APPENDIX D

GEOPHYSICAL LOGS

MV Geophysical

DUAL INDUCTION LL3 / SP LOG

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida
Location	City of Lake Worth Water Treatment Plant JLA Geosciences, Inc.
Other Services	XY/GR
Permanent Datum	G.L.
Elevation	25'
Log Measured From	G.L.
Drilling Measured From	G.L.
Elevation	K.B. 30' D.F. G.L. 25'

Date	26-JAN-2005	
Run Number	ONE	
Depth Driller	335'	
Depth Logger	335'	
Bottom Logged Interval	333'	
Top Log Interval	SURFACE	
Open Hole Size	12"	
Type Fluid	MUD	
Density / Viscosity	9.2/47	
Max. Recorded Temp.	na	
Estimated Cement Top	NA	
Time Well Ready	12:00 1/26/05	
Time Logger on Bottom	15:45 1/26/05	
Equipment Number	MVGS-1	
Location	Ft. Myers	
Recorded By	S.Miller	
Witnessed By	J.Andersen (JLA)	S.Edick (AWE) / Dana Webb (AWE)

Borehole Record

Run Number	Bit	From	To
ONE	12"	SURFACE	335'

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	N/A			
Prot. String				
Production String				
Liner				

Invoice No. 2005013

* FIELD PRINT *

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Comments

Rm=6.766 ohm-m @ 83.7 degF

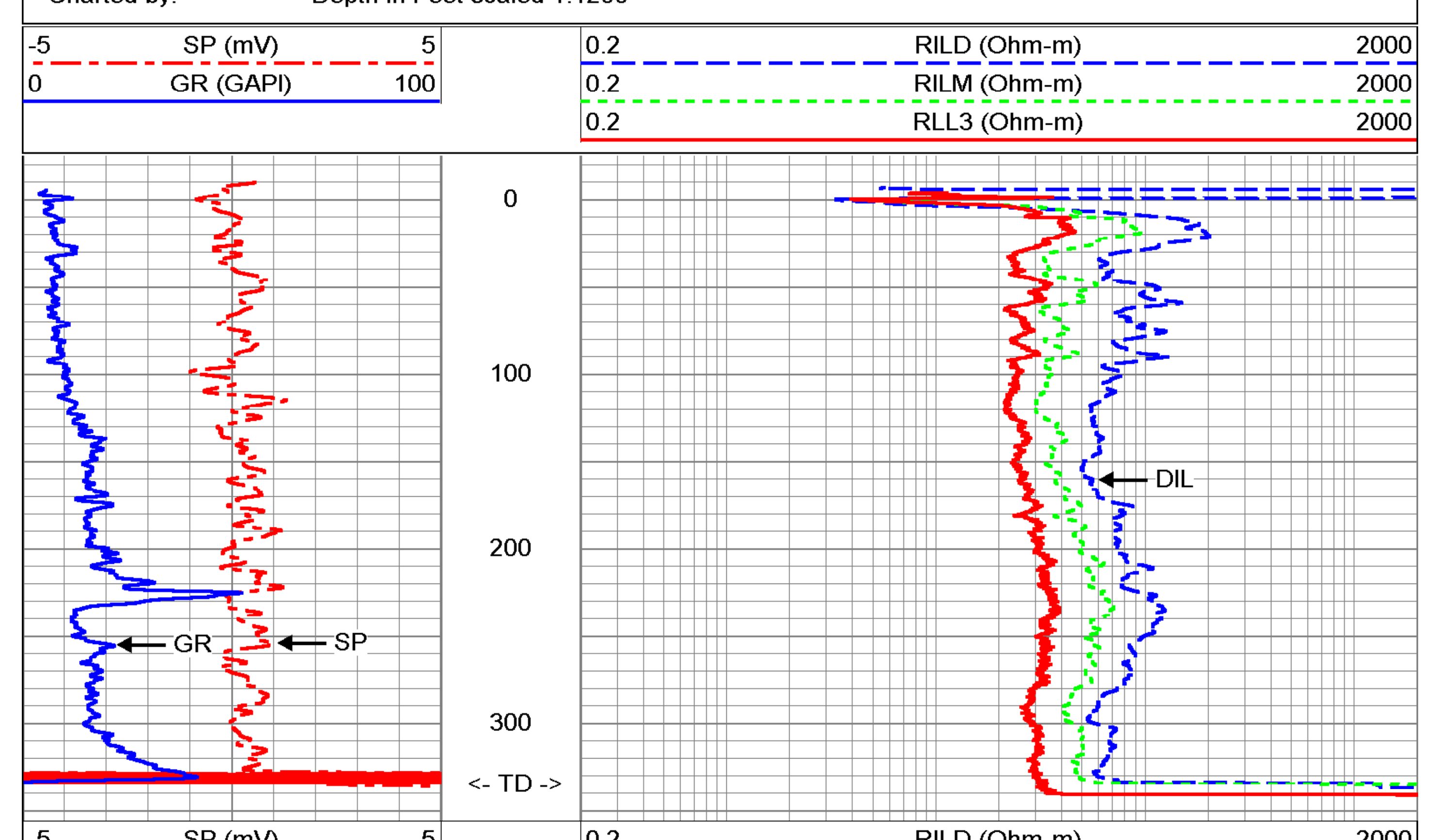
Drilling Contractor: All Webb Enterprises, Inc.

MAIN PASS

MV Geophysical

Database File:	awelwf-1.db
Dataset Pathname:	MAIN
Presentation Format:	DIL-1
Dataset Creation:	Wed Jan 26 15:07:21 2005
Charted by:	Depth in Feet scaled 1:1200

-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000



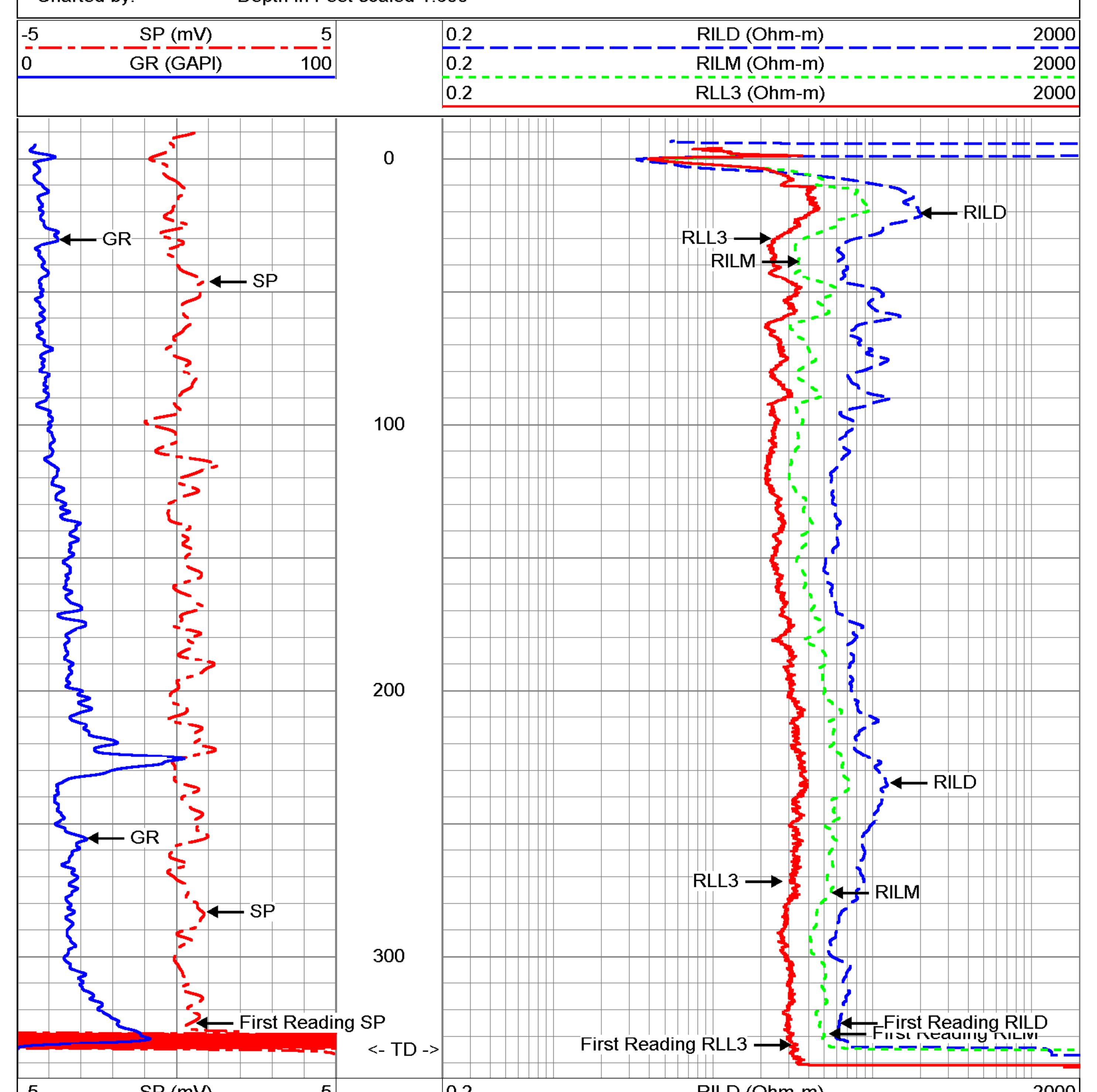
-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000

MAIN PASS

MV Geophysical

Database File:	awelwf-1.db
Dataset Pathname:	MAIN
Presentation Format:	DIL
Dataset Creation:	Wed Jan 26 15:07:21 2005
Charted by:	Depth in Feet scaled 1:600

-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000



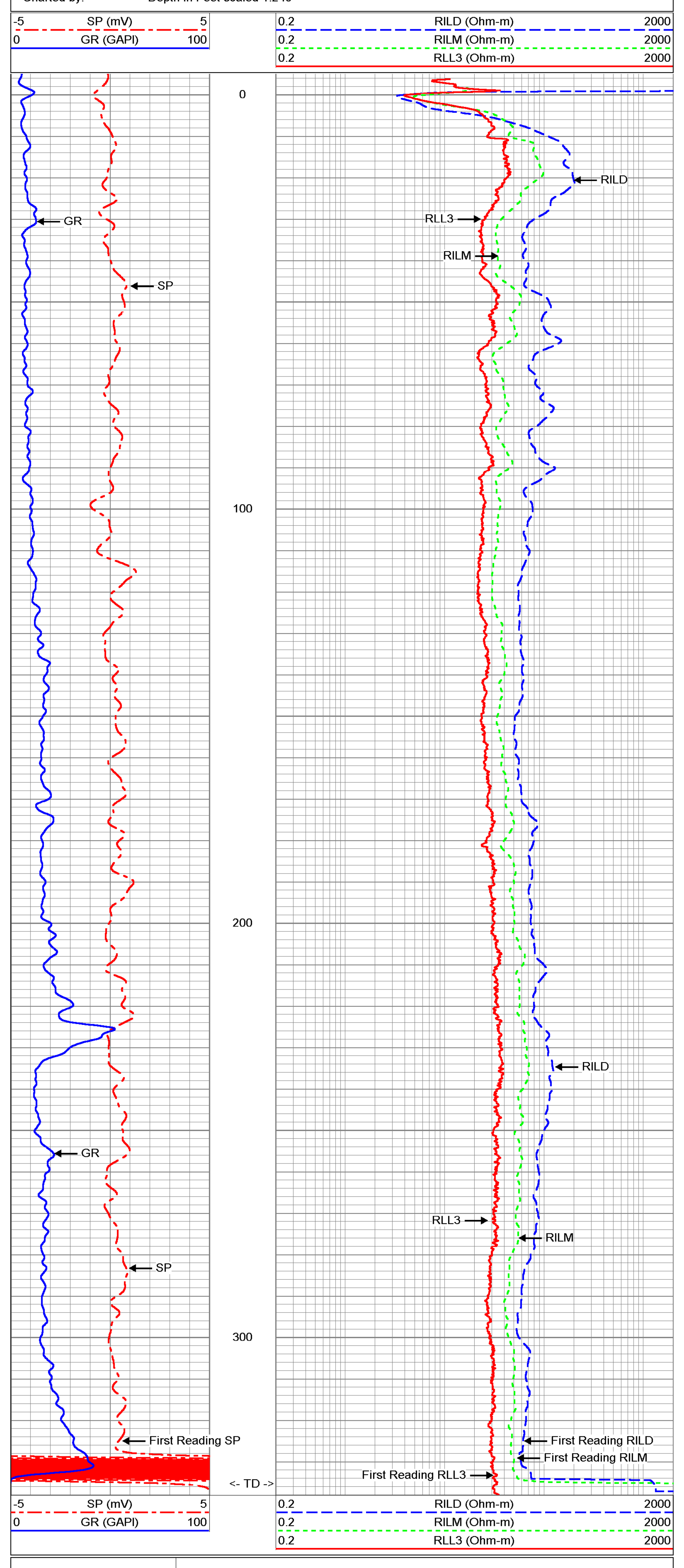
-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000

