

30 015 40584

DEVON ENERGY

Project: Eddy County, NM (NAD-83)
Site: Jasper 32 State
Well: #7H
Wellbore: OH
Design: Plan #2

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



Azimuths to Grid North
True North: -0.13°
Magnetic North: 7.56°

Magnetic Field
Strength: 48550.4nT
Dip Angle: 60.40°
Date: 10/07/2013
Model: BGGM2013

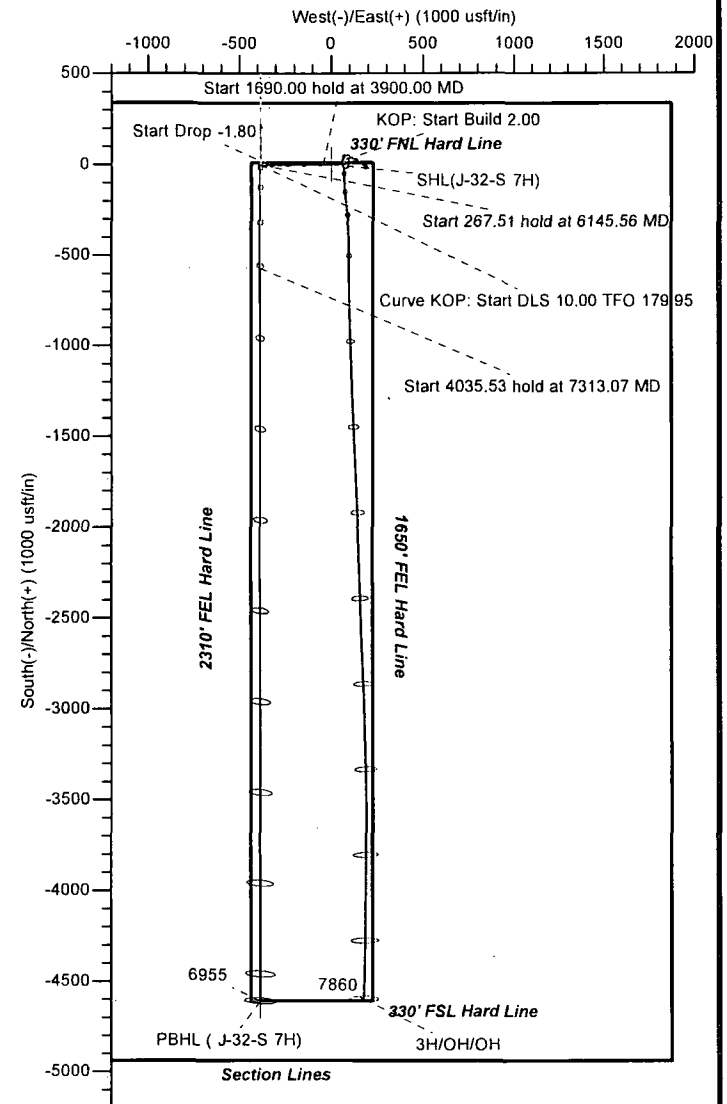
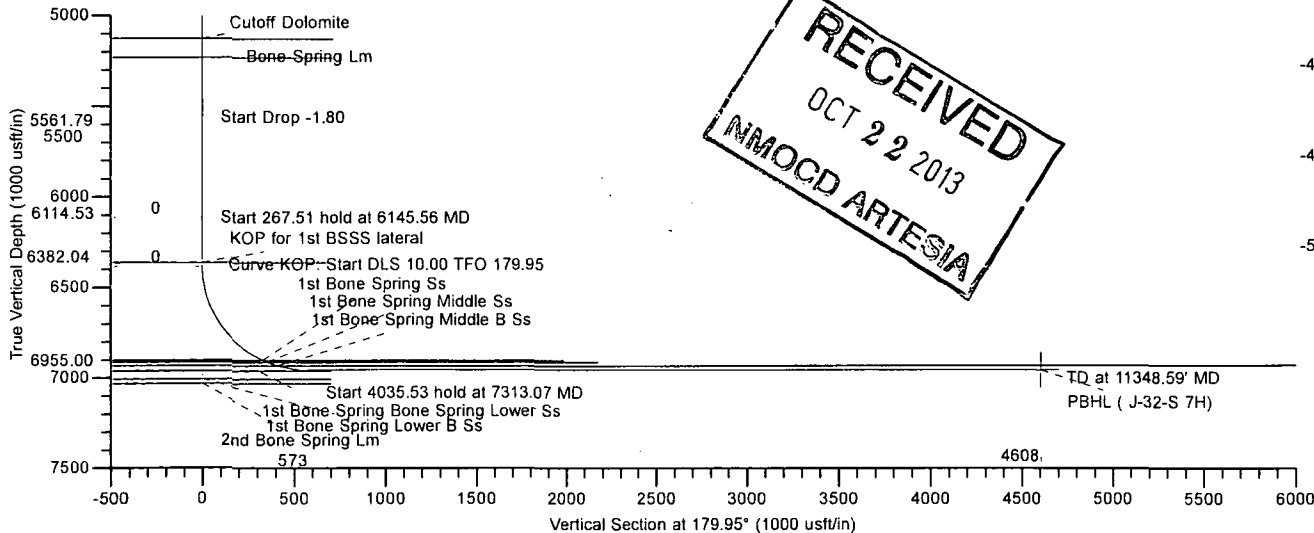


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(J-32-S 7H)	0.00	0.00	0.00	590691.43	614865.12	32° 37' 25.082 N	104° 5' 40.229 W
PBHL (J-32-S 7H)	6955.00	-4608.48	-381.07	586082.95	614484.05	32° 36' 39.488 N	104° 5' 44.805 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	
2	3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	KOP: Start Build 2.00
3	3900.00	10.00	270.00	3897.47	0.00	-43.52	2.00	270.00	-0.04	Start 1690.00 hold at 3900.00 MD
4	5590.00	10.00	270.00	5561.79	0.00	-336.99	0.00	0.00	-0.29	Start Drop -1.80
5	6145.56	0.00	0.00	6114.53	0.00	-385.35	1.80	180.00	-0.33	Start 267.51 hold at 6145.56 MD
6	6413.07	0.00	0.00	6382.04	0.00	-385.35	0.00	0.00	-0.33	Curve KOP: Start DLS 10.00 TFO 179.95
7	7313.07	90.00	179.95	6955.00	-572.96	-384.81	10.00	179.95	572.63	Start 4035.53 hold at 7313.07 MD
8	11348.59	90.00	179.95	6955.00	-4608.48	-381.07	0.00	0.00	4608.16	TD at 11348.59' MD



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

Plan: Plan #2 (#7H/OH)
Jasper 32 State
Created By: Heber Claros
Date: 9:07, October 21 2013
Approved: _____
Date: _____

DEVON ENERGY

Project: Eddy County, NM (NAD-83)

