



DJ SIMMONS

DJ Simmons

Dolores County, CO (Nad 83)

Sec 7, T39N, R19W

Pinto No. 1-7

Vertical

UWI:

WL:

Survey: Final

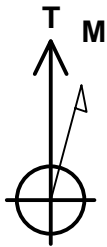
Standard Survey Report

13 November, 2013



Project: Dolores County, CO (Nad 83)
Site: Sec 7, T39N, R19W
Well: Pinto No. 1-7
Wellbore: Vertical
Plan: Final

Reference Details - WELL CENTRE
Geodetic System: Universal Transverse Mercator
Ellipsoid: GRS 1980
Zone: Zone 12N (114 W to 108 W)
Northing: 4169357.72
Easting: 677648.77
Latitude: 37° 39' 15.156 N
Longitude: 108° 59' 10.068 W
Grid Convergence: 1.23° West
Ground Elevation: 6609.0
KB Elevation: RKB @ 6621.0ft (Aztec 222)

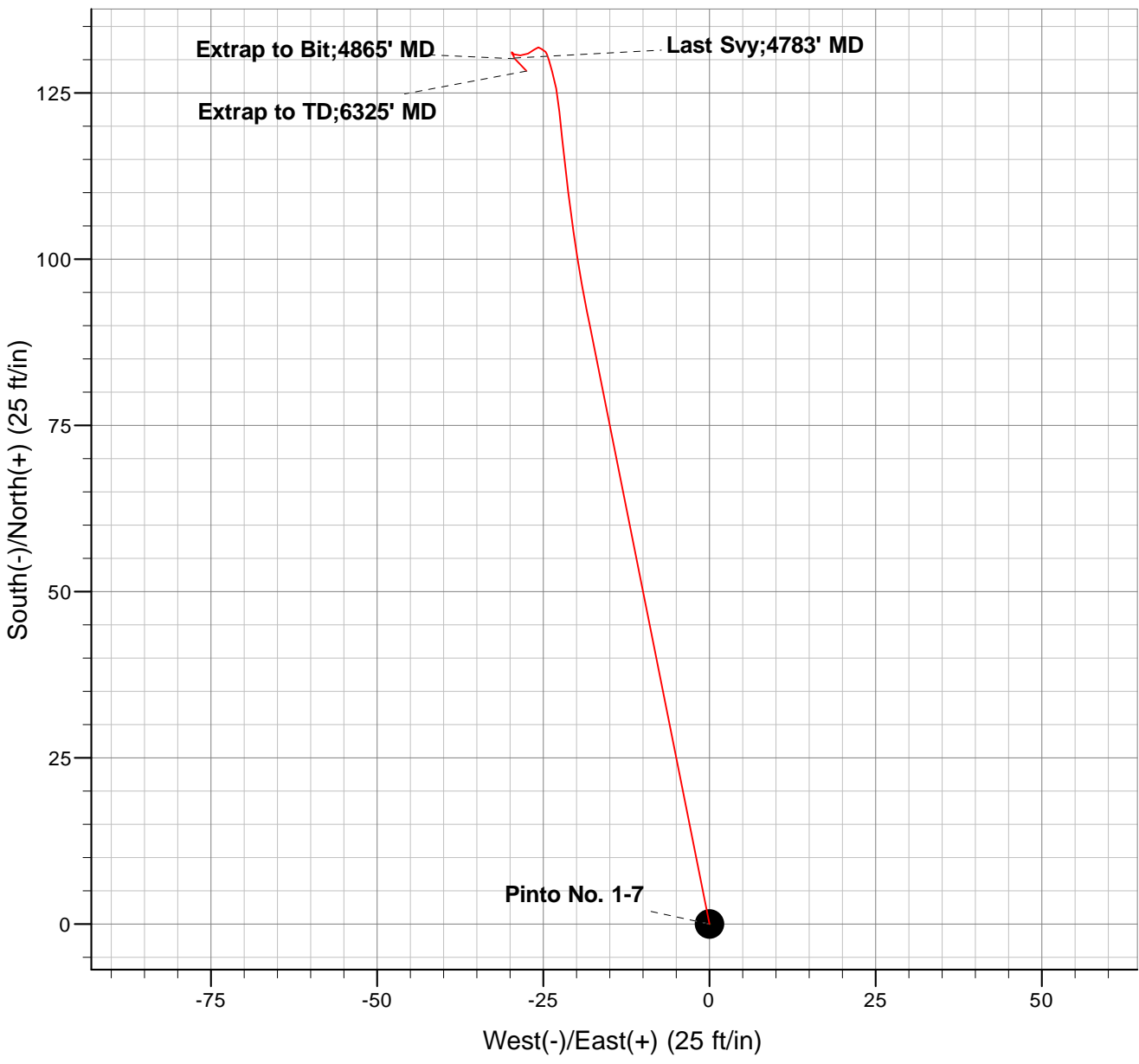
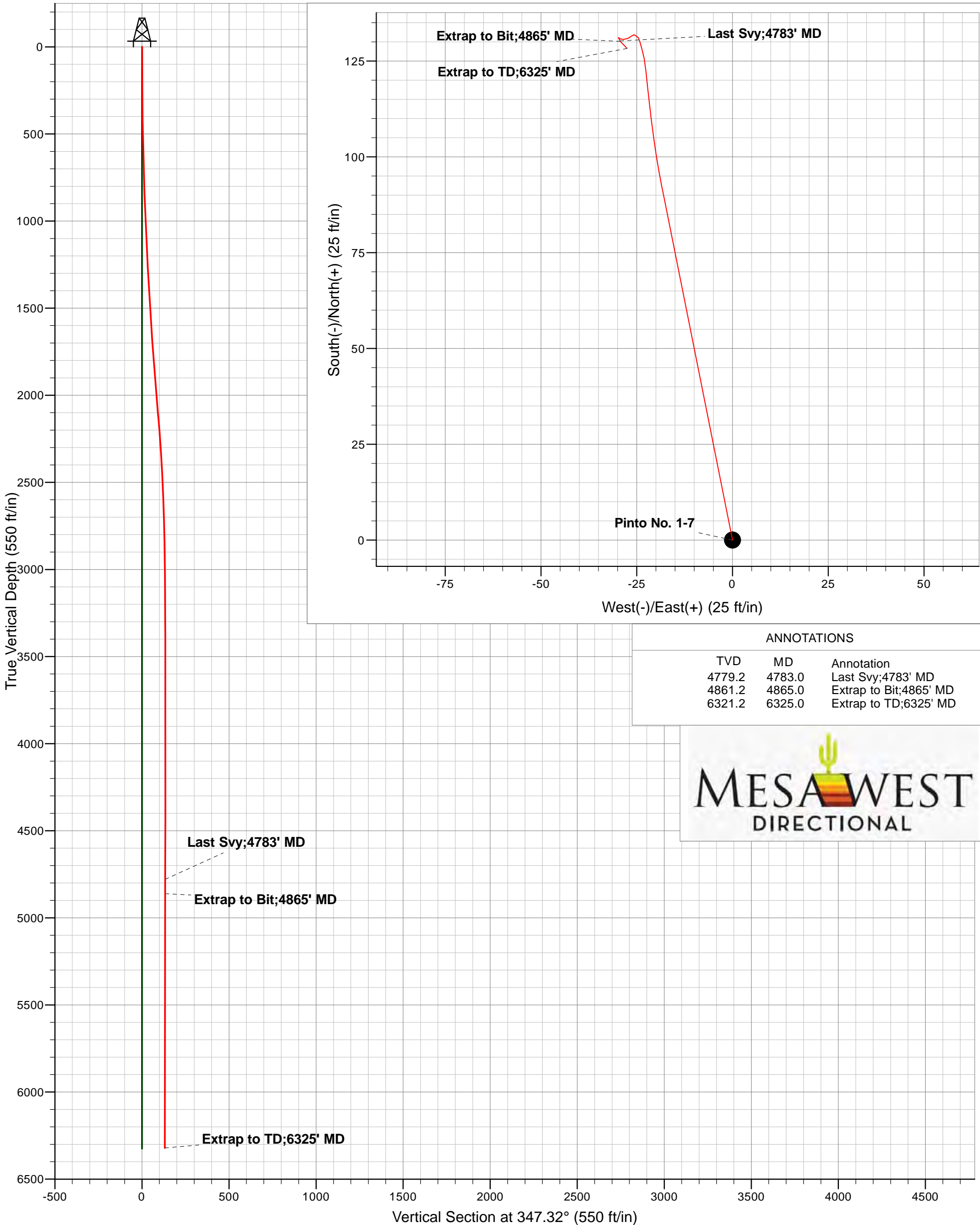


