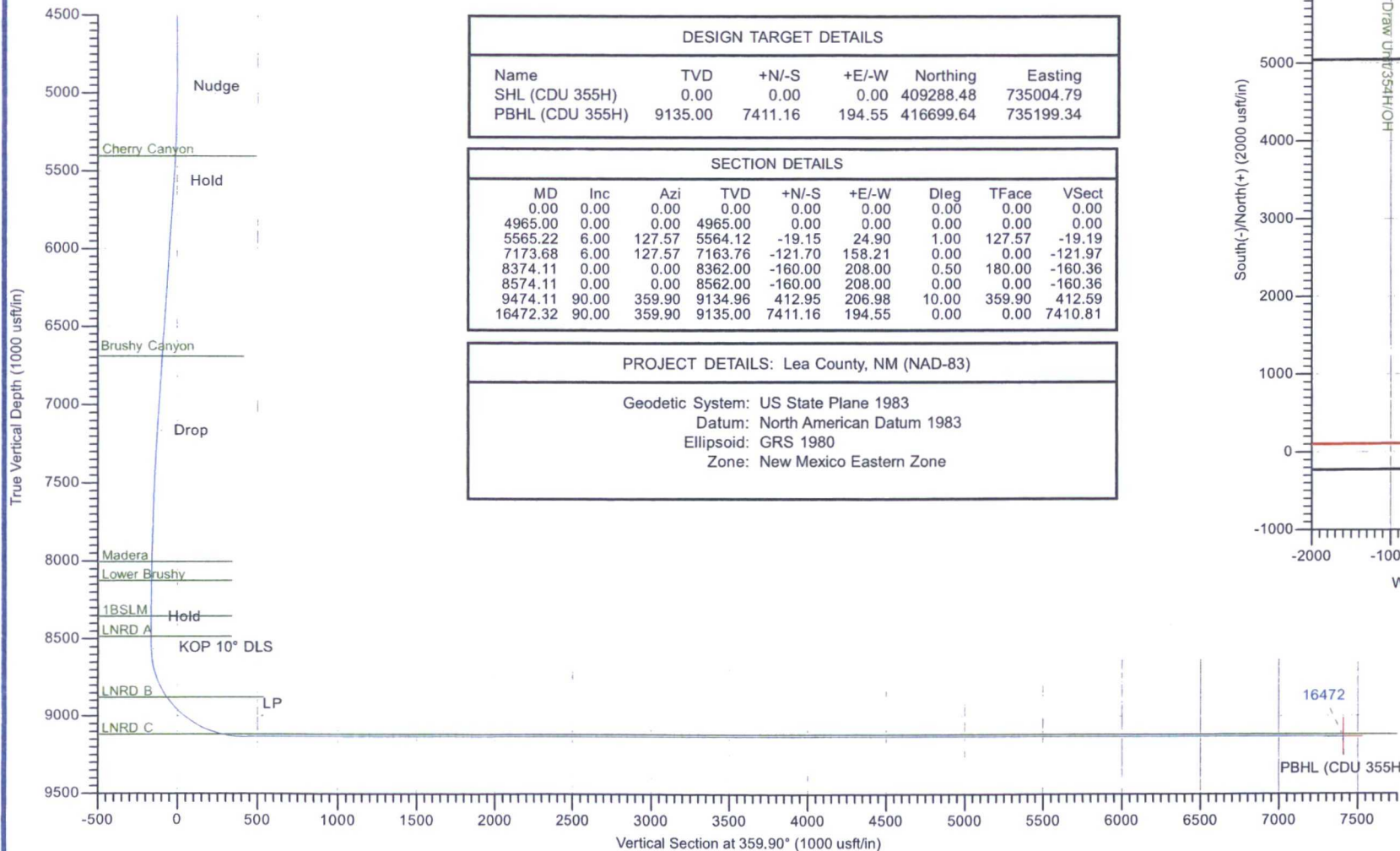




Project: Lea County, NM (NAD-83)
 Site: Cotton Draw Unit
 Well: 355H
 Wellbore: OH
 Design: Plan #1



