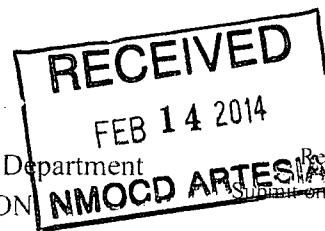


District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6170
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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



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 30-015-42070	² Pool Code 96144	³ Pool Name CARLSBAD EAST; BONE SPRING
⁴ Property Code 40392	⁵ Property Name LONE TREE DRAW 14 STATE COM	
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	
		⁶ Well Number 1H
		⁹ Elevation 3224.4

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
P	11	21 S	27 E		335	SOUTH	1110	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

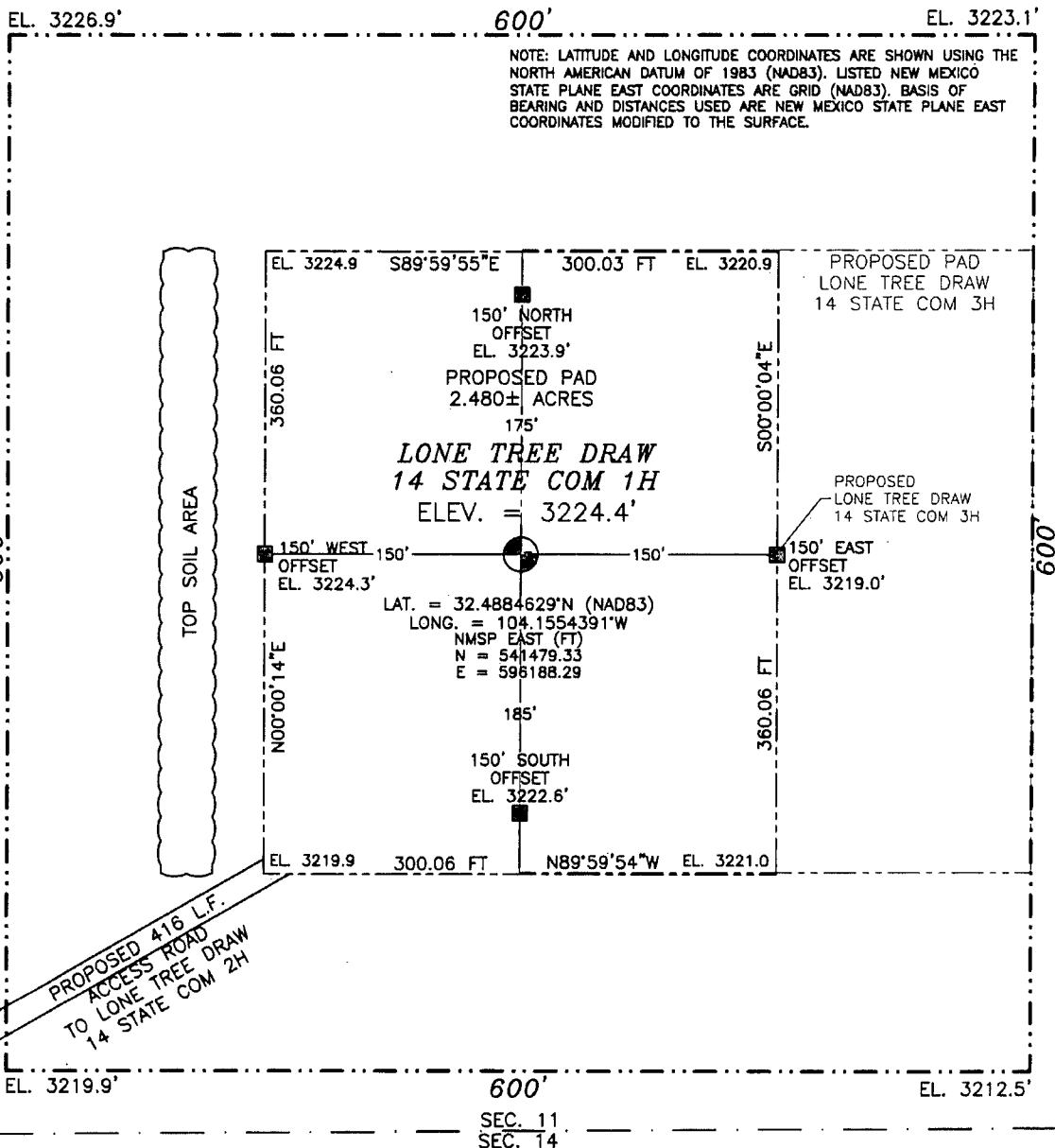
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	14	21 S	27 E		330	SOUTH	810	EAST	EDDY

¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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.

NW CORNER SEC. 11 LAT. = 32.5020163°N LONG. = 104.1689954°W NMSP EAST (FT) N = 546403.31 E = 592000.82 W/4 CORNER SEC. 11 LAT. = 32.4947873°N LONG. = 104.1691234°W NMSP EAST (FT) N = 543773.38 E = 591965.39 SECTION CORNER LAT. = 32.4874915°N LONG. = 104.1691038°W NMSP EAST (FT) N = 541119.20 E = 591975.53 Project Area Lease Line W/4 CORNER SEC. 14 COMPUTED Completion Interval SW CORNER SEC. 14 COMPUTED	N/4 CORNER SEC. 11 LAT. = 32.5020348°N LONG. = 104.1603695°W NMSP EAST (FT) N = 546414.26 E = 594660.06 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. SEC. 11 LONE TREE DRAW 14 STATE COM 1H ELEV. = 3224.4 LAT. = 32.4884629°N (NAD83) LONG. = 104.1554391°W NMSP EAST (FT) N = 541479.33 E = 596188.29 QUARTER CORNER LAT. = 32.4875225°N LONG. = 104.1604750°W NMSP EAST (FT) N = 541134.69 E = 594636.10 SECTION CORNER LAT. = 32.4875581°N LONG. = 104.1518461°W NMSP EAST (FT) N = 541151.32 E = 597296.69 W/4 CORNER SEC. 14 COMPUTED 1/4 CORNER SEC. 14 LAT. = 32.4802575°N LONG. = 104.1518272°W NMSP EAST (FT) N = 538496.13 E = 597307.02 SECTION CORNER LAT. = 32.4728692°N LONG. = 104.1517858°W NMSP EAST (FT) N = 535844.87 E = 597324.30	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Judy A. Barnett</i> Date: 2-13-14 Judy A. Barnett Sr. Regulatory Specialist Printed Name E-mail Address
	SEC. 14 BOTTOM OF HOLE LAT. = 32.4738483°N LONG. = 104.1544015°W NMSP EAST (FT) N = 537631.11 E = 595124.20 330' 330' 330'	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. SEPTEMBER 26, 2013 Date of Survey Signature and Seal of Professional Surveyor <i>James Jaramillo</i> Certificate Number 12797 JAMES JARAMILLO, PLS 12797 SURVEY NO. 2183

**SECTION 11, TOWNSHIP 21 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP**



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP) AND SR 200 (GEORGE SHOUP, RELIEF ROUTE) GO NORTH ON CR 206 1.3 MILES TO CR 600 (RAINS ROAD) ON THE RIGHT (EAST) GO DOWN CR 600 2.1 MILES (RAMBO BOOSTER) PAVEMENT ENDS CONTINUE EAST AT 2.3 MILES CALICHE ROAD TO THE RIGHT (EAST) ACROSS FROM A GRAVEL PIT GO RIGHT ON CALICHE ROAD 2.4 MILES FOLLOW FLAG ON LEFT (NORTH) SIDE OF ROAD FOR 900 L.F. TO SE CORNER OF PAD FOR LONE TREE DRAW 14 STATE COM 2H THEN GO TO NE. CORNER OF SAID PAD THEN FOLLOW FLAGS 416 L.F. TO SW. CORNER OF PAD

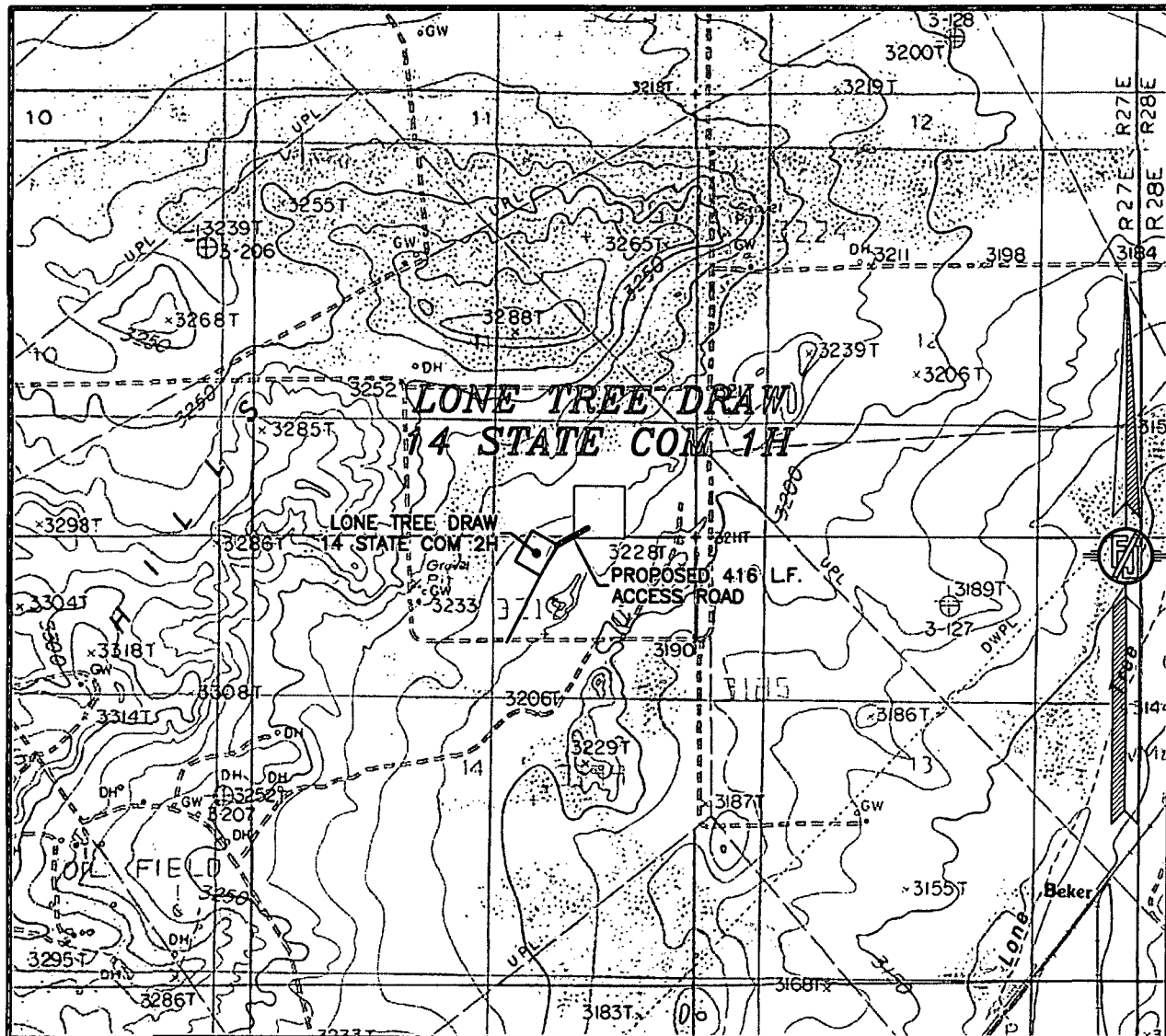
**DEVON ENERGY PRODUCTION COMPANY, L.P.
LONE TREE DRAW 14 STATE COM 1H
LOCATED 335 FT. FROM THE SOUTH LINE
AND 1110 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO**

SEPTEMBER 26, 2013

SURVEY NO. 2183

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

SECTION 11, TOWNSHIP 21 SOUTH, RANGE 27 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 LOCATION VERIFICATION MAP



USGS QUAD MAP:
 CARLSBAD EAST

NOT TO SCALE

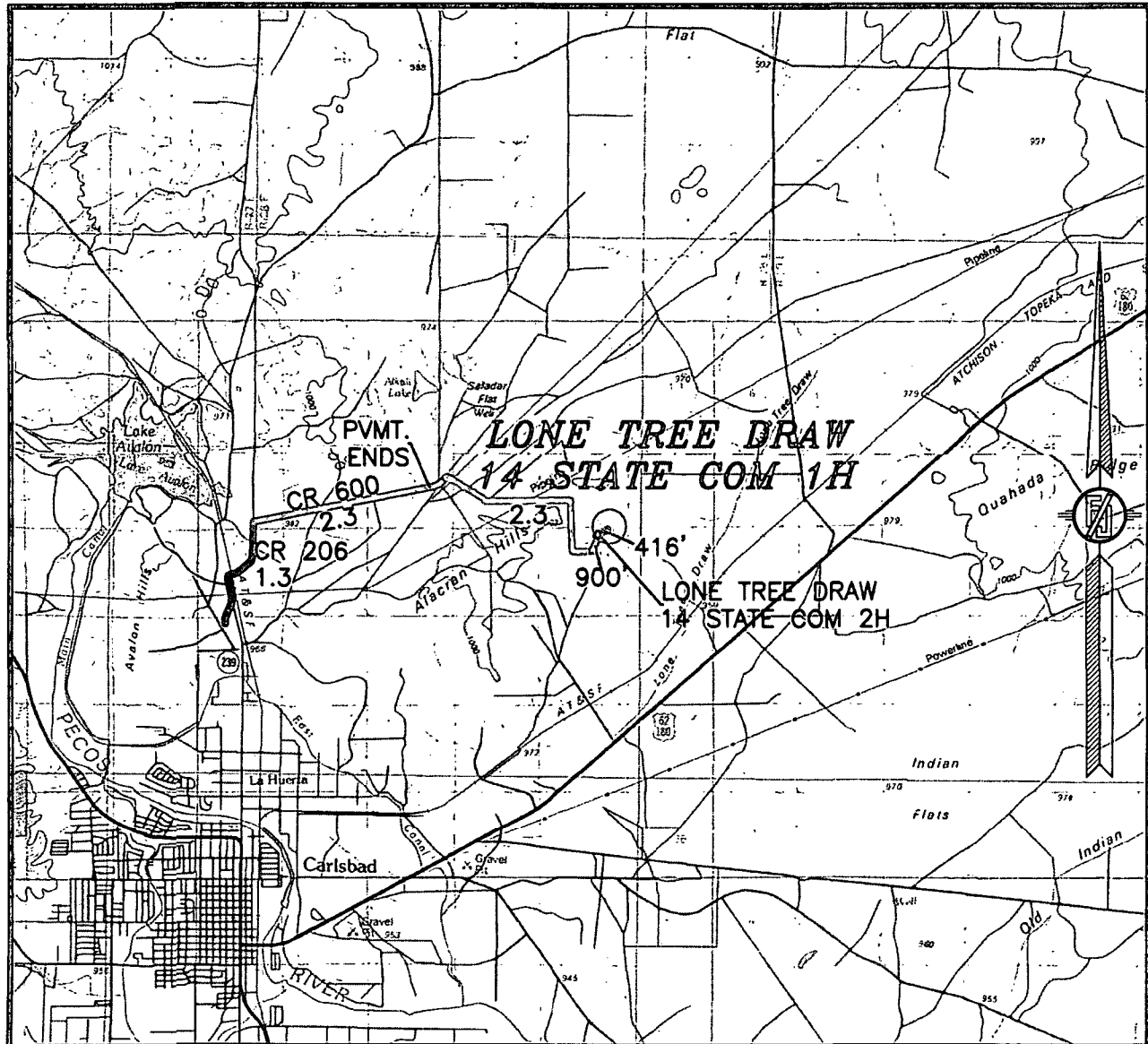
DEVON ENERGY PRODUCTION COMPANY, L.P.
 LONE TREE DRAW 14 STATE COM 1H
 LOCATED 335 FT. FROM THE SOUTH LINE
 AND 1110 FT. FROM THE EAST LINE OF
 SECTION 11, TOWNSHIP 21 SOUTH,
 RANGE 27 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2013

SURVEY NO. 2183

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

SECTION 11, 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) AND SR 200 (GEORGE SHOUP, RELIEF ROUTE) GO NORTH ON CR 206 1.3 MILES TO CR 600 (RAINS ROAD) ON THE RIGHT (EAST) GO DOWN CR 600 2.1 MILES (RAMBO BOOSTER) PAVEMENT ENDS CONTINUE EAST AT 2.3 MILES CALICHE ROAD TO THE RIGHT (EAST) ACROSS FROM A GRAVEL PIT GO RIGHT ON CALICHE ROAD 2.4 MILES FOLLOW FLAG ON LEFT (NORTH) SIDE OF ROAD FOR 900 L.F. TO SE CORNER OF PAD FOR LONE TREE DRAW 14 STATE COM 2H THEN GO TO NE. CORNER OF SAID PAD THEN FOLLOW FLAGS 416 L.F. TO SW. CORNER OF PAD

DEVON ENERGY PRODUCTION COMPANY, L.P.