Site: Jasper 32 State

Well: #7H

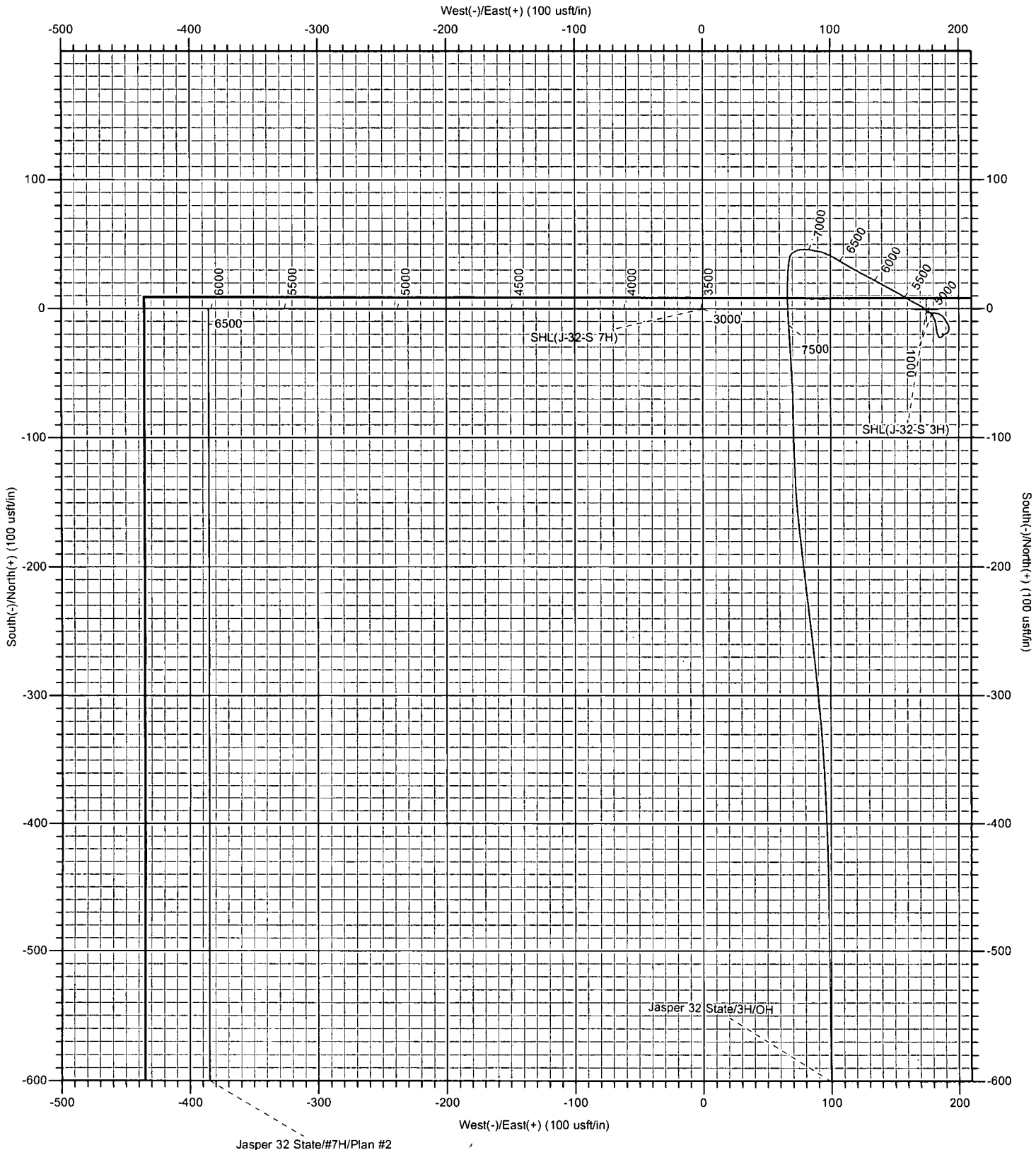
Wellbore: OH

Design: Plan #2



Azimuths to Grid North
True North: -0.13°
Magnetic North: 7.56°

Magnetic Field
Strength: 48550.4snT
Dip Angle: 60.40°
Date: 10/07/2013
Model: BGGM2013



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

Plan: Plan #2 (#7H/OH)
Jasper 32 State
Created By: Heber Claros Date: 9:04, October 21 2013
Approved: _____ Date: _____

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #7H
Company:	DEVON ENERGY	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site:	Jasper 32 State	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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:	Jasper 32 State		
Site Position:		Northing:	590,690.89 usft
From:	Map	Easting:	615,040.04 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 37' 25.073 N
		Longitude:	104° 5' 38.183 W
		Grid Convergence:	0.13 °

Well	#7H		
Well Position	+N/-S	0.54 usft	Northing:
	+E/-W	-174.92 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 37' 25.082 N
		Longitude:	104° 5' 40.229 W
		Ground Level:	3,268.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2013	10/07/13	7.69
			Dip Angle
			(°)
			Field Strength
			(nT)
			48,550

Design	Plan #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.95

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	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,900.00	10.00	270.00	3,897.47	0.00	-43.52	2.00	2.00	0.00	270.00	
5,590.00	10.00	270.00	5,561.79	0.00	-336.99	0.00	0.00	0.00	0.00	
6,145.56	0.00	0.00	6,114.53	0.00	-385.35	1.80	-1.80	0.00	180.00	
6,413.07	0.00	0.00	6,382.04	0.00	-385.35	0.00	0.00	0.00	0.00	
7,313.07	90.00	179.95	6,955.00	-572.96	-384.81	10.00	10.00	19.99	179.95	
11,348.59	90.00	179.95	6,955.00	-4,608.48	-381.07	0.00	0.00	0.00	0.00	PBHL (J-32-S 7H)

