868.57	15.29	17.45	-91.27	-685.36	4,046.84	4,096.85	4,064.11	32.73	125.160	
6,850.00	6,749.60	7,161.38	6,868.63	15.42	17.66	-91.20	-707.27	4,044.43	4,096.24	4,063.17	33.07	123.866	
6,875.00	6,760.29	7,184.01	6,868.69	15.56	17.87	-91.13	-729.75	4,041.96	4,095.69	4,062.27	33.42	122.540	
6,900.00	6,769.79	7,207.15	6,868.75	15.71	18.10	-91.07	-752.76	4,039.44	4,095.19	4,061.39	33.80	121.155	
6,925.00	6,778.06	7,230.76	6,868.81	15.87	18.35	-91.01	-776.23	4,036.86	4,094.74	4,060.52	34.21	119.678	
6,950.00	6,785.08	7,254.77	6,868.87	16.04	18.61	-90.97	-800.09	4,034.24	4,094.32	4,059.68	34.64	118.187	
6,975.00	6,790.84	7,279.11	6,868.93	16.22	18.87	-90.94	-824.28	4,031.59	4,093.93	4,058.85	35.08	116.687	
7,000.00	6,795.32	7,303.71	6,868.99	16.41	19.14	-90.92	-848.74	4,028.90	4,093.57	4,058.03	35.54	115.172	
7,025.00	6,798.50	7,328.51	6,869.06	16.61	19.43	-90.92	-873.39	4,026.20	4,093.24	4,057.20	36.03	113.591	
7,050.00	6,800.39	7,353.44	6,869.12	16.82	19.73	-90.93	-898.17	4,023.48	4,092.93	4,056.39	36.54	112.022	
7,073.93	6,800.96	7,377.36	6,869.18	17.02	20.01	-90.96	-921.95	4,020.86	4,092.65	4,055.62	37.03	110.535	
7,100.00	6,800.94	7,403.43	6,869.25	17.26	20.32	-90.96	-947.86	4,018.02	4,092.36	4,054.79	37.57	108.926	
7,200.00	6,800.85	7,503.42	6,869.51	18.24	21.59	-90.96	-1,047.26	4,007.11	4,091.24	4,051.42	39.82	102.738	
7,300.00	6,800.76	7,603.41	6,869.77	19.35	22.93	-90.97	-1,146.65	3,996.20	4,090.12	4,047.85	42.27	96.769	
7,400.00	6,800.67	7,703.41	6,870.02	20.55	24.33	-90.97	-1,246.05	3,985.29	4,089.00	4,044.13	44.87	91.125	
7,500.00	6,800.58	7,803.40	6,870.28	21.84	25.78	-90.98	-1,345.44	3,974.38	4,087.88	4,040.27	47.61	85.857	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 13H - OH - Plan #1 Draft 1													Offset Site Error: 0.00 usft
Survey Program: O-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)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,600.00	6,800.49	7,903.39	6,870.54	23.20	27.28	-90.98	-1,444.84	3,963.46	4,086.76	4,036.30	50.47	80.981	
7,700.00	6,800.40	8,003.39	6,870.80	24.61	28.81	-90.99	-1,544.24	3,952.55	4,085.65	4,032.23	53.41	76.492	
7,800.00	6,800.31	8,103.38	6,871.05	26.08	30.37	-90.99	-1,643.63	3,941.64	4,084.53	4,028.09	56.44	72.370	
7,900.00	6,800.22	8,203.37	6,871.31	27.59	31.96	-91.00	-1,743.03	3,930.73	4,083.41	4,023.88	59.53	68.591	
8,000.00	6,800.12	8,303.37	6,871.57	29.13	33.57	-91.00	-1,842.42	3,919.82	4,082.29	4,019.61	62.68	65.125	
8,100.00	6,800.03	8,403.36	6,871.83	30.70	35.20	-91.01	-1,941.82	3,908.91	4,081.17	4,015.29	65.88	61.946	
8,200.00	6,799.94	8,503.35	6,872.08	32.29	36.84	-91.01	-2,041.21	3,898.00	4,080.05	4,010.93	69.12	59.025	
8,300.00	6,799.85	8,603.34	6,872.34	33.91	38.50	-91.02	-2,140.61	3,887.09	4,078.93	4,006.53	72.40	56.337	
8,400.00	6,799.76	8,703.34	6,872.60	35.55	40.18	-91.02	-2,240.01	3,876.17	4,077.82	4,002.10	75.71	53.860	
8,500.00	6,799.67	8,803.33	6,872.86	37.20	41.86	-91.03	-2,339.40	3,865.26	4,076.70	3,997.65	79.05	51.573	
8,600.00	6,799.58	8,903.32	6,873.11	38.86	43.56	-91.03	-2,438.80	3,854.35	4,075.58	3,993.17	82.41	49.456	
8,700.00	6,799.49	9,003.32	6,873.37	40.54	45.26	-91.04	-2,538.19	3,843.44	4,074.46	3,988.67	85.79	47.494	
8,800.00	6,799.40	9,103.31	6,873.63	42.23	46.97	-91.04	-2,637.59	3,832.53	4,073.34	3,984.15	89.19	45.670	
8,900.00	6,799.31	9,203.30	6,873.88	43.93	48.69	-91.05	-2,736.98	3,821.62	4,072.22	3,979.62	92.61	43.973	
9,000.00	6,799.22	9,303.29	6,874.14	45.64	50.40	-91.05	-2,836.37	3,810.71	4,071.10	3,975.10	96.05	42.119	
9,100.00	6,799.13	9,403.28	6,874.40	47.35	52.12	-91.06	-2,935.76	3,799.80	4,069.98	3,970.58	99.50	40.244	
9,200.00	6,799.04	9,503.27	6,874.66	49.06	53.84	-91.07	-3,035.15	3,788.89	4,068.86	3,966.06	103.06	38.272	
9,300.00	6,798.95	9,603.26	6,874.92	50.77	55.56	-91.08	-3,134.54	3,777.98	4,067.74	3,962.14	106.61	36.266	
9,400.00	6,798.86	9,703.25	6,875.18	52.48	57.28	-91.09	-3,233.93	3,767.07	4,066.62	3,958.22	110.20	34.244	
9,500.00	6,798.77	9,803.24	6,875.44	54.19	59.00	-91.10	-3,333.32	3,756.16	4,065.50	3,954.30	113.81	32.222	
9,600.00	6,798.68	9,903.23	6,875.70	55.90	60.72	-91.11	-3,432.71	3,745.25	4,064.38	3,950.38	117.42	30.200	
9,700.00	6,798.59	10,003.22	6,875.96	57.61	62.44	-91.12	-3,532.10	3,734.34	4,063.26	3,946.46	121.03	28.178	
9,800.00	6,798.50	10,103.21	6,876.22	59.32	64.16	-91.13	-3,631.49	3,723.43	4,062.14	3,942.54	124.64	26.156	
9,900.00	6,798.41	10,203.20	6,876.48	61.03	65.88	-91.14	-3,730.88	3,712.52	4,061.02	3,938.62	128.25	24.134	
10,000.00	6,798.32	10,303.19	6,876.74	62.74	67.60	-91.15	-3,830.27	3,701.61	4,059.90	3,934.70	131.86	22.112	
10,100.00	6,798.23	10,403.18	6,877.00	64.45	69.32	-91.16	-3,929.66	3,690.70	4,058.78	3,930.78	135.47	20.090	
10,200.00	6,798.14	10,503.17	6,877.26	66.16	71.04	-91.17	-4,029.05	3,679.79	4,057.66	3,926.86	139.08	18.068	
10,300.00	6,798.05	10,603.16	6,877.52	67.87	72.76	-91.18	-4,128.44	3,668.88	4,056.54	3,922.94	142.69	16.046	
10,400.00	6,797.96	10,703.15	6,877.78	69.58	74.48	-91.19	-4,227.83	3,657.97	4,055.42	3,919.02	146.30	14.024	
10,500.00	6,797.87	10,803.14	6,878.04	71.29	76.20	-91.20	-4,327.22	3,647.06	4,054.30	3,915.10	149.91	12.002	
10,600.00	6,797.78	10,903.13	6,878.30	73.00	77.92	-91.21	-4,426.61	3,636.15	4,053.18	3,911.18	153.52	10.000	
10,700.00	6,797.69	11,003.12	6,878.56	74.71	79.64	-91.22	-4,526.00	3,625.24	4,052.06	3,907.26	157.13	8.000	
10,800.00	6,797.60	11,103.11	6,878.82	76.42	81.36	-91.23	-4,625.39	3,614.33	4,050.94	3,903.34	160.74	6.000	
10,900.00	6,797.51	11,203.10	6,879.08	78.13	83.08	-91.24	-4,724.78	3,603.42	4,049.82	3,899.42	164.35	4.000	
10,987.41	6,797.42	11,246.07	6,827.00	80.51	84.63	-90.42	-4,765.17	3,582.73	4,032.28	3,867.15	165.12	24.420 CC	
11,000.00	6,797.40	11,246.07	6,827.00	80.74	84.63	-90.42	-4,765.17	3,582.73	4,032.30	3,866.95	165.35	24.387	
11,100.00	6,797.31	11,246.07	6,827.00	82.52	84.63	-90.42	-4,765.17	3,582.73	4,033.85	3,866.72	167.13	24.136 ES	
11,200.00	6,797.22	11,246.07	6,827.00	84.30	84.63	-90.42	-4,765.17	3,582.73	4,037.88	3,868.97	168.91	23.905	
11,300.00	6,797.13	11,246.07	6,827.00	86.08	84.63	-90.42	-4,765.17	3,582.73	4,044.37	3,873.68	170.69	23.694	
11,400.00	6,797.04	11,246.07	6,827.00	87.86	84.63	-90.42	-4,765.17	3,582.73	4,053.33	3,880.85	172.48	23.501	
11,445.37	6,797.00	11,246.07	6,827.00	88.67	84.63	-90.42	-4,765.17	3,582.73	4,058.20	3,884.91	173.29	23.419 SF	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM.(NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000:1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - OH - OH												Offset Site Error:
Survey Program: 80-NS-GYRO-MS, 4361-LEAM MWD, 9485-Project												0.00 usft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	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)	Separation (usft)	Factor	
0.00	0.00	0.00	2.00	0.00	0.00	-90.32	-0.84	-149.90	149.92			
100.00	100.00	98.26	100.26	0.08	0.12	-90.34	-0.88	-149.80	149.81	149.60	0.20	736.524
200.00	200.00	198.37	200.37	0.31	0.39	-90.37	-0.98	-149.60	149.60	148.91	0.69	215.652
300.00	300.00	298.53	300.53	0.53	0.65	-90.43	-1.11	-149.29	149.30	148.11	1.18	126.070
400.00	400.00	398.68	400.68	0.76	0.92	-90.50	-1.30	-148.90	148.91	147.23	1.67	88.914
500.00	500.00	498.96	500.96	0.98	1.18	-90.60	-1.56	-148.34	148.35	146.19	2.17	68.506
600.00	600.00	599.28	601.28	1.21	1.45	-90.76	-1.96	-147.59	147.61	144.96	2.66	55.569
700.00	700.00	699.54	701.52	1.43	1.71	-90.96	-2.46	-146.63	146.66	143.51	3.15	46.613
800.00	800.00	799.81	801.79	1.66	1.98	-91.32	-3.34	-145.48	145.53	141.90	3.63	40.039
900.00	900.00	900.26	902.22	1.88	2.24	-91.75	-4.39	-144.08	144.17	140.04	4.12	34.955
1,000.00	1,000.00	1,000.58	1,002.51	2.11	2.51	-92.26	-5.63	-142.36	142.49	137.88	4.61	30.881
1,100.00	1,100.00	1,100.66	1,102.57	2.33	2.77	-92.89	-7.09	-140.48	140.68	135.58	5.10	27.569
1,200.00	1,200.00	1,200.62	1,202.49	2.56	3.03	-93.70	-8.96	-138.55	138.87	133.28	5.59	24.845
1,300.00	1,300.00	1,300.98	1,302.80	2.78	3.29	-94.80	-11.46	-136.45	136.96	130.89	6.07	22.550
1,400.00	1,400.00	1,400.75	1,402.49	3.01	3.55	-96.16	-14.49	-134.19	135.00	128.44	6.56	20.593
1,500.00	1,500.00	1,500.47	1,502.16	3.23	3.81	-97.50	-17.39	-132.11	133.26	126.22	7.04	18.936
1,600.00	1,600.00	1,600.13	1,601.77	3.45	4.07	-98.67	-19.86	-130.30	131.82	124.30	7.52	17.528
1,700.00	1,700.00	1,700.73	1,702.33	3.68	4.33	-99.61	-21.74	-128.36	130.21	122.20	8.01	16.255
1,800.00	1,800.00	1,800.48	1,802.05	3.90	4.60	-100.37	-23.13	-126.37	128.48	119.98	8.50	15.115
1,900.00	1,900.00	1,899.94	1,901.49	4.13	4.86	-100.92	-24.09	-124.83	127.14	118.15	8.99	14.144
2,000.00	2,000.00	1,999.80	2,001.34	4.35	5.13	-101.36	-24.83	-123.54	126.02	116.54	9.48	13.296
2,100.00	2,100.00	2,099.83	2,101.37	4.58	5.39	-101.77	-25.49	-122.35	124.98	115.02	9.97	12.540
2,200.00	2,200.00	2,200.08	2,201.60	4.80	5.66	-102.31	-26.38	-120.91	123.77	113.31	10.46	11.835
2,300.00	2,300.00	2,300.13	2,301.64	5.03	5.92	-102.89	-27.30	-119.35	122.44	111.49	10.95	11.184
2,400.00	2,400.00	2,400.09	2,401.57	5.25	6.19	-103.46	-28.19	-117.78	121.11	109.68	11.44	10.589
2,500.00	2,500.00	2,499.95	2,501.43	5.48	6.45	-103.96	-28.92	-116.31	119.86	107.94	11.93	10.051
2,600.00	2,600.00	2,599.85	2,601.31	5.70	6.71	-104.41	-29.54	-114.98	118.72	106.31	12.41	9.564
2,700.00	2,700.00	2,699.79	2,701.24	5.93	6.98	-104.89	-30.23	-113.69	117.65	104.74	12.90	9.118
2,800.00	2,800.00	2,799.80	2,801.24	6.15	7.24	-105.40	-30.95	-112.40	116.59	103.20	13.39	8.706
2,900.00	2,900.00	2,899.95	2,901.38	6.38	7.51	-105.99	-31.80	-111.00	115.47	101.59	13.88	8.317
3,000.00	3,000.00	2,999.87	3,001.28	6.60	7.77	-106.59	-32.63	-109.53	114.30	99.92	14.37	7.952
3,100.00	3,100.00	3,099.87	3,101.27	6.83	8.04	-107.10	-33.27	-108.17	113.18	98.32	14.86	7.616
3,200.00	3,200.00	3,200.17	3,201.56	7.05	8.30	-107.56	-33.77	-106.70	111.93	96.58	15.35	7.293
3,300.00	3,300.00	3,300.55	3,301.92	7.28	8.55	-107.98	-34.07	-104.94	110.35	94.52	15.83	6.972
3,400.00	3,400.00	3,400.45	3,401.81	7.50	8.80	-108.29	-34.08	-103.13	108.63	92.33	16.29	6.667
3,500.00	3,500.00	3,500.04	3,501.39	7.73	9.02	-108.41	-33.85	-101.68	107.18	90.43	16.75	6.400
3,600.00	3,600.00	3,599.98	3,601.32	7.95	9.24	-108.44	-33.49	-100.45	105.90	88.71	17.19	6.161
3,700.00	3,700.00	3,699.91	3,701.24	8.17	9.44	-108.32	-32.90	-99.39	104.70	87.09	17.61	5.945
3,800.00	3,800.00	3,799.91	3,801.23	8.40	9.61	-108.01	-32.01	-98.42	103.50	85.49	18.00	5.748
3,900.00	3,900.00	3,899.85	3,901.16	8.62	9.77	-107.59	-30.94	-97.55	102.35	83.96	18.39	5.566
4,000.00	4,000.00	3,999.70	4,001.00	8.85	9.93	-107.22	-29.98	-96.70	101.25	82.47	18.77	5.394
4,100.00	4,100.00	4,099.53	4,100.82	9.07	10.08	-106.84	-29.08	-96.07	100.38	81.23	19.15	5.241
4,200.00	4,200.00	4,199.43	4,200.72	9.30	10.23	-106.47	-28.24	-95.50	99.59	80.06	19.53	5.100
4,300.00	4,300.00	4,299.34	4,300.63	9.52	10.38	-106.08	-27.41	-95.05	98.92	79.02	19.90	4.971
4,343.94	4,343.94	4,342.66	4,343.94	9.62	10.44	-106.00	-27.20	-94.86	98.68	78.62	20.06	4.919 CC, ES, SF
4,400.00	4,400.00	4,395.66	4,396.76	9.75	10.45	-108.39	-31.41	-94.46	98.60	79.38	20.22	4.927
4,500.00	4,500.00	4,489.24	4,489.06	9.97	10.47	-116.20	-46.52	-94.56	105.95	85.48	20.48	5.175
4,600.00	4,600.00	4,576.74	4,572.97	10.20	10.50	-126.83	-71.11	-94.95	121.66	100.89	20.77	5.857
4,700.00	4,700.00	4,655.20	4,644.68	10.42	10.56	-136.98	-102.81	-95.95	151.12	130.02	21.10	7.163
4,800.00	4,800.00	4,723.84	4,703.78	10.65	10.67	-144.62	-137.61	-97.71	194.27	172.85	21.43	9.067
4,900.00	4,900.00	4,779.74	4,748.21	10.87	10.81	-149.89	-171.44	-99.41	249.63	227.88	21.75	11.477

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 80-NS-GYRO-MS, 4361-LEAM MWD, 9485-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	
5,000.00	5,000.00	4,833.00	4,786.74	11.10	11.00	-154.00	-208.11	-101.52	314.80	292.72	22.07	14.263	
5,100.00	5,100.00	4,865.00	4,808.38	11.32	11.14	-155.91	-231.60	-103.54	386.52	364.17	22.35	17.293	
5,200.00	5,200.00	4,897.00	4,828.43	11.55	11.30	-157.50	-256.39	-106.18	463.76	441.13	22.63	20.489	
5,300.00	5,300.00	4,928.00	4,846.14	11.77	11.48	-158.79	-281.64	-109.28	545.21	522.29	22.92	23.791	
5,400.00	5,400.00	4,960.00	4,862.83	12.00	11.69	-159.96	-308.73	-112.60	629.71	606.52	23.20	27.149	
5,500.00	5,500.00	4,979.20	4,872.14	12.22	11.83	-160.61	-325.41	-114.54	716.39	692.94	23.45	30.549	
5,600.00	5,600.00	4,991.00	4,877.83	12.45	11.92	-160.98	-335.79	-115.76	804.97	781.28	23.69	33.973	
5,700.00	5,700.00	5,023.00	4,891.48	12.67	12.18	-161.90	-364.43	-119.10	894.82	870.86	23.97	37.334	
5,800.00	5,800.00	5,023.00	4,891.48	12.89	12.18	-161.90	-364.43	-119.10	986.11	961.92	24.19	40.761	
5,900.00	5,900.00	5,042.48	4,899.02	13.12	12.35	-162.42	-382.28	-121.14	1,078.32	1,053.87	24.45	44.107	
6,000.00	6,000.00	5,054.00	4,903.09	13.34	12.45	-162.71	-392.99	-122.35	1,171.59	1,146.90	24.69	47.452	
6,100.00	6,100.00	5,054.00	4,903.09	13.57	12.45	-162.71	-392.99	-122.35	1,265.71	1,240.79	24.91	50.802	
6,200.00	6,200.00	5,068.15	4,907.67	13.79	12.59	-163.05	-406.28	-123.85	1,360.34	1,335.18	25.16	54.067	
6,300.00	6,300.00	5,086.00	4,912.79	14.02	12.76	-163.45	-423.28	-125.80	1,455.80	1,430.39	25.41	57.291	
6,323.50	6,323.50	5,086.00	4,912.79	14.07	12.76	-163.45	-423.28	-125.80	1,478.21	1,452.75	25.46	58.052	
6,325.00	6,325.00	5,086.00	4,912.79	14.07	12.76	10.82	-423.28	-125.80	1,479.64	1,454.59	25.05	59.071	
6,350.00	6,349.99	5,086.00	4,912.79	14.12	12.76	9.29	-423.28	-125.80	1,503.30	1,478.24	25.05	60.006	
6,375.00	6,374.90	5,086.00	4,912.79	14.16	12.76	8.14	-423.28	-125.80	1,526.55	1,501.55	25.00	61.057	
6,400.00	6,399.67	5,086.00	4,912.79	14.20	12.76	7.24	-423.28	-125.80	1,549.37	1,524.48	24.89	62.238	
6,425.00	6,424.24	5,086.00	4,912.79	14.25	12.76	6.52	-423.28	-125.80	1,571.71	1,546.85	24.86	63.234	
6,450.00	6,448.53	5,086.00	4,912.79	14.29	12.76	5.94	-423.28	-125.80	1,593.52	1,568.75	24.78	64.314	
6,475.00	6,472.47	5,086.00	4,912.79	14.34	12.76	5.46	-423.28	-125.80	1,614.78	1,590.14	24.64	65.535	
6,500.00	6,496.01	5,086.00	4,912.79	14.38	12.76	5.06	-423.28	-125.80	1,635.44	1,610.99	24.44	66.907	
6,525.00	6,519.07	5,100.30	4,916.44	14.42	12.90	4.68	-437.00	-127.40	1,655.26	1,631.06	24.20	68.388	
6,550.00	6,541.60	5,105.07	4,917.60	14.47	12.95	4.38	-441.61	-127.93	1,674.47	1,650.57	23.90	70.059	
6,575.00	6,563.53	5,117.00	4,920.36	14.51	13.07	4.12	-453.13	-129.28	1,692.99	1,669.44	23.55	71.876	
6,600.00	6,584.80	5,117.00	4,920.36	14.55	13.07	3.91	-453.13	-129.28	1,710.64	1,687.50	23.14	73.927	
6,625.00	6,605.36	5,117.00	4,920.36	14.60	13.07	3.73	-453.13	-129.28	1,727.53	1,704.86	22.67	76.192	
6,650.00	6,625.14	5,117.00	4,920.36	14.66	13.07	3.56	-453.13	-129.28	1,743.65	1,721.49	22.16	78.689	
6,675.00	6,644.10	5,130.38	4,923.21	14.72	13.22	3.41	-466.11	-130.82	1,758.77	1,737.14	21.63	81.328	
6,700.00	6,662.18	5,135.64	4,924.25	14.80	13.27	3.29	-471.23	-131.43	1,773.08	1,752.04	21.04	84.280	
6,725.00	6,679.33	5,149.00	4,926.69	14.88	13.42	3.18	-484.28	-133.00	1,786.55	1,766.12	20.44	87.426	
6,750.00	6,695.50	5,149.00	4,926.69	14.97	13.42	3.08	-484.28	-133.00	1,798.97	1,779.20	19.77	91.001	
6,775.00	6,710.66	5,149.00	4,926.69	15.07	13.42	3.00	-484.28	-133.00	1,810.51	1,791.43	19.07	94.916	
6,800.00	6,724.75	5,149.00	4,926.69	15.17	13.42	2.93	-484.28	-133.00	1,821.15	1,802.79	18.36	99.193	
6,825.00	6,737.74	5,165.79	4,929.38	15.29	13.61	2.87	-500.73	-134.96	1,830.62	1,812.93	17.69	103.491	
6,850.00	6,749.60	5,181.00	4,931.50	15.42	13.78	2.81	-515.69	-136.71	1,839.24	1,822.23	17.02	108.089	
6,875.00	6,760.29	5,181.00	4,931.50	15.56	13.78	2.77	-515.69	-136.71	1,846.71	1,830.42	16.30	113.328	
6,900.00	6,769.79	5,181.00	4,931.50	15.71	13.78	2.73	-515.69	-136.71	1,853.24	1,837.85	15.59	118.861	
6,925.00	6,778.06	5,195.46	4,933.25	15.87	13.95	2.70	-529.95	-138.33	1,858.66	1,843.67	14.99	124.022	
6,950.00	6,785.08	5,212.00	4,934.98	16.04	14.15	2.67	-546.31	-140.09	1,863.08	1,848.64	14.45	128.951	
6,975.00	6,790.84	5,212.00	4,934.98	16.22	14.15	2.65	-546.31	-140.09	1,866.33	1,852.43	13.90	134.288	
7,000.00	6,795.32	5,212.00	4,934.98	16.41	14.15	2.64	-546.31	-140.09	1,868.61	1,855.17	13.43	139.099	
7,025.00	6,798.50	5,230.44	4,936.59	16.61	14.37	2.64	-564.58	-142.00	1,869.66	1,856.48	13.18	141.841	
7,050.00	6,800.39	5,244.00	4,937.58	16.82	14.54	2.64	-578.03	-143.40	1,869.70	1,856.67	13.03	143.500	
7,073.93	6,800.96	5,244.00	4,937.58	17.02	14.54	2.65	-578.03	-143.40	1,868.70	1,855.76	12.94	144.442	
7,100.00	6,800.94	5,244.00	4,937.58	17.26	14.54	2.65	-578.03	-143.40	1,867.30	1,854.28	13.03	143.350	
7,200.00	6,800.85	5,275.00	4,938.47	18.24	14.93	2.66	-608.82	-146.80	1,864.46	1,850.87	13.59	137.178	
7,217.99	6,800.83	5,275.00	4,938.47	18.44	14.93	2.66	-608.82	-146.80	1,864.37	1,850.70	13.67	136.381	
7,300.00	6,800.76	5,307.00	4,937.80	19.35	15.34	2.68	-640.57	-150.70	1,865.72	1,851.49	14.23	131.144	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00' usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1.	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 80-NS-GYRO-MS, 4361-LEAM MWD, 9485-Project													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis 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	Warning
7,400.00	6,800.67	5,490.00	4,939.15	20.55	17.55	2.94	-821.64	-176.91	1,864.23	1,848.32	15.91	117.206	
7,500.00	6,800.58	5,564.79	4,940.34	21.84	18.58	3.06	-895.57	-188.15	1,862.91	1,845.97	16.94	109.953	
7,600.00	6,800.49	5,666.34	4,940.52	23.20	20.03	3.12	-996.40	-200.08	1,862.76	1,844.56	18.20	102.372	
7,700.00	6,800.40	5,782.20	4,941.21	24.61	21.69	2.97	-1,112.07	-206.51	1,861.84	1,842.28	19.56	95.165	
7,800.00	6,800.31	5,894.39	4,942.60	26.08	23.32	2.78	-1,224.15	-211.17	1,860.23	1,839.30	20.93	88.858	
7,900.00	6,800.22	6,025.01	4,945.66	27.59	25.25	2.60	-1,354.56	-217.91	1,857.62	1,835.16	22.46	82.701	
8,000.00	6,800.12	6,111.89	4,948.58	29.13	26.57	2.47	-1,441.29	-222.14	1,854.00	1,830.30	23.70	78.219	
8,100.00	6,800.03	6,174.53	4,949.74	30.70	27.55	2.41	-1,503.78	-226.30	1,852.00	1,827.21	24.79	74.708	
8,122.75	6,800.01	6,186.61	4,949.79	31.06	27.75	2.41	-1,515.82	-227.27	1,851.86	1,826.84	25.02	74.001	
8,200.00	6,799.94	6,247.00	4,949.05	32.29	28.72	2.40	-1,575.93	-233.02	1,852.57	1,826.60	25.96	71.356	
8,300.00	6,799.85	6,318.64	4,947.31	33.91	29.86	2.41	-1,647.16	-240.42	1,854.64	1,827.50	27.14	68.336	
8,400.00	6,799.76	6,488.20	4,947.33	35.55	32.54	2.25	-1,816.28	-251.85	1,854.08	1,825.06	29.02	63.900	
8,500.00	6,799.67	6,584.18	4,948.38	37.20	34.10	2.05	-1,912.22	-254.67	1,852.63	1,822.26	30.37	61.008	
8,600.00	6,799.58	6,671.34	4,949.16	38.86	35.51	1.88	-1,999.31	-257.86	1,851.46	1,819.79	31.67	58.470	
8,700.00	6,799.49	6,762.62	4,949.20	40.54	37.01	1.81	-2,090.36	-264.30	1,851.21	1,818.21	33.01	56.087	
8,800.00	6,799.40	6,859.58	4,949.37	42.23	38.60	1.77	-2,186.96	-272.64	1,850.92	1,816.52	34.40	53.811	
8,805.86	6,799.39	6,864.57	4,949.36	42.33	38.68	1.77	-2,191.93	-273.09	1,850.91	1,816.44	34.47	53.691	
8,900.00	6,799.31	6,956.13	4,949.04	43.93	40.20	1.75	-2,283.11	-281.39	1,851.14	1,815.35	35.79	51.723	
8,969.35	6,799.25	7,027.91	4,948.96	45.12	41.39	1.72	-2,354.63	-287.52	1,851.12	1,814.33	36.79	50.313	
9,000.00	6,799.22	7,055.62	4,948.90	45.64	41.85	1.71	-2,382.23	-289.92	1,851.15	1,813.94	37.21	49.754	
9,100.00	6,799.13	7,135.40	4,948.38	47.35	43.19	1.69	-2,461.68	-297.24	1,851.73	1,813.24	38.49	48.116	
9,200.00	6,799.04	7,210.53	4,946.77	49.08	44.47	1.71	-2,536.36	-305.25	1,853.76	1,814.03	39.74	46.653	
9,300.00	6,798.95	7,305.15	4,944.17	50.80	46.08	1.76	-2,630.33	-316.02	1,856.47	1,815.34	41.13	45.134	
9,400.00	6,798.86	7,413.86	4,940.76	52.54	47.93	1.82	-2,738.22	-328.93	1,859.62	1,816.99	42.64	43.616	
9,500.00	6,798.76	7,597.57	4,941.13	54.28	50.94	1.92	-2,920.68	-350.07	1,859.05	1,814.35	44.70	41.593	
9,600.00	6,798.67	7,705.80	4,943.54	56.02	52.73	1.96	-3,028.23	-361.94	1,856.77	1,810.57	46.20	40.186	
9,700.00	6,798.58	7,807.75	4,946.26	57.77	54.42	2.02	-3,129.46	-373.74	1,854.07	1,806.40	47.67	38.893	
9,800.00	6,798.49	7,907.46	4,948.79	59.52	56.09	2.11	-3,228.35	-386.28	1,851.55	1,802.42	49.13	37.688	
9,900.00	6,798.40	8,007.84	4,951.53	61.27	57.78	2.22	-3,327.83	-398.37	1,848.86	1,798.26	50.60	36.542	
10,000.00	6,798.31	8,110.81	4,954.32	63.03	59.51	2.35	-3,429.78	-413.54	1,846.22	1,794.13	52.09	35.443	
10,100.00	6,798.22	8,194.50	4,956.51	64.79	60.90	2.45	-3,512.68	-424.78	1,843.70	1,790.26	53.44	34.501	
10,200.00	6,798.13	8,284.50	4,957.78	66.55	62.39	2.52	-3,602.00	-435.79	1,842.28	1,787.45	54.83	33.598	
10,300.00	6,798.04	8,367.49	4,958.71	68.32	63.78	2.51	-3,684.60	-443.74	1,841.11	1,784.95	56.16	32.783	
10,323.63	6,798.02	8,383.07	4,958.73	68.74	64.04	2.51	-3,700.12	-445.19	1,841.06	1,784.61	56.45	32.617	
10,400.00	6,797.95	8,437.54	4,958.28	70.09	64.95	2.51	-3,754.34	-450.35	1,841.58	1,784.19	57.39	32.086	
10,500.00	6,797.86	8,530.54	4,956.83	71.86	66.52	2.47	-3,846.99	-458.23	1,842.99	1,784.20	58.79	31.349	
10,600.00	6,797.77	8,642.07	4,954.97	73.63	68.40	2.39	-3,958.16	-466.87	1,844.50	1,784.19	60.31	30.582	
10,700.00	6,797.68	8,765.35	4,954.73	75.40	70.49	2.24	-4,081.23	-474.09	1,844.37	1,782.46	61.91	29.791	
10,763.46	6,797.62	8,823.09	4,954.72	76.53	71.47	2.18	-4,138.86	-477.73	1,844.23	1,781.45	62.78	29.376	
10,800.00	6,797.59	8,853.63	4,954.62	77.18	71.99	2.16	-4,169.31	-480.07	1,844.29	1,781.03	63.26	29.152	
10,900.00	6,797.49	8,950.95	4,953.93	78.96	73.65	2.15	-4,266.19	-489.27	1,844.89	1,780.19	64.70	28.515	
11,000.00	6,797.40	9,138.09	4,956.81	80.74	76.79	2.04	-4,452.70	-503.94	1,843.35	1,776.57	66.78	27.605	
11,100.00	6,797.31	9,241.72	4,961.48	82.52	78.55	1.90	-4,556.07	-509.45	1,838.58	1,770.35	68.24	26.944	
11,200.00	6,797.22	9,336.44	4,965.22	84.30	80.17	1.78	-4,650.57	-514.84	1,834.41	1,764.77	69.64	26.342	
11,300.00	6,797.13	9,453.03	4,970.35	86.08	81.75	1.66	-4,766.80	-522.30	1,829.82	1,758.79	71.03	25.763	
11,400.00	6,797.04	9,485.00	4,971.91	87.86	81.75	1.63	-4,798.66	-524.42	1,826.01	1,754.27	71.74	25.454	
11,424.65	6,797.02	9,485.00	4,971.91	88.30	81.75	1.63	-4,798.66	-524.42	1,825.84	1,753.93	71.92	25.388	
11,445.37	6,797.00	9,485.00	4,971.91	88.67	81.75	1.63	-4,798.66	-524.42	1,825.96	1,753.89	72.07	25.337	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - Pilot - Pilot													Offset Site Error: 0.00 usft
Survey Program: 80-NS-GYRO-MS													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	0.00	2.00	0.00	0.00	-90.32	-0.84	-149.90	149.92				
100.00	100.00	98.26	100.26	0.08	0.12	-90.34	-0.88	-149.80	149.81	149.60	0.20	736.521	
200.00	200.00	198.37	200.37	0.31	0.39	-90.37	-0.98	-149.60	149.60	148.91	0.69	215.652	
300.00	300.00	298.53	300.53	0.53	0.65	-90.43	-1.11	-149.29	149.30	148.11	1.18	126.070	
400.00	400.00	398.68	400.68	0.76	0.92	-90.50	-1.30	-148.90	148.91	147.23	1.67	88.914	
500.00	500.00	498.96	500.96	0.98	1.18	-90.60	-1.56	-148.34	148.35	146.19	2.17	68.506	
600.00	600.00	599.26	601.26	1.21	1.45	-90.76	-1.96	-147.59	147.61	144.96	2.66	55.569	
700.00	700.00	699.54	701.52	1.43	1.71	-90.96	-2.46	-146.63	146.66	143.51	3.15	46.614	
800.00	800.00	799.81	801.79	1.66	1.98	-91.32	-3.34	-145.48	145.53	141.90	3.63	40.039	
900.00	900.00	900.26	902.22	1.88	2.24	-91.75	-4.39	-144.08	144.17	140.04	4.12	34.956	
1,000.00	1,000.00	1,000.58	1,002.51	2.11	2.51	-92.26	-5.63	-142.36	142.49	137.88	4.61	30.881	
1,100.00	1,100.00	1,100.66	1,102.57	2.33	2.77	-92.89	-7.09	-140.48	140.68	135.58	5.10	27.569	
1,200.00	1,200.00	1,200.82	1,202.49	2.56	3.03	-93.70	-8.96	-138.55	138.87	133.28	5.59	24.845	
1,300.00	1,300.00	1,300.98	1,302.80	2.78	3.29	-94.80	-11.46	-136.45	136.96	130.89	6.07	22.550	
1,400.00	1,400.00	1,400.75	1,402.49	3.01	3.55	-96.16	-14.49	-134.19	135.00	128.44	6.56	20.594	
1,500.00	1,500.00	1,500.47	1,502.16	3.23	3.81	-97.50	-17.39	-132.11	133.26	126.23	7.04	18.937	
1,600.00	1,600.00	1,600.13	1,601.77	3.45	4.07	-98.67	-19.86	-130.30	131.82	124.30	7.52	17.528	
1,700.00	1,700.00	1,700.73	1,702.33	3.68	4.33	-99.61	-21.74	-128.36	130.21	122.20	8.01	16.255	
1,800.00	1,800.00	1,800.48	1,802.05	3.90	4.60	-100.37	-23.13	-126.37	128.48	119.98	8.50	15.116	
1,900.00	1,900.00	1,899.94	1,901.49	4.13	4.86	-100.92	-24.09	-124.83	127.14	118.15	8.99	14.144	
2,000.00	2,000.00	1,999.80	2,001.34	4.35	5.13	-101.36	-24.83	-123.54	126.02	116.54	9.48	13.296	
2,100.00	2,100.00	2,099.83	2,101.37	4.58	5.39	-101.77	-25.49	-122.35	124.98	115.02	9.97	12.540	
2,200.00	2,200.00	2,200.08	2,201.60	4.80	5.66	-102.31	-26.38	-120.91	123.77	113.31	10.46	11.835	
2,300.00	2,300.00	2,300.13	2,301.64	5.03	5.92	-102.89	-27.30	-119.35	122.44	111.49	10.95	11.185	
2,400.00	2,400.00	2,400.09	2,401.57	5.25	6.19	-103.46	-28.19	-117.78	121.11	109.68	11.44	10.590	
2,500.00	2,500.00	2,499.95	2,501.43	5.48	6.45	-103.96	-28.92	-116.31	119.86	107.94	11.93	10.051	
2,600.00	2,600.00	2,599.85	2,601.31	5.70	6.71	-104.41	-29.54	-114.98	118.72	106.31	12.41	9.564	
2,700.00	2,700.00	2,699.79	2,701.24	5.93	6.98	-104.89	-30.23	-113.69	117.65	104.74	12.90	9.118	
2,800.00	2,800.00	2,799.80	2,801.24	6.15	7.24	-105.40	-30.95	-112.40	116.59	103.20	13.39	8.706	
2,900.00	2,900.00	2,899.95	2,901.38	6.38	7.51	-105.99	-31.80	-111.00	115.47	101.59	13.88	8.317	
3,000.00	3,000.00	2,899.87	3,001.28	6.60	7.77	-106.59	-32.63	-109.53	114.30	99.92	14.37	7.952	
3,100.00	3,100.00	3,099.87	3,101.27	6.83	8.04	-107.10	-33.27	-108.17	113.18	98.32	14.86	7.616	
3,200.00	3,200.00	3,200.17	3,201.56	7.05	8.30	-107.56	-33.77	-106.70	111.93	96.58	15.35	7.293	
3,300.00	3,300.00	3,300.55	3,301.92	7.28	8.55	-107.98	-34.07	-104.94	110.35	94.53	15.83	6.973	
3,400.00	3,400.00	3,400.45	3,401.81	7.50	8.80	-108.29	-34.08	-103.13	108.63	92.33	16.29	6.667	
3,500.00	3,500.00	3,500.04	3,501.39	7.73	9.02	-108.41	-33.85	-101.68	107.18	90.43	16.75	6.400	
3,600.00	3,600.00	3,599.98	3,601.32	7.95	9.24	-108.44	-33.49	-100.45	105.90	88.71	17.19	6.161	
3,700.00	3,700.00	3,699.91	3,701.24	8.17	9.44	-108.32	-32.90	-99.39	104.70	87.09	17.61	5.946	
3,800.00	3,800.00	3,799.91	3,801.23	8.40	9.61	-108.01	-32.01	-98.42	103.50	85.49	18.00	5.748	
3,900.00	3,900.00	3,899.85	3,901.16	8.62	9.77	-107.59	-30.94	-97.55	102.35	83.96	18.39	5.566	
4,000.00	4,000.00	3,999.70	4,001.00	8.85	9.93	-107.22	-29.98	-96.70	101.25	82.47	18.77	5.394	
4,100.00	4,100.00	4,099.53	4,100.82	9.07	10.08	-106.84	-29.08	-96.07	100.38	81.23	19.15	5.241	
4,200.00	4,200.00	4,199.43	4,200.72	9.30	10.23	-106.47	-28.24	-95.50	99.59	80.06	19.53	5.100	
4,300.00	4,300.00	4,299.34	4,300.63	9.52	10.38	-106.08	-27.41	-95.05	98.92	79.02	19.90	4.971	
4,400.00	4,400.00	4,399.30	4,400.58	9.75	10.53	-105.69	-26.59	-94.64	98.31	78.04	20.27	4.849	
4,500.00	4,500.00	4,499.31	4,500.59	9.97	10.68	-105.32	-25.82	-94.24	97.72	77.07	20.65	4.732	
4,600.00	4,600.00	4,599.26	4,600.54	10.20	10.84	-104.94	-25.04	-93.84	97.13	76.10	21.03	4.618	
4,700.00	4,700.00	4,699.15	4,700.42	10.42	10.99	-104.56	-24.28	-93.53	96.63	75.22	21.41	4.514	
4,800.00	4,800.00	4,798.99	4,800.26	10.65	11.12	-104.15	-23.54	-93.35	96.27	74.51	21.76	4.424	
4,900.00	4,900.00	4,898.97	4,900.24	10.87	11.24	-103.68	-22.71	-93.29	96.01	73.91	22.11	4.343	
5,000.00	5,000.00	4,999.19	5,000.45	11.10	11.37	-103.06	-21.61	-93.19	95.66	73.21	22.46	4.260	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - Pilot - Pilot												Offset Site Error:
Survey Program: 80-NS-GYRO-MS												0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning		Offset Well Error:
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)	Warning
5,100.00	5,100.00	5,099.71	5,100.96	11.32	11.52	-102.23	-20.11	-92.75	94.91	72.08	22.83	4.157
5,200.00	5,200.00	5,199.93	5,201.15	11.55	11.69	-101.25	-18.29	-91.98	93.79	70.56	23.23	4.037
5,300.00	5,300.00	5,299.95	5,301.15	11.77	11.87	-100.14	-16.29	-91.04	92.50	68.86	23.63	3.914
5,400.00	5,400.00	5,399.65	5,400.83	12.00	12.04	-99.03	-14.35	-90.32	91.45	67.42	24.03	3.806
5,500.00	5,500.00	5,499.61	5,500.77	12.22	12.21	-97.84	-12.36	-89.74	90.59	66.16	24.42	3.709
5,600.00	5,600.00	5,599.53	5,600.67	12.45	12.39	-96.69	-10.45	-89.14	89.75	64.93	24.82	3.616
5,700.00	5,700.00	5,699.51	5,700.64	12.67	12.58	-95.88	-9.12	-88.62	89.09	63.85	25.24	3.530
5,800.00	5,800.00	5,799.55	5,800.67	12.89	12.80	-95.56	-8.55	-87.87	88.28	62.59	25.69	3.436
5,900.00	5,900.00	5,899.35	5,900.47	13.12	13.03	-95.86	-8.94	-87.18	87.63	61.49	26.14	3.352
6,000.00	6,000.00	5,998.98	6,000.10	13.34	13.22	-96.58	-10.01	-86.69	87.27	60.72	26.55	3.287
6,019.73	6,019.73	6,018.62	6,019.73	13.39	13.25	-96.75	-10.26	-86.65	87.26	60.63	26.63	3.277 CC
6,100.00	6,100.00	6,098.52	6,099.63	13.57	13.36	-97.49	-11.39	-86.69	87.43	60.51	26.92	3.248 ES
6,200.00	6,200.00	6,197.97	6,199.07	13.79	13.45	-98.34	-12.79	-87.22	88.16	60.92	27.24	3.236 SF
6,300.00	6,300.00	6,296.78	6,297.86	14.02	13.51	-98.82	-13.76	-88.71	89.80	62.28	27.52	3.263
6,323.50	6,323.50	6,319.97	6,321.04	14.07	13.52	-98.82	-13.86	-89.30	90.40	62.82	27.58	3.278
6,325.00	6,325.00	6,321.46	6,322.53	14.07	13.52	75.56	-13.86	-89.34	90.44	62.86	27.59	3.279
6,350.00	6,349.99	6,346.28	6,347.34	14.12	13.53	75.92	-14.00	-90.03	90.97	63.34	27.63	3.292
6,375.00	6,374.90	6,371.05	6,372.10	14.16	13.53	77.06	-14.21	-90.75	91.24	63.57	27.67	3.297
6,400.00	6,399.67	6,395.71	6,396.75	14.20	13.54	78.95	-14.49	-91.50	91.33	63.62	27.71	3.296
6,425.00	6,424.24	6,420.31	6,421.33	14.25	13.55	81.58	-14.84	-92.27	91.36	63.59	27.76	3.291
6,450.00	6,448.53	6,444.87	6,445.87	14.29	13.57	84.95	-15.24	-93.01	91.43	63.61	27.82	3.286
6,475.00	6,472.47	6,469.12	6,470.11	14.34	13.58	88.99	-15.66	-93.70	91.75	63.87	27.88	3.290
6,500.00	6,496.01	6,493.00	6,493.98	14.38	13.59	93.58	-16.12	-94.33	92.59	64.65	27.94	3.314
6,525.00	6,519.07	6,516.39	6,517.36	14.42	13.60	98.56	-16.60	-94.92	94.23	66.27	27.96	3.370
6,550.00	6,541.60	6,539.20	6,540.15	14.47	13.62	103.72	-17.09	-95.48	97.01	69.08	27.93	3.474
6,575.00	6,563.53	6,561.46	6,562.40	14.51	13.64	108.89	-17.60	-96.03	101.18	73.37	27.81	3.638
6,600.00	6,584.80	6,583.12	6,584.05	14.55	13.65	113.87	-18.12	-96.57	106.94	79.34	27.60	3.875
6,625.00	6,605.36	6,604.12	6,605.03	14.60	13.66	118.50	-18.64	-97.09	114.39	87.11	27.28	4.194
6,650.00	6,625.14	6,624.33	6,625.23	14.66	13.68	122.68	-19.14	-97.57	123.57	96.71	26.86	4.600
6,675.00	6,644.10	6,643.69	6,644.59	14.72	13.70	126.36	-19.59	-98.01	134.47	108.10	26.37	5.099
6,700.00	6,662.18	6,662.16	6,663.05	14.80	13.71	129.50	-20.00	-98.40	147.01	121.19	25.82	5.693
6,725.00	6,679.33	6,679.68	6,680.56	14.88	13.72	132.12	-20.37	-98.74	161.09	135.84	25.25	6.380
6,750.00	6,695.50	6,696.21	6,697.08	14.97	13.74	134.21	-20.70	-99.05	176.59	151.92	24.67	7.159
6,775.00	6,710.66	6,711.70	6,712.57	15.07	13.75	135.80	-21.00	-99.32	193.39	169.27	24.11	8.020
6,800.00	6,724.75	6,726.12	6,726.99	15.17	13.76	136.89	-21.27	-99.58	211.38	187.75	23.61	8.952
6,825.00	6,737.74	6,739.45	6,740.30	15.29	13.77	137.49	-21.51	-99.81	230.39	207.20	23.19	9.935
6,850.00	6,749.60	6,751.63	6,752.49	15.42	13.78	137.59	-21.72	-100.02	250.37	227.48	22.89	10.937
6,875.00	6,760.29	6,762.65	6,763.50	15.56	13.79	137.13	-21.91	-100.20	271.20	248.44	22.76	11.918
6,900.00	6,769.79	6,772.47	6,773.32	15.71	13.80	136.06	-22.07	-100.36	292.78	269.95	22.83	12.824
6,925.00	6,778.06	6,781.08	6,781.92	15.87	13.81	134.25	-22.21	-100.51	315.01	291.84	23.17	13.596
6,950.00	6,785.08	6,788.44	6,789.28	16.04	13.81	131.53	-22.33	-100.63	337.80	313.97	23.83	14.175
6,975.00	6,790.84	6,794.61	6,795.45	16.22	13.82	127.67	-22.43	-100.73	361.07	336.21	24.86	14.524
7,000.00	6,795.32	6,799.52	6,800.36	16.41	13.82	122.30	-22.51	-100.81	384.74	358.46	26.28	14.641
7,025.00	6,798.50	6,803.15	6,803.99	16.61	13.83	114.95	-22.57	-100.87	408.72	380.71	28.00	14.596
7,050.00	6,800.39	6,805.48	6,806.32	16.82	13.83	105.19	-22.60	-100.92	432.93	403.19	29.73	14.561
7,073.93	6,800.96	6,806.49	6,807.33	17.02	13.83	93.47	-22.62	-100.93	456.25	425.44	30.81	14.810
7,100.00	6,800.94	6,806.93	6,807.77	17.26	13.83	93.73	-22.63	-100.94	481.73	450.70	31.03	15.523
7,200.00	6,800.85	6,808.64	6,809.48	18.24	13.83	94.72	-22.66	-100.97	579.98	548.00	31.98	18.133
7,300.00	6,800.76	6,810.36	6,811.20	19.35	13.83	95.71	-22.68	-101.00	678.74	645.69	33.04	20.540
7,400.00	6,800.67	6,812.09	6,812.93	20.55	13.83	96.71	-22.71	-101.04	777.81	743.61	34.19	22.749

