



HOBBS OCD

FEB 29 2016

RECEIVED

Legacy Reserves

Lea County, NM (NAD-27 2015)

Lea Unit #37H

Lea Unit #37H

OH

Plan: Plan #1

Standard Planning Report

18 February, 2016



MAR 01 2016

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #37H
Company:	Legacy Reserves	TVD Reference:	KB @ 3692.00usft (McVay 4)
Project:	Lea County, NM (NAD-27 2015)	MD Reference:	KB @ 3692.00usft (McVay 4)
Site:	Lea Unit #37H	North Reference:	Grid
Well:	Lea Unit #37H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project:	Lea County, NM (NAD-27 2015)		
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 #37H		
Site Position:	From: Map	Northing:	567,504.90 usft
		Easting:	753,834.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	32° 33' 26.923 N
		Longitude:	103° 30' 34.149 W
		Grid Convergence:	0.44 °

Well:	Lea Unit #37H					
Well Position	+N/-S	0.00 usft	Northing:	567,504.90 usft	Latitude:	32° 33' 26.923 N
	+E/-W	0.00 usft	Easting:	753,834.80 usft	Longitude:	103° 30' 34.149 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,674.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/2/2015	7.14	60.40	48,326

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	354.33

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	
10,027.04	0.00	0.00	10,027.04	0.00	0.00	0.00	0.00	0.00	0.00	
10,927.04	90.00	340.15	10,600.00	538.93	-194.52	10.00	10.00	0.00	340.15	
11,733.27	90.00	356.28	10,600.00	1,325.56	-358.64	2.00	0.00	2.00	90.00	
18,367.10	90.00	356.28	10,600.00	7,945.40	-789.30	0.00	0.00	0.00	0.00	BHL (LU #37H/OH)

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD-27 2015)
Site: Lea Unit #37H
Well: Lea Unit #37H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Lea Unit #37H
TVD Reference: KB @ 3692.00usft (McVay 4)
MD Reference: KB @ 3692.00usft (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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
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
1,100.00	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
4,400.00	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
4,600.00	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
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

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5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
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
6,800.00	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
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,027.04	0.00	0.00	10,027.04	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Start Build 10.00									
10,050.00	2.30	340.15	10,049.99	0.43	-0.16	0.45	10.00	10.00	0.00
10,100.00	7.30	340.15	10,099.80	4.36	-1.57	4.50	10.00	10.00	0.00
10,150.00	12.30	340.15	10,149.06	12.36	-4.46	12.74	10.00	10.00	0.00
10,200.00	17.30	340.15	10,197.39	24.37	-8.80	25.12	10.00	10.00	0.00

