



Legacy Reserves

Lea County, NM (NAD-27 2015)

Hamon Fed Com A #11H

Hamon Fed Com A #11H

Lateral #1

Plan: Design #1

Standard Planning Report

27 September, 2015

HOBBS OCD

MAY 16 2016

RECEIVED



Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD-27 2015)
Site: Hamon Fed Com A #11H
Well: Hamon Fed Com A #11H
Wellbore: Lateral #1
Design: Design #1

Local Co-ordinate Reference: Well Hamon Fed Com A #11H
TVD Reference: KB @ 3628.00usft (McVay 4)
MD Reference: KB @ 3628.00usft (McVay 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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 Hamon Fed Com A #11H

Site Position: Northing: 575,257.40 usft Latitude: 32° 34' 45.743 N
From: Map Easting: 724,614.60 usft Longitude: 103° 36' 14.917 W
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: 0.39 °

Well Hamon Fed Com A #11H

Well Position: +N/-S 0.00 usft Northing: 575,257.40 usft Latitude: 32° 34' 45.743 N
+E/-W 0.00 usft Easting: 724,614.60 usft Longitude: 103° 36' 14.917 W
Position Uncertainty 0.00 usft Wellhead Elevation: 0.00 usft Ground Level: 3,610.00 usft

Wellbore Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/18/2015	7.20	60.41	48,343

Design Design #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	359.22

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	
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,573.00	1.46	334.80	5,572.99	0.84	-0.40	2.00	2.00	0.00	334.80	
8,876.40	1.46	334.80	8,875.32	77.00	-36.23	0.00	0.00	0.00	0.00	
9,763.15	90.00	359.67	9,435.00	649.76	-45.53	10.00	9.98	2.80	24.88	
14,381.57	90.00	359.67	9,435.00	5,268.10	-72.10	0.00	0.00	0.00	0.00	BHL (HFCA #11H/OH)