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 2H - Pilot - Pilot													Offset Site Error:
Survey Program: 80-NS-GYRO-MS													Offset Well Error:
Reference		Offset		Semi Major Axis		Highside Toolface deg (°)	Offset Wellbore Centre		Distance				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)	Minimum Separation (usft)	Separation Factor	
7,500.00	6,800.58	6,813.83	6,814.67	21.84	13.83	97.70	-22.74	-101.07	877.08	841.68	35.41	24.771	
7,600.00	6,800.49	6,815.58	6,816.42	23.20	13.84	98.70	-22.77	-101.10	976.50	939.83	36.68	26.623	
7,700.00	6,800.40	6,817.35	6,818.18	24.61	13.84	99.69	-22.80	-101.14	1,076.03	1,038.04	37.99	28.323	
7,800.00	6,800.31	6,819.12	6,819.95	26.08	13.84	100.69	-22.83	-101.17	1,175.53	1,136.30	39.34	29.887	
7,900.00	6,800.22	6,820.90	6,821.74	27.59	13.84	101.69	-22.86	-101.20	1,275.30	1,234.59	40.70	31.332	
8,000.00	6,800.12	6,822.70	6,823.53	29.13	13.84	102.68	-22.89	-101.24	1,375.01	1,332.92	42.08	32.673	
8,100.00	6,800.03	6,824.50	6,825.33	30.70	13.84	103.67	-22.92	-101.28	1,474.76	1,431.28	43.47	33.923	
8,200.00	6,799.94	6,826.32	6,827.15	32.29	13.84	104.66	-22.95	-101.31	1,574.53	1,529.67	44.87	35.094	
8,300.00	6,799.85	6,828.14	6,828.98	33.91	13.85	105.64	-22.98	-101.35	1,674.33	1,628.08	46.26	36.196	
8,400.00	6,799.76	6,829.98	6,830.81	35.55	13.85	106.62	-23.01	-101.39	1,774.16	1,726.51	47.64	37.238	
8,500.00	6,799.67	6,831.83	6,832.66	37.20	13.85	107.60	-23.04	-101.42	1,874.00	1,824.98	49.02	38.229	
8,600.00	6,799.58	6,833.69	6,834.52	38.86	13.85	108.57	-23.07	-101.46	1,973.85	1,923.46	50.39	39.174	
8,700.00	6,799.49	6,835.57	6,836.40	40.54	13.85	109.53	-23.10	-101.50	2,073.72	2,021.98	51.74	40.080	
8,800.00	6,799.40	6,837.45	6,838.28	42.23	13.85	110.49	-23.13	-101.54	2,173.59	2,120.52	53.08	40.952	
8,900.00	6,799.31	6,839.35	6,840.17	43.93	13.85	111.44	-23.16	-101.58	2,273.48	2,219.09	54.40	41.795	
9,000.00	6,799.22	6,841.25	6,842.08	45.64	13.86	112.38	-23.19	-101.62	2,373.38	2,317.68	55.70	42.613	
9,100.00	6,799.13	6,843.17	6,844.00	47.35	13.86	113.32	-23.23	-101.67	2,473.28	2,416.30	56.98	43.410	
9,200.00	6,799.04	6,845.11	6,845.93	49.08	13.86	114.25	-23.26	-101.71	2,573.19	2,514.95	58.23	44.187	
9,300.00	6,798.95	6,847.05	6,847.88	50.80	13.86	115.17	-23.29	-101.75	2,673.10	2,613.63	59.47	44.948	
9,400.00	6,798.86	6,849.01	6,849.83	52.54	13.86	116.08	-23.33	-101.79	2,773.02	2,712.33	60.68	45.696	
9,500.00	6,798.76	6,850.98	6,851.80	54.28	13.86	116.98	-23.36	-101.84	2,872.94	2,811.07	61.87	46.432	
9,600.00	6,798.67	6,852.96	6,853.78	56.02	13.86	117.87	-23.39	-101.88	2,972.87	2,909.83	63.04	47.159	
9,700.00	6,798.58	6,854.95	6,855.77	57.77	13.87	118.76	-23.43	-101.93	3,072.80	3,008.62	64.18	47.877	
9,800.00	6,798.49	6,856.96	6,857.78	59.52	13.87	119.63	-23.46	-101.98	3,172.73	3,107.43	65.30	48.588	
9,900.00	6,798.40	6,858.98	6,859.80	61.27	13.87	120.49	-23.50	-102.02	3,272.67	3,206.28	66.39	49.293	
10,000.00	6,798.31	6,861.01	6,861.83	63.03	13.87	121.34	-23.53	-102.07	3,372.61	3,305.15	67.46	49.994	
10,100.00	6,798.22	6,863.06	6,863.88	64.79	13.87	122.18	-23.57	-102.12	3,472.55	3,404.05	68.50	50.691	
10,200.00	6,798.13	6,865.12	6,865.94	66.55	13.87	123.02	-23.60	-102.17	3,572.49	3,502.97	69.52	51.385	
10,300.00	6,798.04	6,867.19	6,868.01	68.32	13.88	123.83	-23.64	-102.22	3,672.44	3,601.92	70.52	52.077	
10,400.00	6,797.95	6,869.28	6,870.09	70.09	13.88	124.64	-23.67	-102.27	3,772.39	3,700.90	71.49	52.767	
10,500.00	6,797.86	6,871.38	6,872.19	71.86	13.88	125.44	-23.71	-102.32	3,872.34	3,799.90	72.44	53.456	
10,600.00	6,797.77	6,873.49	6,874.31	73.63	13.88	126.23	-23.75	-102.38	3,972.29	3,898.92	73.37	54.144	
10,700.00	6,797.68	6,875.62	6,876.43	75.40	13.88	127.00	-23.79	-102.43	4,072.24	3,997.97	74.27	54.831	
10,800.00	6,797.59	6,877.76	6,878.57	77.18	13.88	127.77	-23.82	-102.49	4,172.19	4,097.05	75.15	55.519	
10,900.00	6,797.49	6,879.92	6,880.73	78.96	13.89	128.52	-23.86	-102.54	4,272.15	4,196.14	76.01	56.206	
11,000.00	6,797.40	6,882.09	6,882.90	80.74	13.89	129.26	-23.90	-102.60	4,372.11	4,295.26	76.85	56.894	
11,100.00	6,797.31	6,883.92	6,884.73	82.52	13.89	129.87	-23.93	-102.64	4,472.06	4,394.30	77.77	57.506	
11,200.00	6,797.22	6,883.92	6,884.73	84.30	13.89	129.87	-23.93	-102.64	4,572.02	4,492.81	79.21	57.720	
11,300.00	6,797.13	6,883.92	6,884.73	86.08	13.89	129.87	-23.93	-102.64	4,671.98	4,591.33	80.66	57.925	
11,400.00	6,797.04	6,889.32	6,890.13	87.86	13.89	131.61	-24.03	-102.79	4,771.94	4,691.47	80.47	59.299	
11,445.37	6,797.00	6,890.09	6,890.90	88.67	13.89	131.85	-24.04	-102.81	4,817.30	4,736.41	80.89	59.556	

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000:1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 4H - OH - OH														Offset Site Error:
Survey Program: 18-NS-GYRO-MS/4369-LEAM MWD, 9572-Project														Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	15.00	0.00	0.00	89.65		12.53	2,078.21	2,078.30				
100.00	100.00	71.82	86.82	0.08	0.06	89.64		12.89	2,078.55	2,078.63	2,078.48	0.15	N/A	
200.00	200.00	168.17	183.16	0.31	0.26	89.64		13.15	2,079.27	2,079.37	2,078.81	0.57	3,678.209	
300.00	300.00	267.80	282.79	0.53	0.52	89.64		13.06	2,080.09	2,080.21	2,079.16	1.05	1,983.342	
400.00	400.00	368.25	383.24	0.76	0.78	89.64		13.05	2,080.91	2,081.02	2,079.48	1.54	1,352.584	
500.00	500.00	468.13	483.12	0.98	1.05	89.64		13.06	2,081.72	2,081.83	2,079.80	2.03	1,026.852	
600.00	600.00	568.51	583.49	1.21	1.31	89.65		12.90	2,082.53	2,082.63	2,080.12	2.51	828.406	
700.00	700.00	678.08	693.05	1.43	1.55	89.64		13.14	2,083.18	2,083.24	2,080.26	2.98	699.071	
800.00	800.00	800.07	815.05	1.66	1.66	89.62		13.78	2,082.78	2,082.88	2,079.57	3.32	628.285	
900.00	900.00	891.28	906.26	1.88	1.72	89.63		13.35	2,082.17	2,082.22	2,078.62	3.60	577.845	
926.27	926.27	911.30	926.27	1.94	1.75	89.64		13.17	2,082.14	2,082.18	2,078.49	3.69	564.645	
1,000.00	1,000.00	972.59	987.56	2.11	1.84	89.65		12.56	2,082.39	2,082.47	2,078.52	3.95	527.673	
1,100.00	1,100.00	1,076.70	1,091.66	2.33	2.06	89.68		11.77	2,082.92	2,082.97	2,078.58	4.39	473.979	
1,200.00	1,200.00	1,179.33	1,194.29	2.56	2.30	89.69		11.38	2,083.24	2,083.28	2,078.42	4.86	428.876	
1,300.00	1,300.00	1,278.50	1,293.56	2.78	2.55	89.69		11.14	2,083.53	2,083.57	2,078.25	5.33	391.122	
1,400.00	1,400.00	1,377.31	1,392.27	3.01	2.80	89.70		10.96	2,083.86	2,083.90	2,078.10	5.80	359.112	
1,500.00	1,500.00	1,475.95	1,490.91	3.23	3.05	89.71		10.64	2,084.27	2,084.31	2,078.04	6.28	332.058	
1,600.00	1,600.00	1,579.15	1,594.11	3.45	3.30	89.72		10.12	2,084.68	2,084.71	2,077.96	6.75	308.794	
1,700.00	1,700.00	1,684.47	1,699.43	3.68	3.53	89.74		9.52	2,084.84	2,084.86	2,077.66	7.21	289.344	
1,800.00	1,800.00	1,792.55	1,807.50	3.90	3.70	89.75		9.04	2,084.67	2,084.71	2,077.10	7.61	274.077	
1,900.00	1,900.00	1,894.52	1,909.47	4.13	3.79	89.76		8.91	2,084.26	2,084.30	2,076.38	7.92	263.309	
2,000.00	2,000.00	1,996.05	2,011.00	4.35	3.85	89.75		8.98	2,083.76	2,083.81	2,075.60	8.20	254.009	
2,100.00	2,100.00	2,098.17	2,113.12	4.58	3.93	89.75		9.08	2,083.17	2,083.23	2,074.72	8.51	244.849	
2,200.00	2,200.00	2,200.68	2,215.63	4.80	4.03	89.75		9.22	2,082.46	2,082.54	2,073.71	8.83	235.889	
2,300.00	2,300.00	2,301.11	2,316.06	5.03	4.13	89.74		9.46	2,081.67	2,081.75	2,072.59	9.16	227.310	
2,400.00	2,400.00	2,398.39	2,413.33	5.25	4.24	89.73		9.74	2,080.97	2,081.04	2,071.54	9.49	219.194	
2,500.00	2,500.00	2,496.64	2,511.58	5.48	4.37	89.72		10.06	2,080.41	2,080.46	2,070.62	9.84	211.374	
2,600.00	2,600.00	2,595.84	2,610.78	5.70	4.51	89.72		10.19	2,079.86	2,079.91	2,069.70	10.21	203.677	
2,700.00	2,700.00	2,697.54	2,712.47	5.93	4.67	89.72		10.18	2,079.33	2,079.39	2,068.79	10.60	196.149	
2,800.00	2,800.00	2,799.62	2,814.55	6.15	4.84	89.71		10.40	2,078.65	2,078.72	2,067.73	10.99	189.120	
2,900.00	2,900.00	2,906.86	2,921.79	6.38	5.02	89.70		10.80	2,077.74	2,077.88	2,066.49	11.40	182.338	
3,000.00	3,000.00	3,011.40	3,026.32	6.60	5.21	89.70		10.82	2,076.47	2,076.66	2,064.85	11.81	175.766	
3,100.00	3,100.00	3,104.95	3,119.86	6.83	5.40	89.71		10.50	2,075.36	2,075.49	2,063.26	12.23	169.729	
3,200.00	3,200.00	3,198.50	3,213.41	7.05	5.60	89.72		10.07	2,074.62	2,074.68	2,062.03	12.65	164.011	
3,300.00	3,300.00	3,292.05	3,306.96	7.28	5.78	89.72		10.16	2,074.00	2,074.04	2,060.98	13.06	158.859	
3,352.30	3,352.30	3,338.44	3,353.35	7.39	5.85	89.71		10.49	2,073.82	2,073.85	2,060.60	13.24	156.587 CC	
3,400.00	3,400.00	3,385.60	3,400.50	7.50	5.92	89.70		10.92	2,073.95	2,073.98	2,060.56	13.42	154.507	
3,400.50	3,400.50	3,385.60	3,400.50	7.50	5.92	89.70		10.92	2,073.95	2,073.98	2,060.56	13.42	154.494	
3,500.00	3,500.00	3,475.23	3,490.13	7.73	6.04	89.68		11.63	2,074.44	2,074.49	2,060.73	13.77	150.670	
3,600.00	3,600.00	3,579.69	3,594.59	7.95	6.19	89.67		12.09	2,074.81	2,074.86	2,060.72	14.14	146.726	
3,700.00	3,700.00	3,680.01	3,694.90	8.17	6.34	89.66		12.34	2,075.07	2,075.11	2,060.59	14.52	142.962	
3,800.00	3,800.00	3,780.85	3,795.74	8.40	6.50	89.65		12.54	2,075.31	2,075.35	2,060.45	14.90	139.309	
3,900.00	3,900.00	3,884.34	3,899.24	8.62	6.67	89.65		12.80	2,075.43	2,075.47	2,060.18	15.29	135.698	
4,000.00	4,000.00	3,987.35	4,002.24	8.85	6.85	89.64		13.10	2,075.38	2,075.42	2,059.72	15.70	132.164	
4,100.00	4,100.00	4,089.28	4,104.17	9.07	7.05	89.63		13.46	2,075.22	2,075.27	2,059.15	16.12	128.748	
4,200.00	4,200.00	4,191.15	4,206.04	9.30	7.24	89.62		13.83	2,074.97	2,075.02	2,058.48	16.54	125.452	
4,300.00	4,300.00	4,292.98	4,307.87	9.52	7.44	89.61		14.17	2,074.63	2,074.69	2,057.72	16.97	122.278	
4,380.01	4,380.01	4,369.00	4,383.89	9.70	7.55	89.61		14.30	2,074.34	2,074.40	2,057.14	17.25	120.244 ES	
4,400.00	4,400.00	4,369.00	4,383.89	9.75	7.55	89.61		14.30	2,074.34	2,074.45	2,057.16	17.30	119.935	
4,500.00	4,500.00	4,405.40	4,420.28	9.97	7.55	89.62		13.83	2,074.99	2,076.56	2,059.04	17.52	118.505	
4,600.00	4,600.00	4,553.26	4,568.82	10.20	7.58	90.09		-3.42	2,079.10	2,079.37	2,061.60	17.77	117.028	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw, "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 4H - OH - OH										Offset Site Error: 0.00 usft		
Survey Program: 18-NS-GYRO-MS-4369-LEAM MWD-9572-Project										Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N-S (usft)	Offset Wellbore Centre +E-W (usft)				Between Centres (usft)
4,700.00	4,700.00	4,605.02	4,616.95	10.42	7.60	90.44	-16.14	2,080.37	2,082.09	2,064.07	18.02	115.575
4,800.00	4,800.00	4,655.00	4,663.79	10.65	7.64	90.92	-33.37	2,082.55	2,087.27	2,068.99	18.28	114.197
4,900.00	4,900.00	4,698.66	4,703.13	10.87	7.69	91.43	-52.10	2,085.14	2,095.06	2,076.50	18.56	112.877
5,000.00	5,000.00	4,733.10	4,732.97	11.10	7.75	91.89	-69.05	2,087.93	2,106.07	2,087.22	18.85	111.728
5,100.00	5,100.00	4,751.00	4,748.10	11.32	7.79	92.15	-78.45	2,089.69	2,120.56	2,101.45	19.11	110.945
5,200.00	5,200.00	4,782.00	4,773.61	11.55	7.88	92.62	-95.67	2,093.43	2,138.55	2,119.13	19.42	110.096
5,300.00	5,300.00	4,814.00	4,798.75	11.77	7.99	93.13	-114.89	2,098.11	2,160.22	2,140.46	19.76	109.322
5,400.00	5,400.00	4,832.30	4,812.49	12.00	8.07	93.45	-126.60	2,101.08	2,185.34	2,165.28	20.06	108.926
5,500.00	5,500.00	4,846.00	4,822.48	12.22	8.13	93.69	-135.68	2,103.42	2,214.01	2,193.66	20.35	108.819
5,600.00	5,600.00	4,878.00	4,844.76	12.45	8.29	94.28	-157.90	2,109.23	2,245.92	2,225.19	20.73	108.324
5,700.00	5,700.00	4,895.93	4,856.60	12.67	8.40	94.62	-170.90	2,112.70	2,281.23	2,260.17	21.07	108.293
5,800.00	5,800.00	4,910.00	4,865.57	12.89	8.49	94.90	-181.36	2,115.56	2,319.84	2,298.46	21.37	108.534
5,900.00	5,900.00	4,942.00	4,884.92	13.12	8.72	95.54	-205.93	2,122.31	2,361.57	2,339.75	21.82	108.241
6,000.00	6,000.00	4,942.00	4,884.92	13.34	8.72	95.54	-205.93	2,122.31	2,406.25	2,384.21	22.04	109.164
6,100.00	6,100.00	4,973.00	4,902.22	13.57	8.97	96.18	-230.69	2,129.28	2,453.92	2,431.41	22.51	109.032
6,200.00	6,200.00	4,973.00	4,902.22	13.79	8.97	96.18	-230.69	2,129.28	2,504.25	2,481.52	22.73	110.168
6,300.00	6,300.00	4,991.54	4,911.88	14.02	9.13	96.57	-245.91	2,133.63	2,557.29	2,534.17	23.11	110.640
6,323.50	6,323.50	5,005.00	4,918.55	14.07	9.25	96.86	-257.16	2,136.77	2,570.17	2,546.89	23.28	110.402
6,325.00	6,325.00	5,005.00	4,918.55	14.07	9.25	-88.64	-257.16	2,136.77	2,570.99	2,547.51	23.48	109.482
6,350.00	6,349.99	5,005.00	4,918.55	14.12	9.25	-86.67	-257.16	2,136.77	2,584.73	2,561.23	23.50	110.007
6,375.00	6,374.90	5,005.00	4,918.55	14.16	9.25	-84.68	-257.16	2,136.77	2,598.58	2,575.06	23.52	110.506
6,400.00	6,399.67	5,005.00	4,918.55	14.20	9.25	-82.68	-257.16	2,136.77	2,612.49	2,588.95	23.54	110.982
6,425.00	6,424.24	5,005.00	4,918.55	14.25	9.25	-80.69	-257.16	2,136.77	2,626.42	2,602.85	23.57	111.439
6,450.00	6,448.53	5,005.00	4,918.55	14.29	9.25	-78.71	-257.16	2,136.77	2,640.35	2,616.75	23.60	111.885
6,475.00	6,472.47	5,020.60	4,925.96	14.34	9.41	-76.53	-270.39	2,140.42	2,654.05	2,630.28	23.76	111.682
6,500.00	6,496.01	5,037.00	4,933.36	14.38	9.57	-74.42	-284.50	2,144.32	2,667.82	2,643.89	23.93	111.507
6,525.00	6,519.07	5,037.00	4,933.36	14.42	9.57	-72.59	-284.50	2,144.32	2,681.26	2,657.32	23.94	112.007
6,550.00	6,541.60	5,037.00	4,933.36	14.47	9.57	-70.80	-284.50	2,144.32	2,694.54	2,670.60	23.94	112.542
6,575.00	6,563.53	5,037.00	4,933.36	14.51	9.57	-69.07	-284.50	2,144.32	2,707.63	2,683.69	23.94	113.120
6,600.00	6,584.80	5,037.00	4,933.36	14.55	9.57	-67.40	-284.50	2,144.32	2,720.48	2,696.56	23.92	113.749
6,625.00	6,605.36	5,051.50	4,939.59	14.60	9.72	-65.71	-297.12	2,147.80	2,732.93	2,708.92	24.00	113.863
6,650.00	6,625.14	5,068.00	4,946.32	14.66	9.90	-64.10	-311.65	2,151.78	2,745.16	2,721.07	24.09	113.967
6,675.00	6,644.10	5,068.00	4,946.32	14.72	9.90	-62.68	-311.65	2,151.78	2,756.89	2,732.87	24.02	114.760
6,700.00	6,662.18	5,068.00	4,946.32	14.80	9.90	-61.33	-311.65	2,151.78	2,768.27	2,744.32	23.95	115.603
6,725.00	6,679.33	5,068.00	4,946.32	14.88	9.90	-60.04	-311.65	2,151.78	2,779.26	2,755.40	23.86	116.491
6,750.00	6,695.50	5,083.91	4,952.43	14.97	10.08	-58.82	-325.83	2,155.59	2,789.70	2,765.81	23.90	116.728
6,775.00	6,710.66	5,099.00	4,957.88	15.07	10.26	-57.70	-339.46	2,159.14	2,799.73	2,775.80	23.93	116.993
6,800.00	6,724.75	5,099.00	4,957.88	15.17	10.26	-56.67	-339.46	2,159.14	2,809.18	2,785.35	23.83	117.883
6,825.00	6,737.74	5,108.60	4,961.17	15.29	10.37	-55.73	-348.20	2,161.35	2,818.12	2,794.29	23.82	118.295
6,850.00	6,749.60	5,118.85	4,964.55	15.42	10.49	-54.87	-357.60	2,163.66	2,826.47	2,802.64	23.83	118.599
6,875.00	6,760.29	5,131.00	4,968.38	15.56	10.64	-54.10	-368.81	2,166.33	2,834.22	2,810.35	23.88	118.704
6,900.00	6,769.79	5,146.24	4,972.93	15.71	10.83	-53.42	-383.00	2,169.54	2,841.33	2,817.35	23.98	118.495
6,925.00	6,778.06	5,163.00	4,977.63	15.87	11.04	-52.83	-398.74	2,172.85	2,847.74	2,823.62	24.13	118.039
6,950.00	6,785.08	5,177.92	4,981.51	16.04	11.23	-52.32	-412.88	2,175.59	2,853.46	2,829.17	24.29	117.468
6,975.00	6,790.84	5,195.00	4,985.55	16.22	11.45	-51.90	-429.22	2,178.51	2,858.49	2,833.97	24.52	116.585
7,000.00	6,795.32	5,195.00	4,985.55	16.41	11.45	-51.48	-429.22	2,178.51	2,862.85	2,838.27	24.58	116.461
7,025.00	6,798.50	5,195.00	4,985.55	16.61	11.45	-51.12	-429.22	2,178.51	2,866.62	2,841.94	24.68	116.160
7,050.00	6,800.39	5,212.92	4,989.26	16.82	11.70	-50.93	-446.51	2,181.37	2,869.59	2,844.54	25.04	114.581
7,073.93	6,800.96	5,227.00	4,991.72	17.02	11.89	-50.79	-460.21	2,183.53	2,871.93	2,846.53	25.40	113.089
7,100.00	6,800.94	5,227.00	4,991.72	17.26	11.89	-50.79	-460.21	2,183.53	2,874.15	2,848.56	25.59	112.336

