

EOG Resources, Inc - RM

Jackson County, CO

Sec. 18, T7N, R80W, 6th P.M.

Hebron #5-18H

Wellbore #1

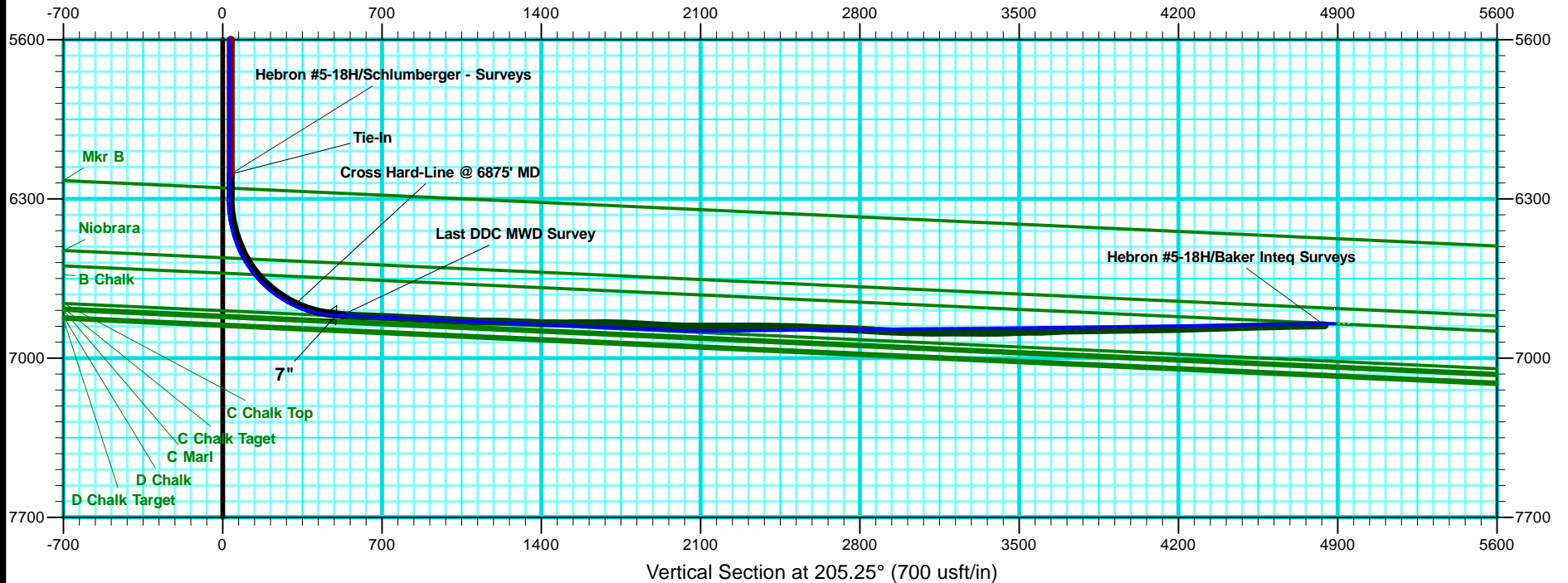
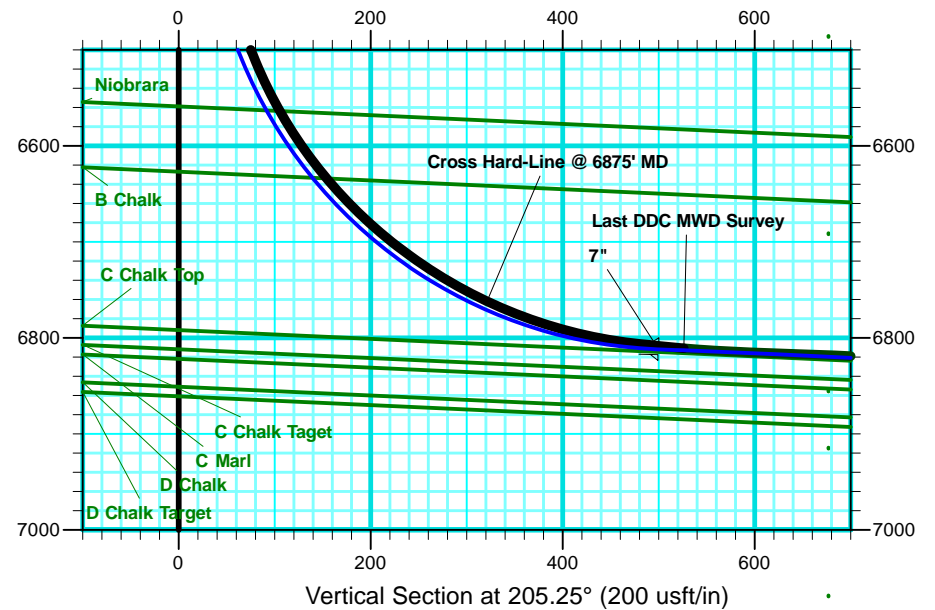
Survey: MWD Surveys

