Geophysical Logs

AQUIFER DATA SYSTEMS

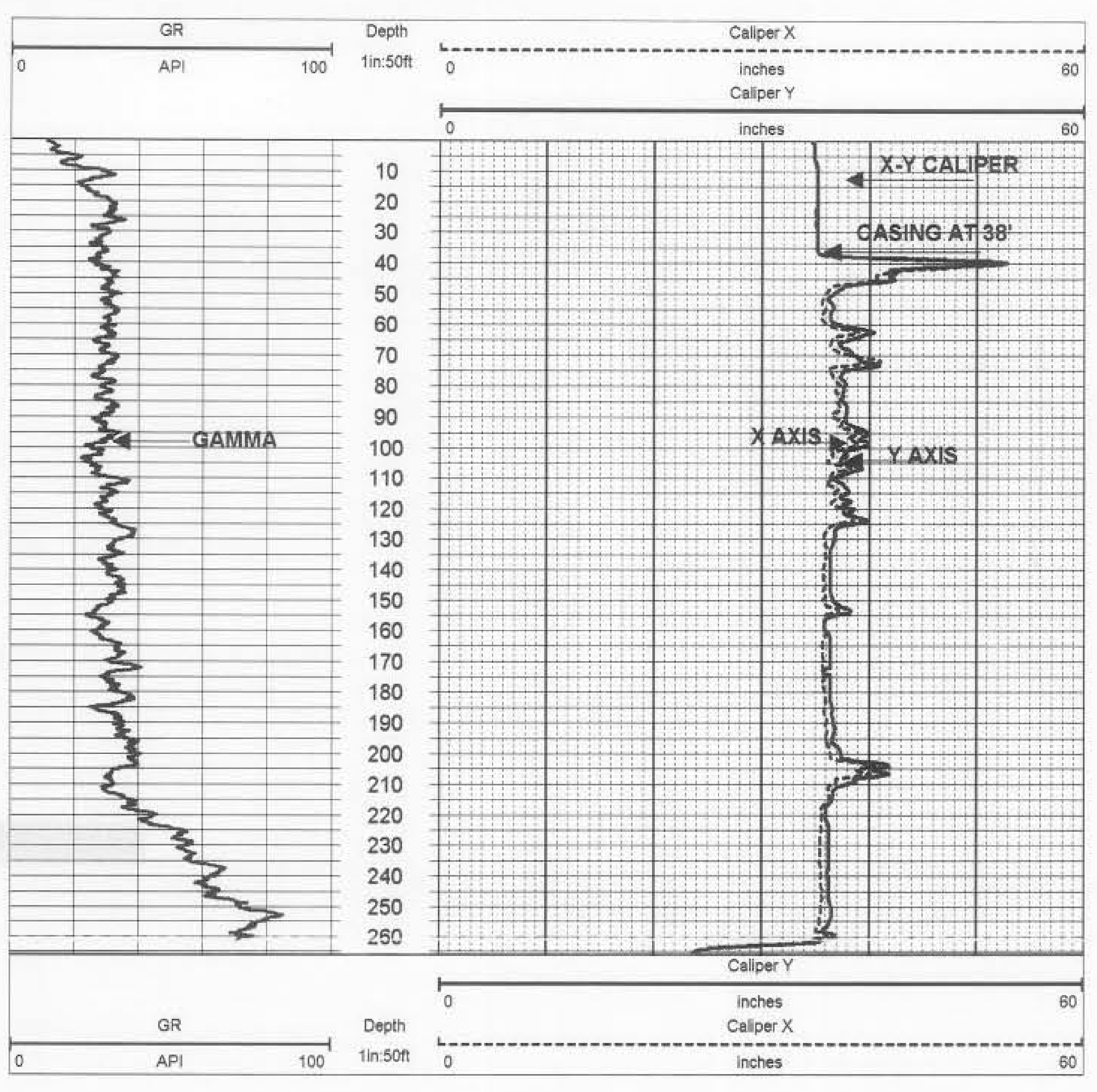
FT. MYERS, FL. 239-872-5617

GAMMA RAY/CALIPER

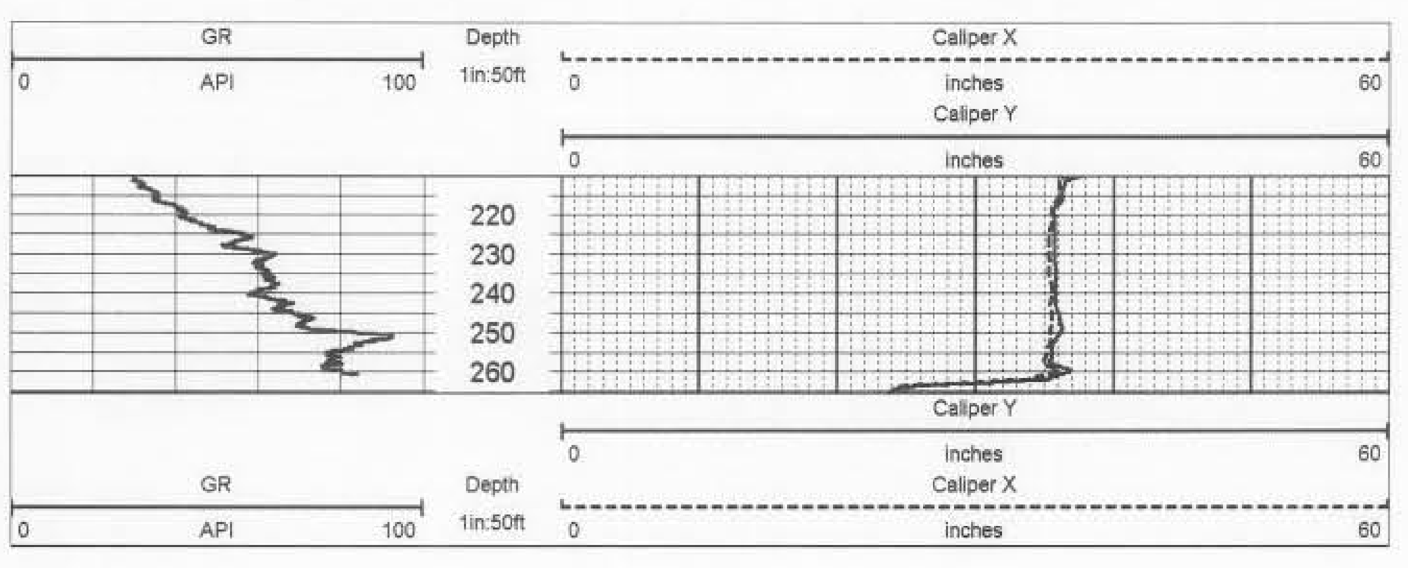
CO	COMPANY	DIVERSIFIED DRILLING CORP.	
WELL	WELL ID	TPW-1	
FLD	FIELD	CITY OF DAVIE	
CTY	COUNTY	BROWARD	STATE FL
STE	LOCATION		OTHER SERVICES
FILING No	SEC	TWP RGE	

PERMANENT DATUM		ELEVATION	K.B.
LOG MEAS. FROM GL		ABOVE PERM. DATUM	D.F.
DRILLING MEAS. FROM GL			G.L.
DATE	6-19-09	TYPE FLUID IN HOLE	MUD
RUN No	ONE	SALINITY	
TYPE LOG	X-Y CALIPER-GAMMA	DENSITY	
DEPTH-DRILLER	265'	LEVEL	7'
DEPTH-LOGGER	266'	MAX. REC. TEMP.	
BTM LOGGED INTERVAL	266'		
TOP LOGGED INTERVAL	GL		
OPERATING RIG TIME	ONE HOUR		
RECORDED BY	NOVAK/ADS		
WITNESSED BY	ENGLISH/BOYLE ENG.		

BOREHOLE RECORD				CASING RECORD			
RUN NO.	BIT	FROM	TO	SIZE	WGT.	FROM	TO
	34.5"	38'	262'	36"	STL	SURF	38'



REPEAT SECTION

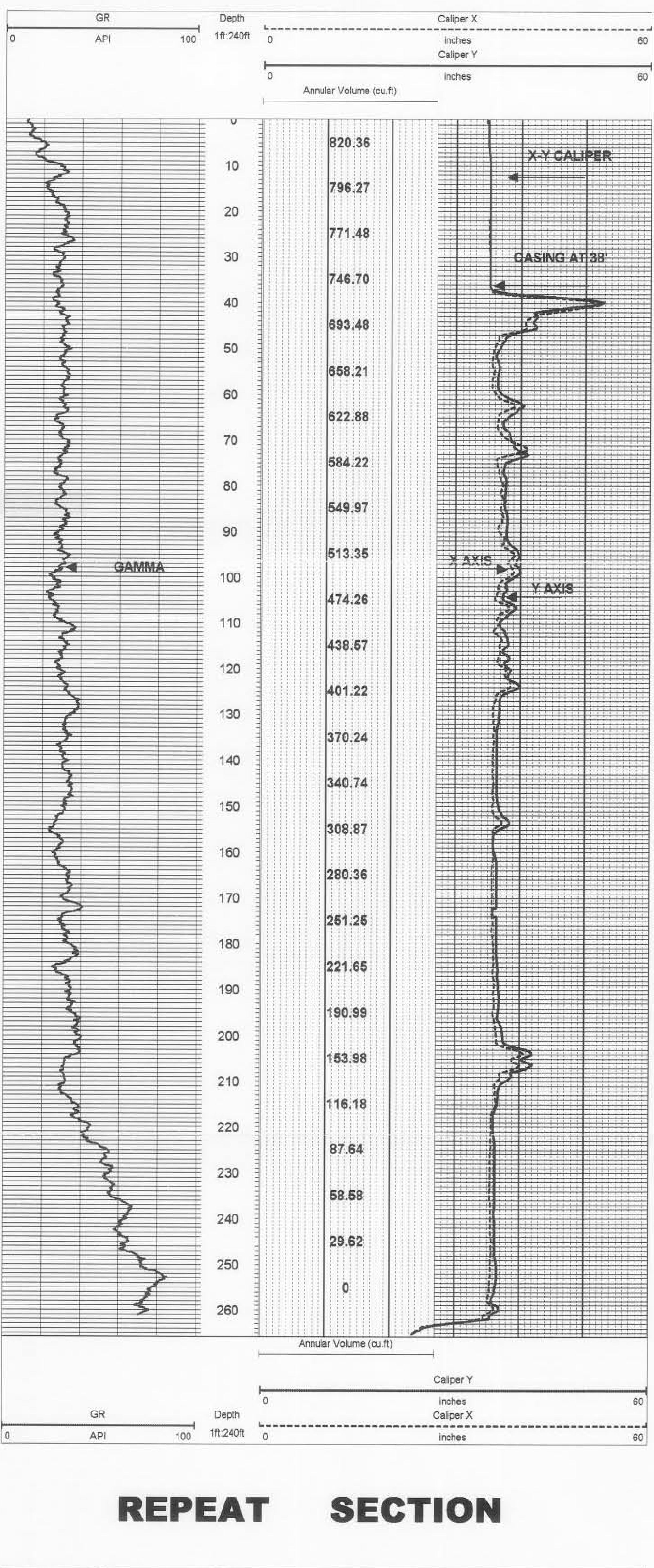


AQUIFER DATA SYSTEMS

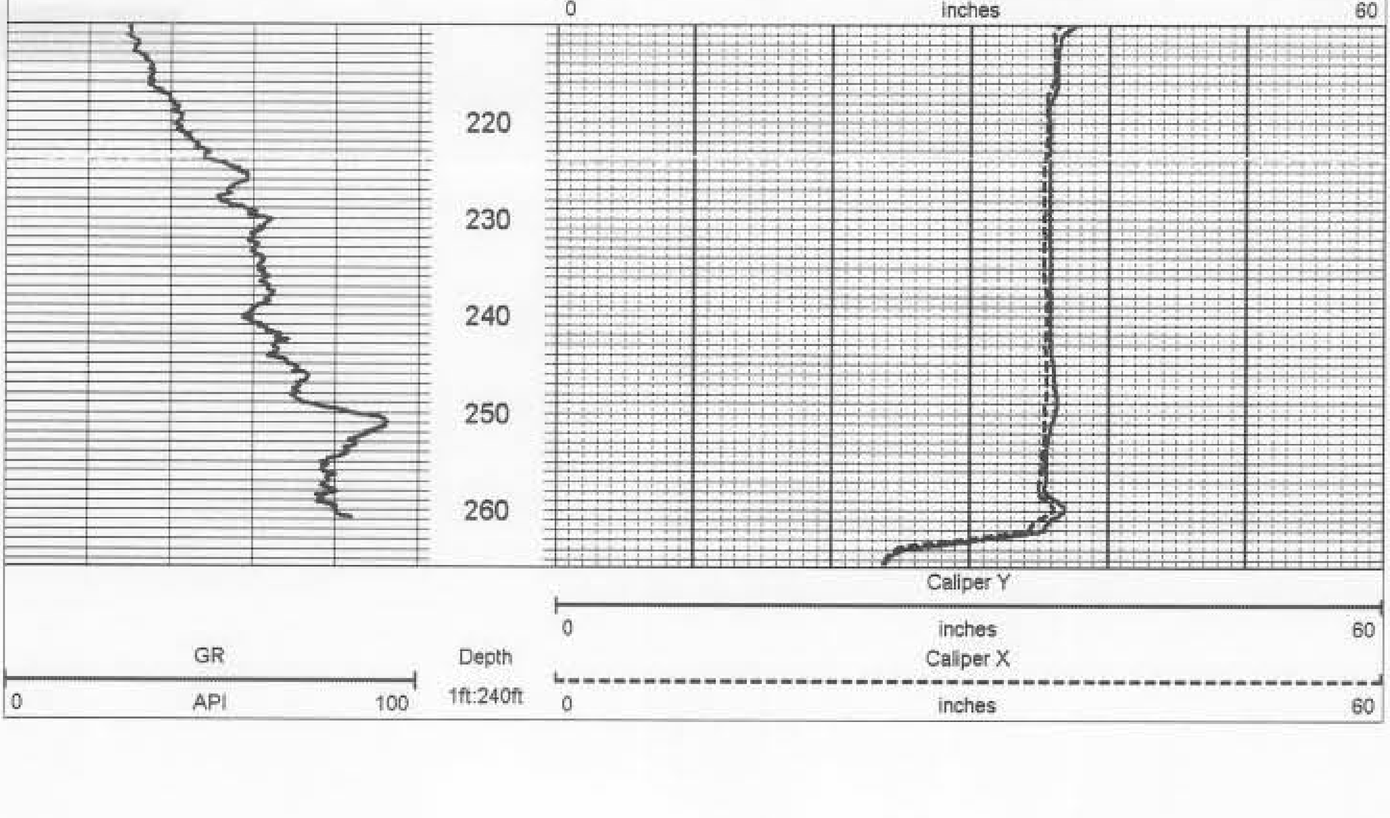
FT. MYERS, FL. 239-872-5617

GAMMA RAY/CALIPER

CO COMPANY DIVERSIFIED DRILLING CORP.
WELL WELL ID TPW-1
FLD FIELD CITY OF DAVIE
CTY COUNTY BROWARD STATE FL
STE LOCATION OTHER SERVICES
FILING No SEC TWP RGE
PERMANENT DATUM ELEVATION K.B.
LOG MEAS. FROM GL ABOVE PERM. DATUM D.F.
DRILLING MEAS. FROM GL G.L.
DATE 6-19-09 TYPE FLUID IN HOLE MUD
RUN No. ONE SALINITY
TYPE LOG X-Y CALIPER-GAMMA DENSITY
DEPTH-DRILLER 265' LEVEL 7'
DEPTH-LOGGER 266' MAX. REC. TEMP.
BTM LOGGED INTERVAL 266'
TOP LOGGED INTERVAL GL
OPERATING RIG TIME ONE HOUR
RECORDED BY NOVAK/ADS
WITNESSED BY ENGLISH/BOYLE ENG.
RUN NO. BOREHOLE RECORD BIT 34.5" FROM 38' TO 262'
CASING RECORD SIZE 36" WGT. STL FROM SURF TO 38'



REPEAT SECTION



MV Geophysical

X-Y CALIPER
GAMMA RAY
LOG

Company	Diversified Drilling Corp.
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida

Company Diversified Drilling Corporation
Well TPW-1
Field Davie
County Broward State/Prv Florida
Location Town of Davie
UF Test Site
AECOM
Other Services
XY/GR
DIL/SP
BHC/VDL

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

Date	30-JUN-2009
Run Number	TWO
Depth Driller	1104'
Depth Logger	1103'
Bottom Logged Interval	1103'
Top Log Interval	SURFACE
Open Hole Size	12.25"
Type Fluid	MUD
Density / Viscosity	na/na
Max. Recorded Temp.	na
Estimated Cement Top	NA
Time Well Ready	13:15 6/30/2009
Time Logger on Bottom	13:30 6/30/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104' 1103' Logger				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String				
Production String				
Liner				

Invoice No.	2009089	P.O.#:111555	Job No.: 70902	davietp1.db * Final Print *

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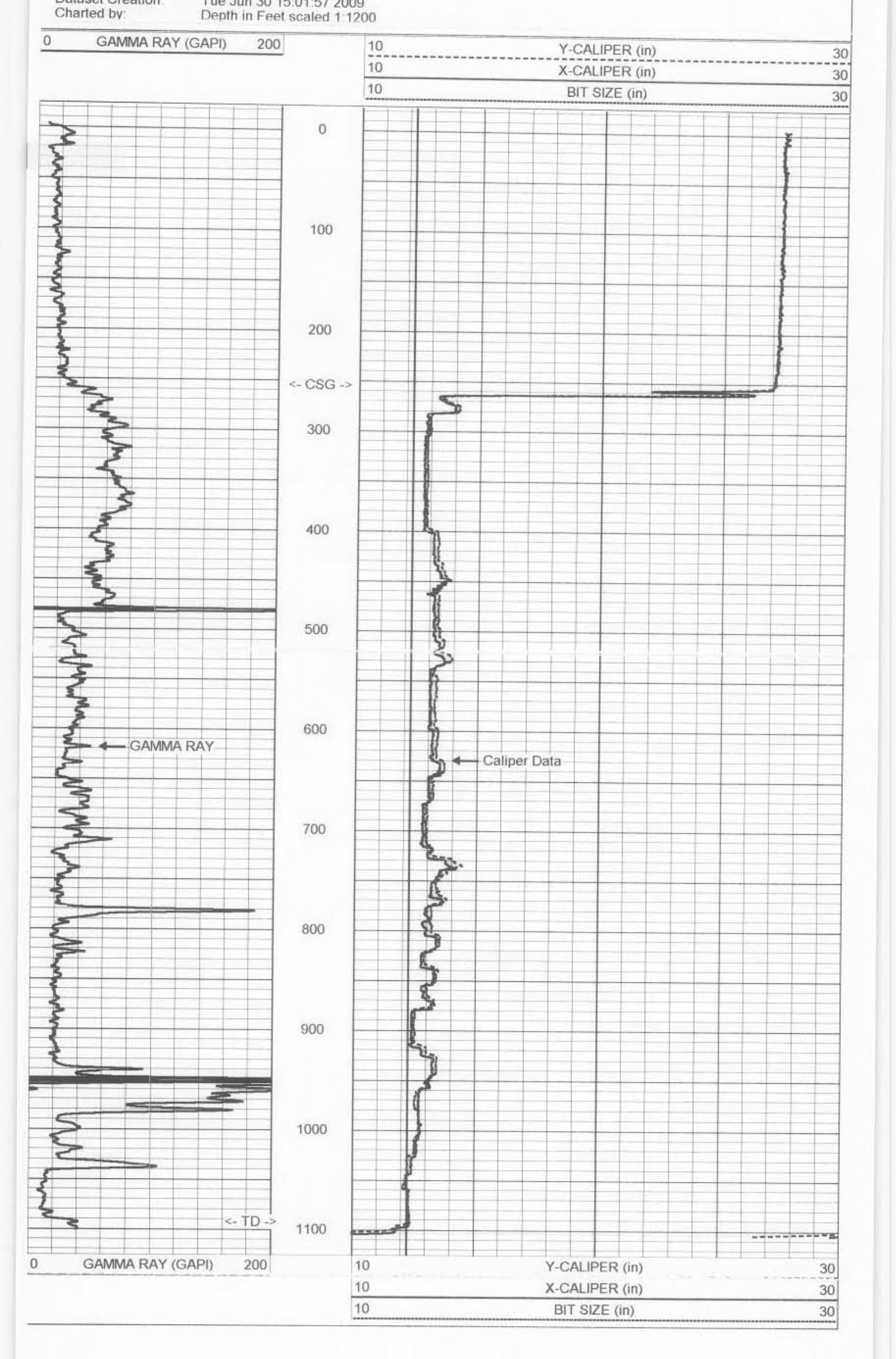
Comments

X-Y Caliper Arm Extensions: 33"

MV Geophysical

MAIN PASS

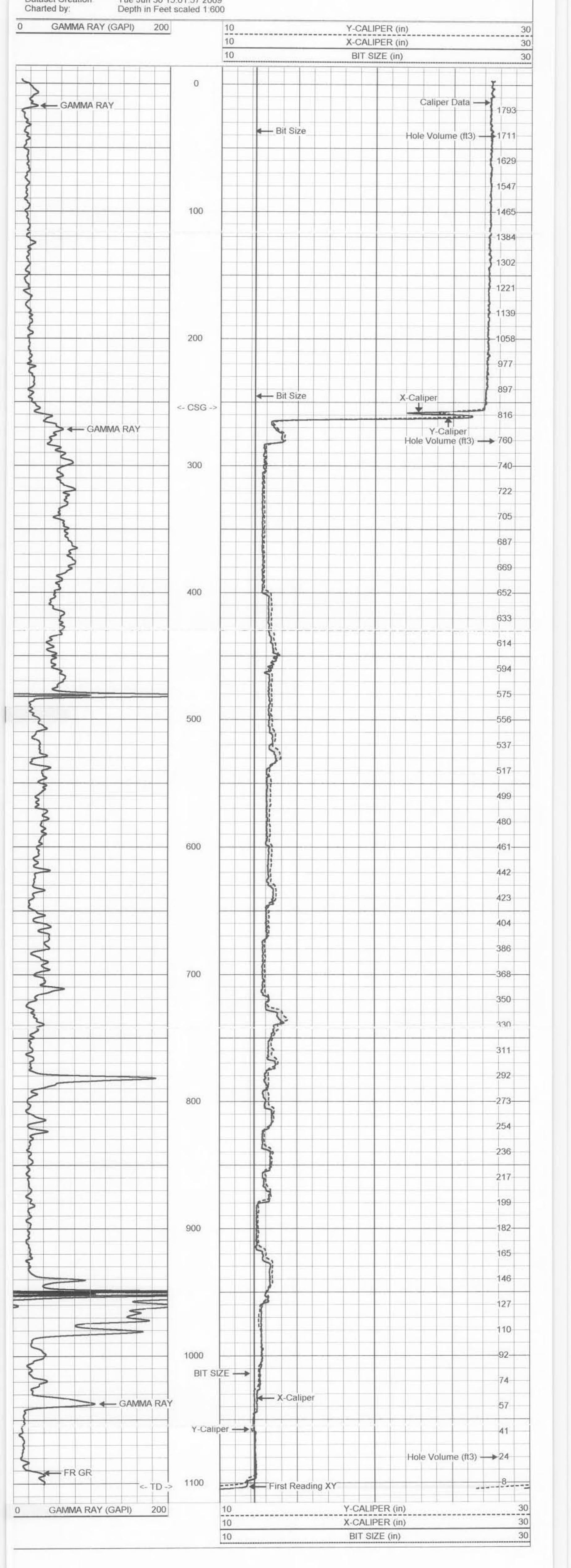
Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: xy103021.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: xy103025.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

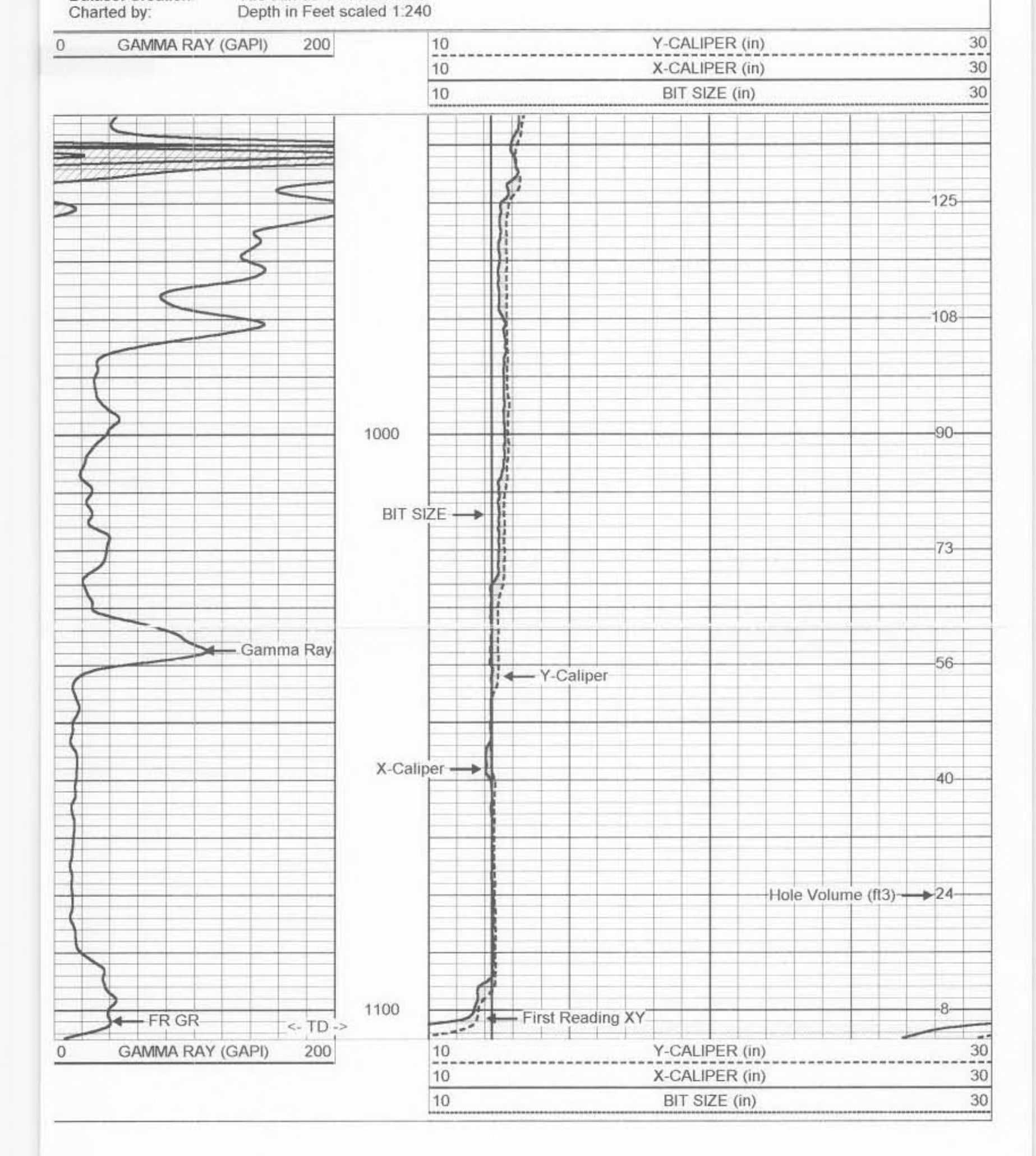
MAIN PASS

Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: xy103025.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

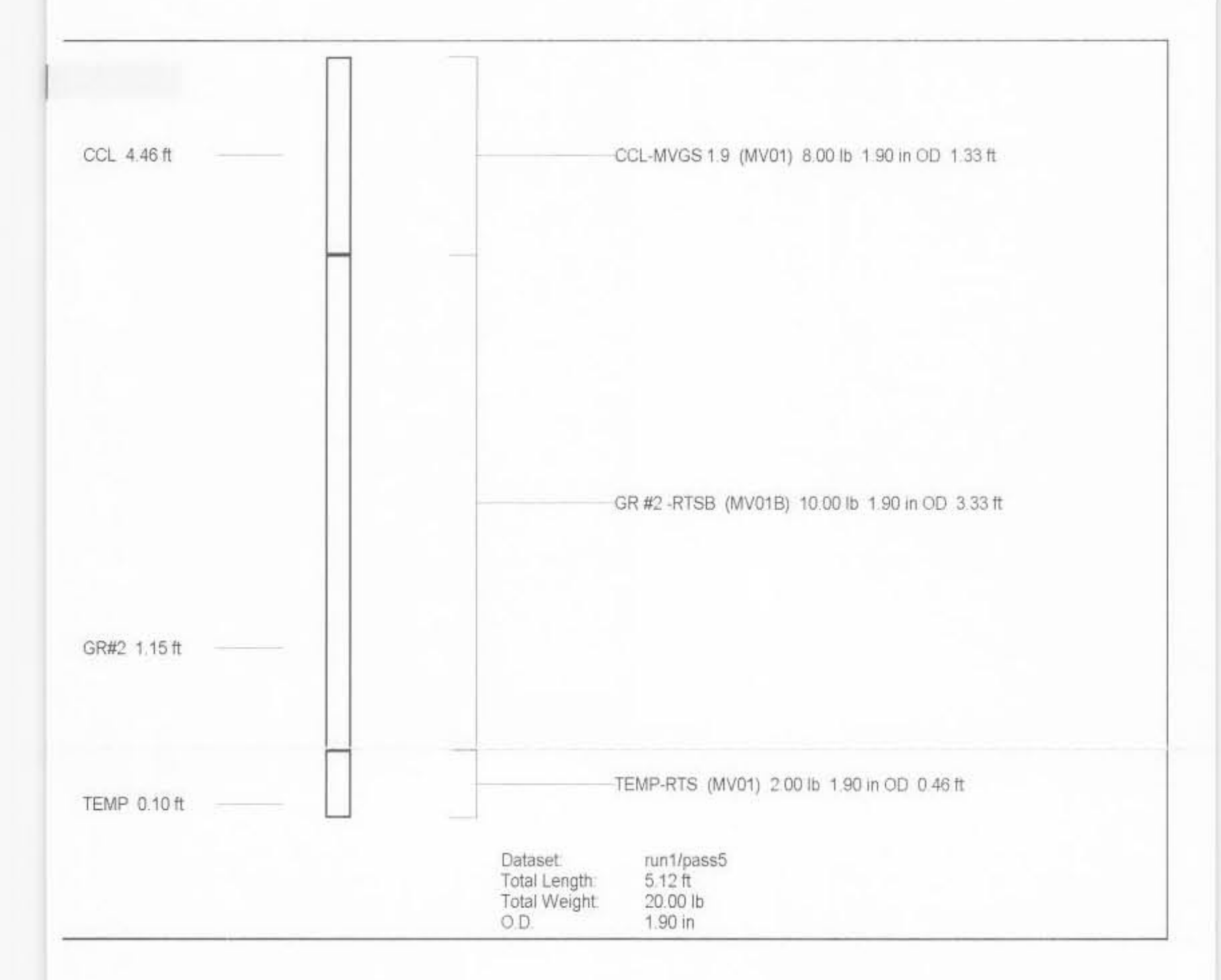
REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: repeat
Presentation Format: xy103025.prs
Dataset Creation: Tue Jun 30 14:14:45 2009
Charted by: Depth in Feet scaled 1:240



Gamma Ray Calibration Report

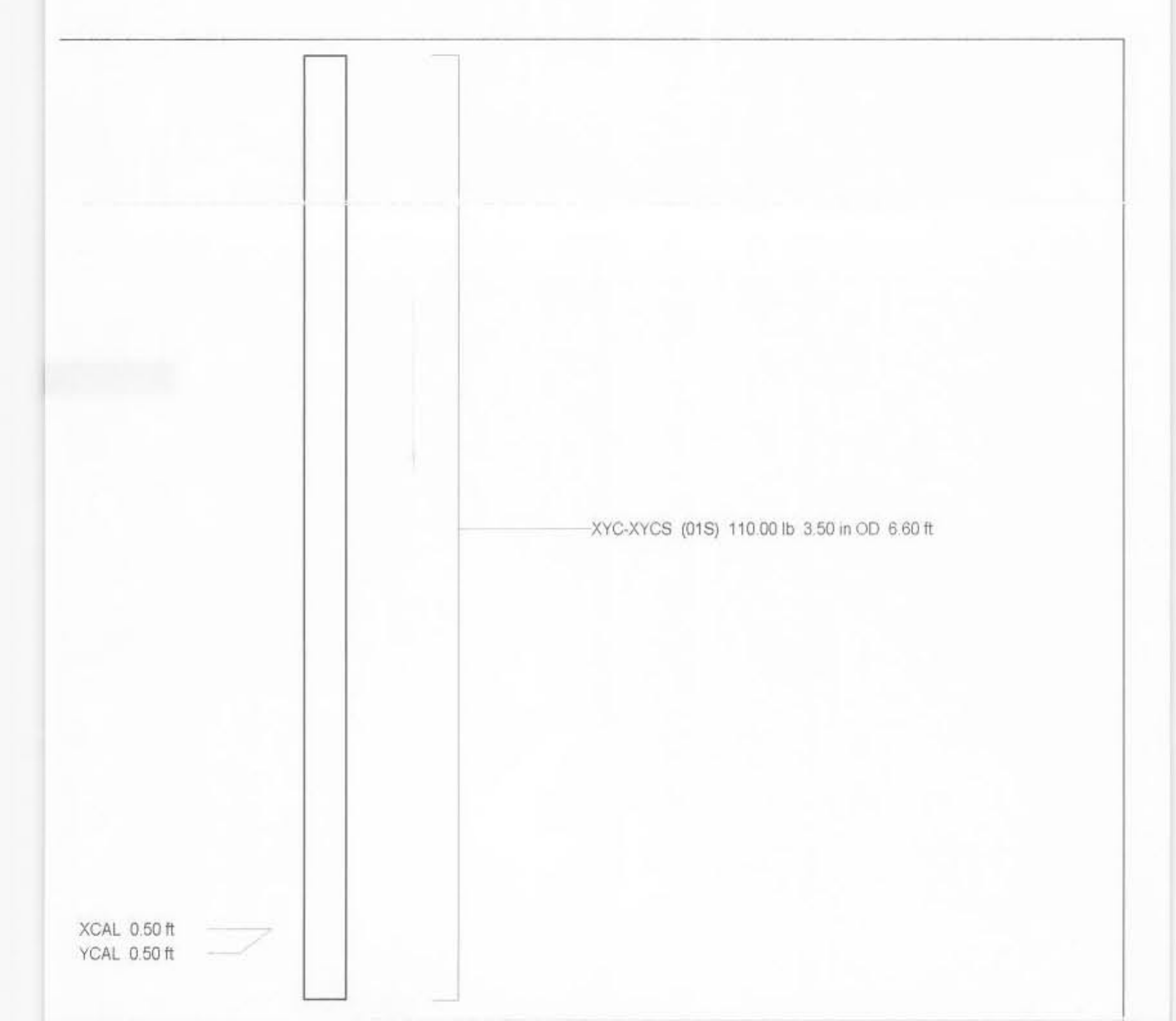
Serial Number:	MV01B	
Tool Model:	RTSB	
Performed:	Tue Jun 30 15:28:25 2009	
Calibrator Value:	120	GAPI
Background Reading:	13.868	cps
Calibrator Reading:	137.775	cps
Sensitivity:	0.968468	GAPI/cps


CCL 4.46 ft
CCL-MVGS 1.9 (MV01) 8.00 lb 1.90 in OD 1.33 ft
GR #2 -RTSB (MV01B) 10.00 lb 1.90 in OD 3.33 ft
GR#2 1.15 ft
TEMP 0.10 ft
TEMP-RTS (MV01) 2.00 lb 1.90 in OD 0.46 ft

Dataset: run1/pass5
Total Length: 5.12 ft
Total Weight: 20.00 lb
O.D. 1.90 in

XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Tue Jun 30 13:59:01 2009		
Small Ring:	12.25	in	
Large Ring:	27.25	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	1318	1317	cps
Reading with Large Ring:	1699	1698	cps
Gain:	0.0393701	0.0393701	
Offset:	-39.6398	-39.6004	



Dataset: run1/pass2
Total Length: 6.60 ft
Total Weight: 110.00 lb
O.D. 3.50 in

MV
Geophysical

BOREHOLE COMPENSATED SONIC w/ VARIABLE DENSITY LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation		
Well	TPW-1		
Field	Davie		
County	Broward	State/Prv	Florida

Location		Other Services
	Town of Davie UF Test Site AECOM	XY/GR DIL/SP BHC/VDL

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

Date	30-JUN-2009		
Run Number	TWO		
Depth Driller	1104'		
Depth Logger	1103'		
Bottom Logged Interval	1095'		
Top Log Interval	225'		
Open Hole Size	12.25"		
Type Fluid	MUD		
Density / Viscosity	na/na		
Max. Recorded Temp.	na		
Estimated Cement Top	NA		
Time Well Ready	13:15 6/30/2009		
Time Logger on Bottom	17:45 6/30/2009		
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller/C.Miller		
Witnessed By	S. English (AECOM)	D. Adkins (DDC)	

	Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104' 1103' Logger				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String				
Production String				
Liner				davietp1.db
Invoice No.	2009089	P.O. #:111555	Job No.: 70902	* Final Print *

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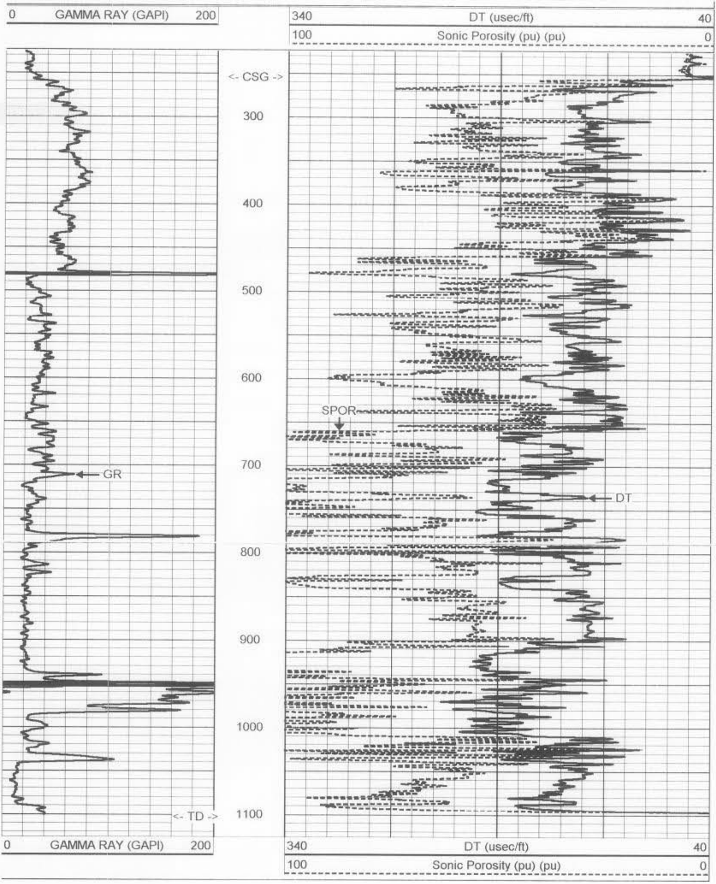
Comments

Sonic Porosity was run on a Limestone Matrix (=47.5)

MV
Geophysical

MAIN PASS

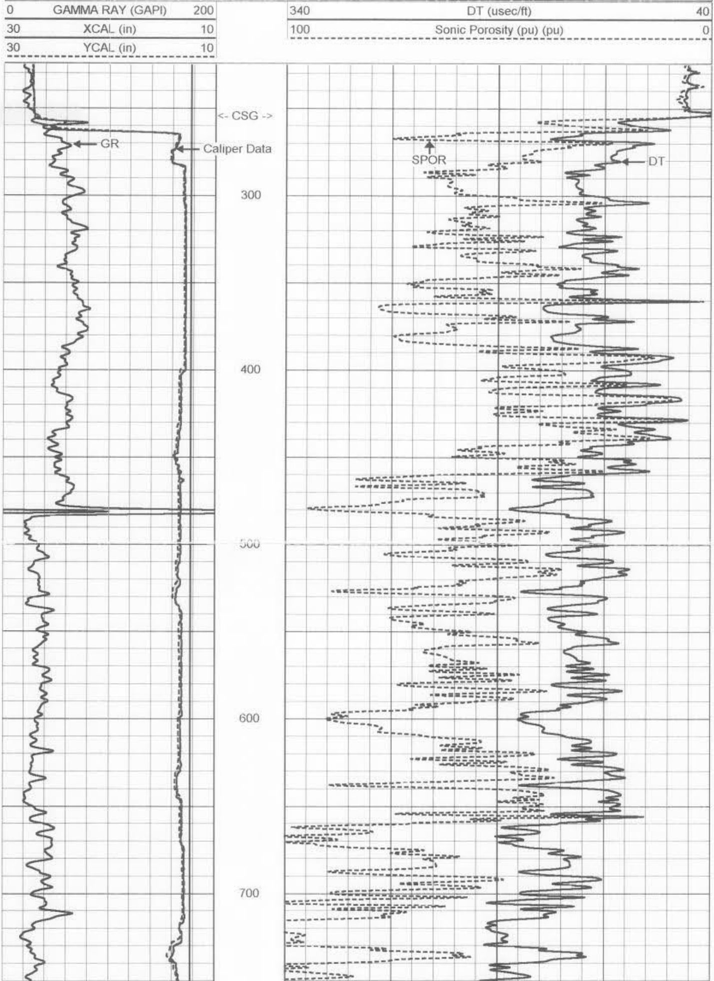
Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: dtg-1340.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:1200

