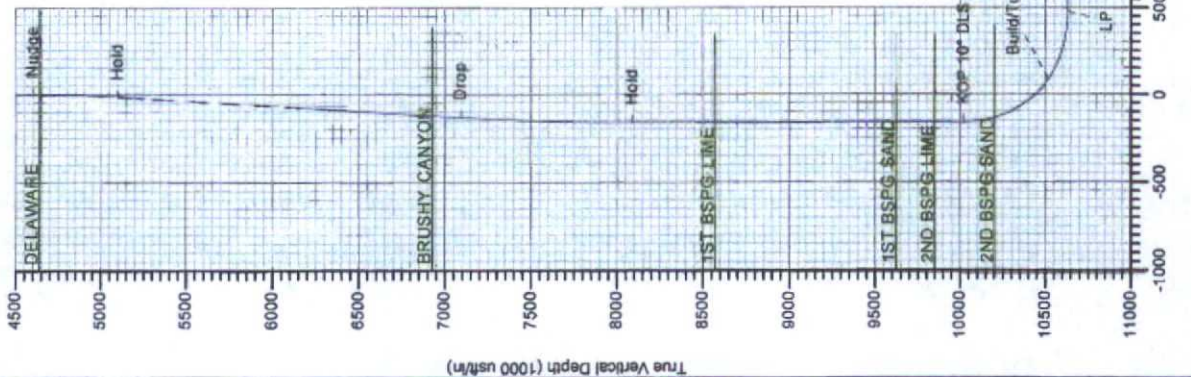




Project: Lea County, NM (NAD-83)
Site: Chincoteague 32 State Com
Well: 2H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.34°
Magnetic North: 6.94°
Magnetic Field
Strength: 48116.9snT
Dip Angle: 60.05°
Date: 12/22/2015
Model: BGGM2015



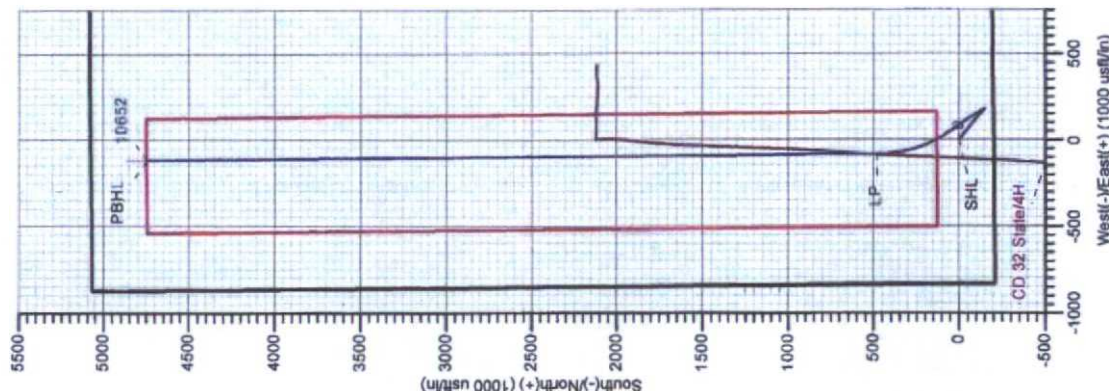
DESIGN TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Northing
SHL (C32SC 2H)	0.00	0.00	-118.55	429877.11
PBHL (C32SC 2H)	10652.00	4747.72	-118.55	429877.11

SECTION DETAILS				
MD	Inc	Azi	+N/-S	+E/-W
0.00	0.00	0.00	0.00	0.00
4600.00	0.00	0.00	0.00	0.00
5100.00	5.00	130.00	-14.01	18.70
7100.00	5.00	130.00	7091.78	150.23
8100.00	0.00	0.00	8090.49	183.64
10630.87	0.00	0.00	10021.36	183.64
11062.71	89.73	359.54	10632.00	475.77
15334.85	89.73	359.54	10652.00	4747.72