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 4H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 18-NS-GYRO-MS, 4369-LEAM MWD, 9572-Project													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,200.00	6,800.85	5,259.00	4,995.89	18.24	12.34	-50.95	-491.60	2,188.07	2,884.42	2,857.60	26.82	107.532	
7,300.00	6,800.76	5,278.36	4,997.41	19.35	12.63	-51.03	-510.73	2,190.63	2,897.20	2,869.20	27.99	103.498	
7,400.00	6,800.67	5,301.56	4,998.27	20.55	12.97	-51.11	-533.72	2,193.63	2,912.60	2,883.30	29.30	99.408	
7,500.00	6,800.58	5,336.06	4,998.56	21.84	13.49	-51.22	-567.89	2,198.41	2,930.43	2,899.58	30.84	95.016	
7,600.00	6,800.49	5,379.47	4,998.44	23.20	14.14	-51.35	-610.77	2,205.13	2,950.27	2,917.70	32.57	90.581	
7,700.00	6,800.40	5,485.45	4,999.57	24.61	15.71	-51.72	-715.18	2,223.22	2,970.71	2,935.47	35.24	84.306	
7,800.00	6,800.31	5,562.00	5,000.65	26.08	16.89	-51.99	-790.50	2,236.87	2,991.65	2,954.06	37.59	79.595	
7,900.00	6,800.22	5,655.00	5,001.43	27.59	18.40	-52.31	-882.01	2,253.44	3,013.01	2,972.73	40.28	74.807	
8,000.00	6,800.12	5,721.41	5,002.52	29.13	19.45	-52.55	-947.21	2,265.99	3,034.91	2,992.32	42.59	71.266	
8,100.00	6,800.03	5,842.76	5,006.90	30.70	21.38	-53.05	-1,065.80	2,291.36	3,057.45	3,011.62	45.83	66.717	
8,200.00	6,799.94	5,926.48	5,009.48	32.29	22.78	-53.37	-1,147.81	2,307.92	3,079.46	3,030.92	48.54	63.437	
8,300.00	6,799.85	6,176.22	5,004.79	33.91	27.01	-53.94	-1,395.18	2,340.60	3,098.39	3,044.46	53.93	57.449	
8,400.00	6,799.76	6,232.67	5,003.26	35.55	27.94	-54.05	-1,451.26	2,346.81	3,116.68	3,060.47	56.21	55.450	
8,500.00	6,799.67	6,330.64	5,000.78	37.20	29.58	-54.24	-1,548.51	2,358.38	3,135.62	3,076.45	59.17	52.991	
8,600.00	6,799.58	6,431.39	5,000.07	38.86	31.26	-54.47	-1,648.45	2,371.14	3,154.26	3,092.03	62.23	50.687	
8,700.00	6,799.49	6,497.48	5,000.88	40.54	32.38	-54.66	-1,713.81	2,380.91	3,173.60	3,108.83	64.77	48.998	
8,800.00	6,799.40	6,836.83	5,006.07	42.23	38.16	-55.46	-2,050.86	2,417.10	3,188.84	3,116.92	71.92	44.338	
8,900.00	6,799.31	6,953.76	5,000.23	43.93	40.16	-55.51	-2,167.62	2,418.88	3,200.91	3,125.70	75.21	42.561	
9,000.00	6,799.22	7,115.87	4,993.07	45.64	42.84	-55.58	-2,329.56	2,419.83	3,211.92	3,132.79	79.14	40.587	
9,100.00	6,799.13	7,200.60	4,991.61	47.35	44.23	-55.65	-2,414.26	2,420.69	3,221.84	3,139.92	81.92	39.331	
9,200.00	6,799.04	7,256.00	4,991.72	49.08	45.15	-55.73	-2,469.62	2,422.82	3,232.96	3,148.67	84.28	38.358	
9,300.00	6,798.95	7,340.90	4,992.56	50.80	46.59	-55.87	-2,554.39	2,427.45	3,244.98	3,157.80	87.19	37.219	
9,400.00	6,798.86	7,478.93	4,993.87	52.54	48.95	-56.10	-2,692.23	2,434.62	3,256.91	3,165.92	90.99	35.795	
9,500.00	6,798.76	7,633.88	4,996.14	54.28	51.58	-56.33	-2,847.07	2,439.82	3,266.90	3,171.83	95.07	34.365	
9,600.00	6,798.67	7,730.00	4,997.66	56.02	53.22	-56.47	-2,943.15	2,442.13	3,276.16	3,177.98	98.18	33.370	
9,700.00	6,798.58	7,786.91	4,998.83	57.77	54.19	-56.56	-3,000.02	2,444.15	3,286.22	3,185.58	100.64	32.653	
9,800.00	6,798.49	7,843.77	4,999.66	59.52	55.15	-56.66	-3,056.79	2,447.07	3,297.79	3,194.67	103.12	31.981	
9,900.00	6,798.40	7,943.27	5,000.89	61.27	56.85	-56.83	-3,156.11	2,452.89	3,310.16	3,203.82	106.34	31.129	
10,000.00	6,798.31	8,321.43	5,003.70	63.03	63.25	-57.21	-3,533.92	2,451.30	3,316.07	3,202.03	114.04	29.077	
10,100.00	6,798.22	8,412.88	5,002.95	64.79	64.77	-57.23	-3,625.22	2,446.02	3,319.86	3,202.89	116.97	28.382	
10,200.00	6,798.13	8,488.00	5,003.65	66.55	66.01	-57.29	-3,700.28	2,443.28	3,324.45	3,204.76	119.69	27.775	
10,300.00	6,798.04	8,534.72	5,004.90	68.32	66.80	-57.34	-3,746.98	2,442.76	3,330.14	3,206.13	122.01	27.295	
10,400.00	6,797.95	8,583.00	5,006.78	70.09	67.62	-57.42	-3,795.22	2,443.25	3,337.21	3,212.84	124.37	26.833	
10,500.00	6,797.86	8,650.10	5,009.56	71.86	68.76	-57.54	-3,862.24	2,445.03	3,345.51	3,218.43	127.08	26.325	
10,600.00	6,797.77	8,716.67	5,011.68	73.63	69.90	-57.65	-3,928.73	2,447.35	3,354.96	3,225.17	129.79	25.849	
10,700.00	6,797.68	8,791.18	5,012.54	75.40	71.18	-57.75	-4,003.20	2,449.70	3,365.26	3,232.63	132.63	25.374	
10,800.00	6,797.59	8,868.00	5,012.18	77.18	72.52	-57.84	-4,079.99	2,451.89	3,376.18	3,240.69	135.49	24.918	
10,900.00	6,797.49	8,951.56	5,010.54	78.96	73.97	-57.91	-4,163.50	2,454.05	3,387.67	3,249.22	138.45	24.468	
11,000.00	6,797.40	9,017.64	5,008.75	80.74	75.11	-57.96	-4,229.53	2,456.04	3,399.91	3,258.79	141.12	24.093	
11,100.00	6,797.31	9,107.91	5,006.85	82.52	76.68	-58.05	-4,319.68	2,460.06	3,413.04	3,268.82	144.22	23.666	
11,200.00	6,797.22	9,214.61	5,004.15	84.30	78.54	-58.14	-4,426.28	2,464.07	3,425.82	3,278.23	147.59	23.211	
11,300.00	6,797.13	9,311.79	5,001.40	86.08	80.23	-58.22	-4,523.35	2,467.62	3,438.67	3,287.87	150.81	22.802	
11,400.00	6,797.04	9,409.03	4,998.60	87.86	81.93	-58.29	-4,620.49	2,471.16	3,451.56	3,297.53	154.02	22.409	
11,445.37	6,797.00	9,454.54	4,997.25	88.67	82.71	-58.33	-4,665.95	2,472.82	3,457.42	3,301.92	155.50	22.234 SF	

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 4H - Pilot - Pilot														Offset Site Error:	0.00 usft
Survey Program: 18-NS-GYRO-MS														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset (usft)	Semi Major Axis	Highside Tooface (")	Offset Wellbore Centre	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	15.00	0.00	0.00	89.65		12.53	2,078.21	2,078.30					
100.00	100.00	71.82	86.82	0.08	0.06	89.64		12.89	2,078.55	2,078.63	2,078.48	0.15	N/A		
200.00	200.00	168.17	183.16	0.31	0.26	89.64		13.15	2,079.27	2,079.37	2,078.81	0.57	3,678.236		
300.00	300.00	267.80	282.79	0.53	0.52	89.64		13.06	2,080.09	2,080.21	2,079.16	1.05	1,983.340		
400.00	400.00	368.25	383.24	0.76	0.78	89.64		13.05	2,080.91	2,081.02	2,079.48	1.54	1,352.594		
500.00	500.00	468.13	483.12	0.98	1.05	89.64		13.06	2,081.72	2,081.83	2,079.80	2.03	1,026.852		
600.00	600.00	568.51	583.49	1.21	1.31	89.65		12.90	2,082.53	2,082.63	2,080.12	2.51	828.407		
700.00	700.00	678.08	693.05	1.43	1.55	89.64		13.14	2,083.18	2,083.24	2,080.26	2.98	699.071		
800.00	800.00	800.07	815.05	1.66	1.66	89.62		13.78	2,082.78	2,082.88	2,079.57	3.32	628.285		
900.00	900.00	891.28	906.26	1.88	1.72	89.63		13.35	2,082.17	2,082.22	2,078.62	3.60	577.845		
926.27	926.27	911.30	926.27	1.94	1.75	89.64		13.17	2,082.14	2,082.18	2,078.49	3.69	564.645		
1,000.00	1,000.00	972.59	987.56	2.11	1.84	89.65		12.56	2,082.39	2,082.47	2,078.52	3.95	527.673		
1,100.00	1,100.00	1,076.70	1,091.66	2.33	2.06	89.68		11.77	2,082.92	2,082.97	2,078.58	4.39	473.979		
1,200.00	1,200.00	1,179.33	1,194.29	2.56	2.30	89.69		11.38	2,083.24	2,083.28	2,078.42	4.86	428.876		
1,300.00	1,300.00	1,278.60	1,293.56	2.78	2.55	89.69		11.14	2,083.53	2,083.57	2,078.25	5.33	391.123		
1,400.00	1,400.00	1,377.31	1,392.27	3.01	2.80	89.70		10.96	2,083.85	2,083.90	2,078.10	5.80	359.112		
1,500.00	1,500.00	1,475.95	1,490.91	3.23	3.05	89.71		10.64	2,084.27	2,084.31	2,078.04	6.28	332.059		
1,600.00	1,600.00	1,579.15	1,594.11	3.45	3.30	89.72		10.12	2,084.68	2,084.71	2,077.96	6.75	308.795		
1,700.00	1,700.00	1,684.47	1,699.43	3.68	3.53	89.74		9.52	2,084.84	2,084.86	2,077.66	7.21	289.345		
1,800.00	1,800.00	1,792.55	1,807.50	3.90	3.70	89.75		9.04	2,084.67	2,084.71	2,077.10	7.61	274.077		
1,900.00	1,900.00	1,894.52	1,909.47	4.13	3.79	89.76		8.91	2,084.26	2,084.30	2,076.38	7.92	263.309		
2,000.00	2,000.00	1,996.05	2,011.00	4.35	3.85	89.75		8.98	2,083.76	2,083.81	2,075.60	8.20	254.010		
2,100.00	2,100.00	2,098.17	2,113.12	4.58	3.93	89.75		9.08	2,083.17	2,083.23	2,074.72	8.51	244.849		
2,200.00	2,200.00	2,200.68	2,215.63	4.80	4.03	89.75		9.22	2,082.46	2,082.54	2,073.71	8.83	235.889		
2,300.00	2,300.00	2,301.11	2,316.06	5.03	4.13	89.74		9.46	2,081.67	2,081.75	2,072.59	9.16	227.310		
2,400.00	2,400.00	2,398.39	2,413.33	5.25	4.24	89.73		9.74	2,080.97	2,081.04	2,071.54	9.49	219.194		
2,500.00	2,500.00	2,496.64	2,511.58	5.48	4.37	89.72		10.06	2,080.41	2,080.46	2,070.62	9.84	211.374		
2,600.00	2,600.00	2,595.84	2,610.78	5.70	4.51	89.72		10.19	2,079.86	2,079.91	2,069.70	10.21	203.677		
2,700.00	2,700.00	2,697.54	2,712.47	5.93	4.67	89.72		10.18	2,079.33	2,079.39	2,068.79	10.60	196.149		
2,800.00	2,800.00	2,799.62	2,814.55	6.15	4.84	89.71		10.40	2,078.65	2,078.72	2,067.73	10.99	189.120		
2,900.00	2,900.00	2,906.86	2,921.79	6.38	5.02	89.70		10.80	2,077.74	2,077.88	2,066.49	11.40	182.338		
3,000.00	3,000.00	3,011.40	3,026.32	6.60	5.21	89.70		10.82	2,076.47	2,076.66	2,064.85	11.81	175.766		
3,100.00	3,100.00	3,104.95	3,119.86	6.83	5.40	89.71		10.50	2,075.36	2,075.49	2,063.26	12.23	169.729		
3,200.00	3,200.00	3,198.50	3,213.41	7.05	5.60	89.72		10.07	2,074.62	2,074.68	2,062.03	12.65	164.011		
3,300.00	3,300.00	3,292.05	3,306.96	7.28	5.78	89.72		10.16	2,074.00	2,074.04	2,060.98	13.06	158.859		
3,352.30	3,352.30	3,338.44	3,353.35	7.39	5.85	89.71		10.49	2,073.82	2,073.85	2,060.60	13.24	156.587		
3,400.00	3,400.00	3,385.60	3,400.50	7.50	5.92	89.70		10.92	2,073.95	2,073.98	2,060.56	13.42	154.507		
3,400.50	3,400.50	3,385.60	3,400.50	7.50	5.92	89.70		10.92	2,073.95	2,073.98	2,060.56	13.42	154.494		
3,500.00	3,500.00	3,475.23	3,490.13	7.73	6.04	89.68		11.63	2,074.44	2,074.49	2,060.73	13.77	150.670		
3,600.00	3,600.00	3,579.69	3,594.59	7.95	6.19	89.67		12.09	2,074.81	2,074.86	2,060.72	14.14	146.726		
3,700.00	3,700.00	3,680.01	3,694.90	8.17	6.34	89.66		12.34	2,075.07	2,075.11	2,060.59	14.52	142.962		
3,800.00	3,800.00	3,780.85	3,795.74	8.40	6.50	89.65		12.54	2,075.31	2,075.35	2,060.45	14.90	139.309		
3,900.00	3,900.00	3,884.34	3,899.24	8.62	6.67	89.65		12.80	2,075.43	2,075.47	2,060.18	15.29	135.698		
4,000.00	4,000.00	3,987.35	4,002.24	8.85	6.85	89.64		13.10	2,075.38	2,075.42	2,059.72	15.70	132.164		
4,100.00	4,100.00	4,089.28	4,104.17	9.07	7.05	89.63		13.46	2,075.22	2,075.27	2,059.15	16.12	128.748		
4,200.00	4,200.00	4,191.15	4,206.04	9.30	7.24	89.62		13.83	2,074.97	2,075.02	2,058.48	16.54	125.452		
4,300.00	4,300.00	4,292.98	4,307.87	9.52	7.44	89.61		14.17	2,074.63	2,074.69	2,057.72	16.97	122.278		
4,400.00	4,400.00	4,398.48	4,413.37	9.75	7.66	89.60		14.39	2,074.11	2,074.20	2,056.80	17.40	119.186		
4,500.00	4,500.00	4,502.03	4,516.92	9.97	7.86	89.60		14.30	2,073.34	2,073.46	2,055.63	17.83	116.283		
4,600.00	4,600.00	4,606.14	4,621.03	10.20	8.06	89.61		14.09	2,072.39	2,072.54	2,054.28	18.26	113.490		
4,700.00	4,700.00	4,707.38	4,722.25	10.42	8.28	89.61		14.24	2,071.32	2,071.49	2,052.79	18.70	110.790		

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well: 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 4H - Pilot - Pilot														Offset Site Error:	0.00 usft
Survey Program: 18-NS-GYRO-MS														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
4,800.00	4,800.00	4,804.42	4,819.29	10.65	8.48	89.60	14.60	2,070.34	2,070.48	2,051.35	19.13	108.236			
4,900.00	4,900.00	4,898.37	4,913.24	10.87	8.68	89.58	15.04	2,069.55	2,069.64	2,050.09	19.55	105.841			
4,976.75	4,976.75	4,961.88	4,978.75	11.04	8.81	89.57	15.41	2,069.34	2,069.40	2,049.54	19.85	104.232 CC			
5,000.00	5,000.00	4,981.87	4,996.73	11.10	8.85	89.57	15.54	2,069.36	2,069.42	2,049.47	19.94	103.764			
5,100.00	5,100.00	5,076.38	5,091.24	11.32	8.99	89.56	15.84	2,069.63	2,069.71	2,049.39	20.32	101.877			
5,200.00	5,200.00	5,169.32	5,184.18	11.55	9.12	89.56	15.82	2,070.18	2,070.30	2,049.64	20.66	100.190			
5,300.00	5,300.00	5,264.30	5,279.16	11.77	9.24	89.57	15.58	2,071.04	2,071.21	2,050.19	21.02	98.556			
5,400.00	5,400.00	5,371.21	5,386.06	12.00	9.40	89.57	15.65	2,071.97	2,072.07	2,050.87	21.40	96.826			
5,500.00	5,500.00	5,482.90	5,497.75	12.22	9.60	89.55	16.19	2,072.37	2,072.44	2,050.61	21.82	94.960			
5,600.00	5,600.00	5,590.32	5,605.16	12.45	9.82	89.54	16.75	2,072.28	2,072.35	2,050.09	22.26	93.078			
5,700.00	5,700.00	5,690.19	5,705.04	12.67	10.03	89.53	17.15	2,071.97	2,072.05	2,049.35	22.70	91.284			
5,800.00	5,800.00	5,786.47	5,801.32	12.89	10.23	89.52	17.51	2,071.82	2,071.90	2,048.77	23.13	89.591			
5,836.51	5,836.51	5,821.66	5,836.51	12.98	10.30	89.51	17.63	2,071.81	2,071.89	2,048.60	23.28	88.995			
5,900.00	5,900.00	5,882.09	5,896.94	13.12	10.41	89.51	17.77	2,071.85	2,071.93	2,048.40	23.53	88.042			
6,000.00	6,000.00	5,983.07	5,997.92	13.34	10.57	89.51	17.80	2,072.02	2,072.10	2,048.19	23.91	86.550			
6,100.00	6,100.00	6,081.09	6,095.94	13.57	10.70	89.52	17.50	2,072.14	2,072.22	2,047.95	24.27	85.386			
6,200.00	6,200.00	6,181.14	6,195.98	13.79	10.84	89.54	16.56	2,072.36	2,072.43	2,047.80	24.63	84.144			
6,300.00	6,300.00	6,276.99	6,291.83	14.02	10.97	89.58	15.32	2,072.64	2,072.71	2,047.72	24.99	82.944 ES			
6,323.50	6,323.50	6,299.55	6,314.38	14.07	11.00	89.58	15.04	2,072.74	2,072.81	2,047.74	25.07	82.666			
6,325.00	6,325.00	6,301.00	6,315.83	14.07	11.01	-96.03	15.02	2,072.74	2,072.82	2,047.74	25.08	82.650			
6,350.00	6,349.99	6,325.11	6,339.94	14.12	11.04	-96.02	14.73	2,072.86	2,073.01	2,047.85	25.15	82.410			
6,375.00	6,374.90	6,349.16	6,363.98	14.16	11.07	-96.03	14.45	2,072.98	2,073.35	2,048.12	25.23	82.181			
6,400.00	6,399.67	6,373.08	6,387.91	14.20	11.11	-96.05	14.19	2,073.11	2,073.84	2,048.54	25.30	81.964			
6,425.00	6,424.24	6,395.06	6,409.88	14.25	11.14	-96.08	13.95	2,073.25	2,074.50	2,049.13	25.37	81.766			
6,450.00	6,448.53	6,416.19	6,431.01	14.29	11.17	-96.11	13.72	2,073.42	2,075.34	2,049.90	25.44	81.581			
6,475.00	6,472.47	6,437.03	6,451.85	14.34	11.20	-96.14	13.49	2,073.61	2,076.38	2,050.88	25.51	81.407			
6,500.00	6,496.01	6,457.53	6,472.35	14.38	11.23	-96.18	13.28	2,073.83	2,077.62	2,052.05	25.57	81.244			
6,525.00	6,519.07	6,472.75	6,487.57	14.42	11.26	-96.16	13.11	2,074.02	2,079.08	2,053.45	25.63	81.110			
6,550.00	6,541.60	6,497.17	6,511.99	14.47	11.29	-96.24	12.87	2,074.35	2,080.75	2,055.04	25.71	80.936			
6,575.00	6,563.53	6,516.21	6,531.02	14.51	11.32	-96.25	12.69	2,074.64	2,082.66	2,056.88	25.78	80.789			
6,600.00	6,584.80	6,534.67	6,549.48	14.55	11.35	-96.26	12.54	2,074.95	2,084.82	2,058.97	25.85	80.645			
6,625.00	6,605.36	6,552.50	6,567.30	14.60	11.38	-96.24	12.40	2,075.27	2,087.23	2,061.30	25.93	80.501			
6,650.00	6,625.14	6,570.31	6,585.10	14.66	11.41	-96.22	12.27	2,075.61	2,089.91	2,063.90	26.01	80.352			
6,675.00	6,644.10	6,590.04	6,604.83	14.72	11.44	-96.22	12.14	2,076.00	2,092.84	2,066.74	26.10	80.186			
6,700.00	6,662.18	6,608.87	6,623.66	14.80	11.47	-96.18	12.00	2,076.36	2,096.05	2,069.85	26.20	80.013			
6,725.00	6,679.33	6,626.77	6,641.56	14.88	11.50	-96.12	11.86	2,076.69	2,099.52	2,073.22	26.30	79.830			
6,750.00	6,695.50	6,643.67	6,658.46	14.97	11.52	-96.01	11.72	2,077.01	2,103.29	2,076.88	26.41	79.636			
6,775.00	6,710.66	6,659.54	6,674.32	15.07	11.55	-95.86	11.59	2,077.30	2,107.36	2,080.83	26.53	79.427			
6,800.00	6,724.75	6,674.50	6,689.28	15.17	11.57	-95.67	11.46	2,077.57	2,111.74	2,085.08	26.66	79.202			
6,825.00	6,737.74	6,688.34	6,703.11	15.29	11.59	-95.42	11.34	2,077.81	2,116.45	2,089.94	26.80	78.959			
6,850.00	6,749.60	6,700.99	6,715.77	15.42	11.61	-95.11	11.22	2,078.03	2,121.48	2,094.52	26.96	78.698			
6,875.00	6,760.29	6,712.44	6,727.21	15.56	11.63	-94.74	11.11	2,078.23	2,126.83	2,099.71	27.12	78.420			
6,900.00	6,769.79	6,722.65	6,737.41	15.71	11.65	-94.30	11.01	2,078.40	2,132.53	2,105.23	27.30	78.126			
6,925.00	6,778.06	6,731.57	6,746.34	15.87	11.66	-93.79	10.92	2,078.55	2,138.55	2,111.07	27.48	77.817			
6,950.00	6,785.08	6,739.20	6,753.97	16.04	11.68	-93.20	10.84	2,078.68	2,144.90	2,117.22	27.68	77.498			
6,975.00	6,790.84	6,745.51	6,760.27	16.22	11.69	-92.54	10.78	2,078.78	2,151.57	2,123.69	27.88	77.172			
7,000.00	6,795.32	6,750.47	6,765.23	16.41	11.69	-91.80	10.72	2,078.86	2,158.55	2,130.46	28.09	76.845			
7,025.00	6,798.50	6,753.40	6,768.16	16.61	11.70	-90.97	10.69	2,078.91	2,165.83	2,137.53	28.30	76.524			
7,050.00	6,800.39	6,756.02	6,770.79	16.82	11.70	-90.09	10.66	2,078.95	2,173.39	2,144.87	28.52	76.208			
7,073.93	6,800.96	6,756.78	6,771.54	17.02	11.70	-89.17	10.66	2,078.97	2,180.87	2,152.15	28.72	75.923			

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset-TVD Reference:	Reference Datum

Offset Design												Offset Site Error:
Lone Tree Draw "13" State - 4H - Pilot - Pilot												0.00 usft
Survey Program: 18-NS-GYRO-MS												Offset Well Error: 0.00usft
Reference	Offset		Semi Major Axis		Distance		Minimum Separation		Separation Factor		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
7,100.00	6,800.94	6,756.97	6,771.73	17.26	11.70	-89.17	10.65	2,078.97	2,189.28	2,160.32	28.96	75.598
7,200.00	6,800.85	6,757.70	6,772.46	18.24	11.71	-89.19	10.65	2,078.98	2,224.09	2,194.15	29.95	74.272
7,300.00	6,800.76	6,758.43	6,773.19	19.35	11.71	-89.21	10.64	2,078.99	2,262.79	2,231.74	31.05	72.873
7,400.00	6,800.67	6,759.14	6,773.90	20.55	11.71	-89.23	10.63	2,079.00	2,305.17	2,272.92	32.26	71.463
7,500.00	6,800.58	6,759.84	6,774.60	21.84	11.71	-89.25	10.63	2,079.01	2,351.05	2,317.51	33.55	70.083
7,600.00	6,800.49	6,760.52	6,775.28	23.20	11.71	-89.27	10.62	2,079.03	2,400.22	2,365.32	34.91	68.762
7,700.00	6,800.40	6,761.20	6,775.96	24.61	11.71	-89.29	10.61	2,079.04	2,452.49	2,416.16	36.32	67.517
7,800.00	6,800.31	6,761.87	6,776.63	26.08	11.71	-89.31	10.61	2,079.05	2,507.65	2,469.86	37.79	66.357
7,900.00	6,800.22	6,762.52	6,777.28	27.59	11.71	-89.33	10.60	2,079.06	2,565.53	2,526.23	39.30	65.284
8,000.00	6,800.12	6,763.17	6,777.93	29.13	11.72	-89.34	10.59	2,079.07	2,625.94	2,585.10	40.84	64.298
8,100.00	6,800.03	6,763.81	6,778.57	30.70	11.72	-89.36	10.59	2,079.08	2,688.71	2,646.30	42.41	63.396
8,200.00	6,799.94	6,764.43	6,779.19	32.29	11.72	-89.38	10.58	2,079.09	2,753.69	2,709.68	44.01	62.572
8,300.00	6,799.85	6,765.05	6,779.81	33.91	11.72	-89.40	10.57	2,079.10	2,820.71	2,775.08	45.63	61.822
8,400.00	6,799.76	6,765.66	6,780.42	35.55	11.72	-89.41	10.57	2,079.11	2,889.64	2,842.38	47.26	61.139
8,500.00	6,799.67	6,766.26	6,781.01	37.20	11.72	-89.43	10.56	2,079.12	2,960.34	2,911.43	48.92	60.519
8,600.00	6,799.58	6,766.85	6,781.60	38.86	11.72	-89.45	10.56	2,079.13	3,032.70	2,982.11	50.58	59.955
8,700.00	6,799.49	6,767.43	6,782.19	40.54	11.72	-89.46	10.55	2,079.14	3,106.58	3,054.32	52.26	59.442
8,800.00	6,799.40	6,768.00	6,782.76	42.23	11.72	-89.48	10.55	2,079.15	3,181.90	3,127.95	53.95	58.975
8,900.00	6,799.31	6,768.56	6,783.32	43.93	11.72	-89.49	10.54	2,079.16	3,258.54	3,202.89	55.65	58.551
9,000.00	6,799.22	6,769.12	6,783.88	45.64	11.72	-89.51	10.54	2,079.17	3,336.42	3,279.06	57.36	58.165
9,100.00	6,799.13	6,769.67	6,784.43	47.35	11.73	-89.52	10.53	2,079.17	3,415.45	3,356.37	59.08	57.813
9,200.00	6,799.04	6,770.21	6,784.97	49.08	11.73	-89.54	10.53	2,079.18	3,495.56	3,434.76	60.80	57.492
9,300.00	6,798.95	6,770.74	6,785.50	50.80	11.73	-89.55	10.52	2,079.19	3,576.66	3,514.13	62.53	57.200
9,400.00	6,798.86	6,771.27	6,786.02	52.54	11.73	-89.57	10.52	2,079.20	3,658.71	3,594.44	64.26	56.932
9,500.00	6,798.76	6,771.78	6,786.54	54.28	11.73	-89.58	10.51	2,079.21	3,741.62	3,675.62	66.00	56.688
9,600.00	6,798.67	6,772.30	6,787.05	56.02	11.73	-89.60	10.51	2,079.22	3,825.36	3,757.61	67.75	56.465
9,700.00	6,798.58	6,772.80	6,787.56	57.77	11.73	-89.61	10.50	2,079.23	3,909.85	3,840.36	69.50	56.260
9,800.00	6,798.49	6,773.30	6,788.05	59.52	11.73	-89.62	10.50	2,079.23	3,995.07	3,923.82	71.25	56.073
9,900.00	6,798.40	6,773.79	6,788.54	61.27	11.73	-89.64	10.49	2,079.24	4,080.95	4,007.95	73.00	55.901
10,000.00	6,798.31	6,774.27	6,789.03	63.03	11.73	-89.65	10.49	2,079.25	4,167.46	4,092.70	74.76	55.743
10,100.00	6,798.22	6,774.75	6,789.51	64.79	11.73	-89.67	10.49	2,079.26	4,254.57	4,178.05	76.52	55.598
10,200.00	6,798.13	6,775.22	6,789.98	66.55	11.74	-89.68	10.48	2,079.26	4,342.23	4,263.94	78.29	55.465
10,300.00	6,798.04	6,775.68	6,790.44	68.32	11.74	-89.69	10.48	2,079.27	4,430.41	4,350.36	80.05	55.343
10,400.00	6,797.95	6,776.14	6,790.90	70.09	11.74	-89.70	10.47	2,079.28	4,519.09	4,437.27	81.82	55.230
10,500.00	6,797.86	6,776.60	6,791.35	71.86	11.74	-89.72	10.47	2,079.29	4,608.23	4,524.63	83.59	55.126
10,600.00	6,797.77	6,777.04	6,791.80	73.63	11.74	-89.73	10.47	2,079.29	4,697.80	4,612.44	85.37	55.031
10,700.00	6,797.68	6,777.48	6,792.24	75.40	11.74	-89.74	10.46	2,079.30	4,787.79	4,700.65	87.14	54.943
10,800.00	6,797.59	6,777.92	6,792.68	77.18	11.74	-89.75	10.46	2,079.31	4,878.17	4,789.25	88.92	54.861
10,900.00	6,797.49	6,778.35	6,793.11	78.96	11.74	-89.76	10.45	2,079.32	4,968.92	4,878.22	90.70	54.787
11,000.00	6,797.40	6,778.78	6,793.53	80.74	11.74	-89.78	10.45	2,079.32	5,060.02	4,967.54	92.48	54.717
11,100.00	6,797.31	6,779.19	6,793.95	82.52	11.74	-89.79	10.45	2,079.33	5,151.44	5,057.19	94.26	54.654
11,200.00	6,797.22	6,779.61	6,794.37	84.30	11.74	-89.80	10.44	2,079.34	5,243.18	5,147.14	96.04	54.595
11,300.00	6,797.13	6,780.02	6,794.77	86.08	11.74	-89.81	10.44	2,079.34	5,335.22	5,237.40	97.82	54.540
11,400.00	6,797.04	6,780.42	6,795.18	87.86	11.74	-89.82	10.44	2,079.35	5,427.54	5,327.93	99.61	54.490
11,445.37	6,797.00	6,780.60	6,795.36	88.67	11.74	-89.83	10.44	2,079.35	5,469.51	5,369.10	100.42	54.469 SF