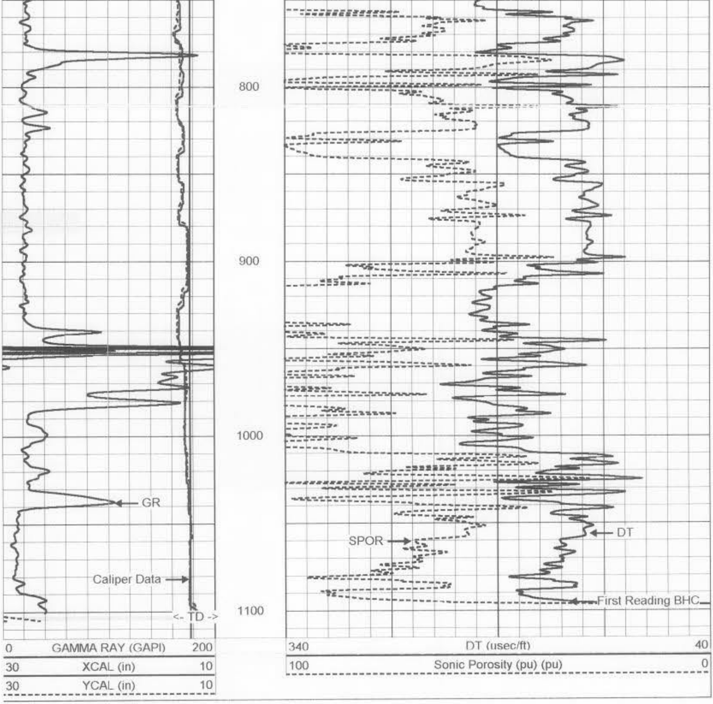


MV Geophysical

MAIN PASS

Database File:	davietp1.db
Dataset Pathname:	MAIN
Presentation Format:	dtxy340.prs
Dataset Creation:	Tue Jun 30 15:01:57 2009
Charted by:	Depth in Feet scaled 1:600





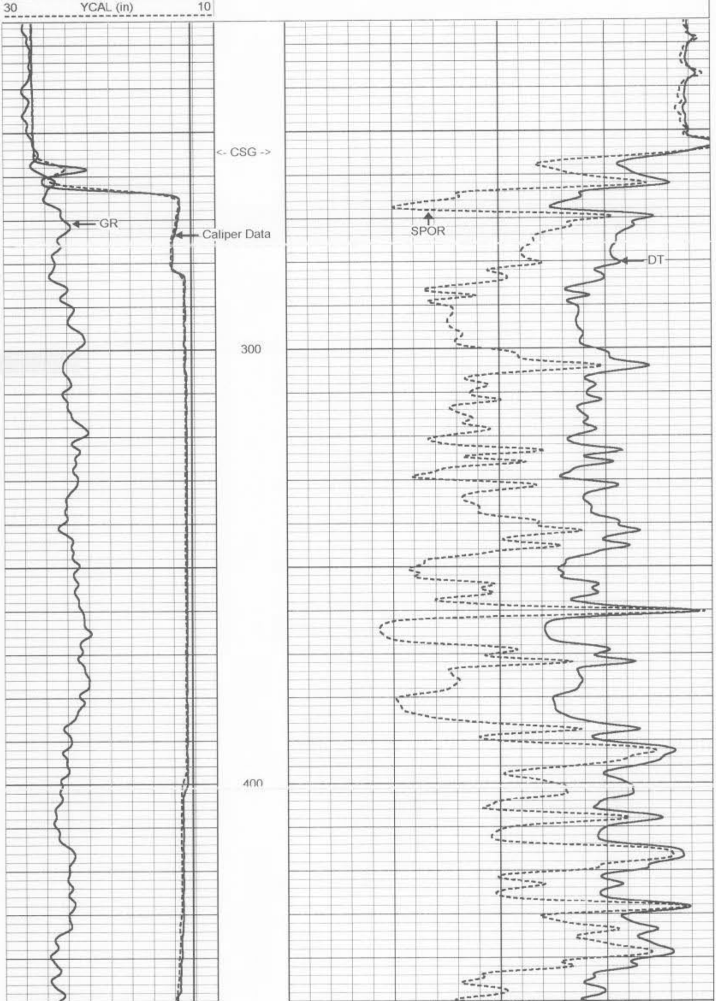
MV Geophysical

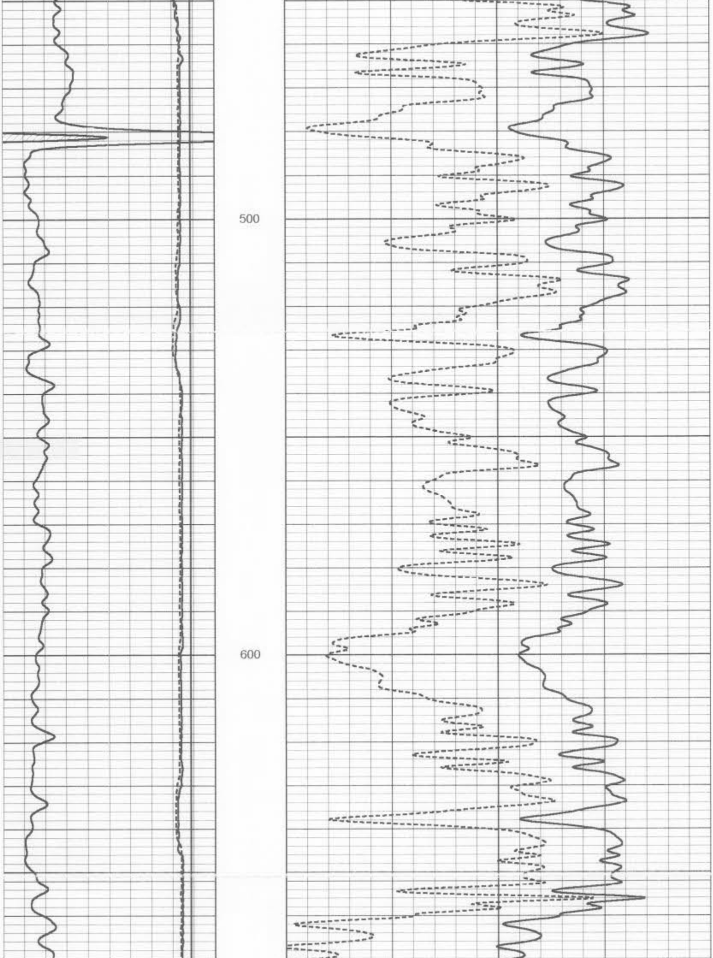
MAIN PASS

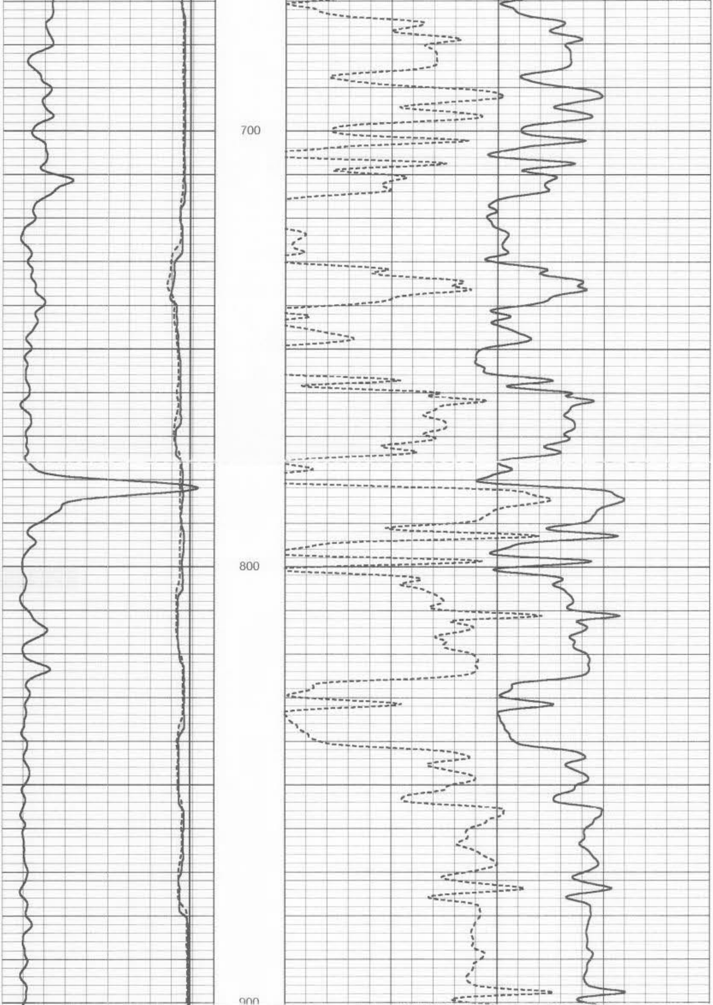
Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: dtxy340.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:240

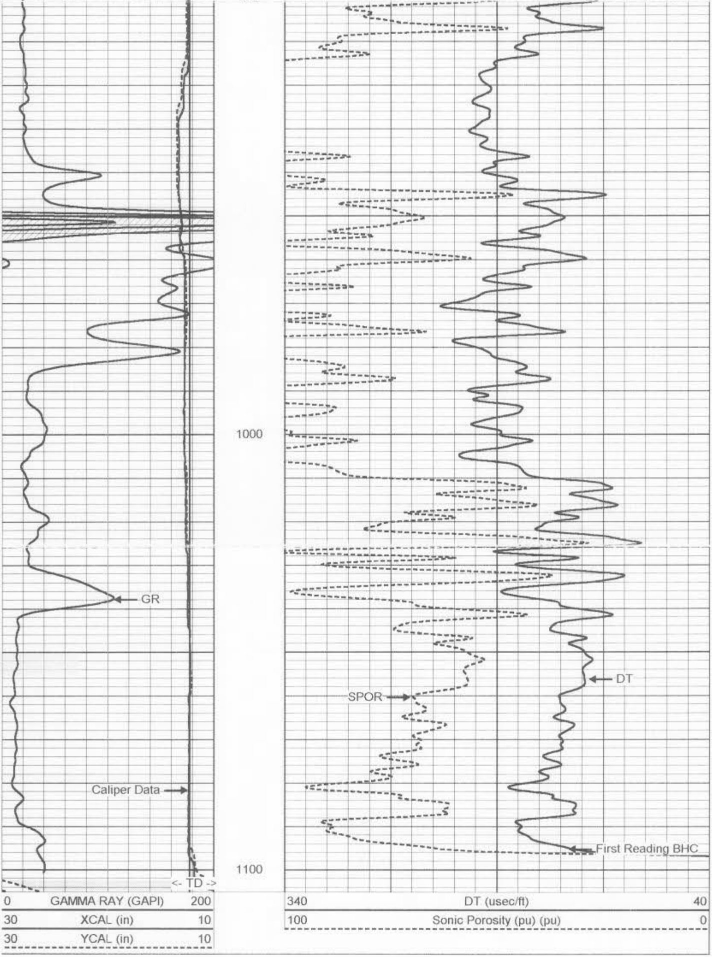
0 GAMMA RAY (GAPI) 200
30 XCAL (in) 10

340 DT (usec/ft) 40
100 Sonic Porosity (pu) (pu) 0





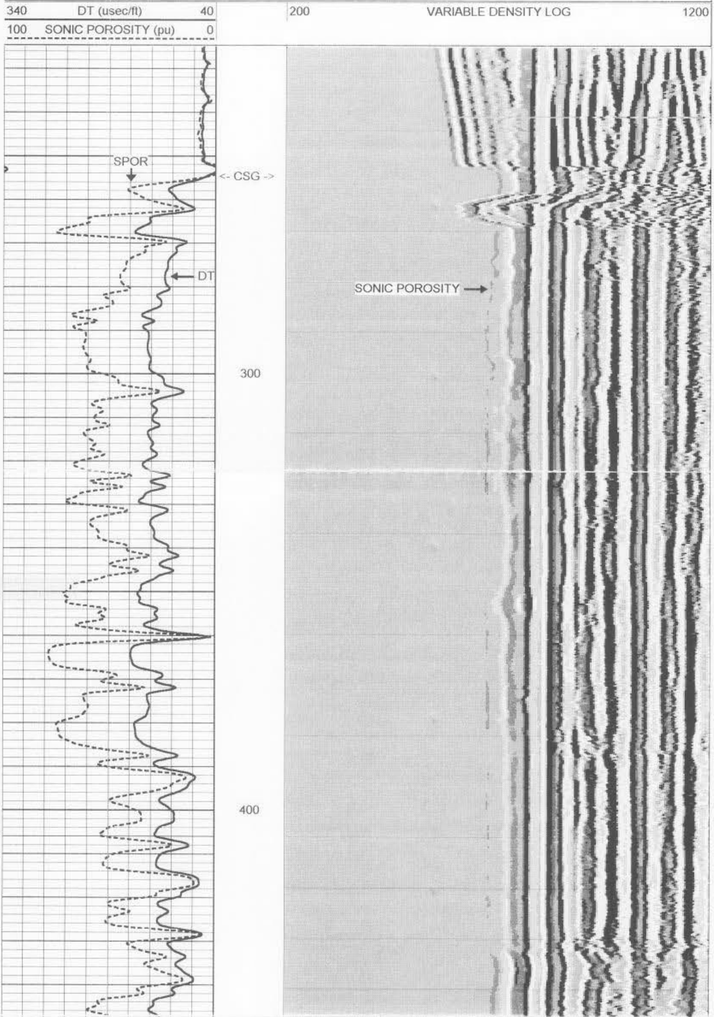


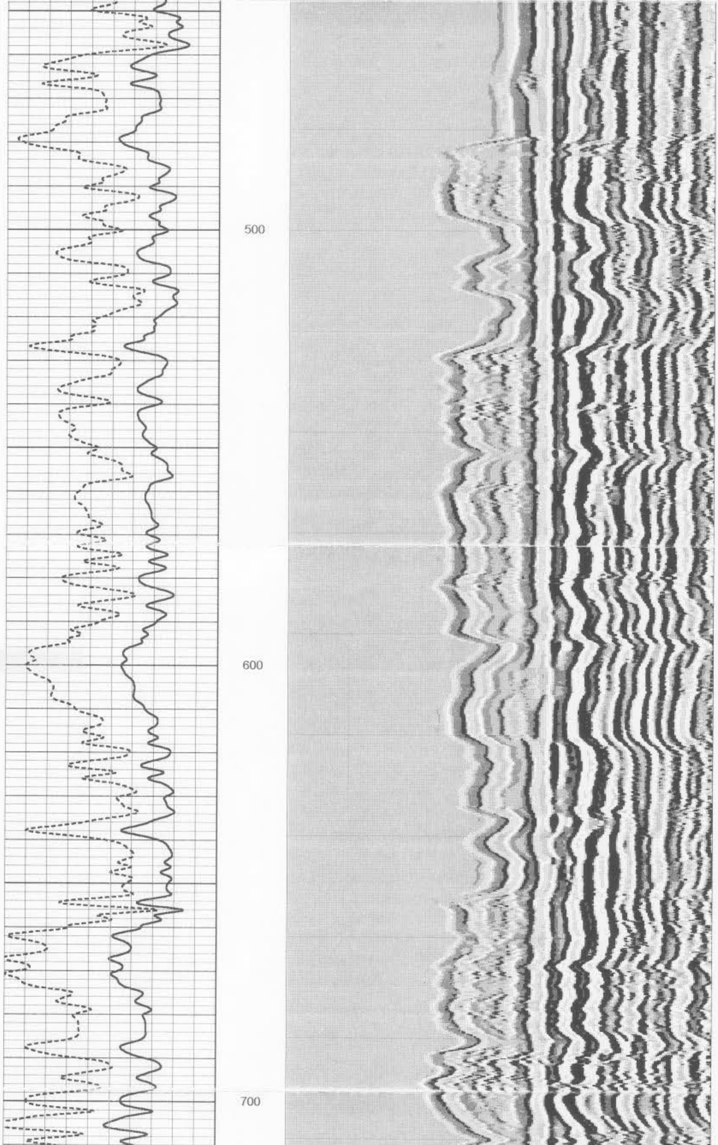


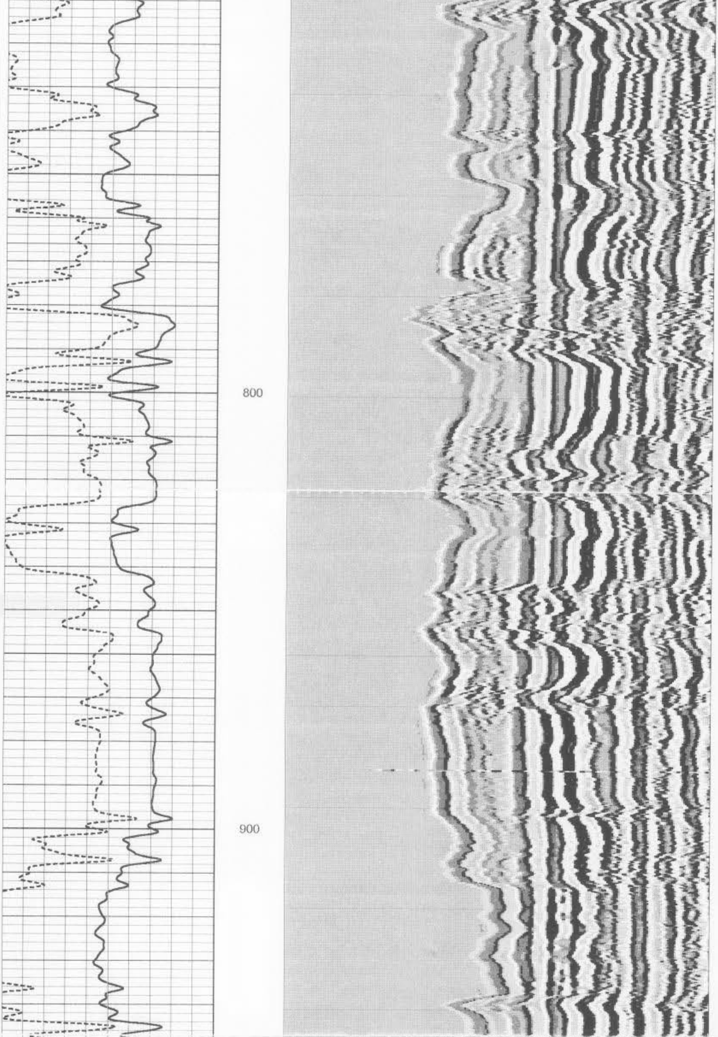
MV
Geophysical

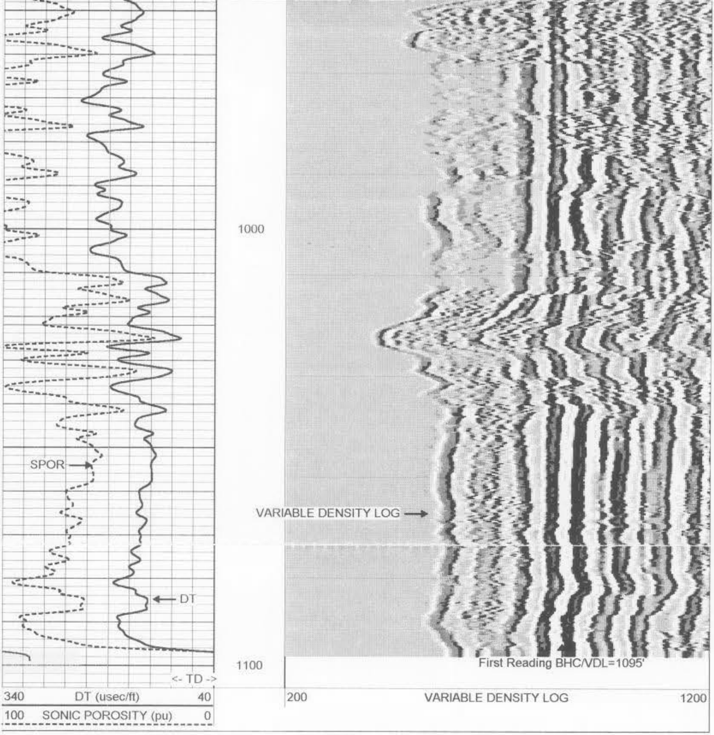
MAIN PASS

Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: sonvdl2.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:240







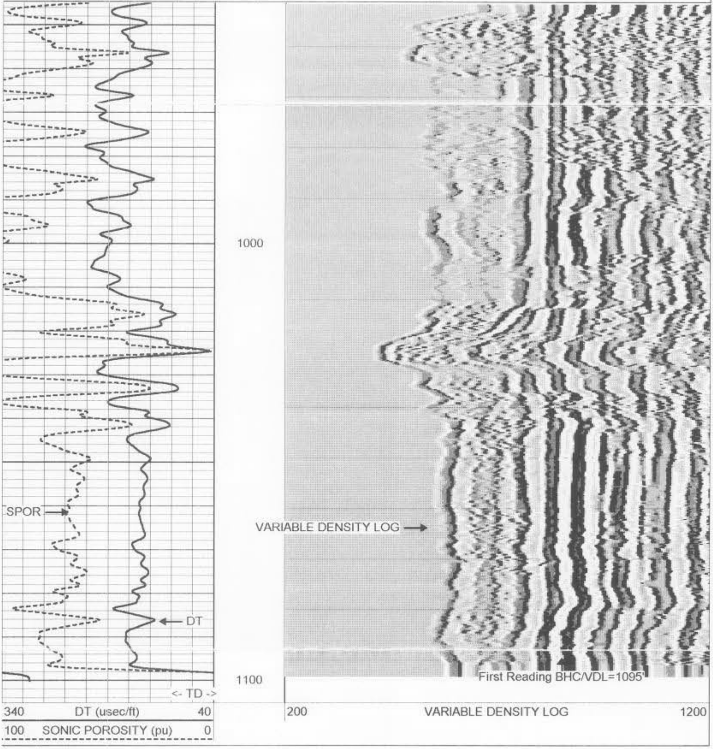


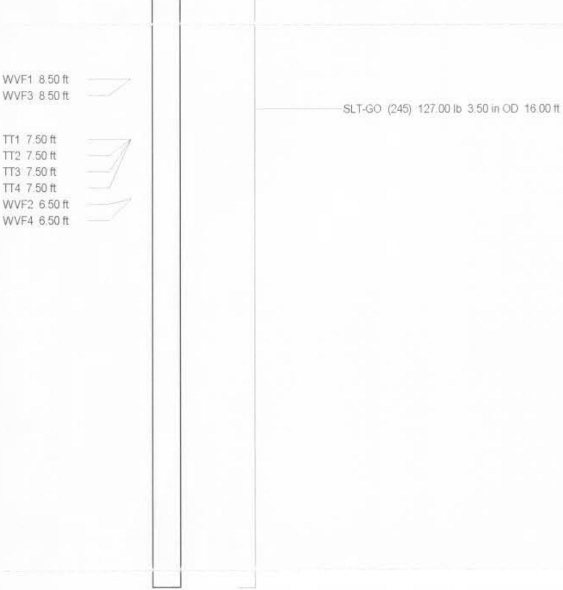
MV
Geophysical

REPEAT SECTION

Database File:	davietp1.db
Dataset Pathname:	repeat
Presentation Format:	sonvdl2.prs
Dataset Creation:	Tue Jun 30 14:14:45 2009
Charted by:	Depth in Feet scaled 1:240

340 DT (usec/ft) 40
100 SONIC POROSITY (pu) 0
200 VARIABLE DENSITY LOG 1200





Dataset:	run1/pass11
Total Length:	16.00 ft
Total Weight:	127.00 lb
O.D.	3.50 in

MV Geophysical

DUAL INDUCTION
LL3 / SP
LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR DIL/SP BHC/VDL

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

Date	30-JUN-2009
Run Number	TWO
Depth Driller	1104'
Depth Logger	1103'
Bottom Logged Interval	1101'
Top Log Interval	255'
Open Hole Size	12.25"
Type Fluid	MUD
Density / Viscosity	na/na
Max. Recorded Temp.	na
Estimated Cement Top	NA
Time Well Ready	13:15 6/30/2009
Time Logger on Bottom	16:30 6/30/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM)
	D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104' 1103' Logger				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String				
Production String				davietp1.db
Liner				* Final Print *
Invoice No.	2009089	P.O. #:111555	Job No.: 70902	

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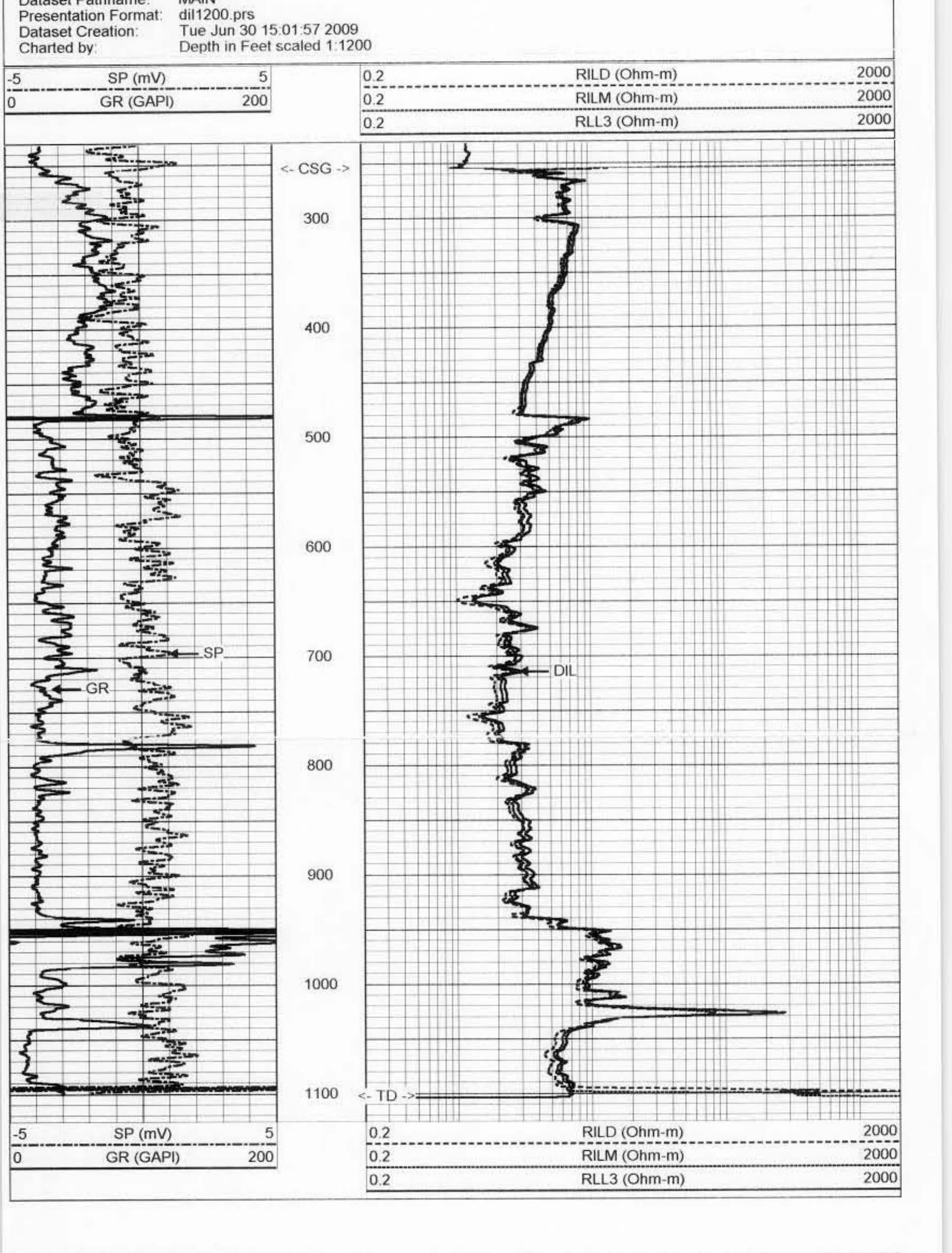
Comments

Rm=3.903 ohm-m @ 85.6 degF
Rf=2.853 ohm-m @ 86.6 degF
Rc=5.513 ohm-m @ 86.5 degF

MV Geophysical

MAIN PASS

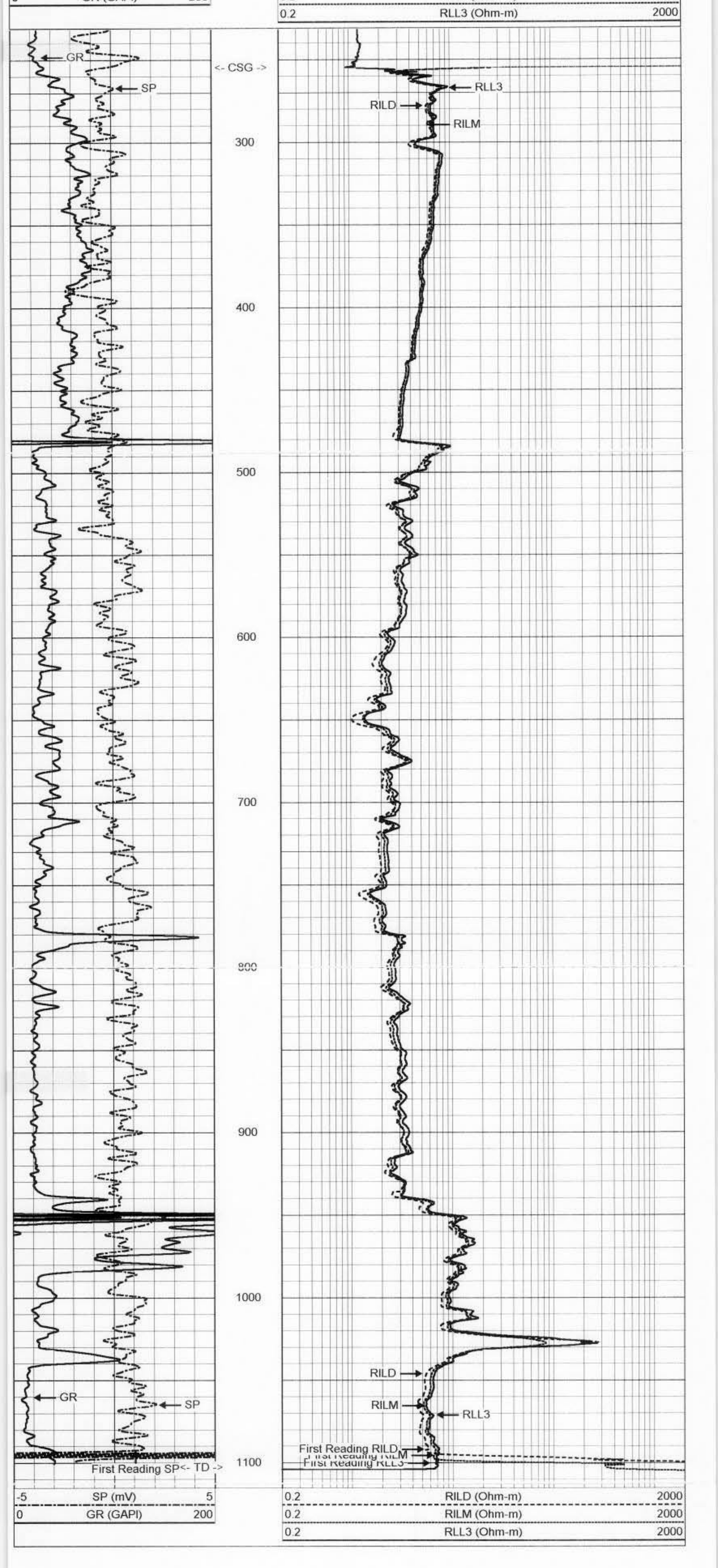
Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: dil1200.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: dil200.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

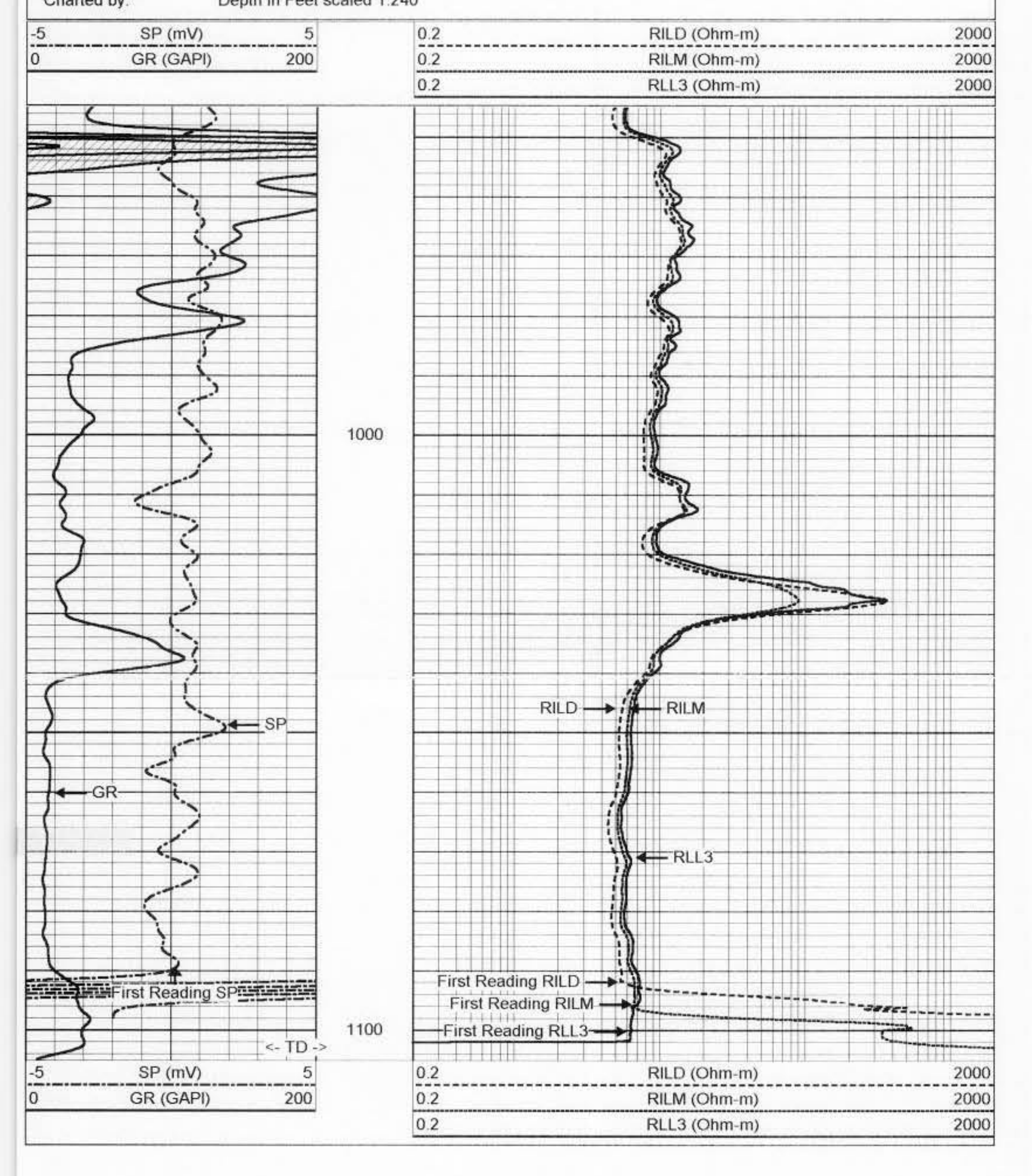
MAIN PASS

Database File: davietp1.db
Dataset Pathname: MAIN
Presentation Format: dil200.prs
Dataset Creation: Tue Jun 30 15:01:57 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: repeat
Presentation Format: dil200.prs
Dataset Creation: Tue Jun 30 14:14:45 2009
Charted by: Depth in Feet scaled 1:240



Dual Induction Calibration Report

Serial-Model: 5390-R
Surface Cal Performed: Thu Nov 15 11:21:40 2007
Downhole Cal Performed: Wed Mar 15 11:08:57 2006
After Survey Verification Performed: Thu Nov 15 11:21:50 2007

Surface Calibration

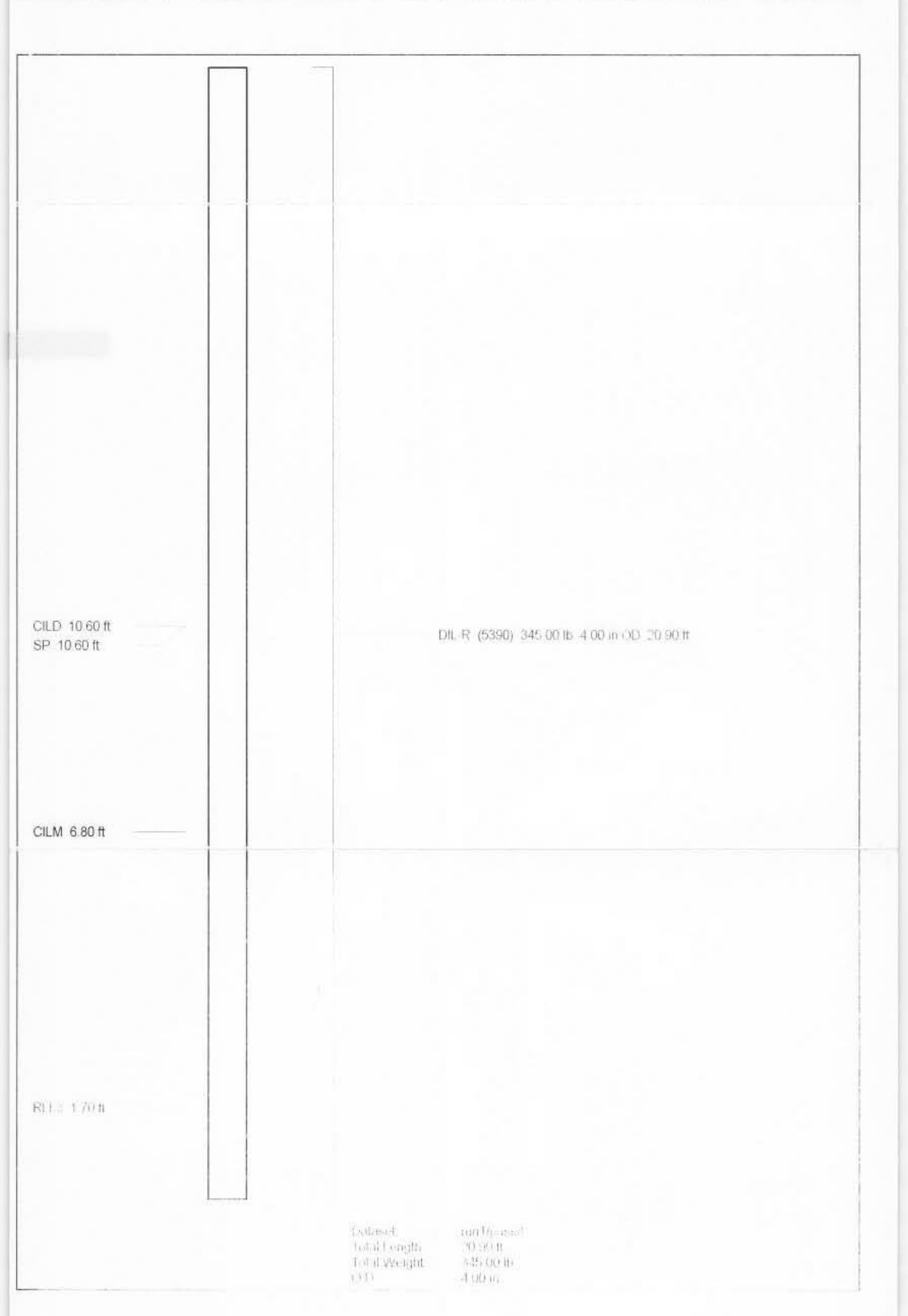
	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.050	0.646	V	0.000	400.000	mmho-m	671.771	-33.646
Medium	0.001	0.732	V	0.000	464.000	mmho-m	634.710	-0.492
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.641	V	0.000	400.000	mmho-m	634.996	-7.104
Medium	-0.009	0.738	V	0.000	464.000	mmho-m	620.900	5.734

