

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) 748-1283 Fax: (575) 748-0720

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-71738		² Pool Code 96144	³ Pool Name Carlsbad; Bone Spring, East
⁴ Property Code 38927	⁵ Property Name LONE TREE DRAW "13" STATE COM		⁶ Well Number 8H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.		⁹ Elevation 3171.6

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
B	13	21 S	27 E		150	NORTH	1980	EAST	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
O	13	21 S	27 E		330	SOUTH	1980	EAST	EDDY

¹² Dedicated Acres 160 ac	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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 NW CORNER SEC. 13 LAT. = 32.4875567°N LONG. = 104.1518461°W NMSP EAST (FT) N = 541151.55 E = 597296.67		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		1980' SURFACE LOCATION NE CORNER SEC. 13 LAT. = 32.4876206°N LONG. = 104.1344381°W NMSP EAST (FT) N = 541184.34 E = 602664.16	
W/4 CORNER SEC. 13 LAT. = 32.4802575°N LONG. = 104.1518272°W NMSP EAST (FT) N = 538496.13 E = 597307.02		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.		E/4 CORNER SEC. 13 LAT. = 32.4803887°N LONG. = 104.1344261°W NMSP EAST (FT) N = 538553.42 E = 602672.77	
SW CORNER SEC. 13 LAT. = 32.4729692°N LONG. = 104.1517858°W NMSP EAST (FT) N = 535844.67 E = 597324.30		S/4 CORNER SEC. 13 LAT. = 32.4730669°N LONG. = 104.1431032°W NMSP EAST (FT) N = 535884.89 E = 600001.85		1980' BOTTOM OF HOLE SE CORNER SEC. 13 LAT. = 32.4731637°N LONG. = 104.1344163°W NMSP EAST (FT) N = 535924.99 E = 602680.71	
S89°08'22"W 2678.50 FT		BOTTOM OF HOLE 330'		S89°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 in the division.

Signature: *[Signature]* Date: **10/16/2013**

Ryan DeLong - Regulatory Coordinator

Printed Name

ryan.delong@dvn.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.

AUGUST 20, 2013

Date of Survey

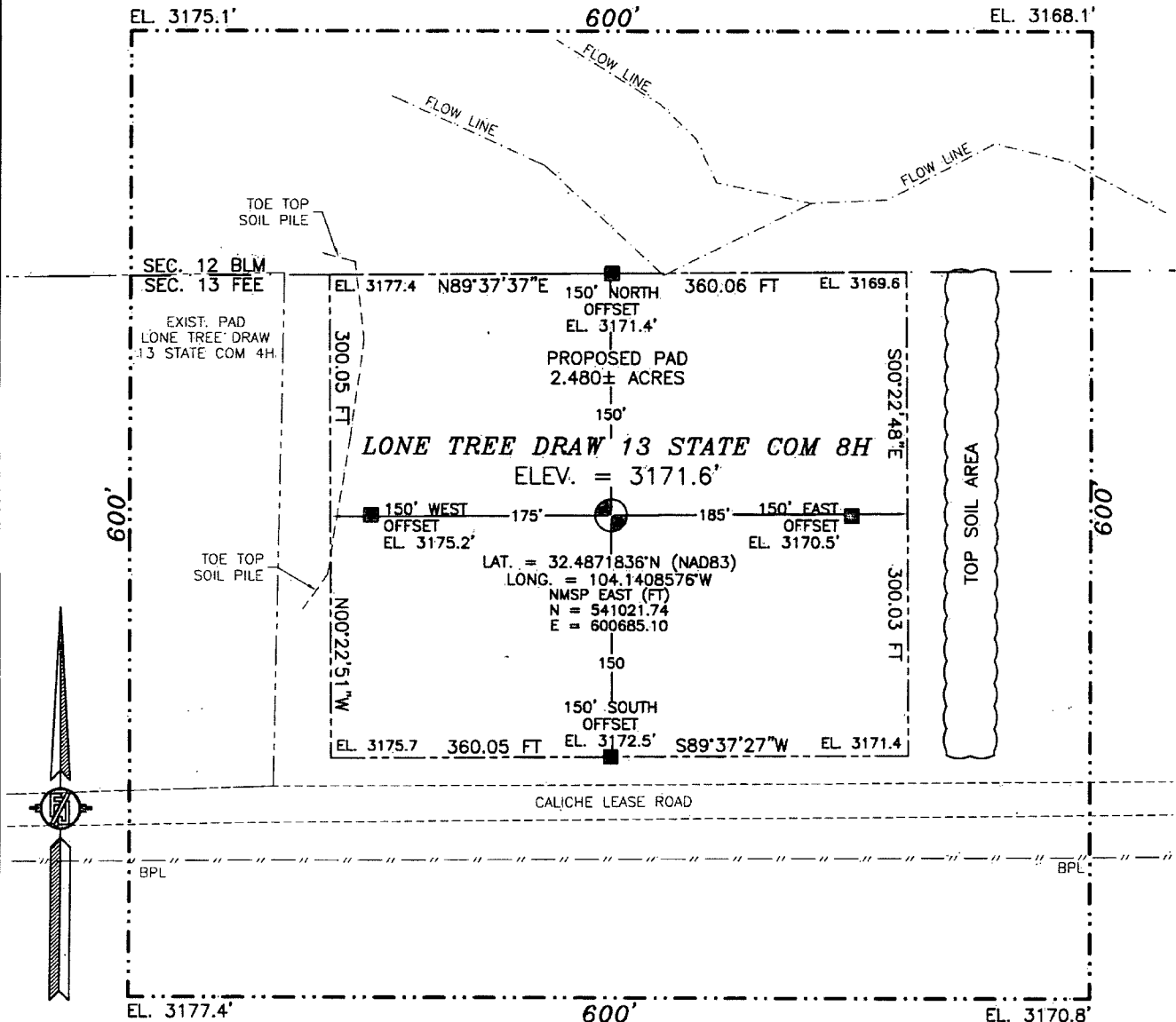
Signature and Seal of Professional Surveyor: *[Signature]*

Certificate Number: **FILMON F. JARAMILLO, PLS 12797**

SURVEY NO. 2187

**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 RIGHT GO EAST ON CR 600 2.3 MILES PAST RAMBO BOOSTER STA. TO A CALICHE LEASE ROAD ON RIGHT ACROSS FROM BORROW PIT GO EAST 2.75 MILES TO ROAD THAT TURNS NORTH (LEFT) PAST CATTLE GUARD GO NORTH ABOUT 800 FT ROAD TURNS RIGHT GO EAST 0.6 MILES SITE IS ABOUT 175 FT ON LEFT

**DEVON ENERGY PRODUCTION COMPANY, L.P.
LONE TREE DRAW 13 STATE COM 8H
LOCATED 150 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE EAST LINE OF
SECTION 13, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO**

AUGUST 20, 2013

SURVEY NO. 2187

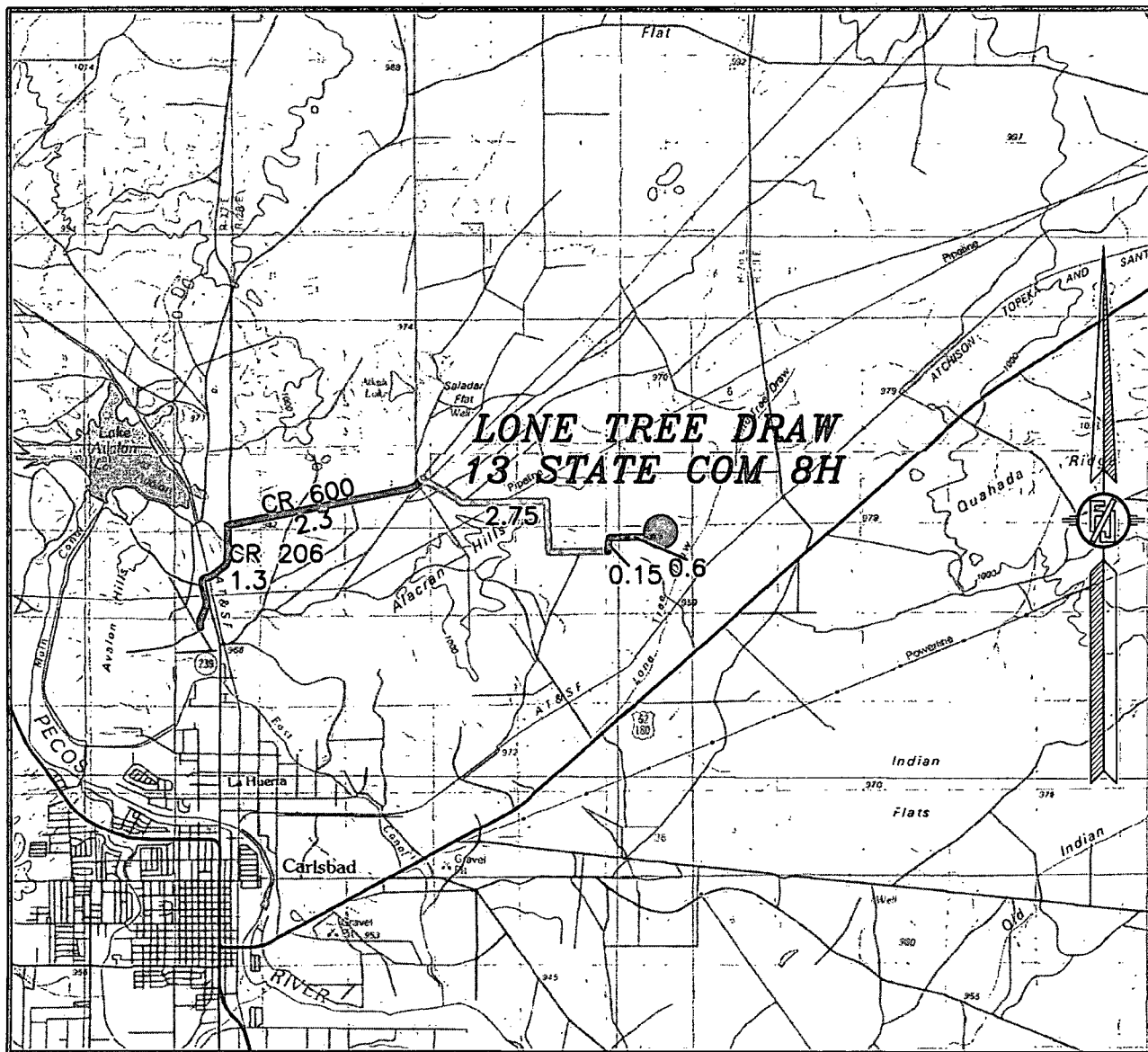
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 **CARLSBAD, NEW MEXICO**

NOT TO SCALE

AUGUST 20, 2013

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
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP RD.) AND CR 200 (GEORGE SHOUP RELIEF ROUTE) GO NORTH ON CR 206 1.3 MILES TO CR 600 (RAINS ROAD) ON RIGHT GO EAST ON CR 600 2.3 MILES PAST RAMBO BOOSTER STA. TO A CALICHE LEASE ROAD ON RIGHT ACROSS FROM BORROW PIT GO EAST 2.75 MILES TO ROAD THAT TURNS NORTH (LEFT) PAST CATTLE GUARD GO NORTH ABOUT 800 FT ROAD TURNS RIGHT GO EAST 0.6 MILES SITE IS ABOUT 175 FT ON LEFT

DEVON ENERGY PRODUCTION COMPANY, L.P.

LONE TREE DRAW 13 STATE COM 8H

LOCATED 150 FT. FROM THE NORTH LINE

AND 1980 FT. FROM THE EAST LINE OF

SECTION 13, TOWNSHIP 21 SOUTH,

RANGE 27 EAST, N.M.P.M.

EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 20, 2013

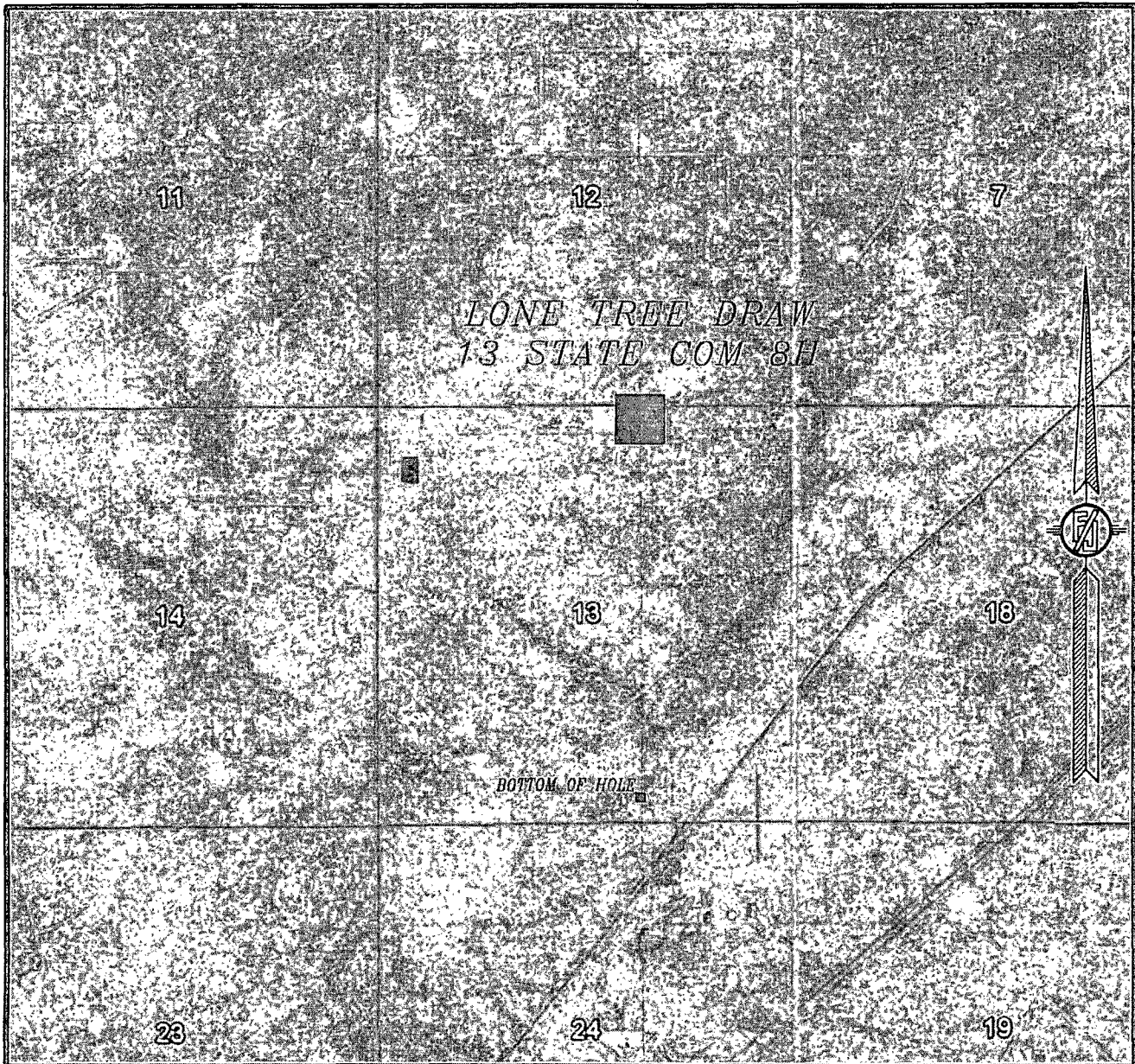
MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SURVEY NO. 2187

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 COM 8H
LOCATED 150 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE EAST LINE OF
SECTION 13, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 20, 2013

SURVEY NO. 2187

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

DEVON ENERGY

Project: Eddy County, NM (NAD-83)
Site: Lone Tree Draw "13" State
Well: 8H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.10°
Magnetic North: 7.60°

Magnetic Field
Strength: 48469.0snT
Dip Angle: 60.26°
Date: 09/18/2013
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

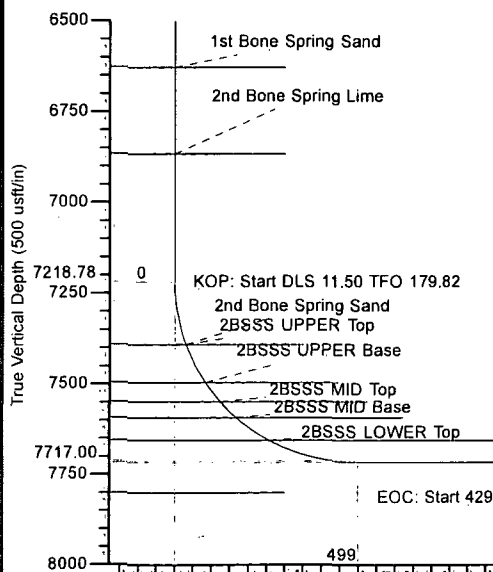
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(LTDS 8H)	0.00	0.00	0.00	541021.74	600685.10	32° 29' 13.861 N	104° 8' 27.087 W
PBHL(LTDS 8H)	7712.00	-4796.37	14.69	536225.37	600699.79	32° 28' 26.398 N	104° 8' 27.017 W

