

Permian District

NM - Lea - Burrus Prospect

Hugh 17

Hugh 17

Wellbore #1

Plan: Plan #1

Standard Survey Report

19 July, 2006

Chesapeake Energy Corporation

Survey Report

30-025-37855

Company:	Permian District	Local Co-ordinate Reference:	Site Hugh 17
Project:	NM - Lea - Burrus Prospect	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Hugh 17	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Well:	Hugh 17	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Drilling Database

Project	NM - Lea - Burrus Prospect		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Hugh 17		
Site Position:		Northing:	ft
From:	None	Easting:	ft
Position Uncertainty:	ft	Slot Radius:	"
		Latitude:	
		Longitude:	
		Grid Convergence:	0.00 °

Well	Hugh 17		
Well Position	+N/-S	0.0 ft	Northing: 0.00 ft
	+E/-W	0.0 ft	Easting: 0.00 ft
			Latitude: 30.99014213
			Longitude: -105.92892703
Position Uncertainty	ft	Wellhead Elevation:	ft
			Ground Level: 0.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	User Defined	7/19/2006	(°) 0.00
			Dip Angle (°) 0.00
			Field Strength (nT) 0

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction (°) 287.09

Survey Tool Program	Date:	7/19/2006		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
0.0	4,420.4	Plan #1 (Wellbore #1)	MWD	correction

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
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	2.52	287.09	500.0	0.6	-2.1	2.2	2.52	2.52	0.00	
600.0	5.03	287.09	599.7	2.6	-8.4	8.8	2.52	2.52	0.00	
700.0	7.55	287.09	699.1	5.8	-18.9	19.7	2.52	2.52	0.00	
800.0	10.06	287.09	797.9	10.3	-33.5	35.0	2.52	2.52	0.00	
811.0	10.34	287.09	808.7	10.9	-35.3	37.0	2.52	2.52	0.00	
900.0	10.34	287.09	896.3	15.6	-50.6	53.0	0.00	0.00	0.00	
1,000.0	10.34	287.09	994.7	20.8	-67.8	70.9	0.00	0.00	0.00	
1,100.0	10.34	287.09	1,093.1	26.1	-84.9	88.8	0.00	0.00	0.00	

Chesapeake Energy Corporation

Survey Report

Company: Permian District
 Project: NM - Lea - Burrus Prospect
 Site: Hugh 17
 Well: Hugh 17
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Site Hugh 17
 WELL @ 0.0ft (Original Well Elev)
 WELL @ 0.0ft (Original Well Elev)
 True
 Minimum Curvature
 Drilling Database

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,200.0	10.34	287.09	1,191.5	31.4	-102.1	106.8	0.00	0.00	0.00
1,300.0	10.34	287.09	1,289.8	36.7	-119.2	124.7	0.00	0.00	0.00
1,400.0	10.34	287.09	1,388.2	41.9	-136.4	142.7	0.00	0.00	0.00
1,500.0	10.34	287.09	1,486.6	47.2	-153.5	160.6	0.00	0.00	0.00
1,600.0	10.34	287.09	1,585.0	52.5	-170.7	178.6	0.00	0.00	0.00
1,700.0	10.34	287.09	1,683.3	57.8	-187.8	196.5	0.00	0.00	0.00
1,800.0	10.34	287.09	1,781.7	63.0	-205.0	214.5	0.00	0.00	0.00
1,900.0	10.34	287.09	1,880.1	68.3	-222.1	232.4	0.00	0.00	0.00
2,000.0	10.34	287.09	1,978.5	73.6	-239.3	250.4	0.00	0.00	0.00
2,100.0	10.34	287.09	2,076.8	78.9	-256.5	268.3	0.00	0.00	0.00
2,200.0	10.34	287.09	2,175.2	84.1	-273.6	286.2	0.00	0.00	0.00
2,300.0	10.34	287.09	2,273.6	89.4	-290.8	304.2	0.00	0.00	0.00
2,400.0	10.34	287.09	2,372.0	94.7	-307.9	322.1	0.00	0.00	0.00
2,500.0	10.34	287.09	2,470.3	100.0	-325.1	340.1	0.00	0.00	0.00
2,600.0	10.34	287.09	2,568.7	105.2	-342.2	358.0	0.00	0.00	0.00
2,700.0	10.34	287.09	2,667.1	110.5	-359.4	376.0	0.00	0.00	0.00
2,800.0	10.34	287.09	2,765.5	115.8	-376.5	393.9	0.00	0.00	0.00
2,900.0	10.34	287.09	2,863.9	121.1	-393.7	411.9	0.00	0.00	0.00
3,000.0	10.34	287.09	2,962.2	126.3	-410.8	429.8	0.00	0.00	0.00
3,013.4	10.34	287.09	2,975.4	127.0	-413.1	432.2	0.00	0.00	0.00
3,100.0	8.36	287.09	3,060.9	131.2	-426.6	446.3	2.29	-2.29	0.00
3,200.0	6.07	287.09	3,160.1	134.9	-438.6	458.8	2.29	-2.29	0.00
3,300.0	3.78	287.09	3,259.7	137.4	-446.8	467.4	2.29	-2.29	0.00
3,400.0	1.50	287.09	3,359.6	138.7	-451.2	472.0	2.29	-2.29	0.00
3,465.4	0.00	0.00	3,425.0	139.0	-452.0	472.9	2.29	-2.29	0.00
geo target - legal BH									
3,500.0	0.00	0.00	3,459.6	139.0	-452.0	472.9	0.00	0.00	0.00
3,600.0	0.00	0.00	3,559.6	139.0	-452.0	472.9	0.00	0.00	0.00
3,700.0	0.00	0.00	3,659.6	139.0	-452.0	472.9	0.00	0.00	0.00
3,800.0	0.00	0.00	3,759.6	139.0	-452.0	472.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,859.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,959.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,100.0	0.00	0.00	4,059.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,159.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,259.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,359.6	139.0	-452.0	472.9	0.00	0.00	0.00
4,420.4	0.00	0.00	4,380.0	139.0	-452.0	472.9	0.00	0.00	0.00
TD hugh									

Chesapeake Energy Corporation

Survey Report

Company: Permian District
Project: NM - Lea - Burrus Prospect
Site: Hugh 17
Well: Hugh 17
Wellbore: Wellbore #1
Design: Plan #1

Local Co-ordinate Reference: Site Hugh 17
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Drilling Database

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
legal BH - plan hits target - Circle (radius 110.0)	0.00	0.00	3,425.0	139.0	-452.0	145.47	-449.96	30.99052419	-105.93036913
TD hugh - plan hits target - Point	0.00	0.00	4,380.0	139.0	-452.0	145.47	-449.96	30.99052419	-105.93036913
geo target - plan hits target - Circle (radius 20.0)	0.00	0.00	3,425.0	139.0	-452.0	145.47	-449.96	30.99052419	-105.93036913

Checked By: _____ Approved By: _____ Date: _____