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-26.499	398.282	mmho-m	-26.130	397.036	mmho-m	0.996	0.268
Medium	-5.803	469.733	mmho-m	-6.353	467.967	mmho-m	0.997	-0.565
Shallow	2.502	0.010	V	494.500	2.000	Ohm-m	197.605	0.050

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	-26.151	398.470	mmho-m	-26.499	398.282	mmho-m	0.996	0.268
Medium	-5.737	470.303	mmho-m	-5.803	469.733	mmho-m	0.997	-0.565
Shallow	567.058	128.961	Ohm-m	494.500	2.000	Ohm-m	1.124	-142.975



Dataset: [illegible]
Total Length 20.90 ft
Total Weight 345.00 lb
OD 4.00 in

ABS
Advanced Borehole Services

GAMMA RAY (API)-XY CALIPER

TPW #1

COMPANY	: DIVERSIFIED DRILLING CORP	OTHER SERVICES:	
WELL	: TPW #1	XY	
FIELD	: DAVIE		
COUNTY	: BROWARD	None	
STATE	: FLORIDA		
LOCATION	:		
SECTION	: None		
TOWNSHIP	: None		
RANGE	: None		
API NO.	:		
UNIQUE WELL ID.	:		
PERMANENT DATUM	: MSL	ELEVATION KB:	None
LOG MEASURED FROM	: GS	ELEVATION DF:	None
DRL MEASURED FROM	: GS	ELEVATION GL:	None
DATE	: 07/21/09		
DEPTH DRILLER	: 972		
BIT SIZE	: 27		
LOG TOP	: 1.50		
LOG BOTTOM	: 972.25		
CASING OD	:		
CASING BOTTOM	: 265		
CASING TYPE	: STEEL		
BOREHOLE FLUID	: FOR		
RM TEMPERATURE	: 0		
MUD RES	: 0		
MUD WEIGHT	:		
WITNESSED BY	:		
RECORDED BY	: AFB		
REMARKS 1	: PRECASE		
REMARKS 2	: None		

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

20-INCH LOG CAL GRAY TPW #1 07/21/09

LOG PARAMETERS

MATRIX DENSITY : 2.71
MAGNETIC DECL : 0
NEUTRON MATRIX : Dolomite
ELECT. CUTOFF : 10000
MATRIX DELTA T : 140
BIT SIZE : 27

PRESENTATION NAME/DATE = Xybhv.0 07/21/2009

20-INCH LOG CAL GRAY TPW #1 07/21/09

LOG PARAMETERS

MATRIX DENSITY : 2.71
MAGNETIC DECL : 0
NEUTRON MATRIX : Dolomite
ELECT. CUTOFF : 10000
MATRIX DELTA T : 140
BIT SIZE : 27

PRESENTATION NAME/DATE = Xybhv.0 07/21/2009

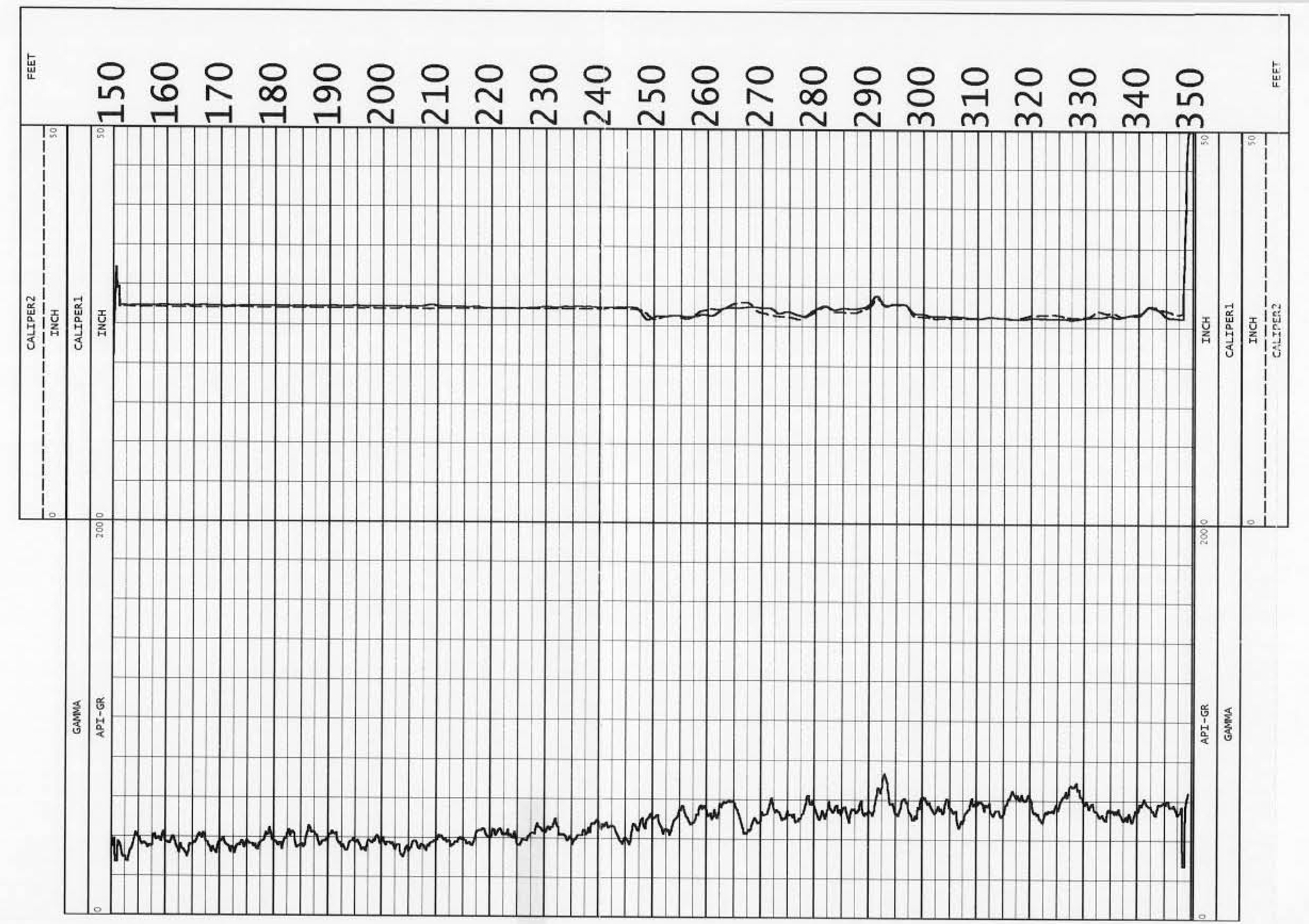
```
TOOL CALIBRATION   TPW #1 07/21/09 10:13
TOOL   9074A1       TM VERSION 0
SERIAL NUMBER       857
    DATE       TIME          SENSOR        STANDARD              RESPONSE
1   Sep02,03   20:50:58      GAMMA         Default  [CPS]        Default  [CPS]
    Sep02,03   17:50:58      GAMMA         180.000  [API-GR ]      205.00 [CPS]
2   Feb13,09   14:38:22      CALIPER         5.000  [INCH   ]   166375.00 [CPS]
    Feb13,09   14:38:22      CALIPER        10.000  [INCH   ]   151124.00 [CPS]
3   Jul21,09   13:48:17      CALIPERL        5.000  [INCH   ]   170855.00 [CPS]
    Jul21,09   13:48:17      CALIPERL       10.000  [INCH   ]   161826.00 [CPS]
4   Dec13,00   22:19:45      CALIPERX      Default  [CPS]        Default  [CPS]
    Dec13,00   22:19:45      CALIPERX      Default  [CPS]        Default  [CPS]
```

REPEAT SECTION TPW #1 07/21/09

LOG PARAMETERS

MATRIX DENSITY : 2.71
MAGNETIC DECL : 0
NEUTRON MATRIX : Dolomite
ELECT. CUTOFF : 10000
MATRIX DELTA T : 140
BIT SIZE : 27

PRESENTATION NAME/DATE = XyRPT.0 08/16/2009



REPEAT SECTION TPW #1 07/21/09

LOG PARAMETERS

MATRIX DENSITY : 2.71
MAGNETIC DECL : 0
NEUTRON MATRIX : Dolomite
ELECT. CUTOFF : 10000
MATRIX DELTA T : 140
BIT SIZE : 27

PRESENTATION NAME/DATE = XyRPT.0 08/16/2009

MV Geophysical

X-Y CALIPER
GAMMA RAY
LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida

Location
Town of Davie
UF Test Site
AECOM

Other Services
XY/GR,FCT
DIL,BHC,CBL
FLO,DHTV

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

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

Date	17-AUG-2009		
Run Number	FOUR		
Depth Driller	1815'		
Depth Logger	1815'		
Bottom Logged Interval	1815'		
Top Log Interval	SURFACE		
Open Hole Size	12.25"		
Type Fluid	H2O		
Density / Viscosity	na/na		
Max. Recorded Temp.	see FCT log		
Estimated Cement Top	SURFACE		
Time Well Ready	07:30 8/17/2009		
Time Logger on Bottom	08:15 8/17/2009 GR	10:30 8/17/2009 XY	
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller/C.Miller		
Witnessed By	S. English (AECOM)	D. Adkins (DDC)	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No.	2009118	P.O. #:111555	Job No.:	* Field Print *

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Comments

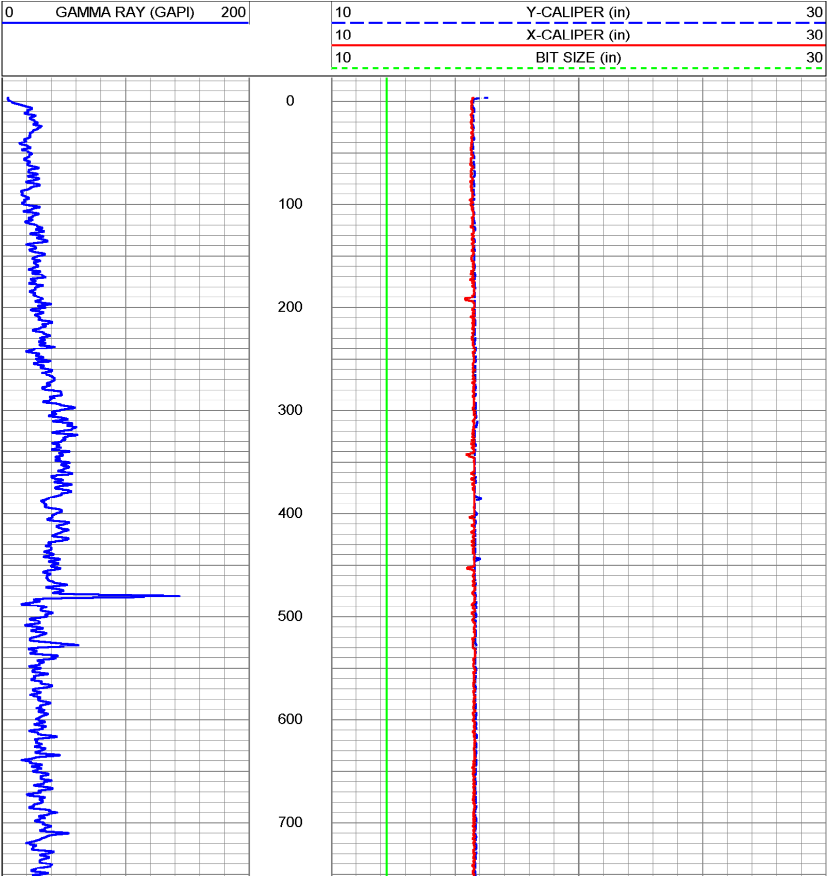
X-Y Caliper Arm Extensions: 33"

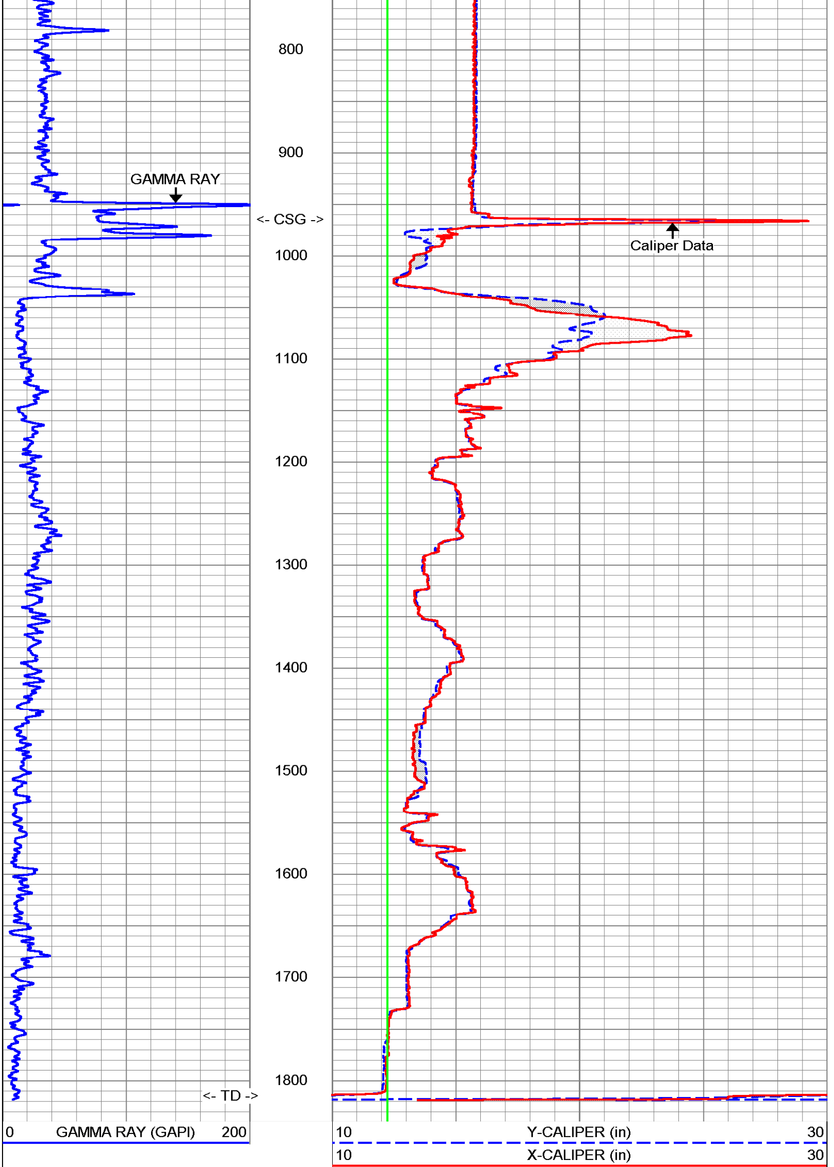
Hydraulic Packoff / Full Riser - All Services

MV Geophysical

MAIN PASS

Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	XY103021
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:1200



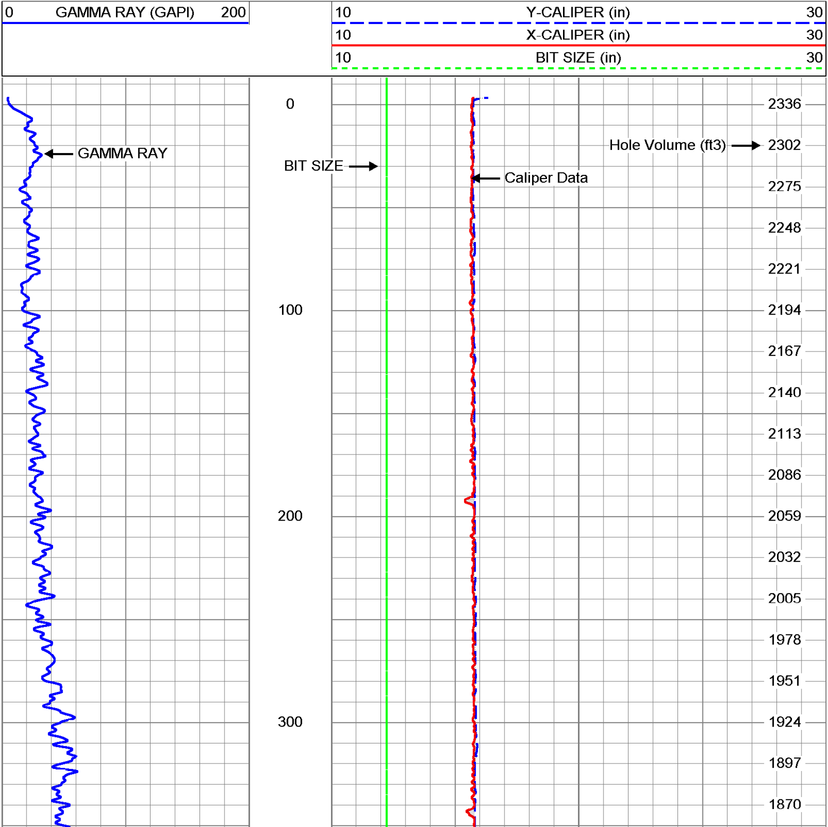


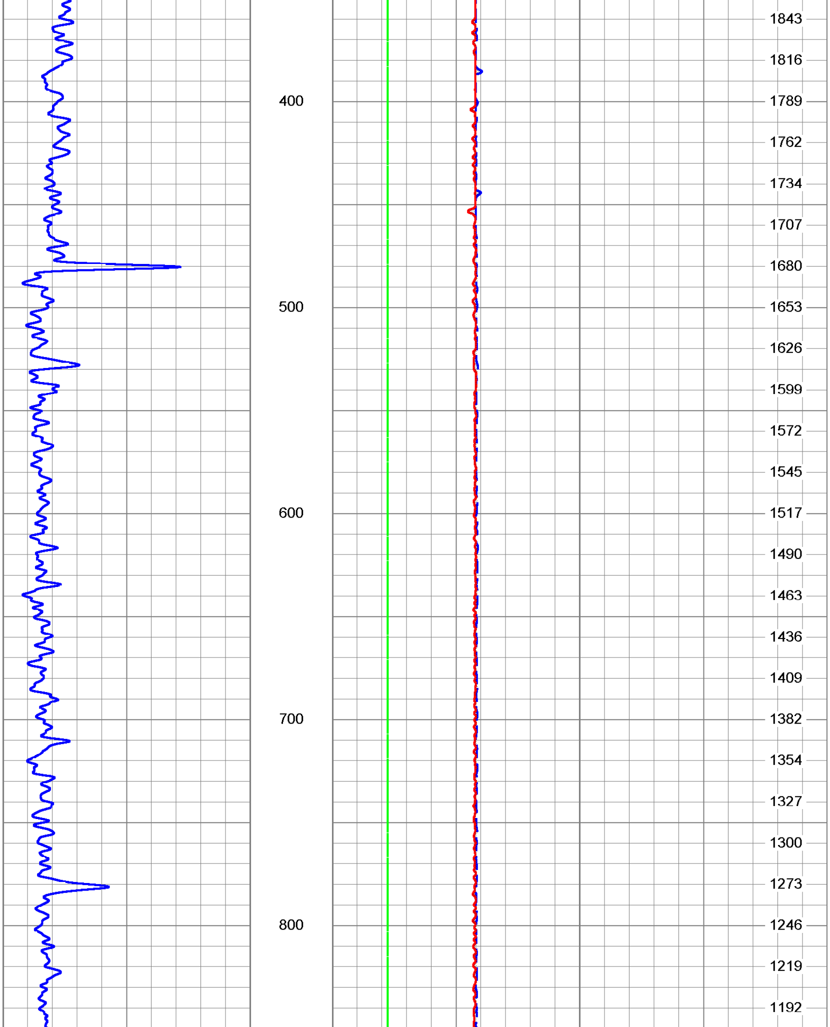
10 BIT SIZE (in) 30

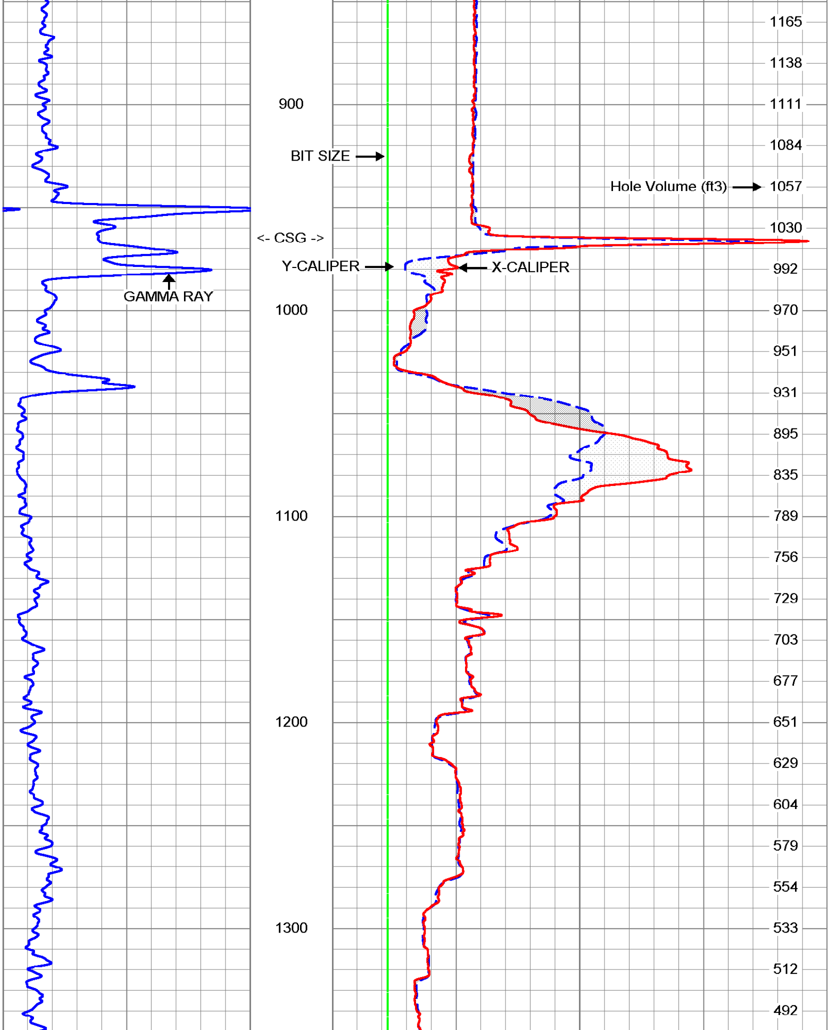
MV Geophysical

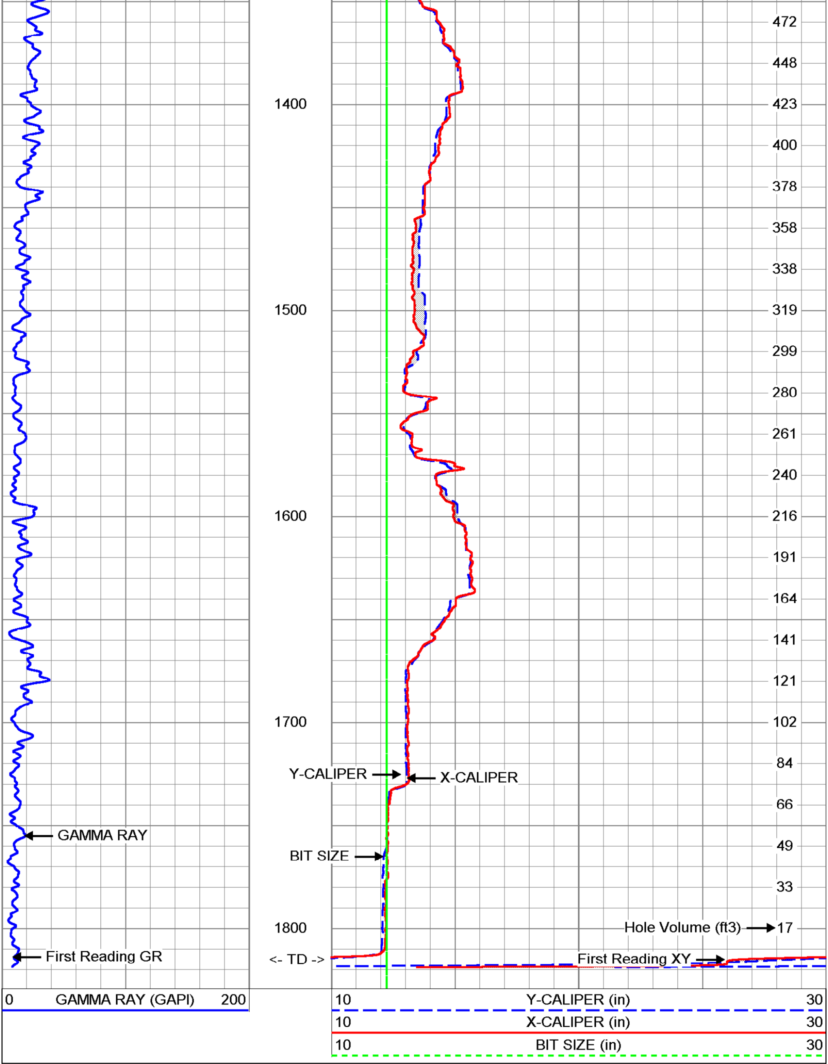
MAIN PASS

Database File: davietp1.db
Dataset Pathname: run2/MAIN
Presentation Format: XY103025
Dataset Creation: Mon Aug 17 10:46:52 2009
Charted by: Depth in Feet scaled 1:600





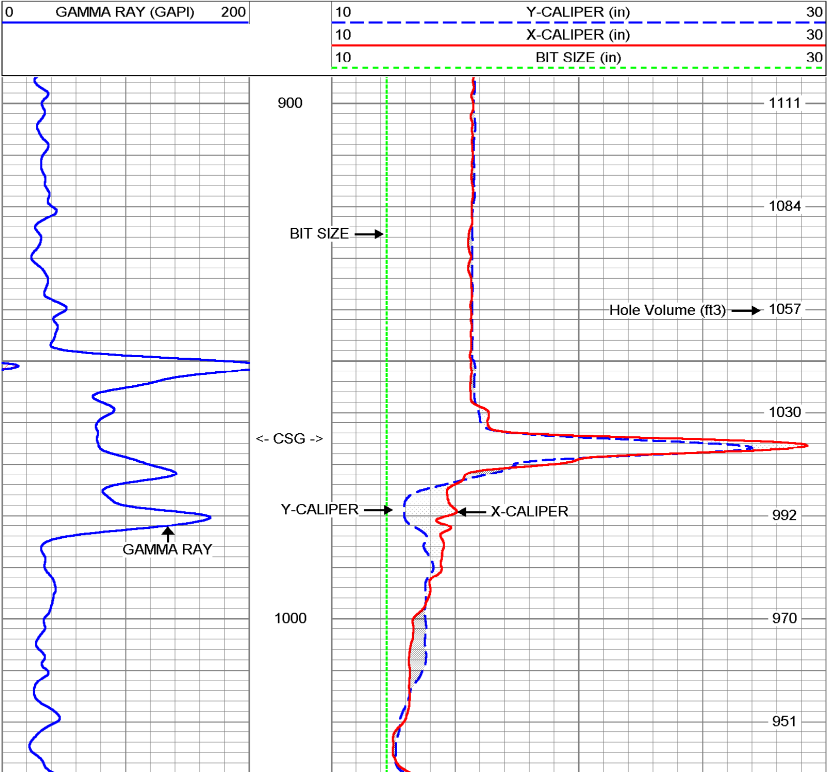


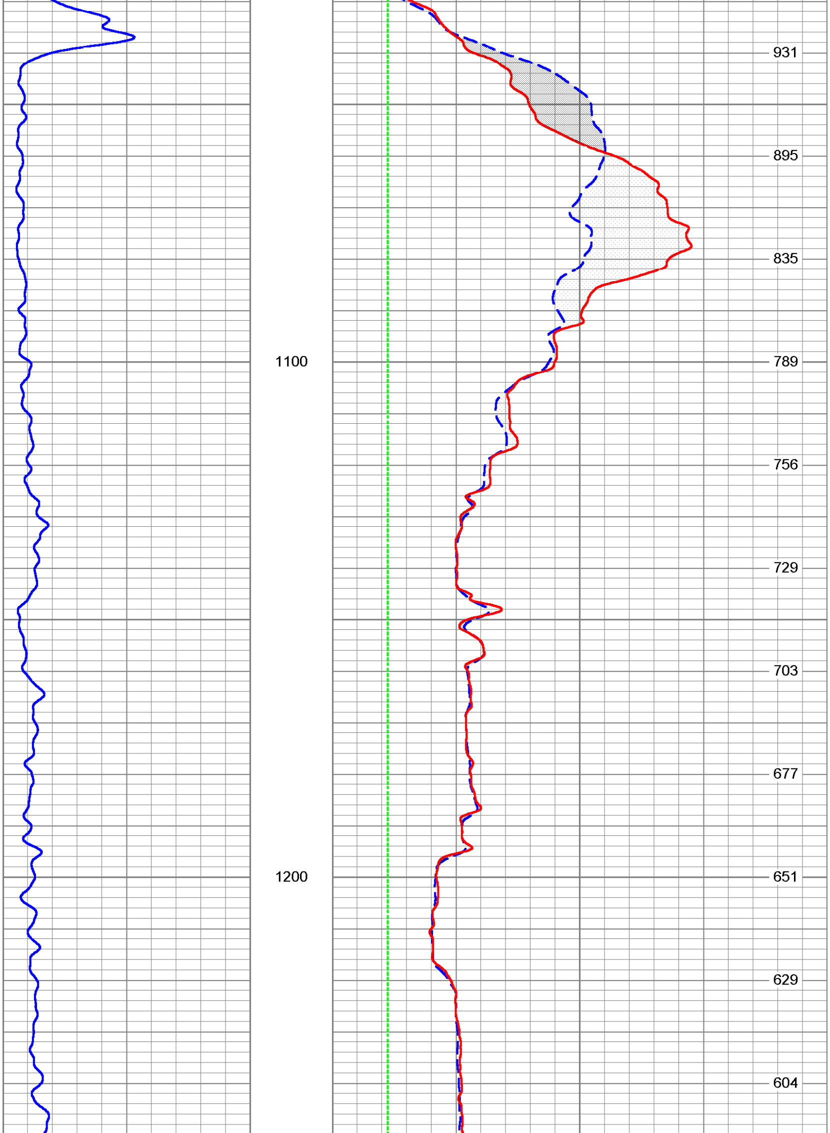


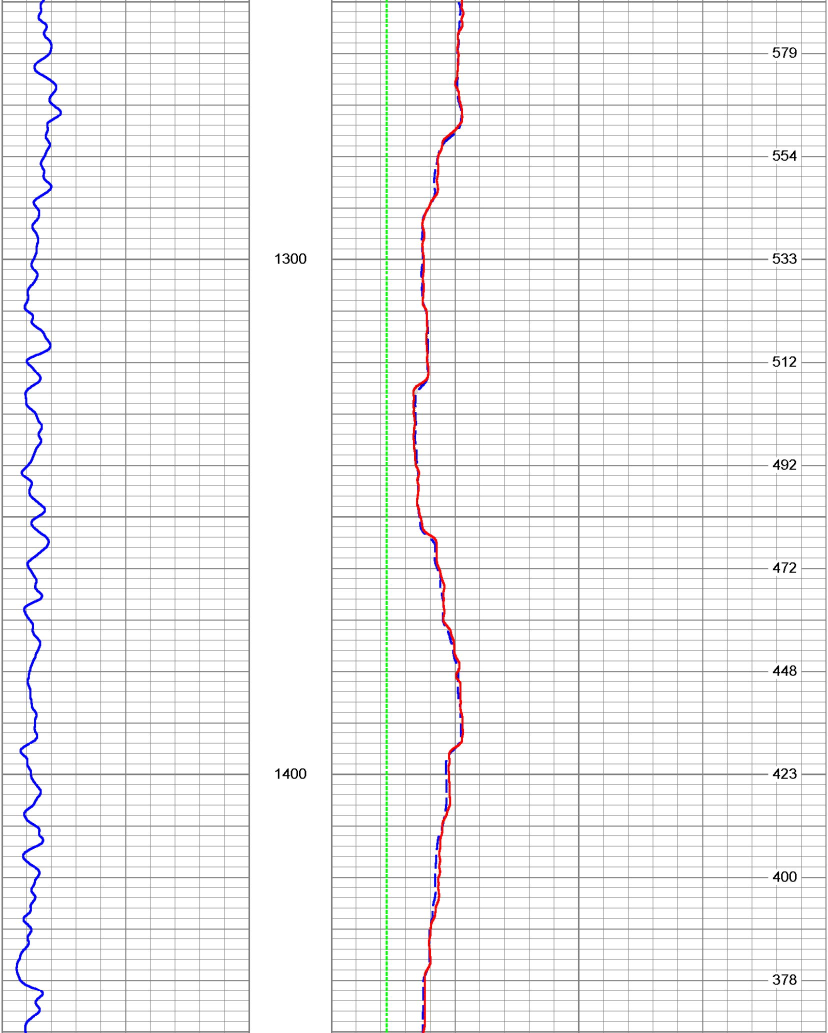
MV
Geophysical

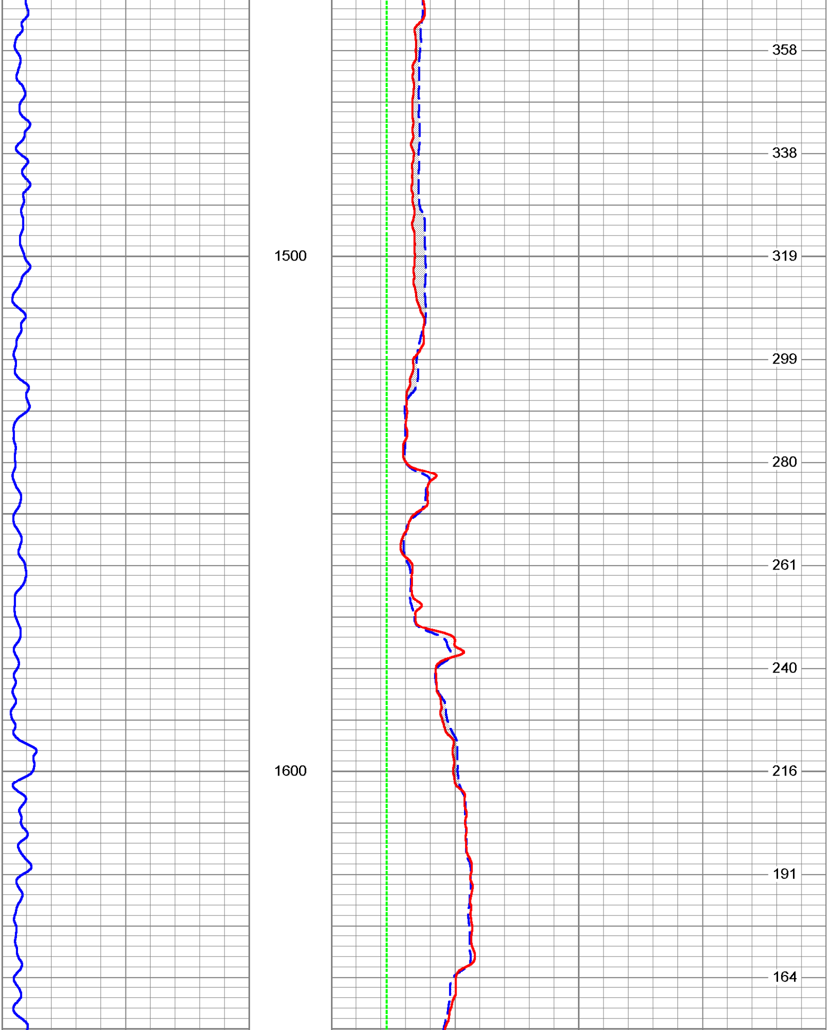
MAIN PASS

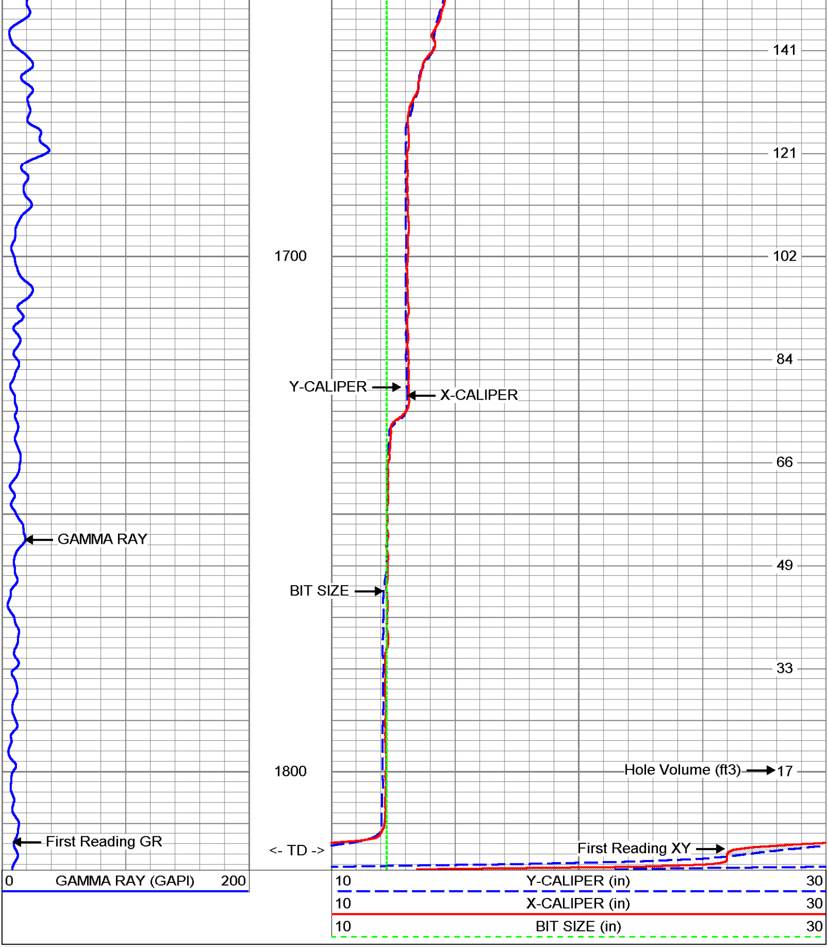
Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	XY103025
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:240