Leam Drilling Systems LLC
Planning Report

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Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site:	Jasper 32 State	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start Build 2.00									
3,500.00	2.00	270.00	3,499.98	0.00	-1.75	0.00	2.00	2.00	0.00
3,600.00	4.00	270.00	3,599.84	0.00	-6.98	-0.01	2.00	2.00	0.00
3,700.00	6.00	270.00	3,699.45	0.00	-15.69	-0.01	2.00	2.00	0.00
3,800.00	8.00	270.00	3,798.70	0.00	-27.88	-0.02	2.00	2.00	0.00
3,900.00	10.00	270.00	3,897.47	0.00	-43.52	-0.04	2.00	2.00	0.00
Start 1690.00 hold at 3900.00 MD									
4,000.00	10.00	270.00	3,995.95	0.00	-60.89	-0.05	0.00	0.00	0.00
4,100.00	10.00	270.00	4,094.43	0.00	-78.25	-0.07	0.00	0.00	0.00
4,200.00	10.00	270.00	4,192.91	0.00	-95.62	-0.08	0.00	0.00	0.00
4,300.00	10.00	270.00	4,291.39	0.00	-112.98	-0.10	0.00	0.00	0.00
4,400.00	10.00	270.00	4,389.87	0.00	-130.35	-0.11	0.00	0.00	0.00
4,500.00	10.00	270.00	4,488.35	0.00	-147.71	-0.13	0.00	0.00	0.00
4,600.00	10.00	270.00	4,586.83	0.00	-165.08	-0.14	0.00	0.00	0.00
4,700.00	10.00	270.00	4,685.31	0.00	-182.44	-0.16	0.00	0.00	0.00
4,800.00	10.00	270.00	4,783.79	0.00	-199.81	-0.17	0.00	0.00	0.00
4,900.00	10.00	270.00	4,882.27	0.00	-217.17	-0.19	0.00	0.00	0.00
5,000.00	10.00	270.00	4,980.75	0.00	-234.54	-0.20	0.00	0.00	0.00
5,100.00	10.00	270.00	5,079.23	0.00	-251.90	-0.21	0.00	0.00	0.00
5,147.49	10.00	270.00	5,126.00	0.00	-260.15	-0.22	0.00	0.00	0.00
Cutoff Dolomite									
5,200.00	10.00	270.00	5,177.72	0.00	-269.27	-0.23	0.00	0.00	0.00
5,254.11	10.00	270.00	5,231.00	0.00	-278.66	-0.24	0.00	0.00	0.00
Bone Spring Lm									
5,300.00	10.00	270.00	5,276.20	0.00	-286.63	-0.24	0.00	0.00	0.00
5,400.00	10.00	270.00	5,374.68	0.00	-303.99	-0.26	0.00	0.00	0.00
5,500.00	10.00	270.00	5,473.16	0.00	-321.36	-0.27	0.00	0.00	0.00
5,590.00	10.00	270.00	5,561.79	0.00	-336.99	-0.29	0.00	0.00	0.00
Start Drop -1.80									
5,600.00	9.82	270.00	5,571.64	0.00	-338.71	-0.29	1.80	-1.80	0.00
5,700.00	8.02	270.00	5,670.43	0.00	-354.21	-0.30	1.80	-1.80	0.00
5,800.00	6.22	270.00	5,769.65	0.00	-366.61	-0.31	1.80	-1.80	0.00
5,900.00	4.42	270.00	5,869.22	0.00	-375.88	-0.32	1.80	-1.80	0.00
6,000.00	2.62	270.00	5,969.03	0.00	-382.02	-0.33	1.80	-1.80	0.00
6,100.00	0.82	270.00	6,068.98	0.00	-385.02	-0.33	1.80	-1.80	0.00
6,145.56	0.00	0.00	6,114.53	0.00	-385.35	-0.33	1.80	-1.80	0.00
Start 247.53 hold at 6145.56 MD									
6,200.00	0.00	0.00	6,168.97	0.00	-385.35	-0.33	0.00	0.00	0.00
6,300.00	0.00	0.00	6,268.97	0.00	-385.35	-0.33	0.00	0.00	0.00
6,391.03	0.00	0.00	6,360.00	0.00	-385.35	-0.33	0.00	0.00	0.00
KOP for 1st BSSS lateral									
6,393.09	0.00	0.00	6,362.06	0.00	-385.35	-0.33	0.00	0.00	0.00
Curve KOP: Start DLS 10.00 TFO 179.95									
6,400.00	0.00	0.00	6,368.97	0.00	-385.35	-0.33	0.00	0.00	0.00
6,413.07	0.00	0.00	6,382.04	0.00	-385.35	-0.33	0.00	0.00	0.00
6,450.00	3.69	179.95	6,418.95	-1.19	-385.35	0.86	10.00	10.00	0.00
6,500.00	8.69	179.95	6,468.64	-6.58	-385.34	6.25	10.00	10.00	0.00
6,550.00	13.69	179.95	6,517.67	-16.29	-385.33	15.96	10.00	10.00	0.00
6,600.00	18.69	179.95	6,565.68	-30.23	-385.32	29.90	10.00	10.00	0.00
6,650.00	23.69	179.95	6,612.28	-48.30	-385.30	47.97	10.00	10.00	0.00

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #7H
Company:	DEVON ENERGY	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site:	Jasper 32 State	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,700.00	28.69	179.95	6,657.13	-70.36	-385.28	70.03	10.00	10.00	0.00
6,750.00	33.69	179.95	6,699.89	-96.25	-385.26	95.92	10.00	10.00	0.00
6,800.00	38.69	179.95	6,740.23	-125.76	-385.23	125.43	10.00	10.00	0.00
6,850.00	43.69	179.95	6,777.84	-158.68	-385.20	158.35	10.00	10.00	0.00
6,900.00	48.69	179.95	6,812.44	-194.76	-385.17	194.43	10.00	10.00	0.00
6,950.00	53.69	179.95	6,843.76	-233.71	-385.13	233.38	10.00	10.00	0.00
7,000.00	58.69	179.95	6,871.57	-275.24	-385.09	274.91	10.00	10.00	0.00
7,050.00	63.69	179.95	6,895.66	-319.04	-385.05	318.71	10.00	10.00	0.00
7,062.32	64.93	179.95	6,901.00	-330.14	-385.04	329.81	10.00	10.00	0.00
1st Bone Spring Ss									
7,087.06	67.40	179.95	6,911.00	-352.77	-385.02	352.44	10.00	10.00	0.00
1st Bone Spring Middle Ss									
7,100.00	68.69	179.95	6,915.84	-364.77	-385.01	364.44	10.00	10.00	0.00
7,146.65	73.36	179.95	6,931.00	-408.87	-384.97	408.55	10.00	10.00	0.00
1st Bone Spring Middle B Ss									
7,150.00	73.69	179.95	6,931.95	-412.08	-384.96	411.76	10.00	10.00	0.00
7,200.00	78.69	179.95	6,943.88	-460.62	-384.92	460.30	10.00	10.00	0.00
7,250.00	83.69	179.95	6,951.53	-510.02	-384.87	509.69	10.00	10.00	0.00
7,288.12	87.51	179.95	6,954.45	-548.02	-384.84	547.69	10.00	10.00	0.00
Start 4040.64 hold at 7288.12 MD									
7,300.00	88.69	179.95	6,954.85	-559.89	-384.83	559.56	10.00	10.00	0.00
7,313.07	90.00	179.95	6,955.00	-572.96	-384.81	572.63	10.00	10.00	0.00
7,400.00	90.00	179.95	6,955.00	-659.89	-384.73	659.56	0.00	0.00	0.00
7,500.00	90.00	179.95	6,955.00	-759.89	-384.64	759.56	0.00	0.00	0.00
7,600.00	90.00	179.95	6,955.00	-859.89	-384.55	859.56	0.00	0.00	0.00
7,700.00	90.00	179.95	6,955.00	-959.89	-384.46	959.56	0.00	0.00	0.00
7,800.00	90.00	179.95	6,955.00	-1,059.89	-384.36	1,059.56	0.00	0.00	0.00
7,900.00	90.00	179.95	6,955.00	-1,159.89	-384.27	1,159.56	0.00	0.00	0.00
8,000.00	90.00	179.95	6,955.00	-1,259.89	-384.18	1,259.56	0.00	0.00	0.00
8,100.00	90.00	179.95	6,955.00	-1,359.89	-384.08	1,359.56	0.00	0.00	0.00
8,200.00	90.00	179.95	6,955.00	-1,459.89	-383.99	1,459.56	0.00	0.00	0.00
8,300.00	90.00	179.95	6,955.00	-1,559.89	-383.90	1,559.56	0.00	0.00	0.00
8,400.00	90.00	179.95	6,955.00	-1,659.89	-383.81	1,659.56	0.00	0.00	0.00
8,500.00	90.00	179.95	6,955.00	-1,759.89	-383.71	1,759.56	0.00	0.00	0.00
8,600.00	90.00	179.95	6,955.00	-1,859.89	-383.62	1,859.56	0.00	0.00	0.00
8,700.00	90.00	179.95	6,955.00	-1,959.89	-383.53	1,959.56	0.00	0.00	0.00
8,800.00	90.00	179.95	6,955.00	-2,059.89	-383.44	2,059.56	0.00	0.00	0.00
8,900.00	90.00	179.95	6,955.00	-2,159.89	-383.34	2,159.56	0.00	0.00	0.00
9,000.00	90.00	179.95	6,955.00	-2,259.89	-383.25	2,259.56	0.00	0.00	0.00
9,100.00	90.00	179.95	6,955.00	-2,359.89	-383.16	2,359.56	0.00	0.00	0.00
9,200.00	90.00	179.95	6,955.00	-2,459.89	-383.06	2,459.56	0.00	0.00	0.00
9,300.00	90.00	179.95	6,955.00	-2,559.89	-382.97	2,559.56	0.00	0.00	0.00
9,400.00	90.00	179.95	6,955.00	-2,659.89	-382.88	2,659.56	0.00	0.00	0.00
9,500.00	90.00	179.95	6,955.00	-2,759.89	-382.79	2,759.56	0.00	0.00	0.00
9,600.00	90.00	179.95	6,955.00	-2,859.89	-382.69	2,859.56	0.00	0.00	0.00
9,700.00	90.00	179.95	6,955.00	-2,959.89	-382.60	2,959.56	0.00	0.00	0.00
9,800.00	90.00	179.95	6,955.00	-3,059.89	-382.51	3,059.56	0.00	0.00	0.00
9,900.00	90.00	179.95	6,955.00	-3,159.89	-382.41	3,159.56	0.00	0.00	0.00
10,000.00	90.00	179.95	6,955.00	-3,259.89	-382.32	3,259.56	0.00	0.00	0.00
10,100.00	90.00	179.95	6,955.00	-3,359.89	-382.23	3,359.56	0.00	0.00	0.00
10,200.00	90.00	179.95	6,955.00	-3,459.89	-382.14	3,459.56	0.00	0.00	0.00