MAIN PASS

MV Geophysical

Database File:	awelwf-1.db
Dataset Pathname:	MAIN
Presentation Format:	DIL
Dataset Creation:	Wed Jan 26 15:07:21 2005
Charted by:	Depth in Feet scaled 1:240

-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000



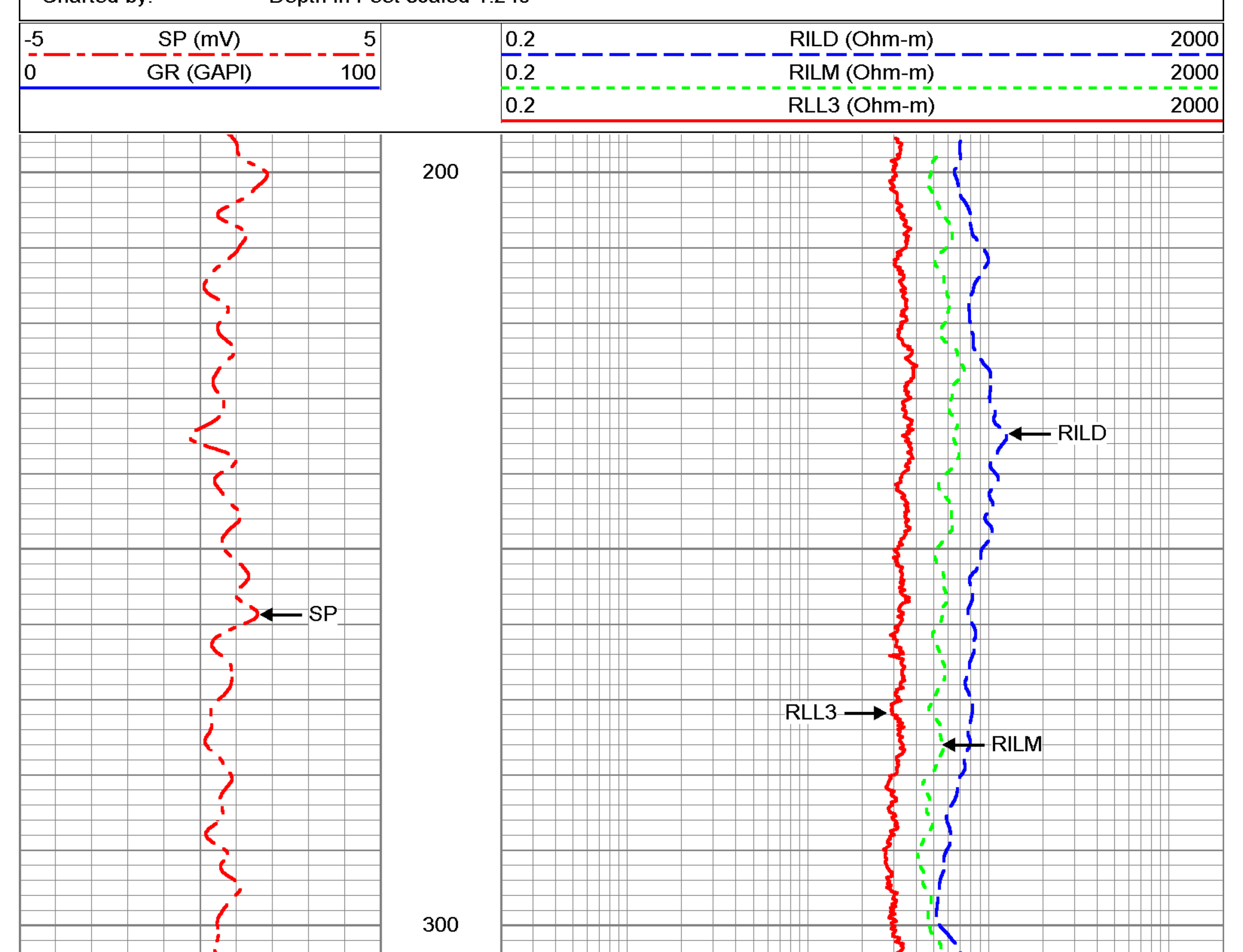
-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000

REPEAT SECTION

MV Geophysical

Database File:	awelwf-1.db
Dataset Pathname:	REPEAT
Presentation Format:	DIL
Dataset Creation:	Wed Jan 26 15:13:52 2005
Charted by:	Depth in Feet scaled 1:240

-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000



-5 SP (mV) 5 | 0 GR (GAPI) 100 | 0.2 RILD (Ohm-m) 2000 | 0.2 RILM (Ohm-m) 2000 | 0.2 RLL3 (Ohm-m) 2000

Dual Induction Calibration Report

Serial-Model:	5390-R
Surface Cal Performed:	Mon Feb 24 16:52:46 2003
Downhole Cal Performed:	Wed Jan 26 15:21:27 2005
After Survey Verification Performed:	Wed Jan 26 15:48:56 2005

Surface Calibration

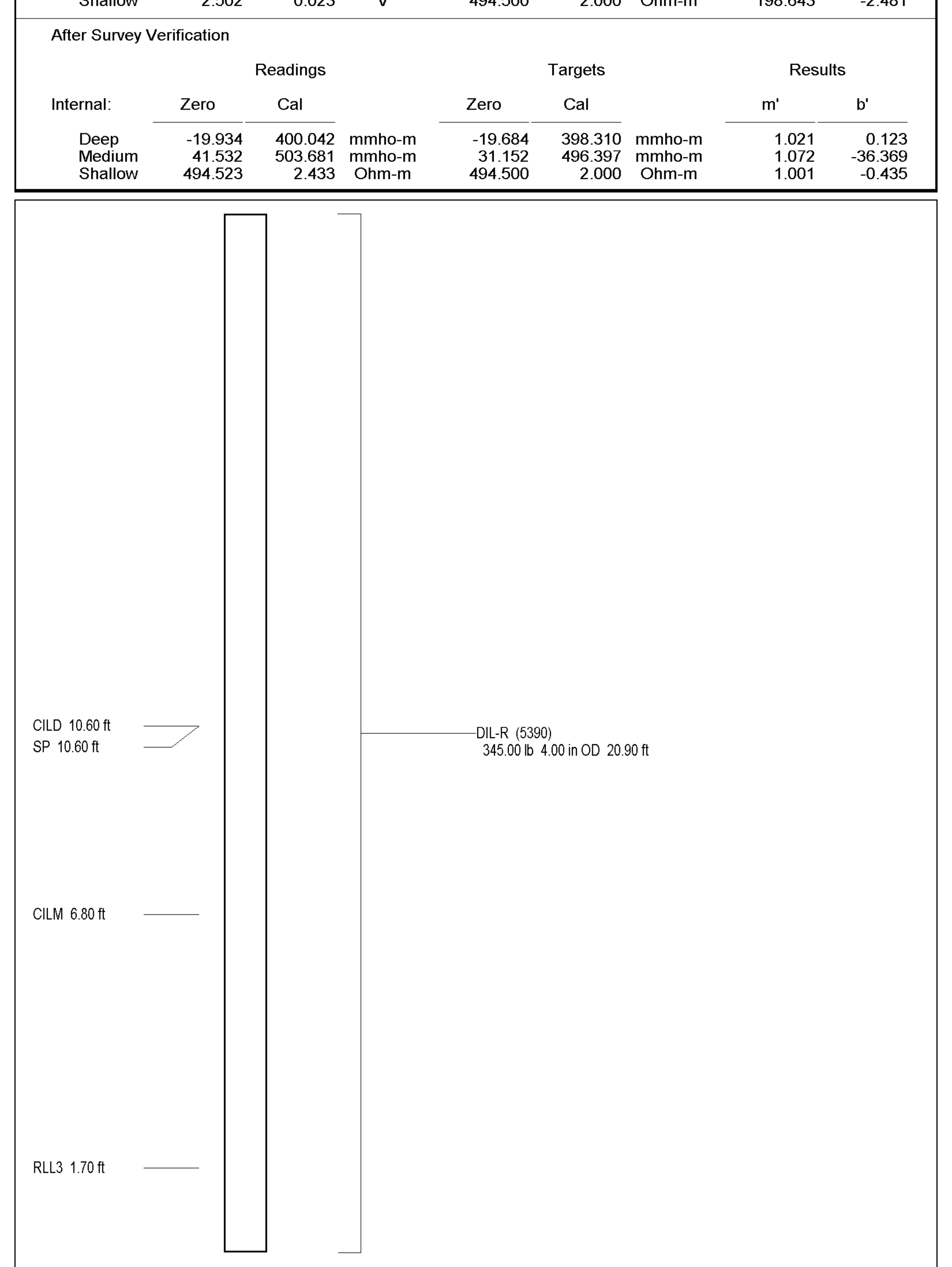
	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.041	0.637	V	0.000	400.000	mmho-m	670.900	-27.223
Medium	-0.006	0.700	V	0.000	464.000	mmho-m	656.366	4.251
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.647	V	0.000	400.000	mmho-m	628.552	-6.783
Medium	-0.011	0.749	V	0.000	464.000	mmho-m	610.612	6.720

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-19.684	398.310	mmho-m	-19.983	406.966	mmho-m	1.021	0.123
Medium	31.152	496.397	mmho-m	-2.972	495.796	mmho-m	1.072	-36.369
Shallow	2.502	0.023	V	494.500	2.000	Ohm-m	198.643	-2.481

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	-19.934	400.042	mmho-m	-19.684	398.310	mmho-m	1.021	0.123
Medium	41.532	503.681	mmho-m	31.152	496.397	mmho-m	1.072	-36.369
Shallow	494.523	2.433	Ohm-m	494.500	2.000	Ohm-m	1.001	-0.435



Dataset:	run1/pass5
Total Length:	20.90 ft
Total Weight:	345.00 lb
O.D.	4.00 in

MV Geophysical

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prov	Florida
Country	USA
Location	Section: 12 Township: 44 S Range: 43 E Elevation: 0 ft Lake Worth Utilities Water Treatment Plant Lake Worth, Florida
Measured From	G.L.
Drilling Measured From	G.L.
Permanent Datum	G.L.
Elevation	12
Log Measured From	Rotary Table
Drilling Measured From	Rotary Table
Date	06/15/05
Run Number	ONE
Depth Driller	300.000
Depth Logger	300.000
Bottom Logged Interval	300.000
Top Logged Interval	0.000
Casing Driller Size	12.000
Casing Logger Size	12.000
Bit Size	12.000
Type Fluid in Hole	Water
Density	N/A
Viscosity	N/A
Max Rec Temp	0
Estimated Temp	N/A
Equipment	2.5 Mile Lake Worth WTP
Recorded By	Anderson, L.A.
Witnessed By	Mr. Bob Bowen

XY CALIPER
GAMMA RAY
LOGS

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Comments

MAXIMUM Caliper Arm Extension: 33"

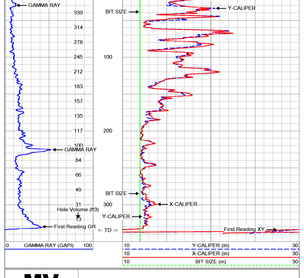
Drilling Contractor: All Webb Enterprises, Inc.

