



Legacy Reserves

Lea County, NM (NAD-27 2015)

Hamon Fed Com A #12H

Hamon Fed Com A #12H

Lateral #1

Plan: Design #1

Standard Planning Report

27 September, 2015

HOBBS OCD

MAY 16 2016

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Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Hamon Fed Com A #12H
Company:	Legacy Reserves	TVD Reference:	KB @ 3628.00usft (McVay 4)
Project:	Lea County, NM (NAD-27 2015)	MD Reference:	KB @ 3628.00usft (McVay 4)
Site:	Hamon Fed Com A #12H	North Reference:	Grid
Well:	Hamon Fed Com A #12H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #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	Hamon Fed Com A #12H		
Site Position:		Northing:	575,257.90 usft
From:	Map	Easting:	724,664.70 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 34' 45.745 N
		Longitude:	103° 36' 14.332 W
		Grid Convergence:	0.39 °

Well	Hamon Fed Com A #12H		
Well Position	+N/-S	0.00 usft	Northing: 575,257.90 usft
	+E/-W	0.00 usft	Easting: 724,664.70 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 34' 45.745 N
		Longitude:	103° 36' 14.332 W
		Ground Level:	3,610.00 usft

Wellbore	Lateral #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	7/18/2015	7.20
			Dip Angle (°)
			60.41
			Field Strength (nT)
			48,343

Design	Design #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 (°)
			3.67

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	
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,741.50	4.83	76.00	5,741.21	2.46	9.87	2.00	2.00	0.00	76.00	
9,554.15	4.83	76.00	9,540.33	80.12	321.36	0.00	0.00	0.00	0.00	
10,442.75	90.00	359.67	10,100.00	653.22	364.04	10.00	9.58	-8.59	-76.37	
15,061.20	90.00	359.67	10,100.00	5,271.60	337.70	0.00	0.00	0.00	0.00	BHL (HFCA #12H/L1)

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD-27 2015)
Site: Hamon Fed Com A #12H
Well: Hamon Fed Com A #12H
Wellbore: Lateral #1
Design: Design #1