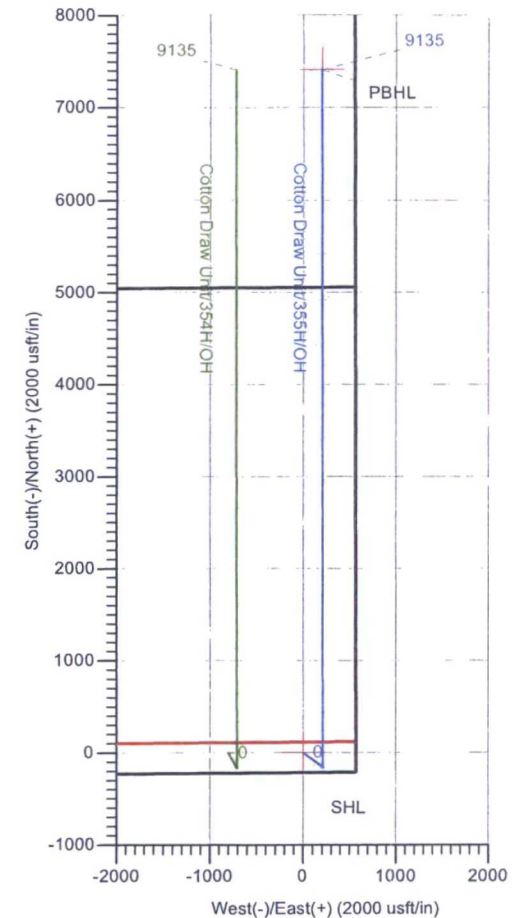
Azimuths to Grid North
 True North: -0.33°
 Magnetic North: 6.62°
 Magnetic Field
 Strength: 48129.0nT
 Dip Angle: 59.87°
 Date: 7/11/2016
 Model: HDGM



DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL (CDU 355H)	0.00	0.00	0.00	409288.48	735004.79
PBHL (CDU 355H)	9135.00	7411.16	194.55	416699.64	735199.34

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSECT
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4965.00	0.00	0.00	4965.00	0.00	0.00	0.00	0.00	0.00
5565.22	6.00	127.57	5564.12	-19.15	24.90	1.00	127.57	-19.19
7173.68	6.00	127.57	7163.76	-121.70	158.21	0.00	0.00	-121.97
8374.11	0.00	0.00	8362.00	-160.00	208.00	0.50	180.00	-160.36
8574.11	0.00	0.00	8562.00	-160.00	208.00	0.00	0.00	-160.36
9474.11	90.00	359.90	9134.96	412.95	206.98	10.00	359.90	412.59
16472.32	90.00	359.90	9135.00	7411.16	194.55	0.00	0.00	7410.81

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



NM OIL CONSERVATION
ARTESIA DISTRICT

MAY 08 2017

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DEVON ENERGY

Lea County, NM (NAD-83)
Cotton Draw Unit
355H

OH

Plan: Plan #1

HOBBS OCD
MAY 10 2017
RECEIVED

Standard Planning Report

12 July, 2016

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Single User Db
 Company: DEVON ENERGY
 Project: Lea County, NM (NAD-83)
 Site: Cotton Draw Unit
 Well: 355H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well 355H
 TVD Reference: 3408.1' GE + 25' KB @ 3433.10usft
 MD Reference: 3408.1' GE + 25' KB @ 3433.10usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	Cotton Draw Unit		
Site Position:		Northing:	414,142.25 usft
From:	Map	Easting:	733,967.43 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 13.293 N
		Longitude:	103° 42' 39.602 W
		Grid Convergence:	0.33 °

Well	355H		
Well Position	+N/-S	-4,853.77 usft	Northing: 409,288.48 usft
	+E/-W	1,037.36 usft	Easting: 735,004.79 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,433.10 usft
		Latitude:	32° 7' 25.203 N
		Longitude:	103° 42' 27.865 W
		Ground Level:	3,408.10 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	7/11/2016	6.95
			Dip Angle (°)
			59.87
			Field Strength (nT)
			48,129

