List of Geophysical Logs

Station Name	Station Location	Comment	PDF File Name
City of Jersey Village	G1010016	2 Geophysical logs by Layne Western Company	1010016 A.pdf 1010016.pdf
Harris Co. Fresh Water District #61	G1010237A	Layne Texas Company	1010237 A.pdf
CCUD	G1010430A	CCUD #1, chemical tests by Orlando Laboratories	1010430 ABC.pdf
CCUD	G1010430B	CCUD #2, multiple screen intervals, 160' total screen, highest and lowest entered	
CCUD	G1010430C	CCUD #3, Geophysical log by Alsay, multiple screen intervals, 232' total screen	
Old Hickory	G1010447	P0870, Well # 1A, geophysical log by Layne Texas file 97205	1010447_duplicate.pdf G 1010447 C.pdf G 1010447 C_ (2).pdf
Creekway	G1010920	CNN# 12434	1010920 B.pdf
HCMUD 130	HCMUD130 Well #1	multiple screen intervals 148 feet total, information from Layne Texas Company, LTD, 1101-2066	1012097.pdf
HCMUD 230	G1012740	CNN# P1126, geophysical log by Alsay, Inc., multiple screen intervals 198' total	1012740.pdf
Sam Houston Race Park	G1012882	WHCMUD 21, multiple screen intervals 318 feet total, chemical test, pump test, geophysical well log by Alsay	G 1012882.pdf
HCMUD 247	CNN# P0690	1102-1951 file 4111, behind park and Ride lot at West Rd and Castlebridge Dr.	G1010016C.pdf

7070016 A

GEARHART

INDUCTION ELECTRICAL LOG

FILING NO.

COMPANY LAYNE WESTERN COMPANY

WELL SEATTLE STREET WATER WELL

FIELD CITY OF JERSEY VILLAGE

COUNTY HARRIS STATE TEXAS

LOCATION:
1/2 MILE EAST OF HWY 290N;
1/4 MILE SOUTH OF SENATE STREET

SEC ____ TWP ____ RGE ____

Other Services
CDL
CNS

Permanent Datum G.L. Elev. ____
Log Measured from G.L. , ____ Ft. Above Perm. Datum
Drilling Measured from G.L.

Elev.: K.B. ____
D.F. ____
G.L. ____

Date	12/12/86			
Run No.	ONE			
Depth—Driller	1452'			
Depth—Logger	1448'			
Bottom Logged Interval	1445'			
Top Logged Interval	38'			
Casing—Driller	30" @ 40'	@	@	@
Casing—Logger	38'			
Bit Size	12 1/4"			
Type Fluid in Hole	FRESH GEL			
Density / Viscosity	/ 34	/	/	/
pH / Fluid Loss	/ cc	/ cc	/ cc	/ cc
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	10+ @ 75 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	10+ @ 75 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	10+ @ 75 °F	@ °F	@ °F	@ °F
Source of Rmf / Rmc	C / C	/	/	/
Rm @ BHT	10+ @ 75 °F	@ °F	@ °F	@ °F
Time: End Circulation	1600 12/12			
Time: Logger on bottom	2017 12/12			
Max. Rec. Temp. Deg. F.	88 °F	°F	°F	°F
Equip. No. / Location	7668 / LIBERTY	/	/	/
Recorded By	SEGOTA			
Witnessed By	MR. MARSHALL, MR. HORTON, MR. CAMPBELL			

FOLD HERE

Changes in Mud Type or Additional Samples				
Date Sample No.				
Depth-Driller				
Type Fluid in Hole				
Dens. Visc.				
pH Fluid Loss		cc		cc
Source of Sample				
Rm @ Meas. Temp.	@	°F	@	°F
Rmf @ Meas. Temp.	@	°F	@	°F
Rmc @ Meas. Temp.	@	°F	@	°F
Source Rmf Rmc				
Rm @ BHT	@	°F	@	°F
Rmf @ BHT	@	°F	@	°F
Rmc @ BHT	@	°F	@	°F

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole

EQUIPMENT DATA

Run No.	Tool No.	Tool Type	Tool Position	S. O.	Gamma Ray Tool No.
ONE	5470	DIKA-FA	FREE	1 1/2"	2502

CALIBRATION DATA

Run No.	S. N. Zero	S. N. Int. Cal.	Loop Cal.	Tool Zero	Int. Cal.	GAMMA RAY API SCALE	GAMMA RAY BKG. CPS.	GAMMA RAY STD. CPS.
ONE	-7438/10	5/7486	401.2	-1.92	656	15	150.3	639.6

Remarks:

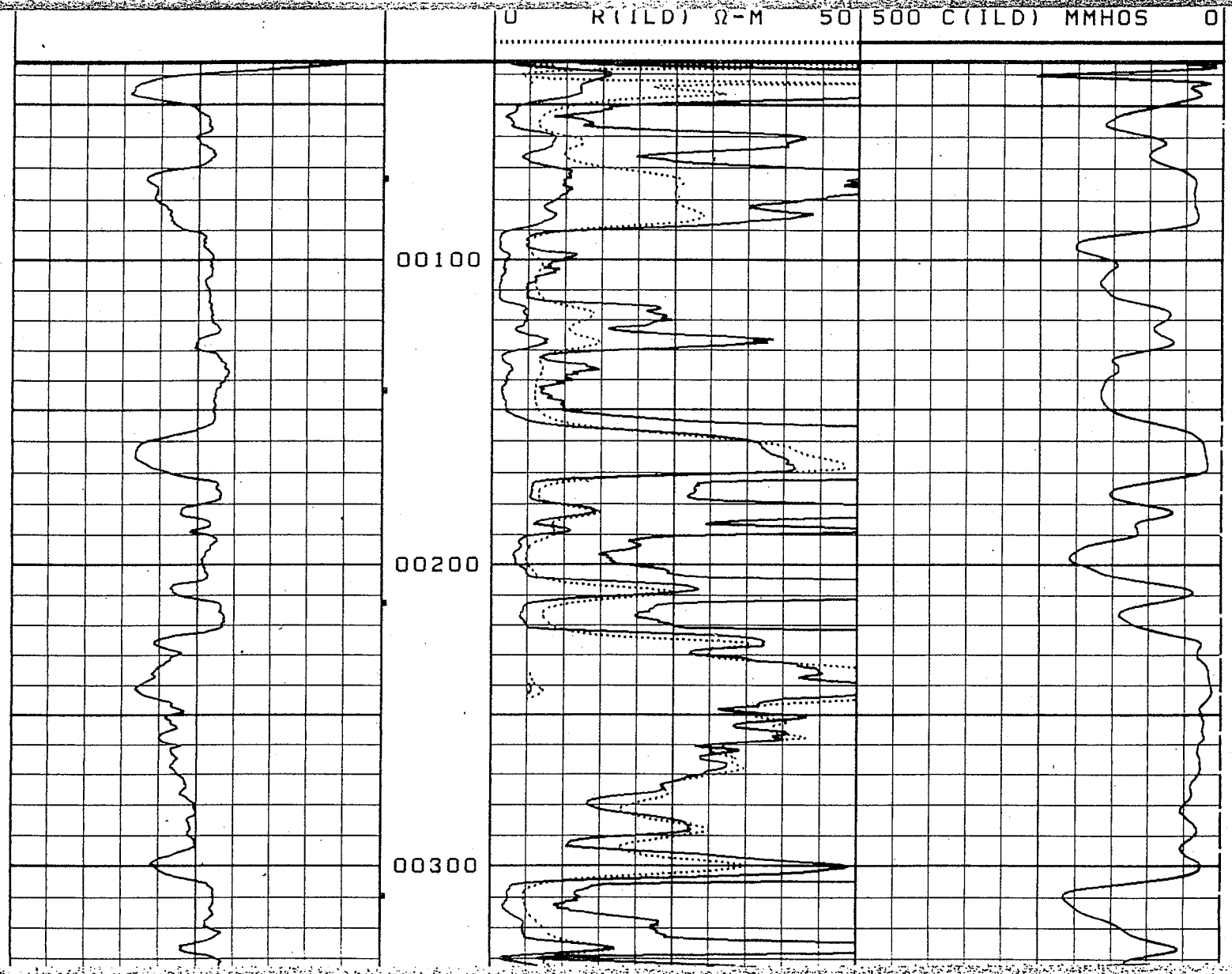
NOTICE: Gearhart Industries, Inc. cannot and does not guarantee the accuracy or correctness of any log data or of any interpretation thereof and shall not be liable or responsible for any loss, cost, damage or expense incurred or sustained by Customer resulting from any log data or interpretation made by Gearhart Industries, Inc. or any of its agents, servants or employees. Neither log data nor interpretation thereof should be relied upon as the sole basis for any drilling, completion, well treatment or production decision or any other procedure. Unless there is presently in effect a master or other specific or general contract intended to extend and apply hereto, this Log is provided in accordance with Gearhart Industries, Inc.'s General Terms and Conditions as set out in its current price schedule.

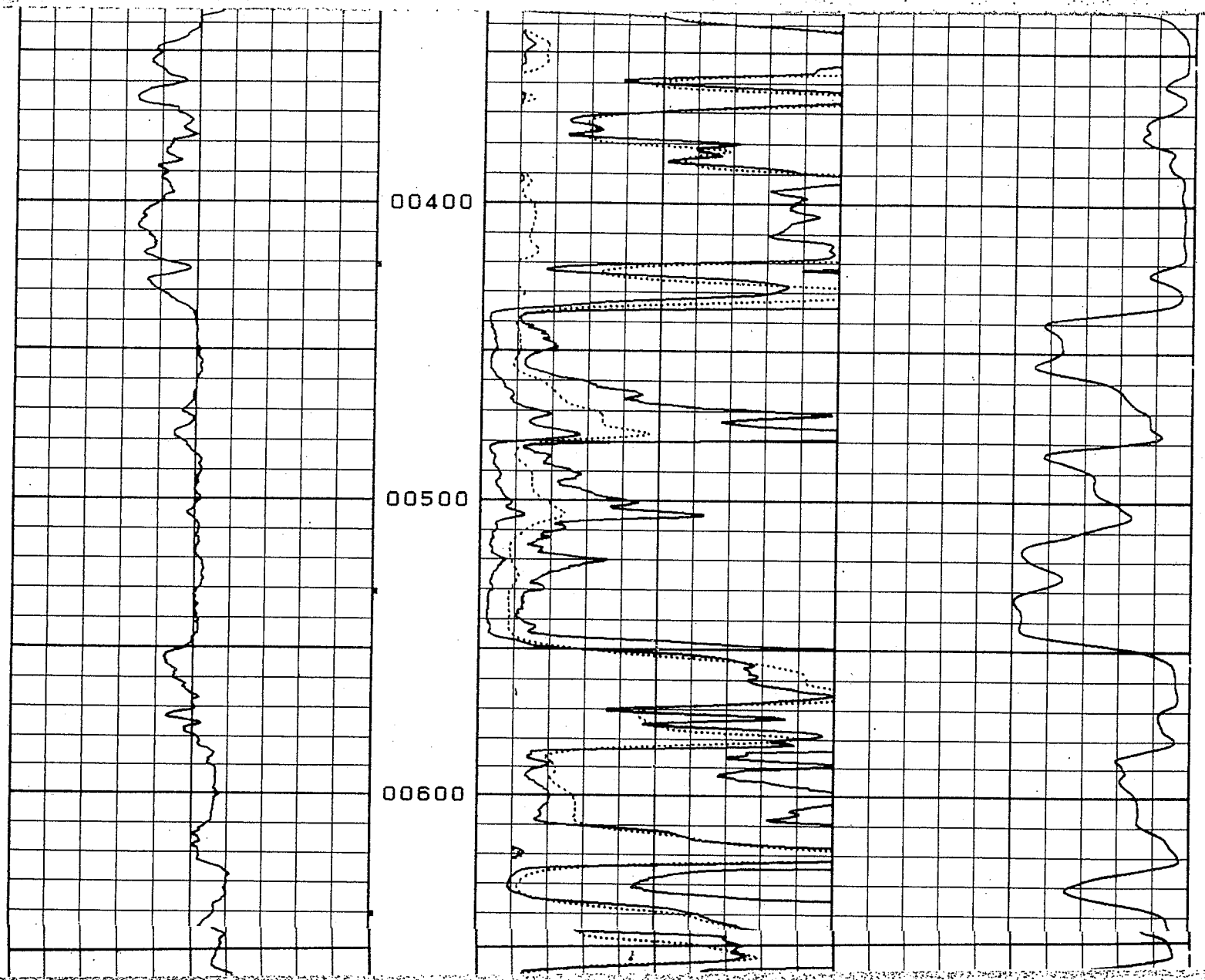
GEARHART INDUSTRIES, INC.