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 5H - OH - OH														Offset Site Error: 0.00 usft
Survey Program: 233-ISCWSA-GYRO-3, 4541-LEAM MWD+HGRF, 9585-Project														Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		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	30.00	0.00	0.00	89.65	21.38	3,477.80	3,478.00					
100.00	100.00	77.37	107.37	0.08	0.06	89.65	21.45	3,477.72	3,477.79	3,477.65	0.14	N/A		
200.00	200.00	187.90	217.89	0.31	0.15	89.64	21.77	3,477.31	3,477.43	3,476.97	0.46	7,635.541		
300.00	300.00	297.00	327.00	0.53	0.30	89.63	22.15	3,476.60	3,476.77	3,475.95	0.83	4,200.060		
400.00	400.00	390.44	420.43	0.76	0.46	89.64	21.94	3,475.91	3,476.04	3,474.82	1.22	2,858.437		
500.00	500.00	482.89	512.88	0.98	0.62	89.65	21.53	3,475.49	3,475.58	3,473.97	1.60	2,168.778		
600.00	600.00	584.40	614.39	1.21	0.80	89.65	21.03	3,475.12	3,475.21	3,473.21	2.00	1,733.352		
700.00	700.00	686.15	716.13	1.43	0.98	89.66	20.37	3,474.67	3,474.77	3,472.36	2.41	1,443.146		
800.00	800.00	782.65	812.63	1.66	1.15	89.68	19.56	3,474.25	3,474.33	3,471.52	2.80	1,240.187		
900.00	900.00	874.96	904.94	1.88	1.31	89.69	19.00	3,473.99	3,474.05	3,470.86	3.19	1,089.854		
1,000.00	1,000.00	979.09	1,009.06	2.11	1.49	89.70	18.46	3,473.78	3,473.84	3,470.25	3.59	966.447		
1,100.00	1,100.00	1,086.08	1,116.05	2.33	1.68	89.70	18.10	3,473.47	3,473.56	3,469.55	4.01	866.985		
1,200.00	1,200.00	1,193.12	1,223.09	2.56	1.86	89.70	18.22	3,472.69	3,472.82	3,468.40	4.42	785.934		
1,300.00	1,300.00	1,281.24	1,311.22	2.78	2.02	89.69	18.54	3,472.29	3,472.36	3,467.56	4.80	723.760		
1,400.00	1,400.00	1,377.43	1,407.40	3.01	2.19	89.69	18.80	3,472.05	3,472.11	3,466.92	5.19	668.924		
1,500.00	1,500.00	1,489.20	1,519.17	3.23	2.38	89.68	19.15	3,471.71	3,471.82	3,466.21	5.61	618.771		
1,600.00	1,600.00	1,601.46	1,631.43	3.45	2.58	89.68	19.62	3,470.86	3,471.05	3,465.02	6.03	575.420		
1,700.00	1,700.00	1,682.53	1,712.50	3.68	2.72	89.67	19.69	3,470.32	3,470.40	3,464.00	6.40	542.338		
1,800.00	1,800.00	1,770.16	1,800.13	3.90	2.87	89.68	19.42	3,470.19	3,470.24	3,463.46	6.78	512.073		
1,801.24	1,801.24	1,771.28	1,801.24	3.91	2.87	89.68	19.42	3,470.19	3,470.24	3,463.46	6.78	511.715 CC		
1,900.00	1,900.00	1,864.93	1,894.89	4.13	3.04	89.69	18.93	3,470.27	3,470.33	3,463.16	7.17	484.227		
2,000.00	2,000.00	1,954.37	1,984.32	4.35	3.19	89.70	18.34	3,470.53	3,470.61	3,463.06	7.55	459.850		
2,100.00	2,100.00	2,052.62	2,092.57	4.58	3.38	89.72	17.24	3,470.96	3,471.01	3,463.05	7.96	436.014		
2,200.00	2,200.00	2,166.98	2,196.93	4.80	3.57	89.73	16.25	3,471.12	3,471.16	3,462.79	8.37	414.824		
2,300.00	2,300.00	2,269.99	2,299.94	5.03	3.75	89.74	15.84	3,471.15	3,471.19	3,462.42	8.77	395.698		
2,400.00	2,400.00	2,369.35	2,399.29	5.25	3.92	89.74	15.62	3,471.17	3,471.20	3,462.03	9.17	378.526		
2,500.00	2,500.00	2,466.48	2,496.43	5.48	4.09	89.75	15.36	3,471.20	3,471.24	3,461.67	9.56	362.930		
2,600.00	2,600.00	2,562.31	2,592.25	5.70	4.26	89.76	14.72	3,471.39	3,471.43	3,461.48	9.96	348.663		
2,700.00	2,700.00	2,663.15	2,693.09	5.93	4.43	89.77	14.17	3,471.60	3,471.64	3,461.28	10.36	335.195		
2,800.00	2,800.00	2,768.26	2,798.20	6.15	4.62	89.78	13.50	3,471.77	3,471.80	3,461.03	10.77	322.499		
2,900.00	2,900.00	2,876.59	2,906.52	6.38	4.81	89.79	13.00	3,471.69	3,471.73	3,460.55	11.18	310.547		
3,000.00	3,000.00	2,971.47	3,001.41	6.60	4.97	89.79	12.93	3,471.56	3,471.59	3,460.02	11.57	300.047		
3,100.00	3,100.00	3,072.63	3,102.57	6.83	5.15	89.79	12.95	3,471.52	3,471.54	3,459.57	11.97	289.976		
3,200.00	3,200.00	3,180.39	3,210.33	7.05	5.34	89.78	13.46	3,471.22	3,471.26	3,458.87	12.39	280.278		
3,237.96	3,237.96	3,208.09	3,238.02	7.14	5.38	89.77	13.69	3,471.17	3,471.20	3,458.68	12.52	277.281		
3,300.00	3,300.00	3,257.20	3,287.13	7.28	5.47	89.77	14.12	3,471.30	3,471.35	3,458.61	12.74	272.393 ES		
3,400.00	3,400.00	3,340.30	3,370.23	7.50	5.61	89.76	14.65	3,471.87	3,472.03	3,458.92	13.11	264.773		
3,500.00	3,500.00	3,454.20	3,484.13	7.73	5.81	89.76	14.73	3,472.62	3,472.69	3,459.15	13.54	256.554		
3,600.00	3,600.00	3,552.00	3,581.92	7.95	5.98	89.76	14.40	3,473.10	3,473.18	3,459.25	13.93	249.316		
3,700.00	3,700.00	3,651.34	3,681.26	8.17	6.16	89.77	13.80	3,473.65	3,473.72	3,459.39	14.33	242.430		
3,800.00	3,800.00	3,749.31	3,779.23	8.40	6.33	89.78	13.25	3,474.16	3,474.24	3,459.52	14.72	235.953		
3,900.00	3,900.00	3,839.65	3,869.57	8.62	6.48	89.79	12.99	3,474.83	3,474.99	3,459.89	15.11	230.035		
4,000.00	4,000.00	3,943.72	3,973.63	8.85	6.67	89.79	12.93	3,475.79	3,475.91	3,460.40	15.51	224.075		
4,100.00	4,100.00	4,052.70	4,082.61	9.07	6.86	89.79	12.55	3,476.40	3,476.46	3,460.53	15.93	218.275		
4,200.00	4,200.00	4,162.01	4,191.91	9.30	7.05	89.80	12.07	3,476.84	3,476.87	3,460.53	16.34	212.752		
4,300.00	4,300.00	4,261.00	4,290.91	9.52	7.22	89.81	11.66	3,477.06	3,477.09	3,460.35	16.74	207.713		
4,400.00	4,400.00	4,366.18	4,396.08	9.75	7.40	89.82	11.20	3,477.26	3,477.28	3,460.13	17.15	202.777		
4,500.00	4,500.00	4,450.62	4,480.52	9.97	7.50	89.83	10.46	3,477.50	3,477.57	3,460.10	17.47	199.105		
4,600.00	4,600.00	4,541.00	4,570.87	10.20	7.58	89.86	8.33	3,478.30	3,478.43	3,460.66	17.77	195.735		
4,700.00	4,700.00	4,590.00	4,619.71	10.42	7.58	89.92	4.69	3,479.34	3,480.26	3,462.26	18.00	193.346		
4,800.00	4,800.00	4,636.00	4,665.09	10.65	7.60	90.04	-2.61	3,480.79	3,483.41	3,465.17	18.23	191.041		

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 5H - OH - OH														Offset Site Error: 0.00 usft
Survey Program: 233-ISCWSA-GYRO-3, 4541-LEAM MWD+IGRF, 9585-Project														Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,900.00	4,683.00	4,710.59	10.87	7.62	90.23		-14.16	3,482.68	3,487.85	3,469.37	18.48	188.762	
5,000.00	5,000.00	4,731.00	4,755.63	11.10	7.66	90.50		-30.44	3,485.46	3,494.15	3,475.41	18.74	186.444	
5,100.00	5,100.00	4,778.00	4,797.73	11.32	7.71	90.84		-51.02	3,488.76	3,502.20	3,483.16	19.03	183.990	
5,200.00	5,200.00	4,835.41	4,845.89	11.55	7.86	91.34		-81.94	3,492.78	3,511.64	3,492.23	19.41	180.929	
5,300.00	5,300.00	5,037.05	4,982.04	11.77	9.13	93.74		-228.81	3,500.18	3,522.04	3,501.15	20.89	168.568	
5,400.00	5,400.00	5,070.56	4,997.13	12.00	9.47	94.23		-258.81	3,499.64	3,532.25	3,510.79	21.46	164.573	
5,500.00	5,500.00	5,097.76	5,006.84	12.22	9.79	94.64		-284.19	3,498.90	3,544.89	3,522.89	22.01	161.091	
5,600.00	5,600.00	5,110.00	5,010.46	12.45	9.94	94.83		-295.88	3,498.47	3,560.11	3,537.74	22.37	159.123	
5,700.00	5,700.00	5,125.33	5,014.25	12.67	10.14	95.08		-310.72	3,497.85	3,577.95	3,555.15	22.80	156.939	
5,800.00	5,800.00	5,141.00	5,017.18	12.89	10.34	95.33		-326.09	3,497.11	3,598.46	3,575.23	23.23	154.921	
5,900.00	5,900.00	5,141.00	5,017.18	13.12	10.34	95.33		-326.09	3,497.11	3,621.53	3,598.07	23.45	154.419	
6,000.00	6,000.00	5,141.00	5,017.18	13.34	10.34	95.33		-326.09	3,497.11	3,647.19	3,623.52	23.68	154.038	
6,100.00	6,100.00	5,141.00	5,017.18	13.57	10.34	95.33		-326.09	3,497.11	3,675.40	3,651.50	23.90	153.769	
6,200.00	6,200.00	5,141.00	5,017.18	13.79	10.34	95.33		-326.09	3,497.11	3,706.10	3,681.97	24.13	153.609	
6,300.00	6,300.00	5,141.00	5,017.18	14.02	10.34	95.33		-326.09	3,497.11	3,739.21	3,714.86	24.35	153.551	
6,323.50	6,323.50	5,141.00	5,017.18	14.07	10.34	95.33		-326.09	3,497.11	3,747.34	3,722.94	24.40	153.552	
6,325.00	6,325.00	5,141.00	5,017.18	14.07	10.34	-90.23		-326.09	3,497.11	3,747.86	3,723.50	24.36	153.833	
6,350.00	6,349.99	5,141.00	5,017.18	14.12	10.34	-89.10		-326.09	3,497.11	3,756.66	3,732.27	24.39	154.017	
6,375.00	6,374.90	5,141.00	5,017.18	14.16	10.34	-87.95		-326.09	3,497.11	3,765.58	3,741.16	24.42	154.222	
6,400.00	6,399.67	5,141.00	5,017.18	14.20	10.34	-86.79		-326.09	3,497.11	3,774.60	3,750.16	24.44	154.445	
6,425.00	6,424.24	5,141.00	5,017.18	14.25	10.34	-85.62		-326.09	3,497.11	3,783.70	3,759.24	24.46	154.688	
6,450.00	6,448.53	5,141.00	5,017.18	14.29	10.34	-84.45		-326.09	3,497.11	3,792.85	3,768.37	24.48	154.950	
6,475.00	6,472.47	5,141.00	5,017.18	14.34	10.34	-83.27		-326.09	3,497.11	3,802.02	3,777.53	24.49	155.231	
6,500.00	6,496.01	5,141.00	5,017.18	14.38	10.34	-82.10		-326.09	3,497.11	3,811.20	3,786.69	24.50	155.532	
6,525.00	6,519.07	5,141.00	5,017.18	14.42	10.34	-80.93		-326.09	3,497.11	3,820.34	3,795.83	24.51	155.854	
6,550.00	6,541.60	5,141.00	5,017.18	14.47	10.34	-79.78		-326.09	3,497.11	3,829.44	3,804.92	24.52	156.196	
6,575.00	6,563.53	5,162.71	5,019.82	14.51	10.65	-78.37		-347.61	3,496.10	3,838.01	3,813.21	24.80	154.765	
6,600.00	6,584.80	5,164.69	5,019.99	14.55	10.68	-77.24		-349.59	3,496.01	3,846.84	3,822.02	24.82	154.995	
6,625.00	6,605.36	5,166.79	5,020.15	14.60	10.70	-76.13		-351.67	3,495.93	3,855.54	3,830.70	24.84	155.235	
6,650.00	6,625.14	5,188.00	5,020.96	14.66	11.00	-74.84		-372.85	3,495.15	3,864.43	3,839.34	25.09	154.022	
6,675.00	6,644.10	5,188.00	5,020.96	14.72	11.00	-73.82		-372.85	3,495.15	3,872.70	3,847.63	25.07	154.453	
6,700.00	6,662.18	5,188.00	5,020.96	14.80	11.00	-72.84		-372.85	3,495.15	3,880.77	3,855.72	25.06	154.884	
6,725.00	6,679.33	5,188.00	5,020.96	14.88	11.00	-71.90		-372.85	3,495.15	3,888.62	3,863.59	25.04	155.308	
6,750.00	6,695.50	5,188.00	5,020.96	14.97	11.00	-70.99		-372.85	3,495.15	3,896.23	3,871.21	25.02	155.714	
6,775.00	6,710.66	5,188.00	5,020.96	15.07	11.00	-70.12		-372.85	3,495.15	3,903.58	3,878.57	25.01	156.093	
6,800.00	6,724.75	5,188.00	5,020.96	15.17	11.00	-69.29		-372.85	3,495.15	3,910.65	3,885.65	25.00	156.432	
6,825.00	6,737.74	5,188.00	5,020.96	15.29	11.00	-68.50		-372.85	3,495.15	3,917.42	3,892.43	25.00	156.721	
6,850.00	6,749.60	5,188.00	5,020.96	15.42	11.00	-67.76		-372.85	3,495.15	3,923.88	3,898.88	25.00	156.945	
6,875.00	6,760.29	5,188.00	5,020.96	15.56	11.00	-67.06		-372.85	3,495.15	3,930.01	3,904.99	25.02	157.092	
6,900.00	6,769.79	5,208.93	5,020.94	15.71	11.32	-66.31		-393.77	3,494.51	3,935.64	3,910.33	25.31	155.484	
6,925.00	6,778.06	5,217.71	5,020.87	15.87	11.45	-65.68		-402.55	3,494.28	3,940.91	3,915.45	25.47	154.748	
6,950.00	6,785.08	5,240.00	5,020.52	16.04	11.79	-65.07		-424.83	3,493.76	3,945.92	3,920.01	25.81	152.876	
6,975.00	6,790.84	5,240.00	5,020.52	16.22	11.79	-64.59		-424.83	3,493.76	3,950.16	3,924.28	25.89	152.583	
7,000.00	6,795.32	5,240.00	5,020.52	16.41	11.79	-64.16		-424.83	3,493.76	3,954.11	3,928.12	25.99	152.164	
7,025.00	6,798.50	5,263.01	5,019.99	16.61	12.16	-63.75		-447.83	3,493.31	3,957.54	3,931.11	26.43	149.764	
7,050.00	6,800.39	5,278.24	5,019.57	16.82	12.41	-63.42		-463.06	3,493.03	3,960.46	3,933.68	26.78	147.888	
7,073.93	6,800.96	5,292.88	5,019.12	17.02	12.64	-63.17		-477.69	3,492.78	3,962.78	3,935.63	27.14	145.991	
7,100.00	6,800.94	5,308.84	5,018.57	17.26	12.90	-63.17		-493.63	3,492.52	3,965.06	3,937.48	27.58	143.748	
7,200.00	6,800.85	5,373.09	5,015.88	18.24	13.99	-63.17		-557.82	3,491.64	3,974.43	3,944.99	29.43	135.033	
7,300.00	6,800.76	5,422.00	5,013.40	19.35	14.83	-63.16		-606.66	3,491.16	3,984.69	3,953.51	31.18	127.790	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 5H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 233-ISCWSA-GYRO-3, 4541-LEAM MWD+IGRF, 9585-Project														Offset Well Error:	0.00 usft
Reference	Vertical	Measured	Vertical	Semi Major Axis		Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning		
Depth	Depth	Depth	Depth	Reference	Offset	Toolface	+N-S	+E-W	Between	Between	Separation	Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	(usft)				
7,400.00	6,800.67	5,513.00	5,009.91	20.55	16.36	-63.18	-697.58	3,491.95	3,995.88	3,962.25	33.64	118.793			
7,500.00	6,800.58	5,550.41	5,009.25	21.84	16.98	-63.21	-734.97	3,493.16	4,008.05	3,972.68	35.37	113.320			
7,600.00	6,800.49	5,603.00	5,008.93	23.20	17.86	-63.25	-787.49	3,495.76	4,021.43	3,984.03	37.40	107.536			
7,700.00	6,800.40	5,672.09	5,008.58	24.61	19.12	-63.32	-856.46	3,499.94	4,035.75	3,995.93	39.82	101.356			
7,800.00	6,800.31	5,747.92	5,007.90	26.08	20.51	-63.39	-932.11	3,504.94	4,050.75	4,008.34	42.41	95.521			
7,900.00	6,800.22	5,820.68	5,008.36	27.59	21.86	-63.48	-1,004.65	3,510.72	4,066.29	4,021.28	45.01	90.350			
8,000.00	6,800.12	5,876.00	5,008.50	29.13	22.89	-63.55	-1,059.76	3,515.42	4,082.59	4,035.24	47.35	86.215			
8,100.00	6,800.03	5,935.89	5,008.52	30.70	24.05	-63.62	-1,119.39	3,521.10	4,099.88	4,050.03	49.84	82.256			
8,200.00	6,799.94	6,348.36	5,017.20	32.29	31.83	-64.17	-1,530.44	3,551.52	4,115.37	4,056.90	58.47	70.386			
8,300.00	6,799.85	6,440.18	5,016.30	33.91	33.62	-64.23	-1,622.24	3,552.81	4,125.83	4,064.24	61.59	66.989			
8,400.00	6,799.76	6,527.00	5,013.99	35.55	35.33	-64.25	-1,709.02	3,553.56	4,136.54	4,071.88	64.66	63.975			
8,500.00	6,799.67	6,582.98	5,012.72	37.20	36.42	-64.28	-1,764.98	3,554.56	4,147.93	4,080.76	67.17	61.752			
8,600.00	6,799.58	6,622.00	5,012.53	38.86	37.18	-64.31	-1,803.97	3,555.99	4,160.42	4,091.02	69.40	59.948			
8,700.00	6,799.49	6,692.74	5,012.57	40.54	38.55	-64.37	-1,874.62	3,559.58	4,173.85	4,101.64	72.21	57.798			
8,800.00	6,799.40	6,823.85	5,014.12	42.23	41.09	-64.52	-2,005.47	3,567.69	4,187.79	4,111.66	76.13	55.005			
8,900.00	6,799.31	6,906.00	5,016.24	43.93	42.70	-64.62	-2,087.42	3,572.95	4,201.28	4,122.08	79.20	53.045			
9,000.00	6,799.22	7,063.39	5,020.05	45.64	45.80	-64.81	-2,244.54	3,581.28	4,213.61	4,129.93	83.69	50.350			
9,100.00	6,799.13	7,193.17	5,022.46	47.35	48.37	-64.95	-2,374.16	3,587.14	4,225.80	4,138.11	87.69	48.192			
9,200.00	6,799.04	7,349.09	5,023.45	49.08	51.45	-65.08	-2,530.02	3,591.30	4,236.81	4,144.65	92.16	45.973			
9,300.00	6,798.95	7,468.11	5,022.47	50.80	53.82	-65.14	-2,649.03	3,592.33	4,246.77	4,150.81	95.96	44.256			
9,400.00	6,798.86	7,542.33	5,021.22	52.54	55.30	-65.17	-2,723.24	3,592.78	4,256.89	4,157.96	98.93	43.028			
9,500.00	6,798.76	7,603.20	5,020.04	54.28	56.51	-65.19	-2,784.09	3,593.55	4,267.72	4,166.07	101.66	41.982			
9,600.00	6,798.67	7,663.00	5,019.18	56.02	57.68	-65.22	-2,843.86	3,595.16	4,279.58	4,175.22	104.36	41.007			
9,700.00	6,798.58	7,717.88	5,018.77	57.77	58.75	-65.26	-2,898.69	3,597.41	4,292.41	4,185.43	106.98	40.123			
9,800.00	6,798.49	7,797.45	5,018.73	59.52	60.32	-65.33	-2,978.15	3,601.62	4,306.06	4,195.98	110.08	39.119			
9,900.00	6,798.40	7,892.78	5,018.13	61.27	62.21	-65.40	-3,073.36	3,606.39	4,319.72	4,206.24	113.48	38.068			
10,000.00	6,798.31	7,986.36	5,018.58	63.03	64.07	-65.49	-3,166.77	3,611.91	4,333.74	4,216.88	116.86	37.086			
10,100.00	6,798.22	8,089.08	5,018.77	64.79	66.12	-65.58	-3,269.34	3,617.52	4,347.50	4,227.07	120.43	36.101			
10,200.00	6,798.13	8,239.97	5,017.85	66.55	68.12	-65.69	-3,420.05	3,624.86	4,361.20	4,236.31	124.89	34.921			
10,300.00	6,798.04	8,343.54	5,017.64	68.32	71.16	-65.77	-3,523.53	3,629.09	4,373.89	4,245.43	128.46	34.049			
10,400.00	6,797.95	8,487.20	5,018.68	70.09	73.98	-65.89	-3,667.07	3,634.67	4,386.06	4,253.27	132.78	33.031			
10,500.00	6,797.86	8,615.95	5,019.70	71.86	76.51	-65.99	-3,795.76	3,638.41	4,397.28	4,260.45	136.83	32.136			
10,600.00	6,797.77	8,744.90	5,020.84	73.63	79.04	-66.08	-3,924.68	3,641.06	4,407.67	4,266.77	140.90	31.283			
10,700.00	6,797.68	8,840.58	5,021.31	75.40	80.95	-66.15	-4,020.44	3,642.81	4,418.06	4,273.70	144.36	30.605			
10,800.00	6,797.59	8,943.47	5,021.44	77.18	82.99	-66.21	-4,123.23	3,644.39	4,428.34	4,280.39	147.95	29.932			
10,900.00	6,797.49	9,021.37	5,022.50	78.96	84.52	-66.28	-4,201.10	3,646.12	4,438.79	4,287.72	151.07	29.382			
11,000.00	6,797.40	9,081.00	5,023.40	80.74	85.69	-66.33	-4,260.69	3,647.96	4,449.97	4,296.13	153.85	28.924			
11,100.00	6,797.31	9,176.00	5,024.72	82.52	87.58	-66.41	-4,355.62	3,651.41	4,461.68	4,304.36	157.32	28.361			
11,200.00	6,797.22	9,279.88	5,025.93	84.30	89.66	-66.50	-4,459.42	3,655.16	4,473.48	4,312.50	160.98	27.789			
11,300.00	6,797.13	9,383.37	5,026.69	86.08	91.74	-66.58	-4,562.86	3,658.39	4,484.98	4,320.34	164.64	27.241			
11,400.00	6,797.04	9,459.00	5,027.45	87.85	93.25	-66.64	-4,638.43	3,661.25	4,496.97	4,329.21	167.76	26.807			
11,445.37	6,797.00	9,483.88	5,027.75	88.67	93.74	-66.66	-4,663.28	3,662.34	4,502.61	4,333.62	168.99	26.644 SF			

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD-ADJ												Offset Well Error:	0.00 usft
Reference												Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	
				Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	7.00	0.00	0.00	0.01	-92.88	-28.35	-562.74	563.45				
100.00	100.00	107.00	100.00	0.08	0.10	-92.88	-28.35	-562.74	563.45	563.27	0.18	3,094.867	
200.00	200.00	207.00	200.00	0.31	0.32	-92.88	-28.35	-562.74	563.45	562.82	0.63	892.115	
300.00	300.00	307.00	300.00	0.53	0.55	-92.88	-28.35	-562.74	563.45	562.37	1.08	521.174	
400.00	400.00	407.00	400.00	0.76	0.77	-92.88	-28.35	-562.74	563.45	561.92	1.53	368.112	
500.00	500.00	507.00	500.00	0.98	1.00	-92.88	-28.35	-562.74	563.45	561.47	1.98	284.545	
600.00	600.00	607.00	600.00	1.21	1.22	-92.88	-28.35	-562.74	563.45	561.02	2.43	231.901	
700.00	700.00	707.00	700.00	1.43	1.45	-92.88	-28.35	-562.74	563.45	560.57	2.88	195.694	
800.00	800.00	807.00	800.00	1.66	1.67	-92.88	-28.35	-562.74	563.45	560.12	3.33	169.267	
900.00	900.00	907.00	900.00	1.88	1.90	-92.88	-28.35	-562.74	563.45	559.68	3.78	149.128	
1,000.00	1,000.00	1,007.00	1,000.00	2.11	2.12	-92.88	-28.35	-562.74	563.45	559.23	4.23	133.272	
1,100.00	1,100.00	1,107.00	1,100.00	2.33	2.35	-92.88	-28.35	-562.74	563.45	558.78	4.68	120.463	
1,200.00	1,200.00	1,207.00	1,200.00	2.56	2.57	-92.88	-28.35	-562.74	563.45	558.33	5.13	109.901	
1,300.00	1,300.00	1,307.00	1,300.00	2.78	2.80	-92.88	-28.35	-562.74	563.45	557.88	5.58	101.042	
1,400.00	1,400.00	1,407.00	1,400.00	3.01	3.02	-92.88	-28.35	-562.74	563.45	557.43	6.03	93.504	
1,500.00	1,500.00	1,507.00	1,500.00	3.23	3.25	-92.88	-28.35	-562.74	563.45	556.98	6.48	87.013	
1,600.00	1,600.00	1,607.00	1,600.00	3.45	3.47	-92.88	-28.35	-562.74	563.45	556.53	6.93	81.365	
1,700.00	1,700.00	1,707.00	1,700.00	3.68	3.70	-92.88	-28.35	-562.74	563.45	556.08	7.37	76.405	
1,800.00	1,800.00	1,807.00	1,800.00	3.90	3.92	-92.88	-28.35	-562.74	563.45	555.63	7.82	72.015	
1,900.00	1,900.00	1,907.00	1,900.00	4.13	4.14	-92.88	-28.35	-562.74	563.45	555.18	8.27	68.102	
2,000.00	2,000.00	2,007.00	2,000.00	4.35	4.37	-92.88	-28.35	-562.74	563.45	554.73	8.72	64.593	
2,100.00	2,100.00	2,107.00	2,100.00	4.58	4.59	-92.88	-28.35	-562.74	563.45	554.28	9.17	61.427	
2,200.00	2,200.00	2,207.00	2,200.00	4.80	4.82	-92.88	-28.35	-562.74	563.45	553.83	9.62	58.557	
2,300.00	2,300.00	2,307.00	2,300.00	5.03	5.04	-92.88	-28.35	-562.74	563.45	553.38	10.07	55.944	
2,400.00	2,400.00	2,407.00	2,400.00	5.25	5.27	-92.88	-28.35	-562.74	563.45	552.93	10.52	53.554	
2,500.00	2,500.00	2,507.00	2,500.00	5.48	5.49	-92.88	-28.35	-562.74	563.45	552.48	10.97	51.359	
2,600.00	2,600.00	2,607.00	2,600.00	5.70	5.72	-92.88	-28.35	-562.74	563.45	552.03	11.42	49.338	
2,700.00	2,700.00	2,707.00	2,700.00	5.93	5.94	-92.88	-28.35	-562.74	563.45	551.58	11.87	47.469	
2,800.00	2,800.00	2,807.00	2,800.00	6.15	6.17	-92.88	-28.35	-562.74	563.45	551.13	12.32	45.737	
2,900.00	2,900.00	2,907.00	2,900.00	6.38	6.39	-92.88	-28.35	-562.74	563.45	550.68	12.77	44.127	
3,000.00	3,000.00	3,007.00	3,000.00	6.60	6.62	-92.88	-28.35	-562.74	563.45	550.24	13.22	42.626	
3,100.00	3,100.00	3,107.00	3,100.00	6.83	6.84	-92.88	-28.35	-562.74	563.45	549.79	13.67	41.224	
3,200.00	3,200.00	3,207.00	3,200.00	7.05	7.07	-92.88	-28.35	-562.74	563.45	549.34	14.12	39.912	
3,300.00	3,300.00	3,307.00	3,300.00	7.28	7.29	-92.88	-28.35	-562.74	563.45	548.89	14.57	38.680	
3,400.00	3,400.00	3,407.00	3,400.00	7.50	7.52	-92.88	-28.35	-562.74	563.45	548.44	15.02	37.522	
3,500.00	3,500.00	3,507.00	3,500.00	7.73	7.74	-92.88	-28.35	-562.74	563.45	547.99	15.47	36.431	
3,600.00	3,600.00	3,607.00	3,600.00	7.95	7.97	-92.88	-28.35	-562.74	563.45	547.54	15.92	35.402	
3,700.00	3,700.00	3,707.00	3,700.00	8.17	8.19	-92.88	-28.35	-562.74	563.45	547.09	16.37	34.430	
3,800.00	3,800.00	3,807.00	3,800.00	8.40	8.42	-92.88	-28.35	-562.74	563.45	546.64	16.81	33.509	
3,900.00	3,900.00	3,907.00	3,900.00	8.62	8.64	-92.88	-28.35	-562.74	563.45	546.19	17.26	32.637	
4,000.00	4,000.00	4,007.00	4,000.00	8.85	8.86	-92.88	-28.35	-562.74	563.45	545.74	17.71	31.809	
4,100.00	4,100.00	4,107.00	4,100.00	9.07	9.09	-92.88	-28.35	-562.74	563.45	545.29	18.16	31.021	
4,200.00	4,200.00	4,207.00	4,200.00	9.30	9.31	-92.88	-28.35	-562.74	563.45	544.84	18.61	30.272	
4,300.00	4,300.00	4,307.00	4,300.00	9.52	9.54	-92.88	-28.35	-562.74	563.45	544.39	19.06	29.558	
4,400.00	4,400.00	4,407.00	4,400.00	9.75	9.76	-92.88	-28.35	-562.74	563.45	543.94	19.51	28.877	
4,500.00	4,500.00	4,507.00	4,500.00	9.97	9.99	-92.88	-28.35	-562.74	563.45	543.49	19.96	28.227	
4,600.00	4,600.00	4,607.00	4,600.00	10.20	10.21	-92.88	-28.35	-562.74	563.45	543.04	20.41	27.605	
4,700.00	4,700.00	4,707.00	4,700.00	10.42	10.44	-92.88	-28.35	-562.74	563.45	542.59	20.86	27.011	
4,800.00	4,800.00	4,807.00	4,800.00	10.65	10.66	-92.88	-28.35	-562.74	563.45	542.14	21.31	26.441	
4,900.00	4,900.00	4,907.00	4,900.00	10.87	10.89	-92.88	-28.35	-562.74	563.45	541.69	21.76	25.894	
5,000.00	5,000.00	5,007.00	5,000.00	11.10	11.11	-92.88	-28.35	-562.74	563.45	541.24	22.21	25.370	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 6H - OH - Plan #1 Draft 1														Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD-ADJ														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (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	5,100.00	5,107.00	5,100.00	11.32	11.34	-92.88		-28.35	-562.74	563.45	540.80	22.66	24.867		
5,200.00	5,200.00	5,207.00	5,200.00	11.55	11.56	-92.88		-28.35	-562.74	563.45	540.35	23.11	24.383		
5,300.00	5,300.00	5,307.00	5,300.00	11.77	11.79	-92.88		-28.35	-562.74	563.45	539.90	23.56	23.918		
5,400.00	5,400.00	5,407.00	5,400.00	12.00	12.01	-92.88		-28.35	-562.74	563.45	539.45	24.01	23.470		
5,500.00	5,500.00	5,507.00	5,500.00	12.22	12.24	-92.88		-28.35	-562.74	563.45	539.00	24.46	23.039		
5,600.00	5,600.00	5,607.00	5,600.00	12.45	12.46	-92.88		-28.35	-562.74	563.45	538.55	24.91	22.623		
5,700.00	5,700.00	5,707.00	5,700.00	12.67	12.69	-92.88		-28.35	-562.74	563.45	538.10	25.36	22.222		
5,800.00	5,800.00	5,807.00	5,800.00	12.89	12.91	-92.88		-28.35	-562.74	563.45	537.65	25.81	21.835		
5,900.00	5,900.00	5,907.00	5,900.00	13.12	13.14	-92.88		-28.35	-562.74	563.45	537.20	26.25	21.461		
6,000.00	6,000.00	6,007.00	6,000.00	13.34	13.36	-92.88		-28.35	-562.74	563.45	536.75	26.70	21.100		
6,100.00	6,100.00	6,107.00	6,100.00	13.57	13.58	-92.88		-28.35	-562.74	563.45	536.30	27.15	20.750		
6,200.00	6,200.00	6,207.00	6,200.00	13.79	13.81	-92.88		-28.35	-562.74	563.45	535.85	27.60	20.412		
6,300.00	6,300.00	6,307.00	6,300.00	14.02	14.03	-92.88		-28.35	-562.74	563.45	535.40	28.05	20.085		
6,323.50	6,323.50	6,330.50	6,323.50	14.07	14.09	-92.88		-28.35	-562.74	563.45	535.29	28.16	20.010		
6,325.00	6,325.00	6,332.00	6,325.00	14.07	14.09	81.50		-28.35	-562.74	563.45	535.29	28.16	20.005		
6,350.00	6,349.99	6,356.99	6,349.99	14.12	14.15	81.58		-28.35	-562.74	563.35	535.08	28.26	19.933		
6,375.00	6,374.90	6,381.90	6,374.90	14.16	14.20	81.82		-28.35	-562.74	563.05	534.69	28.36	19.857		
6,400.00	6,399.67	6,406.67	6,399.67	14.20	14.26	82.21		-28.35	-562.74	562.58	534.13	28.45	19.775		
6,425.00	6,424.24	6,431.24	6,424.24	14.25	14.31	82.74		-28.35	-562.74	561.96	533.42	28.54	19.690		
6,450.00	6,448.53	6,455.53	6,448.53	14.29	14.37	83.41		-28.35	-562.74	561.23	532.60	28.63	19.601		
6,475.00	6,472.47	6,479.47	6,472.47	14.34	14.42	84.21		-28.35	-562.74	560.42	531.70	28.72	19.510		
6,500.00	6,496.01	6,503.01	6,496.01	14.38	14.47	85.12		-28.35	-562.74	559.59	530.77	28.82	19.417		
6,525.00	6,519.07	6,526.07	6,519.07	14.42	14.53	86.12		-28.35	-562.74	558.80	529.88	28.92	19.325		
6,550.00	6,541.60	6,548.60	6,541.60	14.47	14.58	87.20		-28.35	-562.74	558.10	529.08	29.01	19.235		
6,575.00	6,563.53	6,570.53	6,563.53	14.51	14.63	88.35		-28.35	-562.74	557.57	528.45	29.11	19.151		
6,600.00	6,584.80	6,591.80	6,584.80	14.55	14.67	89.53		-28.35	-562.74	557.29	528.07	29.22	19.075		
6,609.85	6,592.99	6,599.99	6,592.99	14.57	14.69	90.00		-28.35	-562.74	557.26	528.00	29.26	19.048 CC, ES		
6,625.00	6,605.36	6,612.36	6,605.36	14.60	14.72	90.73		-28.35	-562.74	557.33	528.01	29.32	19.011		
6,650.00	6,625.14	6,632.14	6,625.14	14.66	14.77	91.91		-28.35	-562.74	557.78	528.36	29.42	18.961		
6,675.00	6,644.10	6,651.10	6,644.10	14.72	14.81	93.07		-28.35	-562.74	558.72	529.20	29.51	18.930		
6,700.00	6,662.18	6,669.18	6,662.18	14.80	14.85	94.17		-28.35	-562.74	560.23	530.61	29.61	18.919		
6,725.00	6,679.33	6,686.33	6,679.33	14.88	14.89	95.18		-28.35	-562.74	562.39	532.68	29.71	18.931		
6,750.00	6,695.50	6,702.50	6,695.50	14.97	14.92	96.09		-28.35	-562.74	565.27	535.47	29.80	18.968		
6,775.00	6,710.66	6,717.66	6,710.66	15.07	14.96	96.87		-28.35	-562.74	568.94	539.04	29.90	19.028		
6,800.00	6,724.75	6,731.75	6,724.75	15.17	14.99	97.50		-28.35	-562.74	573.46	543.46	30.00	19.112		
6,825.00	6,737.74	6,744.74	6,737.74	15.29	15.02	97.96		-28.35	-562.74	578.87	548.75	30.12	19.219		
6,850.00	6,749.60	6,756.60	6,749.60	15.42	15.04	98.23		-28.35	-562.74	585.21	554.97	30.25	19.347		
6,875.00	6,760.29	6,767.29	6,760.29	15.56	15.07	98.30		-28.35	-562.74	592.51	562.11	30.39	19.494		
6,900.00	6,769.79	6,776.79	6,769.79	15.71	15.09	98.15		-28.35	-562.74	600.76	570.19	30.56	19.657		
6,925.00	6,778.06	6,785.06	6,778.06	15.87	15.11	97.76		-28.35	-562.74	609.96	579.21	30.75	19.834		
6,950.00	6,785.08	6,792.08	6,785.08	16.04	15.12	97.12		-28.35	-562.74	620.10	589.14	30.97	20.024		
6,975.00	6,790.84	6,797.84	6,790.84	16.22	15.14	96.22		-28.35	-562.74	631.15	599.95	31.20	20.227		
7,000.00	6,795.32	6,802.32	6,795.32	16.41	15.15	95.05		-28.35	-562.74	643.07	611.61	31.45	20.446		
7,025.00	6,798.50	6,805.50	6,798.50	16.61	15.15	93.60		-28.35	-562.74	655.79	624.08	31.71	20.682		
7,050.00	6,800.39	6,807.39	6,800.39	16.82	15.16	91.87		-28.35	-562.74	669.27	637.31	31.96	20.941		
7,073.93	6,800.96	6,807.96	6,800.96	17.02	15.16	89.96		-28.35	-562.74	682.81	650.62	32.18	21.216		
7,100.00	6,800.94	6,807.94	6,800.94	17.26	15.16	89.96		-28.35	-562.74	698.20	665.78	32.42	21.537		
7,200.00	6,800.85	6,807.85	6,800.85	18.24	15.16	89.95		-28.35	-562.74	762.63	729.23	33.40	22.832		
7,300.00	6,800.76	6,807.76	6,800.76	19.35	15.16	89.94		-28.35	-562.74	834.11	799.60	34.51	24.172		
7,400.00	6,800.67	6,807.67	6,800.67	20.55	15.16	89.93		-28.35	-562.74	910.97	875.26	35.71	25.509		

