

3002543070

HOBBS OCD

FEB 16 2016

RECEIVED



Legacy Reserves

Lea County, NM

Lea Unit

#36H

OH

Plan: Plan #1

Standard Planning Report

02 September, 2015



FEB 18 2016

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #36H
TVD Reference: KB @ 3695.0usft (McVay 4)
MD Reference: KB @ 3695.0usft (McVay 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Lea Unit				
Site Position:		Northing:	567,504.40 usft	Latitude:	32° 33' 26.922 N
From:	Map	Easting:	753,784.90 usft	Longitude:	103° 30' 34.732 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.44 °

Well	#36H					
Well Position	+N/-S	-19.3 usft	Northing:	567,485.10 usft	Latitude:	32° 33' 26.901 N
	+E/-W	-2,226.0 usft	Easting:	751,558.90 usft	Longitude:	103° 31' 0.741 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level:	3,677.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (")	Dip Angle (")	Field Strength (nT)
	IGRF2015	9/2/2015	7.15	60.40	48,325

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.15

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,027.0	0.00	0.00	10,027.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,927.0	90.00	13.79	10,600.0	556.4	136.6	10.00	10.00	0.00	13.79	
11,642.2	90.00	359.49	10,600.0	1,265.0	219.0	2.00	0.00	-2.00	-90.00	
18,331.2	90.00	359.49	10,600.0	7,953.7	159.1	0.00	0.00	0.00	0.00	BHL (LU #36H/OH)