Local Co-ordinate Reference: Well Hamon Fed Com A #12H
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)
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									
5,600.00	2.00	76.00	5,599.98	0.42	1.69	0.53	2.00	2.00	0.00
5,700.00	4.00	76.00	5,699.84	1.69	6.77	2.12	2.00	2.00	0.00
5,741.50	4.83	76.00	5,741.21	2.46	9.87	3.09	2.00	2.00	0.00
HOLD - Start 3812.65 hold at 5741.50 MD									
5,800.00	4.83	76.00	5,799.51	3.65	14.65	4.58	0.00	0.00	0.00
5,900.00	4.83	76.00	5,899.15	5.69	22.82	7.14	0.00	0.00	0.00
6,000.00	4.83	76.00	5,998.80	7.73	30.99	9.69	0.00	0.00	0.00
6,100.00	4.83	76.00	6,098.44	9.76	39.16	12.25	0.00	0.00	0.00
6,200.00	4.83	76.00	6,198.09	11.80	47.33	14.80	0.00	0.00	0.00
6,300.00	4.83	76.00	6,297.73	13.84	55.50	17.36	0.00	0.00	0.00
6,400.00	4.83	76.00	6,397.38	15.87	63.67	19.91	0.00	0.00	0.00
6,500.00	4.83	76.00	6,497.02	17.91	71.84	22.47	0.00	0.00	0.00
6,600.00	4.83	76.00	6,596.67	19.95	80.01	25.02	0.00	0.00	0.00
6,700.00	4.83	76.00	6,696.31	21.99	88.18	27.58	0.00	0.00	0.00
6,800.00	4.83	76.00	6,795.96	24.02	96.35	30.13	0.00	0.00	0.00
6,900.00	4.83	76.00	6,895.60	26.06	104.52	32.69	0.00	0.00	0.00
7,000.00	4.83	76.00	6,995.25	28.10	112.69	35.24	0.00	0.00	0.00
7,100.00	4.83	76.00	7,094.89	30.13	120.86	37.80	0.00	0.00	0.00
7,200.00	4.83	76.00	7,194.53	32.17	129.03	40.35	0.00	0.00	0.00
7,300.00	4.83	76.00	7,294.18	34.21	137.20	42.91	0.00	0.00	0.00
7,400.00	4.83	76.00	7,393.82	36.24	145.37	45.46	0.00	0.00	0.00
7,500.00	4.83	76.00	7,493.47	38.28	153.54	48.02	0.00	0.00	0.00
7,600.00	4.83	76.00	7,593.11	40.32	161.71	50.57	0.00	0.00	0.00
7,700.00	4.83	76.00	7,692.76	42.36	169.88	53.13	0.00	0.00	0.00
7,800.00	4.83	76.00	7,792.40	44.39	178.05	55.68	0.00	0.00	0.00
7,900.00	4.83	76.00	7,892.05	46.43	186.22	58.24	0.00	0.00	0.00
8,000.00	4.83	76.00	7,991.69	48.47	194.39	60.79	0.00	0.00	0.00
8,100.00	4.83	76.00	8,091.34	50.50	202.56	63.35	0.00	0.00	0.00
8,200.00	4.83	76.00	8,190.98	52.54	210.73	65.90	0.00	0.00	0.00
8,300.00	4.83	76.00	8,290.63	54.58	218.90	68.46	0.00	0.00	0.00
8,400.00	4.83	76.00	8,390.27	56.61	227.07	71.01	0.00	0.00	0.00
8,500.00	4.83	76.00	8,489.92	58.65	235.24	73.57	0.00	0.00	0.00
8,600.00	4.83	76.00	8,589.56	60.69	243.41	76.12	0.00	0.00	0.00
8,700.00	4.83	76.00	8,689.21	62.72	251.58	78.68	0.00	0.00	0.00
8,800.00	4.83	76.00	8,788.85	64.76	259.75	81.23	0.00	0.00	0.00
8,900.00	4.83	76.00	8,888.50	66.80	267.92	83.79	0.00	0.00	0.00
9,000.00	4.83	76.00	8,988.14	68.84	276.09	86.34	0.00	0.00	0.00
9,100.00	4.83	76.00	9,087.79	70.87	284.26	88.90	0.00	0.00	0.00
9,200.00	4.83	76.00	9,187.43	72.91	292.43	91.46	0.00	0.00	0.00
9,300.00	4.83	76.00	9,287.08	74.95	300.60	94.01	0.00	0.00	0.00
9,400.00	4.83	76.00	9,386.72	76.98	308.76	96.57	0.00	0.00	0.00
9,500.00	4.83	76.00	9,486.37	79.02	316.93	99.12	0.00	0.00	0.00
9,554.15	4.83	76.00	9,540.33	80.12	321.36	100.50	0.00	0.00	0.00
KOP - Start DLS 10.00 TFO -76.37									
9,600.00	7.40	38.89	9,585.93	82.89	325.09	103.50	10.00	5.60	-80.93
9,650.00	11.70	23.04	9,635.23	90.06	329.09	110.92	10.00	8.60	-31.71
9,700.00	16.39	15.88	9,683.73	101.52	333.01	122.60	10.00	9.40	-14.32
9,750.00	21.23	11.88	9,731.04	117.18	336.81	138.47	10.00	9.67	-8.00
9,800.00	26.12	9.31	9,776.82	136.91	340.45	158.39	10.00	9.79	-5.13
9,850.00	31.05	7.51	9,820.72	160.57	343.92	182.23	10.00	9.85	-3.60