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON-ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 6H - OH - Plan #1 Draft 1													Offset Site Error:	0.00 usft
Survey Program: O-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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,500.00	6,800.58	6,807.58	6,800.58	21.84	15.16	89.92	-28.35	-562.74	991.96	954.96	37.00	26.810		
7,600.00	6,800.49	6,803.28	7,793.81	23.20	25.16	158.86	-1,045.84	-488.91	1,068.38	1,043.82	24.55	43.511		
7,700.00	6,800.40	6,801.82	7,791.99	24.61	26.54	159.67	-1,144.10	-481.79	1,060.64	1,035.08	25.56	41.499		
7,800.00	6,800.31	6,800.35	7,790.18	26.08	27.96	160.49	-1,242.36	-474.66	1,053.12	1,026.55	26.58	39.628		
7,900.00	6,800.22	6,800.22	7,788.36	27.59	29.43	161.33	-1,340.62	-467.53	1,045.83	1,018.23	27.60	37.897		
8,000.00	6,800.12	6,800.12	7,786.54	29.13	30.94	162.17	-1,438.88	-460.40	1,038.76	1,010.15	28.62	36.300		
8,100.00	6,800.03	6,800.03	7,784.73	30.70	32.49	163.03	-1,537.14	-453.27	1,031.93	1,002.30	29.63	34.830		
8,200.00	6,799.94	6,799.94	7,782.91	32.29	34.06	163.89	-1,635.40	-446.14	1,025.34	994.71	30.63	33.475		
8,300.00	6,799.85	6,799.85	7,781.09	33.91	35.66	164.77	-1,733.66	-439.01	1,018.98	987.37	31.62	32.226		
8,400.00	6,799.76	6,799.76	7,779.28	35.55	37.28	165.66	-1,831.92	-431.88	1,012.88	980.28	32.60	31.073		
8,500.00	6,799.67	6,799.67	7,777.46	37.20	38.91	166.56	-1,930.18	-424.75	1,007.03	973.47	33.56	30.004		
8,600.00	6,799.58	6,799.58	7,775.65	38.86	40.57	167.47	-2,028.44	-417.62	1,001.43	966.91	34.52	29.011		
8,700.00	6,799.49	6,799.49	7,773.83	40.54	42.24	168.39	-2,126.70	-410.49	996.10	960.63	35.47	28.084		
8,800.00	6,799.40	6,799.40	7,772.01	42.23	43.92	169.31	-2,224.96	-403.36	991.03	954.61	36.42	27.215		
8,900.00	6,799.31	6,799.31	7,770.20	43.93	45.61	170.25	-2,323.22	-396.23	986.23	948.86	37.36	26.395		
9,000.00	6,799.22	6,799.22	7,768.38	45.64	47.32	171.20	-2,421.48	-389.10	981.70	943.38	38.32	25.619		
9,100.00	6,799.13	6,799.13	7,766.56	47.35	49.03	172.15	-2,519.73	-381.97	977.45	938.16	39.29	24.878		
9,200.00	6,799.04	6,799.04	7,764.75	49.08	50.75	173.11	-2,617.99	-374.84	973.48	933.20	40.28	24.168		
9,300.00	6,798.95	6,798.95	7,762.93	50.80	52.48	174.08	-2,716.25	-367.72	969.79	928.49	41.30	23.483		
9,400.00	6,798.86	6,798.86	7,761.11	52.54	54.22	175.06	-2,814.51	-360.59	966.39	924.04	42.35	22.818		
9,500.00	6,798.76	6,798.76	7,759.30	54.28	55.96	176.04	-2,912.77	-353.46	963.28	919.83	43.45	22.170		
9,600.00	6,798.67	6,798.67	7,757.48	56.02	57.71	177.03	-3,011.03	-346.33	960.46	915.86	44.60	21.534		
9,700.00	6,798.58	6,798.58	7,755.66	57.77	59.46	178.02	-3,109.29	-339.20	957.94	912.13	45.81	20.909		
9,800.00	6,798.49	6,798.49	7,753.85	59.52	61.22	179.02	-3,207.55	-332.07	955.72	908.62	47.10	20.293		
9,900.00	6,798.40	6,798.40	7,752.03	61.27	62.98	179.98	-3,305.81	-324.94	953.80	905.34	48.45	19.685		
10,000.00	6,798.31	6,798.31	7,750.21	63.03	64.75	178.97	-3,404.07	-317.81	952.17	902.28	49.90	19.083		
10,100.00	6,798.22	6,798.22	7,748.40	64.79	66.52	177.96	-3,502.33	-310.68	950.85	899.42	51.43	18.487		
10,200.00	6,798.13	6,798.13	7,746.58	66.55	68.29	176.95	-3,600.59	-303.55	949.84	896.77	53.07	17.899		
10,300.00	6,798.04	6,798.04	7,744.77	68.32	70.07	175.94	-3,698.85	-296.42	949.13	894.33	54.80	17.319		
10,400.00	6,797.95	6,797.95	7,742.95	70.09	71.84	174.92	-3,797.11	-289.29	948.73	892.08	56.65	16.747		
10,481.37	6,797.87	6,797.87	7,741.17	71.53	73.29	174.10	-3,877.06	-283.49	948.63	890.39	58.24	16.289		
10,500.00	6,797.86	6,797.86	7,741.13	71.86	73.63	173.91	-3,895.37	-282.16	948.63	890.02	58.61	16.186		
10,600.00	6,797.77	6,797.77	7,739.32	73.63	75.41	172.89	-3,993.63	-275.03	948.84	888.16	60.68	15.636		
10,700.00	6,797.68	6,797.68	7,737.50	75.40	77.20	171.88	-4,091.89	-267.90	949.36	886.48	62.88	15.099		
10,800.00	6,797.59	6,797.59	7,735.68	77.18	78.98	170.87	-4,190.15	-260.78	950.18	884.99	65.19	14.576		
10,900.00	6,797.49	6,797.49	7,733.87	78.96	80.77	169.86	-4,288.41	-253.65	951.31	883.69	67.62	14.069		
11,000.00	6,797.40	6,797.40	7,732.05	80.74	82.57	168.85	-4,386.67	-246.52	952.74	882.58	70.17	13.578		
11,100.00	6,797.31	6,797.31	7,730.23	82.52	84.36	167.84	-4,484.93	-239.39	954.48	881.64	72.83	13.105		
11,200.00	6,797.22	6,797.22	7,728.42	84.30	86.16	166.84	-4,583.19	-232.26	956.51	880.90	75.62	12.649		
11,300.00	6,797.13	6,797.13	7,726.60	86.08	87.95	165.84	-4,681.44	-225.13	958.85	880.33	78.51	12.213		
11,400.00	6,797.04	6,797.04	7,724.78	87.86	89.75	164.85	-4,779.70	-218.00	961.48	879.96	81.52	11.794		
11,445.37	6,797.00	6,797.00	7,724.00	88.67	90.53	164.43	-4,822.12	-214.92	962.77	879.90	82.87	11.618 SF		

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Lone Tree Draw "13" State - 7H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 2922-LEAM MWD-ADJ, 12456-Project													
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	0.00	8.00	0.00	0.00	89.66	6.45	1,079.77	1,079.82				
100.00	100.00	90.95	98.95	0.08	0.09	89.66	6.47	1,079.82	1,079.84	1,079.66	0.17	6,216.550	
200.00	200.00	194.54	202.54	0.31	0.30	89.65	6.69	1,079.76	1,079.79	1,079.18	0.61	1,779.168	
300.00	300.00	297.03	305.03	0.53	0.51	89.63	7.04	1,079.40	1,079.43	1,078.39	1.04	1,036.456	
400.00	400.00	401.34	409.33	0.76	0.70	89.63	6.93	1,078.71	1,078.77	1,077.32	1.46	741.036	
500.00	500.00	509.36	517.35	0.98	0.89	89.69	5.87	1,077.35	1,077.51	1,075.64	1.87	575.242	
600.00	600.00	610.68	618.64	1.21	1.10	89.78	4.15	1,075.64	1,075.81	1,073.50	2.31	466.649	
700.00	700.00	706.59	714.52	1.43	1.32	89.85	2.88	1,074.17	1,074.28	1,071.53	2.75	390.605	
800.00	800.00	805.69	813.61	1.66	1.57	89.88	2.17	1,072.89	1,072.98	1,069.76	3.22	333.068	
900.00	900.00	910.26	918.17	1.88	1.83	89.91	1.73	1,071.34	1,071.49	1,067.78	3.71	288.442	
1,000.00	1,000.00	1,012.84	1,020.74	2.11	2.10	89.92	1.47	1,069.43	1,069.63	1,065.43	4.21	254.358	
1,100.00	1,100.00	1,108.85	1,116.72	2.33	2.35	89.92	1.48	1,067.77	1,067.91	1,063.23	4.68	228.313	
1,200.00	1,200.00	1,213.50	1,221.36	2.56	2.62	89.94	1.03	1,065.99	1,066.21	1,061.04	5.17	206.174	
1,300.00	1,300.00	1,326.59	1,334.38	2.78	2.91	90.05	-0.89	1,062.77	1,063.33	1,057.64	5.68	187.050	
1,400.00	1,400.00	1,420.53	1,428.25	3.01	3.14	90.19	-3.47	1,060.01	1,060.40	1,054.26	6.14	172.652	
1,500.00	1,500.00	1,516.43	1,524.07	3.23	3.37	90.34	-6.32	1,057.63	1,057.93	1,051.33	6.60	160.332	
1,600.00	1,600.00	1,613.36	1,620.94	3.45	3.61	90.50	-9.14	1,055.60	1,055.85	1,048.79	7.06	149.623	
1,700.00	1,700.00	1,717.11	1,724.63	3.68	3.86	90.66	-12.10	1,053.26	1,053.62	1,046.08	7.54	139.804	
1,800.00	1,800.00	1,813.63	1,821.09	3.90	4.10	90.80	-14.77	1,051.17	1,051.49	1,043.48	8.00	131.408	
1,900.00	1,900.00	1,916.62	1,924.01	4.13	4.36	90.97	-17.72	1,048.91	1,049.34	1,040.85	8.48	123.681	
2,000.00	2,000.00	2,020.59	2,027.89	4.35	4.63	91.15	-20.95	1,046.32	1,046.91	1,037.93	8.97	116.673	
2,100.00	2,100.00	2,126.32	2,133.53	4.58	4.90	91.33	-24.17	1,043.04	1,043.86	1,034.39	9.47	110.211	
2,200.00	2,200.00	2,222.55	2,229.67	4.80	5.15	91.48	-26.91	1,040.01	1,040.78	1,030.83	9.95	104.627	
2,300.00	2,300.00	2,316.13	2,323.17	5.03	5.40	91.63	-29.62	1,037.62	1,038.30	1,027.69	10.41	99.701	
2,400.00	2,400.00	2,416.88	2,423.85	5.25	5.66	91.81	-32.66	1,035.21	1,036.00	1,025.10	10.90	95.066	
2,500.00	2,500.00	2,513.82	2,520.73	5.48	5.91	91.97	-35.46	1,033.05	1,033.87	1,022.50	11.37	90.914	
2,600.00	2,600.00	2,614.20	2,621.05	5.70	6.17	92.12	-38.25	1,030.92	1,031.84	1,019.99	11.86	87.035	
2,700.00	2,700.00	2,713.87	2,720.66	5.93	6.43	92.28	-40.91	1,028.78	1,029.80	1,017.46	12.34	83.461	
2,800.00	2,800.00	2,811.74	2,818.48	6.15	6.63	92.41	-43.27	1,026.85	1,027.93	1,015.16	12.77	80.492	
2,900.00	2,900.00	2,911.16	2,917.87	6.38	6.76	92.49	-44.61	1,025.03	1,026.16	1,013.03	13.13	78.177	
3,000.00	3,000.00	3,011.90	3,018.60	6.60	6.79	92.52	-45.05	1,023.23	1,024.39	1,011.01	13.37	76.600	
3,100.00	3,100.00	3,140.83	3,147.46	6.83	6.81	92.48	-44.15	1,019.30	1,021.36	1,007.74	13.62	74.987	
3,200.00	3,200.00	3,265.39	3,271.70	7.05	6.84	92.25	-39.73	1,011.75	1,015.07	1,001.19	13.88	73.135	
3,300.00	3,300.00	3,367.84	3,373.78	7.28	6.88	91.99	-34.93	1,004.47	1,007.78	993.64	14.14	71.274	
3,400.00	3,400.00	3,467.62	3,473.19	7.50	6.92	91.74	-30.22	997.33	1,000.46	986.06	14.40	69.458	
3,500.00	3,500.00	3,567.16	3,572.37	7.73	6.97	91.48	-25.53	990.19	993.16	978.48	14.68	67.672	
3,600.00	3,600.00	3,666.64	3,671.49	7.95	7.03	91.21	-20.82	983.08	985.89	970.94	14.96	65.917	
3,700.00	3,700.00	3,766.95	3,771.42	8.17	7.10	90.94	-15.99	975.88	978.62	963.38	15.25	64.185	
3,800.00	3,800.00	3,866.60	3,870.69	8.40	7.19	90.66	-11.08	968.69	971.33	955.79	15.55	62.481	
3,900.00	3,900.00	3,961.00	3,964.73	8.62	7.27	90.39	-6.49	961.94	964.14	948.29	15.84	60.855	
4,000.00	4,000.00	4,056.00	4,059.41	8.85	7.36	90.10	-1.63	955.79	957.63	941.49	16.14	59.315	
4,100.00	4,100.00	4,159.28	4,162.39	9.07	7.46	89.84	2.60	949.35	951.40	934.94	16.46	57.806	
4,200.00	4,200.00	4,257.24	4,260.10	9.30	7.56	89.67	5.41	942.89	944.82	928.05	16.77	56.338	
4,300.00	4,300.00	4,340.00	4,342.69	9.52	7.65	89.50	8.19	938.43	939.44	922.37	17.07	55.022	
4,400.00	4,400.00	4,436.56	4,439.08	9.75	7.76	89.27	11.98	934.27	935.16	917.77	17.40	53.752	
4,500.00	4,500.00	4,535.88	4,538.25	9.97	7.87	89.02	15.86	930.10	931.02	913.29	17.73	52.516	
4,600.00	4,600.00	4,635.15	4,637.36	10.20	7.99	88.78	19.71	925.99	926.95	908.89	18.06	51.316	
4,700.00	4,700.00	4,734.43	4,736.48	10.42	8.11	88.54	23.48	921.93	922.95	904.55	18.40	50.150	
4,800.00	4,800.00	4,833.06	4,834.97	10.65	8.23	88.31	27.13	918.02	919.09	900.34	18.75	49.027	
4,900.00	4,900.00	4,933.06	4,934.82	10.87	8.37	88.07	30.81	914.11	915.29	896.19	19.10	47.929	
5,000.00	5,000.00	5,032.52	5,034.14	11.10	8.50	87.83	34.42	910.19	911.48	892.03	19.45	46.864	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0:00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design - Lone Tree Draw "13" State - 7H-OH-OH												Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 2922-LEAM MWD-ADJ, 12456-Project												Offset Well Error:	0.00 usft
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	5,100.00	5,136.41	5,137.89	11.32	8.65	87.59	38.14	906.16	907.76	887.94	19.81	45.818	
5,200.00	5,200.00	5,246.03	5,247.25	11.55	8.81	87.26	43.08	900.59	902.86	882.66	20.19	44.712	
5,300.00	5,300.00	5,345.81	5,346.77	11.77	8.97	86.94	47.80	895.07	897.57	877.00	20.56	43.646	
5,400.00	5,400.00	5,445.26	5,445.97	12.00	9.13	86.64	52.28	889.70	892.42	871.48	20.94	42.622	
5,500.00	5,500.00	5,542.28	5,542.77	12.22	9.28	86.36	56.30	884.56	887.38	866.07	21.31	41.643	
5,600.00	5,600.00	5,640.27	5,640.57	12.45	9.44	86.10	59.96	879.74	882.71	861.02	21.68	40.707	
5,700.00	5,700.00	5,739.75	5,739.87	12.67	9.60	85.84	63.65	874.93	878.15	856.08	22.06	39.799	
5,800.00	5,800.00	5,836.80	5,836.76	12.89	9.76	85.60	66.97	870.40	873.74	851.30	22.44	38.933	
5,900.00	5,900.00	5,948.39	5,948.14	13.12	9.95	85.33	70.58	864.82	869.03	846.19	22.85	38.039	
6,000.00	6,000.00	6,066.64	6,066.02	13.34	10.17	85.01	74.76	856.45	862.24	838.97	23.27	37.054	
6,100.00	6,100.00	6,164.06	6,163.07	13.57	10.35	84.75	77.97	848.61	854.52	830.85	23.66	36.113	
6,200.00	6,200.00	6,254.24	6,252.95	13.79	10.53	84.46	81.62	842.27	847.87	823.83	24.05	35.262	
6,300.00	6,300.00	6,356.04	6,354.44	14.02	10.72	84.16	85.43	835.34	841.46	817.01	24.45	34.415	
6,323.50	6,323.50	6,379.31	6,377.64	14.07	10.77	84.09	86.34	833.74	839.95	815.40	24.55	34.220	
6,325.00	6,325.00	6,380.79	6,379.12	14.07	10.77	-101.55	86.40	833.64	839.85	815.36	24.49	34.291	
6,350.00	6,349.99	6,405.50	6,403.75	14.12	10.82	-101.85	87.45	831.93	838.39	813.81	24.58	34.111	
6,375.00	6,374.90	6,428.77	6,426.94	14.16	10.86	-102.20	88.50	830.33	837.22	812.56	24.66	33.950	
6,400.00	6,399.67	6,450.00	6,448.10	14.20	10.90	-102.56	89.52	828.94	836.43	811.69	24.74	33.814	
6,425.00	6,424.24	6,470.98	6,469.01	14.25	10.94	-102.94	90.57	827.64	836.05	811.24	24.81	33.699	
6,434.06	6,433.07	6,478.51	6,476.52	14.26	10.96	-103.09	90.96	827.19	836.03	811.19	24.84	33.663 CC, ES	
6,450.00	6,448.53	6,491.66	6,489.62	14.29	10.98	-103.35	91.65	826.43	836.12	811.24	24.88	33.607	
6,475.00	6,472.47	6,514.00	6,511.90	14.34	11.03	-103.80	92.87	825.21	836.65	811.70	24.95	33.534	
6,500.00	6,496.01	6,533.23	6,531.07	14.38	11.06	-104.20	93.93	824.22	837.66	812.65	25.01	33.492	
6,525.00	6,519.07	6,554.20	6,551.99	14.42	11.10	-104.64	95.04	823.19	839.16	814.09	25.07	33.470	
6,550.00	6,541.60	6,574.66	6,572.41	14.47	11.14	-105.06	96.08	822.22	841.18	816.05	25.13	33.472	
6,575.00	6,563.53	6,594.57	6,592.27	14.51	11.18	-105.46	97.05	821.33	843.76	818.57	25.19	33.500	
6,600.00	6,584.80	6,614.20	6,611.86	14.55	11.22	-105.83	97.97	820.48	846.92	821.68	25.24	33.553	
6,625.00	6,605.36	6,633.84	6,631.47	14.60	11.25	-106.18	98.87	819.66	850.69	825.39	25.30	33.630	
6,650.00	6,625.14	6,652.71	6,650.30	14.66	11.29	-106.48	99.71	818.87	855.09	829.74	25.35	33.731	
6,675.00	6,644.10	6,670.75	6,668.31	14.72	11.32	-106.70	100.51	818.13	860.15	834.74	25.41	33.855	
6,700.00	6,662.18	6,687.92	6,685.44	14.80	11.36	-106.84	101.25	817.43	865.91	840.44	25.47	34.000	
6,725.00	6,679.33	6,704.17	6,701.66	14.88	11.39	-106.89	101.95	816.78	872.39	846.85	25.54	34.163	
6,750.00	6,695.50	6,719.60	6,717.07	14.97	11.41	-106.83	102.60	816.16	879.61	853.99	25.61	34.341	
6,775.00	6,710.66	6,734.00	6,731.45	15.07	11.44	-106.84	103.20	815.59	887.58	861.87	25.70	34.531	
6,800.00	6,724.75	6,747.32	6,744.74	15.17	11.47	-106.32	103.76	815.05	896.31	870.50	25.81	34.728	
6,825.00	6,737.74	6,759.52	6,756.92	15.29	11.49	-105.85	104.26	814.57	905.61	879.87	25.93	34.930	
6,850.00	6,749.60	6,770.57	6,767.95	15.42	11.51	-105.22	104.72	814.13	916.06	889.99	26.07	35.132	
6,875.00	6,760.29	6,780.44	6,777.81	15.56	11.53	-104.41	105.12	813.74	927.07	900.83	26.24	35.333	
6,900.00	6,769.79	6,789.09	6,786.45	15.71	11.54	-103.41	105.48	813.40	938.81	912.39	26.42	35.529	
6,925.00	6,778.06	6,796.52	6,793.86	15.87	11.56	-102.22	105.78	813.10	951.26	924.63	26.63	35.721	
6,950.00	6,785.08	6,802.55	6,799.88	16.04	11.57	-100.81	106.02	812.86	964.38	937.52	26.86	35.910	
6,975.00	6,790.84	6,807.29	6,804.62	16.22	11.58	-99.19	106.21	812.68	978.14	951.04	27.10	36.098	
7,000.00	6,795.32	6,810.78	6,808.10	16.41	11.58	-97.36	106.36	812.54	992.49	965.14	27.35	36.292	
7,025.00	6,798.50	6,813.00	6,810.32	16.61	11.59	-95.30	106.45	812.45	1,007.38	979.78	27.60	36.498	
7,050.00	6,800.39	6,813.95	6,811.27	16.82	11.59	-93.04	106.48	812.42	1,022.75	994.90	27.85	36.725	
7,073.93	6,800.96	6,813.67	6,810.98	17.02	11.59	-90.68	106.47	812.43	1,037.87	1,009.80	28.07	36.968	
7,100.00	6,800.94	6,812.72	6,810.03	17.26	11.59	-90.61	106.43	812.46	1,054.73	1,026.42	28.31	37.260	
7,200.00	6,800.85	6,809.07	6,806.39	18.24	11.58	-90.35	106.29	812.61	1,122.64	1,093.36	29.29	38.333	
7,300.00	6,800.76	6,805.41	6,802.74	19.35	11.57	-90.08	106.14	812.75	1,195.06	1,164.68	30.38	39.331	
7,400.00	6,800.67	6,801.75	6,799.09	20.55	11.57	-89.82	105.99	812.89	1,271.22	1,239.64	31.58	40.250	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 7H - OH - OH														Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS, 2922-LEAM MWD-ADJ, 12456-Project														Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		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		
7,500.00	6,800.58	8,517.23	7,761.59	21.84	19.50	-137.63	-870.22	795.07	1,305.81	1,272.81	33.00	39.571		
7,600.00	6,800.49	8,642.79	7,762.82	23.20	21.25	-137.23	-995.75	796.41	1,314.01	1,278.74	35.27	37.259		
7,700.00	6,800.40	8,724.70	7,762.28	24.61	22.37	-136.91	-1,077.65	798.08	1,321.68	1,284.47	37.21	35.518		
7,800.00	6,800.31	8,852.15	7,762.26	26.08	24.17	-136.47	-1,205.09	799.44	1,329.26	1,289.52	39.74	33.450		
7,900.00	6,800.22	8,964.18	7,762.22	27.59	25.83	-136.20	-1,317.10	797.37	1,334.76	1,292.60	42.16	31.658		
8,000.00	6,800.12	9,055.55	7,763.11	29.13	27.18	-136.02	-1,408.43	795.04	1,340.55	1,296.19	44.37	30.216		
8,100.00	6,800.03	9,149.46	7,764.77	30.70	28.58	-135.87	-1,502.29	792.40	1,346.76	1,300.12	46.63	28.879		
8,200.00	6,799.94	9,233.42	7,765.35	32.29	29.86	-135.66	-1,586.24	791.81	1,353.70	1,304.82	48.88	27.694		
8,300.00	6,799.85	9,306.00	7,765.73	33.91	30.97	-135.41	-1,658.80	793.27	1,362.41	1,311.35	51.05	26.685		
8,400.00	6,799.76	9,465.61	7,758.03	35.55	33.53	-134.51	-1,817.99	800.62	1,368.90	1,314.19	54.71	25.021		
8,500.00	6,799.67	9,538.70	7,752.95	37.20	34.71	-134.04	-1,890.81	804.39	1,374.96	1,317.81	57.15	24.059		
8,600.00	6,799.58	9,610.22	7,751.00	38.86	35.86	-133.68	-1,962.21	808.03	1,383.76	1,324.23	59.53	23.243		
8,700.00	6,799.49	9,717.45	7,749.24	40.54	37.59	-133.22	-2,069.35	811.85	1,392.38	1,329.92	62.46	22.294		
8,800.00	6,799.40	9,790.10	7,750.42	42.23	38.77	-133.01	-2,141.97	813.55	1,402.39	1,337.57	64.82	21.635		
8,900.00	6,799.31	9,881.86	7,754.18	43.93	40.26	-132.83	-2,233.63	815.13	1,413.67	1,346.25	67.42	20.969		
9,000.00	6,799.22	10,011.21	7,758.07	45.64	42.40	-132.55	-2,362.91	816.85	1,423.92	1,353.31	70.61	20.165		
9,100.00	6,799.13	10,106.51	7,758.57	47.35	43.99	-132.26	-2,458.19	818.79	1,433.10	1,359.69	73.41	19.522		
9,200.00	6,799.04	10,195.46	7,759.98	49.08	45.46	-132.01	-2,547.09	821.09	1,443.39	1,367.27	76.11	18.963		
9,300.00	6,798.95	10,332.62	7,760.65	50.80	47.77	-131.59	-2,684.20	824.42	1,453.04	1,373.40	79.63	18.246		
9,400.00	6,798.86	10,427.98	7,758.65	52.54	49.36	-131.23	-2,778.52	826.70	1,460.88	1,378.30	82.58	17.691		
9,500.00	6,798.76	10,505.93	7,757.85	54.28	50.65	-130.96	-2,857.43	828.85	1,469.77	1,384.54	85.22	17.246		
9,600.00	6,798.67	10,644.77	7,757.12	56.02	52.96	-130.52	-2,996.22	831.70	1,478.61	1,389.75	88.86	16.640		
9,700.00	6,798.58	10,774.74	7,755.75	57.77	55.14	-130.16	-3,126.19	831.83	1,485.80	1,393.46	92.35	16.090		
9,800.00	6,798.49	10,908.00	7,750.92	59.52	57.40	-129.79	-3,259.31	828.41	1,488.85	1,392.91	95.94	15.518		
9,900.00	6,798.40	11,006.00	7,747.01	61.27	59.07	-129.51	-3,357.19	825.37	1,491.53	1,392.55	98.98	15.069		
10,000.00	6,798.31	11,071.38	7,745.56	63.03	60.16	-129.36	-3,422.52	823.41	1,495.52	1,394.07	101.45	14.742		
10,100.00	6,798.22	11,151.14	7,746.10	64.79	61.49	-129.23	-3,502.26	821.64	1,501.81	1,397.71	104.10	14.427		
10,200.00	6,798.13	11,266.80	7,746.55	66.55	63.43	-129.03	-3,617.89	819.32	1,508.20	1,400.87	107.33	14.052		
10,300.00	6,798.04	11,353.67	7,745.98	68.32	64.90	-128.86	-3,704.74	817.61	1,513.99	1,403.82	110.16	13.743		
10,400.00	6,797.95	11,454.93	7,746.25	70.09	66.61	-128.67	-3,805.99	816.19	1,520.77	1,407.55	113.22	13.431		
10,500.00	6,797.86	11,534.62	7,746.48	71.86	67.96	-128.52	-3,885.66	814.90	1,527.49	1,411.54	115.95	13.174		
10,600.00	6,797.77	11,618.34	7,749.82	73.63	69.38	-128.47	-3,969.30	813.26	1,536.08	1,417.46	118.63	12.949		
10,700.00	6,797.68	11,739.87	7,755.06	75.40	71.47	-128.43	-4,090.66	809.58	1,544.13	1,422.30	121.84	12.674		
10,800.00	6,797.59	11,814.57	7,758.28	77.18	72.74	-128.42	-4,165.24	806.96	1,551.91	1,427.55	124.36	12.480		
10,900.00	6,797.49	11,878.32	7,762.02	78.96	73.82	-128.41	-4,228.87	806.03	1,562.07	1,435.36	126.72	12.327		
11,000.00	6,797.40	11,957.00	7,766.04	80.74	75.14	-128.33	-4,307.44	807.10	1,574.02	1,444.65	129.37	12.167		
11,100.00	6,797.31	12,047.98	7,768.42	82.52	76.69	-128.11	-4,398.29	811.16	1,586.89	1,454.49	132.40	11.985		
11,200.00	6,797.22	12,195.16	7,766.61	84.30	78.25	-127.55	-4,545.20	819.62	1,598.50	1,461.79	136.72	11.692		
11,300.00	6,797.13	12,356.68	7,760.44	86.08	82.08	-126.91	-4,706.49	825.35	1,606.99	1,465.59	141.41	11.364		
11,400.00	6,797.04	12,456.00	7,754.88	87.86	82.83	-126.53	-4,805.66	826.16	1,612.24	1,468.30	143.94	11.201		
11,445.37	6,797.00	12,456.00	7,754.88	88.67	82.83	-126.53	-4,805.66	826.16	1,615.77	1,471.16	144.62	11.173 SF		