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MD Reference: KB @ 3692.00usft (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)
10,250.00	22.30	340.15	10,244.42	40.29	-14.54	41.53	10.00	10.00	0.00
10,300.00	27.30	340.15	10,289.79	60.01	-21.66	61.86	10.00	10.00	0.00
10,350.00	32.30	340.15	10,333.17	83.37	-30.09	85.94	10.00	10.00	0.00
10,400.00	37.30	340.15	10,374.21	110.20	-39.78	113.59	10.00	10.00	0.00
10,450.00	42.30	340.15	10,412.62	140.29	-50.64	144.61	10.00	10.00	0.00
10,500.00	47.30	340.15	10,448.09	173.42	-62.60	178.76	10.00	10.00	0.00
10,550.00	52.30	340.15	10,480.35	209.33	-75.56	215.77	10.00	10.00	0.00
10,600.00	57.30	340.15	10,509.17	247.74	-89.42	255.37	10.00	10.00	0.00
10,650.00	62.30	340.15	10,534.31	288.38	-104.09	297.25	10.00	10.00	0.00
10,700.00	67.30	340.15	10,555.60	330.92	-119.44	341.10	10.00	10.00	0.00
10,750.00	72.30	340.15	10,572.86	375.04	-135.37	386.58	10.00	10.00	0.00
10,800.00	77.30	340.15	10,585.97	420.41	-151.74	433.35	10.00	10.00	0.00
10,850.00	82.30	340.15	10,594.83	466.68	-168.45	481.05	10.00	10.00	0.00
10,900.00	87.30	340.15	10,599.36	513.50	-185.35	529.31	10.00	10.00	0.00
10,927.04	90.00	340.15	10,600.00	538.93	-194.52	555.52	10.00	10.00	0.00
EOC/TURN - Start DLS 2.00 TFO 90.00									
11,000.00	90.00	341.61	10,600.00	607.86	-218.42	626.47	2.00	0.00	2.00
11,100.00	90.00	343.61	10,600.00	703.29	-248.30	724.39	2.00	0.00	2.00
11,200.00	90.00	345.61	10,600.00	799.70	-274.83	822.95	2.00	0.00	2.00
11,300.00	90.00	347.61	10,600.00	896.97	-297.99	922.04	2.00	0.00	2.00
11,400.00	90.00	349.61	10,600.00	995.00	-317.73	1,021.54	2.00	0.00	2.00
11,500.00	90.00	351.61	10,600.00	1,093.66	-334.04	1,121.32	2.00	0.00	2.00
11,600.00	90.00	353.61	10,600.00	1,192.82	-346.90	1,221.27	2.00	0.00	2.00
11,700.00	90.00	355.61	10,600.00	1,292.37	-356.29	1,321.26	2.00	0.00	2.00
11,733.27	90.00	356.28	10,600.00	1,325.56	-358.64	1,354.52	2.00	0.00	2.00
END TURN - Start 6633.83 hold at 11733.27 MD									
11,800.00	90.00	356.28	10,600.00	1,392.15	-362.97	1,421.21	0.00	0.00	0.00
11,900.00	90.00	356.28	10,600.00	1,491.94	-369.46	1,521.15	0.00	0.00	0.00
12,000.00	90.00	356.28	10,600.00	1,591.73	-375.95	1,621.10	0.00	0.00	0.00
12,100.00	90.00	356.28	10,600.00	1,691.52	-382.45	1,721.04	0.00	0.00	0.00
12,200.00	90.00	356.28	10,600.00	1,791.31	-388.94	1,820.98	0.00	0.00	0.00
12,300.00	90.00	356.28	10,600.00	1,891.10	-395.43	1,920.92	0.00	0.00	0.00