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MD Reference: KB @ 3628.00usft (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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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)
5,400.00	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
NUDGE - Start Build 2.00									
5,573.00	1.46	334.80	5,572.99	0.84	-0.40	0.85	2.00	2.00	0.00
HOLD - Start 3303.40 hold at 5573.00 MD									
5,600.00	1.46	334.80	5,599.98	1.46	-0.69	1.47	0.00	0.00	0.00
5,700.00	1.46	334.80	5,699.95	3.77	-1.77	3.79	0.00	0.00	0.00
5,800.00	1.46	334.80	5,799.92	6.07	-2.86	6.11	0.00	0.00	0.00
5,900.00	1.46	334.80	5,899.89	8.38	-3.94	8.43	0.00	0.00	0.00
6,000.00	1.46	334.80	5,999.85	10.69	-5.03	10.75	0.00	0.00	0.00
6,100.00	1.46	334.80	6,099.82	12.99	-6.11	13.07	0.00	0.00	0.00
6,200.00	1.46	334.80	6,199.79	15.30	-7.20	15.39	0.00	0.00	0.00
6,300.00	1.46	334.80	6,299.76	17.60	-8.28	17.71	0.00	0.00	0.00
6,400.00	1.46	334.80	6,399.72	19.91	-9.37	20.03	0.00	0.00	0.00
6,500.00	1.46	334.80	6,499.69	22.21	-10.45	22.35	0.00	0.00	0.00
6,600.00	1.46	334.80	6,599.66	24.52	-11.54	24.67	0.00	0.00	0.00
6,700.00	1.46	334.80	6,699.63	26.82	-12.62	26.99	0.00	0.00	0.00
6,800.00	1.46	334.80	6,799.59	29.13	-13.71	29.31	0.00	0.00	0.00
6,900.00	1.46	334.80	6,899.56	31.43	-14.79	31.63	0.00	0.00	0.00
7,000.00	1.46	334.80	6,999.53	33.74	-15.88	33.95	0.00	0.00	0.00
7,100.00	1.46	334.80	7,099.50	36.05	-16.96	36.27	0.00	0.00	0.00
7,200.00	1.46	334.80	7,199.46	38.35	-18.05	38.59	0.00	0.00	0.00
7,300.00	1.46	334.80	7,299.43	40.66	-19.13	40.91	0.00	0.00	0.00
7,400.00	1.46	334.80	7,399.40	42.96	-20.22	43.23	0.00	0.00	0.00
7,500.00	1.46	334.80	7,499.37	45.27	-21.30	45.55	0.00	0.00	0.00
7,600.00	1.46	334.80	7,599.33	47.57	-22.39	47.87	0.00	0.00	0.00
7,700.00	1.46	334.80	7,699.30	49.88	-23.47	50.19	0.00	0.00	0.00
7,800.00	1.46	334.80	7,799.27	52.18	-24.56	52.51	0.00	0.00	0.00
7,900.00	1.46	334.80	7,899.24	54.49	-25.64	54.83	0.00	0.00	0.00
8,000.00	1.46	334.80	7,999.20	56.79	-26.73	57.15	0.00	0.00	0.00
8,100.00	1.46	334.80	8,099.17	59.10	-27.81	59.47	0.00	0.00	0.00
8,200.00	1.46	334.80	8,199.14	61.40	-28.89	61.79	0.00	0.00	0.00
8,300.00	1.46	334.80	8,299.11	63.71	-29.98	64.11	0.00	0.00	0.00
8,400.00	1.46	334.80	8,399.07	66.02	-31.06	66.43	0.00	0.00	0.00
8,500.00	1.46	334.80	8,499.04	68.32	-32.15	68.75	0.00	0.00	0.00
8,600.00	1.46	334.80	8,599.01	70.63	-33.23	71.07	0.00	0.00	0.00
8,700.00	1.46	334.80	8,698.98	72.93	-34.32	73.39	0.00	0.00	0.00
8,800.00	1.46	334.80	8,798.94	75.24	-35.40	75.71	0.00	0.00	0.00
8,876.40	1.46	334.80	8,875.32	77.00	-36.23	77.49	0.00	0.00	0.00
KOP - Start DLS 10.00 TFO 24.88									
8,900.00	3.74	350.22	8,898.89	78.03	-36.49	78.52	10.00	9.64	65.34
8,950.00	8.71	355.66	8,948.58	83.41	-37.06	83.91	10.00	9.94	10.87
9,000.00	13.70	357.15	8,997.62	93.10	-37.64	93.61	10.00	9.98	2.99
9,050.00	18.69	357.85	9,045.62	107.03	-38.23	107.54	10.00	9.99	1.41
9,100.00	23.69	358.27	9,092.22	125.09	-38.83	125.61	10.00	10.00	0.83
9,150.00	28.69	358.55	9,137.07	147.14	-39.44	147.67	10.00	10.00	0.55
9,200.00	33.69	358.75	9,179.83	173.02	-40.05	173.55	10.00	10.00	0.40
9,250.00	38.69	358.90	9,220.17	202.53	-40.65	203.07	10.00	10.00	0.31
9,300.00	43.69	359.03	9,257.79	235.44	-41.24	235.98	10.00	10.00	0.25
9,350.00	48.69	359.13	9,292.39	271.51	-41.82	272.05	10.00	10.00	0.21
9,400.00	53.69	359.22	9,323.72	310.45	-42.38	311.00	10.00	10.00	0.18
9,450.00	58.69	359.30	9,351.54	351.98	-42.92	352.53	10.00	10.00	0.16
9,500.00	63.69	359.37	9,375.63	395.77	-43.43	396.33	10.00	10.00	0.14