SECTION DETAILS

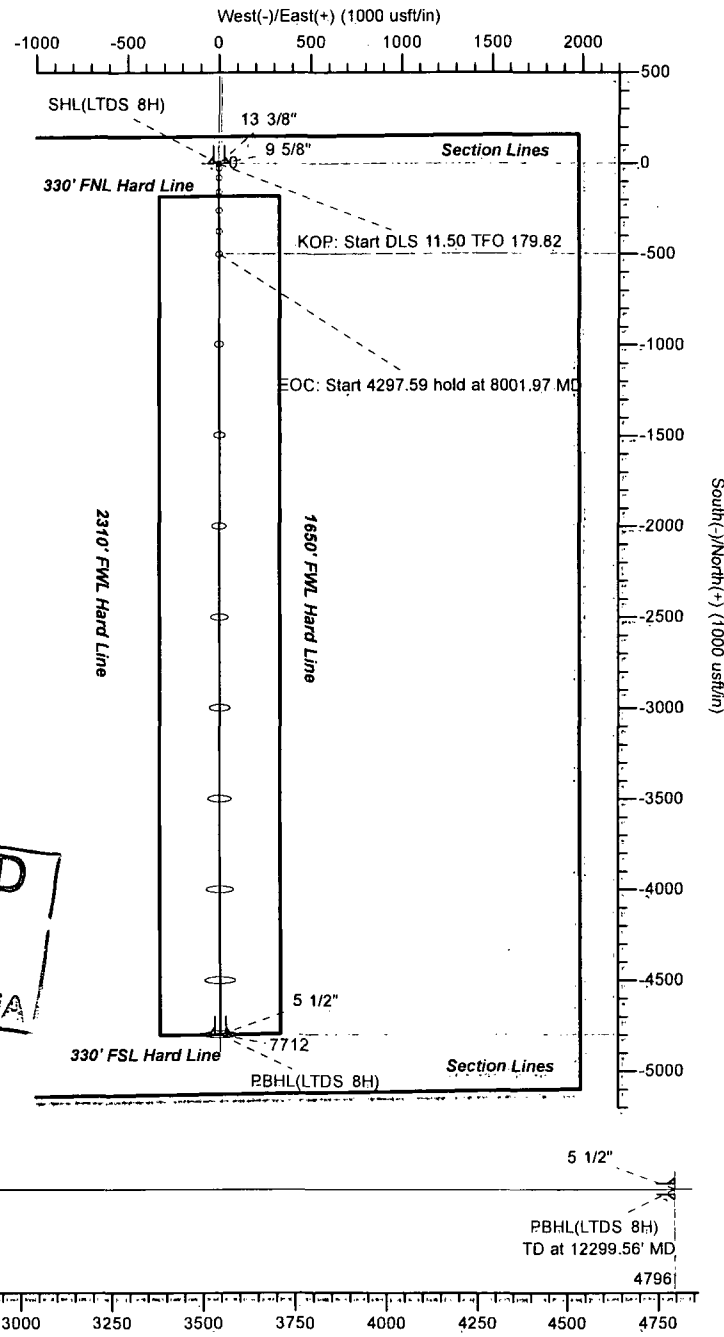
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP: Start DLS 11.50 TFO 179.82
2	7218.78	0.00	0.00	7218.78	0.00	0.00	0.00	0.00	0.00	EOC: Start 4297.59 hold at 8001.97 MD
3	8001.97	90.07	179.82	7717.00	-498.80	1.53	11.50	179.82	498.80	TD at 12299.56' MD
4	12299.56	90.07	179.82	7712.00	-4796.37	14.69	0.00	0.00	4796.39	

CASING DETAILS

TVD	MD	Name	Size
290.00	290.00	13 3/8"	13-3/8
2800.00	2800.00	9 5/8"	9-5/8
7712.00	12299.56	5 1/2"	5-1/2



Vertical Section at 179.82° (500 usft/in)



RECEIVED
OCT 17 2013
NMOCD ARTESIA



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

Plan: Plan #1 (8H/OH)
Lone Tree Draw "13" State
Created By: Heber Claros
Date: 18/38, September 18 2013
Approved: _____
Date: _____

Project: Eddy County, NM (NAD-83)
Site: Lone Tree Draw "13" State
Well: 8H
Wellbore: OH
Design: Plan #1



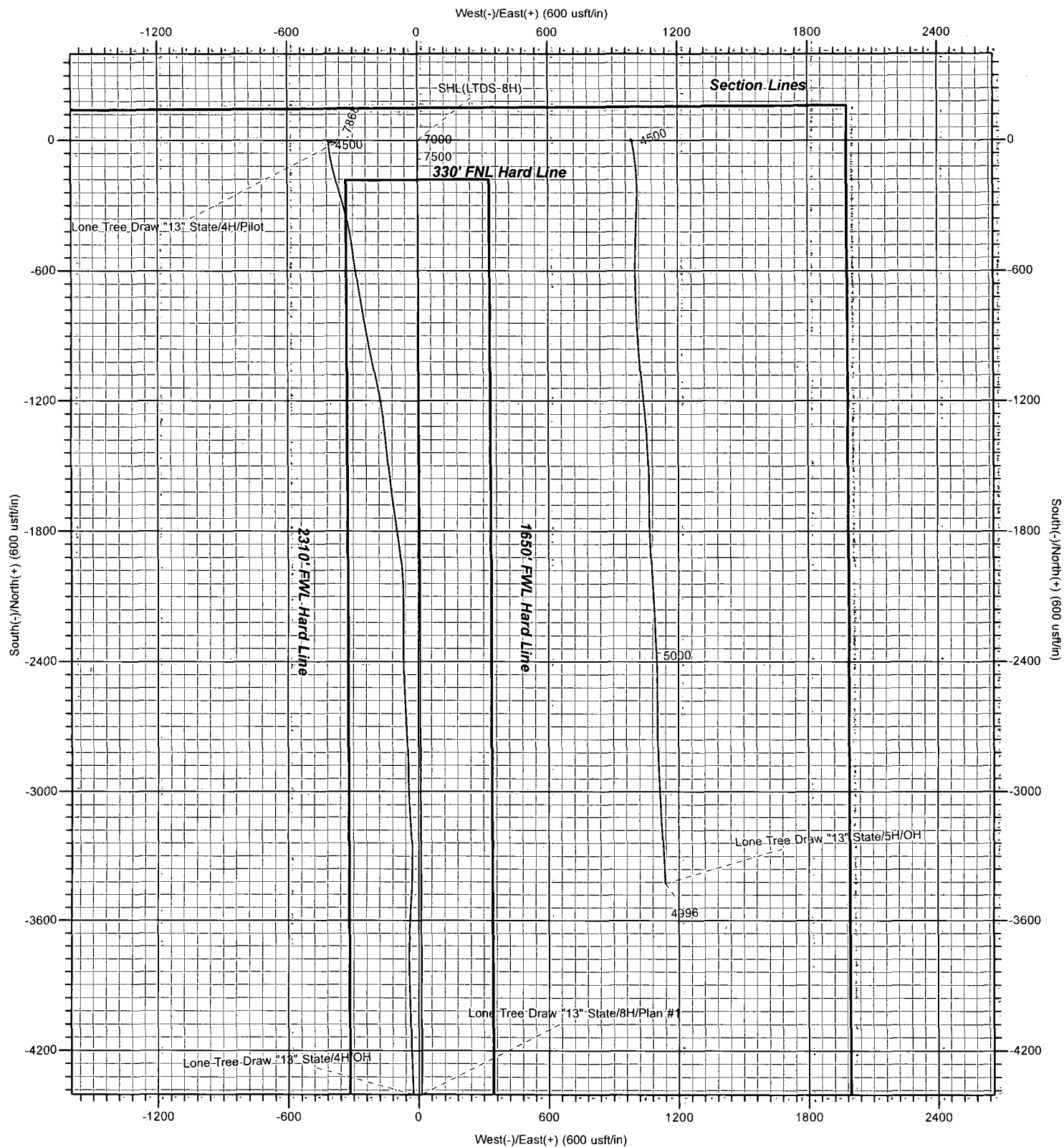
Azimuths to Grid North
True North: -0.10°
Magnetic North: 7.60°

**Magnetic Field
Strength: 48469.0snT
Dip Angle: 60.26°
Date: 09/18/2013
Model: BGGM2013**

RECEIVED

OCT 17 2013

NMOCD ART **devon**



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

Plan: Plan #1 (8H/OH)
Lone Tree Draw "13" State
Created By: Heber Claros Date: 18:21, September 18 2013
Approved: _____ Date: _____

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single-User Db	Local Co-ordinate Reference:	Well 8H
Company:	DEVON ENERGY	TVD Reference:	GE3172' + KB 26' @ 3198.00usft,(Cactus 126)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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:	Map	Northings:	541,005.87 usft
From:		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	8H					
Well Position	+N/-S	15.87 usft	Northing:	541,021.74 usft	Latitude:	32° 29' 13.861 N
	+E/-W	2,637.98 usft	Easting:	600,685.10 usft	Longitude:	104° 8' 27.087 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,172.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	09/18/13	7.71	60.26	48,469

Design:	Plan #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	179.82	

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	
7,218.78	0.00	0.00	7,218.78	0.00	0.00	0.00	0.00	0.00	0.00	
8,001.97	90.07	179.82	7,717.00	-498.80	1.53	11.50	11.50	22.96	179.82	
12,299.56	90.07	179.82	7,712.00	-4,796.37	14.69	0.00	0.00	0.00	0.00	PBHL(LTDS 8H)

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db-	Local Co-ordinate Reference:	Well 8H
Company:	DEVON ENERGY	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,218.78	0.00	0.00	7,218.78	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start DLS 11.50 TFO 179.82									
7,225.00	0.72	179.82	7,225.00	-0.04	0.00	0.04	11.50	11.50	0.00
7,250.00	3.59	179.82	7,249.98	-0.98	0.00	0.98	11.50	11.50	0.00
7,275.00	6.47	179.82	7,274.88	-3.17	0.01	3.17	11.50	11.50	0.00
7,300.00	9.34	179.82	7,299.64	-6.61	0.02	6.61	11.50	11.50	0.00
7,325.00	12.22	179.82	7,324.20	-11.28	0.03	11.28	11.50	11.50	0.00
7,350.00	15.09	179.82	7,348.49	-17.18	0.05	17.18	11.50	11.50	0.00
7,375.00	17.97	179.82	7,372.45	-24.29	0.07	24.29	11.50	11.50	0.00
7,393.56	20.10	179.82	7,390.00	-30.34	0.09	30.34	11.50	11.50	0.00
2nd Bone Spring Sand - 2BSSS UPPER Top									
7,400.00	20.84	179.82	7,396.03	-32.60	0.10	32.60	11.50	11.50	0.00
7,425.00	23.72	179.82	7,419.16	-42.07	0.13	42.07	11.50	11.50	0.00
7,450.00	26.59	179.82	7,441.79	-52.70	0.16	52.70	11.50	11.50	0.00
7,475.00	29.47	179.82	7,463.85	-64.44	0.20	64.44	11.50	11.50	0.00
7,500.00	32.34	179.82	7,485.30	-77.28	0.24	77.28	11.50	11.50	0.00
7,511.56	33.67	179.82	7,495.00	-83.58	0.26	83.58	11.50	11.50	0.00
2BSSS UPPER Base									
7,525.00	35.22	179.82	7,506.08	-91.18	0.28	91.18	11.50	11.50	0.00
7,550.00	38.09	179.82	7,526.14	-106.10	0.33	106.10	11.50	11.50	0.00
7,575.00	40.97	179.82	7,545.42	-122.01	0.37	122.01	11.50	11.50	0.00
7,578.43	41.36	179.82	7,548.00	-124.27	0.38	124.27	11.50	11.50	0.00
2BSSS MID Top									
7,600.00	43.84	179.82	7,563.88	-138.87	0.43	138.87	11.50	11.50	0.00
7,625.00	46.72	179.82	7,581.47	-156.63	0.48	156.63	11.50	11.50	0.00
7,640.63	48.51	179.82	7,592.00	-168.17	0.52	168.17	11.50	11.50	0.00
2BSSS MID Base									
7,650.00	49.59	179.82	7,598.14	-175.25	0.54	175.25	11.50	11.50	0.00
7,675.00	52.47	179.82	7,613.86	-194.68	0.60	194.69	11.50	11.50	0.00
7,700.00	55.34	179.82	7,628.59	-214.88	0.66	214.88	11.50	11.50	0.00
7,725.00	58.22	179.82	7,642.29	-235.79	0.72	235.80	11.50	11.50	0.00
7,750.00	61.09	179.82	7,654.92	-257.37	0.79	257.37	11.50	11.50	0.00
7,750.17	61.09	179.82	7,655.00	-257.52	0.79	257.52	0.00	0.00	0.00
2BSSS LOWER Top									
7,775.00	63.97	179.82	7,666.45	-279.54	0.86	279.55	11.58	11.58	0.00
7,800.00	66.84	179.82	7,676.85	-302.27	0.93	302.27	11.50	11.50	0.00
7,825.00	69.72	179.82	7,686.11	-325.50	1.00	325.50	11.50	11.50	0.00
7,850.00	72.59	179.82	7,694.18	-349.15	1.07	349.15	11.50	11.50	0.00
7,875.00	75.47	179.82	7,701.06	-373.18	1.14	373.19	11.50	11.50	0.00
7,900.00	78.34	179.82	7,706.72	-397.53	1.22	397.53	11.50	11.50	0.00
7,925.00	81.22	179.82	7,711.16	-422.13	1.29	422.13	11.50	11.50	0.00
7,950.00	84.09	179.82	7,714.36	-446.92	1.37	446.93	11.50	11.50	0.00
7,975.00	86.97	179.82	7,716.31	-471.85	1.45	471.85	11.50	11.50	0.00
8,001.97	90.07	179.82	7,717.00	-498.80	1.53	498.80	11.50	11.50	0.00
EOC: Start 4297.59' hold at 8001.97' MD									
8,100.00	90.07	179.82	7,716.89	-596.83	1.83	596.84	0.00	0.00	0.00
8,200.00	90.07	179.82	7,716.77	-696.83	2.13	696.84	0.00	0.00	0.00
8,300.00	90.07	179.82	7,716.66	-796.83	2.44	796.84	0.00	0.00	0.00
8,400.00	90.07	179.82	7,716.54	-896.83	2.75	896.84	0.00	0.00	0.00
8,500.00	90.07	179.82	7,716.42	-996.83	3.05	996.84	0.00	0.00	0.00
8,600.00	90.07	179.82	7,716.31	-1,096.83	3.36	1,096.84	0.00	0.00	0.00

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 8H
Company:	DEVON ENERGY	TVD Reference:	GE3172' + KB-26' @ 3198.00usft (Cactus 126)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,700.00	90.07	179.82	7,716.19	-1,196.83	3.67	1,196.84	0.00	0.00	0.00
8,800.00	90.07	179.82	7,716.07	-1,296.83	3.97	1,296.83	0.00	0.00	0.00
8,900.00	90.07	179.82	7,715.96	-1,396.83	4.28	1,396.83	0.00	0.00	0.00
9,000.00	90.07	179.82	7,715.84	-1,496.83	4.59	1,496.83	0.00	0.00	0.00
9,100.00	90.07	179.82	7,715.73	-1,596.83	4.89	1,596.83	0.00	0.00	0.00
9,200.00	90.07	179.82	7,715.61	-1,696.83	5.20	1,696.83	0.00	0.00	0.00
9,300.00	90.07	179.82	7,715.49	-1,796.83	5.50	1,796.83	0.00	0.00	0.00
9,400.00	90.07	179.82	7,715.38	-1,896.83	5.81	1,896.83	0.00	0.00	0.00
9,500.00	90.07	179.82	7,715.26	-1,996.83	6.12	1,996.83	0.00	0.00	0.00
9,600.00	90.07	179.82	7,715.14	-2,096.82	6.42	2,096.83	0.00	0.00	0.00
9,700.00	90.07	179.82	7,715.03	-2,196.82	6.73	2,196.83	0.00	0.00	0.00
9,800.00	90.07	179.82	7,714.91	-2,296.82	7.04	2,296.83	0.00	0.00	0.00
9,900.00	90.07	179.82	7,714.79	-2,396.82	7.34	2,396.83	0.00	0.00	0.00
10,000.00	90.07	179.82	7,714.68	-2,496.82	7.65	2,496.83	0.00	0.00	0.00
10,100.00	90.07	179.82	7,714.56	-2,596.82	7.96	2,596.83	0.00	0.00	0.00
10,200.00	90.07	179.82	7,714.44	-2,696.82	8.26	2,696.83	0.00	0.00	0.00
10,300.00	90.07	179.82	7,714.33	-2,796.82	8.57	2,796.83	0.00	0.00	0.00
10,400.00	90.07	179.82	7,714.21	-2,896.82	8.87	2,896.83	0.00	0.00	0.00
10,500.00	90.07	179.82	7,714.10	-2,996.82	9.18	2,996.83	0.00	0.00	0.00
10,600.00	90.07	179.82	7,713.98	-3,096.82	9.49	3,096.83	0.00	0.00	0.00
10,700.00	90.07	179.82	7,713.86	-3,196.82	9.79	3,196.83	0.00	0.00	0.00
10,800.00	90.07	179.82	7,713.75	-3,296.82	10.10	3,296.83	0.00	0.00	0.00
10,900.00	90.07	179.82	7,713.63	-3,396.82	10.41	3,396.83	0.00	0.00	0.00
11,000.00	90.07	179.82	7,713.51	-3,496.82	10.71	3,496.83	0.00	0.00	0.00
11,100.00	90.07	179.82	7,713.40	-3,596.82	11.02	3,596.83	0.00	0.00	0.00
11,200.00	90.07	179.82	7,713.28	-3,696.82	11.33	3,696.83	0.00	0.00	0.00
11,300.00	90.07	179.82	7,713.16	-3,796.82	11.63	3,796.83	0.00	0.00	0.00
11,400.00	90.07	179.82	7,713.05	-3,896.81	11.94	3,896.83	0.00	0.00	0.00
11,500.00	90.07	179.82	7,712.93	-3,996.81	12.24	3,996.83	0.00	0.00	0.00
11,600.00	90.07	179.82	7,712.81	-4,096.81	12.55	4,096.83	0.00	0.00	0.00
11,700.00	90.07	179.82	7,712.70	-4,196.81	12.86	4,196.83	0.00	0.00	0.00
11,800.00	90.07	179.82	7,712.58	-4,296.81	13.16	4,296.83	0.00	0.00	0.00
11,900.00	90.07	179.82	7,712.47	-4,396.81	13.47	4,396.83	0.00	0.00	0.00
12,000.00	90.07	179.82	7,712.35	-4,496.81	13.78	4,496.83	0.00	0.00	0.00
12,100.00	90.07	179.82	7,712.23	-4,596.81	14.08	4,596.83	0.00	0.00	0.00
12,200.00	90.07	179.82	7,712.12	-4,696.81	14.39	4,696.83	0.00	0.00	0.00
12,299.56	90.07	179.82	7,712.00	-4,796.37	14.69	4,796.39	0.00	0.00	0.00
TD at 12299.56' MD - PBHL(LTDS 8H)									

Design Targets

Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL(LTDS 8H)	0.00	0.00	0.00	0.00	0.00	541,021.74	600,685.10	32° 29' 13.861 N	104° 8' 27.087 W
- plan misses target center by 7218.78usft at 7218.78usft MD (7218.78 TVD, 0.00 N, 0.00 E)									
- Point									
PBHL(LTDS 8H)	0.00	0.00	7,712.00	-4,796.37	14.69	536,225.38	600,699.80	32° 28' 26.398 N	104° 8' 27.017 W
- plan hits target center									
- Point									