MAIN PASS

Database File: avwtref-1.db
Dataset Pathname: MAIN
Presentation Format: XY1030-1
Dataset Creation: Wed Jan 26 15:07:21 2005
Charted by: Depth in Feet scaled 1:1200

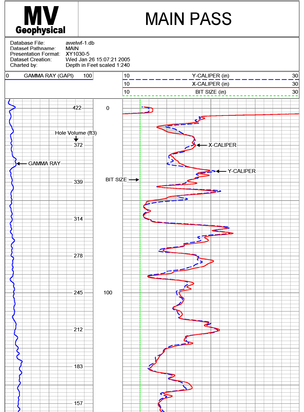
MAIN PASS

Database File: avwtref-1.db
Dataset Pathname: MAIN
Presentation Format: XY1030-5
Dataset Creation: Wed Jan 26 15:07:21 2005
Charted by: Depth in Feet scaled 1:600



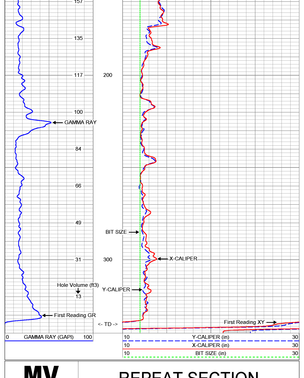
MAIN PASS

Database File: avwtref-1.db
Dataset Pathname: MAIN
Presentation Format: XY1030-5
Dataset Creation: Wed Jan 26 15:07:21 2005
Charted by: Depth in Feet scaled 1:240



REPEAT SECTION

Database File: avwtref-1.db
Dataset Pathname: REPEAT
Presentation Format: XY1030
Dataset Creation: Wed Jan 26 15:13:52 2005
Charted by: Depth in Feet scaled 1:240

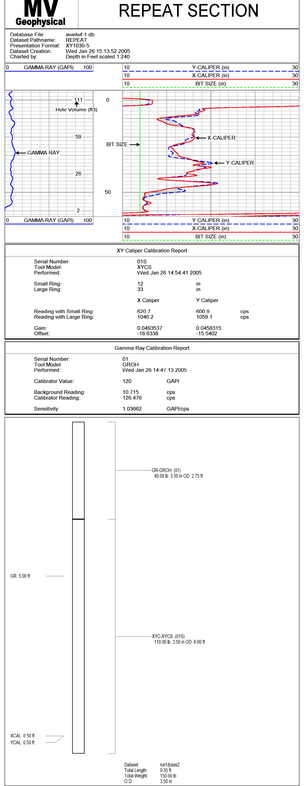


XY Caliper Calibration Report

Serial Number:	015		
Tool Model:	XYCS		
Performed:	Wed Jan 26 14:54:41 2005		
Small Ring:	12	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	620.7	600.9	cps
Reading with Large Ring:	1046.2	1059.1	cps
Gain:	0.0403537	0.0458315	
Offset:	-18.6338	-15.5402	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GRCH	
Performed:	Wed Jan 26 14:47:13 2005	
Calibrator Value:	120	GAPI
Background Reading:	10.715	cps
Calibrator Reading:	126.476	cps
Sensitivity	1.03662	GAPI/cps



Dataset: repf15ses2
Total Length: 3.33 ft
Total Weight: 150.00 lb
O.D. 3.50 in

Company Lake Worth Utilities
Well F-1
Field Lake Worth
County Palm Beach
State/Prv Florida

DUAL INDUCTION LL3 / SP LOG

MV Geophysical

Company: Lake Worth Utilities
Well: F-1
Field: Lake Worth
County: Palm Beach
State/Prv: Florida
Location: City of Lake Worth Water Treatment Plant, JLA Geosciences, Inc.
Other Services: XY/GR

Permanent Datum: G.L. — Elevation: 25
Log Measured From: G.L.
Drilling Measured From: G.L.
Elevation: K.B. 30', D.F., G.L. 25'

Date	17-FEB-2005
Run Number	TWO
Depth Driller	1047'
Depth Logger	1047'
Bottom Logged Interval	1047'
Top Log Interval	200'
Open Hole Size	12.25"
Type Fluid	MUD
Density / Viscosity	9.0/54
Max Recorded Temp	NA
Estimated Cement Top	
Time Well Ready	08:00 2/17/05
Time Logger on Bottom	09:30 2/17/05
Equipment Number	MVGS-7
Location	Ft. Myers
Recorded By	S. Miller
Witnessed By	J. Andersen/JLA, Dana Webb (AWE), D. Webb (AWE)

Borehole Record

Run Number	Bit	From	To
ONE	12"	SURFACE	320
TWO	12.25"	200	1047

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	30"	0.375" WT	SURFACE	200'
Prot. String				
Production String				
Liner				

Invoice No. 2005027 — * FIELD PRINT *

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Comments

Rm=4.763 OHM-M @ 81.4 degF

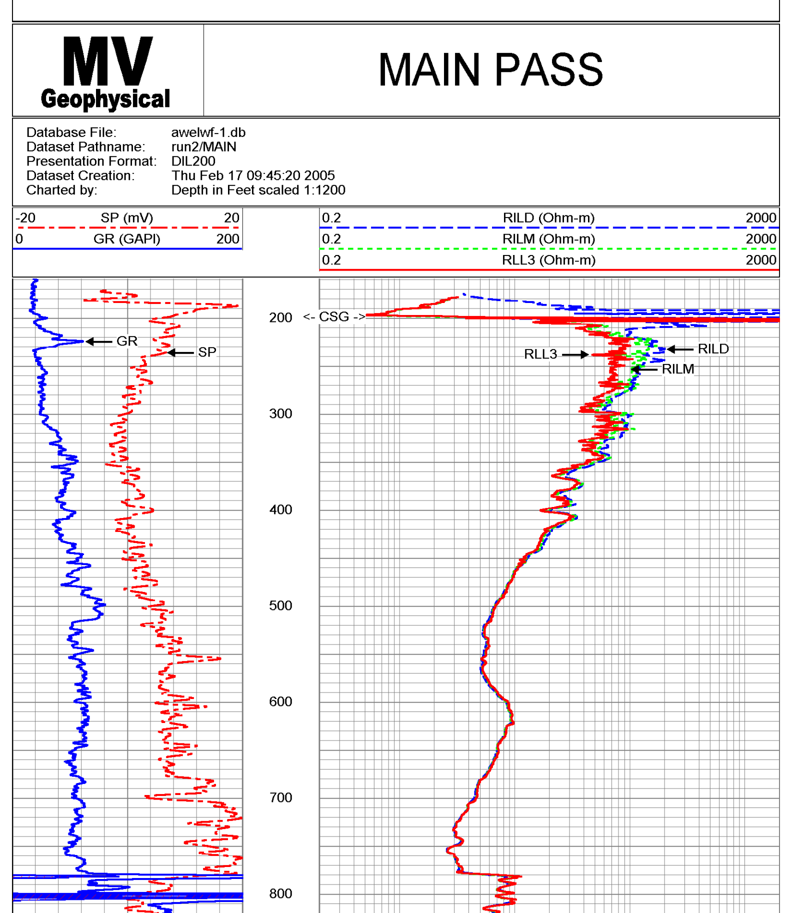
Drilling Contractor: All Webb Enterprises, Inc.

MV Geophysical

MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL200
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:1200

-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000



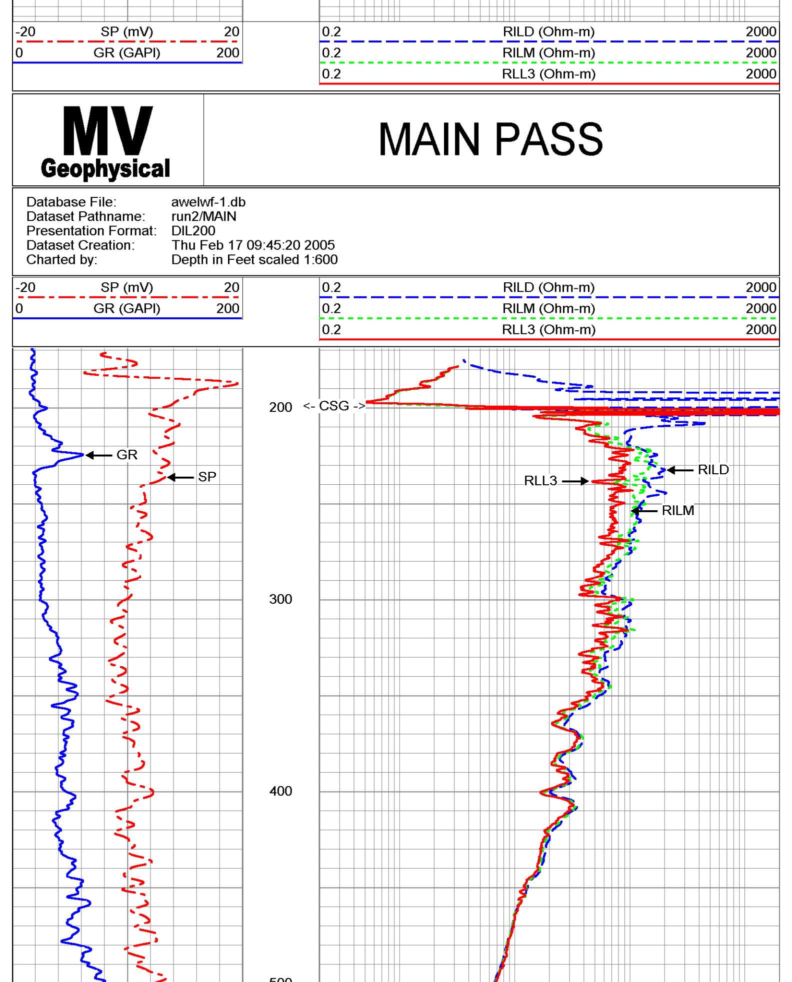
-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000

MV Geophysical

MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL200
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:600

-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000



-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000

MV Geophysical

MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL200
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:240

-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000

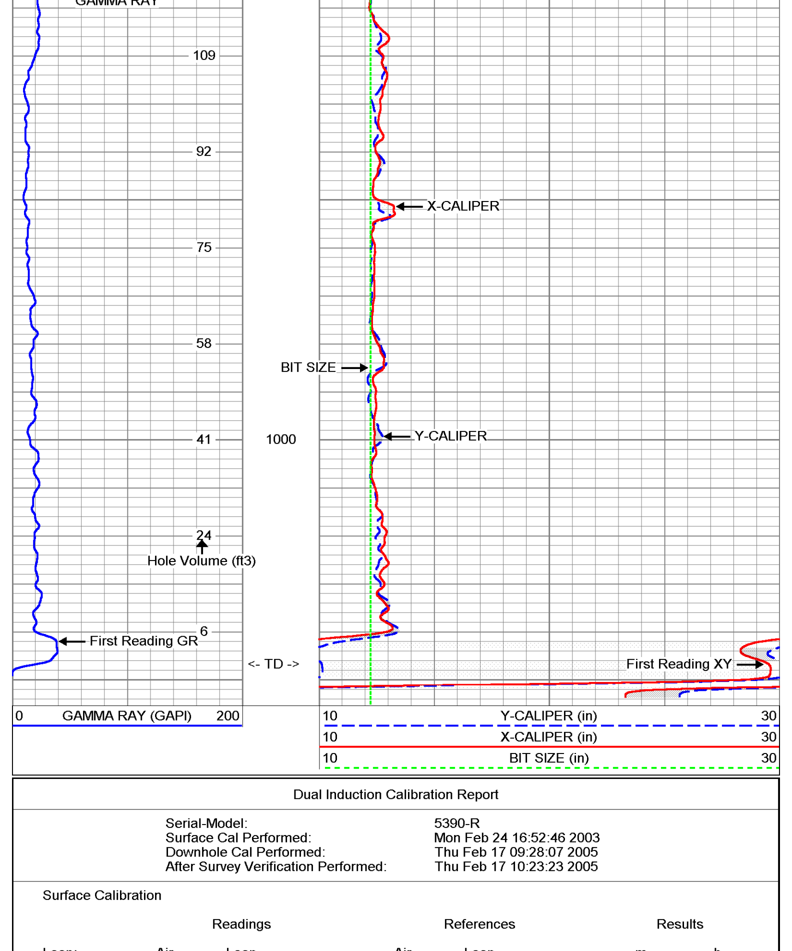
-20	SP (mV)	20	0.2 RILD (Ohm-m) 2000
0	GR (GAPI)	200	0.2 RILM (Ohm-m) 2000
			0.2 RLL3 (Ohm-m) 2000