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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)
9,550.00	68.69	359.43	9,395.81	441.49	-43.91	442.05	10.00	10.00	0.13
9,600.00	73.69	359.49	9,411.93	488.81	-44.35	489.37	10.00	10.00	0.12
9,650.00	78.69	359.55	9,423.86	537.34	-44.76	537.90	10.00	10.00	0.11
9,700.00	83.68	359.60	9,431.52	586.73	-45.13	587.30	10.00	10.00	0.11
9,750.00	88.68	359.66	9,434.85	636.61	-45.45	637.17	10.00	10.00	0.11
9,763.15	90.00	359.67	9,435.00	649.76	-45.53	650.32	10.00	10.00	0.11
EOC - Start 4618.42 hold at 9763.15 MD									
9,800.00	90.00	359.67	9,435.00	686.60	-45.74	687.17	0.00	0.00	0.00
9,900.00	90.00	359.67	9,435.00	786.60	-46.31	787.16	0.00	0.00	0.00
10,000.00	90.00	359.67	9,435.00	886.60	-46.89	887.16	0.00	0.00	0.00
10,100.00	90.00	359.67	9,435.00	986.60	-47.47	987.16	0.00	0.00	0.00
10,200.00	90.00	359.67	9,435.00	1,086.60	-48.04	1,087.15	0.00	0.00	0.00
10,300.00	90.00	359.67	9,435.00	1,186.60	-48.62	1,187.15	0.00	0.00	0.00
10,400.00	90.00	359.67	9,435.00	1,286.59	-49.19	1,287.15	0.00	0.00	0.00
10,500.00	90.00	359.67	9,435.00	1,386.59	-49.77	1,387.14	0.00	0.00	0.00
10,600.00	90.00	359.67	9,435.00	1,486.59	-50.34	1,487.14	0.00	0.00	0.00
10,700.00	90.00	359.67	9,435.00	1,586.59	-50.92	1,587.14	0.00	0.00	0.00
10,800.00	90.00	359.67	9,435.00	1,686.59	-51.49	1,687.13	0.00	0.00	0.00
10,900.00	90.00	359.67	9,435.00	1,786.59	-52.07	1,787.13	0.00	0.00	0.00
11,000.00	90.00	359.67	9,435.00	1,886.58	-52.64	1,887.13	0.00	0.00	0.00
11,100.00	90.00	359.67	9,435.00	1,986.58	-53.22	1,987.13	0.00	0.00	0.00
11,200.00	90.00	359.67	9,435.00	2,086.58	-53.79	2,087.12	0.00	0.00	0.00
11,300.00	90.00	359.67	9,435.00	2,186.58	-54.37	2,187.12	0.00	0.00	0.00
11,400.00	90.00	359.67	9,435.00	2,286.58	-54.95	2,287.12	0.00	0.00	0.00
11,500.00	90.00	359.67	9,435.00	2,386.58	-55.52	2,387.11	0.00	0.00	0.00
11,600.00	90.00	359.67	9,435.00	2,486.57	-56.10	2,487.11	0.00	0.00	0.00
11,700.00	90.00	359.67	9,435.00	2,586.57	-56.67	2,587.11	0.00	0.00	0.00