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10,300.00	90.00	179.95	6,955.00	-3,559.89	-382.04	3,559.56	0.00	0.00	0.00
10,400.00	90.00	179.95	6,955.00	-3,659.89	-381.95	3,659.56	0.00	0.00	0.00
10,500.00	90.00	179.95	6,955.00	-3,759.89	-381.86	3,759.56	0.00	0.00	0.00
10,600.00	90.00	179.95	6,955.00	-3,859.89	-381.77	3,859.56	0.00	0.00	0.00
10,700.00	90.00	179.95	6,955.00	-3,959.89	-381.67	3,959.56	0.00	0.00	0.00
10,800.00	90.00	179.95	6,955.00	-4,059.89	-381.58	4,059.56	0.00	0.00	0.00
10,900.00	90.00	179.95	6,955.00	-4,159.89	-381.49	4,159.56	0.00	0.00	0.00
11,000.00	90.00	179.95	6,955.00	-4,259.89	-381.39	4,259.56	0.00	0.00	0.00
11,100.00	90.00	179.95	6,955.00	-4,359.89	-381.30	4,359.56	0.00	0.00	0.00
11,200.00	90.00	179.95	6,955.00	-4,459.89	-381.21	4,459.56	0.00	0.00	0.00
11,300.00	90.00	179.95	6,955.00	-4,559.89	-381.12	4,559.56	0.00	0.00	0.00
11,328.77	90.00	179.95	6,955.00	-4,588.66	-381.09	4,588.33	0.00	0.00	0.00
TD at 11328.77' MD									
11,348.59	90.00	179.95	6,955.00	-4,608.48	-381.07	4,608.16	0.00	0.00	0.00
PBHL (J-32-S 7H)									

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(J-32-S 7H)	0.00	0.00	0.00	0.00	0.00	590,691.43	614,865.12	32° 37' 25.082 N	104° 5' 40.229 W
- plan misses target center by 3400.00usft at 3400.00usft MD (3400.00 TVD, 0.00 N, 0.00 E)									
- Point									
PBHL (J-32-S 7H)	0.00	0.00	6,955.00	-4,608.48	-381.07	586,082.95	614,484.05	32° 36' 39.488 N	104° 5' 44.805 W
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
341.00	341.00	Salado		0.01	
1,091.00	1,091.00	Tansil Dolomite		0.01	
1,211.00	1,211.00	Yates		0.01	
1,511.00	1,511.00	Seven Rivers		0.01	
2,271.00	2,271.00	Queen		0.01	
2,611.00	2,611.00	San Andres		0.01	
3,311.00	3,311.00	Delaware		0.01	
5,147.49	5,126.00	Cutoff Dolomite		0.01	
5,254.11	5,231.00	Bone Spring Lm		0.01	
6,391.03	6,360.00	KOP for 1st BSSS lateral		0.01	
7,062.32	6,901.00	1st Bone Spring Ss		0.01	
7,087.06	6,911.00	1st Bone Spring Middle Ss		0.01	
7,146.65	6,931.00	1st Bone Spring Middle B Ss		0.01	

Leam Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #7H
Company:	DEVON ENERGY	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Project:	Eddy County, NM (NAD-83)	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site:	Jasper 32 State	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,400.00	3,400.00	0.00	0.00	KOP: Start Build 2.00
3,900.00	3,897.47	0.00	-43.52	Start 1690.00 hold at 3900.00 MD
5,590.00	5,561.79	0.00	-336.99	Start Drop -1.80
6,145.56	6,114.53	0.00	-385.35	Start 247.53 hold at 6145.56 MD
6,393.09	6,362.06	0.00	-385.35	Curve KOP: Start DLS 10.00 TFO 179.95
7,288.12	6,935.00	-567.99	-384.82	Start 4040.64 hold at 7288.12 MD
11,328.77	6,970.00	-4,608.48	-381.07	TD at 11328.77' MD

DEVON ENERGY

Eddy County, NM (NAD-83)

Jasper 32 State

#7H

OH

Plan #2

Anticollision Report

21 October, 2013

Leam Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	TVD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	0.00 to 11,348.59usft	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	10/21/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,348.59	Plan #2 (OH)	LEAM MWD-ADJ	MWD - Standard	

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Jasper 32 State						
3H - OH - OH	400.57	399.07	174.41	173.15	138.383	CC
3H - OH - OH	600.00	597.59	174.93	172.88	85.071	ES
3H - OH - OH	11,348.59	12,239.00	1,064.78	957.78	9.952	SF