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft:1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 8H - OH - Plan #1													Offset Site Error:
Survey Program: 0-LEAM MWD-ADJ													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis 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	Warning
0.00	0.00	0.00	22.00	0.00	0.00	89.65	15.03	2,488.08	2,488.22				
100.00	100.00	78.00	100.00	0.08	0.06	89.65	15.03	2,488.08	2,488.13	2,487.98	0.15	N/A	
200.00	200.00	178.00	200.00	0.31	0.28	89.65	15.03	2,488.08	2,488.13	2,487.56	0.57	4,392.794	
300.00	300.00	278.00	300.00	0.53	0.48	89.65	15.03	2,488.08	2,488.13	2,487.11	1.02	2,449.081	
400.00	400.00	378.00	400.00	0.76	0.71	89.65	15.03	2,488.08	2,488.13	2,486.66	1.47	1,697.829	
500.00	500.00	478.00	500.00	0.98	0.93	89.65	15.03	2,488.08	2,488.13	2,486.21	1.92	1,299.278	
600.00	600.00	578.00	600.00	1.21	1.16	89.65	15.03	2,488.08	2,488.13	2,485.76	2.36	1,052.267	
700.00	700.00	678.00	700.00	1.43	1.38	89.65	15.03	2,488.08	2,488.13	2,485.31	2.81	884.173	
800.00	800.00	778.00	800.00	1.66	1.61	89.65	15.03	2,488.08	2,488.13	2,484.86	3.26	762.386	
900.00	900.00	878.00	900.00	1.88	1.83	89.65	15.03	2,488.08	2,488.13	2,484.41	3.71	670.088	
1,000.00	1,000.00	978.00	1,000.00	2.11	2.06	89.65	15.03	2,488.08	2,488.13	2,483.96	4.16	597.724	
1,100.00	1,100.00	1,078.00	1,100.00	2.33	2.28	89.65	15.03	2,488.08	2,488.13	2,483.51	4.61	539.466	
1,200.00	1,200.00	1,178.00	1,200.00	2.56	2.51	89.65	15.03	2,488.08	2,488.13	2,483.06	5.06	491.556	
1,300.00	1,300.00	1,278.00	1,300.00	2.78	2.73	89.65	15.03	2,488.08	2,488.13	2,482.61	5.51	451.462	
1,400.00	1,400.00	1,378.00	1,400.00	3.01	2.96	89.65	15.03	2,488.08	2,488.13	2,482.16	5.96	417.415	
1,500.00	1,500.00	1,478.00	1,500.00	3.23	3.18	89.65	15.03	2,488.08	2,488.13	2,481.72	6.41	388.143	
1,600.00	1,600.00	1,578.00	1,600.00	3.45	3.41	89.65	15.03	2,488.08	2,488.13	2,481.27	6.86	362.708	
1,700.00	1,700.00	1,678.00	1,700.00	3.68	3.63	89.65	15.03	2,488.08	2,488.13	2,480.82	7.31	340.401	
1,800.00	1,800.00	1,778.00	1,800.00	3.90	3.85	89.65	15.03	2,488.08	2,488.13	2,480.37	7.76	320.679	
1,900.00	1,900.00	1,878.00	1,900.00	4.13	4.08	89.65	15.03	2,488.08	2,488.13	2,479.92	8.21	303.117	
2,000.00	2,000.00	1,978.00	2,000.00	4.35	4.30	89.65	15.03	2,488.08	2,488.13	2,479.47	8.66	287.379	
2,100.00	2,100.00	2,078.00	2,100.00	4.58	4.53	89.65	15.03	2,488.08	2,488.13	2,479.02	9.11	273.195	
2,200.00	2,200.00	2,178.00	2,200.00	4.80	4.75	89.65	15.03	2,488.08	2,488.13	2,478.57	9.56	260.344	
2,300.00	2,300.00	2,278.00	2,300.00	5.03	4.98	89.65	15.03	2,488.08	2,488.13	2,478.12	10.01	248.649	
2,400.00	2,400.00	2,378.00	2,400.00	5.25	5.20	89.65	15.03	2,488.08	2,488.13	2,477.67	10.46	237.959	
2,500.00	2,500.00	2,478.00	2,500.00	5.48	5.43	89.65	15.03	2,488.08	2,488.13	2,477.22	10.91	228.150	
2,600.00	2,600.00	2,578.00	2,600.00	5.70	5.65	89.65	15.03	2,488.08	2,488.13	2,476.77	11.36	219.118	
2,700.00	2,700.00	2,678.00	2,700.00	5.93	5.88	89.65	15.03	2,488.08	2,488.13	2,476.32	11.80	210.774	
2,800.00	2,800.00	2,778.00	2,800.00	6.15	6.10	89.65	15.03	2,488.08	2,488.13	2,475.87	12.25	203.042	
2,900.00	2,900.00	2,878.00	2,900.00	6.38	6.33	89.65	15.03	2,488.08	2,488.13	2,475.42	12.70	195.857	
3,000.00	3,000.00	2,978.00	3,000.00	6.60	6.55	89.65	15.03	2,488.08	2,488.13	2,474.97	13.15	189.163	
3,100.00	3,100.00	3,078.00	3,100.00	6.83	6.78	89.65	15.03	2,488.08	2,488.13	2,474.52	13.60	182.912	
3,200.00	3,200.00	3,178.00	3,200.00	7.05	7.00	89.65	15.03	2,488.08	2,488.13	2,474.07	14.05	177.061	
3,300.00	3,300.00	3,278.00	3,300.00	7.28	7.23	89.65	15.03	2,488.08	2,488.13	2,473.62	14.50	171.572	
3,400.00	3,400.00	3,378.00	3,400.00	7.50	7.45	89.65	15.03	2,488.08	2,488.13	2,473.17	14.95	166.414	
3,500.00	3,500.00	3,478.00	3,500.00	7.73	7.68	89.65	15.03	2,488.08	2,488.13	2,472.72	15.40	161.556	
3,600.00	3,600.00	3,578.00	3,600.00	7.95	7.90	89.65	15.03	2,488.08	2,488.13	2,472.27	15.85	156.975	
3,700.00	3,700.00	3,678.00	3,700.00	8.17	8.13	89.65	15.03	2,488.08	2,488.13	2,471.83	16.30	152.645	
3,800.00	3,800.00	3,778.00	3,800.00	8.40	8.35	89.65	15.03	2,488.08	2,488.13	2,471.38	16.75	148.549	
3,900.00	3,900.00	3,878.00	3,900.00	8.62	8.57	89.65	15.03	2,488.08	2,488.13	2,470.93	17.20	144.666	
4,000.00	4,000.00	3,978.00	4,000.00	8.85	8.80	89.65	15.03	2,488.08	2,488.13	2,470.48	17.65	140.981	
4,100.00	4,100.00	4,078.00	4,100.00	9.07	9.02	89.65	15.03	2,488.08	2,488.13	2,470.03	18.10	137.479	
4,200.00	4,200.00	4,178.00	4,200.00	9.30	9.25	89.65	15.03	2,488.08	2,488.13	2,469.58	18.55	134.147	
4,300.00	4,300.00	4,278.00	4,300.00	9.52	9.47	89.65	15.03	2,488.08	2,488.13	2,469.13	19.00	130.973	
4,400.00	4,400.00	4,378.00	4,400.00	9.75	9.70	89.65	15.03	2,488.08	2,488.13	2,468.68	19.45	127.946	
4,500.00	4,500.00	4,478.00	4,500.00	9.97	9.92	89.65	15.03	2,488.08	2,488.13	2,468.23	19.90	125.055	
4,600.00	4,600.00	4,578.00	4,600.00	10.20	10.15	89.65	15.03	2,488.08	2,488.13	2,467.78	20.35	122.292	
4,700.00	4,700.00	4,678.00	4,700.00	10.42	10.37	89.65	15.03	2,488.08	2,488.13	2,467.33	20.80	119.648	
4,800.00	4,800.00	4,778.00	4,800.00	10.65	10.60	89.65	15.03	2,488.08	2,488.13	2,466.88	21.24	117.116	
4,900.00	4,900.00	4,878.00	4,900.00	10.87	10.82	89.65	15.03	2,488.08	2,488.13	2,466.43	21.69	114.690	
5,000.00	5,000.00	4,978.00	5,000.00	11.10	11.05	89.65	15.03	2,488.08	2,488.13	2,465.98	22.14	112.361	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well- 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 8H - OH - Plan #1														Offset Site Error:	0.00 usft
Survey Program: O-LEAM.MWD-ADJ														Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		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	5,100.00	5,078.00	5,100.00	11.32	11.27	89.65	15.03	2,488.08	2,488.13	2,465.53	22.59	110.126			
5,200.00	5,200.00	5,178.00	5,200.00	11.55	11.50	89.65	15.03	2,488.08	2,488.13	2,465.08	23.04	107.977			
5,300.00	5,300.00	5,278.00	5,300.00	11.77	11.72	89.65	15.03	2,488.08	2,488.13	2,464.63	23.49	105.911			
5,400.00	5,400.00	5,378.00	5,400.00	12.00	11.95	89.65	15.03	2,488.08	2,488.13	2,464.18	23.94	103.923			
5,500.00	5,500.00	5,478.00	5,500.00	12.22	12.17	89.65	15.03	2,488.08	2,488.13	2,463.73	24.39	102.007			
5,600.00	5,600.00	5,578.00	5,600.00	12.45	12.40	89.65	15.03	2,488.08	2,488.13	2,463.28	24.84	100.161			
5,700.00	5,700.00	5,678.00	5,700.00	12.67	12.62	89.65	15.03	2,488.08	2,488.13	2,462.83	25.29	98.381			
5,800.00	5,800.00	5,778.00	5,800.00	12.89	12.85	89.65	15.03	2,488.08	2,488.13	2,462.39	25.74	96.663			
5,900.00	5,900.00	5,878.00	5,900.00	13.12	13.07	89.65	15.03	2,488.08	2,488.13	2,461.94	26.19	95.004			
6,000.00	6,000.00	5,978.00	6,000.00	13.34	13.29	89.65	15.03	2,488.08	2,488.13	2,461.49	26.64	93.401			
6,100.00	6,100.00	6,078.00	6,100.00	13.57	13.52	89.65	15.03	2,488.08	2,488.13	2,461.04	27.09	91.851			
6,200.00	6,200.00	6,178.00	6,200.00	13.79	13.74	89.65	15.03	2,488.08	2,488.13	2,460.59	27.54	90.351			
6,300.00	6,300.00	6,278.00	6,300.00	14.02	13.97	89.65	15.03	2,488.08	2,488.13	2,460.14	27.99	88.900			
6,323.50	6,323.50	6,301.50	6,323.50	14.07	14.02	89.65	15.03	2,488.08	2,488.13	2,460.03	28.09	88.566 CC			
6,325.00	6,325.00	6,303.00	6,325.00	14.07	14.03	-95.97	15.03	2,488.08	2,488.13	2,460.03	28.10	88.546			
6,350.00	6,349.99	6,327.99	6,349.99	14.12	14.08	-95.97	15.03	2,488.08	2,488.20	2,460.01	28.20	88.244 ES			
6,375.00	6,374.90	6,352.90	6,374.90	14.16	14.14	-95.99	15.03	2,488.08	2,488.42	2,460.12	28.29	87.954			
6,400.00	6,399.67	6,377.67	6,399.67	14.20	14.19	-96.03	15.03	2,488.08	2,488.77	2,460.38	28.39	87.675			
6,425.00	6,424.24	6,402.24	6,424.24	14.25	14.25	-96.07	15.03	2,488.08	2,489.27	2,460.79	28.48	87.407			
6,450.00	6,448.53	6,426.53	6,448.53	14.29	14.30	-96.13	15.03	2,488.08	2,489.91	2,461.34	28.57	87.150			
6,475.00	6,472.47	6,450.47	6,472.47	14.34	14.36	-96.19	15.03	2,488.08	2,490.72	2,462.06	28.66	86.904			
6,500.00	6,496.01	6,474.01	6,496.01	14.38	14.41	-96.25	15.03	2,488.08	2,491.68	2,462.93	28.75	86.667			
6,525.00	6,519.07	6,497.07	6,519.07	14.42	14.46	-96.32	15.03	2,488.08	2,492.83	2,463.99	28.84	86.438			
6,550.00	6,541.60	6,519.60	6,541.60	14.47	14.51	-96.39	15.03	2,488.08	2,494.16	2,465.23	28.93	86.217			
6,575.00	6,563.53	6,541.53	6,563.53	14.51	14.56	-96.44	15.03	2,488.08	2,495.68	2,466.66	29.02	86.001			
6,600.00	6,584.80	6,562.80	6,584.80	14.55	14.61	-96.49	15.03	2,488.08	2,497.42	2,468.31	29.11	85.788			
6,625.00	6,605.36	6,583.36	6,605.36	14.60	14.66	-96.53	15.03	2,488.08	2,499.37	2,470.17	29.21	85.578			
6,650.00	6,625.14	6,603.14	6,625.14	14.66	14.70	-96.54	15.03	2,488.08	2,501.56	2,472.26	29.30	85.367			
6,675.00	6,644.10	6,622.10	6,644.10	14.72	14.74	-96.53	15.03	2,488.08	2,504.00	2,474.59	29.41	85.153			
6,700.00	6,662.18	6,640.18	6,662.18	14.80	14.78	-96.49	15.03	2,488.08	2,506.69	2,477.18	29.51	84.934			
6,725.00	6,679.33	6,657.33	6,679.33	14.88	14.82	-96.42	15.03	2,488.08	2,509.66	2,480.03	29.63	84.708			
6,750.00	6,695.50	6,673.50	6,695.50	14.97	14.86	-96.31	15.03	2,488.08	2,512.90	2,483.15	29.75	84.471			
6,775.00	6,710.66	6,688.66	6,710.66	15.07	14.89	-96.16	15.03	2,488.08	2,516.43	2,486.55	29.88	84.224			
6,800.00	6,724.75	6,702.75	6,724.75	15.17	14.92	-95.97	15.03	2,488.08	2,520.26	2,490.24	30.02	83.963			
6,825.00	6,737.74	6,715.74	6,737.74	15.29	14.95	-95.72	15.03	2,488.08	2,524.39	2,494.22	30.16	83.688			
6,850.00	6,749.60	6,727.60	6,749.60	15.42	14.98	-95.42	15.03	2,488.08	2,528.83	2,498.50	30.32	83.397			
6,875.00	6,760.29	6,738.29	6,760.29	15.56	15.00	-95.07	15.03	2,488.08	2,533.58	2,503.09	30.49	83.092			
6,900.00	6,769.79	6,747.79	6,769.79	15.71	15.03	-94.65	15.03	2,488.08	2,538.63	2,507.97	30.67	82.774			
6,925.00	6,778.06	6,756.06	6,778.06	15.87	15.04	-94.17	15.03	2,488.08	2,544.00	2,513.14	30.86	82.442			
6,950.00	6,785.08	6,763.08	6,785.08	16.04	15.06	-93.63	15.03	2,488.08	2,549.67	2,518.62	31.06	82.101			
6,975.00	6,790.84	6,768.84	6,790.84	16.22	15.07	-93.02	15.03	2,488.08	2,555.64	2,524.38	31.26	81.753			
7,000.00	6,795.32	6,773.32	6,795.32	16.41	15.08	-92.35	15.03	2,488.08	2,561.89	2,530.42	31.47	81.402			
7,025.00	6,798.50	6,776.50	6,798.50	16.61	15.09	-91.61	15.03	2,488.08	2,568.42	2,536.73	31.69	81.052			
7,050.00	6,800.39	6,778.39	6,800.39	16.82	15.09	-90.81	15.03	2,488.08	2,575.20	2,543.30	31.91	80.708			
7,073.93	6,800.96	6,778.96	6,800.96	17.02	15.10	-89.98	15.03	2,488.08	2,581.93	2,549.81	32.12	80.368			
7,100.00	6,800.94	6,778.94	6,800.94	17.26	15.10	-89.98	15.03	2,488.08	2,589.48	2,557.13	32.35	80.039			
7,200.00	6,800.85	6,778.85	6,800.85	18.24	15.09	-89.98	15.03	2,488.08	2,620.67	2,587.34	33.34	78.611			
7,300.00	6,800.76	6,778.76	6,800.76	19.35	15.09	-89.98	15.03	2,488.08	2,655.27	2,620.83	34.44	77.095			
7,400.00	6,800.67	6,778.67	6,800.67	20.55	15.09	-89.98	15.03	2,488.08	2,693.13	2,657.49	35.65	75.552			
7,500.00	6,800.58	6,778.58	6,800.58	21.84	15.09	-89.98	15.03	2,488.08	2,734.13	2,697.20	36.93	74.027			

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 8H - OH - Plan #1															Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD-ADJ															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)						
7,600.00	6,800.49	8,510.50	7,738.41	23.20	24.69	-110.00	-992.30	2,491.17	2,754.12	2,708.48	45.64	60.346				
7,700.00	6,800.40	8,609.99	7,738.30	24.61	26.05	-109.93	-1,091.79	2,491.47	2,763.61	2,715.34	48.26	57.259				
7,800.00	6,800.31	8,709.48	7,738.18	26.08	27.46	-109.86	-1,191.27	2,491.78	2,773.10	2,722.11	50.99	54.383				
7,900.00	6,800.22	8,808.96	7,738.06	27.59	28.92	-109.78	-1,290.76	2,492.08	2,782.60	2,728.79	53.80	51.717				
8,000.00	6,800.12	8,908.45	7,737.95	29.13	30.41	-109.71	-1,390.25	2,492.39	2,792.10	2,735.41	56.69	49.252				
8,100.00	6,800.03	9,007.94	7,737.83	30.70	31.94	-109.64	-1,489.74	2,492.69	2,801.60	2,741.96	59.64	46.976				
8,200.00	6,799.94	9,107.43	7,737.72	32.29	33.50	-109.57	-1,589.23	2,492.99	2,811.11	2,748.47	62.64	44.875				
8,300.00	6,799.85	9,206.92	7,737.60	33.91	35.09	-109.51	-1,688.72	2,493.30	2,820.63	2,754.93	65.69	42.936				
8,400.00	6,799.76	9,306.41	7,737.49	35.55	36.69	-109.44	-1,788.20	2,493.60	2,830.14	2,761.36	68.79	41.144				
8,500.00	6,799.67	9,405.90	7,737.37	37.20	38.32	-109.37	-1,887.69	2,493.91	2,839.66	2,767.75	71.92	39.486				
8,600.00	6,799.58	9,505.39	7,737.25	38.86	39.96	-109.30	-1,987.18	2,494.21	2,849.19	2,774.11	75.08	37.950				
8,700.00	6,799.49	9,604.88	7,737.14	40.54	41.62	-109.23	-2,086.67	2,494.52	2,858.72	2,780.45	78.27	36.525				
8,800.00	6,799.40	9,704.36	7,737.02	42.23	43.29	-109.17	-2,186.16	2,494.82	2,868.25	2,786.77	81.48	35.201				
8,900.00	6,799.31	9,803.85	7,736.91	43.93	44.97	-109.10	-2,285.65	2,495.13	2,877.79	2,793.07	84.72	33.968				
9,000.00	6,799.22	9,903.34	7,736.79	45.64	46.67	-109.03	-2,385.13	2,495.43	2,887.33	2,799.35	87.98	32.818				
9,100.00	6,799.13	10,002.83	7,736.67	47.35	48.37	-108.97	-2,484.62	2,495.74	2,896.87	2,805.62	91.26	31.744				
9,200.00	6,799.04	10,102.32	7,736.56	49.08	50.08	-108.90	-2,584.11	2,496.04	2,906.42	2,811.87	94.55	30.739				
9,300.00	6,798.95	10,201.81	7,736.44	50.80	51.80	-108.84	-2,683.60	2,496.35	2,915.97	2,818.11	97.86	29.797				
9,400.00	6,798.86	10,301.30	7,736.33	52.54	53.53	-108.77	-2,783.09	2,496.65	2,925.53	2,824.35	101.18	28.913				
9,500.00	6,798.76	10,400.79	7,736.21	54.28	55.26	-108.71	-2,882.58	2,496.96	2,935.09	2,830.57	104.52	28.082				
9,600.00	6,798.67	10,500.27	7,736.10	56.02	56.99	-108.65	-2,982.06	2,497.26	2,944.65	2,836.78	107.87	27.299				
9,700.00	6,798.58	10,599.76	7,735.98	57.77	58.74	-108.58	-3,081.55	2,497.57	2,954.22	2,842.99	111.22	26.561				
9,800.00	6,798.49	10,699.25	7,735.86	59.52	60.48	-108.52	-3,181.04	2,497.87	2,963.79	2,849.19	114.59	25.864				
9,900.00	6,798.40	10,798.74	7,735.75	61.27	62.24	-108.46	-3,280.53	2,498.18	2,973.36	2,855.39	117.97	25.204				
10,000.00	6,798.31	10,898.23	7,735.63	63.03	63.99	-108.40	-3,380.02	2,498.48	2,982.94	2,861.58	121.36	24.580				
10,100.00	6,798.22	10,997.72	7,735.52	64.79	65.75	-108.34	-3,479.51	2,498.79	2,992.52	2,867.77	124.75	23.988				
10,200.00	6,798.13	11,097.21	7,735.40	66.55	67.51	-108.27	-3,578.99	2,499.09	3,002.10	2,873.95	128.15	23.426				
10,300.00	6,798.04	11,196.70	7,735.28	68.32	69.28	-108.21	-3,678.48	2,499.40	3,011.69	2,880.13	131.56	22.892				
10,400.00	6,797.95	11,296.19	7,735.17	70.09	71.05	-108.15	-3,777.97	2,499.70	3,021.28	2,886.30	134.98	22.383				
10,500.00	6,797.86	11,395.67	7,735.05	71.86	72.82	-108.09	-3,877.46	2,500.00	3,030.87	2,892.47	138.40	21.899				
10,600.00	6,797.77	11,495.16	7,734.94	73.63	74.59	-108.03	-3,976.95	2,500.31	3,040.47	2,898.64	141.83	21.438				
10,700.00	6,797.68	11,594.65	7,734.82	75.40	76.37	-107.97	-4,076.44	2,500.61	3,050.07	2,904.81	145.26	20.997				
10,800.00	6,797.59	11,694.14	7,734.71	77.18	78.15	-107.92	-4,175.92	2,500.92	3,059.67	2,910.97	148.70	20.576				
10,900.00	6,797.49	11,793.63	7,734.59	78.96	79.93	-107.86	-4,275.41	2,501.22	3,069.28	2,917.14	152.14	20.174				
11,000.00	6,797.40	11,893.12	7,734.47	80.74	81.71	-107.80	-4,374.90	2,501.53	3,078.89	2,923.30	155.59	19.788				
11,100.00	6,797.31	11,992.61	7,734.36	82.52	83.49	-107.74	-4,474.39	2,501.83	3,088.50	2,929.46	159.05	19.419				
11,200.00	6,797.22	12,092.10	7,734.24	84.30	85.28	-107.68	-4,573.88	2,502.14	3,098.12	2,935.62	162.50	19.065				
11,300.00	6,797.13	12,191.59	7,734.13	86.08	87.06	-107.63	-4,673.37	2,502.44	3,107.74	2,941.77	165.96	18.725				
11,400.00	6,797.04	12,291.07	7,734.01	87.86	88.85	-107.57	-4,772.85	2,502.75	3,117.36	2,947.93	169.43	18.399				
11,445.37	6,797.00	12,299.56	7,734.00	88.67	89.01	-107.57	-4,781.34	2,502.77	3,121.94	2,951.58	170.36	18.326 SF				

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00'usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00'usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000:1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 9H - OH - Plan #1 Draft 1														Offset Site Error:
Survey Program: D-LEAM MWD-ADJ														Offset Well Error:
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		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	42.00	0.00	0.00	91.86	-134.42	4,138.26	4,140.66					
100.00	100.00	58.00	100.00	0.08	0.05	91.86	-134.42	4,138.26	4,140.44	4,140.31	0.13	N/A		
200.00	200.00	158.00	200.00	0.31	0.21	91.86	-134.42	4,138.26	4,140.44	4,139.92	0.52	7,940.136		
300.00	300.00	258.00	300.00	0.53	0.44	91.86	-134.42	4,138.26	4,140.44	4,139.47	0.97	4,264.148		
400.00	400.00	358.00	400.00	0.76	0.66	91.86	-134.42	4,138.26	4,140.44	4,139.02	1.42	2,914.734		
500.00	500.00	458.00	500.00	0.98	0.89	91.86	-134.42	4,138.26	4,140.44	4,138.57	1.87	2,214.077		
600.00	600.00	558.00	600.00	1.21	1.11	91.86	-134.42	4,138.26	4,140.44	4,138.12	2.32	1,784.892		
700.00	700.00	658.00	700.00	1.43	1.34	91.86	-134.42	4,138.26	4,140.44	4,137.67	2.77	1,495.221		
800.00	800.00	758.00	800.00	1.66	1.56	91.86	-134.42	4,138.26	4,140.44	4,137.22	3.22	1,286.391		
900.00	900.00	858.00	900.00	1.88	1.79	91.86	-134.42	4,138.26	4,140.44	4,136.77	3.67	1,128.745		
1,000.00	1,000.00	958.00	1,000.00	2.11	2.01	91.86	-134.42	4,138.26	4,140.44	4,136.32	4.12	1,005.520		
1,100.00	1,100.00	1,058.00	1,100.00	2.33	2.24	91.86	-134.42	4,138.26	4,140.44	4,135.88	4.57	906.551		
1,200.00	1,200.00	1,158.00	1,200.00	2.56	2.46	91.86	-134.42	4,138.26	4,140.44	4,135.43	5.02	825.319		
1,300.00	1,300.00	1,258.00	1,300.00	2.78	2.69	91.86	-134.42	4,138.26	4,140.44	4,134.98	5.47	757.447		
1,400.00	1,400.00	1,358.00	1,400.00	3.01	2.91	91.86	-134.42	4,138.26	4,140.44	4,134.53	5.92	699.891		
1,500.00	1,500.00	1,458.00	1,500.00	3.23	3.14	91.86	-134.42	4,138.26	4,140.44	4,134.08	6.37	650.463		
1,600.00	1,600.00	1,558.00	1,600.00	3.45	3.36	91.86	-134.42	4,138.26	4,140.44	4,133.63	6.81	607.557		
1,700.00	1,700.00	1,658.00	1,700.00	3.68	3.59	91.86	-134.42	4,138.26	4,140.44	4,133.18	7.26	569.960		
1,800.00	1,800.00	1,758.00	1,800.00	3.90	3.81	91.86	-134.42	4,138.26	4,140.44	4,132.73	7.71	536.746		
1,900.00	1,900.00	1,858.00	1,900.00	4.13	4.03	91.86	-134.42	4,138.26	4,140.44	4,132.28	8.16	507.189		
2,000.00	2,000.00	1,958.00	2,000.00	4.35	4.26	91.86	-134.42	4,138.26	4,140.44	4,131.83	8.61	480.718		
2,100.00	2,100.00	2,058.00	2,100.00	4.58	4.48	91.86	-134.42	4,138.26	4,140.44	4,131.38	9.06	456.873		
2,200.00	2,200.00	2,158.00	2,200.00	4.80	4.71	91.86	-134.42	4,138.26	4,140.44	4,130.93	9.51	435.282		
2,300.00	2,300.00	2,258.00	2,300.00	5.03	4.93	91.86	-134.42	4,138.26	4,140.44	4,130.48	9.96	415.639		
2,400.00	2,400.00	2,358.00	2,400.00	5.25	5.16	91.86	-134.42	4,138.26	4,140.44	4,130.03	10.41	397.693		
2,500.00	2,500.00	2,458.00	2,500.00	5.48	5.38	91.86	-134.42	4,138.26	4,140.44	4,129.58	10.86	381.232		
2,600.00	2,600.00	2,558.00	2,600.00	5.70	5.61	91.86	-134.42	4,138.26	4,140.44	4,129.13	11.31	366.080		
2,700.00	2,700.00	2,658.00	2,700.00	5.93	5.83	91.86	-134.42	4,138.26	4,140.44	4,128.68	11.76	352.086		
2,800.00	2,800.00	2,758.00	2,800.00	6.15	6.06	91.86	-134.42	4,138.26	4,140.44	4,128.23	12.21	339.122		
2,900.00	2,900.00	2,858.00	2,900.00	6.38	6.28	91.86	-134.42	4,138.26	4,140.44	4,127.78	12.66	327.080		
3,000.00	3,000.00	2,958.00	3,000.00	6.60	6.51	91.86	-134.42	4,138.26	4,140.44	4,127.33	13.11	315.863		
3,100.00	3,100.00	3,058.00	3,100.00	6.83	6.73	91.86	-134.42	4,138.26	4,140.44	4,126.88	13.56	305.390		
3,200.00	3,200.00	3,158.00	3,200.00	7.05	6.96	91.86	-134.42	4,138.26	4,140.44	4,126.44	14.01	295.589		
3,300.00	3,300.00	3,258.00	3,300.00	7.28	7.18	91.86	-134.42	4,138.26	4,140.44	4,125.99	14.46	286.398		
3,400.00	3,400.00	3,358.00	3,400.00	7.50	7.41	91.86	-134.42	4,138.26	4,140.44	4,125.54	14.91	277.761		
3,500.00	3,500.00	3,458.00	3,500.00	7.73	7.63	91.86	-134.42	4,138.26	4,140.44	4,125.09	15.36	269.630		
3,600.00	3,600.00	3,558.00	3,600.00	7.95	7.86	91.86	-134.42	4,138.26	4,140.44	4,124.64	15.81	261.961		
3,700.00	3,700.00	3,658.00	3,700.00	8.17	8.08	91.86	-134.42	4,138.26	4,140.44	4,124.19	16.26	254.717		
3,800.00	3,800.00	3,758.00	3,800.00	8.40	8.31	91.86	-134.42	4,138.26	4,140.44	4,123.74	16.70	247.862		
3,900.00	3,900.00	3,858.00	3,900.00	8.62	8.53	91.86	-134.42	4,138.26	4,140.44	4,123.29	17.15	241.367		
4,000.00	4,000.00	3,958.00	4,000.00	8.85	8.75	91.86	-134.42	4,138.26	4,140.44	4,122.84	17.60	235.203		
4,100.00	4,100.00	4,058.00	4,100.00	9.07	8.98	91.86	-134.42	4,138.26	4,140.44	4,122.39	18.05	229.347		
4,200.00	4,200.00	4,158.00	4,200.00	9.30	9.20	91.86	-134.42	4,138.26	4,140.44	4,121.94	18.50	223.775		
4,300.00	4,300.00	4,258.00	4,300.00	9.52	9.43	91.86	-134.42	4,138.26	4,140.44	4,121.49	18.95	218.467		
4,400.00	4,400.00	4,358.00	4,400.00	9.75	9.65	91.86	-134.42	4,138.26	4,140.44	4,121.04	19.40	213.405		
4,500.00	4,500.00	4,458.00	4,500.00	9.97	9.88	91.86	-134.42	4,138.26	4,140.44	4,120.59	19.85	208.572		
4,600.00	4,600.00	4,558.00	4,600.00	10.20	10.10	91.86	-134.42	4,138.26	4,140.44	4,120.14	20.30	203.954		
4,700.00	4,700.00	4,658.00	4,700.00	10.42	10.33	91.86	-134.42	4,138.26	4,140.44	4,119.69	20.75	199.536		
4,800.00	4,800.00	4,758.00	4,800.00	10.65	10.55	91.86	-134.42	4,138.26	4,140.44	4,119.24	21.20	195.305		
4,900.00	4,900.00	4,858.00	4,900.00	10.87	10.78	91.86	-134.42	4,138.26	4,140.44	4,118.79	21.65	191.249		
5,000.00	5,000.00	4,958.00	5,000.00	11.10	11.00	91.86	-134.42	4,138.26	4,140.44	4,118.34	22.10	187.359		

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD=83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw "13" State - 9H - OH - Plan #1 Draft 1														Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD-ADJ														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Semi-Major Axis 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	Warning		
5,100.00	5,100.00	5,058.00	5,100.00	11.32	11.23	91.86	-134.42	4,138.26	4,140.44	4,117.89	22.55	183.624			
5,200.00	5,200.00	5,158.00	5,200.00	11.55	11.45	91.86	-134.42	4,138.26	4,140.44	4,117.44	23.00	180.034			
5,300.00	5,300.00	5,258.00	5,300.00	11.77	11.68	91.86	-134.42	4,138.26	4,140.44	4,117.00	23.45	176.583			
5,400.00	5,400.00	5,358.00	5,400.00	12.00	11.90	91.86	-134.42	4,138.26	4,140.44	4,116.55	23.90	173.261			
5,500.00	5,500.00	5,458.00	5,500.00	12.22	12.13	91.86	-134.42	4,138.26	4,140.44	4,116.10	24.35	170.062			
5,600.00	5,600.00	5,558.00	5,600.00	12.45	12.35	91.86	-134.42	4,138.26	4,140.44	4,115.65	24.80	166.979			
5,700.00	5,700.00	5,658.00	5,700.00	12.67	12.58	91.86	-134.42	4,138.26	4,140.44	4,115.20	25.25	164.006			
5,800.00	5,800.00	5,758.00	5,800.00	12.89	12.80	91.86	-134.42	4,138.26	4,140.44	4,114.75	25.70	161.136			
5,900.00	5,900.00	5,858.00	5,900.00	13.12	13.03	91.86	-134.42	4,138.26	4,140.44	4,114.30	26.14	158.366			
6,000.00	6,000.00	5,958.00	6,000.00	13.34	13.25	91.86	-134.42	4,138.26	4,140.44	4,113.85	26.59	155.689			
6,100.00	6,100.00	6,058.00	6,100.00	13.57	13.47	91.86	-134.42	4,138.26	4,140.44	4,113.40	27.04	153.101			
6,200.00	6,200.00	6,158.00	6,200.00	13.79	13.70	91.86	-134.42	4,138.26	4,140.44	4,112.95	27.49	150.598			
6,300.00	6,300.00	6,258.00	6,300.00	14.02	13.92	91.86	-134.42	4,138.26	4,140.44	4,112.50	27.94	148.175			
6,323.50	6,323.50	6,281.50	6,323.50	14.07	13.98	91.86	-134.42	4,138.26	4,140.44	4,112.39	28.05	147.617 CC			
6,325.00	6,325.00	6,283.00	6,325.00	14.07	13.98	-93.76	-134.42	4,138.26	4,140.44	4,112.39	28.05	147.584			
6,350.00	6,349.99	6,307.99	6,349.99	14.12	14.04	-93.76	-134.42	4,138.26	4,140.49	4,112.34	28.15	147.077 ES			
6,375.00	6,374.90	6,332.90	6,374.90	14.16	14.09	-93.78	-134.42	4,138.26	4,140.63	4,112.38	28.25	146.582			
6,400.00	6,399.67	6,357.67	6,399.67	14.20	14.15	-93.79	-134.42	4,138.26	4,140.85	4,112.51	28.34	146.099			
6,425.00	6,424.24	6,382.24	6,424.24	14.25	14.20	-93.82	-134.42	4,138.26	4,141.16	4,112.72	28.44	145.628			
6,450.00	6,448.53	6,406.53	6,448.53	14.29	14.26	-93.85	-134.42	4,138.26	4,141.57	4,113.04	28.53	145.169			
6,475.00	6,472.47	6,430.47	6,472.47	14.34	14.31	-93.89	-134.42	4,138.26	4,142.07	4,113.45	28.62	144.719			
6,500.00	6,496.01	6,454.01	6,496.01	14.38	14.36	-93.92	-134.42	4,138.26	4,142.68	4,113.97	28.71	144.278			
6,525.00	6,519.07	6,477.07	6,519.07	14.42	14.42	-93.96	-134.42	4,138.26	4,143.40	4,114.60	28.80	143.843			
6,550.00	6,541.60	6,499.60	6,541.60	14.47	14.47	-93.99	-134.42	4,138.26	4,144.23	4,115.34	28.90	143.412			
6,575.00	6,563.53	6,521.53	6,563.53	14.51	14.52	-94.02	-134.42	4,138.26	4,145.19	4,116.20	28.99	142.982			
6,600.00	6,584.80	6,542.80	6,584.80	14.55	14.56	-94.05	-134.42	4,138.26	4,146.27	4,117.19	29.09	142.549			
6,625.00	6,605.36	6,563.36	6,605.36	14.60	14.61	-94.06	-134.42	4,138.26	4,147.50	4,118.31	29.18	142.112			
6,650.00	6,625.14	6,583.14	6,625.14	14.66	14.66	-94.07	-134.42	4,138.26	4,148.86	4,119.58	29.29	141.665			
6,675.00	6,644.10	6,602.10	6,644.10	14.72	14.70	-94.05	-134.42	4,138.26	4,150.38	4,120.99	29.39	141.206			
6,700.00	6,662.18	6,620.18	6,662.18	14.80	14.74	-94.02	-134.42	4,138.26	4,152.06	4,122.56	29.50	140.732			
6,725.00	6,679.33	6,637.33	6,679.33	14.88	14.78	-93.98	-134.42	4,138.26	4,153.91	4,124.29	29.62	140.239			
6,750.00	6,695.50	6,653.50	6,695.50	14.97	14.81	-93.90	-134.42	4,138.26	4,155.93	4,126.18	29.74	139.724			
6,775.00	6,710.66	6,668.66	6,710.66	15.07	14.85	-93.81	-134.42	4,138.26	4,158.13	4,128.25	29.87	139.185			
6,800.00	6,724.75	6,682.75	6,724.75	15.17	14.88	-93.68	-134.42	4,138.26	4,160.51	4,130.49	30.01	138.620			
6,825.00	6,737.74	6,695.74	6,737.74	15.29	14.91	-93.52	-134.42	4,138.26	4,163.08	4,132.92	30.16	138.027			
6,850.00	6,749.60	6,707.60	6,749.60	15.42	14.93	-93.33	-134.42	4,138.26	4,165.84	4,135.52	30.32	137.406			
6,875.00	6,760.29	6,718.29	6,760.29	15.56	14.96	-93.11	-134.42	4,138.26	4,168.79	4,138.31	30.48	136.757			
6,900.00	6,769.79	6,727.79	6,769.79	15.71	14.98	-92.85	-134.42	4,138.26	4,171.94	4,141.28	30.66	136.082			
6,925.00	6,778.06	6,736.06	6,778.06	15.87	15.00	-92.56	-134.42	4,138.26	4,175.28	4,144.44	30.84	135.382			
6,950.00	6,785.08	6,743.08	6,785.08	16.04	15.01	-92.22	-134.42	4,138.26	4,178.81	4,147.78	31.03	134.661			
6,975.00	6,790.84	6,748.84	6,790.84	16.22	15.03	-91.85	-134.42	4,138.26	4,182.53	4,151.30	31.23	133.922			
7,000.00	6,795.32	6,753.32	6,795.32	16.41	15.04	-91.44	-134.42	4,138.26	4,186.43	4,154.99	31.44	133.169			
7,025.00	6,798.50	6,756.50	6,798.50	16.61	15.04	-90.99	-134.42	4,138.26	4,190.50	4,158.85	31.65	132.409			
7,050.00	6,800.39	6,758.39	6,800.39	16.82	15.05	-90.49	-134.42	4,138.26	4,194.74	4,162.88	31.86	131.645			
7,073.93	6,800.96	6,758.96	6,800.96	17.02	15.05	-89.99	-134.42	4,138.26	4,198.95	4,166.87	32.07	130.917			
7,100.00	6,800.94	6,758.94	6,800.94	17.26	15.05	-89.99	-134.42	4,138.26	4,203.68	4,171.37	32.31	130.113			
7,200.00	6,800.85	6,758.85	6,800.85	18.24	15.05	-89.99	-134.42	4,138.26	4,223.27	4,189.97	33.29	126.854			
7,300.00	6,800.76	6,758.76	6,800.76	19.35	15.05	-89.99	-134.42	4,138.26	4,245.12	4,210.73	34.40	123.417			
7,400.00	6,800.67	6,758.67	6,800.67	20.55	15.05	-89.99	-134.42	4,138.26	4,269.21	4,233.61	35.60	119.918			
7,500.00	6,800.58	6,758.58	6,800.58	21.84	15.05	-89.99	-134.42	4,138.26	4,295.49	4,259.60	36.89	116.443			