11,800.00	90.00	359.67	9,435.00	2,686.57	-57.25	2,687.10	0.00	0.00	0.00
11,900.00	90.00	359.67	9,435.00	2,786.57	-57.82	2,787.10	0.00	0.00	0.00
12,000.00	90.00	359.67	9,435.00	2,886.57	-58.40	2,887.10	0.00	0.00	0.00
12,100.00	90.00	359.67	9,435.00	2,986.57	-58.97	2,987.09	0.00	0.00	0.00
12,200.00	90.00	359.67	9,435.00	3,086.56	-59.55	3,087.09	0.00	0.00	0.00
12,300.00	90.00	359.67	9,435.00	3,186.56	-60.12	3,187.09	0.00	0.00	0.00
12,400.00	90.00	359.67	9,435.00	3,286.56	-60.70	3,287.08	0.00	0.00	0.00
12,500.00	90.00	359.67	9,435.00	3,386.56	-61.27	3,387.08	0.00	0.00	0.00
12,600.00	90.00	359.67	9,435.00	3,486.56	-61.85	3,487.08	0.00	0.00	0.00
12,700.00	90.00	359.67	9,435.00	3,586.56	-62.42	3,587.07	0.00	0.00	0.00
12,800.00	90.00	359.67	9,435.00	3,686.55	-63.00	3,687.07	0.00	0.00	0.00
12,900.00	90.00	359.67	9,435.00	3,786.55	-63.58	3,787.07	0.00	0.00	0.00
13,000.00	90.00	359.67	9,435.00	3,886.55	-64.15	3,887.07	0.00	0.00	0.00
13,100.00	90.00	359.67	9,435.00	3,986.55	-64.73	3,987.06	0.00	0.00	0.00
13,200.00	90.00	359.67	9,435.00	4,086.55	-65.30	4,087.06	0.00	0.00	0.00
13,300.00	90.00	359.67	9,435.00	4,186.55	-65.88	4,187.06	0.00	0.00	0.00
13,400.00	90.00	359.67	9,435.00	4,286.54	-66.45	4,287.05	0.00	0.00	0.00
13,500.00	90.00	359.67	9,435.00	4,386.54	-67.03	4,387.05	0.00	0.00	0.00
13,600.00	90.00	359.67	9,435.00	4,486.54	-67.60	4,487.05	0.00	0.00	0.00
13,700.00	90.00	359.67	9,435.00	4,586.54	-68.18	4,587.04	0.00	0.00	0.00
13,800.00	90.00	359.67	9,435.00	4,686.54	-68.75	4,687.04	0.00	0.00	0.00
13,900.00	90.00	359.67	9,435.00	4,786.54	-69.33	4,787.04	0.00	0.00	0.00
14,000.00	90.00	359.67	9,435.00	4,886.53	-69.90	4,887.03	0.00	0.00	0.00
14,100.00	90.00	359.67	9,435.00	4,986.53	-70.48	4,987.03	0.00	0.00	0.00
14,200.00	90.00	359.67	9,435.00	5,086.53	-71.06	5,087.03	0.00	0.00	0.00
14,300.00	90.00	359.67	9,435.00	5,186.53	-71.63	5,187.02	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD-27 2015)
Site: Hamon Fed Com A #11H
Well: Hamon Fed Com A #11H
Wellbore: Lateral #1
Design: Design #1