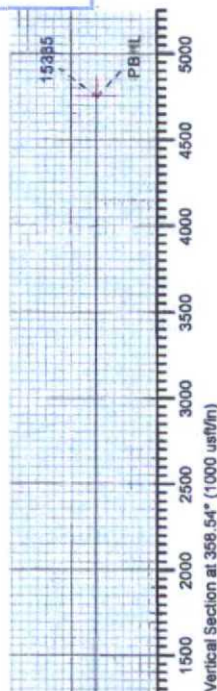
PROJECT DETAILS:				
Lea County, NM				
Geodetic System:	US State Plane 1983			
Datum:	North American Datum 1983			
Ellipsoid:	GRS 1980			
Zone:	New Mexico Eastern Zone			
System Datum:	Mean Sea Level			

FORMATION TOP DETAILS	
TVDPath	MDPath
752.00	752.00
1052.00	1052.00
4392.00	4392.00
4637.00	4637.00
6927.00	6927.00
8572.00	8572.00
9622.00	9622.00
9852.00	9852.00
10202.00	10202.00

Formation
RUSTLER
SALT
BASE SALT
DELAWARE
BRUSHY CANYON
1ST BSPG LIME
1ST BSPG SAND
2ND BSPG LIME
2ND BSPG SAND



HOBBS OCD
JAN 05 2016
RECEIVED





DEVON ENERGY

Lea County, NM (NAD-83)
Chincoteague 32 State Com
2H

OH

Plan: Plan #1

Standard Planning Report

22 December, 2015





LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site	Chincoteague 32 State Com		
Site Position:		Northing:	425,129.39 usft
From:	Map	Easting:	736,582.94 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 1.867 N
		Longitude:	103° 42' 8.435 W
		Grid Convergence:	0.34 °

Well	2H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,500.30 usft
		Latitude:	32° 10' 1.867 N
		Longitude:	103° 42' 8.435 W
		Ground Level:	3,476.80 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	BGGM2015	12/22/2015	7.28
			Dip Angle
			60.05
			Field Strength
			48,117

Design	Plan #1		
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
			358.54

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,100.00	5.00	130.00	5,099.37	-14.01	16.70	1.00	1.00	0.00	130.00	
7,100.00	5.00	130.00	7,091.76	-126.06	150.23	0.00	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,090.49	-154.09	183.64	0.50	-0.50	0.00	180.00	
10,030.87	0.00	0.00	10,021.36	-154.09	183.64	0.00	0.00	0.00	0.00	
10,630.87	60.00	326.60	10,517.56	85.08	25.93	10.00	10.00	0.00	326.60	
11,062.71	89.73	359.54	10,632.00	475.77	-84.00	10.00	6.88	7.63	52.61	
15,334.85	89.73	359.54	10,652.00	4,747.72	-118.55	0.00	0.00	0.00	0.00	PBHL (C32SC 2H)



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (C32SC 2H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
752.00	0.00	0.00	752.00	0.00	0.00	0.00	0.00	0.00	0.00
RUSTLER									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,052.00	0.00	0.00	1,052.00	0.00	0.00	0.00	0.00	0.00	0.00
SALT									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,392.00	0.00	0.00	4,392.00	0.00	0.00	0.00	0.00	0.00	0.00
BASE SALT									
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00