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #36H
KB @ 3695.0usft (McVay 4)
KB @ 3695.0usft (McVay 4)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #36H
TVD Reference: KB @ 3695.0usft (McVay 4)
MD Reference: KB @ 3695.0usft (McVay 4)
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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,027.0	0.00	0.00	10,027.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 10.00									
10,050.0	2.30	13.79	10,050.0	0.4	0.1	0.5	10.00	10.00	0.00
10,100.0	7.30	13.79	10,099.8	4.5	1.1	4.5	10.00	10.00	0.00
10,150.0	12.30	13.79	10,149.1	12.8	3.1	12.8	10.00	10.00	0.00
10,200.0	17.30	13.79	10,197.4	25.2	6.2	25.3	10.00	10.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #36H
TVD Reference: KB @ 3695.0usft (McVay 4)
MD Reference: KB @ 3695.0usft (McVay 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,250.0	22.30	13.79	10,244.4	41.6	10.2	41.8	10.00	10.00	0.00
10,300.0	27.30	13.79	10,289.8	62.0	15.2	62.3	10.00	10.00	0.00
10,350.0	32.30	13.79	10,333.2	86.1	21.1	86.5	10.00	10.00	0.00
10,400.0	37.30	13.79	10,374.2	113.8	27.9	114.3	10.00	10.00	0.00
10,450.0	42.30	13.79	10,412.6	144.9	35.6	145.6	10.00	10.00	0.00
10,500.0	47.30	13.79	10,448.1	179.1	44.0	179.9	10.00	10.00	0.00
10,550.0	52.30	13.79	10,480.3	216.2	53.1	217.2	10.00	10.00	0.00
10,600.0	57.30	13.79	10,509.2	255.8	62.8	257.0	10.00	10.00	0.00
10,650.0	62.30	13.79	10,534.3	297.8	73.1	299.2	10.00	10.00	0.00
10,700.0	67.30	13.79	10,555.6	341.7	83.9	343.3	10.00	10.00	0.00
10,750.0	72.30	13.79	10,572.8	387.3	95.0	389.1	10.00	10.00	0.00
10,800.0	77.30	13.79	10,585.9	434.1	106.5	436.2	10.00	10.00	0.00
10,850.0	82.30	13.79	10,594.8	481.9	118.3	484.2	10.00	10.00	0.00
10,900.0	87.30	13.79	10,599.3	530.2	130.1	532.7	10.00	10.00	0.00
10,927.0	90.00	13.79	10,600.0	556.4	136.6	559.1	10.00	10.00	0.00
EOC/TURN - Start DLS 2.00 TFO -90.00									
11,000.0	90.00	12.33	10,600.0	627.6	153.1	630.5	2.00	0.00	-2.00
11,100.0	90.00	10.33	10,600.0	725.6	172.7	728.9	2.00	0.00	-2.00
11,200.0	90.00	8.33	10,600.0	824.3	188.9	827.9	2.00	0.00	-2.00
11,300.0	90.00	6.33	10,600.0	923.4	201.7	927.3	2.00	0.00	-2.00
11,400.0	90.00	4.33	10,600.0	1,023.0	211.0	1,027.0	2.00	0.00	-2.00
11,500.0	90.00	2.33	10,600.0	1,122.8	216.8	1,126.9	2.00	0.00	-2.00
11,600.0	90.00	0.33	10,600.0	1,222.8	219.1	1,226.9	2.00	0.00	-2.00
11,642.2	90.00	359.49	10,600.0	1,265.0	219.0	1,269.1	2.00	0.00	-2.00
END TURN - Start 6689.0 hold at 11642.2 MD									
11,700.0	90.00	359.49	10,600.0	1,322.8	218.5	1,326.9	0.00	0.00	0.00
11,800.0	90.00	359.49	10,600.0	1,422.8	217.6	1,426.9	0.00	0.00	0.00
11,900.0	90.00	359.49	10,600.0	1,522.8	216.7	1,526.8	0.00	0.00	0.00
12,000.0	90.00	359.49	10,600.0	1,622.8	215.8	1,626.8	0.00	0.00	0.00
12,100.0	90.00	359.49	10,600.0	1,722.8	214.9	1,726.7	0.00	0.00	0.00
12,200.0	90.00	359.49	10,600.0	1,822.8	214.0	1,826.7	0.00	0.00	0.00
12,300.0	90.00	359.49	10,600.0	1,922.8	213.1	1,926.7	0.00	0.00	0.00
12,400.0	90.00	359.49	10,600.0	2,022.8	212.2	2,026.6	0.00	0.00	0.00
12,500.0	90.00	359.49	10,600.0	2,122.8	211.3	2,126.6	0.00	0.00	0.00
12,600.0	90.00	359.49	10,600.0	2,222.8	210.5	2,226.5	0.00	0.00	0.00
12,700.0	90.00	359.49	10,600.0	2,322.8	209.6	2,326.5	0.00	0.00	0.00
12,800.0	90.00	359.49	10,600.0	2,422.8	208.7	2,426.4	0.00	0.00	0.00
12,900.0	90.00	359.49	10,600.0	2,522.8	207.8	2,526.4	0.00	0.00	0.00
13,000.0	90.00	359.49	10,600.0	2,622.8	206.9	2,626.4	0.00	0.00	0.00
13,100.0	90.00	359.49	10,600.0	2,722.7	206.0	2,726.3	0.00	0.00	0.00
13,200.0	90.00	359.49	10,600.0	2,822.7	205.1	2,826.3	0.00	0.00	0.00
13,300.0	90.00	359.49	10,600.0	2,922.7	204.2	2,926.2	0.00	0.00	0.00
13,400.0	90.00	359.49	10,600.0	3,022.7	203.3	3,026.2	0.00	0.00	0.00
13,500.0	90.00	359.49	10,600.0	3,122.7	202.4	3,126.2	0.00	0.00	0.00
13,600.0	90.00	359.49	10,600.0	3,222.7	201.5	3,226.1	0.00	0.00	0.00
13,700.0	90.00	359.49	10,600.0	3,322.7	200.6	3,326.1	0.00	0.00	0.00
13,800.0	90.00	359.49	10,600.0	3,422.7	199.7	3,426.0	0.00	0.00	0.00
13,900.0	90.00	359.49	10,600.0	3,522.7	198.8	3,526.0	0.00	0.00	0.00
14,000.0	90.00	359.49	10,600.0	3,622.7	197.9	3,625.9	0.00	0.00	0.00
14,100.0	90.00	359.49	10,600.0	3,722.7	197.0	3,725.9	0.00	0.00	0.00
14,200.0	90.00	359.49	10,600.0	3,822.7	196.1	3,825.9	0.00	0.00	0.00
14,300.0	90.00	359.49	10,600.0	3,922.7	195.2	3,925.8	0.00	0.00	0.00
14,400.0	90.00	359.49	10,600.0	4,022.7	194.3	4,025.8	0.00	0.00	0.00
14,500.0	90.00	359.49	10,600.0	4,122.7	193.4	4,125.7	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #36H
KB @ 3695.0usft (McVay 4)
KB @ 3695.0usft (McVay 4)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,600.0	90.00	359.49	10,600.0	4,222.7	192.5	4,225.7	0.00	0.00	0.00
14,700.0	90.00	359.49	10,600.0	4,322.7	191.6	4,325.7	0.00	0.00	0.00
14,800.0	90.00	359.49	10,600.0	4,422.7	190.7	4,425.6	0.00	0.00	0.00
14,900.0	90.00	359.49	10,600.0	4,522.7	189.8	4,525.6	0.00	0.00	0.00
15,000.0	90.00	359.49	10,600.0	4,622.7	188.9	4,625.5	0.00	0.00	0.00
15,100.0	90.00	359.49	10,600.0	4,722.7	188.1	4,725.5	0.00	0.00	0.00
15,200.0	90.00	359.49	10,600.0	4,822.7	187.2	4,825.4	0.00	0.00	0.00
15,300.0	90.00	359.49	10,600.0	4,922.7	186.3	4,925.4	0.00	0.00	0.00
15,400.0	90.00	359.49	10,600.0	5,022.7	185.4	5,025.4	0.00	0.00	0.00
15,500.0	90.00	359.49	10,600.0	5,122.6	184.5	5,125.3	0.00	0.00	0.00
15,600.0	90.00	359.49	10,600.0	5,222.6	183.6	5,225.3	0.00	0.00	0.00
15,700.0	90.00	359.49	10,600.0	5,322.6	182.7	5,325.2	0.00	0.00	0.00
15,800.0	90.00	359.49	10,600.0	5,422.6	181.8	5,425.2	0.00	0.00	0.00
15,900.0	90.00	359.49	10,600.0	5,522.6	180.9	5,525.1	0.00	0.00	0.00
16,000.0	90.00	359.49	10,600.0	5,622.6	180.0	5,625.1	0.00	0.00	0.00
16,100.0	90.00	359.49	10,600.0	5,722.6	179.1	5,725.1	0.00	0.00	0.00
16,200.0	90.00	359.49	10,600.0	5,822.6	178.2	5,825.0	0.00	0.00	0.00
16,300.0	90.00	359.49	10,600.0	5,922.6	177.3	5,925.0	0.00	0.00	0.00
16,400.0	90.00	359.49	10,600.0	6,022.6	176.4	6,024.9	0.00	0.00	0.00
16,500.0	90.00	359.49	10,600.0	6,122.6	175.5	6,124.9	0.00	0.00	0.00
16,600.0	90.00	359.49	10,600.0	6,222.6	174.6	6,224.9	0.00	0.00	0.00
16,700.0	90.00	359.49	10,600.0	6,322.6	173.7	6,324.8	0.00	0.00	0.00
16,800.0	90.00	359.49	10,600.0	6,422.6	172.8	6,424.8	0.00	0.00	0.00
16,900.0	90.00	359.49	10,600.0	6,522.6	171.9	6,524.7	0.00	0.00	0.00
17,000.0	90.00	359.49	10,600.0	6,622.6	171.0	6,624.7	0.00	0.00	0.00
17,100.0	90.00	359.49	10,600.0	6,722.6	170.1	6,724.6	0.00	0.00	0.00
17,200.0	90.00	359.49	10,600.0	6,822.6	169.2	6,824.6	0.00	0.00	0.00
17,300.0	90.00	359.49	10,600.0	6,922.6	168.3	6,924.6	0.00	0.00	0.00
17,400.0	90.00	359.49	10,600.0	7,022.6	167.4	7,024.5	0.00	0.00	0.00
17,500.0	90.00	359.49	10,600.0	7,122.6	166.5	7,124.5	0.00	0.00	0.00
17,600.0	90.00	359.49	10,600.0	7,222.6	165.7	7,224.4	0.00	0.00	0.00
17,700.0	90.00	359.49	10,600.0	7,322.6	164.8	7,324.4	0.00	0.00	0.00
17,800.0	90.00	359.49	10,600.0	7,422.6	163.9	7,424.4	0.00	0.00	0.00
17,900.0	90.00	359.49	10,600.0	7,522.6	163.0	7,524.3	0.00	0.00	0.00
18,000.0	90.00	359.49	10,600.0	7,622.5	162.1	7,624.3	0.00	0.00	0.00
18,100.0	90.00	359.49	10,600.0	7,722.5	161.2	7,724.2	0.00	0.00	0.00
18,200.0	90.00	359.49	10,600.0	7,822.5	160.3	7,824.2	0.00	0.00	0.00
18,300.0	90.00	359.49	10,600.0	7,922.5	159.4	7,924.1	0.00	0.00	0.00
18,331.2	90.00	359.49	10,600.0	7,953.7	159.1	7,955.3	0.00	0.00	0.00
TD at 18331.2									