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 8H
Company:	DEVON ENERGY	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Project:	Eddy County, NM.(NAD-83)	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site:	Lone Tree Draw "13" State	North Reference:	Grid
Well:	8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
290.00	290.00	13 3/8"	13-3/8	17-1/2
2,800.00	2,800.00	9 5/8"	9-5/8	12-1/4
12,299.56	7,712.00	5 1/2"	5-1/2	6

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip Direction (°)
350.00	350.00	Top Salt		0.00
505.00	505.00	Base Salt		0.00
600.00	600.00	Tansil		0.00
691.00	691.00	Yates		0.00
820.00	820.00	Seven Rivers		0.00
880.00	880.00	Capitan		0.00
2,740.00	2,740.00	Base of Capitan		0.00
2,802.00	2,802.00	Delaware		0.00
5,231.00	5,231.00	Lower Brushy Canyon		0.00
5,441.00	5,441.00	Bone Spring Lime		0.00
5,584.00	5,584.00	Avalon Sand		0.00
6,627.00	6,627.00	1st Bone Spring Sand		0.00
6,865.00	6,865.00	2nd Bone Spring Lime		0.00
7,393.56	7,390.00	2nd Bone Spring Sand		0.00
7,393.56	7,390.00	2BSSS UPPER Top		0.00
7,511.56	7,495.00	2BSSS UPPER Base		0.00
7,578.43	7,548.00	2BSSS MID Top		0.00
7,640.63	7,592.00	2BSSS MID Base		0.00
7,750.17	7,655.00	2BSSS LOWER Top		0.00

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,218.78	7,218.78	0.00	0.00	KOP: Start DLS 11.50 TFO 179.82
8,001.97	7,717.00	-498.80	1.53	EOC: Start 4297.59 hold at 8001.97 MD
12,299.56	7,712.00	-4,796.37	14.69	TD at 12299.56' MD

DEVON ENERGY

Eddy County, NM (NAD-83)
Lone Tree Draw "13" State
8H

OH
Plan #1

Anticollision Report

18 September, 2013

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 20,000.00 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	09/18/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	12,299.56	Plan #1 (OH)	LEAM MWD-ADJ	MWD - Standard	

Summary						
Site Name	Reference	Offset	Distance		Separation	Warning
	Measured	Measured	Between	Between		
Offset Well - Wellbore - Design	Depth	Depth	Centres	Ellipses	Factor	
	(usft)	(usft)	(usft)	(usft)		
Lone Tree Draw "13" State						
2H - OH - OH	4,391.16	4,412.19	2,582.94	2,562.76	128.042	CC
2H - OH - OH	4,400.00	4,418.39	2,582.94	2,562.75	127.914	ES
2H - OH - OH	12,299.56	9,394.29	4,097.10	3,962.56	30.451	SF
2H - Pilot - Pilot	6,026.42	6,047.31	2,574.84	2,548.15	96.483	CC
2H - Pilot - Pilot	6,100.00	6,112.47	2,574.96	2,548.02	95.601	ES
2H - Pilot - Pilot	12,299.56	6,978.42	5,476.22	5,376.82	55.094	SF
4H - OH - OH	1,682.12	1,689.21	403.28	396.10	56.204	CC
4H - OH - OH	4,649.38	4,662.88	408.42	390.44	22.721	ES
4H - OH - OH	4,900.00	4,878.00	423.55	404.20	21.891	SF
4H - Pilot - Pilot	7,436.32	7,456.23	391.09	361.71	13.314	CC, ES
4H - Pilot - Pilot	7,500.00	7,512.09	392.69	363.16	13.299	SF
5H - OH - OH	1,779.12	1,771.16	982.12	975.38	145.901	CC
5H - OH - OH	3,300.00	3,285.83	983.40	970.61	76.871	ES
5H - OH - OH	12,100.00	8,231.00	3,163.66	3,082.24	38.853	SF

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					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
0.00	0.00	21.13	21.13	0.00	0.02	-90.34	-15.87	-2,637.98	2,638.02				
100.00	100.00	124.95	124.95	0.08	0.19	-90.35	-15.93	-2,637.84	2,637.89	2,637.62		0.27	9,619.902
200.00	200.00	227.52	227.52	0.31	0.46	-90.35	-16.04	-2,637.60	2,637.66	2,636.89		0.77	3,420.832
300.00	300.00	329.75	329.75	0.53	0.73	-90.35	-16.19	-2,637.26	2,637.33	2,636.06		1.27	2,081.437
400.00	400.00	433.90	433.90	0.76	1.01	-90.36	-16.41	-2,636.81	2,636.89	2,635.13		1.77	1,491.284
500.00	500.00	538.96	538.96	0.98	1.29	-90.36	-16.73	-2,636.15	2,636.27	2,634.00		2.27	1,160.507
600.00	600.00	645.36	645.35	1.21	1.57	-90.37	-17.19	-2,635.25	2,635.43	2,632.65		2.78	948.459
700.00	700.00	749.74	749.72	1.43	1.85	-90.39	-17.90	-2,634.16	2,634.39	2,631.11		3.28	803.549
800.00	800.00	857.06	857.03	1.66	2.13	-90.41	-18.95	-2,632.81	2,633.13	2,629.35		3.79	695.599
900.00	900.00	965.90	965.84	1.88	2.42	-90.44	-20.22	-2,631.06	2,631.54	2,627.24		4.30	612.316
1,000.00	1,000.00	1,069.57	1,069.49	2.11	2.69	-90.47	-21.62	-2,629.15	2,629.71	2,624.91		4.80	548.289
1,100.00	1,100.00	1,170.39	1,170.28	2.33	2.96	-90.51	-23.39	-2,627.22	2,627.80	2,622.52		5.29	497.189