LEAM Drilling Systems LLC

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Site:	Chincoteague 32 State Corn	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
Nudge									
4,637.00	0.37	130.00	4,637.00	-0.08	0.09	-0.08	1.00	1.00	0.00
DELAWARE									
4,700.00	1.00	130.00	4,700.00	-0.56	0.67	-0.58	1.00	1.00	0.00
4,800.00	2.00	130.00	4,799.96	-2.24	2.67	-2.31	1.00	1.00	0.00
4,900.00	3.00	130.00	4,899.86	-5.05	6.02	-5.20	1.00	1.00	0.00
5,000.00	4.00	130.00	4,999.68	-8.97	10.69	-9.24	1.00	1.00	0.00
5,100.00	5.00	130.00	5,099.37	-14.01	16.70	-14.44	1.00	1.00	0.00
Hold									
5,200.00	5.00	130.00	5,198.99	-19.62	23.38	-20.21	0.00	0.00	0.00
5,300.00	5.00	130.00	5,298.60	-25.22	30.05	-25.98	0.00	0.00	0.00
5,400.00	5.00	130.00	5,398.22	-30.82	36.73	-31.75	0.00	0.00	0.00
5,500.00	5.00	130.00	5,497.84	-36.42	43.41	-37.52	0.00	0.00	0.00
5,600.00	5.00	130.00	5,597.46	-42.03	50.08	-43.29	0.00	0.00	0.00
5,700.00	5.00	130.00	5,697.08	-47.63	56.76	-49.06	0.00	0.00	0.00
5,800.00	5.00	130.00	5,796.70	-53.23	63.44	-54.83	0.00	0.00	0.00
5,900.00	5.00	130.00	5,896.32	-58.83	70.11	-60.60	0.00	0.00	0.00
6,000.00	5.00	130.00	5,995.94	-64.43	76.79	-66.37	0.00	0.00	0.00
6,100.00	5.00	130.00	6,095.56	-70.04	83.47	-72.14	0.00	0.00	0.00
6,200.00	5.00	130.00	6,195.18	-75.64	90.14	-77.91	0.00	0.00	0.00
6,300.00	5.00	130.00	6,294.80	-81.24	96.82	-83.68	0.00	0.00	0.00
6,400.00	5.00	130.00	6,394.42	-86.84	103.50	-89.45	0.00	0.00	0.00
6,500.00	5.00	130.00	6,494.04	-92.45	110.17	-95.22	0.00	0.00	0.00
6,600.00	5.00	130.00	6,593.66	-98.05	116.85	-100.99	0.00	0.00	0.00
6,700.00	5.00	130.00	6,693.28	-103.65	123.53	-106.76	0.00	0.00	0.00
6,800.00	5.00	130.00	6,792.90	-109.25	130.20	-112.54	0.00	0.00	0.00
6,900.00	5.00	130.00	6,892.52	-114.86	136.88	-118.31	0.00	0.00	0.00
6,934.62	5.00	130.00	6,927.00	-116.79	139.19	-120.30	0.00	0.00	0.00
BRUSHY CANYON									
7,000.00	5.00	130.00	6,992.14	-120.46	143.66	-124.08	0.00	0.00	0.00
7,100.00	5.00	130.00	7,091.76	-126.06	150.23	-129.85	0.00	0.00	0.00
Drop									
7,200.00	4.50	130.00	7,191.41	-131.38	156.58	-135.33	0.50	-0.50	0.00
7,300.00	4.00	130.00	7,291.14	-136.15	162.25	-140.24	0.50	-0.50	0.00
7,400.00	3.50	130.00	7,390.92	-140.35	167.26	-144.57	0.50	-0.50	0.00
7,500.00	3.00	130.00	7,490.76	-143.99	171.61	-148.32	0.50	-0.50	0.00
7,600.00	2.50	130.00	7,590.65	-147.08	175.28	-151.50	0.50	-0.50	0.00
7,700.00	2.00	130.00	7,690.57	-149.60	178.29	-154.10	0.50	-0.50	0.00
7,800.00	1.50	130.00	7,790.52	-151.56	180.63	-156.12	0.50	-0.50	0.00
7,900.00	1.00	130.00	7,890.50	-152.97	182.30	-157.56	0.50	-0.50	0.00
8,000.00	0.50	130.00	7,990.49	-153.81	183.30	-158.43	0.50	-0.50	0.00
8,100.00	0.00	0.00	8,090.49	-154.09	183.64	-158.72	0.50	-0.50	0.00
Hold									
8,200.00	0.00	0.00	8,190.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,300.00	0.00	0.00	8,290.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,400.00	0.00	0.00	8,390.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,500.00	0.00	0.00	8,490.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,581.51	0.00	0.00	8,572.00	-154.09	183.64	-158.72	0.00	0.00	0.00
1ST BSPG LINE									