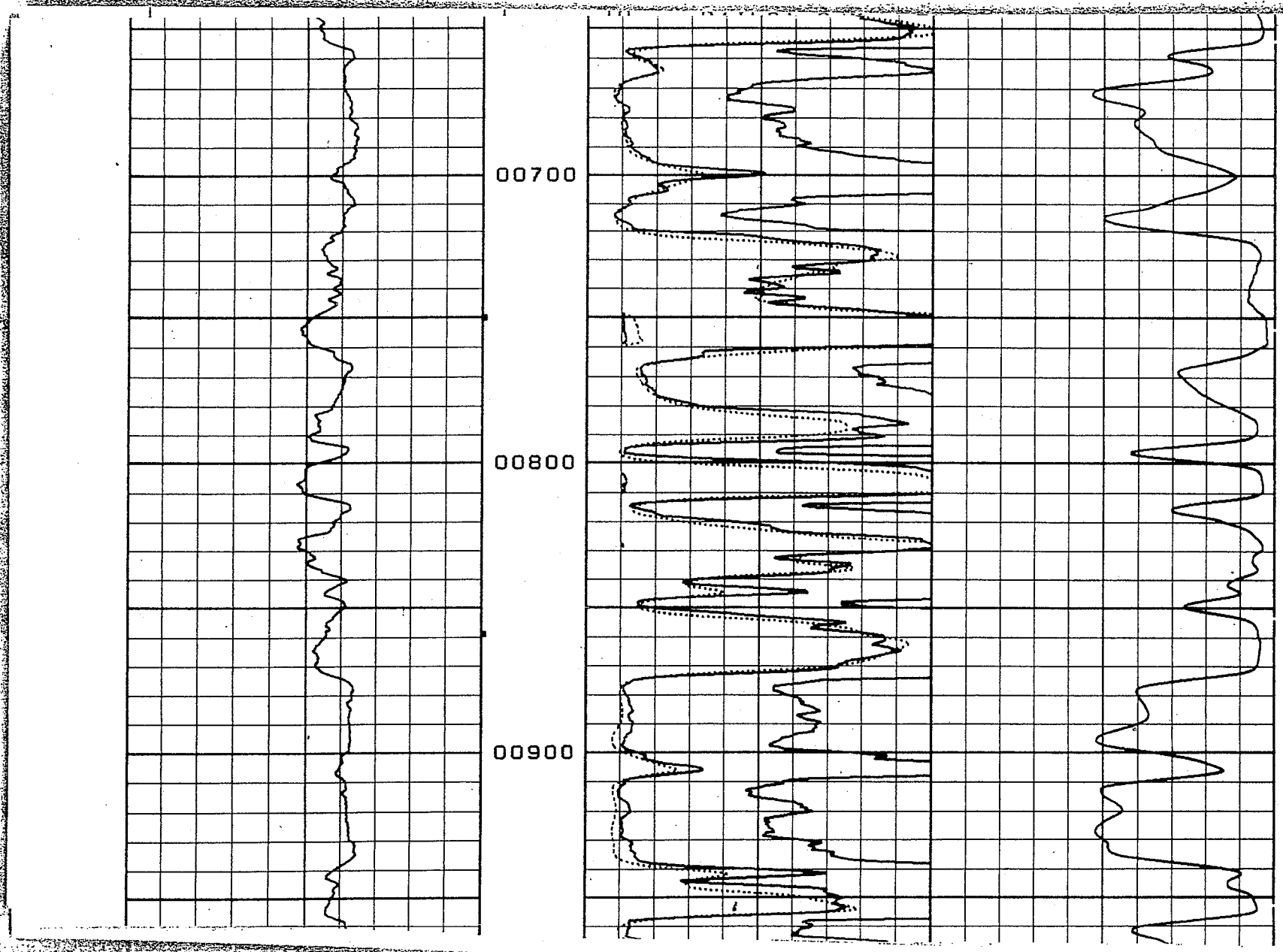
12-12-86	20:38	36.0	365998	0042-38	0	2

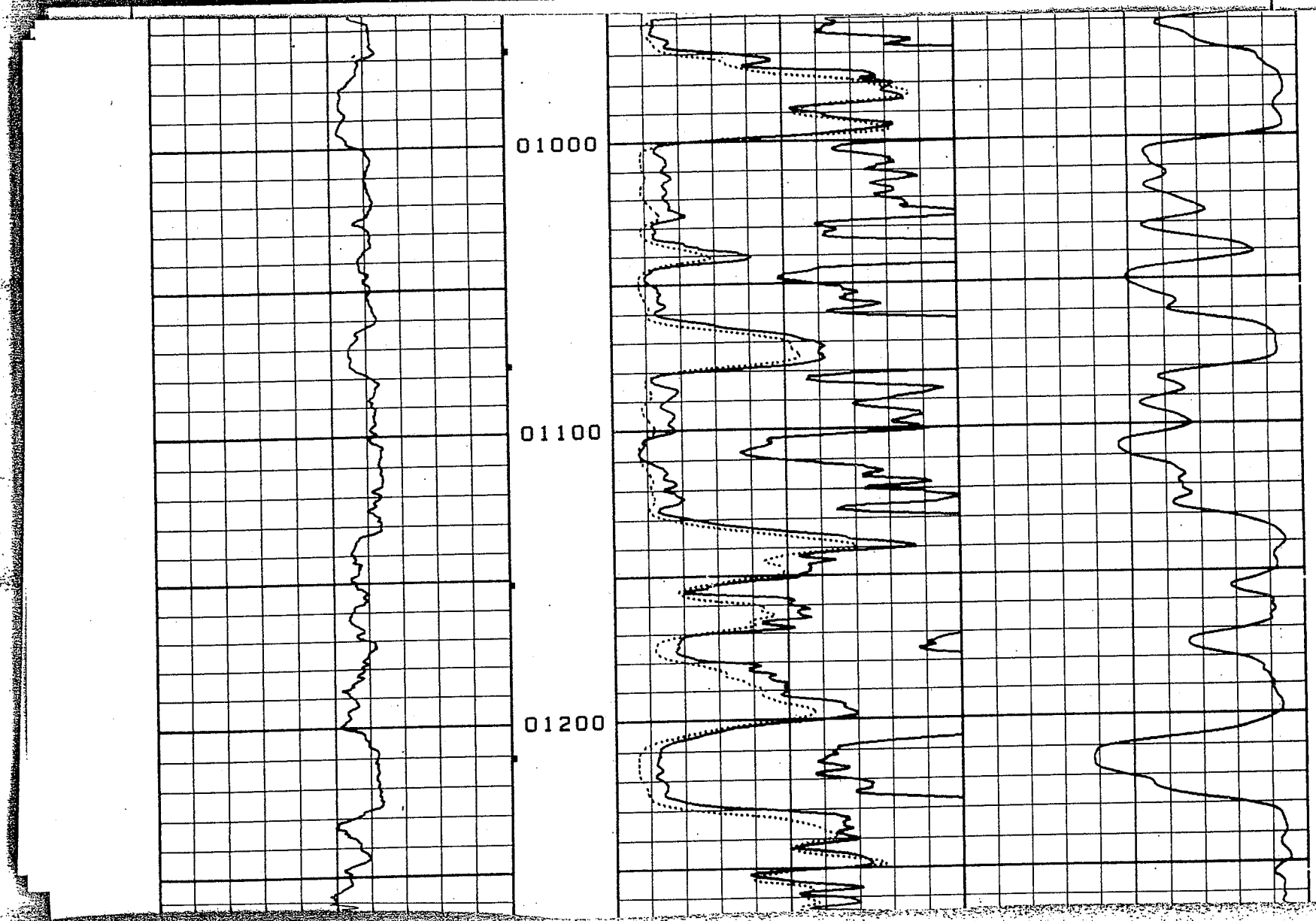
0.0	SP MV	100.0	

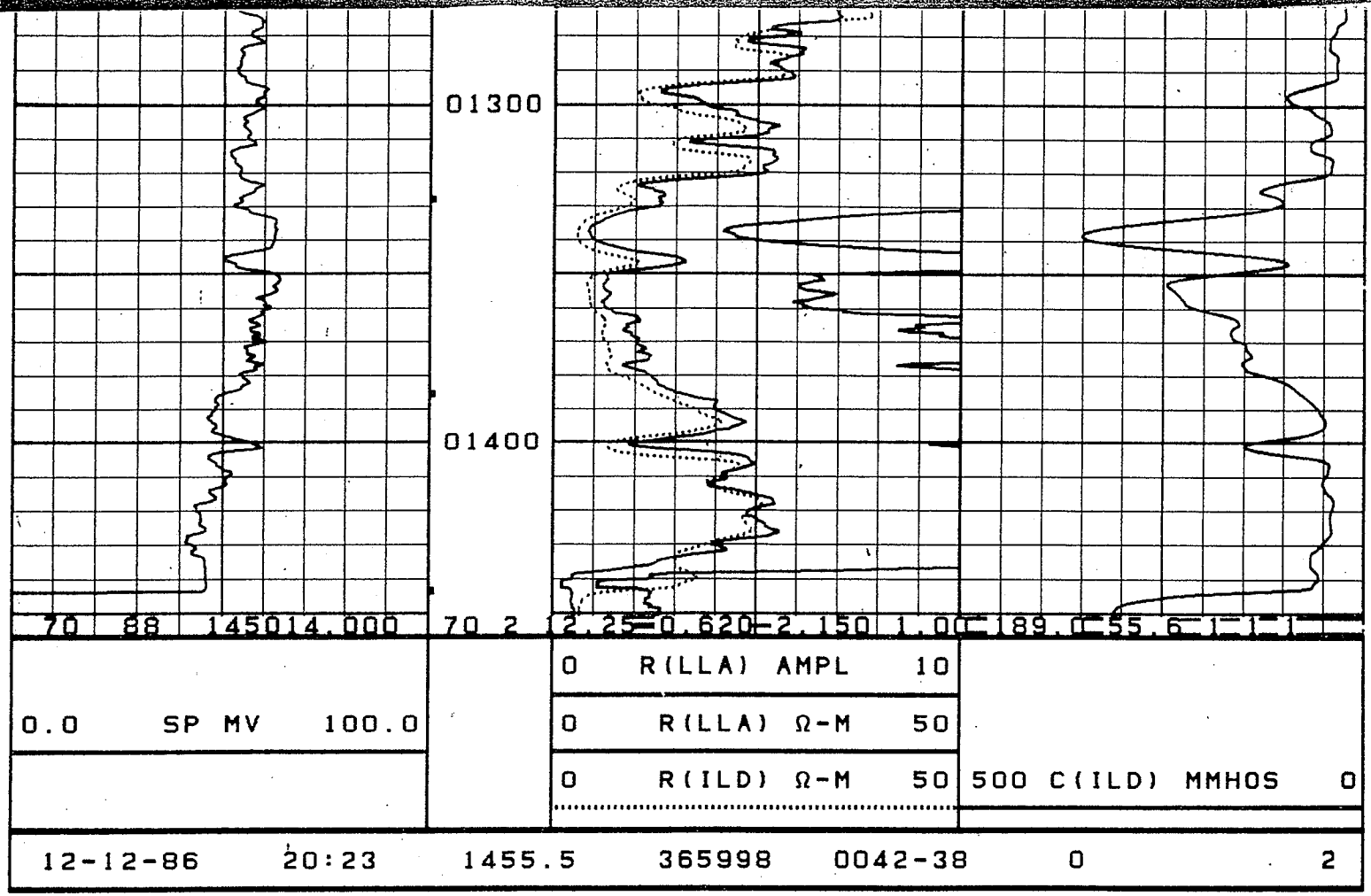
0	R(LLA)	AMPL	10
0	R(LLA)	Ω-M	50

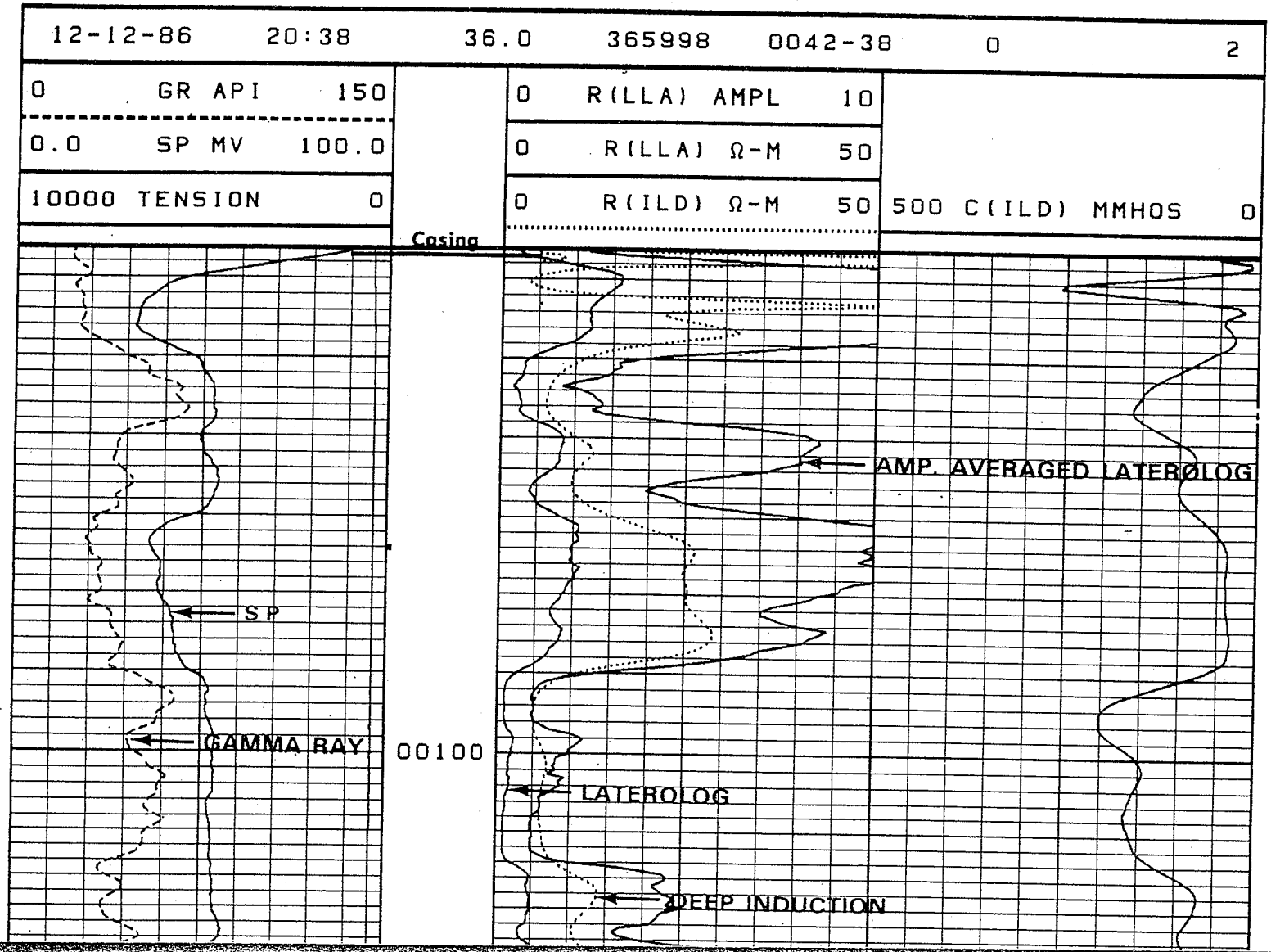

0 R(ILD) Ω-M 50
500 C(ILD) MMHOS 0
00100
00200
00300


00400
00500
00600

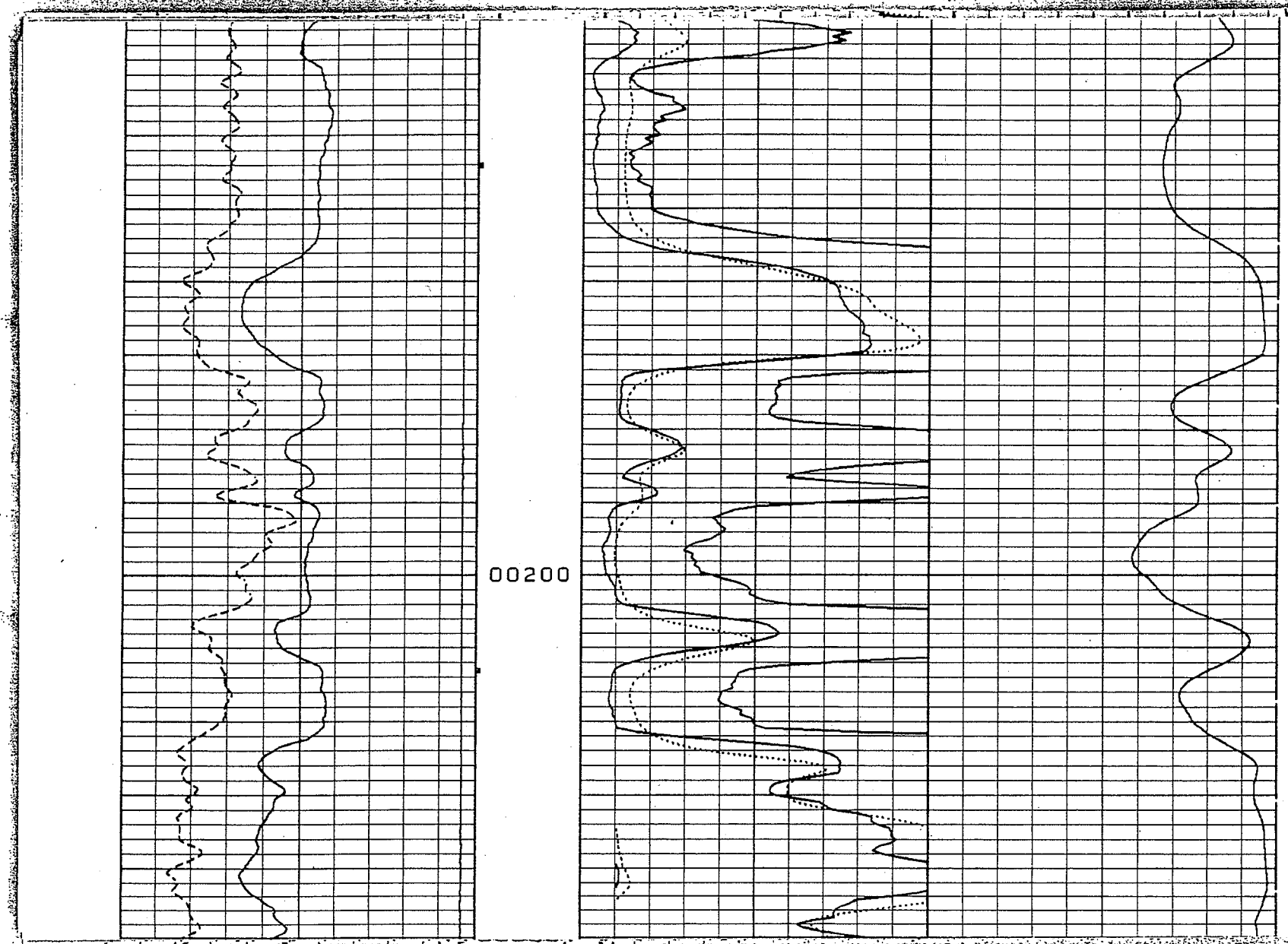

00700
00800
00900


01000
01100
01200

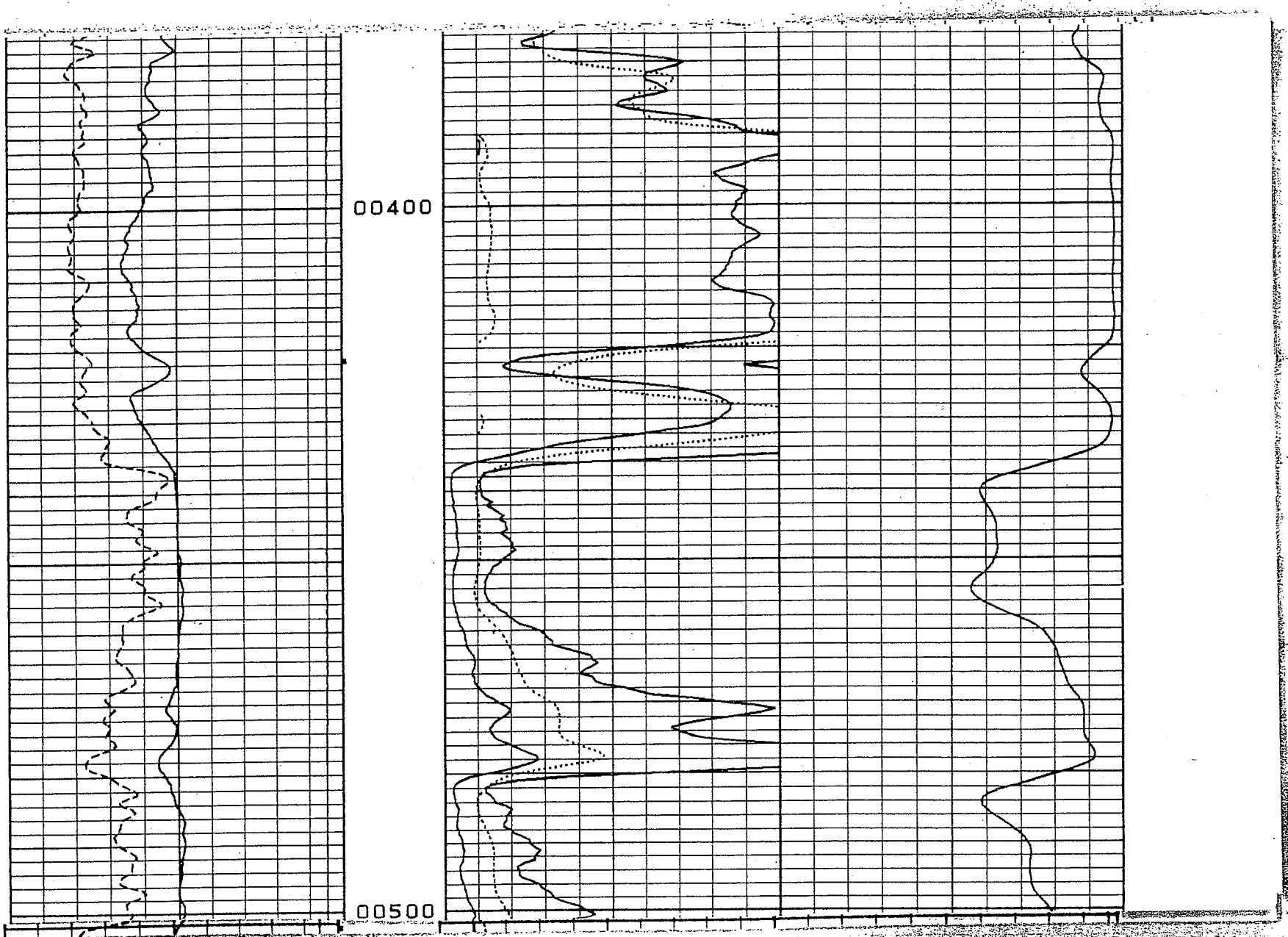

01300
01400
70 88 145014.000
70 2 2.25 0.620 2.150 1.00 189.0 55.6
0.0 SP MV 100.0
0 R(LLA) AMPL 10
0 R(LLA) Ω-M 50
0 R(ILD) Ω-M 50
500 C(ILD) MMHOS 0
12-12-86 20:23 1455.5 365998 0042-38 0 2

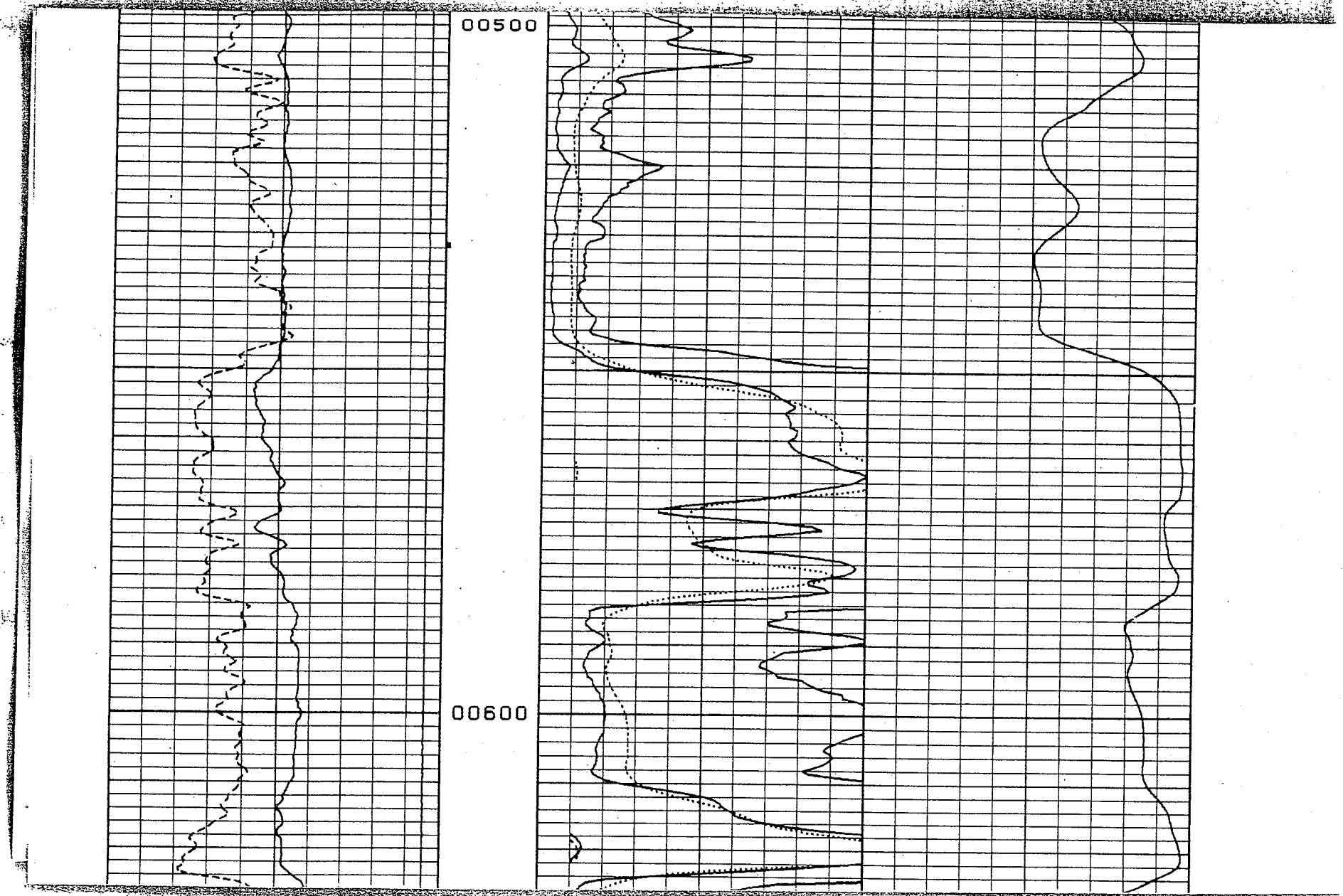

12-12-86 20:38 36.0 365998 0042-38 0 2
0 GR API 150
0.0 SP MV 100.0
10000 TENSION 0
0 R(LLA) AMPL 10
0 R(LLA) Ω-M 50
0 R(ILD) Ω-M 50
500 C(ILD) MMHOS 0
Casing
AMP. AVERAGED LATERØLOG
SP
GAMMA RAY
00100
LATEROLOG
DEEP INDUCTION