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design										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		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
1,200.00	1,200.00	1,277.39	1,277.23	2.56	3.23	-90.56	-25.81	-2,625.06	2,625.82	2,620.03	5.79	453.694	
1,300.00	1,300.00	1,377.58	1,377.35	2.78	3.49	-90.63	-28.83	-2,622.78	2,623.57	2,617.30	6.27	418.406	
1,400.00	1,400.00	1,473.33	1,473.04	3.01	3.74	-90.69	-31.64	-2,620.74	2,621.46	2,614.72	6.74	388.846	
1,500.00	1,500.00	1,565.29	1,564.94	3.23	3.98	-90.75	-34.11	-2,618.97	2,619.58	2,612.37	7.20	363.623	
1,600.00	1,600.00	1,673.45	1,673.06	3.45	4.26	-90.80	-36.32	-2,617.01	2,617.80	2,610.09	7.71	339.439	
1,700.00	1,700.00	1,771.50	1,771.08	3.68	4.52	-90.83	-37.80	-2,615.00	2,615.78	2,607.58	8.20	319.117	
1,800.00	1,800.00	1,858.89	1,858.45	3.90	4.75	-90.85	-38.77	-2,613.48	2,614.05	2,605.40	8.65	302.086	
1,900.00	1,900.00	1,953.68	1,953.23	4.13	5.00	-90.87	-39.53	-2,612.20	2,612.71	2,603.58	9.13	286.198	
2,000.00	2,000.00	2,050.38	2,049.92	4.35	5.26	-90.88	-40.19	-2,611.02	2,611.50	2,601.89	9.61	271.768	
2,100.00	2,100.00	2,158.16	2,158.69	4.58	5.55	-90.90	-41.02	-2,609.61	2,610.22	2,600.10	10.12	257.875	
2,200.00	2,200.00	2,261.09	2,260.60	4.80	5.82	-90.92	-41.98	-2,608.04	2,608.70	2,598.08	10.62	245.709	
2,300.00	2,300.00	2,361.21	2,360.70	5.03	6.08	-90.94	-42.89	-2,606.46	2,607.13	2,596.02	11.11	234.731	
2,400.00	2,400.00	2,458.17	2,457.65	5.25	6.34	-90.96	-43.66	-2,604.99	2,605.62	2,594.04	11.59	224.860	
2,500.00	2,500.00	2,554.64	2,554.10	5.48	6.59	-90.97	-44.28	-2,603.66	2,604.26	2,592.19	12.07	215.823	
2,600.00	2,600.00	2,653.90	2,653.36	5.70	6.86	-90.99	-44.94	-2,602.36	2,602.96	2,590.41	12.55	207.350	
2,700.00	2,700.00	2,753.62	2,753.06	5.93	7.12	-91.01	-45.64	-2,601.09	2,601.70	2,588.65	13.04	199.482	
2,800.00	2,800.00	2,856.96	2,856.40	6.15	7.39	-91.02	-46.45	-2,599.71	2,600.37	2,586.83	13.54	192.036	
2,900.00	2,900.00	2,958.03	2,957.45	6.38	7.66	-91.04	-47.33	-2,598.21	2,598.91	2,584.87	14.03	185.189	
3,000.00	3,000.00	3,055.56	3,054.96	6.60	7.92	-91.06	-48.03	-2,596.85	2,597.53	2,583.02	14.52	178.938	
3,100.00	3,100.00	3,158.98	3,158.37	6.83	8.19	-91.07	-48.62	-2,595.42	2,596.16	2,581.15	15.01	172.938	
3,200.00	3,200.00	3,267.45	3,266.83	7.05	8.47	-91.08	-49.03	-2,593.64	2,594.53	2,579.01	15.51	167.231	
3,300.00	3,300.00	3,367.36	3,366.72	7.28	8.72	-91.09	-49.14	-2,591.79	2,592.68	2,576.69	15.99	162.188	
3,400.00	3,400.00	3,457.22	3,456.57	7.50	8.93	-91.08	-49.00	-2,590.32	2,591.04	2,574.62	16.42	157.791	
3,500.00	3,500.00	3,552.70	3,552.04	7.73	9.14	-91.08	-48.71	-2,589.10	2,589.76	2,572.90	16.86	153.610	
3,600.00	3,600.00	3,648.48	3,647.82	7.95	9.34	-91.07	-48.27	-2,587.99	2,588.59	2,571.31	17.28	149.771	
3,700.00	3,700.00	3,746.33	3,745.66	8.17	9.52	-91.05	-47.55	-2,587.01	2,587.57	2,569.89	17.69	146.291	
3,800.00	3,800.00	3,843.46	3,842.78	8.40	9.68	-91.03	-46.58	-2,586.11	2,586.63	2,568.56	18.07	143.156	
3,900.00	3,900.00	3,944.09	3,943.40	8.62	9.84	-91.01	-45.52	-2,585.24	2,585.75	2,567.30	18.45	140.123	
4,000.00	4,000.00	4,037.34	4,036.64	8.85	9.99	-90.99	-44.66	-2,584.52	2,584.96	2,566.13	18.83	137.303	
4,100.00	4,100.00	4,136.51	4,135.80	9.07	10.14	-90.97	-43.79	-2,583.93	2,584.35	2,565.14	19.20	134.571	
4,200.00	4,200.00	4,232.82	4,232.11	9.30	10.29	-90.95	-42.99	-2,583.42	2,583.80	2,564.23	19.58	131.991	
4,300.00	4,300.00	4,331.54	4,330.82	9.52	10.43	-90.94	-42.17	-2,583.00	2,583.36	2,563.42	19.94	129.532	
4,391.16	4,391.16	4,412.19	4,411.16	9.73	10.46	-91.08	-48.48	-2,582.48	2,582.94	2,562.76	20.17	128.042 CC	
4,400.00	4,400.00	4,418.39	4,417.31	9.75	10.46	-91.09	-49.30	-2,582.47	2,582.94	2,562.75	20.19	127.914 ES	
4,500.00	4,500.00	4,495.19	4,492.87	9.97	10.47	-91.39	-62.88	-2,582.67	2,583.58	2,563.15	20.43	126.471	
4,600.00	4,600.00	4,574.90	4,569.25	10.20	10.50	-91.90	-85.51	-2,583.01	2,584.93	2,564.24	20.68	124.976	
4,700.00	4,700.00	4,633.85	4,623.56	10.42	10.53	-92.40	-108.34	-2,583.65	2,587.72	2,566.75	20.96	123.435	
4,800.00	4,800.00	4,685.20	4,668.99	10.65	10.60	-92.93	-132.23	-2,584.69	2,592.47	2,571.21	21.26	121.913	
4,900.00	4,900.00	4,739.00	4,714.22	10.87	10.70	-93.57	-161.29	-2,586.25	2,599.43	2,577.83	21.60	120.322	
5,000.00	5,000.00	4,781.84	4,747.79	11.10	10.82	-94.15	-187.84	-2,587.56	2,608.61	2,586.65	21.96	118.798	
5,100.00	5,100.00	4,802.00	4,762.71	11.32	10.88	-94.45	-201.38	-2,588.23	2,620.52	2,598.27	22.25	117.758	
5,200.00	5,200.00	4,833.00	4,784.74	11.55	11.00	-94.92	-223.14	-2,589.60	2,635.39	2,612.79	22.60	116.588	
5,300.00	5,300.00	4,865.00	4,806.38	11.77	11.14	-95.44	-246.63	-2,591.62	2,653.51	2,630.54	22.98	115.485	
5,400.00	5,400.00	4,865.00	4,806.38	12.00	11.14	-95.44	-246.63	-2,591.62	2,674.67	2,651.47	23.20	115.278	
5,500.00	5,500.00	4,897.00	4,826.43	12.22	11.30	-95.97	-271.42	-2,594.26	2,699.05	2,675.45	23.60	114.386	
5,600.00	5,600.00	4,897.00	4,826.43	12.45	11.30	-95.97	-271.42	-2,594.26	2,726.46	2,702.64	23.82	114.457	
5,700.00	5,700.00	4,916.03	4,837.49	12.67	11.41	-96.30	-286.80	-2,596.10	2,756.96	2,732.80	24.16	114.117	
5,800.00	5,800.00	4,928.00	4,844.14	12.89	11.48	-96.52	-296.67	-2,597.36	2,790.45	2,765.99	24.46	114.105	
5,900.00	5,900.00	4,960.00	4,860.83	13.12	11.69	-97.10	-323.76	-2,600.68	2,826.69	2,801.80	24.89	113.568	
6,000.00	6,000.00	4,972.32	4,866.86	13.34	11.78	-97.32	-334.43	-2,601.92	2,865.58	2,840.38	25.20	113.696	
6,100.00	6,100.00	4,991.00	4,875.63	13.57	11.92	-97.67	-350.82	-2,603.84	2,907.15	2,881.59	25.56	113.725	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lohe Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 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		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
6,200.00	6,200.00	4,991.00	4,875.63	13.79	11.92	-97.67	-350.82	-2,603.84	2,951.34	2,925.55	25.79	114.447	
6,300.00	6,300.00	5,023.00	4,889.48	14.02	12.18	-98.28	-379.46	-2,607.18	2,997.96	2,971.70	26.26	114.148	
6,400.00	6,400.00	5,023.00	4,889.48	14.24	12.18	-98.28	-379.46	-2,607.18	3,046.95	3,020.46	26.49	115.028	
6,500.00	6,500.00	5,023.00	4,889.48	14.47	12.18	-98.28	-379.46	-2,607.18	3,098.38	3,071.67	26.71	115.986	
6,600.00	6,600.00	5,040.38	4,896.24	14.69	12.33	-98.62	-395.36	-2,609.00	3,151.91	3,124.82	27.09	116.366	
6,700.00	6,700.00	5,054.00	4,901.09	14.92	12.45	-98.88	-408.02	-2,610.43	3,207.69	3,180.26	27.43	116.958	
6,800.00	6,800.00	5,054.00	4,901.09	15.14	12.45	-98.88	-408.02	-2,610.43	3,265.43	3,237.78	27.65	118.095	
6,900.00	6,900.00	5,054.00	4,901.09	15.37	12.45	-98.88	-408.02	-2,610.43	3,325.18	3,297.31	27.88	119.286	
7,000.00	7,000.00	5,054.00	4,901.09	15.59	12.45	-98.88	-408.02	-2,610.43	3,386.83	3,358.73	28.10	120.526	
7,100.00	7,100.00	5,068.40	4,905.75	15.82	12.59	-99.17	-421.55	-2,611.96	3,450.07	3,421.61	28.46	121.239	
7,200.00	7,200.00	5,086.00	4,910.79	16.04	12.76	-99.52	-438.31	-2,613.88	3,515.25	3,486.41	28.84	121.882	
7,300.00	7,299.84	5,086.00	4,910.79	16.22	12.76	72.81	-438.31	-2,613.88	3,580.70	3,552.03	28.68	124.870	
7,400.00	7,396.03	5,086.00	4,910.79	16.40	12.76	64.22	-438.31	-2,613.88	3,643.32	3,614.71	28.60	127.376	
7,500.00	7,485.30	5,086.00	4,910.79	16.56	12.76	57.19	-438.31	-2,613.88	3,700.74	3,672.31	28.43	130.170	
7,600.00	7,563.88	5,117.00	4,918.36	16.79	13.07	51.57	-468.16	-2,617.36	3,750.49	3,722.31	28.19	133.067	
7,700.00	7,628.59	5,117.00	4,918.36	17.13	13.07	47.67	-468.16	-2,617.36	3,791.09	3,763.50	27.59	137.427	
7,800.00	7,676.85	5,149.00	4,924.69	17.60	13.42	44.99	-499.31	-2,621.08	3,820.81	3,793.55	27.26	140.138	
7,900.00	7,706.72	5,165.18	4,927.29	18.23	13.60	43.52	-515.16	-2,622.97	3,838.88	3,811.70	27.18	141.239	
8,000.00	7,717.00	5,181.00	4,929.50	19.00	13.78	43.09	-530.72	-2,624.79	3,844.57	3,816.93	27.64	139.070	
8,059.44	7,717.10	5,212.00	4,932.98	19.53	14.15	43.16	-561.34	-2,628.17	3,844.39	3,816.11	28.28	135.947	
8,100.00	7,716.89	5,212.00	4,932.98	19.90	14.15	43.17	-561.34	-2,628.17	3,844.49	3,815.97	28.52	134.822	
8,200.00	7,716.77	5,244.00	4,935.58	20.92	14.54	43.23	-593.06	-2,631.48	3,864.22	3,816.73	29.49	130.425	
8,300.00	7,716.66	5,244.00	4,935.58	22.04	14.54	43.23	-593.06	-2,631.48	3,850.34	3,820.10	30.24	127.340	
8,400.00	7,716.54	5,275.00	4,936.47	23.26	14.93	43.28	-623.85	-2,634.88	3,856.42	3,825.06	31.36	122.977	
8,500.00	7,716.42	5,275.00	4,936.47	24.55	14.93	43.28	-623.85	-2,634.88	3,864.91	3,832.68	32.24	119.893	
8,600.00	7,716.31	5,409.89	4,935.35	25.91	16.58	43.47	-757.50	-2,652.87	3,875.06	3,840.57	34.48	112.376	
8,700.00	7,716.19	5,490.00	4,937.15	27.32	17.55	43.62	-836.67	-2,664.99	3,884.08	3,847.82	36.26	107.125	
8,800.00	7,716.07	5,869.00	4,940.21	28.78	22.94	44.02	-1,213.82	-2,698.10	3,889.08	3,847.60	41.48	93.757	
8,900.00	7,715.96	5,969.81	4,942.09	30.28	24.43	44.10	-1,314.49	-2,703.15	3,891.35	3,847.66	43.69	89.068	
9,000.00	7,715.84	6,093.70	4,946.06	31.82	26.29	44.21	-1,438.17	-2,709.22	3,892.43	3,846.20	46.23	84.195	
9,100.00	7,715.73	6,152.00	4,947.46	33.38	27.19	44.26	-1,496.34	-2,712.74	3,894.87	3,846.82	48.05	81.051	
9,200.00	7,715.61	6,152.00	4,947.46	34.97	27.19	44.26	-1,496.34	-2,712.74	3,898.87	3,849.66	49.20	79.239	
9,300.00	7,715.49	6,199.61	4,947.77	36.59	27.96	44.30	-1,543.81	-2,716.46	3,904.42	3,853.45	50.97	76.599	
9,400.00	7,715.38	6,247.00	4,947.05	38.22	28.72	44.35	-1,590.96	-2,721.10	3,912.08	3,859.32	52.76	74.152	
9,500.00	7,715.26	6,600.36	4,946.55	39.87	34.36	44.59	-1,943.42	-2,743.23	3,916.46	3,858.14	58.32	67.155	
9,600.00	7,715.14	6,625.00	4,946.81	41.54	34.76	44.60	-1,968.05	-2,743.99	3,918.69	3,858.84	59.85	65.476	
9,700.00	7,715.03	6,719.00	4,947.22	43.22	36.29	44.66	-2,061.90	-2,748.99	3,922.25	3,859.98	62.27	62.985	
9,800.00	7,714.91	6,737.93	4,947.20	44.91	36.60	44.68	-2,080.77	-2,750.43	3,927.04	3,863.28	63.77	61.586	
9,900.00	7,714.79	6,814.00	4,947.30	46.61	37.85	44.75	-2,156.59	-2,756.69	3,932.90	3,866.89	66.01	59.580	
10,000.00	7,714.68	6,890.44	4,947.30	48.32	39.11	44.82	-2,232.72	-2,763.51	3,939.36	3,871.07	68.29	57.687	
10,100.00	7,714.56	7,016.51	4,946.97	50.04	41.20	44.94	-2,358.30	-2,774.63	3,945.93	3,874.70	71.23	55.397	
10,200.00	7,714.44	7,088.00	4,946.73	51.77	42.55	45.01	-2,439.48	-2,781.77	3,952.45	3,878.86	73.60	53.704	
10,300.00	7,714.33	7,137.55	4,946.35	53.50	43.22	45.05	-2,478.85	-2,785.53	3,959.91	3,884.48	75.43	52.496	
10,400.00	7,714.21	7,193.00	4,945.23	55.24	44.17	45.10	-2,533.98	-2,791.37	3,968.81	3,891.31	77.49	51.216	
10,500.00	7,714.10	7,257.59	4,943.50	56.99	45.27	45.16	-2,598.13	-2,798.64	3,978.72	3,899.03	79.69	49.929	
10,600.00	7,713.98	7,334.89	4,941.27	58.74	46.59	45.23	-2,674.88	-2,807.57	3,989.12	3,907.05	82.07	48.606	
10,700.00	7,713.86	7,611.83	4,939.42	60.50	51.18	45.55	-2,949.89	-2,839.66	3,998.66	3,911.47	87.19	45.864	
10,800.00	7,713.75	7,704.15	4,941.50	62.26	52.70	45.68	-3,041.62	-2,849.84	4,005.12	3,915.31	89.81	44.597	
10,900.00	7,713.63	7,791.68	4,943.84	64.02	54.15	45.80	-3,128.54	-2,859.90	4,011.68	3,919.29	92.39	43.421	
11,000.00	7,713.51	7,860.60	4,945.60	65.79	55.31	45.91	-3,196.92	-2,868.39	4,018.91	3,924.18	94.73	42.424	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB' 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB' 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Lone Tree Draw "13" State - 2H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 80-NS-GYRO-MS: 4361-LEAM MWD, 9485-Project													
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,100.00	7,713.40	7,950.00	4,947.94	67.56	56.81	46.05	-3,285.55	-2,879.82	4,026.49	3,929.10	97.39	41.344	
11,200.00	7,713.28	8,045.00	4,950.51	69.34	58.41	46.21	-3,379.66	-2,892.55	4,034.46	3,934.31	100.15	40.284	
11,300.00	7,713.16	8,140.00	4,953.17	71.12	60.00	46.37	-3,473.72	-2,905.60	4,042.65	3,939.72	102.93	39.278	
11,400.00	7,713.05	8,234.00	4,955.14	72.90	61.56	46.51	-3,566.88	-2,917.95	4,050.91	3,945.25	105.66	38.338	
11,500.00	7,712.93	8,383.89	4,956.73	74.68	64.05	46.68	-3,715.96	-2,933.35	4,057.42	3,948.26	109.16	37.168	
11,600.00	7,712.81	8,462.02	4,955.94	76.46	65.37	46.75	-3,793.75	-2,940.65	4,065.01	3,953.37	111.63	36.414	
11,700.00	7,712.70	8,583.63	4,953.91	78.25	67.42	46.83	-3,914.94	-2,950.48	4,072.16	3,957.48	114.68	35.508	
11,800.00	7,712.58	8,785.10	4,952.74	80.04	70.82	46.95	-4,115.98	-2,963.35	4,076.75	3,957.92	118.83	34.308	
11,900.00	7,712.47	8,833.75	4,952.69	81.83	71.65	46.98	-4,164.52	-2,966.59	4,081.89	3,961.00	120.90	33.764	
12,000.00	7,712.35	8,897.00	4,952.32	83.62	72.74	47.03	-4,227.53	-2,972.10	4,088.58	3,965.39	123.19	33.189	
12,100.00	7,712.23	9,228.15	4,958.90	85.42	78.32	47.35	-4,557.57	-2,996.80	4,093.69	3,964.37	129.32	31.655	
12,200.00	7,712.12	9,301.08	4,961.83	87.22	79.56	47.42	-4,630.32	-3,000.83	4,095.18	3,963.39	131.78	31.075	
12,299.56	7,712.00	9,394.29	4,965.57	89.01	81.15	47.52	-4,723.29	-3,006.53	4,097.10	3,962.56	134.55	30.451 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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 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		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	Warning
0.00	0.00	21.13	21.13	0.00	0.02	-90.34	-15.87	-2,637.98	2,638.02				
100.00	100.00	124.95	124.95	0.08	0.19	-90.35	-15.93	-2,637.84	2,637.89	2,637.62	0.27	9,619.883	
200.00	200.00	227.52	227.52	0.31	0.46	-90.35	-16.04	-2,637.60	2,637.66	2,636.89	0.77	3,420.831	
300.00	300.00	329.75	329.75	0.53	0.73	-90.35	-16.19	-2,637.26	2,637.33	2,636.06	1.27	2,081.438	
400.00	400.00	433.90	433.90	0.76	1.01	-90.36	-16.41	-2,636.81	2,636.89	2,635.13	1.77	1,461.285	
500.00	500.00	538.96	538.96	0.98	1.29	-90.36	-16.73	-2,636.15	2,636.27	2,634.00	2.27	1,160.508	
600.00	600.00	645.36	645.35	1.21	1.57	-90.37	-17.19	-2,635.25	2,635.43	2,632.65	2.78	948.461	
700.00	700.00	749.74	749.72	1.43	1.85	-90.39	-17.90	-2,634.16	2,634.39	2,631.11	3.28	803.550	
800.00	800.00	857.06	857.03	1.66	2.13	-90.41	-18.95	-2,632.81	2,633.13	2,629.35	3.79	695.601	
900.00	900.00	965.90	965.84	1.88	2.42	-90.44	-20.22	-2,631.06	2,631.54	2,627.24	4.30	612.319	
1,000.00	1,000.00	1,069.57	1,069.49	2.11	2.69	-90.47	-21.62	-2,629.15	2,629.71	2,624.91	4.80	548.293	
1,100.00	1,100.00	1,170.39	1,170.28	2.33	2.96	-90.51	-23.39	-2,627.22	2,627.80	2,622.52	5.29	497.195	
1,200.00	1,200.00	1,277.39	1,277.23	2.56	3.23	-90.56	-25.81	-2,625.06	2,625.82	2,620.03	5.79	453.700	
1,300.00	1,300.00	1,377.58	1,377.35	2.78	3.49	-90.63	-28.83	-2,622.78	2,623.57	2,617.30	6.27	418.414	
1,400.00	1,400.00	1,473.33	1,473.04	3.01	3.74	-90.69	-31.64	-2,620.74	2,621.46	2,614.72	6.74	388.855	
1,500.00	1,500.00	1,565.29	1,564.94	3.23	3.98	-90.75	-34.11	-2,618.97	2,619.58	2,612.37	7.20	363.633	
1,600.00	1,600.00	1,673.45	1,673.06	3.45	4.26	-90.80	-36.32	-2,617.01	2,617.80	2,610.09	7.71	339.449	
1,700.00	1,700.00	1,771.50	1,771.08	3.68	4.52	-90.83	-37.80	-2,615.00	2,615.78	2,607.58	8.20	319.127	
1,800.00	1,800.00	1,858.89	1,858.45	3.90	4.75	-90.85	-38.77	-2,613.48	2,614.05	2,605.40	8.65	302.095	
1,900.00	1,900.00	1,953.68	1,953.23	4.13	5.00	-90.87	-39.53	-2,612.20	2,612.71	2,603.58	9.13	286.207	
2,000.00	2,000.00	2,050.38	2,049.92	4.35	5.26	-90.88	-40.19	-2,611.02	2,611.50	2,601.89	9.61	271.775	
2,100.00	2,100.00	2,159.16	2,158.69	4.58	5.55	-90.90	-41.02	-2,609.61	2,610.22	2,600.10	10.12	257.883	
2,200.00	2,200.00	2,261.09	2,260.60	4.80	5.82	-90.92	-41.98	-2,608.04	2,608.70	2,598.08	10.62	245.716	
2,300.00	2,300.00	2,361.21	2,360.70	5.03	6.08	-90.94	-42.89	-2,606.46	2,607.13	2,596.02	11.11	234.738	
2,400.00	2,400.00	2,458.17	2,457.65	5.25	6.34	-90.96	-43.66	-2,604.99	2,605.62	2,594.04	11.59	224.866	
2,500.00	2,500.00	2,554.64	2,554.10	5.48	6.59	-90.97	-44.28	-2,603.65	2,604.26	2,592.19	12.07	215.829	
2,600.00	2,600.00	2,653.90	2,653.36	5.70	6.86	-90.99	-44.94	-2,602.36	2,602.96	2,590.41	12.55	207.356	
2,700.00	2,700.00	2,753.62	2,753.06	5.93	7.12	-91.01	-45.64	-2,601.09	2,601.70	2,588.65	13.04	199.487	
2,800.00	2,800.00	2,856.96	2,856.40	6.15	7.39	-91.02	-46.45	-2,599.71	2,600.37	2,586.83	13.54	192.041	
2,900.00	2,900.00	2,958.03	2,957.45	6.38	7.66	-91.04	-47.33	-2,598.21	2,598.91	2,584.88	14.03	185.194	
3,000.00	3,000.00	3,055.56	3,054.96	6.60	7.92	-91.06	-48.03	-2,596.85	2,597.53	2,583.02	14.52	178.942	
3,100.00	3,100.00	3,158.98	3,158.37	6.83	8.19	-91.07	-48.62	-2,595.42	2,596.16	2,581.15	15.01	172.942	
3,200.00	3,200.00	3,267.45	3,266.83	7.05	8.47	-91.08	-49.03	-2,593.64	2,594.53	2,579.01	15.51	167.235	
3,300.00	3,300.00	3,367.36	3,366.72	7.28	8.72	-91.09	-49.14	-2,591.79	2,592.68	2,576.70	15.99	162.193	
3,400.00	3,400.00	3,457.22	3,456.57	7.50	8.93	-91.08	-49.00	-2,590.32	2,591.04	2,574.62	16.42	157.794	
3,500.00	3,500.00	3,552.70	3,552.04	7.73	9.14	-91.08	-48.71	-2,589.10	2,589.76	2,572.90	16.86	153.613	
3,600.00	3,600.00	3,648.48	3,647.82	7.95	9.34	-91.07	-48.27	-2,587.99	2,588.59	2,571.31	17.28	149.775	
3,700.00	3,700.00	3,746.33	3,745.66	8.17	9.52	-91.05	-47.55	-2,587.01	2,587.57	2,569.89	17.69	146.294	
3,800.00	3,800.00	3,843.46	3,842.78	8.40	9.68	-91.03	-46.58	-2,586.11	2,586.63	2,568.56	18.07	143.159	
3,900.00	3,900.00	3,944.09	3,943.40	8.62	9.84	-91.01	-45.52	-2,585.24	2,585.75	2,567.30	18.45	140.125	
4,000.00	4,000.00	4,037.34	4,036.64	8.85	9.99	-90.99	-44.66	-2,584.52	2,584.96	2,566.13	18.83	137.306	
4,100.00	4,100.00	4,136.51	4,135.80	9.07	10.14	-90.97	-43.79	-2,583.93	2,584.35	2,565.15	19.20	134.574	
4,200.00	4,200.00	4,232.82	4,232.11	9.30	10.29	-90.95	-42.99	-2,583.42	2,583.80	2,564.23	19.58	131.993	
4,300.00	4,300.00	4,331.54	4,330.82	9.52	10.43	-90.94	-42.17	-2,583.00	2,583.36	2,563.42	19.94	129.534	
4,400.00	4,400.00	4,431.27	4,430.56	9.75	10.58	-90.92	-41.38	-2,582.60	2,582.95	2,562.63	20.32	127.134	
4,500.00	4,500.00	4,531.72	4,531.00	9.97	10.73	-90.90	-40.60	-2,582.19	2,582.53	2,561.83	20.70	124.773	
4,600.00	4,600.00	4,629.81	4,629.08	10.20	10.89	-90.88	-39.84	-2,581.81	2,582.14	2,561.06	21.07	122.523	
4,700.00	4,700.00	4,726.58	4,725.85	10.42	11.03	-90.87	-39.11	-2,581.54	2,581.84	2,560.40	21.44	120.418	
4,800.00	4,800.00	4,822.91	4,822.18	10.65	11.15	-90.85	-38.39	-2,581.41	2,581.70	2,559.91	21.79	118.483	
4,900.00	4,900.00	4,922.81	4,922.07	10.87	11.27	-90.83	-37.52	-2,581.36	2,581.63	2,559.50	22.13	116.642	
5,000.00	5,000.00	5,029.99	5,029.25	11.10	11.41	-90.80	-36.23	-2,581.19	2,581.46	2,558.96	22.50	114.737	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:
Lone Tree Draw "13" State - 2H - Pilot - Pilot													0.00 usft
Survey Program: 80-NS-GYRO-MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,100.00	5,140.83	5,140.07	11.32	11.59	-90.76	-34.42	-2,580.54	2,580.85	2,557.95	22.90	112.701	
5,200.00	5,200.00	5,245.68	5,244.90	11.55	11.77	-90.72	-32.42	-2,579.64	2,579.97	2,556.66	23.31	110.685	
5,300.00	5,300.00	5,340.79	5,339.99	11.77	11.94	-90.68	-30.51	-2,578.79	2,579.04	2,555.34	23.70	108.809	
5,400.00	5,400.00	5,436.41	5,435.59	12.00	12.10	-90.64	-28.66	-2,578.18	2,578.38	2,554.29	24.09	107.026	
5,500.00	5,500.00	5,537.05	5,536.20	12.22	12.28	-90.59	-26.64	-2,577.59	2,577.78	2,553.30	24.49	105.269	
5,600.00	5,600.00	5,633.81	5,632.94	12.45	12.45	-90.55	-24.95	-2,577.04	2,577.19	2,552.31	24.88	103.571	
5,700.00	5,700.00	5,741.39	5,740.52	12.67	12.67	-90.53	-23.81	-2,576.41	2,576.60	2,551.27	25.33	101.730	
5,800.00	5,800.00	5,839.01	5,838.14	12.89	12.90	-90.53	-23.63	-2,575.66	2,575.83	2,550.04	25.79	99.896	
5,900.00	5,900.00	5,935.31	5,934.43	13.12	13.11	-90.54	-24.30	-2,575.04	2,575.20	2,548.98	26.22	98.216	
6,000.00	6,000.00	6,023.94	6,023.05	13.34	13.26	-90.56	-25.37	-2,574.73	2,574.85	2,548.26	26.59	96.820	
6,026.42	6,026.42	6,047.31	6,046.42	13.40	13.29	-90.57	-25.69	-2,574.71	2,574.84	2,548.15	26.69	96.483 CC	
6,100.00	6,100.00	6,112.47	6,111.58	13.57	13.37	-90.59	-26.62	-2,574.81	2,574.96	2,548.02	26.93	95.801 ES	
6,200.00	6,200.00	6,197.97	6,197.07	13.79	13.45	-90.62	-27.82	-2,575.30	2,575.56	2,548.32	27.24	94.554	
6,300.00	6,300.00	6,271.73	6,270.81	14.02	13.50	-90.64	-28.62	-2,576.26	2,576.89	2,549.39	27.51	93.681	
6,400.00	6,400.00	6,347.40	6,346.46	14.24	13.53	-90.65	-29.04	-2,578.14	2,579.35	2,551.59	27.76	92.908	
6,500.00	6,500.00	6,444.87	6,443.88	14.47	13.57	-90.67	-30.27	-2,581.09	2,582.39	2,554.37	28.03	92.142	
6,600.00	6,600.00	6,556.22	6,555.16	14.69	13.63	-90.72	-32.51	-2,583.98	2,585.00	2,556.68	28.32	91.285	
6,700.00	6,700.00	6,668.94	6,667.82	14.92	13.72	-90.78	-35.18	-2,586.61	2,587.38	2,558.75	28.63	90.379	
6,800.00	6,800.00	6,778.00	6,776.85	15.14	13.81	-90.82	-37.19	-2,588.54	2,589.16	2,560.22	28.94	89.458	
6,900.00	6,900.00	6,859.39	6,858.21	15.37	13.87	-90.85	-38.53	-2,590.11	2,591.14	2,561.91	29.23	88.641	
7,000.00	7,000.00	6,952.44	6,951.21	15.59	13.94	-90.89	-40.11	-2,592.52	2,593.74	2,564.22	29.53	87.845	
7,100.00	7,100.00	6,978.42	6,977.18	15.82	13.96	-90.90	-40.51	-2,593.20	2,597.45	2,567.68	29.77	87.250	
7,200.00	7,200.00	6,978.42	6,977.18	16.04	13.96	-90.90	-40.51	-2,593.20	2,604.86	2,574.87	30.00	86.843	
7,300.00	7,299.64	6,978.42	6,977.18	16.22	13.96	88.21	-40.51	-2,593.20	2,615.96	2,585.79	30.17	86.709	
7,400.00	7,396.03	6,978.42	6,977.18	16.40	13.96	86.56	-40.51	-2,593.20	2,630.19	2,599.86	30.32	86.745	
7,500.00	7,485.30	6,978.42	6,977.18	16.56	13.96	84.61	-40.51	-2,593.20	2,646.92	2,616.45	30.47	86.863	
7,600.00	7,563.88	6,978.42	6,977.18	16.79	13.96	82.45	-40.51	-2,593.20	2,665.46	2,634.82	30.64	86.993	
7,700.00	7,628.59	6,978.42	6,977.18	17.13	13.96	80.19	-40.51	-2,593.20	2,685.02	2,654.17	30.84	87.052	
7,800.00	7,676.85	6,978.42	6,977.18	17.60	13.96	77.91	-40.51	-2,593.20	2,704.80	2,673.69	31.11	86.942	
7,900.00	7,706.72	6,978.42	6,977.18	18.23	13.96	75.71	-40.51	-2,593.20	2,724.02	2,692.55	31.47	86.551	
8,000.00	7,717.00	6,978.42	6,977.18	19.00	13.96	73.70	-40.51	-2,593.20	2,741.93	2,709.96	31.97	85.774	
8,100.00	7,716.89	6,978.42	6,977.18	19.90	13.96	73.66	-40.51	-2,593.20	2,760.59	2,727.77	32.82	84.117	
8,200.00	7,716.77	6,978.42	6,977.18	20.92	13.96	73.66	-40.51	-2,593.20	2,782.72	2,748.92	33.79	82.347	
8,300.00	7,716.66	6,978.42	6,977.18	22.04	13.96	73.66	-40.51	-2,593.20	2,808.24	2,773.37	34.87	80.538	
8,400.00	7,716.54	6,978.42	6,977.18	23.26	13.96	73.66	-40.51	-2,593.20	2,837.05	2,801.02	36.03	78.738	
8,500.00	7,716.42	6,978.42	6,977.18	24.55	13.96	73.66	-40.51	-2,593.20	2,869.07	2,831.80	37.27	76.982	
8,600.00	7,716.31	6,978.42	6,977.18	25.91	13.96	73.66	-40.51	-2,593.20	2,904.17	2,865.60	38.57	75.294	
8,700.00	7,716.19	6,978.42	6,977.18	27.32	13.96	73.66	-40.51	-2,593.20	2,942.26	2,902.33	39.93	73.692	
8,800.00	7,716.07	6,978.42	6,977.18	28.78	13.96	73.66	-40.51	-2,593.20	2,983.22	2,941.89	41.33	72.183	
8,900.00	7,715.96	6,978.42	6,977.18	30.28	13.96	73.66	-40.51	-2,593.20	3,026.92	2,984.15	42.77	70.772	
9,000.00	7,715.84	6,978.42	6,977.18	31.82	13.96	73.66	-40.51	-2,593.20	3,073.26	3,029.01	44.25	69.459	
9,100.00	7,715.73	6,978.42	6,977.18	33.38	13.96	73.66	-40.51	-2,593.20	3,122.12	3,076.36	45.75	68.241	
9,200.00	7,715.61	6,978.42	6,977.18	34.97	13.96	73.66	-40.51	-2,593.20	3,173.37	3,126.09	47.28	67.116	
9,300.00	7,715.49	6,978.42	6,977.18	36.59	13.96	73.66	-40.51	-2,593.20	3,226.91	3,178.08	48.83	66.078	
9,400.00	7,715.38	6,978.42	6,977.18	38.22	13.96	73.66	-40.51	-2,593.20	3,282.63	3,232.22	50.41	65.122	
9,500.00	7,715.26	6,978.42	6,977.18	39.87	13.96	73.66	-40.51	-2,593.20	3,340.41	3,288.41	52.00	64.243	
9,600.00	7,715.14	6,978.42	6,977.18	41.54	13.96	73.66	-40.51	-2,593.20	3,400.14	3,346.54	53.60	63.434	
9,700.00	7,715.03	6,978.42	6,977.18	43.22	13.96	73.66	-40.51	-2,593.20	3,461.74	3,406.52	55.22	62.691	
9,800.00	7,714.91	6,978.42	6,977.18	44.91	13.96	73.66	-40.51	-2,593.20	3,525.10	3,468.25	56.85	62.008	
9,900.00	7,714.79	6,978.42	6,977.18	46.61	13.96	73.66	-40.51	-2,593.20	3,590.13	3,531.64	58.49	61.381	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design - 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		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	
10,000.00	7,714.68	6,978.42	6,977.18	48.32	13.96	73.66	-40.51	-2,593.20	3,656.73	3,596.59	60.14	60.805	
10,100.00	7,714.56	6,978.42	6,977.18	50.04	13.96	73.66	-40.51	-2,593.20	3,724.83	3,663.03	61.80	60.276	
10,200.00	7,714.44	6,978.42	6,977.18	51.77	13.96	73.66	-40.51	-2,593.20	3,794.34	3,730.88	63.46	59.789	
10,300.00	7,714.33	6,978.42	6,977.18	53.50	13.96	73.66	-40.51	-2,593.20	3,865.19	3,800.06	65.14	59.341	
10,400.00	7,714.21	6,978.42	6,977.18	55.24	13.96	73.66	-40.51	-2,593.20	3,937.31	3,870.49	66.81	58.929	
10,500.00	7,714.10	6,978.42	6,977.18	56.99	13.96	73.66	-40.51	-2,593.20	4,010.62	3,942.12	68.50	58.551	
10,600.00	7,713.98	6,978.42	6,977.18	58.74	13.96	73.66	-40.51	-2,593.20	4,085.06	4,014.88	70.19	58.202	
10,700.00	7,713.86	6,978.42	6,977.18	60.50	13.96	73.66	-40.51	-2,593.20	4,160.58	4,088.70	71.88	57.880	
10,800.00	7,713.75	6,978.42	6,977.18	62.26	13.96	73.66	-40.51	-2,593.20	4,237.11	4,163.53	73.58	57.584	
10,900.00	7,713.63	6,978.42	6,977.18	64.02	13.96	73.66	-40.51	-2,593.20	4,314.60	4,239.32	75.28	57.311	
11,000.00	7,713.51	6,978.42	6,977.18	65.79	13.96	73.66	-40.51	-2,593.20	4,393.00	4,316.01	76.99	57.059	
11,100.00	7,713.40	6,978.42	6,977.18	67.56	13.96	73.66	-40.51	-2,593.20	4,472.26	4,393.56	78.70	56.827	
11,200.00	7,713.28	6,978.42	6,977.18	69.34	13.96	73.66	-40.51	-2,593.20	4,552.34	4,471.93	80.41	56.612	
11,300.00	7,713.16	6,978.42	6,977.18	71.12	13.96	73.66	-40.51	-2,593.20	4,633.19	4,551.07	82.13	56.414	
11,400.00	7,713.05	6,978.42	6,977.18	72.90	13.96	73.66	-40.51	-2,593.20	4,714.78	4,630.93	83.85	56.231	
11,500.00	7,712.93	6,978.42	6,977.18	74.68	13.96	73.66	-40.51	-2,593.20	4,797.07	4,711.50	85.57	56.061	
11,600.00	7,712.81	6,978.42	6,977.18	76.46	13.96	73.66	-40.51	-2,593.20	4,880.01	4,792.72	87.29	55.905	
11,700.00	7,712.70	6,978.42	6,977.18	78.25	13.96	73.66	-40.51	-2,593.20	4,963.59	4,874.57	89.02	55.760	
11,800.00	7,712.58	6,978.42	6,977.18	80.04	13.96	73.66	-40.51	-2,593.20	5,047.76	4,957.01	90.74	55.627	
11,900.00	7,712.47	6,978.42	6,977.18	81.83	13.96	73.66	-40.51	-2,593.20	5,132.50	5,040.03	92.47	55.503	
12,000.00	7,712.35	6,978.42	6,977.18	83.62	13.96	73.66	-40.51	-2,593.20	5,217.78	5,123.58	94.20	55.388	
12,100.00	7,712.23	6,978.42	6,977.18	85.42	13.96	73.66	-40.51	-2,593.20	5,303.57	5,207.64	95.94	55.282	
12,200.00	7,712.12	6,978.42	6,977.18	87.22	13.96	73.66	-40.51	-2,593.20	5,389.86	5,292.19	97.67	55.184	
12,299.56	7,712.00	6,978.42	6,977.18	89.01	13.96	73.66	-40.51	-2,593.20	5,476.22	5,376.82	99.40	55.094 6F	