Offset Design													Jasper 32 State - 3H - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 200-ISCWSA-GYRO-3, 6781-LEAM MWD-ADJ, 12239-Project													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis				Distance					Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.00	1.50	0.00	0.00	90.18	-0.54	174.92	174.93							
100.00	100.00	98.72	100.22	0.08	0.08	90.21	-0.66	174.86	174.86	174.70	0.16	1,101.637				
200.00	200.00	198.94	200.44	0.31	0.15	90.33	-1.01	174.67	174.67	174.21	0.46	379.545				
300.00	300.00	298.73	300.22	0.53	0.33	90.45	-1.38	174.47	174.48	173.62	0.86	203.205				
400.00	400.00	398.50	400.00	0.76	0.50	90.50	-1.53	174.41	174.41	173.16	1.26	138.634				
400.57	400.57	399.07	400.57	0.76	0.50	90.50	-1.53	174.41	174.41	173.15	1.26	138.383	CC			
500.00	500.00	498.05	499.55	0.98	0.67	90.56	-1.69	174.53	174.54	172.89	1.66	105.323				
600.00	600.00	597.59	599.09	1.21	0.85	90.70	-2.13	174.92	174.93	172.88	2.06	85.071	ES			
700.00	700.00	697.39	698.88	1.43	1.02	90.86	-2.64	175.49	175.51	173.06	2.46	71.479				
800.00	800.00	797.19	798.68	1.66	1.20	90.96	-2.97	176.18	176.21	173.35	2.85	61.728				
900.00	900.00	895.85	897.33	1.88	1.37	91.01	-3.14	177.28	177.33	174.07	3.25	54.539				
1,000.00	1,000.00	994.45	995.92	2.11	1.54	91.02	-3.18	179.14	179.22	175.57	3.65	49.126				
1,100.00	1,100.00	1,094.37	1,095.80	2.33	1.72	91.04	-3.30	181.45	181.53	177.48	4.05	44.852				
1,200.00	1,200.00	1,194.36	1,195.77	2.56	1.89	91.17	-3.75	183.75	183.84	179.39	4.45	41.342				
1,300.00	1,300.00	1,295.07	1,296.46	2.78	2.07	91.41	-4.59	185.86	185.95	181.10	4.85	38.357				
1,400.00	1,400.00	1,395.84	1,397.21	3.01	2.25	91.81	-5.92	187.53	187.65	182.40	5.25	35.748				
1,500.00	1,500.00	1,496.19	1,497.53	3.23	2.42	92.30	-7.60	188.87	189.04	183.39	5.65	33.458				
1,600.00	1,600.00	1,596.53	1,597.84	3.45	2.60	92.85	-9.47	190.01	190.26	184.21	6.05	31.443				
1,700.00	1,700.00	1,696.77	1,698.06	3.68	2.77	93.40	-11.34	190.99	191.33	184.88	6.45	29.656				
1,800.00	1,800.00	1,797.01	1,798.29	3.90	2.95	93.89	-13.03	191.84	192.29	185.43	6.85	28.061				
1,900.00	1,900.00	1,897.92	1,899.18	4.13	3.13	94.34	-14.61	192.39	192.95	185.69	7.25	26.599				
2,000.00	2,000.00	1,998.84	2,000.09	4.35	3.30	94.81	-16.18	192.46	193.14	185.48	7.66	25.228				

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 #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Offset Design Jasper 32 State - 3H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 200-ISCWSA-GYRO-3, 6791-LEAM MWD-ADJ, 12239-Project												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
2,100.00	2,100.00	2,099.75	2,100.99	4.58	3.48	95.24	-17.61	192.05	192.86	184.80	8.06	23.938	
2,200.00	2,200.00	2,200.65	2,201.87	4.80	3.66	95.61	-18.77	191.19	192.11	183.66	8.46	22.715	
2,300.00	2,300.00	2,300.70	2,301.92	5.03	3.83	95.87	-19.56	190.11	191.13	182.27	8.88	21.579	
2,400.00	2,400.00	2,400.75	2,401.96	5.25	4.00	96.01	-19.92	189.05	190.11	180.85	9.26	20.539	
2,500.00	2,500.00	2,500.35	2,501.56	5.48	4.18	96.07	-20.00	188.11	189.18	179.53	9.65	19.595	
2,600.00	2,600.00	2,600.00	2,601.21	5.70	4.35	96.09	-19.98	187.40	188.46	178.41	10.05	18.748	
2,700.00	2,700.00	2,699.15	2,700.36	5.93	4.52	96.06	-19.85	187.01	188.06	177.61	10.45	17.997	
2,744.87	2,744.87	2,743.67	2,744.87	6.03	4.60	96.03	-19.74	186.98	188.02	177.39	10.63	17.691	
2,800.00	2,800.00	2,798.36	2,799.56	6.15	4.70	95.98	-19.58	187.06	188.08	177.24	10.85	17.340	
2,900.00	2,900.00	2,898.29	2,899.49	6.38	4.87	95.91	-19.40	187.34	188.34	177.09	11.25	16.748	
3,000.00	3,000.00	2,998.23	2,999.44	6.60	5.04	95.95	-19.55	187.61	188.62	176.98	11.64	16.190	
3,100.00	3,100.00	3,098.32	3,099.52	6.83	5.22	96.04	-19.89	187.85	188.90	176.86	12.04	15.684	
3,200.00	3,200.00	3,198.41	3,199.61	7.05	5.39	96.14	-20.24	188.04	189.13	176.68	12.44	15.198	
3,300.00	3,300.00	3,299.27	3,300.47	7.28	5.57	96.29	-20.72	187.97	189.11	176.27	12.85	14.722	
3,400.00	3,400.00	3,400.13	3,401.32	7.50	5.75	96.53	-21.44	187.41	188.64	175.39	13.25	14.240	
3,420.07	3,420.07	3,420.19	3,421.39	7.54	5.78	-173.42	-21.60	187.25	188.56	175.24	13.32	14.153	
3,500.00	3,499.98	3,500.07	3,501.26	7.71	5.92	-173.30	-22.11	186.64	189.68	176.05	13.63	13.915	
3,600.00	3,599.84	3,599.91	3,601.10	7.91	6.10	-173.35	-22.45	185.93	194.22	180.21	14.00	13.869	
3,700.00	3,699.45	3,699.19	3,700.38	8.12	6.27	-173.56	-22.58	185.37	202.32	187.95	14.38	14.071	
3,800.00	3,798.70	3,798.09	3,799.27	8.33	6.44	-173.88	-22.60	185.00	214.08	199.32	14.76	14.506	
3,900.00	3,897.47	3,897.46	3,898.65	8.56	6.61	-174.34	-22.31	184.65	229.26	214.12	15.14	15.139	
4,000.00	3,995.95	3,996.64	3,997.82	8.80	6.79	-174.93	-21.44	184.09	245.92	230.40	15.52	15.841	
4,100.00	4,094.43	4,094.99	4,096.16	9.05	6.96	-175.53	-20.16	183.49	262.52	246.61	15.91	16.504	
4,200.00	4,192.91	4,193.26	4,194.42	9.31	7.13	-176.12	-18.65	183.01	279.25	262.96	16.29	17.140	
4,300.00	4,291.39	4,291.70	4,292.83	9.58	7.30	-176.70	-16.82	182.61	296.08	279.40	16.68	17.749	
4,400.00	4,389.87	4,390.11	4,391.22	9.86	7.48	-177.29	-14.58	182.27	312.96	295.89	17.07	18.332	
4,500.00	4,488.35	4,488.65	4,489.73	10.14	7.65	-177.86	-12.12	181.96	329.90	312.43	17.47	18.888	
4,600.00	4,586.83	4,587.21	4,588.26	10.44	7.82	-178.37	-9.72	181.63	346.85	328.98	17.86	19.418	
4,700.00	4,685.31	4,688.22	4,689.24	10.73	8.00	-178.83	-7.35	180.98	363.51	345.25	18.26	19.903	
4,800.00	4,783.79	4,789.86	4,790.84	11.04	8.18	-179.23	-5.06	179.52	379.43	360.76	18.67	20.324	
4,900.00	4,882.27	4,889.53	4,890.47	11.35	8.36	-179.57	-2.92	177.56	394.82	375.75	19.07	20.702	
5,000.00	4,980.75	4,989.01	4,989.91	11.66	8.53	-179.87	-0.93	175.42	410.06	390.59	19.48	21.056	
5,100.00	5,079.23	5,090.20	5,091.05	11.98	8.71	179.88	0.89	172.91	424.97	405.09	19.88	21.374	
5,200.00	5,177.72	5,191.77	5,192.56	12.30	8.89	179.68	2.45	169.77	439.30	419.00	20.29	21.649	
5,300.00	5,276.20	5,292.14	5,292.85	12.63	9.07	179.48	4.10	166.21	453.16	432.46	20.70	21.891	
5,400.00	5,374.68	5,392.44	5,393.06	12.96	9.24	179.21	6.39	162.36	466.76	445.65	21.11	22.111	
5,500.00	5,473.16	5,493.26	5,493.75	13.30	9.42	178.91	9.05	158.18	480.06	458.54	21.52	22.305	
5,590.00	5,561.79	5,584.11	5,584.48	13.60	9.58	178.66	11.42	154.08	491.73	469.83	21.89	22.459	
5,600.00	5,571.64	5,594.21	5,594.56	13.63	9.60	178.63	11.68	153.61	492.99	471.06	21.93	22.479	
5,700.00	5,670.43	5,693.38	5,693.59	13.90	9.78	178.38	14.22	148.95	503.90	481.62	22.28	22.618	
5,800.00	5,769.65	5,792.70	5,792.77	14.15	9.95	178.13	16.70	144.35	511.75	489.12	22.63	22.817	
5,900.00	5,869.22	5,893.14	5,893.07	14.38	10.13	177.86	19.24	139.67	516.46	493.49	22.98	22.477	
6,000.00	5,969.03	5,993.75	5,993.53	14.59	10.31	177.57	21.93	134.86	517.93	494.59	23.33	22.198	
6,100.00	6,068.98	6,095.78	6,095.39	14.78	10.49	177.25	24.75	129.72	516.01	492.31	23.69	21.779	
6,145.56	6,114.53	6,142.26	6,141.79	14.85	10.57	87.09	26.05	127.23	513.96	490.10	23.86	21.543	
6,200.00	6,168.97	6,197.77	6,197.19	14.95	10.67	86.90	27.61	124.14	511.01	486.95	24.06	21.236	
6,300.00	6,268.97	6,296.90	6,296.12	15.15	10.85	86.53	30.56	118.56	505.56	481.10	24.46	20.672	
6,400.00	6,368.97	6,395.96	6,394.98	15.35	11.02	86.11	33.85	113.10	500.27	475.43	24.85	20.133	
6,413.07	6,382.04	6,408.96	6,407.94	15.37	11.05	86.06	34.30	112.40	499.60	474.70	24.90	20.064	
6,431.03	6,400.00	6,426.84	6,425.79	15.40	11.08	-94.09	34.92	111.43	498.69	473.72	24.97	19.972	
6,450.00	6,418.95	6,445.69	6,444.60	15.44	11.11	-94.37	35.55	110.41	497.77	472.73	25.04	19.878	