12,400.00	90.00	356.28	10,600.00	1,990.88	-401.92	2,020.86	0.00	0.00	0.00
12,500.00	90.00	356.28	10,600.00	2,090.67	-408.41	2,120.81	0.00	0.00	0.00
12,600.00	90.00	356.28	10,600.00	2,190.46	-414.91	2,220.75	0.00	0.00	0.00
12,700.00	90.00	356.28	10,600.00	2,290.25	-421.40	2,320.69	0.00	0.00	0.00
12,800.00	90.00	356.28	10,600.00	2,390.04	-427.89	2,420.63	0.00	0.00	0.00
12,900.00	90.00	356.28	10,600.00	2,489.83	-434.38	2,520.57	0.00	0.00	0.00
13,000.00	90.00	356.28	10,600.00	2,589.62	-440.87	2,620.52	0.00	0.00	0.00
13,100.00	90.00	356.28	10,600.00	2,689.41	-447.37	2,720.46	0.00	0.00	0.00
13,200.00	90.00	356.28	10,600.00	2,789.20	-453.86	2,820.40	0.00	0.00	0.00
13,300.00	90.00	356.28	10,600.00	2,888.99	-460.35	2,920.34	0.00	0.00	0.00
13,400.00	90.00	356.28	10,600.00	2,988.77	-466.84	3,020.28	0.00	0.00	0.00
13,500.00	90.00	356.28	10,600.00	3,088.56	-473.33	3,120.23	0.00	0.00	0.00
13,600.00	90.00	356.28	10,600.00	3,188.35	-479.82	3,220.17	0.00	0.00	0.00
13,700.00	90.00	356.28	10,600.00	3,288.14	-486.32	3,320.11	0.00	0.00	0.00
13,800.00	90.00	356.28	10,600.00	3,387.93	-492.81	3,420.05	0.00	0.00	0.00
13,900.00	90.00	356.28	10,600.00	3,487.72	-499.30	3,520.00	0.00	0.00	0.00
14,000.00	90.00	356.28	10,600.00	3,587.51	-505.79	3,619.94	0.00	0.00	0.00
14,100.00	90.00	356.28	10,600.00	3,687.30	-512.28	3,719.88	0.00	0.00	0.00
14,200.00	90.00	356.28	10,600.00	3,787.09	-518.78	3,819.82	0.00	0.00	0.00
14,300.00	90.00	356.28	10,600.00	3,886.88	-525.27	3,919.76	0.00	0.00	0.00
14,400.00	90.00	356.28	10,600.00	3,986.67	-531.76	4,019.71	0.00	0.00	0.00
14,500.00	90.00	356.28	10,600.00	4,086.45	-538.25	4,119.65	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD-27 2015)
Site: Lea Unit #37H
Well: Lea Unit #37H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference
TVD Reference: KB @ 3692.00usft (McVay 4)
MD Reference: KB @ 3692.00usft (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)
14,600.00	90.00	356.28	10,600.00	4,186.24	-544.74	4,219.59	0.00	0.00	0.00
14,700.00	90.00	356.28	10,600.00	4,286.03	-551.24	4,319.53	0.00	0.00	0.00
14,800.00	90.00	356.28	10,600.00	4,385.82	-557.73	4,419.47	0.00	0.00	0.00
14,900.00	90.00	356.28	10,600.00	4,485.61	-564.22	4,519.42	0.00	0.00	0.00
15,000.00	90.00	356.28	10,600.00	4,585.40	-570.71	4,619.36	0.00	0.00	0.00
15,100.00	90.00	356.28	10,600.00	4,685.19	-577.20	4,719.30	0.00	0.00	0.00
15,200.00	90.00	356.28	10,600.00	4,784.98	-583.70	4,819.24	0.00	0.00	0.00