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 (°)
			359.90

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(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	
4,965.00	0.00	0.00	4,965.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,565.22	6.00	127.57	5,564.12	-19.15	24.90	1.00	1.00	0.00	127.57	
7,173.68	6.00	127.57	7,163.76	-121.70	158.21	0.00	0.00	0.00	0.00	
8,374.11	0.00	0.00	8,362.00	-160.00	208.00	0.50	-0.50	0.00	180.00	
8,574.11	0.00	0.00	8,562.00	-160.00	208.00	0.00	0.00	0.00	0.00	
9,474.11	90.00	359.90	9,134.96	412.95	206.98	10.00	10.00	-0.01	359.90	
16,472.32	90.00	359.90	9,135.00	7,411.16	194.55	0.00	0.00	0.00	0.00	PBHL (CDU 355H)

LEAM Drilling Systems LLC

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 MD Reference: 3408.1' GE + 25' KB @ 3433.10usft
 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (CDU 355H)									
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
615.00	0.00	0.00	615.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
945.00	0.00	0.00	945.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
955.00	0.00	0.00	955.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Salt									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
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
4,220.00	0.00	0.00	4,220.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
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

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4,465.00	0.00	0.00	4,465.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
4,470.00	0.00	0.00	4,470.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
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
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,965.00	0.00	0.00	4,965.00	0.00	0.00	0.00	0.00	0.00	0.00
Nudge									
5,000.00	0.35	127.57	5,000.00	-0.07	0.08	-0.07	1.00	1.00	0.00
5,100.00	1.35	127.57	5,099.99	-0.97	1.26	-0.97	1.00	1.00	0.00
5,200.00	2.35	127.57	5,199.93	-2.94	3.82	-2.94	1.00	1.00	0.00
5,300.00	3.35	127.57	5,299.81	-5.97	7.76	-5.98	1.00	1.00	0.00
5,400.00	4.35	127.57	5,399.58	-10.06	13.08	-10.09	1.00	1.00	0.00
5,405.43	4.40	127.57	5,405.00	-10.32	13.41	-10.34	1.00	1.00	0.00
Cherry Canyon									
5,500.00	5.35	127.57	5,499.22	-15.22	19.78	-15.25	1.00	1.00	0.00
5,565.22	6.00	127.57	5,564.12	-19.15	24.90	-19.19	1.00	1.00	0.00
Hold									
5,600.00	6.00	127.57	5,598.71	-21.37	27.78	-21.42	0.00	0.00	0.00
5,700.00	6.00	127.57	5,698.16	-27.74	36.07	-27.81	0.00	0.00	0.00
5,800.00	6.00	127.57	5,797.62	-34.12	44.36	-34.20	0.00	0.00	0.00
5,900.00	6.00	127.57	5,897.07	-40.50	52.64	-40.59	0.00	0.00	0.00
6,000.00	6.00	127.57	5,996.52	-46.87	60.93	-46.98	0.00	0.00	0.00
6,100.00	6.00	127.57	6,095.97	-53.25	69.22	-53.37	0.00	0.00	0.00
6,200.00	6.00	127.57	6,195.42	-59.62	77.51	-59.76	0.00	0.00	0.00
6,300.00	6.00	127.57	6,294.87	-66.00	85.80	-66.15	0.00	0.00	0.00
6,400.00	6.00	127.57	6,394.33	-72.37	94.08	-72.54	0.00	0.00	0.00
6,500.00	6.00	127.57	6,493.78	-78.75	102.37	-78.93	0.00	0.00	0.00
6,600.00	6.00	127.57	6,593.23	-85.12	110.66	-85.32	0.00	0.00	0.00
6,697.30	6.00	127.57	6,690.00	-91.33	118.73	-91.53	0.00	0.00	0.00
Brushy Canyon									
6,700.00	6.00	127.57	6,692.68	-91.50	118.95	-91.71	0.00	0.00	0.00
6,800.00	6.00	127.57	6,792.13	-97.87	127.24	-98.10	0.00	0.00	0.00
6,900.00	6.00	127.57	6,891.59	-104.25	135.52	-104.49	0.00	0.00	0.00
7,000.00	6.00	127.57	6,991.04	-110.63	143.81	-110.88	0.00	0.00	0.00
7,100.00	6.00	127.57	7,090.49	-117.00	152.10	-117.27	0.00	0.00	0.00
7,173.68	6.00	127.57	7,163.76	-121.70	158.21	-121.97	0.00	0.00	0.00
Drop									
7,200.00	5.87	127.57	7,189.94	-123.36	160.37	-123.64	0.50	-0.50	0.00
7,300.00	5.37	127.57	7,289.46	-129.33	168.13	-129.62	0.50	-0.50	0.00
7,400.00	4.87	127.57	7,389.06	-134.77	175.20	-135.08	0.50	-0.50	0.00
7,500.00	4.37	127.57	7,488.74	-139.68	181.59	-140.00	0.50	-0.50	0.00
7,600.00	3.87	127.57	7,588.48	-144.06	187.28	-144.39	0.50	-0.50	0.00
7,700.00	3.37	127.57	7,688.28	-147.91	192.29	-148.25	0.50	-0.50	0.00
7,800.00	2.87	127.57	7,788.13	-151.23	196.60	-151.58	0.50	-0.50	0.00
7,900.00	2.37	127.57	7,888.03	-154.02	200.23	-154.37	0.50	-0.50	0.00
8,000.00	1.87	127.57	7,987.96	-156.28	203.16	-156.63	0.50	-0.50	0.00
8,017.05	1.79	127.57	8,005.00	-156.61	203.59	-156.96	0.50	-0.50	0.00
Madera									
8,100.00	1.37	127.57	8,087.92	-158.00	205.40	-158.36	0.50	-0.50	0.00