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM
Site: Lea Unit
Well: #36H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #36H
KB @ 3695.0usft (McVay 4)
KB @ 3695.0usft (McVay 4)
Grid
Minimum Curvature

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EOC (LU #36H/OH Plan - plan hits target center - Point	0.00	0.00	10,600.0	556.4	136.6	568,041.55	751,695.47	32° 33' 32.397 N	103° 30' 59.095 W
BHL (LU #36H/OH) - plan hits target center - Point	0.00	0.00	10,600.0	7,953.7	159.1	575,438.80	751,718.00	32° 34' 45.589 N	103° 30' 58.168 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,027.0	10,027.0	0.0	0.0	KOP - Start Build 10.00
10,927.0	10,600.0	556.4	136.6	EOC/TURN - Start DLS 2.00 TFO -90.00
11,642.2	10,600.0	1,265.0	219.0	END TURN - Start 6689.0 hold at 11642.2 MD
18,331.2	10,600.0	7,953.7	159.1	TD at 18331.2

Legacy Reserves
#36H - Plan #1

Lea County, NM
Lea Unit
Your Ref:

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0		0	0	0	0	0	0
100		0	0	100	0	0	0
200		0	0	200	0	0	0
300		0	0	300	0	0	0
400		0	0	400	0	0	0
500		0	0	500	0	0	0
600		0	0	600	0	0	0
700		0	0	700	0	0	0
800		0	0	800	0	0	0
900		0	0	900	0	0	0
1000		0	0	1000	0	0	0
1100		0	0	1100	0	0	0
1200		0	0	1200	0	0	0
1300		0	0	1300	0	0	0
1400		0	0	1400	0	0	0
1500		0	0	1500	0	0	0
1600		0	0	1600	0	0	0
1700		0	0	1700	0	0	0
1800		0	0	1800	0	0	0
1900		0	0	1900	0	0	0
2000		0	0	2000	0	0	0
2100		0	0	2100	0	0	0
2200		0	0	2200	0	0	0
2300		0	0	2300	0	0	0
2400		0	0	2400	0	0	0
2500		0	0	2500	0	0	0
2600		0	0	2600	0	0	0
2700		0	0	2700	0	0	0
2800		0	0	2800	0	0	0
2900		0	0	2900	0	0	0
3000		0	0	3000	0	0	0
3100		0	0	3100	0	0	0

3200	0	0	3200	0	0	0	0
3300	0	0	3300	0	0	0	0
3400	0	0	3400	0	0	0	0
3500	0	0	3500	0	0	0	0
3600	0	0	3600	0	0	0	0
3700	0	0	3700	0	0	0	0
3800	0	0	3800	0	0	0	0
3900	0	0	3900	0	0	0	0
4000	0	0	4000	0	0	0	0
4100	0	0	4100	0	0	0	0
4200	0	0	4200	0	0	0	0
4300	0	0	4300	0	0	0	0
4400	0	0	4400	0	0	0	0
4500	0	0	4500	0	0	0	0
4600	0	0	4600	0	0	0	0
4700	0	0	4700	0	0	0	0
4800	0	0	4800	0	0	0	0
4900	0	0	4900	0	0	0	0
5000	0	0	5000	0	0	0	0
5100	0	0	5100	0	0	0	0
5200	0	0	5200	0	0	0	0
5300	0	0	5300	0	0	0	0
5400	0	0	5400	0	0	0	0
5500	0	0	5500	0	0	0	0
5600	0	0	5600	0	0	0	0
5700	0	0	5700	0	0	0	0
5800	0	0	5800	0	0	0	0
5900	0	0	5900	0	0	0	0
6000	0	0	6000	0	0	0	0
6100	0	0	6100	0	0	0	0
6200	0	0	6200	0	0	0	0
6300	0	0	6300	0	0	0	0
6400	0	0	6400	0	0	0	0
6500	0	0	6500	0	0	0	0
6600	0	0	6600	0	0	0	0
6700	0	0	6700	0	0	0	0
6800	0	0	6800	0	0	0	0
6900	0	0	6900	0	0	0	0
7000	0	0	7000	0	0	0	0
7100	0	0	7100	0	0	0	0
7200	0	0	7200	0	0	0	0
7300	0	0	7300	0	0	0	0
7400	0	0	7400	0	0	0	0
7500	0	0	7500	0	0	0	0
7600	0	0	7600	0	0	0	0
7700	0	0	7700	0	0	0	0
7800	0	0	7800	0	0	0	0

