DIVERSIFIED DRILLING CORPORATION
5620 Lee Street, Lehigh Acres, FL 33971
Phone (239) 368-6404 Fax (239) 368-6716
E-Mail bmusselwhite@wellwater.com

February 27, 2006

Mr. Steve Bell
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33406

Re: FPL Turkey Point Floridan Aquifer Well PW-3

Dear Mr. Bell,

Diversified Drilling Corporation (DDC) has completed construction and testing of the above referenced well and with this report, I am following up on my November 2005 telephone conference with you. Herein we are requesting the South Florida Water Management District's (SFWMD) concurrence that the above referenced well meets the construction requirements of the SFWMD. In our professional judgment and opinion, we believe that the above referenced well meets the criteria for construction of wells in the SFWMD; and that over its life, the well as constructed will maintain the seal between the aquifers as intended by the SFWMD.

As described below, DDC cannot confirm that the FRP casing was grouted between 630 feet and 875 feet. However, despite the potential that this interval may not be grouted, for the reasons described below and based on the information provided herein, DDC believes that the well is soundly constructed and poses no threat to the water resource. Therefore, we specifically request that SFWMD grant an exception to the 'bottom to top' grouting requirement for the specific interval between 630 and 875 feet on Turkey Point Floridan Aquifer Well PW-3 as allowed under FAC 62-532.500 (2)(f) and 40E-3.517.

We have attached a completed SFWMD Well Completion Report (Attachment A1) and accompanying lithologic log that provide a summary of the casings that were installed in the referenced well, PW-3 located at FPL's Turkey Point power plant. The report provides the details of the incremental and total quantities of grout used in the construction of the well. The total quantity of cement that was used for the construction of PW-3 was 3,275 sacks (94 pounds standard weight sack).

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Three strings of casing were installed for the construction of PW-3 including a grouted 46-inch diameter pit casing to 50 feet; a grouted 36-inch diameter surface casing to 305 feet; and the 24-inch FRP casing grouted as discussed herein and as shown on Attachment A2. These casings were installed based on the well site specific geology as described in the geologist's log. To establish a surface seal and facilitate the mud rotary drilling, the pit casing was installed. The 36-inch diameter surface casing was installed and grouted into the intermediate confining layer separating the surficial and Floridan Aquifers. The top of the confining layer was encountered at 280 feet. The FRP casing was installed and grouted into the upper Floridan Aquifer which was encountered at a depth of 970 feet. According to the geologist's log of the PW-3 site, the confining layer consists of clays, silts, and lime mud with interbedded limestone layers.

Between the dates of September 17, 2005 and September 28, 2005, DDC installed the 24-inch diameter FRP casing and grouted the casing in stages. A table summarizing the grout lifts is provided as Attachment A3. A summary of the events that took place is provided below:

- September 17-18, 2005 – 1,003 feet of 24-inch diameter FRP casing was installed in the 35-inch diameter borehole at well site PW-3. A caliper log was performed on the borehole prior to casing installation (Attachment A4).
- September 18, 2005 – First lift of cement was installed in PW-3 by the pressure grouting method through the FRP casing. The expected theoretical lift of the cement was 200 feet.
- September 19, 2005 – A temperature log (per the project specifications) was performed to confirm the depth to the top of the first lift of cement (Attachment A5). The log indicated the top of the first cement lift was at 875 feet. The grout plug within the casing was measured at a depth of 985 feet.
- September 19-24, 2005 – DDC attempted to lower tremie pipes to the 875-foot depth to obtain a physical "hard tag" at the top of the first lift of cement. DDC was unable to lower its tremie pipes below 630 feet. Hurricane Rita passed south of the Florida Peninsula on September 20, requiring the drilling derrick to be lowered and the site temporarily evacuated.
- September 25, 28 and 29, 2005 – DDC installed lifts 2, 3 and 4 grouting well PW-3 to land surface beginning at a depth of 630 feet. Since the tremie was unable to pass below 630 feet, DDC is uncertain as to the nature of the cementation behind the 24-inch FRP between 630 feet and 875 feet.
- December 16, 2005 – A cement bond log was performed to evaluate the continuity of the cement behind the casing. The bond log indicates a uniform signal across the entire FRP casing string, including the interval in question (between 630 feet and 875 feet). It should be noted however, that a cement bond log's ability to clearly demonstrate the characteristics of cement backing a non ferrous casing is limited. The log shows enough resolution to mark the narrow steel casing bell-socket retaining rings every 40 feet at each casing connection. The log is attached as Attachment A6.

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Based on the above, we requested Ershigs, Inc., the manufacturer of the 24-inch FRP casing, to evaluate the casing's ability to support itself if in the worst case scenario: that there is no grout supporting the casing across the interval between 630 feet and 875 feet. According to Mr. Steve Hettick, P.E., General Manager of Ershigs Inc., the casing was designed to support itself and remain sealed without cement because of its FRP construction and O-Ring sealing connections. Correspondence from Ershigs, Inc., is attached as Attachment A7.

It is DDC's belief that even though it is not known whether cement was physically placed in the interval between 630 feet and 875 feet, the known cement support above and below the interval of discussion will support this casing for the life of the well. Furthermore, the naturally occurring clayey lime muds that are known to occur in the vicinity of this interval are of a plastic nature and will squeeze in over time filling any void that was formerly the annular space providing support of the casing.

In support of the above, the following items are attached with this report for your review:

Attachment A1 – Completed SFWMD Well Completion Report and accompanying lithologic log prepared by JLA Geosciences (the client's hydrogeologic consultant), under the direction of Jim Andersen, P.G.

Attachment A2 – As-Built drawing of well PW-3 that shows the casings that were installed, the grouted intervals and the geologic formations including the confining units.

Attachment A3 – A spreadsheet showing the volumes of cement pumped for grouting of the 24-inch diameter FRP casing including the top-of-cementing stage tagged depths, cement mix and yield.

Attachment A4 – The caliper log by MV Geophysical Surveys performed on the nominal 35-inch hole prior to installation of the 24-inch diameter Fiberglass (FRP) casing. The caliper log shows a total annular volume of 3,768 cubic feet for the cased interval.

Attachment A5 – The temperature log by MV Geophysical Surveys performed following the initial pressure grout of the 24-inch diameter FRP casing showing the first lift of neat cement extending from the base of casing at 1,003 feet to a depth of 875 feet below land surface.

Attachment A6 – The cement bond log (CBL) by MV Geophysical Surveys performed on the 24-inch diameter FRP casing following completion of the well, showing uniformity of response over the length of the casing.

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Attachment A7 – A copy of correspondence that Steve Hettick, P.E., General Manager of Ershigs Fiberglass, the manufacturer of the 24-inch diameter FRP casing, provided regarding the structural integrity of the casing.

We believe the data provided herein will support the conclusion that the well is soundly constructed and poses no threat to the water resource and your examination will allow you to grant the requested exception. We solicit your timely response.

Please contact me should you require additional information or clarification of anything contained herein.

Sincerely,

Diversified Drilling Corporation
Bill Musselwhite
License No. 11191

Attachment A1

Completed SFWMD Well Completion Report and accompanying lithologic log prepared by JLA Geosciences (the client's hydrogeologic consultant), under the direction of Jim Andersen, P.G.

WELL COMPLETION REPORT

OWNER'S NAME: FPL - 9700 SW 344th St Homestead, FL 33035

COMPLETION DATE: December 8, 2005 Well # PW-3

PERMIT # _____ CUP / WUP# PA 03-45 2 DID # _____

WELL USE: DEP/Public _____ Irrigation _____ Domestic _____ Monitor _____

HRS Limited _____ 65-524 _____ Other x ASR PS _____

If permit is for multiple wells indicate the number of wells drilled - 1

Indicate remaining wells to be constructed - 2

DRILL METHOD: x Rotary _____ Cable Tool _____ Combination

Jet _____ Auger _____ Other

WATER WELL CONTRACTOR'S SIGNATURE: Bill Musselwhite

License # 11191

I certify that the information provided in this report is accurate and true.

Measured Static Water Level (WL) 49.7' NGVD Measured Pumping WL -14.4' NGVD

After 2 HR at 4500 GPM Measuring Pt. TOC

Which is 6.65 Ft. NGVD x Below _____ Land Surface

CASING: Black Steel _____ Galv. _____ PVC _____ Other FRP

GROUT	NO. OF BAGS	FROM(FT)	TO(FT)
48"	325	0	50
36"	1,070	0	305
24"	1,880	0	1,003
CEMENT			
CEMENT	3,275		

x Open Hole

_____ Screen

Depth (Ft.)

DRILL CUTTINGS LOG

WELL LOCATION: County Dade

1/4 of	1/4 of	SEC:	TWP:	RGE:
SE	NW	27	57	40

Lattitude: 25° 26' 21.6" Longitude: 80° 19' 43.7"

DATE STAMP

Sketch of well location on property

N

Λ

See Attached

Casing Diameter & Depth (Ft.)		From	To	Color | Grain Size | Type of Material
Diameter	48" Steel			
From	0			
To	50			
Diameter	36" Steel			
From	0			Please See Attached
To	305			Lithology for Well PW-3
Diameter	24" FRP			
From	0			
To	1,003			

TD of the Well is 1,247'

Casing Depth of well is 1,003'

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: 0.015 ppm Sulfate: 300 ppm

Chloride: 960 ppm

(X)Lab Test ( )Field Test Kit

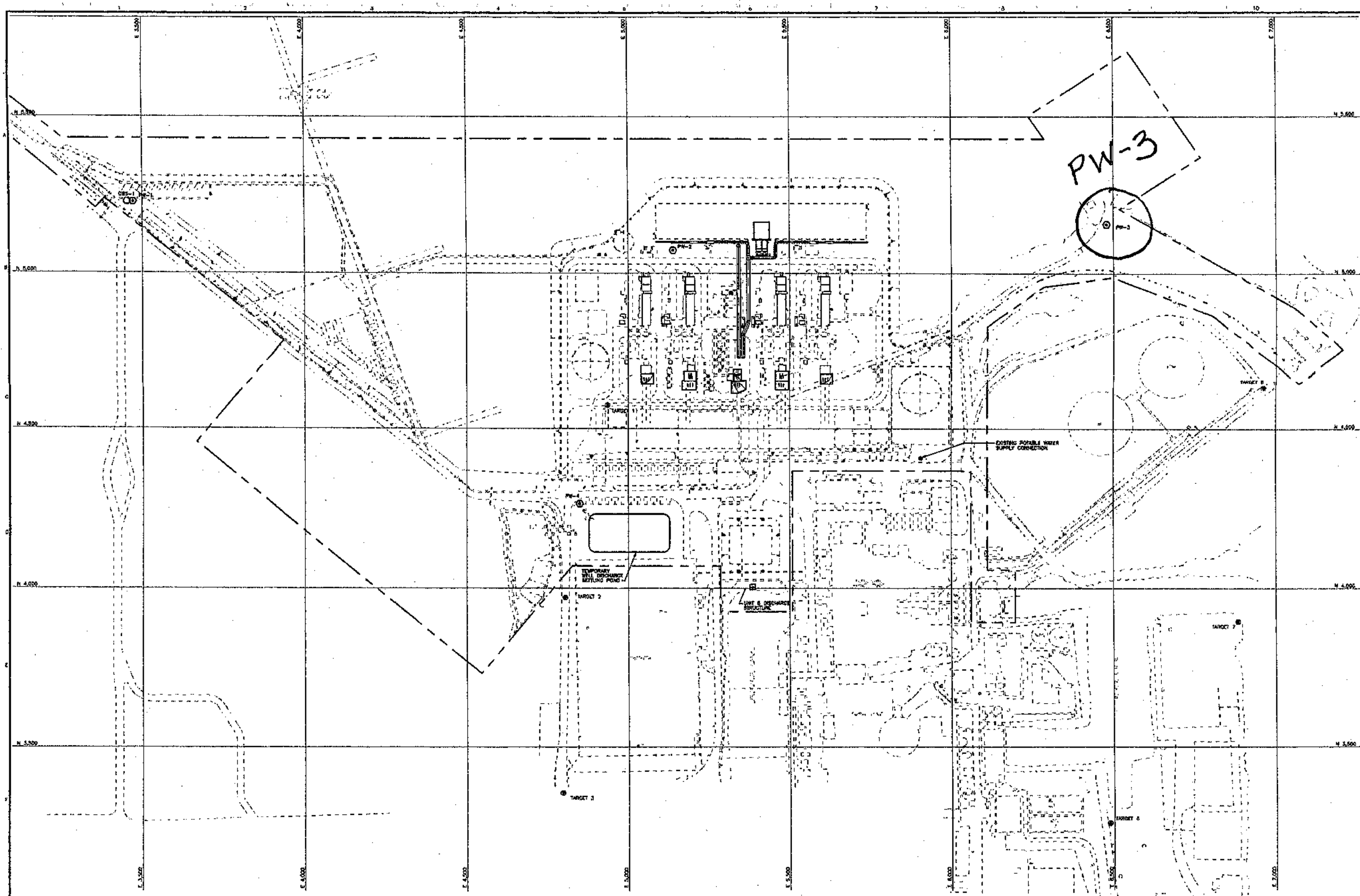
Pump Type

( )Centrifugal ( )Jet ( )Submersible (X)Turbine

Horsepower _____ Capacity _____ GPM _____

Pump Depth _____ Ft. Intake Depth _____ Ft.

DRILLER'S NAME: T.Toy/D.Adkins/S.Underwood



WATER WELL LOCATION POINTS

WELL NO.	PLANT COORDINATES		WELL NO.	STATE PLANE COORDINATES	
	NORTHING	EASTING		NORTHING	EASTING
PW-1	N 5226.79	E 3472.03	PW-1	N 402,531.37	E 874,528.75
PW-2	N 5138.00	E 5074.00	PW-2	N 402,376.61	E 876,105.56
PW-3	N 5156.89	E 6478.21	PW-3	N 402,481.46	E 877,535.73
PW-4	N 4286.18	E 4848.37	PW-4	N 401,576.72	E 875,904.80
OBS-1	N 5227.33	E 3453.18	OBS-1	N 402,431.61	E 874,508.69

AS-BUILT WATER WELL LOCATION POINTS

WELL NO.	PLANT COORDINATES		WELL NO.	STATE PLANE COORDINATES	
	NORTHING	EASTING		NORTHING	EASTING
PW-1	-	-	PW-1	-	-
PW-2	-	-	PW-2	-	-
PW-3	-	-	PW-3	-	-
PW-4	-	-	PW-4	-	-
OBS-1	-	-	OBS-1	-	-

GENERAL LEGEND

- UNIT 5 PROPERTY/SCA BOUNDARY
- EXISTING FENCE
- NEW FENCE
- EXISTING TREELINE
- ⊕ EXISTING AREAL SURVEY TARGET
- ◉ PRODUCTION WELL (COOLING TOWER MAKE-UP)
- ○ OBSERVATION WELL

GENERAL NOTES

1. SEE DRAWING 138729-5STA-S1001 FOR SITE ARRANGEMENT AND TERMINAL POINTS.
2. SEE DRAWING 138729-5CPI-S3800 FOR CONSTRUCTION FACILITIES PLAN.