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8,137.09	1.19	127.57	8,125.00	-158.51	206.06	-158.86	0.50	-0.50	0.00
Lower Brushy									
8,200.00	0.87	127.57	8,187.90	-159.19	206.95	-159.55	0.50	-0.50	0.00
8,300.00	0.37	127.57	8,287.89	-159.85	207.81	-160.22	0.50	-0.50	0.00
8,367.11	0.04	127.57	8,355.00	-160.00	208.00	-160.36	0.50	-0.50	0.00
1BSLM									
8,374.11	0.00	0.00	8,362.00	-160.00	208.00	-160.36	0.50	-0.50	0.00
Hold									
8,400.00	0.00	0.00	8,387.89	-160.00	208.00	-160.36	0.00	0.00	0.00
8,497.11	0.00	0.00	8,485.00	-160.00	208.00	-160.36	0.00	0.00	0.00
LNRD A									
8,500.00	0.00	0.00	8,487.89	-160.00	208.00	-160.36	0.00	0.00	0.00
8,574.11	0.00	0.00	8,562.00	-160.00	208.00	-160.36	0.00	0.00	0.00
KOP 10° DLS									
8,600.00	2.59	359.90	8,587.88	-159.42	208.00	-159.78	10.00	10.00	0.00
8,650.00	7.59	359.90	8,637.67	-154.98	207.99	-155.34	10.00	10.00	0.00
8,700.00	12.59	359.90	8,686.88	-146.23	207.98	-146.59	10.00	10.00	0.00
8,750.00	17.59	359.90	8,735.14	-133.21	207.95	-133.58	10.00	10.00	0.00
8,800.00	22.59	359.90	8,782.08	-116.04	207.92	-116.41	10.00	10.00	0.00
8,850.00	27.59	359.90	8,827.35	-94.85	207.88	-95.21	10.00	10.00	0.00
8,900.00	32.59	359.90	8,870.60	-69.79	207.84	-70.15	10.00	10.00	0.00
8,911.23	33.71	359.90	8,880.00	-63.65	207.83	-64.01	10.00	10.00	0.00
LNRD B									
8,950.00	37.59	359.90	8,911.50	-41.06	207.79	-41.42	10.00	10.00	0.00
9,000.00	42.59	359.90	8,949.74	-8.87	207.73	-9.23	10.00	10.00	0.00
9,050.00	47.59	359.90	8,985.03	26.53	207.67	26.17	10.00	10.00	0.00
9,100.00	52.59	359.90	9,017.10	64.87	207.60	64.51	10.00	10.00	0.00
9,150.00	57.59	359.90	9,045.71	105.86	207.53	105.50	10.00	10.00	0.00
9,200.00	62.59	359.90	9,070.63	149.19	207.45	148.82	10.00	10.00	0.00
9,250.00	67.59	359.90	9,091.68	194.52	207.37	194.16	10.00	10.00	0.00
9,300.00	72.59	359.90	9,108.71	241.52	207.29	241.15	10.00	10.00	0.00
9,342.90	76.88	359.90	9,120.00	282.89	207.21	282.53	10.00	10.00	0.00
LNRD C									
9,350.00	77.59	359.90	9,121.57	289.82	207.20	289.45	10.00	10.00	0.00
9,400.00	82.59	359.90	9,130.17	339.05	207.11	338.69	10.00	10.00	0.00
9,450.00	87.59	359.90	9,134.45	388.85	207.02	388.49	10.00	10.00	0.00
9,474.11	90.00	359.90	9,134.96	412.95	206.98	412.59	10.00	10.00	0.00
LP									
9,500.00	90.00	359.90	9,134.96	438.85	206.94	438.49	0.00	0.00	0.00
9,600.00	90.00	359.90	9,134.96	538.85	206.76	538.49	0.00	0.00	0.00
9,700.00	90.00	359.90	9,134.96	638.85	206.58	638.49	0.00	0.00	0.00
9,800.00	90.00	359.90	9,134.96	738.85	206.40	738.49	0.00	0.00	0.00
9,900.00	90.00	359.90	9,134.96	838.85	206.23	838.49	0.00	0.00	0.00
10,000.00	90.00	359.90	9,134.96	938.85	206.05	938.49	0.00	0.00	0.00
10,100.00	90.00	359.90	9,134.96	1,038.85	205.87	1,038.49	0.00	0.00	0.00
