

DEVON ENERGY

Eddy County, NM (NAD-83)

Cotton Draw Unit

253H

OH

Plan: Plan #1

Standard Planning Report

14 October, 2014

NOV 10 2015

LEAM Drilling Systems LLC
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 253H
Company:	DEVON ENERGY	TVD Reference:	3448.2' GL + 25' RKB @ 94' 3.20usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	3448.2' GL + 25' RKB @ 94' 3.20usft (Original Well Elev)
Site:	Cotton Draw Unit	North Reference:	Grid
Well:	253H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OR		
Design:	Plan #1		

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

Site:	Cotton Draw Unit				
Site Position:		Northing:	419,194.51 usft	Latitude:	32° 9' 3.901 N
From:	Map	Easting:	722,955.98 usft	Longitude:	103° 44' 47.345 W
Position Uncertainty:		Slot Radius:	13-3/16 "	Grid Convergence:	0.31 °

Well:	253H					
Well Position	+N/-S	280.09 usft	Northing:	419,474.60 usft	Latitude:	32° 9' 6.018 N
	+E/-W	11,754.08 usft	Easting:	734,710.04 usft	Longitude:	103° 42' 30.606 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	3,473.20 usft	Ground Level:	3,448.20 usft

Wellbore:	OR				
Magnetics:	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	10/14/2014	7.40	60.00	48,182

Design:	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	177.67

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	
7,717.04	0.00	0.00	7,717.04	0.00	0.00	0.00	0.00	0.00	0.00	
8,617.04	90.00	177.67	8,290.00	-572.48	23.33	10.00	10.00	0.00	177.67	
12,844.87	90.00	177.67	8,290.00	-4,796.80	195.51	0.00	0.00	0.00	0.00	PBHL (CDU 253H)

LEAM Drilling Systems LLC
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinates:	Barranca	Well:	253H
Company:	DECON ENERGY	TVA Reference:		3448.2 GL = 24' RMB @ 3473.20' SH	
Project:	Essex County NM (NAD 83)	MD Reference:		3448.2 GL = 24' RMB @ 3473.20' SH	
Site:	Cotton Draw Well	North Reference:		Original Well Elev	
Well:	253H	Survey Calculation Method:		Grid	
Wellbore:	CH			Minimum Curvature	
Design:	Plan A1				

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	N/S (feet)	E/W (ft)	Vertical Section (ft)	Doubled Rate (ft/1000ft)	Build Rate (ft/1000ft)	Tort Rate (ft/1000ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHE (CDU 253H)										
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
745.00	0.00	0.00	745.00	0.00	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	0.00
900.00	0.00	0.00	900.00	0.00	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	0.00
1,084.00	0.00	0.00	1,084.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado										
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,153.00	0.00	0.00	1,153.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt										
1,200.00	0.00	0.00	1,200.00	0.00	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	0.00
1,400.00	0.00	0.00	1,400.00	0.00	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	0.00
1,600.00	0.00	0.00	1,600.00	0.00	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	0.00
1,800.00	0.00	0.00	1,800.00	0.00	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	0.00
2,000.00	0.00	0.00	2,000.00	0.00	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	0.00
2,200.00	0.00	0.00	2,200.00	0.00	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	0.00
2,400.00	0.00	0.00	2,400.00	0.00	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	0.00
2,600.00	0.00	0.00	2,600.00	0.00	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	0.00
2,800.00	0.00	0.00	2,800.00	0.00	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	0.00
3,000.00	0.00	0.00	3,000.00	0.00	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	0.00
3,200.00	0.00	0.00	3,200.00	0.00	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	0.00
3,400.00	0.00	0.00	3,400.00	0.00	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	0.00
3,600.00	0.00	0.00	3,600.00	0.00	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	0.00
3,800.00	0.00	0.00	3,800.00	0.00	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	0.00
4,000.00	0.00	0.00	4,000.00	0.00	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	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,270.00	0.00	0.00	4,270.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LEAM Drilling Systems LLC
Planning Report