LONE TREE DRAW 14 STATE COM 1H

LOCATED 335 FT. FROM THE SOUTH LINE

AND 1110 FT. FROM THE EAST LINE OF

SECTION 11, TOWNSHIP 21 SOUTH,

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

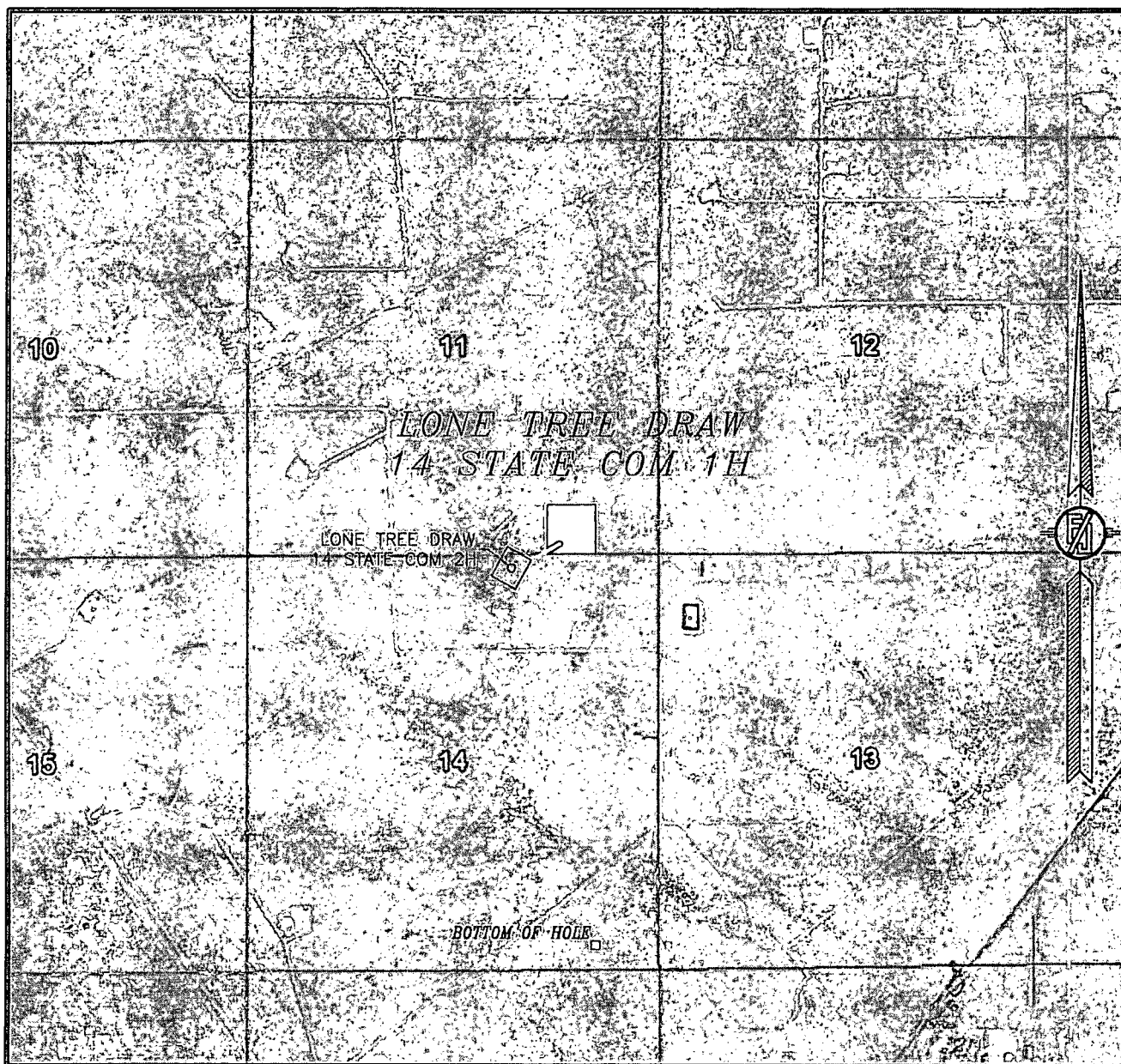
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2013

SURVEY NO. 2183

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

SECTION 11, 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 14 STATE COM 1H
LOCATED 335 FT. FROM THE SOUTH LINE
AND 1110 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 21 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2013

SURVEY NO. 2183

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

DEVON ENERGY

Project: Eddy County, NM (NAD-83)
Site: Lone Tree Draw "14" State
Well: #1H
Wellbore: OH
Design: Plan #1 Draft 1



Azimuths to Grid North
True North: -0.10°
Magnetic North: 7.58°

Magnetic Field
Strength: 48430.4snT
Dip Angle: 60.25°
Date: 01/13/2014
Model: BGGM2013



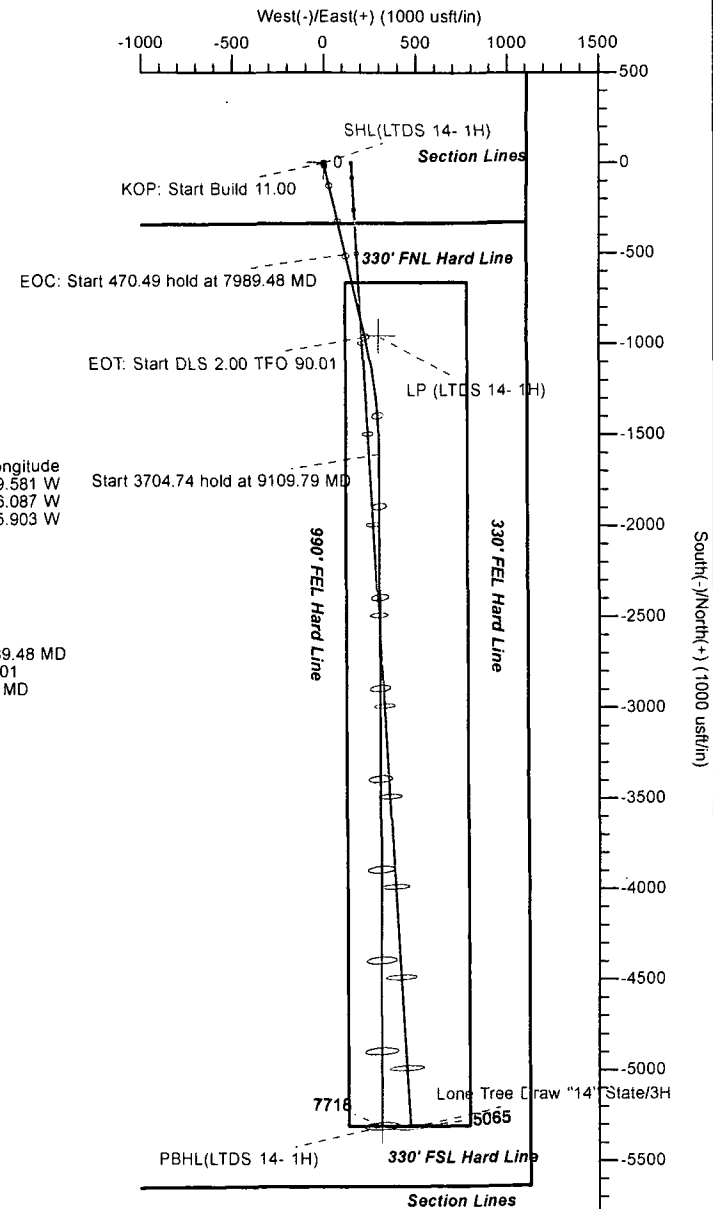
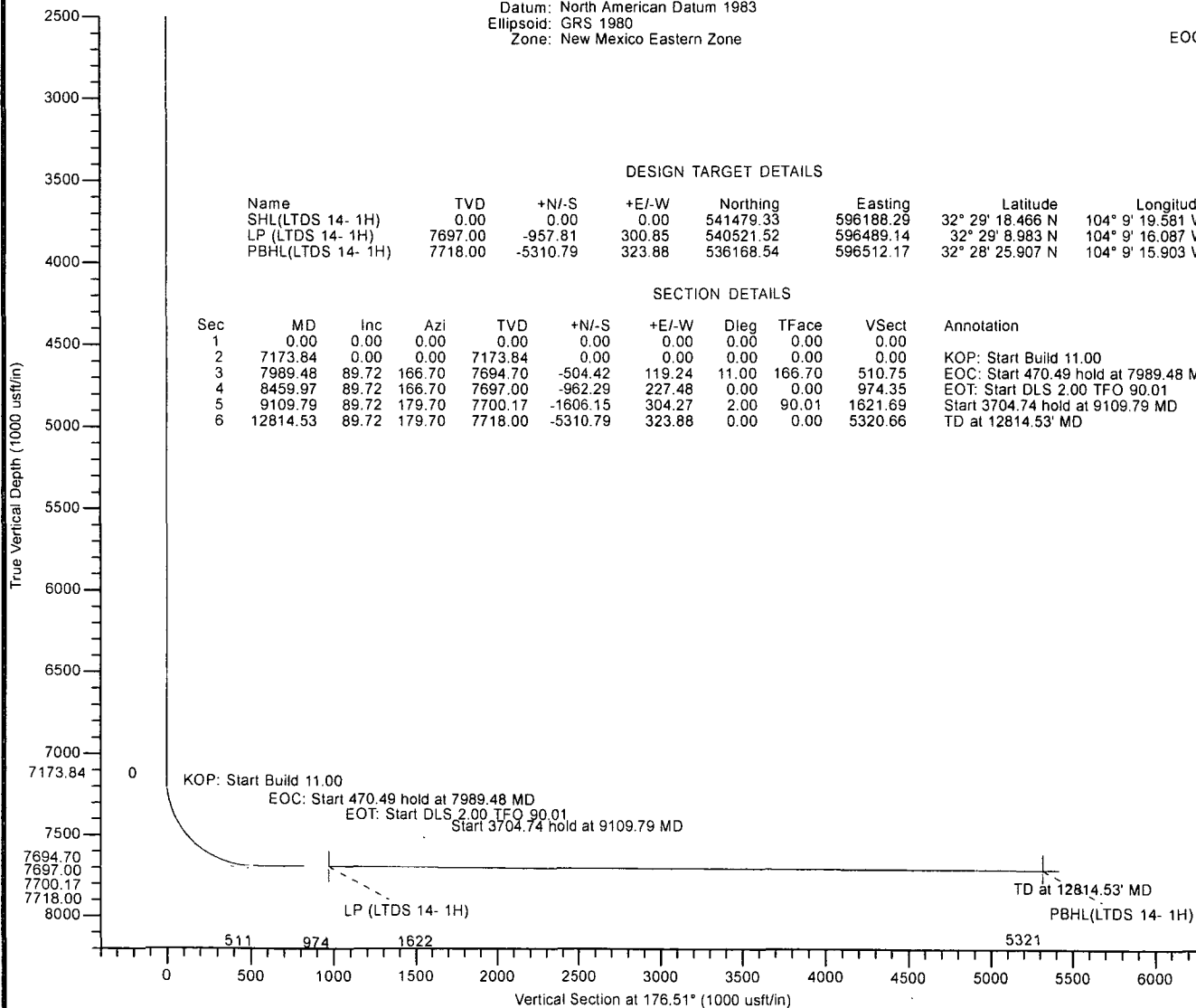
PROJECT DETAILS: Eddy County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(LTDS 14- 1H)	0.00	0.00	0.00	541479.33	596188.29	32° 29' 18.466 N	104° 9' 19.581 W
LP (LTDS 14- 1H)	7697.00	-957.81	300.85	540521.52	596489.14	32° 29' 8.983 N	104° 9' 16.087 W
PBHL(LTDS 14- 1H)	7718.00	-5310.79	323.88	536168.54	596512.17	32° 28' 25.907 N	104° 9' 15.903 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP: Start Build 11.00
2	7173.84	0.00	0.00	7173.84	0.00	0.00	0.00	0.00	0.00	EOC: Start 470.49 hold at 7989.48 MD
3	7989.48	89.72	166.70	7694.70	-504.42	119.24	11.00	166.70	510.75	EOT: Start DLS 2.00 TFO 90.01
4	8459.97	89.72	166.70	7697.00	-962.29	227.48	0.00	0.00	974.35	Start 3704.74 hold at 9109.79 MD
5	9109.79	89.72	179.70	7700.17	-1606.15	304.27	2.00	90.01	1621.69	TD at 12814.53' MD
6	12814.53	89.72	179.70	7718.00	-5310.79	323.88	0.00	0.00	5320.66	



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

Plan: Plan #1 Draft 1 (#1H/OH)
Lone Tree Draw "14" State
Created By: Heber Claros Date: 12/04, January 13 2014
Date: _____
Approved: _____ Date: _____

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	DEVON ENERGY	TVD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Site:	Lone Tree Draw "14" State	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 1		

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

Site:	Lone Tree Draw "14" State				
Site Position:		Northing:	541,480.29 usft	Latitude:	32° 29' 18.473 N
From:	Lat/Long	Easting:	596,338.28 usft	Longitude:	104° 9' 17.829 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.10 °