DDC Survey Report

04 October, 2010

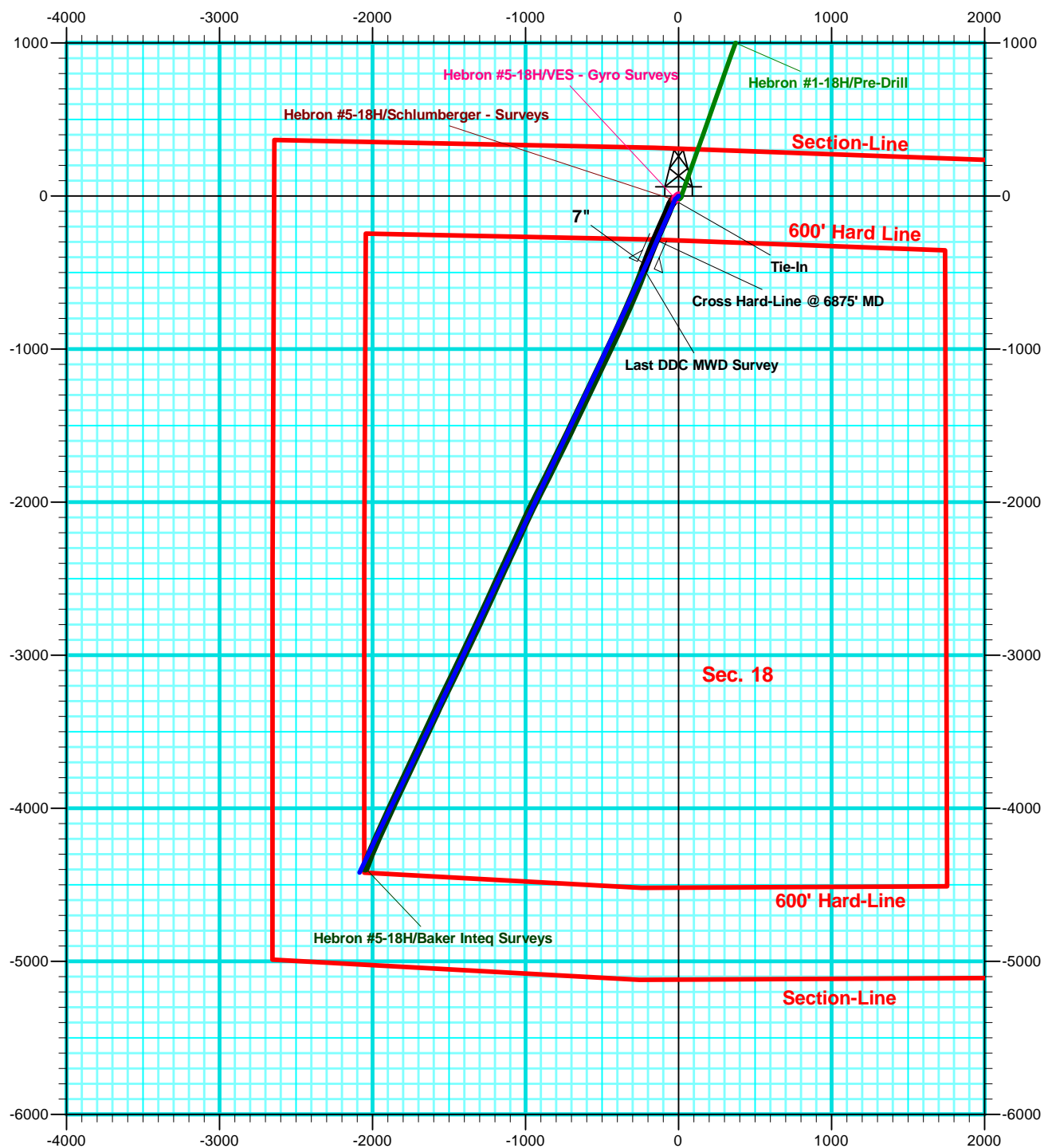


Jackson County, CO
Sec. 18, T7N, R80W, 6th P.M.
Hebron #5-18H
Wellbore #1
Pre-Drill