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design: Lone Tree Draw "13" State - 9H - OH - Plan #1 Draft 1												Offset Site Error:	0.00 usft
Survey Program: 0-LEAM/MWD-ADJ												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis 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	Warning
7,600.00	6,800.49	8,625.09	7,837.97	23.20	25.63	-103.93	-1,209.48	4,083.42	4,313.65	4,266.06	47.59	90.646	
7,700.00	6,800.40	8,724.98	7,838.26	24.61	27.01	-103.92	-1,309.24	4,078.33	4,318.31	4,268.00	50.31	85.826	
7,800.00	6,800.31	8,824.86	7,838.54	26.08	28.44	-103.91	-1,409.00	4,073.25	4,322.98	4,269.84	53.14	81.354	
7,900.00	6,800.22	8,924.75	7,838.83	27.59	29.91	-103.90	-1,508.76	4,068.16	4,327.64	4,271.60	56.04	77.222	
8,000.00	6,800.12	9,024.64	7,839.11	29.13	31.42	-103.89	-1,608.52	4,063.07	4,332.30	4,273.29	59.01	73.411	
8,100.00	6,800.03	9,124.53	7,839.39	30.70	32.95	-103.88	-1,708.28	4,057.98	4,336.97	4,274.92	62.05	69.898	
8,200.00	6,799.94	9,224.42	7,839.68	32.29	34.52	-103.87	-1,808.03	4,052.89	4,341.63	4,276.50	65.13	66.661	
8,300.00	6,799.85	9,324.30	7,839.96	33.91	36.11	-103.86	-1,907.79	4,047.80	4,346.29	4,278.04	68.26	63.675	
8,400.00	6,799.76	9,424.19	7,840.25	35.55	37.72	-103.85	-2,007.55	4,042.72	4,350.96	4,279.53	71.42	60.917	
8,500.00	6,799.67	9,524.08	7,840.53	37.20	39.34	-103.84	-2,107.31	4,037.63	4,355.62	4,281.00	74.62	58.368	
8,600.00	6,799.58	9,623.97	7,840.81	38.86	40.99	-103.83	-2,207.07	4,032.54	4,360.29	4,282.43	77.85	56.007	
8,700.00	6,799.49	9,723.86	7,841.10	40.54	42.64	-103.82	-2,306.82	4,027.45	4,364.95	4,283.84	81.11	53.817	
8,800.00	6,799.40	9,823.75	7,841.38	42.23	44.31	-103.81	-2,406.58	4,022.36	4,369.61	4,285.23	84.39	51.781	
8,900.00	6,799.31	9,923.63	7,841.67	43.93	45.99	-103.80	-2,506.34	4,017.27	4,374.28	4,286.59	87.68	49.887	
9,000.00	6,799.22	10,023.52	7,841.95	45.64	47.68	-103.79	-2,606.10	4,012.18	4,378.93	4,287.96	91.01	47.993	
9,100.00	6,799.13	10,123.41	7,842.24	47.35	49.37	-103.78	-2,705.86	4,007.09	4,383.58	4,289.32	94.38	46.141	
9,200.00	6,799.04	10,223.30	7,842.52	49.08	51.06	-103.77	-2,805.62	4,002.00	4,388.23	4,290.67	97.79	44.331	
9,300.00	6,798.95	10,323.19	7,842.81	50.80	52.75	-103.76	-2,905.38	3,996.91	4,392.87	4,292.01	101.24	42.561	
9,400.00	6,798.86	10,423.08	7,843.10	52.54	54.44	-103.75	-3,005.14	3,991.82	4,397.50	4,293.34	104.73	40.831	
9,500.00	6,798.77	10,522.97	7,843.39	54.28	56.13	-103.74	-3,104.90	3,986.73	4,402.13	4,294.66	108.25	39.141	
9,600.00	6,798.68	10,622.86	7,843.68	56.02	57.82	-103.73	-3,204.66	3,981.64	4,406.75	4,295.97	111.80	37.491	
9,700.00	6,798.59	10,722.75	7,843.97	57.77	59.51	-103.72	-3,304.42	3,976.55	4,411.36	4,297.27	115.38	35.881	
9,800.00	6,798.50	10,822.64	7,844.26	59.52	61.20	-103.71	-3,404.18	3,971.46	4,415.96	4,298.56	118.99	34.311	
9,900.00	6,798.41	10,922.53	7,844.55	61.27	62.89	-103.70	-3,503.94	3,966.37	4,420.56	4,299.84	122.63	32.781	
10,000.00	6,798.32	11,022.42	7,844.84	63.03	64.58	-103.69	-3,603.70	3,961.28	4,425.15	4,301.12	126.30	31.291	
10,100.00	6,798.23	11,122.31	7,845.13	64.79	66.27	-103.68	-3,703.46	3,956.19	4,429.73	4,302.39	130.00	29.841	
10,200.00	6,798.14	11,222.20	7,845.42	66.55	67.96	-103.67	-3,803.22	3,951.10	4,434.31	4,303.65	133.73	28.431	
10,300.00	6,798.05	11,322.09	7,845.71	68.32	69.65	-103.66	-3,902.98	3,946.01	4,438.88	4,304.90	137.49	27.061	
10,400.00	6,797.96	11,421.98	7,846.00	70.09	71.34	-103.65	-4,002.74	3,940.92	4,443.45	4,306.15	141.28	25.731	
10,500.00	6,797.87	11,521.87	7,846.29	71.86	73.03	-103.64	-4,102.50	3,935.83	4,447.99	4,307.39	145.10	24.441	
10,600.00	6,797.78	11,621.76	7,846.58	73.63	74.72	-103.63	-4,202.26	3,930.74	4,452.52	4,308.62	148.95	23.191	
10,700.00	6,797.69	11,721.65	7,846.87	75.40	76.41	-103.62	-4,302.02	3,925.65	4,457.05	4,309.84	152.73	21.981	
10,800.00	6,797.60	11,821.54	7,847.16	77.18	78.10	-103.61	-4,401.78	3,920.56	4,461.57	4,311.05	156.55	20.811	
10,900.00	6,797.51	11,921.43	7,847.45	78.96	79.79	-103.60	-4,501.54	3,915.47	4,466.08	4,312.26	160.40	19.681	
11,000.00	6,797.42	12,021.32	7,847.74	80.74	81.48	-103.59	-4,601.30	3,910.38	4,470.58	4,313.46	164.28	18.591	
11,100.00	6,797.33	12,121.21	7,848.03	82.52	83.17	-103.58	-4,701.06	3,905.29	4,475.07	4,314.65	168.19	17.541	
11,200.00	6,797.24	12,221.10	7,848.32	84.30	84.86	-103.57	-4,800.82	3,900.20	4,479.56	4,315.84	172.13	16.531	
11,300.00	6,797.15	12,321.00	7,848.61	86.08	86.55	-103.56	-4,900.58	3,895.11	4,484.03	4,317.02	176.10	15.561	
11,400.00	6,797.06	12,420.89	7,848.90	87.86	88.24	-103.55	-5,000.34	3,890.02	4,488.49	4,318.19	180.10	14.631	
11,445.37	6,797.00	12,465.78	7,849.19	88.67	89.05	-103.54	-5,100.10	3,884.93	4,492.94	4,319.35	184.13	13.741	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00'usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan: #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH														Offset Site Error:
Survey Program: 100-NS-GYRO-MS														Offset Well Error:
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 Topface (")	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	42.00	0.00	0.00	160.86	-3,152.24	1,094.23	3,337.02					
100.00	100.00	59.11	101.11	0.08	0.07	160.86	-3,152.25	1,094.16	3,336.75	3,336.50	0.15	N/A		
200.00	200.00	163.74	205.74	0.31	0.28	160.86	-3,152.30	1,093.74	3,336.86	3,336.07	0.59	5.662.660		
300.00	300.00	260.90	302.90	0.53	0.54	160.88	-3,152.34	1,093.11	3,336.48	3,335.41	1.07	3,118.733		
337.81	337.81	295.83	337.83	0.62	0.63	160.88	-3,152.41	1,092.86	3,336.47	3,335.22	1.25	2,676.526		
400.00	400.00	353.66	395.66	0.75	0.78	160.89	-3,152.58	1,092.47	3,336.51	3,334.97	1.54	2,173.416		
500.00	500.00	445.74	487.73	0.98	1.01	160.90	-3,153.02	1,091.90	3,336.75	3,334.76	1.99	1,675.091		
600.00	600.00	541.05	583.04	1.21	1.25	160.91	-3,153.69	1,091.35	3,337.23	3,334.77	2.45	1,360.754		
700.00	700.00	638.89	680.88	1.43	1.48	160.92	-3,154.39	1,090.84	3,337.73	3,334.83	2.91	1,148.001		
800.00	800.00	735.64	777.62	1.66	1.69	160.93	-3,155.10	1,090.74	3,338.40	3,335.05	3.35	997.858		
900.00	900.00	836.01	877.99	1.88	1.92	160.94	-3,155.99	1,090.10	3,339.02	3,335.22	3.80	877.538		
1,000.00	1,000.00	927.24	969.21	2.11	2.14	160.95	-3,156.81	1,089.84	3,339.79	3,335.54	4.25	785.924		
1,100.00	1,100.00	1,015.51	1,057.47	2.33	2.35	160.96	-3,157.91	1,089.75	3,340.92	3,336.24	4.68	713.858		
1,200.00	1,200.00	1,118.44	1,160.39	2.56	2.61	160.98	-3,159.40	1,089.28	3,342.14	3,336.98	5.16	647.593		
1,300.00	1,300.00	1,218.91	1,260.85	2.78	2.87	161.00	-3,161.02	1,088.22	3,343.33	3,337.68	5.65	591.803		
1,400.00	1,400.00	1,321.05	1,362.96	3.01	3.14	161.03	-3,162.65	1,086.98	3,344.44	3,338.30	6.14	544.267		
1,500.00	1,500.00	1,425.54	1,467.43	3.23	3.42	161.06	-3,164.37	1,085.72	3,345.61	3,338.96	6.64	503.517		
1,600.00	1,600.00	1,563.19	1,605.05	3.45	3.76	161.11	-3,165.71	1,083.13	3,345.89	3,338.67	7.21	463.814		
1,700.00	1,700.00	1,664.37	1,706.20	3.68	4.00	161.15	-3,166.18	1,080.98	3,345.63	3,337.95	7.68	435.448		
1,800.00	1,800.00	1,762.41	1,804.22	3.90	4.24	161.19	-3,166.78	1,078.82	3,345.50	3,337.36	8.15	410.564		
1,900.00	1,900.00	1,868.23	1,910.02	4.13	4.50	161.23	-3,167.35	1,076.54	3,345.32	3,336.68	8.63	387.484		
2,000.00	2,000.00	1,974.83	2,016.59	4.35	4.76	161.26	-3,167.56	1,074.57	3,344.91	3,335.80	9.11	367.176		
2,100.00	2,100.00	2,090.53	2,132.28	4.58	5.01	161.29	-3,167.27	1,072.91	3,344.21	3,334.63	9.59	348.851		
2,200.00	2,200.00	2,196.12	2,237.85	4.80	5.22	161.31	-3,166.64	1,071.25	3,343.15	3,333.12	10.02	333.486		
2,300.00	2,300.00	2,289.09	2,330.81	5.03	5.41	161.33	-3,166.09	1,069.88	3,342.12	3,331.68	10.44	320.105		
2,400.00	2,400.00	2,396.03	2,437.74	5.25	5.64	161.35	-3,165.49	1,068.32	3,341.12	3,330.22	10.89	306.776		
2,500.00	2,500.00	2,493.54	2,535.24	5.48	5.85	161.37	-3,164.87	1,066.81	3,340.02	3,328.69	11.32	294.949		
2,600.00	2,600.00	2,593.45	2,635.14	5.70	6.06	161.39	-3,164.23	1,065.42	3,338.97	3,327.21	11.76	283.909		
2,700.00	2,700.00	2,678.74	2,720.42	5.93	6.25	161.40	-3,163.78	1,064.48	3,338.12	3,325.95	12.17	274.215		
2,800.00	2,800.00	2,786.63	2,828.30	6.15	6.49	161.42	-3,163.38	1,063.47	3,337.48	3,324.84	12.64	264.044		
2,900.00	2,900.00	2,880.66	2,922.33	6.38	6.70	161.43	-3,162.91	1,062.52	3,336.68	3,323.81	13.07	255.203		
3,000.00	3,000.00	2,982.04	3,023.71	6.60	6.91	161.44	-3,162.46	1,061.75	3,336.03	3,322.52	13.51	246.925		
3,100.00	3,100.00	3,085.14	3,126.80	6.83	7.11	161.45	-3,161.85	1,061.12	3,335.27	3,321.33	13.94	239.281		
3,200.00	3,200.00	3,196.93	3,238.58	7.05	7.31	161.45	-3,160.94	1,060.46	3,334.30	3,319.94	14.36	232.181		
3,300.00	3,300.00	3,303.46	3,345.11	7.28	7.48	161.46	-3,159.70	1,059.93	3,333.04	3,318.29	14.75	225.956		
3,400.00	3,400.00	3,403.52	3,445.16	7.50	7.62	161.45	-3,158.37	1,059.62	3,331.69	3,316.57	15.12	220.375		
3,500.00	3,500.00	3,506.68	3,548.31	7.73	7.76	161.45	-3,156.95	1,059.35	3,330.29	3,314.81	15.49	215.024		
3,600.00	3,600.00	3,618.19	3,659.80	7.95	7.94	161.45	-3,155.23	1,058.79	3,328.68	3,312.78	15.89	209.432		
3,700.00	3,700.00	3,725.97	3,767.56	8.17	8.10	161.44	-3,153.06	1,058.56	3,326.69	3,310.42	16.28	204.377		
3,800.00	3,800.00	3,820.07	3,861.64	8.40	8.23	161.43	-3,151.16	1,058.58	3,324.79	3,308.15	16.63	199.898		
3,900.00	3,900.00	3,923.58	3,965.13	8.62	8.39	161.42	-3,149.08	1,058.43	3,322.84	3,305.83	17.01	195.320		
4,000.00	4,000.00	4,018.63	4,060.16	8.85	8.54	161.41	-3,147.27	1,058.31	3,320.98	3,303.60	17.39	190.993		
4,100.00	4,100.00	4,121.00	4,162.52	9.07	8.71	161.41	-3,145.29	1,058.08	3,319.08	3,301.30	17.78	186.624		
4,200.00	4,200.00	4,208.96	4,250.46	9.30	8.87	161.40	-3,143.84	1,057.74	3,317.39	3,299.22	18.17	182.564		
4,300.00	4,300.00	4,304.66	4,346.15	9.52	9.05	161.40	-3,142.48	1,057.43	3,315.94	3,297.37	18.58	178.505		
4,400.00	4,400.00	4,414.56	4,456.03	9.75	9.26	161.40	-3,140.82	1,057.07	3,314.41	3,295.40	19.01	174.355		
4,500.00	4,500.00	4,520.23	4,561.69	9.97	9.47	161.39	-3,138.85	1,056.74	3,312.53	3,293.10	19.44	170.414		
4,600.00	4,600.00	4,600.02	4,641.47	10.20	9.63	161.39	-3,137.64	1,056.43	3,310.98	3,291.15	19.82	167.019		
4,700.00	4,700.00	4,706.20	4,747.63	10.42	9.84	161.39	-3,136.23	1,056.14	3,309.63	3,289.37	20.26	163.342		
4,800.00	4,800.00	4,811.74	4,853.16	10.65	10.06	161.39	-3,134.66	1,055.67	3,308.07	3,287.37	20.70	159.775		
4,900.00	4,900.00	4,900.00	4,941.42	10.87	10.25	161.39	-3,133.47	1,055.30	3,306.66	3,285.55	21.12	156.587		

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH													Offset Site Error:
Survey Program: 100-NS-GYRO-MS													Offset Well Error:
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	
5,000.00	5,000.00	5,001.37	5,042.78	11.10	10.48	161.39	-3,132.26	1,054.86	3,305.39	3,283.82	21.57	153.223	
5,100.00	5,100.00	5,100.74	5,142.14	11.32	10.72	161.39	-3,131.08	1,054.34	3,304.10	3,282.07	22.04	149.933	
5,200.00	5,200.00	5,200.12	5,241.51	11.55	10.96	161.39	-3,129.93	1,053.84	3,302.84	3,280.34	22.50	146.780	
5,300.00	5,300.00	5,299.49	5,340.88	11.77	11.20	161.39	-3,128.79	1,053.34	3,301.59	3,278.62	22.97	143.755	
5,400.00	5,400.00	5,398.87	5,440.24	12.00	11.44	161.40	-3,127.66	1,052.85	3,300.36	3,276.93	23.43	140.851	
5,500.00	5,500.00	5,498.24	5,539.61	12.22	11.68	161.40	-3,126.56	1,052.36	3,299.15	3,275.26	23.90	138.060	
5,600.00	5,600.00	5,597.62	5,638.98	12.45	11.92	161.40	-3,125.47	1,051.89	3,297.96	3,273.80	24.36	135.377	
5,700.00	5,700.00	5,696.99	5,738.35	12.67	12.16	161.40	-3,124.40	1,051.42	3,296.79	3,271.96	24.83	132.795	
5,800.00	5,800.00	5,796.37	5,837.72	12.89	12.40	161.40	-3,123.34	1,050.96	3,295.63	3,270.34	25.29	130.309	
5,900.00	5,900.00	5,895.74	5,937.09	13.12	12.64	161.40	-3,122.31	1,050.50	3,294.50	3,268.74	25.76	127.913	
6,000.00	6,000.00	5,995.12	6,036.46	13.34	12.88	161.41	-3,121.29	1,050.05	3,293.38	3,267.16	26.22	125.603	
6,100.00	6,100.00	6,094.50	6,135.83	13.57	13.12	161.41	-3,120.28	1,049.62	3,292.29	3,265.60	26.69	123.374	
6,200.00	6,200.00	6,193.88	6,235.20	13.79	13.36	161.41	-3,119.30	1,049.18	3,291.21	3,264.06	27.15	121.222	
6,300.00	6,300.00	6,293.25	6,334.57	14.02	13.60	161.41	-3,118.33	1,048.76	3,290.15	3,262.53	27.62	119.143	
6,323.50	6,323.50	6,316.61	6,357.92	14.07	13.66	161.41	-3,118.10	1,048.66	3,289.90	3,262.18	27.72	118.665	
6,325.00	6,325.00	6,318.10	6,359.42	14.07	13.66	-24.21	-3,118.09	1,048.65	3,289.88	3,262.15	27.73	118.636	
6,350.00	6,349.99	6,342.92	6,384.24	14.12	13.72	-24.26	-3,117.85	1,048.55	3,288.95	3,261.16	27.79	118.330	
6,375.00	6,374.90	6,367.66	6,408.98	14.16	13.78	-24.38	-3,117.61	1,048.45	3,288.83	3,259.03	27.80	118.227	
6,400.00	6,399.67	6,392.25	6,433.57	14.20	13.84	-24.57	-3,117.38	1,048.34	3,288.53	3,258.78	27.75	118.324	
6,425.00	6,424.24	6,416.62	6,457.93	14.25	13.90	-24.83	-3,117.15	1,048.24	3,279.06	3,251.41	27.64	118.619	
6,450.00	6,448.53	6,440.71	6,482.02	14.29	13.96	-25.17	-3,116.92	1,048.14	3,273.42	3,245.94	27.48	119.107	
6,475.00	6,472.47	6,464.44	6,505.75	14.34	14.01	-25.58	-3,116.70	1,048.05	3,266.64	3,239.37	27.27	119.783	
6,500.00	6,496.01	6,487.76	6,529.07	14.38	14.07	-26.08	-3,116.48	1,047.95	3,258.73	3,231.72	27.01	120.636	
6,525.00	6,519.07	6,510.60	6,551.90	14.42	14.13	-26.67	-3,116.27	1,047.86	3,249.73	3,223.02	26.71	121.655	
6,550.00	6,541.60	6,532.89	6,574.20	14.47	14.18	-27.35	-3,116.06	1,047.77	3,239.65	3,213.27	26.38	122.820	
6,575.00	6,563.53	6,554.58	6,595.89	14.51	14.23	-28.14	-3,115.86	1,047.68	3,228.52	3,202.51	26.01	124.104	
6,600.00	6,584.80	6,575.81	6,616.92	14.55	14.28	-29.05	-3,115.67	1,047.59	3,216.39	3,190.75	25.64	125.467	
6,625.00	6,605.36	6,595.92	6,637.22	14.60	14.33	-30.08	-3,115.48	1,047.51	3,203.27	3,178.02	25.25	126.857	
6,650.00	6,625.14	6,615.45	6,656.75	14.66	14.38	-31.25	-3,115.30	1,047.44	3,189.22	3,164.35	24.88	128.199	
6,675.00	6,644.10	6,634.16	6,675.46	14.72	14.42	-32.58	-3,115.13	1,047.36	3,174.28	3,149.75	24.53	129.402	
6,700.00	6,662.18	6,651.98	6,693.28	14.80	14.47	-34.08	-3,114.97	1,047.29	3,158.48	3,134.24	24.23	130.347	
6,725.00	6,679.33	6,668.87	6,710.17	14.88	14.51	-35.78	-3,114.82	1,047.22	3,141.87	3,117.87	24.00	130.897	
6,750.00	6,695.50	6,684.79	6,726.08	14.97	14.55	-37.69	-3,114.68	1,047.16	3,124.50	3,100.63	23.87	130.900	
6,775.00	6,710.66	6,699.68	6,740.98	15.07	14.58	-39.86	-3,114.54	1,047.10	3,106.43	3,082.58	23.86	130.209	
6,800.00	6,724.75	6,713.52	6,754.81	15.17	14.62	-42.30	-3,114.42	1,047.05	3,087.71	3,063.72	23.99	128.702	
6,825.00	6,737.74	6,726.26	6,767.55	15.29	14.65	-45.04	-3,114.31	1,047.00	3,068.38	3,044.09	24.29	126.318	
6,850.00	6,749.60	6,737.86	6,779.16	15.42	14.67	-48.12	-3,114.20	1,046.95	3,048.51	3,023.74	24.77	123.076	
6,875.00	6,760.29	6,748.30	6,789.59	15.56	14.70	-51.57	-3,114.11	1,046.91	3,028.15	3,002.73	25.43	119.093	
6,900.00	6,769.79	6,757.54	6,798.84	15.71	14.72	-55.42	-3,114.03	1,046.88	3,007.37	2,981.12	26.25	114.578	
6,925.00	6,778.06	6,765.57	6,806.86	15.87	14.74	-59.66	-3,113.96	1,046.85	2,986.22	2,959.02	27.20	109.802	
6,950.00	6,785.08	6,772.35	6,813.65	16.04	14.76	-64.31	-3,113.90	1,046.82	2,964.76	2,936.54	28.22	105.064	
6,975.00	6,790.84	6,777.88	6,819.17	16.22	14.77	-69.32	-3,113.85	1,046.80	2,943.05	2,913.81	29.24	100.645	
7,000.00	6,795.32	6,782.13	6,823.42	16.41	14.78	-74.65	-3,113.81	1,046.78	2,921.17	2,890.98	30.18	96.777	
7,025.00	6,798.50	6,785.09	6,826.38	16.61	14.79	-80.20	-3,113.79	1,046.77	2,899.16	2,868.19	30.97	93.625	
7,050.00	6,800.39	6,786.75	6,828.04	16.82	14.79	-85.86	-3,113.77	1,046.76	2,877.09	2,845.57	31.52	91.274	
7,073.93	6,800.96	6,787.13	6,828.42	17.02	14.79	-91.27	-3,113.77	1,046.76	2,855.97	2,824.16	31.81	89.786	
7,100.00	6,800.94	6,786.88	6,828.18	17.26	14.79	-91.25	-3,113.77	1,046.76	2,833.01	2,800.97	32.04	88.414	
7,200.00	6,800.85	6,785.96	6,827.25	18.24	14.79	-91.22	-3,113.78	1,046.77	2,745.45	2,712.42	33.03	83.132	
7,300.00	6,800.76	6,785.04	6,826.33	19.35	14.79	-91.18	-3,113.79	1,046.77	2,658.76	2,624.64	34.13	77.907	
7,400.00	6,800.67	6,784.11	6,825.40	20.55	14.79	-91.14	-3,113.79	1,046.77	2,573.04	2,537.71	35.33	72.829	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS														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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
7,500.00	6,800.58	6,783.18	6,824.48	21.84	14.78	-91.10	-3,113.80	1,046.78	2,488.39	2,451.77	36.62	67.958			
7,600.00	6,800.49	6,782.26	6,823.55	23.20	14.78	-91.06	-3,113.81	1,046.78	2,404.92	2,366.94	37.97	63.333			
7,700.00	6,800.40	6,781.33	6,822.63	24.61	14.78	-91.02	-3,113.82	1,046.78	2,322.75	2,283.36	39.39	58.972			
7,800.00	6,800.31	6,780.41	6,821.70	26.08	14.78	-90.98	-3,113.83	1,046.79	2,242.03	2,201.18	40.85	54.884			
7,900.00	6,800.22	6,779.48	6,820.77	27.59	14.78	-90.94	-3,113.83	1,046.79	2,162.92	2,120.56	42.35	51.087			
8,000.00	6,800.12	6,778.55	6,819.85	29.13	14.77	-90.90	-3,113.84	1,046.79	2,085.60	2,041.71	43.89	47.515			
8,100.00	6,800.03	6,777.62	6,818.92	30.70	14.77	-90.86	-3,113.85	1,046.80	2,010.29	1,964.83	45.46	44.219			
8,200.00	6,799.94	6,776.70	6,817.99	32.29	14.77	-90.82	-3,113.86	1,046.80	1,937.21	1,890.15	47.06	41.169			
8,300.00	6,799.85	6,775.77	6,817.06	33.91	14.77	-90.78	-3,113.87	1,046.81	1,866.63	1,817.96	48.67	38.353			
8,400.00	6,799.76	6,774.84	6,816.13	35.55	14.76	-90.74	-3,113.88	1,046.81	1,788.84	1,743.53	50.30	35.759			
8,500.00	6,799.67	6,773.91	6,815.21	37.20	14.76	-90.70	-3,113.88	1,046.81	1,734.17	1,682.21	51.95	33.379			
8,600.00	6,799.58	6,772.98	6,814.28	38.86	14.76	-90.66	-3,113.89	1,046.82	1,672.98	1,619.36	53.62	31.202			
8,700.00	6,799.49	6,772.05	6,813.35	40.54	14.76	-90.62	-3,113.90	1,046.82	1,615.66	1,560.37	55.29	29.219			
8,800.00	6,799.40	6,771.12	6,812.42	42.23	14.75	-90.58	-3,113.91	1,046.82	1,562.65	1,505.67	56.98	27.424			
8,900.00	6,799.31	6,770.19	6,811.49	43.93	14.75	-90.54	-3,113.92	1,046.83	1,514.39	1,455.71	58.68	25.808			
9,000.00	6,799.22	6,769.26	6,810.56	45.64	14.75	-90.51	-3,113.92	1,046.83	1,471.36	1,410.97	60.38	24.367			
9,100.00	6,799.13	6,768.33	6,809.63	47.35	14.75	-90.47	-3,113.93	1,046.83	1,434.01	1,371.92	62.10	23.093			
9,200.00	6,799.04	6,767.40	6,808.70	49.08	14.75	-90.43	-3,113.94	1,046.84	1,402.82	1,339.00	63.82	21.982			
9,300.00	6,798.95	6,766.47	6,807.77	50.80	14.74	-90.39	-3,113.95	1,046.84	1,378.19	1,312.65	65.54	21.027			
9,400.00	6,798.86	6,765.54	6,806.83	52.54	14.74	-90.35	-3,113.96	1,046.85	1,360.48	1,293.20	67.27	20.223			
9,500.00	6,798.76	6,764.61	6,805.90	54.28	14.74	-90.31	-3,113.97	1,046.85	1,349.96	1,280.95	69.01	19.562			
9,592.52	6,798.68	6,763.75	6,805.04	55.89	14.74	-90.27	-3,113.97	1,046.85	1,346.79	1,276.17	70.62	19.071 CC			
9,600.00	6,798.67	6,763.68	6,804.97	56.02	14.74	-90.27	-3,113.97	1,046.85	1,346.81	1,276.06	70.75	19.036 ES			
9,700.00	6,798.58	6,762.75	6,804.04	57.77	14.73	-90.23	-3,113.98	1,046.86	1,351.07	1,278.58	72.50	18.636			
9,800.00	6,798.49	6,761.81	6,803.11	59.52	14.73	-90.19	-3,113.99	1,046.86	1,362.68	1,288.43	74.25	18.354			
9,900.00	6,798.40	6,760.88	6,802.17	61.27	14.73	-90.15	-3,114.00	1,046.86	1,381.44	1,305.44	76.00	18.177			
10,000.00	6,798.31	6,759.95	6,801.24	63.03	14.73	-90.11	-3,114.01	1,046.87	1,407.08	1,329.33	77.75	18.087 SF			
10,100.00	6,798.22	6,759.01	6,800.31	64.79	14.73	-90.07	-3,114.02	1,046.87	1,439.22	1,359.71	79.51	18.101			
10,200.00	6,798.13	6,758.08	6,799.37	66.55	14.72	-90.03	-3,114.02	1,046.87	1,477.45	1,396.17	81.27	18.179			
10,300.00	6,798.04	6,757.15	6,798.44	68.32	14.72	-89.99	-3,114.03	1,046.88	1,521.29	1,438.28	83.04	18.321			
10,400.00	6,797.95	6,756.21	6,797.50	70.09	14.72	-89.95	-3,114.04	1,046.88	1,570.29	1,485.49	84.80	18.517			
10,500.00	6,797.86	6,755.28	6,796.57	71.86	14.72	-89.91	-3,114.05	1,046.88	1,623.98	1,537.41	86.57	18.759			
10,600.00	6,797.77	6,754.34	6,795.64	73.63	14.71	-89.87	-3,114.06	1,046.89	1,681.90	1,593.56	88.34	19.039			
10,700.00	6,797.68	6,753.41	6,794.70	75.40	14.71	-89.83	-3,114.07	1,046.89	1,743.63	1,653.52	90.11	19.350			
10,800.00	6,797.59	6,752.47	6,793.76	77.18	14.71	-89.79	-3,114.07	1,046.90	1,808.79	1,716.91	91.88	19.686			
10,900.00	6,797.49	6,751.53	6,792.83	78.96	14.71	-89.75	-3,114.08	1,046.90	1,877.02	1,783.36	93.66	20.041			
11,000.00	6,797.40	6,750.60	6,791.89	80.74	14.71	-89.71	-3,114.09	1,046.90	1,947.99	1,852.56	95.43	20.412			
11,100.00	6,797.31	6,749.66	6,790.96	82.52	14.70	-89.67	-3,114.10	1,046.91	2,021.42	1,924.21	97.21	20.794			
11,200.00	6,797.22	6,748.72	6,790.02	84.30	14.70	-89.63	-3,114.11	1,046.91	2,097.05	1,998.06	98.99	21.184			
11,300.00	6,797.13	6,747.79	6,789.08	86.08	14.70	-89.59	-3,114.12	1,046.91	2,174.65	2,073.88	100.77	21.580			
11,400.00	6,797.04	6,746.85	6,788.14	87.86	14.70	-89.55	-3,114.12	1,046.92	2,254.01	2,151.46	102.55	21.979			
11,445.37	6,797.00	6,746.42	6,787.72	88.67	14.70	-89.53	-3,114.13	1,046.92	2,290.55	2,187.19	103.36	22.161			