10,200.00	90.00	359.90	9,134.96	1,138.85	205.69	1,138.49	0.00	0.00	0.00
10,300.00	90.00	359.90	9,134.96	1,238.85	205.51	1,238.49	0.00	0.00	0.00
10,400.00	90.00	359.90	9,134.96	1,338.85	205.34	1,338.49	0.00	0.00	0.00
10,500.00	90.00	359.90	9,134.96	1,438.85	205.16	1,438.49	0.00	0.00	0.00
10,600.00	90.00	359.90	9,134.96	1,538.85	204.98	1,538.49	0.00	0.00	0.00
10,700.00	90.00	359.90	9,134.97	1,638.85	204.80	1,638.49	0.00	0.00	0.00
10,800.00	90.00	359.90	9,134.97	1,738.85	204.63	1,738.49	0.00	0.00	0.00
10,900.00	90.00	359.90	9,134.97	1,838.85	204.45	1,838.49	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Single User Db
Company: DEVON ENERGY
Project: Lea County, NM (NAD-83)
Site: Cotton Draw Unit
Well: 355H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 355H
TVD Reference: 3408.1' GE + 25' KB @ 3433.10usft
MD Reference: 3408.1' GE + 25' KB @ 3433.10usft
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)
11,000.00	90.00	359.90	9,134.97	1,938.85	204.27	1,938.49	0.00	0.00	0.00
11,100.00	90.00	359.90	9,134.97	2,038.85	204.09	2,038.49	0.00	0.00	0.00
11,200.00	90.00	359.90	9,134.97	2,138.84	203.92	2,138.49	0.00	0.00	0.00
11,300.00	90.00	359.90	9,134.97	2,238.84	203.74	2,238.49	0.00	0.00	0.00
11,400.00	90.00	359.90	9,134.97	2,338.84	203.56	2,338.49	0.00	0.00	0.00
11,500.00	90.00	359.90	9,134.97	2,438.84	203.38	2,438.49	0.00	0.00	0.00
11,600.00	90.00	359.90	9,134.97	2,538.84	203.21	2,538.49	0.00	0.00	0.00
11,700.00	90.00	359.90	9,134.97	2,638.84	203.03	2,638.49	0.00	0.00	0.00
11,800.00	90.00	359.90	9,134.97	2,738.84	202.85	2,738.49	0.00	0.00	0.00
11,900.00	90.00	359.90	9,134.97	2,838.84	202.67	2,838.49	0.00	0.00	0.00
12,000.00	90.00	359.90	9,134.97	2,938.84	202.49	2,938.49	0.00	0.00	0.00
12,100.00	90.00	359.90	9,134.97	3,038.84	202.32	3,038.49	0.00	0.00	0.00
12,200.00	90.00	359.90	9,134.97	3,138.84	202.14	3,138.49	0.00	0.00	0.00
12,300.00	90.00	359.90	9,134.98	3,238.84	201.96	3,238.49	0.00	0.00	0.00
12,400.00	90.00	359.90	9,134.98	3,338.84	201.78	3,338.49	0.00	0.00	0.00
12,500.00	90.00	359.90	9,134.98	3,438.84	201.61	3,438.49	0.00	0.00	0.00
12,600.00	90.00	359.90	9,134.98	3,538.84	201.43	3,538.49	0.00	0.00	0.00
12,700.00	90.00	359.90	9,134.98	3,638.84	201.25	3,638.49	0.00	0.00	0.00
12,800.00	90.00	359.90	9,134.98	3,738.84	201.07	3,738.49	0.00	0.00	0.00
12,900.00	90.00	359.90	9,134.98	3,838.84	200.90	3,838.49	0.00	0.00	0.00
13,000.00	90.00	359.90	9,134.98	3,938.84	200.72	3,938.49	0.00	0.00	0.00
13,100.00	90.00	359.90	9,134.98	4,038.84	200.54	4,038.49	0.00	0.00	0.00
13,200.00	90.00	359.90	9,134.98	4,138.84	200.36	4,138.49	0.00	0.00	0.00
13,300.00	90.00	359.90	9,134.98	4,238.84	200.19	4,238.49	0.00	0.00	0.00