APPROVED FOR CONSTRUCTION

NO	DATE	REVISIONS AND RECORD OF ISSUE	DSV	PH	CM	DAG	PHR
0	04/01/05	ISSUED FOR CONSTRUCTION					

100' 50' 0 100' 200'
SCALE: 1" = 100'

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA
SIGNED: DONOLAE ALLAN DUDRAK
DATE: 04/01/05 REG NO. 58763

FLORIDA LAKES Power Partners, LLC
ENGINEER: BPM DRAWN: DSV
CHECKED: CM DATE: 04/01/05

FLORIDA POWER & LIGHT
TURKEY POINT EXPANSION PROJECT - UNIT 5

CIRCULATING WATER MAKEUP - SITE WATER WELL LOCATION PLAN

PROJECT / DRAWING NUMBER: 138729-5HRD-S1020 REV: 0

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LITHOLOGIC LOG

FLORIDA POWER AND LIGHT TURKEY POINT POWER PLANT EXPANSION WELL PW-3	
Depth in feet below land surface	**Description**
0-10	LIMESTONE (95%), Very Pale Orange (10Y/R 8/2), hard, granular texture, calcite cemented, medium to fine sand size quartz grains, intergranular porosity, medium low permeability. ORGANICS (5%), dusky brown (5YR 2/2).
10-30	LIMESTONE (100%), pale yellowish brown (10YR 6/2), hard, granular texture, very fine to microcrystalline calcareous matrix, minor amounts of fine sand to silt size phosphate and quartz grains, secondary, vuggy porosity, medium low permeability.
30-60	LIMESTONE (90%), white (N9), medium hardness, very fine sand to silt size granular texture, low permeability. SAND (10%), moderate yellowish brown (10YR 5/4), unconsolidated, fine-coarse grained sand size grains, quartz, phosphate, calcareous nodules, overall low permeability.
60-125	LIMESTONE (100%), yellowish gray (5Y 8/1) to white (N9), medium hardness, granular texture, sparry calcite, bioclasts, quartz, secondary dissolution porosity, moderately high permeability.
125-130	LIMESTONE (50%), Same as Above, LIMESTONE (50%), white (N9), medium hardness, fossiliferous, secondary, moldic porosity, minor quartz grains, moderate permeability.
130-140	LIMESTONE (50%), White (N9), medium hardness, very fine granular texture, some medium to fine sand size quartz grains, intergranular porosity, low permeability. LIMESTONE (50%), yellowish gray (5Y 7/2), soft, granular texture, carbonate cemented, medium sand to silt size, subrounded, quartz and phosphate grains, minor secondary porosity, low permeability.
140-165	LIMESTONE (90%), yellowish gray (5Y 7/2), Same as above. LIMESTONE (10%), yellowish gray (5Y 7/2), medium hardness, carbonate cemented shell fragments, some moldic porosity, medium permeability.
165-170	LIMESTONE (50%) Same as above. LIMESTONE (50%), very pale orange (10YR 8/2), medium hard, very fine granular to microcrystalline texture, intergranular porosity, low permeability.
170-175	LIMESTONE (100%), yellowish gray (5Y 7/2), Same as above.
175-190	LIMESTONE (70%), yellowish gray (5Y 8/1), medium hardness, fine grained granular texture, bioclasts, quartz and phosphate grains, minor moldic porosity, low to medium permeability. LIMESTONE (20%), pale orange (10YR 8/4) to white (N9), microcrystalline to very fine granular texture, sparry calcite, low permeability. SANDSTONE (10%), light gray (N7), poorly consolidated, very fine granular texture, fine sand to

LITHOLOGIC LOG

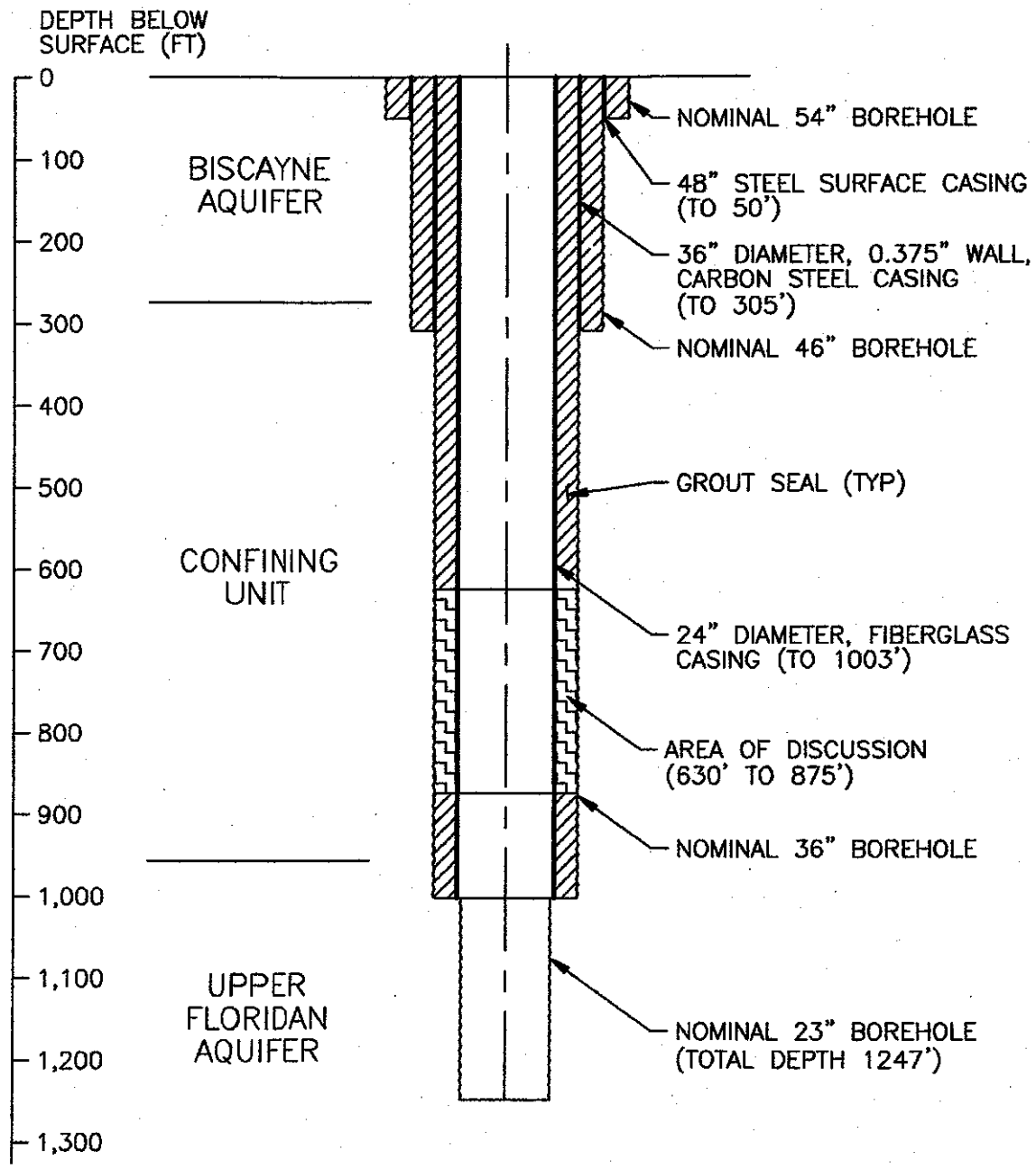
FLORIDA POWER AND LIGHT TURKEY POINT POWER PLANT EXPANSION WELL PW-3	
Depth in feet below land surface	**Description**
	silt size quartz and phosphate grains, intergranular porosity, low permeability.
190-220	LIMESTONE (100%), yellowish gray (5Y 8/1), white (N9), soft, poorly consolidated, fossiliferous, moldic porosity, sparry calcite, very fine granular texture, some quarts grains, good permeability.
220-280	LIMESTONE (60%), Same as above. LIMESTONE (40%), yellowish gray (5Y 8/1), medium hardness, granular texture, carbonate cemented, shell fragments, quartz and minor phosphate grains, partially connected sand size dissolution cavities, medium permeability.
280-330	SILT (100%), olive gray (5Y 4/1), unconsolidated, predominantly silt, clay and fine sand size, rounded to subrounded, quartz and phosphate grains, minor amounts of coarse to medium sand size quartz and shell fragments, low permeability.
330-450	CLAY (100%), olive gray (5Y 3/2), cohesive, silty, fine sand size, rounded quartz and phosphate grains, low permeability.
450-460	SANDSTONE (100%), pale grayish olive (10Y 5/2), poorly consolidated, granular texture, fine sand to silt size, rounded quartz grains, minor phosphate, low permeability.
460-470	SANDSTONE (20%), same as above. LIME MUD (80%), pale orange (10YR 7/2), cohesive, minor sand size quartz and calcareous grains, low permeability.
470-550	LIMESTONE (100%), yellowish gray (5Y 7/2), soft, poorly consolidated, granular texture, bioclasts, quartz and minor phosphate, intergranular porosity, low permeability.
550-635	LIME MUD (100%), yellowish gray (5Y 7/2), cohesive, dense, low permeability.
635-645	LIMESTONE (60%), same as above. LIME MUD (40%), same as above.
645-655	LIME MUD (100%), same as above.
655-675	LIMESTONE (100%), yellowish gray (5Y 7/2), moderately well consolidated, granular texture, medium hardness, low permeability.
675-720	LIME MUD (100%), yellowish gray (5Y 7/2), to light olive gray (5Y 5/2), cohesive, very low permeability.
720-730	LIME MUD (50%), same as above. LIMESTONE (50%), same as above.
730-790	LIMESTONE (100%), yellowish gray (5Y 7/2, 8/1), medium hardness, granular texture, calcareous grains, quartz, phosphate, minor amounts of sand size vugged porosity, low permeability.
790-805	LIMESTONE (60%), same as above. LIME MUD (40%), same as above.

LITHOLOGIC LOG

FLORIDA POWER AND LIGHT TURKEY POINT POWER PLANT EXPANSION WELL PW-3	
Depth in feet below land surface	**Description**
805-915	LIME MUD (100%), yellowish gray (5Y 7/2), light olive gray (5Y 5/2), cohesive, minor amounts of silt to fine sand size quartz and phosphate grains and medium to coarse sand size shell fragments, low permeability.
915-940	LIMESTONE (100%), yellowish gray (5Y 7/2), same as above.
940-970	LIME MUD (100%), yellowish olive gray (5Y 6/2), cohesive, minor amounts of shell fragments, quartz and phosphate, low permeability.
970-1020	LIMESTONE (100%), very pale orange (10YR 8/2), pale yellowish brown (10YR 6/2), grayish orange (10YR 7/4), medium hardness, granular texture, low permeability.
1020-1035	LIMESTONE (100%), very pale yellowish brown (10YR 7/2), medium hardness, granular texture, well consolidated carbonate grains, intergranular porosity, low permeability.
1035-1045	LIMESTONE (100%), grayish orange (10YR 7/4), to pale yellowish brown (10YR 6/2), granular to microcrystalline texture, medium to hard, calcarenite, low permeability.
1045-1050	LIMESTONE 10% very pale yellowish brown (10YR 7/2), granular texture, coarse sand to silt size carbonate grains, well cemented, low permeability. LIMESTONE (90%), grayish orange brown (10YR 6/4), granular texture, carbonate cemented, coarse sand to silt size grains, good intergranular porosity, moderate permeability.
1050-1095	LIMESTONE (100%), grayish orange brown (10 YR 6/4), same as above.
1095-1247	LIMESTONE (100%), grayish orange brown, very pale orange (10YR 6/4, 8/2), yellowish gray (5Y 7/2), medium hardness, granular texture, intergranular porosity and some vugged porosity, good permeability.

Attachment A2

"As-Built drawing of well PW-3 that shows the casings that were installed, the grouted intervals and the geologic formations including the confining units.



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FLORIDA POWER & LIGHT TURKEY POINT EXPANSION PROJECT – UNIT 5		
PRODUCTION WELL PW-3 AS-INSTALLED DETAIL		DRAWN: 12/08/05 REV. 0

Attachment A3

A spreadsheet showing the volumes of cement pumped for grouting of the 24-inch diameter FRP casing including the top-of-cementing stage tagged depths, cement mix and yield.

RECAP OF CEMENT PUMPED ON THE 24-INCH FRP CASING

WELL NO. PW-3 TURKEY POINT

DATE	TAG BEFORE	SACKS	MIX*	YIELD	TAG AFTER	TOTAL C.F.
9/18/2005		300	NEAT	1.18		354
		282	3%	1.46		412
9/25/2005		498	3%	1.46	354	727
9/28/2005	354	400	3%	1.46	282	584
9/29/2005	282	400	3%	1.46		584
				TOTAL C.F. INSTALLED		2,661

* Mix equals % of Bentonite to Cement (Prehydrated)

Attachment A4

The caliper log by MV Geophysical Surveys performed on the nominal 35-inch hole prior to installation of the 24-inch diameter FRP casing. The caliper log shows a total annular volume of 3,768 cubic feet for the cased interval.

MV Geophysical

X-Y CALIPER GAMMA RAY LOG

Company Diversified Drilling Corp.
Well FP&L PW-3
Field Turkey Point
County Miami-Dade
State/Prv Florida

Company Diversified Drilling Corporation
Well FP&L PW-3
Field Turkey Point
County Miami-Dade State/Prv Florida

Location
FP&L Turkey Point Nuclear Power Facility
LAT.: N25.43930 LONG.: W80.32894
B&V / JLA Geosciences, Inc.

Other Services
NONE

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

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

Date	17-SEPT-2005		
Run Number	FOUR		
Depth Driller	1015'		
Depth Logger	1023'		
Bottom Logged Interval	1021'		
Top Log Interval	SURFACE		
Open Hole Size	35"		
Type Fluid	MUD		
Density / Viscosity	na/na		
Max. Recorded Temp.	na		
Estimated Cement Top	NA		
Time Well Ready	22:00 9/15/2005		
Time Logger on Bottom	22:15 9/15/2005		
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller		T.Toy (DDC)
Witnessed By	J.Andersen (JLA)	J.Friedrichs (JLA)	N.Johnson (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	11.875"	50'	1058'				
TWO	46.5"	50'	310'				
THREE	35"	310'	1015'				
			1017' Logger				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	50"	.375" WT	SURFACE	50'
Prot. String	36"	.375" WT	SURFACE	306'
Production String				305' Logger
Liner				

Invoice No.: 5163 P.O. #: Job No.: 5505 * FIELD PRINT *

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Comments

X-Y Caliper Arm Extensions: 51"

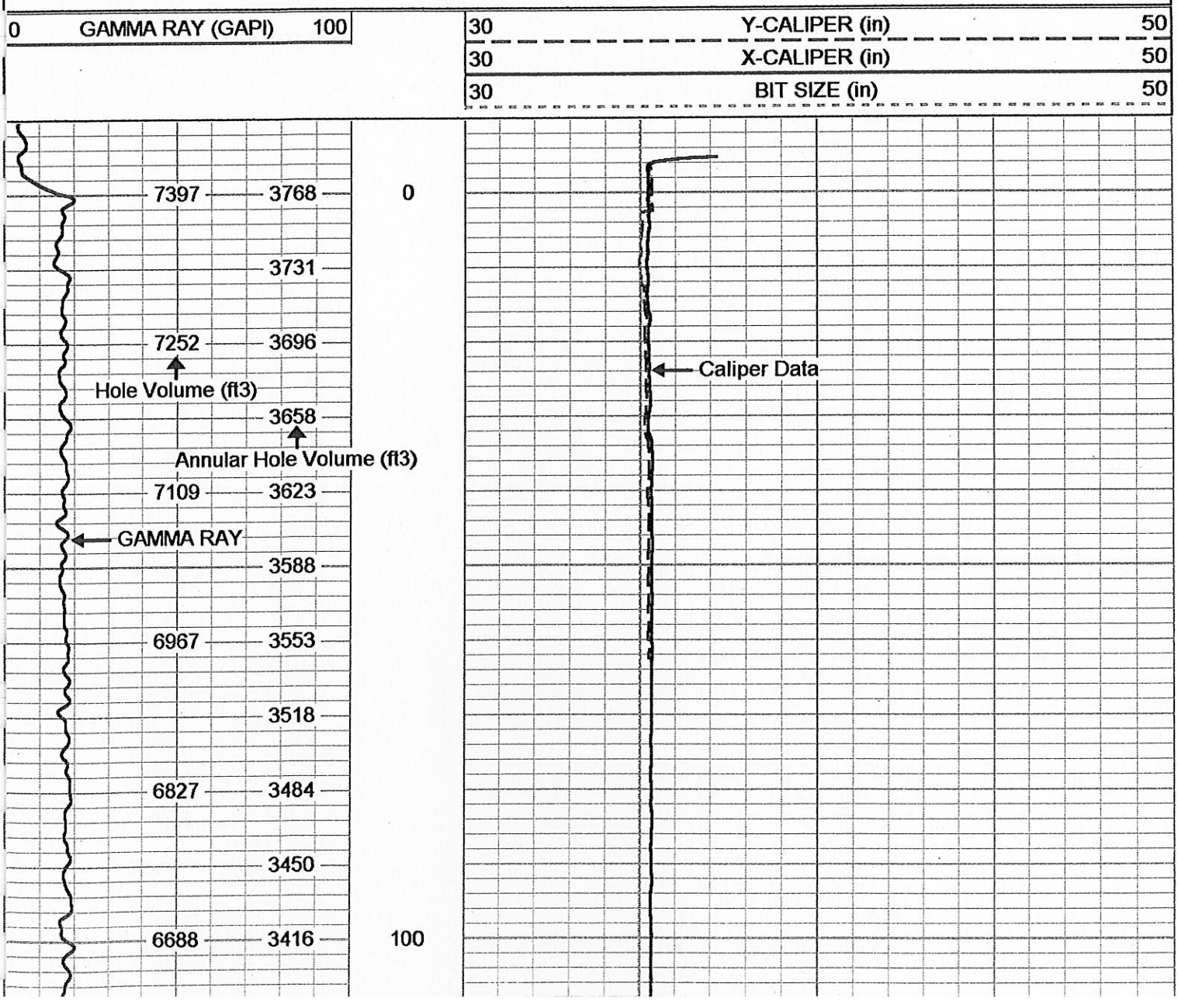
FUTURE CASING SIZE: 24" FRP (25.5" OD)