Well:	#1H					
Well Position	+N/-S	-0.95 usft	Northing:	541,479.33 usft	Latitude:	32° 29' 18.466 N
	+E/-W	-149.99 usft	Easting:	596,188.29 usft	Longitude:	104° 9' 19.581 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,224.00 usft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	01/13/14	7.68	60.25	48,430

Design:	Plan #1 Draft 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	7,718.00	0.00	0.00	176.51

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	
7,173.84	0.00	0.00	7,173.84	0.00	0.00	0.00	0.00	0.00	0.00	
7,989.48	89.72	166.70	7,694.70	-504.42	119.24	11.00	11.00	0.00	166.70	
8,459.97	89.72	166.70	7,697.00	-962.29	227.48	0.00	0.00	0.00	0.00	LP (LTDS 14- 1H)
9,109.79	89.72	179.70	7,700.17	-1,606.15	304.27	2.00	0.00	2.00	90.01	
12,814.53	89.72	179.70	7,718.00	-5,310.79	323.88	0.00	0.00	0.00	0.00	PBHL(LTDS 14- 1H)

Leam Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Single User Db
Company: DEVON ENERGY

Project: Eddy County, NM (NAD-83)

Site: Lone Tree Draw "14" State

Well: #1H

Wellbore: OH

Design: Plan #1 Draft 1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well #1H

GE 3224' + KB 26' @ 3250.00usft (Cactus 126)

GE 3224' + KB 26' @ 3250.00usft (Cactus 126)

Grid

Minimum Curvature

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)
7,173.84	0.00	0.00	7,173.84	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start Build 11.00									
7,200.00	2.88	166.70	7,199.99	-0.64	0.15	0.65	11.00	11.00	0.00
7,250.00	8.38	166.70	7,249.73	-5.41	1.28	5.48	11.00	11.00	0.00
7,300.00	13.88	166.70	7,298.77	-14.80	3.50	14.98	11.00	11.00	0.00
7,350.00	19.38	166.70	7,346.66	-28.71	6.79	29.07	11.00	11.00	0.00
7,400.00	24.88	166.70	7,392.96	-47.04	11.12	47.63	11.00	11.00	0.00
7,450.00	30.38	166.70	7,437.24	-69.59	16.45	70.46	11.00	11.00	0.00
7,500.00	35.88	166.70	7,479.10	-96.17	22.73	97.38	11.00	11.00	0.00
7,550.00	41.38	166.70	7,518.15	-126.54	29.91	128.12	11.00	11.00	0.00
7,600.00	46.88	166.70	7,554.02	-160.40	37.92	162.41	11.00	11.00	0.00
7,650.00	52.38	166.70	7,586.40	-197.46	46.68	199.94	11.00	11.00	0.00
7,700.00	57.88	166.70	7,614.97	-237.37	56.11	240.34	11.00	11.00	0.00
7,750.00	63.38	166.70	7,639.49	-279.75	66.13	283.26	11.00	11.00	0.00
7,800.00	68.88	166.70	7,659.72	-324.23	76.65	328.30	11.00	11.00	0.00
7,850.00	74.38	166.70	7,675.47	-370.39	87.56	375.04	11.00	11.00	0.00
7,900.00	79.88	166.70	7,686.60	-417.81	98.77	423.05	11.00	11.00	0.00
7,950.00	85.38	166.70	7,693.02	-466.05	110.17	471.89	11.00	11.00	0.00
7,989.48	89.72	166.70	7,694.70	-504.42	119.24	510.75	11.00	11.00	0.00
EOC: Start 470.49 hold at 7989.48 MD									
8,000.00	89.72	166.70	7,694.76	-514.66	121.66	521.12	0.00	0.00	0.00
8,100.00	89.72	166.70	7,695.24	-611.98	144.67	619.65	0.00	0.00	0.00
8,200.00	89.72	166.70	7,695.73	-709.30	167.67	718.19	0.00	0.00	0.00
8,300.00	89.72	166.70	7,696.22	-806.61	190.68	816.73	0.00	0.00	0.00
8,400.00	89.72	166.70	7,696.71	-903.93	213.68	915.26	0.00	0.00	0.00
8,459.97	89.72	166.70	7,697.00	-962.29	227.48	974.35	0.00	0.00	0.00
EOT: Start DLS 2.00 TFO 90.01									
8,471.98	89.72	166.94	7,697.06	-973.99	230.22	986.20	2.00	0.00	2.00
LP (LTDS 14- 1H)									
8,500.00	89.72	167.50	7,697.20	-1,001.31	236.41	1,013.85	2.00	0.00	2.00
8,600.00	89.72	169.50	7,697.69	-1,099.30	256.35	1,112.86	2.00	0.00	2.00
8,700.00	89.72	171.50	7,698.18	-1,197.92	272.85	1,212.31	2.00	0.00	2.00
8,800.00	89.72	173.50	7,698.67	-1,297.06	285.90	1,312.06	2.00	0.00	2.00
8,900.00	89.72	175.50	7,699.15	-1,396.59	295.48	1,411.99	2.00	0.00	2.00
9,000.00	89.72	177.50	7,699.64	-1,496.40	301.59	1,511.98	2.00	0.00	2.00
9,109.79	89.72	179.70	7,700.17	-1,606.15	304.27	1,621.69	2.00	0.00	2.00
Start 3704.74 hold at 9109.79 MD									
9,200.00	89.72	179.70	7,700.60	-1,696.36	304.75	1,711.76	0.00	0.00	0.00
9,300.00	89.72	179.70	7,701.08	-1,796.35	305.28	1,811.61	0.00	0.00	0.00
9,400.00	89.72	179.70	7,701.57	-1,896.35	305.81	1,911.45	0.00	0.00	0.00
9,500.00	89.72	179.70	7,702.05	-1,996.35	306.34	2,011.29	0.00	0.00	0.00
9,600.00	89.72	179.70	7,702.53	-2,096.35	306.87	2,111.14	0.00	0.00	0.00
9,700.00	89.72	179.70	7,703.01	-2,196.34	307.39	2,210.98	0.00	0.00	0.00
9,800.00	89.72	179.70	7,703.49	-2,296.34	307.92	2,310.83	0.00	0.00	0.00
9,900.00	89.72	179.70	7,703.97	-2,396.34	308.45	2,410.67	0.00	0.00	0.00
10,000.00	89.72	179.70	7,704.45	-2,496.34	308.98	2,510.52	0.00	0.00	0.00
10,100.00	89.72	179.70	7,704.94	-2,596.33	309.51	2,610.36	0.00	0.00	0.00
10,200.00	89.72	179.70	7,705.42	-2,696.33	310.04	2,710.20	0.00	0.00	0.00
10,300.00	89.72	179.70	7,705.90	-2,796.33	310.57	2,810.05	0.00	0.00	0.00
10,400.00	89.72	179.70	7,706.38	-2,896.33	311.10	2,909.89	0.00	0.00	0.00
10,500.00	89.72	179.70	7,706.86	-2,996.32	311.63	3,009.74	0.00	0.00	0.00

Leam Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Single User Db
 Company: DEVON ENERGY
 Project: Eddy County, NM (NAD-83)
 Site: Lone Tree Draw "14" State
 Well: #1H
 Wellbore: OH
 Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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)
10,600.00	89.72	179.70	7,707.34	-3,096.32	312.16	3,109.58	0.00	0.00	0.00
10,700.00	89.72	179.70	7,707.82	-3,196.32	312.69	3,209.43	0.00	0.00	0.00
10,800.00	89.72	179.70	7,708.30	-3,296.32	313.22	3,309.27	0.00	0.00	0.00
10,900.00	89.72	179.70	7,708.79	-3,396.31	313.75	3,409.11	0.00	0.00	0.00
11,000.00	89.72	179.70	7,709.27	-3,496.31	314.28	3,508.96	0.00	0.00	0.00
11,100.00	89.72	179.70	7,709.75	-3,596.31	314.81	3,608.80	0.00	0.00	0.00
11,200.00	89.72	179.70	7,710.23	-3,696.31	315.34	3,708.65	0.00	0.00	0.00
11,300.00	89.72	179.70	7,710.71	-3,796.30	315.86	3,808.49	0.00	0.00	0.00
11,400.00	89.72	179.70	7,711.19	-3,896.30	316.39	3,908.33	0.00	0.00	0.00
11,500.00	89.72	179.70	7,711.67	-3,996.30	316.92	4,008.18	0.00	0.00	0.00
11,600.00	89.72	179.70	7,712.15	-4,096.30	317.45	4,108.02	0.00	0.00	0.00
11,700.00	89.72	179.70	7,712.64	-4,196.29	317.98	4,207.87	0.00	0.00	0.00
11,800.00	89.72	179.70	7,713.12	-4,296.29	318.51	4,307.71	0.00	0.00	0.00
11,900.00	89.72	179.70	7,713.60	-4,396.29	319.04	4,407.56	0.00	0.00	0.00
12,000.00	89.72	179.70	7,714.08	-4,496.28	319.57	4,507.40	0.00	0.00	0.00
12,100.00	89.72	179.70	7,714.56	-4,596.28	320.10	4,607.24	0.00	0.00	0.00
12,200.00	89.72	179.70	7,715.04	-4,696.28	320.63	4,707.09	0.00	0.00	0.00
12,300.00	89.72	179.70	7,715.52	-4,796.28	321.16	4,806.93	0.00	0.00	0.00
12,400.00	89.72	179.70	7,716.01	-4,896.27	321.69	4,906.78	0.00	0.00	0.00
12,500.00	89.72	179.70	7,716.49	-4,996.27	322.22	5,006.62	0.00	0.00	0.00
12,600.00	89.72	179.70	7,716.97	-5,096.27	322.75	5,106.47	0.00	0.00	0.00
12,700.00	89.72	179.70	7,717.45	-5,196.27	323.28	5,206.31	0.00	0.00	0.00
12,800.00	89.72	179.70	7,717.93	-5,296.26	323.81	5,306.15	0.00	0.00	0.00
12,814.53	89.72	179.70	7,718.00	-5,310.79	323.88	5,320.66	0.00	0.00	0.00

TD at 12814.53' MD - PBHL(LTDS 14- 1H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL(LTDS 14- 1H)	0.00	0.00	0.00	0.00	0.00	541,479.33	596,188.29	32° 29' 18.466 N	104° 9' 19.581 W
- hit/miss target									
- plan misses target center by 7173.84usft at 7173.84usft MD (7173.84 TVD, 0.00 N, 0.00 E)									
- Point									
LP (LTDS 14- 1H)	0.00	0.00	7,697.00	-957.81	300.85	540,521.52	596,489.14	32° 29' 8.983 N	104° 9' 16.087 W
- hit/miss target									
- plan misses target center by 72.46usft at 8471.98usft MD (7697.06 TVD, -973.99 N, 230.22 E)									
- Point									
PBHL(LTDS 14- 1H)	0.00	0.00	7,718.00	-5,310.79	323.88	536,168.54	596,512.18	32° 28' 25.907 N	104° 9' 15.903 W
- hit/miss target									
- plan hits target center									
- Point									

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	DEVON ENERGY	TVD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Site:	Lone Tree Draw "14" State	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 Draft 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,173.84	7,173.84	0.00	0.00	KOP: Start Build 11.00
7,989.48	7,694.70	-504.42	119.24	EOC: Start 470.49 hold at 7989.48 MD
8,459.97	7,697.00	-962.29	227.48	EOT: Start DLS 2.00 TFO 90.01
9,109.79	7,700.17	-1,606.15	304.27	Start 3704.74 hold at 9109.79 MD
12,814.53	7,718.00	-5,310.79	323.88	TD at 12814.53' MD

DEVON ENERGY

**Eddy County, NM (NAD-83)
Lone Tree Draw "14" State
#1H**

**OH
Plan #1 Draft 1**

Anticollision Report

13 January, 2014

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Reference Site:	Lone Tree Draw "14" State	MD Reference:	GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1 Draft 1	Offset TVD Reference:	Reference Datum

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

Survey Tool Program	Date 01/13/14		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.00	12,814.53	Plan #1 Draft 1 (OH)	LEAM MWD-ADJ
			Description:
			MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Lone Tree Draw "14" State						
3H - OH - Plan #1 Draft 1	4,400.00	4,395.00	149.99	130.50	7.698	CC, ES
3H - OH - Plan #1 Draft 1	4,500.00	4,492.59	150.67	130.78	7.576	SF
Lone Tree Draw Offsets						
Lone Tree #1 - OH - OH	11,097.68	7,647.14	2,737.71	2,653.23	32.404	CC
Lone Tree #1 - OH - OH	11,100.00	7,647.14	2,737.72	2,653.19	32.388	ES
Lone Tree #1 - OH - OH	12,700.00	7,643.10	3,172.14	3,059.11	28.064	SF
Lone Tree Draw 13 State #3H - OH - OH	4,562.01	4,516.00	2,921.44	2,901.18	144.200	CC, ES
Lone Tree Draw 13 State #3H - OH - OH	12,814.53	9,564.00	3,676.46	3,537.06	26.373	SF

Offset Design Lone Tree Draw "14" State - 3H - OH - Plan #1 Draft 1														Offset Site Error:
Survey Program: LEAM MWD-ADJ														Offset Well Error:
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	Offset Wellbore Centre E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	5.00	0.00	0.00	89.64	0.95	149.99	150.07					
100.00	100.00	95.00	100.00	0.08	0.08	89.64	0.95	149.99	149.99	149.83	0.16	924.899		
200.00	200.00	195.00	200.00	0.31	0.30	89.64	0.95	149.99	149.99	149.39	0.60	248.073		
300.00	300.00	295.00	300.00	0.53	0.52	89.64	0.95	149.99	149.99	148.94	1.05	142.285		
400.00	400.00	395.00	400.00	0.76	0.75	89.64	0.95	149.99	149.99	148.49	1.50	99.748		
500.00	500.00	495.00	500.00	0.98	0.97	89.64	0.95	149.99	149.99	148.04	1.95	76.791		
600.00	600.00	595.00	600.00	1.21	1.20	89.64	0.95	149.99	149.99	147.59	2.40	62.424		
700.00	700.00	695.00	700.00	1.43	1.42	89.64	0.95	149.99	149.99	147.14	2.85	52.586		
800.00	800.00	795.00	800.00	1.66	1.65	89.64	0.95	149.99	149.99	146.69	3.30	45.426		
900.00	900.00	895.00	900.00	1.88	1.87	89.64	0.95	149.99	149.99	146.24	3.75	39.983		
1,000.00	1,000.00	995.00	1,000.00	2.11	2.09	89.64	0.95	149.99	149.99	145.79	4.20	35.704		
1,100.00	1,100.00	1,095.00	1,100.00	2.33	2.32	89.64	0.95	149.99	149.99	145.34	4.65	32.253		
1,200.00	1,200.00	1,195.00	1,200.00	2.56	2.54	89.64	0.95	149.99	149.99	144.89	5.10	29.410		
1,300.00	1,300.00	1,295.00	1,300.00	2.78	2.77	89.64	0.95	149.99	149.99	144.44	5.55	27.028		
1,400.00	1,400.00	1,395.00	1,400.00	3.01	2.99	89.64	0.95	149.99	149.99	143.99	6.00	25.002		
1,500.00	1,500.00	1,495.00	1,500.00	3.23	3.22	89.64	0.95	149.99	149.99	143.54	6.45	23.260		
1,600.00	1,600.00	1,595.00	1,600.00	3.45	3.44	89.64	0.95	149.99	149.99	143.09	6.90	21.744		