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Local Co-ordinate Reference: Well Hamon Fed Com A #12H
TVD Reference: KB @ 3628.00usft (McVay 4)
MD Reference: KB @ 3628.00usft (McVay 4)
North Reference: Grid
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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)
9,900.00	35.99	6.16	9,862.39	187.98	347.19	209.79	10.00	9.89	-2.70
9,950.00	40.95	5.10	9,901.52	218.92	350.22	240.86	10.00	9.91	-2.12
10,000.00	45.91	4.23	9,937.82	253.17	353.01	275.22	10.00	9.93	-1.74
10,050.00	50.88	3.50	9,971.01	290.46	355.52	312.60	10.00	9.94	-1.47
10,100.00	55.86	2.87	10,000.83	330.51	357.74	352.71	10.00	9.95	-1.27
10,150.00	60.83	2.30	10,027.07	373.02	359.65	395.25	10.00	9.95	-1.13
10,200.00	65.81	1.79	10,049.51	417.65	361.24	439.89	10.00	9.96	-1.03
10,250.00	70.79	1.31	10,067.99	464.08	362.49	486.30	10.00	9.96	-0.95
10,300.00	75.77	0.87	10,082.37	511.94	363.40	534.13	10.00	9.96	-0.89
10,350.00	80.76	0.44	10,092.53	560.88	363.96	583.00	10.00	9.96	-0.85
10,400.00	85.74	0.02	10,098.41	610.51	364.16	632.55	10.00	9.97	-0.83
10,442.75	90.00	359.67	10,100.00	653.22	364.04	675.16	10.00	9.97	-0.82
EOC - Start 4618.45 hold at 10442.74 MD									
10,500.00	90.00	359.67	10,100.00	710.47	363.72	732.27	0.00	0.00	0.00
10,600.00	90.00	359.67	10,100.00	810.47	363.15	832.03	0.00	0.00	0.00
10,700.00	90.00	359.67	10,100.00	910.47	362.58	931.79	0.00	0.00	0.00
10,800.00	90.00	359.67	10,100.00	1,010.47	362.00	1,031.55	0.00	0.00	0.00
10,900.00	90.00	359.67	10,100.00	1,110.47	361.43	1,131.30	0.00	0.00	0.00
11,000.00	90.00	359.67	10,100.00	1,210.47	360.86	1,231.06	0.00	0.00	0.00
11,100.00	90.00	359.67	10,100.00	1,310.46	360.29	1,330.82	0.00	0.00	0.00
11,200.00	90.00	359.67	10,100.00	1,410.46	359.72	1,430.57	0.00	0.00	0.00
11,300.00	90.00	359.67	10,100.00	1,510.46	359.15	1,530.33	0.00	0.00	0.00
11,400.00	90.00	359.67	10,100.00	1,610.46	358.58	1,630.09	0.00	0.00	0.00
11,500.00	90.00	359.67	10,100.00	1,710.46	358.01	1,729.85	0.00	0.00	0.00
11,600.00	90.00	359.67	10,100.00	1,810.46	357.44	1,829.60	0.00	0.00	0.00
11,700.00	90.00	359.67	10,100.00	1,910.45	356.87	1,929.36	0.00	0.00	0.00
11,800.00	90.00	359.67	10,100.00	2,010.45	356.30	2,029.12	0.00	0.00	0.00
11,900.00	90.00	359.67	10,100.00	2,110.45	355.73	2,128.88	0.00	0.00	0.00
12,000.00	90.00	359.67	10,100.00	2,210.45	355.16	2,228.63	0.00	0.00	0.00
12,100.00	90.00	359.67	10,100.00	2,310.45	354.59	2,328.39	0.00	0.00	0.00
12,200.00	90.00	359.67	10,100.00	2,410.45	354.02	2,428.15	0.00	0.00	0.00
12,300.00	90.00	359.67	10,100.00	2,510.45	353.45	2,527.91	0.00	0.00	0.00
12,400.00	90.00	359.67	10,100.00	2,610.44	352.88	2,627.66	0.00	0.00	0.00
12,500.00	90.00	359.67	10,100.00	2,710.44	352.31	2,727.42	0.00	0.00	0.00
12,600.00	90.00	359.67	10,100.00	2,810.44	351.74	2,827.18	0.00	0.00	0.00
12,700.00	90.00	359.67	10,100.00	2,910.44	351.17	2,926.94	0.00	0.00	0.00
12,800.00	90.00	359.67	10,100.00	3,010.44	350.60	3,026.69	0.00	0.00	0.00
12,900.00	90.00	359.67	10,100.00	3,110.44	350.03	3,126.45	0.00	0.00	0.00
13,000.00	90.00	359.67	10,100.00	3,210.43	349.46	3,226.21	0.00	0.00	0.00
13,100.00	90.00	359.67	10,100.00	3,310.43	348.89	3,325.96	0.00	0.00	0.00
13,200.00	90.00	359.67	10,100.00	3,410.43	348.32	3,425.72	0.00	0.00	0.00
13,300.00	90.00	359.67	10,100.00	3,510.43	347.75	3,525.48	0.00	0.00	0.00
13,400.00	90.00	359.67	10,100.00	3,610.43	347.18	3,625.24	0.00	0.00	0.00
13,500.00	90.00	359.67	10,100.00	3,710.43	346.60	3,724.99	0.00	0.00	0.00
13,600.00	90.00	359.67	10,100.00	3,810.42	346.03	3,824.75	0.00	0.00	0.00
13,700.00	90.00	359.67	10,100.00	3,910.42	345.46	3,924.51	0.00	0.00	0.00
13,800.00	90.00	359.67	10,100.00	4,010.42	344.89	4,024.27	0.00	0.00	0.00
13,900.00	90.00	359.67	10,100.00	4,110.42	344.32	4,124.02	0.00	0.00	0.00
14,000.00	90.00	359.67	10,100.00	4,210.42	343.75	4,223.78	0.00	0.00	0.00
14,100.00	90.00	359.67	10,100.00	4,310.42	343.18	4,323.54	0.00	0.00	0.00
14,200.00	90.00	359.67	10,100.00	4,410.41	342.61	4,423.30	0.00	0.00	0.00
14,300.00	90.00	359.67	10,100.00	4,510.41	342.04	4,523.05	0.00	0.00	0.00
14,400.00	90.00	359.67	10,100.00	4,610.41	341.47	4,622.81	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 #12H
Well: Hamon Fed Com A #12H
Wellbore: Lateral #1
Design: Design #1