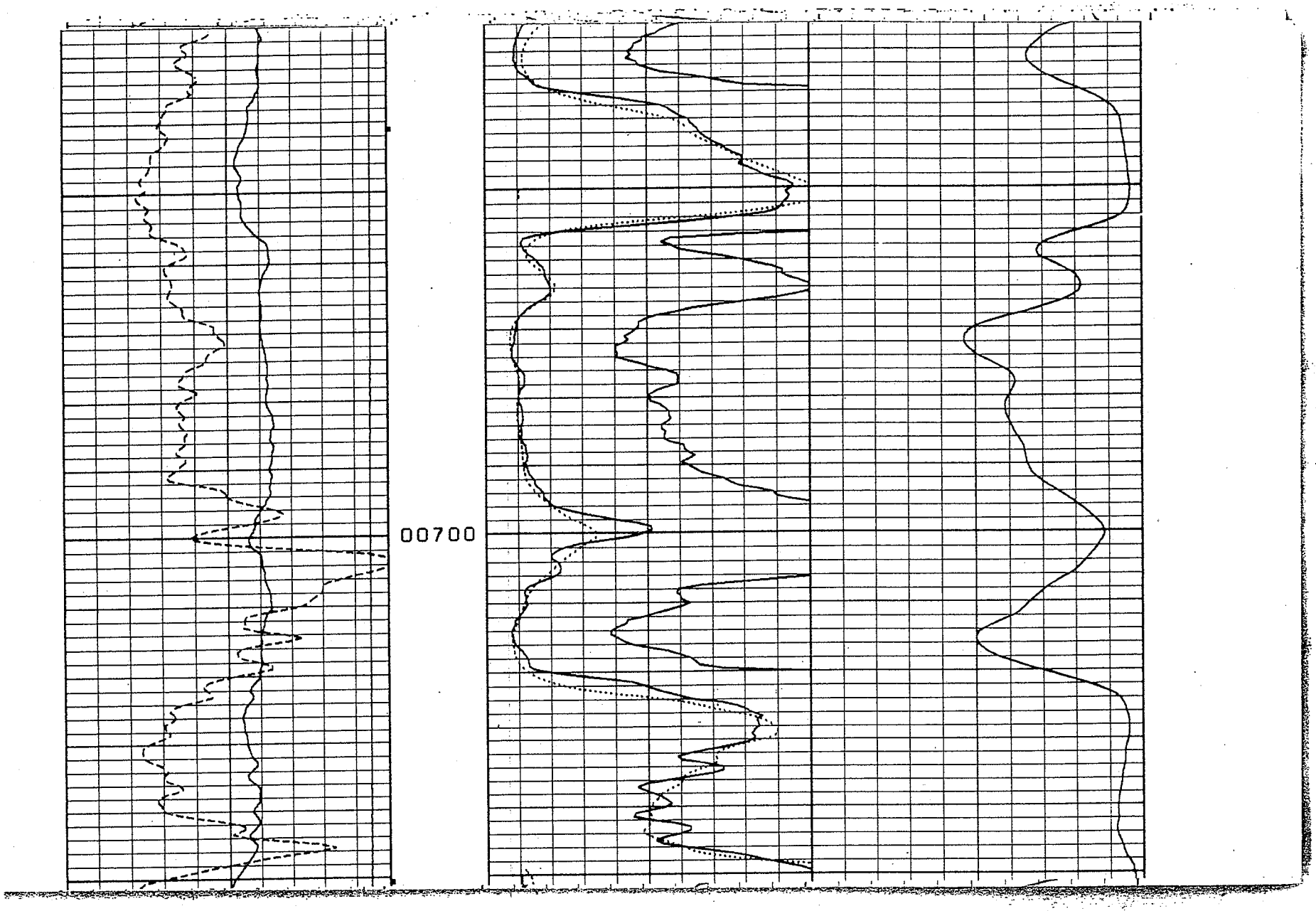
101 0016


00200

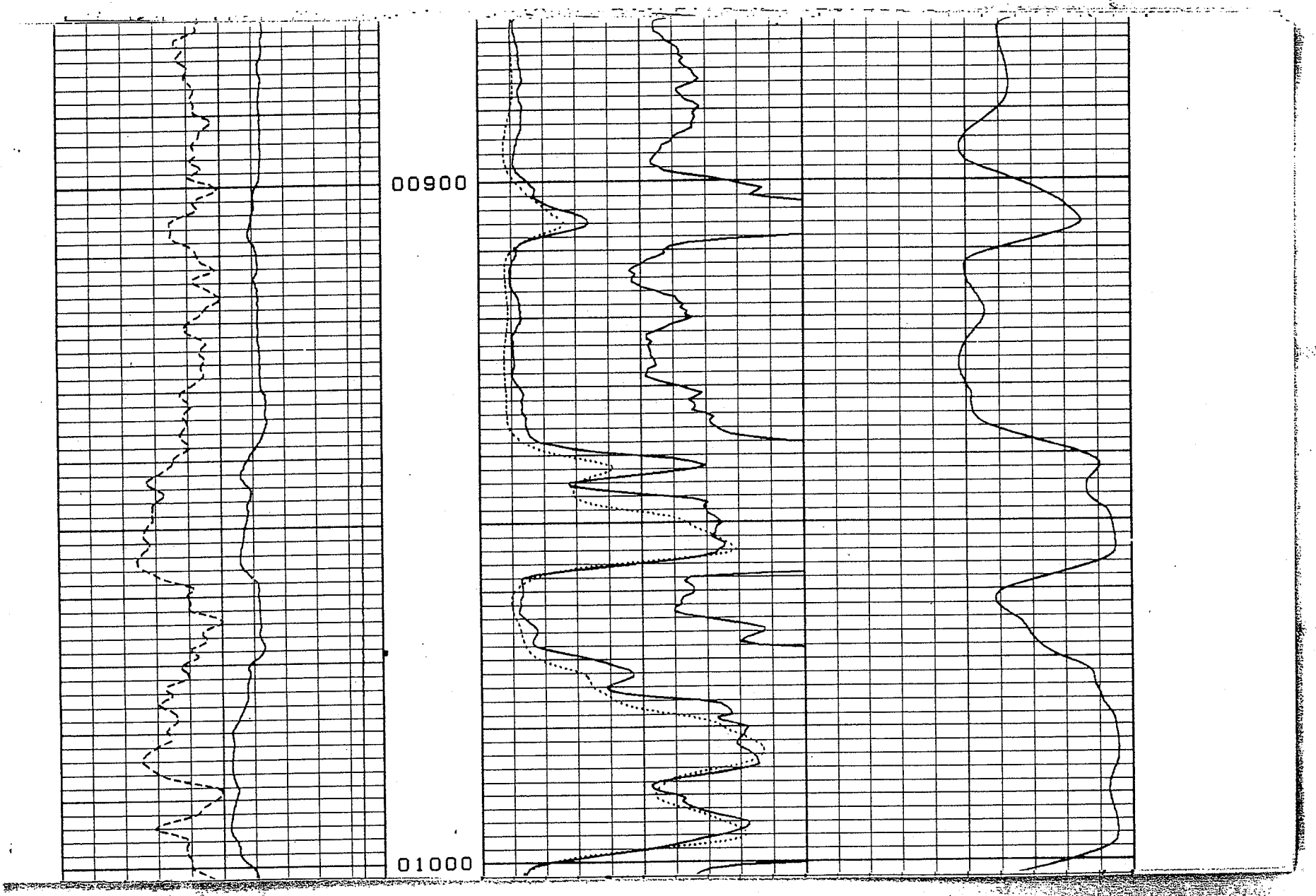
00300

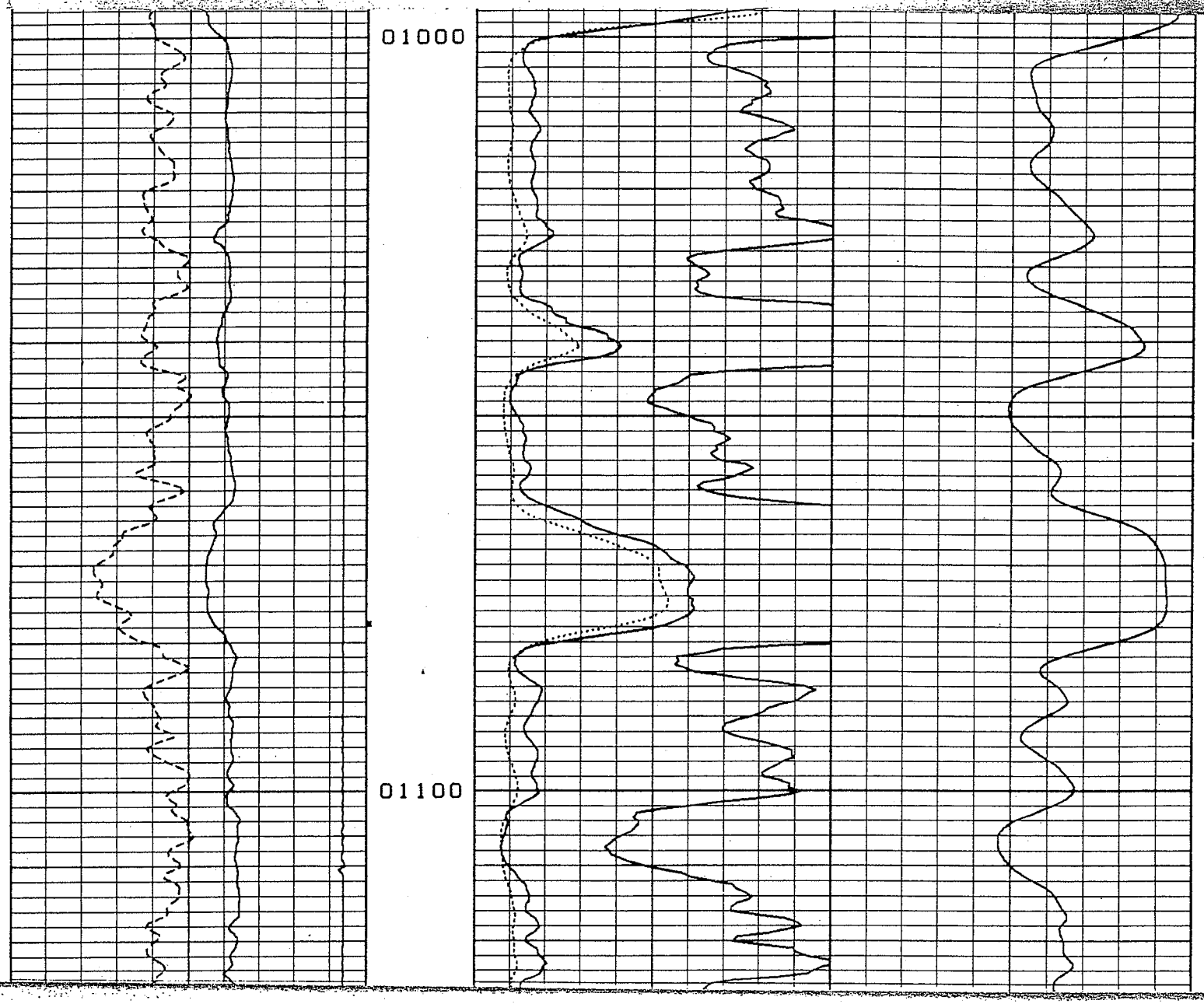

00400
00500

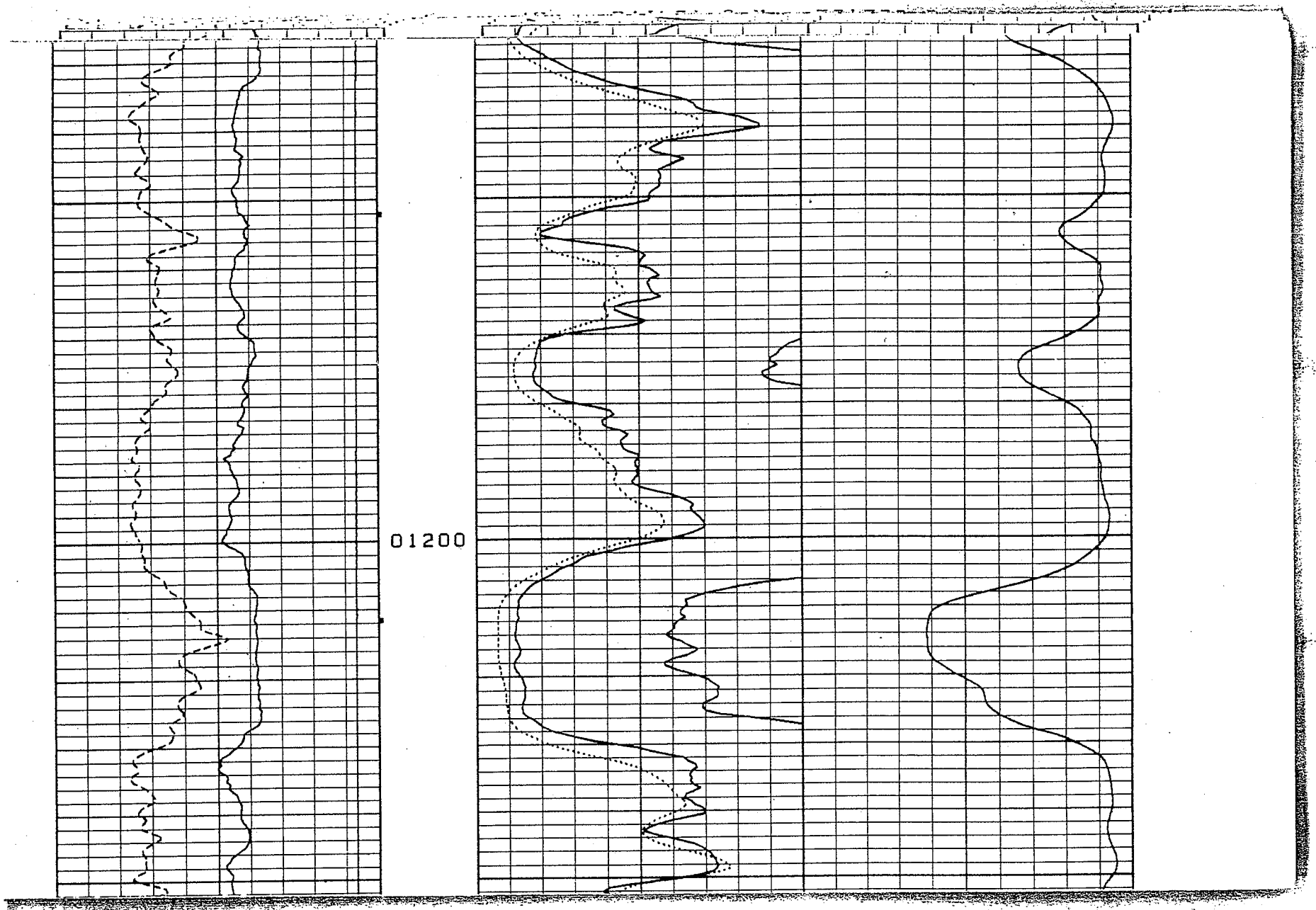

00500
00600

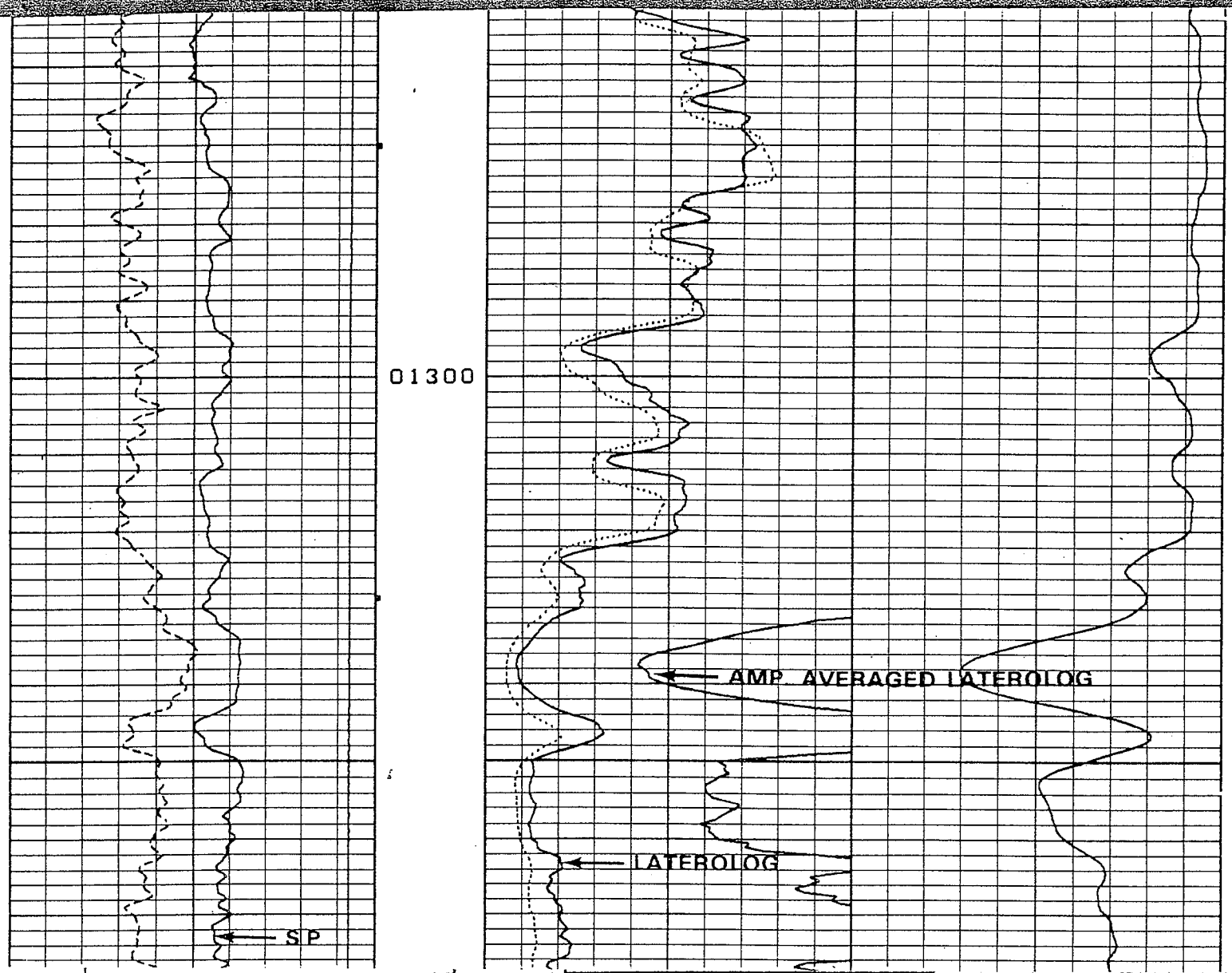

00700

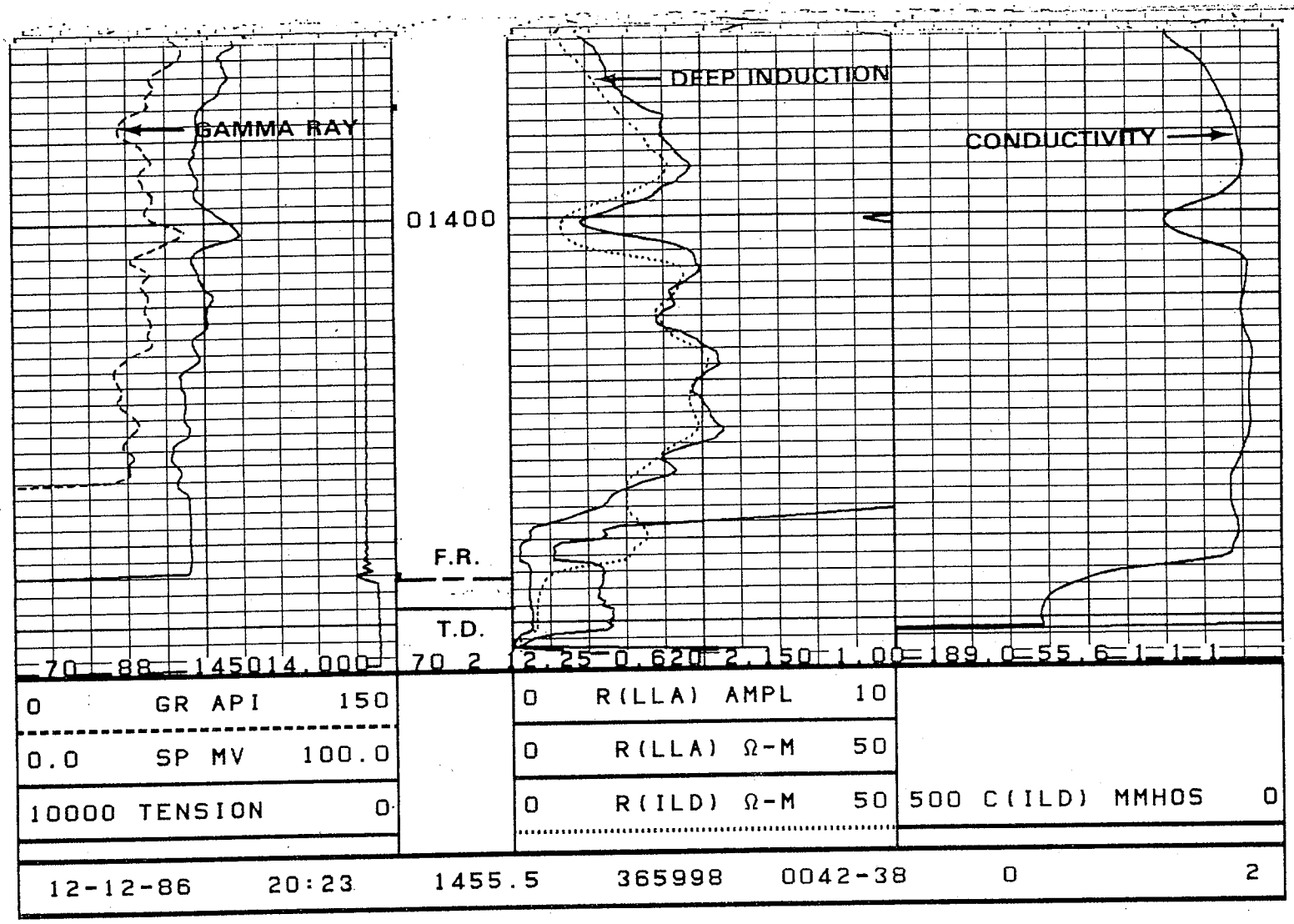
00800


00900
01000

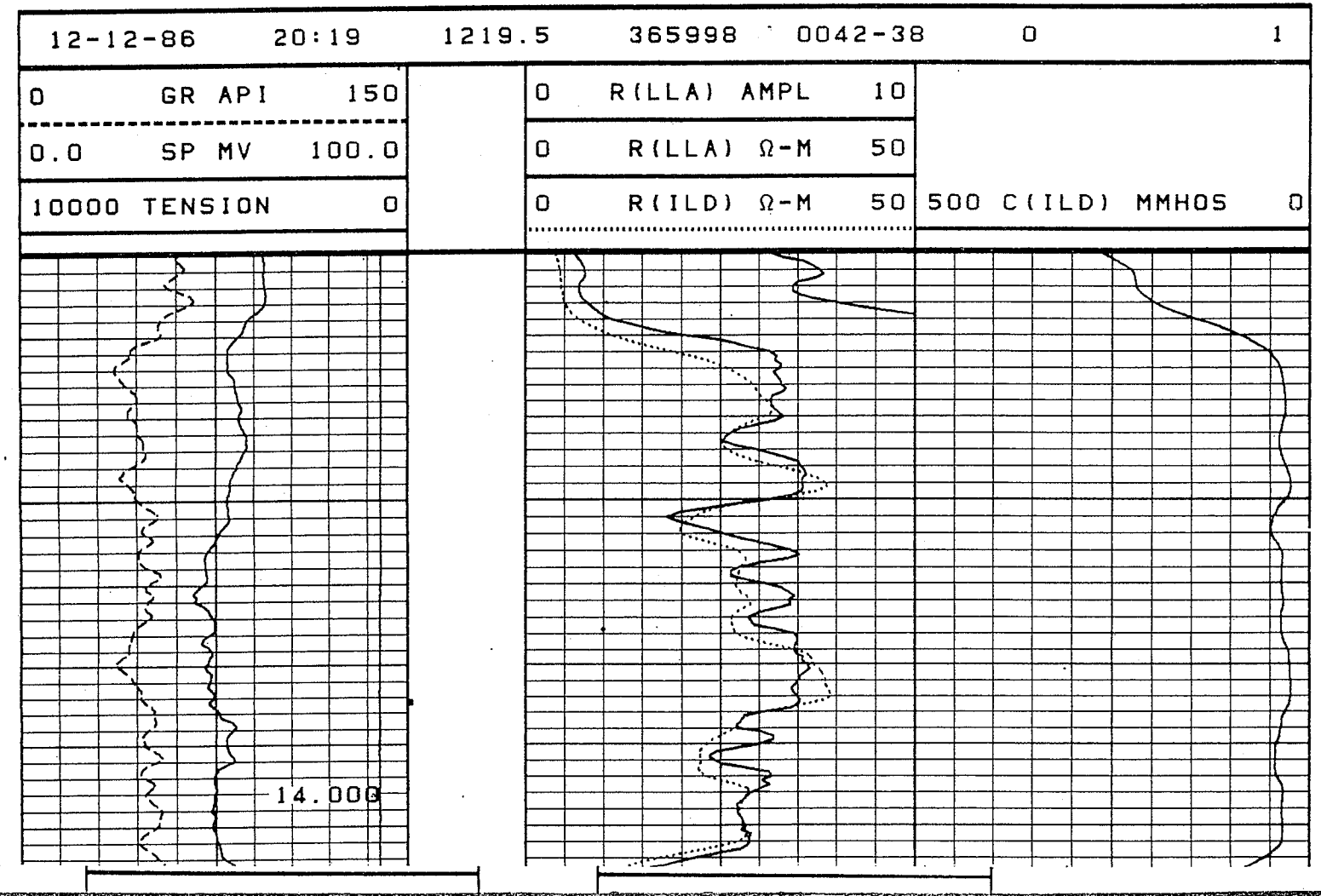

01000
01100

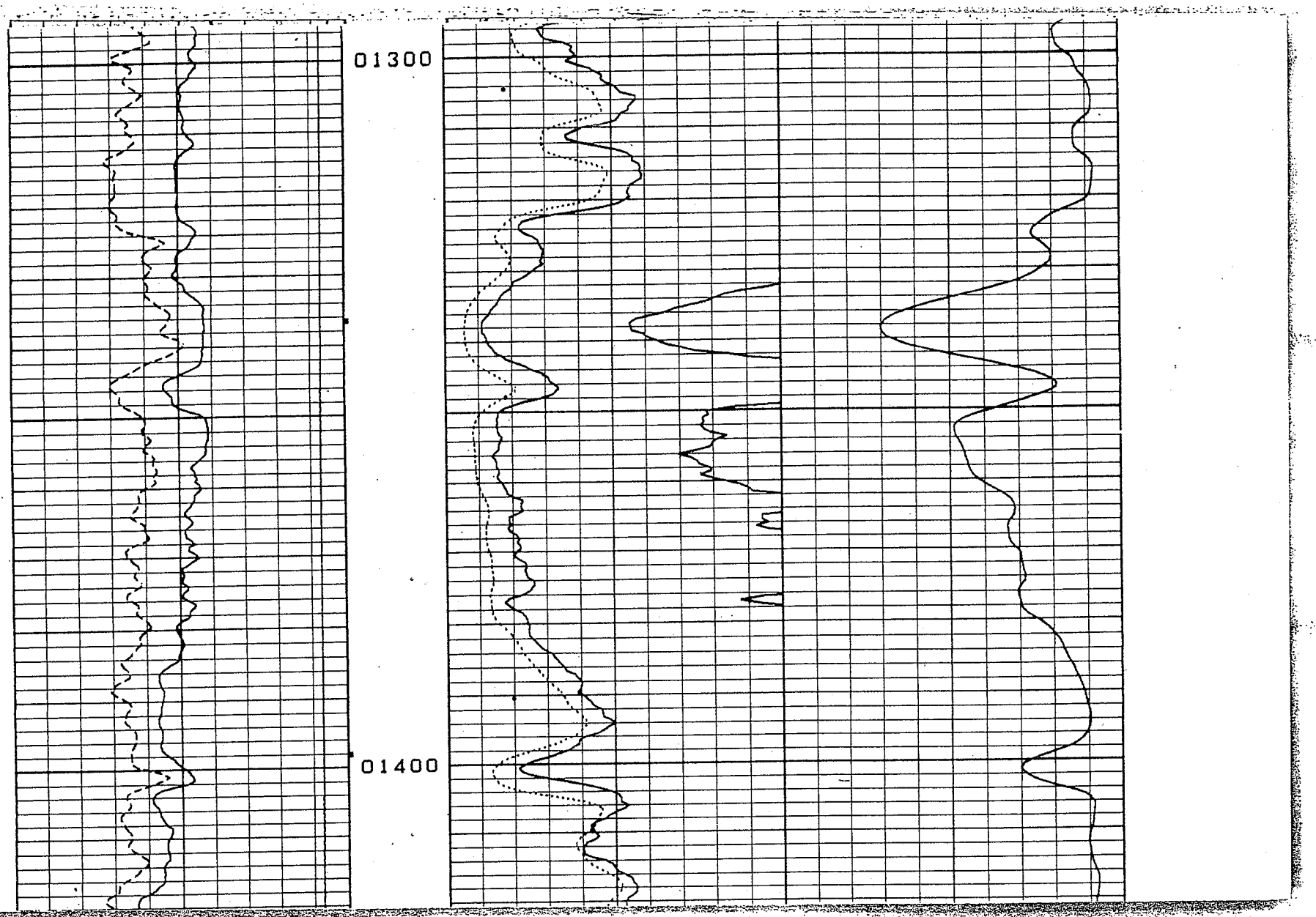

01200


01300
AMP. AVERAGED LATEROLOG
LATEROLOG
SP

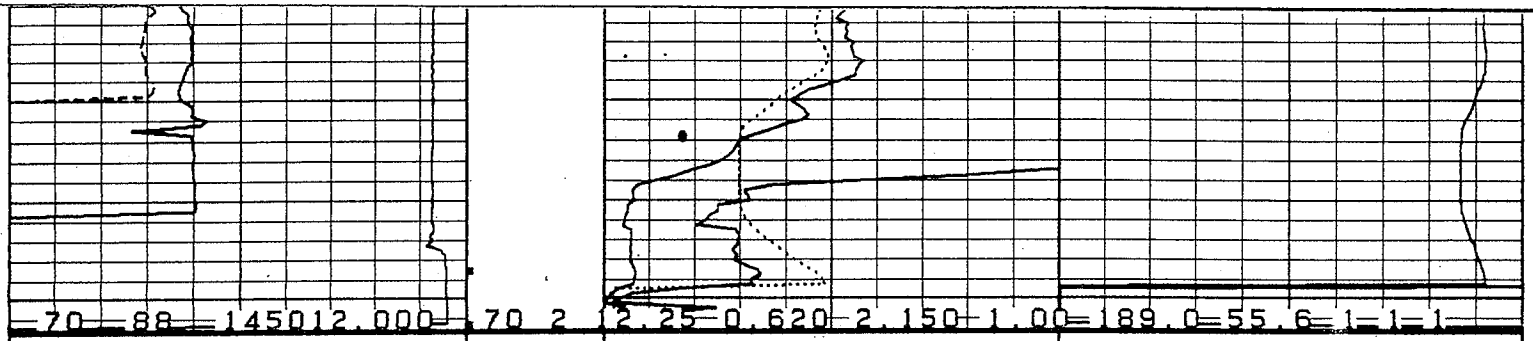

GAMMA RAY
DEEP INDUCTION
CONDUCTIVITY
01400
F.R.
T.D.
70 88 145014.000
70 2
2.25 0.620 2.150 1.00 189.0 55.6 1 1 1
0 GR API 150
0.0 SP MV 100.0
10000 TENSION 0
0 R(LLA) AMPL 10
0 R(LLA) Ω-M 50
0 R(ILD) Ω-M 50
500 C(ILD) MMHOS 0
12-12-86 20:23 1455.5 365998 0042-38 0 2

REPEAT SECTION




01300
01400

FOLD HERE



0	GR API	150	0	R(LLA) AMPL	10		
0.0	SP MV	100.0	0	R(LLA) Ω-M	50		
10000	TENSION	0	0	R(ILD) Ω-M	50	500 C(ILD) MMHOS	0

12-12-86	20:17	1453.0	365998	0042-38	0	1

11-18-86	12:01	0.0	7668	0152-04	0	0

DUAL INDUCTION SHOP CALIBRATION

TOOL TYPE: DIL-FA SERIAL NO:04044

	TEST LOOP CALIBRATION				INTERNAL CALIBRATION				
	MEASURED		CALIBRATED		MEASURED		CALIBRATED		
	ZERO	CAL	ZERO	CAL	ZERO	CAL	ZERO	CAL	UNITS
ILD	4.3	401.2	0.0	400.0	0.6	406.8	0.0	409.4	MMHO/M
ILM	0.0	469.6	0.0	464.0	4.3	465.8	0.0	455.9	MMHO/M

ILD SONDE ERROR CORRECTION: -3.40 MMHO/M
ILM SONDE ERROR CORRECTION: 5.20 MMHO/M

12-12-86 20:40 36.0 365998 0042-38 0 2

DUAL INDUCTION AFTER SURVEY TOOL CHECK

	ZERO		CAL		
	BEFORE	AFTER	BEFORE	AFTER	UNITS
ILD	0.0	6.6	409.4	410.2	MMHO/M
ILM	0.0	9.6	455.9	438.3	MMHO/M

LL RES	20.0	12.8	1500.0	1496.2	OHM-M
LL COND	0.267	0.280	20.0	12.8	OHM-M

ILD SONDE ERROR CORRECTION: -3.4 MMHO/M
ILM SONDE ERROR CORRECTION: 5.2 MMHO/M

1010237 A A

HARRIS COUNTY
FRESH WATER DISTRICT NO. 61
JONES & JACK RABBIT ROAD
WELL NO. 1 - LAYNE PUMP NO. 56241L

Geo. C. Cox, Inc., Gen. Contractors

1010237A

Q-1746

Schlumberger

ISF

COUNTY HARRIS
FIELD or LOCATION WATER WELL
WELL HARRIS CO. FRESH WATER SUPP. DIST #61 WELL #2
COMPANY LAYNE TEXAS CO.