MV Geophysical

REPEAT SECTION

Database File: awelwf-1.db
Dataset Pathname: run2/REPEAT
Presentation Format: XY103025
Dataset Creation: Thu Feb 17 08:34:54 2005
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	200	10 Y-CALIPER (in) 30
			10 X-CALIPER (in) 30
			10 BIT SIZE (in) 30



0	GAMMA RAY (GAPI)	200	10 Y-CALIPER (in) 30
			10 X-CALIPER (in) 30
			10 BIT SIZE (in) 30

Dual Induction Calibration Report

Serial-Model: 5390-R
Surface Cal Performed: Mon Feb 24 16:52:46 2003
Downhole Cal Performed: Thu Feb 17 09:28:07 2005
After Survey Verification Performed: Thu Feb 17 10:23:23 2005

Surface Calibration

Loop:	Readings Air	Readings Loop		References Air	References Loop		Results m	Results b
Deep	0.041	0.637	V	0.000	400.000	mmho-m	670.900	-27.223
Medium	-0.006	0.700	V	0.000	464.000	mmho-m	656.366	4.251

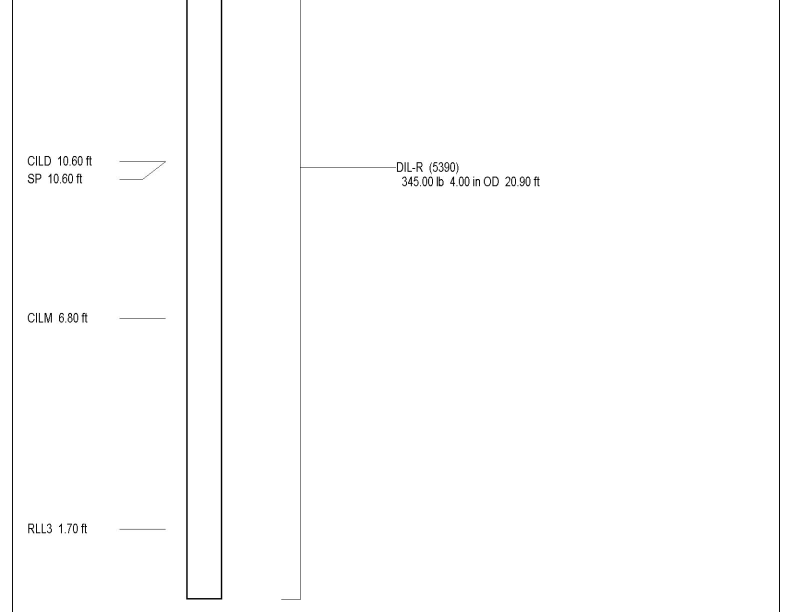
Internal:	Readings Zero	Readings Cal		References Zero	References Cal		Results m	Results b
Deep	0.011	0.647	V	0.000	400.000	mmho-m	628.552	-6.783
Medium	-0.011	0.749	V	0.000	464.000	mmho-m	610.612	6.720

Downhole Calibration

Internal:	Readings Zero	Readings Cal		References Zero	References Cal		Results m	Results b
Deep	-18.656	389.191	mmho-m	-19.983	406.966	mmho-m	1.047	-0.453
Medium	13.185	479.828	mmho-m	-2.972	495.796	mmho-m	1.069	-17.064
Shallow	2.503	0.429	V	494.500	2.000	Ohm-m	237.533	-99.968

After Survey Verification

Internal:	Readings Zero	Readings Cal		Targets Zero	Targets Cal		Results m'	Results b'
Deep	-18.800	399.915	mmho-m	-18.656	389.191	mmho-m	1.047	-0.453
Medium	13.585	489.811	mmho-m	13.185	479.828	mmho-m	1.069	-17.064
Shallow	494.742	-93.890	Ohm-m	494.500	2.000	Ohm-m	0.837	80.557



Dataset: run2/pass5
Total Length: 20.90 ft
Total Weight: 345.00 lb
O.D.: 4.00 in

MV Geophysical

X-Y CALIPER GAMMA RAY LOG

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida
Location	City of Lake Worth Water Treatment Plant JLA Geosciences, Inc.
Other Services	DIL/SP

Permanent Datum	G.L.	Elevation 25'	Elevation K.B. 30' D.F. G.L. 25'
Log Measured From	G.L.		
Drilling Measured From	G.L.		

Date	17-FEB-2005
Run Number	TWO
Depth Driller	1047'
Depth Logger	1047'
Bottom Logged Interval	1047'
Top Log Interval	SURFACE
Open Hole Size	12.25"
Type Fluid	MUD
Density / Viscosity	9.0/54
Max. Recorded Temp.	na
Estimated Cement Top	NA
Time Well Ready	08:00 2/17/05
Time Logger on Bottom	08:00 2/17/05
Equipment Number	M/GS-1
Location	Ft. Myers
Recorded By	S.Miller
Witnessed By	J.Andersen (JLA) / D. Webb (AWE) / Dana Webb (AWE) / D. Webb, Jr. (AWE)

Borehole Record / Tubing Record

Run Number	Bit	From	To	Size	Weight	From	To
ONE	12"	SURFACE	335'				
TWO	12.25"	200'	1047'				

	Size	Wgt/Ft	Top	Bottom
Casing Record				
Surface String	30"	0.375" WT	SURFACE	200'
Prot. String				
Production String				
Liner				

Invoice No. 2005027   * FIELD PRINT *

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Comments

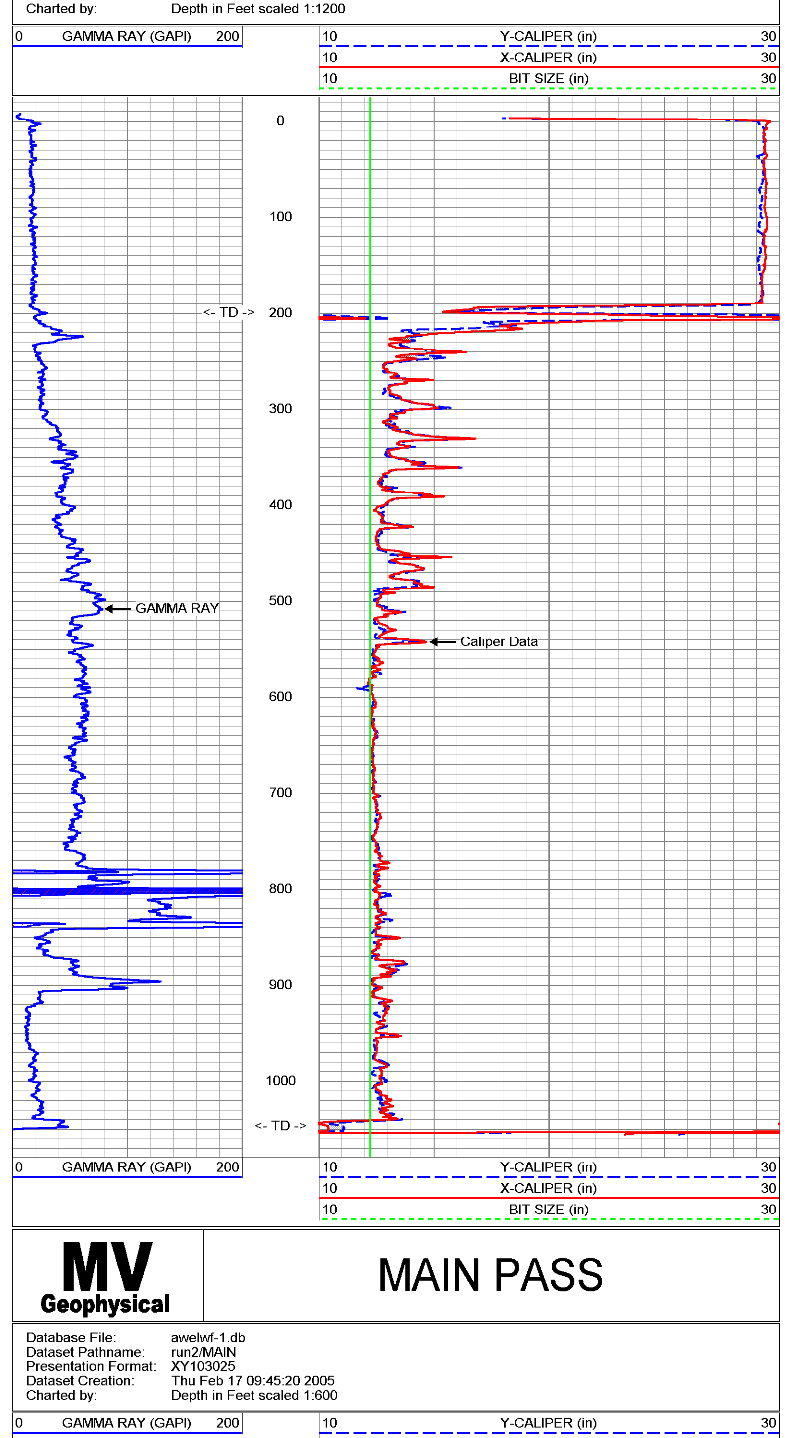
MAXIMUM Caliper Arm Extension: 33"

Drilling Contractor: All Webb Enterprises, Inc.

MV Geophysical

MAIN PASS

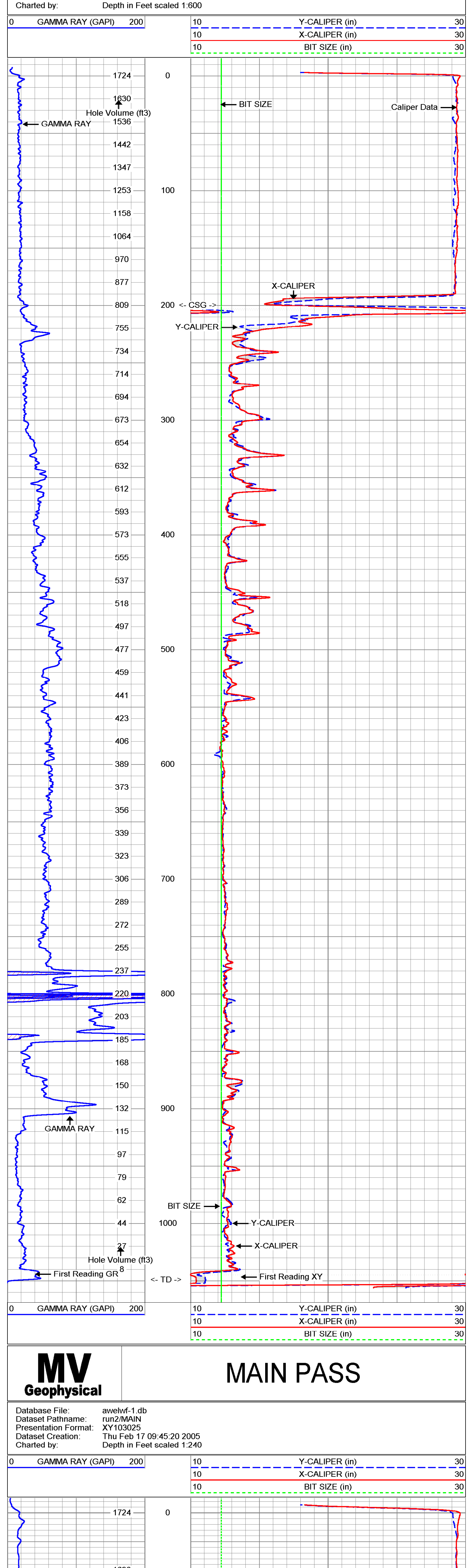
Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: XY103021
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