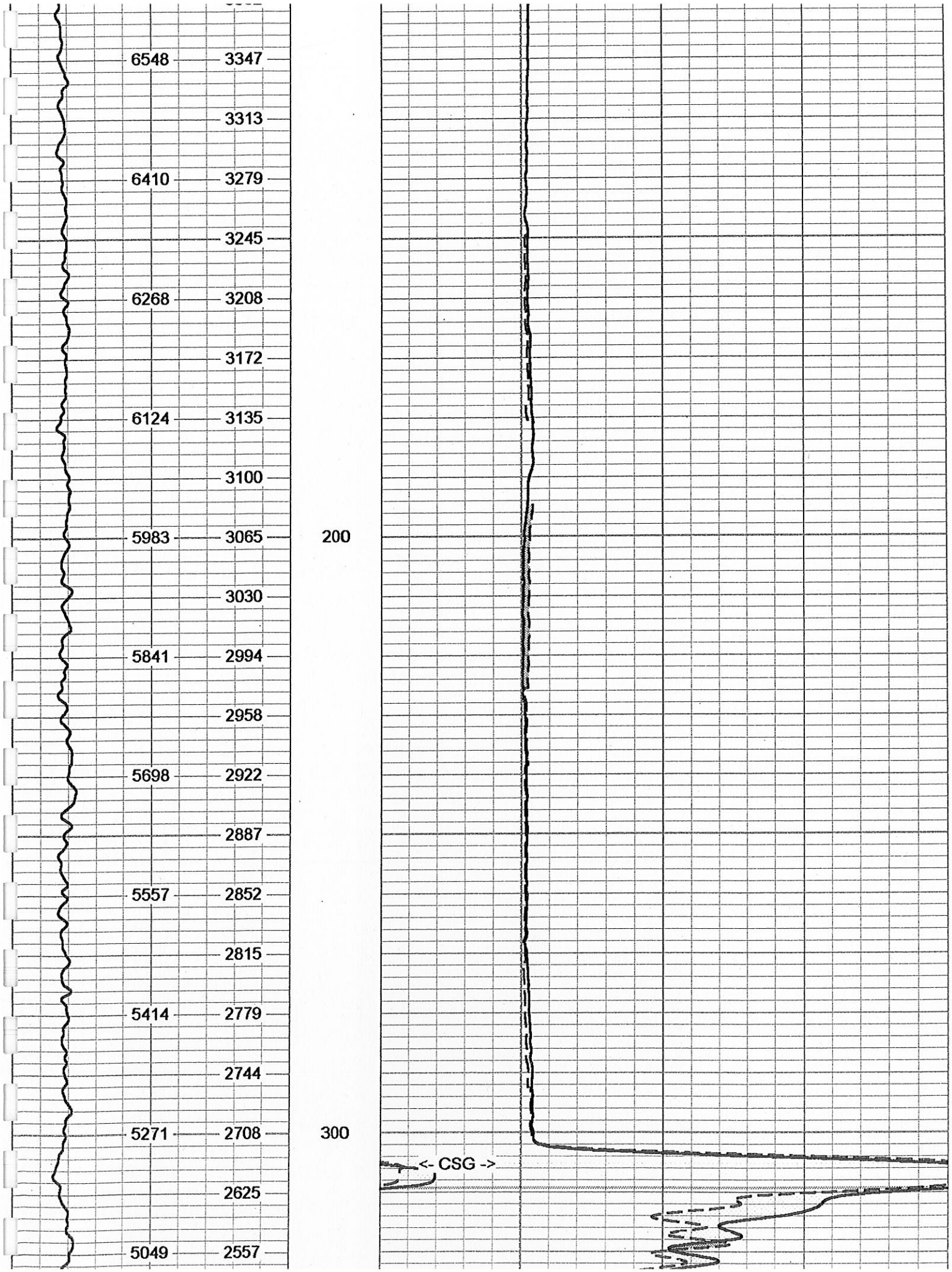
8' of "STINGER" bit below 35" Reamer.

MV Geophysical

MAIN PASS

Database File:	turkpt-1.db
Dataset Pathname:	run4/main
Presentation Format:	XY3050-5
Dataset Creation:	Sat Sep 17 08:18:12 2005
Charted by:	Depth in Feet scaled 1:240

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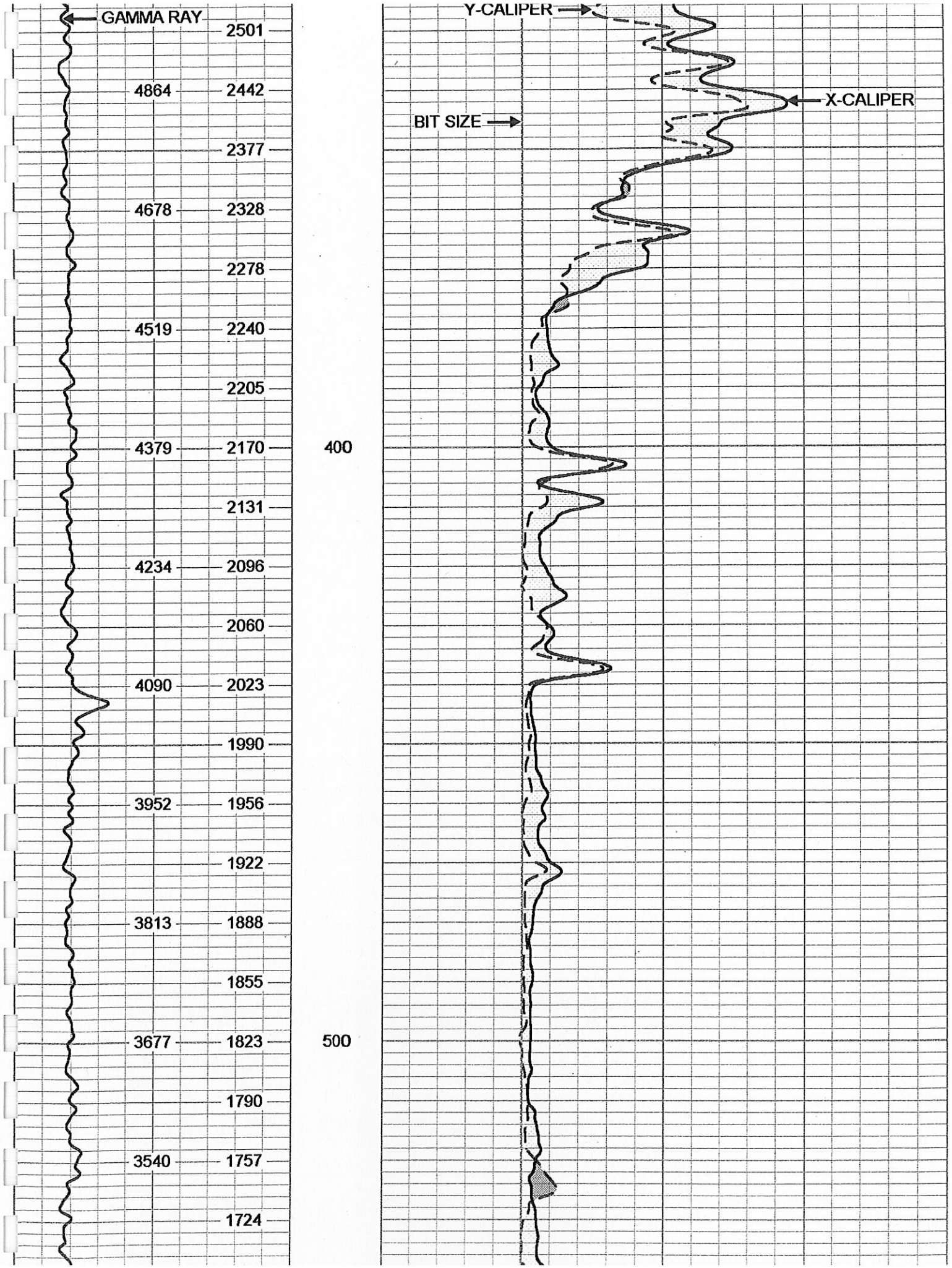
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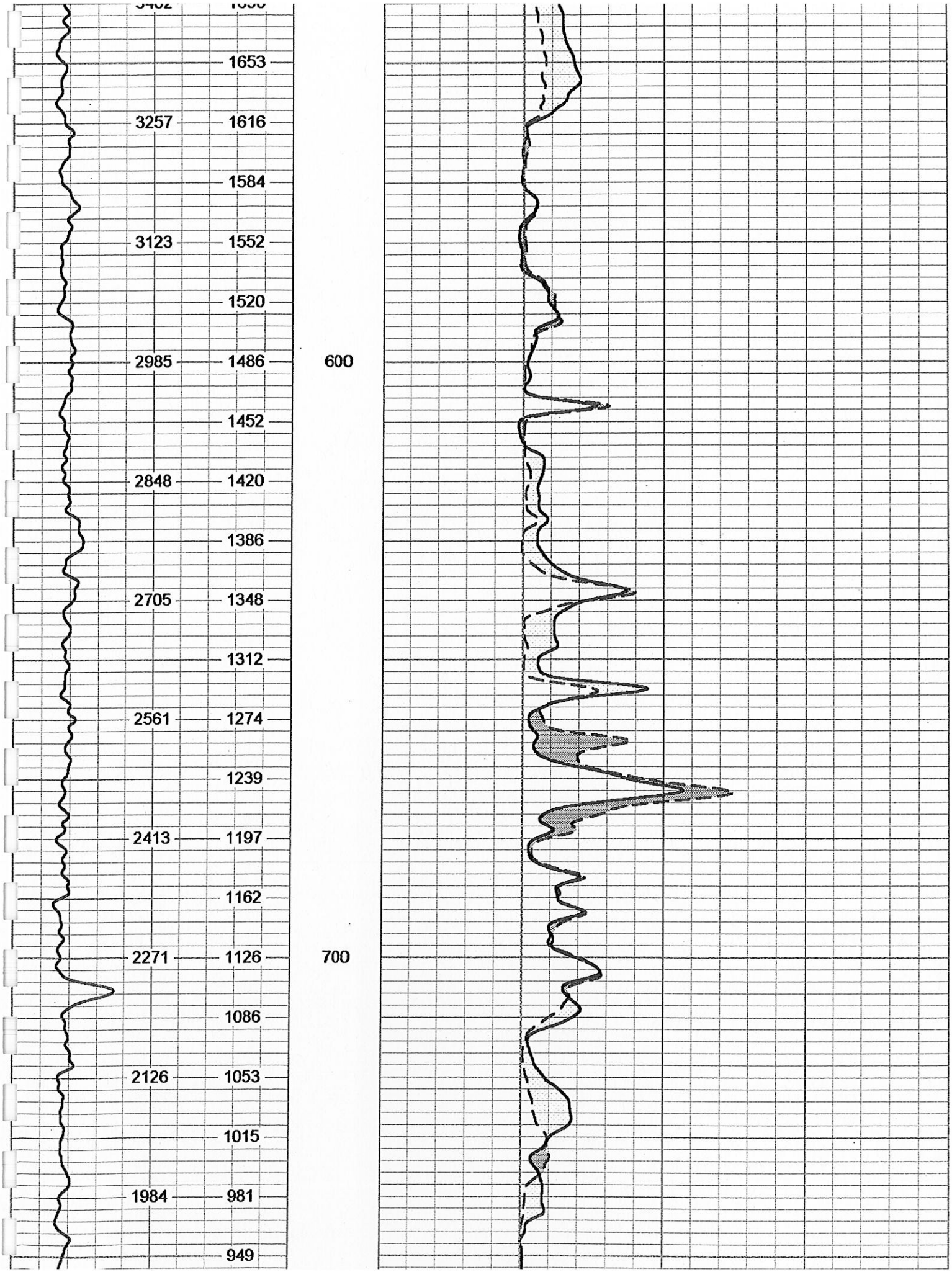
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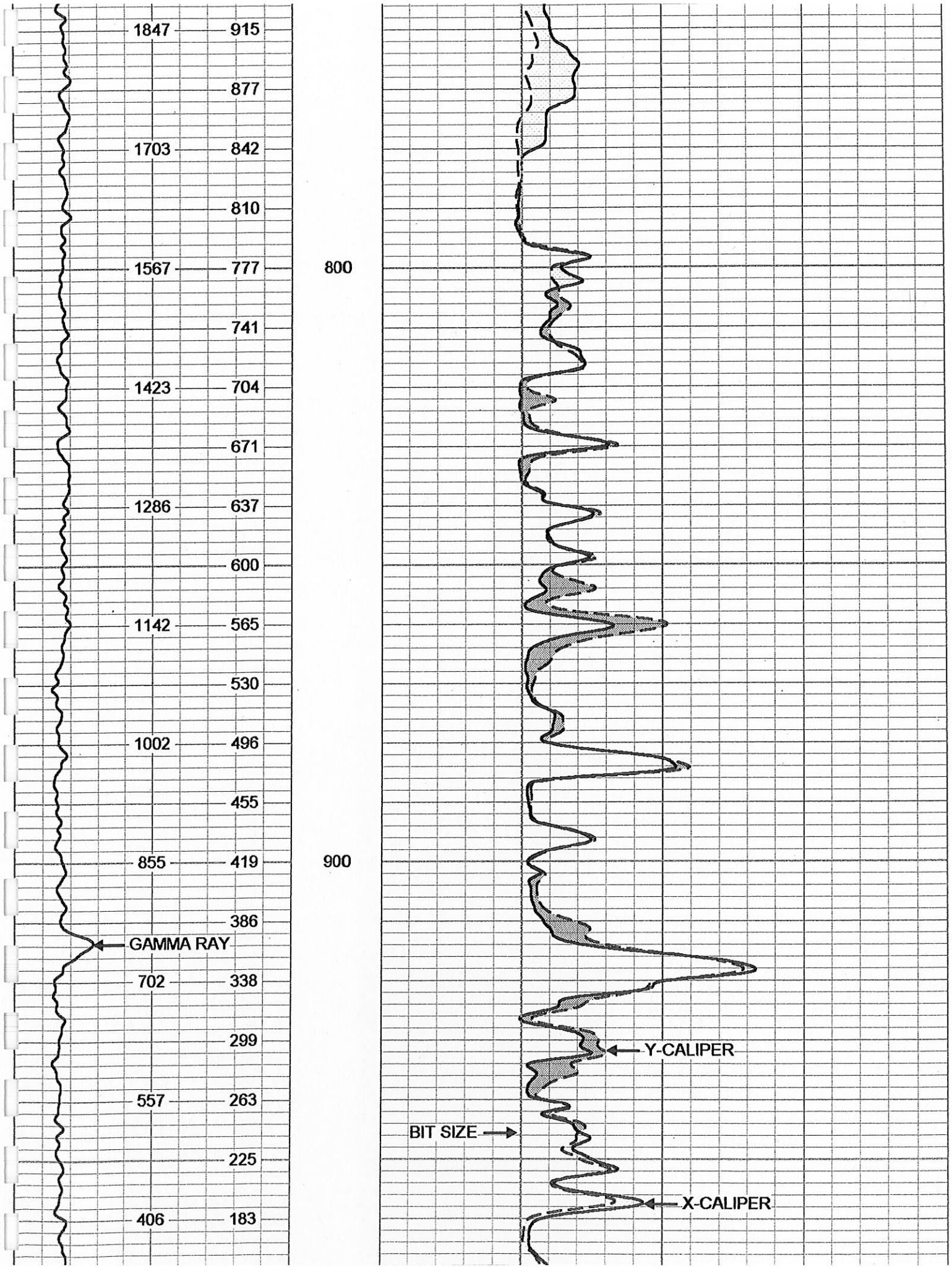
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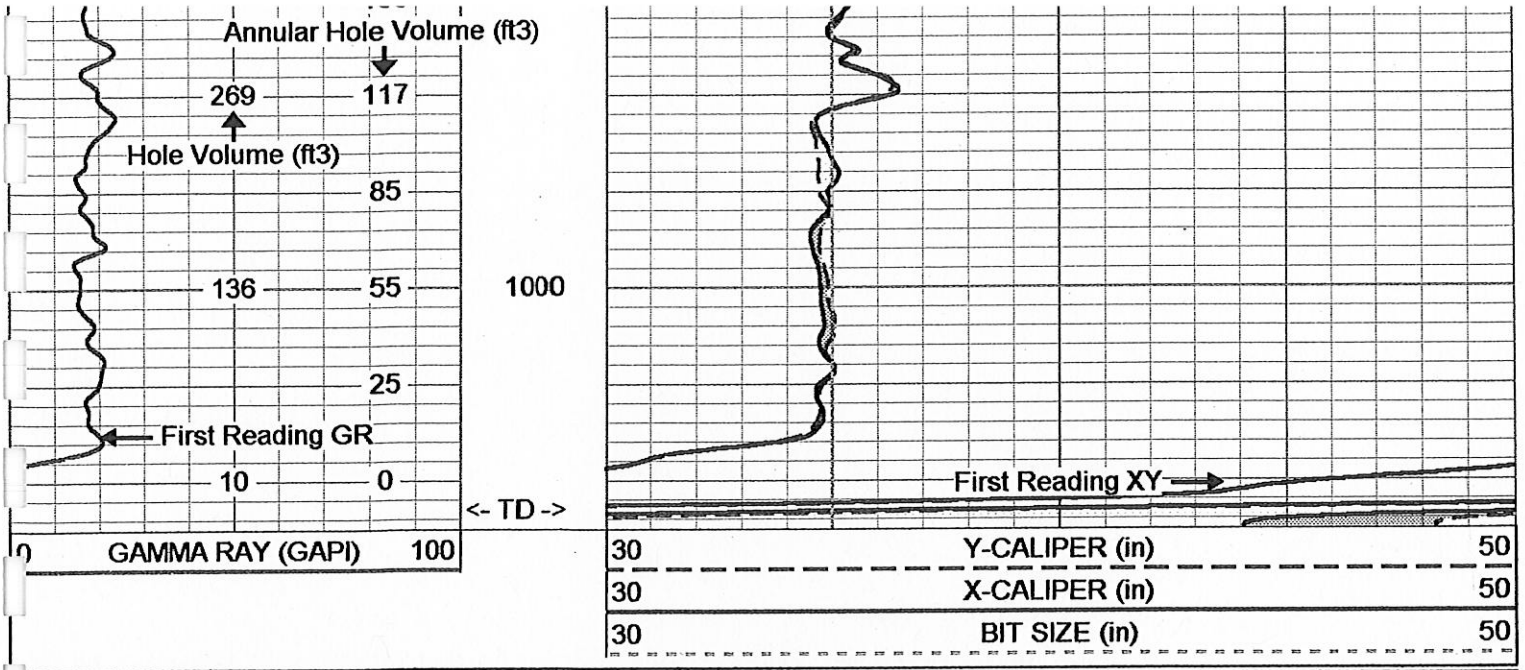
406
183

