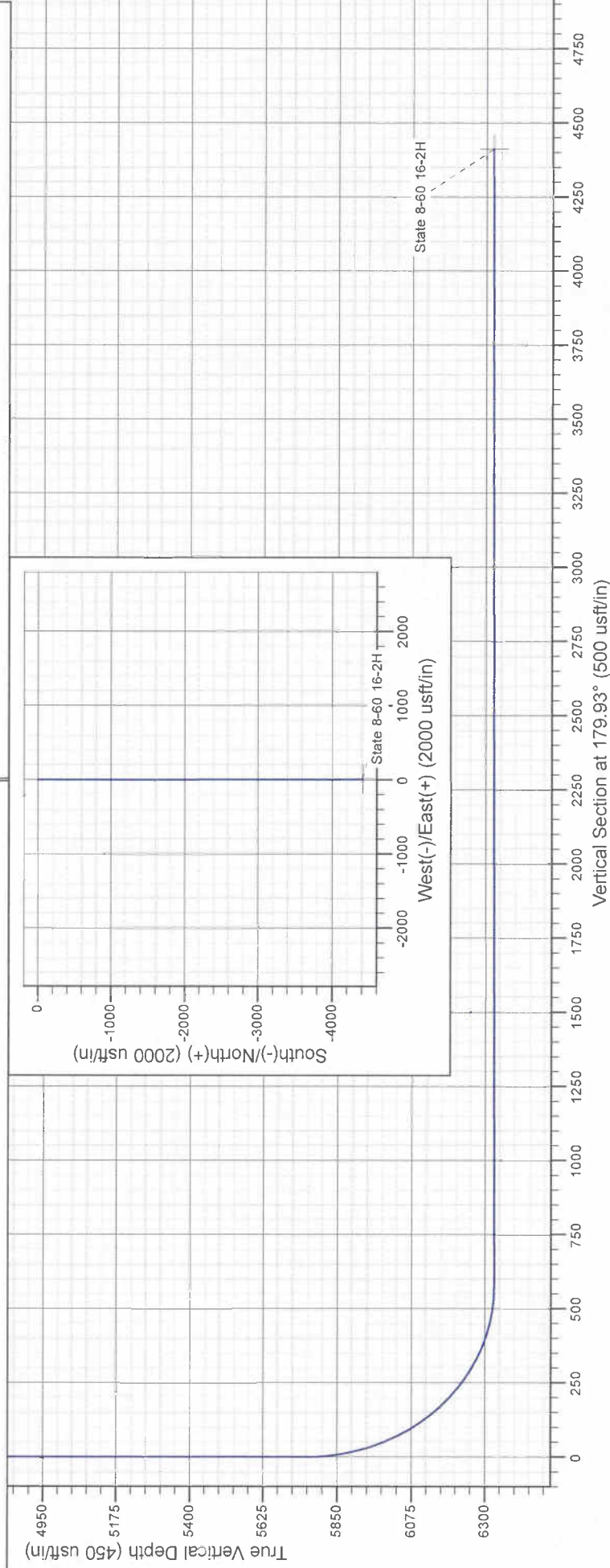


Project: Weld - DJ Basin
Site: State 8-60 16-2H
Well: State 8-60 16-2H
Wellbore: State 8-60 16-2H
Design: State 8-60 16-2H

PROJECT DETAILS: Weld - DJ Basin

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Colorado North 501

System Datum: Mean Sea Level



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5755.7	0.00	0.00	5755.7	0.0	0.0	0.00	0.00	0.0	
3	6656.7	90.10	179.93	6328.7	-574.0	0.8	10.00	179.93	574.0	
4	10494.5	90.10	179.93	6322.0	-4411.7	5.8	0.00	0.00	4411.7	State 8-60 16-2H

Chesapeake Energy - Rockies District

Weld - DJ Basin

State 8-60 16-2H

State 8-60 16-2H

State 8-60 16-2H

Plan: State 8-60 16-2H

Standard Planning Report

23 November, 2011

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well State 8-60 16-2H
Company:	Chesapeake Energy - Rockies District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Weld - DJ Basin	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	State 8-60 16-2H	North Reference:	Grid
Well:	State 8-60 16-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	State 8-60 16-2H		
Design:	State 8-60 16-2H		

Project	Weld - DJ Basin		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado North 501		

Site	State 8-60 16-2H		
Site Position:		Northing:	489,541.68 ft
From:	Map	Easting:	2,387,609.23 ft
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in
		Latitude:	40° 40' 7.76742247 N
		Longitude:	104° 6' 9.83881220 W
		Grid Convergence:	0.90 °