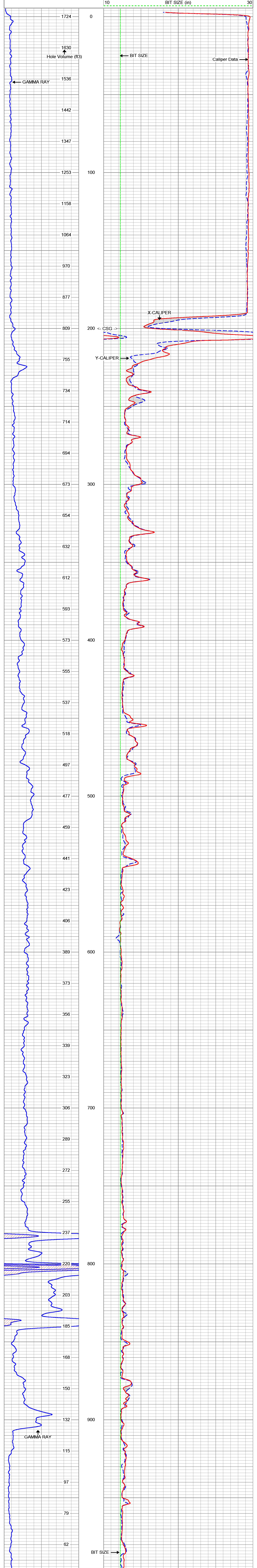
Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: XY103025
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:600



MV Geophysical

MAIN PASS

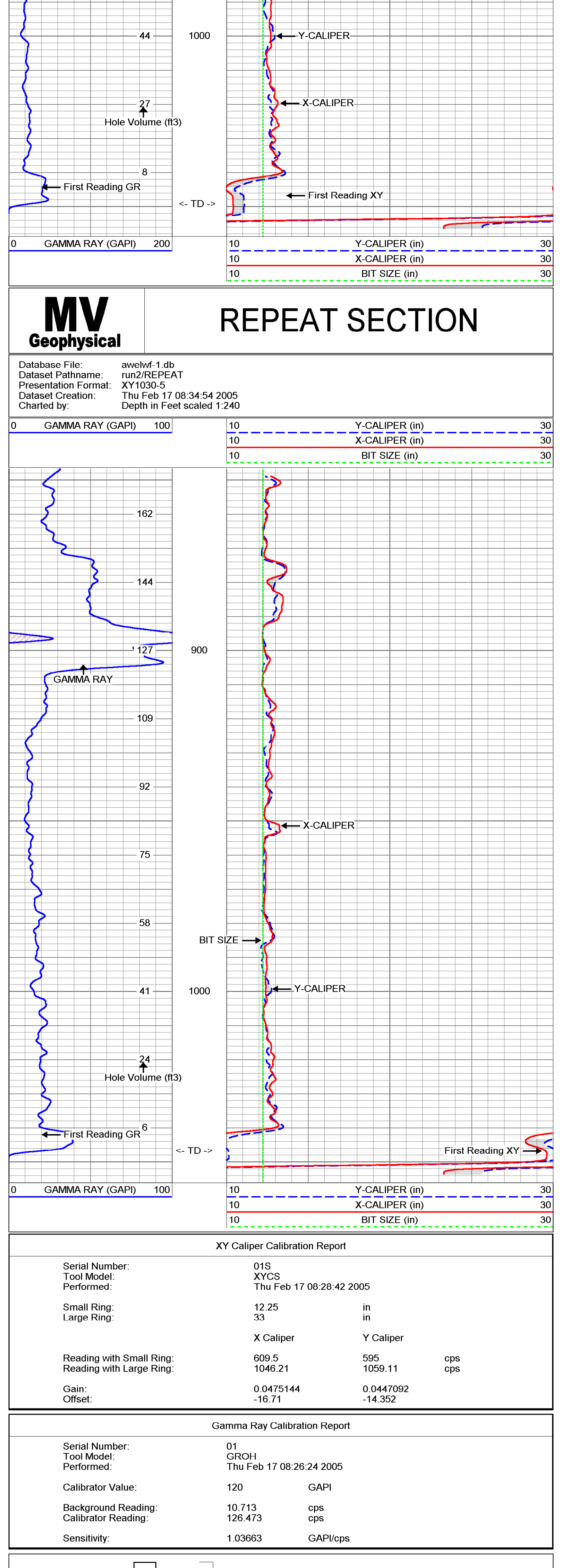
Database File: awelwf-1.db
Dataset Pathname: run2/MAIN
Presentation Format: XY103025
Dataset Creation: Thu Feb 17 09:45:20 2005
Charted by: Depth in Feet scaled 1:240



MV Geophysical

REPEAT SECTION

Database File: awelwf-1.db
Dataset Pathname: run2/REPEAT
Presentation Format: XY1030-5
Dataset Creation: Thu Feb 17 08:34:54 2005
Charted by: Depth in Feet scaled 1:240

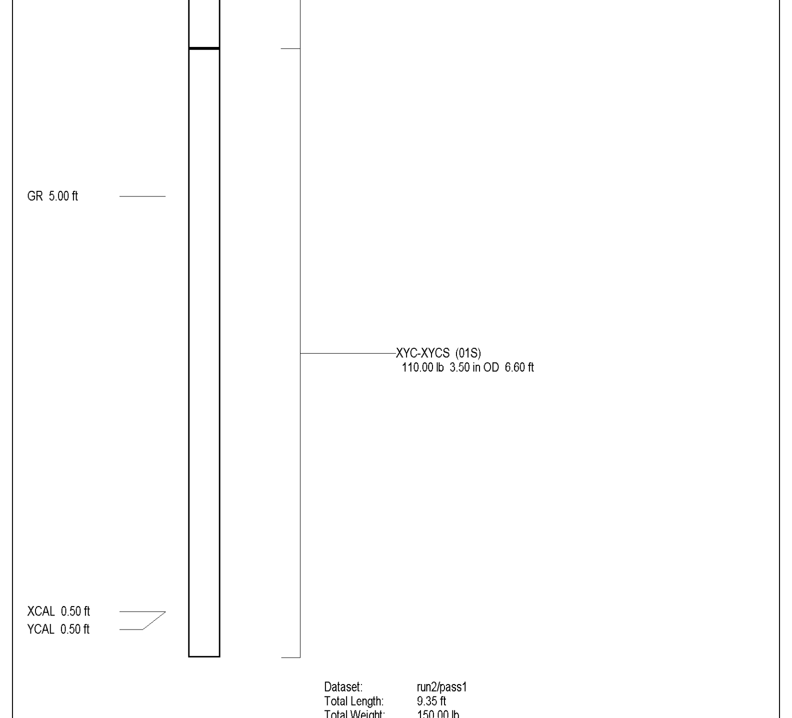


XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Thu Feb 17 08:28:42 2005		
Small Ring:	12.25	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	609.5	595	cps
Reading with Large Ring:	1046.21	1059.11	cps
Gain:	0.0475144	0.0447092	
Offset:	-16.71	-14.352	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GROH	
Performed:	Thu Feb 17 08:26:24 2005	
Calibrator Value:	120	GAPI
Background Reading:	10.713	cps
Calibrator Reading:	126.473	cps
Sensitivity:	1.03663	GAPI/cps



Dataset: run2/pass1
Total Length: 9.35 ft
Total Weight: 150.00 lb
O.D. 3.50 in

MV Geophysical

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prov	Florida

Company: Lake Worth Utilities
Field: Lake Worth
County: Palm Beach
State/Prov: Florida

Location: City of Lake Worth
Lat & Longitude: N/A
Elevation: 10 ft
Datum: N/A
Elevation: 0 ft
Log Measured From: Ground Level
Drilling Measured From: Ground Level

XY CALIPER LOG

Date: Thursday, June 16, 2005
Time: 10:00:00 AM

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Comments

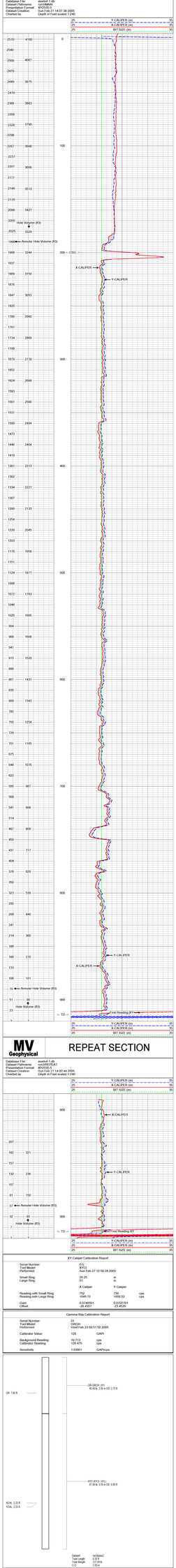
MAXIMUM Caliper Arm Extension: 51"

FUTURE CASING SIZE: 18"

Drilling Contractor: All Webb Enterprises, Inc.

MAIN PASS

Database File: swefed1.db
Dataset Pathname: KYCSWA
Presentation Format: KYCSCA
Dataset Creation: Sun Feb 27 14:07:36 2005
Charted by: Depth in Feet scaled 1:240



REPEAT SECTION

Database File: swefed1.db
Dataset Pathname: KYCSWA
Presentation Format: KYCSCA
Dataset Creation: Sun Feb 27 14:00:44 2005
Charted by: Depth in Feet scaled 1:240

XY Caliper Calibration Report

Serial Number:	031	
Tool Model:	XYCI	
Performed:	Wed Feb 23 08:51:50 2005	
Small Ring:	29.25	in
Large Ring:	51	in
	X Caliper	Y Caliper
Reading with Small Ring:	752	752 cps
Reading with Large Ring:	1045.72	1055.52 cps
Gain:	0.0140501	0.0127201
Offset:	-26.4357	-23.4526

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GR/CM	
Performed:	Wed Feb 23 09:51:50 2005	
Calibrator Value:	120	GAPI
Background Reading:	10.713	cps
Calibrator Reading:	126.475	cps
Sensitivity:	1.03061	GAPI/cps

Dataset: rar00pass2
Total Length: 0.35 ft
Total Time: 00:00:18
O.D.: 3.59 in

MV Geophysical

Company: Lake Worth Utilities
Well: F-1
Field: Lake Worth
County: Palm Beach
State: Florida

Date: 12/13/05
Time: 11:00
Depth Reference: Ground Level
Elevation: 0.00 m
Log Measured From: Ground Level
Permanent Datum: Ground Level
Drilling Measured From: Ground Level

Date: 12/13/05
Run No: Five
Depth Driller: 1500.0 m
Depth Logger: 1500.0 m
Depth Logged: 1500.0 m
Top Log Interval: 0.0 m
Bottom Log Interval: 1500.0 m
Casing Driller Size: 0.000 m @ 0.0 m
Casing Logger Size: 0.000 m @ 0.0 m
Bit Size: 0.000 m
Type Fluid in Hole: Fresh Water
Density: 1.000 g/cm³
Viscosity: 0.000 mPa.s
Fluid Level: 0.0 m
Max Rec Temp: 0.000 °C
Estimated Cement Top: 0.000 m
Equipment: 1500 m Mobile Lab
Operator: Chris Leahy
Witnessed By: Mr. Bob Scott, Mr. Ken Ward

Lake Worth Utilities
F-1
Lake Worth
Palm Beach
Florida

DUAL INDUCTION
LL3 SP
LOG

Comments

Run1.663 D+B54 @ 76.1 degF

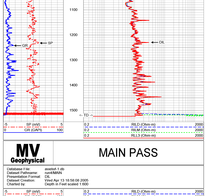
Drilling Contractor: All Weather Enterprises, Inc.