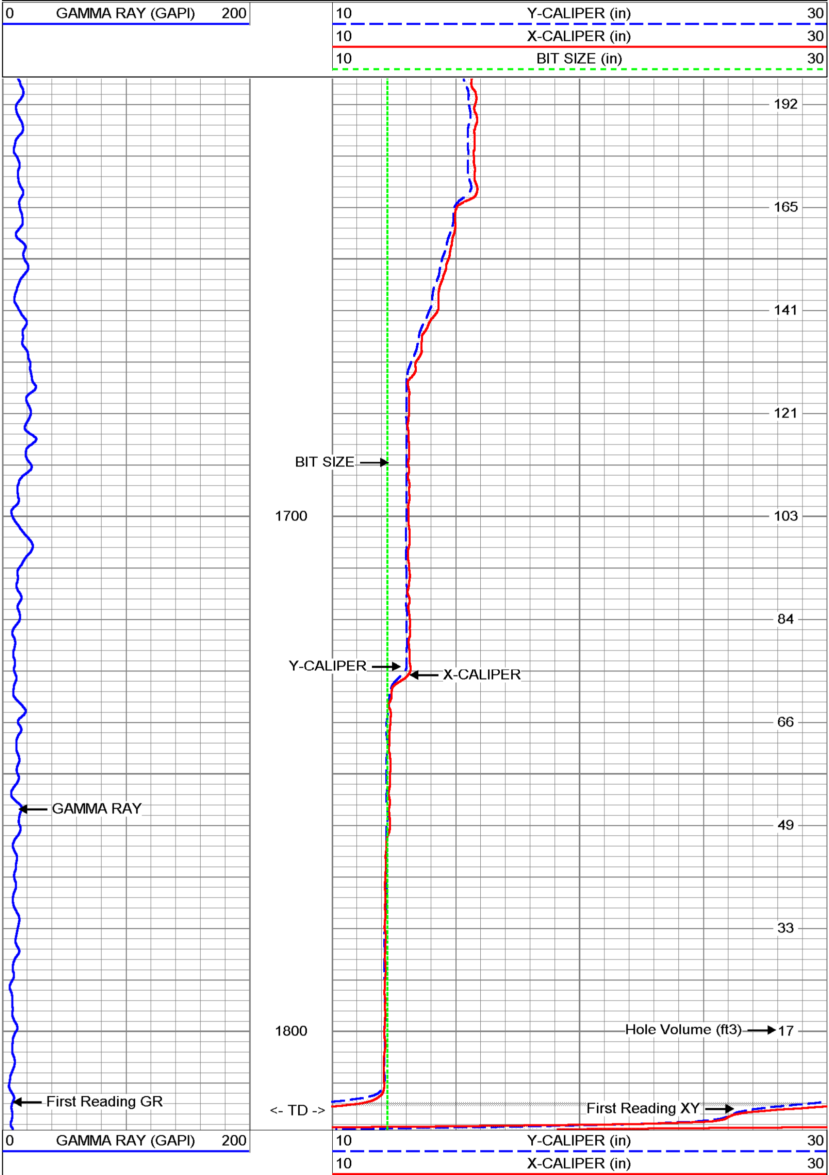




MV
Geophysical

REPEAT SECTION

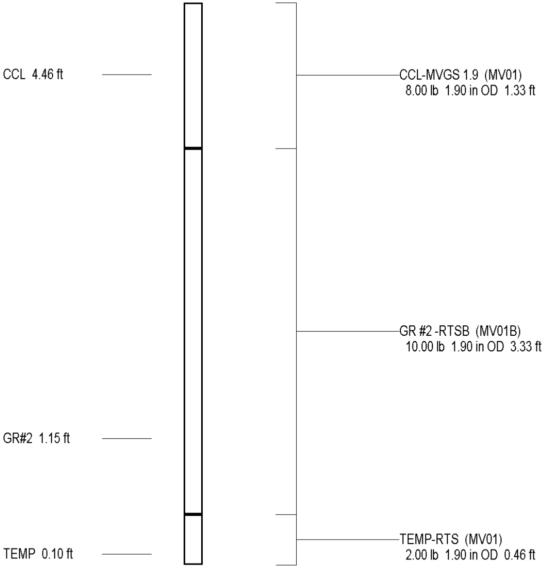
Database File:	davietp1.db
Dataset Pathname:	run2/REPEAT
Presentation Format:	XY103025
Dataset Creation:	Mon Aug 17 10:59:56 2009
Charted by:	Depth in Feet scaled 1:240



10 BIT SIZE (in) 30

Gamma Ray Calibration Report

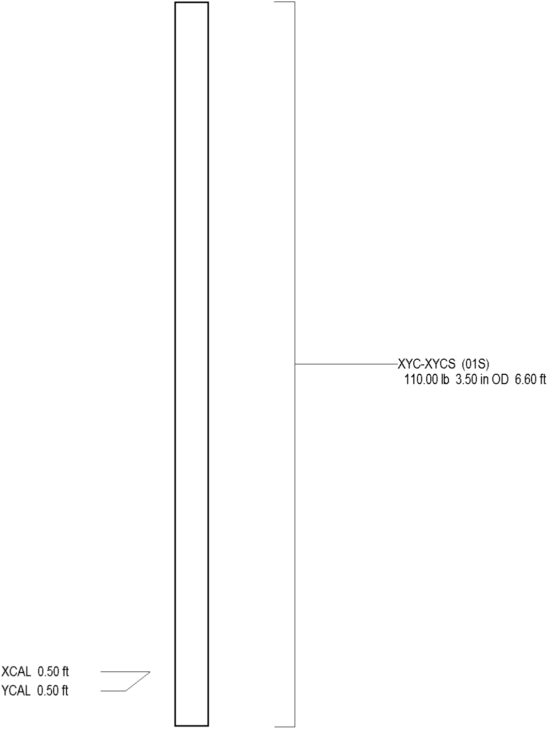
Serial Number:	MV01B	
Tool Model:	RTSB	
Performed:	Mon Aug 17 08:08:20 2009	
Calibrator Value:	120	GAPI
Background Reading:	13.9149	cps
Calibrator Reading:	137.689	cps
Sensitivity:	0.969507	GAPI/cps



Dataset:	run2/pass1
Total Length:	5.12 ft
Total Weight:	20.00 lb
O.D.	1.90 in

XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Mon Aug 17 11:02:56 2009		
Small Ring:	15.75	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	791.4	791.1	cps
Reading with Large Ring:	1032.5	1026.1	cps
Gain:	0.0715471	0.0691489	
Offset:	-40.8724	-38.9537	



Dataset:	run2/pass5
Total Length:	6.60 ft
Total Weight:	110.00 lb
O.D.	3.50 in

MV Geophysical

BOREHOLE COMPENSATED SONIC w/ VARIABLE DENSITY LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida

Location
Town of Davie
UF Test Site
AECOM

Other Services
XY/GR,FCT
DIL,BHC,CBL
FLO,DHTV

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

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

Date	17-AUG-2009		
Run Number	FOUR		
Depth Driller	1815'		
Depth Logger	1815'		
Bottom Logged Interval	1807'		
Top Log Interval	945'		
Open Hole Size	12.25"		
Type Fluid	H2O		
Density / Viscosity	na/na		
Max. Recorded Temp.	see FCT log		
Estimated Cement Top	SURFACE		
Time Well Ready	07:30 8/17/2009		
Time Logger on Bottom	14:00 8/17/2009		
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller/C.Miller		
Witnessed By	S. English (AECOM)	D. Adkins (DDC)	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No.	2009118	P.O. #:111555	Job No.:	* Field Print *

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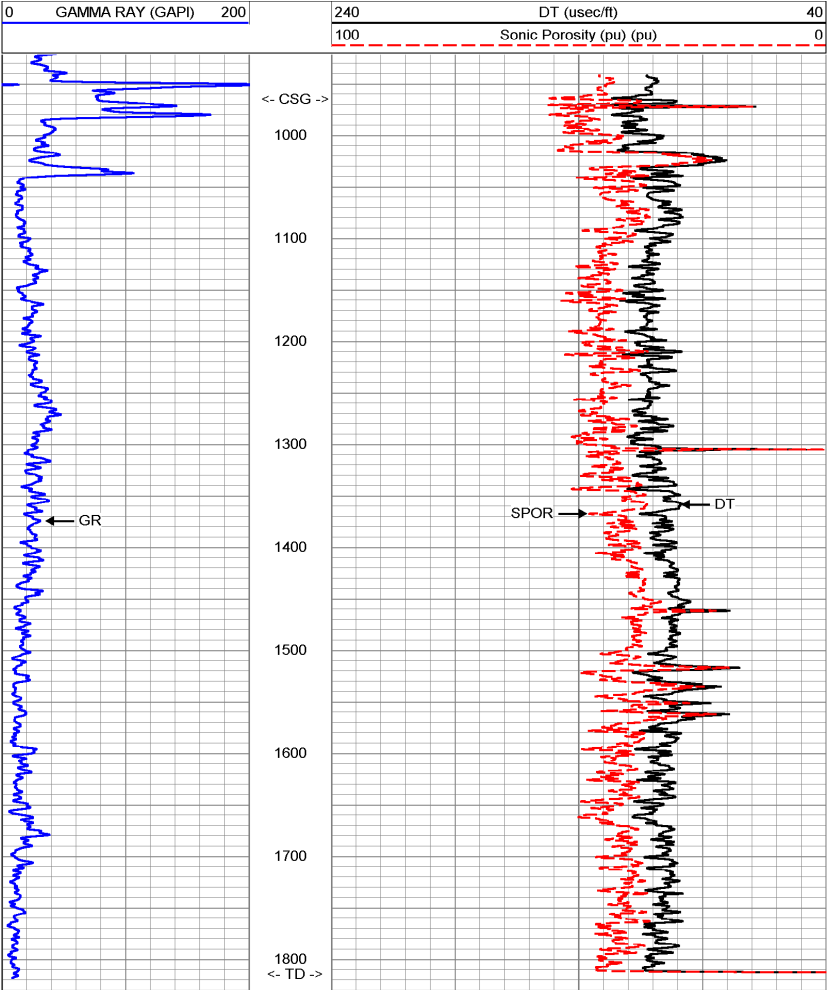
Comments

Sonic Porosity was run on a Limestone Matrix (=47.5)

MV
Geophysical

MAIN PASS

Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	DTG-12
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:1200



0 GAMMA RAY (GAPI) 200

240 DT (usec/ft) 40

100 Sonic Porosity (pu) (pu) 0

MV Geophysical

MAIN PASS

Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	DTXY13G2
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:600

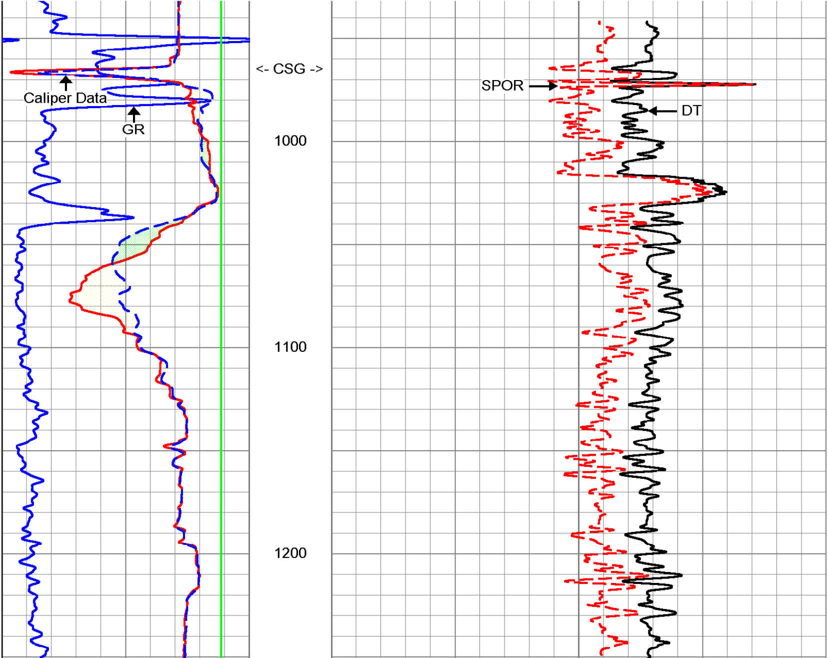
0 GAMMA RAY (GAPI) 200

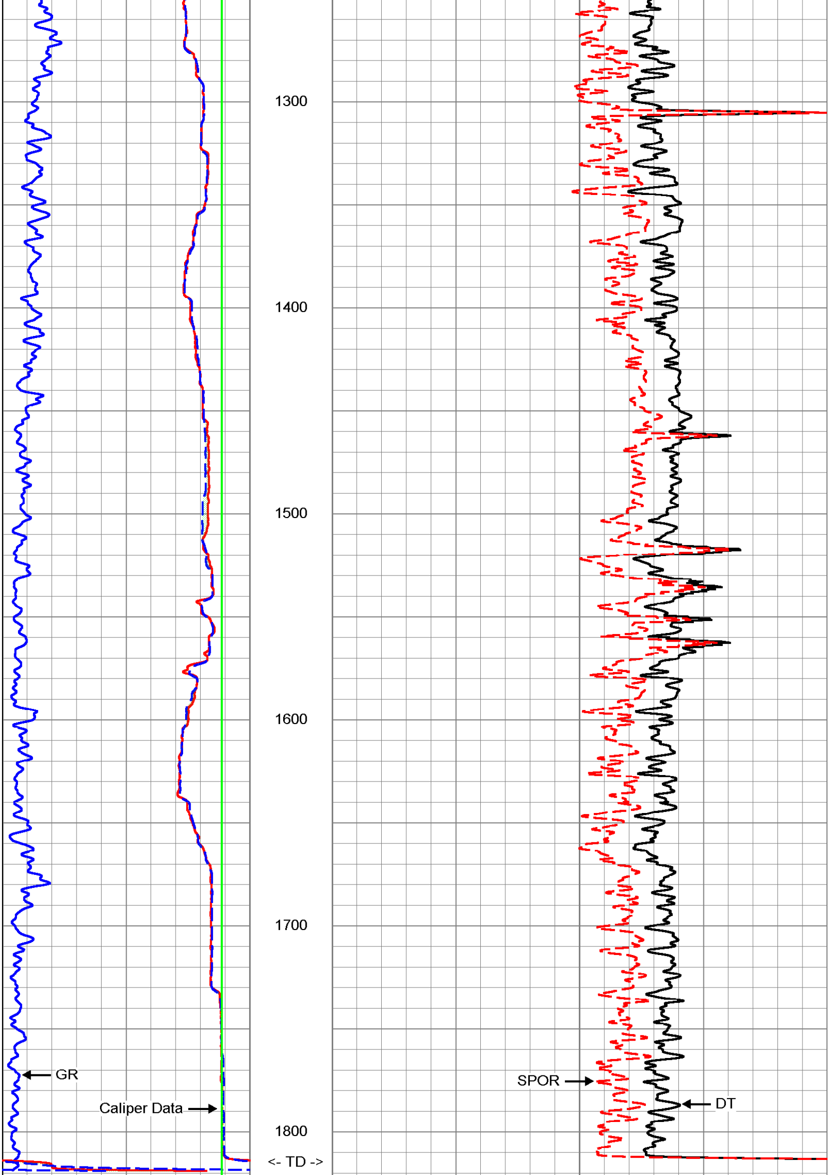
30 XCAL (in) 10

30 YCAL (in) 10

240 DT (usec/ft) 40

100 Sonic Porosity (pu) (pu) 0





0 GAMMA RAY (GAPI) 200
30 XCAL (in) 10
30 YCAL (in) 10

240 DT (usec/ft) 40
100 Sonic Porosity (pu) (pu) 0

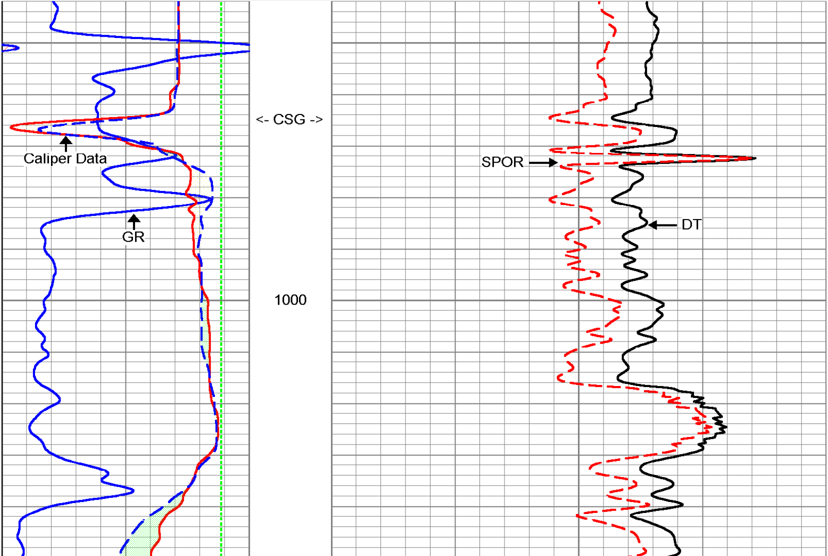
MV Geophysical

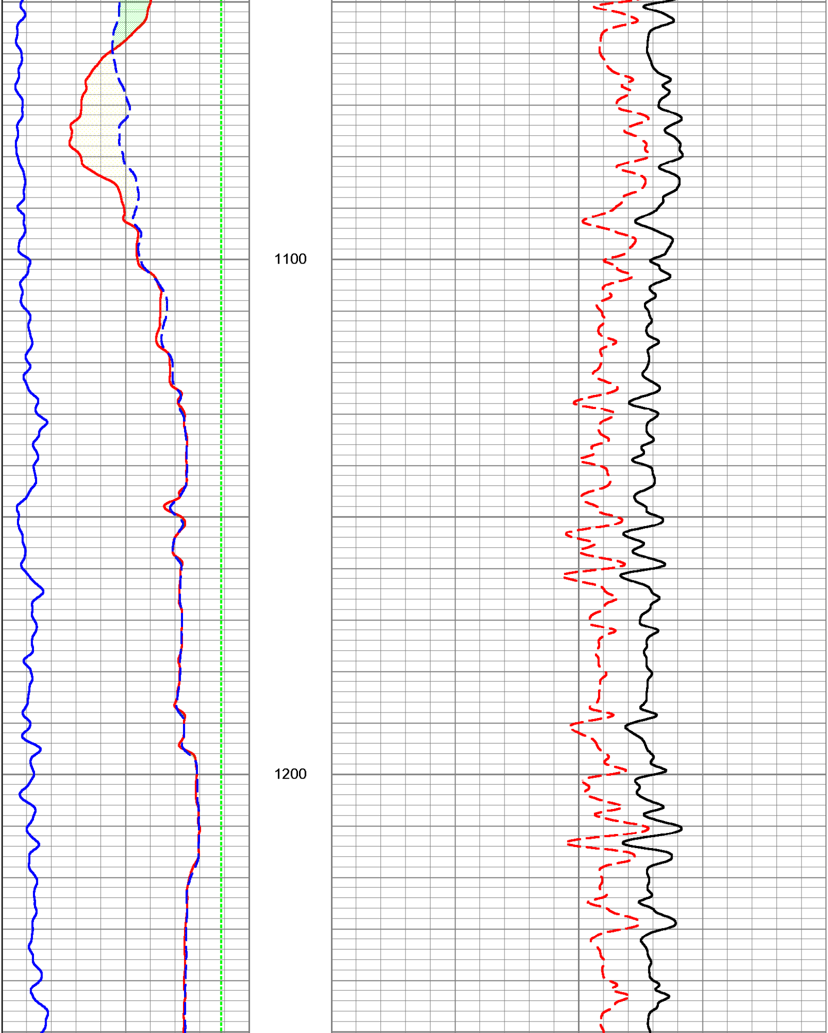
MAIN PASS

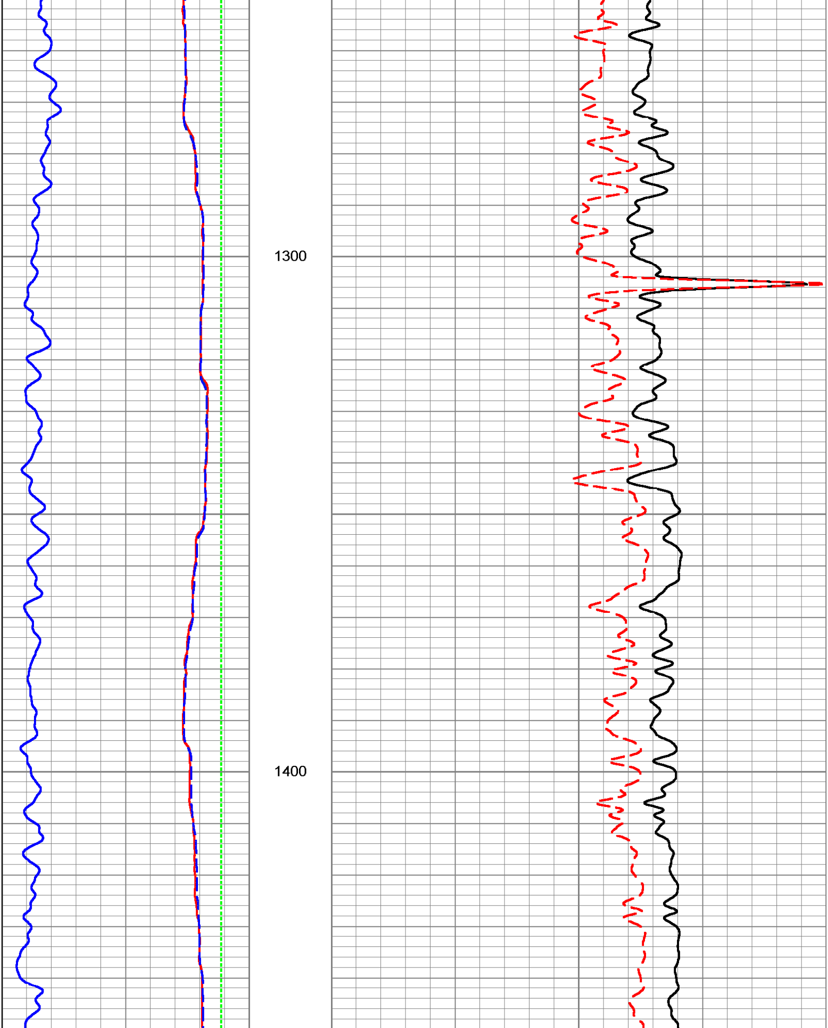
Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	DTXY13G2
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:240

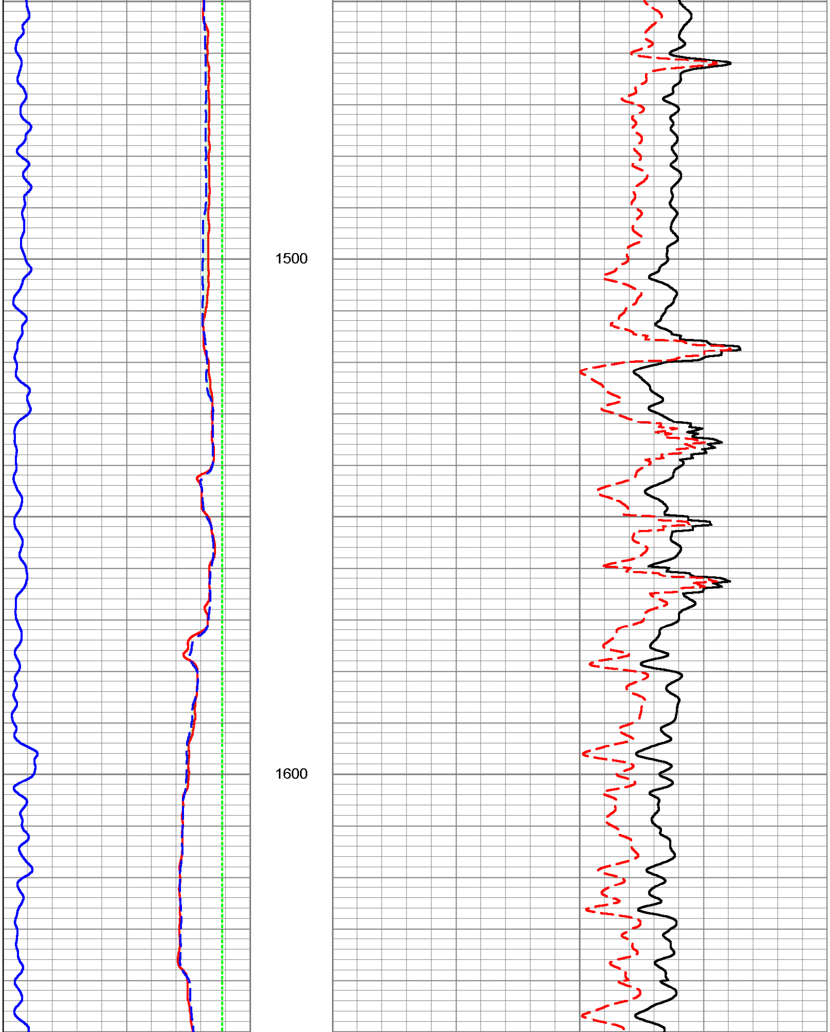
0 GAMMA RAY (GAPI) 200
30 XCAL (in) 10
30 YCAL (in) 10

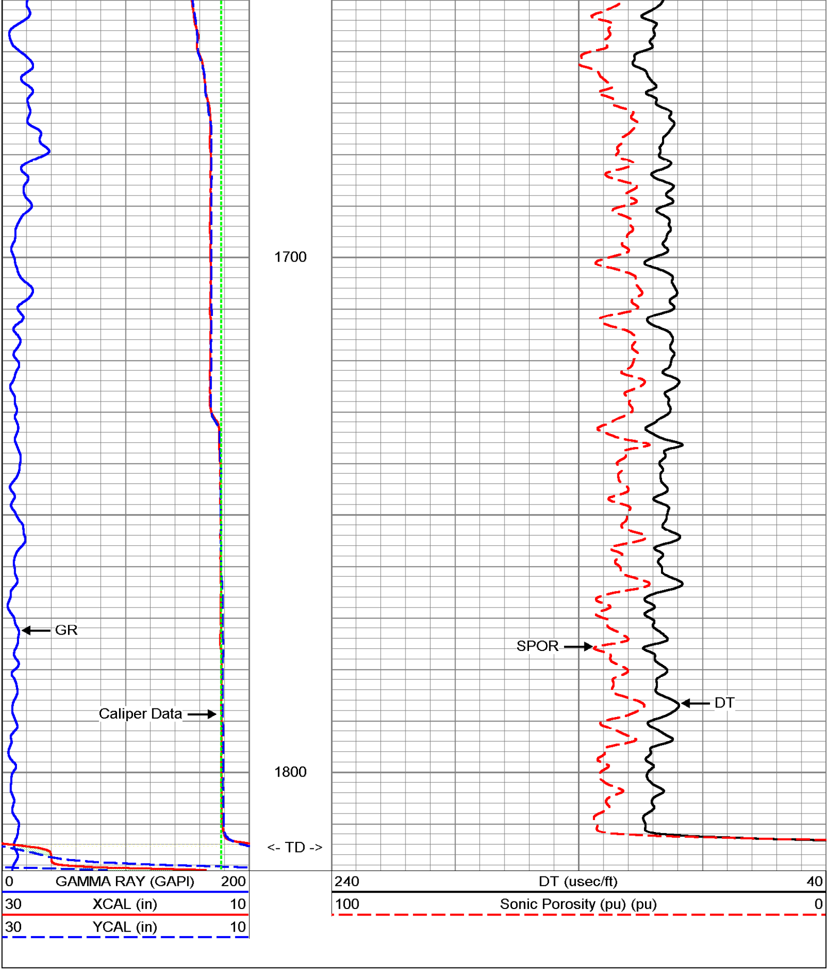
240 DT (usec/ft) 40
100 Sonic Porosity (pu) (pu) 0







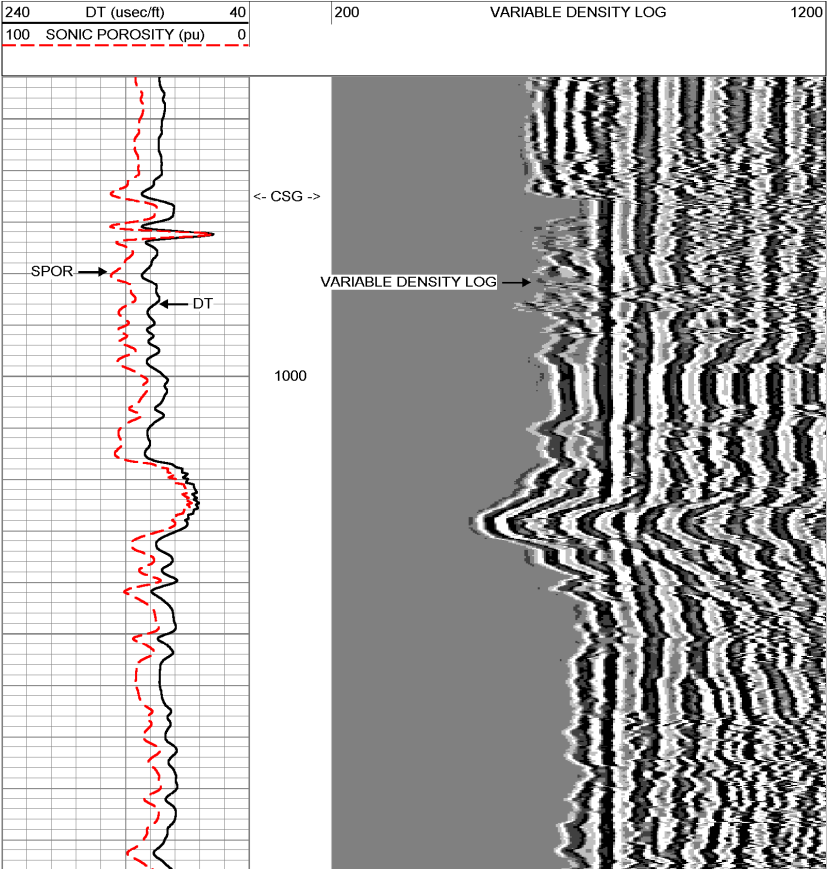


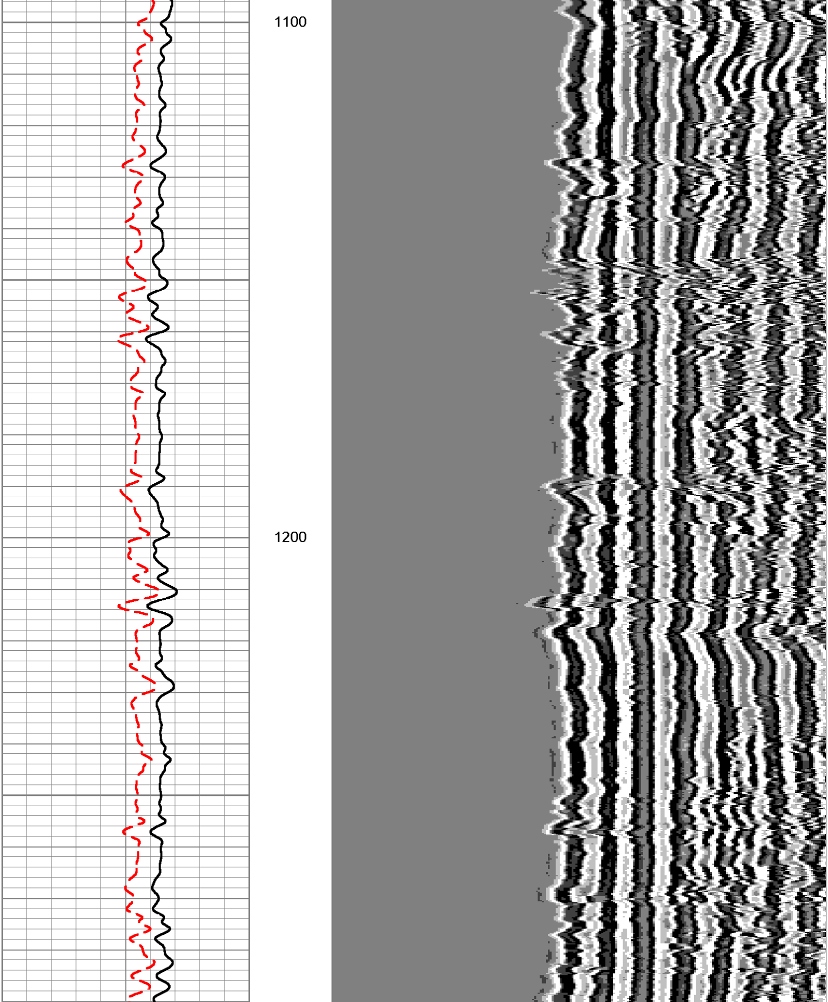


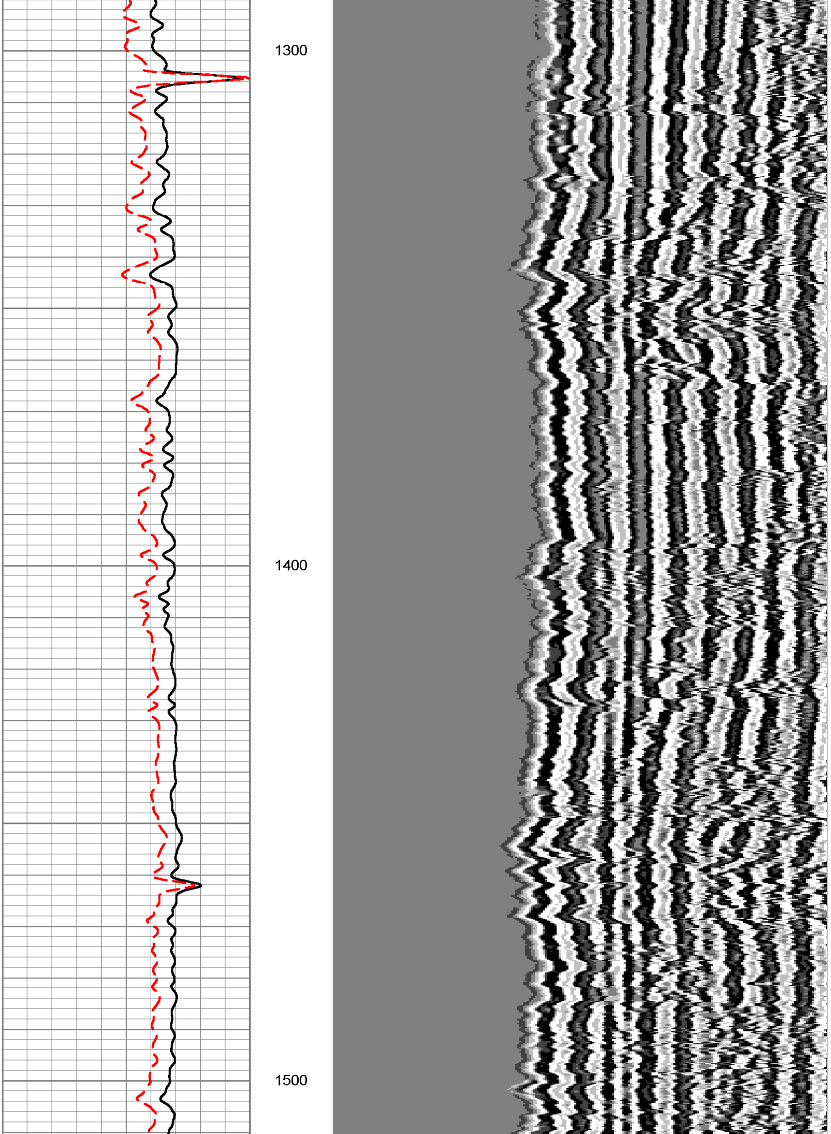
MV Geophysical

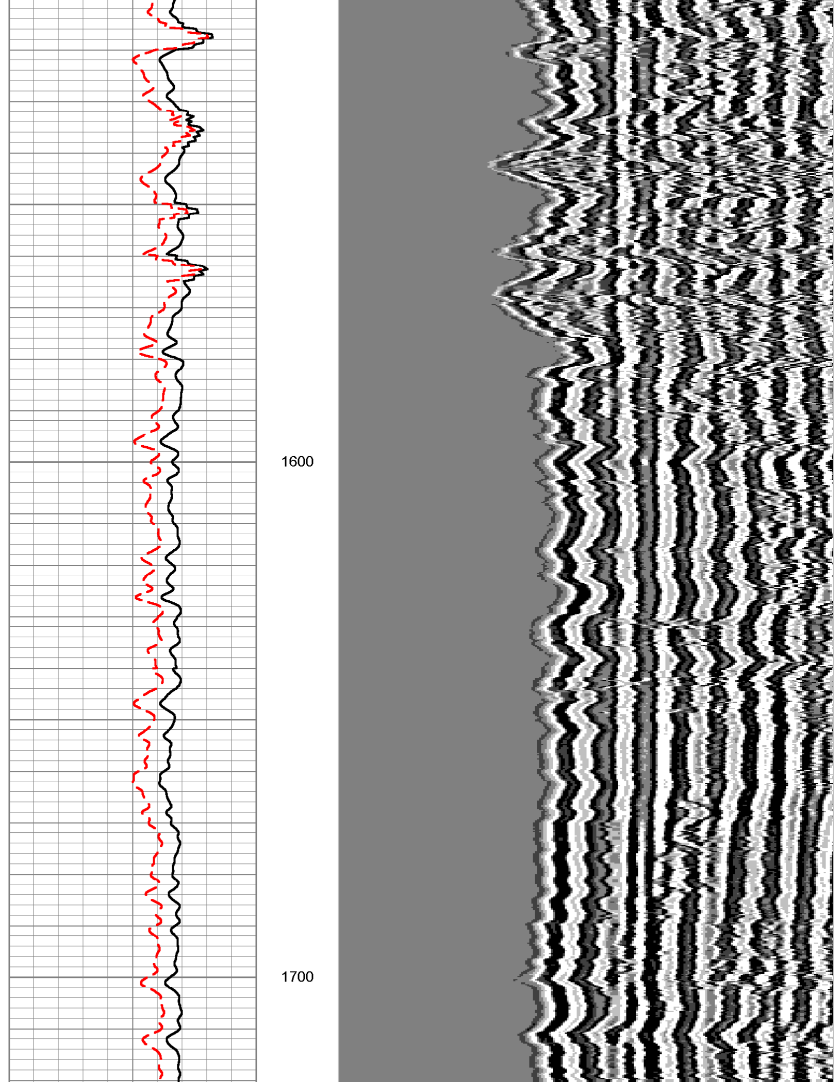
MAIN PASS

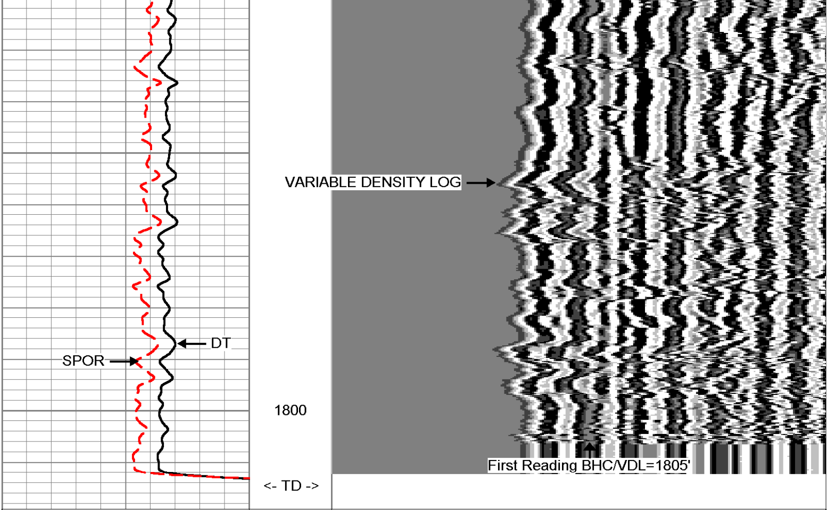
Database File:	davietp1.db
Dataset Pathname:	run2/MAIN
Presentation Format:	SON_VDL
Dataset Creation:	Mon Aug 17 10:46:52 2009
Charted by:	Depth in Feet scaled 1:240











240 DT (usec/ft) 40

100 SONIC POROSITY (pu) 0

200 VARIABLE DENSITY LOG 1200

MV
Geophysical

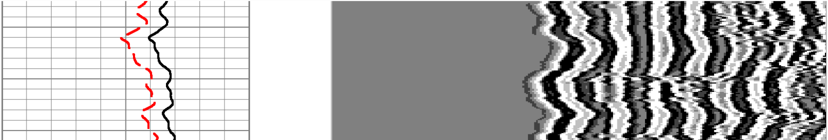
REPEAT SECTION

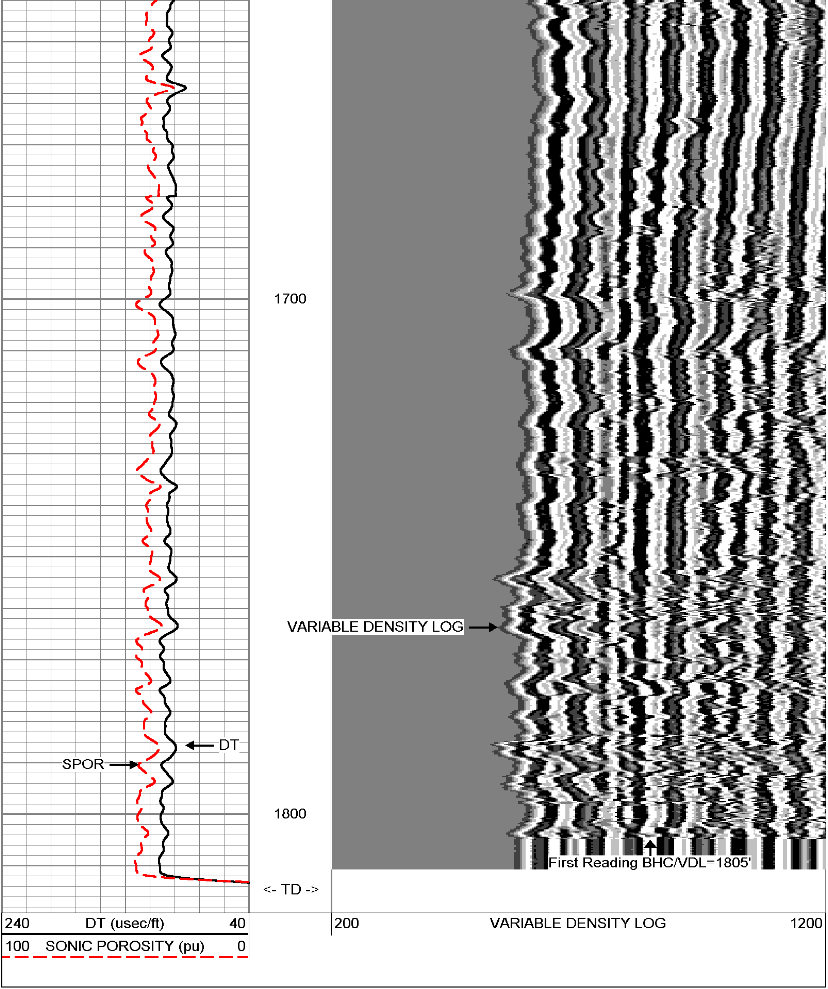
Database File:	davietp1.db
Dataset Pathname:	run2/REPEAT
Presentation Format:	SON_VDL
Dataset Creation:	Mon Aug 17 10:59:56 2009
Charted by:	Depth in Feet scaled 1:240