15,300.00	90.00	356.28	10,600.00	4,884.77	-590.19	4,919.18	0.00	0.00	0.00
15,400.00	90.00	356.28	10,600.00	4,984.56	-596.68	5,019.13	0.00	0.00	0.00
15,500.00	90.00	356.28	10,600.00	5,084.35	-603.17	5,119.07	0.00	0.00	0.00
15,600.00	90.00	356.28	10,600.00	5,184.13	-609.66	5,219.01	0.00	0.00	0.00
15,700.00	90.00	356.28	10,600.00	5,283.92	-616.15	5,318.95	0.00	0.00	0.00
15,800.00	90.00	356.28	10,600.00	5,383.71	-622.65	5,418.89	0.00	0.00	0.00
15,900.00	90.00	356.28	10,600.00	5,483.50	-629.14	5,518.84	0.00	0.00	0.00
16,000.00	90.00	356.28	10,600.00	5,583.29	-635.63	5,618.78	0.00	0.00	0.00
16,100.00	90.00	356.28	10,600.00	5,683.08	-642.12	5,718.72	0.00	0.00	0.00
16,200.00	90.00	356.28	10,600.00	5,782.87	-648.61	5,818.66	0.00	0.00	0.00
16,300.00	90.00	356.28	10,600.00	5,882.66	-655.11	5,918.60	0.00	0.00	0.00
16,400.00	90.00	356.28	10,600.00	5,982.45	-661.60	6,018.55	0.00	0.00	0.00
16,500.00	90.00	356.28	10,600.00	6,082.24	-668.09	6,118.49	0.00	0.00	0.00
16,600.00	90.00	356.28	10,600.00	6,182.02	-674.58	6,218.43	0.00	0.00	0.00
16,700.00	90.00	356.28	10,600.00	6,281.81	-681.07	6,318.37	0.00	0.00	0.00
16,800.00	90.00	356.28	10,600.00	6,381.60	-687.57	6,418.31	0.00	0.00	0.00
16,900.00	90.00	356.28	10,600.00	6,481.39	-694.06	6,518.26	0.00	0.00	0.00
17,000.00	90.00	356.28	10,600.00	6,581.18	-700.55	6,618.20	0.00	0.00	0.00
17,100.00	90.00	356.28	10,600.00	6,680.97	-707.04	6,718.14	0.00	0.00	0.00
17,200.00	90.00	356.28	10,600.00	6,780.76	-713.53	6,818.08	0.00	0.00	0.00
17,300.00	90.00	356.28	10,600.00	6,880.55	-720.02	6,918.02	0.00	0.00	0.00
17,400.00	90.00	356.28	10,600.00	6,980.34	-726.52	7,017.97	0.00	0.00	0.00
17,500.00	90.00	356.28	10,600.00	7,080.13	-733.01	7,117.91	0.00	0.00	0.00
17,600.00	90.00	356.28	10,600.00	7,179.92	-739.50	7,217.85	0.00	0.00	0.00
17,700.00	90.00	356.28	10,600.00	7,279.70	-745.99	7,317.79	0.00	0.00	0.00
17,800.00	90.00	356.28	10,600.00	7,379.49	-752.48	7,417.73	0.00	0.00	0.00
17,900.00	90.00	356.28	10,600.00	7,479.28	-758.98	7,517.68	0.00	0.00	0.00
18,000.00	90.00	356.28	10,600.00	7,579.07	-765.47	7,617.62	0.00	0.00	0.00
18,100.00	90.00	356.28	10,600.00	7,678.86	-771.96	7,717.56	0.00	0.00	0.00
18,200.00	90.00	356.28	10,600.00	7,778.65	-778.45	7,817.50	0.00	0.00	0.00
18,300.00	90.00	356.28	10,600.00	7,878.44	-784.94	7,917.44	0.00	0.00	0.00
18,367.10	90.00	356.28	10,600.00	7,945.40	-789.30	7,984.51	0.00	0.00	0.00