Database:	EDM5000.1 Single User DB	Local Coordinate Reference:	Well: 253H
Company:	BEACON ENERGY	TVD Reference:	2448.2 GL 3.25 RKB @ 3473.20feet Original VWS Elev:
Project:	Eddy County, NM (NAD 83)	MD Reference:	2448.2 GL 3.25 RKB @ 3473.20feet Original VWS Elev:
Site:	Good Draw Unit	North Reference:	3rd
Well:	253H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Display:	Plan &		

Planned Survey									
Measured Depth (feet)	Inclination (°)	Azimuth (°)	Vertical Depth (feet)	N-S (feet)	E-W (feet)	Vertical Section (feet)	Dipless Rate (1/1000ft)	Bold Rate (1/1000ft)	Turn Rate (1/1000ft)
Base 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
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,511.00	0.00	0.00	4,511.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
4,548.00	0.00	0.00	4,548.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
4,800.00	0.00	0.00	4,800.00	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
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,458.00	0.00	0.00	5,458.00	0.00	0.00	0.00	0.00	0.00	0.00
Charry Canyon									
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,776.00	0.00	0.00	6,776.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,717.04	0.00	0.00	7,717.04	0.00	0.00	0.00	0.00	0.00	0.00
KOP 10' DLS									
7,750.00	3.30	177.67	7,749.98	-0.95	0.04	0.95	10.00	10.00	0.00
7,800.00	8.30	177.67	7,799.71	-5.99	0.24	6.00	10.00	10.00	0.00
7,850.00	13.30	177.67	7,848.81	-15.34	0.63	15.36	10.00	10.00	0.00
7,900.00	18.30	177.67	7,896.91	-28.94	1.18	28.96	10.00	10.00	0.00
7,950.00	23.30	177.67	7,943.63	-48.67	1.90	46.71	10.00	10.00	0.00

LEAM Drilling Systems LLC Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 453H
Company:	DEVON ENERGY	N/D Reference:	3448' CL + 25' RKB @ 4473.20' (ft)
Project:	Eddy County, NM (NA 5-81)	MB Reference:	(Original Well Elev)
Site:	Cotton Draw, NM	N/D Reference:	3448' CL + 25' RKB @ 4473.20' (ft)
Well:	253H	Survey Calculation Method:	(Original Well Elev)
Wellbore:	CL		3448'
Design:	Plan #1		Minimum Curvature