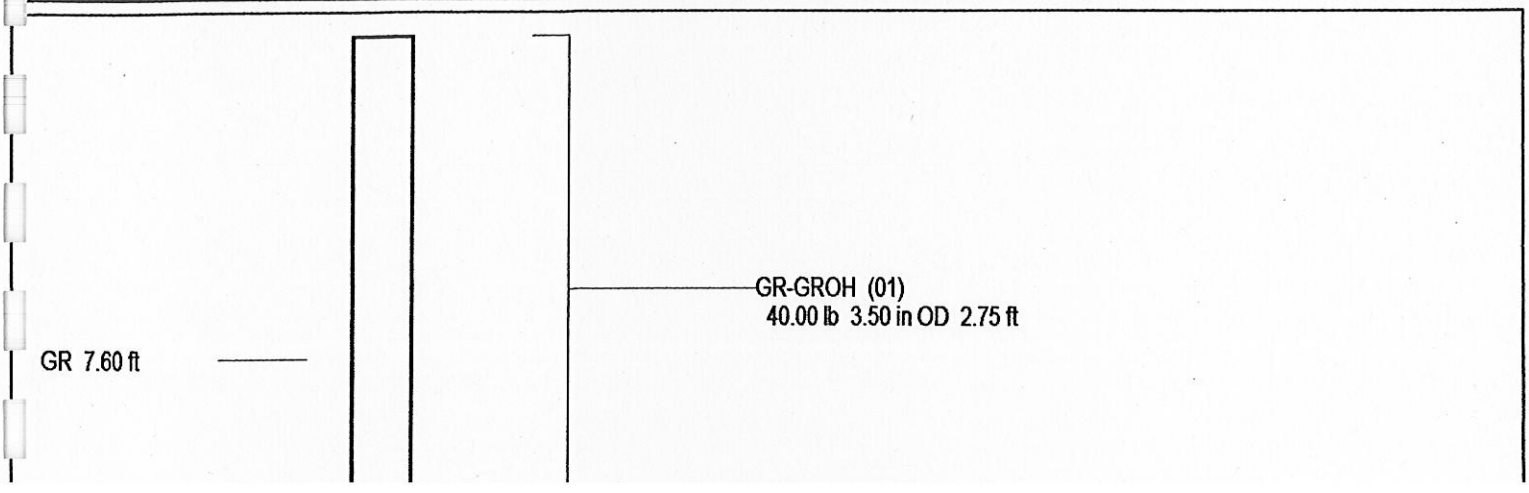


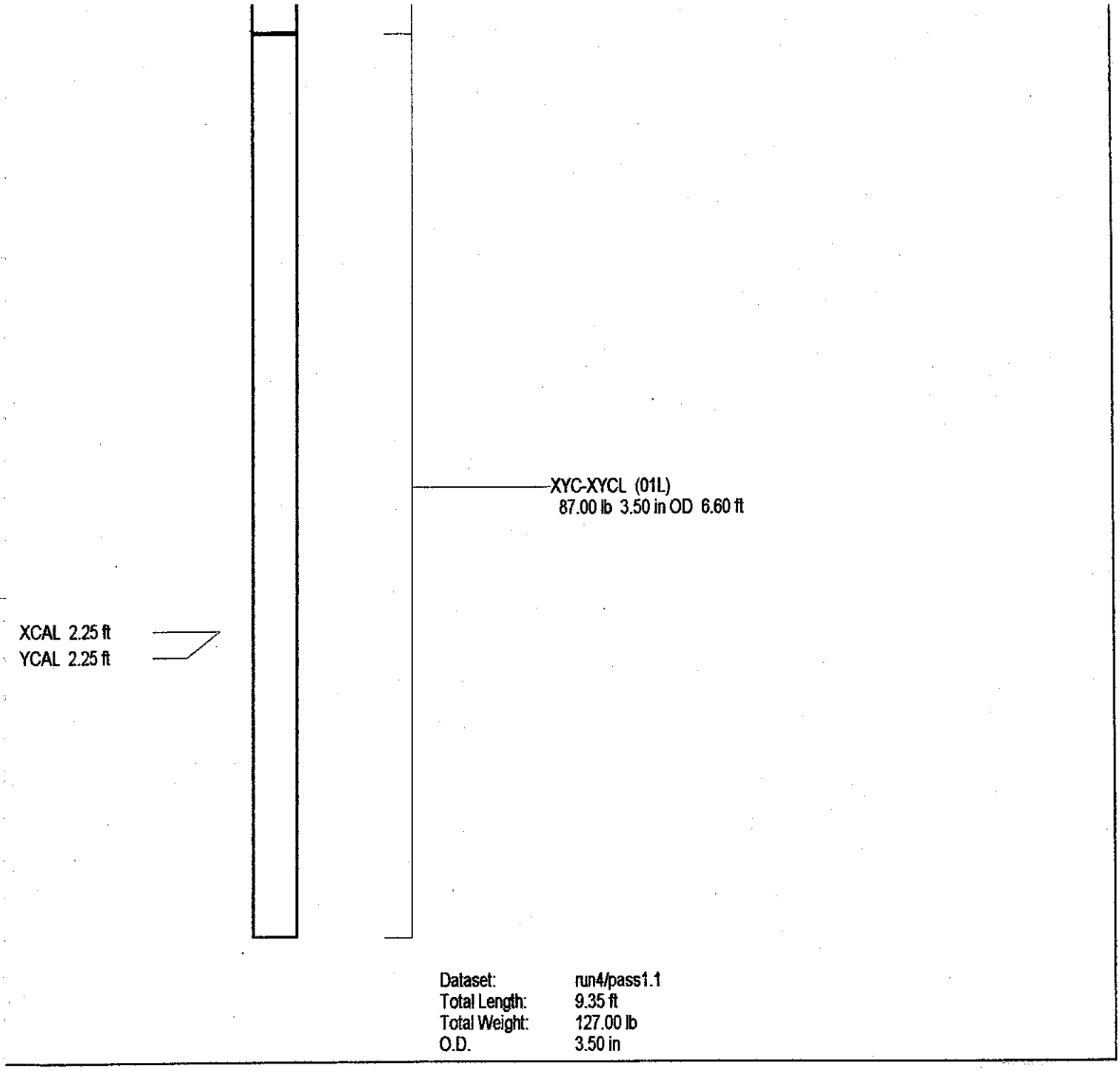
XY Caliper Calibration Report

Serial Number:	01L		
Tool Model:	XYCL		
Performed:	Sat Sep 17 07:41:11 2005		
Small Ring:	35.25	in	
Large Ring:	51	in	
	X Caliper	Y Caliper	
Reading with Small Ring:	842	813.51	cps
Reading with Large Ring:	1101	1086.2	cps
Gain:	0.0608108	0.0577579	
Offset:	-15.9527	-11.7366	

Gamma Ray Calibration Report

Serial Number:	01	
Tool Model:	GROH	
Performed:	Thu Sep 15 14:05:11 2005	
Calibrator Value:	120	GAPI
Background Reading:	10.722	cps
Calibrator Reading:	126.427	cps
Sensitivity:	1.03712	GAPI/cps





Dataset:	run4/pass1.1
Total Length:	9.35 ft
Total Weight:	127.00 lb
O.D.	3.50 in

Attachment A5

The temperature log by MV Geophysical Surveys performed following the initial pressure grout of the 24-inch diameter FRP casing showing the first lift of neat cement extending from the base of casing at 1,003 feet to a depth of 875 feet below land surface.

MV Geophysical

CEMENT TOP LOG
HIGH RESOLUTION TEMPERATURE
GAMMA RAY

Company Diversified Drilling Corporation
Well FP&L PW-3
Field Turkey Point
County Miami-Dade State/Prv Florida
Location FP&L Turkey Point Nuclear Power Facility
LAT.: N25.43930 LONG.: W80.32894
B&V / JLA Geosciences, Inc.
Other Services: NONE

Company Diversified Drilling Corp.
Well FP&L PW-3
Field Turkey Point
County Miami-Dade
State/Prv Florida

Date	19-SEPT-2005		
Run Number	FIVE		
Depth Driller	1008'		
Depth Logger	985' Cmt Plg		
Bottom Logged Interval	985'		
Top Log Interval	SURFACE		
Open Hole Size	35"		
Type Fluid	MUD		
Density / Viscosity	na/na		
Max. Recorded Temp.	na		
Estimated Cement Top	NA		
Time Well Ready	02:30 9/19/2005		
Time Logger on Bottom	02:30 9/19/2005		
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller		
Witnessed By	S.Underwood (DDC)		

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

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

Borehole Record

Run Number	Bit	From	To
ONE	11.875"	50'	1058'
TWO	46.5"	50'	310'
THREE	35"	310'	1015'

Tubing Record

	Size	Wgt/Ft	Top	Bottom
Casing Record		1017' Logger		
Surface String	50"	.375" WT	SURFACE	50'
Prot. String	36"	.375" WT	SURFACE	306'
Production String	24" FRP	24" ID	SURFACE	1008'
Liner				

Size	Weight	From	To

Invoice No. 2005164 P.O. # Job No. 5505 * FIELD PRINT *

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Comments

Cement Tops

Stage	CTL	TAG
1	875'	NA
2	XXX'	YYY

TEMPERATURE CALIBRATION REPORT

(Performed: 12-SEP1-05 12:45)