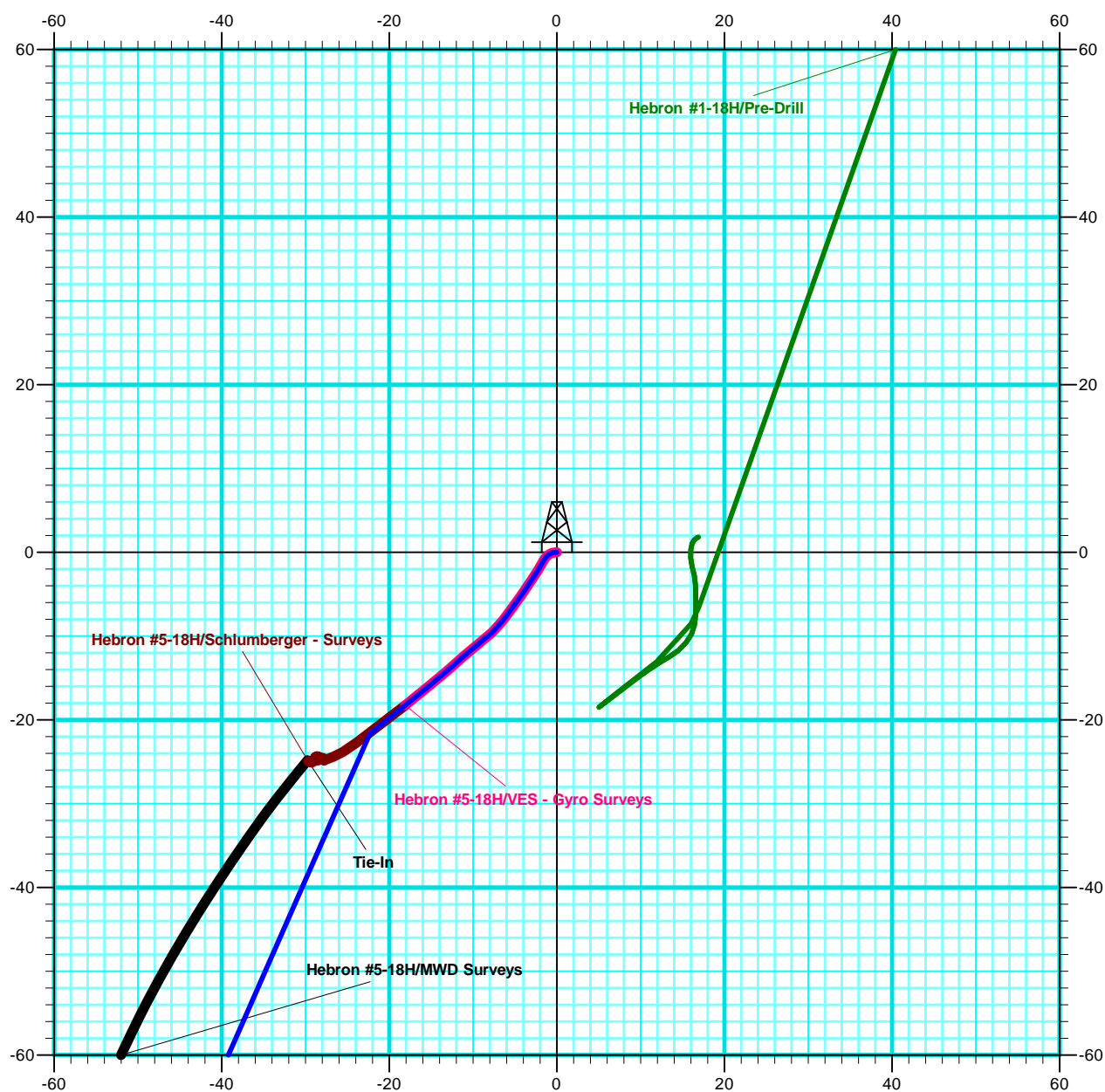




Jackson County, CO
Sec. 18, T7N, R80W, 6th P.M.
Hebron #5-18H
Wellbore #1
Pre-Drill



Jackson County, CO
Sec. 18, T7N, R80W, 6th P.M.
Hebron #5-18H
Wellbore #1
Pre-Drill



Company:	EOG Resources, Inc - RM	Local Co-ordinate Reference:	Well Hebron #5-18H
Project:	Jackson County, CO	TVD Reference:	WELL @ 8175.0usft (SST #53)
Site:	Sec. 18, T7N, R80W, 6th P.M.	MD Reference:	WELL @ 8175.0usft (SST #53)
Well:	Hebron #5-18H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Jackson County, CO		
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	Sec. 18, T7N, R80W, 6th P.M.				
Site Position:		Northing:	456,960.37 usft	Latitude:	40° 35' 3.041 N
From:	Lat/Long	Easting:	1,745,862.29 usft	Longitude:	106° 24' 53.881 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.59 °

Well	Hebron #5-18H					
Well Position	+N-S	0.0 usft	Northing:	456,960.37 usft	Latitude:	40° 35' 3.041 N
	+E-W	0.0 usft	Easting:	1,745,862.29 usft	Longitude:	106° 24' 53.881 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	8,153.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/2/2010	9.84	66.94	53,095