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: 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB.26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00' usft
Lone Tree Draw "13" State - 4H - OH - OH												Offset Well Error:	0.00' usft
Survey Program: 18-NS-GYRO-MS, 4369-LEAM MWD, 9572-Project													
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	7.84	7.84	0.00	0.00	-90.35	-2.49	-409.86	409.87				
100.00	100.00	110.09	110.09	0.08	0.11	-90.28	-1.99	-409.27	409.29	409.09	0.19	2,123.348	
200.00	200.00	210.44	210.44	0.31	0.37	-90.27	-1.91	-408.46	408.48	407.81	0.67	605.721	
300.00	300.00	310.34	310.33	0.53	0.63	-90.28	-1.98	-407.64	407.65	406.49	1.16	351.325	
400.00	400.00	410.28	410.27	0.76	0.89	-90.28	-1.96	-406.83	406.85	405.20	1.65	246.611	
500.00	500.00	510.29	510.28	0.98	1.16	-90.28	-2.01	-406.02	406.04	403.90	2.14	189.934	
600.00	600.00	609.70	609.68	1.21	1.40	-90.31	-2.19	-405.25	405.26	402.65	2.61	155.302	
699.55	699.55	706.58	706.55	1.43	1.58	-90.24	-1.69	-404.85	404.85	401.84	3.01	134.488	
700.00	700.00	707.00	706.98	1.43	1.58	-90.24	-1.68	-404.85	404.85	401.84	3.01	134.422	
800.00	800.00	804.08	804.06	1.66	1.66	-90.18	-1.25	-405.33	405.34	402.02	3.32	122.208	
900.00	900.00	906.76	906.73	1.88	1.74	-90.26	-1.82	-405.94	405.94	402.32	3.62	112.051	
1,000.00	1,000.00	1,009.20	1,009.16	2.11	1.92	-90.40	-2.80	-405.48	405.49	401.47	4.02	100.785	
1,100.00	1,100.00	1,108.36	1,108.32	2.33	2.14	-90.48	-3.42	-405.04	405.06	400.59	4.47	90.692	
1,200.00	1,200.00	1,208.21	1,208.17	2.56	2.37	-90.53	-3.73	-404.76	404.78	399.85	4.93	82.152	
1,300.00	1,300.00	1,308.30	1,308.26	2.78	2.62	-90.56	-3.94	-404.45	404.48	399.07	5.40	74.870	
1,400.00	1,400.00	1,408.67	1,408.63	3.01	2.88	-90.59	-4.15	-404.10	404.12	398.24	5.88	68.694	
1,500.00	1,500.00	1,508.83	1,508.79	3.23	3.13	-90.64	-4.54	-403.67	403.70	397.34	6.36	63.481	
1,600.00	1,600.00	1,608.15	1,608.11	3.45	3.37	-90.72	-5.08	-403.33	403.36	396.55	6.82	59.148	
1,682.12	1,682.12	1,689.21	1,689.16	3.64	3.54	-90.79	-5.53	-403.24	403.28	396.10	7.18	56.204 CC	
1,700.00	1,700.00	1,706.89	1,706.85	3.68	3.57	-90.80	-5.63	-403.24	403.28	396.03	7.25	55.826	
1,800.00	1,800.00	1,805.51	1,805.46	3.90	3.71	-90.86	-6.03	-403.45	403.50	395.88	7.62	52.961	
1,900.00	1,900.00	1,905.19	1,905.14	4.13	3.79	-90.87	-6.12	-403.87	403.92	396.00	7.92	50.987	
2,000.00	2,000.00	2,004.88	2,004.84	4.35	3.86	-90.86	-6.04	-404.37	404.42	396.21	8.21	49.258	
2,100.00	2,100.00	2,104.47	2,104.42	4.58	3.94	-90.84	-5.94	-404.95	405.00	396.49	8.51	47.570	
2,200.00	2,200.00	2,204.00	2,203.95	4.80	4.03	-90.82	-5.80	-405.65	405.70	396.87	8.83	45.936	
2,300.00	2,300.00	2,303.94	2,303.89	5.03	4.13	-90.78	-5.56	-406.43	406.48	397.32	9.16	44.370	
2,400.00	2,400.00	2,404.51	2,404.45	5.25	4.25	-90.74	-5.27	-407.15	407.19	397.69	9.50	42.856	
2,500.00	2,500.00	2,504.80	2,504.73	5.48	4.38	-90.70	-4.95	-407.72	407.76	397.90	9.85	41.382	
2,600.00	2,600.00	2,604.98	2,604.91	5.70	4.52	-90.68	-4.84	-408.27	408.30	398.07	10.23	39.927	
2,700.00	2,700.00	2,704.56	2,704.50	5.93	4.69	-90.68	-4.84	-408.80	408.83	398.22	10.61	38.523	
2,800.00	2,800.00	2,804.20	2,804.13	6.15	4.85	-90.65	-4.61	-409.47	409.50	398.50	11.00	37.231	
2,900.00	2,900.00	2,902.84	2,902.77	6.38	5.01	-90.59	-4.24	-410.30	410.34	398.95	11.39	36.030	
3,000.00	3,000.00	3,001.54	3,001.46	6.60	5.20	-90.58	-4.19	-411.48	411.54	399.74	11.80	34.887	
3,100.00	3,100.00	3,102.95	3,102.86	6.83	5.40	-90.63	-4.52	-412.70	412.74	400.52	12.22	33.764	
3,200.00	3,200.00	3,204.53	3,204.43	7.05	5.61	-90.69	-4.98	-413.50	413.54	400.88	12.66	32.662	
3,300.00	3,300.00	3,304.94	3,304.85	7.28	5.80	-90.66	-4.79	-414.16	414.19	401.12	13.08	31.677	
3,400.00	3,400.00	3,409.51	3,409.41	7.50	5.96	-90.54	-3.89	-413.99	414.01	400.56	13.46	30.769	
3,500.00	3,500.00	3,508.78	3,508.67	7.73	6.09	-90.44	-3.21	-413.50	413.51	399.70	13.82	29.931	
3,600.00	3,600.00	3,608.16	3,608.06	7.95	6.23	-90.40	-2.86	-413.19	413.20	399.02	14.18	29.133	
3,700.00	3,700.00	3,708.11	3,708.00	8.17	6.38	-90.36	-2.63	-412.94	412.95	398.40	14.56	28.365	
3,800.00	3,800.00	3,807.78	3,807.67	8.40	6.54	-90.34	-2.43	-412.73	412.73	397.79	14.94	27.623	
3,897.40	3,897.40	3,904.50	3,904.40	8.62	6.71	-90.30	-2.17	-412.65	412.65	397.33	15.32	26.928	
3,900.00	3,900.00	3,907.09	3,906.98	8.62	6.71	-90.30	-2.16	-412.65	412.65	397.32	15.33	26.910	
4,000.00	4,000.00	4,006.59	4,006.49	8.85	6.89	-90.26	-1.87	-412.72	412.73	396.99	15.74	26.223	
4,100.00	4,100.00	4,106.20	4,106.09	9.07	7.08	-90.21	-1.51	-412.89	412.90	396.75	16.15	25.565	
4,200.00	4,200.00	4,205.85	4,205.75	9.30	7.27	-90.16	-1.15	-413.16	413.16	396.59	16.57	24.936	
4,300.00	4,300.00	4,305.49	4,305.38	9.52	7.47	-90.11	-0.83	-413.50	413.51	396.52	16.99	24.335	
4,400.00	4,400.00	4,433.00	4,432.82	9.75	7.55	-90.30	-2.16	-411.59	412.41	395.10	17.31	23.830	
4,500.00	4,500.00	4,508.64	4,507.91	9.97	7.57	-91.47	-10.50	-409.49	409.62	392.09	17.54	23.355	
4,600.00	4,600.00	4,616.85	4,613.20	10.20	7.61	-94.88	-34.79	-407.25	408.78	390.97	17.81	22.949	
4,649.38	4,649.38	4,662.88	4,656.00	10.31	7.64	-97.25	-51.56	-405.15	408.42	390.44	17.98	22.721 ES	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: 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		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	
4,700.00	4,700.00	4,714.09	4,701.63	10.42	7.71	-100.51	-74.51	-401.77	408.66	390.47	18.18	22.473	
4,800.00	4,800.00	4,811.46	4,781.80	10.65	7.98	-108.20	-128.34	-390.36	411.69	392.94	18.75	21.962	
4,900.00	4,900.00	4,878.00	4,829.76	10.87	8.29	-114.53	-172.93	-378.85	423.55	404.20	19.35	21.891 SF	
5,000.00	5,000.00	4,930.67	4,863.23	11.10	8.64	-119.95	-212.14	-368.18	448.59	428.63	19.96	22.478	
5,100.00	5,100.00	4,973.00	4,887.22	11.32	8.97	-124.40	-245.72	-358.80	487.25	466.73	20.52	23.746	
5,200.00	5,200.00	5,005.00	4,903.55	11.55	9.25	-127.77	-272.19	-351.31	538.13	517.12	21.01	25.609	
5,300.00	5,300.00	5,037.00	4,918.36	11.77	9.57	-131.07	-299.53	-343.76	599.11	577.60	21.51	27.855	
5,400.00	5,400.00	5,057.43	4,927.05	12.00	9.79	-133.12	-317.36	-338.85	667.75	645.84	21.91	30.483	
5,500.00	5,500.00	5,077.15	4,934.88	12.22	10.01	-135.06	-334.81	-334.10	742.32	720.03	22.29	33.303	
5,600.00	5,600.00	5,099.00	4,942.88	12.45	10.26	-137.14	-354.49	-328.94	821.54	798.85	22.68	36.216	
5,700.00	5,700.00	5,099.00	4,942.88	12.67	10.26	-137.14	-354.49	-328.94	904.29	881.38	22.91	39.473	
5,800.00	5,800.00	5,131.00	4,953.38	12.89	10.84	-140.03	-383.84	-321.75	989.71	966.34	23.37	42.355	
5,900.00	5,900.00	5,131.00	4,953.38	13.12	10.64	-140.03	-383.84	-321.75	1,077.14	1,053.55	23.59	45.658	
6,000.00	6,000.00	5,145.09	4,957.60	13.34	10.82	-141.23	-396.95	-318.77	1,166.38	1,142.47	23.91	48.781	
6,100.00	6,100.00	5,163.00	4,962.63	13.57	11.04	-142.70	-413.77	-315.23	1,257.05	1,232.80	24.25	51.841	
6,200.00	6,200.00	5,163.00	4,962.63	13.79	11.04	-142.70	-413.77	-315.23	1,348.72	1,324.24	24.47	55.110	
6,300.00	6,300.00	5,163.00	4,962.63	14.02	11.04	-142.70	-413.77	-315.23	1,441.50	1,416.80	24.70	58.365	
6,400.00	6,400.00	5,179.92	4,967.00	14.24	11.26	-144.01	-429.82	-312.13	1,534.85	1,509.83	25.02	61.341	
6,500.00	6,500.00	5,195.00	4,970.55	14.47	11.45	-145.13	-444.25	-309.57	1,629.07	1,603.74	25.33	64.314	
6,600.00	6,600.00	5,195.00	4,970.55	14.69	11.45	-145.13	-444.25	-309.57	1,723.70	1,698.15	25.55	67.452	
6,700.00	6,700.00	5,195.00	4,970.55	14.92	11.45	-145.13	-444.25	-309.57	1,818.91	1,793.13	25.78	70.557	
6,800.00	6,800.00	5,195.00	4,970.55	15.14	11.45	-145.13	-444.25	-309.57	1,914.61	1,888.61	26.00	73.627	
6,900.00	6,900.00	5,195.00	4,970.55	15.37	11.45	-145.13	-444.25	-309.57	2,010.73	1,984.50	26.23	76.661	
7,000.00	7,000.00	5,210.11	4,973.72	15.59	11.66	-146.20	-458.83	-307.15	2,106.92	2,080.38	26.53	79.409	
7,100.00	7,100.00	5,213.62	4,974.39	15.82	11.71	-146.44	-462.23	-306.60	2,203.56	2,176.79	26.77	82.300	
7,200.00	7,200.00	5,227.00	4,976.72	16.04	11.89	-147.35	-475.24	-304.55	2,300.59	2,273.53	27.06	85.003	
7,300.00	7,299.64	5,227.00	4,976.72	16.22	11.89	20.02	-475.24	-304.55	2,396.02	2,370.56	25.46	94.126	
7,400.00	7,396.03	5,227.00	4,976.72	16.40	11.89	13.49	-475.24	-304.55	2,485.10	2,460.19	24.90	99.794	
7,500.00	7,485.30	5,227.00	4,976.72	16.56	11.89	10.32	-475.24	-304.55	2,565.03	2,540.70	24.34	105.391	
7,600.00	7,563.88	5,259.00	4,980.89	16.79	12.34	8.33	-506.63	-300.01	2,633.16	2,609.66	23.50	112.029	
7,700.00	7,628.59	5,259.00	4,980.89	17.13	12.34	7.32	-506.63	-300.01	2,687.56	2,665.24	22.32	120.406	
7,800.00	7,676.85	5,274.91	4,982.20	17.60	12.58	6.65	-522.35	-297.90	2,727.03	2,705.86	21.17	128.816	
7,900.00	7,706.72	5,291.00	4,983.00	18.23	12.81	6.28	-538.28	-295.82	2,750.44	2,730.17	20.27	135.700	
8,000.00	7,717.00	5,309.00	4,983.38	19.00	13.08	6.15	-556.12	-293.46	2,757.09	2,737.17	19.92	138.435	
8,100.00	7,716.89	5,416.74	4,983.47	19.90	14.69	5.81	-662.55	-276.79	2,755.33	2,734.59	20.74	132.846	
8,200.00	7,716.77	5,534.48	4,985.36	20.92	16.47	5.39	-778.45	-256.14	2,751.77	2,730.07	21.70	126.815	
8,300.00	7,716.66	5,621.45	4,986.15	22.04	17.86	5.08	-864.02	-240.58	2,749.10	2,726.57	22.52	122.058	
8,400.00	7,716.54	5,821.30	4,990.95	23.26	21.04	4.28	-1,059.85	-201.17	2,745.04	2,720.90	24.13	113.744	
8,500.00	7,716.42	5,884.43	4,993.55	24.55	22.08	4.02	-1,121.60	-188.28	2,739.42	2,714.53	24.89	110.069	
8,600.00	7,716.31	5,939.00	4,994.62	25.91	22.99	3.80	-1,175.14	-177.81	2,735.82	2,710.20	25.62	106.795	
8,700.00	7,716.19	5,976.23	4,994.67	27.32	23.63	3.67	-1,211.78	-171.21	2,734.16	2,707.90	26.26	104.118	
8,729.52	7,716.16	5,990.16	4,994.56	27.75	23.87	3.62	-1,225.51	-168.90	2,734.05	2,707.58	26.48	103.259	
8,800.00	7,716.07	6,034.00	4,993.74	28.78	24.63	3.48	-1,268.83	-162.19	2,734.53	2,707.46	27.07	101.021	
8,900.00	7,715.96	6,100.88	4,991.90	30.28	25.75	3.32	-1,335.20	-154.17	2,736.34	2,708.37	27.97	97.836	
9,000.00	7,715.84	6,205.08	4,989.00	31.82	27.48	3.12	-1,438.90	-144.44	2,738.52	2,709.36	29.15	93.937	
9,100.00	7,715.73	6,310.39	4,986.24	33.38	29.24	2.86	-1,543.44	-132.13	2,740.44	2,710.07	30.36	90.251	
9,200.00	7,715.61	6,552.88	4,987.12	34.97	33.33	2.18	-1,783.56	-98.59	2,738.83	2,706.26	32.57	84.100	
9,300.00	7,715.49	6,659.68	4,990.23	36.59	35.14	1.88	-1,889.30	-83.97	2,735.29	2,701.45	33.84	80.832	
9,400.00	7,715.38	6,720.19	4,991.80	38.22	36.17	1.76	-1,949.48	-77.87	2,732.37	2,697.57	34.80	78.517	
9,500.00	7,715.26	6,780.00	4,992.13	39.87	37.19	1.67	-2,009.12	-73.55	2,731.32	2,695.55	35.77	76.358	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00' sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:		0.00 usft
Lone Tree Draw "13" State - 4H - OH - OH												Offset Well Error:		0.00 usft
Survey Program: 18-NS-GYRO-MS-4369-LEAM-MWD-9572-Project														
Reference		Offset		Semi Major Axis		Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
9,515.23	7,715.24	6,780.00	4,992.13	40.13	37.19	1.67	-2,009.12	-73.55	2,731.28	2,695.42	35.85	76.177		
9,600.00	7,715.14	6,813.46	4,991.69	41.54	37.76	1.64	-2,042.53	-71.86	2,732.12	2,695.55	36.56	74.723		
9,700.00	7,715.03	6,875.00	4,989.50	43.22	38.82	1.60	-2,104.01	-70.08	2,735.18	2,697.61	37.57	72.801		
9,800.00	7,714.91	6,918.77	4,987.21	44.91	39.56	1.59	-2,147.71	-69.52	2,739.83	2,701.37	38.46	71.237		
9,900.00	7,714.79	7,074.34	4,979.33	46.61	42.17	1.58	-2,303.08	-68.49	2,745.11	2,704.95	40.16	68.346		
10,000.00	7,714.68	7,299.44	4,977.15	48.32	45.89	1.48	-2,528.03	-62.95	2,745.61	2,703.23	42.39	64.775		
10,100.00	7,714.56	7,397.08	4,978.10	50.04	47.56	1.37	-2,625.51	-57.48	2,744.39	2,700.69	43.70	62.804		
10,200.00	7,714.44	7,515.82	4,979.40	51.77	49.58	1.26	-2,744.11	-51.91	2,743.11	2,697.94	45.17	60.728		
10,300.00	7,714.33	7,603.29	4,980.82	53.50	51.06	1.21	-2,831.52	-48.99	2,741.33	2,694.91	46.42	59.049		
10,400.00	7,714.21	7,730.00	4,982.66	55.24	53.22	1.15	-2,958.18	-45.95	2,739.78	2,691.81	47.97	57.113		
10,500.00	7,714.10	7,811.41	4,984.23	56.99	54.60	1.09	-3,039.51	-42.77	2,737.70	2,688.50	49.19	55.650		
10,600.00	7,713.98	7,903.99	4,985.40	58.74	56.18	0.99	-3,131.93	-37.52	2,736.21	2,685.71	50.51	54.176		
10,700.00	7,713.86	8,035.11	4,987.83	60.50	58.41	0.85	-3,262.85	-30.69	2,734.13	2,682.03	52.10	52.474		
10,800.00	7,713.75	8,109.00	4,989.35	62.26	59.67	0.83	-3,336.71	-29.25	2,731.97	2,678.68	53.29	51.266		
10,900.00	7,713.63	8,170.42	4,989.92	64.02	60.71	0.85	-3,398.12	-29.88	2,731.01	2,676.62	54.39	50.214		
10,909.99	7,713.62	8,176.08	4,989.92	64.20	60.81	0.85	-3,403.77	-30.02	2,731.00	2,676.51	54.49	50.116		
11,000.00	7,713.51	8,242.50	4,989.46	65.79	61.93	0.90	-3,470.14	-32.50	2,731.53	2,675.96	55.57	49.159		
11,100.00	7,713.40	8,341.20	4,988.52	67.56	63.58	1.02	-3,568.70	-37.94	2,732.46	2,675.52	56.94	47.987		
11,200.00	7,713.28	8,583.00	4,991.78	69.34	67.62	1.19	-3,810.25	-44.83	2,731.43	2,672.06	59.37	46.007		
11,300.00	7,713.16	8,678.00	4,995.57	71.12	69.24	1.14	-3,905.14	-42.10	2,727.27	2,666.55	60.73	44.909		
11,400.00	7,713.05	8,725.74	4,996.87	72.90	70.06	1.11	-3,952.82	-40.43	2,724.26	2,662.51	61.75	44.120		
11,500.00	7,712.93	8,773.00	4,997.47	74.68	70.87	1.08	-4,000.06	-38.92	2,722.94	2,660.18	62.76	43.385		
11,550.92	7,712.87	8,816.01	4,997.54	75.59	71.61	1.05	-4,043.05	-37.65	2,722.80	2,659.38	63.42	42.933		
11,600.00	7,712.81	8,849.01	4,997.37	76.46	72.19	1.04	-4,076.03	-36.71	2,722.97	2,658.98	63.99	42.552		
11,700.00	7,712.70	8,914.97	4,996.42	78.25	73.33	1.00	-4,141.97	-34.95	2,724.24	2,659.10	65.15	41.816		
11,800.00	7,712.58	9,002.13	4,994.13	80.04	74.84	0.96	-4,229.06	-32.61	2,726.67	2,660.21	66.46	41.026		
11,900.00	7,712.47	9,110.01	4,991.80	81.83	76.71	0.87	-4,336.82	-27.93	2,728.64	2,660.71	67.93	40.168		
12,000.00	7,712.35	9,198.14	4,989.59	83.62	78.25	0.80	-4,424.85	-24.61	2,730.97	2,661.72	69.26	39.433		
12,100.00	7,712.23	9,293.68	4,986.91	85.42	79.91	0.73	-4,520.29	-21.12	2,733.62	2,662.98	70.64	38.698		
12,200.00	7,712.12	9,391.53	4,984.11	87.22	81.62	0.66	-4,618.04	-17.56	2,736.33	2,664.28	72.04	37.983		
12,299.56	7,712.00	9,495.11	4,981.10	89.01	83.41	0.59	-4,721.50	-13.78	2,739.07	2,665.59	73.48	37.274		