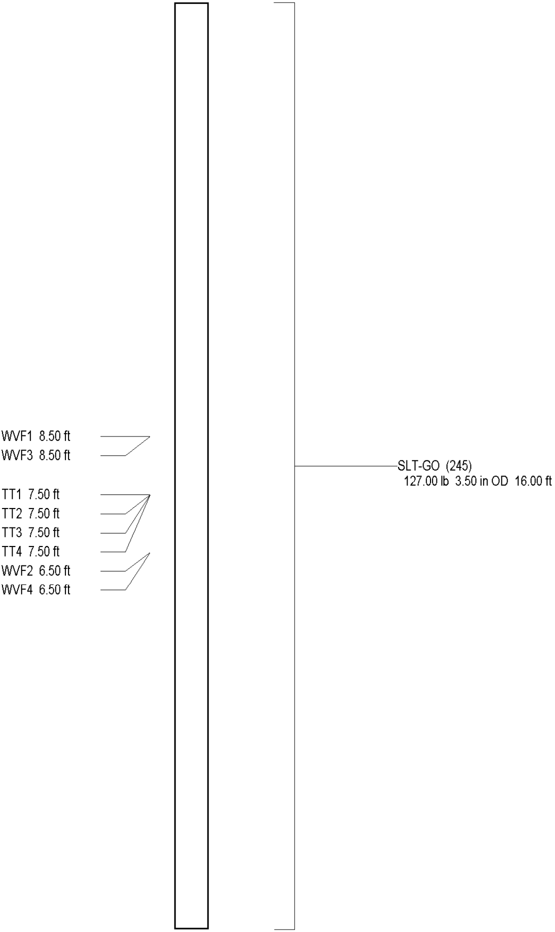
240 DT (usec/ft) 40

100 SONIC POROSITY (pu) 0

200 VARIABLE DENSITY LOG 1200







Dataset:	run2/pass11
Total Length:	16.00 ft
Total Weight:	127.00 lb
O.D.	3.50 in

MV Geophysical

DUAL INDUCTION LL3 / SP LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company Diversified Drilling Corporation
Well TPW-1
Field Davie
County Broward State/Prv Florida

Location Town of Davie
UF Test Site
AECOM

Other Services XY/GR,FCT
DIL,BHC,CBL
FLO,DHTV

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

Date	17-AUG-2009
Run Number	FOUR
Depth Driller	1815'
Depth Logger	1815'
Bottom Logged Interval	1813'
Top Log Interval	965'
Open Hole Size	12.25"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	07:30 8/17/2009
Time Logger on Bottom	12:30 8/17/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No.	2009118	P.O. #:111555	Job No.:	* Field Print *

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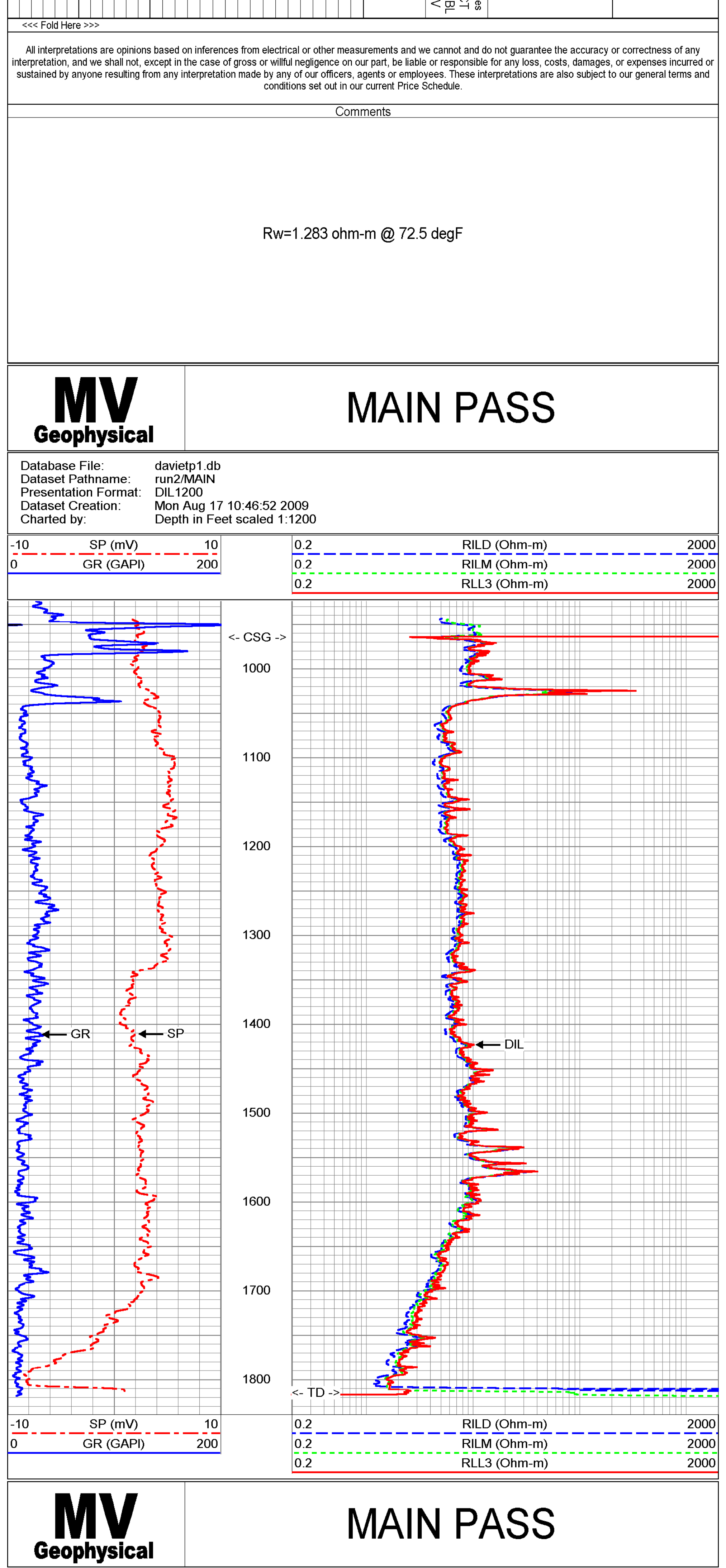
Comments

Rw=1.283 ohm-m @ 72.5 degF

MV Geophysical

MAIN PASS

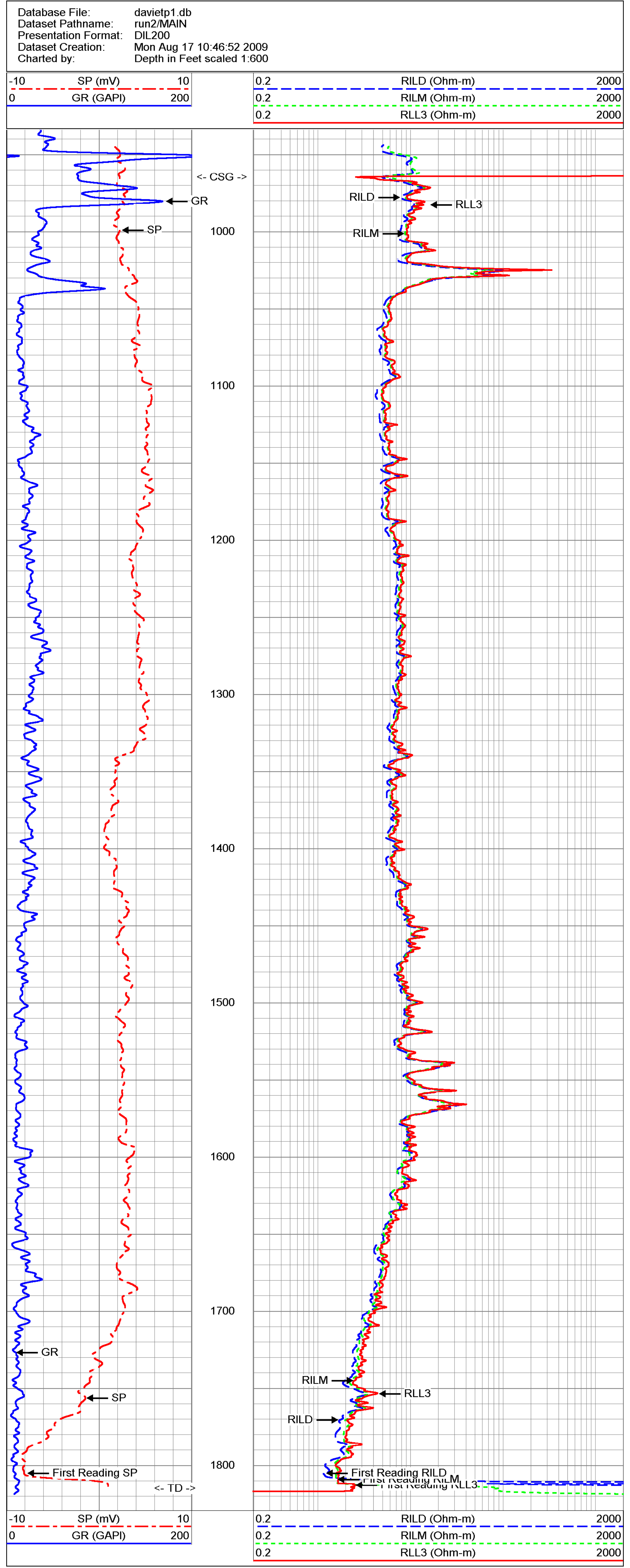
Database File: davietp1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL1200
Dataset Creation: Mon Aug 17 10:46:52 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

Database File: davietp1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL200
Dataset Creation: Mon Aug 17 10:46:52 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

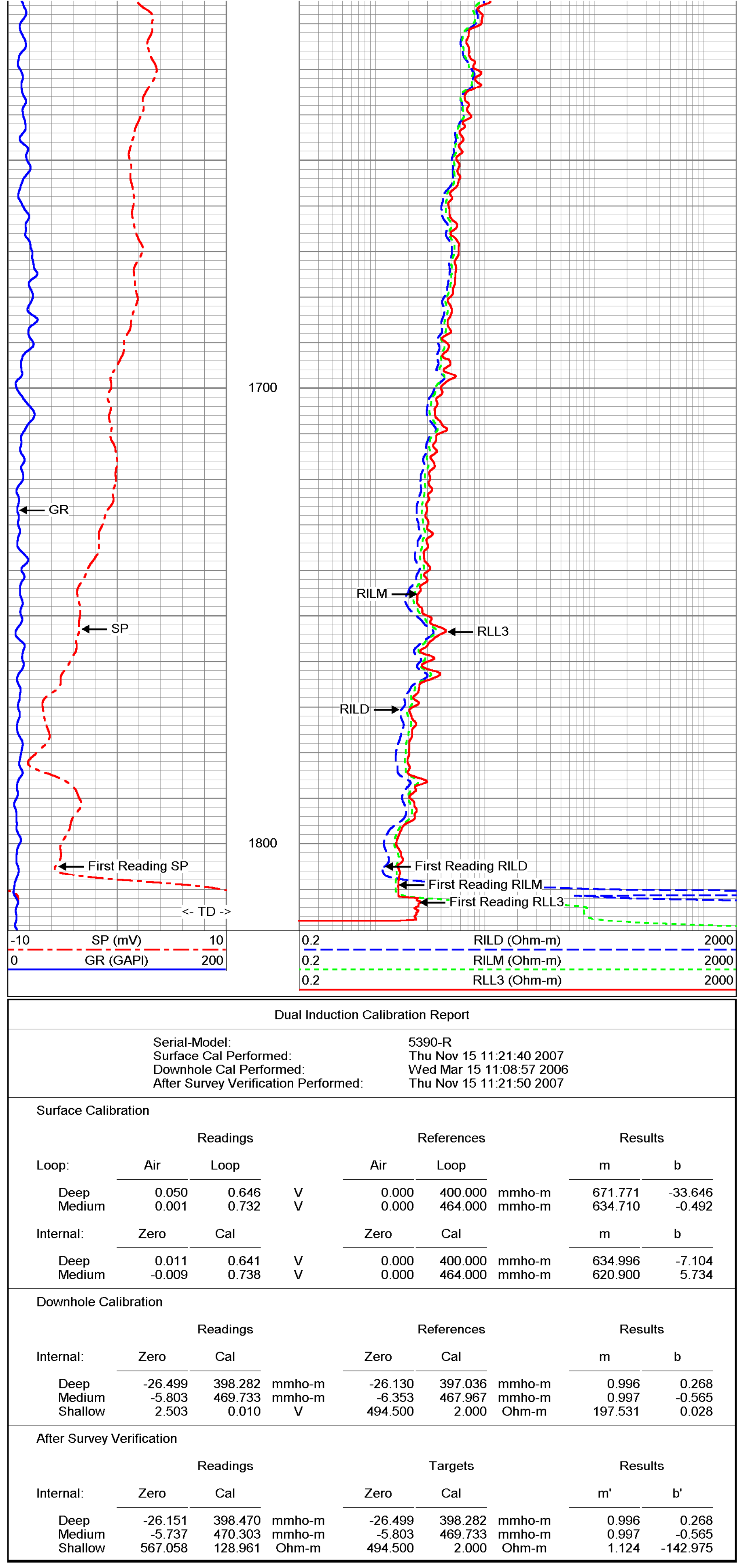
MAIN PASS

Database File: davietp1.db
Dataset Pathname: run2/MAIN
Presentation Format: DIL200
Dataset Creation: Mon Aug 17 10:46:52 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: run2/REPEAT
Presentation Format: DIL200
Dataset Creation: Mon Aug 17 10:59:56 2009
Charted by: Depth in Feet scaled 1:240



Dual Induction Calibration Report

Serial-Model: 5390-R
Surface Cal Performed: Thu Nov 15 11:21:40 2007
Downhole Cal Performed: Wed Mar 15 11:08:57 2006
After Survey Verification Performed: Thu Nov 15 11:21:50 2007

Surface Calibration

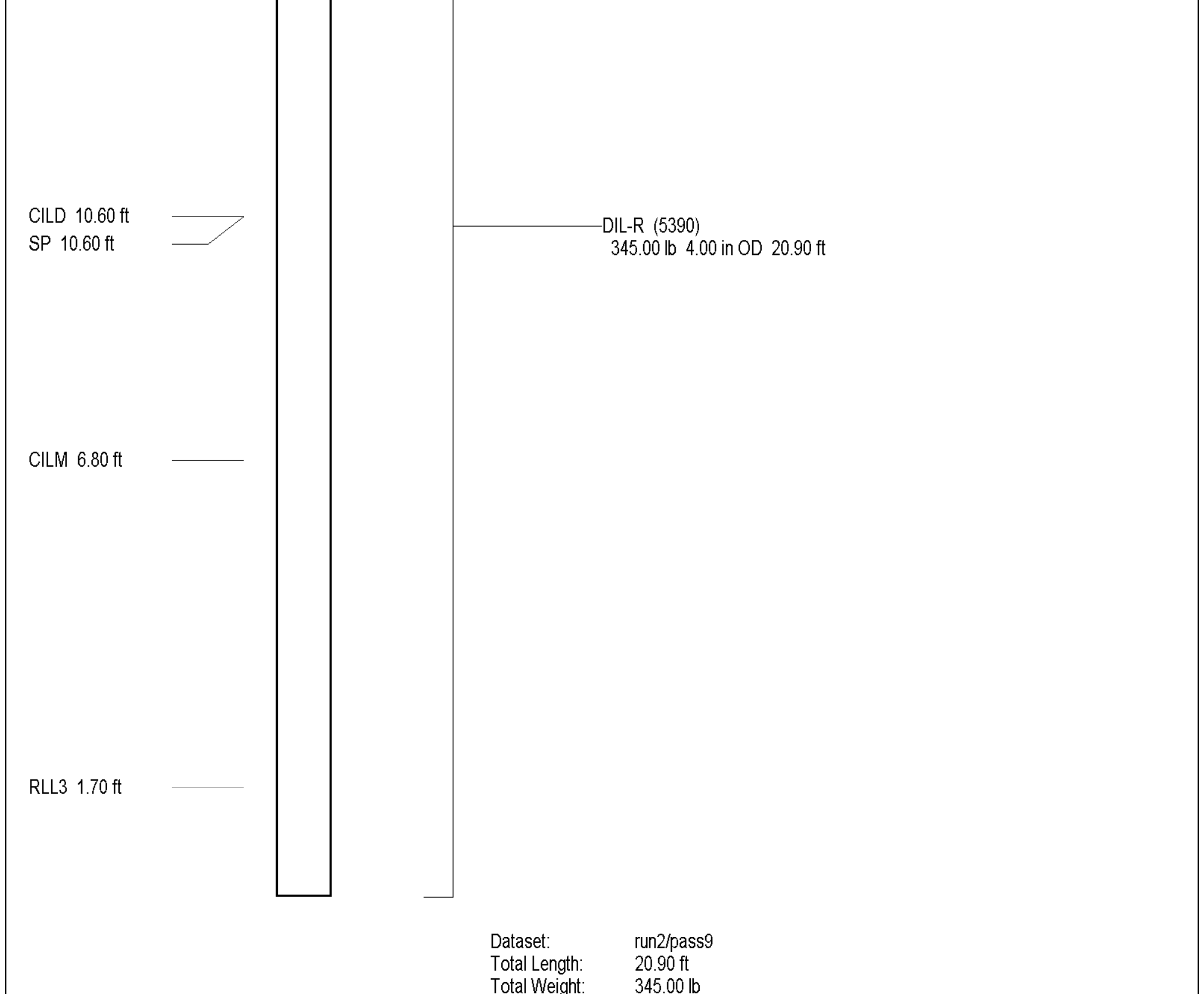
	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.050	0.646	V	0.000	400.000	mmho-m	671.771	-33.646
Medium	0.001	0.732	V	0.000	464.000	mmho-m	634.710	-0.492
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.641	V	0.000	400.000	mmho-m	634.996	-7.104
Medium	-0.009	0.738	V	0.000	464.000	mmho-m	620.900	5.734

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-26.499	398.282	mmho-m	-26.130	397.036	mmho-m	0.996	0.268
Medium	-5.803	469.733	mmho-m	-6.353	467.967	mmho-m	0.997	-0.565
Shallow	2.503	0.010	V	494.500	2.000	Ohm-m	197.531	0.028

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	-26.151	398.470	mmho-m	-26.499	398.282	mmho-m	0.996	0.268
Medium	-5.737	470.303	mmho-m	-5.803	469.733	mmho-m	0.997	-0.565
Shallow	567.058	128.961	Ohm-m	494.500	2.000	Ohm-m	1.124	-142.975



Dataset: run2/pass9
Total Length: 20.90 ft
Total Weight: 345.00 lb
O.D. 4.00 in

MV Geophysical

FLOWMETER LOG

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR,FCT DIL,BHC,CBL FLO,DHTV

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

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Date	17-AUG-2009
Run Number	FOUR
Depth Driller	1815'
Depth Logger	1815'
Bottom Logged Interval	1807'
Top Log Interval	895'
Open Hole Size	12.25"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	07:30 8/17/2009
Time Logger on Bottom	16:15 8/17/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No. 2009118	P.O. #:111555		Job No.:	* Field Print *

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Comments

STATIC and DYNAMIC down passes were made at 50 fpm.
FIVE stations performed.

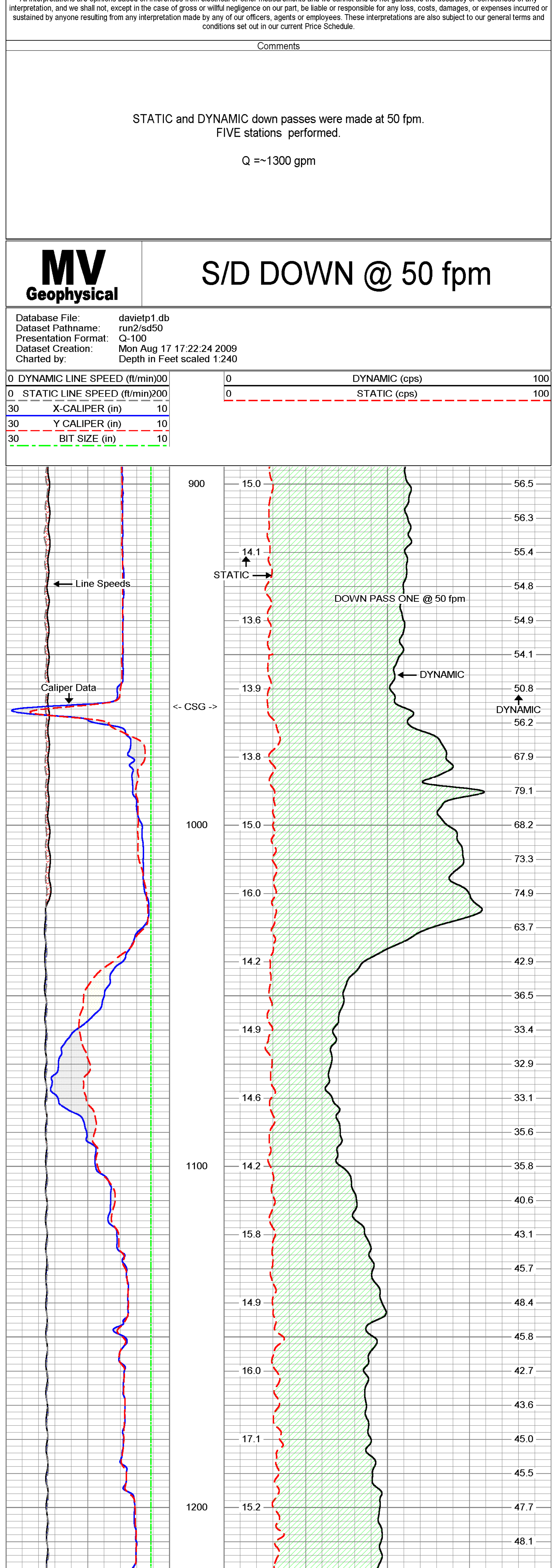
Q =~1300 gpm

MV Geophysical

S/D DOWN @ 50 fpm

Database File: davietp1.db
Dataset Pathname: run2/sd50
Presentation Format: Q-100
Dataset Creation: Mon Aug 17 17:22:24 2009
Charted by: Depth in Feet scaled 1:240

0 DYNAMIC LINE SPEED (ft/min)00
0 STATIC LINE SPEED (ft/min)200
30 X-CALIPER (in) 10
30 Y CALIPER (in) 10
30 BIT SIZE (in) 10
0 DYNAMIC (cps) 100
0 STATIC (cps) 100



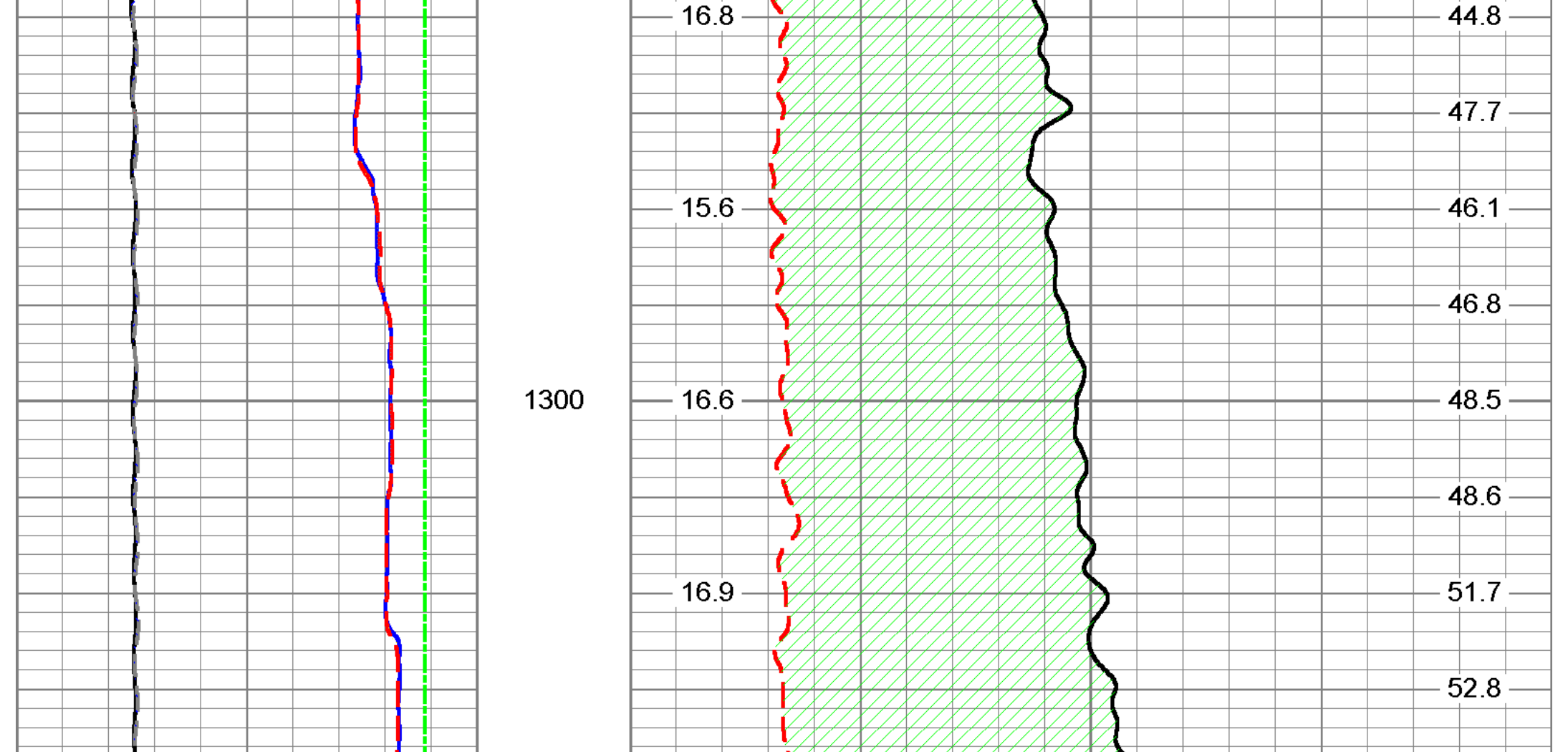
0 DYNAMIC LINE SPEED (ft/min)00
0 STATIC LINE SPEED (ft/min)200
30 X-CALIPER (in) 10
30 Y CALIPER (in) 10
30 BIT SIZE (in) 10
0 DYNAMIC (cps) 100
0 STATIC (cps) 100

MV Geophysical

Station #5: 900'

Database File: davietp1.db
Dataset Pathname: run2/pass25
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 17:42:39 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



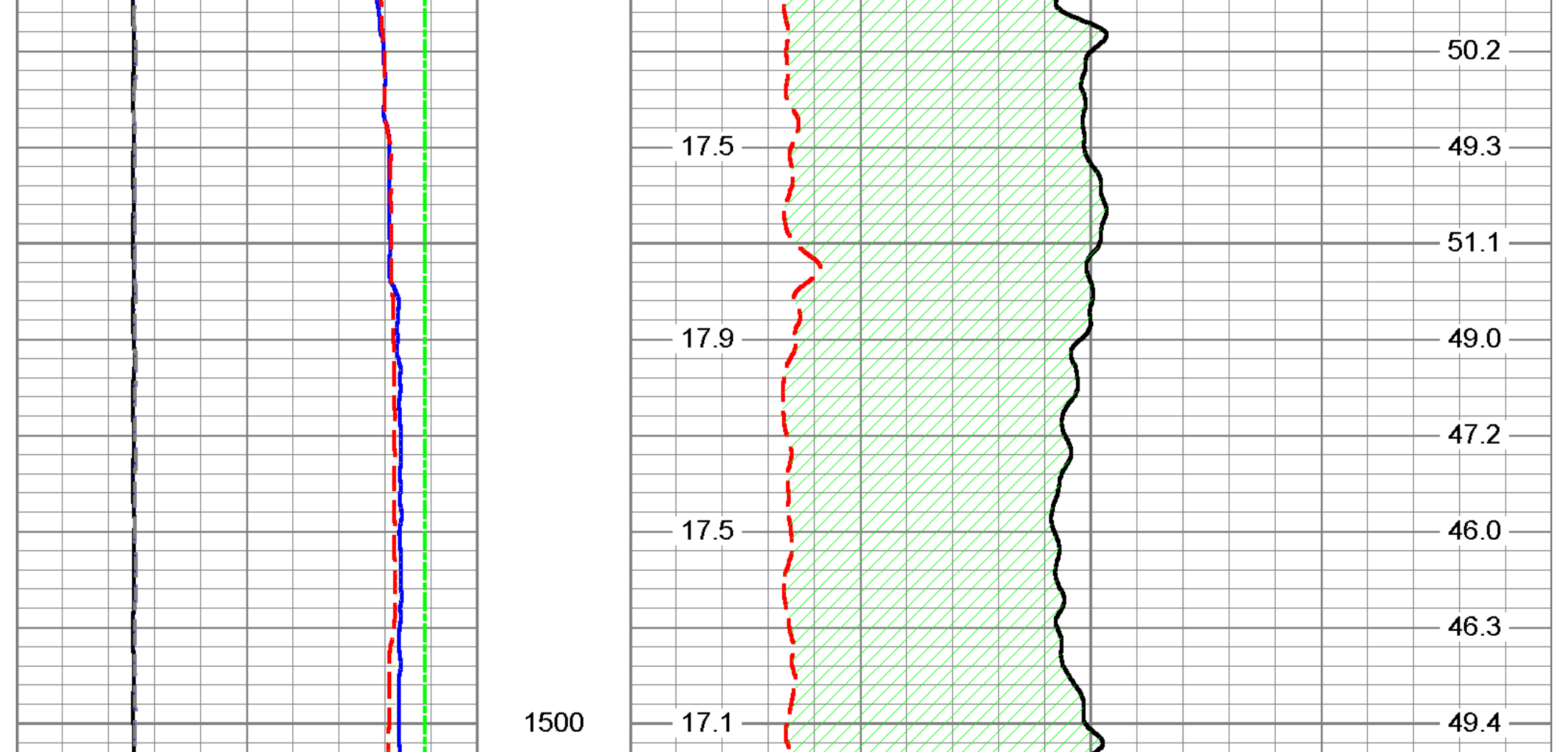
-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100

MV Geophysical

Station #4: 1025'

Database File: davietp1.db
Dataset Pathname: run2/pass24
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 17:39:47 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



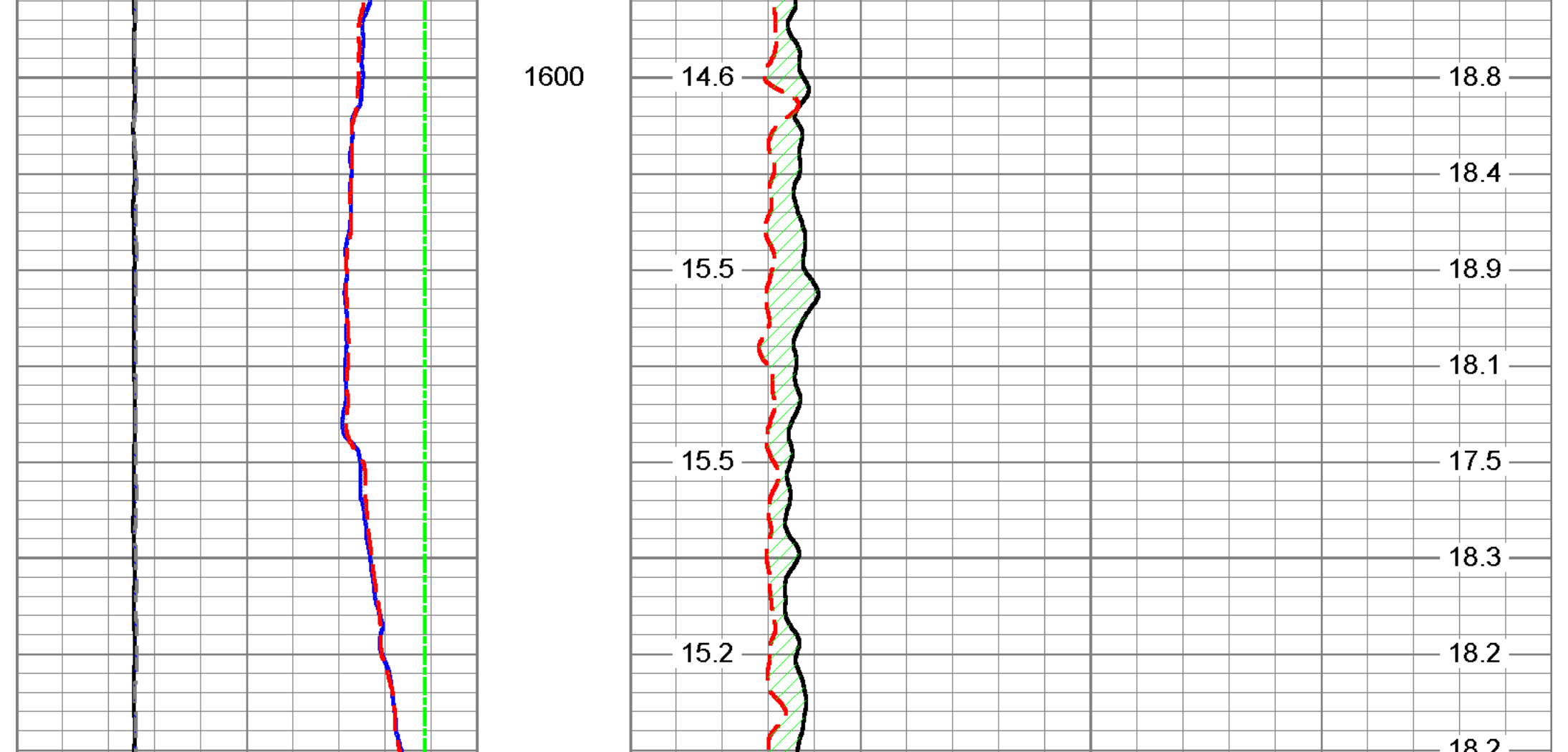
-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100

MV Geophysical

Station #3: 1140'

Database File: davietp1.db
Dataset Pathname: run2/pass23
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 17:36:47 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



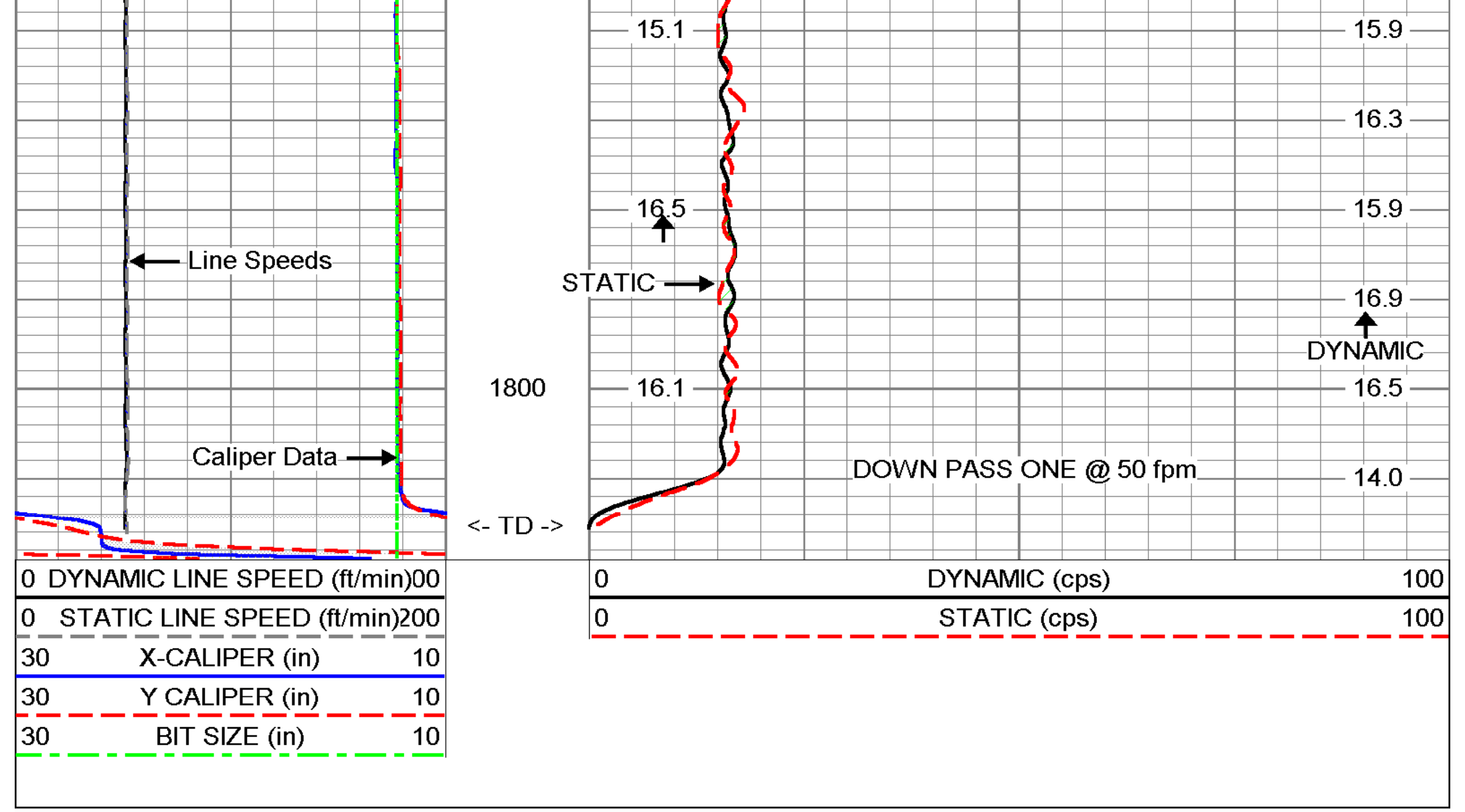
-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100

MV Geophysical

Station #2: 1350'

Database File: davietp1.db
Dataset Pathname: run2/pass21
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 17:33:05 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



