MV Geophysical

X-Y CALIPER LOG

Company	Rowe Drilling Company
Well	MW-2
Field	Vero Beach
County	Indian River
State/Prv	Florida

Company Rowe Drilling Company
Well MW-2
Field Vero Beach
County Indian River State/Prv. Florida
Location INEOS BIO Facility
925 74th Avenue SW, Vero Beach, FL 32968
CH2M HILL, Inc.

Other Services: NONE

		Elevation
Permanent Datum	G.L.	
Log Measured From	G.L.	
Drilling Measured From	G.L.	

Elevation: K.B. / D.F. / G.L.

Date	5-JUN-2012
Run Number	FOUR
Depth Driller	1945'
Depth Logger	1949'
Bottom Logged Interval	1949'
Top Log Interval	SURFACE
Open Hole Size	9.875/13.75"
Type Fluid	H2O
Density / Viscosity	NA/NA
Max. Recorded Temp.	NA
Estimated Cement Top	SURFACE
Time Well Ready	09:00 6/5/2012
Time Logger on Bottom	09:15 6/5/2012
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	B.Schmidt (RDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	29"	140'	507'				
TWO	23"	502'	1395'				
THREE	13.75"	1395'	1900'				
FOUR	9.875"	1900'	1945'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	30"	0.375" WT	SURFACE	140'
Prot. String	24"	0.375" WT	SURFACE	502'
Production String	16"	0.500" WT	SURFACE	1390'
Liner				
Invoice No.	2012117	5x/pdf/las	RVBAMEC1.db	* FIELD PRINT *

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

MAXIMUM Caliper Arm Extensions: 33"

FUTURE CASING SIZE: 6.5" OD Effective

MV Geophysical — MAIN PASS

Database File:	rvbamec1.db
Dataset Pathname:	run4/MAIN
Presentation Format:	xy525-5
Dataset Creation:	Tue Jun 05 10:36:29 2012
Charted by:	Depth in Feet scaled 1:240

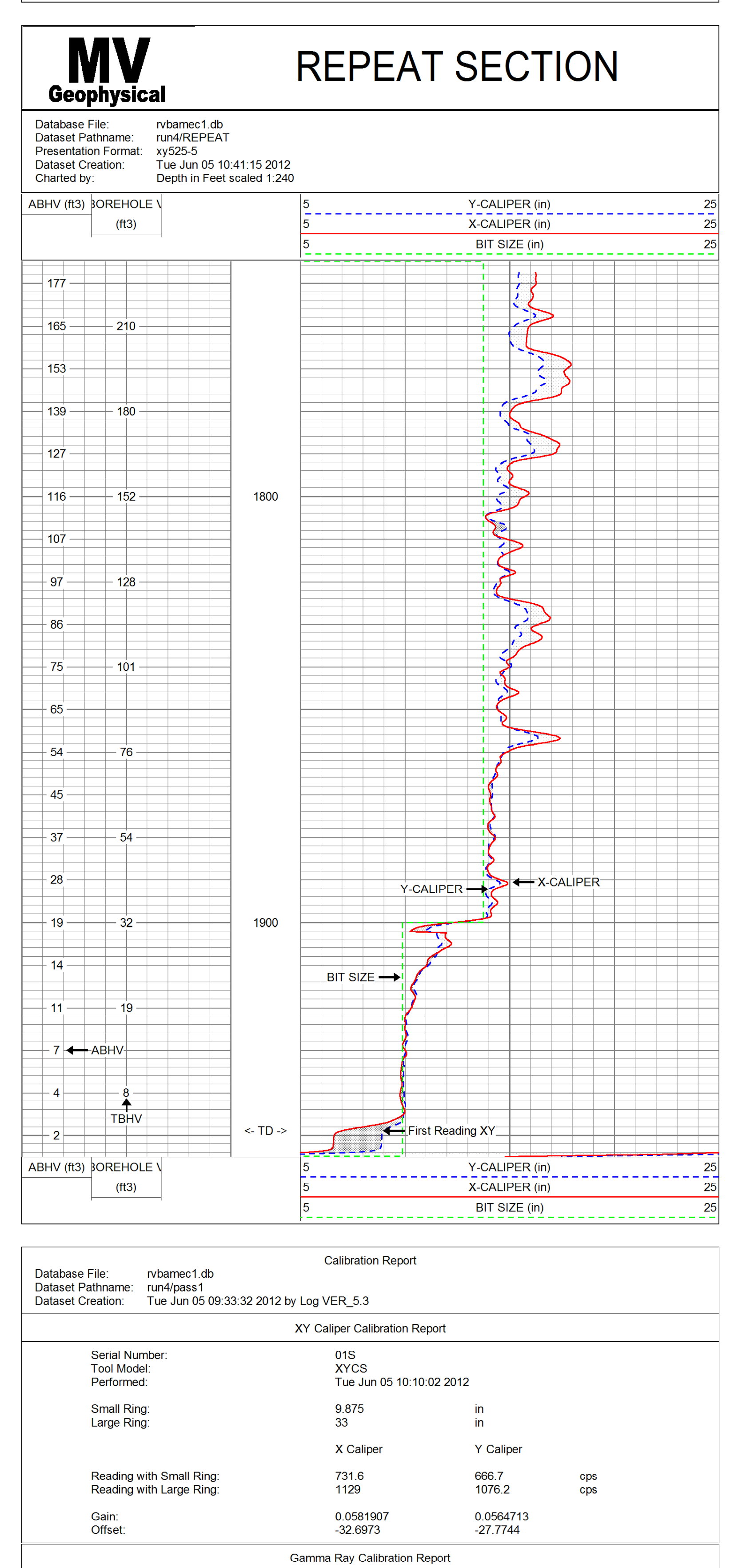
ABHV (ft3) | BOREHOLE V (ft3) | 5 Y-CALIPER (in) 25 | 5 X-CALIPER (in) 25 | 5 BIT SIZE (in) 25

