

30-025-40861
ELG 11-14-2012

Permian District

NM- Lea- Avalon

McCloy Ranch 2-24-32 ST COM 4H

Well #1

Wellbore #1

Plan: Plat

Standard Planning Report

09 November, 2012

NOV 15 2012

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site McCloy Ranch 2-24-32 ST COM 4H
Company:	Permian District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	NM- Lea- Avalon	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	McCloy Ranch 2-24-32 ST COM 4H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Project	NM- Lea- Avalon		
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	McCloy Ranch 2-24-32 ST COM 4H		
Site Position:		Northing:	451,579.00 ft
From:	Map	Easting:	714,844.00 ft
Position Uncertainty:	0.0 usft	Slot Radius:	13 200 in
		Latitude:	32° 14' 22.54091918 N
		Longitude:	103° 38' 18.51130564 W
		Grid Convergence:	0 37 °

Well	Well #1		
Well Position	+N/-S	0 0 usft	Northing:
	+E/-W	0 0 usft	Easting:
Position Uncertainty	0 0 usft	Wellhead Elevation:	Ground Level:
			0 0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	10/30/2012	(°)
			Dip Angle
			(°)
			Field Strength
			(nT)
			48,548

Design	Plat		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			359.46

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	
9,218.1	0.00	0.00	9,218.1	0 0	0 0	0 00	0.00	0 00	0 00	
9,972.3	90 50	359.46	9,695.5	481.6	-4.5	12.00	12.00	0 00	359.46	
14,503.0	90 50	359.46	9,656.0	5,012.0	-47 0	0.00	0.00	0 00	0 00	MR 2-24-32 4H- PE

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Site:	McCloy Ranch 2-24-32 ST COM 4H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

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	

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Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

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
9,218.1	0.00	0.00	9,218.1	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	9.83	359.46	9,299.6	7.0	-0.1	7.0	12.00	12.00	0.00
9,400.0	21.83	359.46	9,395.6	34.2	-0.3	34.2	12.00	12.00	0.00
9,500.0	33.83	359.46	9,483.9	80.8	-0.8	80.8	12.00	12.00	0.00
9,600.0	45.83	359.46	9,560.5	144.7	-1.4	144.8	12.00	12.00	0.00
9,700.0	57.83	359.46	9,622.2	223.2	-2.1	223.2	12.00	12.00	0.00
9,800.0	69.83	359.46	9,666.3	312.8	-2.9	312.8	12.00	12.00	0.00
9,900.0	81.83	359.46	9,690.7	409.6	-3.8	409.6	12.00	12.00	0.00
9,972.3	90.50	359.46	9,695.5	481.6	-4.5	481.6	12.00	12.00	0.00
10,000.0	90.50	359.46	9,695.3	509.3	-4.8	509.4	0.00	0.00	0.00
10,100.0	90.50	359.46	9,694.4	609.3	-5.7	609.3	0.00	0.00	0.00
10,200.0	90.50	359.46	9,693.6	709.3	-6.7	709.3	0.00	0.00	0.00
10,300.0	90.50	359.46	9,692.7	809.3	-7.6	809.3	0.00	0.00	0.00
10,400.0	90.50	359.46	9,691.8	909.3	-8.5	909.3	0.00	0.00	0.00
10,500.0	90.50	359.46	9,690.9	1,009.3	-9.5	1,009.3	0.00	0.00	0.00

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Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