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 #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Offset Design Jasper 32 State - 3H - OH - OH													Offset Site Error: 0.00 usft	
Survey Program: 200-ISCWSA-GYRO-3, 6791-LEAM MWD-ADJ, 12239-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		
6,500.00	6,468.64	6,495.03	6,493.85	15.52	11.20	-95.40	37.14	107.74	495.66	470.44	25.22	19.653		
6,550.00	6,517.67	6,543.63	6,542.35	15.61	11.29	-96.83	38.60	105.14	494.15	468.75	25.40	19.455		
6,600.00	6,565.68	6,591.12	6,589.76	15.70	11.37	-98.59	39.94	102.61	493.53	467.95	25.58	19.292		
6,601.86	6,567.43	6,592.86	6,591.49	15.70	11.38	-98.67	39.98	102.51	493.53	467.94	25.59	19.287		
6,650.00	6,612.28	6,636.23	6,634.79	15.79	11.45	-100.56	41.12	100.25	494.23	468.46	25.77	19.179		
6,700.00	6,657.13	6,679.40	6,677.89	15.89	11.53	-102.62	42.16	98.11	496.75	470.78	25.97	19.128		
6,750.00	6,699.89	6,720.55	6,718.98	16.00	11.60	-104.68	43.07	96.18	501.55	475.35	26.19	19.147		
6,750.14	6,700.00	6,720.66	6,719.09	16.00	11.60	-104.68	43.07	96.17	501.56	475.37	26.19	19.148		
6,800.00	6,740.23	6,762.05	6,760.44	16.11	11.65	-106.78	43.84	94.26	509.00	482.78	26.23	19.409		
6,850.00	6,777.84	6,800.91	6,799.24	16.25	11.69	-108.65	44.31	92.37	519.36	493.19	26.17	19.848		
6,881.49	6,800.00	6,822.33	6,820.64	16.34	11.69	-109.53	44.52	91.33	527.61	501.39	26.21	20.127		
6,900.00	6,812.44	6,834.35	6,832.65	16.40	11.69	-109.96	44.64	90.76	533.12	506.88	26.24	20.315		
6,950.00	6,843.76	6,864.61	6,862.87	16.58	11.69	-110.78	44.93	89.35	550.58	524.21	26.36	20.884		
7,000.00	6,871.57	6,891.43	6,889.67	16.79	11.69	-110.99	45.17	88.14	571.79	545.24	26.55	21.534		
7,050.00	6,895.66	6,915.05	6,913.26	17.04	11.69	-110.55	45.38	87.11	596.70	569.86	26.83	22.237		
7,059.97	6,900.00	6,919.40	6,917.60	17.10	11.69	-110.37	45.42	86.92	602.09	575.18	26.91	22.378		
7,100.00	6,915.84	6,935.22	6,933.41	17.33	11.69	-109.32	45.55	86.22	625.08	597.86	27.22	22.960		
7,150.00	6,931.95	6,951.28	6,949.45	17.67	11.69	-107.14	45.67	85.51	656.65	628.92	27.73	23.677		
7,200.00	6,943.88	6,963.09	6,961.25	18.05	11.70	-103.88	45.76	84.98	691.04	662.69	28.35	24.379		
7,250.00	6,951.53	6,970.55	6,968.70	18.48	11.70	-99.43	45.82	84.64	727.80	698.79	29.01	25.086		
7,300.00	6,954.85	6,973.58	6,971.73	18.94	11.70	-93.74	45.84	84.51	766.47	736.82	29.64	25.857		
7,313.07	6,955.00	6,973.63	6,971.78	19.06	11.70	-92.05	45.84	84.50	776.82	747.04	29.79	26.081		
7,400.00	6,955.00	6,973.00	6,971.15	19.95	11.70	-91.97	45.83	84.53	847.66	816.93	30.73	27.582		
7,500.00	6,955.00	6,972.26	6,970.41	21.09	11.70	-91.88	45.83	84.57	932.51	900.59	31.92	29.213		
7,600.00	6,955.00	6,977.28	7,814.43	22.32	19.66	-150.52	-841.86	101.21	987.37	956.41	30.97	31.886		
7,700.00	6,955.00	6,578.92	7,815.00	23.62	21.07	-150.36	-943.43	104.89	989.62	957.22	32.40	30.544		
7,800.00	6,955.00	6,671.35	7,815.27	25.00	22.41	-150.25	-1,035.83	107.36	991.18	957.33	33.85	29.280		
7,900.00	6,955.00	6,772.87	7,816.94	26.43	23.91	-150.16	-1,137.30	110.21	993.97	958.53	35.44	28.047		
8,000.00	6,955.00	6,861.62	7,818.00	27.90	25.27	-150.07	-1,226.00	112.65	996.37	959.37	37.01	26.925		
8,100.00	6,955.00	6,967.80	7,819.91	29.42	26.94	-149.90	-1,332.08	117.16	1,000.04	961.24	38.81	25.768		
8,200.00	6,955.00	9,048.75	7,821.12	30.97	28.23	-149.79	-1,412.95	120.23	1,003.30	962.86	40.44	24.810		
8,300.00	6,955.00	9,131.04	7,824.01	32.55	29.52	-149.65	-1,495.06	124.94	1,009.11	966.98	42.13	23.951		
8,400.00	6,955.00	9,242.87	7,828.82	34.16	31.29	-149.52	-1,606.64	130.47	1,015.32	971.21	44.11	23.016		
8,500.00	6,955.00	9,372.48	7,831.35	35.79	33.42	-149.34	-1,736.11	135.70	1,018.99	972.64	46.35	21.983		
8,600.00	6,955.00	9,464.81	7,831.67	37.43	34.90	-149.15	-1,828.33	140.06	1,021.66	973.37	48.29	21.155		
8,700.00	6,955.00	9,560.94	7,832.87	39.10	36.43	-148.98	-1,924.36	144.31	1,024.96	974.68	50.28	20.385		
8,800.00	6,955.00	9,679.33	7,833.32	40.77	38.39	-148.79	-2,042.67	148.65	1,027.07	974.51	52.55	19.544		
8,900.00	6,955.00	9,770.77	7,833.84	42.46	39.90	-148.68	-2,134.06	151.50	1,029.12	974.58	54.54	18.869		
9,000.00	6,955.00	9,876.14	7,835.39	44.16	41.63	-148.59	-2,239.38	154.43	1,031.80	975.13	56.66	18.209		
9,100.00	6,955.00	9,987.16	7,834.90	45.88	43.49	-148.45	-2,350.37	157.08	1,032.56	973.64	58.92	17.525		
9,200.00	6,955.00	10,088.14	7,834.28	47.60	45.19	-148.28	-2,451.29	160.30	1,033.66	972.53	61.13	16.910		
9,300.00	6,955.00	10,192.62	7,832.92	49.32	46.98	-148.10	-2,555.72	163.51	1,034.12	970.70	63.42	16.305		
9,400.00	6,955.00	10,283.97	7,831.70	51.06	48.54	-147.92	-2,647.00	166.67	1,034.78	969.18	65.60	15.773		
9,500.00	6,955.00	10,383.06	7,830.53	52.80	50.22	-147.67	-2,745.98	171.23	1,036.19	968.24	67.95	15.250		
9,600.00	6,955.00	10,488.65	7,828.62	54.55	52.03	-147.38	-2,851.43	176.38	1,037.24	966.79	70.44	14.724		
9,700.00	6,955.00	10,574.21	7,827.93	56.30	53.49	-147.21	-2,936.92	179.66	1,038.60	965.98	72.62	14.302		
9,800.00	6,955.00	10,683.97	7,829.16	58.06	55.34	-147.15	-3,046.64	181.85	1,040.59	965.65	74.95	13.885		
9,900.00	6,955.00	10,797.96	7,828.19	59.82	57.31	-147.01	-3,160.60	184.47	1,041.06	963.62	77.45	13.442		
10,000.00	6,955.00	10,899.30	7,826.34	61.59	59.07	-146.84	-3,261.89	186.95	1,040.82	960.97	79.86	13.034		
10,061.61	6,955.00	10,958.41	7,825.16	62.68	60.09	-146.73	-3,320.97	188.68	1,040.75	959.42	81.32	12.798		