Well	State 8-60 16-2H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
		Latitude:	40° 40' 7.76742247 N
		Longitude:	104° 6' 9.83881220 W
		Ground Level:	0.0 usft

Wellbore	State 8-60 16-2H		
Magnetics	Model Name	Sample Date	Declination (°)
	User Defined	11/22/2011	0.00
			Dip Angle (°)
			0.00
			Field Strength (nT)
			0

Design	State 8-60 16-2H		
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 (°)
			179.93

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	
5,755.7	0.00	0.00	5,755.7	0.0	0.0	0.00	0.00	0.00	0.00	
6,656.7	90.10	179.93	6,328.7	-574.0	0.8	10.00	10.00	0.00	179.93	
10,494.5	90.10	179.93	6,322.0	-4,411.7	5.8	0.00	0.00	0.00	0.00	State 8-60 16-2H

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well State 8-60 16-2H
Company:	Chesapeake Energy - Rockies District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Weld - DJ Basin	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	State 8-60 16-2H	North Reference:	Grid
Well:	State 8-60 16-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	State 8-60 16-2H		
Design:	State 8-60 16-2H		

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

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well State 8-60 16-2H
Company:	Chesapeake Energy - Rockies District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Weld - DJ Basin	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	State 8-60 16-2H	North Reference:	Grid
Well:	State 8-60 16-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	State 8-60 16-2H		
Design:	State 8-60 16-2H		