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.00	0.00	0.00	8,590.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,700.00	0.00	0.00	8,690.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,800.00	0.00	0.00	8,790.49	-154.09	183.64	-158.72	0.00	0.00	0.00
8,900.00	0.00	0.00	8,890.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,000.00	0.00	0.00	8,990.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,100.00	0.00	0.00	9,090.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,200.00	0.00	0.00	9,190.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,300.00	0.00	0.00	9,290.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,400.00	0.00	0.00	9,390.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,500.00	0.00	0.00	9,490.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,600.00	0.00	0.00	9,590.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,631.51	0.00	0.00	9,622.00	-154.09	183.64	-158.72	0.00	0.00	0.00
1ST BSPG SAND									
9,700.00	0.00	0.00	9,690.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,800.00	0.00	0.00	9,790.49	-154.09	183.64	-158.72	0.00	0.00	0.00
9,861.51	0.00	0.00	9,852.00	-154.09	183.64	-158.72	0.00	0.00	0.00
2ND BSPG LIME									
9,900.00	0.00	0.00	9,890.49	-154.09	183.64	-158.72	0.00	0.00	0.00
10,000.00	0.00	0.00	9,990.49	-154.09	183.64	-158.72	0.00	0.00	0.00
10,030.87	0.00	0.00	10,021.36	-154.09	183.64	-158.72	0.00	0.00	0.00
KOP 10" DLS									
10,050.00	1.91	326.60	10,040.48	-153.82	183.46	-158.45	10.00	10.00	0.00
10,100.00	6.91	326.60	10,090.32	-150.61	181.34	-155.18	10.00	10.00	0.00
10,150.00	11.91	326.60	10,139.63	-143.79	176.84	-148.25	10.00	10.00	0.00
10,200.00	16.91	326.60	10,188.04	-133.40	169.99	-137.69	10.00	10.00	0.00
10,214.65	18.38	326.60	10,202.00	-129.69	167.55	-133.92	10.00	10.00	0.00
2ND BSPG SAND									
10,250.00	21.91	326.60	10,235.18	-119.53	160.85	-123.59	10.00	10.00	0.00
10,300.00	26.91	326.60	10,280.70	-102.28	149.48	-106.06	10.00	10.00	0.00
10,350.00	31.91	326.60	10,324.24	-81.79	135.96	-85.23	10.00	10.00	0.00
10,400.00	36.91	326.60	10,365.48	-58.21	120.41	-61.26	10.00	10.00	0.00
10,450.00	41.91	326.60	10,404.09	-31.71	102.94	-34.33	10.00	10.00	0.00
10,500.00	46.91	326.60	10,439.80	-2.51	83.69	-4.64	10.00	10.00	0.00
10,550.00	51.91	326.60	10,472.32	29.18	62.79	27.57	10.00	10.00	0.00
10,600.00	56.91	326.60	10,501.41	63.11	40.42	62.06	10.00	10.00	0.00
10,630.87	60.00	326.60	10,517.55	85.07	25.94	84.39	10.00	10.00	0.00
Build/Turn									
10,650.00	61.17	328.33	10,526.95	99.12	16.98	98.66	10.00	6.13	9.07
10,700.00	64.34	332.89	10,549.85	137.81	-4.87	137.89	10.00	6.33	8.71
10,750.00	67.62	336.82	10,570.20	179.11	-24.33	179.67	10.00	6.57	8.25
10,800.00	71.01	340.75	10,587.86	222.71	-41.23	223.69	10.00	6.77	7.87
10,850.00	74.48	344.52	10,602.70	268.27	-55.46	269.59	10.00	6.93	7.55
10,900.00	78.01	348.17	10,614.59	315.45	-66.91	317.05	10.00	7.08	7.30
10,950.00	81.58	351.72	10,623.45	363.89	-75.49	365.69	10.00	7.15	7.11
11,000.00	85.19	355.21	10,629.21	413.22	-81.14	415.15	10.00	7.21	6.98
11,050.00	88.81	358.66	10,631.83	463.06	-83.80	465.04	10.00	7.25	6.90
11,062.71	89.73	359.54	10,632.00	475.77	-84.00	477.75	10.00	7.26	6.88
LP									
11,100.00	89.73	359.54	10,632.17	513.06	-84.30	515.04	0.00	0.00	0.00
11,200.00	89.73	359.54	10,632.64	613.05	-85.11	615.02	0.00	0.00	0.00
11,300.00	89.73	359.54	10,633.11	713.05	-85.92	715.00	0.00	0.00	0.00