13,400.00	90.00	359.90	9,134.98	4,338.84	200.01	4,338.49	0.00	0.00	0.00
13,500.00	90.00	359.90	9,134.98	4,438.84	199.83	4,438.49	0.00	0.00	0.00
13,600.00	90.00	359.90	9,134.98	4,538.84	199.65	4,538.49	0.00	0.00	0.00
13,700.00	90.00	359.90	9,134.98	4,638.84	199.47	4,638.49	0.00	0.00	0.00
13,800.00	90.00	359.90	9,134.98	4,738.84	199.30	4,738.49	0.00	0.00	0.00
13,900.00	90.00	359.90	9,134.98	4,838.84	199.12	4,838.49	0.00	0.00	0.00
14,000.00	90.00	359.90	9,134.99	4,938.84	198.94	4,938.49	0.00	0.00	0.00
14,100.00	90.00	359.90	9,134.99	5,038.84	198.76	5,038.49	0.00	0.00	0.00
14,200.00	90.00	359.90	9,134.99	5,138.84	198.59	5,138.49	0.00	0.00	0.00
14,300.00	90.00	359.90	9,134.99	5,238.84	198.41	5,238.49	0.00	0.00	0.00
14,400.00	90.00	359.90	9,134.99	5,338.84	198.23	5,338.49	0.00	0.00	0.00
14,500.00	90.00	359.90	9,134.99	5,438.84	198.05	5,438.49	0.00	0.00	0.00
14,600.00	90.00	359.90	9,134.99	5,538.84	197.88	5,538.49	0.00	0.00	0.00
14,700.00	90.00	359.90	9,134.99	5,638.84	197.70	5,638.49	0.00	0.00	0.00
14,800.00	90.00	359.90	9,134.99	5,738.84	197.52	5,738.49	0.00	0.00	0.00
14,900.00	90.00	359.90	9,134.99	5,838.84	197.34	5,838.49	0.00	0.00	0.00
15,000.00	90.00	359.90	9,134.99	5,938.84	197.17	5,938.49	0.00	0.00	0.00
15,100.00	90.00	359.90	9,134.99	6,038.84	196.99	6,038.49	0.00	0.00	0.00
15,200.00	90.00	359.90	9,134.99	6,138.84	196.81	6,138.49	0.00	0.00	0.00
15,300.00	90.00	359.90	9,134.99	6,238.84	196.63	6,238.49	0.00	0.00	0.00
15,400.00	90.00	359.90	9,134.99	6,338.84	196.45	6,338.49	0.00	0.00	0.00
15,500.00	90.00	359.90	9,134.99	6,438.84	196.28	6,438.49	0.00	0.00	0.00
15,600.00	90.00	359.90	9,134.99	6,538.84	196.10	6,538.49	0.00	0.00	0.00
15,700.00	90.00	359.90	9,135.00	6,638.84	195.92	6,638.49	0.00	0.00	0.00
15,800.00	90.00	359.90	9,135.00	6,738.84	195.74	6,738.49	0.00	0.00	0.00
15,900.00	90.00	359.90	9,135.00	6,838.84	195.57	6,838.49	0.00	0.00	0.00
16,000.00	90.00	359.90	9,135.00	6,938.84	195.39	6,938.49	0.00	0.00	0.00
16,100.00	90.00	359.90	9,135.00	7,038.84	195.21	7,038.49	0.00	0.00	0.00
16,200.00	90.00	359.90	9,135.00	7,138.84	195.03	7,138.49	0.00	0.00	0.00
16,300.00	90.00	359.90	9,135.00	7,238.84	194.86	7,238.49	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Single User Db
 Company: DEVON ENERGY
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 Site: Cotton Draw Unit
 Well: 355H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well 355H
 TVD Reference: 3408.1' GE + 25' KB @ 3433.10usft
 MD Reference: 3408.1' GE + 25' KB @ 3433.10usft
 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)
16,400.00	90.00	359.90	9,135.00	7,338.84	194.68	7,338.49	0.00	0.00	0.00
16,472.32	90.00	359.90	9,135.00	7,411.16	194.55	7,410.81	0.00	0.00	0.00
TD - PBHL (CDU 355H)									