7900	0	0	7900	0	0	0	0
8000	0	0	8000	0	0	0	0
8100	0	0	8100	0	0	0	0
8200	0	0	8200	0	0	0	0
8300	0	0	8300	0	0	0	0
8400	0	0	8400	0	0	0	0
8500	0	0	8500	0	0	0	0
8600	0	0	8600	0	0	0	0
8700	0	0	8700	0	0	0	0
8800	0	0	8800	0	0	0	0
8900	0	0	8900	0	0	0	0
9000	0	0	9000	0	0	0	0
9100	0	0	9100	0	0	0	0
9200	0	0	9200	0	0	0	0
9300	0	0	9300	0	0	0	0
9400	0	0	9400	0	0	0	0
9500	0	0	9500	0	0	0	0
9600	0	0	9600	0	0	0	0
9700	0	0	9700	0	0	0	0
9800	0	0	9800	0	0	0	0
9900	0	0	9900	0	0	0	0
10000	0	0	10000	0	0	0	0
10027	0	0	10027	0	0	0	0
10050	2.3	13.79	10049.99	0.45	0.11	0.45	10
10100	7.3	13.79	10099.8	4.51	1.11	4.53	10
10150	12.3	13.79	10149.06	12.77	3.13	12.83	10
10200	17.3	13.79	10197.38	25.17	6.18	25.29	10
10250	22.3	13.79	10244.41	41.62	10.21	41.81	10
10300	27.3	13.79	10289.79	61.98	15.21	62.27	10
10350	32.3	13.79	10333.16	86.1	21.13	86.51	10
10400	37.3	13.79	10374.21	113.81	27.93	114.34	10
10450	42.3	13.79	10412.61	144.88	35.56	145.56	10
10500	47.3	13.79	10448.08	179.09	43.95	179.93	10
10550	52.3	13.79	10480.34	216.16	53.05	217.18	10
10600	57.3	13.79	10509.15	255.83	62.79	257.03	10
10650	62.3	13.79	10534.29	297.78	73.09	299.19	10
10700	67.3	13.79	10555.58	341.71	83.87	343.32	10
10750	72.3	13.79	10572.83	387.27	95.05	389.09	10
10800	77.3	13.79	10585.94	434.11	106.55	436.16	10
10850	82.3	13.79	10594.79	481.89	118.27	484.16	10
10900	87.3	13.79	10599.32	530.23	130.14	532.73	10
10927	90	13.79	10599.96	556.44	136.57	559.06	10
11000	90	12.33	10599.96	627.55	153.07	630.49	2
11100	90	10.33	10599.96	725.6	172.71	728.91	2
11200	90	8.33	10599.96	824.27	188.92	827.88	2
11300	90	6.33	10599.96	923.45	201.68	927.3	2
11400	90	4.33	10599.96	1023.01	210.97	1027.03	2

11500	90	2.33	10599.96	1122.84	216.78	1126.95	2
11600	90	0.33	10599.96	1222.81	219.1	1226.94	2
11642.17	90	359.487	10599.96	1264.97	219.03	1269.1	2
11700	90	359.487	10599.96	1322.8	218.51	1326.91	0
11800	90	359.487	10599.96	1422.8	217.62	1426.87	0
11900	90	359.487	10599.96	1522.79	216.72	1526.82	0
12000	90	359.487	10599.96	1622.79	215.83	1626.78	0
12100	90	359.487	10599.96	1722.79	214.93	1726.74	0
12200	90	359.487	10599.96	1822.78	214.03	1826.7	0
12300	90	359.487	10599.96	1922.78	213.14	1926.66	0
12400	90	359.487	10599.96	2022.77	212.24	2026.61	0
12500	90	359.487	10599.97	2122.77	211.35	2126.57	0
12600	90	359.487	10599.97	2222.77	210.45	2226.53	0
12700	90	359.487	10599.97	2322.76	209.55	2326.49	0
12800	90	359.487	10599.97	2422.76	208.66	2426.45	0
12900	90	359.487	10599.97	2522.75	207.76	2526.4	0
13000	90	359.487	10599.97	2622.75	206.87	2626.36	0
13100	90	359.487	10599.97	2722.75	205.97	2726.32	0
13200	90	359.487	10599.97	2822.74	205.07	2826.28	0
13300	90	359.487	10599.97	2922.74	204.18	2926.24	0
13400	90	359.487	10599.97	3022.73	203.28	3026.2	0
13500	90	359.487	10599.97	3122.73	202.39	3126.15	0
13600	90	359.487	10599.97	3222.73	201.49	3226.11	0
13700	90	359.487	10599.97	3322.72	200.59	3326.07	0
13800	90	359.487	10599.97	3422.72	199.7	3426.03	0
13900	90	359.487	10599.97	3522.71	198.8	3525.99	0
14000	90	359.487	10599.97	3622.71	197.91	3625.94	0
14100	90	359.487	10599.97	3722.71	197.01	3725.9	0
14200	90	359.487	10599.98	3822.7	196.11	3825.86	0
14300	90	359.487	10599.98	3922.7	195.22	3925.82	0
14400	90	359.487	10599.98	4022.69	194.32	4025.78	0
14500	90	359.487	10599.98	4122.69	193.43	4125.73	0
14600	90	359.487	10599.98	4222.69	192.53	4225.69	0
14700	90	359.487	10599.98	4322.68	191.63	4325.65	0
14800	90	359.487	10599.98	4422.68	190.74	4425.61	0
14900	90	359.487	10599.98	4522.67	189.84	4525.57	0
15000	90	359.487	10599.98	4622.67	188.95	4625.52	0
15100	90	359.487	10599.98	4722.67	188.05	4725.48	0
15200	90	359.487	10599.98	4822.66	187.15	4825.44	0
15300	90	359.487	10599.98	4922.66	186.26	4925.4	0
15400	90	359.487	10599.98	5022.65	185.36	5025.36	0
15500	90	359.487	10599.98	5122.65	184.47	5125.31	0
15600	90	359.487	10599.98	5222.65	183.57	5225.27	0
15700	90	359.487	10599.98	5322.64	182.67	5325.23	0
15800	90	359.487	10599.98	5422.64	181.78	5425.19	0
15900	90	359.487	10599.99	5522.63	180.88	5525.15	0
16000	90	359.487	10599.99	5622.63	179.99	5625.11	0