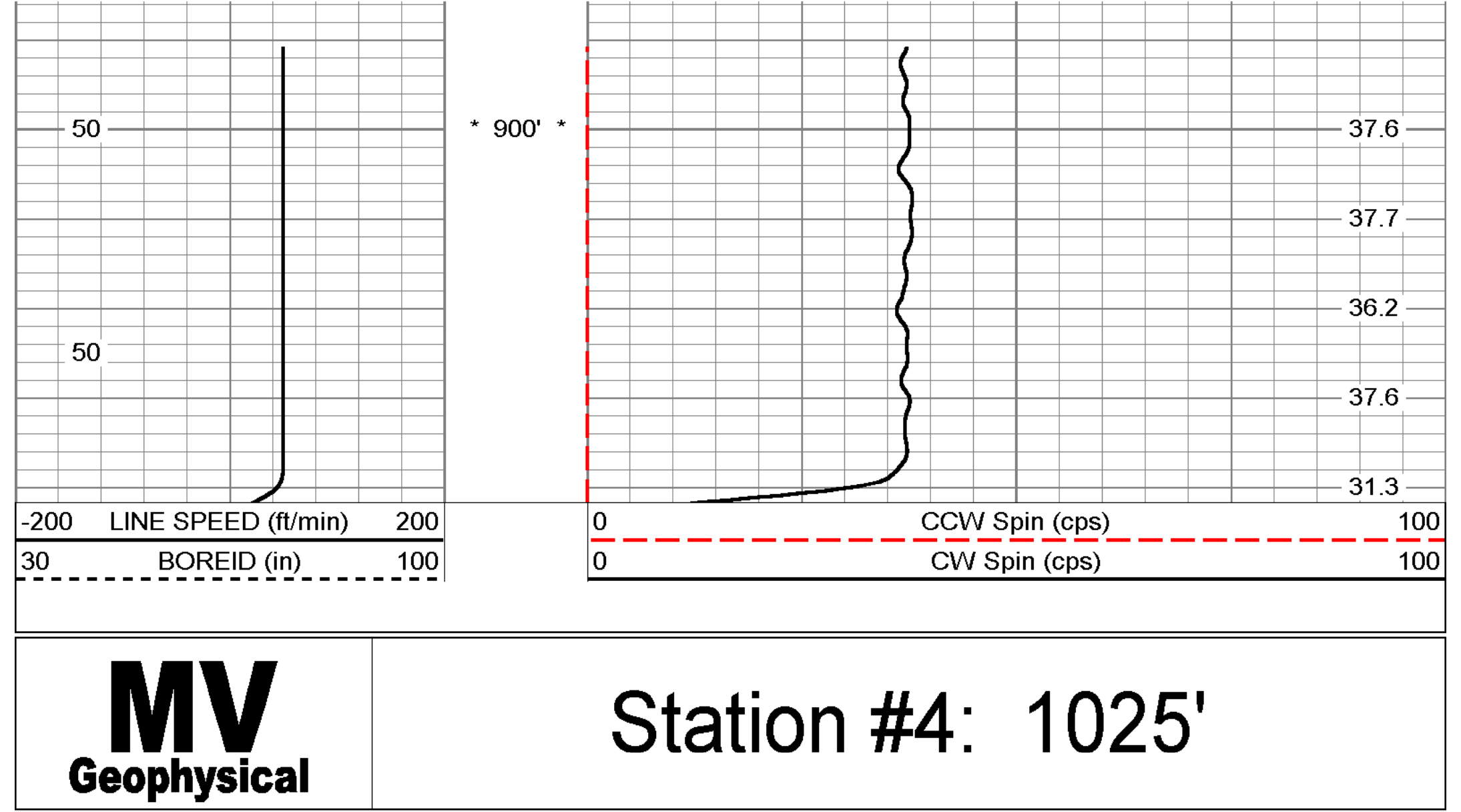
-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100

MV Geophysical

Station #1: 1550'

Database File: davietp1.db
Dataset Pathname: run2/pass20
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 17:28:50 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



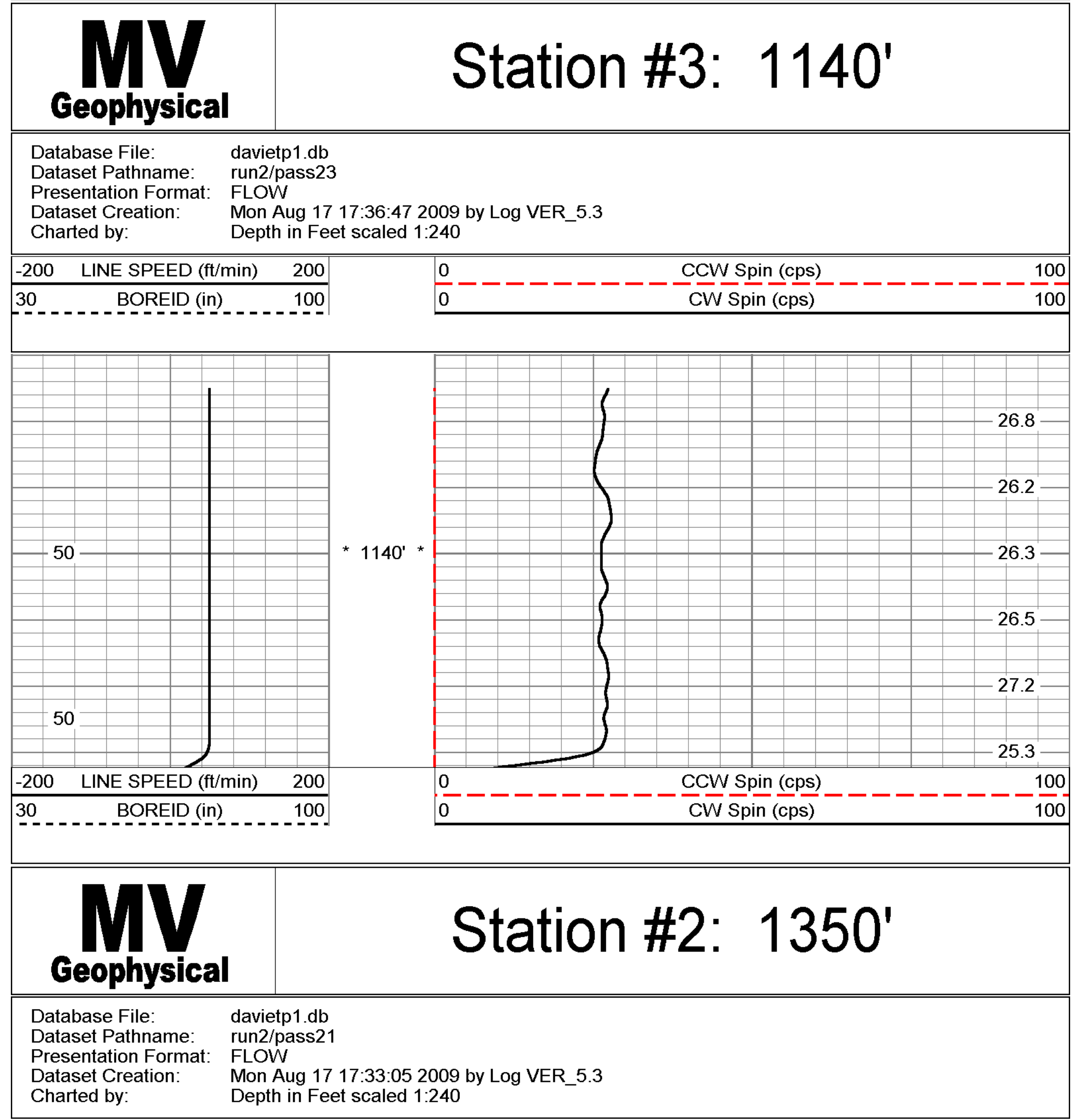
-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100

MV Geophysical

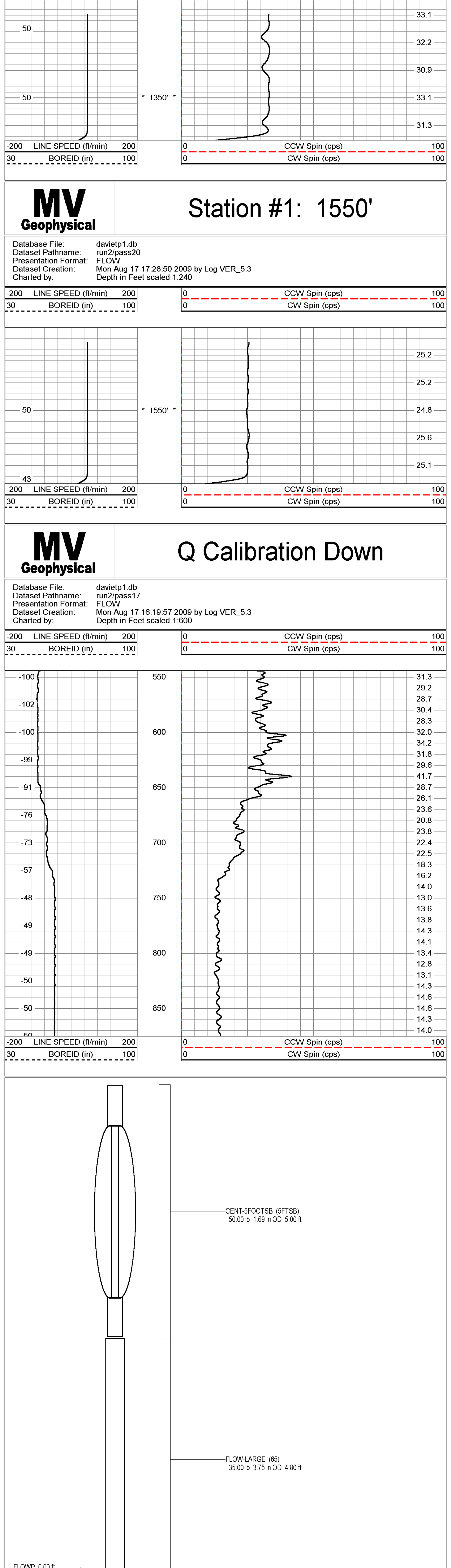
Q Calibration Down

Database File: davietp1.db
Dataset Pathname: run2/pass17
Presentation Format: FLOW
Dataset Creation: Mon Aug 17 16:19:57 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:600

-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



-200 LINE SPEED (ft/min) 200
30 BOREID (in) 100
0 CCW Spin (cps) 100
0 CW Spin (cps) 100



Dataset: run2/pass17
Total Length: 9.80 ft
Total Weight: 85.00 lb
O.D. 3.75 in

MV Geophysical

CEMENT BOND LOG w/ VARIABLE DENSITY LOG

Company	Diversified Drilling Corp.
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida

Company	Diversified Drilling Corporation		
Well	TPW-1		
Field	Davie		
County	Broward	State/Prv	Florida
Location	Town of Davie UF Test Site AECOM	Other Services	XY/GR,FCT DIL,BHC,CBL FLO,DHTV
Permanent Datum	G.L.	Elevation	
Log Measured From	G.L.	Elevation	K.B. D.F. G.L.
Drilling Measured From	G.L.		

Date	17-AUG-2009	
Run Number	FOUR	
Depth Driller	1815'	
Depth Logger	1815'	
Bottom Logged Interval	1807'	
Top Log Interval	945'	
Open Hole Size	12.25"	
Type Fluid	H2O	
Density / Viscosity	na/na	
Max. Recorded Temp.	see FCT log	
Estimated Cement Top	SURFACE	
Time Well Ready	07:30 8/17/2009	
Time Logger on Bottom	15:15 8/17/2009	
Equipment Number	MVGS-1	
Location	Ft. Myers	
Recorded By	S.Miller/C.Miller	
Witnessed By	S. English (AECOM)	D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No.	2009118	P.O. #:111555	Job No.:	* Field Print *

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Comments

CBL tool run Centralized.

MV Geophysical

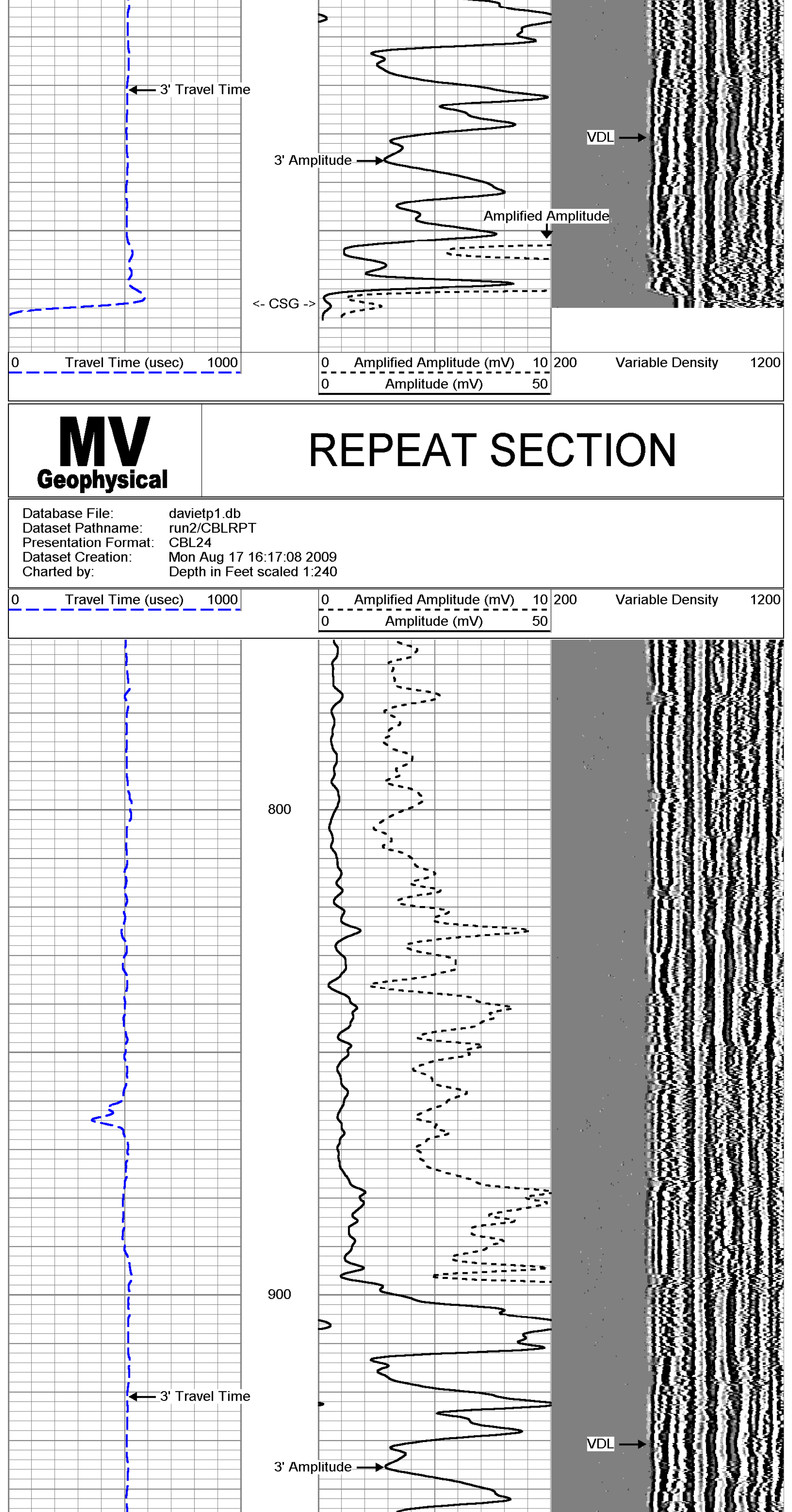
MAIN PASS

Database File: davietp1.db
Dataset Pathname: run2/CBLMAIN
Presentation Format: CBL24
Dataset Creation: Mon Aug 17 16:11:47 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

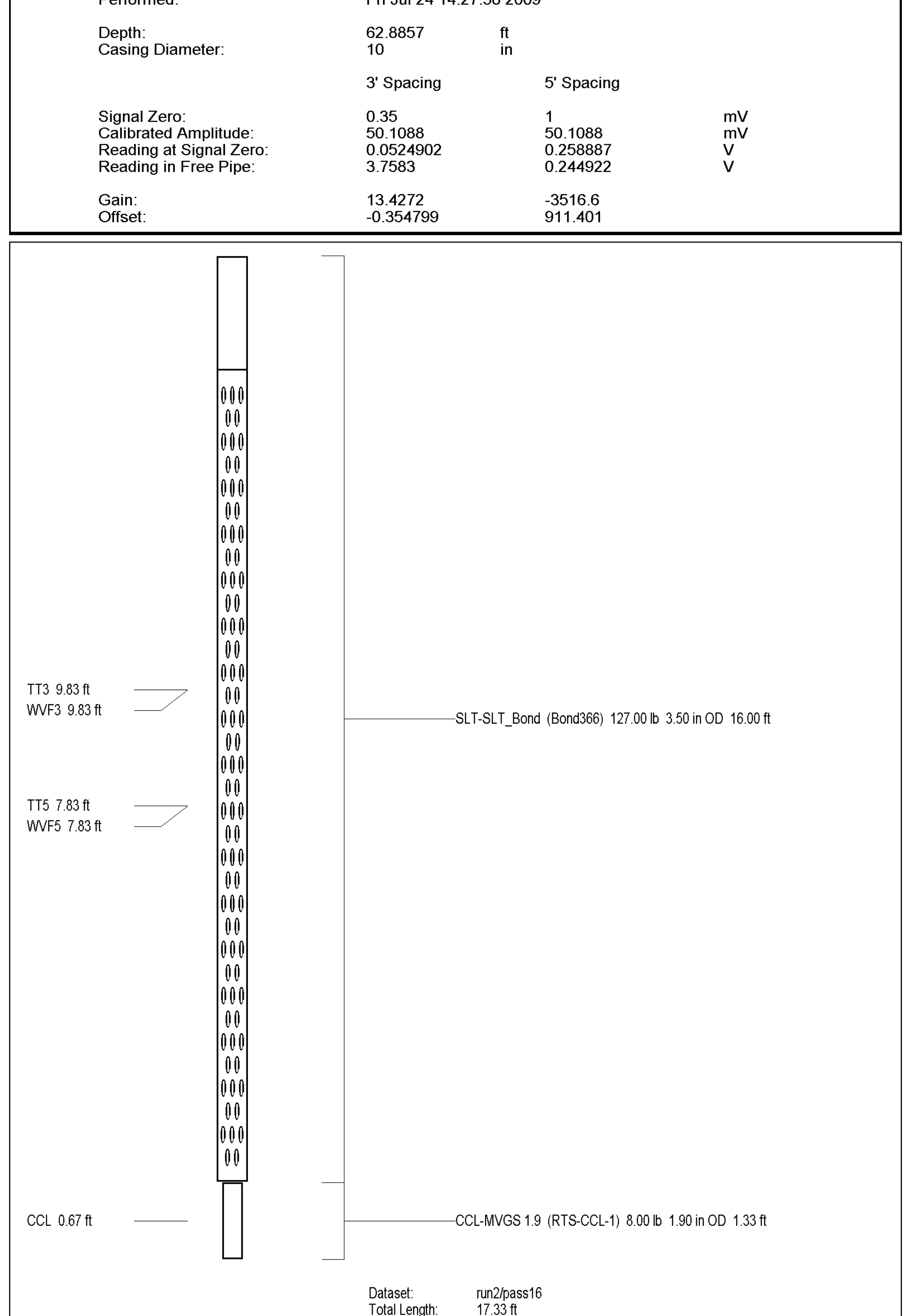
REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: run2/CBLRPT
Presentation Format: CBL24
Dataset Creation: Mon Aug 17 16:17:08 2009
Charted by: Depth in Feet scaled 1:240



Cement Bond Log Calibration Report

Serial Number:	Bond366		
Tool Model:	SLT_Bond		
Performed:	Fri Jul 24 14:27:58 2009		
Depth:	62.8857	ft	
Casing Diameter:	10	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.35	1	mV
Calibrated Amplitude:	50.1088	50.1088	mV
Reading at Signal Zero:	0.0524902	0.258887	V
Reading in Free Pipe:	3.7583	0.244922	V
Gain:	13.4272	-3516.6	
Offset:	-0.354799	911.401	


TT3 9.83 ft
WVF3 9.83 ft
TT5 7.83 ft
WVF5 7.83 ft
CCL 0.67 ft
SLT-SLT_Bond (Bond366) 127.00 lb 3.50 in OD 16.00 ft
CCL-MVGS 1.9 (RTS-CCL-1) 8.00 lb 1.90 in OD 1.33 ft

Dataset: run2/pass16
Total Length: 17.33 ft
Total Weight: 135.00 lb
O.D. 3.50 in

MV Geophysical

FLUID CONDUCTIVITY TEMPERATURE LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR,FCT DIL,BHC,CBL FLO,DHTV

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

Date	17-AUG-2009
Run Number	FOUR
Depth Driller	1815'
Depth Logger	1815'
Bottom Logged Interval	1815'
Top Log Interval	895'
Open Hole Size	12.25"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	07:30 8/17/2009
Time Logger on Bottom	08:15 8/17/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner				

Invoice No.	2009118	P.O. #:111555	2 Fld/12 Fnl Job No.:	davietp1.db * Field Print *

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Comments

STATIC and DYNAMIC DOWN passes were performed.
Cw=7,797 uS/cm @ 72.5 degF (Dynamic Sample). Q =~1,300 gpm.

FLUID RESISTIVITY CALIBRATION REPORT (Performed: 1-AUG-09 14:45)

uS/cm	CPS
2023.6	2985.71
4402.1	2702.45
8828.1	2403.14

TEMPERATURE CALIBRATION REPORT (Performed: 1-AUG-09 14:30)

DEG-F	CPS
38.5	147.851
148.8	2690.21

MV Geophysical

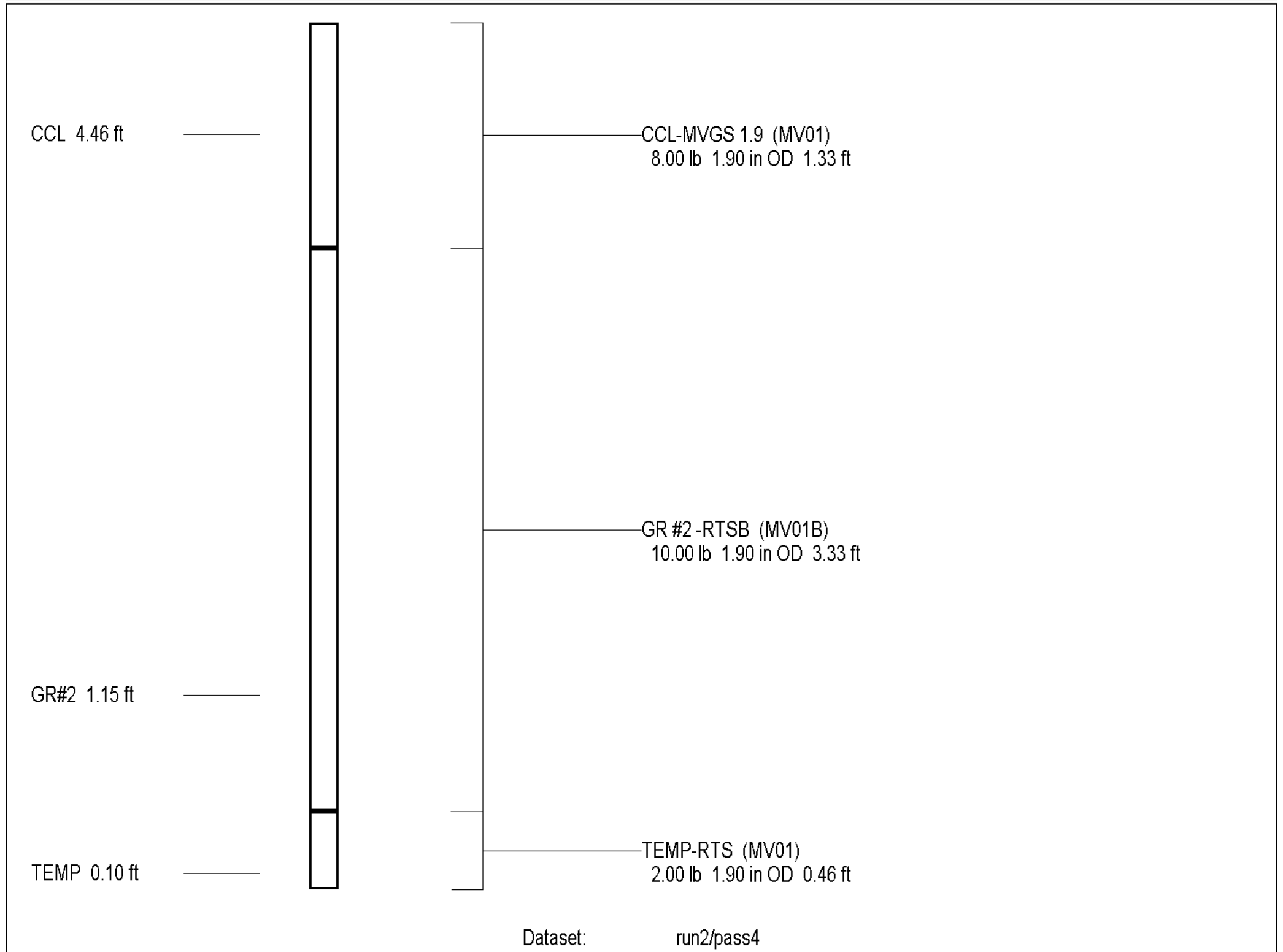
DYNAMIC FCT DOWN

Database File: davietp1.db
Dataset Pathname: run2/DFCT
Presentation Format: FCTDAVI2
Dataset Creation: Mon Aug 17 18:39:03 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

STATIC FCT DOWN

Database File: davietp1.db
Dataset Pathname: run2/SFCT
Presentation Format: FCTDAVI1
Dataset Creation: Mon Aug 17 18:04:15 2009
Charted by: Depth in Feet scaled 1:240



Dataset: run2/pass4
Total Length: 5.12 ft
Total Weight: 20.00 lb
O.D. 1.90 in

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

MV Geophysical

X-Y CALIPER GAMMA RAY LOG

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR,FCT DIL,BHC FLO,DHTV
Permanent Datum	G.L.
Log Measured From	G.L.
Drilling Measured From	G.L.
Elevation	
Elevation	K.B. D.F. G.L.

Date	21-SEP-2009	
Run Number	FIVE	
Depth Driller	1582'	
Depth Logger	1582'	
Bottom Logged Interval	1582'	
Top Log Interval	SURFACE	
Open Hole Size	15"	
Type Fluid	H2O	
Density / Viscosity	na/na	
Max. Recorded Temp.	see FCT log	
Estimated Cement Top	SURFACE	
Time Well Ready	09:30 9/21/2009	
Time Logger on Bottom	13:00 9/21/2009	
Equipment Number	MVGS-1	
Location	Ft. Myers	
Recorded By	S.Miller/C.Miller	
Witnessed By	S. English (AECOM)	D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				
FIVE	15"	965'	1582'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner				
Invoice No.	2009136	P.O. #:111555	2 Fld/12 Fnl Job No.: 70902	davietp1.db * Final Print *

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Comments

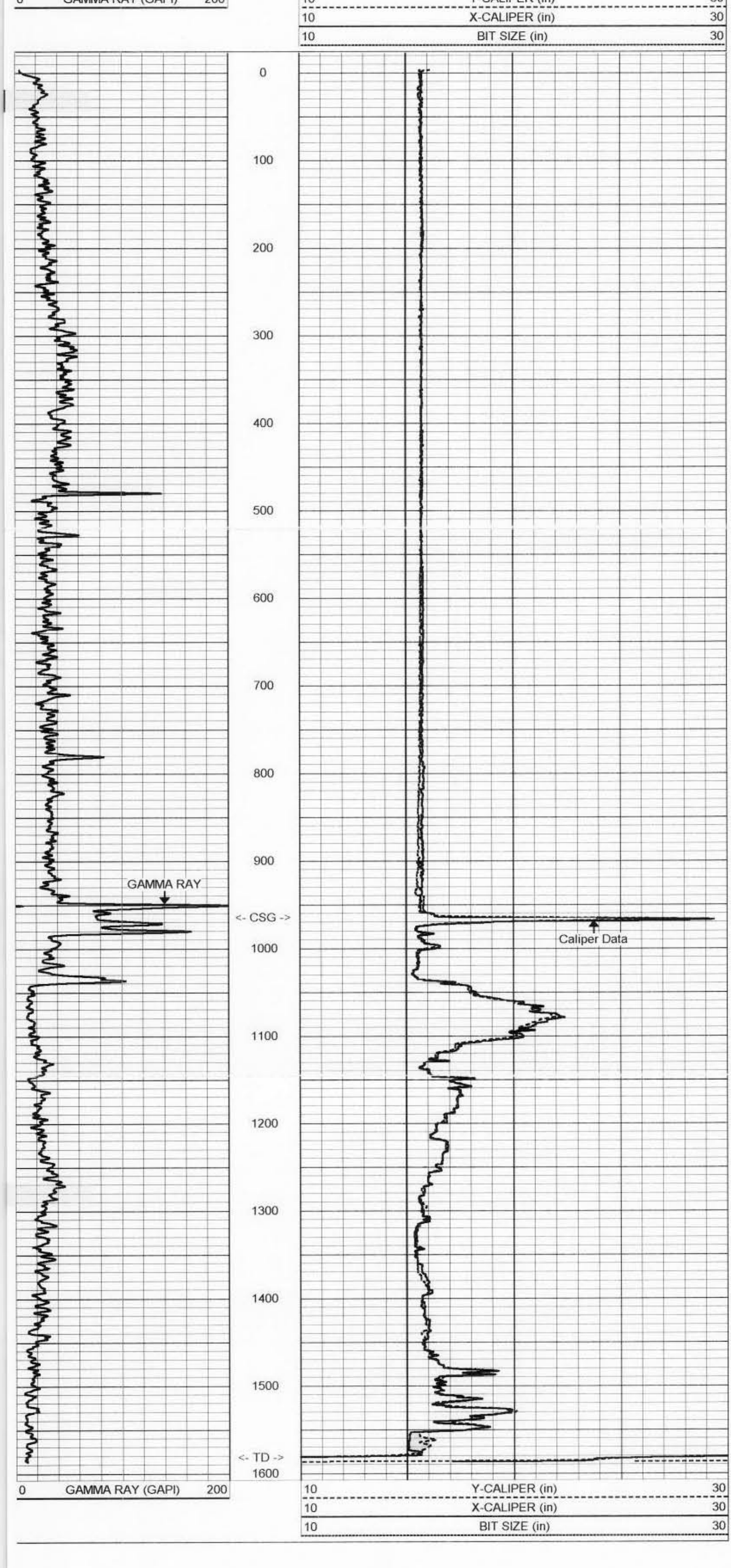
X-Y Caliper Arm Extensions: 33"

Hydraulic Packoff / Full Riser - All Services

MV Geophysical

MAIN PASS

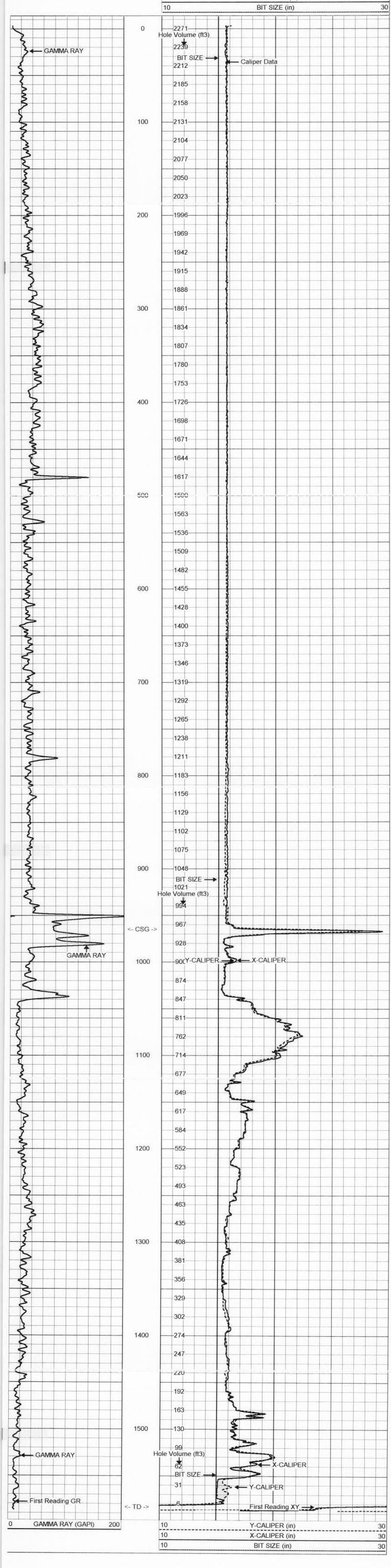
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: xy103021.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

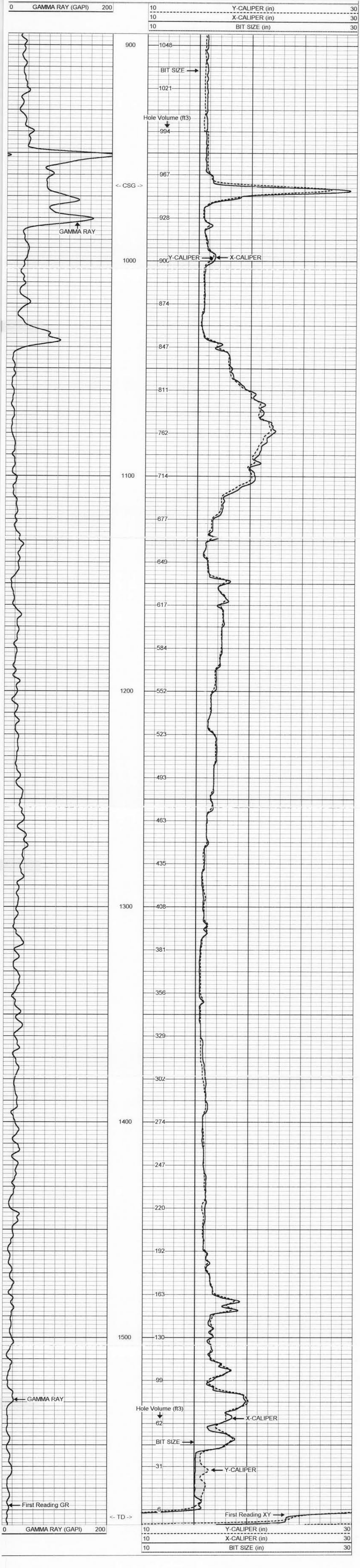
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: xy103025.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

MAIN PASS

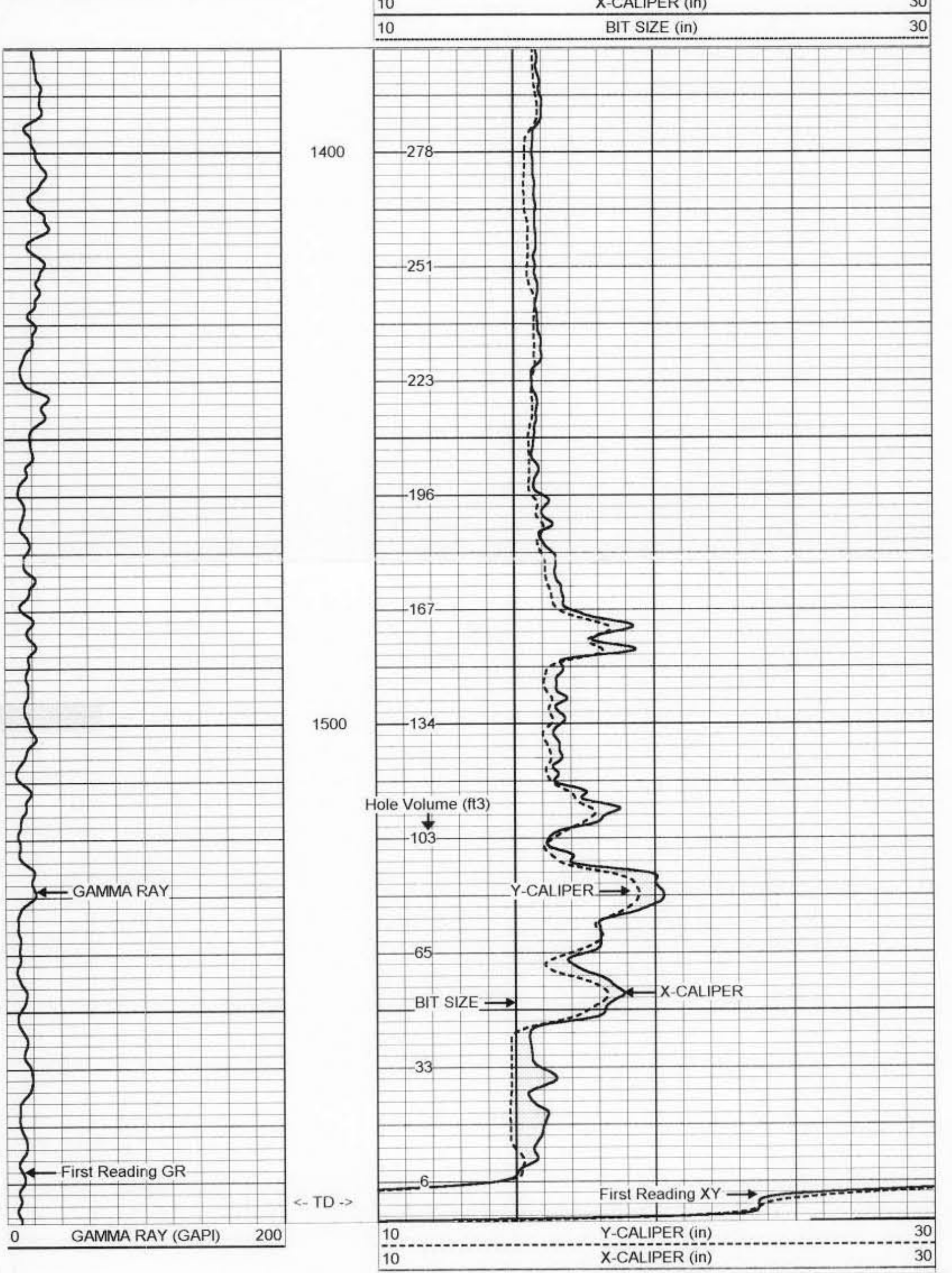
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: xy103025.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:240



MV Geophysical

REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: run3/REPEAT
Presentation Format: xy103025.prs
Dataset Creation: Mon Sep 21 13:57:41 2009
Charted by: Depth in Feet scaled 1:240