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 #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Jasper 32 State - 3H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 200-ISCWSA-GYRO-3, 6791-LEAM MWD-ADJ, 12239-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)		
10,100.00	6,955.00	10,992.98	7,824.51	63.36	60.68	-146.66	-3,355.51	189.79	1,040.81	958.59	82.21	12.660	
10,200.00	6,955.00	11,080.78	7,824.29	65.13	62.15	-146.57	-3,443.29	191.78	1,041.79	957.40	84.40	12.344	
10,300.00	6,955.00	11,173.89	7,826.25	66.91	63.70	-146.61	-3,536.37	192.19	1,043.74	957.27	86.46	12.072	
10,400.00	6,955.00	11,273.19	7,828.58	68.69	65.38	-146.67	-3,635.64	192.45	1,045.78	957.20	88.58	11.805	
10,500.00	6,955.00	11,356.80	7,831.74	70.47	66.79	-146.77	-3,719.19	192.45	1,048.89	958.40	90.49	11.591	
10,600.00	6,955.00	11,452.96	7,836.65	72.26	68.40	-146.94	-3,815.22	191.97	1,052.84	960.43	92.41	11.393	
10,700.00	6,955.00	11,539.08	7,841.94	74.04	69.84	-147.12	-3,901.17	191.57	1,057.69	963.49	94.21	11.227	
10,800.00	6,955.00	11,639.15	7,848.85	75.83	71.52	-147.35	-4,001.01	191.08	1,063.19	967.11	96.08	11.066	
10,900.00	6,955.00	11,747.10	7,855.92	77.63	73.36	-147.57	-4,108.72	190.95	1,068.62	970.57	98.05	10.899	
11,000.00	6,955.00	11,910.28	7,861.70	79.42	76.16	-147.89	-4,271.74	187.56	1,070.49	970.06	100.43	10.659	
11,100.00	6,955.00	12,009.36	7,861.71	81.21	77.86	-148.00	-4,370.80	185.39	1,069.29	966.84	102.45	10.437	
11,200.00	6,955.00	12,121.01	7,860.76	83.01	79.78	-148.06	-4,482.42	183.44	1,067.59	962.92	104.67	10.200	
11,300.00	6,955.00	12,221.45	7,859.68	84.81	80.94	-148.14	-4,582.83	181.12	1,065.40	958.96	106.44	10.009	
11,341.01	6,955.00	12,239.00	7,859.50	85.55	80.94	-148.16	-4,600.38	180.68	1,064.75	957.84	106.91	9.959	
11,348.59	6,955.00	12,239.00	7,859.50	85.68	80.94	-148.16	-4,600.38	180.68	1,064.78	957.78	107.00	9.952 SF	