ABHV (ft3) | BOREHOLE V (ft3) | 5 Y-CALIPER (in) 25 | 5 X-CALIPER (in) 25 | 5 BIT SIZE (in) 25

MV Geophysical — REPEAT SECTION

Database File:	rvbamec1.db
Dataset Pathname:	run4/REPEAT
Presentation Format:	xy525-5
Dataset Creation:	Tue Jun 05 10:41:15 2012
Charted by:	Depth in Feet scaled 1:240

ABHV (ft3) | BOREHOLE V (ft3) | 5 Y-CALIPER (in) 25 | 5 X-CALIPER (in) 25 | 5 BIT SIZE (in) 25



ABHV (ft3) | BOREHOLE V (ft3) | 5 Y-CALIPER (in) 25 | 5 X-CALIPER (in) 25 | 5 BIT SIZE (in) 25

Calibration Report

Database File:	rvbamec1.db
Dataset Pathname:	run4/pass1
Dataset Creation:	Tue Jun 05 09:33:32 2012 by Log VER_5.3

XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Tue Jun 05 10:10:02 2012		
Small Ring:	9.875	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	731.6	666.7	cps
Reading with Large Ring:	1129	1076.2	cps
Gain:	0.0581907	0.0564713	
Offset:	-32.6973	-27.7744	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GROH	
Performed:	Tue Jun 05 09:28:32 2012	
Calibrator Value:	120	GAPI
Background Reading:	11.987	cps
Calibrator Reading:	131.489	cps
Sensitivity:	1.00417	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			GR-GROH (01)	2.75	3.50	40.00
GR	5.00					
			XYC-XYCS (01S)	6.60	3.50	110.00
XCAL	0.50					
YCAL	0.50					

Dataset:	rvbamec1.db: field/well/run4/pass1
Total Length:	9.35 ft
Total Weight:	150.00 lb
O.D.	3.50 in

MV Geophysical

Company	Rowe Drilling Company
Well	MW-2
Field	Vero Beach
County	Indian River
State	Florida
Country	USA