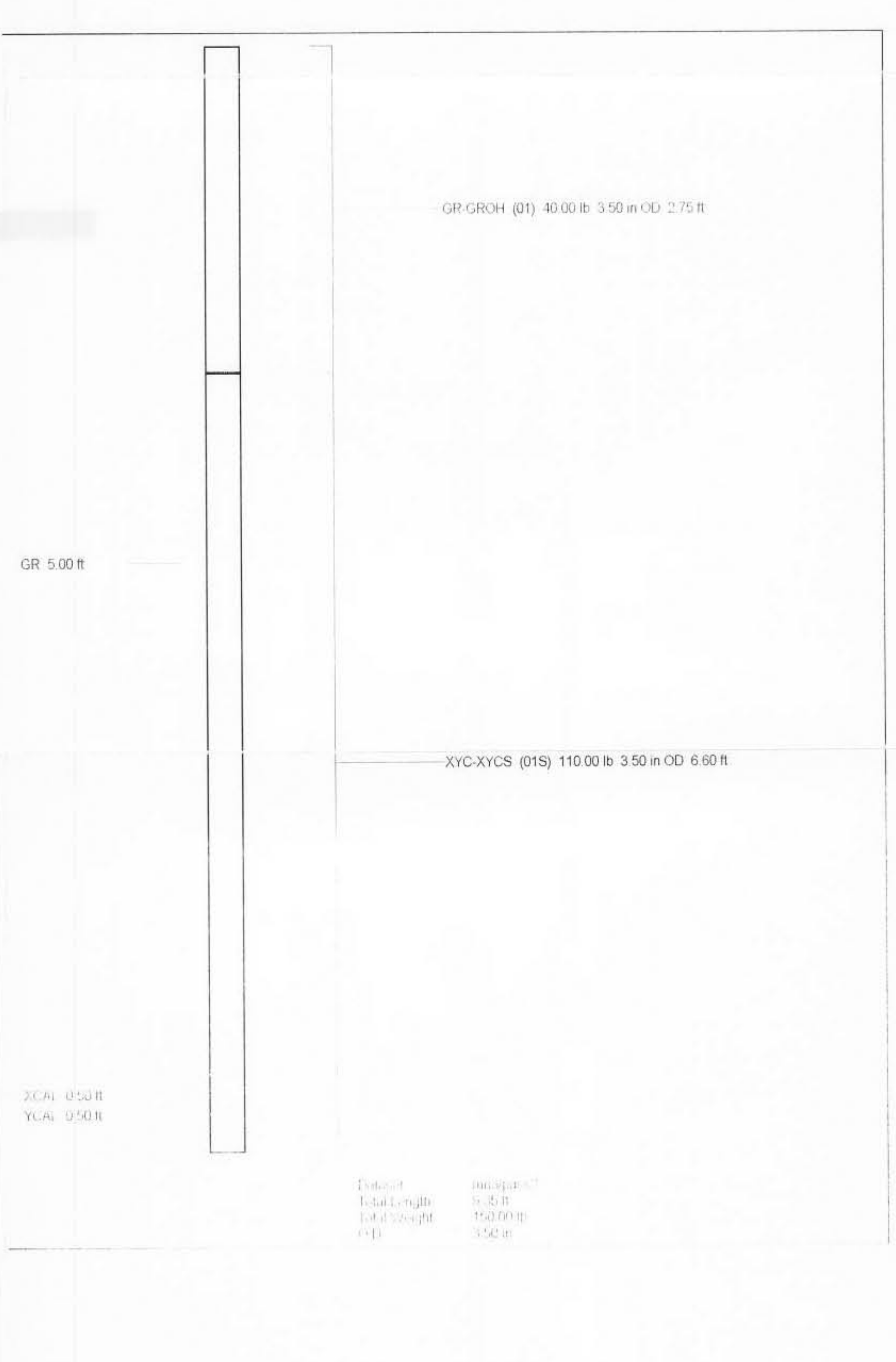


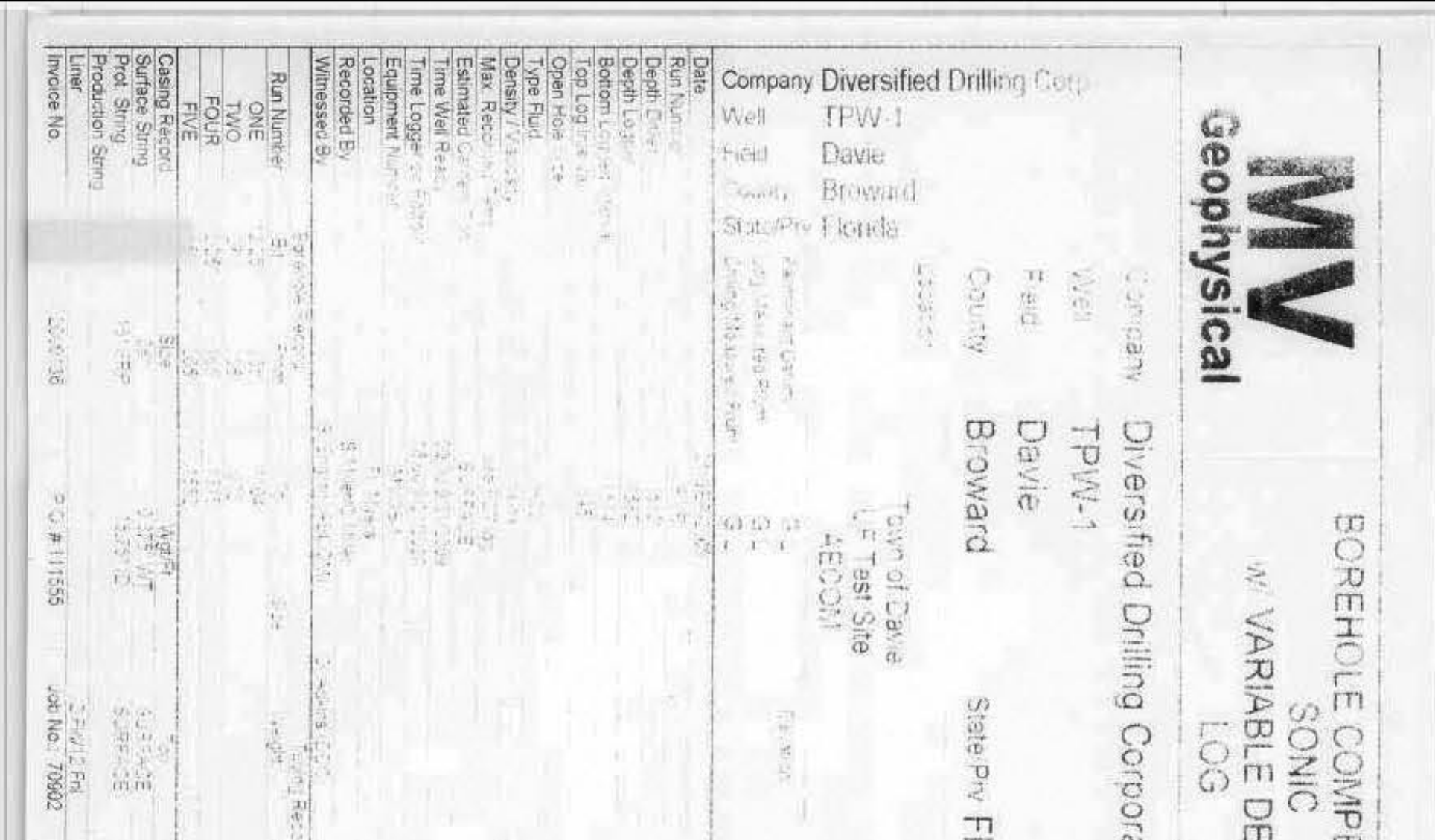
XY Caliper Calibration Report

Serial Number:	01S		
Tool Model:	XYCS		
Performed:	Mon Sep 21 13:41:24 2009		
Small Ring:	15.75	in	
Large Ring:	33	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	785.3	785.7	cps
Reading with Large Ring:	1030.7	1041.5	cps
Gain:	0.0702934	0.0674355	
Offset:	-39.4514	-37.2341	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GROH	
Performed:	Mon Sep 21 13:12:52 2009	
Calibrator Value:	120	GAPI
Background Reading:	14.894	cps
Calibrator Reading:	126.693	cps
Sensitivity:	1.07335	GAPI/cps





MV Geophysical

BOREHOLE COMPENSATED
SONIC
W/ VARIABLE DENSITY
LOG

Company Diversified Drilling Corp
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company Diversified Drilling Corporation
Well TPW-1
Field Davie
County Broward State/Prv Florida

Location Town of Davie
LF Test Site
4ECOM

Other Services
GR FOT
DL BHC
FLO DHTV

Elevation

Date
Run Number
Depth Driller
Depth Logger
Bottom Logged Interval
Top Log Interval
Open Hole Size
Type Fluid
Density / Viscosity
Max. Recorded Temp.
Estimated Cement Top
Time Well Ready
Time Logger on Bottom
Equipment Number
Location
Recorded By
Witnessed By

Run Number ONE TWO FOUR FIVE | Borehole Record Bit From To
Casing Record Size Wgt/Ft Top Bottom
Surface String SURFACE
Prot. String SURFACE
Production String
Liner
Invoice No. P.O. # 111555 Job No.: 70902 davietp1.db
* Final Print *

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Comments

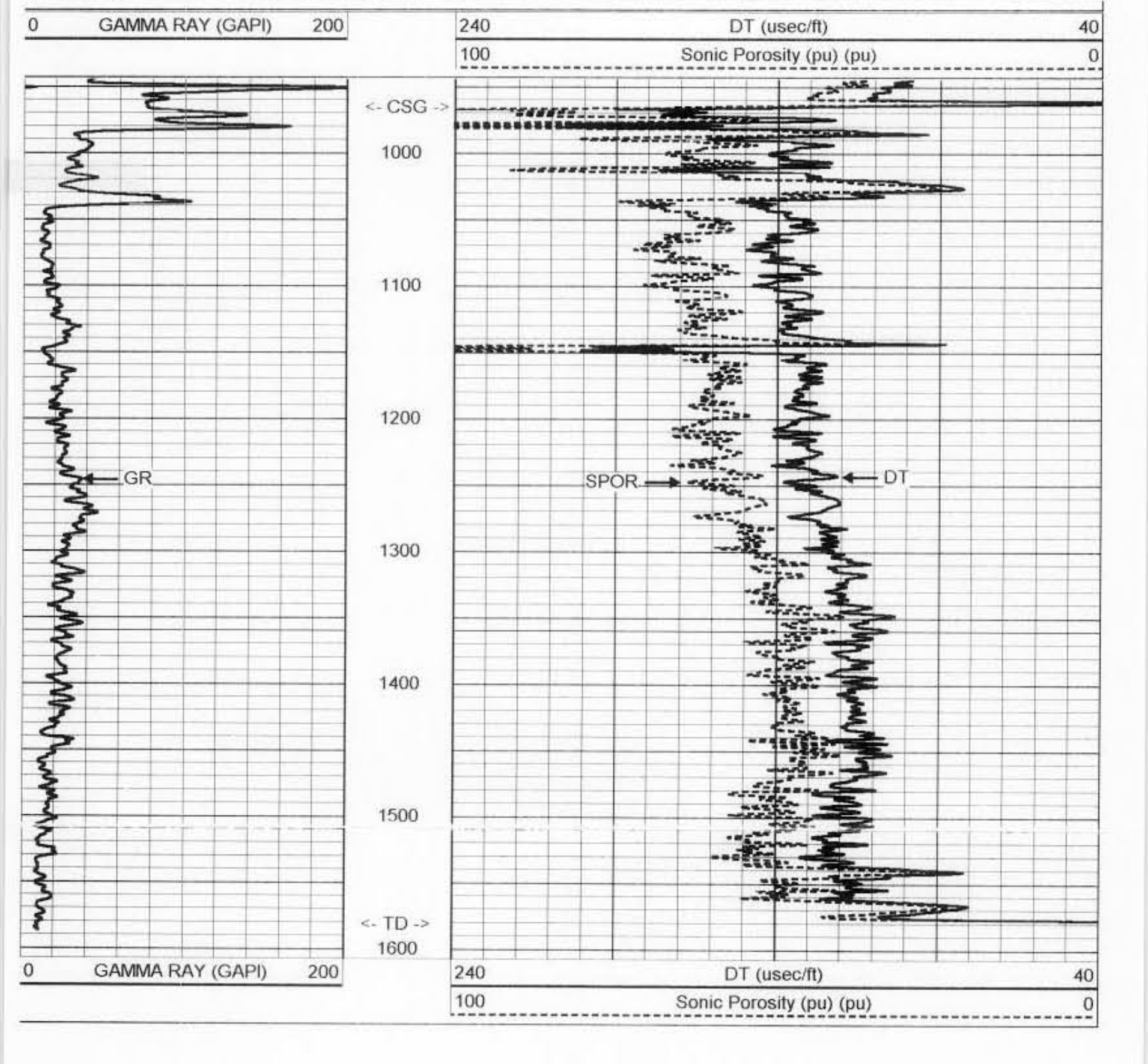
Sonic Porosity was run on a Limestone Matrix (=47.5)

Hydraulic Packoff / Full Riser - All Services

MV Geophysical

MAIN PASS

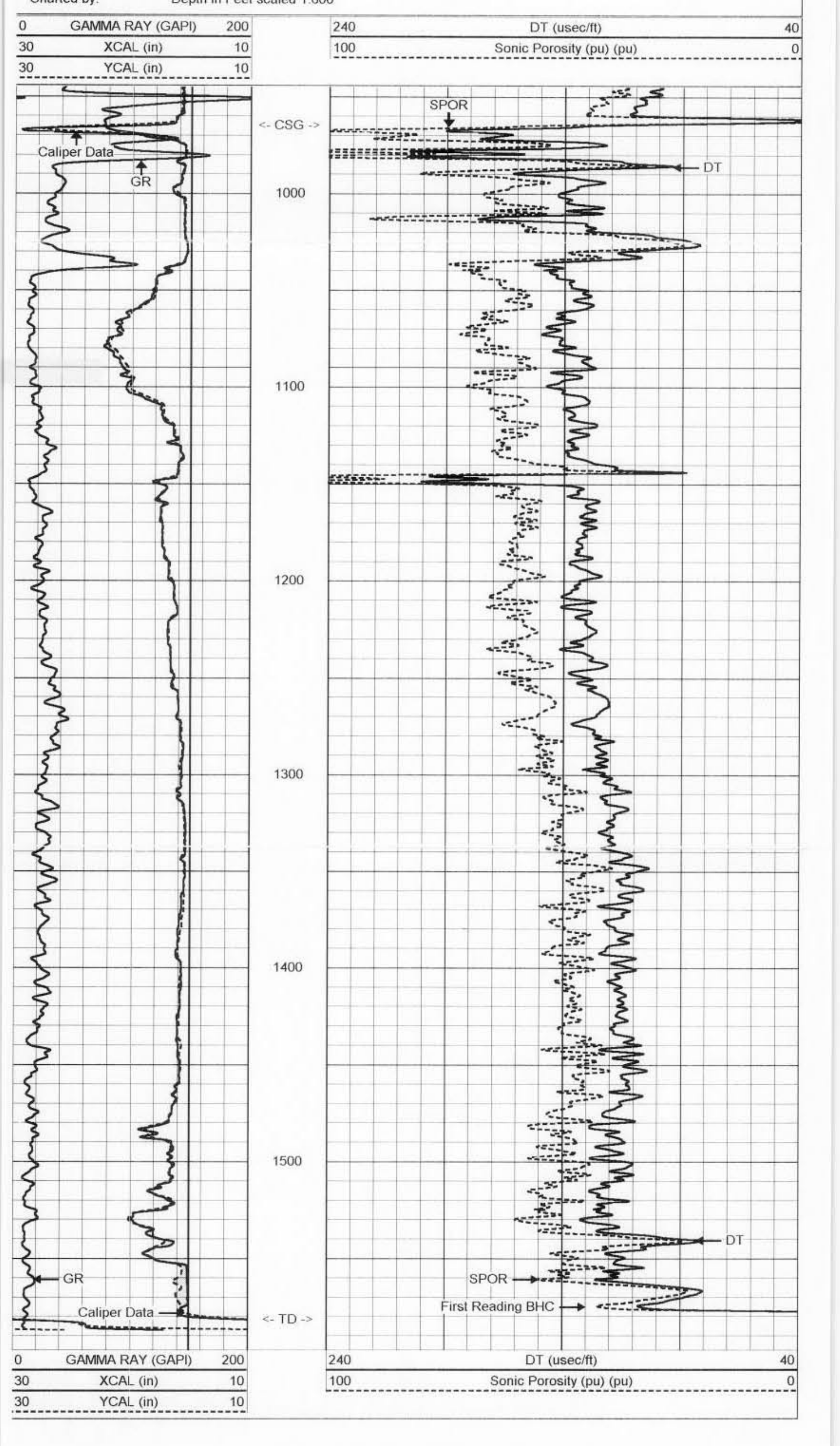
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dtg-12.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

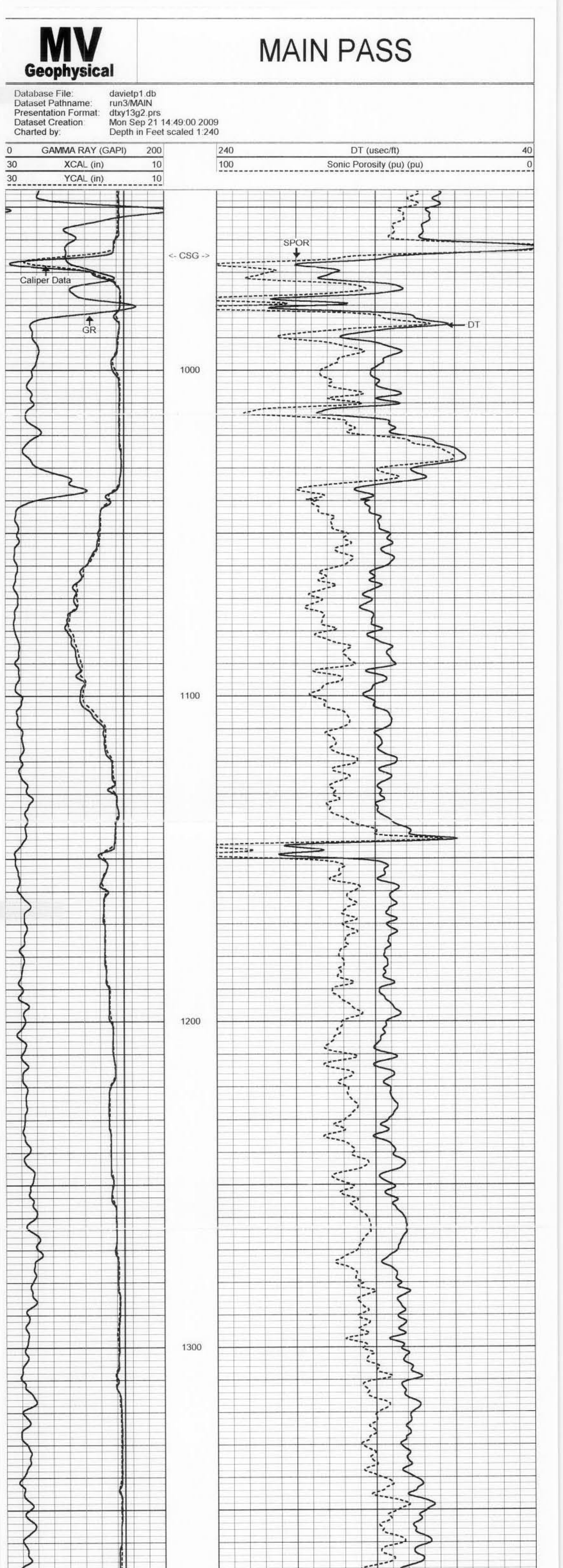
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dtxy13g2.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

MAIN PASS

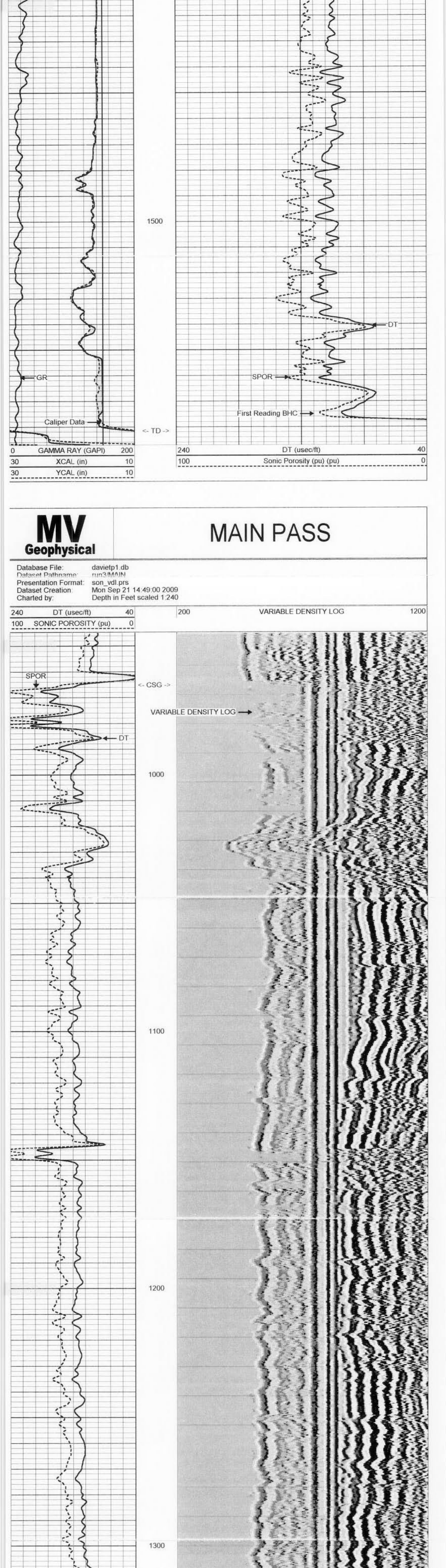
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dtxy13g2.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:240



MV Geophysical

MAIN PASS

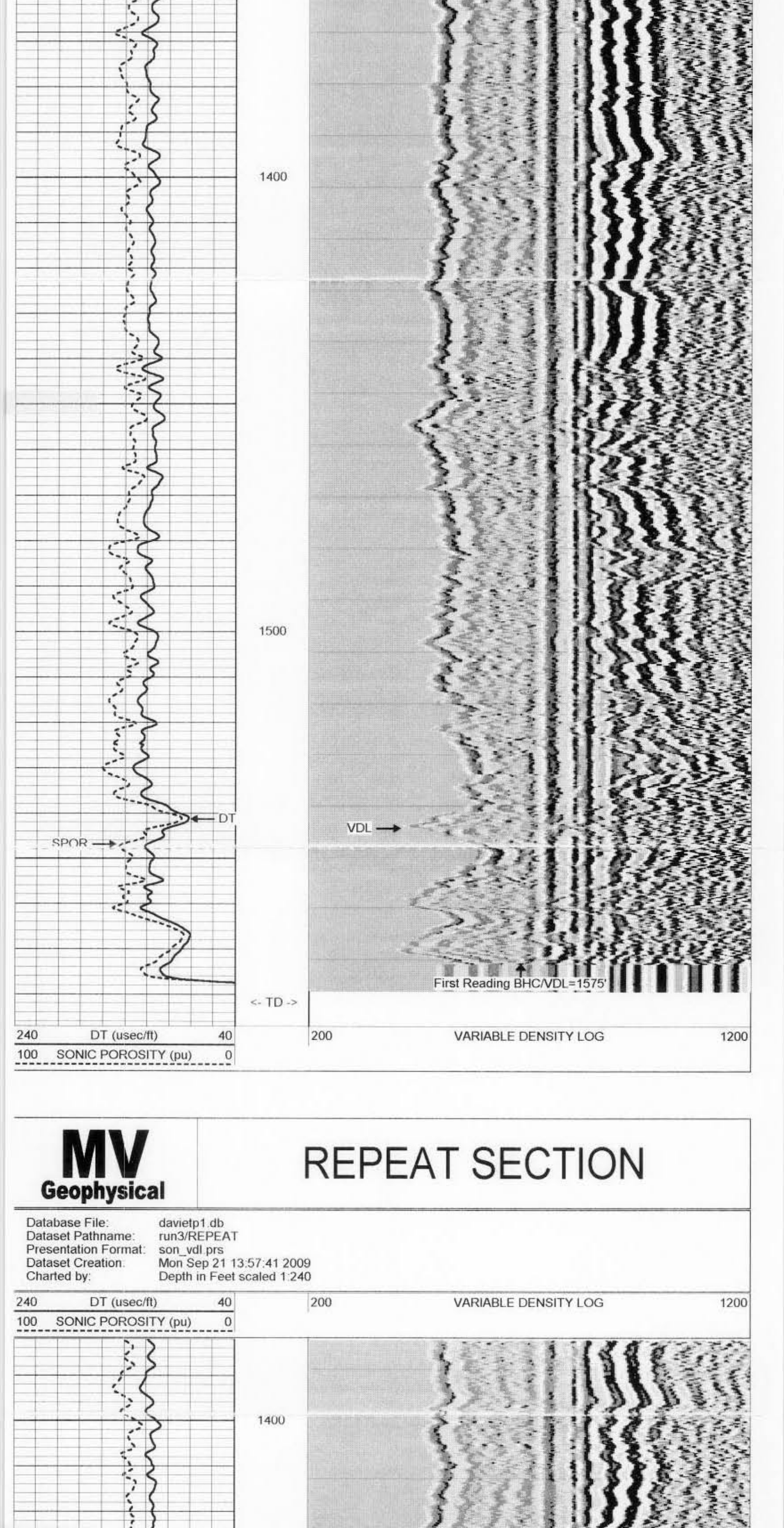
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: son_vdl.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:240

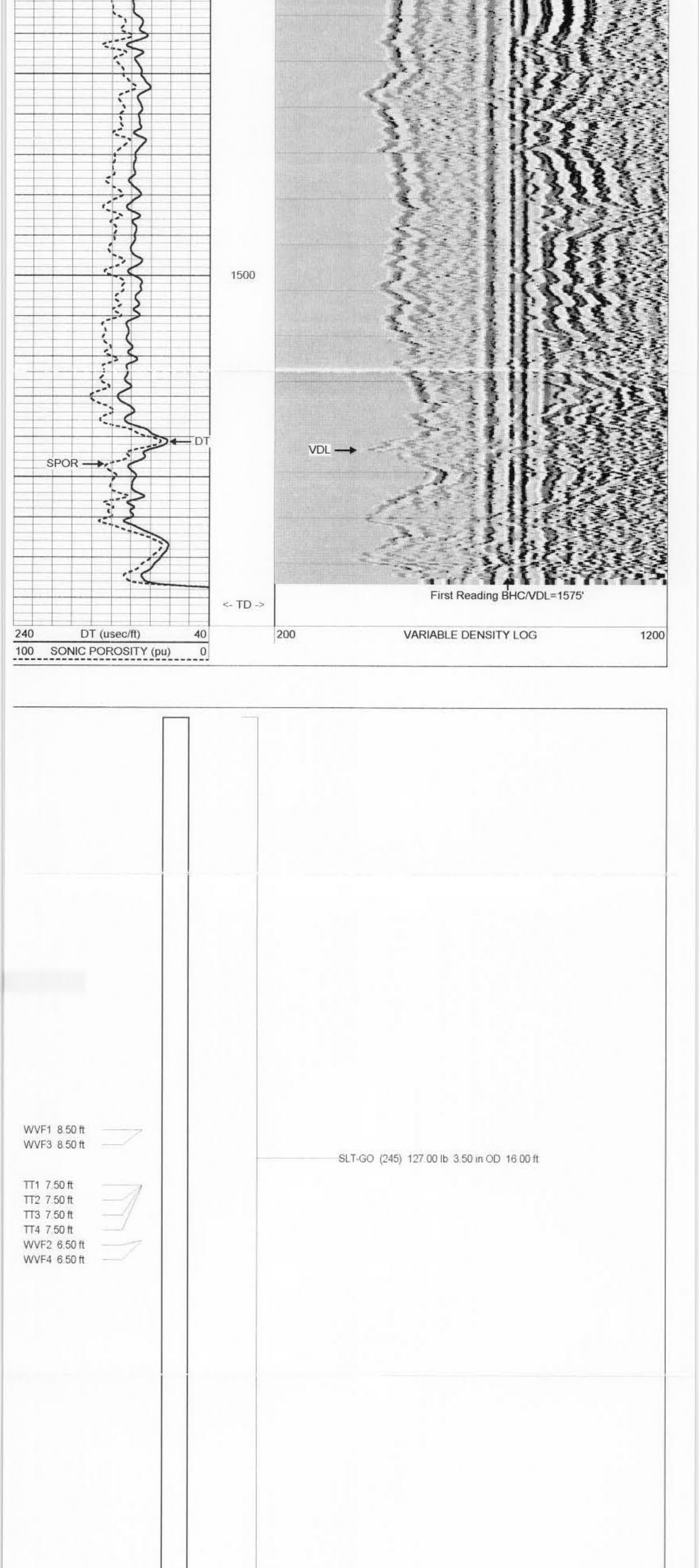


MV Geophysical

REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: run3/REPEAT
Presentation Format: son_vdl.prs
Dataset Creation: Mon Sep 21 13:57:41 2009
Charted by: Depth in Feet scaled 1:240





Dataset: run3/pass9
Total Length: 16.00 ft
Total Weight: 127.00 lb
O.D. 3.50 in

MV Geophysical

DUAL INDUCTION
LL3 / SP
LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR,FCT DIL,BHC FLO,DHTV
Permanent Datum	G.L.
Log Measured From	G.L.
Drilling Measured From	G.L.
Elevation	K.B. D.F. G.L.

Date	21-SEP-2009
Run Number	FIVE
Depth Driller	1582'
Depth Logger	1582'
Bottom Logged Interval	1580'
Top Log Interval	965'
Open Hole Size	15"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	09:30 9/21/2009
Time Logger on Bottom	15:00 9/21/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				
FIVE	15"	965'	1582'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db
Invoice No.	2009136	P.O.#:111555	Job No.: 70902	* Final Print *

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Comments

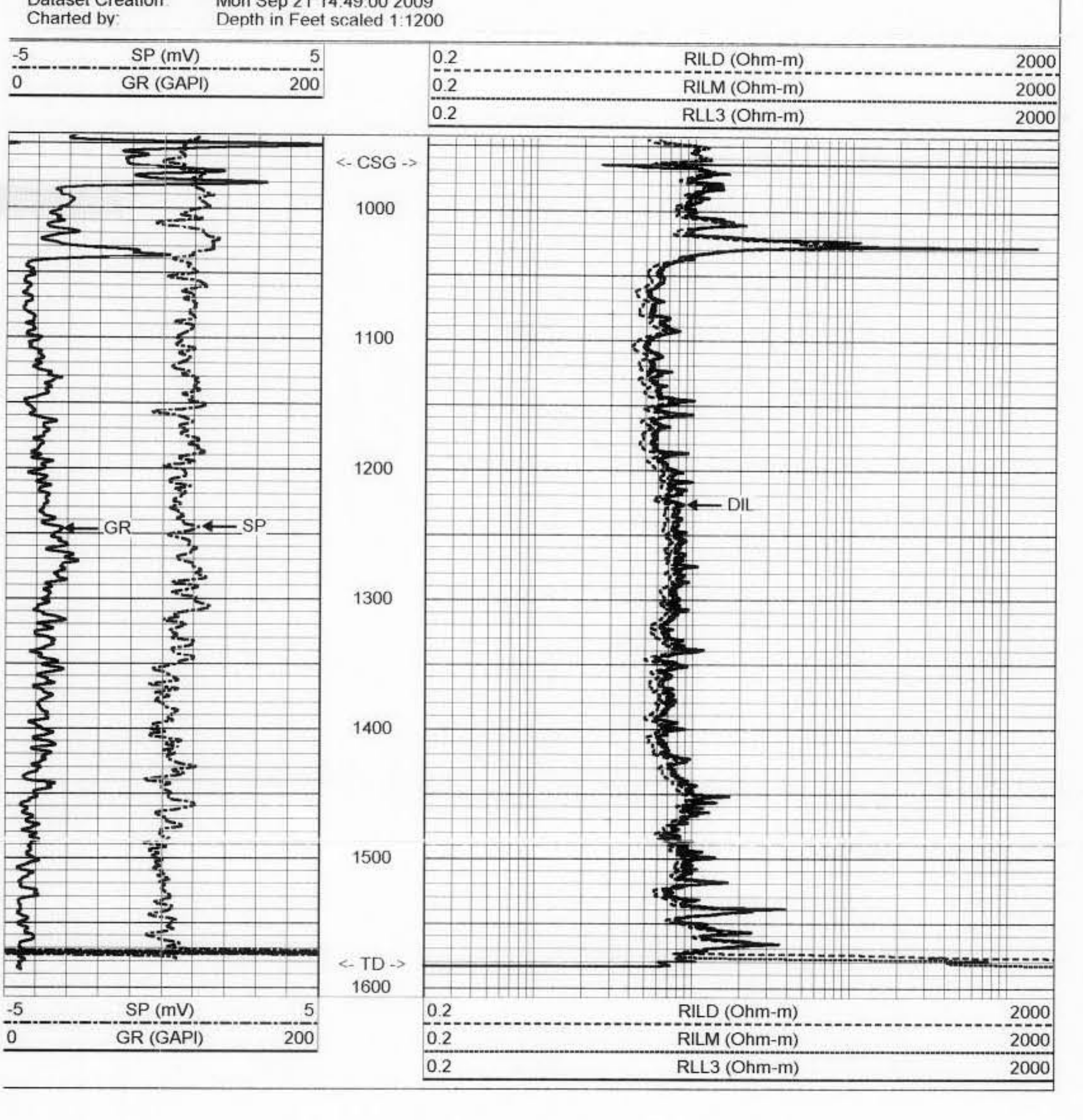
Rw=1.285 ohm-m @ 70.5 degF

Hydraulic Packoff / Full Riser - All Services

MV Geophysical

MAIN PASS

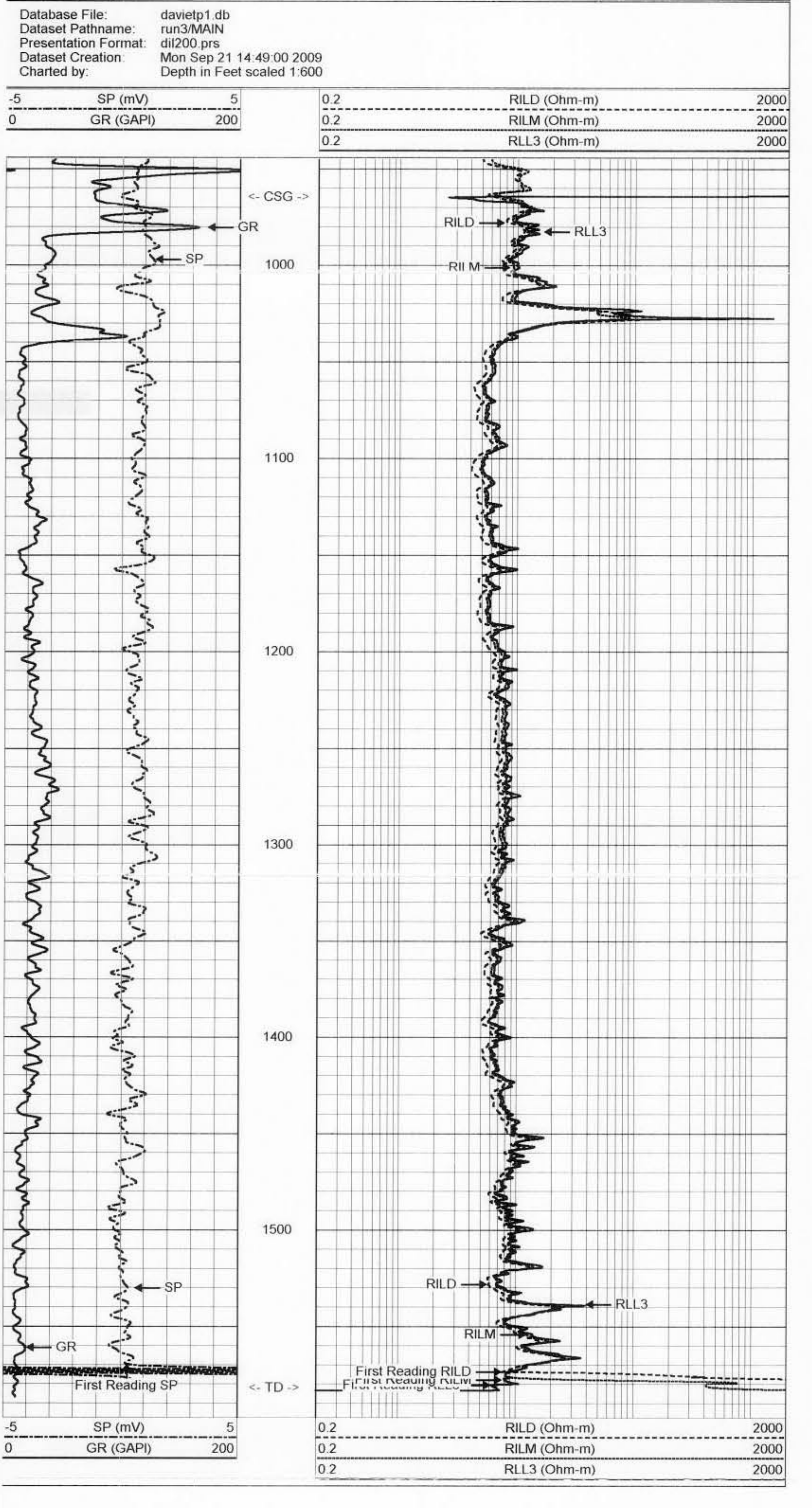
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dil1200.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:1200



MV Geophysical

MAIN PASS

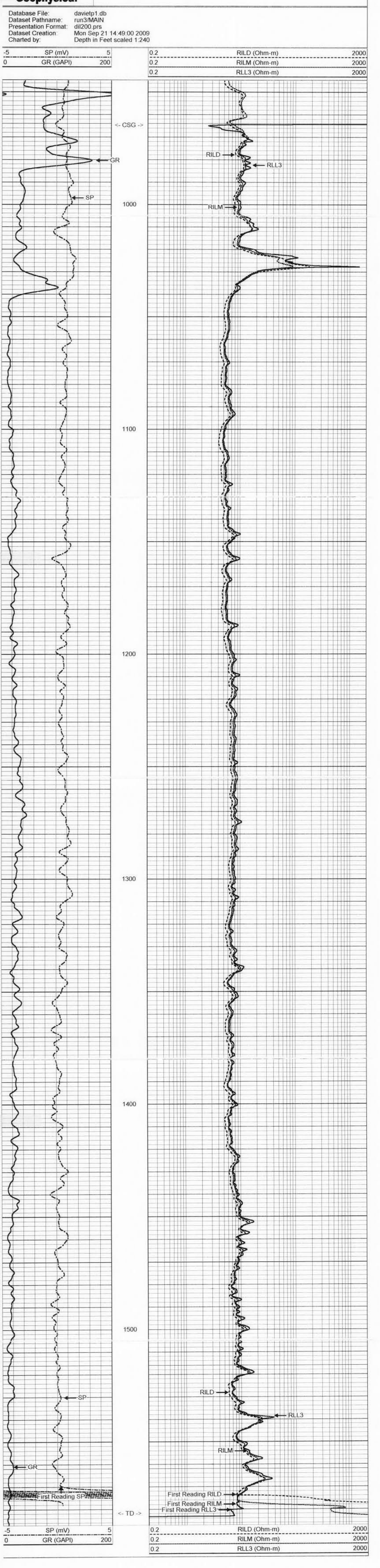
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dil200.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:600



MV Geophysical

MAIN PASS

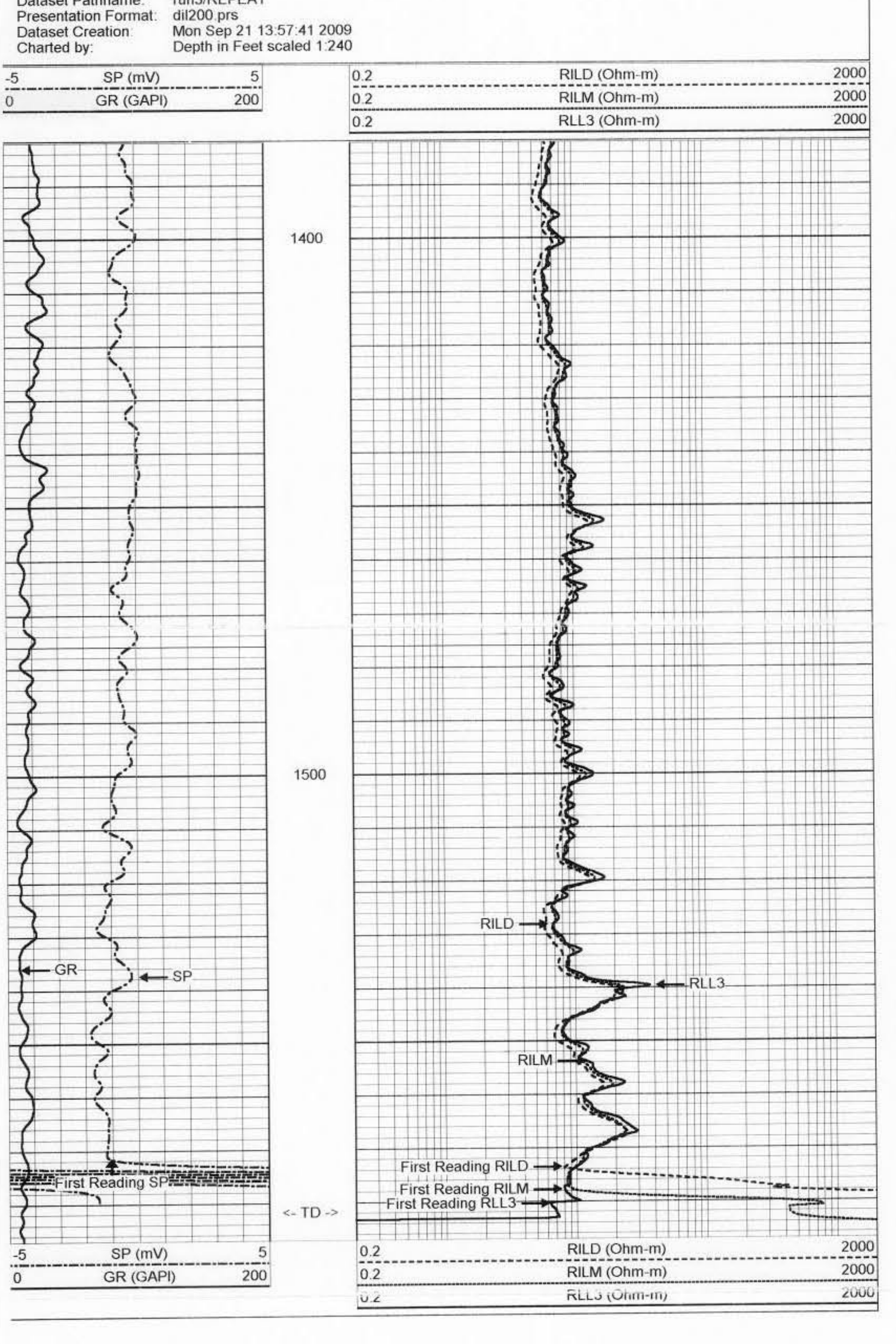
Database File: davietp1.db
Dataset Pathname: run3/MAIN
Presentation Format: dil200.prs
Dataset Creation: Mon Sep 21 14:49:00 2009
Charted by: Depth in Feet scaled 1:240