Local Co-ordinate Reference: Well Hamon Fed Com A #12H
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)
14,500.00	90.00	359.67	10,100.00	4,710.41	340.90	4,722.57	0.00	0.00	0.00
14,600.00	90.00	359.67	10,100.00	4,810.41	340.33	4,822.32	0.00	0.00	0.00
14,700.00	90.00	359.67	10,100.00	4,910.41	339.76	4,922.08	0.00	0.00	0.00
14,800.00	90.00	359.67	10,100.00	5,010.40	339.19	5,021.84	0.00	0.00	0.00
14,900.00	90.00	359.67	10,100.00	5,110.40	338.62	5,121.60	0.00	0.00	0.00
15,000.00	90.00	359.67	10,100.00	5,210.40	338.05	5,221.35	0.00	0.00	0.00
15,061.20	90.00	359.67	10,100.00	5,271.60	337.70	5,282.41	0.00	0.00	0.00
TD at 15061.20									

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
Target Window (HFCA # - plan hits target center - Rectangle (sides W100.00 H4,618.50 D30.00)	0.00	359.67	10,100.00	5,271.60	337.70	580,529.50	725,002.40	32° 35' 37.884 N	103° 36' 9.962 W
BHL (HFCA #12H/L1) - plan hits target center - Point	0.00	0.00	10,100.00	5,271.60	337.70	580,529.50	725,002.40	32° 35' 37.884 N	103° 36' 9.962 W
EOC (HFCA #12H/L1 Dε - plan hits target center - Point	0.00	0.00	10,100.00	653.18	364.04	575,911.08	725,028.74	32° 34' 52.183 N	103° 36' 10.025 W