Planned Survey									
Measured Depth (feet)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	N/S (feet)	E/W (feet)	Vertical Section (ft)	Depth Rate (1000ft)	Build Rate (1000ft)	Turn Rate (1000ft)
8,000.00	28.30	177.67	7,988.64	-68.40	2.79	68.46	10.00	10.00	0.00
8,050.00	33.30	177.67	8,031.57	-93.97	3.83	94.05	10.00	10.00	0.00
8,100.00	38.30	177.67	8,072.12	-123.19	5.02	123.29	10.00	10.00	0.00
8,150.00	43.30	177.67	8,109.96	-155.82	6.36	155.95	10.00	10.00	0.00
8,200.00	48.30	177.67	8,144.81	-191.62	7.81	191.78	10.00	10.00	0.00
8,250.00	53.30	177.67	8,176.40	-230.32	9.39	230.51	10.00	10.00	0.00
8,300.00	58.30	177.67	8,204.50	-271.62	11.07	271.85	10.00	10.00	0.00
8,350.00	63.30	177.67	8,228.89	-315.22	12.85	315.48	10.00	10.00	0.00
8,400.00	68.30	177.67	8,249.38	-360.77	14.70	361.07	10.00	10.00	0.00
8,450.00	73.30	177.67	8,265.82	-407.93	16.63	408.27	10.00	10.00	0.00
8,500.00	78.30	177.67	8,278.09	-456.35	18.60	456.73	10.00	10.00	0.00
8,550.00	83.30	177.67	8,286.08	-505.85	20.61	508.07	10.00	10.00	0.00
8,600.00	88.30	177.67	8,289.75	-555.46	22.64	555.92	10.00	10.00	0.00
8,617.04	90.00	177.67	8,290.00	-572.48	23.33	572.96	10.00	10.00	0.00
LP									
8,700.00	90.00	177.67	8,290.00	-655.37	26.71	655.92	0.00	0.00	0.00
8,800.00	90.00	177.67	8,290.00	-755.29	30.78	755.92	0.00	0.00	0.00
8,900.00	90.00	177.67	8,290.00	-855.21	34.86	855.92	0.00	0.00	0.00
9,000.00	90.00	177.67	8,290.00	-955.12	38.93	955.92	0.00	0.00	0.00
9,100.00	90.00	177.67	8,290.00	-1,055.04	43.00	1,055.92	0.00	0.00	0.00
9,200.00	90.00	177.67	8,290.00	-1,154.96	47.07	1,155.92	0.00	0.00	0.00
9,300.00	90.00	177.67	8,290.00	-1,254.87	51.15	1,255.92	0.00	0.00	0.00
9,400.00	90.00	177.67	8,290.00	-1,354.79	55.22	1,355.92	0.00	0.00	0.00
9,500.00	90.00	177.67	8,290.00	-1,454.71	59.29	1,455.92	0.00	0.00	0.00
9,600.00	90.00	177.67	8,290.00	-1,554.62	63.36	1,555.92	0.00	0.00	0.00
9,700.00	90.00	177.67	8,290.00	-1,654.54	67.44	1,655.92	0.00	0.00	0.00
9,800.00	90.00	177.67	8,290.00	-1,754.46	71.51	1,755.92	0.00	0.00	0.00
9,900.00	90.00	177.67	8,290.00	-1,854.38	75.58	1,855.92	0.00	0.00	0.00
10,000.00	90.00	177.67	8,290.00	-1,954.29	79.65	1,955.92	0.00	0.00	0.00
10,100.00	90.00	177.67	8,290.00	-2,054.21	83.73	2,055.92	0.00	0.00	0.00
10,200.00	90.00	177.67	8,290.00	-2,154.13	87.80	2,155.92	0.00	0.00	0.00
10,300.00	90.00	177.67	8,290.00	-2,254.04	91.87	2,255.92	0.00	0.00	0.00
10,400.00	90.00	177.67	8,290.00	-2,353.96	95.94	2,355.92	0.00	0.00	0.00
10,500.00	90.00	177.67	8,290.00	-2,453.88	100.02	2,455.92	0.00	0.00	0.00
10,600.00	90.00	177.67	8,290.00	-2,553.80	104.09	2,555.92	0.00	0.00	0.00
10,700.00	90.00	177.67	8,290.00	-2,653.71	108.16	2,655.92	0.00	0.00	0.00
10,800.00	90.00	177.67	8,290.00	-2,753.63	112.23	2,755.92	0.00	0.00	0.00
10,900.00	90.00	177.67	8,290.00	-2,853.55	116.31	2,855.92	0.00	0.00	0.00
11,000.00	90.00	177.67	8,290.00	-2,953.46	120.38	2,955.92	0.00	0.00	0.00
11,100.00	90.00	177.67	8,290.00	-3,053.38	124.45	3,055.92	0.00	0.00	0.00
11,200.00	90.00	177.67	8,290.00	-3,153.30	128.52	3,155.92	0.00	0.00	0.00
11,300.00	90.00	177.67	8,290.00	-3,253.21	132.60	3,255.92	0.00	0.00	0.00
11,400.00	90.00	177.67	8,290.00	-3,353.13	136.67	3,355.92	0.00	0.00	0.00
11,500.00	90.00	177.67	8,290.00	-3,453.05	140.74	3,455.92	0.00	0.00	0.00
11,600.00	90.00	177.67	8,290.00	-3,552.97	144.81	3,555.92	0.00	0.00	0.00
11,700.00	90.00	177.67	8,290.00	-3,652.88	148.89	3,655.92	0.00	0.00	0.00
11,800.00	90.00	177.67	8,290.00	-3,752.80	152.96	3,755.92	0.00	0.00	0.00
11,900.00	90.00	177.67	8,290.00	-3,852.72	157.03	3,855.92	0.00	0.00	0.00
12,000.00	90.00	177.67	8,290.00	-3,952.63	161.10	3,955.92	0.00	0.00	0.00
12,100.00	90.00	177.67	8,290.00	-4,052.55	165.18	4,055.92	0.00	0.00	0.00
12,200.00	90.00	177.67	8,290.00	-4,152.47	169.25	4,155.92	0.00	0.00	0.00
12,300.00	90.00	177.67	8,290.00	-4,252.39	173.32	4,255.92	0.00	0.00	0.00