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
Project: Eddy County, NM (NAD-83)
Reference Site: Lone Tree Draw "14" State
Site Error: 0.00 usft
Reference Well: #1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design: Lone Tree Draw "14" State - 3H - OH - Plan #1 Draft 1													Offset Site Error: 0.00 usft	
Survey Program: O-LEAM MWD-ADJ													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						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		
1,700.00	1,700.00	1,695.00	1,700.00	3.68	3.67	89.64	0.95	149.99	149.99	142.64	7.35	20.413		
1,800.00	1,800.00	1,795.00	1,800.00	3.90	3.89	89.64	0.95	149.99	149.99	142.19	7.80	19.237		
1,900.00	1,900.00	1,895.00	1,900.00	4.13	4.12	89.64	0.95	149.99	149.99	141.74	8.25	18.188		
2,000.00	2,000.00	1,995.00	2,000.00	4.35	4.34	89.64	0.95	149.99	149.99	141.29	8.70	17.248		
2,100.00	2,100.00	2,095.00	2,100.00	4.58	4.57	89.64	0.95	149.99	149.99	140.84	9.15	16.400		
2,200.00	2,200.00	2,195.00	2,200.00	4.80	4.79	89.64	0.95	149.99	149.99	140.39	9.60	15.632		
2,300.00	2,300.00	2,295.00	2,300.00	5.03	5.02	89.64	0.95	149.99	149.99	139.95	10.04	14.932		
2,400.00	2,400.00	2,395.00	2,400.00	5.25	5.24	89.64	0.95	149.99	149.99	139.50	10.49	14.292		
2,500.00	2,500.00	2,495.00	2,500.00	5.48	5.47	89.64	0.95	149.99	149.99	139.05	10.94	13.705		
2,600.00	2,600.00	2,595.00	2,600.00	5.70	5.69	89.64	0.95	149.99	149.99	138.60	11.39	13.165		
2,700.00	2,700.00	2,695.00	2,700.00	5.93	5.92	89.64	0.95	149.99	149.99	138.15	11.84	12.665		
2,800.00	2,800.00	2,795.00	2,800.00	6.15	6.14	89.64	0.95	149.99	149.99	137.70	12.29	12.202		
2,900.00	2,900.00	2,895.00	2,900.00	6.38	6.37	89.64	0.95	149.99	149.99	137.25	12.74	11.771		
3,000.00	3,000.00	2,995.00	3,000.00	6.60	6.59	89.64	0.95	149.99	149.99	136.80	13.19	11.370		
3,100.00	3,100.00	3,095.00	3,100.00	6.83	6.81	89.64	0.95	149.99	149.99	136.35	13.64	10.995		
3,200.00	3,200.00	3,195.00	3,200.00	7.05	7.04	89.64	0.95	149.99	149.99	135.90	14.09	10.645		
3,300.00	3,300.00	3,295.00	3,300.00	7.28	7.26	89.64	0.95	149.99	149.99	135.45	14.54	10.316		
3,400.00	3,400.00	3,395.00	3,400.00	7.50	7.49	89.64	0.95	149.99	149.99	135.00	14.99	10.006		
3,500.00	3,500.00	3,495.00	3,500.00	7.73	7.71	89.64	0.95	149.99	149.99	134.55	15.44	9.715		
3,600.00	3,600.00	3,595.00	3,600.00	7.95	7.94	89.64	0.95	149.99	149.99	134.10	15.89	9.440		
3,700.00	3,700.00	3,695.00	3,700.00	8.17	8.16	89.64	0.95	149.99	149.99	133.65	16.34	9.180		
3,800.00	3,800.00	3,795.00	3,800.00	8.40	8.39	89.64	0.95	149.99	149.99	133.20	16.79	8.934		
3,900.00	3,900.00	3,895.00	3,900.00	8.62	8.61	89.64	0.95	149.99	149.99	132.75	17.24	8.701		
4,000.00	4,000.00	3,995.00	4,000.00	8.85	8.84	89.64	0.95	149.99	149.99	132.30	17.69	8.480		
4,100.00	4,100.00	4,095.00	4,100.00	9.07	9.06	89.64	0.95	149.99	149.99	131.85	18.14	8.270		
4,200.00	4,200.00	4,195.00	4,200.00	9.30	9.29	89.64	0.95	149.99	149.99	131.40	18.59	8.070		
4,300.00	4,300.00	4,295.00	4,300.00	9.52	9.51	89.64	0.95	149.99	149.99	130.95	19.04	7.880		
4,400.00	4,400.00	4,395.00	4,400.00	9.75	9.74	89.64	0.95	149.99	149.99	130.50	19.48	7.698 CC, ES		
4,500.00	4,500.00	4,492.59	4,497.12	9.97	9.92	92.66	-7.00	150.48	150.67	130.78	19.89	7.576 SF		
4,600.00	4,600.00	4,584.08	4,585.36	10.20	10.09	101.43	-30.72	151.94	155.70	135.44	20.27	7.682		
4,700.00	4,700.00	4,665.24	4,659.09	10.42	10.24	112.68	-64.36	154.02	171.86	151.21	20.65	8.321		
4,800.00	4,800.00	4,734.50	4,717.24	10.65	10.42	123.08	-101.81	156.33	204.09	183.06	21.03	9.704		
4,900.00	4,900.00	4,792.36	4,761.66	10.87	10.62	131.19	-138.79	158.61	252.11	230.72	21.38	11.791		
5,000.00	5,000.00	4,840.32	4,795.17	11.10	10.83	137.11	-173.01	160.72	312.60	290.90	21.70	14.406		
5,100.00	5,100.00	4,880.09	4,820.47	11.32	11.04	141.39	-203.61	162.61	382.15	360.15	21.99	17.375		
5,200.00	5,200.00	4,913.23	4,839.72	11.55	11.24	144.53	-230.53	164.27	458.18	435.91	22.27	20.574		
5,300.00	5,300.00	4,950.00	4,859.02	11.77	11.48	147.59	-261.76	166.19	539.07	516.53	22.54	23.912		
5,400.00	5,400.00	4,964.64	4,866.09	12.00	11.59	148.69	-274.57	166.98	623.16	600.38	22.79	27.348		
5,500.00	5,500.00	4,984.80	4,875.21	12.22	11.75	150.12	-292.50	168.09	710.05	687.02	23.03	30.827		
5,600.00	5,600.00	5,000.00	4,881.63	12.45	11.87	151.12	-306.25	168.94	798.99	775.71	23.27	34.329		
5,700.00	5,700.00	5,017.28	4,888.44	12.67	12.02	152.19	-322.11	169.91	889.52	866.01	23.51	37.829		
5,800.00	5,800.00	5,030.51	4,893.29	12.89	12.14	152.96	-334.39	170.67	981.36	957.61	23.75	41.319		
5,900.00	5,900.00	5,050.00	4,899.87	13.12	12.31	154.03	-352.70	171.80	1,074.33	1,050.34	23.99	44.780		
6,000.00	6,000.00	5,050.00	4,899.87	13.34	12.31	154.03	-352.70	171.80	1,167.99	1,143.78	24.22	48.232		
6,100.00	6,100.00	5,050.00	4,899.87	13.57	12.31	154.03	-352.70	171.80	1,262.63	1,238.19	24.44	51.660		
6,200.00	6,200.00	5,070.10	4,905.92	13.79	12.51	155.05	-371.82	172.98	1,357.50	1,332.82	24.68	55.008		
6,300.00	6,300.00	5,077.59	4,907.99	14.02	12.58	155.41	-379.02	173.42	1,453.07	1,428.16	24.91	58.338		
6,400.00	6,400.00	5,100.00	4,913.56	14.24	12.80	156.43	-400.68	174.76	1,549.39	1,524.24	25.15	61.616		
6,500.00	6,500.00	5,100.00	4,913.56	14.47	12.80	156.43	-400.68	174.76	1,645.56	1,620.19	25.37	64.861		
6,600.00	6,600.00	5,100.00	4,913.56	14.69	12.80	156.43	-400.68	174.76	1,742.17	1,716.58	25.60	68.066		
6,700.00	6,700.00	5,100.00	4,913.56	14.92	12.80	156.43	-400.68	174.76	1,839.15	1,813.33	25.82	71.229		

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
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw "14" State - 3H - OH - Plan #1 Draft 1													Offset Site Error: 0.00 usft
Survey Program: O-LEAM MWD-ADJ													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Tooface (")	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
6,800.00	6,800.00	5,100.00	4,913.56	15.14	12.80	156.43	-400.68	174.76	1,936.43	1,910.38	26.04	74.350	
6,900.00	6,900.00	5,100.00	4,913.56	15.37	12.80	156.43	-400.68	174.76	2,033.97	2,007.70	26.27	77.427	
7,000.00	7,000.00	5,100.00	4,913.56	15.59	12.80	156.43	-400.68	174.76	2,131.74	2,105.25	26.49	80.460	
7,100.00	7,100.00	5,100.00	4,913.56	15.82	12.80	156.43	-400.68	174.76	2,229.71	2,202.99	26.72	83.450	
7,173.84	7,173.84	5,121.12	4,917.94	15.98	13.03	157.32	-421.29	176.03	2,301.64	2,274.75	26.89	85.584	
7,200.00	7,199.99	5,122.13	4,918.13	16.03	13.04	-7.49	-422.29	176.09	2,327.15	2,300.04	27.11	85.836	
7,250.00	7,249.73	5,124.65	4,918.60	16.12	13.07	-5.38	-424.76	176.25	2,375.01	2,348.01	27.00	87.974	
7,300.00	7,298.77	5,127.89	4,919.17	16.21	13.10	-4.19	-427.94	176.44	2,421.38	2,394.66	26.72	90.613	
7,350.00	7,346.66	5,150.00	4,922.58	16.29	13.34	-3.24	-449.74	177.79	2,466.31	2,440.00	26.31	93.738	
7,400.00	7,392.96	5,150.00	4,922.58	16.38	13.34	-2.79	-449.74	177.79	2,508.53	2,482.83	25.70	97.599	
7,450.00	7,437.24	5,150.00	4,922.58	16.47	13.34	-2.45	-449.74	177.79	2,548.35	2,523.41	24.94	102.182	
7,500.00	7,479.10	5,150.00	4,922.58	16.57	13.34	-2.21	-449.74	177.79	2,585.51	2,561.47	24.04	107.568	
7,550.00	7,518.15	5,150.00	4,922.58	16.70	13.34	-2.01	-449.74	177.79	2,619.79	2,596.78	23.01	113.843	
7,600.00	7,554.02	5,150.00	4,922.58	16.85	13.34	-1.87	-449.74	177.79	2,650.99	2,629.10	21.89	121.088	
7,650.00	7,586.40	5,150.00	4,922.58	17.03	13.34	-1.75	-449.74	177.79	2,678.95	2,658.24	20.71	129.358	
7,700.00	7,614.97	5,150.00	4,922.58	17.26	13.34	-1.66	-449.74	177.79	2,703.50	2,684.00	19.50	138.641	
7,750.00	7,639.49	5,179.99	4,925.71	17.52	13.69	-1.46	-479.51	179.62	2,723.48	2,705.09	18.40	148.038	
7,800.00	7,659.72	5,204.61	4,927.00	17.83	13.98	-1.32	-504.05	181.14	2,740.62	2,723.26	17.36	157.849	
7,850.00	7,675.47	5,204.61	4,927.00	18.18	13.98	-1.29	-504.05	181.14	2,753.31	2,736.91	16.40	167.898	
7,900.00	7,686.60	5,204.61	4,927.00	18.57	13.98	-1.26	-504.05	181.14	2,762.18	2,746.53	15.65	176.486	
7,950.00	7,693.02	5,241.49	4,928.05	19.00	14.44	-1.12	-540.84	183.41	2,766.94	2,751.64	15.31	180.749	
7,989.48	7,694.70	5,280.38	4,929.17	19.37	14.94	-0.98	-579.65	185.80	2,767.36	2,752.06	15.30	180.849	
8,000.00	7,694.76	5,290.75	4,929.46	19.47	15.07	-0.95	-589.99	186.44	2,767.08	2,751.71	15.37	180.089	
8,100.00	7,695.24	5,389.27	4,932.28	20.52	16.41	-0.60	-688.28	192.50	2,764.43	2,748.39	16.04	172.303	
8,200.00	7,695.73	5,487.80	4,935.10	21.69	17.84	-0.25	-786.58	198.56	2,761.89	2,745.06	16.82	164.175	
8,300.00	7,696.22	5,586.32	4,937.92	22.97	19.34	0.09	-884.87	204.63	2,759.45	2,741.76	17.69	155.995	
8,400.00	7,696.71	5,684.84	4,940.74	24.34	20.88	0.44	-983.17	210.69	2,757.11	2,738.48	18.63	147.975	
8,459.97	7,697.00	5,743.92	4,942.43	25.20	21.84	0.65	-1,042.11	214.33	2,755.76	2,736.53	19.23	143.292	
8,500.00	7,697.20	5,783.41	4,943.56	25.76	22.48	0.76	-1,081.51	216.76	2,754.88	2,735.23	19.64	140.258	
8,600.00	7,697.69	5,882.41	4,946.39	27.14	24.11	0.99	-1,180.28	222.85	2,752.69	2,731.98	20.71	132.933	
8,700.00	7,698.18	5,981.83	4,949.24	28.56	25.77	1.16	-1,279.48	228.97	2,750.50	2,728.68	21.82	126.046	
8,800.00	7,698.67	6,081.56	4,952.09	30.01	27.47	1.25	-1,378.98	235.11	2,748.26	2,725.29	22.98	119.620	
8,900.00	7,699.15	6,181.47	4,954.95	31.48	29.19	1.26	-1,478.65	241.25	2,745.96	2,721.80	24.16	113.653	
9,000.00	7,699.64	6,281.44	4,957.81	32.96	30.92	1.21	-1,578.39	247.41	2,743.59	2,718.21	25.37	108.129	
9,109.79	7,700.17	6,391.11	4,960.95	34.60	32.84	1.06	-1,687.81	254.16	2,740.89	2,714.16	26.73	102.545	
9,200.00	7,700.60	6,481.15	4,963.53	35.96	34.42	0.95	-1,777.65	259.70	2,738.65	2,710.79	27.86	98.286	
9,300.00	7,701.08	6,580.97	4,966.39	37.52	36.19	0.84	-1,877.23	265.84	2,736.18	2,707.04	29.14	93.895	
9,400.00	7,701.57	6,680.78	4,969.24	39.09	37.96	0.72	-1,976.81	271.98	2,733.72	2,703.28	30.43	89.824	
9,500.00	7,702.05	6,780.59	4,972.10	40.69	39.74	0.60	-2,076.40	278.12	2,731.27	2,699.52	31.74	86.044	
9,600.00	7,702.53	6,880.41	4,974.96	42.31	41.53	0.48	-2,175.98	284.27	2,728.83	2,695.76	33.06	82.530	
9,700.00	7,703.01	6,980.22	4,977.81	43.94	43.32	0.37	-2,275.56	290.41	2,726.40	2,692.00	34.40	79.259	
9,800.00	7,703.49	7,080.03	4,980.67	45.59	45.11	0.25	-2,375.15	296.55	2,723.99	2,688.24	35.74	76.210	
9,900.00	7,703.97	7,179.85	4,983.53	47.25	46.91	0.13	-2,474.73	302.70	2,721.58	2,684.48	37.10	73.362	
10,000.00	7,704.45	7,279.66	4,986.38	48.92	48.72	0.01	-2,574.31	308.84	2,719.19	2,680.73	38.46	70.700	
10,100.00	7,704.94	7,379.47	4,989.24	50.61	50.53	-0.11	-2,673.89	314.98	2,716.81	2,676.98	39.83	68.206	
10,200.00	7,705.42	7,479.29	4,992.09	52.30	52.34	-0.23	-2,773.48	321.12	2,714.44	2,673.23	41.21	65.866	
10,300.00	7,705.90	7,579.10	4,994.95	54.01	54.15	-0.34	-2,873.06	327.27	2,712.08	2,669.49	42.60	63.667	
10,400.00	7,706.38	7,678.91	4,997.81	55.72	55.97	-0.46	-2,972.64	333.41	2,709.74	2,665.75	43.99	61.598	
10,500.00	7,706.86	7,778.73	5,000.66	57.44	57.79	-0.58	-3,072.23	339.55	2,707.40	2,662.01	45.39	59.648	
10,600.00	7,707.34	7,878.54	5,003.52	59.17	59.61	-0.70	-3,171.81	345.69	2,705.08	2,658.29	46.79	57.808	