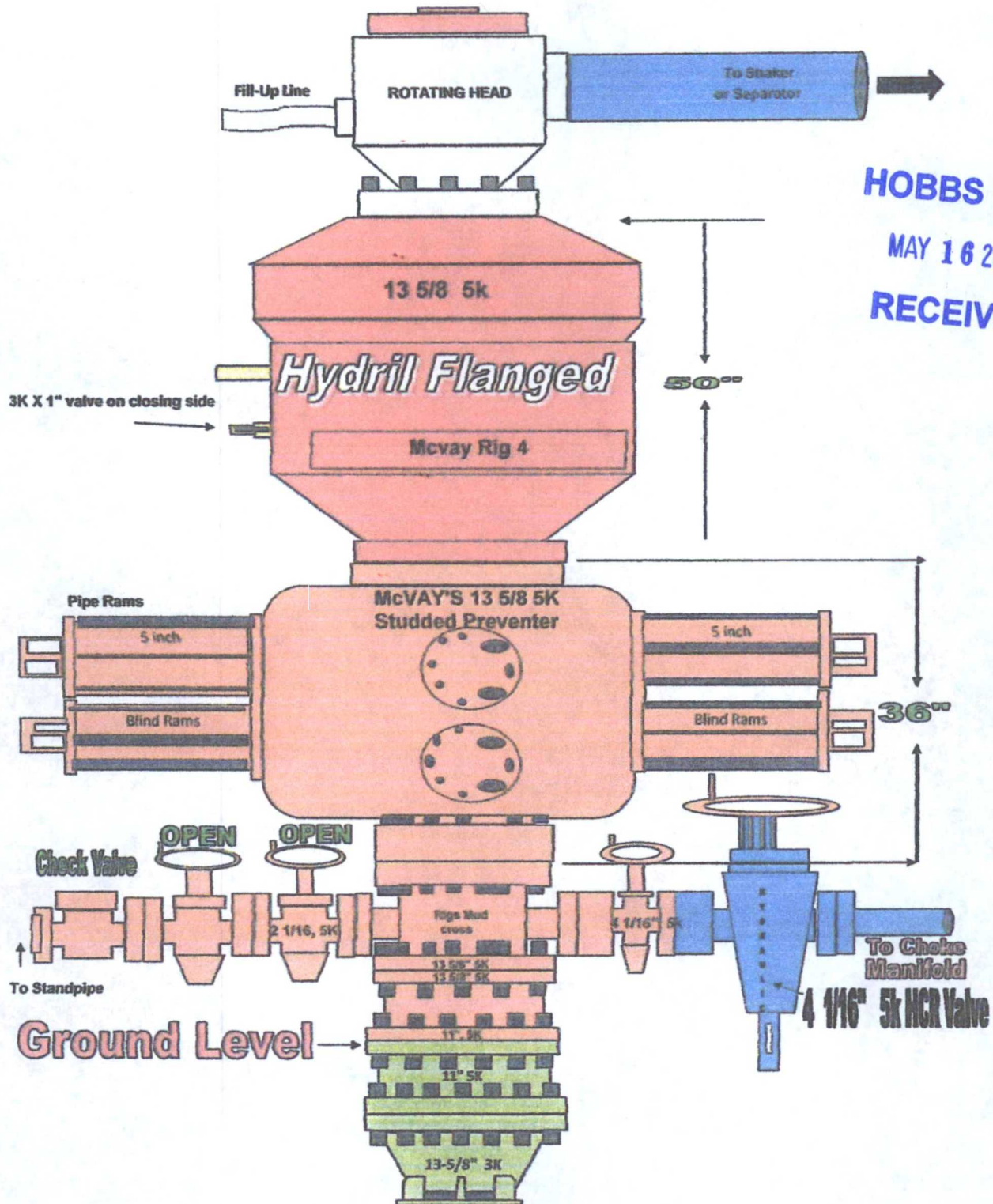
Casing Points

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

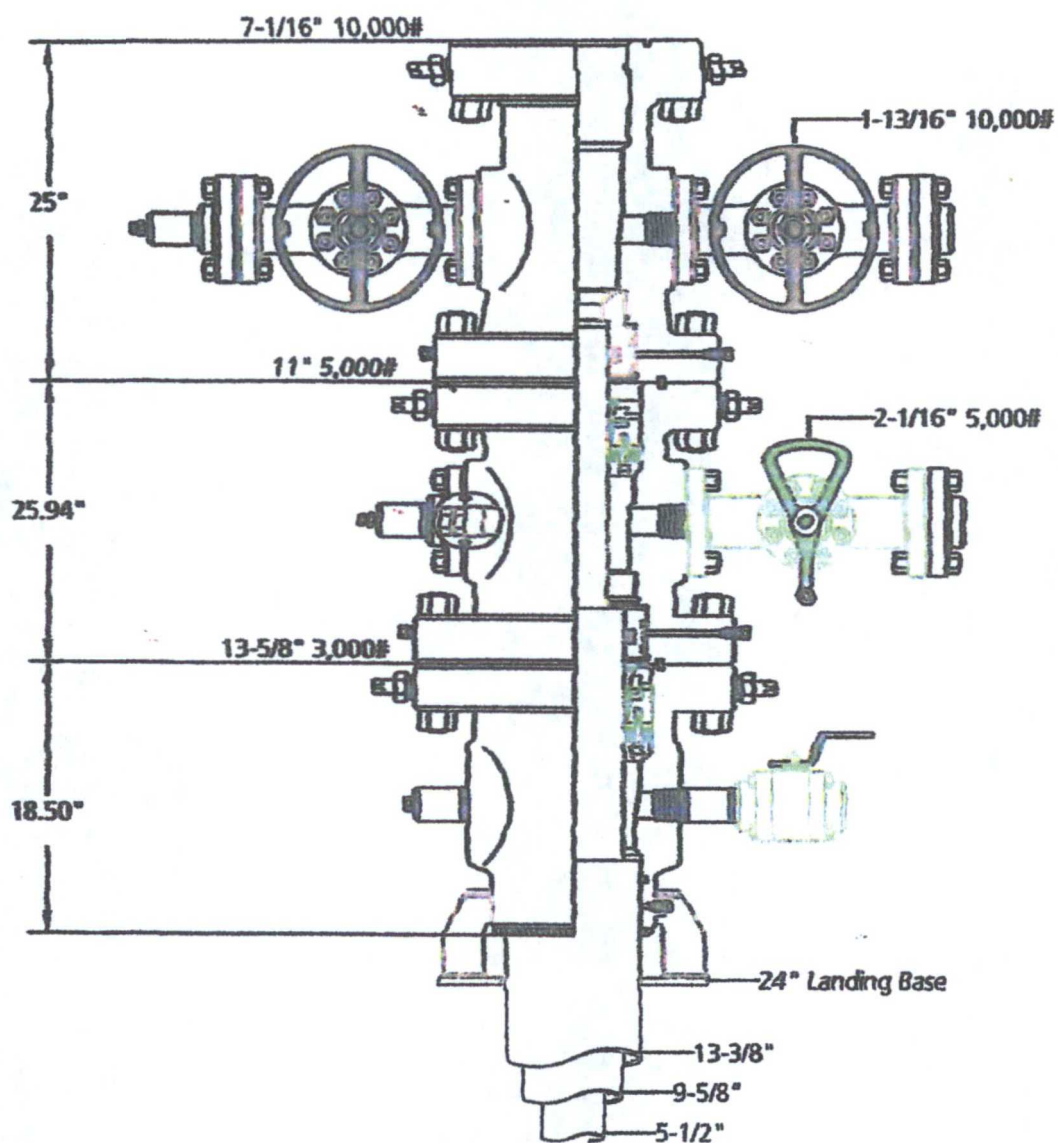
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft) +E/-W (usft)	Comment
5,500.00	5,500.00	0.00 0.00	NUDGE - Start Build 2.00
5,741.50	5,741.21	2.46 9.87	HOLD - Start 3812.65 hold at 5741.50 MD
9,554.15	9,540.33	80.12 321.36	KOP - Start DLS 10.00 TFO -76.37
10,442.75	10,100.00	653.22 364.04	EOC - Start 4618.45 hold at 10442.74 MD
15,061.20	10,100.00	5,271.60 337.70	TD at 15061.20