COMPANY LAYNE TEXAS COMPANY 65-04-422

#1104-1449-E
WELL HARRIS CO. FRESH WATER SUPPLY DIST. #61, WELL #2

FIELD WATER WELL 1010237A

COUNTY HARRIS STATE TEXAS

LOCATION NOT AVAILABLE

Sec. Twp. Rge.

Other Services: NONE

Permanent Datum: GROUND LEVEL, Elev. NA
Log Measured From G.L., 0 Ft. Above Perm. Datum
Drilling Measured From G.L.

Elev.: K.B. NA
D.F. NA
G.L. NA 125'

Date	6-27-72			
Run No.	ONE			
Depth—Driller	672			
Depth—Logger	672			
Btm. Log Interval	665			
Top Log Interval	50			
Casing—Driller	NONE @	@	@	@
Casing—Logger	--			
Bit Size	7-7/8			
Type Fluid in Hole	NATIVE MUD			
	GEL			
Dens. / Visc.	9.7 / 35			
pH / Fluid Loss	NA / NA ml	ml	ml	ml
Source of Sample	PIT			
R_m @ Meas. Temp.	10.3 @ 93 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	10.0 @ 93 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	6.8 @ 93 °F	@ °F	@ °F	@ °F
Source: R_{mf} / R_{mc}	M / C			
R_m @ BHT	10.3 @ 93 °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HOURS			
Max. Rec. Temp.	93 °F	°F	°F	°F
Equip. / Location	7659 / DAYTON			
Recorded By	LIPE			
Witnessed By	MR. PATTON			

The well name, location and borehole reference data were furnished by the customer.

FOLD HERE

Date
Run No.
Depth—Driller

Btm. Log Interval						
Top Log Interval						
Casing—Driller	@	@	@	@	@	@
Casing—Logger						
Bit Size						
Type Fluid in Hole						
Dens. / Visc.						
pH / Fluid Loss	ml	ml	ml	ml	ml	ml
Source of Sample						
R_m @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F	@ °F
Source: R_{mf} / R_{mc}						
R_m @ BHT	@ °F	@ °F	@ °F	@ °F	@ °F	@ °F
Time Since Circ.						
Max. Rec. Temp.	°F	°F	°F	°F	°F	°F
Equip. / Location						
Recorded By						
Witnessed By						

Changes in Mud Type or Additional Samples					Scale Changes			
Date / Sample No.					Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller								
Type Fluid in Hole								
Dens. / Visc.								
ph / Fluid Loss	ml							
Source of Sample								
R_m @ Meas. Temp.	@ °F	@ °F						
R_{mf} @ Meas. Temp.	@ °F	@ °F						
R_{mc} @ Meas. Temp.	@ °F	@ °F						
Source: R_{mf} / R_{mc}								
R_m @ BHT	@ °F	@ °F						
R_m @ BHT	@ °F	@ °F						
R_m @ BHT	@ °F	@ °F						

Run No.	ONE						
Ind. Panel No.	IRPS-27						
Mem. Panel No.	ILP-A-38						
Ind. Cart. No.	34						
Ind. Sonde No.	42						
Sonic Panel No.	--						
Oscil. Panel No.	--						
Sonic Cart. No.	--						
Sonic Sonde No.	--						
G.R. Cart. No.	--						
G.R. Panel No.	--						
Caliper No.	--						

REMARKS:

S.E.	- -
SBR	0.5
Cent. Device	- -
Stand off-Inches	- -
Time Const.-Sec.	- -
Speed-F.P.M.	- -

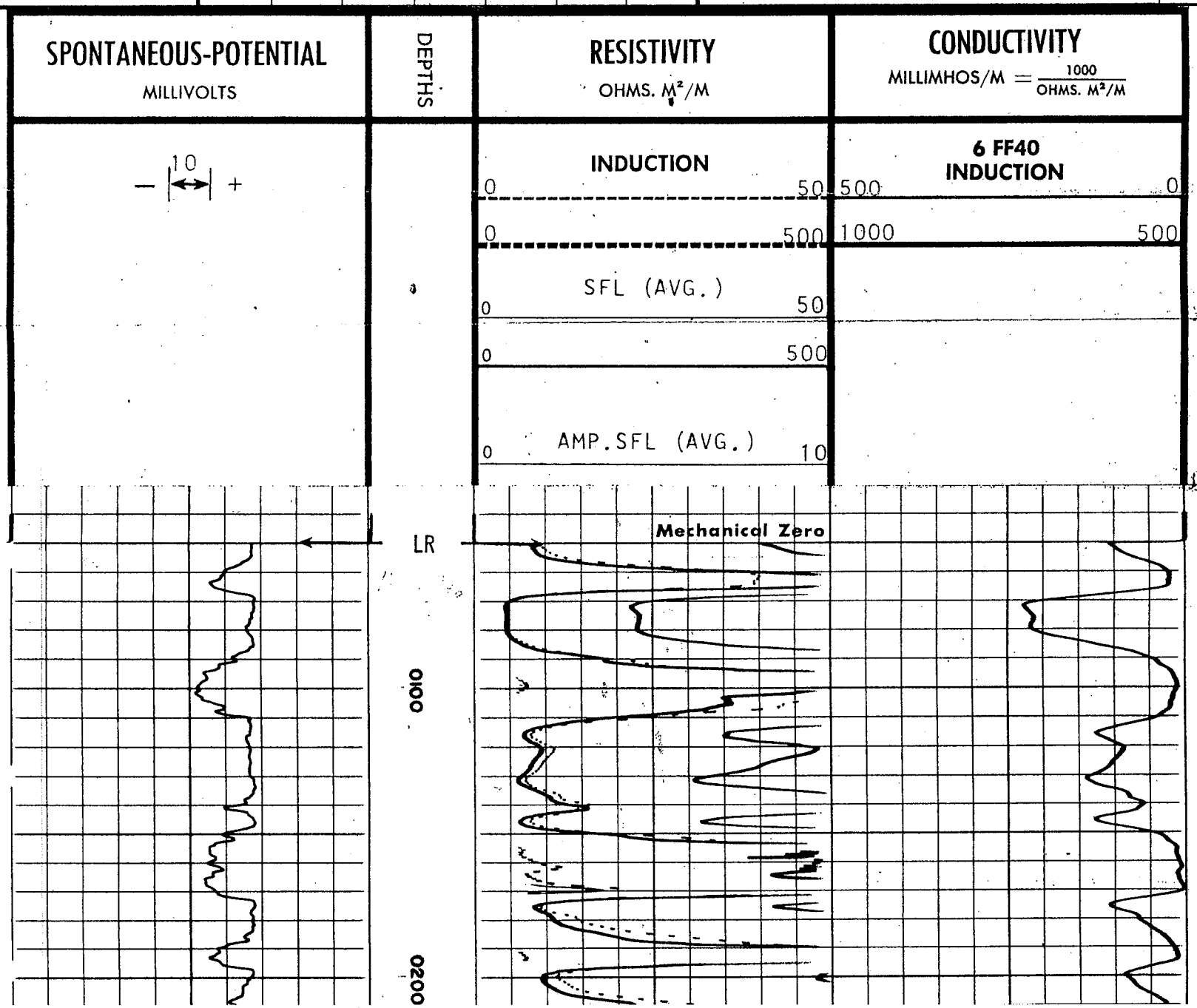
API Serial No.-

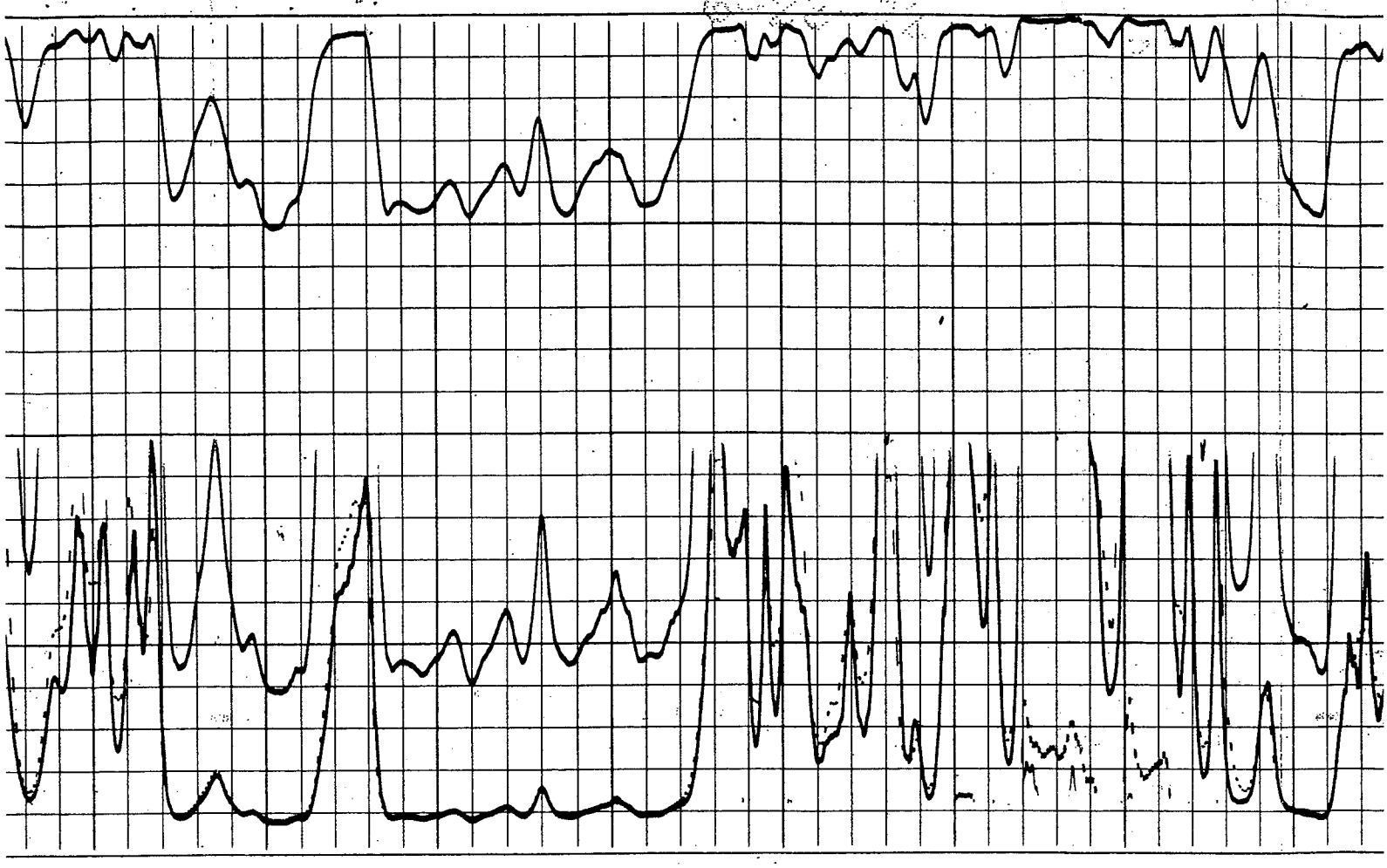
Check one, filling in blanks where applicable:

[X] Surface determined sonde errors used for 6FF40.

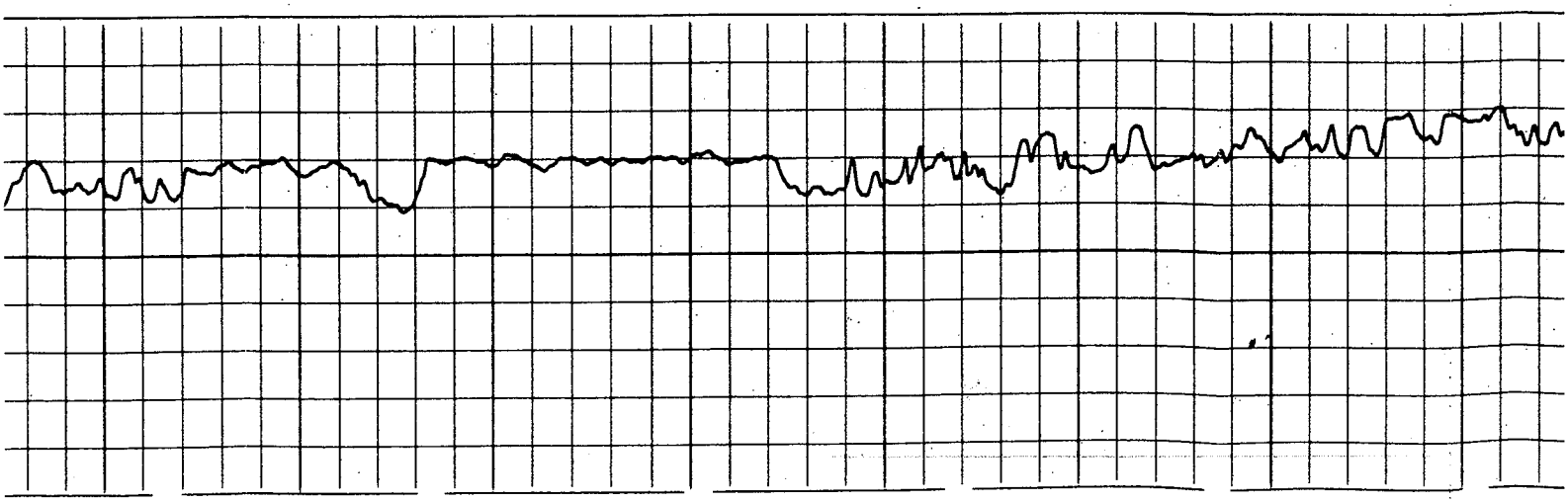
[ ] 6FF40 sonde error corrected for inch borehole signal at Rm

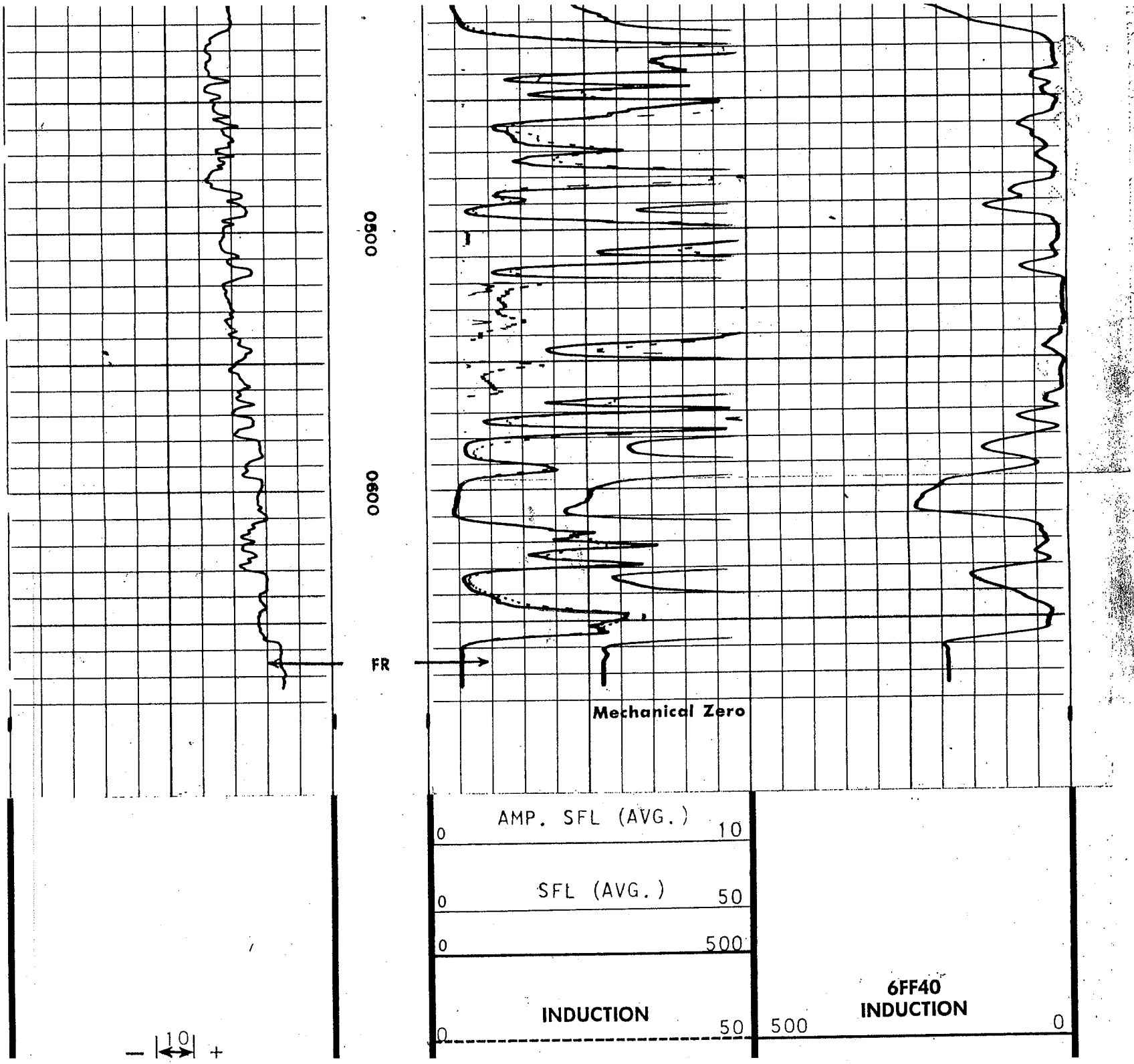
[ ] 6FF40 zero set in hole at depth of feet.





0300 0400 0500 0600




0500
0600
FR
Mechanical Zero
AMP. SFL (AVG.)
0
10
SFL (AVG.)
0
50
0
500
INDUCTION
0
50
6FF40
INDUCTION
500
0
10
–
+

SPONTANEOUS-POTENTIAL MILLIVOLTS	DEPTHS	RESISTIVITY OHMS. M²/M	CONDUCTIVITY MILLIMHOS/M = 1000 / OHMS. M²/M

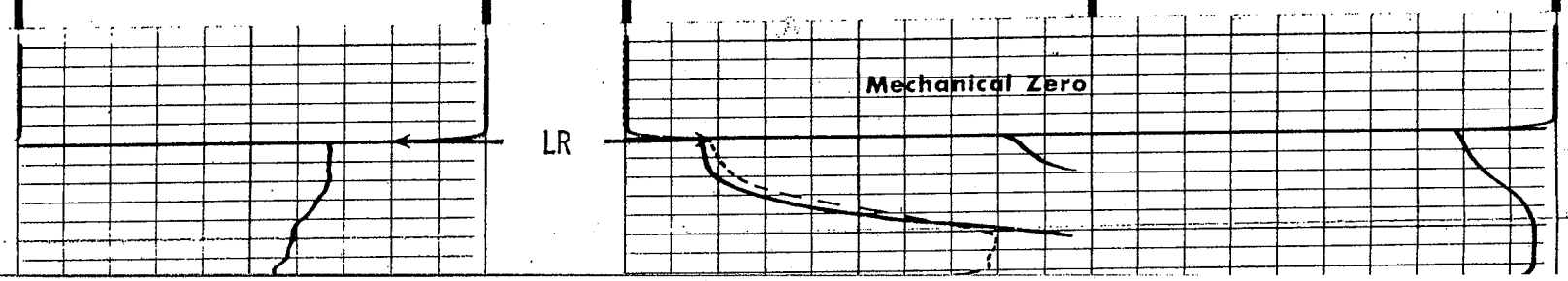
COMPANY LAYNE TEXAS COMPANY
WELL HARRIS CO. FRESH WATER SUPPLY DIST. #61, WELL #2
FIELD WATER WELL
COUNTY HARRIS STATE TEXAS

SCHL. FR 665
SCHL. TD 672
DRLR TD 672
Elev:
KB NA
DF NA
GL NA

DETAIL LOG

5" = 100'

SPONTANEOUS-POTENTIAL MILLIVOLTS	DEPTHS	RESISTIVITY OHMS. M²/M	CONDUCTIVITY MILLIMHOS/M = 1000 / OHMS. M²/M
− 10 +		INDUCTION 0 — 50; 0 — 500	6 FF40 INDUCTION 500 — 0; 1000 — 500
		SFL (AVG.) 0 — 50; 0 — 500	
		AMP. SFL (AVG.) 0 — 10	



Jones Road

PWS wells located
from 1 mile - 2 miles
radius from
11600 Jones Rd / Finch's

1-2 miles

CNN#: P0104

1010430
A, B, C

CYPRESS CREEK UTILITY DISTRICT
HARRIS COUNTY, TEXAS
TEXAS DEPARTMENT OF HEALTH I.D. NUMBER 1010430

PREPARED BY:
WATER, ENVIRONMENTAL &
TECHNICAL SERVICES, INC.

CYPRESS CREEK UTILITY DISTRICT

August 7, 1992

Texas Water Commission
Water Utilities Division
P.O. Box 13087
Austin, Texas 78711-3087

Gentlemen:

The Cypress Creek Utility District respectfully requests a sampling waiver of certain contaminates to be monitored by the Phase II National Drinking Water Regulation, that are not considered necessary after an assessment evaluation, conducted by the Texas Water Commission. Information and documents are hereby submitted by this transmittal for each water well operated by the District.

J.Kenneth High
Authorized Agent for the Cypress Creek Utility District

CYPRESS CREEK UTILITY DISTRICT

WATER WELL #1

Well construction & material setting

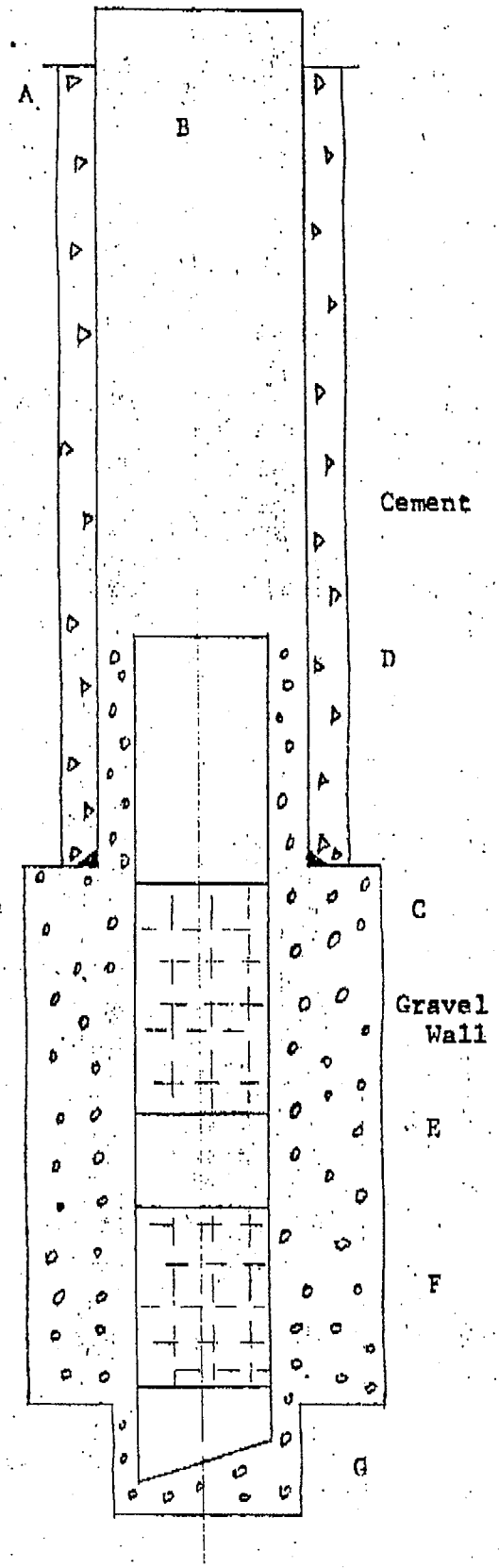
Driller geological log

Original water chemical analysis

ATY
RILLING
ICORPORATED
O. BOX 278
ATY, TEXAS
ysses 2-4357

MUNICIPAL TYPE WELL

Symbol	Description
A	Hole Size 15 In.
B	Casing Size 10 3/4 In. O.D.
	Wall Thickness .279 In.
C	Depth 396 Ft.
	Bottom of Surface Casing
D	Depth 316 Ft.
	Top of Blank Liner
E	Underreamed Hole Size 24 In.
F	Screen Size 6 In.
	Type Howard Smith 55 WW
	Depth (Length) 50 Ft.
G	Depth 510 Ft.
	Set shoe and Back Pressure Valve



For: Westchester Corp.