16100	90	359.487	10599.99	5722.63	179.09	5725.06	0
16200	90	359.487	10599.99	5822.62	178.19	5825.02	0
16300	90	359.487	10599.99	5922.62	177.3	5924.98	0
16400	90	359.487	10599.99	6022.61	176.4	6024.94	0
16500	90	359.487	10599.99	6122.61	175.51	6124.9	0
16600	90	359.487	10599.99	6222.61	174.61	6224.85	0
16700	90	359.487	10599.99	6322.6	173.71	6324.81	0
16800	90	359.487	10599.99	6422.6	172.82	6424.77	0
16900	90	359.487	10599.99	6522.59	171.92	6524.73	0
17000	90	359.487	10599.99	6622.59	171.03	6624.69	0
17100	90	359.487	10599.99	6722.59	170.13	6724.64	0
17200	90	359.487	10599.99	6822.58	169.24	6824.6	0
17300	90	359.487	10599.99	6922.58	168.34	6924.56	0
17400	90	359.487	10599.99	7022.57	167.44	7024.52	0
17500	90	359.487	10600	7122.57	166.55	7124.48	0
17600	90	359.487	10600	7222.57	165.65	7224.43	0
17700	90	359.487	10600	7322.56	164.76	7324.39	0
17800	90	359.487	10600	7422.56	163.86	7424.35	0
17900	90	359.487	10600	7522.55	162.96	7524.31	0
18000	90	359.487	10600	7622.55	162.07	7624.27	0
18100	90	359.487	10600	7722.55	161.17	7724.22	0
18200	90	359.487	10600	7822.54	160.28	7824.18	0
18300	90	359.487	10600	7922.54	159.38	7924.14	0
18331.16	90	359.487	10600	7953.7	159.1	7955.29	0

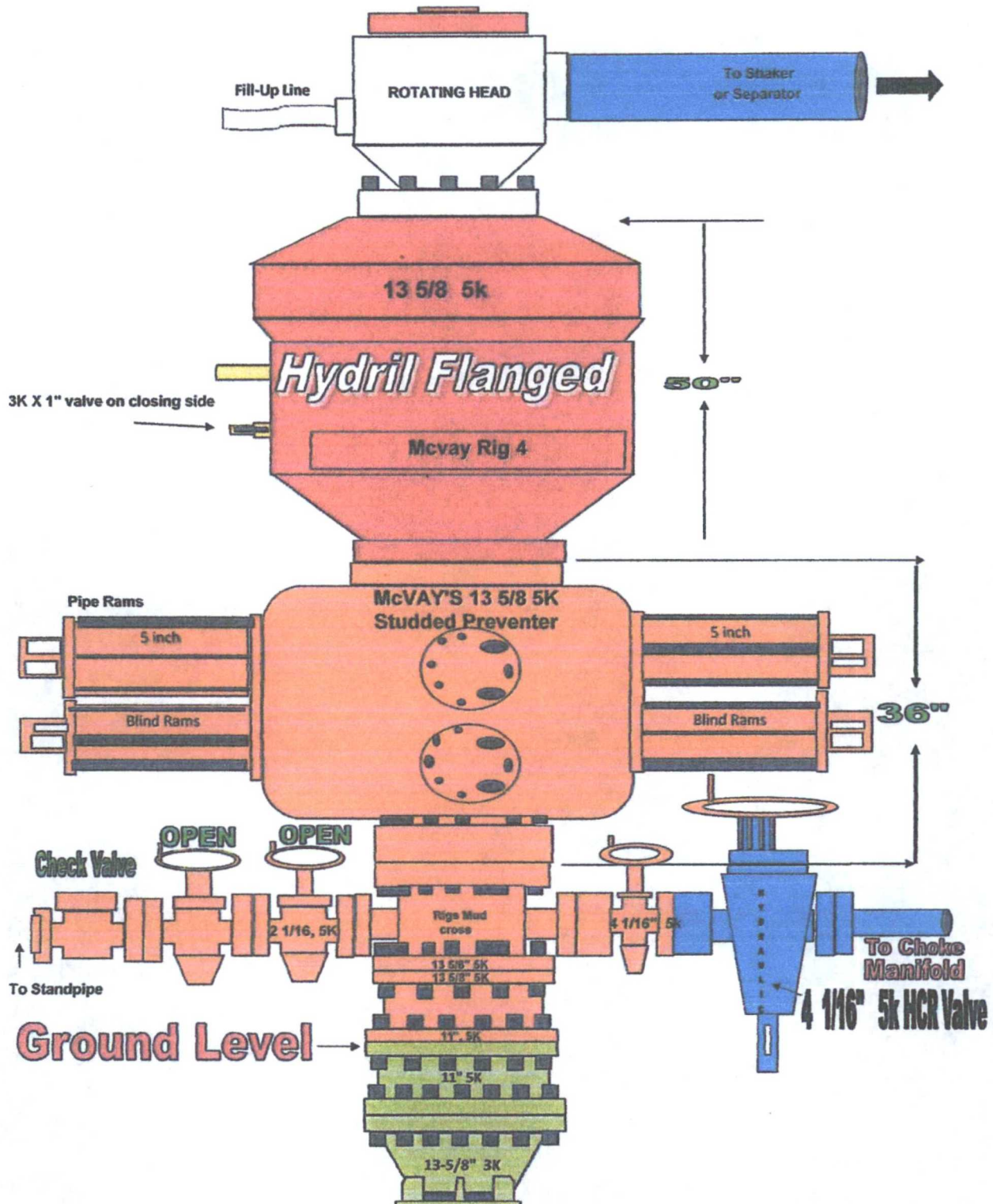
All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to KB. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 1.146° (Grid).