MV Geophysical

MV Geophysical is pleased to present its interpretation of the data measurements and we cannot and do not guarantee the accuracy or correctness of any interpretations we may make, and we shall not be liable for any loss or damage suffered by the customer or any other person or entity as a result of any interpretation made by us. Interpretations are based upon computer analysis and are intended to be only a general review and a guide to potential areas of interest. These interpretations are data subject to our general terms and conditions set out in our current price schedule and service agreement.

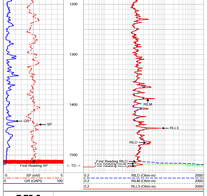
MAIN PASS

Datasource: F-1.dat
Dataset Pathname: run4/MAIN
Dataset Description: Dual Induction
Dataset Creation: Wed Apr 13 18:58:08 2005
Created by: Depth in Feet scaled 1:240



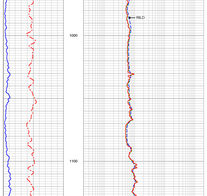
MAIN PASS

Datasource: F-1.dat
Dataset Pathname: run4/MAIN
Dataset Description: Dual Induction
Dataset Creation: Wed Apr 13 18:58:08 2005
Created by: Depth in Feet scaled 1:240



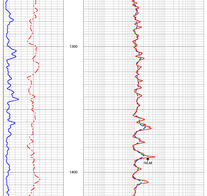
MAIN PASS

Datasource: F-1.dat
Dataset Pathname: run4/MAIN
Dataset Description: Dual Induction
Dataset Creation: Wed Apr 13 18:58:08 2005
Created by: Depth in Feet scaled 1:240



REPEAT SECTION

Datasource: F-1.dat
Dataset Pathname: run4/REPEAT
Dataset Description: Dual Induction
Dataset Creation: Wed Apr 13 18:39:48 2005
Created by: Depth in Feet scaled 1:240



Dual Induction Calibration Report

Serial Model: SI9M-R
Surface Cal Performed: Wed Apr 13 18:42:46 2005
Downhole Cal Performed: Wed Apr 13 18:10:12 2005
After Survey Verification Performed: Wed Apr 13 20:13:58 2005

Surface Calibration

	Readings			References		Results	
Loop:	Air	Loop		Air	Loop	m	b
Deep:	0.000	0.621	V	0.000	464.000	mmho-m	0.000
Medium:	0.000	0.750	V	0.000	464.000	mmho-m	0.000

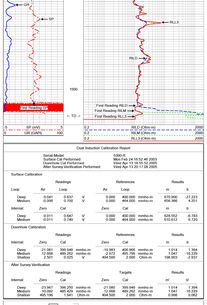
Internal:	Zero	Cal		Zero	Cal	m	b
Deep:	0.011	0.621	V	0.000	464.000	mmho-m	458.703
Medium:	0.011	0.749	V	0.000	464.000	mmho-m	610.012

Downhole Calibration

	Readings			References		Results	
Internal:	Zero	Cal		Zero	Cal	m	b
Deep:	23.982	309.590	mmho-m	19.993	468.590	mmho-m	1.014
Medium:	12.948	456.192	mmho-m	8.002	468.196	mmho-m	1.047
Shallow:	4.000	468.196	mmho-m	4.000	468.196	mmho-m	1.000

After Survey Verification

	Readings			Targets		Results	
Internal:	Zero	Cal		Zero	Cal	m	b
Deep:	23.982	309.250	mmho-m	23.982	309.590	mmho-m	1.014
Medium:	12.948	456.192	mmho-m	12.948	456.192	mmho-m	1.000
Shallow:	4.000	468.196	mmho-m	4.000	468.196	mmho-m	1.000



MV Geophysical

X-Y CALIPER GAMMA RAY LOG

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida

Location: City of Lake Worth Water Treatment Plant, JLA Geosciences, Inc.

Other Services: DIL/SP, FCT, FLOW

Permanent Datum	G.L.	Elevation	25'
Log Measured From	G.L.		
Drilling Measured From	G.L.		

Elevation: K.B. 30', D.F., G.L. 25'

Date	13-APR-2005
Run Number	FOUR
Depth Driller	1550'
Depth Logger	1520'
Bottom Logged Interval	1520'
Top Log Interval	SURFACE
Open Hole Size	16.25"
Type Fluid	WATER
Density / Viscosity	NA/NA
Max. Recorded Temp.	na
Estimated Cement Top	NA
Time Well Ready	ROA 4/13/05
Time Logger on Bottom	17:30 4/13/05
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller
Witnessed By	Charlie (AWE)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12"	SURFACE	335'				
TWO	12.25"	200'	1047'				
THREE	28"	200'	920'				
FOUR	16.25"	910'	1550'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	30"	0.375" WT	SURFACE	200'
Prot. String	18"	0.375" WT	180'	910'
Production String				
Liner				

Invoice No. 2005071

* FIELD PRINT *

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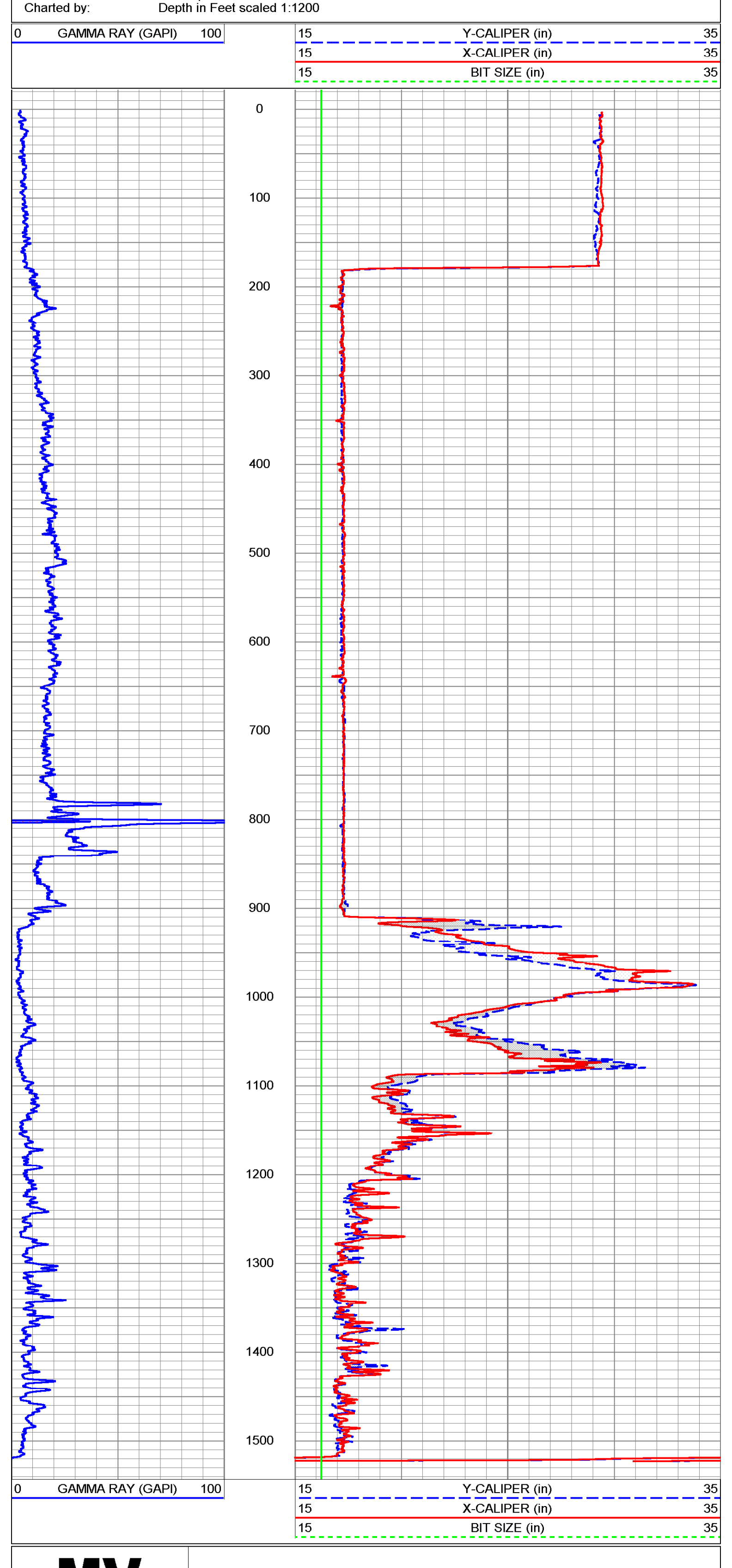
Comments

MAXIMUM Caliper Arm Extension: 33"

Drilling Contractor: All Webb Enterprises, Inc.

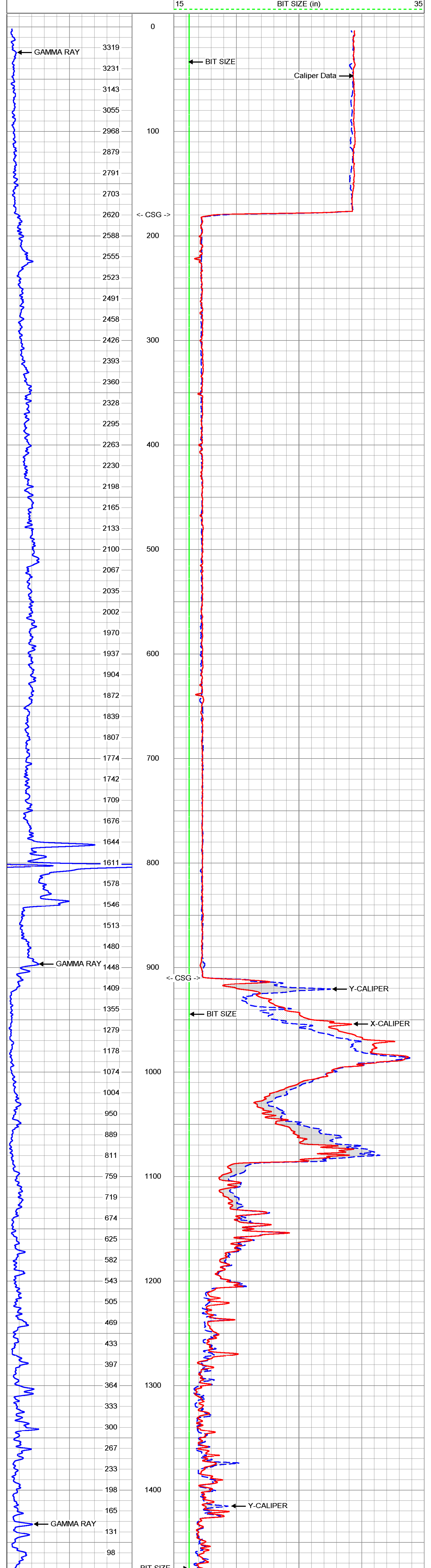
MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run4/MAIN
Presentation Format: XY1535-1
Dataset Creation: Wed Apr 13 18:58:08 2005
Charted by: Depth in Feet scaled 1:1200