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 168)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,400.00	89.73	359.54	10,633.58	813.04	-86.73	814.99	0.00	0.00	0.00
11,500.00	89.73	359.54	10,634.04	813.04	-87.54	814.97	0.00	0.00	0.00
11,600.00	89.73	359.54	10,634.51	1,013.03	-88.35	1,014.96	0.00	0.00	0.00
11,700.00	89.73	359.54	10,634.98	1,113.03	-89.15	1,114.94	0.00	0.00	0.00
11,800.00	89.73	359.54	10,635.45	1,213.02	-89.96	1,214.92	0.00	0.00	0.00
11,900.00	89.73	359.54	10,635.92	1,313.02	-90.77	1,314.91	0.00	0.00	0.00
12,000.00	89.73	359.54	10,636.38	1,413.02	-91.58	1,414.89	0.00	0.00	0.00
12,100.00	89.73	359.54	10,636.85	1,513.01	-92.39	1,514.87	0.00	0.00	0.00
12,200.00	89.73	359.54	10,637.32	1,613.01	-93.20	1,614.86	0.00	0.00	0.00
12,300.00	89.73	359.54	10,637.79	1,713.00	-94.01	1,714.84	0.00	0.00	0.00
12,400.00	89.73	359.54	10,638.26	1,813.00	-94.82	1,814.83	0.00	0.00	0.00
12,500.00	89.73	359.54	10,638.73	1,912.99	-95.62	1,914.81	0.00	0.00	0.00
12,600.00	89.73	359.54	10,639.19	2,012.99	-96.43	2,014.79	0.00	0.00	0.00
12,700.00	89.73	359.54	10,639.66	2,112.99	-97.24	2,114.78	0.00	0.00	0.00
12,800.00	89.73	359.54	10,640.13	2,212.98	-98.05	2,214.76	0.00	0.00	0.00
12,900.00	89.73	359.54	10,640.60	2,312.98	-98.86	2,314.74	0.00	0.00	0.00
13,000.00	89.73	359.54	10,641.07	2,412.97	-99.67	2,414.73	0.00	0.00	0.00
13,100.00	89.73	359.54	10,641.54	2,512.97	-100.48	2,514.71	0.00	0.00	0.00
13,200.00	89.73	359.54	10,642.00	2,612.96	-101.28	2,614.70	0.00	0.00	0.00
13,300.00	89.73	359.54	10,642.47	2,712.96	-102.09	2,714.68	0.00	0.00	0.00
13,400.00	89.73	359.54	10,642.94	2,812.95	-102.90	2,814.66	0.00	0.00	0.00
13,500.00	89.73	359.54	10,643.41	2,912.95	-103.71	2,914.65	0.00	0.00	0.00
13,600.00	89.73	359.54	10,643.88	3,012.95	-104.52	3,014.63	0.00	0.00	0.00
13,700.00	89.73	359.54	10,644.34	3,112.94	-105.33	3,114.61	0.00	0.00	0.00
13,800.00	89.73	359.54	10,644.81	3,212.94	-106.14	3,214.60	0.00	0.00	0.00
13,900.00	89.73	359.54	10,645.28	3,312.93	-106.95	3,314.58	0.00	0.00	0.00
14,000.00	89.73	359.54	10,645.75	3,412.93	-107.75	3,414.57	0.00	0.00	0.00
14,100.00	89.73	359.54	10,646.22	3,512.92	-108.56	3,514.55	0.00	0.00	0.00
14,200.00	89.73	359.54	10,646.69	3,612.92	-109.37	3,614.53	0.00	0.00	0.00
14,300.00	89.73	359.54	10,647.15	3,712.92	-110.18	3,714.52	0.00	0.00	0.00
14,400.00	89.73	359.54	10,647.62	3,812.91	-110.99	3,814.50	0.00	0.00	0.00
14,500.00	89.73	359.54	10,648.09	3,912.91	-111.80	3,914.49	0.00	0.00	0.00
14,600.00	89.73	359.54	10,648.56	4,012.90	-112.61	4,014.47	0.00	0.00	0.00
14,700.00	89.73	359.54	10,649.03	4,112.90	-113.42	4,114.45	0.00	0.00	0.00
14,800.00	89.73	359.54	10,649.50	4,212.89	-114.22	4,214.44	0.00	0.00	0.00
14,900.00	89.73	359.54	10,649.96	4,312.89	-115.03	4,314.42	0.00	0.00	0.00
15,000.00	89.73	359.54	10,650.43	4,412.88	-115.84	4,414.40	0.00	0.00	0.00
15,100.00	89.73	359.54	10,650.90	4,512.88	-116.65	4,514.39	0.00	0.00	0.00
15,200.00	89.73	359.54	10,651.37	4,612.88	-117.46	4,614.37	0.00	0.00	0.00
15,300.00	89.73	359.54	10,651.84	4,712.87	-118.27	4,714.36	0.00	0.00	0.00
15,334.85	89.73	359.54	10,652.00	4,747.72	-118.55	4,749.20	0.00	0.00	0.00