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)
10,600.0	90.50	359.46	9,690.1	1,109.3	-10.4	1,109.3	0.00	0.00	0.00
10,700.0	90.50	359.46	9,689.2	1,209.3	-11.3	1,209.3	0.00	0.00	0.00
10,800.0	90.50	359.46	9,688.3	1,309.3	-12.3	1,309.3	0.00	0.00	0.00
10,900.0	90.50	359.46	9,687.4	1,409.3	-13.2	1,409.3	0.00	0.00	0.00
11,000.0	90.50	359.46	9,686.6	1,509.2	-14.2	1,509.3	0.00	0.00	0.00
11,100.0	90.50	359.46	9,685.7	1,609.2	-15.1	1,609.3	0.00	0.00	0.00
11,200.0	90.50	359.46	9,684.8	1,709.2	-16.0	1,709.3	0.00	0.00	0.00
11,300.0	90.50	359.46	9,684.0	1,809.2	-17.0	1,809.3	0.00	0.00	0.00
11,400.0	90.50	359.46	9,683.1	1,909.2	-17.9	1,909.3	0.00	0.00	0.00
11,500.0	90.50	359.46	9,682.2	2,009.2	-18.8	2,009.3	0.00	0.00	0.00
11,600.0	90.50	359.46	9,681.3	2,109.2	-19.8	2,109.3	0.00	0.00	0.00
11,700.0	90.50	359.46	9,680.5	2,209.2	-20.7	2,209.3	0.00	0.00	0.00
11,800.0	90.50	359.46	9,679.6	2,309.2	-21.7	2,309.3	0.00	0.00	0.00
11,900.0	90.50	359.46	9,678.7	2,409.2	-22.6	2,409.3	0.00	0.00	0.00
12,000.0	90.50	359.46	9,677.8	2,509.2	-23.5	2,509.3	0.00	0.00	0.00
12,100.0	90.50	359.46	9,677.0	2,609.2	-24.5	2,609.3	0.00	0.00	0.00
12,200.0	90.50	359.46	9,676.1	2,709.1	-25.4	2,709.3	0.00	0.00	0.00
12,300.0	90.50	359.46	9,675.2	2,809.1	-26.3	2,809.3	0.00	0.00	0.00
12,400.0	90.50	359.46	9,674.4	2,909.1	-27.3	2,909.3	0.00	0.00	0.00
12,500.0	90.50	359.46	9,673.5	3,009.1	-28.2	3,009.3	0.00	0.00	0.00
12,600.0	90.50	359.46	9,672.6	3,109.1	-29.2	3,109.2	0.00	0.00	0.00
12,700.0	90.50	359.46	9,671.7	3,209.1	-30.1	3,209.2	0.00	0.00	0.00
12,800.0	90.50	359.46	9,670.9	3,309.1	-31.0	3,309.2	0.00	0.00	0.00
12,900.0	90.50	359.46	9,670.0	3,409.1	-32.0	3,409.2	0.00	0.00	0.00
13,000.0	90.50	359.46	9,669.1	3,509.1	-32.9	3,509.2	0.00	0.00	0.00
13,100.0	90.50	359.46	9,668.2	3,609.1	-33.8	3,609.2	0.00	0.00	0.00
13,200.0	90.50	359.46	9,667.4	3,709.1	-34.8	3,709.2	0.00	0.00	0.00
13,300.0	90.50	359.46	9,666.5	3,809.1	-35.7	3,809.2	0.00	0.00	0.00
13,400.0	90.50	359.46	9,665.6	3,909.0	-36.7	3,909.2	0.00	0.00	0.00
13,500.0	90.50	359.46	9,664.8	4,009.0	-37.6	4,009.2	0.00	0.00	0.00
13,600.0	90.50	359.46	9,663.9	4,109.0	-38.5	4,109.2	0.00	0.00	0.00
13,700.0	90.50	359.46	9,663.0	4,209.0	-39.5	4,209.2	0.00	0.00	0.00
13,800.0	90.50	359.46	9,662.1	4,309.0	-40.4	4,309.2	0.00	0.00	0.00
13,900.0	90.50	359.46	9,661.3	4,409.0	-41.3	4,409.2	0.00	0.00	0.00
14,000.0	90.50	359.46	9,660.4	4,509.0	-42.3	4,509.2	0.00	0.00	0.00
14,100.0	90.50	359.46	9,659.5	4,609.0	-43.2	4,609.2	0.00	0.00	0.00
14,200.0	90.50	359.46	9,658.6	4,709.0	-44.2	4,709.2	0.00	0.00	0.00
14,300.0	90.50	359.46	9,657.8	4,809.0	-45.1	4,809.2	0.00	0.00	0.00
14,400.0	90.50	359.46	9,656.9	4,909.0	-46.0	4,909.2	0.00	0.00	0.00
14,500.0	90.50	359.46	9,656.0	5,009.0	-47.0	5,009.2	0.00	0.00	0.00
14,503.0	90.50	359.46	9,656.0	5,012.0	-47.0	5,012.2	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site McCloy Ranch 2-24-32 ST COM 4H
Company:	Permian District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	NM- Lea- Avalon	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	McCloy Ranch 2-24-32 ST COM 4H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Design Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(ft)	(ft)	Latitude Longitude
MR 2-24-32 4H- PBHI		0.00	0.00	9,656.0	5,012.0	-47.0	456,591.00	714,797.00	15' 12 14066454 N 38' 18.68092527 W
- plan hits target center									
- Point									
MR 2-24-32 4H- SHL-		0.00	0.00	9,700.0	0.0	0.0	451,579.00	714,844.00	14' 22.54091918 N 38' 18.51130564 W
- plan misses target center by 201.0usft at 9600.0usft MD (9560.5 TVD, 144.7 N, -1.4 E)									
- Point									