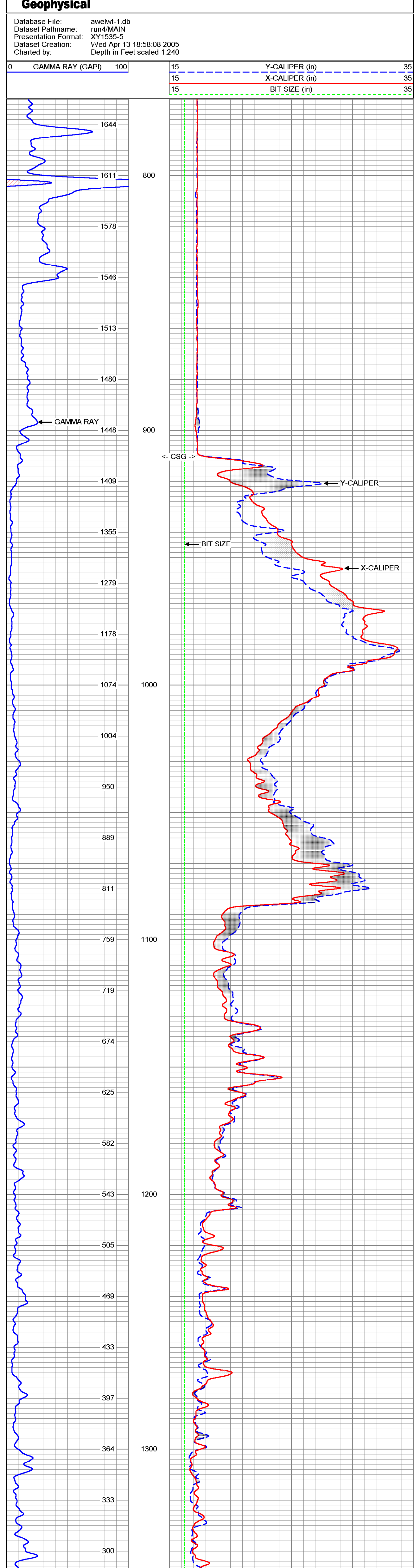
MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run4/MAIN
Presentation Format: XY1535-5
Dataset Creation: Wed Apr 13 18:58:08 2005
Charted by: Depth in Feet scaled 1:600



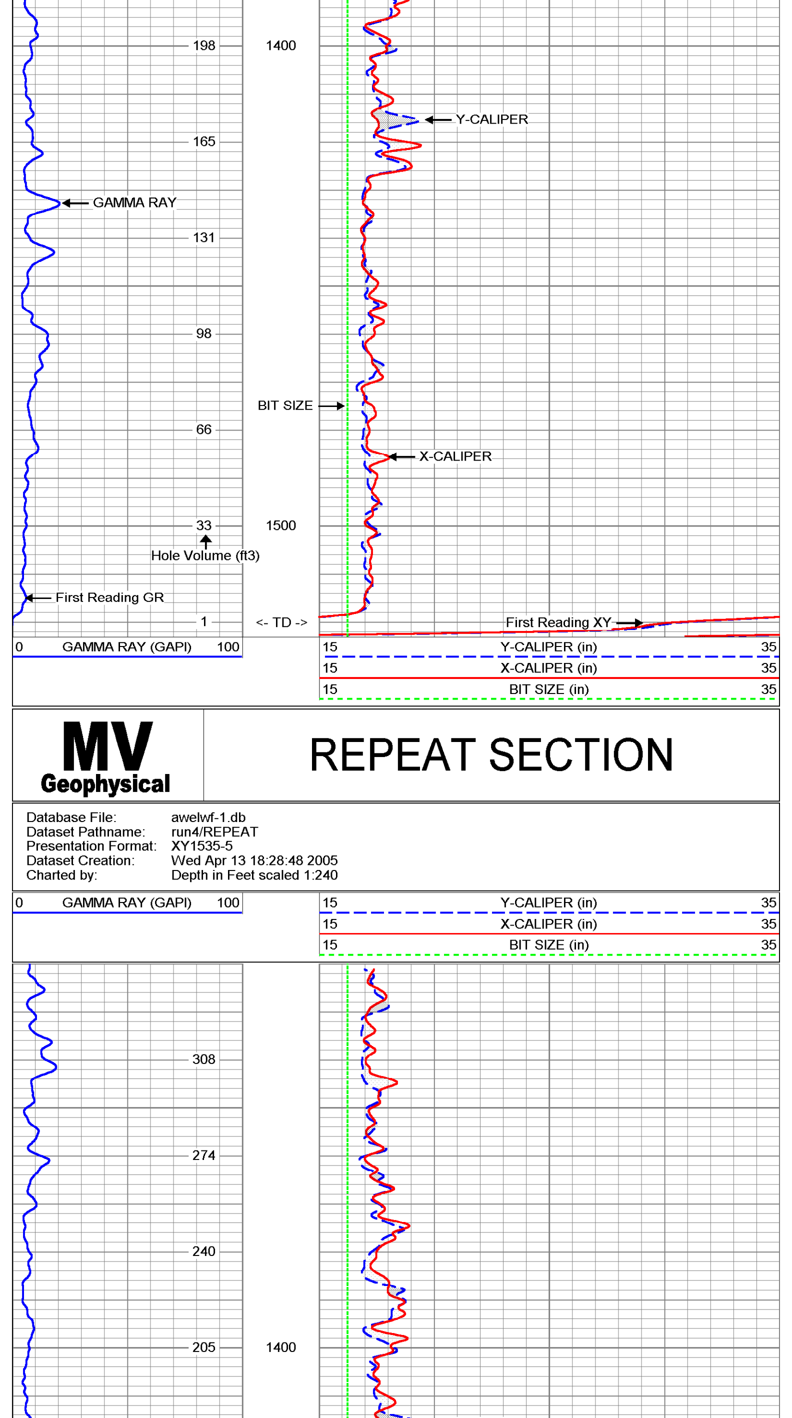
MAIN PASS

Database File: awelwf-1.db
Dataset Pathname: run4/MAIN
Presentation Format: XY1535-5
Dataset Creation: Wed Apr 13 18:58:08 2005
Charted by: Depth in Feet scaled 1:240



REPEAT SECTION

Database File: awelwf-1.db
Dataset Pathname: run4/REPEAT
Presentation Format: XY1535-5
Dataset Creation: Wed Apr 13 18:28:48 2005
Charted by: Depth in Feet scaled 1:240

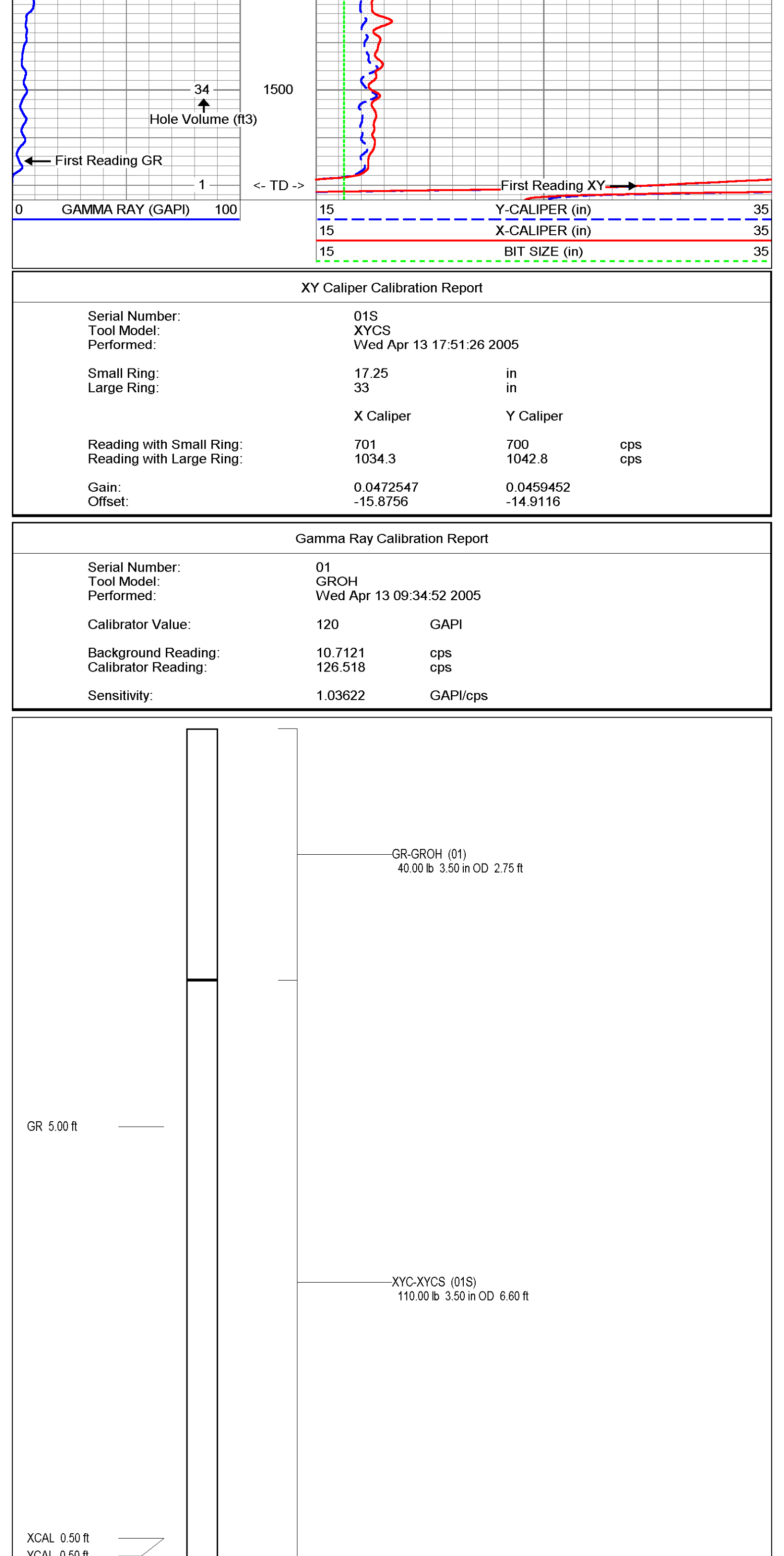


XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Wed Apr 13 17:51:26 2005		
Small Ring:	17.25	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	701	700	cps
Reading with Large Ring:	1034.3	1042.8	cps
Gain:	0.0472547	0.0459452	
Offset:	-15.8756	-14.9116	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GROH	
Performed:	Wed Apr 13 09:34:52 2005	
Calibrator Value:	120	GAPI
Background Reading:	10.7121	cps
Calibrator Reading:	126.518	cps
Sensitivity:	1.03622	GAPI/cps



Dataset: run4/pass3
Total Length: 9.35 ft
Total Weight: 150.00 lb
O.D.: 3.50 in

MV Geophysical

FLUID CONDUCTIVITY TEMPERATURE LOG

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prv	Florida

Company: Lake Worth Utilities
Well: F-1
Field: Lake Worth
County: Palm Beach
State/Prv: Florida
Location: City of Lake Worth, Water Treatment Plant, JLA Geosciences, Inc.

Other Services: DIL/SP, XY/GR, FLOW

Permanent Datum	G.L.	Elevation 25'	K.B. 30'
Log Measured From	G.L.		D.F.
Drilling Measured From	G.L.		G.L. 25'

Date	13-APR-2005
Run Number	FOUR
Depth Driller	1550'
Depth Logger	1520'
Bottom Logged Interval	1520'
Top Log Interval	845'
Open Hole Size	16.25"
Type Fluid	WATER
Density / Viscosity	NA/NA
Max. Recorded Temp.	na
Estimated Cement Top	NA
Time Well Ready	ROA 4/13/05
Time Logger on Bottom	15:30 4/13/05
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller
Witnessed By	Charlie (AWE)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12"	SURFACE	335'				
TWO	12.25"	200'	1047'				
THREE	28"	200'	920'				
FOUR	16.25"	910'	1550'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	30"	0.375" WT	SURFACE	200'
Prot. String	18*	0.375" WT	180'	910'
Production String				
Liner				
Invoice No.	2005071			* FIELD PRINT *

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Comments

STATIC & DYNAMIC passes were performed.
Cw=6123 uS/Cm @ 76.1 degF (Dynamic Sample). Q=850 gpm.
FLUID RESISTIVITY CALIBRATION REPORT (Performed: 1-APR-05 11:00)

uS/cm	CPS
3335.0	3305.33
4820.1	3030.12
6525.1	2891.11

TEMPERATURE CALIBRATION REPORT (Performed: 1-APR-04 11:45)

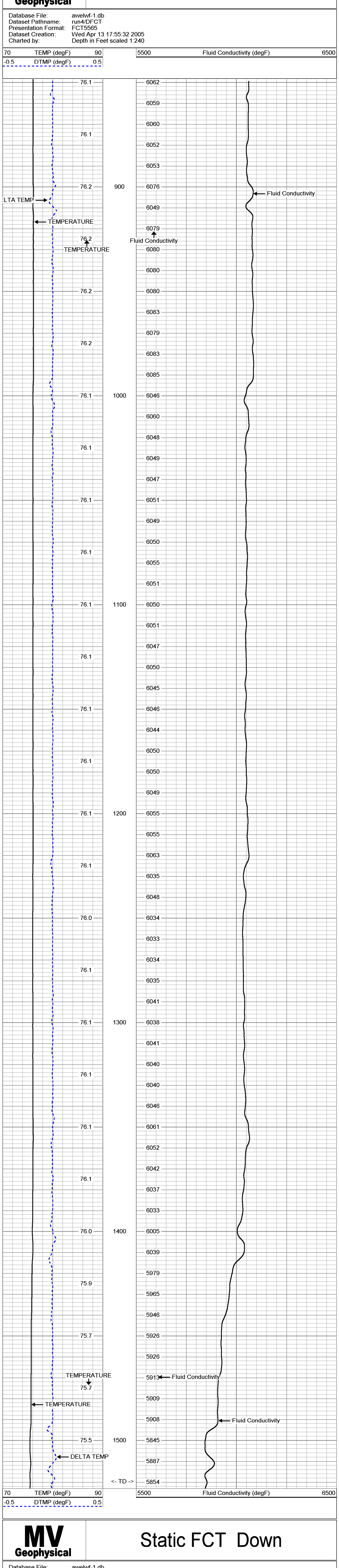
DEG-F	CPS
34.1	2341.74
144.6	6951.41

Drilling Contractor: All Webb Enterprises, Inc.