Location: Cypress Creek Util Dist.

Date: 10-69

By: RAG

KATY DRILLING, INCORPORATED

CYPRESS CREEK UTILITY DISTRICT
JOB NO. 577

DRILLER'S LOG

0 - 65	Clay
65 - 88	Sand
88 - 115	Clay
115 - 135	Sand
135 - 165	Streaks sand and clay
165 - 190	Sand, streaks clay
190 - 225	Sand
225 - 320	Streaks sand and clay
320 - 342	Sand
342 - 400	Sandy shale, streaks sand
400 - 464	Clay streaks, sand
464 - 515	Sand
515 - 558	Streaks sand and clay

Vick
577

Orlando Laboratories, Inc.

P. O. Box 20254 • Orlando, Florida 32814 • 305 424-5606

WATER ANALYSIS REPORT

ANALYTICAL LABORATORY DIVISION

Report to: Katy Drilling Inc.

Date: October 6, 1969

Sample Number: 3200

Appearance: clear

Sampled by: client

Identification: ~~Cypress Creek Util. Dist.~~ Well #1
10/1/69

METHODS

This water was analyzed using methods adapted from "Standard Methods for the Examination of Water and Wastewater," Twelfth Edition, 1965, APHA, AWWA and WPCF.

RESULTS

Determination	p.p.m.	Determination	p.p.m.
Total Dissolved Solids, @ 105°C	290	Sulfate, as SO_4	0
Total Hardness, as $CaCO_3$	210	Fluorides, as F	0.9
Calcium Hardness, as $CaCO_3$	180	Silica, as SiO_2	2.2
Magnesium Hardness, as $CaCO_3$	30	Copper, as Cu	0
Calcium, as Ca	72	Phosphate (Total), as PO_4	3.6
Magnesium, as Mg	7.4	Color, Standard Platinum Cobalt Scale	0
Alkalinity (Phenolphthalein), as $CaCO_3$	0	Odor	0
Alkalinity (Total), as $CaCO_3$	162	pH (Laboratory)	7.5
Carbonate Alkalinity, as $CaCO_3$	0	pHs	7.2
Bicarbonate Alkalinity, as $CaCO_3$	162	Stability Index	6.9
Hydroxides, as OH	0	Saturation Index	0.3
Carbon Dioxide, as CO_2	11	Turbidity, Silica Scale	0
Carbonates, as CO_3	0	Na = 60	
Bicarbonates, as HCO_3	199		
Chlorides, as Cl	48		
I as Fe	0		
Manganese, as Mn	0		

Signed: L Morgan

CYPRESS CREEK UTILITY DISTRICT

WATER WELL #2

Well construction & material setting

Driller geological log

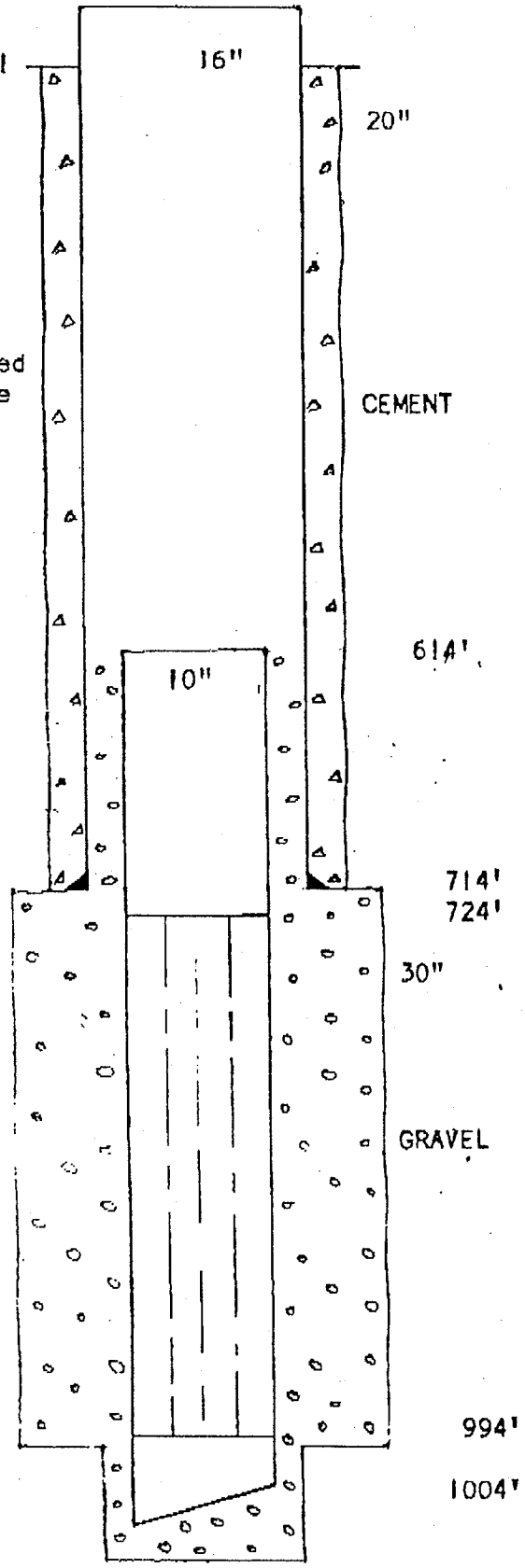
Electric log

Original water chemical analysis

82-068
from L-W 10/10/84 ±

MATERIAL SETTING

DEPTH	LENGTH	DESCRIPTION
0	-	Top of 16" O.D., .375" Wall Thickness, Surface Casing
714	714	Bottom of Casing, Cemented In Place
614	-	Top of 10-3/4" O.D.,.279" Wall Thickness, Liner and Screen
724	110	Blank Liner Section
740	16	Stainless Steel Wire Wrapped Screen Section, .030" gauge
748	8	Blank
822	74	Screen
910	88	Blank
950	40	Screen
964	14	Blank
994	30	Screen
1004	10'	Blank Liner, Includes 2 Back Pressure Valves
-	160'	Total Screen
-	230'	Total Blank Liner



RECEIVED
OCT 10 1984
ENGINEERING CORP

OWNER: CYPRESS CREEK UTILITY DIST.,WELL 2	
CONTRACTOR: KATY DRILLING, INC.	
DRAWN BY: RAG	DATE: 3-72
APPROVED BY:	SCALE: NONE

0420 B

KATY DRILLING, INCORPORATED

DRILLER'S LOG

0	-	4	Surface
4	-	30	Clay
30	-	45	Sand
45	-	80	Clay
80	-	100	Clay
100	-	220	Sand and Clay
220	-	230	Clay
230	-	260	rock
260	-	320	Clay
320	-	325	Sand and Rock
325	-	392	Clay
392	-	406	Sand and Rock
406	-	446	Sand
446	-	460	Clay
460	-	502	Sand
502	-	510	Clay
510	-	520	Sand and Rock
520	-	530	Clay
530	-	597	Sand
597	-	604	Clay
604	-	634	Sand
634	-	718	Clay
718	-	720	Clay
720	-	725	Sand
725	-	760	Rock
760	-	820	Sand and Rock Sand
820	-	869	Clay
869	-	880	Sand
880	-	890	Clay and Sand Breaks
890	-	894	Rock
894	-	910	Clay
910	-	920	Sand and Rock
920	-	950	Sand
950	-	965	Clay
965	-	1020	Sand
1020	-	1025	Clay
1025	-	1050	Sand
1050	-	1055	Clay
1055	-	1080	Sand and Rock
1080	-	1090	Rock
1090	-	1123	Clay
1123	-	1195	Sand
1195	-	1198	Sandy Rock
1198	-	1252	Clay
1252	-		T.D.

Schlumberger INDUCTION-ELECTRICAL LOG

FIELD or LOCATION WATER WELL
WELL CYPRESS CREEK UTI DISTRICT #2
COMPANY KATY DRILLING INC

COMPANY KATY DRILLING INC.

WELL CYPRESS CREEK UTILITY DISTRICT #2

FIELD WATER WELL

COUNTY HARRIS STATE TEXAS

LOCATION NOT AVAILABLE

Sec. _____ Twp. _____ Rge. _____

Other Services: NONE

ermanent Datum: GROUND LEVEL, Elev. NA
g Measured From K. B. ,4.0 Ft. Above Perm. Datum
rilling Measured From K. B.

Elev.: K.B. NA
D.F. NA
G.L. NA

ate	2-12-72			
un No.	ONE			
epth—Driller	1252			
epth—Logger	1255			
tm. Log Interval	1254			
op Log Interval	50			
asing—Driller	NONE @ ---	@	@	@
asing—Logger	---			
it Size	12-1/4"			
ype Fluid in Hole	FRESH NATURAL MUD			
Dens. / Visc.	9.0 / 33.0			
pH / Fluid Loss	-- / -- ml	ml	ml	ml
Source of Sample	PIT			
R_m @ Meas. Temp.	12.5 @ 68 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	12.5 @ 68 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	8.0 @ 68 °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	C / C			
R_m @ BHT	8.5 @ 102°F	@ °F	@ °F	@ °F
ime Since Circ.	4 HOURS			
Max. Rec. Temp.	102 °F	°F	°F	°F

The well name, location and borehole reference data were furnished by the customer.

KS

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole

Equipment Data

Run No.	Tool Type	Tool Position	Other

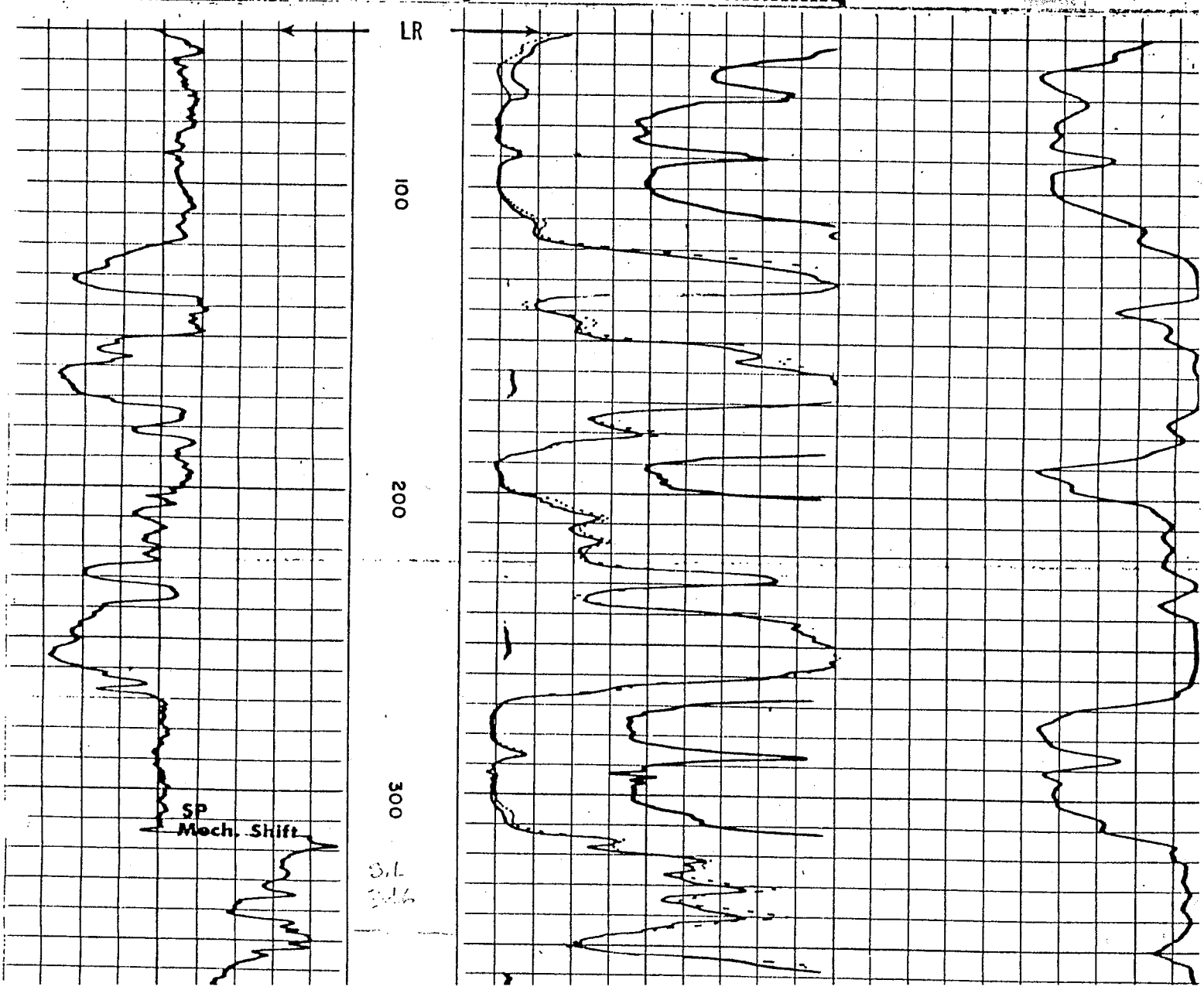
s in Mud Type or Additional Samples					
Sample No.					
—Driller					
uid in Hole					
Visc. / Fluid Loss	ml				
e of Sample	@ °F	@ °F	@ °F	@ °F	@ °F
@ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F
@ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F
@ Meas. Temp. R_{mf} / R_{mc}	—	—	—	—	—
: @ BHT	@ °F	@ °F	@ °F	@ °F	@ °F
@ BHT	@ °F	@ °F	@ °F	@ °F	@ °F
@ BHT	@ °F	@ °F	@ °F	@ °F	@ °F

Run No.: ONE
C.D.: NO
S.O.: 0
PANEL No.: N-536
CART. No.: FB-455
SONDE No.: M-535
IAP No.: B-292
S.B.R.: 0.5

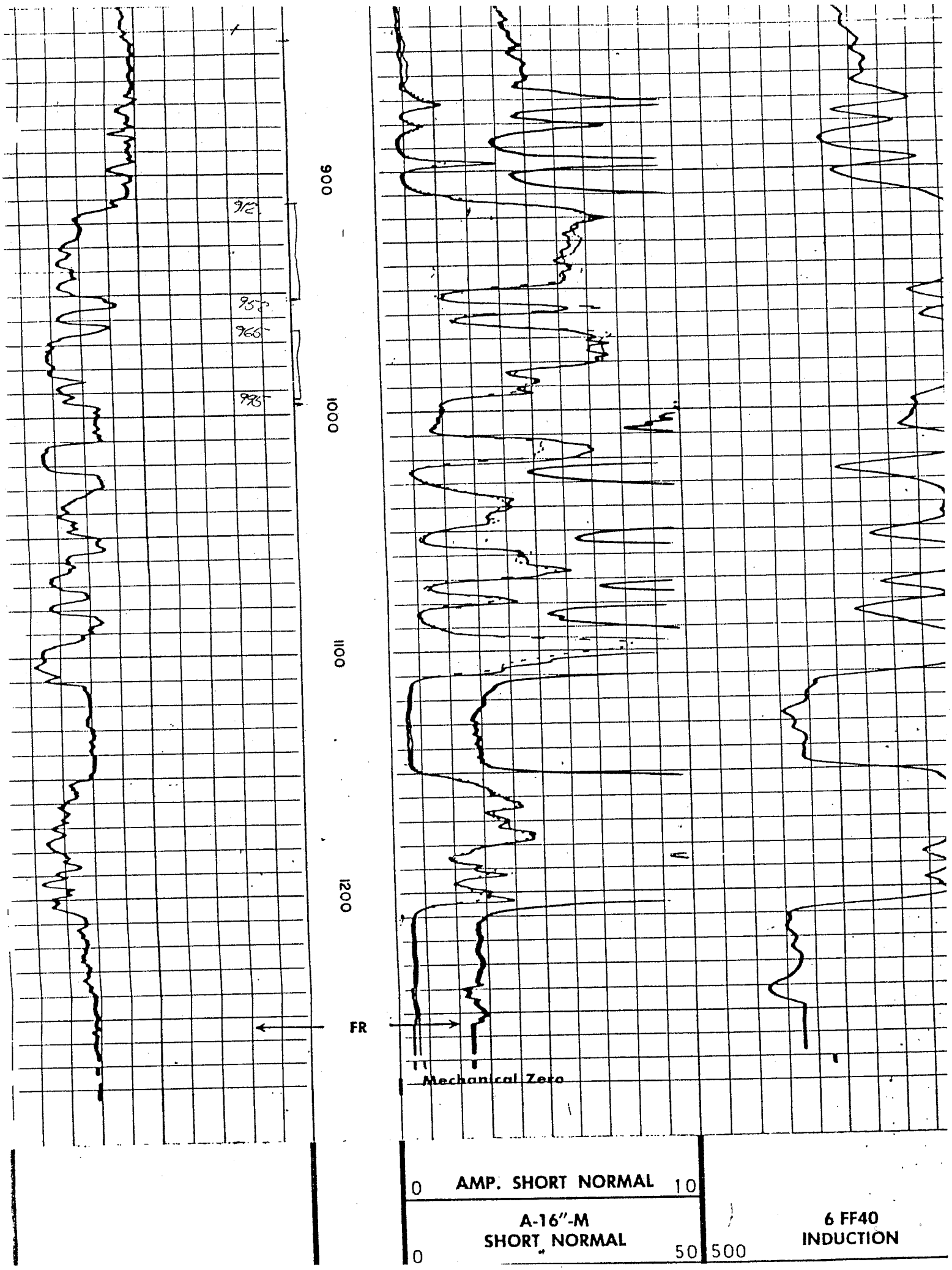
PANEL No.: N-536
CART. No.: FB-455
SONDE No.: M-535
IAP No.: B-292
S.B.R.: 0.5

Check one, filling in blanks where applicable:
[X] Surface determined sonde errors used for 6FF40.
[ ] 6FF40 sonde error corrected for _____ inch
borehole signal at Rm =
[ ] 6FF40 zero set in hole at depth of _____ feet.

SPONTANEOUS POTENTIAL millivolts	DEPTHS	RESISTIVITY ohms-m²/m	CONDUCTIVITY millimhos/m = 1000 / ohms-m²/m
10 (− ↔ +)		A-16"-M SHORT NORMAL 0 – 50	6FF40 INDUCTION 500
		0 – 500	1000 – 50
		INDUCTION 0 – 50	



400
500
600
800
540'
8"
6"
615
680'
6"
700
724'
716
736
726
823


900
1000
1100
1200
FR
Mechanical Zero
0 AMP. SHORT NORMAL 10
A-16"-M
SHORT NORMAL
0 50
500
6 FF40
INDUCTION

KATY DRILLING, INCORPORATED

CYPRESS CREEK UTILITY DISTRICT
Job No. 653
8" Orifice

PRODUCTION TEST

DATE	TIME	VOLUME - GPM	WATER LEVEL-FT.	SAND CONTENT
3-16-72	6:00 A.M.	1336	303' 11"	None
	7:00	1319	301' 1"	None
	8:00	1319	301' 11"	None
	9:00	1319	301' 5"	None
	10:00	1319	301' 10"	None
	11:00	1319	301' 8"	None
	12:00	1319	301' 6"	None
	1:00 P.M.	1319	301' 6"	None
	2:00	1319	300' 9"	None
5 min.	2:05		182'5"	
10 min.	2:10		178' 10"	
	3:10	1319	300'	None

RECOVERY TEST

3-16-72	3:15 p.m.		181' 10"
	3:20		178'
	3:25		176' 4"
	3:30		175' 8"
	3:40		174' 9"
	3:50		173' 6"
	4:00		172' 7"
	4:15		171' 6"
	4:45		170' 2"
	5:15		169' 2"

EDNA WOOD LABORATORIES

WATER TECHNOLOGISTS . . CHEMISTS . . MICROBIOLOGISTS

28 March 1972

65

To: Katy Drilling Incorporated
P. O. Box 278
Katy, Texas 77450

For: Mr. R. A. Green

Sample marked: Well #2, Cypress Creek Utility District, located off Jones Road in NW Harris County, taken 3-17-72 after 6 hrs. pumping at 1300 gpm. Screened: 724' - 994'.

Received: 3-17-72

WATER ANALYSIS

results in parts per million (mg/l) except as noted

Dissolved Residue at 350°C		408	Conductance, micromhos/cm, 25°C	719
Total Dissolved Solids, actual†		591	Color, units	3
Total Dissolved Solids, calc.		605	Turbidity, units	0.5
Silica	SiO_2	16	As Calcium Carbonate, $CaCO_3$:	
Calcium	Ca	17	Phenolphthalein Alkalinity	0
Magnesium	Mg	6	Total Alkalinity	295
Sodium (diff.) Na + K as	Na	144	Total Hardness	64
			Threshold Odor No. at 60°C	1
Carbonate	CO_3	0	Free Carbon Dioxide CO_2	5
Bicarbonate	HCO_3	360	pH . . . 7.95	
Sulfate	SO_4	2	HYPOTHETICAL COMBINATIONS	
Fluoride	F	1.0		
Chloride	Cl	58		
Nitrate	NO_3	0.5		
Total Iron *	Fe	0.18		
Arsenic*	As	< 0.02		
Cadmium*	Cd	< 0.01		
Cobalt*	Co	< 0.01		
Lead*	Pb	< 0.01		
Manganese*	Mn	0.02		
Mercury*	Hg	< 0.001		
Zinc*	Zn	0.01		
Chromium*	Cr	< 0.01		

* By Atomic Absorption

†Total Dissolved Solids, actual = Dissolved Residue + 50.8% of bicarbonate (HCO_3) ion

9831
lr

EDNA WOOD LABORATORIES, INC.

By: Edna Wood

CYPRESS CREEK UTILITY DISTRICT

WATER WELL #3

State Well Report\ Well schedule

Well construction & material setting

Driller geological log

Electric log

Original water chemical analysis

1 original copy by
ed mail to the
Department of Water Resources
box 13087
in, Texas 78711

State of Texas
WATER WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

For TDWR use only
Well No.
Located on map
Received:

OWNER Cypress Creek Utility (Name) Address Houston (Street or RFD) Texas (City) (State) (Zip)

LOCATION OF WELL:
County Harris 20 miles in N.E. (N.E., S.W., etc.) direction from Houston (Town)

er must complete the legal description to the right distance and direction from two intersecting sec- or survey lines, or he must locate and identify the on an official Quarter- or Half-Scale Texas County ral Highway Map and attach the map to this form.

☐ Legal description:
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____

☒ See attached map.

TYPE OF WORK (Check):
New Well ☐ Deepening
Reconditioning ☐ Plugging

4) PROPOSED USE (Check):
☐ Domestic ☐ Industrial ☒ Public Supply
☐ Irrigation ☐ Test Well ☐ Other _____

5) DRILLING METHOD (Check):
☒ Mud Rotary ☐ Air Hammer ☐ Driven ☐ Bored
☐ Air Rotary ☐ Cable Tool ☐ Jetted ☐ Other _____

WELL LOG:
Date drilled Dec. 1988

DIAMETER OF HOLE

Dia. (in.)	From (ft.)	To (ft.)
25"	Surface	725'
14"	625'	1234'
30"	725'	1234'

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☒ Gravel Packed ☐ Other _____
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

From (ft.)	To (ft.)	Description and color of formation material
		(as atthached)

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial	Setting (ft.) From	Setting (ft.) To	Gage Casing Screen
		(as attached)			

CEMENTING DATA
Cemented from 0 ft. to 725' ft.
Method used Pressure
Cemented by Haliburton (Company or Individual)

9) WATER LEVEL:
Static level 313.75 ft. below land surface Date 2/11/88
Artesian flow _____ gpm. Date _____

10) PACKERS: Type Depth

(Use reverse side if necessary)

11) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., _____ ft.

WATER QUALITY:
Did you knowingly penetrate any strata which contained undesirable water? ☐ Yes ☐ No
If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? _____ Depth of strata _____
Was a chemical analysis made? ☐ Yes ☐ No

12) WELL TESTS:
☐ Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 383.45 gpm with 69.70 ft. drawdown after 1 hrs.