TD - PBHL (C32SC 2H)



LEAM Drilling Systems LLC
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 2H
Company:	DEVON ENERGY	TVD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 188)
Project:	Lea County, NM (NAD-83)	MD Reference:	3476.8' GL + 23.5' KB @ 3500.30usft (Cactus 188)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SHL (C32SC 2H)	0.00	0.00	0.00	0.00	0.00	425,129.39	736,582.94	32° 10' 1.867 N	103° 42' 8.435 W
- plan hits target center									
- Point									
PBHL (C32SC 2H)	0.00	0.00	10,652.00	4,747.72	-118.55	429,877.11	736,464.39	32° 10' 48.855 N	103° 42' 9.490 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
752.00	752.00	RUSTLER		0.00		
1,052.00	1,052.00	SALT		0.00		
4,392.00	4,392.00	BASE SALT		0.00		
4,637.00	4,637.00	DELAWARE		0.00		
6,934.62	6,927.00	BRUSHY CANYON		0.00		
8,581.51	8,572.00	1ST BSPG LIME		0.00		
9,631.51	9,622.00	1ST BSPG SAND		0.00		
9,861.51	9,852.00	2ND BSPG LIME		0.00		
10,214.65	10,202.00	2ND BSPG SAND		0.00		

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
4,600.00	4,600.00	0.00	0.00	Nudge
5,100.00	5,099.37	-14.01	16.70	Hold
7,100.00	7,091.76	-126.06	150.23	Drop
8,100.00	8,090.49	-154.09	183.64	Hold
10,030.87	10,021.36	-154.09	183.64	KOP 10" DLS
10,630.87	10,517.55	85.07	25.94	Build/Turn
11,062.71	10,632.00	475.77	-84.00	LP
15,334.85	10,652.00	4,747.72	-118.55	TD