TD at 18367.10

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Site: Lea Unit #37H
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Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Lea Unit #37H
TVD Reference: KB @ 3692.00usft (McVay 4)
MD Reference: KB @ 3692.00usft (McVay 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

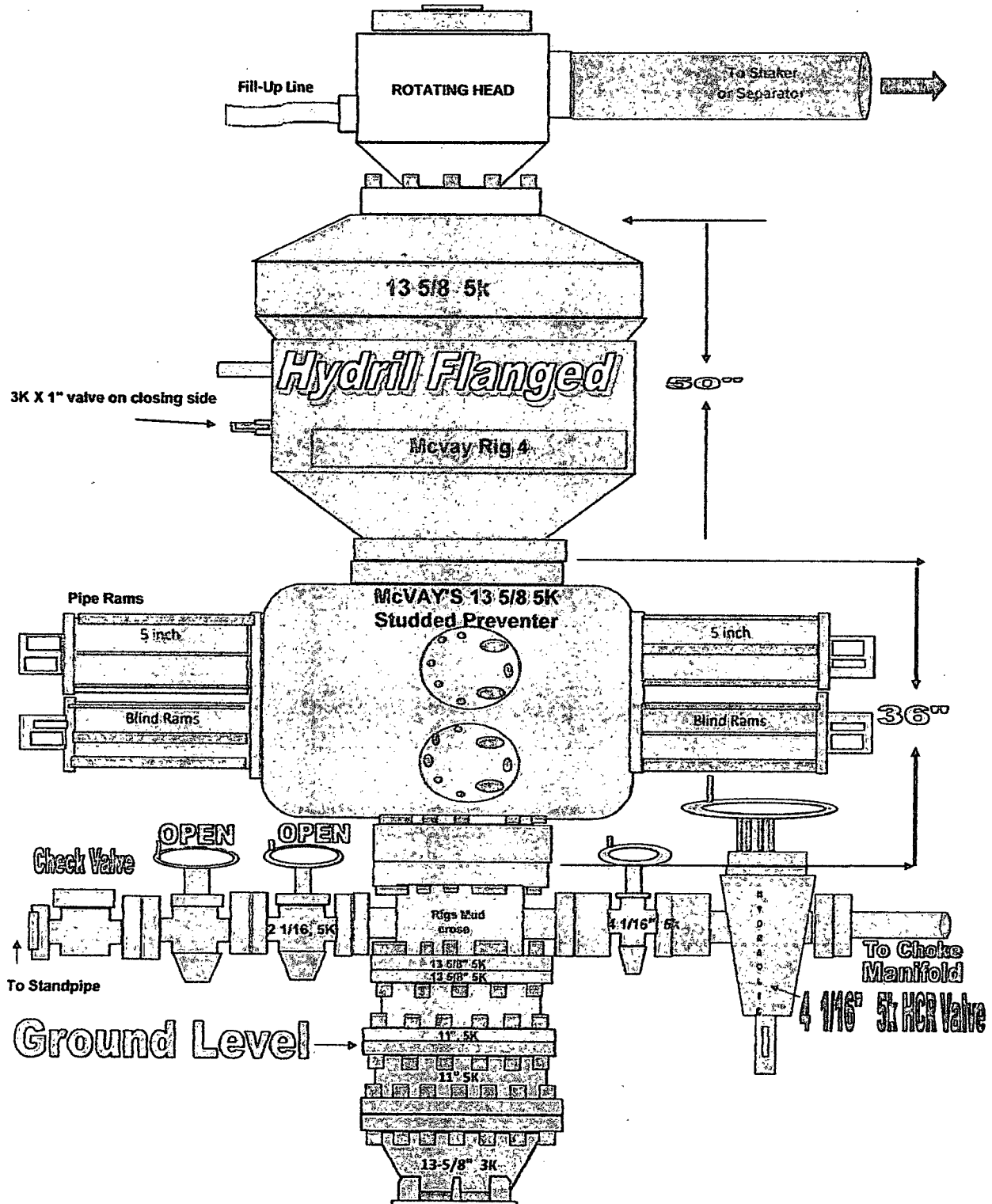
Design Targets

Target Name	hit/miss target	Shape	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL (LU #37H/OH)	- plan hits target center - Rectangle (sides W80.00 H6,629.99 D30.00)		0.00	356.28	10,600.00	7,945.40	-789.30	575,450.30	753,045.50	32° 34' 45.602 N	103° 30' 42.654 W
EOC (LU #37H/OH Plan)	- plan hits target center - Point		0.00	0.00	10,600.00	538.93	-194.52	568,043.83	753,640.27	32° 33' 32.271 N	103° 30' 36.373 W