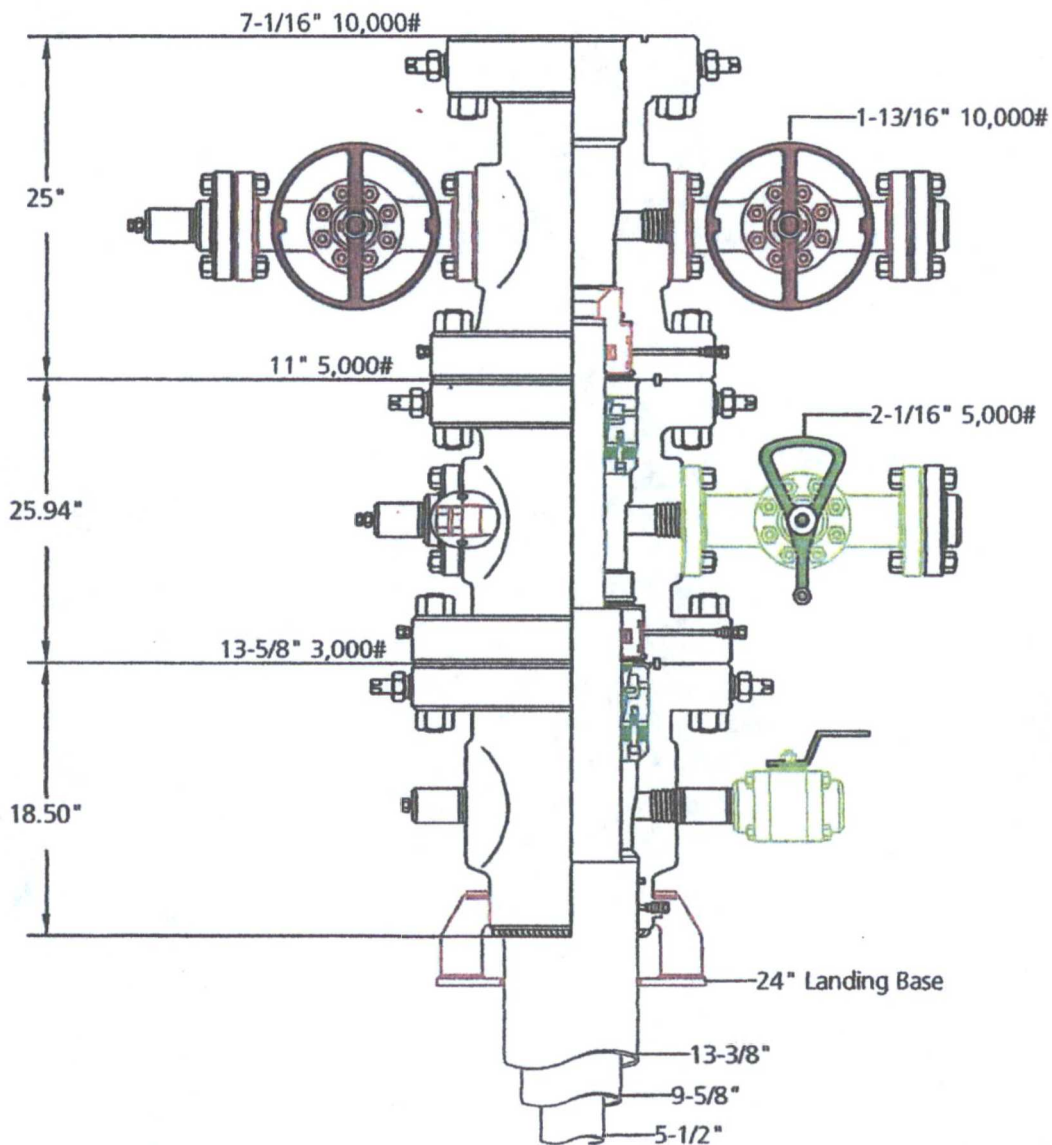
Coordinate System is NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution), New Mexico East 3001.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.439°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 18331.16ft.,
the Bottom Hole Displacement is 7955.29ft., in the Direction of 1.146° (Grid).

McVay Rig 4



Note: Dimensional information reflected on this drawing are estimated measurements only.