Azimuths to True North
Magnetic North: 10.23°

Magnetic Field
Strength: 50849.2snT
Dip Angle: 63.95°
Date: 11/8/2013
Model: IGRF2010

PLAN 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	6325.0	0.00	0.00	6325.0	0.0	0.0	0.00	0.00	0.0	



ANNOTATIONS

TVD	MD	Annotation
4779.2	4783.0	Last Svy;4783' MD
4861.2	4865.0	Extrap to Bit;4865' MD
6321.2	6325.0	Extrap to TD;6325' MD



Company:	DJ Simmons	Local Co-ordinate Reference:	Well Pinto No. 1-7
Project:	Dolores County, CO (Nad 83)	TVD Reference:	RKB @ 6621.0ft (Aztec 222)
Site:	Sec 7, T39N, R19W	MD Reference:	RKB @ 6621.0ft (Aztec 222)
Well:	Pinto No. 1-7	North Reference:	True
Wellbore:	Vertical	Survey Calculation Method:	Minimum Curvature
Design:	Final	Database:	EDM 5000.1 Single User Db

Project	Dolores County, CO (Nad 83)		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	Sec 7, T39N, R19W		
Site Position:		Northing:	4,169,357.73 m
From:	Lat/Long	Easting:	677,648.76 m
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in
		Latitude:	37° 39' 15.156 N
		Longitude:	108° 59' 10.068 W
		Grid Convergence:	1.23 °

Well	Pinto No. 1-7		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	37° 39' 15.156 N
		Longitude:	108° 59' 10.068 W
		Ground Level:	6,609.0 ft

Wellbore	Vertical				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/8/2013	10.23	63.95	50,849

Design	Final				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	347.32	

Survey Program	Date	11/13/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
2,110.0	6,325.0	Final (Vertical)			

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea (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	-6,621.0	0.0	0.0	0.0	0.00	0.00	0.00
2,110.0	5.00	348.70	2,107.3	-4,513.7	90.2	-18.0	92.0	0.24	0.24	0.00
2,146.0	5.10	348.70	2,143.2	-4,477.8	93.3	-18.6	95.1	0.28	0.28	0.00
2,240.0	4.00	351.40	2,236.9	-4,384.1	100.7	-20.0	102.6	1.19	-1.17	2.87
2,334.0	3.70	353.10	2,330.7	-4,290.3	106.9	-20.8	108.9	0.34	-0.32	1.81
2,428.0	3.40	352.60	2,424.5	-4,196.5	112.7	-21.5	114.7	0.32	-0.32	-0.53
2,554.0	2.30	354.20	2,550.3	-4,070.7	118.9	-22.3	120.9	0.88	-0.87	1.27
2,646.0	1.80	354.70	2,642.3	-3,978.7	122.2	-22.6	124.2	0.54	-0.54	0.54
2,772.0	1.40	349.30	2,768.2	-3,852.8	125.7	-23.1	127.7	0.34	-0.32	-4.29
2,897.0	1.00	343.50	2,893.2	-3,727.8	128.2	-23.7	130.3	0.33	-0.32	-4.64

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Site:	Sec 7, T39N, R19W	MD Reference:	RKB @ 6621.0ft (Aztec 222)
Well:	Pinto No. 1-7	North Reference:	True
Wellbore:	Vertical	Survey Calculation Method:	Minimum Curvature
Design:	Final	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,023.0	0.60	344.50	3,019.2	-3,601.8	129.9	-24.1	132.0	0.32	-0.32	0.79
3,148.0	0.30	336.20	3,144.2	-3,476.8	130.8	-24.5	133.0	0.24	-0.24	-6.64
3,273.0	0.10	314.30	3,269.2	-3,351.8	131.2	-24.7	133.4	0.17	-0.16	-17.52
3,399.0	0.20	291.80	3,395.2	-3,225.8	131.4	-24.9	133.6	0.09	0.08	-17.86
3,525.0	0.20	323.60	3,521.2	-3,099.8	131.6	-25.3	134.0	0.09	0.00	25.24
3,650.0	0.30	280.70	3,646.2	-2,974.8	131.9	-25.7	134.3	0.16	0.08	-34.32
3,775.0	0.50	219.60	3,771.2	-2,849.8	131.5	-26.4	134.1	0.35	0.16	-48.88
3,901.0	0.50	253.80	3,897.2	-2,723.8	130.9	-27.3	133.7	0.23	0.00	27.14
4,027.0	0.60	258.50	4,023.2	-2,597.8	130.7	-28.5	133.7	0.09	0.08	3.73
4,154.0	0.40	314.90	4,150.2	-2,470.8	130.8	-29.4	134.1	0.40	-0.16	44.41
4,279.0	0.00	184.60	4,275.2	-2,345.8	131.1	-29.7	134.5	0.32	-0.32	0.00
4,406.0	0.20	177.10	4,402.2	-2,218.8	130.9	-29.7	134.2	0.16	0.16	0.00
4,532.0	0.10	70.70	4,528.2	-2,092.8	130.7	-29.6	134.0	0.20	-0.08	-84.44
4,658.0	0.20	174.40	4,654.2	-1,966.8	130.6	-29.5	133.8	0.19	0.08	82.30
Last Svy;4783' MD										
4,783.0	0.10	136.30	4,779.2	-1,841.8	130.3	-29.4	133.5	0.11	-0.08	-30.48
Extrap to Bit;4865' MD										
4,865.0	0.10	136.30	4,861.2	-1,759.8	130.2	-29.3	133.4	0.00	0.00	0.00
Extrap to TD;6325' MD										
6,325.0	0.10	136.30	6,321.2	-299.8	128.3	-27.5	131.2	0.00	0.00	0.00

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
4,783.0	4,779.2	130.3	-29.4	Last Svy;4783' MD	
4,865.0	4,861.2	130.2	-29.3	Extrap to Bit;4865' MD	
6,325.0	6,321.2	128.3	-27.5	Extrap to TD;6325' MD	

Checked By: _____	Approved By: _____	Date: _____
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