DEG-F	CPS
34.9	143.19
148.9	2694.95

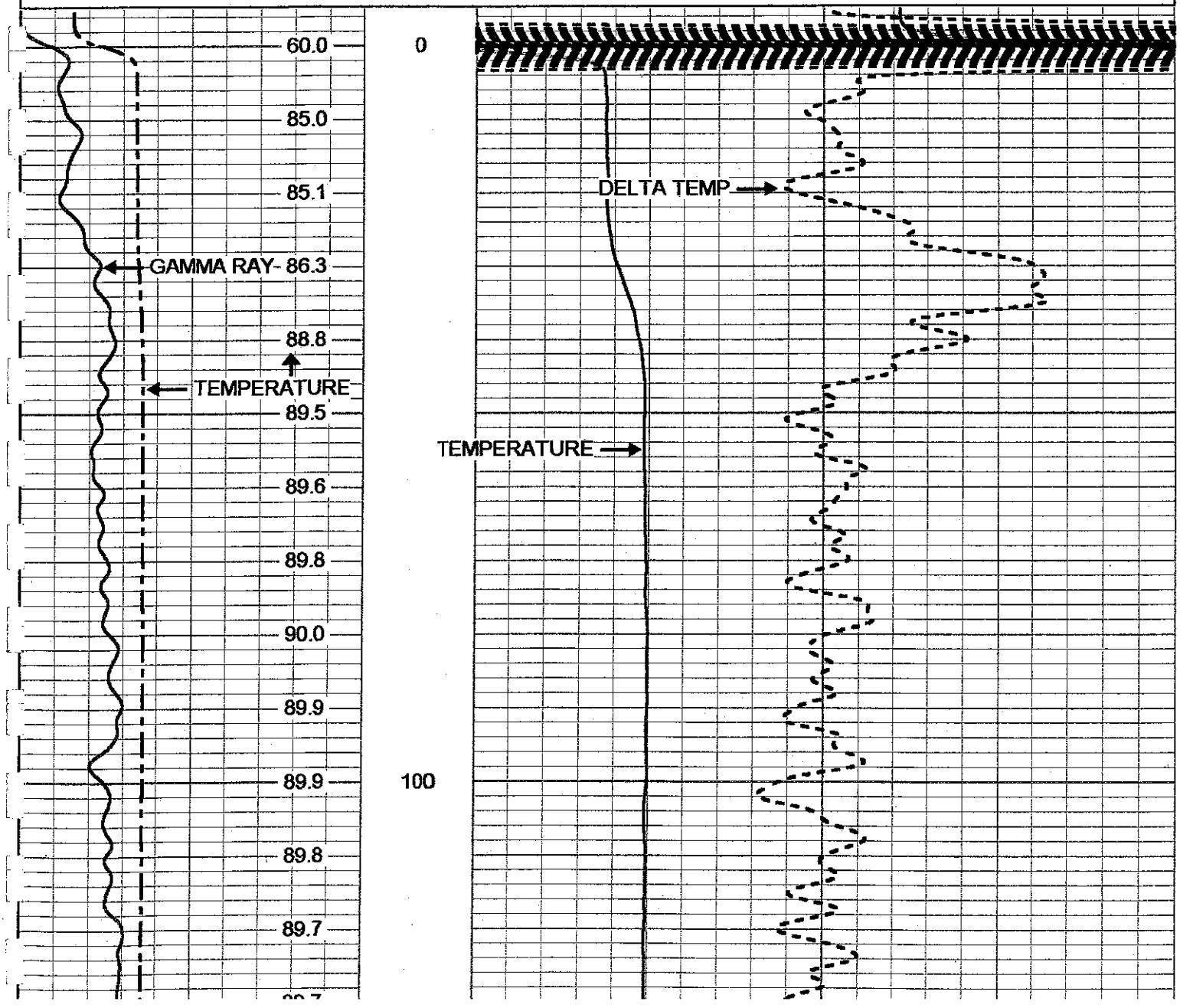
MV Geophysical

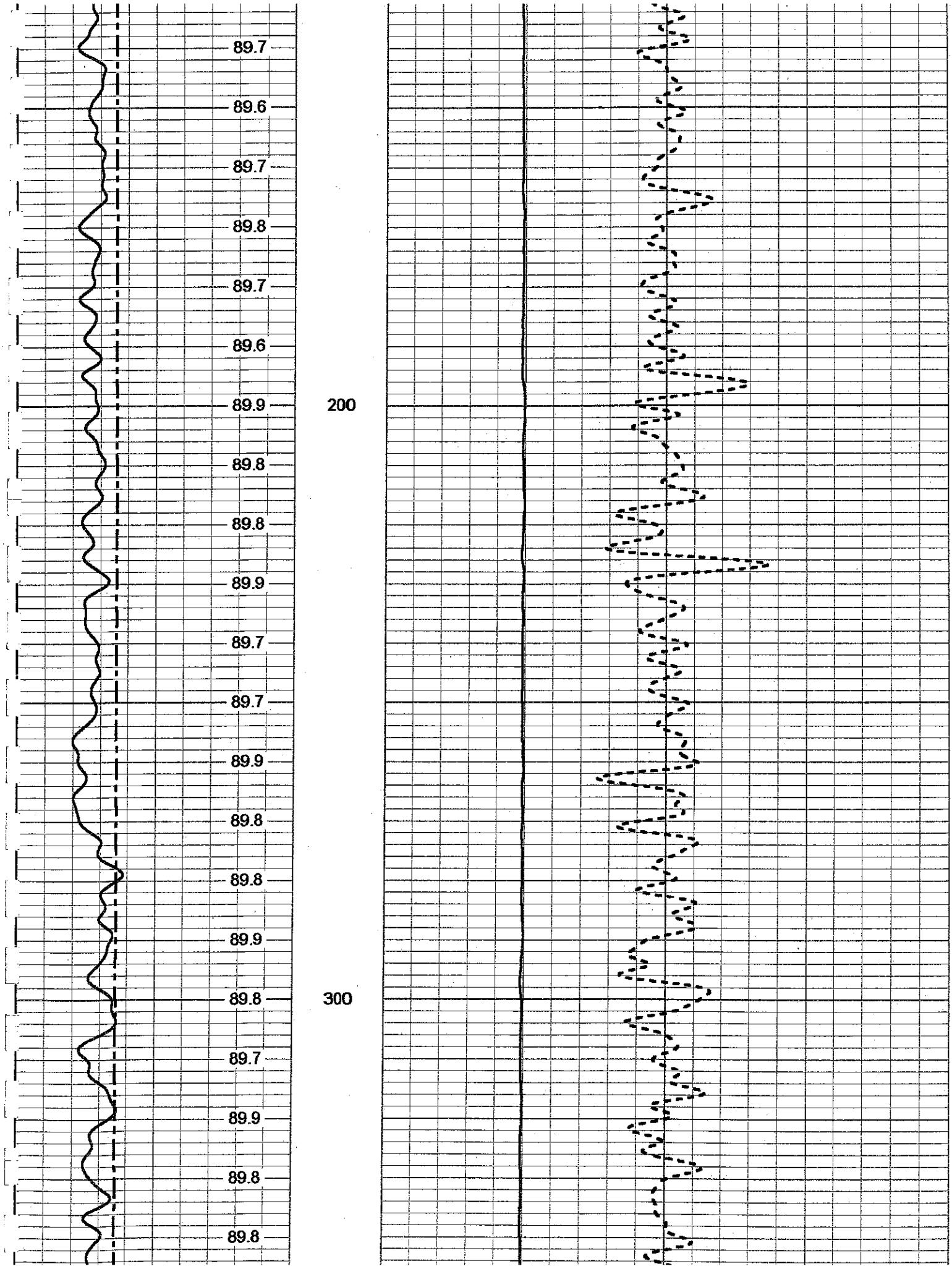
Stage 1: 875'

Database File:	turkpt-1.db
Dataset Pathname:	run5/pass1
Presentation Format:	HRT-FKAA
Dataset Creation:	Mon Sep 19 02:58:39 2005 by Log VER_5.3
Charted by:	Depth in Feet scaled 1:240

0	TEMP (degF)	250
0	GAMMA RAY (GAPI)	100

70	TEMPERATURE (degF)	150
-0.5	DELTA TEMP (degF)	0.5




89.7
89.6
89.7
89.8
89.7
89.6
89.9
200
89.8
89.8
89.9
89.7
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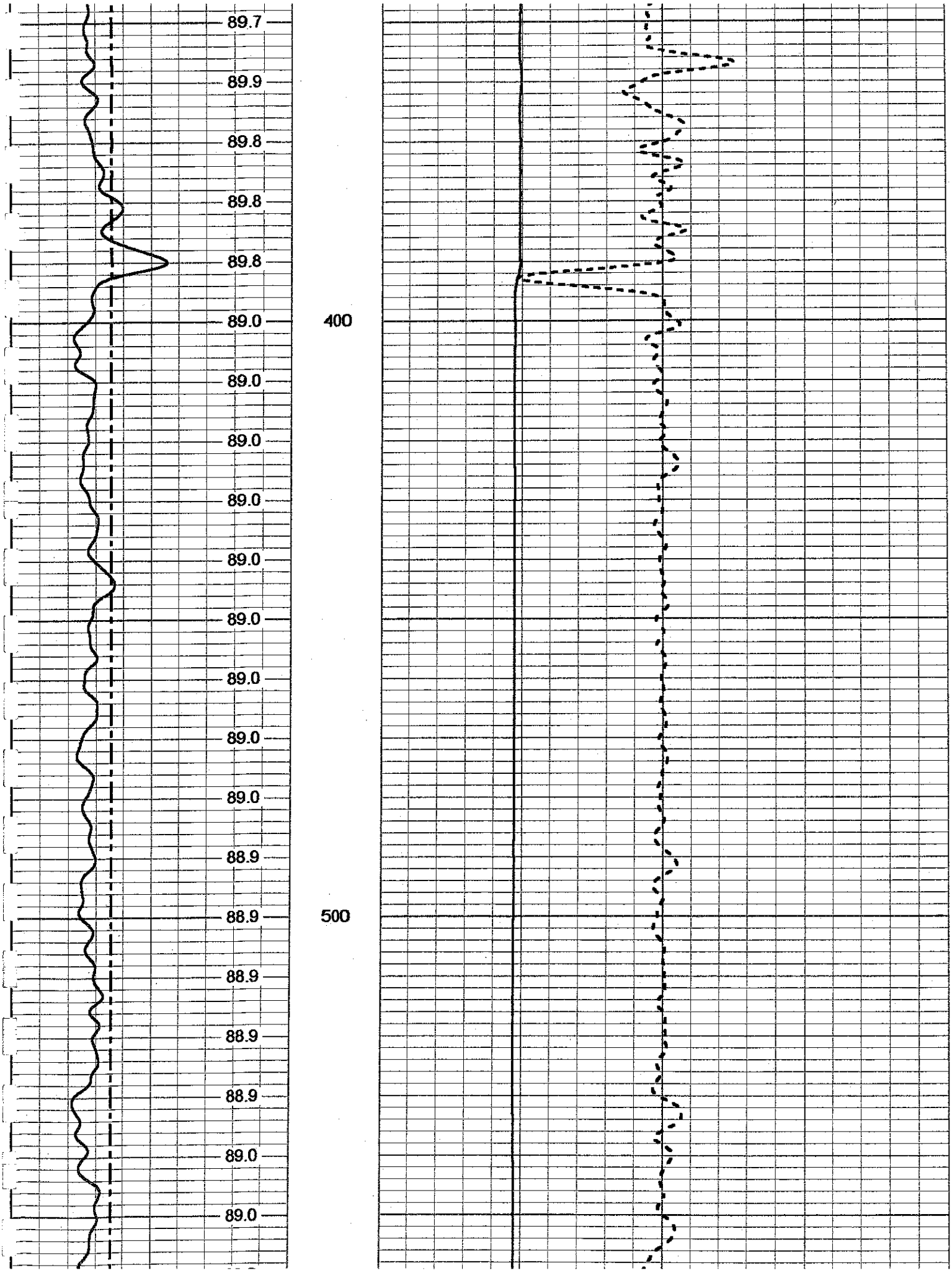
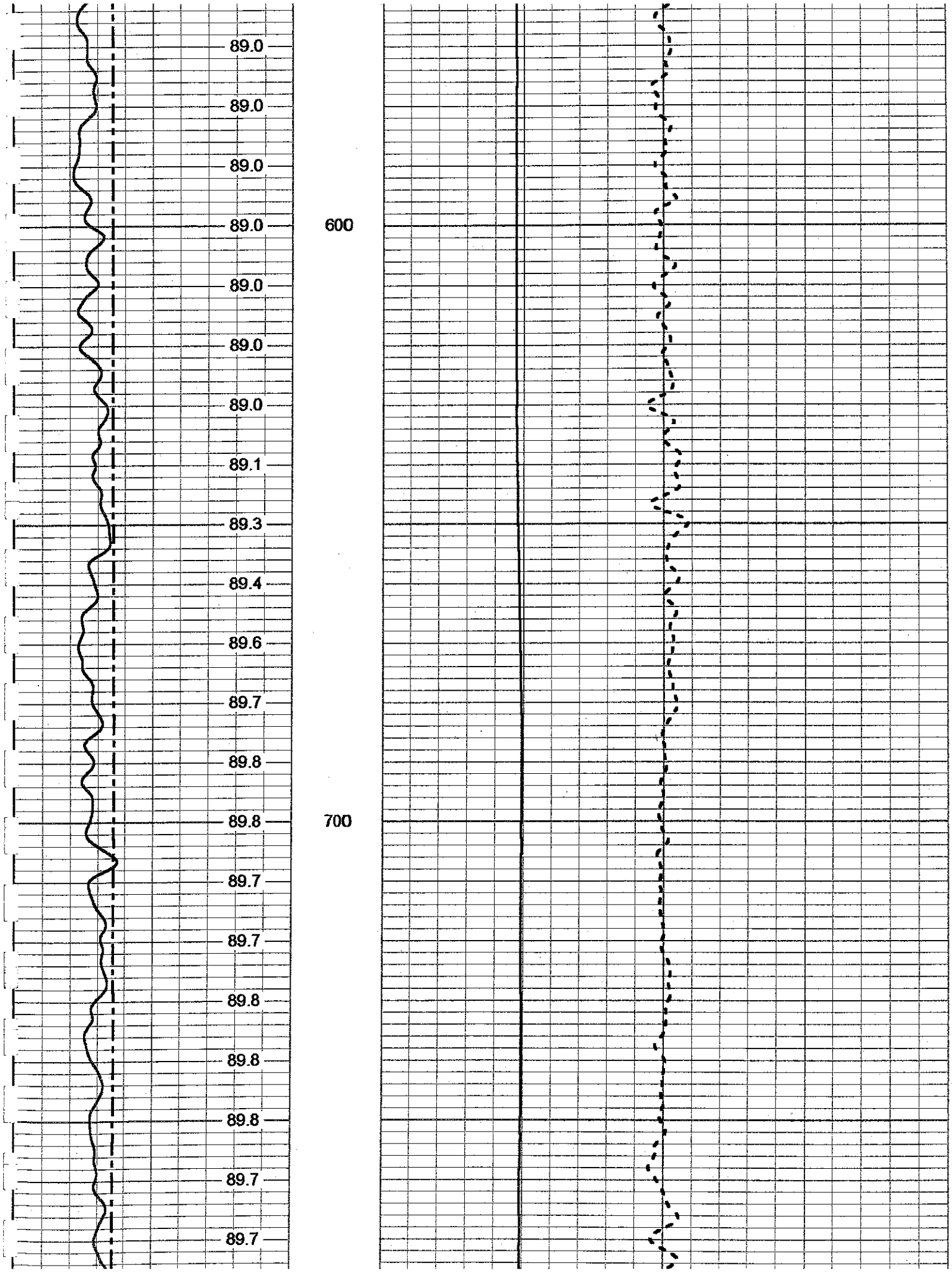
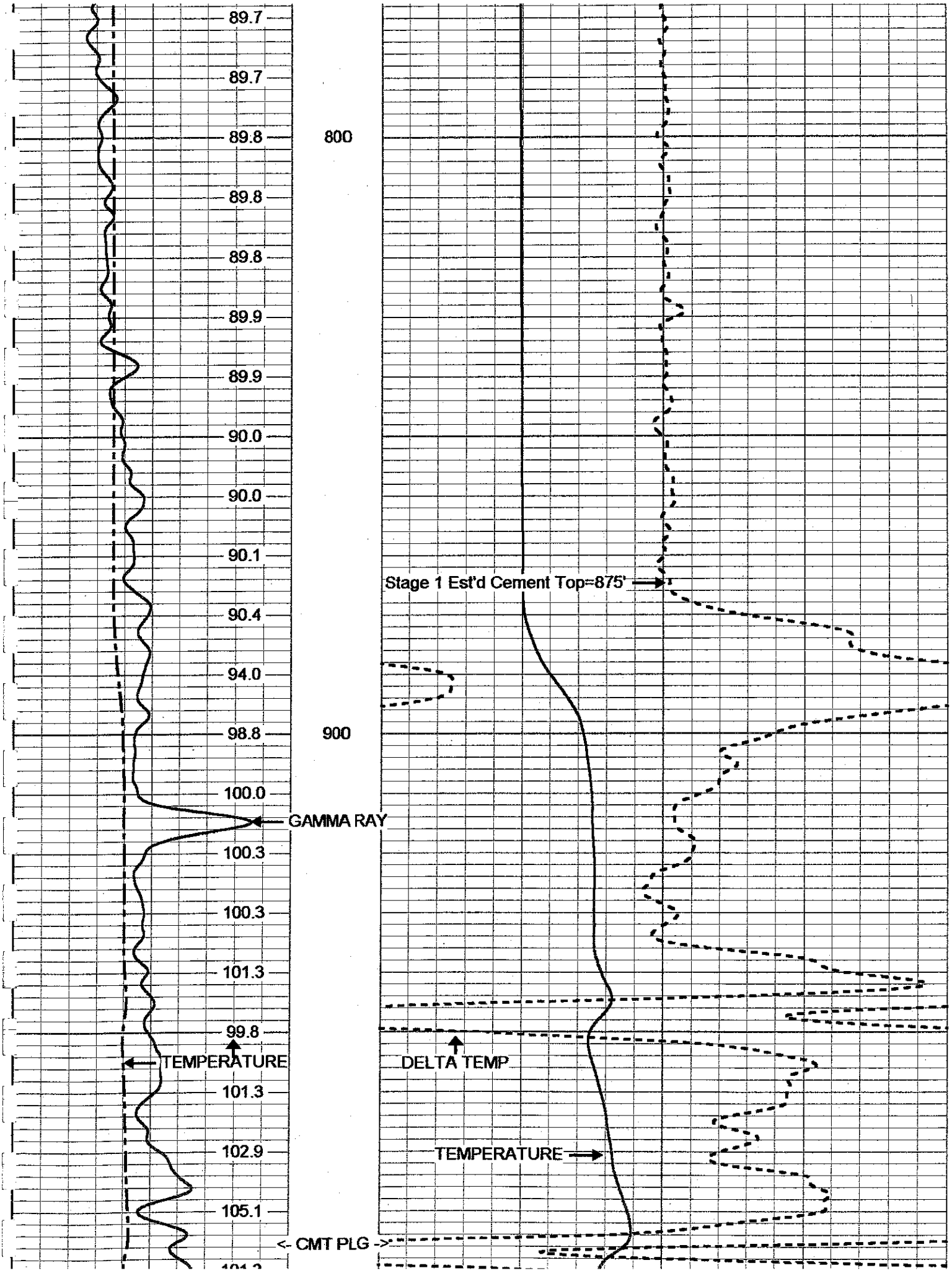
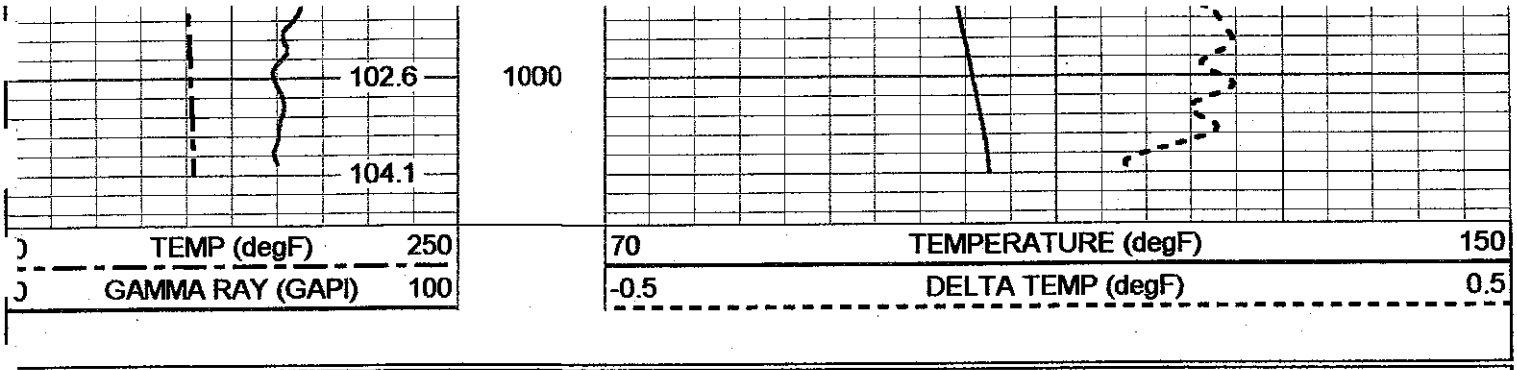
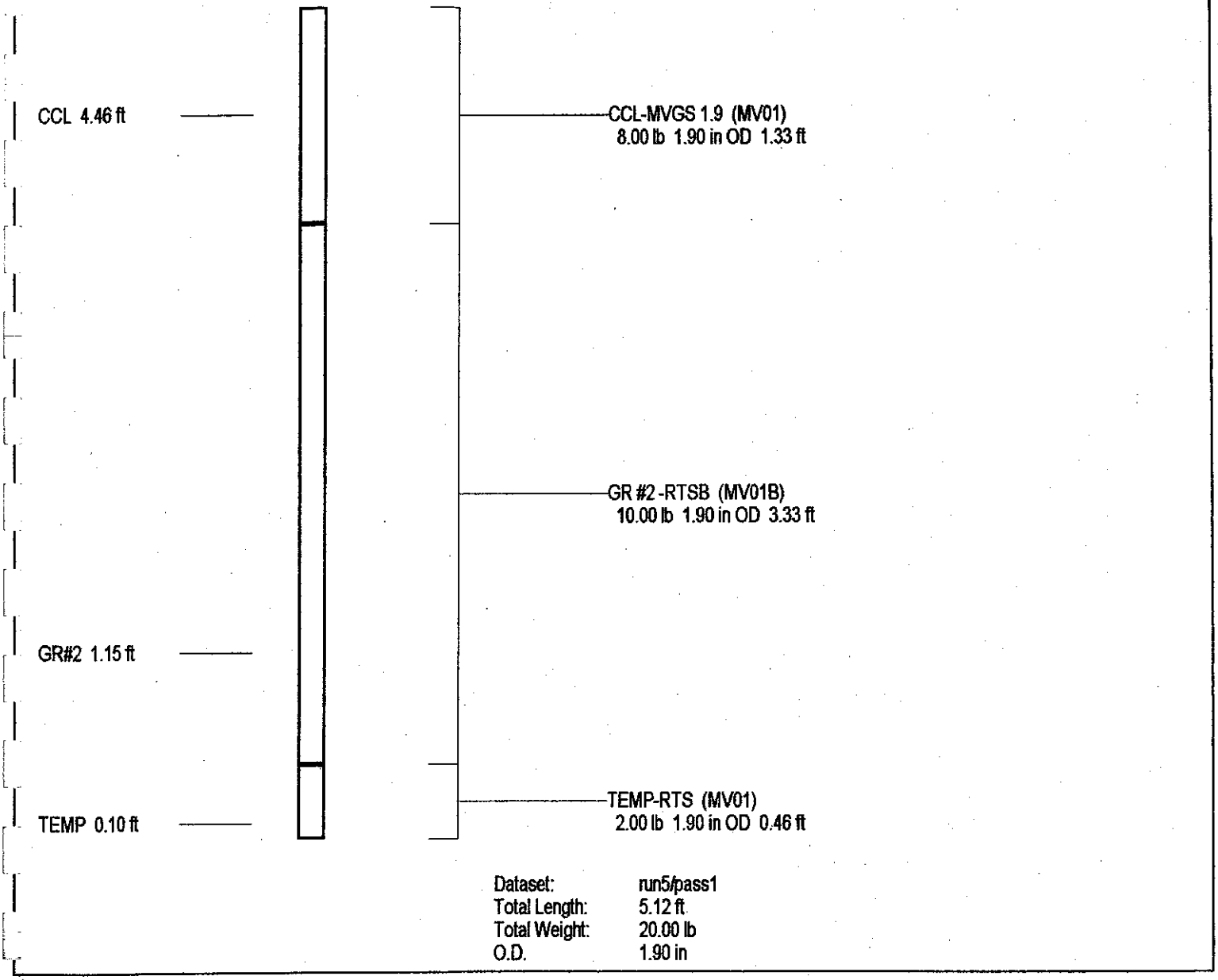
89.9
89.8
89.8
89.9
89.8
300
89.7
89.9
89.8
89.8