Local Co-ordinate Reference: Well Hamon Fed Com A #11H
TVD Reference: KB @ 3628.00usft (McVay 4)
MD Reference: KB @ 3628.00usft (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)
14,381.57	90.00	359.67	9,435.00	5,268.10	-72.10	5,268.59	0.00	0.00	0.00
TD at 14381.57									

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 (HFCA #11H/L1 De - plan hits target center - Point	0.00	0.00	9,435.00	649.76	-45.53	575,907.16	724,569.07	32° 34' 52.176 N	103° 36' 15.397 W
Target Window (HFCA # - plan hits target center - Rectangle (sides W100.00 H4,618.50 D30.00)	0.00	359.67	9,435.00	5,268.10	-72.10	580,525.50	724,542.50	32° 35' 37.876 N	103° 36' 15.338 W
BHL (HFCA #11H/OH) - plan hits target center - Point	0.00	0.01	9,435.00	5,268.10	-72.10	580,525.50	724,542.50	32° 35' 37.876 N	103° 36' 15.338 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,400.00	5,400.00	9 5/8"	9-5/8	12-1/4

Plan Annotations

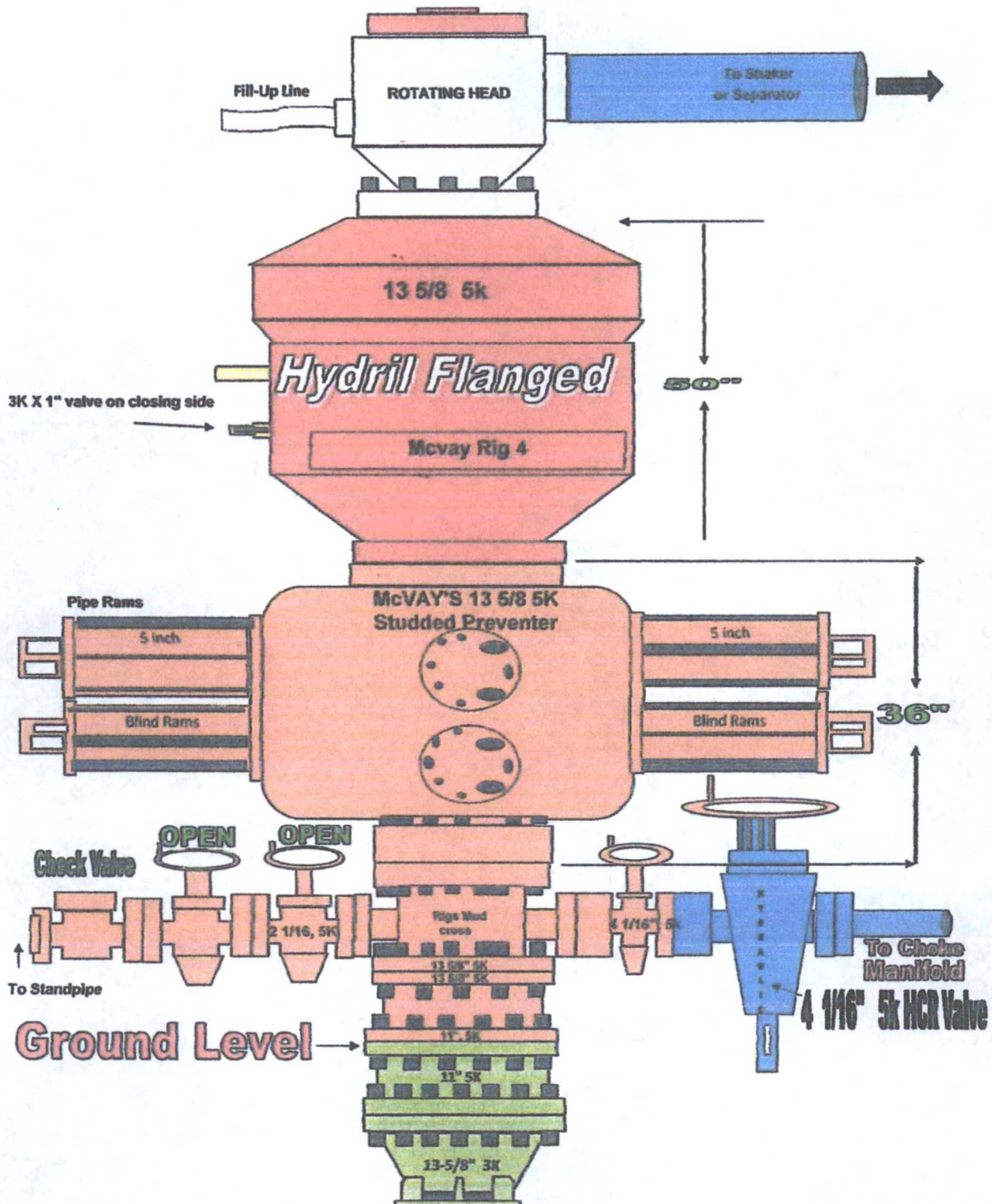
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
5,500.00	5,500.00	0.00	0.00	NUDGE - Start Build 2.00
5,573.00	5,572.99	0.84	-0.40	HOLD - Start 3303.40 hold at 5573.00 MD
8,876.40	8,875.32	77.00	-36.23	KOP - Start DLS 10.00 TFO 24.88
9,763.15	9,435.00	649.76	-45.53	EOC - Start 4618.42 hold at 9763.15 MD
14,381.57	9,435.00	5,268.10	-72.10	TD at 14381.57