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	205.25	

Survey Program		Date	10/4/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
50.0	925.0	VES - Gyro Surveys (Wellbore #1)	Good_gyro	Good Gyro	
1,063.0	6,192.0	Schlumberger - Surveys (Wellbore #1)	MWD default	MWD - Standard	
6,218.0	7,087.0	MWD Surveys (Wellbore #1)	MWD default	MWD - Standard	
7,131.0	11,408.0	Baker Inteq Surveys (Wellbore #1)	MWD default	MWD - Standard	

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)
Tie-In									
6,192.0	0.05	314.49	6,191.2	-25.0	-29.6	35.2	0.00	0.00	0.00
6,218.0	0.20	328.40	6,217.2	-24.9	-29.7	35.2	0.58	0.58	53.50
6,249.0	0.20	326.30	6,248.2	-24.8	-29.7	35.1	0.02	0.00	-6.77
6,281.0	0.10	126.40	6,280.2	-24.8	-29.7	35.1	0.92	-0.31	500.31
6,313.0	1.10	221.30	6,312.2	-25.1	-29.9	35.4	3.48	3.13	296.56
6,345.0	4.80	219.40	6,344.2	-26.3	-31.0	37.0	11.56	11.56	-5.94
6,376.0	8.60	218.10	6,375.0	-29.2	-33.2	40.5	12.27	12.26	-4.19