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

ME A.C. England (Type or Print) Water Well Drillers Registration No. 2016

DRESS 6615 Gant rd. (Street or RFD) Houston (City) Texas (State) 77066 (Zip)

gned) A C England (Water Well Driller) Alsay Inc. (Company Name)

ase attach electric log, chemical analysis, and other pertinent information, if available.

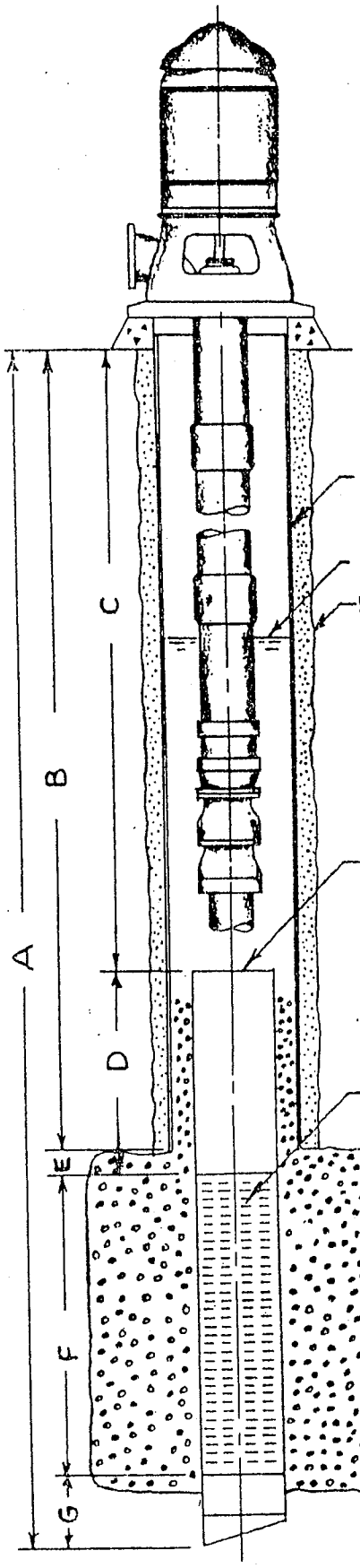
VR-0392 (Rev. 1-12-79)

DEPARTMENT OF WATER RESOURCES COPY

WELL LOG and MATERIAL REPORT

CUSTOMER Cypress Creek Utility District
LOCATION Houston, Texas
ADDRESS 6943 Copeland

WELL NO. 3
COMPLETED Feb. 1988
CONTRACT NO.



DIMENSIONS:

A — 1234'
B — 725'
C — 625'
D — 100'
E — 5'
F — 609'
G — 20'
H — 24" Diam.
I — 30" Diam.
J — 313.75

Size 20"
Weight 78.6
Wall .375

(Static Level)

Size 14"
Weight 55.61
Wall .312

Size 14"
Type Pipe Base
Material S.S.
Gauge N/A
Opening .035

PUMP DATA: Serial

Bowl Assembly 9 Stage, Size Model 11 MQ-"H"
Discharge Column — Setting 1150' Feet
Size — 10 Pipe - Tubing - Shaft
Head-Type BJ Size Discharge 8"
Suction, Length N/A Size N/A
Design Conditions: — 1000 USGPM 446 TDH
Manufacturing: Byron Jackson

MOTOR DATA:

HP 175 Make BJ Speed 1746
Voltage 2300 Frame Type H
Serial No.
Calculated Thrust:
Thrust Capacity:

REMARKS:

SCREEN & BLANK LINER LAYOUT:

Depth	Blank	Screen

(as attached)

ALSAY-TEXAS CORPORATION
Industrial & Municipal Water Wells
Well and Pump Workover
6615 Gant St. Houston, Texas 77066
(713) 444-6960 / Telex: 792838

CYPRESS CREEK U.D.
WELL NO. #3
PROPOSED RECOMMENDED MATERIAL SETTINGS
12/17/87

DEPTH	20" SURFACE CASING	14" BLANK	14" SCREEN
0-725'	725'		
625-730'		105'	
730-752'			22'
752-784'		32'	
784-852'			68'
852-940'		88'	
940-978'			38'
978-1010'		32'	
1010-1040'			30'
1040-1060'		20'	
1060-1070'			10'
1070-1080'		10'	
1080-1086'			6'
1086-1110'		24'	
1110-1116'			6'
1116-1146'		30'	
1146-1156'			10'
1156-1164'		8'	
1164-1196'			32'
1196-1204'		8'	
1204-1214'			10'
1214-1234' TD		20'	
	725'	377'	232'

TOTAL MATERIALS

20" Surface Casing = 725'
14" Blank Liner = 377'
14" Screen = 232'

CYPRESS CREEK U.D.
WELL NO. 3
DRILLERS LOG
12/17/87

DEPTH	DESCRIPTION
0-6'	Rig to ground level
6-11'	Top soil
11-20'	Sand
20-25'	White clay
25-41'	Red clay
41-45'	Sand
45-53'	White clay
53-90'	Sand
90-125'	Clay white
125-241'	Sand
241-252'	Clay tan
252-260'	Sand course
260-340'	Clay tan
340-355'	Sand
355-371'	Clay brown
371-405'	Sand
405-415'	Tan clay
415-453'	Sand
453-477'	White clay
477-506'	Sand
506-523'	Brown clay
523-554'	Sand streaks of brown clay
554-568'	Sand
568-580'	Clay tan and white
580-632'	Sand
632-720'	Tan clay and blue shale
720-751'	Sand
751-795'	Brown clay
795-844'	Sand hard
844-883'	Clay grown
883-920'	Sand
920-930'	Clay blue
930-959'	Sand
959-961'	Clay blue
961-990'	Sand with small clay breaks
990-1023'	Clay blue
1023-1029'	Sand
1029-1040'	Clay blue
1040-1053'	Sand
1053-1067'	Clay blue
1067-1071'	Sand
1071-1097'	Clay blue
1097-1108'	Sand
1108-1134'	Brown and blue clay
1134-1197'	Sand streks of blue shale
1197-1205'	Tan and white clay

CYPRESS CREEK U.D./WELL NO. 3
DRILLERS LOG
12/17/87

DEPTH	DESCRIPTION
1205-1212'	Sand
1212-1240'	Blue-grey shale
1240-1254'	Sand
1254-1303'	Brown clay and tan clay
1303-1315'	Sand

Schlumberger

DUAL INDUCTION / SFL

CSU Field Log

COMPANY: ALSAY , INC.

WELL: CYPRESS CREEK U. D. #3

FIELD: WATER WELL
COUNTY: HARRIS
STATE: TEXAS

LOCATION: NOT AVAILABLE

OTHER SERVICES-
RFT
MICRO-SFL
LDT/CNL/GR

PERMANENT DATUM: GROUND LEVEL ELEVATIONS-
ELEV. OF PERM. DATUM: KB:
LOG MEASURED FROM: R.K.B. DF:
5.0 F ABOVE PERM. DATUM GL:
DRLG. MEASURED FROM: R.K.B.

PROGRAM
TAPE NO:
27.796
SERVICE
ORDER NO:
491882

DATE: 16 DEC 87
RUN NO: 1

DEPTH-DRILLER: 1350.0 F
DEPTH-LOGGER: 1335.0 F
BTM. LOG INTERVAL: 1332.0 F
TOP LOG INTERVAL: 40.0 F

CASING-DRILLER: 40.0 F
CASING-LOGGER: 40.0 F
CASING: 30
WEIGHT:
BIT SIZE: 9 7/8
DEPTH:

TYPE FLUID IN HOLE: GEL/WATER
DENSITY: 9.10 LB/G
VISCOSITY: 34.0 S
PH: 7.8
FLUID LOSS: 11.0 C3
SOURCE OF SAMPLE: CIRC. PIT
RM: 16.90 OHMM AT 75.0 DEGF
RMF: 10.90 OHMM AT 75.0 DEGF
RMC: 25.40 OHMM AT 75.0 DEGF
SOURCE RMF/RMC: MEASURED/CALCULATED
RM AT BHT: 14.00 OHMM AT 92.0 DEGF
RMF AT BHT: 9.028 OHMM AT 92.0 DEGF
RMC AT BHT: 21.04 OHMM AT 92.0 DEGF

TIME CIR . STOPPED: 0900/16/DEC
TIME LOGGER ON BTM.: 1130/16/DEC

MAX. REC. TEMP: 92.0 DEGF

LOGGING UNIT NO: 8243
LOGGING UNIT LOC: DAYTON
RECORDED BY: MORRISON
WITNESSED BY: HARRISON/ENGLAND

REMARKS:

EQUIPMENT NUMBERS-

DIS 513 DIC 1268 DRS 5897 NSC 1746
CNC 101

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

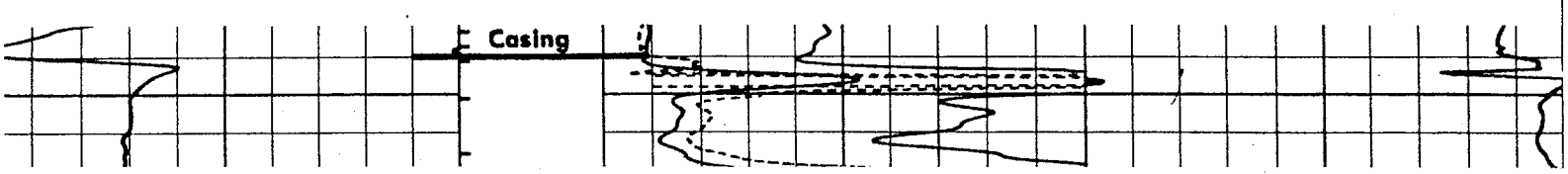
CP 27.796 FILE 7 16-DEC-87 12:48
DATA ACQUIRED 16-DEC-87 12:10

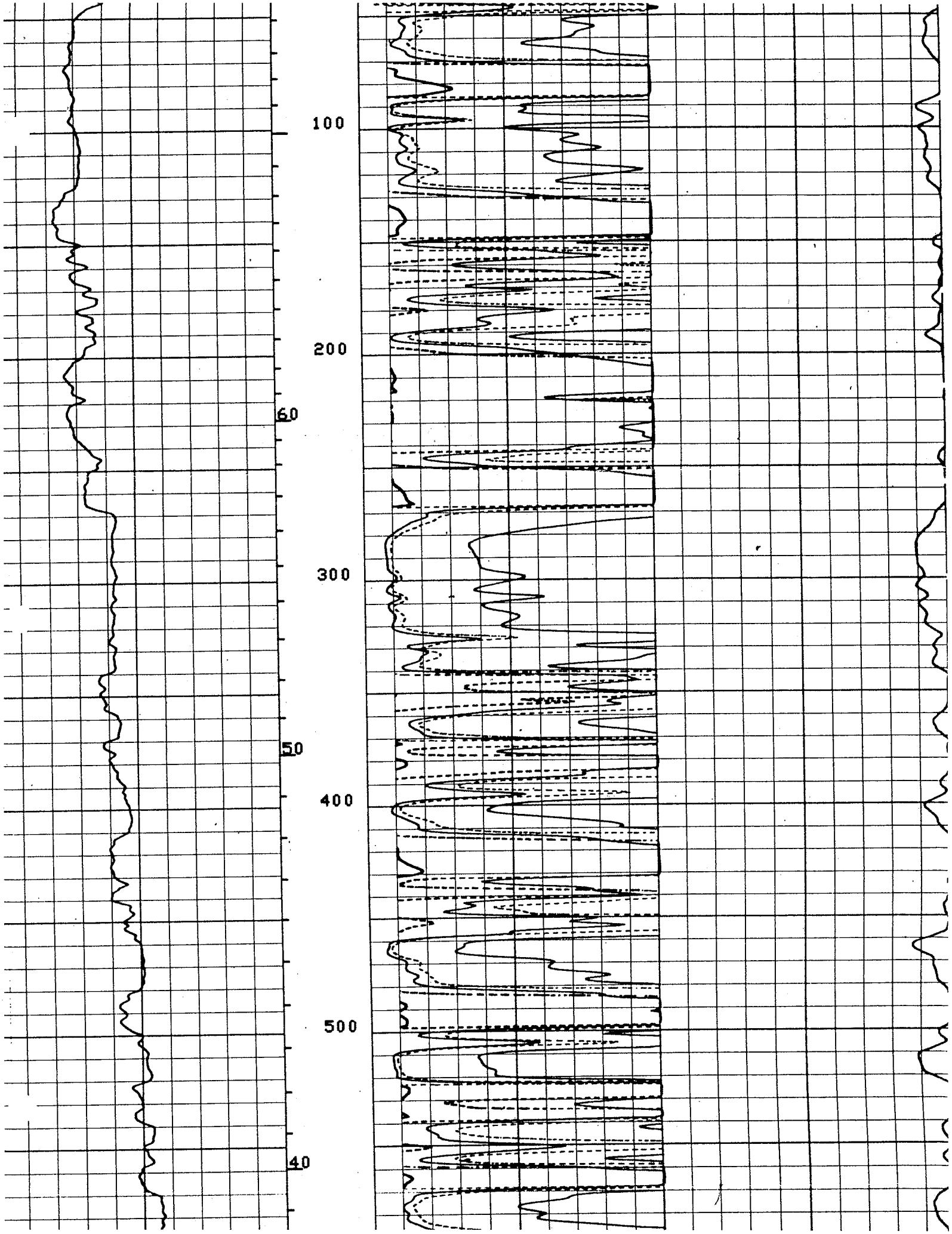
EVENT MARK SUMMARY:

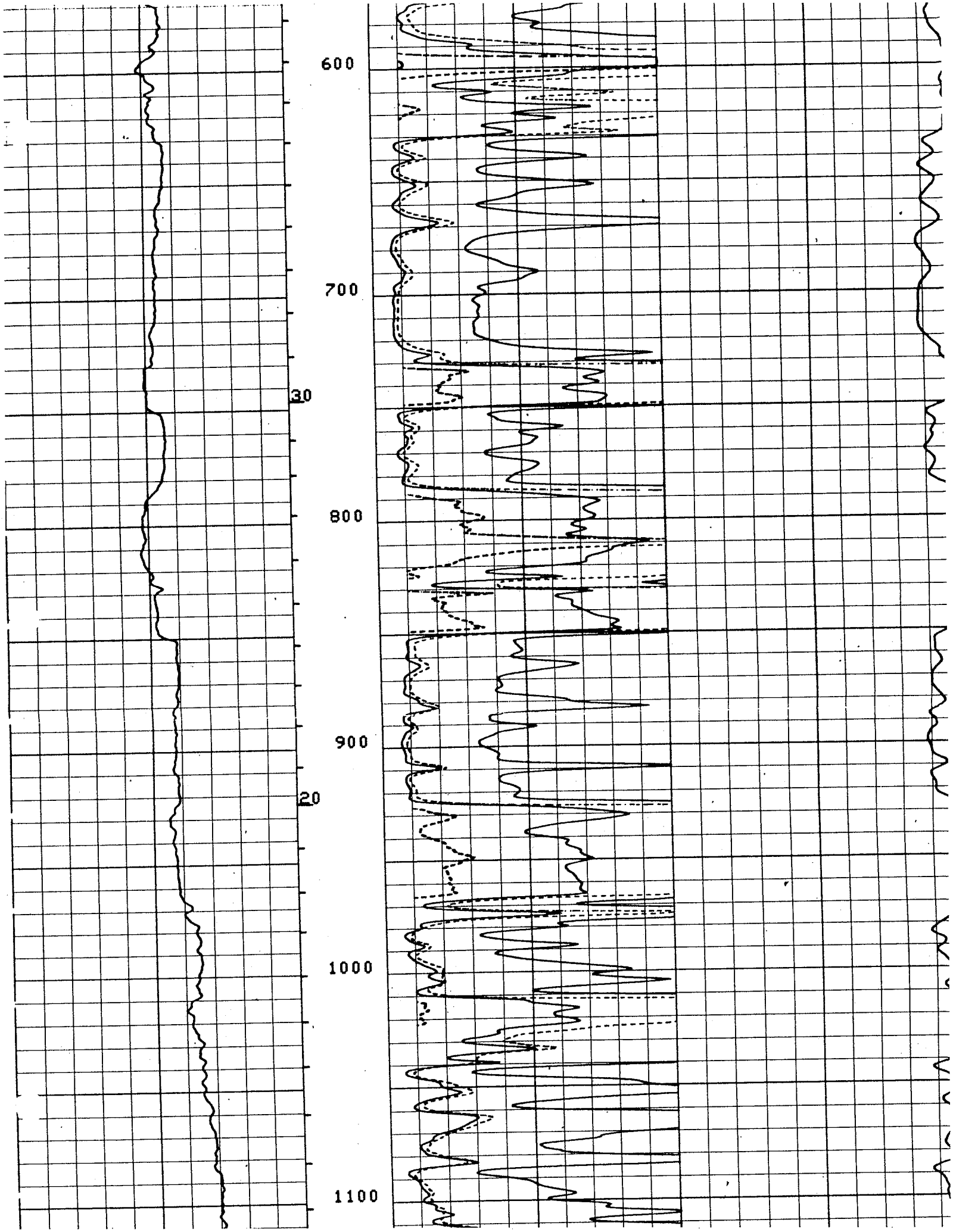
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE

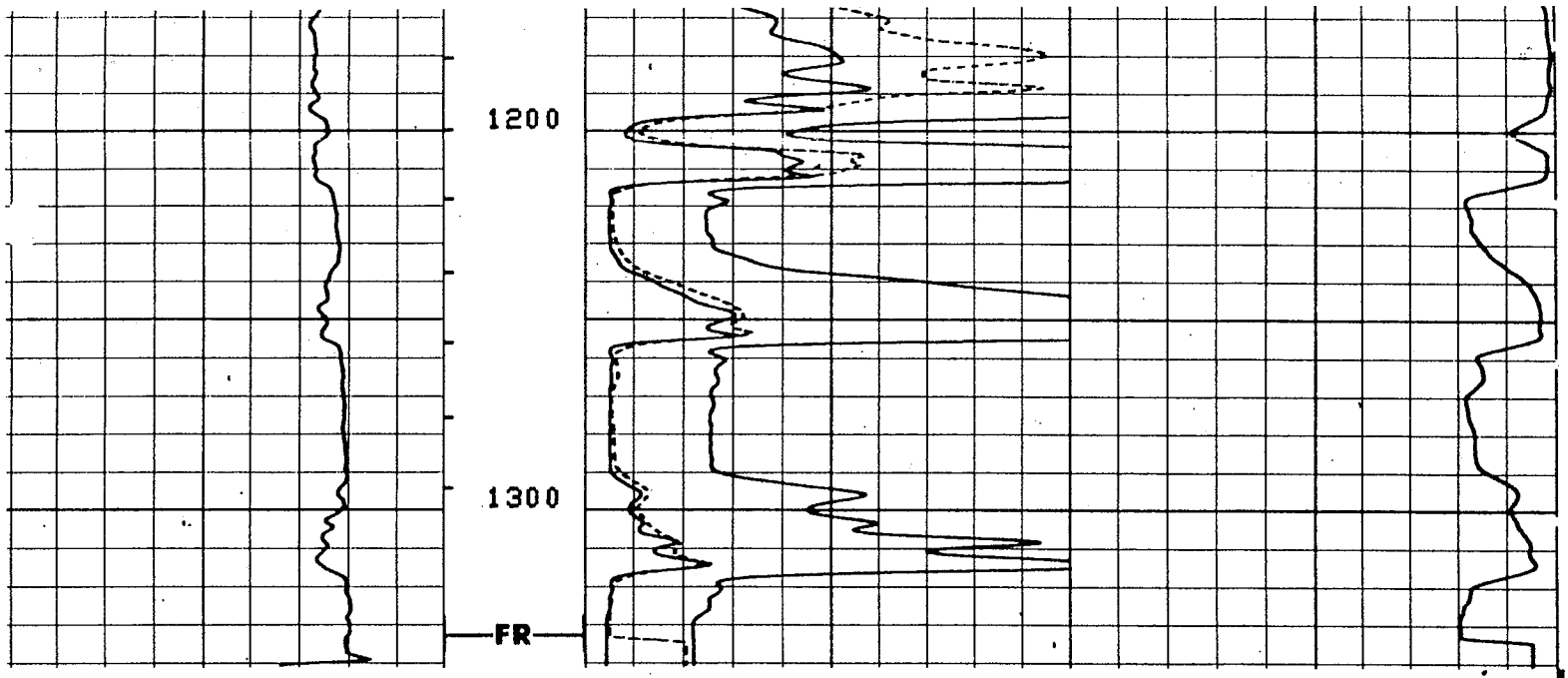
SP (MV)		ILD (OHMM)	CILD(MMHO)
		0.0 50.000	
		SFLA(OHMM) 0.0 10.000	
-160.0 40.000		SFLA(OHMM) 0.0 50.000	2000.0 0.0

CP 27.796 FILE 7 16-DEC-87 12:10




100
200
60
300
50
400
500
40


600
700
30
800
900
20
1000
1100



CP 27.796 FILE 7 16-DEC-87 11:38

SP (MV)		ILD (OHMM)	CILD(MMHO)
		0.0 50.000	
		SFLA(OHMM)	
		0.0 10.000	
		SFLA(OHMM)	
160.0 40.000		0.0 50.000	2000.0 0.0

SENSOR MEASURE POINT TO TOOL ZERO

STSG	2.5	FEET	GR	59.7	FEET
SPAR	2.5	FEET	SP	2.5	FEET
NCNL	51.2	FEET	FCNL	51.2	FEET
LITH	32.9	FEET	SCNL	2.5	FEET
LS	32.9	FEET	LL	32.9	FEET
SS1	32.4	FEET	LU	32.9	FEET
DTCL	32.9	FEET	SS2	32.4	FEET
DTPL	32.9	FEET	DTCS	32.4	FEET
LLLC	32.9	FEET	DTPS	32.4	FEET
LLUC	32.9	FEET	LULC	32.9	FEET
SLLC	32.4	FEET	LUUC	32.9	FEET
SLUC	32.4	FEET	SULC	32.4	FEET
ILD	9.4	FEET	SUUC	32.4	FEET
SFL	6.4	FEET	ILM	5.8	FEET
TENS	2.5	FEET	CALI	33.0	FEET
NRAT	51.2	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SHT	74.0000	DEGF	TD	10000.0	F
HC	CALI		PSNR	2.27800	
FD	1.00000	G/C3	MATR	SAND	
WMUD	10.0000	LB/G	MDEN	2.65000	G/C3
DHC	NONE		BFM	LIQU	
SBR	1.00000	OHMM	DSEC	8.10000	MMHO
FEXP	2.00000		MSEC	8.90000	MMHO
BHS	OPEN		FNUM	.810000	
BS	9.87500	IN			

CYPRESS CREEK U.D.
WELL NO. 3
INCLINATION SURVEY
(1 DEGREE = 60 MINUTES)
12/17/87

DEPTH	INCLINATION	DEPTH	INCLINATION
57'	5 minutes	701'	20 minutes
86'	8 minutes	732'	17 minutes
111'	12 minutes	764'	18 minutes
139'	3 minutes	795'	8 minutes
168'	10 minutes	826'	10 minutes
199'	15 minutes	858'	10 minutes
231'	15 minutes	889'	10 minutes
213'	17 minutes	921'	10 minutes
325'	17 minutes	952'	10 minutes
356'	17 minutes	984'	10 minutes
387'	20 minutes	1015'	10 minutes
418'	20 minutes	1047'	25 minutes
450'	28 minutes	1078'	25 minutes
481'	28 minutes	1110'	10 minutes
513'	13 minutes	1142'	13 minutes
544'	28 minutes	1173'	15 minutes
576'	10 minutes	1204'	10 minutes
608'	18 minutes	1236'	28 minutes
639'	27 minutes	1267'	12 minutes
670'	28 minutes	1300' TD	15 minutes

EDNA WOOD LABORATORIES, INC.