89.7
89.9
89.8
89.8
89.8
89.0
89.0
89.0
89.0
89.0
89.0
89.0
89.0
89.0
89.0
88.9
88.9
88.9
88.9
89.0
89.0
400
500


89.0
89.0
89.0
89.0
600
89.0
89.0
89.0
89.1
89.3
89.4
89.6
89.7
89.8
89.8
700
89.7
89.7
89.8
89.8
89.8
89.7
89.7


89.7
89.7
89.8
800
89.8
89.8
89.9
89.9
90.0
90.0
90.1
Stage 1 Est'd Cement Top=875'
90.4
94.0
98.8
900
100.0
GAMMA RAY
100.3
100.3
101.3
99.8
TEMPERATURE
DELTA TEMP
101.3
102.9
TEMPERATURE
105.1
<- CMT PLG ->
101.2





Dataset:	run5/pass1
Total Length:	5.12 ft
Total Weight:	20.00 lb
O.D.	1.90 in

Attachment A6

The cement bond log (CBL) by MV Geophysical Surveys performed on the 24-inch diameter FRP casing following completion of the well, showing uniformity of response over the length of the casing.

MV Geophysical

CEMENT BOND VARIABLE DENSITY LOG

Company Diversified Drilling Corp.
Well FP&L PW-3
Field Turkey Point
County Miami-Dade
State/Prv Florida

Company **Diversified Drilling Corporation**
Well **FP&L PW-3**
Field **Turkey Point**
County **Miami-Dade** State/Prv **Florida**

Location
FP&L Turkey Point Nuclear Power Facility
LAT.: N25.43930 LONG.: W80.32894
B&V / JLA Geosciences, Inc.

Other Services
DHTV

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

Date	16-DEC-2005		
Run Number	SIX		
Depth Driller	1247'		
Depth Logger	1016'		
Bottom Logged Interval	1008'		
Top Log Interval	SURFACE		
Open Hole Size	23"		
Type Fluid	H2O		
Density / Viscosity	na/na		
Max. Recorded Temp.	na		
Estimated Cement Top	SURFACE		
Time Well Ready	08:00 12/16/2005		
Time Logger on Bottom	08:00 12/16/2005		
Equipment Number	MVGS-1		
Location	Ft. Myers		
Recorded By	S.Miller		
Witnessed By	J.Friedrichs (JLA)	C.Dodd (DDC)	N.Johnson (DDC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	11.875"	50'	1058'				
TWO	46.5"	50'	310'				
THREE	35"	310'	1015'				
FOUR			1247'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	50"	.375" WT	SURFACE	50'
Prot. String	36"	.375" WT	SURFACE	306'
Production String	24" FRP	24" ID	SURFACE	1008'
Liner				

Invoice No. 2005240 P.O. #: Job No.: 5505 * FIELD PRINT *

Comments

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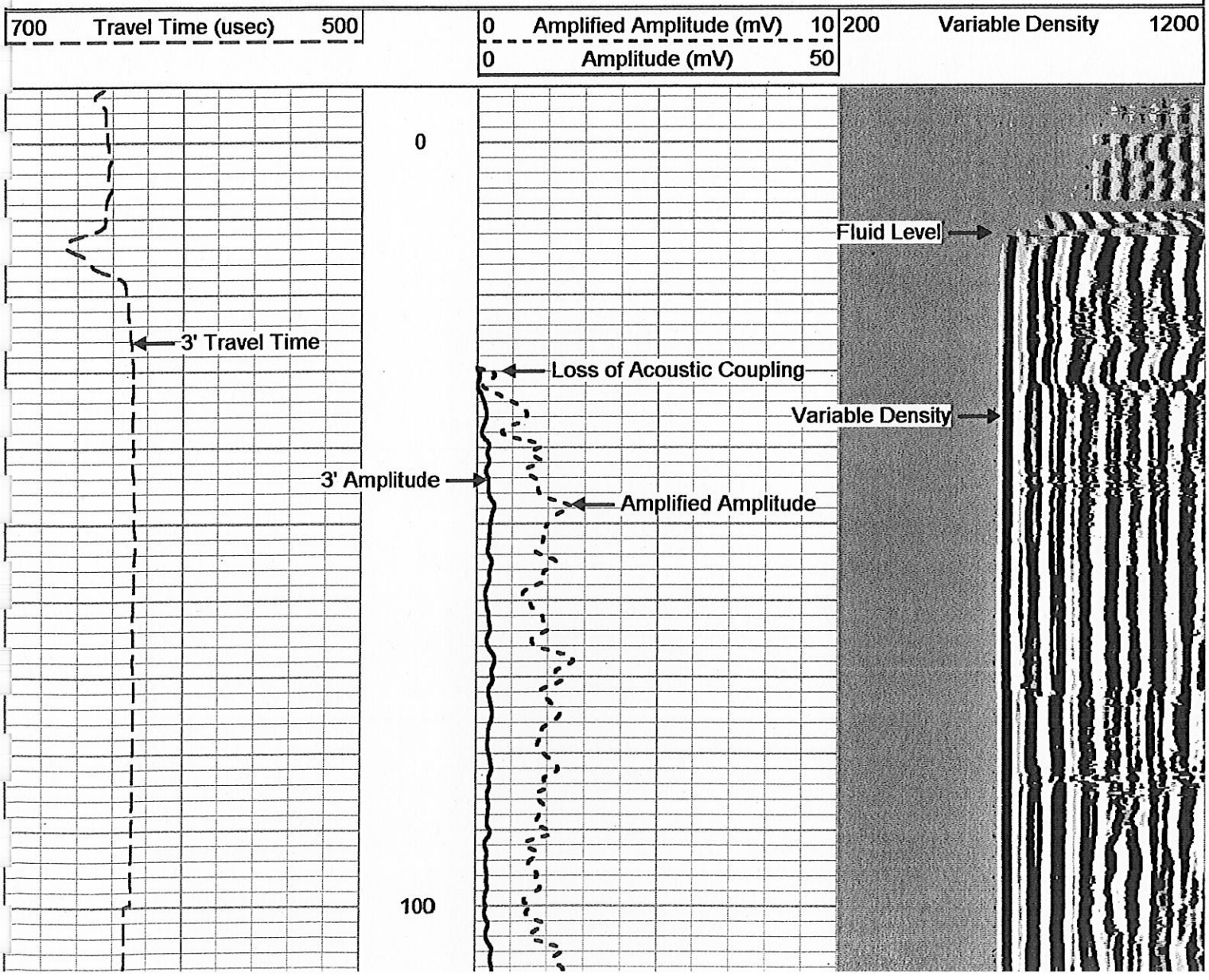
Cement Bond tool is Centralized.