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
Project: Eddy County, NM (NAD-83)

Reference Site: Lone Tree Draw "14" State

Site Error: 0.00 usft

Reference Well: #1H

Well Error: 0.00 usft

Reference Wellbore: OH

Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at

Database:

Offset TVD Reference:

Well #1H

GE 3224' + KB 26' @ 3250.00usft (Cactus 126)

GE 3224' + KB 26' @ 3250.00usft (Cactus 126)

Grid

Minimum Curvature

2.00 sigma

EDM 5000.1 Single User Db

Reference Datum

Offset Design Lone Tree Draw "14" State - 3H - OH - Plan #1 Draft 1													Offset Site Error:	0.00 usft
Survey Program: 0-LEAM MWD-ADJ													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance			Minimum		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)	Separation (usft)			
10,700.00	7,707.82	7,978.35	5,006.38	60.90	61.43	-0.82	-3,271.39	351.84	2,702.77	2,654.57	48.20	56.069		
10,800.00	7,708.30	8,078.16	5,009.23	62.64	63.25	-0.94	-3,370.98	357.98	2,700.47	2,650.85	49.62	54.423		
10,900.00	7,708.79	8,177.98	5,012.09	64.38	65.08	-1.06	-3,470.56	364.12	2,698.19	2,647.15	51.04	52.864		
11,000.00	7,709.27	8,277.79	5,014.95	66.13	66.91	-1.18	-3,570.14	370.26	2,695.91	2,643.45	52.47	51.384		
11,100.00	7,709.75	8,377.60	5,017.80	67.88	68.73	-1.30	-3,669.73	376.41	2,693.65	2,639.75	53.90	49.978		
11,200.00	7,710.23	8,477.42	5,020.66	69.64	70.56	-1.42	-3,769.31	382.55	2,691.40	2,636.07	55.33	48.641		
11,300.00	7,710.71	8,577.23	5,023.52	71.40	72.39	-1.54	-3,868.89	388.69	2,689.16	2,632.39	56.77	47.368		
11,400.00	7,711.19	8,677.04	5,026.37	73.16	74.23	-1.67	-3,968.47	394.83	2,686.93	2,628.72	58.22	46.154		
11,500.00	7,711.67	8,776.86	5,029.23	74.93	76.06	-1.79	-4,068.06	400.98	2,684.72	2,625.05	59.67	44.996		
11,600.00	7,712.15	8,876.67	5,032.09	76.70	77.89	-1.91	-4,167.64	407.12	2,682.52	2,621.40	61.12	43.890		
11,700.00	7,712.64	8,976.48	5,034.94	78.47	79.73	-2.03	-4,267.22	413.26	2,680.33	2,617.75	62.58	42.833		
11,800.00	7,713.12	9,076.30	5,037.80	80.25	81.56	-2.15	-4,366.81	419.40	2,678.15	2,614.11	64.04	41.821		
11,900.00	7,713.60	9,176.11	5,040.66	82.03	83.40	-2.27	-4,466.39	425.55	2,675.98	2,610.48	65.51	40.851		
12,000.00	7,714.08	9,275.92	5,043.51	83.81	85.23	-2.40	-4,565.97	431.69	2,673.83	2,606.85	66.98	39.922		
12,100.00	7,714.56	9,375.74	5,046.37	85.59	87.07	-2.52	-4,665.56	437.83	2,671.69	2,603.24	68.45	39.030		
12,200.00	7,715.04	9,475.55	5,049.22	87.38	88.91	-2.64	-4,765.14	443.98	2,669.56	2,599.63	69.93	38.174		
12,300.00	7,715.52	9,575.36	5,052.08	89.16	90.74	-2.76	-4,864.72	450.12	2,667.44	2,596.02	71.42	37.350		
12,400.00	7,716.01	9,675.18	5,054.94	90.95	92.58	-2.89	-4,964.31	456.26	2,665.34	2,592.43	72.91	36.559		
12,500.00	7,716.49	9,774.99	5,057.79	92.74	94.42	-3.01	-5,063.89	462.40	2,663.24	2,588.84	74.40	35.797		
12,600.00	7,716.97	9,874.80	5,060.65	94.53	96.26	-3.13	-5,163.47	468.55	2,661.16	2,585.27	75.90	35.063		
12,700.00	7,717.45	9,974.62	5,063.51	96.33	98.10	-3.26	-5,263.05	474.69	2,659.10	2,581.70	77.40	34.355		
12,800.00	7,717.93	10,026.79	5,066.00	98.12	99.06	-3.32	-5,315.11	477.90	2,657.47	2,578.93	78.54	33.838		
12,806.89	7,717.96	10,026.79	5,065.00	98.25	99.06	-3.32	-5,315.11	477.90	2,657.46	2,578.87	78.59	33.816		
12,814.53	7,718.00	10,026.79	5,065.00	98.38	99.06	-3.32	-5,315.11	477.90	2,657.47	2,578.83	78.64	33.792		

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
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
0.00	0.00	0.00	72.00	0.00	0.00	139.44	-3,624.86	3,102.96	4,772.12				
100.00	100.00	30.81	102.81	0.08	0.03	139.44	-3,624.86	3,102.94	4,771.57	4,771.45	0.12	N/A	
200.00	200.00	142.30	214.30	0.31	0.22	139.44	-3,624.92	3,102.58	4,771.40	4,770.87	0.53	8,959.191	
300.00	300.00	245.40	317.40	0.53	0.50	139.45	-3,624.94	3,101.94	4,771.01	4,769.98	1.03	4,636.128	
400.00	400.00	336.86	408.85	0.76	0.73	139.45	-3,625.14	3,101.31	4,770.73	4,769.24	1.49	3,197.606	
491.52	491.52	419.53	491.52	0.96	0.94	139.46	-3,625.49	3,100.79	4,770.64	4,768.74	1.91	2,500.136	
500.00	500.00	427.09	499.08	0.98	0.96	139.46	-3,625.53	3,100.74	4,770.65	4,768.70	1.95	2,451.645	
600.00	600.00	518.59	590.58	1.21	1.19	139.47	-3,626.14	3,100.21	4,770.77	4,768.38	2.40	1,990.420	
700.00	700.00	616.54	688.52	1.43	1.43	139.48	-3,626.85	3,099.66	4,770.96	4,768.10	2.86	1,668.739	
800.00	800.00	700.00	771.98	1.66	1.61	139.49	-3,627.45	3,099.50	4,771.38	4,768.12	3.26	1,461.577	
900.00	900.00	817.96	889.94	1.88	1.88	139.50	-3,628.45	3,098.95	4,771.71	4,767.95	3.76	1,268.830	
1,000.00	1,000.00	900.00	971.97	2.11	2.08	139.51	-3,629.18	3,098.60	4,772.11	4,767.92	4.19	1,139.816	
1,100.00	1,100.00	983.38	1,055.35	2.33	2.27	139.52	-3,630.08	3,098.52	4,772.87	4,768.27	4.60	1,036.753	
1,200.00	1,200.00	1,093.49	1,165.45	2.56	2.54	139.53	-3,631.65	3,098.18	4,773.76	4,768.66	5.10	936.658	
1,300.00	1,300.00	1,205.58	1,277.52	2.78	2.83	139.56	-3,633.42	3,097.12	4,774.35	4,768.73	5.61	850.422	
1,400.00	1,400.00	1,308.47	1,380.39	3.01	3.11	139.58	-3,635.08	3,095.86	4,774.78	4,768.67	6.11	781.268	
1,500.00	1,500.00	1,403.81	1,475.71	3.23	3.36	139.60	-3,636.64	3,094.73	4,775.26	4,768.67	6.59	724.768	
1,600.00	1,600.00	1,505.06	1,576.92	3.45	3.79	139.64	-3,638.40	3,091.61	4,774.75	4,767.50	7.24	659.248	
1,700.00	1,700.00	1,604.75	1,676.58	3.68	4.03	139.67	-3,638.86	3,089.48	4,773.71	4,766.00	7.71	619.293	
1,800.00	1,800.00	1,703.79	1,775.59	3.90	4.27	139.69	-3,639.47	3,087.30	4,772.76	4,764.59	8.18	583.695	
1,900.00	1,900.00	1,804.68	1,876.46	4.13	4.53	139.72	-3,640.01	3,085.06	4,771.77	4,763.11	8.66	551.071	
2,000.00	2,000.00	1,904.97	2,046.73	4.35	4.76	139.73	-3,640.18	3,083.30	4,770.73	4,761.62	9.11	523.667	
2,100.00	2,100.00	2,005.40	2,167.16	4.58	5.02	139.75	-3,639.86	3,081.57	4,769.61	4,760.01	9.60	496.998	
2,200.00	2,200.00	2,106.00	2,271.74	4.80	5.23	139.76	-3,639.24	3,079.92	4,768.14	4,758.10	10.03	475.259	
2,300.00	2,300.00	2,209.29	2,361.01	5.03	5.41	139.77	-3,638.71	3,078.61	4,766.74	4,756.30	10.44	456.535	
2,400.00	2,400.00	2,310.00	2,471.71	5.25	5.65	139.78	-3,638.08	3,076.98	4,765.36	4,754.46	10.90	437.210	
2,500.00	2,500.00	2,406.29	2,567.99	5.48	5.85	139.79	-3,637.47	3,075.50	4,763.88	4,752.55	11.33	420.469	
2,600.00	2,600.00	2,502.24	2,663.93	5.70	6.06	139.79	-3,636.85	3,074.17	4,762.49	4,750.73	11.76	405.039	
2,700.00	2,700.00	2,601.16	2,742.84	5.93	6.23	139.80	-3,636.43	3,073.28	4,761.36	4,749.20	12.16	391.668	
2,800.00	2,800.00	2,708.85	2,850.52	6.15	6.47	139.80	-3,636.04	3,072.28	4,760.49	4,747.87	12.62	377.148	
2,900.00	2,900.00	2,812.22	2,943.89	6.38	6.68	139.81	-3,635.57	3,071.33	4,759.44	4,746.39	13.06	364.548	
3,000.00	3,000.00	2,916.48	3,038.14	6.60	6.88	139.81	-3,635.17	3,070.58	4,758.61	4,745.13	13.48	353.055	
3,100.00	3,100.00	3,021.97	3,143.63	6.83	7.09	139.81	-3,634.55	3,069.95	4,757.78	4,743.86	13.91	341.972	
3,200.00	3,200.00	3,127.97	3,249.62	7.05	7.28	139.81	-3,633.76	3,069.26	4,756.79	4,742.46	14.33	331.997	
3,300.00	3,300.00	3,231.64	3,353.28	7.28	7.46	139.81	-3,632.46	3,068.74	4,755.62	4,740.89	14.73	322.791	
3,400.00	3,400.00	3,332.22	3,453.86	7.50	7.59	139.80	-3,631.30	3,068.36	4,754.37	4,739.28	15.09	315.111	
3,500.00	3,500.00	3,431.12	3,552.75	7.73	7.74	139.79	-3,629.78	3,068.15	4,753.18	4,737.72	15.46	307.360	
3,600.00	3,600.00	3,530.36	3,653.98	7.95	7.92	139.79	-3,628.09	3,067.58	4,751.72	4,735.85	15.87	299.362	
3,700.00	3,700.00	3,629.14	3,750.73	8.17	8.08	139.77	-3,626.04	3,067.30	4,750.05	4,733.80	16.25	292.236	
3,800.00	3,800.00	3,728.00	3,851.57	8.40	8.20	139.76	-3,624.17	3,067.31	4,748.48	4,731.88	16.60	286.008	
3,900.00	3,900.00	3,827.04	3,950.59	8.62	8.37	139.74	-3,622.00	3,067.19	4,746.90	4,729.91	16.99	279.408	
4,000.00	4,000.00	4,000.00	4,071.54	8.85	8.51	139.73	-3,620.23	3,067.06	4,745.32	4,727.96	17.36	273.392	
4,100.00	4,100.00	4,108.27	4,179.79	9.07	8.69	139.71	-3,618.16	3,066.85	4,743.73	4,725.97	17.76	267.081	
4,200.00	4,200.00	4,200.00	4,271.50	9.30	8.86	139.71	-3,616.59	3,066.51	4,742.18	4,724.03	18.15	261.220	
4,300.00	4,300.00	4,286.82	4,358.32	9.52	9.02	139.70	-3,615.35	3,066.20	4,740.86	4,722.31	18.54	255.879	
4,400.00	4,400.00	4,397.90	4,469.37	9.75	9.23	139.69	-3,613.71	3,065.86	4,739.54	4,720.56	18.98	249.744	
4,500.00	4,500.00	4,500.00	4,571.46	9.97	9.43	139.68	-3,611.86	3,065.53	4,737.95	4,718.55	19.40	244.261	
4,600.00	4,600.00	4,588.31	4,659.76	10.20	9.61	139.67	-3,610.40	3,065.21	4,736.47	4,716.67	19.80	239.215	
4,700.00	4,700.00	4,684.20	4,755.64	10.42	9.80	139.66	-3,609.18	3,064.89	4,735.27	4,715.06	20.22	234.218	
4,800.00	4,800.00	4,800.00	4,871.43	10.65	10.04	139.65	-3,607.45	3,064.48	4,733.90	4,713.22	20.68	228.920	
4,900.00	4,900.00	4,882.24	4,953.66	10.87	10.21	139.65	-3,606.31	3,064.07	4,732.53	4,711.46	21.08	224.514	