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 (CDU 355H)	0.00	0.00	0.00	0.00	0.00	409,288.48	735,004.79	32° 7' 25.203 N	103° 42' 27.865 W
- plan hits target center									
- Point									
PBHL (CDU 355H)	0.00	0.00	9,135.00	7,411.16	194.55	416,699.64	735,199.34	32° 8' 38.530 N	103° 42' 25.102 W
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
615.00	615.00	Rustler		0.00	
945.00	945.00	Salado		0.00	
955.00	955.00	Top of Salt		0.00	
4,220.00	4,220.00	Base of Salt		0.00	
4,465.00	4,465.00	Delaware		0.00	
4,470.00	4,470.00	Bell Canyon		0.00	
5,405.43	5,405.00	Cherry Canyon		0.00	
6,697.30	6,690.00	Brushy Canyon		0.00	
8,017.05	8,005.00	Madera		0.00	
8,137.09	8,125.00	Lower Brushy		0.00	
8,367.11	8,355.00	1BSLM		0.00	
8,497.11	8,485.00	LNRD A		0.00	
8,911.23	8,880.00	LNRD B		0.00	
9,342.90	9,120.00	LNRD C		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,965.00	4,965.00	0.00	0.00	Nudge
5,565.22	5,564.12	-19.15	24.90	Hold
7,173.68	7,163.76	-121.70	158.21	Drop
8,374.11	8,362.00	-160.00	208.00	Hold
8,574.11	8,562.00	-160.00	208.00	KOP 10° DLS
9,474.11	9,134.96	412.95	206.98	LP
16,472.32	9,135.00	7,411.16	194.55	TD