WATER TECHNOLOGISTS · · CHEMISTS · · MICROBIOLOGISTS

21 December 1987

To: Alsay, Inc.
6615 Gant
Houston, Texas 77066

RECEIVED DEC 23 1987

P. O. No. A-19450

For: Mr. Ace England

Sample marked: Well No. 3, Cypress Creek Test hole - 933'

Received: 12-17-87

WATER ANALYSIS

results in parts per million (mg/l) except as noted

Dissolved Residue at 350° C		391	Conductance, micromhos/cm, 25°C		680
Total Dissolved Solids, actual†		544	Color, units		-
Total Dissolved Solids, calc.		541	Turbidity, units		-
Silica	SiO_2	13	As Calcium Carbonate, $CaCo_3$:		
Calcium	Ca	19	Phenolphthalein Alkalinity		0
Magnesium	Mg	4	Total Alkalinity		247
Sodium (diff.) Na + K as	Na	129	Total Hardness		65
Carbonate	CO_3	0	Free Carbon Dioxide	CO_2	0
Bicarbonate	HCO_3	301	pH . . . 8.27 at 21.5°C		
Sulfate	SO_4	15	HYPOTHETICAL COMBINATIONS		
Chloride	Cl	60			
Total Fluoride	F	0.9			
Total Nitrate	NO_3	< 0.4			
Total Manganese *	Mn	0.80			
Total Iron *	Fe	70			
Iron, filtered sample *	Fe	0.66			

*By Atomic Absorption.

†Total Dissolved Solids, actual = Dissolved Residue + 50.8% of bicarbonate (HCO_3) ion

EDNA WOOD LABORATORIES, INC.

By: Rita Wells
Rita Wells, Chemist

1686-2
pm

Tel: (713) 747-7271 • P. O. BOX 14171 • 4820 OLD SPANISH TRAIL • HOUSTON, TEXAS 77021

EDNA WOOD LABORATORIES, INC.
WATER TECHNOLOGISTS · · CHEMISTS · · MICROBIOLOGISTS

21 December 1987

To: Alsay, Inc.
6615 Gant
Houston, Texas 77066

P. O. No. A-19450

For: Mr. Ace England

Sample marked: Well No. 3, Cypress Creek Test hole 813'

Received: 12-17-87

WATER ANALYSIS
results in parts per million (mg/l) except as noted

Dissolved Residue at 350° C		433	Conductance, micromhos/cm, 25°C		740
Total Dissolved Solids, actual†		591	Color, units		-
Total Dissolved Solids, calc.		590	Turbidity, units		-
Silica	SiO_2	15	As Calcium Carbonate, $CaCo_3$:		
Calcium	Ca	28	Phenolphthalein Alkalinity		0
Magnesium	Mg	5	Total Alkalinity		255
Sodium (diff.) Na + K as	Na	135	Total Hardness		89
Carbonate	CO_3	0	Free Carbon Dioxide	CO_2	6
Bicarbonate	HCO_3	311	pH . . . 7.90 at 20°C		
Sulfate	SO_4	20	HYPOTHETICAL COMBINATIONS		
Chloride	Cl	76			
Total Fluoride	F	0.7			
Total Nitrate	NO_3	< 0.4			
Total Manganese *	Mn	0.30			
Total Iron *	Fe	56			
Iron, filtered sample *	Fe	0.28			

*By Atomic Absorption.

†Total Dissolved Solids, actual = Dissolved Residue + 50.8% of bicarbonate (HCO_3) ion

EDNA WOOD LABORATORIES, INC.

By: Rita Wells
Rita Wells, Chemist

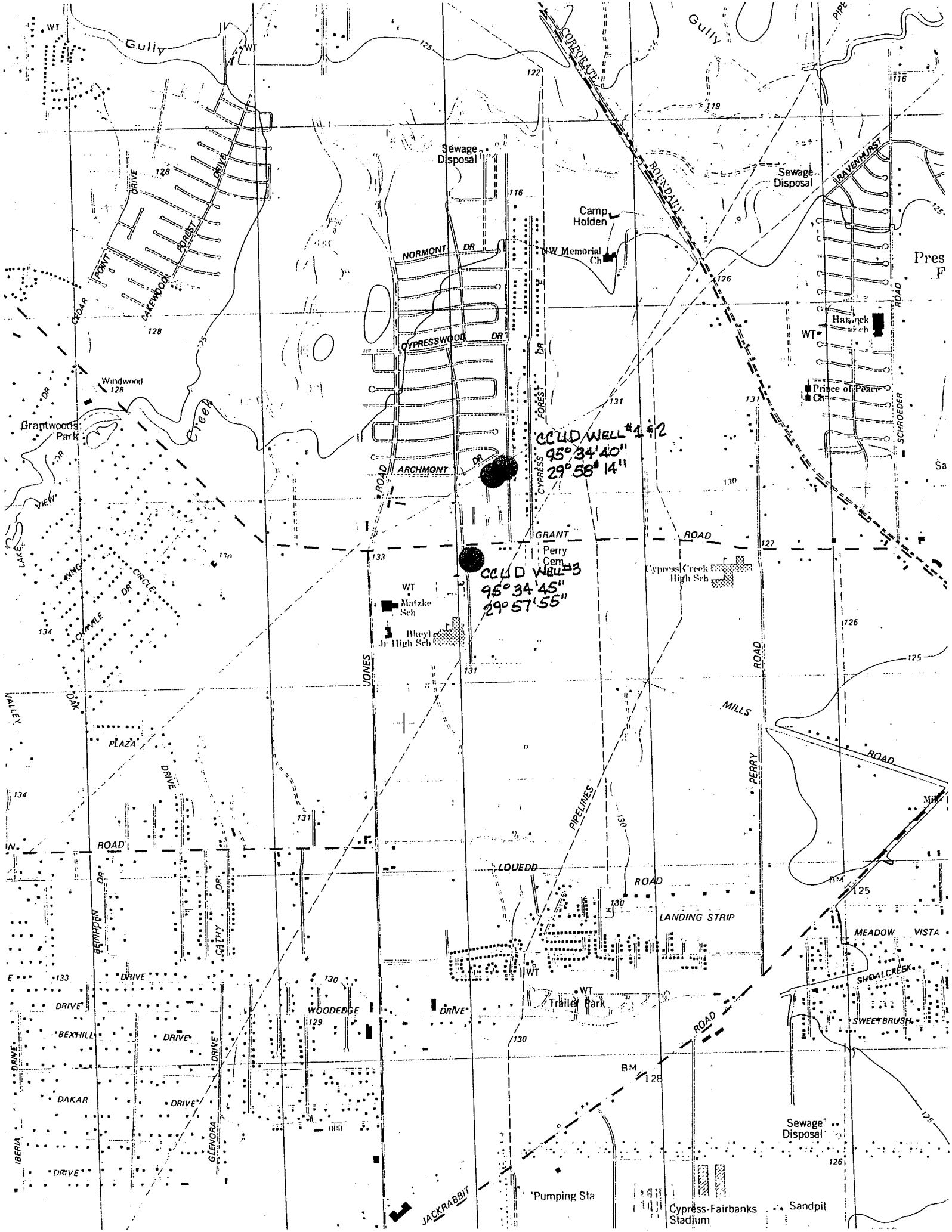
1686-2
pm

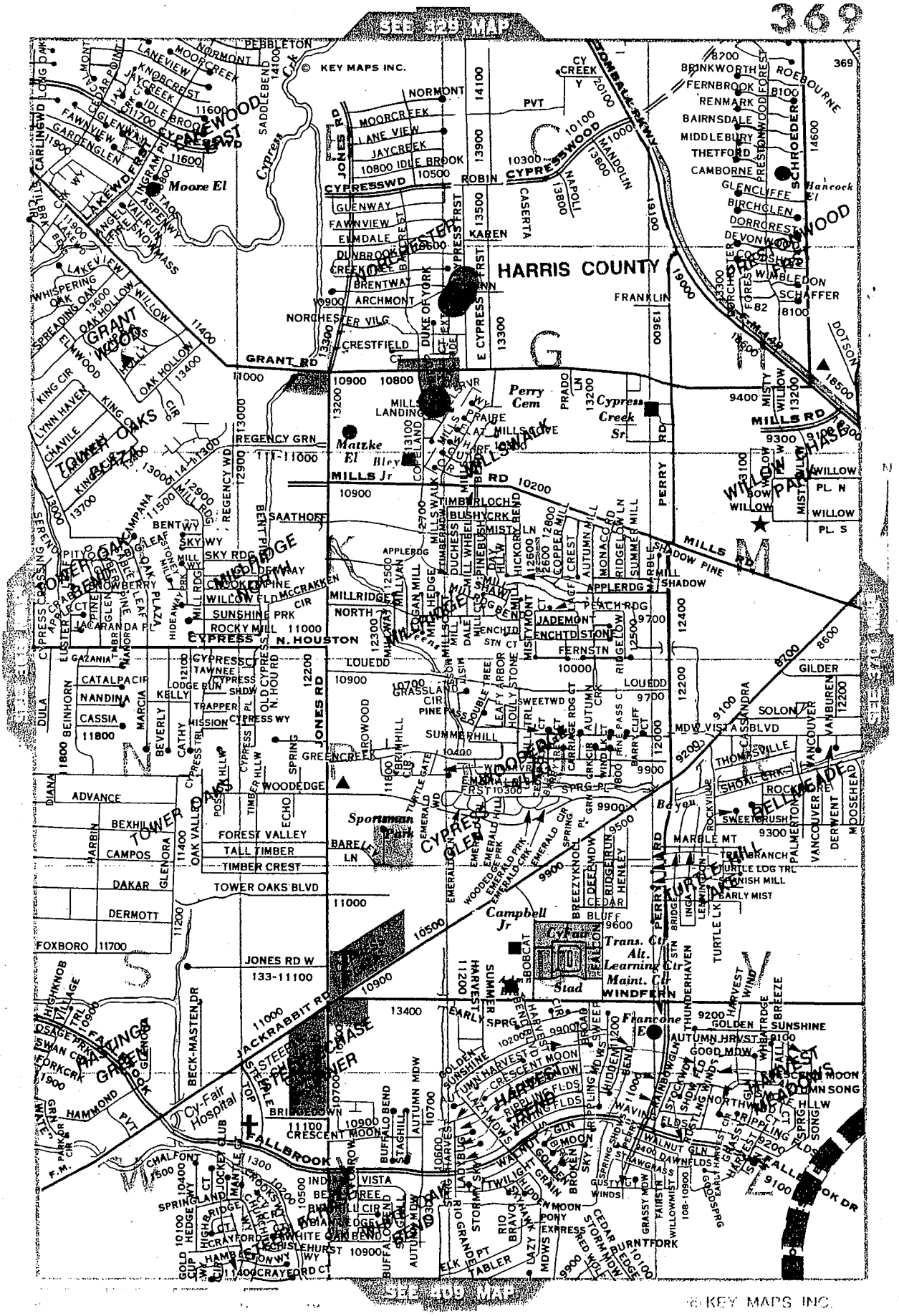
Tel: (713) 747-7271 • P. O. BOX 14171 • 4820 OLD SPANISH TRAIL • HOUSTON, TEXAS 77021

Location Map

Satsuma 7 1/2 minute USGS Quaddrangle sheet

Coordinate location of Wells #1, #2, #3


Gully
Sewage Disposal
Camp Holden
NW Memorial Ch
NORMONT DR
CYPRESSWOOD DR
CORPORATE BOUNDARY
RAVENHURST
Sewage Disposal
Hayrick Sch
Prince of Peace Ch
SCHROEDER ROAD
Windwood
Grantwoods Park
Creek
CCUD WELL #1 & 2
95° 34' 40"
29° 58' 14"
ARCHMONT DR
CYPRESS FOREST DR
GRANT ROAD
Perry Cem
CCUD WELL #3
95° 34' 45"
29° 57' 55"
Cypress Creek High Sch
Matzke Sch
Bleyl Jr High Sch
JONES ROAD
MILLS ROAD
PERRY ROAD
PIPELINES
PLAZA DRIVE
LOUEDD ROAD
LANDING STRIP
MEADOW VISTA
SHOALCREEK
SWEETBRUSH
Trailer Park
WOODEDGE DRIVE
BEXHILL DRIVE
DAKAR DRIVE
GLENORA DRIVE
IBERIA DRIVE
JACKRABBIT ROAD
Pumping Sta
Cypress-Fairbanks Stadium
Sandpit
Sewage Disposal


SEE 329 MAP
© KEY MAPS INC.
HARRIS COUNTY
CYPRESS
N. HOUSTON
GRANT RD
MILLS RD
JONES RD
TOWER OAKS BLVD
JACKRABBIT RD
FALLBROOK
Cy-Fair Hospital
Campbell Jr
Perry Cem
Cypress Creek Sr
Moore El
Matzke El
Francone El
Hancock El
Sportsman Park
SEE 409 MAP
© KEY MAPS INC.

WRD Exp. (GW)
April 1966

U. S. DEPT. OF THE INTERIOR

Well No. LJ-65-04-207

WELL SCHEDULE

GEOLOGICAL SURVEY

124000
WATER RESOURCES DIVISION

Satsuma, 1970

MASTER CARD

Record by G. McAdoo Source of data D-records Date 10-22-70 Map ~~Alvin~~ ~~1955~~

State Texas [48] County (or town) Harris St [LJ] Sequential number: [1]

Latitude: 29 58 13 N (deg, min, sec) Longitude: 095 34 31 (degrees, min, sec)

Lat-long accuracy: [1] T ____ N, R ____ E, Sec ____, ____ k, ____ k, ____ B & M

Local well number: LJ-65-04-207 Other number: N. Cypress Forest Dr. #1 EPT well

Local use: ____ Owner or name: Cypress Creek

Owner or name: CYPRESS CREEK Address: Utility District Northeastern Subd.

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist [W]

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other [P]

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdrew, (X) Waste, (Z) Destroyed. [W]

DATA AVAILABLE: Well data [ ] Freq. W/L meas.: 1969 — annual [A] Field aquifer char. [ ]

Hyd. lab. data: new MIS 3-75 (GW)

Qual. water data; type: ____

Freq. sampling: 4-14-72 (Prelim) [ ] Pumpage inventory: yes no, period: ____

Aperture cards: ____ yes

Log data: D-Log 0-558 [D]

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 510 ft [510] Meas. rept accuracy D-Log [3]

Depth cased (first perf.): 408 ft [408] Casing type: S; Diam 10-6 in [10]

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., screen, (S) sd. pt., (W) shored, (X) open hole, (Z) other [G]

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other [H]

Date Drilled: 9-27-69 [9 69] Pump intake setting: 270 ft

Driller: Katy Drlg. Co. (name), Houston, Texas (address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple, (cent.), (M) multiple, (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other [T] Deep Shallow [D]

Power (type): diesel, elec, nat gas, gasoline, hand, LP gas, wind; H.P. 30 Trans. or meter no. ____

Descrip. MP ____ ft above below LSD, Alt. MP ____

Alt. LSD: 132 [132] Accuracy (source): Topo 5' [3]

Water Level 142 ft above below MP; Ft above below LSD [142] Accuracy: rept [D]

Date meas: 10-1-69 [069] Yield: 250 gpm [250] Method determined [ ]

Drawdown: 38 ft [38] Accuracy: rept Pumping period 8 hrs [8]

QUALITY OF WATER DATA: Iron ____ ppm Sulfate ____ ppm Chloride ____ ppm Hard. ____ ppm

Sp. Conduct ____ K x 10^6 Temp. ____ °F Date sampled ____

Taste, color, etc. ____

Well No. LJ-65-04-207

1	1	CN	2438XA	153072	DECENTRALIZED
1	1	DENSITY	2228MA	153006	PAD
1	1	DIFL	1503MA	052692	1.5" STAND-OFF

MAIN LOG 5"/100FT SCALE

Release:3.0 May 05, 1997
Updates:1

Plotmgr 3.48
Pcrplt /main/35

Cplot /main/27
Pdf_cpp /main/12

Tue Dec 9 14:27:39 1997

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
gr	56.75	kth	56.75	th	56.75		
k	56.75	ten	0.00	u	56.75		

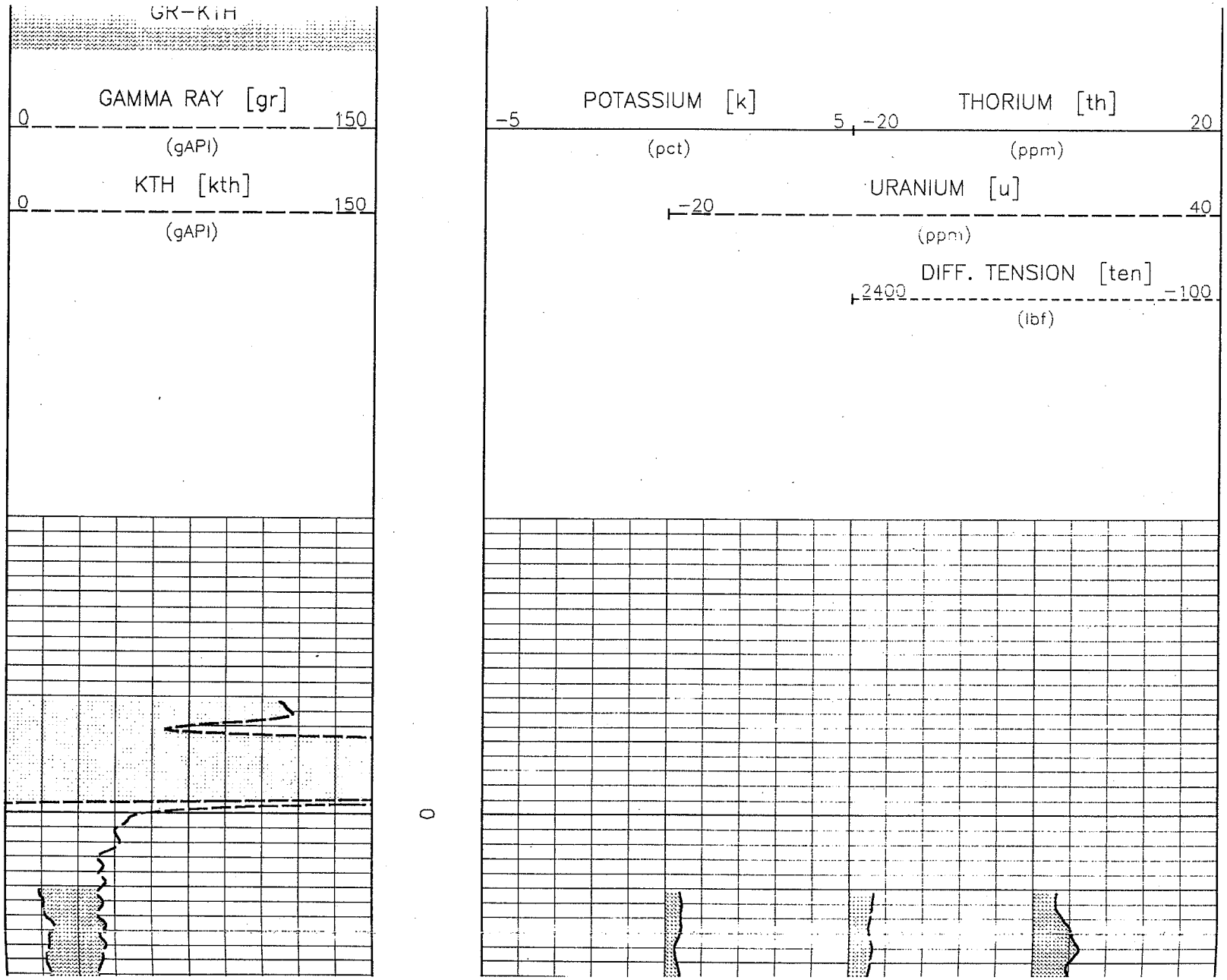
Presentation : sl.log
Data File : plt1:/dat1a/pass/layne/main.xtf
Company : layne texas
Interval : -38.50 - 969.00 Feet
Oct : c764a

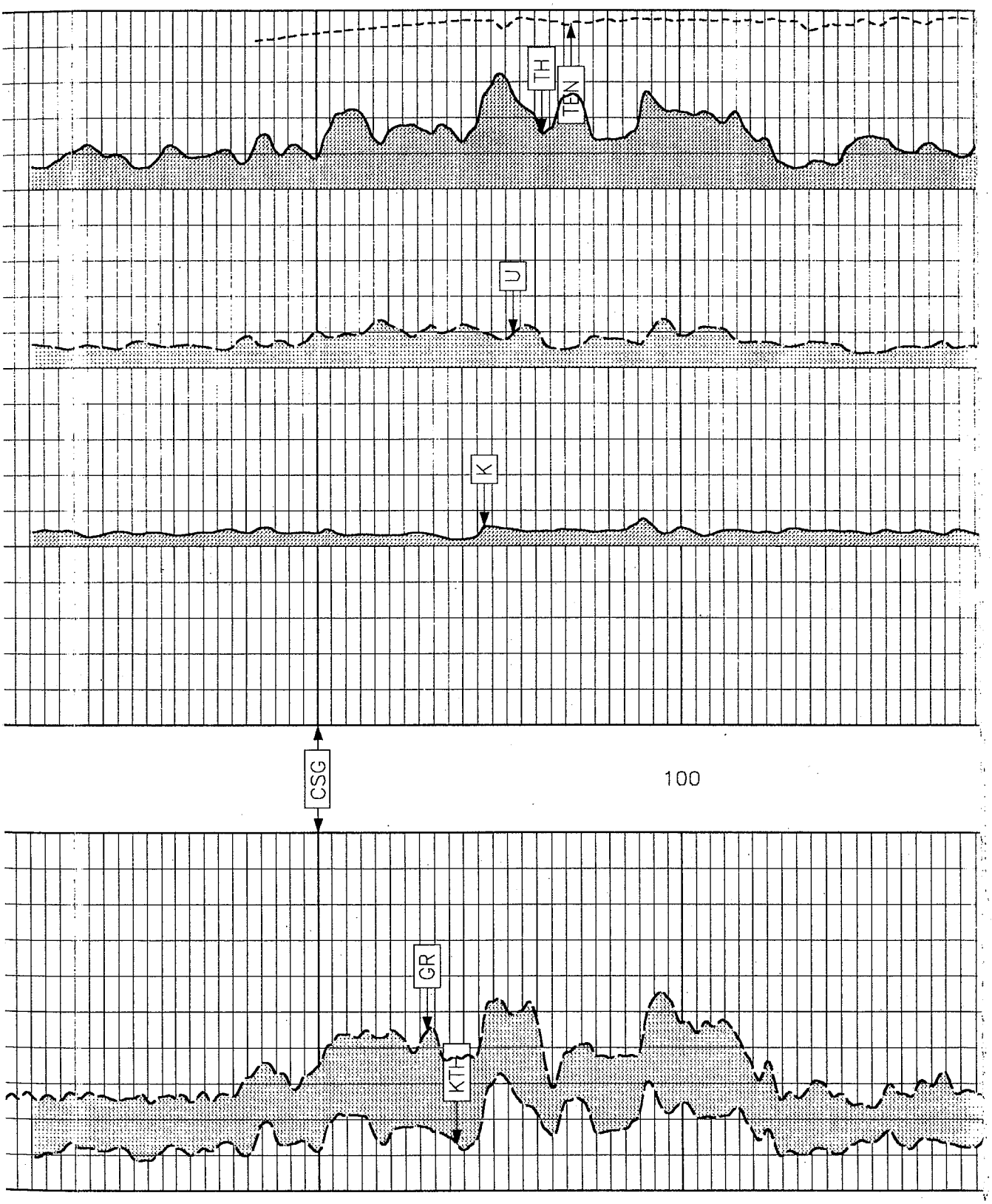
GR BACKUP

FEET

TOOL STICKING

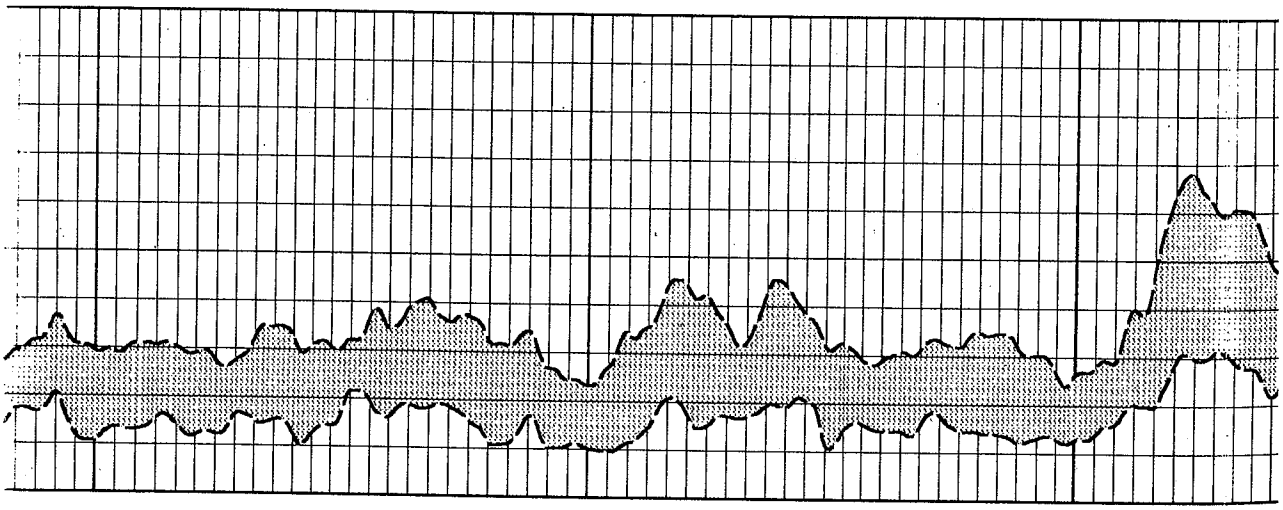
CNW#: P0870 PWS ID: ~~[illegible]~~ 1010447