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
5,755.7	0.00	0.00	5,755.7	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	4.43	179.93	5,800.0	-1.7	0.0	1.7	10.00	10.00	0.00
5,850.0	9.43	179.93	5,849.6	-7.7	0.0	7.7	10.00	10.00	0.00
5,900.0	14.43	179.93	5,898.5	-18.1	0.0	18.1	10.00	10.00	0.00
5,950.0	19.43	179.93	5,946.3	-32.6	0.0	32.6	10.00	10.00	0.00
6,000.0	24.43	179.93	5,992.7	-51.3	0.1	51.3	10.00	10.00	0.00
6,050.0	29.43	179.93	6,037.2	-73.9	0.1	73.9	10.00	10.00	0.00
6,100.0	34.43	179.93	6,079.7	-100.3	0.1	100.3	10.00	10.00	0.00
6,150.0	39.43	179.93	6,119.6	-130.4	0.2	130.4	10.00	10.00	0.00
6,200.0	44.43	179.93	6,156.8	-163.8	0.2	163.8	10.00	10.00	0.00
6,250.0	49.43	179.93	6,190.9	-200.3	0.3	200.3	10.00	10.00	0.00
6,300.0	54.43	179.93	6,221.8	-239.6	0.3	239.6	10.00	10.00	0.00
6,350.0	59.43	179.93	6,249.0	-281.5	0.4	281.5	10.00	10.00	0.00
6,400.0	64.43	179.93	6,272.6	-325.6	0.4	325.6	10.00	10.00	0.00
6,450.0	69.43	179.93	6,292.2	-371.6	0.5	371.6	10.00	10.00	0.00
6,500.0	74.43	179.93	6,307.7	-419.1	0.5	419.1	10.00	10.00	0.00
6,550.0	79.43	179.93	6,319.0	-467.8	0.6	467.8	10.00	10.00	0.00
6,600.0	84.43	179.93	6,326.0	-517.3	0.7	517.3	10.00	10.00	0.00
6,650.0	89.43	179.93	6,328.7	-567.2	0.7	567.2	10.00	10.00	0.00
6,656.7	90.10	179.93	6,328.7	-574.0	0.8	574.0	10.00	10.00	0.00
6,700.0	90.10	179.93	6,328.6	-617.2	0.8	617.2	0.00	0.00	0.00
6,800.0	90.10	179.93	6,328.4	-717.2	0.9	717.2	0.00	0.00	0.00
6,900.0	90.10	179.93	6,328.3	-817.2	1.1	817.2	0.00	0.00	0.00
7,000.0	90.10	179.93	6,328.1	-917.2	1.2	917.2	0.00	0.00	0.00
7,100.0	90.10	179.93	6,327.9	-1,017.2	1.3	1,017.2	0.00	0.00	0.00
7,200.0	90.10	179.93	6,327.7	-1,117.2	1.5	1,117.2	0.00	0.00	0.00
7,300.0	90.10	179.93	6,327.6	-1,217.2	1.6	1,217.2	0.00	0.00	0.00
7,400.0	90.10	179.93	6,327.4	-1,317.2	1.7	1,317.2	0.00	0.00	0.00
7,500.0	90.10	179.93	6,327.2	-1,417.2	1.9	1,417.2	0.00	0.00	0.00
7,600.0	90.10	179.93	6,327.1	-1,517.2	2.0	1,517.2	0.00	0.00	0.00
7,700.0	90.10	179.93	6,326.9	-1,617.2	2.1	1,617.2	0.00	0.00	0.00
7,800.0	90.10	179.93	6,326.7	-1,717.2	2.2	1,717.2	0.00	0.00	0.00
7,900.0	90.10	179.93	6,326.5	-1,817.2	2.4	1,817.2	0.00	0.00	0.00
8,000.0	90.10	179.93	6,326.4	-1,917.2	2.5	1,917.2	0.00	0.00	0.00
8,100.0	90.10	179.93	6,326.2	-2,017.2	2.6	2,017.2	0.00	0.00	0.00
8,200.0	90.10	179.93	6,326.0	-2,117.2	2.8	2,117.2	0.00	0.00	0.00
8,300.0	90.10	179.93	6,325.8	-2,217.2	2.9	2,217.2	0.00	0.00	0.00
8,400.0	90.10	179.93	6,325.7	-2,317.2	3.0	2,317.2	0.00	0.00	0.00
8,500.0	90.10	179.93	6,325.5	-2,417.2	3.2	2,417.2	0.00	0.00	0.00
8,600.0	90.10	179.93	6,325.3	-2,517.2	3.3	2,517.2	0.00	0.00	0.00
8,700.0	90.10	179.93	6,325.1	-2,617.2	3.4	2,617.2	0.00	0.00	0.00
8,800.0	90.10	179.93	6,325.0	-2,717.2	3.6	2,717.2	0.00	0.00	0.00
8,900.0	90.10	179.93	6,324.8	-2,817.2	3.7	2,817.2	0.00	0.00	0.00
9,000.0	90.10	179.93	6,324.6	-2,917.2	3.8	2,917.2	0.00	0.00	0.00
9,100.0	90.10	179.93	6,324.4	-3,017.2	3.9	3,017.2	0.00	0.00	0.00
9,200.0	90.10	179.93	6,324.3	-3,117.2	4.1	3,117.2	0.00	0.00	0.00
9,300.0	90.10	179.93	6,324.1	-3,217.2	4.2	3,217.2	0.00	0.00	0.00
9,400.0	90.10	179.93	6,323.9	-3,317.2	4.3	3,317.2	0.00	0.00	0.00
9,500.0	90.10	179.93	6,323.7	-3,417.2	4.5	3,417.2	0.00	0.00	0.00
9,600.0	90.10	179.93	6,323.6	-3,517.2	4.6	3,517.2	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well State 8-60 16-2H
Company:	Chesapeake Energy - Rockies District	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Weld - DJ Basin	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	State 8-60 16-2H	North Reference:	Grid
Well:	State 8-60 16-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	State 8-60 16-2H		
Design:	State 8-60 16-2H		

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)	
9,700.0	90.10	179.93	6,323.4	-3,617.2	4.7	3,617.2	0.00	0.00	0.00	
9,800.0	90.10	179.93	6,323.2	-3,717.2	4.9	3,717.2	0.00	0.00	0.00	
9,900.0	90.10	179.93	6,323.0	-3,817.2	5.0	3,817.2	0.00	0.00	0.00	
10,000.0	90.10	179.93	6,322.9	-3,917.2	5.1	3,917.2	0.00	0.00	0.00	
10,100.0	90.10	179.93	6,322.7	-4,017.2	5.3	4,017.2	0.00	0.00	0.00	
10,200.0	90.10	179.93	6,322.5	-4,117.2	5.4	4,117.2	0.00	0.00	0.00	
10,300.0	90.10	179.93	6,322.3	-4,217.2	5.5	4,217.2	0.00	0.00	0.00	
10,400.0	90.10	179.93	6,322.2	-4,317.2	5.6	4,317.2	0.00	0.00	0.00	
10,494.5	90.10	179.93	6,322.0	-4,411.7	5.8	4,411.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (ft)	Easting (ft)	Latitude Longitude		
- hit/miss target										
- Shape										
State 8-60 16-2H	0.00	0.00	6,322.0	-4,411.7	5.8	485,130.00	2,387,615.00	0° 39' 24.17782981 N 104° 6' 10.66586402 W		
- plan hits target center										
- Point										