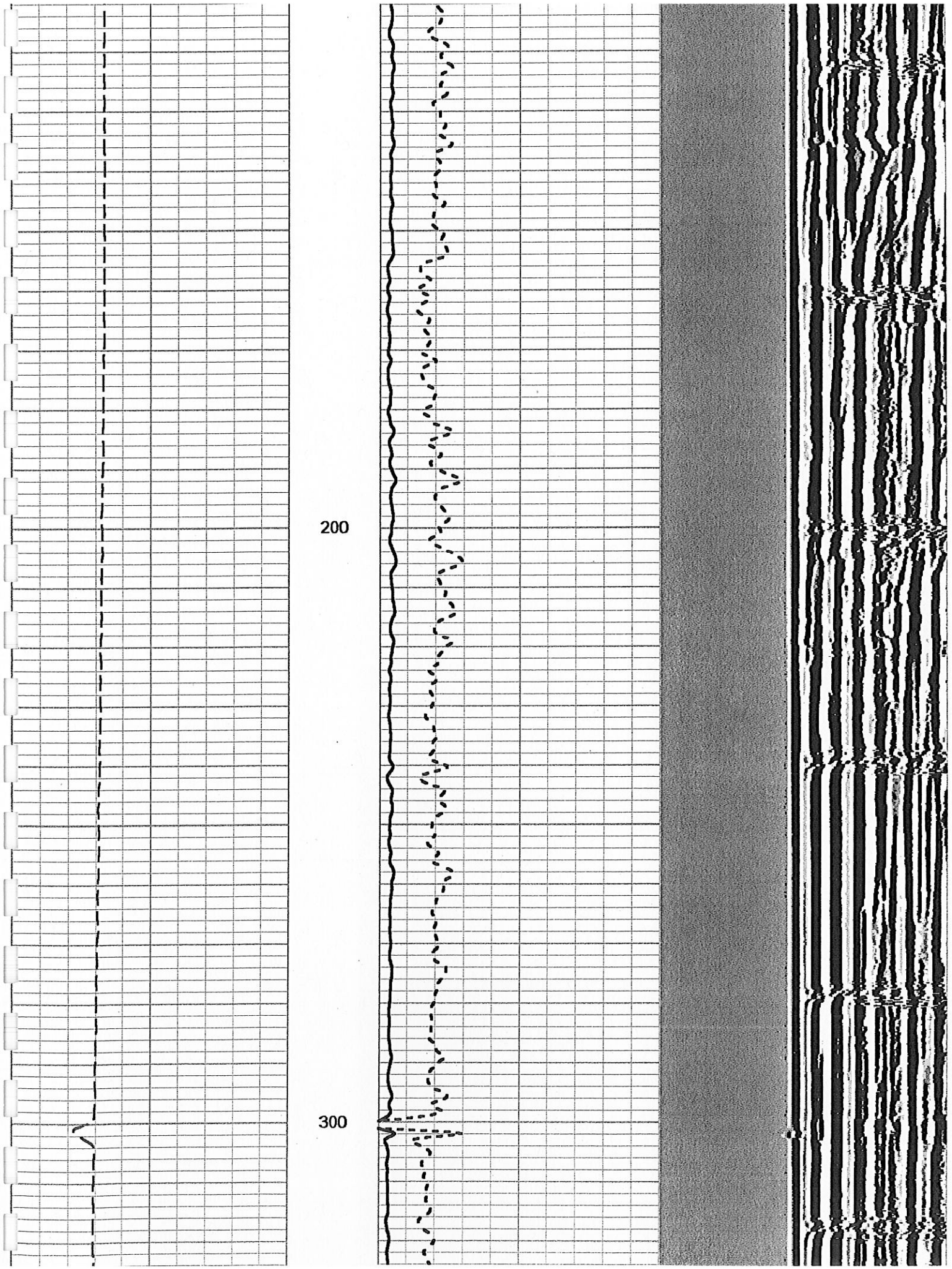
Well Status: Static (Salt Waffer Kill)

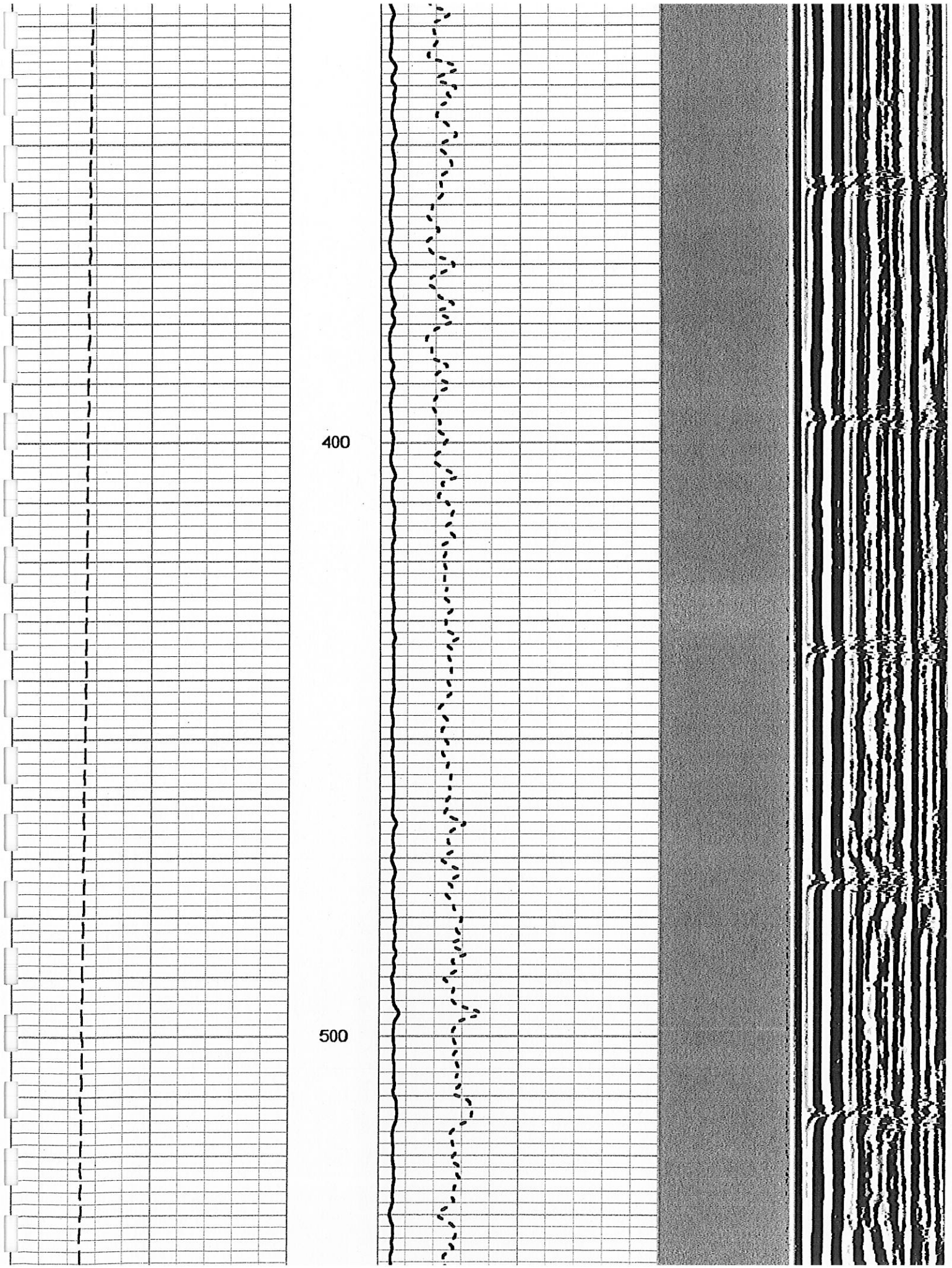
MV Geophysical

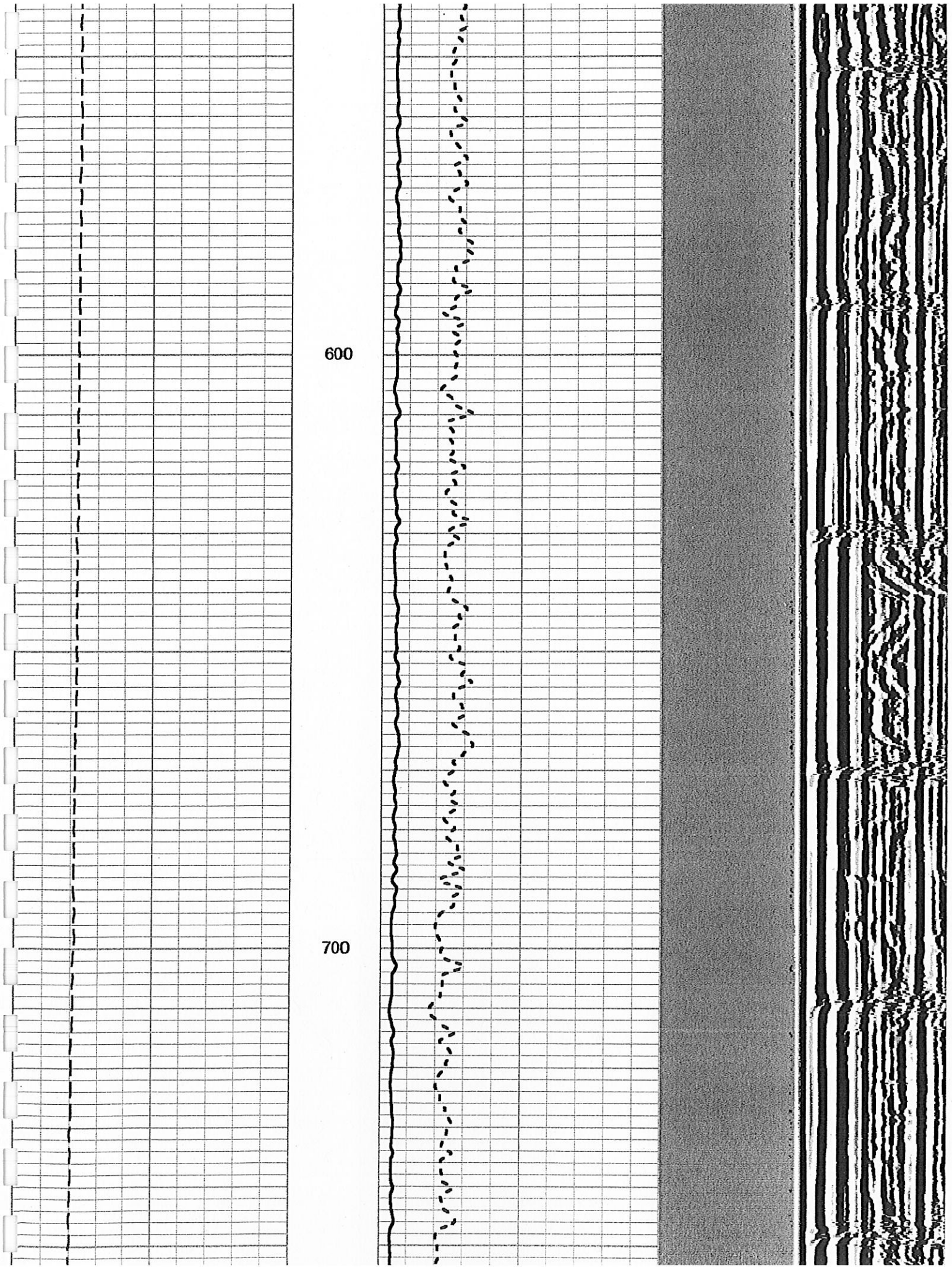
MAIN PASS

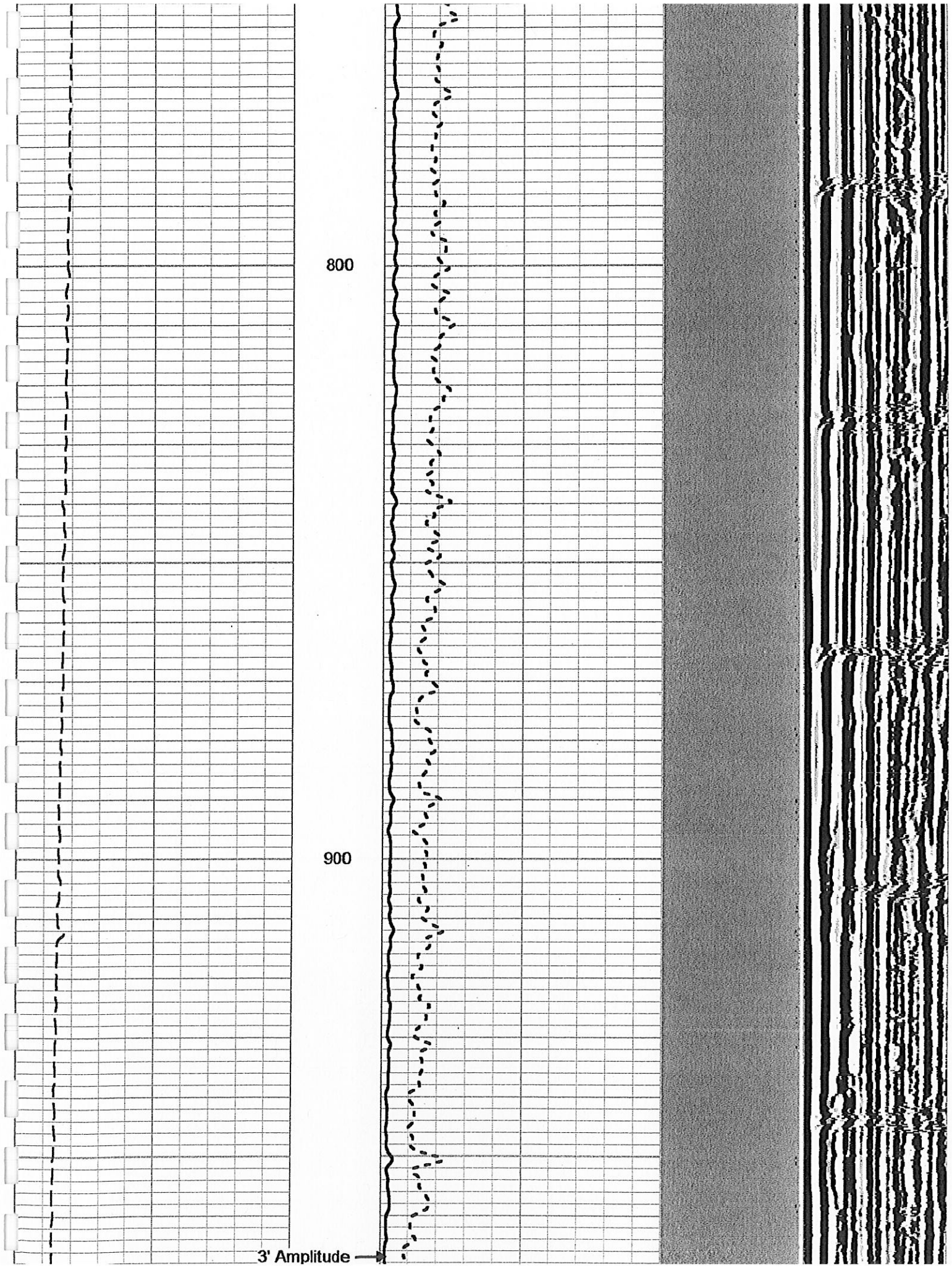
Database File:	turkpt-1.db
Dataset Pathname:	run8/MAIN
Presentation Format:	CBL24
Dataset Creation:	Fri Dec 16 10:12:25 2005
Charted by:	Depth in Feet scaled 1:240