LEAM Drilling Systems LLC
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 253H
Company:	DEVON ENERGY	TVS Reference:	3448.2 GL + 25° RKB @ 3473.200sh
Project:	Eddy County, NM (NAD 83)	MT Reference:	(Original Well Elev)
Site:	Common Draw Unit	North Reference:	3448.2 GL + 25° RKB @ 3473.200sh
Well:	253H	Survey Calculation Method:	(Original Well Elev)
Wellbore:	OH		CRD
Design:	Plan #1		Minimum Curvature

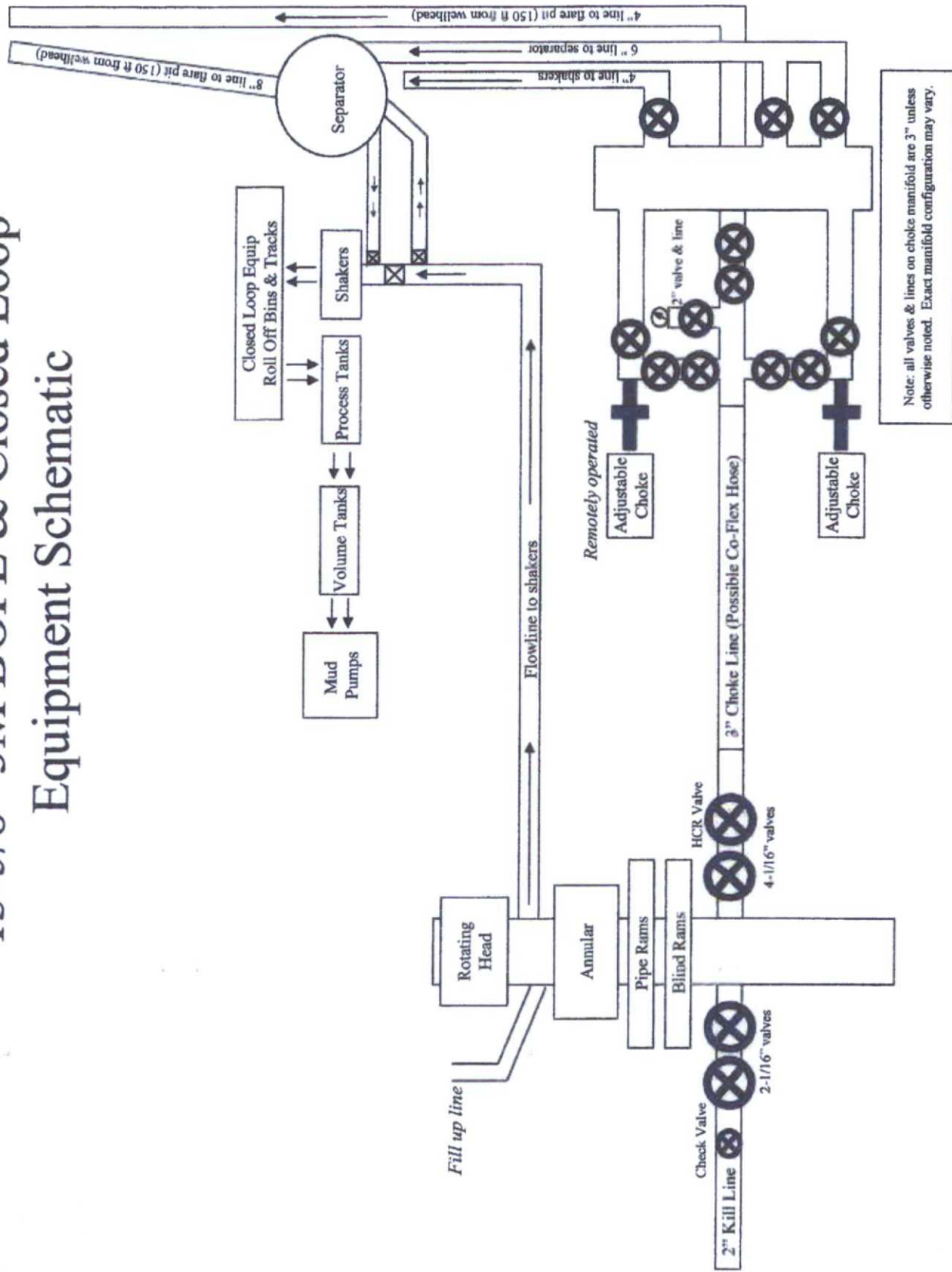
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (1/1000usft)	Built Rate (1/1000usft)	True Rate (1/1000usft)
12,400.00	90.00	177.67	8,290.00	-4,352.30	177.39	4,355.92	0.00	0.00	0.00
12,500.00	90.00	177.67	8,290.00	-4,452.22	181.47	4,455.92	0.00	0.00	0.00
12,600.00	90.00	177.67	8,290.00	-4,552.14	185.54	4,555.92	0.00	0.00	0.00
12,700.00	90.00	177.67	8,290.00	-4,652.05	189.61	4,655.92	0.00	0.00	0.00
12,800.00	90.00	177.67	8,290.00	-4,751.97	193.68	4,755.92	0.00	0.00	0.00
12,844.87	90.00	177.67	8,290.00	-4,796.80	195.51	4,800.78	0.00	0.00	0.00
TD - PBHL (CDU 253H)									