McVay Rig 4



HOBBS OCD
MAY 16 2016
RECEIVED

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

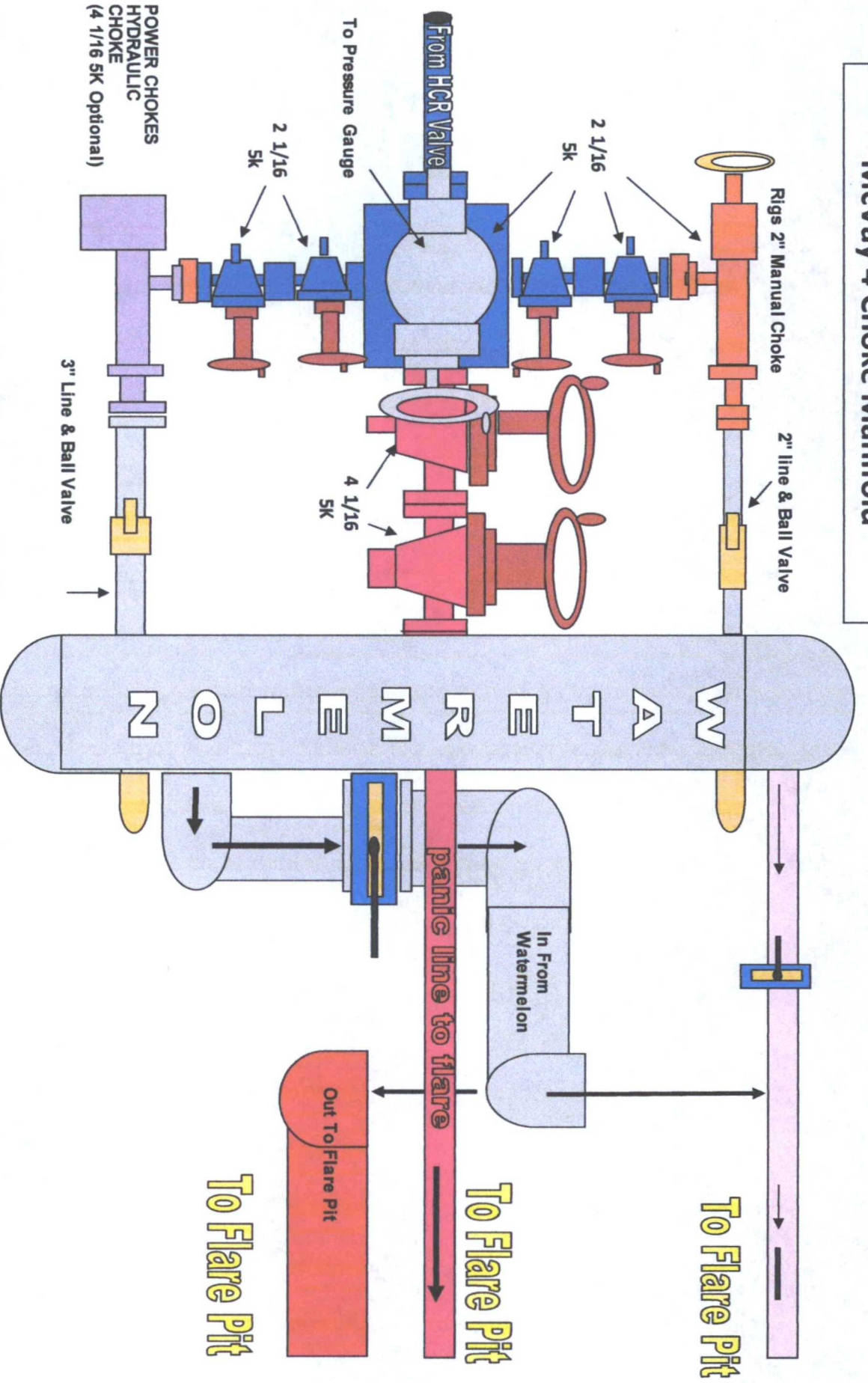


Legacy Reserves
Conventional 3-String

 **CAMERON**

name	Jeanette	date	7-15-15	drawing number	#	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 ~~1H~~ 1H - 4H + 9H - 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