MV Geophysical — Dynamic FCT Up

Database File: awelwf-1.db
Dataset Pathname: run4/DFCT
Presentation Format: FCT5565
Dataset Creation: Wed Apr 13 17:55:32 2005
Charted by: Depth in Feet scaled 1:240

70 TEMP (degF) 90 | 5500 Fluid Conductivity (degF) 6500
-0.5 DTMP (degF) 0.5

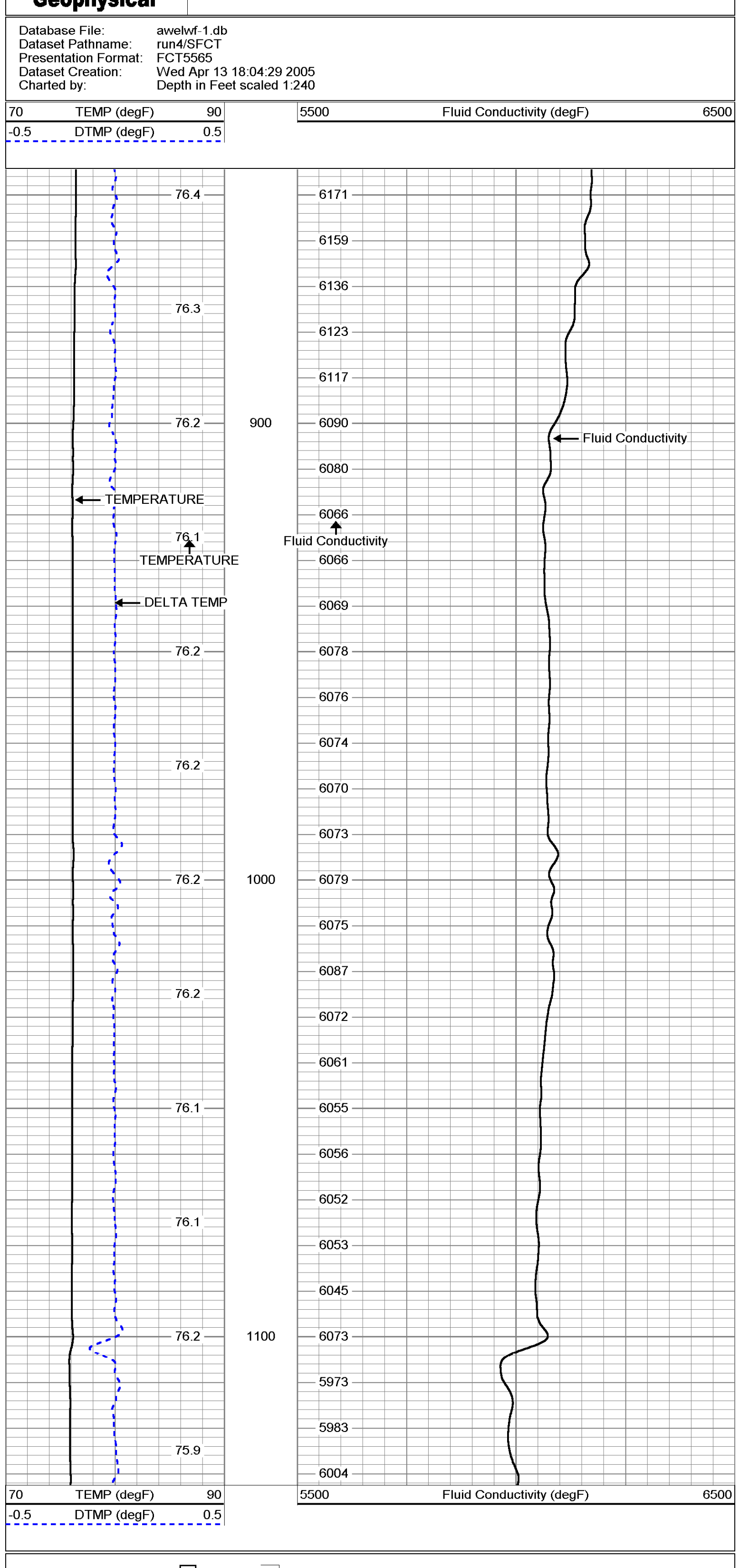


70 TEMP (degF) 90 | 5500 Fluid Conductivity (degF) 6500
-0.5 DTMP (degF) 0.5

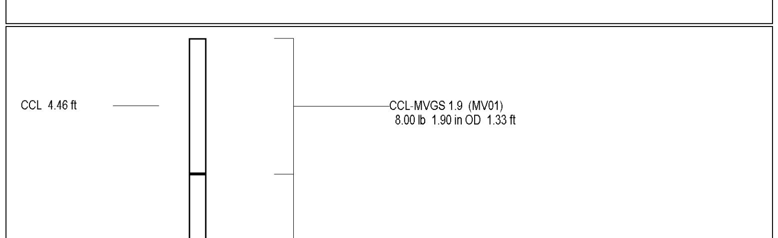
MV Geophysical — Static FCT Down

Database File: awelwf-1.db
Dataset Pathname: run4/SFCT
Presentation Format: FCT5565
Dataset Creation: Wed Apr 13 18:04:29 2005
Charted by: Depth in Feet scaled 1:240

70 TEMP (degF) 90 | 5500 Fluid Conductivity (degF) 6500
-0.5 DTMP (degF) 0.5



70 TEMP (degF) 90 | 5500 Fluid Conductivity (degF) 6500
-0.5 DTMP (degF) 0.5



Dataset: run4/pass1
Total Length: 5.12 ft
Total Weight: 20.00 lb
O.D. 1.90 in

MV Geophysical

Company	Lake Worth Utilities
Well	F-1
Field	Lake Worth
County	Palm Beach
State/Prov	Florida
Location	City of Lake Worth J.A Cooscoscos, Inc. Section 22 T 44 S R 43 E Palm Beach, Florida
Elevation	22'
Date	10/13/05
Time	10:00 AM
Depth Reference	Ground Level
Log Measured from	Ground Level
Drilling Measured from	Ground Level
Permanent Datum	Ground Level
Elevation	0.0 ft
Log Measured from	0.0 ft
Drilling Measured from	0.0 ft
Max. Rec. Temp.	0.0 C
Equipment	0 Miles
Recorded By	Jim Kirkpatrick
Witnessed By	Mr. Jim Cooscoscos
Run Number	ONE
Depth Driller	1500
Depth Logger	1500
Bottom Logged Interval	1500
Top Logged Interval	0
Casing Driller	0 @ 0
Casing Logger	0 @ 0
Bit Size	0
Type Fluid in Hole	Fresh Water
Density	0
Viscosity	0
Fluid Level	0
Max. Rec. Temp.	0 C
Estimated Cement Top	0
Time Logger on Bottom	0
Equipment	0 Miles
Recorded By	Jim Kirkpatrick
Witnessed By	Mr. Jim Cooscoscos

FLOWMETER LOG

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Comments

STATIC and DYNAMIC down passes were made at 50 fpm.

1 Stations were performed.

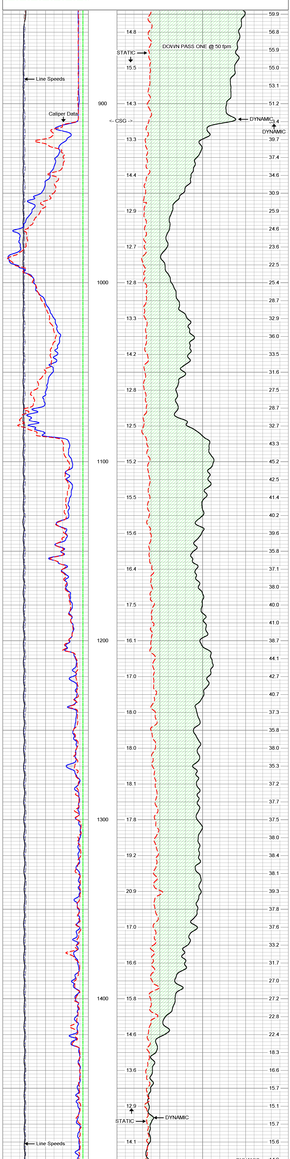
Q =1-500 gpm

Drilling Contractor: Ali Webb Enterprises, Inc.

MV Geophysical — S/D DOWN @ 50 fpm

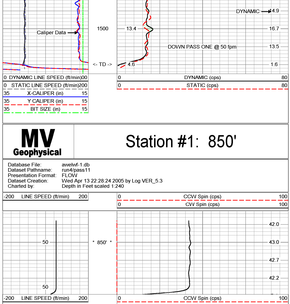
Database File: awelcwf.1.db
Dataset Pathname: run4CDD50
Presentation Format: FLOW
Dataset Creation: Wed Apr 13 21:59:23 2005
Charted by: Depth in Feet scaled 1:240

0 DYNAMIC LINE SPEED (ft/min)200
0 STATIC LINE SPEED (ft/min)200
35 X-CALIPER (in) 15
35 Y-CALIPER (in) 15
35 BIT SIZE (in) 15



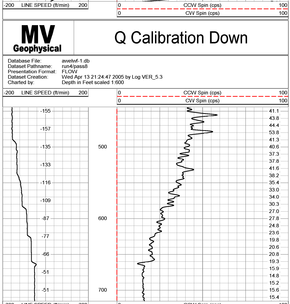
MV Geophysical — Station #1: 850'

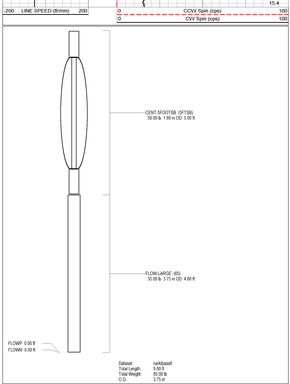
Database File: awelcwf.1.db
Dataset Pathname: run4cpass11
Presentation Format: FLOW
Dataset Creation: Wed Apr 13 22:28:24 2005 by Log VERL_5.3
Charted by: Depth in Feet scaled 1:240



MV Geophysical — Q Calibration Down

Database File: awelcwf.1.db
Dataset Pathname: run4cpass8
Presentation Format: FLOW
Dataset Creation: Wed Apr 13 21:24:47 2005 by Log VERL_5.3
Charted by: Depth in Feet scaled 1:600





Dataset run4cpass8
Total Length 9.00 ft
Total Weight 85.00 lb
O.D. 3.75 in