Design Targets									
Target Name	Hit Miss Target	Dip Angle (°)	Dip Dir (°)	WD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Eastng (usft)	Latitude Longitude
SHL (CDU 253H) - plan hits target center - Point		0.00	0.00	0.00	0.00	0.00	419,474.60	734,710.04	32° 9' 6.018 N 103° 42' 30.606 W
PBHL (CDU 253H) - plan hits target center - Point		0.00	0.00	8,290.00	-4,796.80	195.51	414,677.80	734,906.55	32° 8' 18.539 N 103° 42' 28.656 W

Formations									
Measured Depth (usft)	Vertical Depth (usft)	Name	Thickness	Dip (°)	Dip Direction (°)				
745.00	745.00	Rustler		0.00					
1,064.00	1,064.00	Salado		0.00					
1,153.00	1,153.00	Top Silt		0.00					
4,270.00	4,270.00	Base Salt		0.00					
4,511.00	4,511.00	Delaware		0.00					
4,548.00	4,548.00	Bell Canyon		0.00					
5,458.00	5,458.00	Cherry Canyon		0.00					
6,776.00	6,776.00	Brushy Canyon		0.00					

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Comment
7,717.04	7,717.04	0.00	0.00	KOP 10° DLS
8,617.04	8,290.00	-572.48	23.33	LP
12,844.87	8,290.00	-4,796.80	195.51	TD

13-5/8" 3M BOPE & Closed Loop Equipment Schematic



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, L.P.

Cotton Draw Unit 253H

1. Drilling Nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated filings will be in operable condition to withstand a minimum of 3000psi working pressure.
4. All fittings will be flanged.
5. A fill bore safety valve tested to a minimum of 3000psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.