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
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH														Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance		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		
5,000.00	5,000.00	4,987.59	5,059.00	11.10	10.45	139.64	-3,605.04	3,063.66	4,731.37	4,709.83	21.54	219.667		
5,100.00	5,100.00	5,086.73	5,158.13	11.32	10.69	139.64	-3,603.87	3,063.15	4,730.13	4,708.13	22.00	214.976		
5,200.00	5,200.00	5,185.87	5,257.26	11.55	10.92	139.63	-3,602.71	3,062.64	4,728.91	4,706.44	22.47	210.479		
5,300.00	5,300.00	5,285.01	5,356.40	11.77	11.16	139.63	-3,601.57	3,062.14	4,727.71	4,704.77	22.93	206.166		
5,400.00	5,400.00	5,384.16	5,455.53	12.00	11.40	139.62	-3,600.45	3,061.65	4,726.52	4,703.13	23.40	202.024		
5,500.00	5,500.00	5,483.30	5,554.67	12.22	11.64	139.62	-3,599.34	3,061.17	4,725.36	4,701.50	23.86	198.044		
5,600.00	5,600.00	5,582.44	5,653.81	12.45	11.88	139.62	-3,598.25	3,060.69	4,724.21	4,699.88	24.32	194.217		
5,700.00	5,700.00	5,681.59	5,752.95	12.67	12.12	139.61	-3,597.18	3,060.22	4,723.08	4,698.29	24.79	190.534		
5,800.00	5,800.00	5,780.73	5,852.08	12.89	12.36	139.61	-3,596.13	3,059.76	4,721.97	4,696.71	25.25	186.987		
5,900.00	5,900.00	5,879.88	5,951.22	13.12	12.60	139.60	-3,595.09	3,059.30	4,720.87	4,695.16	25.72	183.569		
6,000.00	6,000.00	5,979.03	6,050.36	13.34	12.84	139.60	-3,594.07	3,058.86	4,719.80	4,693.62	26.18	180.272		
6,100.00	6,100.00	6,078.17	6,149.50	13.57	13.08	139.60	-3,593.07	3,058.42	4,718.74	4,692.09	26.65	177.092		
6,200.00	6,200.00	6,177.32	6,248.64	13.79	13.32	139.59	-3,592.08	3,057.98	4,717.70	4,690.59	27.11	174.020		
6,300.00	6,300.00	6,276.47	6,347.79	14.02	13.56	139.59	-3,591.11	3,057.56	4,716.68	4,689.10	27.57	171.053		
6,400.00	6,400.00	6,375.61	6,446.93	14.24	13.80	139.58	-3,590.16	3,057.14	4,715.67	4,687.63	28.04	168.185		
6,500.00	6,500.00	6,474.76	6,546.07	14.47	14.04	139.58	-3,589.22	3,056.73	4,714.69	4,686.18	28.50	165.411		
6,600.00	6,600.00	6,573.91	6,645.21	14.69	14.28	139.58	-3,588.30	3,056.33	4,713.72	4,684.75	28.97	162.726		
6,700.00	6,700.00	6,673.06	6,744.36	14.92	14.52	139.57	-3,587.40	3,055.94	4,712.77	4,683.34	29.43	160.127		
6,800.00	6,800.00	6,772.21	6,843.50	15.14	14.76	139.57	-3,586.52	3,055.55	4,711.84	4,681.94	29.90	157.609		
6,900.00	6,900.00	6,871.36	6,942.65	15.37	15.00	139.57	-3,585.65	3,055.17	4,710.92	4,680.56	30.36	155.169		
7,000.00	7,000.00	6,970.51	7,041.79	15.59	15.24	139.56	-3,584.80	3,054.80	4,710.02	4,679.20	30.82	152.802		
7,100.00	7,100.00	7,069.66	7,140.94	15.82	15.48	139.56	-3,583.97	3,054.43	4,709.15	4,677.86	31.29	150.507		
7,173.84	7,173.84	7,142.87	7,214.15	15.98	15.65	139.56	-3,583.36	3,054.17	4,708.51	4,676.88	31.63	148.856		
7,200.00	7,199.99	7,168.79	7,240.07	16.03	15.72	-27.19	-3,583.15	3,054.08	4,707.70	4,675.99	31.71	148.463		
7,250.00	7,249.73	7,218.07	7,289.34	16.12	15.83	-27.46	-3,582.75	3,053.90	4,707.92	4,671.23	31.69	148.398		
7,300.00	7,298.77	7,266.61	7,337.88	16.21	15.95	-27.98	-3,582.36	3,053.73	4,693.93	4,662.45	31.48	149.129		
7,350.00	7,346.66	7,313.98	7,385.25	16.29	16.07	-28.78	-3,581.99	3,053.57	4,680.82	4,649.74	31.08	150.607		
7,400.00	7,392.96	7,359.73	7,431.00	16.38	16.18	-29.87	-3,581.63	3,053.41	4,663.72	4,633.19	30.53	152.738		
7,450.00	7,437.24	7,403.45	7,474.71	16.47	16.28	-31.30	-3,581.29	3,053.26	4,642.80	4,612.92	29.89	155.353		
7,500.00	7,479.10	7,444.73	7,516.00	16.57	16.38	-33.12	-3,580.97	3,053.12	4,618.27	4,589.07	29.20	158.153		
7,550.00	7,518.15	7,483.20	7,554.46	16.70	16.48	-35.41	-3,580.68	3,052.99	4,590.36	4,561.79	28.57	160.651		
7,600.00	7,554.02	7,518.50	7,589.76	16.85	16.56	-38.26	-3,580.41	3,052.87	4,559.35	4,531.23	28.12	162.129		
7,650.00	7,586.40	7,550.31	7,621.57	17.03	16.64	-41.77	-3,580.17	3,052.77	4,525.54	4,497.56	27.99	161.705		
7,700.00	7,614.97	7,578.33	7,649.59	17.26	16.71	-46.09	-3,579.96	3,052.68	4,489.27	4,460.96	28.31	158.585		
7,750.00	7,639.49	7,602.30	7,673.56	17.52	16.76	-51.36	-3,579.78	3,052.60	4,450.88	4,421.70	29.18	152.508		
7,800.00	7,659.72	7,622.01	7,693.27	17.83	16.81	-57.71	-3,579.64	3,052.54	4,410.75	4,380.14	30.61	144.115		
7,850.00	7,675.47	7,637.27	7,708.53	18.18	16.95	-65.18	-3,579.53	3,052.49	4,369.26	4,336.86	32.40	134.856		
7,900.00	7,686.60	7,647.94	7,719.20	18.57	16.87	-73.69	-3,579.45	3,052.45	4,326.81	4,292.59	34.22	126.435		
7,950.00	7,693.02	7,653.92	7,725.17	19.00	16.89	-82.92	-3,579.40	3,052.43	4,283.80	4,248.15	35.64	120.183		
7,989.48	7,694.70	7,655.28	7,726.54	19.37	16.89	-90.37	-3,579.39	3,052.43	4,249.71	4,213.45	36.26	117.200		
8,000.00	7,694.76	7,655.25	7,726.51	19.47	16.89	-90.37	-3,579.39	3,052.43	4,240.63	4,204.27	36.36	116.623		
8,100.00	7,695.24	7,654.96	7,726.22	20.52	16.89	-90.36	-3,579.40	3,052.43	4,154.71	4,117.30	37.40	111.074		
8,200.00	7,695.73	7,654.67	7,725.93	21.69	16.89	-90.35	-3,579.40	3,052.43	4,069.43	4,030.85	38.58	105.492		
8,300.00	7,696.22	7,654.37	7,725.63	22.97	16.89	-90.35	-3,579.40	3,052.43	3,984.83	3,944.97	39.85	99.984		
8,400.00	7,696.71	7,654.08	7,725.34	24.34	16.89	-90.34	-3,579.40	3,052.43	3,900.96	3,859.74	41.22	94.627		
8,459.97	7,697.00	7,653.90	7,725.16	25.20	16.89	-90.33	-3,579.40	3,052.43	3,851.04	3,808.95	42.08	91.509		
8,500.00	7,697.20	7,653.79	7,725.04	25.76	16.89	-90.33	-3,579.41	3,052.43	3,818.03	3,775.38	42.64	89.535		
8,600.00	7,697.69	7,653.50	7,724.76	27.14	16.89	-90.32	-3,579.41	3,052.44	3,737.62	3,693.62	44.00	84.941		
8,700.00	7,698.18	7,653.21	7,724.47	28.56	16.89	-90.31	-3,579.41	3,052.44	3,660.37	3,614.98	45.39	80.549		
8,800.00	7,698.67	7,652.94	7,724.20	30.01	16.89	-90.30	-3,579.41	3,052.44	3,586.57	3,539.79	46.78	76.670		

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
Project: Eddy County, NM (NAD-83)
Reference Site: Lone Tree Draw "14" State
Site Error: 0.00 usft
Reference Well: #1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree #1 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance			Minimum Separation			Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,900.00	7,699.15	7,652.67	7,723.93	31.48	16.88	-90.29	-3,579.41	3,052.44	3,516.55	3,468.38	48.17	73.001	
9,000.00	7,699.64	7,652.41	7,723.67	32.96	16.88	-90.29	-3,579.42	3,052.44	3,450.61	3,401.06	49.55	69.637	
9,109.79	7,700.17	7,652.13	7,723.39	34.60	16.88	-90.29	-3,579.42	3,052.44	3,383.31	3,332.26	51.05	66.279	
9,200.00	7,700.60	7,651.90	7,723.16	35.96	16.88	-90.28	-3,579.42	3,052.44	3,331.10	3,278.67	52.43	63.534	
9,300.00	7,701.08	7,651.65	7,722.91	37.52	16.88	-90.28	-3,579.42	3,052.44	3,275.17	3,221.17	54.00	60.654	
9,400.00	7,701.57	7,651.40	7,722.66	39.09	16.88	-90.27	-3,579.42	3,052.44	3,221.36	3,165.77	55.59	57.950	
9,500.00	7,702.05	7,651.15	7,722.41	40.69	16.88	-90.27	-3,579.42	3,052.44	3,169.80	3,112.60	57.20	55.416	
9,600.00	7,702.53	7,650.90	7,722.16	42.31	16.88	-90.26	-3,579.43	3,052.44	3,120.59	3,061.77	58.83	53.044	
9,700.00	7,703.01	7,650.65	7,721.91	43.94	16.88	-90.25	-3,579.43	3,052.44	3,073.85	3,013.38	60.48	50.828	
9,800.00	7,703.49	7,650.40	7,721.66	45.59	16.88	-90.25	-3,579.43	3,052.44	3,029.69	2,967.56	62.14	48.760	
9,900.00	7,703.97	7,650.15	7,721.41	47.25	16.88	-90.24	-3,579.43	3,052.45	2,988.23	2,924.42	63.81	46.831	
10,000.00	7,704.45	7,649.90	7,721.16	48.92	16.88	-90.24	-3,579.43	3,052.45	2,949.57	2,884.08	65.49	45.037	
10,100.00	7,704.94	7,649.65	7,720.91	50.61	16.88	-90.23	-3,579.44	3,052.45	2,913.84	2,846.65	67.19	43.369	
10,200.00	7,705.42	7,649.40	7,720.66	52.30	16.88	-90.23	-3,579.44	3,052.45	2,881.13	2,812.24	68.89	41.822	
10,300.00	7,705.90	7,649.15	7,720.41	54.01	16.88	-90.22	-3,579.44	3,052.45	2,851.56	2,780.95	70.60	40.389	
10,400.00	7,706.38	7,648.90	7,720.16	55.72	16.88	-90.22	-3,579.44	3,052.45	2,825.21	2,752.89	72.32	39.064	
10,500.00	7,706.86	7,648.65	7,719.91	57.44	16.88	-90.21	-3,579.44	3,052.45	2,802.20	2,728.15	74.05	37.842	
10,600.00	7,707.34	7,648.39	7,719.65	59.17	16.87	-90.21	-3,579.44	3,052.45	2,782.58	2,706.80	75.78	36.718	
10,700.00	7,707.82	7,648.14	7,719.40	60.90	16.87	-90.20	-3,579.45	3,052.45	2,766.45	2,688.92	77.52	35.686	
10,800.00	7,708.30	7,647.89	7,719.15	62.64	16.87	-90.20	-3,579.45	3,052.45	2,753.85	2,674.58	79.27	34.742	
10,900.00	7,708.79	7,647.64	7,718.90	64.38	16.87	-90.19	-3,579.45	3,052.45	2,744.84	2,663.83	81.02	33.880	
11,000.00	7,709.27	7,647.39	7,718.65	66.13	16.87	-90.19	-3,579.45	3,052.45	2,739.46	2,656.69	82.77	33.097	
11,097.68	7,709.74	7,647.14	7,718.40	67.84	16.87	-90.18	-3,579.45	3,052.46	2,737.71	2,653.23	84.49	32.404 CC	
11,100.00	7,709.75	7,647.14	7,718.40	67.88	16.87	-90.18	-3,579.45	3,052.46	2,737.72	2,653.19	84.53	32.388 ES	
11,200.00	7,710.23	7,646.89	7,718.15	69.64	16.87	-90.18	-3,579.46	3,052.46	2,739.63	2,653.34	86.29	31.749	
11,300.00	7,710.71	7,646.63	7,717.89	71.40	16.87	-90.17	-3,579.46	3,052.46	2,745.18	2,657.13	88.05	31.176	
11,400.00	7,711.19	7,646.38	7,717.64	73.16	16.87	-90.17	-3,579.46	3,052.46	2,754.36	2,664.53	89.82	30.664	
11,500.00	7,711.67	7,646.13	7,717.39	74.93	16.87	-90.16	-3,579.46	3,052.46	2,767.12	2,675.52	91.59	30.210	
11,600.00	7,712.15	7,645.88	7,717.14	76.70	16.87	-90.15	-3,579.46	3,052.46	2,783.42	2,690.05	93.37	29.811	
11,700.00	7,712.64	7,645.63	7,716.89	78.47	16.87	-90.15	-3,579.46	3,052.46	2,803.19	2,708.04	95.15	29.462	
11,800.00	7,713.12	7,645.37	7,716.63	80.25	16.87	-90.14	-3,579.47	3,052.46	2,826.36	2,729.44	96.93	29.160	
11,900.00	7,713.60	7,645.12	7,716.38	82.03	16.87	-90.14	-3,579.47	3,052.46	2,852.86	2,754.15	98.71	28.902	
12,000.00	7,714.08	7,644.87	7,716.13	83.81	16.87	-90.13	-3,579.47	3,052.46	2,882.58	2,782.09	100.49	28.685	
12,100.00	7,714.56	7,644.62	7,715.88	85.59	16.87	-90.13	-3,579.47	3,052.46	2,915.43	2,813.15	102.28	28.505	
12,200.00	7,715.04	7,644.37	7,715.62	87.38	16.86	-90.12	-3,579.47	3,052.46	2,951.30	2,847.24	104.07	28.360	
12,300.00	7,715.52	7,644.11	7,715.37	89.16	16.86	-90.12	-3,579.48	3,052.47	2,990.09	2,884.23	105.86	28.247	
12,400.00	7,716.01	7,643.86	7,715.12	90.95	16.86	-90.11	-3,579.48	3,052.47	3,031.68	2,924.04	107.65	28.163	
12,500.00	7,716.49	7,643.61	7,714.87	92.74	16.86	-90.11	-3,579.48	3,052.47	3,075.97	2,966.53	109.44	28.106	
12,600.00	7,716.97	7,643.35	7,714.61	94.53	16.86	-90.10	-3,579.48	3,052.47	3,122.82	3,011.59	111.23	28.074	
12,700.00	7,717.45	7,643.10	7,714.36	96.33	16.86	-90.10	-3,579.48	3,052.47	3,172.14	3,059.11	113.03	28.064 SF	
12,800.00	7,717.93	7,642.85	7,714.11	98.12	16.86	-90.09	-3,579.49	3,052.47	3,223.81	3,108.98	114.83	28.075	
12,814.53	7,718.00	7,642.81	7,714.07	98.38	16.86	-90.09	-3,579.49	3,052.47	3,231.50	3,116.42	115.09	28.078	