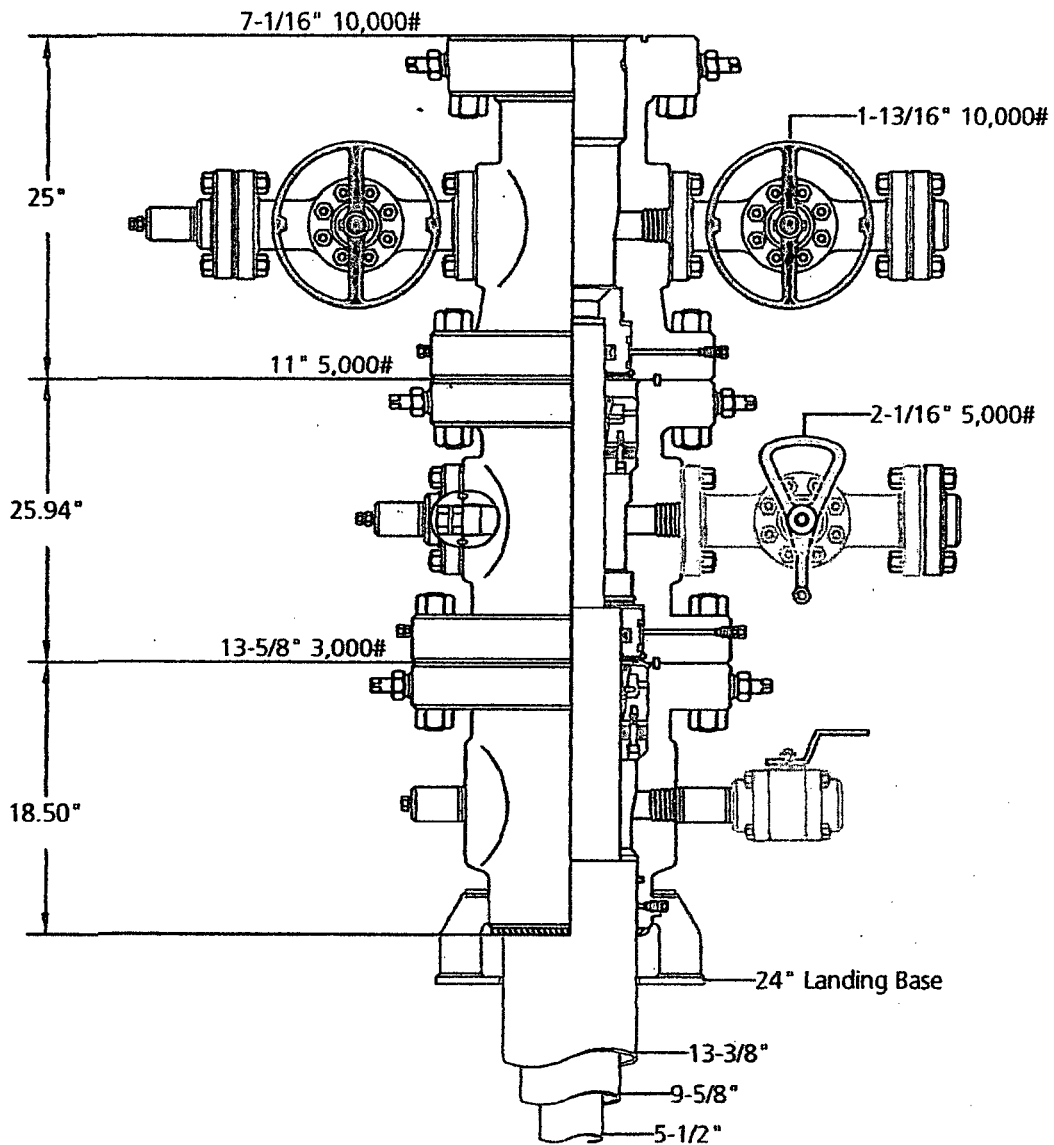
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
10,027.04	10,027.04	0.00	0.00	KOP - Start Build 10.00
10,927.04	10,600.00	538.93	-194.52	EOC/TURN - Start DLS 2.00 TFO 90.00
11,733.27	10,600.00	1,325.56	-358.64	END TURN - Start 6633.83 hold at 11733.27 MD
18,367.10	10,600.00	7,945.40	-789.30	TD at 18367.10