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Lone Tree Draw "13" State - 4H - Pilot - Pilot													Offset Site Error:
Survey Program: 18-NS-GYRO-MS													0.00 usft
Reference Offset Semi Major Axis Distance													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
0.00	0.00	7.84	7.84	0.00	0.00	-90.35	-2.49	-409.86	409.87				
100.00	100.00	110.09	110.09	0.08	0.11	-90.28	-1.99	-409.27	409.29	409.09	0.19	2,123.482	
200.00	200.00	210.44	210.44	0.31	0.37	-90.27	-1.91	-408.46	408.48	407.81	0.67	605.721	
300.00	300.00	310.34	310.33	0.53	0.63	-90.28	-1.98	-407.64	407.65	406.49	1.16	351.324	
400.00	400.00	410.28	410.27	0.76	0.89	-90.28	-1.96	-406.83	406.85	405.20	1.65	246.610	
500.00	500.00	510.29	510.28	0.98	1.16	-90.28	-2.01	-406.02	406.04	403.90	2.14	189.934	
600.00	600.00	609.70	609.68	1.21	1.40	-90.31	-2.19	-405.25	405.26	402.65	2.61	155.302	
699.55	699.55	706.58	706.55	1.43	1.58	-90.24	-1.69	-404.85	404.85	401.84	3.01	134.488	
700.00	700.00	707.00	706.98	1.43	1.58	-90.24	-1.68	-404.85	404.85	401.84	3.01	134.422	
800.00	800.00	804.08	804.06	1.66	1.66	-90.18	-1.25	-405.33	405.34	402.02	3.32	122.208	
900.00	900.00	906.76	906.73	1.88	1.74	-90.26	-1.82	-405.94	405.94	402.32	3.62	112.051	
1,000.00	1,000.00	1,009.20	1,009.16	2.11	1.92	-90.40	-2.80	-405.48	405.49	401.47	4.02	100.785	
1,100.00	1,100.00	1,108.36	1,108.32	2.33	2.14	-90.48	-3.42	-405.04	405.06	400.59	4.47	90.692	
1,200.00	1,200.00	1,208.21	1,208.17	2.56	2.37	-90.53	-3.73	-404.76	404.78	399.85	4.93	82.152	
1,300.00	1,300.00	1,308.30	1,308.26	2.78	2.62	-90.56	-3.94	-404.45	404.48	399.07	5.40	74.870	
1,400.00	1,400.00	1,408.67	1,408.63	3.01	2.88	-90.59	-4.15	-404.10	404.12	398.24	5.88	68.694	
1,500.00	1,500.00	1,508.83	1,508.79	3.23	3.13	-90.64	-4.54	-403.67	403.70	397.34	6.36	63.481	
1,600.00	1,600.00	1,608.15	1,608.11	3.45	3.37	-90.72	-5.08	-403.33	403.36	396.55	6.82	59.148	
1,682.12	1,682.12	1,689.21	1,689.16	3.64	3.54	-90.79	-5.53	-403.24	403.28	396.10	7.18	56.204	
1,700.00	1,700.00	1,706.89	1,706.85	3.68	3.57	-90.80	-5.63	-403.24	403.28	396.03	7.25	55.626	
1,800.00	1,800.00	1,805.51	1,805.46	3.90	3.71	-90.86	-6.03	-403.45	403.50	395.88	7.62	52.961	
1,900.00	1,900.00	1,905.19	1,905.14	4.13	3.79	-90.87	-6.12	-403.87	403.92	396.00	7.92	50.987	
2,000.00	2,000.00	2,004.88	2,004.84	4.35	3.86	-90.86	-6.04	-404.37	404.42	396.21	8.21	49.258	
2,100.00	2,100.00	2,104.47	2,104.42	4.58	3.94	-90.84	-5.94	-404.95	405.00	396.49	8.51	47.570	
2,200.00	2,200.00	2,204.00	2,203.95	4.80	4.03	-90.82	-5.80	-405.65	405.70	396.87	8.83	45.936	
2,300.00	2,300.00	2,303.94	2,303.89	5.03	4.13	-90.78	-5.56	-406.43	406.48	397.32	9.16	44.370	
2,400.00	2,400.00	2,404.51	2,404.45	5.25	4.25	-90.74	-5.27	-407.15	407.19	397.59	9.50	42.856	
2,500.00	2,500.00	2,504.80	2,504.73	5.48	4.38	-90.70	-4.95	-407.72	407.76	397.90	9.85	41.382	
2,600.00	2,600.00	2,604.98	2,604.91	5.70	4.52	-90.68	-4.84	-408.27	408.30	398.07	10.23	39.927	
2,700.00	2,700.00	2,704.56	2,704.50	5.93	4.69	-90.68	-4.84	-408.80	408.83	398.22	10.61	38.523	
2,800.00	2,800.00	2,804.20	2,804.13	6.15	4.85	-90.65	-4.61	-409.47	409.50	398.50	11.00	37.231	
2,900.00	2,900.00	2,902.84	2,902.77	6.38	5.01	-90.59	-4.24	-410.30	410.34	398.95	11.39	36.030	
3,000.00	3,000.00	3,001.54	3,001.46	6.60	5.20	-90.58	-4.19	-411.48	411.54	399.74	11.80	34.887	
3,100.00	3,100.00	3,102.95	3,102.86	6.83	5.40	-90.63	-4.52	-412.70	412.74	400.52	12.22	33.764	
3,200.00	3,200.00	3,204.53	3,204.43	7.05	5.61	-90.69	-4.98	-413.50	413.54	400.88	12.66	32.662	
3,300.00	3,300.00	3,304.94	3,304.85	7.28	5.80	-90.66	-4.79	-414.16	414.19	401.12	13.08	31.677	
3,400.00	3,400.00	3,409.51	3,409.41	7.50	5.96	-90.54	-3.89	-413.99	414.01	400.56	13.46	30.769	
3,500.00	3,500.00	3,508.78	3,508.67	7.73	6.09	-90.44	-3.21	-413.50	413.51	399.70	13.82	29.931	
3,600.00	3,600.00	3,608.16	3,608.06	7.95	6.23	-90.40	-2.86	-413.19	413.20	399.02	14.18	29.133	
3,700.00	3,700.00	3,708.11	3,708.00	8.17	6.38	-90.36	-2.63	-412.94	412.95	398.40	14.56	28.365	
3,800.00	3,800.00	3,807.78	3,807.67	8.40	6.54	-90.34	-2.43	-412.73	412.73	397.79	14.94	27.623	
3,897.40	3,897.40	3,904.50	3,904.40	8.62	6.71	-90.30	-2.17	-412.65	412.65	397.33	15.32	26.928	
3,900.00	3,900.00	3,907.09	3,906.98	8.62	6.71	-90.30	-2.16	-412.65	412.65	397.32	15.33	26.910	
4,000.00	4,000.00	4,006.59	4,006.49	8.85	6.89	-90.26	-1.87	-412.72	412.73	396.99	15.74	26.223	
4,100.00	4,100.00	4,106.20	4,106.09	9.07	7.08	-90.21	-1.51	-412.89	412.90	396.75	16.15	25.565	
4,200.00	4,200.00	4,205.85	4,205.75	9.30	7.27	-90.16	-1.15	-413.16	413.16	396.59	16.57	24.936	
4,300.00	4,300.00	4,305.49	4,305.38	9.52	7.47	-90.11	-0.83	-413.50	413.51	396.52	16.99	24.335	
4,400.00	4,400.00	4,404.36	4,404.25	9.75	7.67	-90.09	-0.63	-414.01	414.02	396.61	17.41	23.741	
4,500.00	4,500.00	4,503.73	4,503.61	9.97	7.86	-90.10	-0.74	-414.75	414.77	396.93	17.83	23.257	
4,600.00	4,600.00	4,602.91	4,602.80	10.20	8.06	-90.13	-0.94	-415.66	415.68	397.43	18.26	22.771	
4,700.00	4,700.00	4,702.61	4,702.49	10.42	8.27	-90.11	-0.81	-416.71	416.74	398.05	18.69	22.301	