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design											Offset Site Error:	0.00 usft
Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH											Offset Well Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS; 4452-MWD-ISCWSA, 8564-Project												
Reference	Vertical	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Minimum	Separation	Warning
Measured Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Tooface (")	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor
0.00	0.00	0.00	16.00	0.00	0.00	89.66	5.53	929.83	929.98			
100.00	100.00	80.92	96.92	0.08	0.09	89.64	5.83	929.96	929.98	929.81	0.17	5,425.180
200.00	200.00	181.77	197.76	0.31	0.33	89.59	6.63	930.29	930.32	929.68	0.63	1,467.688
300.00	300.00	281.52	297.51	0.53	0.59	89.53	7.57	930.52	930.55	929.43	1.12	829.142
400.00	400.00	383.98	399.95	0.76	0.86	89.43	9.26	930.67	930.72	929.10	1.62	576.232
500.00	500.00	484.10	500.07	0.98	1.12	89.34	10.73	930.63	930.69	928.59	2.10	442.864
508.88	508.88	492.94	508.91	1.00	1.14	89.33	10.84	930.63	930.69	928.55	2.14	433.974
600.00	600.00	581.12	597.08	1.21	1.37	89.26	11.99	930.74	930.82	928.24	2.58	360.482
700.00	700.00	683.57	699.51	1.43	1.65	89.15	13.79	930.97	931.07	927.99	3.08	302.518
800.00	800.00	783.26	799.18	1.66	1.91	89.04	15.67	930.97	931.10	927.54	3.57	261.105
900.00	900.00	879.44	895.35	1.88	2.16	88.94	17.30	931.20	931.37	927.33	4.05	230.223
1,000.00	1,000.00	986.40	1,002.29	2.11	2.44	88.81	19.42	931.42	931.63	927.08	4.55	204.762
1,100.00	1,100.00	1,092.48	1,108.35	2.33	2.71	88.69	21.26	930.75	931.03	925.99	5.04	184.818
1,200.00	1,200.00	1,197.03	1,212.88	2.56	2.95	88.59	22.83	929.52	929.89	924.39	5.50	169.020
1,300.00	1,300.00	1,298.26	1,314.10	2.78	3.16	88.52	24.02	928.01	928.43	922.49	5.94	156.326
1,400.00	1,400.00	1,394.79	1,410.61	3.01	3.35	88.47	24.76	926.70	927.10	920.74	6.36	145.791
1,500.00	1,500.00	1,499.50	1,515.31	3.23	3.57	88.41	25.61	925.24	925.72	918.92	6.80	136.051
1,600.00	1,600.00	1,601.18	1,616.96	3.45	3.80	88.34	26.78	923.43	923.97	916.72	7.26	127.336
1,700.00	1,700.00	1,700.04	1,715.80	3.68	4.03	88.25	28.08	921.64	922.20	914.49	7.71	119.583
1,800.00	1,800.00	1,808.33	1,824.06	3.90	4.27	88.19	29.05	919.19	919.96	911.80	8.17	112.615
1,900.00	1,900.00	1,902.23	1,917.93	4.13	4.46	88.15	29.59	917.04	917.69	909.11	8.59	106.878
2,000.00	2,000.00	2,007.85	2,023.51	4.35	4.68	88.12	30.02	914.56	915.36	906.33	9.03	101.392
2,100.00	2,100.00	2,100.00	2,115.65	4.58	4.87	88.10	30.28	912.73	913.37	903.93	9.44	96.715
2,200.00	2,200.00	2,203.43	2,219.07	4.80	5.07	88.09	30.31	910.91	911.62	901.74	9.88	92.305
2,300.00	2,300.00	2,300.00	2,315.62	5.03	5.28	88.08	30.44	909.26	909.99	899.59	10.30	88.301
2,400.00	2,400.00	2,391.21	2,406.82	5.25	5.48	88.06	30.72	908.30	908.84	898.10	10.74	84.656
2,500.00	2,500.00	2,492.64	2,508.25	5.48	5.70	88.06	30.73	907.49	908.05	896.87	11.18	81.249
2,600.00	2,600.00	2,599.51	2,615.11	5.70	5.92	88.06	30.62	906.13	906.78	895.16	11.62	78.024
2,700.00	2,700.00	2,700.05	2,715.64	5.93	6.12	88.08	30.28	904.44	905.08	893.03	12.05	75.141
2,800.00	2,800.00	2,801.23	2,816.80	6.15	6.32	88.11	29.85	902.63	903.28	890.81	12.47	72.432
2,900.00	2,900.00	2,900.00	2,915.55	6.38	6.53	88.12	29.50	900.91	901.53	888.63	12.90	69.889
3,000.00	3,000.00	2,992.19	3,007.73	6.60	6.72	88.14	29.25	899.77	900.27	886.96	13.32	67.598
3,100.00	3,100.00	3,094.95	3,110.49	6.83	6.95	88.14	29.15	898.77	899.31	885.54	13.77	65.304
3,200.00	3,200.00	3,198.51	3,215.04	7.05	7.20	88.13	29.22	897.29	897.89	883.65	14.24	63.036
3,300.00	3,300.00	3,298.79	3,314.31	7.28	7.43	88.13	29.19	895.66	896.25	881.55	14.70	60.962
3,400.00	3,400.00	3,395.29	3,410.79	7.50	7.65	88.15	28.96	894.32	894.85	879.71	15.14	59.090
3,500.00	3,500.00	3,496.42	3,511.92	7.73	7.88	88.16	28.76	893.05	893.59	877.99	15.60	57.283
3,600.00	3,600.00	3,596.05	3,611.54	7.95	8.12	88.16	28.66	891.74	892.27	876.21	16.06	55.556
3,700.00	3,700.00	3,695.47	3,710.95	8.17	8.36	88.15	28.70	890.48	891.01	874.48	16.53	53.901
3,800.00	3,800.00	3,795.98	3,811.46	8.40	8.61	88.15	28.73	889.22	889.76	872.75	17.00	52.330
3,900.00	3,900.00	3,896.46	3,911.92	8.62	8.85	88.15	28.67	887.90	888.44	870.97	17.47	50.847
4,000.00	4,000.00	3,995.63	4,011.09	8.85	9.10	88.15	28.71	886.61	887.14	869.20	17.95	49.436
4,100.00	4,100.00	4,097.05	4,112.50	9.07	9.36	88.13	28.86	885.26	885.82	867.39	18.43	48.069
4,200.00	4,200.00	4,198.64	4,214.08	9.30	9.62	88.12	29.06	883.73	884.32	865.40	18.91	46.757
4,300.00	4,300.00	4,301.49	4,316.91	9.52	9.88	88.10	29.21	881.92	882.56	863.16	19.40	45.495
4,400.00	4,400.00	4,400.71	4,416.11	9.75	10.09	88.11	29.05	880.07	880.70	860.87	19.83	44.414
4,500.00	4,500.00	4,511.33	4,526.46	9.97	10.16	88.50	23.00	877.92	878.62	858.50	20.12	43.664
4,600.00	4,600.00	4,604.51	4,617.02	10.20	10.19	89.89	1.75	876.00	876.16	855.80	20.37	43.021
4,700.00	4,700.00	4,705.00	4,708.34	10.42	10.25	92.60	-39.69	873.31	874.25	853.58	20.67	42.303
4,715.34	4,715.34	4,713.14	4,715.34	10.46	10.26	92.87	-43.85	873.08	874.18	853.46	20.71	42.205 CC, ES
4,800.00	4,800.00	4,757.48	4,752.20	10.65	10.33	94.49	-68.44	872.48	876.47	855.49	20.98	41.783

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 4452-MWD-ISCWSA, 9564-Project													
Reference													
Semi Major Axis													
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
4,900.00	4,900.00	4,805.82	4,789.91	10.87	10.45	96.45	-98.66	873.00	885.43	864.11	21.32	41.534	
5,000.00	5,000.00	4,869.27	4,835.21	11.10	10.66	99.30	-143.03	873.88	900.71	878.95	21.76	41.390	
5,100.00	5,100.00	4,910.76	4,861.54	11.32	10.86	101.33	-175.07	874.00	922.71	900.53	22.18	41.607	
5,200.00	5,200.00	4,941.51	4,879.01	11.55	11.03	102.91	-200.37	874.10	952.48	929.91	22.57	42.205	
5,300.00	5,300.00	4,957.00	4,887.04	11.77	11.12	103.73	-213.61	874.14	990.10	967.21	22.88	43.269	
5,400.00	5,400.00	4,989.00	4,901.99	12.00	11.34	105.46	-241.89	874.31	1,034.87	1,011.55	23.32	44.384	
5,500.00	5,500.00	5,001.57	4,907.31	12.22	11.43	106.15	-253.29	874.46	1,086.33	1,062.70	23.63	45.968	
5,600.00	5,600.00	5,020.00	4,914.64	12.45	11.58	107.16	-270.18	874.87	1,143.73	1,119.74	23.99	47.677	
5,700.00	5,700.00	5,030.48	4,918.60	12.67	11.66	107.73	-279.89	875.21	1,206.19	1,181.90	24.30	49.646	
5,800.00	5,800.00	5,051.00	4,926.00	12.89	11.84	108.84	-299.00	876.07	1,273.10	1,248.42	24.68	51.588	
5,900.00	5,900.00	5,051.00	4,926.00	13.12	11.84	108.84	-299.00	876.07	1,343.72	1,318.81	24.90	53.958	
6,000.00	6,000.00	5,068.95	4,932.04	13.34	12.00	109.81	-315.88	876.98	1,417.54	1,392.27	25.27	56.086	
6,100.00	6,100.00	5,083.00	4,938.43	13.57	12.13	110.56	-329.20	877.76	1,494.23	1,468.62	25.61	58.342	
6,200.00	6,200.00	5,083.00	4,936.43	13.79	12.13	110.56	-329.20	877.76	1,573.35	1,547.51	25.84	60.897	
6,300.00	6,300.00	5,095.90	4,940.16	14.02	12.26	111.25	-341.53	878.46	1,654.54	1,628.37	26.17	63.224	
6,323.50	6,323.50	5,097.56	4,940.61	14.07	12.27	111.33	-343.12	878.55	1,673.91	1,647.67	26.24	63.801	
6,325.00	6,325.00	5,097.56	4,940.64	14.07	12.27	-74.03	-343.22	878.55	1,675.14	1,648.91	26.24	63.844	
6,350.00	6,349.89	5,099.55	4,941.15	14.12	12.29	-69.79	-345.04	878.65	1,695.74	1,669.51	26.23	64.659	
6,375.00	6,374.90	5,101.69	4,941.72	14.16	12.31	-65.74	-347.11	878.76	1,716.18	1,689.97	26.22	65.461	
6,400.00	6,399.67	5,115.00	4,945.02	14.20	12.44	-61.48	-359.98	879.40	1,736.57	1,710.30	26.27	66.103	
6,425.00	6,424.24	5,115.00	4,945.02	14.25	12.44	-58.06	-359.98	879.40	1,756.50	1,730.27	26.22	66.979	
6,450.00	6,448.53	5,115.00	4,945.02	14.29	12.44	-54.88	-359.98	879.40	1,776.14	1,749.98	26.16	67.897	
6,475.00	6,472.47	5,115.00	4,945.02	14.34	12.44	-51.95	-359.98	879.40	1,795.45	1,769.38	26.07	68.877	
6,500.00	6,496.01	5,115.00	4,945.02	14.38	12.44	-49.27	-359.98	879.40	1,814.38	1,788.44	25.94	69.935	
6,525.00	6,519.07	5,115.00	4,945.02	14.42	12.44	-46.81	-359.98	879.40	1,832.90	1,807.12	25.78	71.087	
6,550.00	6,541.60	5,115.00	4,945.02	14.47	12.44	-44.56	-359.98	879.40	1,850.97	1,825.39	25.59	72.345	
6,575.00	6,563.53	5,127.45	4,947.76	14.51	12.57	-42.31	-372.11	879.92	1,868.38	1,842.99	25.40	73.571	
6,600.00	6,584.80	5,131.64	4,948.61	14.55	12.62	-40.42	-376.21	880.07	1,885.31	1,860.18	25.13	75.015	
6,625.00	6,605.36	5,147.00	4,951.38	14.60	12.78	-38.57	-391.31	880.51	1,901.77	1,876.89	24.88	76.453	
6,650.00	6,625.14	5,147.00	4,951.38	14.66	12.78	-37.10	-391.31	880.51	1,917.38	1,892.86	24.52	78.195	
6,675.00	6,644.10	5,147.00	4,951.38	14.72	12.78	-35.77	-391.31	880.51	1,932.37	1,908.23	24.13	80.071	
6,700.00	6,662.18	5,147.00	4,951.38	14.80	12.78	-34.56	-391.31	880.51	1,946.71	1,922.99	23.72	82.082	
6,725.00	6,679.33	5,147.00	4,951.38	14.88	12.78	-33.46	-391.31	880.51	1,960.37	1,937.10	23.27	84.227	
6,750.00	6,695.50	5,162.26	4,953.71	14.97	12.94	-32.39	-406.39	880.86	1,973.14	1,950.25	22.88	86.223	
6,775.00	6,710.66	5,179.00	4,955.86	15.07	13.13	-31.43	-422.99	881.19	1,985.29	1,962.80	22.49	88.274	
6,800.00	6,724.75	5,179.00	4,955.86	15.17	13.13	-30.66	-422.99	881.19	1,996.46	1,974.44	22.02	90.679	
6,825.00	6,737.74	5,179.00	4,955.86	15.29	13.13	-29.96	-422.99	881.19	2,006.86	1,985.31	21.55	93.146	
6,850.00	6,749.60	5,179.00	4,955.86	15.42	13.13	-29.34	-422.99	881.19	2,016.48	1,995.40	21.08	95.642	
6,875.00	6,760.29	5,179.00	4,955.86	15.56	13.13	-28.79	-422.99	881.19	2,025.31	2,004.67	20.64	98.121	
6,900.00	6,769.79	5,179.00	4,955.86	15.71	13.13	-28.31	-422.99	881.19	2,033.34	2,013.11	20.23	100.525	
6,925.00	6,778.06	5,203.97	4,958.26	15.87	13.42	-27.89	-447.84	881.70	2,039.92	2,019.90	20.02	101.885	
6,950.00	6,785.08	5,209.91	4,958.68	16.04	13.50	-27.54	-453.76	881.83	2,045.97	2,026.22	19.75	103.604	
6,975.00	6,790.84	5,237.00	4,959.87	16.22	13.82	-27.28	-480.81	882.49	2,051.55	2,031.85	19.69	104.170	
7,000.00	6,795.32	5,237.00	4,959.87	16.41	13.82	-27.05	-480.81	882.49	2,055.54	2,036.03	19.52	105.324	
7,025.00	6,798.50	5,237.00	4,959.87	16.61	13.82	-26.88	-480.81	882.49	2,058.68	2,039.27	19.41	106.045	
7,050.00	6,800.39	5,237.00	4,959.87	16.82	13.82	-26.76	-480.81	882.49	2,060.96	2,041.57	19.39	106.288	
7,073.83	6,800.96	5,246.72	4,960.08	17.02	13.94	-26.72	-490.52	882.73	2,062.31	2,042.78	19.53	105.572	
7,100.00	6,800.94	5,269.01	4,960.49	17.26	14.22	-26.79	-512.80	883.23	2,063.28	2,043.41	19.87	103.849	
7,200.00	6,800.85	5,381.17	4,961.80	18.24	15.61	-27.11	-624.95	884.74	2,067.27	2,045.83	21.44	96.420	
7,300.00	6,800.76	5,511.55	4,965.60	19.35	17.20	-27.51	-755.27	885.98	2,069.46	2,046.18	23.29	88.862	

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

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH													Offset Site Error:
Survey Program: 100-NS-GYRO-MS, 4452-MWD-ISCWSA, 9564-Project													Offset Well Error:
Reference	Vertical	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning		
Measured Depth (usft)	Depth (usft)	Measured Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
7,400.00	6,800.67	5,621.31	4,969.86	20.55	18.64	-27.86	-864.93	887.24	2,071.03	2,045.94	25.09	82.545	
7,500.00	6,800.58	5,711.00	4,973.64	21.84	19.92	-28.16	-954.53	888.73	2,072.62	2,045.80	26.82	77.291	
7,600.00	6,800.49	5,806.00	4,976.54	23.20	21.36	-28.43	-1,049.48	889.15	2,074.71	2,046.04	28.67	72.364	
7,700.00	6,800.40	5,901.00	4,978.57	24.61	22.79	-28.67	-1,144.46	888.23	2,076.98	2,046.43	30.55	67.982	
7,800.00	6,800.31	5,995.00	4,980.69	26.08	24.23	-28.91	-1,238.43	887.94	2,079.51	2,047.02	32.49	64.005	
7,900.00	6,800.22	6,101.11	4,982.67	27.59	25.90	-29.17	-1,344.52	887.15	2,082.21	2,047.59	34.61	60.154	
8,000.00	6,800.12	6,231.13	4,984.34	29.13	27.96	-29.39	-1,474.43	882.41	2,084.04	2,047.05	36.99	56.338	
8,100.00	6,800.03	6,334.64	4,986.93	30.70	29.59	-29.57	-1,577.83	878.36	2,084.67	2,045.56	39.11	53.298	
8,200.00	6,799.94	6,427.90	4,990.00	32.29	31.09	-29.79	-1,671.03	876.93	2,085.83	2,044.62	41.21	50.620	
8,300.00	6,799.85	6,524.75	4,993.05	33.91	32.68	-30.02	-1,767.82	875.29	2,087.06	2,043.69	43.38	48.115	
8,400.00	6,799.76	6,619.15	4,996.15	35.55	34.24	-30.27	-1,862.16	874.40	2,088.60	2,043.03	45.56	45.838	
8,500.00	6,799.67	6,712.87	4,998.71	37.20	35.81	-30.49	-1,955.84	873.07	2,090.40	2,042.64	47.77	43.764	
8,600.00	6,799.58	6,823.34	5,001.45	38.86	37.67	-30.74	-2,066.25	871.18	2,092.33	2,042.13	50.19	41.685	
8,700.00	6,799.49	6,896.81	5,003.63	40.54	38.89	-30.92	-2,139.69	870.34	2,094.23	2,042.05	52.18	40.133	
8,800.00	6,799.40	6,966.86	5,004.37	42.23	40.05	-31.08	-2,209.74	869.83	2,097.88	2,043.74	54.14	38.752	
8,900.00	6,799.31	7,060.47	5,004.76	43.93	41.63	-31.29	-2,303.34	869.34	2,102.25	2,045.84	56.41	37.267	
9,000.00	6,799.22	7,156.78	5,004.93	45.64	43.25	-31.50	-2,399.65	868.92	2,106.92	2,048.17	58.74	35.867	
9,100.00	6,799.13	7,261.72	5,004.80	47.35	45.02	-31.72	-2,504.59	867.81	2,111.54	2,050.35	61.19	34.510	
9,200.00	6,799.04	7,366.27	5,004.96	49.08	46.76	-31.93	-2,609.13	866.57	2,115.89	2,052.25	63.64	33.249	
9,300.00	6,798.95	7,463.46	5,005.12	50.80	48.40	-32.12	-2,706.31	865.33	2,120.20	2,054.18	66.01	32.117	
9,400.00	6,798.86	7,563.68	5,005.52	52.54	50.08	-32.34	-2,806.53	864.71	2,124.69	2,056.23	68.47	31.033	
9,500.00	6,798.76	7,652.48	5,005.96	54.28	51.57	-32.53	-2,895.32	864.28	2,129.23	2,058.45	70.78	30.081	
9,600.00	6,798.67	7,749.62	5,005.41	56.02	53.21	-32.73	-2,992.46	863.56	2,134.52	2,061.30	73.21	29.154	
9,700.00	6,798.58	7,857.63	5,004.62	57.77	55.04	-32.91	-3,100.44	861.42	2,139.29	2,063.53	75.77	28.235	
9,800.00	6,798.49	7,961.57	5,003.89	59.52	56.78	-33.08	-3,204.35	859.17	2,143.97	2,065.71	78.27	27.393	
9,900.00	6,798.40	8,062.11	5,003.39	61.27	58.47	-33.24	-3,304.87	856.95	2,148.48	2,067.74	80.74	26.611	
10,000.00	6,798.31	8,156.19	5,003.30	63.03	60.06	-33.42	-3,398.94	855.67	2,153.13	2,069.95	83.18	25.887	
10,100.00	6,798.22	8,251.95	5,003.56	64.79	61.70	-33.62	-3,494.69	855.33	2,158.05	2,072.36	85.69	25.184	
10,200.00	6,798.13	8,352.09	5,003.89	66.55	63.41	-33.84	-3,594.84	855.18	2,163.08	2,074.79	88.30	24.498	
10,300.00	6,798.04	8,452.28	5,004.18	68.32	65.13	-34.06	-3,695.03	854.90	2,168.10	2,077.18	90.92	23.847	
10,400.00	6,797.95	8,570.03	5,003.93	70.09	67.15	-34.26	-3,812.75	852.73	2,172.66	2,078.93	93.73	23.179	
10,500.00	6,797.86	8,663.98	5,003.25	71.86	68.75	-34.39	-3,906.65	849.91	2,177.04	2,080.86	96.18	22.636	
10,600.00	6,797.77	8,766.04	5,002.57	73.63	70.49	-34.54	-4,008.68	847.08	2,181.49	2,082.74	98.75	22.091	
10,700.00	6,797.68	8,870.13	5,001.43	75.40	72.27	-34.66	-4,112.69	843.20	2,185.77	2,084.45	101.32	21.573	
10,800.00	6,797.59	8,977.81	4,999.75	77.18	74.12	-34.75	-4,220.23	838.15	2,189.90	2,086.00	103.90	21.076	
10,900.00	6,797.49	9,081.31	4,999.31	78.96	75.89	-34.88	-4,323.65	834.09	2,193.53	2,087.04	106.49	20.598	
11,000.00	6,797.40	9,177.04	4,999.26	80.74	77.54	-35.02	-4,419.34	831.15	2,197.37	2,088.34	109.03	20.154	
11,100.00	6,797.31	9,272.24	4,999.01	82.52	79.17	-35.15	-4,514.49	828.16	2,201.34	2,089.78	111.56	19.733	
11,200.00	6,797.22	9,365.36	4,998.56	84.30	80.75	-35.28	-4,607.56	825.42	2,205.62	2,091.56	114.06	19.337	
11,300.00	6,797.13	9,460.11	4,997.94	86.08	82.37	-35.41	-4,702.28	822.84	2,210.18	2,093.58	116.60	18.955	
11,400.00	6,797.04	9,558.32	4,997.01	87.86	83.00	-35.55	-4,800.44	820.03	2,214.92	2,096.45	118.47	18.696	
11,445.37	6,797.00	9,564.00	4,996.95	88.67	83.00	-35.55	-4,806.12	819.86	2,217.43	2,098.40	119.03	18.630 SF	

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

Leam Drilling Systems LLC

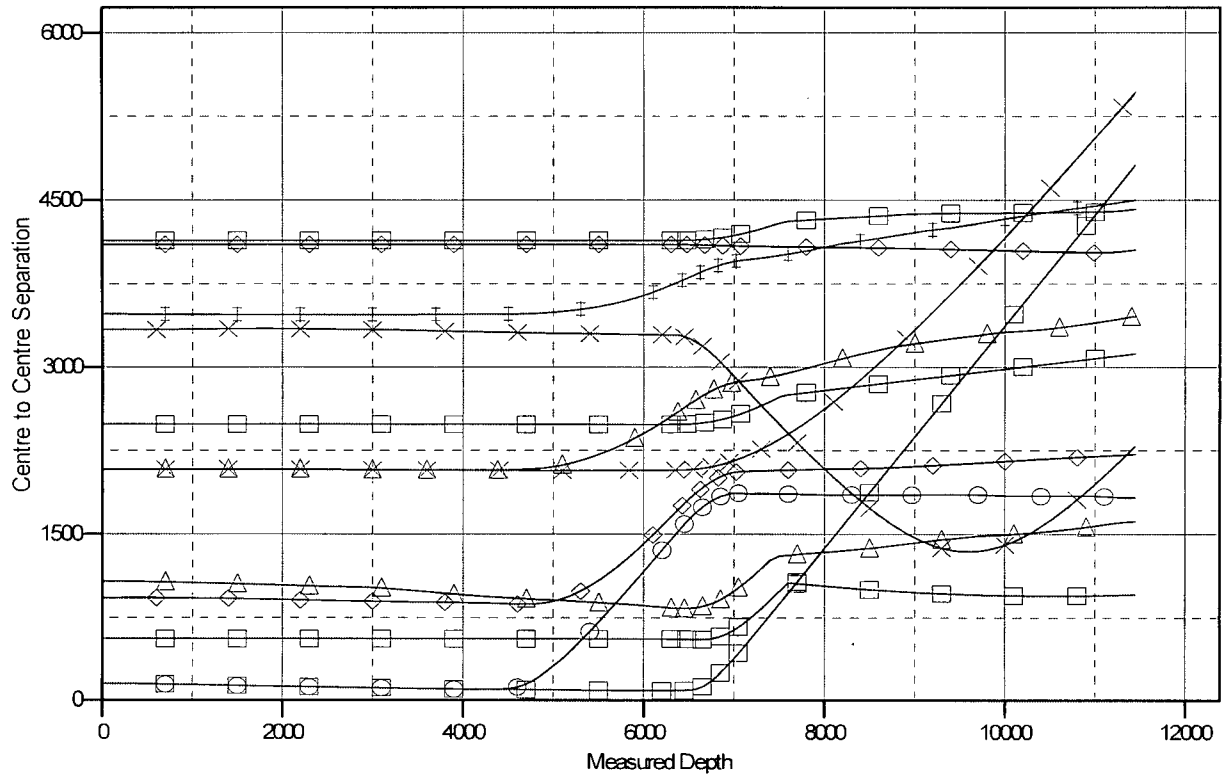
Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GE 3194' + KB @ 3220.00usft (Origin)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 10H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.10°

Ladder Plot



LEGEND

- ◆ 13H, OH, Plan #1 Draft 1 V0
- 2H, OH, OH V0
- 2H, Pilot, Pilot V0
- ▲ 4H, OH, OH V0
- ✕ 4H, Pilot, Pilot V0
- ◆ 5H, OH, OH V0
- 6H, OH, Plan #1 Draft 1 V0
- ▲ 7H, OH, OH V0
- 8H, OH, Plan #1 V0
- 9H, OH, Plan #1 Draft 1 V0
- ✕ Lone Tree #1, OH, OH V0
- ◆ Lone Tree Draw 13 State #3H, OH, OH V0

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

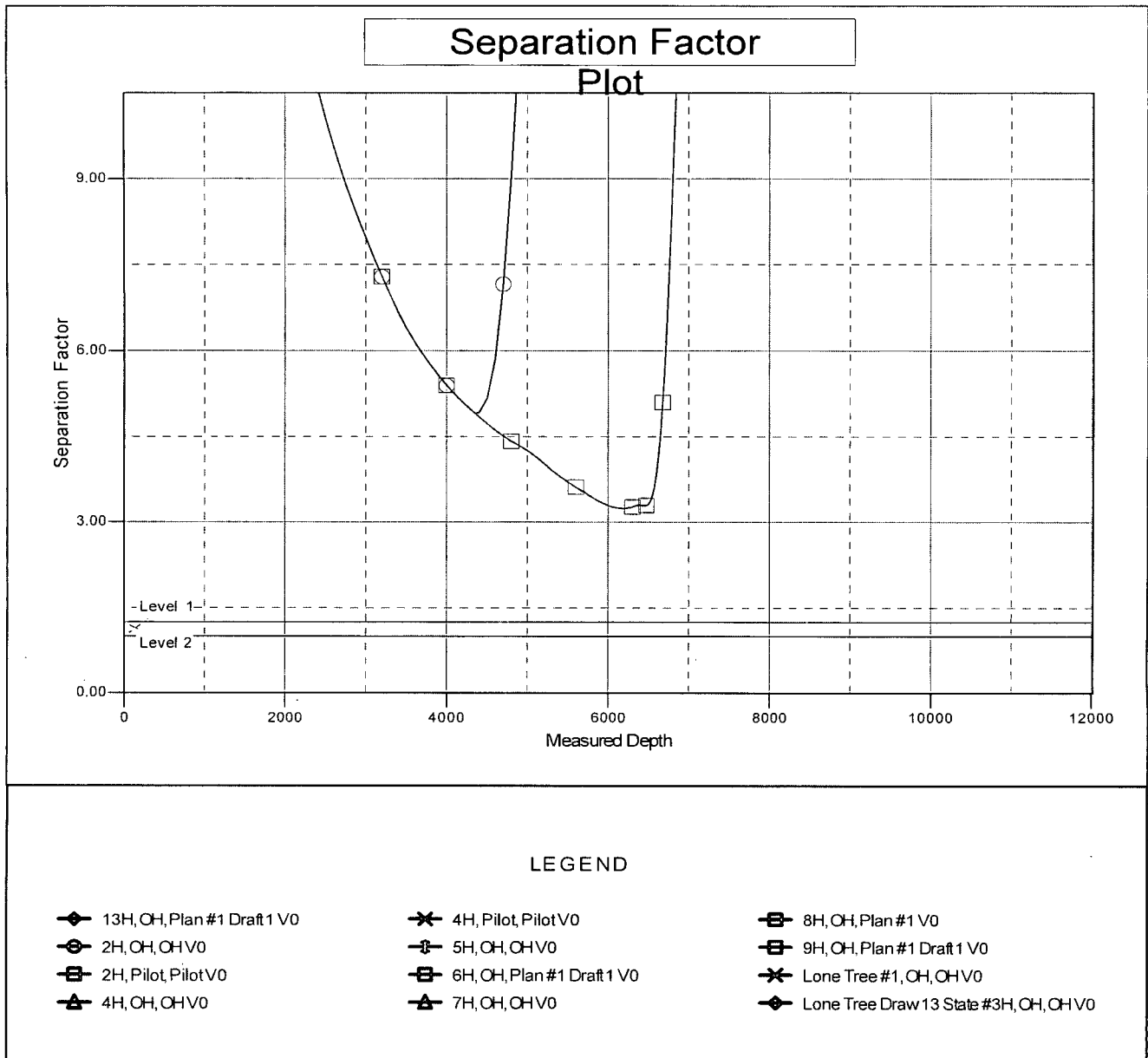
Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 10H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE 3194' + KB @ 3220.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GE 3194' + KB @ 3220.00usft (Origin)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 10H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.10°



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

MD	INC	AZI	TVD	NS	EW	DLS	BUILD	TURN	VSECT
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00
3900.00	0.00	0.00	3900.00	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	0.00
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	0.00	0.00
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00

4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	0.00	0.00
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	0.00	0.00
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	0.00
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00	0.00	0.00	0.00
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	0.00	0.00
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	0.00	0.00
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00	0.00	0.00	0.00
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00	0.00	0.00	0.00
6323.50	0.00	0.00	6323.50	0.00	0.00	0.00	0.00	0.00	0.00
6325.00	0.18	185.62	6325.00	0.00	0.00	12.00	12.00	0.00	0.00
6350.00	3.18	185.62	6349.99	-0.73	-0.07	12.00	12.00	0.00	0.74
6375.00	6.18	185.62	6374.90	-2.76	-0.27	12.00	12.00	0.00	2.77
6400.00	9.18	185.62	6399.67	-6.09	-0.60	12.00	12.00	0.00	6.12
6425.00	12.18	185.62	6424.24	-10.70	-1.05	12.00	12.00	0.00	10.75
6450.00	15.18	185.62	6448.53	-16.58	-1.63	12.00	12.00	0.00	16.66
6475.00	18.18	185.62	6472.47	-23.72	-2.33	12.00	12.00	0.00	23.83
6500.00	21.18	185.62	6496.01	-32.10	-3.16	12.00	12.00	0.00	32.25
6525.00	24.18	185.62	6519.07	-41.69	-4.10	12.00	12.00	0.00	41.89
6550.00	27.18	185.62	6541.60	-52.47	-5.16	12.00	12.00	0.00	52.72
6575.00	30.18	185.62	6563.53	-64.41	-6.34	12.00	12.00	0.00	64.72
6600.00	33.18	185.62	6584.80	-77.47	-7.62	12.00	12.00	0.00	77.85
6625.00	36.18	185.62	6605.36	-91.63	-9.02	12.00	12.00	0.00	92.07
6650.00	39.18	185.62	6625.14	-106.83	-10.51	12.00	12.00	0.00	107.35
6675.00	42.18	185.62	6644.10	-123.05	-12.11	12.00	12.00	0.00	123.64
6700.00	45.18	185.62	6662.18	-140.23	-13.80	12.00	12.00	0.00	140.91
6725.00	48.18	185.62	6679.33	-158.33	-15.58	12.00	12.00	0.00	159.09
6750.00	51.18	185.62	6695.50	-177.30	-17.45	12.00	12.00	0.00	178.15
6775.00	54.18	185.62	6710.66	-197.08	-19.39	12.00	12.00	0.00	198.03
6800.00	57.18	185.62	6724.75	-217.63	-21.42	12.00	12.00	0.00	218.68
6825.00	60.18	185.62	6737.74	-238.88	-23.51	12.00	12.00	0.00	240.03
6850.00	63.18	185.62	6749.60	-260.78	-25.66	12.00	12.00	0.00	262.04
6875.00	66.18	185.62	6760.29	-283.27	-27.87	12.00	12.00	0.00	284.63
6900.00	69.18	185.62	6769.79	-306.28	-30.14	12.00	12.00	0.00	307.76
6925.00	72.18	185.62	6778.06	-329.75	-32.45	12.00	12.00	0.00	331.35
6950.00	75.18	185.62	6785.08	-353.63	-34.80	12.00	12.00	0.00	355.34
6975.00	78.18	185.62	6790.84	-377.84	-37.18	12.00	12.00	0.00	379.66
7000.00	81.18	185.62	6795.32	-402.31	-39.59	12.00	12.00	0.00	404.25
7025.00	84.18	185.62	6798.50	-426.99	-42.02	12.00	12.00	0.00	429.05
7050.00	87.18	185.62	6800.39	-451.79	-44.46	12.00	12.00	0.00	453.97
7073.93	90.05	185.62	6800.96	-475.60	-46.80	12.00	12.00	0.00	477.90
7100.00	90.05	185.62	6800.94	-501.54	-49.35	0.00	0.00	0.00	503.96
7200.00	90.05	185.62	6800.85	-601.06	-59.15	0.00	0.00	0.00	603.96
7300.00	90.05	185.62	6800.76	-700.58	-68.94	0.00	0.00	0.00	703.96

7400.00	90.05	185.62	6800.67	-800.10	-78.73	0.00	0.00	0.00	803.96
7500.00	90.05	185.62	6800.58	-899.62	-88.53	0.00	0.00	0.00	903.96
7600.00	90.05	185.62	6800.49	-999.14	-98.32	0.00	0.00	0.00	1003.96
7700.00	90.05	185.62	6800.40	-1098.66	-108.11	0.00	0.00	0.00	1103.96
7800.00	90.05	185.62	6800.31	-1198.18	-117.91	0.00	0.00	0.00	1203.96
7900.00	90.05	185.62	6800.22	-1297.70	-127.70	0.00	0.00	0.00	1303.96
8000.00	90.05	185.62	6800.12	-1397.22	-137.49	0.00	0.00	0.00	1403.96
8100.00	90.05	185.62	6800.03	-1496.74	-147.29	0.00	0.00	0.00	1503.96
8200.00	90.05	185.62	6799.94	-1596.25	-157.08	0.00	0.00	0.00	1603.96
8300.00	90.05	185.62	6799.85	-1695.77	-166.87	0.00	0.00	0.00	1703.96
8400.00	90.05	185.62	6799.76	-1795.29	-176.66	0.00	0.00	0.00	1803.96
8500.00	90.05	185.62	6799.67	-1894.81	-186.46	0.00	0.00	0.00	1903.96
8600.00	90.05	185.62	6799.58	-1994.33	-196.25	0.00	0.00	0.00	2003.96
8700.00	90.05	185.62	6799.49	-2093.85	-206.04	0.00	0.00	0.00	2103.96
8800.00	90.05	185.62	6799.40	-2193.37	-215.84	0.00	0.00	0.00	2203.96
8900.00	90.05	185.62	6799.31	-2292.89	-225.63	0.00	0.00	0.00	2303.96
9000.00	90.05	185.62	6799.22	-2392.41	-235.42	0.00	0.00	0.00	2403.96
9100.00	90.05	185.62	6799.13	-2491.93	-245.22	0.00	0.00	0.00	2503.96
9200.00	90.05	185.62	6799.04	-2591.45	-255.01	0.00	0.00	0.00	2603.96
9300.00	90.05	185.62	6798.95	-2690.97	-264.80	0.00	0.00	0.00	2703.96
9400.00	90.05	185.62	6798.86	-2790.49	-274.60	0.00	0.00	0.00	2803.96
9500.00	90.05	185.62	6798.76	-2890.01	-284.39	0.00	0.00	0.00	2903.96
9600.00	90.05	185.62	6798.67	-2989.52	-294.18	0.00	0.00	0.00	3003.96
9700.00	90.05	185.62	6798.58	-3089.04	-303.97	0.00	0.00	0.00	3103.96
9800.00	90.05	185.62	6798.49	-3188.56	-313.77	0.00	0.00	0.00	3203.96
9900.00	90.05	185.62	6798.40	-3288.08	-323.56	0.00	0.00	0.00	3303.96
10000.00	90.05	185.62	6798.31	-3387.60	-333.35	0.00	0.00	0.00	3403.96
10100.00	90.05	185.62	6798.22	-3487.12	-343.15	0.00	0.00	0.00	3503.96
10200.00	90.05	185.62	6798.13	-3586.64	-352.94	0.00	0.00	0.00	3603.96
10300.00	90.05	185.62	6798.04	-3686.16	-362.73	0.00	0.00	0.00	3703.96
10400.00	90.05	185.62	6797.95	-3785.68	-372.53	0.00	0.00	0.00	3803.96
10500.00	90.05	185.62	6797.86	-3885.20	-382.32	0.00	0.00	0.00	3903.96
10600.00	90.05	185.62	6797.77	-3984.72	-392.11	0.00	0.00	0.00	4003.96
10700.00	90.05	185.62	6797.68	-4084.24	-401.91	0.00	0.00	0.00	4103.96
10800.00	90.05	185.62	6797.59	-4183.76	-411.70	0.00	0.00	0.00	4203.96
10900.00	90.05	185.62	6797.49	-4283.27	-421.49	0.00	0.00	0.00	4303.96
11000.00	90.05	185.62	6797.40	-4382.79	-431.29	0.00	0.00	0.00	4403.96
11100.00	90.05	185.62	6797.31	-4482.31	-441.08	0.00	0.00	0.00	4503.96
11200.00	90.05	185.62	6797.22	-4581.83	-450.87	0.00	0.00	0.00	4603.96
11300.00	90.05	185.62	6797.13	-4681.35	-460.66	0.00	0.00	0.00	4703.96
11400.00	90.05	185.62	6797.04	-4780.87	-470.46	0.00	0.00	0.00	4803.96
11445.37	90.05	185.62	6797.00	-4826.03	-474.90	0.00	0.00	0.00	4849.34