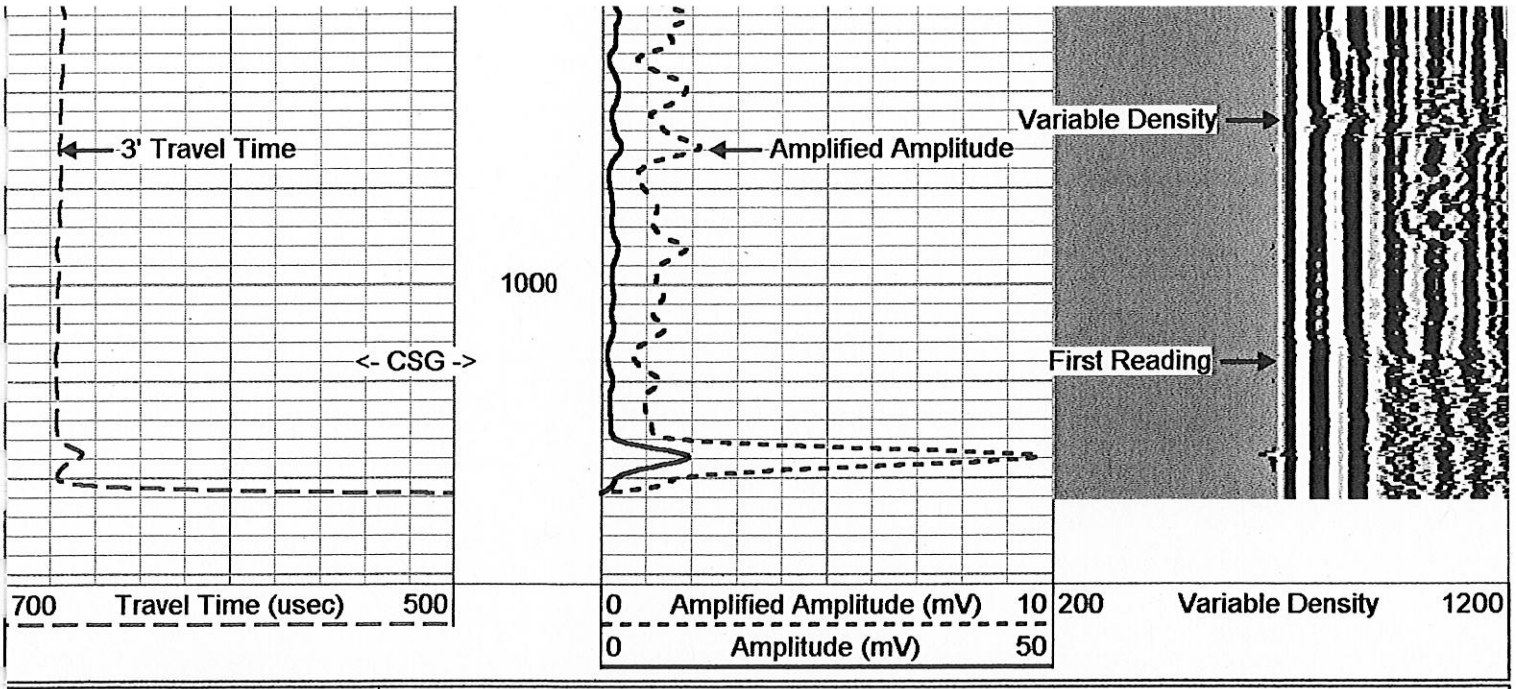



200
300


400
500


600
700

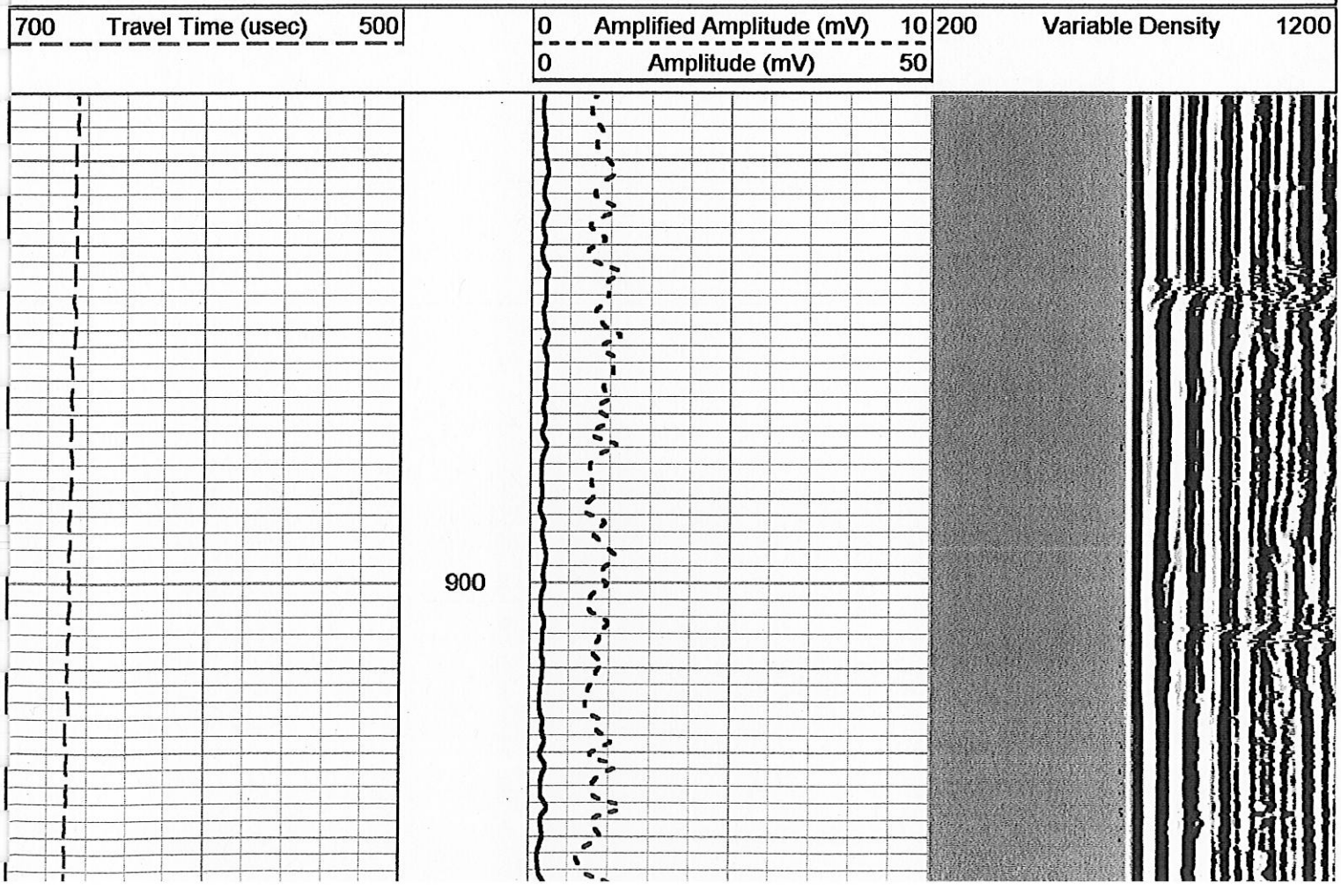

800
900
3' Amplitude

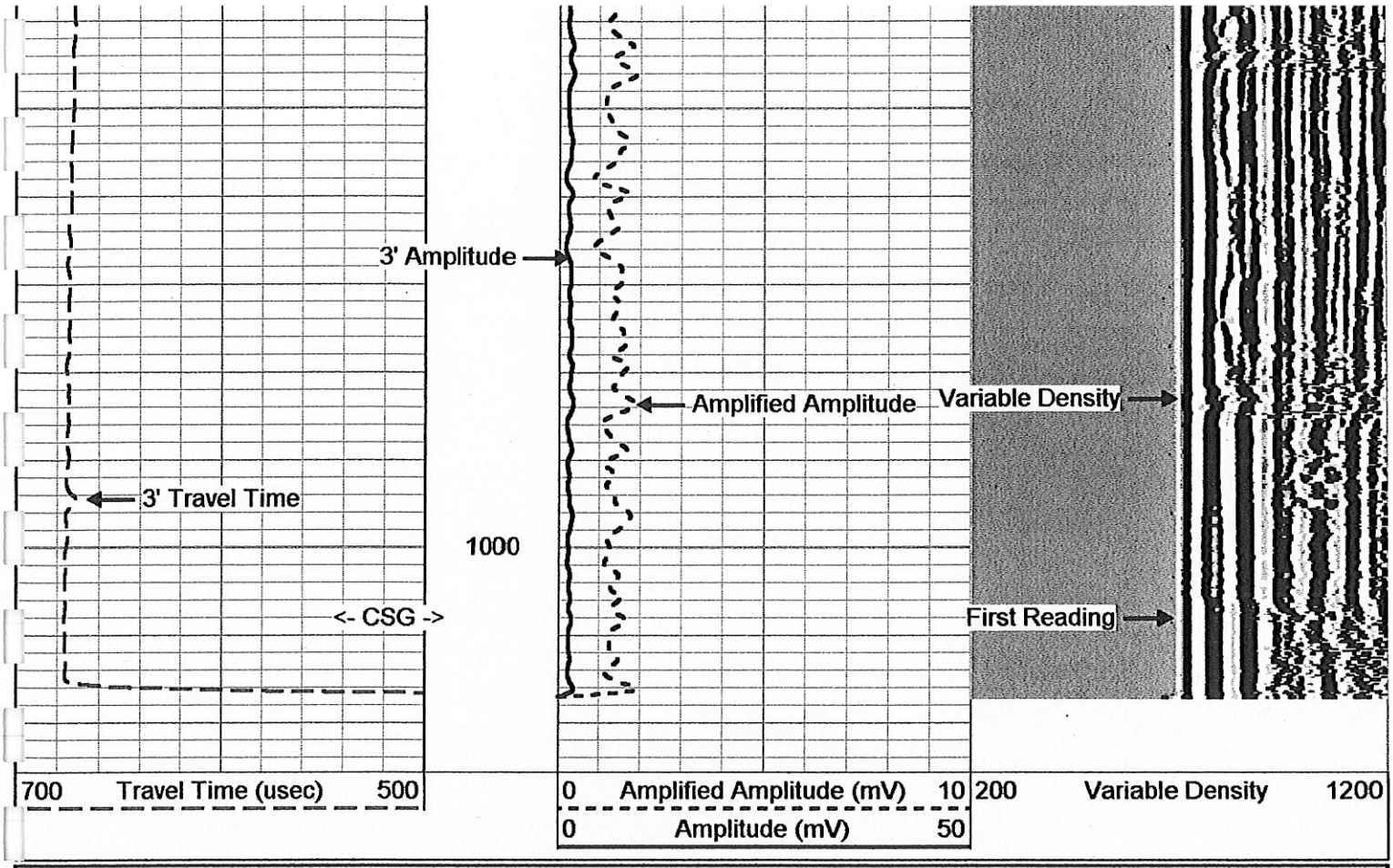


MV Geophysical

REPEAT SECTION

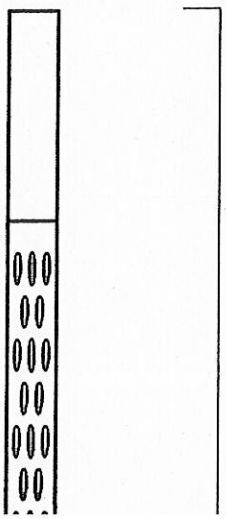
Database File:	turkpt-1.db
Dataset Pathname:	run8/pass1
Presentation Format:	CBL24
Dataset Creation:	Fri Dec 16 08:45:22 2005 by Log VER_5.3
Charted by:	Depth in Feet scaled 1:240

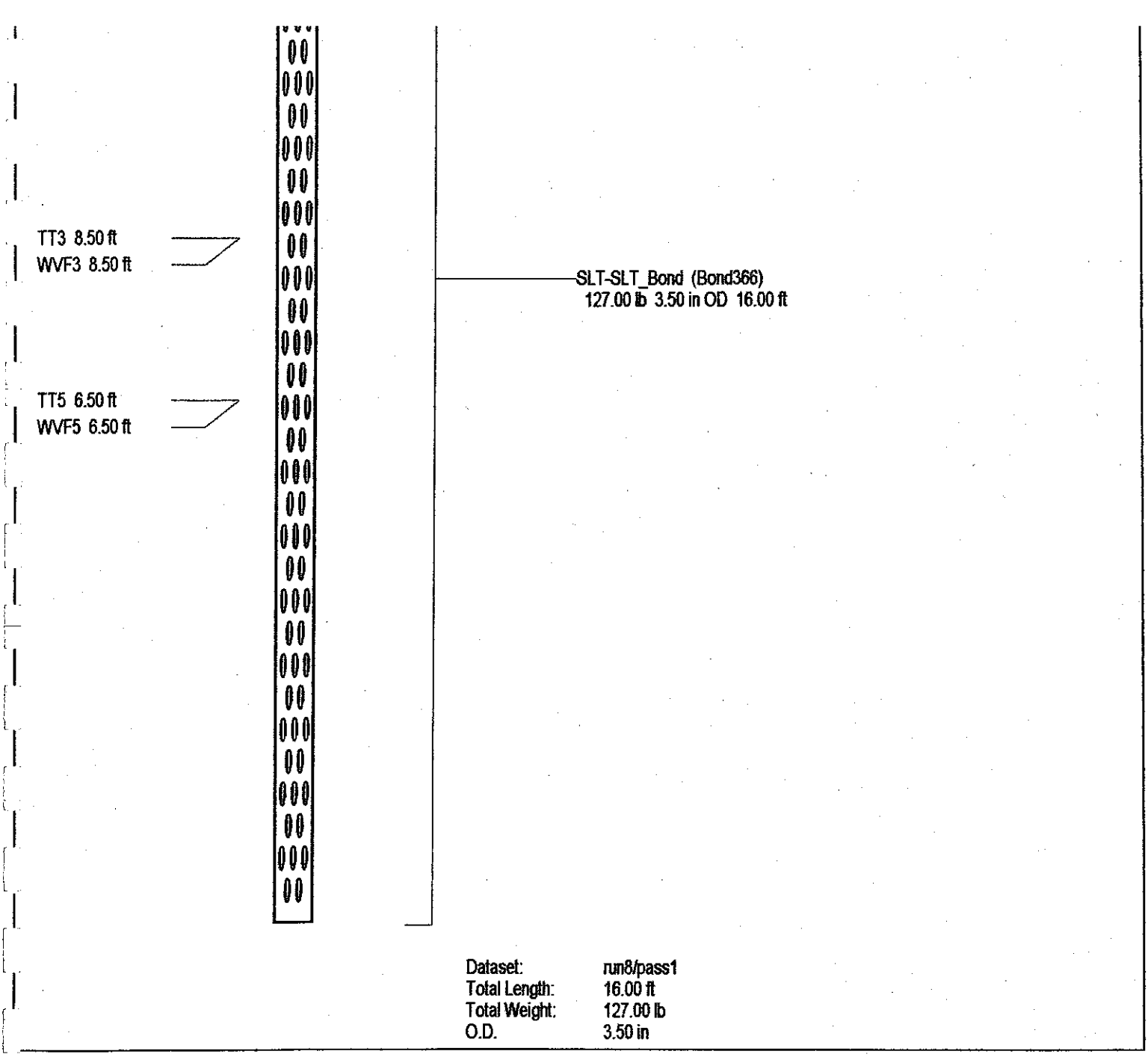




Cement Bond Log Calibration Report

Serial Number:	Bond366		
Tool Model:	SLT_Bond		
Performed:	Fri Dec 16 08:33:36 2005		
Depth:	158.576	ft	
Casing Diameter:	14	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.35	1	mV
Calibrated Amplitude:	35.12	40.8869	mV
Reading at Signal Zero:	0.1551	0.0127441	V
Reading in Free Pipe:	1.5231	0.0216797	V
Gain:	25.4167	4463.85	
Offset:	-3.59212	-55.8879	




TT3 8.50 ft
WVF3 8.50 ft
TT5 6.50 ft
WVF5 6.50 ft
SLT-SLT_Bond (Bond366)
127.00 lb 3.50 in OD 16.00 ft
Dataset: run8/pass1
Total Length: 16.00 ft
Total Weight: 127.00 lb
O.D. 3.50 in

Attachment A7

A copy of correspondence that Steve Hettick, P.E., General Manager of Ershigs Fiberglass, the manufacturer of the 24-inch diameter FRP casing, provided regarding the structural integrity of the casing.

From: Steve Hettick [mailto:SHettick@ershigs.com]
Sent: Tuesday, October 11, 2005 12:48 AM
To: Bill Musselwhite
Cc: Steve Guay; Dave Turner (Plasticon Fluid Systems)
Subject: RE:

Bill,

As discussed, you believe the casing might not be fully grouted at the elevation between 633' and 875' depth, but is fully grouted above to grade and below to ~ 1000' +.

I do not see a significant design problem as the casing connections were designed to suspend the entire planned 1100 linear feet (and more if necessary) until such time as the grout would cure. The fact that the casing is locked in above and base supported below, suggests to me that there isn't anywhere for the questionable support section to go and that much of the original suspended load is no longer in the string, but has been transferred to those areas where the casing was fully grouted.

The o-rings seals will be fine regardless of whether there is grout or native soils pushing on the backside. For what it is worth, this style of joint is what we most frequently use in a variety of buried piping applications / soil types.

Please give me a call tomorrow if you have further questions.

Regards,

Steve Hettick, PE
Ershigs, Inc.
360-527-3447

-----Original Message-----
From: Bill Musselwhite [mailto:bmusselwhite@wellwater.com]
Sent: Monday, October 10, 2005 1:29 PM
To: Steve Hettick
Subject:

Steve,
For a variety of reasons we have an uncemented interval extending potentially from 633 feet bls to approx 875 feet bls. The casing is cemented from 0 to 633 and fron 875 feet to the total depth of 875 feet. The client would like us to get your comments on " the ability of the casing to span the length of questionable support between 633 feet and 875 feet".

Please e-mail your comments on this. Give me a call if you need additional information.

Thanks,

Bill Musselwhite (239) 887-3313 bmusselwhite@wellwater.com