MV Geophysical

REPEAT SECTION

Database File: davietp1.db
Dataset Pathname: run3/REPEAT
Presentation Format: dil200.prs
Dataset Creation: Mon Sep 21 13:57:41 2009
Charted by: Depth in Feet scaled 1:240



Dual Induction Calibration Report

Serial-Model: 5390-R
Surface Cal Performed: Thu Nov 15 11:21:40 2007
Downhole Cal Performed: Wed Mar 15 11:08:57 2006
After Survey Verification Performed: Thu Nov 15 11:21:50 2007

Surface Calibration

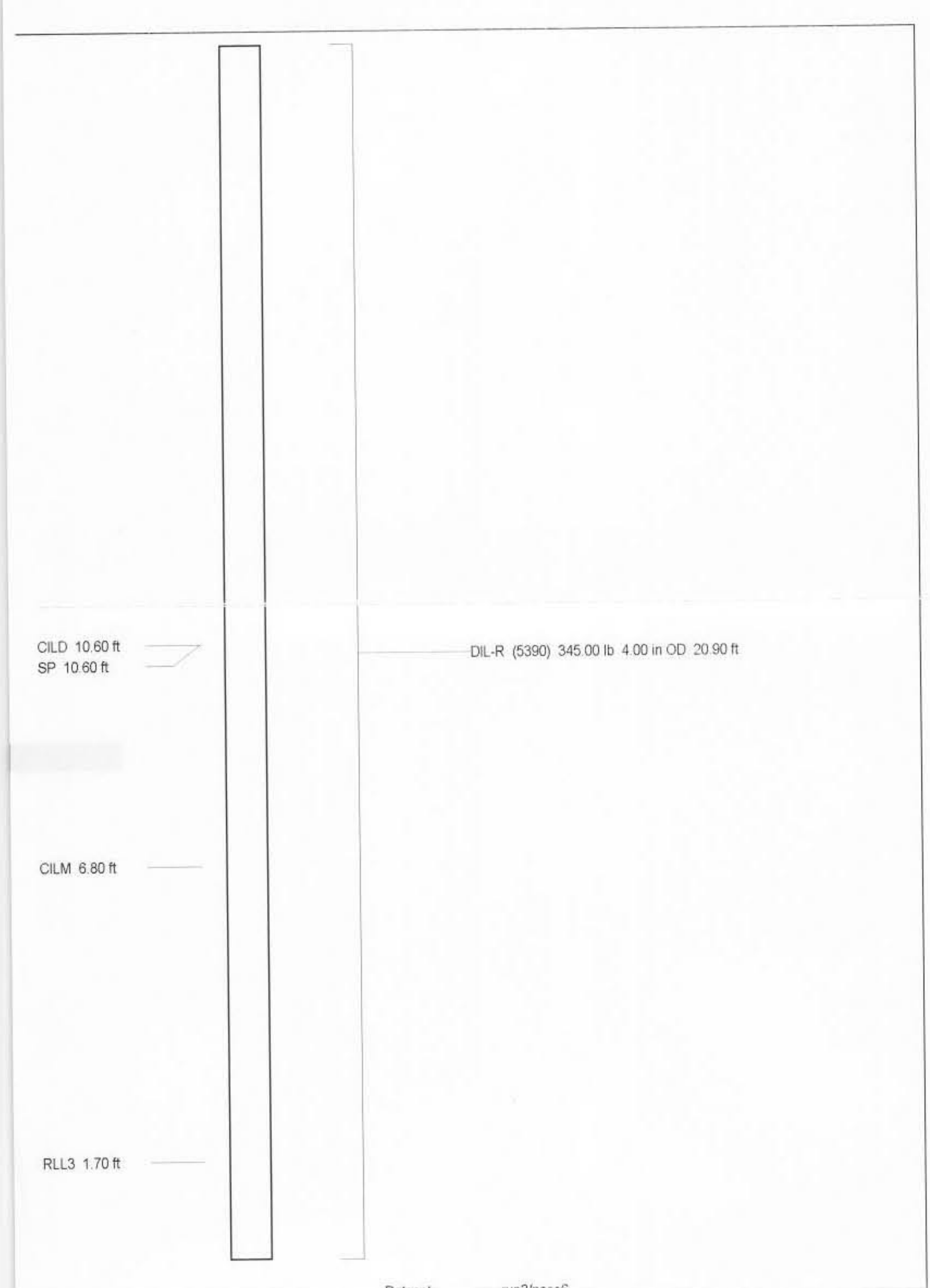
	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.050	0.646	V	0.000	400.000	mmho-m	671.771	-33.646
Medium	0.001	0.732	V	0.000	464.000	mmho-m	634.710	-0.492
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.641	V	0.000	400.000	mmho-m	634.996	-7.104
Medium	-0.009	0.738	V	0.000	464.000	mmho-m	620.900	5.734

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-26.499	398.282	mmho-m	-26.130	397.036	mmho-m	0.996	0.268
Medium	-5.803	469.733	mmho-m	-6.353	467.967	mmho-m	0.997	-0.565
Shallow	2.503	0.010	V	494.500	2.000	Ohm-m	197.522	0.043

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	-26.151	398.470	mmho-m	-26.499	398.282	mmho-m	0.996	0.268
Medium	-5.737	470.303	mmho-m	-5.803	469.733	mmho-m	0.997	-0.565
Shallow	567.058	128.961	Ohm-m	494.500	2.000	Ohm-m	1.124	-142.975



Dataset: run3/pass6
Total Length: 20.90 ft
Total Weight: 345.00 lb
O.D.: 4.00 in

MV Geophysical

FLOWMETER LOG

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

Company	Diversified Drilling Corporation
Well	TPW-1
Field	Davie
County	Broward
State/Prv	Florida
Location	Town of Davie UF Test Site AECOM
Other Services	XY/GR,FCT DIL,BHC FLO,DHTV

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

Date	21-SEP-2009
Run Number	FIVE
Depth Driller	1582'
Depth Logger	1582'
Bottom Logged Interval	1574'
Top Log Interval	895'
Open Hole Size	15"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	09:30 9/21/2009
Time Logger on Bottom	19:15 9/21/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) | D. Adkins (DDC)

Run Number	Borehole Record Bit	From	To	Tubing Record Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				
FIVE	15"	965'	1582'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	davietp1.db

Invoice No. 2009136 P.O. #:111555 Job No.: 70902 * Final Print *

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Comments

STATIC and DYNAMIC down passes were made at 50 fpm.

FIVE stations performed.

Q =~2200 gpm

MV Geophysical

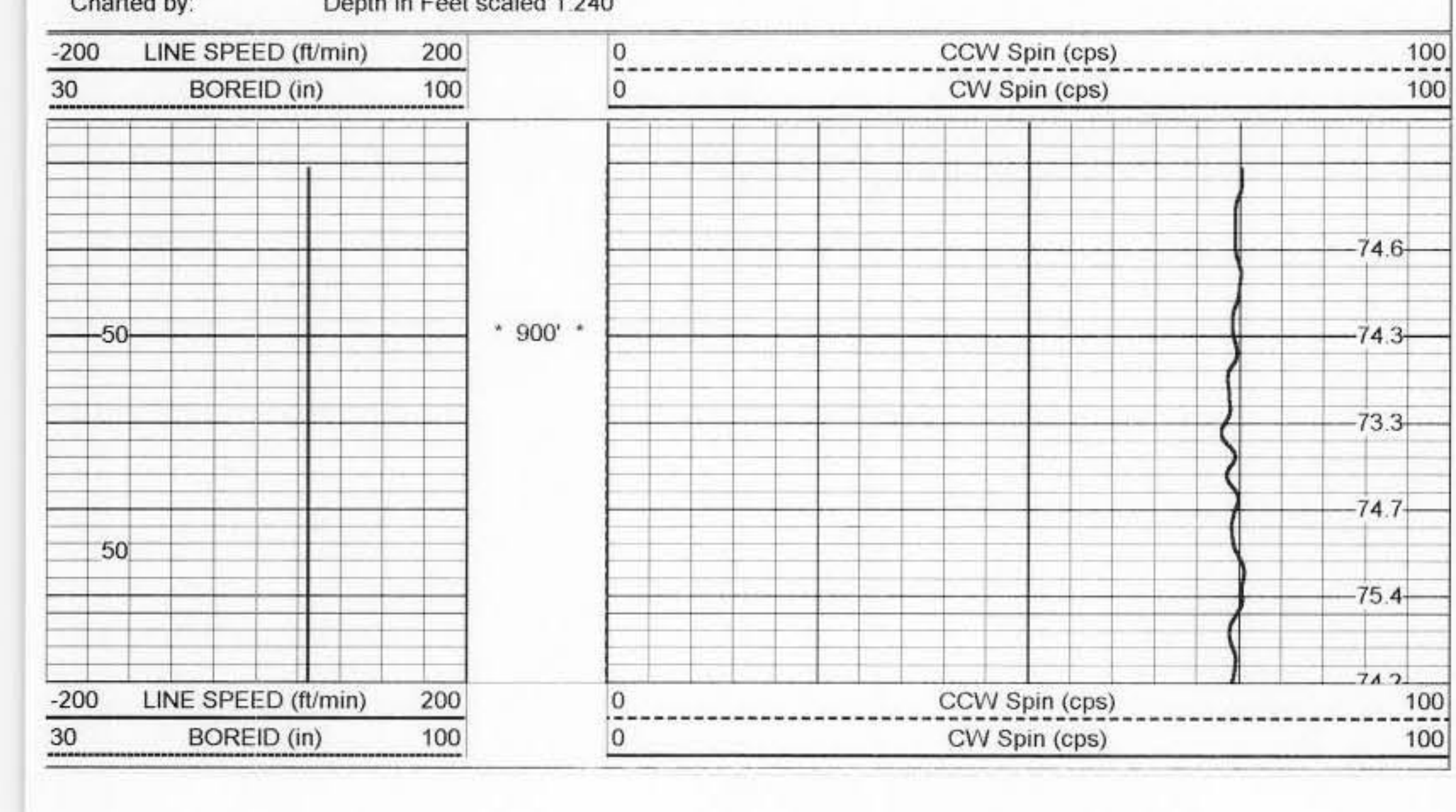
S/D DOWN @ 50 fpm

Database File: davietp1.db
Dataset Pathname: run3/sd50
Presentation Format: q-120.prs
Dataset Creation: Mon Sep 21 19:42:36 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

Station #5: 900'

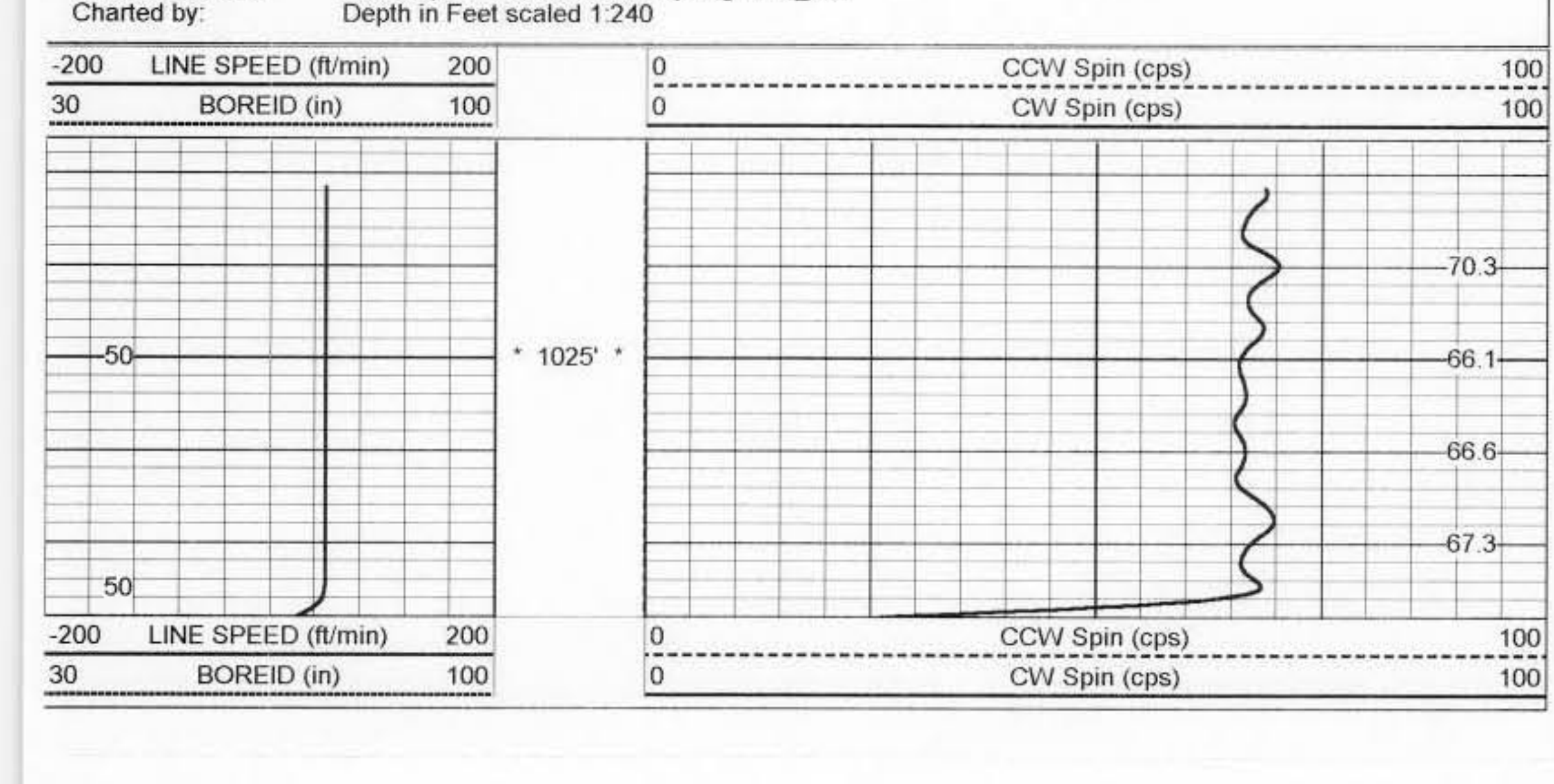
Database File: davietp1.db
Dataset Pathname: run3/pass19
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 20:00:13 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240



MV Geophysical

Station #4: 1025'

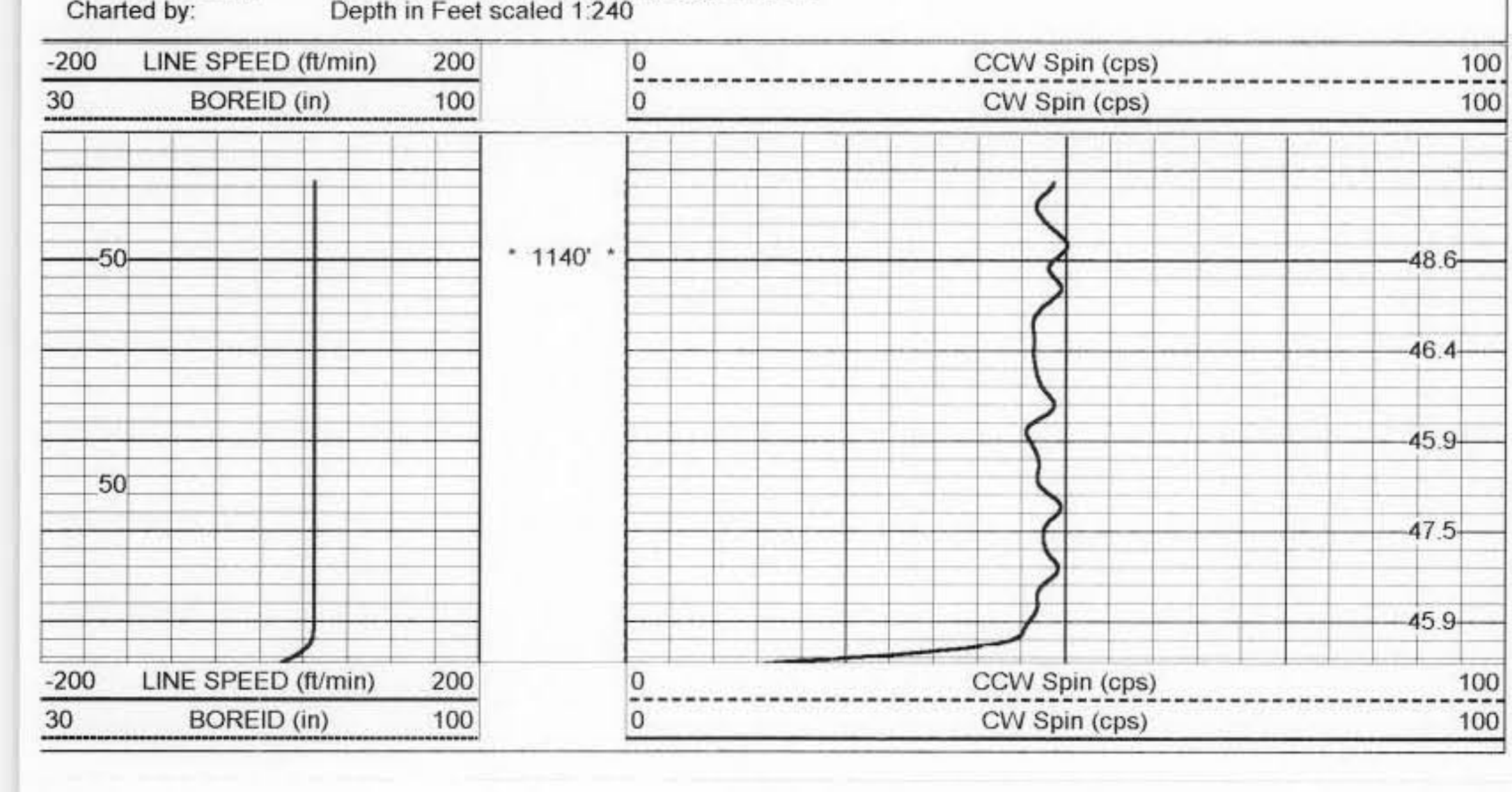
Database File: davietp1.db
Dataset Pathname: run3/pass18
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 19:57:40 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240



MV Geophysical

Station #3: 1140'

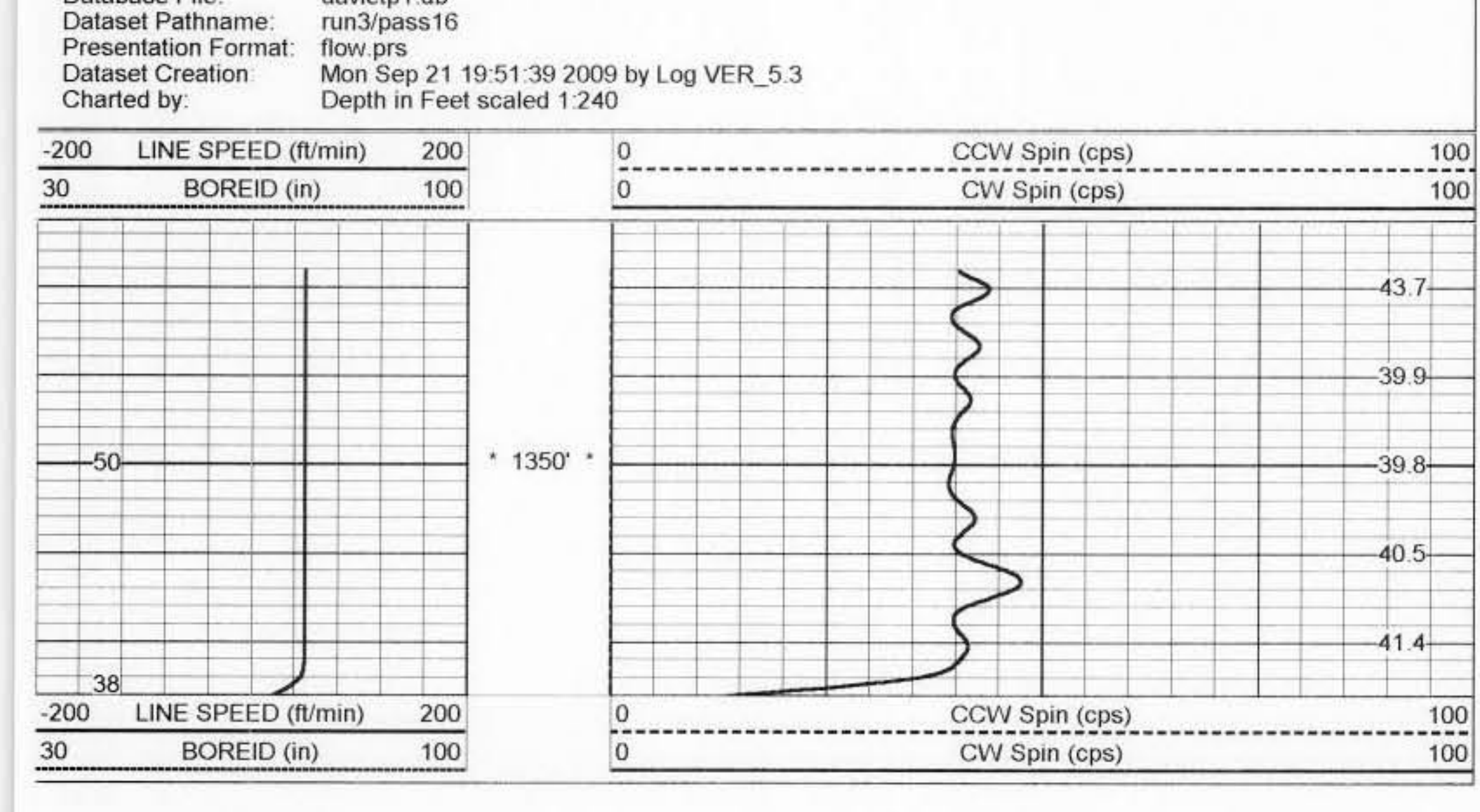
Database File: davietp1.db
Dataset Pathname: run3/pass17
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 19:55:19 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240



MV Geophysical

Station #2: 1350'

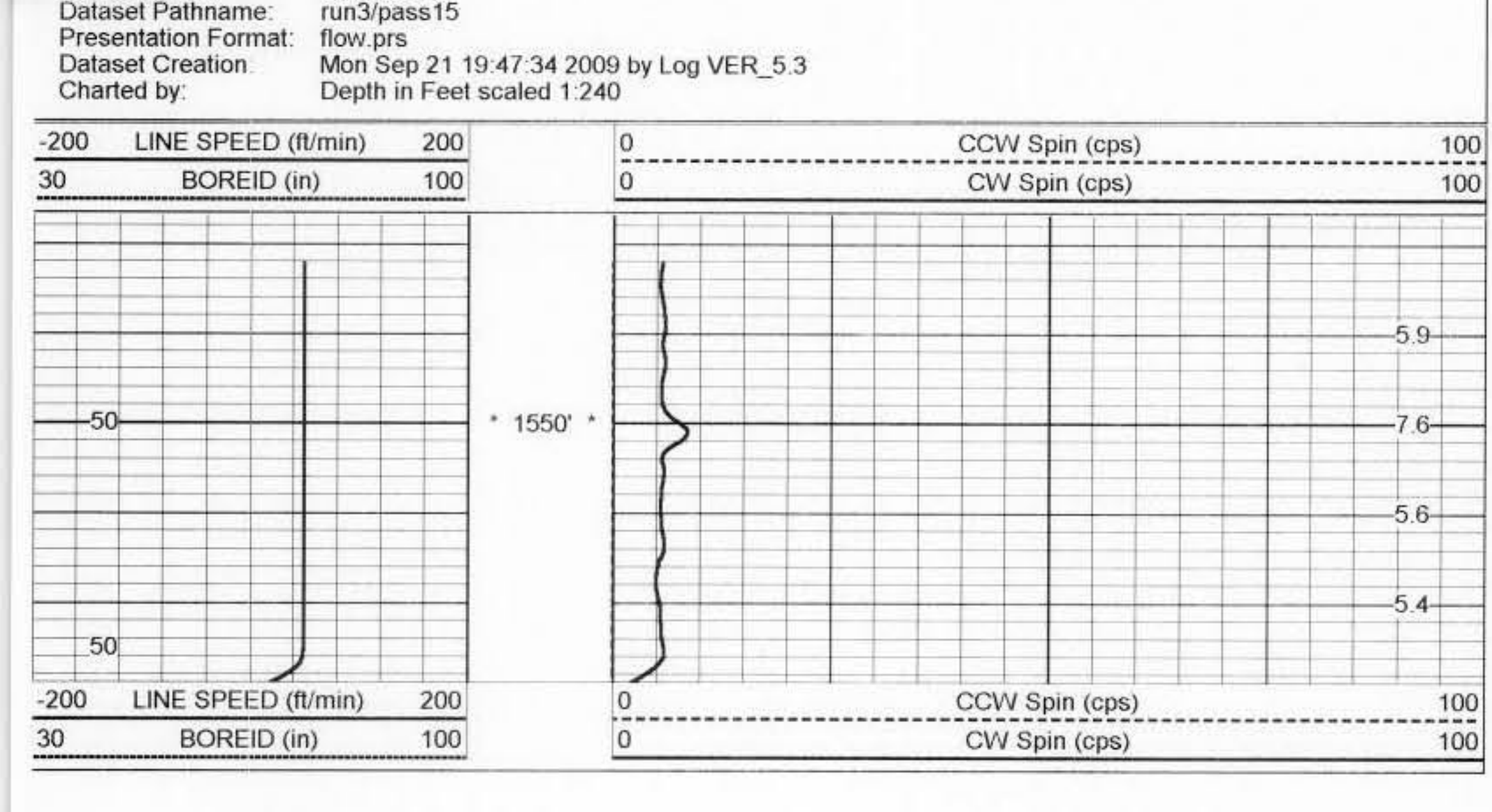
Database File: davietp1.db
Dataset Pathname: run3/pass16
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 19:51:39 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240



MV Geophysical

Station #1: 1550'

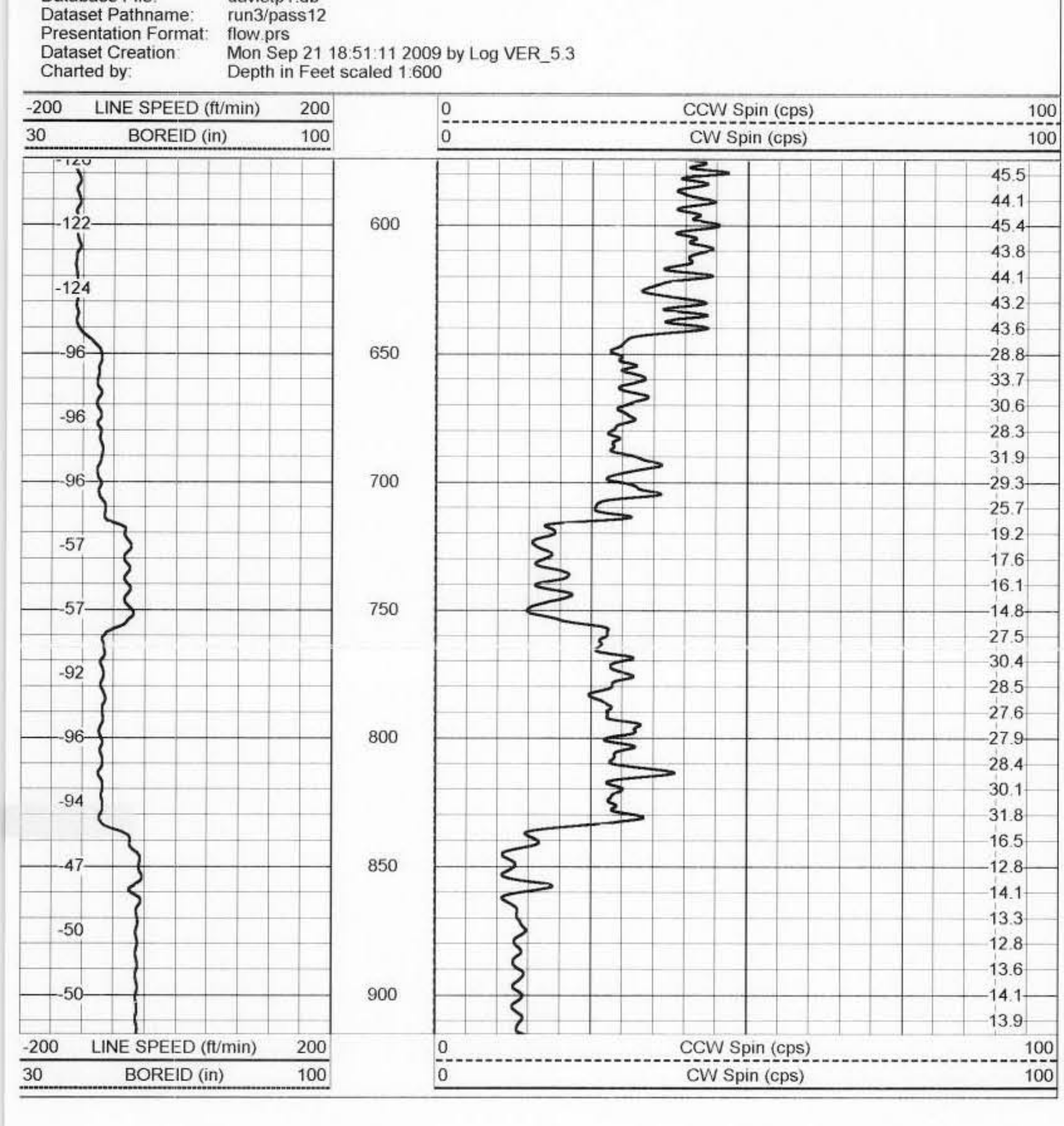
Database File: davietp1.db
Dataset Pathname: run3/pass15
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 19:47:34 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:240

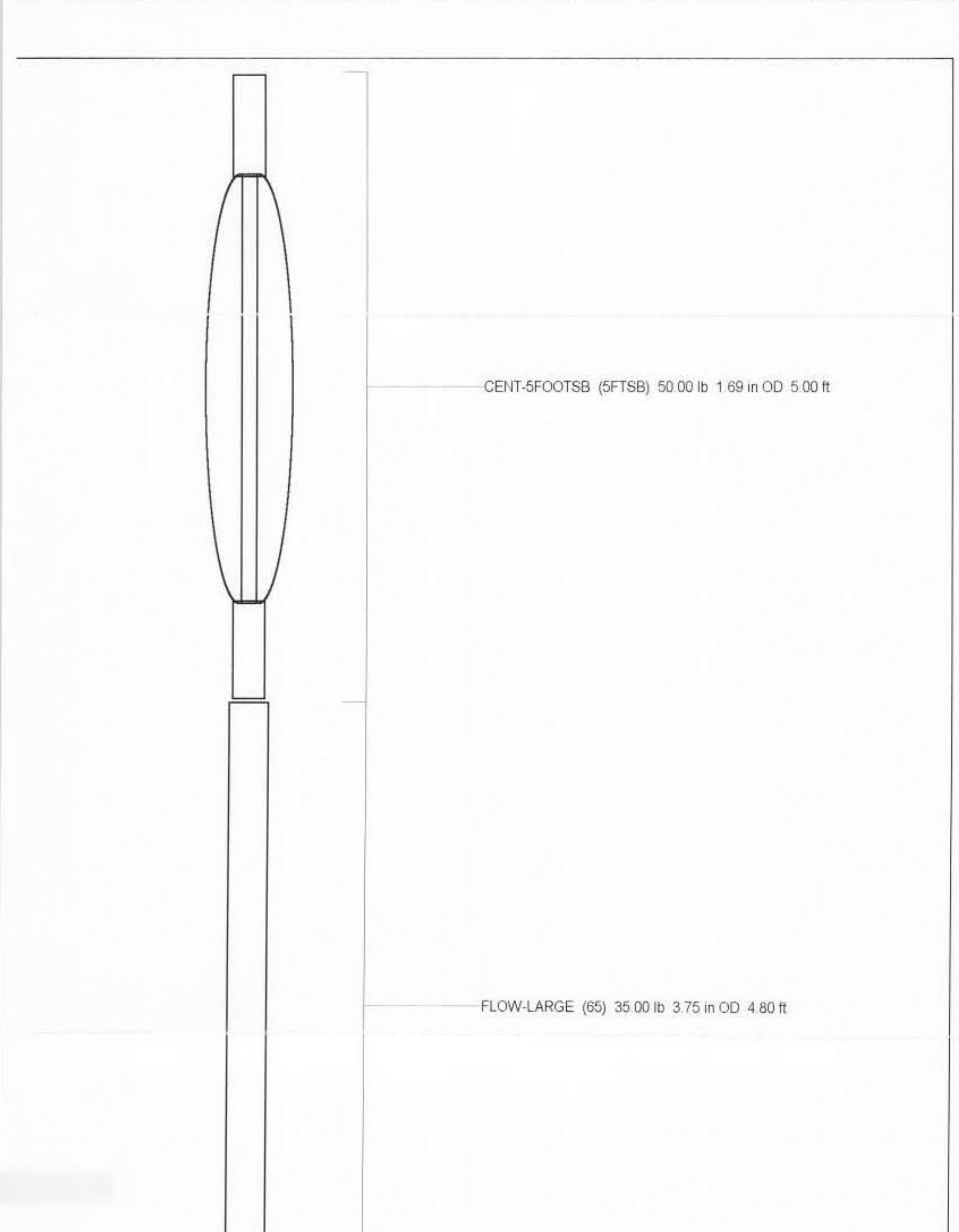


MV Geophysical

Q Calibration Down

Database File: davietp1.db
Dataset Pathname: run3/pass12
Presentation Format: flow.prs
Dataset Creation: Mon Sep 21 18:51:11 2009 by Log VER_5.3
Charted by: Depth in Feet scaled 1:600




CENT-5FOOTSB (5FTSB) 50.00 lb 1.69 in OD 5.00 ft
FLOW-LARGE (65) 35.00 lb 3.75 in OD 4.80 ft
FLOWP 0.00 ft
FLOWN 0.00 ft

Dataset: run3/pass12
Total Length: 9.80 ft
Total Weight: 85.00 lb
O.D.: 3.75 in

MV Geophysical

Company Diversified Drilling Corp.
Well TPW-1
Field Davie
County Broward
State/Prv Florida

FLUID CONDUCTIVITY TEMPERATURE LOG

Company Diversified Drilling Corporation
Well TPW-1
Field Davie
County Broward State/Prv Florida
Location Town of Davie UF Test Site AECOM
Other Services XY/GR,FCT DIL,BHC FLO,DHTV

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

Date	21-SEP-2009
Run Number	FIVE
Depth Driller	1582'
Depth Logger	1582'
Bottom Logged Interval	1574'
Top Log Interval	945'
Open Hole Size	15"
Type Fluid	H2O
Density / Viscosity	na/na
Max. Recorded Temp.	see FCT log
Estimated Cement Top	SURFACE
Time Well Ready	09:30 9/21/2009
Time Logger on Bottom	17:15 9/21/2009
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	S. English (AECOM) D. Adkins (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	255'	1104'				
TWO	27"	255'	972'				
FOUR	12.25"	965'	1815'				
FIVE	15"	965'	1582'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	28"	0.375" WT	SURFACE	255'
Prot. String	16" FRP	15.75" ID	SURFACE	965'
Production String				
Liner			2 Fld/12 Fnl	daviet p1.db
Invoice No. 2009136	P.O. #:111555		Job No.: 70902	* Final Print *

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Comments

STATIC and DYNAMIC DOWN passes were performed.
Cw=7,780 uS/cm @ 70.5 degF (Dynamic Sample). Q =~2,200 gpm.
FLUID RESISTIVITY CALIBRATION REPORT (Performed: 1-AUG-09 14:45)

uS/cm	CPS
2023.6	2985.71
4402.1	2702.45
8828.1	2403.14

TEMPERATURE CALIBRATION REPORT (Performed: 1-AUG-09 14:30)

DEG-F	CPS
38.5	147.851
148.8	2690.21

MV Geophysical

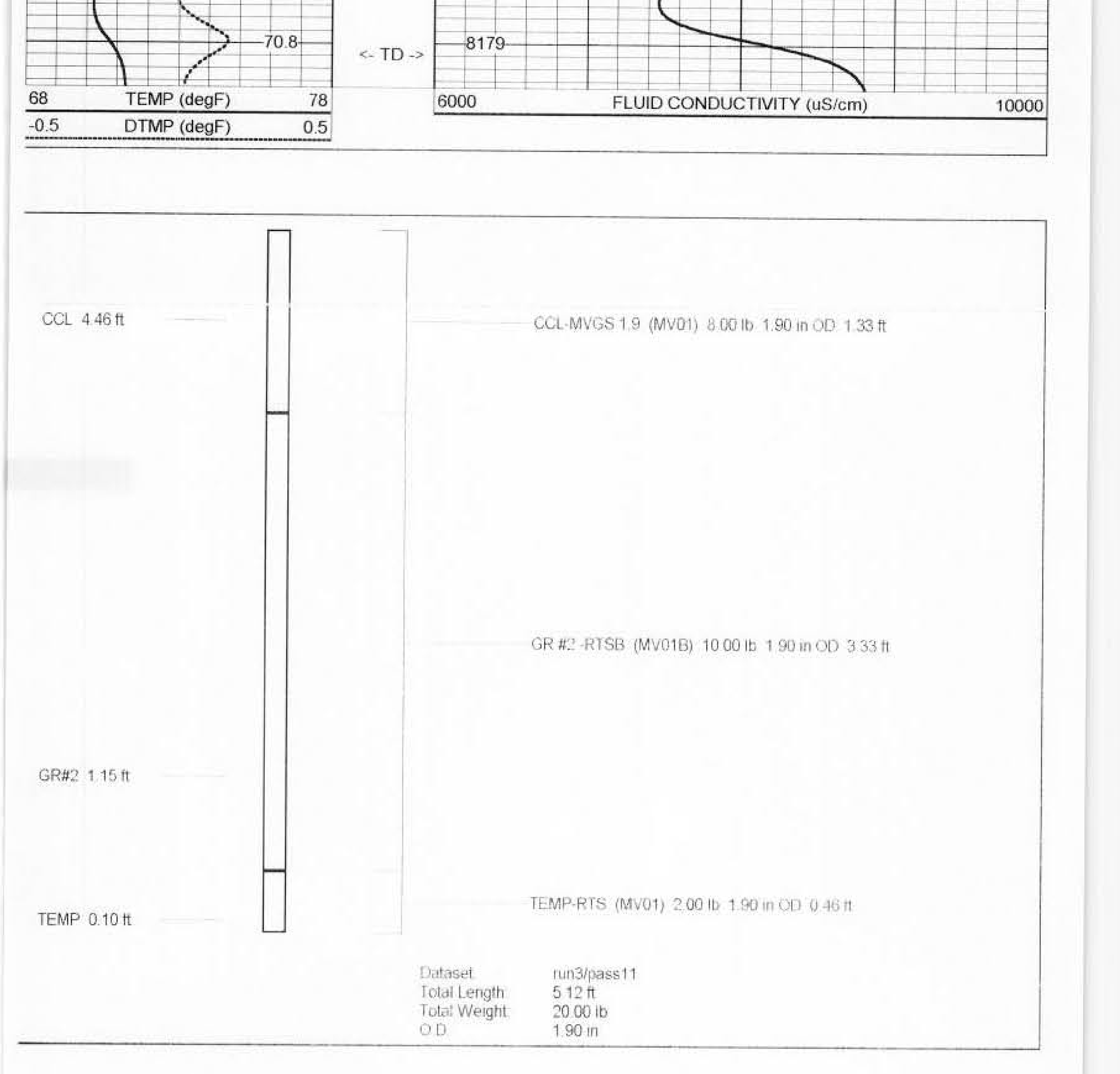
DYNAMIC FCT DOWN

Database File: davietp1.db
Dataset Pathname: run3/DFCT
Presentation Format: fctdavi4.prs
Dataset Creation: Mon Sep 21 20:26:21 2009
Charted by: Depth in Feet scaled 1:240

MV Geophysical

STATIC FCT DOWN

Database File: davietp1.db
Dataset Pathname: run3/sFCT
Presentation Format: fctdavi3.prs
Dataset Creation: Mon Sep 21 20:17:34 2009
Charted by: Depth in Feet scaled 1:240



CCL-MVGS 1.9 (MV01) 8.00 lb 1.90 in OD 1.33 ft

GR #2 -RTSB (MV01B) 10.00 lb 1.90 in OD 3.33 ft

TEMP-RTS (MV01) 2.00 lb 1.90 in OD 0.46 ft

Dataset	run3/pass11
Total Length	5.12 ft
Total Weight	20.00 lb
O.D.	1.90 in