McVay Rig 4



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

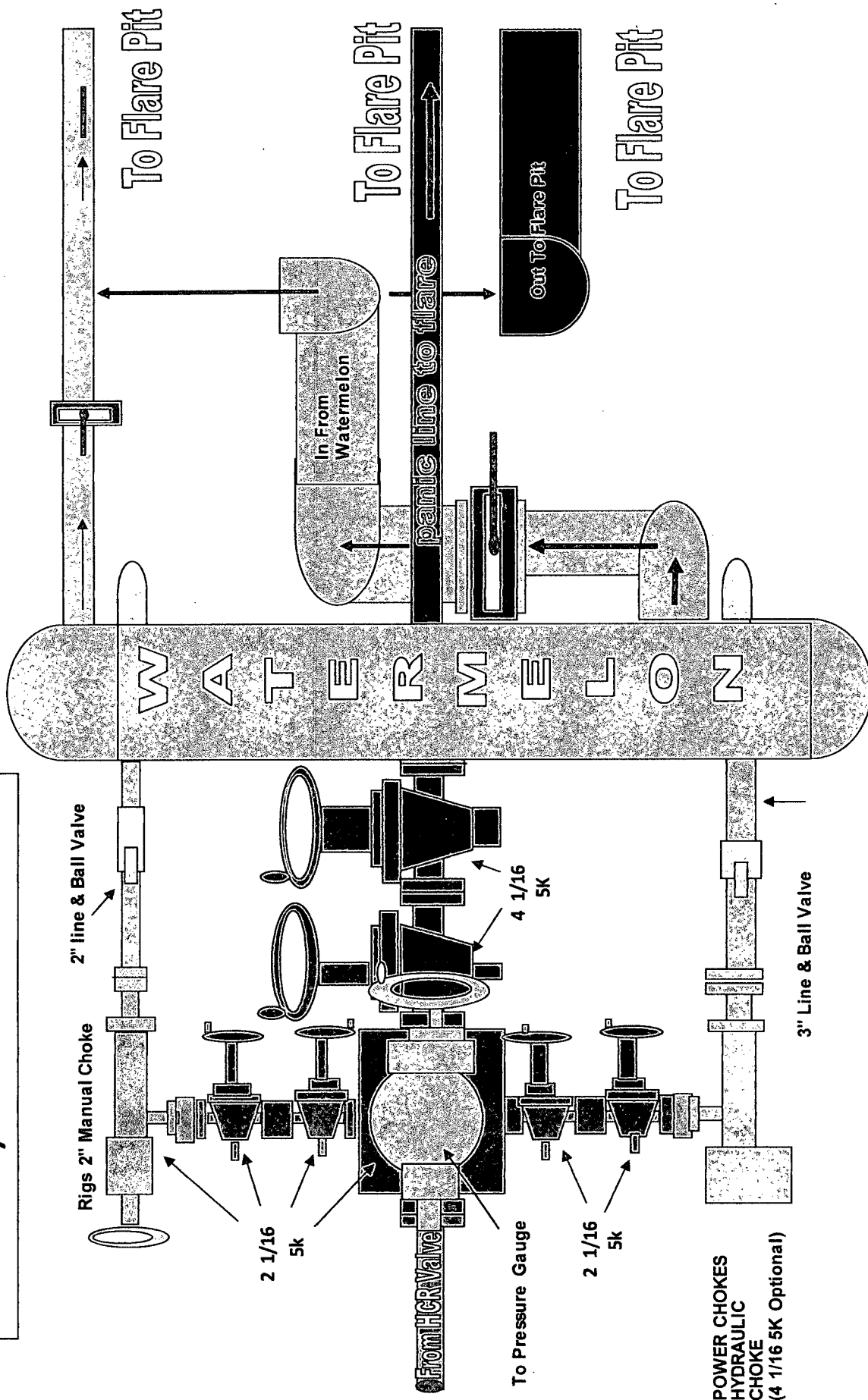


Legacy Reserves
Conventional 3-String



NAME: Jeanette	DATE: 7-15-15	WORKING PRESSURE:	# 1274616
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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 .