Leam Drilling Systems LLC

Anticollision Report

Company: DEVON ENERGY
Project: Eddy County, NM (NAD-83)
Reference Site: Lone Tree Draw "14" State
Site Error: 0.00 usft
Reference Well: #1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS, 4452-MWD-ISCWSA, 9564-Project													Offset Well Error: 0.00 usft
Reference	Vertical	Measured	Vertical	Semi Major Axis		Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning:
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
0.00	0.00	0.00	46.00	0.00	0.00	99.03	-467.09	2,938.56	2,975.80				
100.00	100.00	50.22	96.22	0.08	0.06	99.03	-466.98	2,938.61	2,975.48	2,975.35	0.14	N/A	
200.00	200.00	148.56	194.55	0.31	0.24	99.01	-466.22	2,938.93	2,975.69	2,975.14	0.55	5,452.518	
300.00	300.00	252.46	298.45	0.53	0.51	99.00	-465.44	2,939.18	2,975.80	2,974.75	1.05	2,846.162	
400.00	400.00	359.67	405.65	0.76	0.79	98.97	-463.76	2,939.40	2,975.76	2,974.21	1.55	1,917.677	
500.00	500.00	461.21	507.18	0.98	1.06	98.94	-462.18	2,939.37	2,975.49	2,973.45	2.04	1,457.316	
600.00	600.00	554.73	600.69	1.21	1.31	98.91	-461.01	2,939.41	2,975.34	2,972.83	2.51	1,184.243	
608.15	608.15	562.19	608.15	1.23	1.32	98.91	-460.90	2,939.42	2,975.34	2,972.79	2.55	1,166.583	
700.00	700.00	659.15	705.10	1.43	1.58	98.88	-459.31	2,939.68	2,975.35	2,972.34	3.01	987.445	
800.00	800.00	761.02	806.94	1.66	1.85	98.84	-457.32	2,939.69	2,975.06	2,971.55	3.51	848.273	
884.21	884.21	838.29	884.21	1.85	2.06	98.82	-456.08	2,939.78	2,974.95	2,971.05	3.90	762.617	
900.00	900.00	852.48	898.39	1.88	2.09	98.81	-455.83	2,939.82	2,974.95	2,970.98	3.97	748.594	
1,000.00	1,000.00	965.07	1,010.96	2.11	2.39	98.77	-453.60	2,940.19	2,975.00	2,970.50	4.49	661.960	
1,100.00	1,100.00	1,088.10	1,133.97	2.33	2.70	98.73	-451.43	2,939.52	2,974.18	2,969.15	5.03	591.696	
1,200.00	1,200.00	1,202.64	1,248.48	2.56	2.96	98.70	-449.71	2,938.17	2,972.78	2,967.27	5.51	539.181	
1,300.00	1,300.00	1,300.00	1,345.83	2.78	3.16	98.68	-448.59	2,936.72	2,971.13	2,965.19	5.94	500.020	
1,400.00	1,400.00	1,391.50	1,437.32	3.01	3.35	98.67	-447.88	2,935.47	2,969.68	2,963.33	6.35	467.554	
1,500.00	1,500.00	1,508.82	1,554.62	3.23	3.60	98.66	-446.92	2,933.81	2,968.16	2,961.34	6.82	434.969	
1,600.00	1,600.00	1,614.43	1,660.21	3.45	3.83	98.64	-445.67	2,931.91	2,966.20	2,958.92	7.29	407.125	
1,700.00	1,700.00	1,715.33	1,761.08	3.68	4.07	98.62	-444.34	2,930.09	2,964.22	2,956.47	7.74	382.823	
1,800.00	1,800.00	1,829.26	1,874.98	3.90	4.31	98.61	-443.46	2,927.39	2,961.73	2,953.52	8.21	360.750	
1,900.00	1,900.00	1,917.87	1,963.56	4.13	4.49	98.61	-442.94	2,925.45	2,959.48	2,950.86	8.62	343.482	
2,000.00	2,000.00	2,024.50	2,070.17	4.35	4.71	98.61	-442.56	2,922.88	2,957.03	2,947.97	9.06	326.387	
2,100.00	2,100.00	2,100.00	2,145.65	4.58	4.87	98.61	-442.34	2,921.46	2,955.11	2,945.67	9.44	313.002	
2,200.00	2,200.00	2,212.42	2,258.05	4.80	5.09	98.62	-442.33	2,919.46	2,953.35	2,943.46	9.89	298.550	
2,300.00	2,300.00	2,300.00	2,345.62	5.03	5.28	98.62	-442.18	2,917.99	2,951.65	2,941.35	10.30	286.523	
2,400.00	2,400.00	2,379.30	2,424.92	5.25	5.46	98.61	-441.92	2,917.12	2,950.51	2,939.80	10.71	275.599	
2,500.00	2,500.00	2,479.96	2,525.57	5.48	5.67	98.62	-441.89	2,916.33	2,949.73	2,938.58	11.15	264.635	
2,600.00	2,600.00	2,602.07	2,647.67	5.70	5.93	98.62	-442.01	2,914.82	2,948.53	2,936.91	11.62	253.660	
2,700.00	2,700.00	2,702.26	2,747.84	5.93	6.12	98.63	-442.35	2,913.13	2,946.91	2,934.87	12.05	244.626	
2,800.00	2,800.00	2,806.37	2,851.94	6.15	6.33	98.65	-442.78	2,911.27	2,945.21	2,932.73	12.48	236.021	
2,900.00	2,900.00	2,900.00	2,945.55	6.38	6.53	98.66	-443.12	2,909.64	2,943.54	2,930.65	12.90	228.242	
3,000.00	3,000.00	2,981.15	3,026.69	6.60	6.70	98.67	-443.35	2,908.60	2,942.31	2,929.02	13.29	221.360	
3,100.00	3,100.00	3,087.30	3,132.84	6.83	6.93	98.67	-443.47	2,907.59	2,941.40	2,927.65	13.75	213.902	
3,200.00	3,200.00	3,204.00	3,249.53	7.05	7.21	98.68	-443.39	2,905.94	2,939.99	2,925.74	14.25	206.288	
3,300.00	3,300.00	3,300.00	3,345.52	7.28	7.43	98.68	-443.43	2,904.37	2,938.38	2,923.68	14.70	199.863	
3,400.00	3,400.00	3,388.99	3,434.49	7.50	7.63	98.69	-443.64	2,903.12	2,937.03	2,921.90	15.13	194.160	
3,500.00	3,500.00	3,492.19	3,537.69	7.73	7.87	98.70	-443.85	2,901.84	2,935.83	2,920.24	15.59	188.347	
3,600.00	3,600.00	3,591.83	3,637.32	7.95	8.11	98.70	-443.96	2,900.52	2,934.54	2,918.49	16.05	182.858	
3,700.00	3,700.00	3,690.92	3,736.40	8.17	8.35	98.71	-443.93	2,899.27	2,933.29	2,916.77	16.52	177.595	
3,800.00	3,800.00	3,791.36	3,836.84	8.40	8.60	98.71	-443.89	2,898.01	2,932.04	2,915.05	16.99	172.586	
3,900.00	3,900.00	3,893.25	3,938.71	8.62	8.85	98.71	-443.95	2,896.67	2,930.75	2,913.29	17.46	167.833	
4,000.00	4,000.00	3,991.48	4,036.94	8.85	9.09	98.72	-443.91	2,895.39	2,929.46	2,911.52	17.93	163.361	
4,100.00	4,100.00	4,096.23	4,141.68	9.07	9.36	98.72	-443.77	2,894.00	2,928.12	2,909.70	18.42	158.936	
4,200.00	4,200.00	4,202.25	4,247.68	9.30	9.63	98.72	-443.55	2,892.40	2,926.60	2,907.68	18.92	154.687	
4,300.00	4,300.00	4,309.92	4,355.34	9.52	9.90	98.72	-443.41	2,890.49	2,924.82	2,905.40	19.42	150.626	
4,400.00	4,400.00	4,401.32	4,446.72	9.75	10.09	98.73	-443.58	2,888.79	2,923.02	2,903.19	19.83	147.422	
4,500.00	4,500.00	4,477.88	4,523.22	9.97	10.15	98.78	-445.96	2,887.42	2,921.75	2,901.63	20.12	145.233	
4,562.01	4,562.01	4,516.00	4,561.07	10.11	10.16	98.87	-450.29	2,886.53	2,921.44	2,901.18	20.26	144.200 CC, ES	
4,600.00	4,600.00	4,534.82	4,579.63	10.20	10.16	98.93	-453.41	2,886.07	2,921.54	2,901.19	20.35	143.581	
4,700.00	4,700.00	4,579.00	4,622.65	10.42	10.18	99.12	-463.37	2,885.21	2,923.20	2,902.62	20.58	142.031	

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
Project: Eddy County, NM (NAD-83)
Reference Site: Lone Tree Draw "14" State
Site Error: 0.00 usft
Reference Well: #1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 4452-MWD-ISCWSA, 9564-Project												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,800.00	4,800.00	4,631.41	4,672.25	10.65	10.20	99.45	-480.17	2,884.23	2,926.71	2,905.88	20.83	140.514	
4,900.00	4,900.00	4,693.59	4,728.42	10.87	10.24	99.97	-506.69	2,882.40	2,931.62	2,910.52	21.10	138.917	
5,000.00	5,000.00	4,719.72	4,750.94	11.10	10.27	100.23	-519.91	2,881.65	2,938.74	2,917.38	21.36	137.577	
5,100.00	5,100.00	4,736.00	4,764.62	11.32	10.29	100.40	-528.74	2,881.37	2,948.61	2,927.01	21.61	136.453	
5,200.00	5,200.00	4,768.00	4,790.63	11.55	10.35	100.76	-547.37	2,881.22	2,961.18	2,939.29	21.89	135.260	
5,300.00	5,300.00	4,784.27	4,803.42	11.77	10.39	100.95	-557.43	2,881.34	2,976.48	2,954.33	22.15	134.353	
5,400.00	5,400.00	4,800.00	4,815.51	12.00	10.43	101.14	-567.48	2,881.61	2,994.55	2,972.13	22.41	133.598	
5,500.00	5,500.00	4,844.83	4,848.40	12.22	10.57	101.72	-597.91	2,882.42	3,015.04	2,992.27	22.76	132.442	
5,600.00	5,600.00	4,876.89	4,870.26	12.45	10.70	102.16	-621.35	2,882.64	3,037.80	3,014.70	23.10	131.523	
5,700.00	5,700.00	4,894.00	4,881.26	12.67	10.77	102.41	-634.45	2,882.69	3,063.13	3,039.75	23.38	130.992	
5,800.00	5,800.00	4,926.00	4,900.44	12.89	10.93	102.90	-660.06	2,882.78	3,091.16	3,067.42	23.75	130.170	
5,900.00	5,900.00	4,926.00	4,900.44	13.12	10.93	102.90	-660.06	2,882.78	3,121.73	3,097.76	23.97	130.225	
6,000.00	6,000.00	4,943.15	4,909.89	13.34	11.04	103.17	-674.37	2,882.83	3,154.97	3,130.69	24.28	129.931	
6,100.00	6,100.00	4,957.00	4,917.04	13.57	11.12	103.39	-686.23	2,882.87	3,190.81	3,166.23	24.58	129.839	
6,200.00	6,200.00	4,957.00	4,917.04	13.79	11.12	103.39	-686.23	2,882.87	3,229.22	3,204.42	24.80	130.211	
6,300.00	6,300.00	4,974.63	4,925.55	14.02	11.24	103.68	-701.67	2,882.95	3,269.99	3,244.87	25.12	130.158	
6,400.00	6,400.00	4,989.00	4,931.99	14.24	11.34	103.92	-714.51	2,883.04	3,313.23	3,287.80	25.43	130.299	
6,500.00	6,500.00	4,989.00	4,931.99	14.47	11.34	103.92	-714.51	2,883.04	3,358.74	3,333.08	25.65	130.931	
6,600.00	6,600.00	4,989.00	4,931.99	14.69	11.34	103.92	-714.51	2,883.04	3,406.57	3,380.69	25.88	131.642	
6,700.00	6,700.00	5,004.83	4,938.64	14.92	11.46	104.19	-728.88	2,883.25	3,456.41	3,430.21	26.20	131.923	
6,800.00	6,800.00	5,020.00	4,944.64	15.14	11.58	104.45	-742.80	2,883.60	3,508.45	3,481.94	26.52	132.304	
6,900.00	6,900.00	5,020.00	4,944.64	15.37	11.58	104.45	-742.80	2,883.60	3,562.35	3,535.61	26.74	133.207	
7,000.00	7,000.00	5,020.00	4,944.64	15.59	11.58	104.45	-742.80	2,883.60	3,618.20	3,591.24	26.97	134.168	
7,100.00	7,100.00	5,020.00	4,944.64	15.82	11.58	104.45	-742.80	2,883.60	3,675.93	3,648.74	27.19	135.182	
7,173.84	7,173.84	5,035.36	4,950.40	15.98	11.71	104.71	-757.04	2,884.12	3,719.53	3,692.07	27.46	135.451	
7,200.00	7,199.99	5,037.16	4,951.06	16.03	11.72	-60.12	-758.71	2,884.19	3,734.97	3,707.13	27.84	134.149	
7,250.00	7,249.73	5,051.00	4,956.00	16.12	11.84	-56.69	-771.62	2,884.80	3,763.37	3,735.30	28.08	134.046	
7,300.00	7,298.77	5,051.00	4,956.00	16.21	11.84	-53.86	-771.62	2,884.80	3,789.89	3,761.76	28.13	134.742	
7,350.00	7,346.66	5,051.00	4,956.00	16.29	11.84	-51.39	-771.62	2,884.80	3,814.46	3,786.37	28.09	135.806	
7,400.00	7,392.96	5,051.00	4,956.00	16.38	11.84	-49.27	-771.62	2,884.80	3,836.90	3,808.96	27.95	137.300	
7,450.00	7,437.24	5,051.00	4,956.00	16.47	11.84	-47.46	-771.62	2,884.80	3,857.05	3,829.35	27.70	139.251	
7,500.00	7,479.10	5,083.00	4,966.43	16.57	12.13	-45.68	-801.82	2,886.49	3,874.60	3,847.01	27.59	140.435	
7,550.00	7,518.15	5,083.00	4,966.43	16.70	12.13	-44.48	-801.82	2,886.49	3,889.38	3,862.21	27.16	143.177	
7,600.00	7,554.02	5,083.00	4,966.43	16.85	12.13	-43.53	-801.82	2,886.49	3,901.46	3,874.77	26.69	146.180	
7,650.00	7,586.40	5,083.00	4,966.43	17.03	12.13	-42.81	-801.82	2,886.49	3,910.75	3,884.55	26.20	149.279	
7,700.00	7,614.97	5,100.00	4,971.02	17.26	12.30	-42.25	-818.09	2,887.41	3,916.97	3,891.11	25.86	151.480	
7,750.00	7,639.49	5,115.00	4,975.02	17.52	12.44	-41.95	-832.60	2,888.13	3,920.30	3,894.72	25.57	153.294	
7,800.00	7,659.72	5,115.00	4,975.02	17.83	12.44	-41.93	-832.60	2,888.13	3,920.52	3,895.23	25.29	155.003	
7,850.00	7,675.47	5,115.00	4,975.02	18.18	12.44	-42.13	-832.60	2,888.13	3,917.82	3,892.65	25.17	155.645	
7,900.00	7,686.60	5,147.00	4,981.38	18.57	12.78	-42.49	-863.93	2,889.24	3,912.04	3,886.54	25.50	153.422	
7,950.00	7,693.02	5,147.00	4,981.38	19.00	12.78	-43.17	-863.93	2,889.24	3,903.14	3,877.36	25.79	151.357	
7,989.48	7,694.70	5,147.00	4,981.38	19.37	12.78	-43.87	-863.93	2,889.24	3,894.14	3,867.96	26.17	148.792	
8,000.00	7,694.76	5,147.00	4,981.38	19.47	12.78	-43.87	-863.93	2,889.24	3,891.52	3,865.27	26.24	148.277	
8,100.00	7,695.24	5,179.00	4,985.86	20.52	13.13	-43.84	-895.61	2,889.92	3,867.51	3,840.24	27.27	141.833	
8,200.00	7,695.73	5,179.00	4,985.86	21.69	13.13	-43.84	-895.61	2,889.92	3,845.62	3,817.50	28.12	136.757	
8,300.00	7,696.22	5,209.61	4,988.66	22.97	13.49	-43.80	-926.08	2,890.56	3,825.51	3,796.19	29.32	130.460	
8,400.00	7,696.71	5,237.00	4,989.87	24.34	13.82	-43.75	-953.43	2,891.22	3,807.71	3,777.15	30.56	124.591	
8,459.97	7,697.00	5,237.00	4,989.87	25.20	13.82	-43.75	-953.43	2,891.22	3,797.92	3,766.73	31.19	121.762	
8,500.00	7,697.20	5,274.59	4,990.58	25.76	14.29	-43.76	-991.01	2,892.08	3,791.89	3,759.90	31.99	118.518	
8,600.00	7,697.69	5,439.98	4,993.27	27.14	16.33	-43.66	-1,156.35	2,894.03	3,778.16	3,743.52	34.64	109.079	