Company:	EOG Resources, Inc - RM	Local Co-ordinate Reference:	Well Hebron #5-18H
Project:	Jackson County, CO	TVD Reference:	WELL @ 8175.0usft (SST #53)
Site:	Sec. 18, T7N, R80W, 6th P.M.	MD Reference:	WELL @ 8175.0usft (SST #53)
Well:	Hebron #5-18H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
6,408.0	12.80	215.30	6,406.4	-33.9	-36.8	46.4	13.22	13.13	-8.75
6,440.0	15.90	212.90	6,437.4	-40.5	-41.2	54.2	9.86	9.69	-7.50
6,472.0	18.40	210.20	6,468.0	-48.5	-46.1	63.6	8.20	7.81	-8.44
6,503.0	21.30	205.50	6,497.1	-57.9	-51.0	74.1	10.67	9.35	-15.16
6,535.0	24.60	203.20	6,526.6	-69.2	-56.1	86.6	10.68	10.31	-7.19
6,567.0	28.20	202.00	6,555.3	-82.4	-61.6	100.8	11.37	11.25	-3.75
6,599.0	32.40	202.00	6,582.9	-97.3	-67.6	116.9	13.13	13.13	0.00
6,630.0	36.10	203.70	6,608.5	-113.4	-74.4	134.3	12.33	11.94	5.48
6,662.0	39.80	204.40	6,633.7	-131.4	-82.4	154.0	11.64	11.56	2.19
6,694.0	44.00	203.90	6,657.5	-150.9	-91.2	175.3	13.17	13.13	-1.56
6,726.0	47.80	203.00	6,679.8	-171.9	-100.3	198.3	12.05	11.88	-2.81
6,757.0	51.30	202.90	6,699.9	-193.7	-109.5	221.9	11.29	11.29	-0.32
6,789.0	54.80	203.70	6,719.1	-217.1	-119.6	247.4	11.12	10.94	2.50
6,820.0	58.60	204.40	6,736.2	-240.8	-130.2	273.3	12.40	12.26	2.26
6,852.0	62.40	204.60	6,751.9	-266.1	-141.7	301.2	11.89	11.88	0.63
Cross Hard-Line @ 6875' MD									
6,874.5	64.87	203.87	6,761.9	-284.5	-150.0	321.3	11.34	10.96	-3.25
6,883.0	65.80	203.60	6,765.5	-291.6	-153.1	329.0	11.34	10.98	-3.16
6,915.0	69.20	202.90	6,777.7	-318.8	-164.8	358.6	10.82	10.63	-2.19
6,947.0	73.10	201.30	6,788.0	-346.8	-176.2	388.8	13.07	12.19	-5.00
6,978.0	77.00	200.90	6,796.0	-374.7	-186.9	418.7	12.64	12.58	-1.29
7,010.0	81.00	200.90	6,802.1	-404.1	-198.1	450.0	12.50	12.50	0.00
7,042.0	83.50	199.70	6,806.5	-433.8	-209.1	481.6	8.65	7.81	-3.75
7,059.0	84.50	201.00	6,808.2	-449.7	-215.0	498.4	9.61	5.88	7.65
Last DDC MWD Survey									
7,087.0	84.90	201.10	6,810.8	-475.7	-225.0	526.2	1.47	1.43	0.36

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
6,192.0	6,191.2	-25.0	-29.6	Tie-In
6,874.5	6,761.9	-284.5	-150.0	Cross Hard-Line @ 6875' MD
7,087.0	6,810.8	-475.7	-225.0	Last DDC MWD Survey

Checked By: _____ Approved By: _____ Date: _____