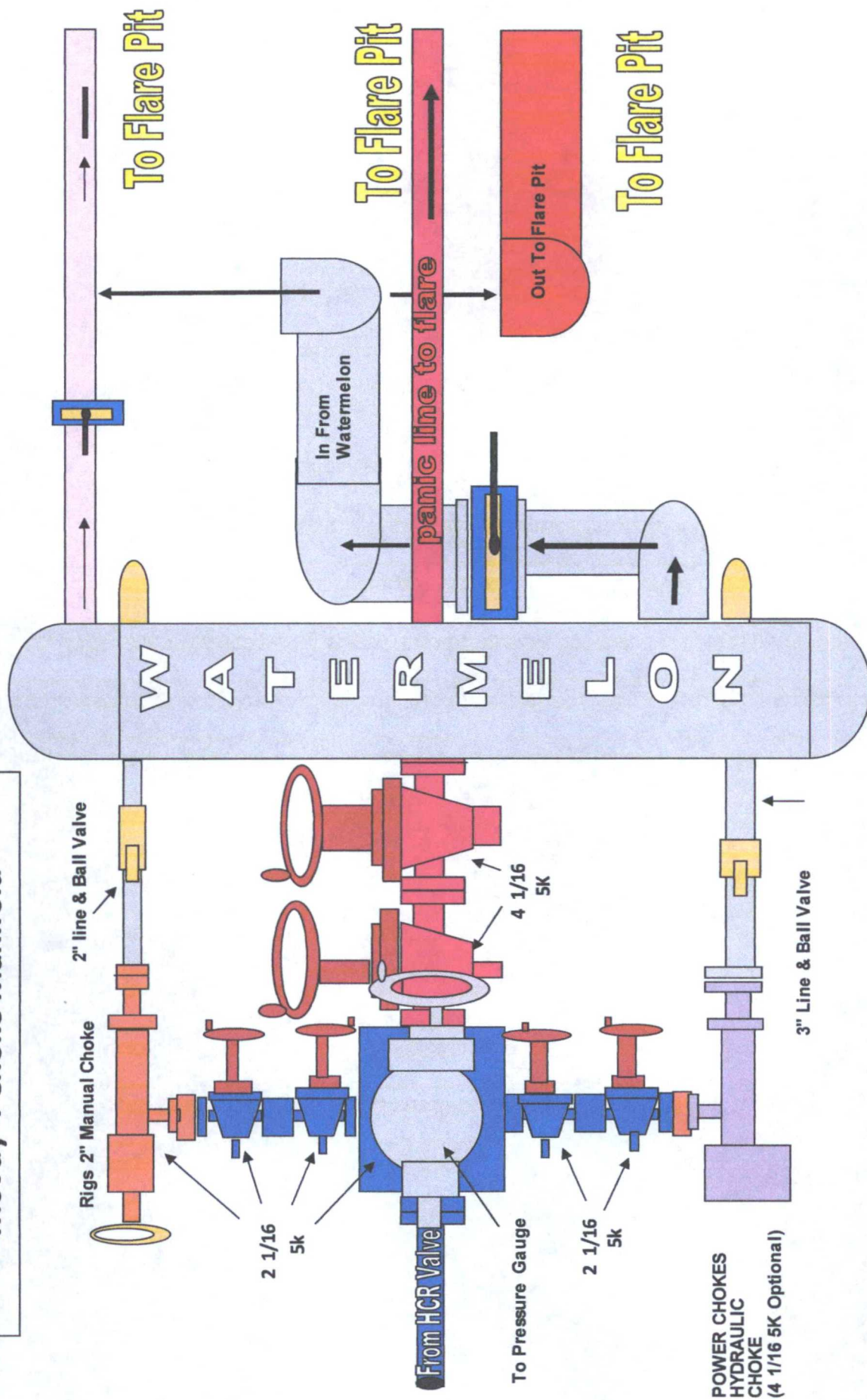


Legacy Reserves
Conventional 3-String



Name: Jeanette	Date: 7-15-15	Working Picture: #	1274616
----------------	---------------	--------------------	---------

McVay 4 Choke Manifold



*We use the same choke manifolds for all aspects of our operations & all are rated to 10K;

* All connections downstream from BOP thru chokes Are Flanged, All connections downstream from chokes are Flanged .