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
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Offset Design													Offset Site Error: 0.00 usft
Lone Tree Draw Offsets - Lone Tree Draw 13 State #3H - OH - OH													Offset Well Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS 4452-MWD-ISCWSA 9564-Project													
Reference													
Offset													
Semi Major Axis													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.00	7,698.18	5,555.46	4,997.19	28.56	17.77	-43.69	-1,271.77	2,895.15	3,765.27	3,728.37	36.90	102.047	
8,800.00	7,698.67	5,653.59	5,001.23	30.01	19.10	-43.77	-1,369.81	2,896.45	3,754.52	3,715.42	39.10	96.033	
8,900.00	7,699.15	5,749.48	5,005.06	31.48	20.50	-43.85	-1,465.60	2,897.97	3,746.44	3,705.10	41.35	90.613	
9,000.00	7,699.64	5,863.64	5,007.73	32.96	22.23	-43.88	-1,579.73	2,897.30	3,740.46	3,696.66	43.81	85.380	
9,109.79	7,700.17	5,955.98	5,009.83	34.60	23.63	-43.93	-1,672.04	2,896.66	3,736.68	3,690.57	46.11	81.041	
9,200.00	7,700.60	6,050.31	5,011.81	35.96	25.10	-43.94	-1,766.35	2,896.53	3,735.22	3,686.88	48.33	77.278	
9,300.00	7,701.08	6,251.32	5,014.73	37.52	28.27	-43.88	-1,967.22	2,890.24	3,731.99	3,680.00	51.99	71.779	
9,400.00	7,701.57	6,330.10	5,016.79	39.09	29.52	-43.86	-2,045.92	2,887.21	3,727.46	3,673.30	54.16	68.817	
9,500.00	7,702.05	6,405.06	5,019.25	40.69	30.72	-43.86	-2,120.83	2,886.00	3,723.91	3,667.58	56.34	66.102	
9,600.00	7,702.53	6,505.09	5,022.41	42.31	32.36	-43.87	-2,220.79	2,884.29	3,720.43	3,661.57	58.86	63.206	
9,700.00	7,703.01	6,590.98	5,025.26	43.94	33.77	-43.88	-2,306.62	2,883.41	3,717.31	3,656.08	61.23	60.710	
9,800.00	7,703.49	6,689.70	5,028.14	45.59	35.42	-43.88	-2,405.29	2,882.18	3,714.32	3,650.53	63.79	58.229	
9,900.00	7,703.97	6,795.33	5,030.63	47.25	37.20	-43.88	-2,510.88	2,880.32	3,711.39	3,644.95	66.44	55.858	
10,000.00	7,704.45	6,877.09	5,033.17	48.92	38.56	-43.88	-2,592.60	2,879.26	3,708.28	3,639.49	68.79	53.905	
10,100.00	7,704.94	6,942.00	5,034.22	50.61	39.64	-43.88	-2,657.49	2,878.72	3,706.38	3,635.46	70.92	52.262	
10,200.00	7,705.42	7,006.50	5,034.56	52.30	40.72	-43.87	-2,721.99	2,878.34	3,705.44	3,632.39	73.05	50.724	
10,300.00	7,705.90	7,096.97	5,034.86	54.01	42.24	-43.86	-2,812.46	2,877.91	3,704.86	3,629.33	75.53	49.050	
10,400.00	7,706.38	7,204.40	5,034.90	55.72	44.06	-43.84	-2,919.89	2,877.25	3,704.39	3,626.14	78.24	47.346	
10,500.00	7,706.86	7,315.72	5,034.85	57.44	45.92	-43.82	-3,031.20	2,875.91	3,703.56	3,622.58	80.98	45.733	
10,600.00	7,707.34	7,413.00	5,035.03	59.17	47.54	-43.79	-3,128.47	2,874.66	3,702.53	3,618.98	83.55	44.318	
10,700.00	7,707.82	7,508.00	5,035.26	60.90	49.15	-43.78	-3,223.46	2,873.73	3,701.65	3,615.56	86.10	42.993	
10,800.00	7,708.30	7,603.00	5,035.78	62.64	50.74	-43.77	-3,318.46	2,873.25	3,700.90	3,612.25	88.65	41.746	
10,900.00	7,708.79	7,681.54	5,035.89	64.38	52.06	-43.75	-3,397.00	2,872.87	3,700.47	3,609.47	91.00	40.666	
11,000.00	7,709.27	7,816.11	5,034.92	66.13	54.34	-43.71	-3,531.55	2,871.03	3,700.05	3,605.99	94.05	39.339	
11,100.00	7,709.75	7,917.76	5,034.18	67.88	56.05	-43.66	-3,633.18	2,868.88	3,699.10	3,602.43	96.66	38.267	
11,200.00	7,710.23	8,023.50	5,033.54	69.64	57.82	-43.62	-3,738.89	2,866.46	3,697.94	3,598.62	99.32	37.232	
11,300.00	7,710.71	8,112.77	5,033.29	71.40	59.32	-43.59	-3,828.14	2,864.84	3,696.88	3,595.09	101.79	36.320	
11,400.00	7,711.19	8,197.61	5,033.40	73.16	60.77	-43.57	-3,912.98	2,864.19	3,696.23	3,592.00	104.23	35.464	
11,500.00	7,711.67	8,292.66	5,033.71	74.93	62.40	-43.56	-4,008.02	2,864.03	3,695.86	3,589.04	106.82	34.599	
11,600.00	7,712.15	8,395.82	5,034.00	76.70	64.16	-43.55	-4,111.19	2,863.77	3,695.47	3,585.95	109.52	33.741	
11,700.00	7,712.64	8,536.46	5,034.16	78.47	66.57	-43.52	-4,251.81	2,862.52	3,694.86	3,582.16	112.70	32.784	
11,800.00	7,713.12	8,634.69	5,033.46	80.25	68.25	-43.47	-4,350.00	2,859.47	3,693.22	3,577.96	115.27	32.041	
11,900.00	7,713.60	8,733.58	5,032.76	82.03	69.94	-43.42	-4,448.85	2,856.72	3,691.80	3,573.96	117.84	31.328	
12,000.00	7,714.08	8,851.20	5,031.69	83.81	71.95	-43.35	-4,566.39	2,852.74	3,690.13	3,569.50	120.63	30.590	
12,100.00	7,714.56	8,963.01	5,029.93	85.59	73.86	-43.26	-4,678.07	2,847.55	3,688.08	3,564.77	123.31	29.909	
12,200.00	7,715.04	9,066.30	5,029.33	87.38	75.64	-43.20	-4,781.27	2,843.34	3,685.69	3,559.78	125.91	29.272	
12,300.00	7,715.52	9,155.40	5,029.28	89.16	77.17	-43.16	-4,870.33	2,840.54	3,683.57	3,555.21	128.36	28.696	
12,400.00	7,716.01	9,251.32	5,029.08	90.95	78.81	-43.11	-4,966.20	2,837.54	3,681.57	3,550.67	130.90	28.125	
12,500.00	7,716.49	9,339.83	5,028.70	92.74	80.32	-43.06	-5,054.66	2,834.87	3,679.82	3,546.49	133.33	27.600	
12,600.00	7,716.97	9,430.61	5,028.16	94.53	81.86	-43.02	-5,145.41	2,832.38	3,678.36	3,542.58	135.78	27.090	
12,700.00	7,717.45	9,527.40	5,027.31	96.33	83.00	-42.97	-5,242.16	2,829.65	3,677.07	3,539.16	137.91	26.663	
12,782.79	7,717.85	9,564.00	5,026.95	97.81	83.00	-42.95	-5,278.74	2,828.59	3,676.32	3,537.34	138.98	26.452	
12,800.00	7,717.93	9,564.00	5,026.95	98.12	83.00	-42.95	-5,278.74	2,828.59	3,676.36	3,537.15	139.21	26.409	
12,814.53	7,718.00	9,564.00	5,026.95	98.38	83.00	-42.95	-5,278.74	2,828.59	3,676.46	3,537.06	139.40	26.373 SF	

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

Leam Drilling Systems LLC

Anticollision Report

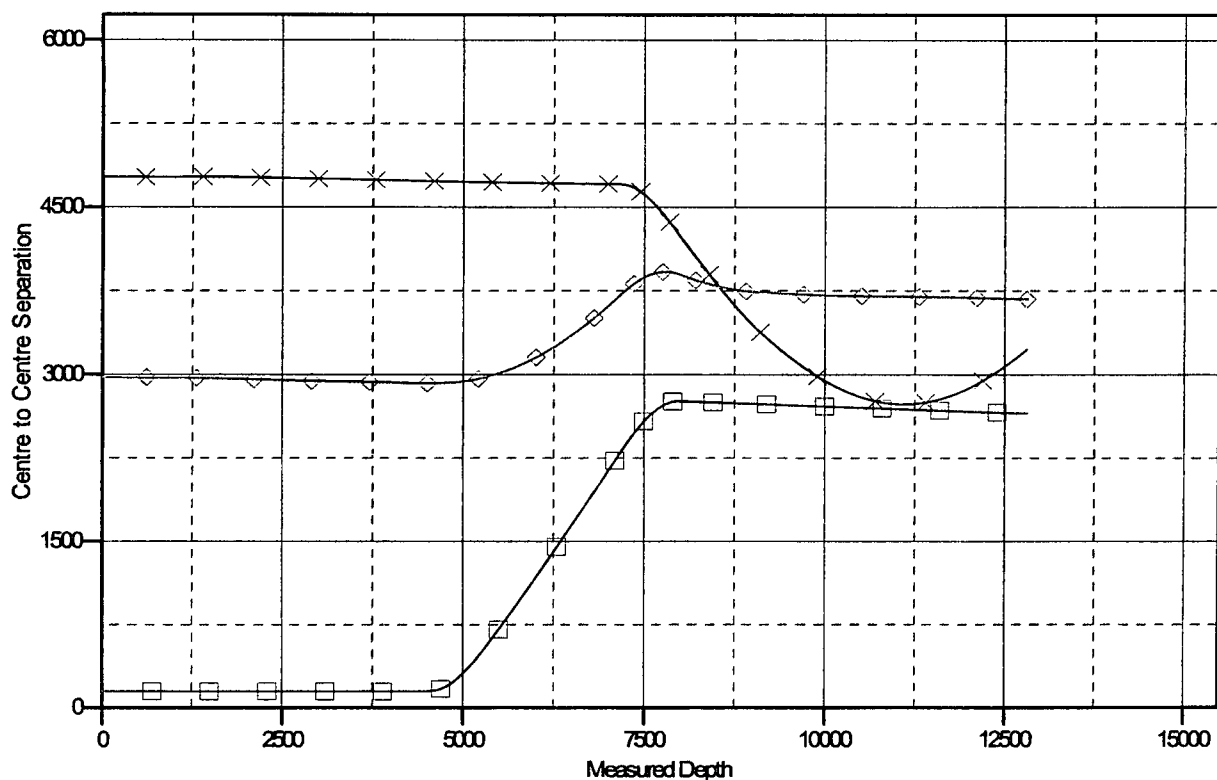
Company: DEVON ENERGY
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1 Draft 1

Local Co-ordinate Reference: Well #1H
 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Reference Depths are relative to GE 3224' + KB 26' @ 3250.00usft (C
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #1H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.10°

Ladder Plot



LEGEND

□ 3H, OH, Plan #1 Draft 1 V0

✕ Lone Tree #1, OH, OH V0

◇ Lone Tree Draw 13 State #3H, OH, OH V0

Leam Drilling Systems LLC

Anticollision Report

Company: DEVON ENERGY
 Project: Eddy County, NM (NAD-83)
 Reference Site: Lone Tree Draw "14" State
 Site Error: 0.00 usft
 Reference Well: #1H
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 TVD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 MD Reference: GE 3224' + KB 26' @ 3250.00usft (Cactus 126)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Reference Depths are relative to GE 3224' + KB 26' @ 3250.00usft (C
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #1H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.10°