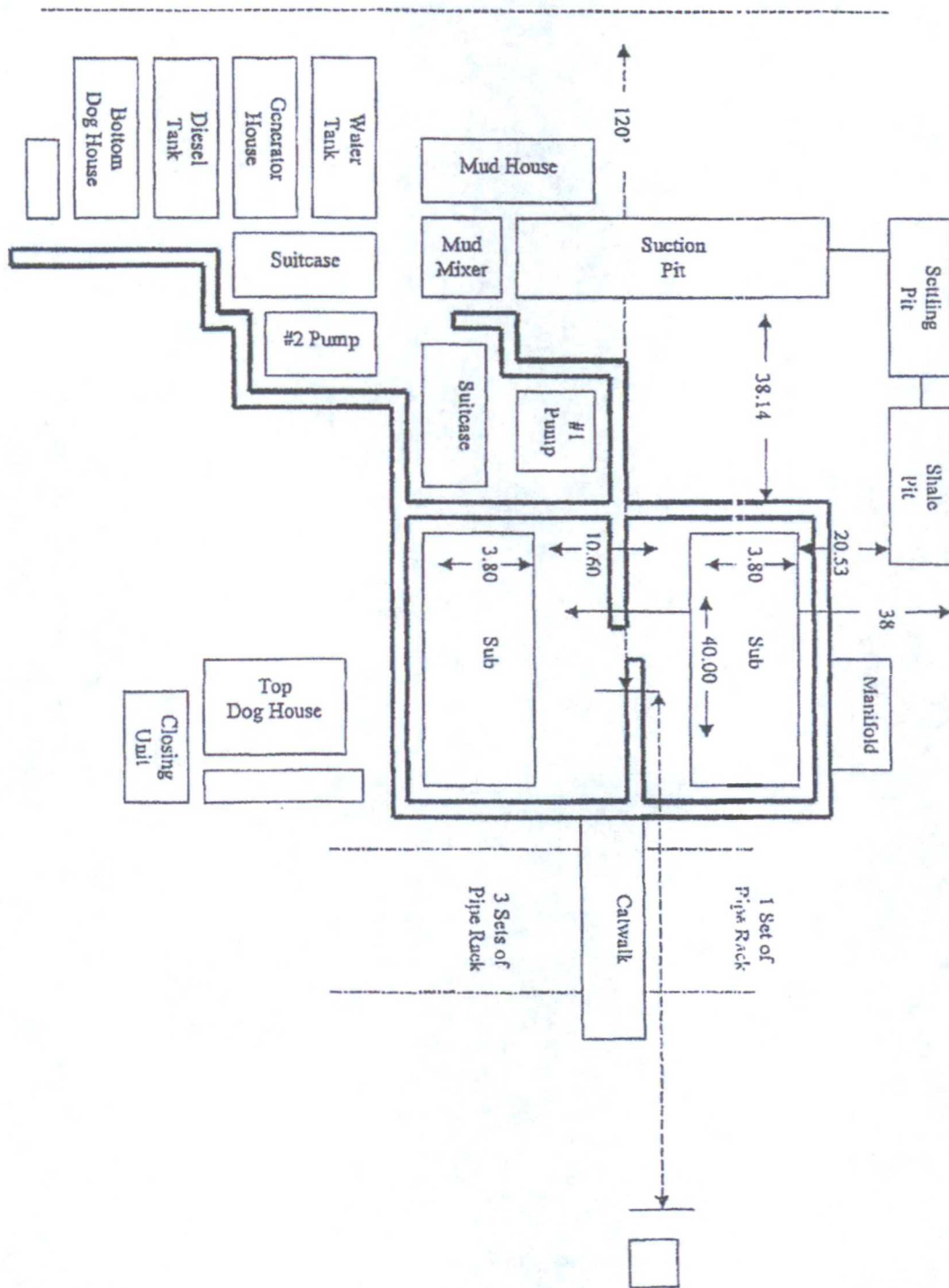


EXHIBIT D

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