HOBBS OCD

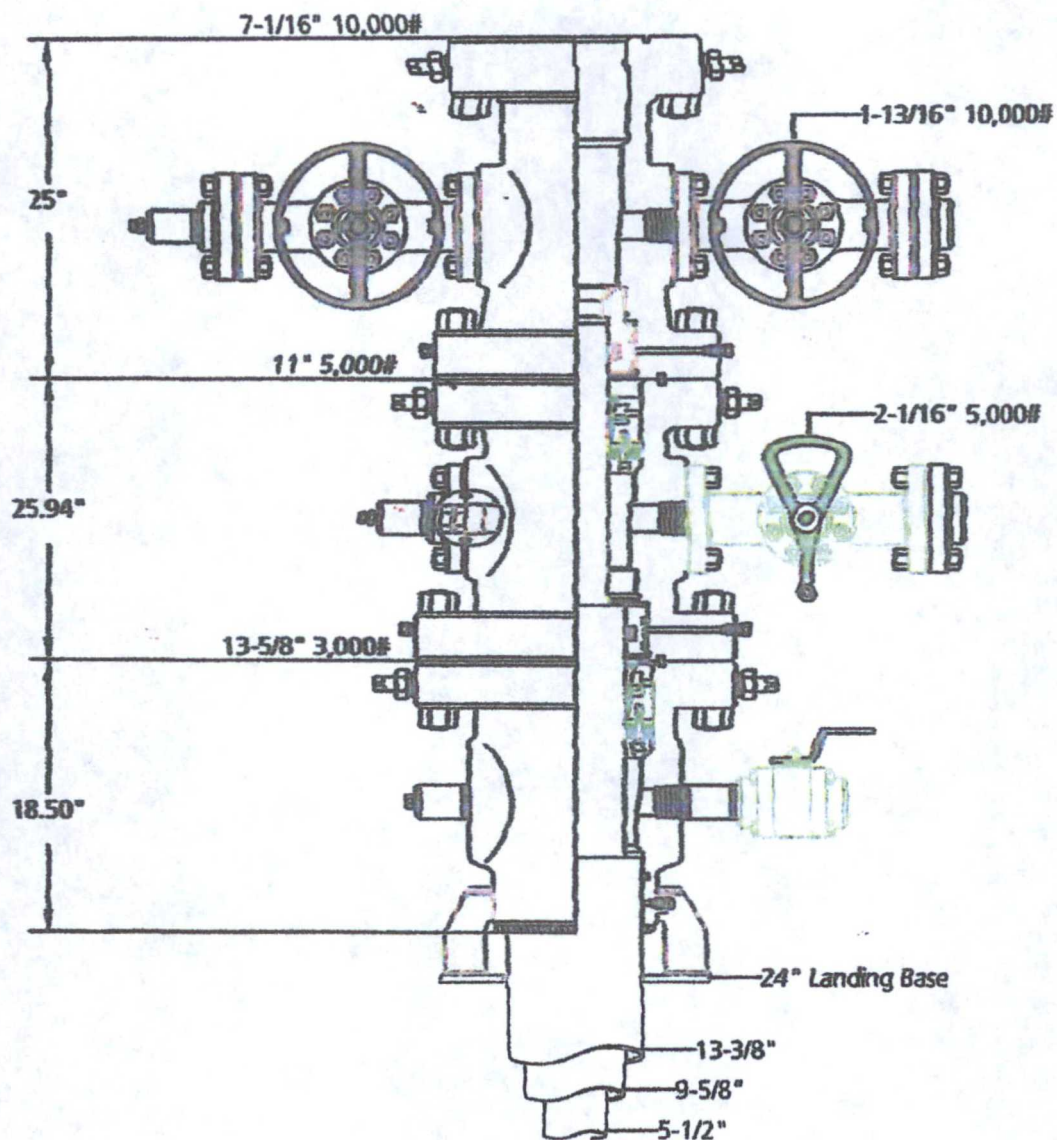
MAY 16 2016

RECEIVED

McVay Rig 4



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

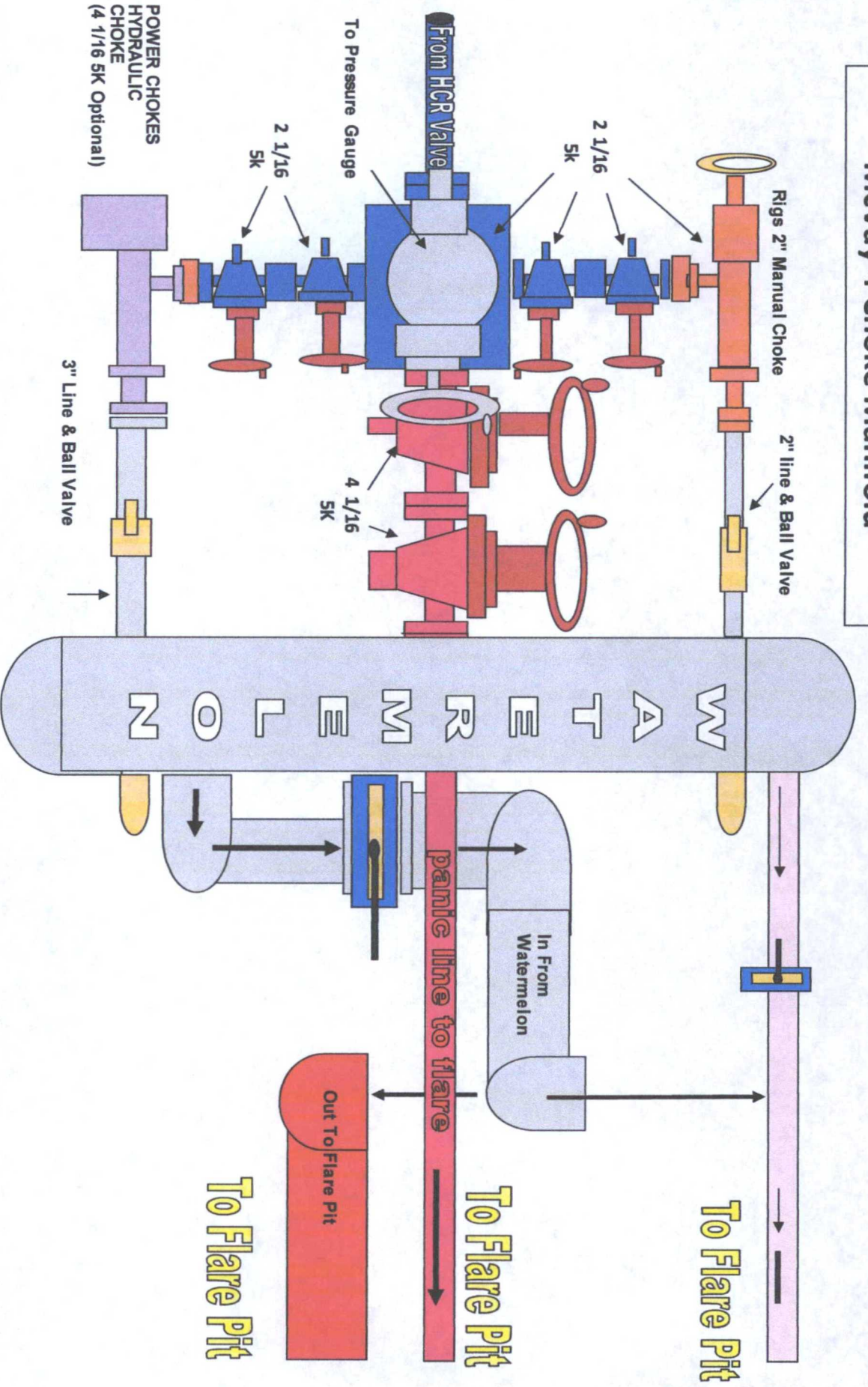


Legacy Reserves
Conventional 3-String

 CAMERON

Rev: Jeanette	Date: 7-15-15	Working/Issue:	# 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

Hamon Fed Com A ~~14~~ 14 - 4H + 5H - 12H

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:

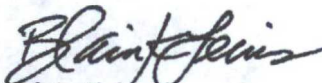
- 2-500 bbl steel tanks (fresh water for drilling)
- 2-700 bbl steel working pits (1400 bbls total)
- 2-20 cu yards steel haul off bins
- 2-pumps (CE FB1300)
- 2-shale shakers
- 1-mud cleaner (if needed)
- 1-centrifuge (if needed)