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

Leam Drilling Systems LLC

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Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan.#1	Offset TVD Reference:	Offset Datum

Offset Design 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
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	Warning		
4,800.00	4,800.00	4,803.22	4,803.09	10.65	8.48	-90.06	-0.43	-417.73	417.75	398.62	19.13	21.841			
4,900.00	4,900.00	4,904.71	4,904.57	10.87	8.70	-89.99	0.05	-418.57	418.58	399.01	19.57	21.392			
5,000.00	5,000.00	5,008.08	5,007.94	11.10	8.89	-89.91	0.65	-418.67	418.67	398.69	19.98	20.950			
5,100.00	5,100.00	5,109.42	5,109.28	11.32	9.04	-89.89	0.82	-418.29	418.30	397.94	20.36	20.546			
5,200.00	5,200.00	5,210.86	5,210.72	11.55	9.17	-89.90	0.72	-417.56	417.57	396.85	20.72	20.154			
5,300.00	5,300.00	5,310.86	5,310.71	11.77	9.31	-89.93	0.48	-416.60	416.61	395.53	21.08	19.761			
5,400.00	5,400.00	5,409.02	5,408.87	12.00	9.47	-89.89	0.78	-415.90	415.90	394.44	21.46	19.377			
5,500.00	5,500.00	5,507.20	5,507.05	12.22	9.65	-89.82	1.30	-415.69	415.70	393.82	21.87	19.006			
5,503.26	5,503.26	5,510.41	5,510.26	12.23	9.66	-89.82	1.31	-415.69	415.70	393.81	21.89	18.994			
5,600.00	5,600.00	5,605.90	5,605.75	12.45	9.85	-89.75	1.79	-415.84	415.85	393.55	22.30	18.650			
5,700.00	5,700.00	5,706.26	5,706.11	12.67	10.06	-89.70	2.18	-416.15	416.15	393.42	22.73	18.306			
5,800.00	5,800.00	5,807.02	5,806.86	12.89	10.27	-89.65	2.56	-416.27	416.27	393.11	23.17	17.967			
5,900.00	5,900.00	5,908.03	5,907.88	13.12	10.46	-89.62	2.77	-416.18	416.19	392.61	23.58	17.650			
6,000.00	6,000.00	6,007.44	6,007.29	13.34	10.60	-89.62	2.74	-416.04	416.05	392.10	23.95	17.373			
6,100.00	6,100.00	6,108.13	6,107.97	13.57	10.74	-89.69	2.28	-415.88	415.89	391.58	24.30	17.111			
6,200.00	6,200.00	6,208.17	6,208.01	13.79	10.87	-89.84	1.17	-415.66	415.67	391.00	24.67	16.851			
6,300.00	6,300.00	6,309.10	6,308.93	14.02	11.02	-90.01	-0.11	-415.30	415.31	390.27	25.04	16.589			
6,400.00	6,400.00	6,410.56	6,410.38	14.24	11.16	-90.17	-1.25	-414.71	414.73	389.32	25.41	16.323			
6,500.00	6,500.00	6,513.69	6,513.50	14.47	11.32	-90.32	-2.32	-413.48	413.53	387.75	25.79	16.037			
6,600.00	6,600.00	6,614.96	6,614.75	14.69	11.48	-90.43	-3.08	-411.61	411.69	385.52	26.17	15.732			
6,700.00	6,700.00	6,714.17	6,713.94	14.92	11.64	-90.55	-3.94	-409.82	409.90	383.35	26.55	15.437			
6,800.00	6,800.00	6,813.89	6,813.64	15.14	11.80	-90.68	-4.82	-408.19	408.27	381.33	26.94	15.154			
6,900.00	6,900.00	6,813.03	6,812.77	15.37	11.97	-90.70	-4.96	-406.64	406.71	379.37	27.34	14.878			
7,000.00	7,000.00	7,015.31	7,015.04	15.59	12.15	-90.65	-4.56	-405.02	405.13	377.39	27.74	14.602			
7,100.00	7,100.00	7,118.06	7,118.75	15.82	12.34	-90.58	-4.09	-402.49	402.68	374.52	28.16	14.301			
7,200.00	7,200.00	7,223.00	7,222.63	16.04	12.53	-90.58	-4.06	-398.94	399.26	370.69	28.57	13.974			
7,300.00	7,299.64	7,325.17	7,324.70	16.22	12.72	90.81	-5.13	-394.58	395.01	366.08	28.93	13.653			
7,400.00	7,396.03	7,422.43	7,421.85	16.40	12.90	94.71	-6.55	-390.06	391.48	362.22	29.26	13.378			
7,436.32	7,429.47	7,456.23	7,455.61	16.46	12.96	96.64	-6.98	-388.45	391.09	361.71	29.38	13.314 CC, ES			
7,500.00	7,485.30	7,512.09	7,511.39	16.56	13.06	100.30	-7.59	-385.75	392.69	363.16	29.53	13.299 SF			
7,600.00	7,563.88	7,587.61	7,586.84	16.79	13.21	105.49	-8.36	-382.52	404.88	375.22	29.66	13.653			
7,700.00	7,628.59	7,650.06	7,649.25	17.13	13.33	108.73	-9.04	-380.38	433.30	403.56	29.74	14.570			
7,800.00	7,676.85	7,697.22	7,696.39	17.60	13.42	108.54	-9.50	-379.08	479.87	449.75	30.12	15.932			
7,900.00	7,706.72	7,727.85	7,727.01	18.23	13.47	103.61	-9.79	-378.30	542.73	511.59	31.13	17.431			
8,000.00	7,717.00	7,738.01	7,738.17	19.00	13.50	92.35	-9.90	-378.02	617.54	585.07	32.47	19.016			
8,100.00	7,716.89	7,739.84	7,739.00	19.90	13.50	92.18	-9.91	-378.00	699.27	665.90	33.38	20.951			
8,200.00	7,716.77	7,740.67	7,739.82	20.92	13.50	92.31	-9.91	-377.98	785.24	750.84	34.40	22.830			
8,300.00	7,716.66	7,741.49	7,740.65	22.04	13.50	92.43	-9.92	-377.96	874.20	838.68	35.52	24.611			
8,400.00	7,716.54	7,742.32	7,741.47	23.26	13.50	92.56	-9.93	-377.94	965.32	928.58	36.73	26.276			
8,500.00	7,716.42	7,743.14	7,742.30	24.55	13.50	92.68	-9.94	-377.92	1,058.04	1,020.02	38.02	27.825			
8,600.00	7,716.31	7,743.96	7,743.12	25.91	13.51	92.81	-9.94	-377.90	1,151.98	1,112.61	39.38	29.254			
8,700.00	7,716.19	7,744.79	7,743.94	27.32	13.51	92.93	-9.95	-377.87	1,246.87	1,206.08	40.79	30.569			
8,800.00	7,716.07	7,745.61	7,744.76	28.78	13.51	93.06	-9.96	-377.85	1,342.50	1,300.25	42.25	31.779			
8,900.00	7,715.96	7,746.43	7,745.58	30.28	13.51	93.18	-9.97	-377.83	1,438.72	1,394.98	43.74	32.891			
9,000.00	7,715.84	7,747.25	7,746.40	31.82	13.51	93.31	-9.97	-377.81	1,535.42	1,490.15	45.27	33.915			
9,100.00	7,715.73	7,748.07	7,747.22	33.38	13.51	93.43	-9.98	-377.79	1,632.52	1,585.69	46.83	34.859			
9,200.00	7,715.61	7,748.89	7,748.04	34.97	13.52	93.55	-9.99	-377.77	1,729.95	1,681.53	48.42	35.730			
9,300.00	7,715.49	7,749.71	7,748.86	36.59	13.52	93.68	-10.00	-377.75	1,827.66	1,777.63	50.02	36.535			
9,400.00	7,715.38	7,750.53	7,749.68	38.22	13.52	93.80	-10.01	-377.73	1,925.60	1,873.95	51.65	37.281			
9,500.00	7,715.26	7,751.34	7,750.50	39.87	13.52	93.93	-10.01	-377.71	2,023.74	1,970.45	53.29	37.974			

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00-sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:
Lone Tree Draw "13" State - 4H - Pilot - Pilot													0.00 usft
Survey Program: 18-NS-GYRO-MS													Offset Well Error:
													0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.00	7,715.14	7,752.16	7,751.31	41.54	13.52	94.05	-10.02	-377.69	2,122.06	2,067.11	54.95	38.618	
9,700.00	7,715.03	7,752.97	7,752.13	43.22	13.52	94.17	-10.03	-377.67	2,220.53	2,163.91	56.62	39.218	
9,800.00	7,714.91	7,753.79	7,752.94	44.91	13.52	94.30	-10.04	-377.65	2,319.13	2,260.82	58.30	39.778	
9,900.00	7,714.79	7,754.60	7,753.75	46.61	13.53	94.42	-10.04	-377.63	2,417.84	2,357.84	59.99	40.302	
10,000.00	7,714.68	7,755.42	7,754.57	48.32	13.53	94.54	-10.05	-377.61	2,516.65	2,454.96	61.69	40.793	
10,100.00	7,714.56	7,756.23	7,755.38	50.04	13.53	94.66	-10.06	-377.59	2,615.56	2,552.15	63.40	41.254	
10,200.00	7,714.44	7,757.04	7,756.19	51.77	13.53	94.79	-10.07	-377.57	2,714.54	2,649.42	65.12	41.688	
10,300.00	7,714.33	7,757.85	7,757.00	53.50	13.53	94.91	-10.07	-377.55	2,813.59	2,746.76	66.84	42.097	
10,400.00	7,714.21	7,758.66	7,757.81	55.24	13.53	95.03	-10.08	-377.53	2,912.71	2,844.15	68.56	42.482	
10,500.00	7,714.10	7,759.47	7,758.62	56.99	13.54	95.15	-10.09	-377.51	3,011.89	2,941.60	70.29	42.847	
10,600.00	7,713.98	7,760.28	7,759.43	58.74	13.54	95.28	-10.10	-377.49	3,111.12	3,039.09	72.03	43.192	
10,700.00	7,713.86	7,761.09	7,760.24	60.50	13.54	95.40	-10.10	-377.46	3,210.40	3,136.63	73.77	43.519	
10,800.00	7,713.75	7,761.90	7,761.04	62.26	13.54	95.52	-10.11	-377.44	3,309.72	3,234.21	75.51	43.830	
10,900.00	7,713.63	7,762.70	7,761.85	64.02	13.54	95.64	-10.12	-377.42	3,409.08	3,331.82	77.26	44.126	
11,000.00	7,713.51	7,763.51	7,762.66	65.79	13.54	95.76	-10.13	-377.40	3,508.48	3,429.47	79.01	44.407	
11,100.00	7,713.40	7,764.31	7,763.46	67.56	13.55	95.88	-10.13	-377.38	3,607.91	3,527.15	80.76	44.675	
11,200.00	7,713.28	7,765.12	7,764.27	69.34	13.55	96.00	-10.14	-377.36	3,707.37	3,624.86	82.51	44.931	
11,300.00	7,713.16	7,765.92	7,765.07	71.12	13.55	96.12	-10.15	-377.34	3,806.86	3,722.59	84.27	45.176	
11,400.00	7,713.05	7,766.73	7,765.87	72.90	13.55	96.25	-10.16	-377.32	3,906.37	3,820.35	86.02	45.410	
11,500.00	7,712.93	7,767.53	7,766.68	74.68	13.55	96.37	-10.16	-377.30	4,005.91	3,918.13	87.78	45.634	
11,600.00	7,712.81	7,768.33	7,767.48	76.46	13.55	96.49	-10.17	-377.28	4,105.47	4,015.93	89.54	45.849	
11,700.00	7,712.70	7,769.13	7,768.28	78.25	13.55	96.61	-10.18	-377.26	4,205.05	4,113.75	91.30	46.055	
11,800.00	7,712.58	7,769.93	7,769.08	80.04	13.56	96.73	-10.19	-377.24	4,304.65	4,211.59	93.07	46.254	
11,900.00	7,712.47	7,770.73	7,769.88	81.83	13.56	96.85	-10.19	-377.22	4,404.27	4,309.44	94.83	46.444	
12,000.00	7,712.35	7,771.53	7,770.68	83.62	13.56	96.97	-10.20	-377.20	4,503.91	4,407.31	96.59	46.628	
12,100.00	7,712.23	7,772.33	7,771.47	85.42	13.56	97.09	-10.21	-377.18	4,603.56	4,505.20	98.36	46.805	
12,200.00	7,712.12	7,773.13	7,772.27	87.22	13.56	97.21	-10.22	-377.16	4,703.22	4,603.10	100.12	46.976	
12,299.56	7,712.00	7,773.92	7,773.06	89.01	13.56	97.33	-10.22	-377.14	4,802.46	4,700.58	101.88	47.140	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset-TVD Reference:	Offset Datum