Leam Drilling Systems LLC

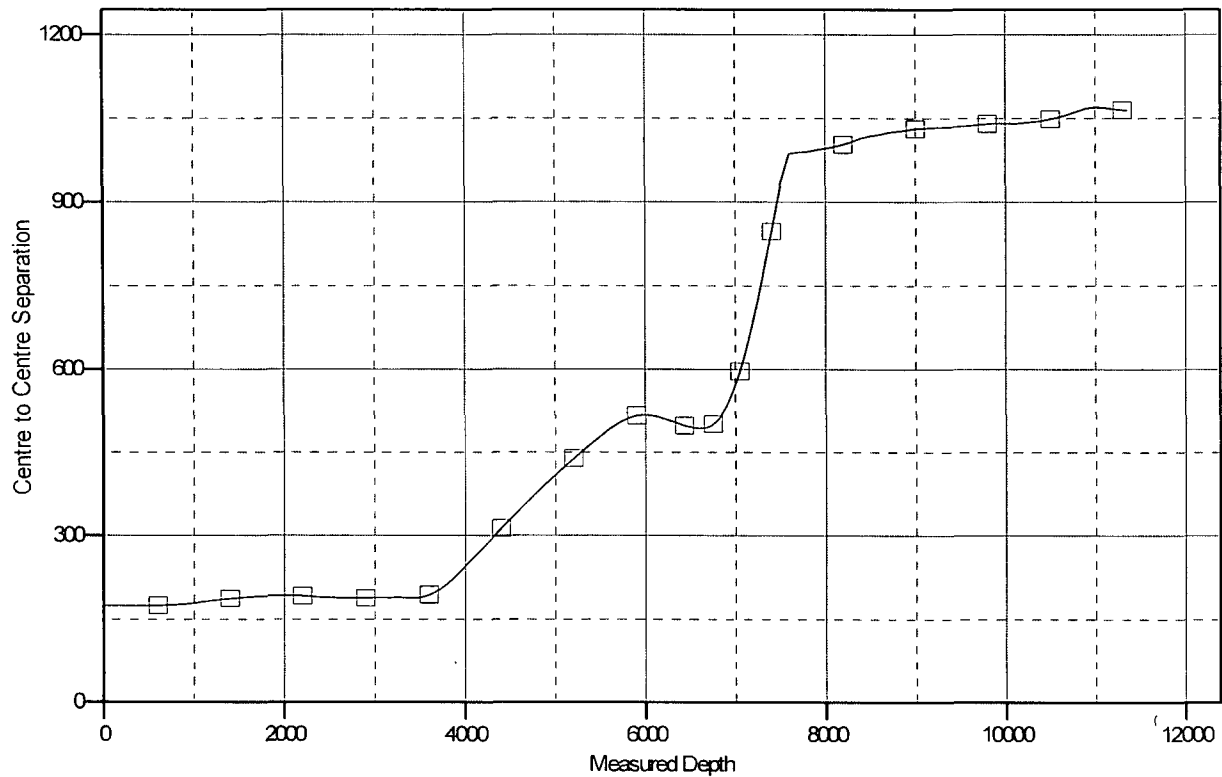
Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GE 3268' + KB 26' @ 3294.00usft (Sc
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #7H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.13°

Ladder Plot



LEGEND

3H, OH, OHV0

Leam Drilling Systems LLC

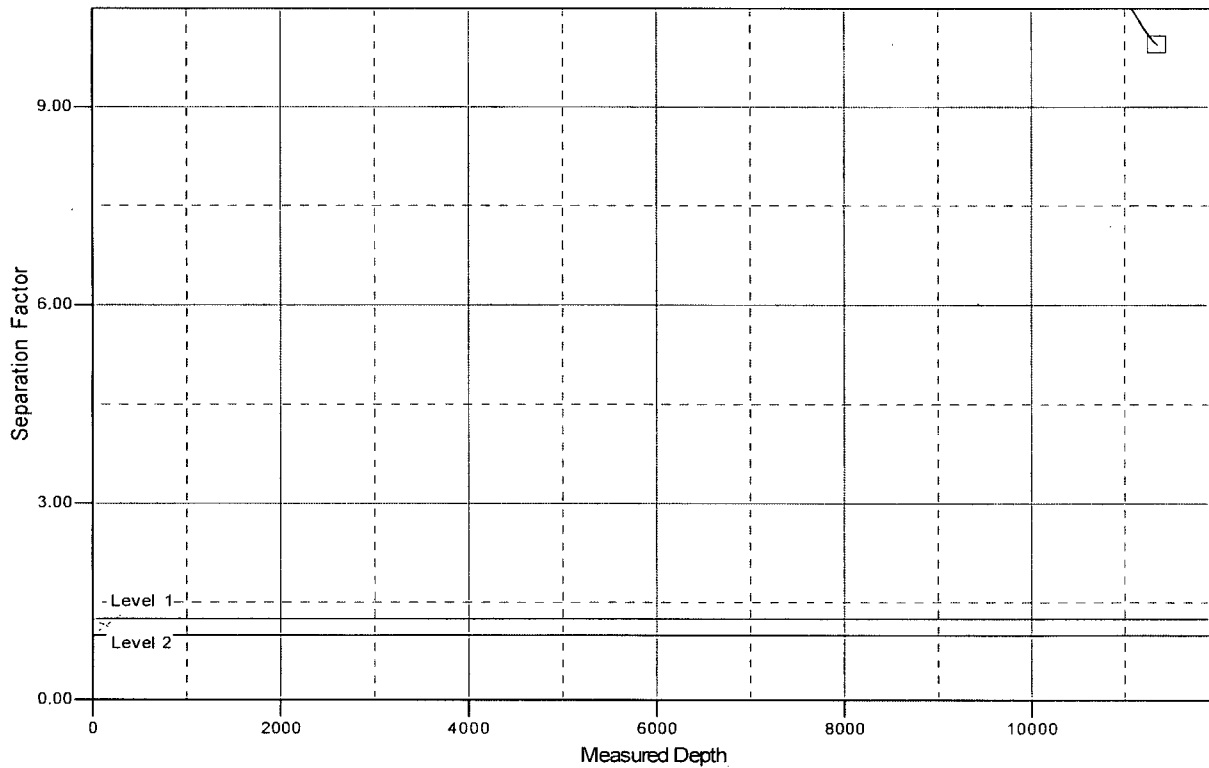
Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well #7H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Reference Site:	Jasper 32 State	MD Reference:	GE 3268' + KB 26' @ 3294.00usft (Scan Texas)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#7H	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 #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GE 3268' + KB 26' @ 3294.00usft (Sc
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #7H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.13°

Separation Factor Plot



LEGEND

3H, OH, OHV0