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

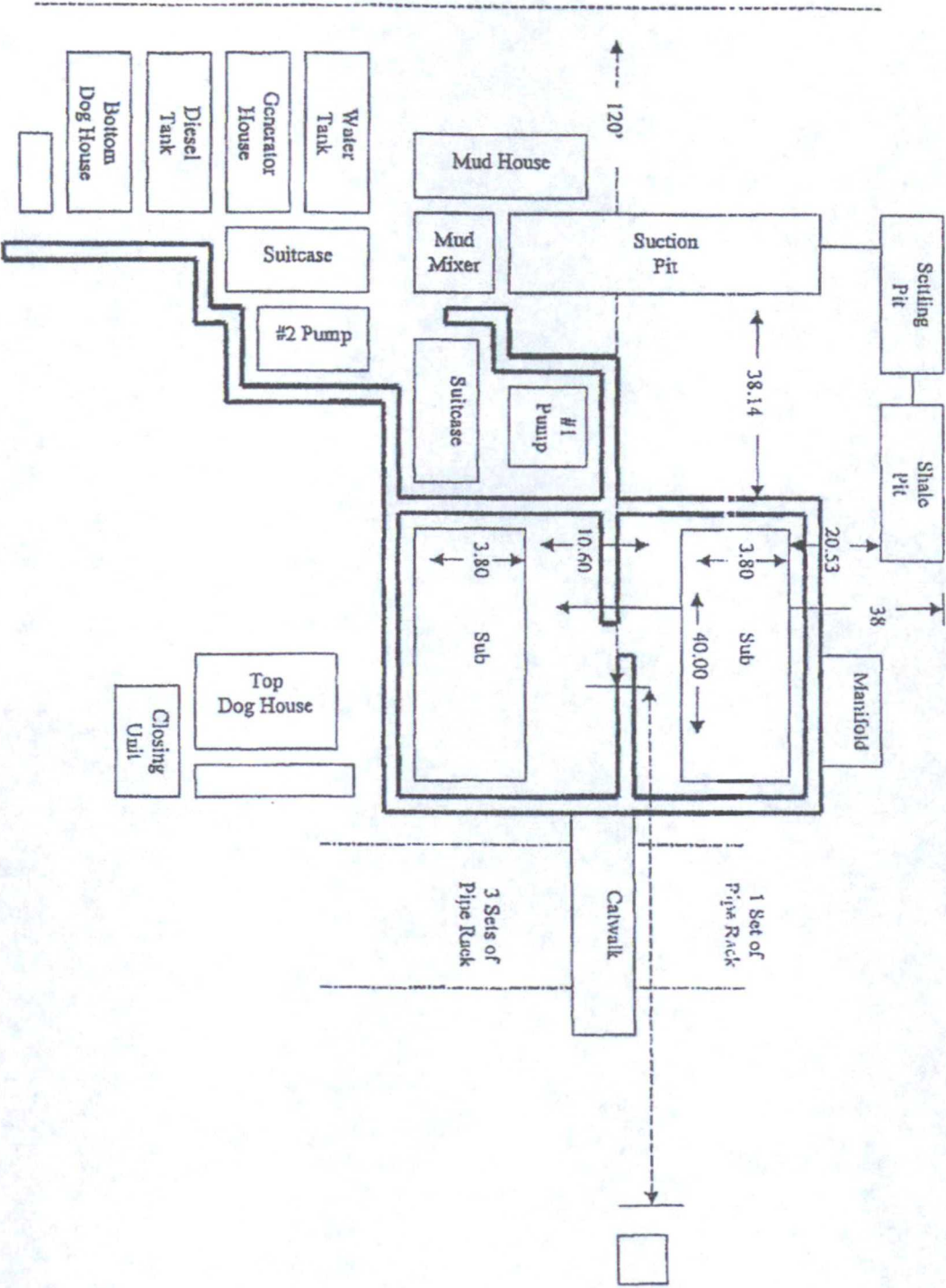


EXHIBIT D

Rig Plat Only
HAMON FED COM A 9H, 10H, 11H, 12H
V-DOOR WEST