Offset Design												Offset Site Error: 0.00 usft	
Lone Tree Draw "13" State - 5H - OH - OH												Offset Well Error: 0.00 usft	
Survey Program: 233-ISCWSA-GYRO-3-4541-LEAM MWD+IGRF													
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)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	89.63	6.35	989.72	989.77				
100.00	100.00	94.56	94.56	0.08	0.07	89.63	6.45	989.60	989.62	989.46	0.16	6,284.136	
200.00	200.00	197.35	197.34	0.31	0.16	89.61	6.78	989.18	989.22	988.76	0.46	2,136.452	
300.00	300.00	299.74	299.74	0.53	0.30	89.59	7.12	988.50	988.55	987.72	0.83	1,187.112	
400.00	400.00	397.55	397.54	0.76	0.47	89.60	6.88	987.79	987.83	986.60	1.23	804.025	
500.00	500.00	495.45	495.44	0.98	0.64	89.63	6.44	987.36	987.39	985.76	1.62	607.804	
600.00	600.00	596.23	596.22	1.21	0.82	89.66	5.94	986.99	987.02	984.99	2.03	487.288	
700.00	700.00	696.58	696.57	1.43	0.99	89.69	5.25	986.54	986.57	984.14	2.43	406.687	
800.00	800.00	795.73	795.71	1.66	1.17	89.74	4.42	986.12	986.13	983.31	2.82	349.186	
900.00	900.00	893.66	893.64	1.88	1.34	89.77	3.90	985.89	985.90	982.68	3.22	306.177	
1,000.00	1,000.00	994.58	994.56	2.11	1.52	89.81	3.34	985.66	985.67	982.05	3.62	272.195	
1,100.00	1,100.00	1,097.36	1,097.34	2.33	1.70	89.82	3.06	985.34	985.36	981.33	4.03	244.760	
1,200.00	1,200.00	1,198.30	1,198.27	2.56	1.87	89.81	3.20	984.58	984.61	980.18	4.43	222.393	
1,300.00	1,300.00	1,294.96	1,294.93	2.78	2.04	89.79	3.55	984.17	984.18	979.36	4.82	204.133	
1,400.00	1,400.00	1,394.08	1,394.05	3.01	2.21	89.78	3.81	983.94	983.95	978.73	5.22	188.517	
1,500.00	1,500.00	1,497.93	1,497.90	3.23	2.40	89.76	4.16	983.58	983.61	977.98	5.63	174.836	
1,600.00	1,600.00	1,600.92	1,600.89	3.45	2.58	89.73	4.59	982.78	982.83	976.80	6.03	162.961	
1,700.00	1,700.00	1,694.68	1,694.64	3.68	2.74	89.73	4.65	982.20	982.22	975.80	6.42	152.992	
1,779.12	1,779.12	1,771.16	1,771.12	3.86	2.87	89.74	4.39	982.11	982.12	975.38	6.73	145.901 CC	
1,800.00	1,800.00	1,791.40	1,791.36	3.90	2.91	89.75	4.28	982.11	982.12	975.31	6.81	144.141	
1,900.00	1,900.00	1,890.09	1,890.05	4.13	3.08	89.78	3.79	982.24	982.24	975.03	7.21	136.230	
2,000.00	2,000.00	1,987.28	1,987.23	4.35	3.25	89.83	2.97	982.61	982.63	975.02	7.60	129.222	
2,100.00	2,100.00	2,090.30	2,090.25	4.58	3.43	89.89	1.96	982.93	982.94	974.93	8.01	122.735	
2,200.00	2,200.00	2,191.43	2,191.38	4.80	3.61	89.94	1.03	983.06	983.06	974.65	8.41	118.893	
2,300.00	2,300.00	2,291.97	2,291.92	5.03	3.78	89.95	0.77	983.07	983.07	974.26	8.81	111.586	
2,400.00	2,400.00	2,391.85	2,391.80	5.25	3.96	89.97	0.53	983.09	983.09	973.88	9.21	106.755	
2,500.00	2,500.00	2,490.44	2,490.39	5.48	4.13	89.99	0.21	983.15	983.16	973.55	9.61	102.353	
2,600.00	2,600.00	2,589.99	2,589.93	5.70	4.30	90.03	-0.48	983.38	983.38	973.37	10.00	98.300	
2,700.00	2,700.00	2,690.04	2,689.98	5.93	4.48	90.06	-1.02	983.58	983.58	973.18	10.40	94.546	
2,800.00	2,800.00	2,792.10	2,792.04	6.15	4.66	90.10	-1.68	983.70	983.70	972.89	10.81	91.032	
2,900.00	2,900.00	2,894.12	2,894.06	6.38	4.84	90.12	-2.06	983.58	983.58	972.37	11.21	87.748	
3,000.00	3,000.00	2,992.29	2,992.23	6.60	5.01	90.12	-2.10	983.48	983.48	971.87	11.61	84.742	
3,100.00	3,100.00	3,093.62	3,093.56	6.83	5.19	90.12	-2.06	983.41	983.42	971.41	12.01	81.900	
3,200.00	3,200.00	3,193.64	3,193.58	7.05	5.36	90.09	-1.46	983.11	983.11	970.70	12.41	79.237	
3,216.61	3,216.61	3,208.67	3,208.61	7.09	5.39	90.08	-1.34	983.09	983.09	970.62	12.47	78.832	
3,300.00	3,300.00	3,285.83	3,285.76	7.28	5.52	90.04	-0.67	983.38	983.40	970.61	12.79	76.871 ES	
3,400.00	3,400.00	3,385.02	3,384.95	7.50	5.69	90.02	-0.27	984.16	984.18	970.99	13.19	74.614	
3,500.00	3,500.00	3,487.35	3,487.27	7.73	5.87	90.02	-0.38	984.70	984.71	971.12	13.59	72.443	
3,600.00	3,600.00	3,586.71	3,586.63	7.95	6.04	90.05	-0.81	985.21	985.22	971.23	13.99	70.420	
3,700.00	3,700.00	3,687.06	3,686.98	8.17	6.22	90.08	-1.45	985.75	985.77	971.38	14.39	68.502	
3,800.00	3,800.00	3,784.93	3,784.85	8.40	6.39	90.11	-1.91	986.31	986.34	971.55	14.79	66.709	
3,900.00	3,900.00	3,882.47	3,882.38	8.62	6.56	90.12	-2.08	987.15	987.20	972.02	15.18	65.032	
4,000.00	4,000.00	3,986.98	3,986.89	8.85	6.74	90.13	-2.21	987.99	988.00	972.42	15.59	63.386	
4,100.00	4,100.00	4,087.27	4,087.18	9.07	6.92	90.15	-2.65	988.49	988.50	972.52	15.99	61.833	
4,200.00	4,200.00	4,190.04	4,189.94	9.30	7.10	90.18	-3.05	988.82	988.82	972.43	16.39	60.328	
4,300.00	4,300.00	4,289.84	4,289.75	9.52	7.27	90.20	-3.52	989.05	989.06	972.27	16.79	58.909	
4,400.00	4,400.00	4,387.00	4,386.90	9.75	7.44	90.23	-3.92	989.20	989.22	972.04	17.18	57.566	
4,500.00	4,500.00	4,484.06	4,483.95	9.97	7.63	90.30	-5.19	989.65	989.69	972.20	17.50	56.569	
4,600.00	4,600.00	4,569.13	4,568.95	10.20	7.80	90.48	-8.27	990.70	991.01	973.23	17.77	55.758	
4,700.00	4,700.00	4,650.28	4,649.03	10.42	7.61	91.19	-20.70	993.21	994.36	976.34	18.01	55.197	
4,800.00	4,800.00	4,715.18	4,710.98	10.65	7.64	92.28	-39.60	996.35	1,000.42	982.14	18.28	54.732	

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 8H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset.TVD Reference:	Offset Datum

Offset Design Lone Tree Draw "13" State - 5H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 233-ISCWSA-GYRO-3, 4541-LEAM MWD+IGRF													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,900.00	4,778.00	4,767.73	10.87	7.71	93.78	-66.05	1,000.68	1,010.52	991.94	18.58	54.377	
5,000.00	5,000.00	4,848.54	4,826.34	11.10	7.91	95.95	-104.87	1,005.58	1,024.51	1,005.51	19.00	53.930	
5,100.00	5,100.00	4,801.64	4,866.11	11.32	8.15	97.89	-139.86	1,008.90	1,043.30	1,023.86	19.44	53.662	
5,200.00	5,200.00	4,987.77	4,924.02	11.55	8.70	101.37	-203.47	1,012.22	1,066.68	1,046.51	20.17	52.887	
5,300.00	5,300.00	5,015.00	4,940.24	11.77	8.91	102.55	-225.33	1,012.27	1,095.08	1,074.50	20.58	53.206	
5,400.00	5,400.00	5,045.61	4,956.23	12.00	9.21	103.95	-251.42	1,012.00	1,130.15	1,109.08	21.07	53.626	
5,500.00	5,500.00	5,062.00	4,963.61	12.22	9.37	104.73	-266.04	1,011.73	1,172.00	1,150.56	21.44	54.666	
5,600.00	5,600.00	5,077.67	4,969.89	12.45	9.56	105.50	-280.39	1,011.40	1,220.07	1,198.24	21.82	55.903	
5,700.00	5,700.00	5,089.65	4,974.18	12.67	9.70	106.09	-291.57	1,011.07	1,273.79	1,251.62	22.17	57.454	
5,800.00	5,800.00	5,110.00	4,980.46	12.89	9.94	107.10	-310.91	1,010.39	1,332.72	1,310.12	22.60	58.977	
5,900.00	5,900.00	5,110.00	4,980.46	13.12	9.94	107.10	-310.91	1,010.39	1,395.87	1,373.05	22.82	61.163	
6,000.00	6,000.00	5,110.00	4,980.46	13.34	9.94	107.10	-310.91	1,010.39	1,463.13	1,440.09	23.05	63.485	
6,100.00	6,100.00	5,110.00	4,980.46	13.57	9.94	107.10	-310.91	1,010.39	1,533.97	1,510.70	23.27	65.916	
6,200.00	6,200.00	5,123.44	4,983.83	13.79	10.11	107.78	-323.91	1,009.85	1,607.60	1,583.96	23.65	67.988	
6,300.00	6,300.00	5,127.25	4,984.66	14.02	10.16	107.98	-327.62	1,009.68	1,684.02	1,660.11	23.91	70.426	
6,400.00	6,400.00	5,141.00	4,987.18	14.24	10.34	108.68	-341.12	1,009.03	1,762.95	1,738.67	24.29	72.592	
6,500.00	6,500.00	5,141.00	4,987.18	14.47	10.34	108.68	-341.12	1,009.03	1,843.63	1,819.12	24.51	75.218	
6,600.00	6,600.00	5,141.00	4,987.18	14.69	10.34	108.68	-341.12	1,009.03	1,926.12	1,901.38	24.74	77.870	
6,700.00	6,700.00	5,141.00	4,987.18	14.92	10.34	108.68	-341.12	1,009.03	2,010.20	1,985.24	24.96	80.537	
6,800.00	6,800.00	5,141.00	4,987.18	15.14	10.34	108.68	-341.12	1,009.03	2,095.68	2,070.49	25.18	83.212	
6,900.00	6,900.00	5,141.00	4,987.18	15.37	10.34	108.68	-341.12	1,009.03	2,182.39	2,156.98	25.41	85.889	
7,000.00	7,000.00	5,141.00	4,987.18	15.59	10.34	108.68	-341.12	1,009.03	2,270.20	2,244.56	25.63	88.561	
7,100.00	7,100.00	5,141.00	4,987.18	15.82	10.34	108.68	-341.12	1,009.03	2,358.97	2,333.11	25.86	91.224	
7,200.00	7,200.00	5,141.00	4,987.18	16.04	10.34	108.68	-341.12	1,009.03	2,448.61	2,422.53	26.08	93.875	
7,300.00	7,299.64	5,141.00	4,987.18	16.22	10.34	-54.95	-341.12	1,009.03	2,537.82	2,512.11	25.71	98.720	
7,400.00	7,396.03	5,141.00	4,987.18	16.40	10.34	-41.35	-341.12	1,009.03	2,622.44	2,597.42	25.02	104.810	
7,500.00	7,485.30	5,141.00	4,987.18	16.56	10.34	-32.91	-341.12	1,009.03	2,699.62	2,675.44	24.18	111.624	
7,600.00	7,563.88	5,188.00	4,990.96	16.79	11.00	-27.19	-387.88	1,007.07	2,766.61	2,743.14	23.47	117.884	
7,700.00	7,628.59	5,188.00	4,990.96	17.13	11.00	-23.96	-387.88	1,007.07	2,820.95	2,798.43	22.52	125.275	
7,800.00	7,676.85	5,188.00	4,990.96	17.60	11.00	-21.94	-387.88	1,007.07	2,861.95	2,840.21	21.74	131.634	
7,900.00	7,706.72	5,209.04	4,990.94	18.23	11.32	-20.74	-408.91	1,006.43	2,888.37	2,866.96	21.41	134.825	
8,000.00	7,717.00	5,240.00	4,990.52	19.00	11.79	-20.28	-439.86	1,005.68	2,898.57	2,876.99	21.58	134.295	
8,100.00	7,716.89	5,312.76	4,988.43	19.90	12.97	-20.23	-512.57	1,004.37	2,900.53	2,878.27	22.26	130.311	
8,200.00	7,716.77	5,378.01	4,985.65	20.92	14.07	-20.20	-577.76	1,003.50	2,903.85	2,880.86	22.98	126.348	
8,300.00	7,716.66	5,507.36	4,980.04	22.04	16.27	-20.16	-706.98	1,003.73	2,907.92	2,883.74	24.18	120.257	
8,400.00	7,716.54	5,627.40	4,978.90	23.26	18.30	-20.24	-826.88	1,009.14	2,910.09	2,884.63	25.47	114.260	
8,500.00	7,716.42	5,694.75	4,978.29	24.55	19.53	-20.31	-894.10	1,013.26	2,912.85	2,886.37	26.48	110.006	
8,600.00	7,716.31	5,826.40	4,978.40	25.91	21.96	-20.49	-1,025.38	1,023.12	2,915.04	2,886.94	28.09	103.760	
8,700.00	7,716.19	5,901.90	4,978.50	27.32	23.39	-20.60	-1,100.58	1,029.68	2,917.74	2,888.41	29.32	99.498	
8,800.00	7,716.07	6,137.96	4,982.65	28.78	27.81	-21.05	-1,335.41	1,053.03	2,920.61	2,888.50	32.10	90.972	
8,900.00	7,715.96	6,210.93	4,985.33	30.28	29.19	-21.15	-1,408.18	1,057.79	2,919.37	2,885.94	33.44	87.314	
8,953.00	7,715.90	6,245.54	4,986.12	31.10	29.85	-21.19	-1,442.72	1,059.80	2,919.23	2,885.11	34.12	85.567	
9,000.00	7,715.84	6,291.09	4,986.81	31.82	30.73	-21.24	-1,488.21	1,061.91	2,919.25	2,884.39	34.86	83.736	
9,100.00	7,715.73	6,371.14	4,987.16	33.38	32.27	-21.27	-1,568.24	1,063.84	2,919.53	2,883.23	36.30	80.427	
9,200.00	7,715.61	6,433.00	4,986.44	34.97	33.47	-21.28	-1,630.09	1,064.66	2,920.90	2,883.32	37.58	77.715	
9,300.00	7,715.49	6,508.91	4,984.56	36.59	34.98	-21.27	-1,705.98	1,065.34	2,923.33	2,884.31	39.02	74.917	
9,400.00	7,715.38	6,649.88	4,982.57	38.22	37.72	-21.32	-1,846.85	1,069.21	2,925.38	2,884.27	41.11	71.160	
9,500.00	7,715.26	6,809.92	4,983.73	39.87	40.82	-21.50	-2,008.59	1,078.74	2,927.15	2,883.66	43.50	67.296	
9,600.00	7,715.14	6,896.14	4,986.00	41.54	42.50	-21.61	-2,092.61	1,084.22	2,926.82	2,881.64	45.18	64.776	
9,700.00	7,715.03	7,015.75	4,988.93	43.22	44.86	-21.74	-2,211.99	1,090.90	2,926.38	2,879.14	47.24	61.949	

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 8H
Project:	Eddy County, NM.(NAD-83)	TVD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "13" State	MD Reference:	GE3172' + KB 26' @ 3198.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Lone Tree Draw "13" State - 5H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 233-ISCWSA-GYRO-3, 4541-LEAM MWD+IGRF													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
9,800.00	7,714.91	7,102.38	4,990.88	44.91	46.56	-21.83	-2,298.50	1,095.13	2,925.88	2,876.92	48.96	59.759	
9,900.00	7,714.79	7,198.13	4,992.53	46.61	48.47	-21.91	-2,394.15	1,099.24	2,925.66	2,874.87	50.79	57.602	
9,938.87	7,714.75	7,232.72	4,992.94	47.28	49.15	-21.94	-2,428.71	1,100.43	2,925.64	2,874.17	51.47	56.838	
10,000.00	7,714.68	7,283.00	4,993.34	48.32	50.14	-21.96	-2,478.97	1,101.88	2,925.72	2,873.23	52.50	55.730	
10,100.00	7,714.56	7,379.00	4,993.34	50.04	52.04	-21.99	-2,574.95	1,103.59	2,926.17	2,871.86	54.31	53.881	
10,200.00	7,714.44	7,459.33	4,992.59	51.77	53.65	-21.99	-2,655.28	1,104.21	2,927.09	2,871.13	55.95	52.313	
10,300.00	7,714.33	7,540.09	4,991.27	53.50	55.26	-21.99	-2,736.03	1,104.68	2,928.60	2,871.00	57.60	50.840	
10,400.00	7,714.21	7,632.03	4,989.58	55.24	57.07	-22.00	-2,827.94	1,106.13	2,930.66	2,871.28	59.38	49.351	
10,500.00	7,714.10	7,743.05	4,988.72	56.99	59.24	-22.07	-2,938.86	1,110.59	2,932.67	2,871.25	61.42	47.749	
10,600.00	7,713.98	7,827.87	4,988.58	58.74	60.92	-22.14	-3,023.56	1,115.09	2,934.62	2,871.39	63.22	46.416	
10,700.00	7,713.86	7,954.25	4,988.36	60.50	63.43	-22.26	-3,149.75	1,121.90	2,936.63	2,871.13	65.50	44.833	
10,800.00	7,713.75	8,042.00	4,988.81	62.26	65.17	-22.35	-3,237.36	1,126.94	2,938.13	2,870.75	67.38	43.607	
10,900.00	7,713.63	8,120.55	4,988.59	64.02	66.75	-22.42	-3,315.79	1,131.12	2,940.21	2,871.06	69.16	42.515	
11,000.00	7,713.51	8,231.00	4,987.87	65.79	68.94	-22.50	-3,426.11	1,136.41	2,942.41	2,871.13	71.28	41.282	
11,100.00	7,713.40	8,231.00	4,987.87	67.56	68.94	-22.50	-3,426.11	1,136.41	2,946.28	2,874.10	72.19	40.816	
11,200.00	7,713.28	8,231.00	4,987.87	69.34	68.94	-22.50	-3,426.11	1,136.41	2,953.54	2,880.44	73.10	40.405	
11,300.00	7,713.16	8,231.00	4,987.87	71.12	68.94	-22.50	-3,426.11	1,136.41	2,964.16	2,890.14	74.01	40.049	
11,400.00	7,713.05	8,231.00	4,987.87	72.90	68.94	-22.50	-3,426.11	1,136.41	2,978.09	2,903.16	74.93	39.744	
11,500.00	7,712.93	8,231.00	4,987.87	74.68	68.94	-22.50	-3,426.11	1,136.41	2,995.31	2,919.45	75.85	39.489	
11,600.00	7,712.81	8,231.00	4,987.87	76.46	68.94	-22.50	-3,426.11	1,136.41	3,015.74	2,938.96	76.78	39.280	
11,700.00	7,712.70	8,231.00	4,987.87	78.25	68.94	-22.50	-3,426.11	1,136.41	3,039.33	2,961.62	77.70	39.115	
11,800.00	7,712.58	8,231.00	4,987.87	80.04	68.94	-22.50	-3,426.11	1,136.41	3,065.99	2,987.36	78.63	38.993	
11,900.00	7,712.47	8,231.00	4,987.87	81.83	68.94	-22.50	-3,426.11	1,136.41	3,095.66	3,016.10	79.56	38.910	
12,000.00	7,712.35	8,231.00	4,987.87	83.62	68.94	-22.50	-3,426.11	1,136.41	3,128.25	3,047.76	80.49	38.864	
12,100.00	7,712.23	8,231.00	4,987.87	85.42	68.94	-22.50	-3,426.11	1,136.41	3,163.66	3,082.24	81.43	38.853 SF	
12,200.00	7,712.12	8,231.00	4,987.87	87.22	68.94	-22.50	-3,426.11	1,136.41	3,201.81	3,119.45	82.36	38.875	
12,299.56	7,712.00	8,231.00	4,987.87	89.01	68.94	-22.50	-3,426.11	1,136.41	3,242.41	3,159.11	83.29	38.927	

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