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

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:

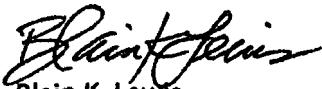
- 2-500 bbl steel tanks (fresh water for drilling)
- 2-700 bbl steel working pits (1400 bbls total)
- 2-20 cu yards steel haul off bins
- 2-pumps (CE FB1300)
- 2-shale shakers
- 1-mud cleaner (if needed)
- 1-centrifuge (if needed)

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

Plat for Closed Loop System

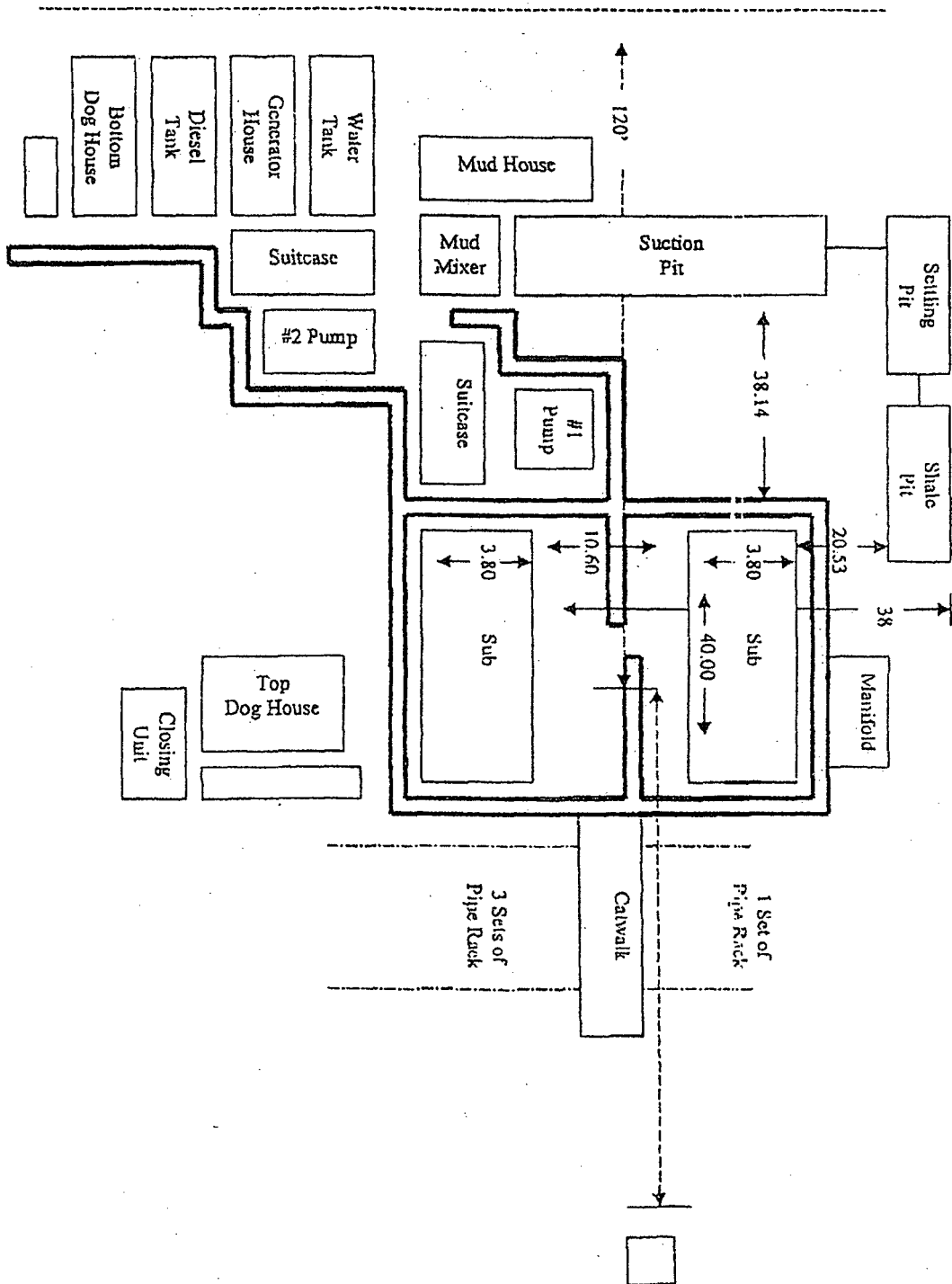


EXHIBIT D

Rig Plat Only
LEA UNIT 37H
V-DOOR EAST