FEB 16 2016

RECEIVED

Plat for Closed Loop System

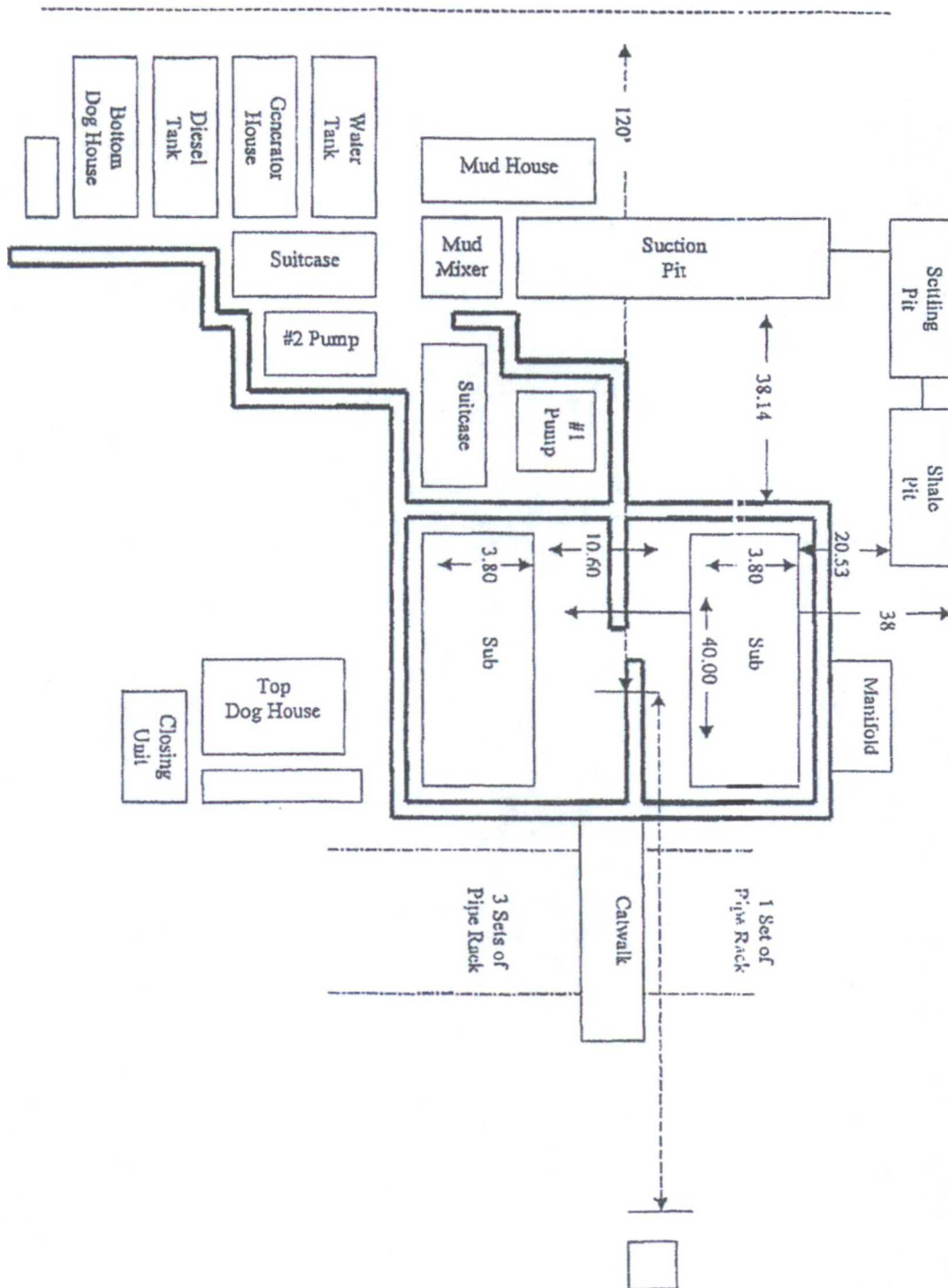
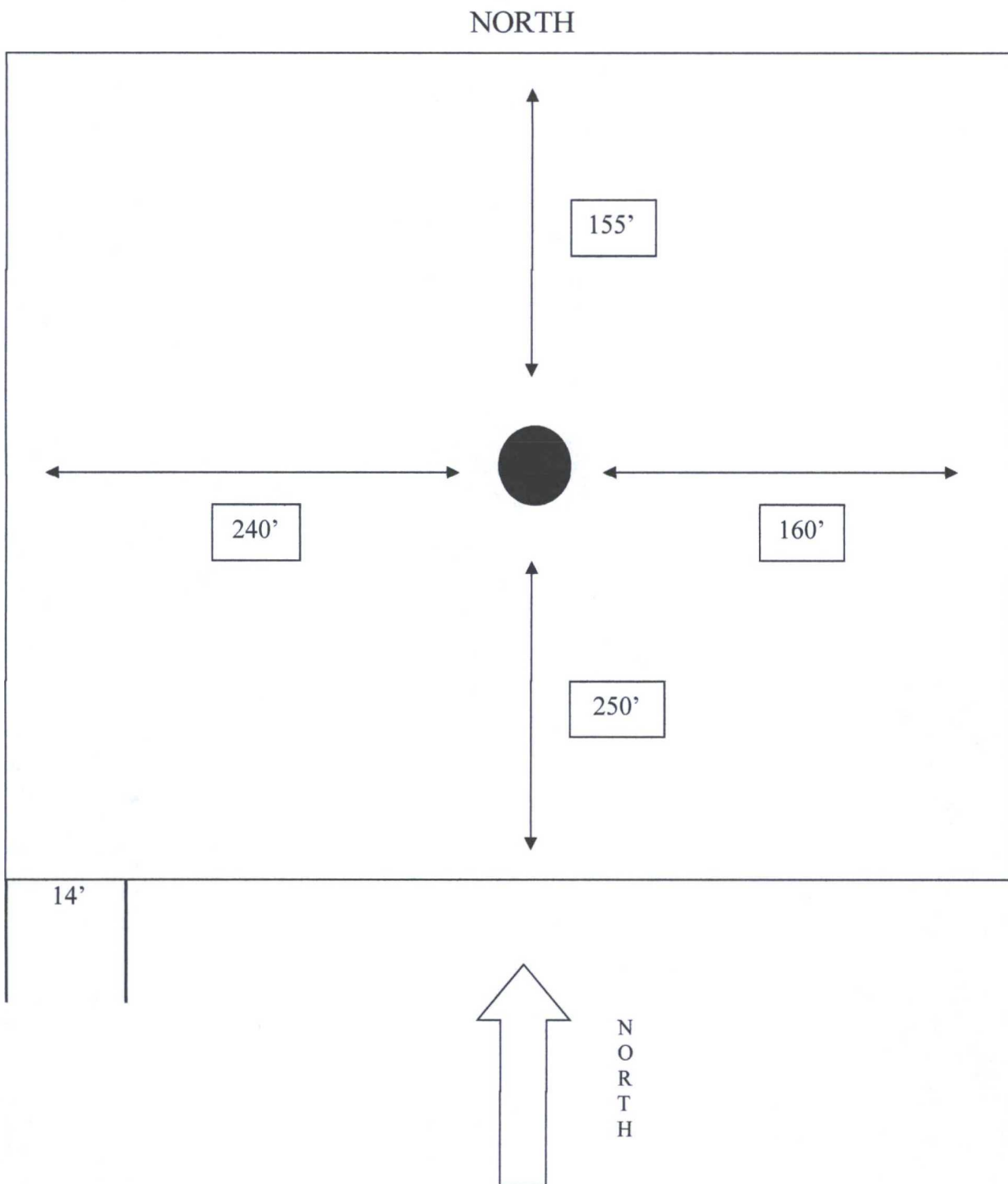


EXHIBIT D

**Rig Plat Only
LEA UNIT 36H
V-DOOR EAST**



FEB 16 2016

Design Plan, Operating & Maintenance Plan & Closure Plan for the OCD Form C-144

RECEIVED

DESIGN PLAN:

Fluid & cuttings coming from drilling operations will pass over the Shale Shaker with the cuttings going to the CRI haul off bin and the cleaned fluid returning to the working steel pits.

Equipment includes:

2-500 bbl steel tanks (fresh water for drilling)
2-700 bbl steel working pits (1400 bbls total)
2-20 cu yards steel haul off bins
2-pumps (CE FB1300)
2-shale shakers
1-mud cleaner (if needed)
1-centrifuge (if needed)

OPERATING AND MAINTENANCE PLAN:

Inspection to occur every tour for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

CLOSURE PLAN:

All haul bins containing cuttings will be removed from location and hauled to Controlled Recovery, Inc. (NM-01-0006) disposal site located near mile marker 66 on Highway 62/180.



Blain K. Lewis

Senior Operations Engineer