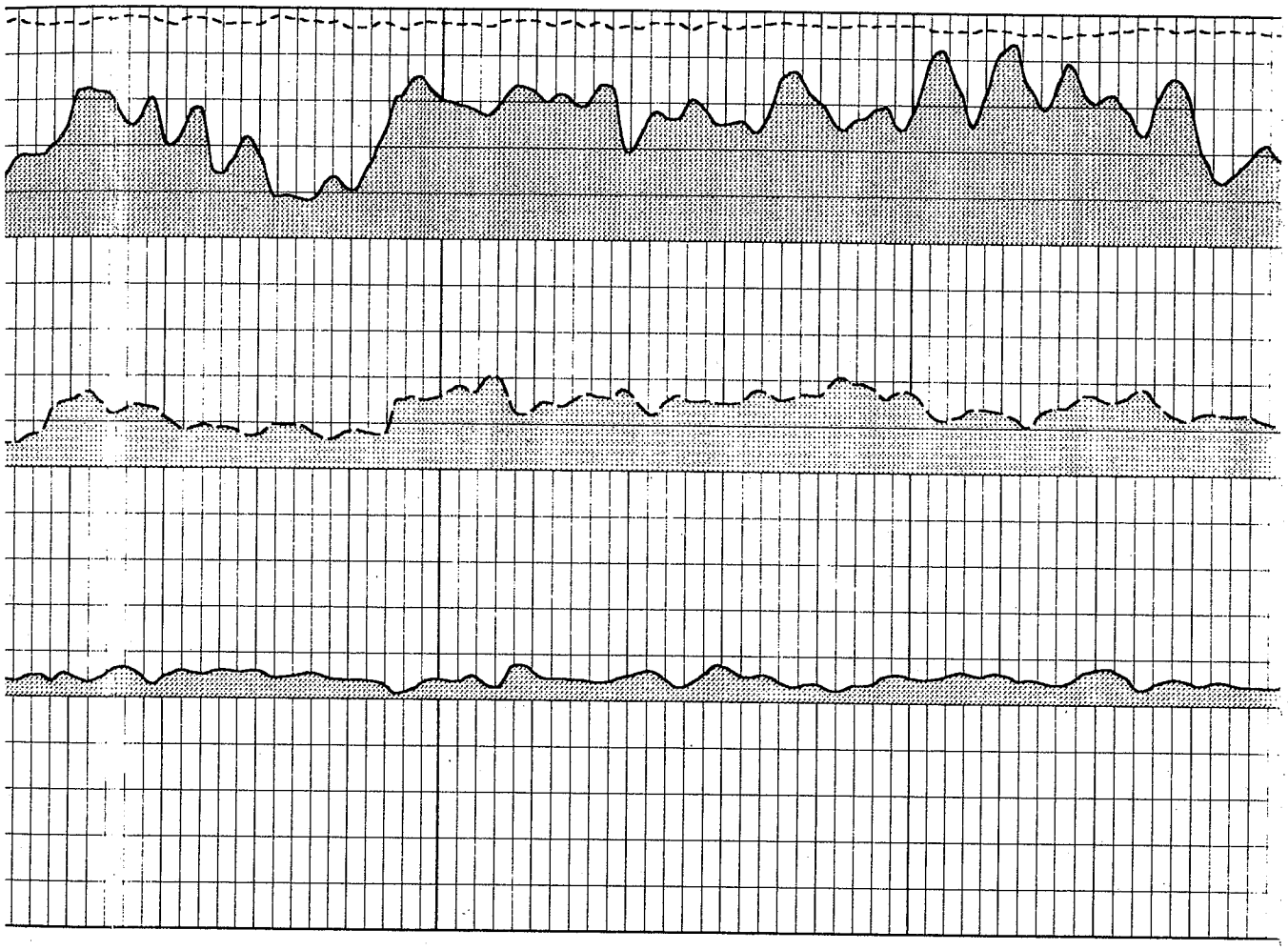

GR-KTH
GAMMA RAY [gr]
0
150
(gAPI)
KTH [kth]
0
150
(gAPI)
POTASSIUM [k]
-5
5
(pct)
THORIUM [th]
-20
20
(ppm)
URANIUM [u]
-20
40
(ppm)
DIFF. TENSION [ten]
2400
-100
(lbf)



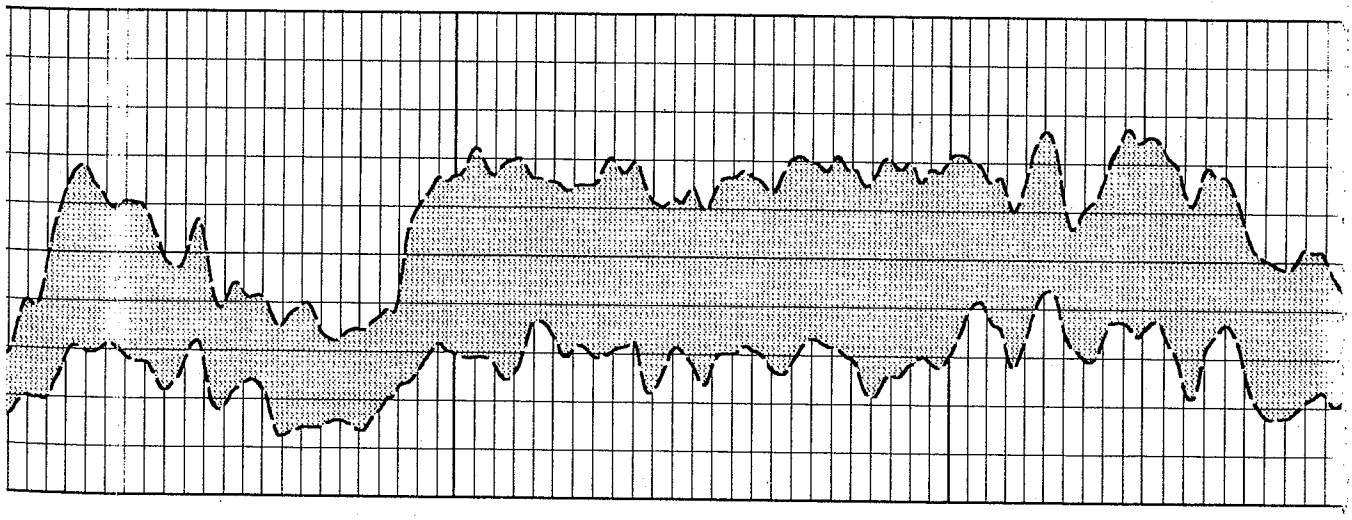
100

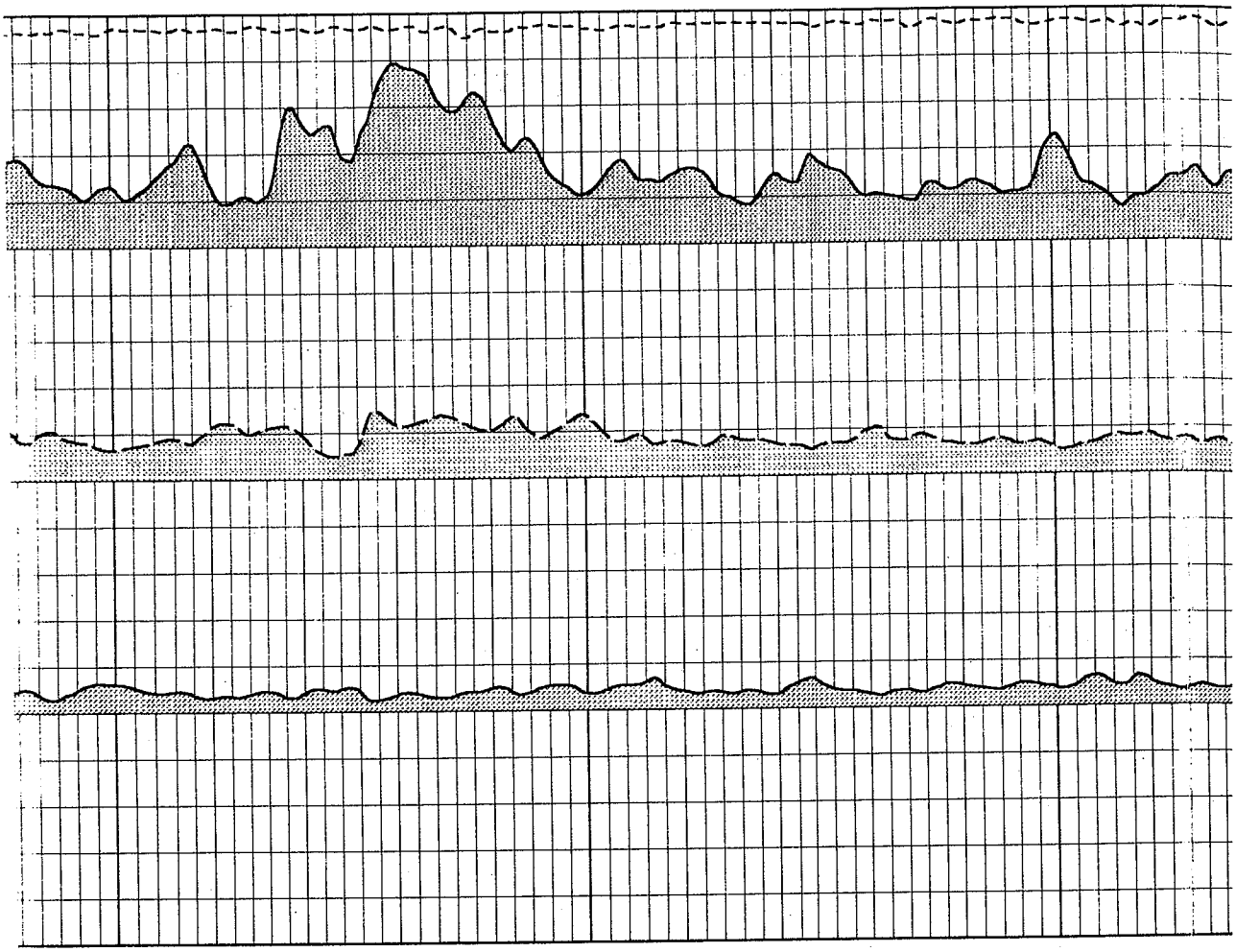
200



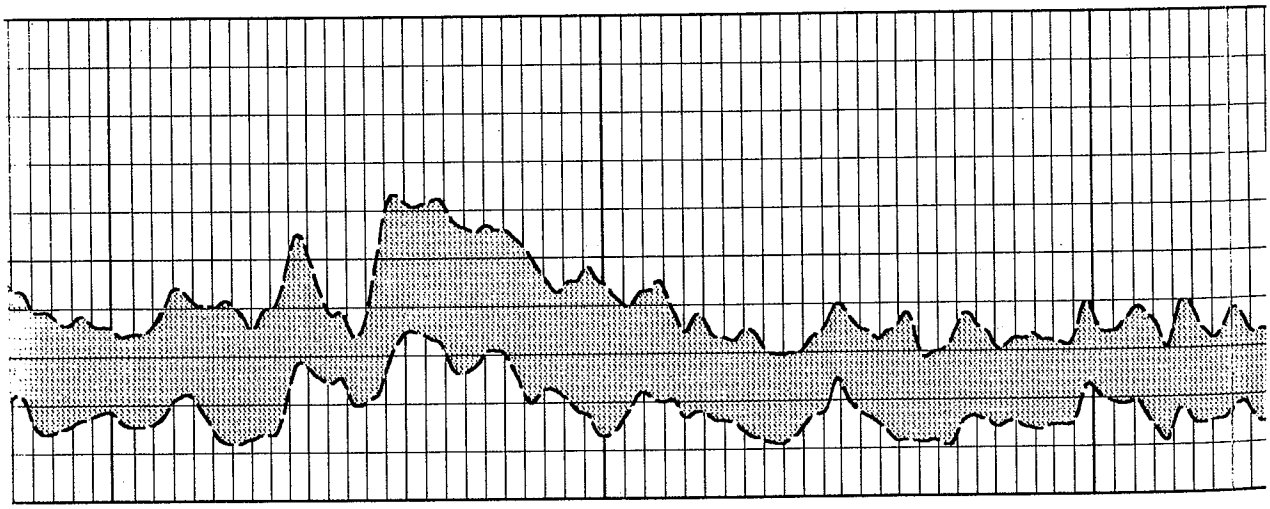


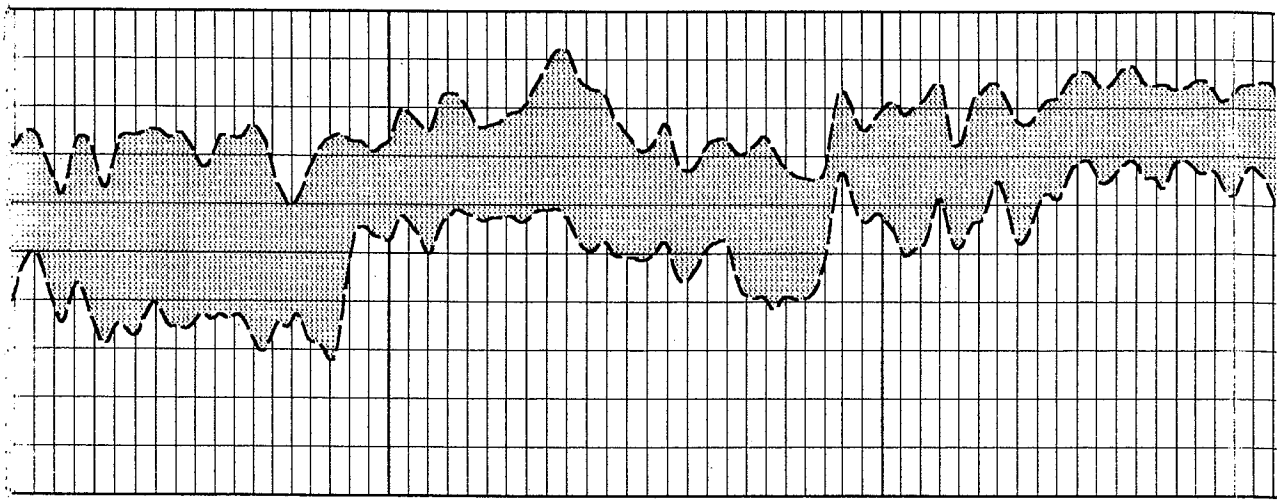
300



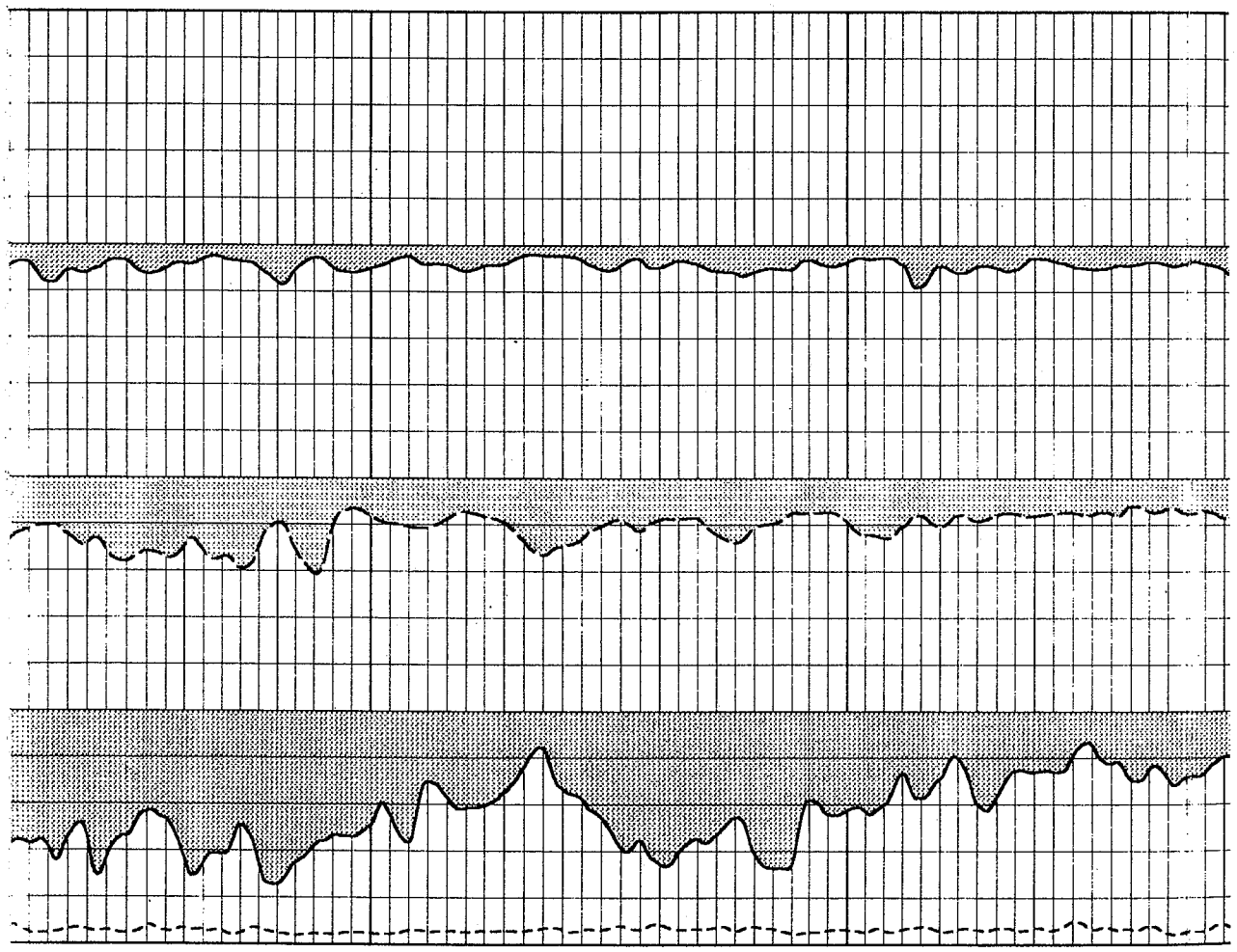


400 500

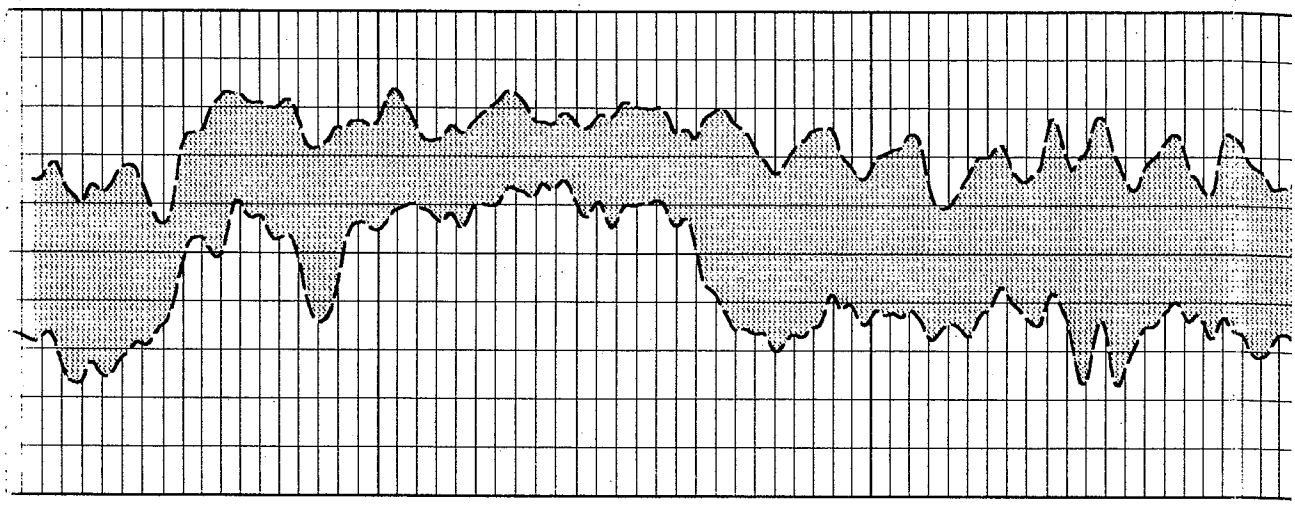




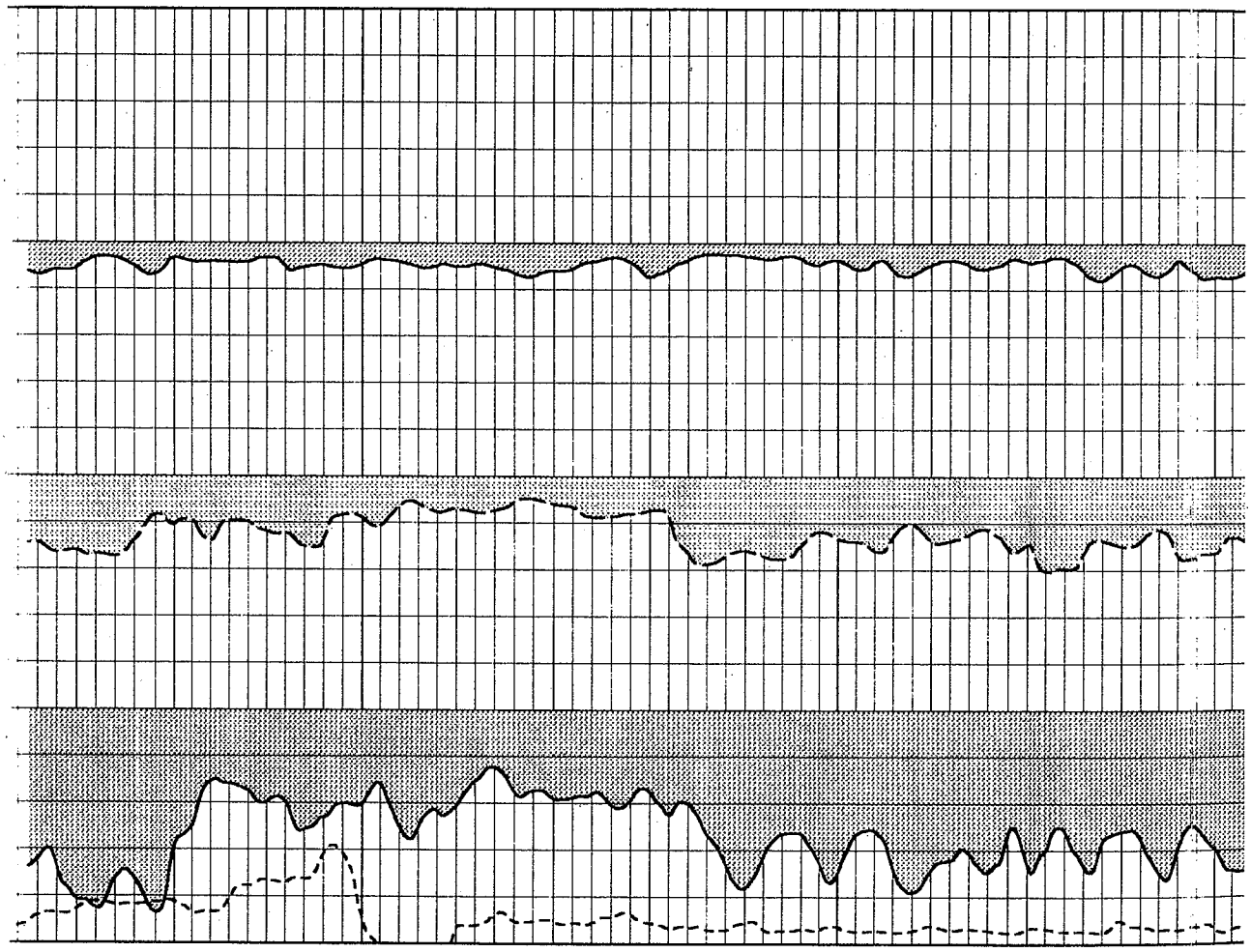
009

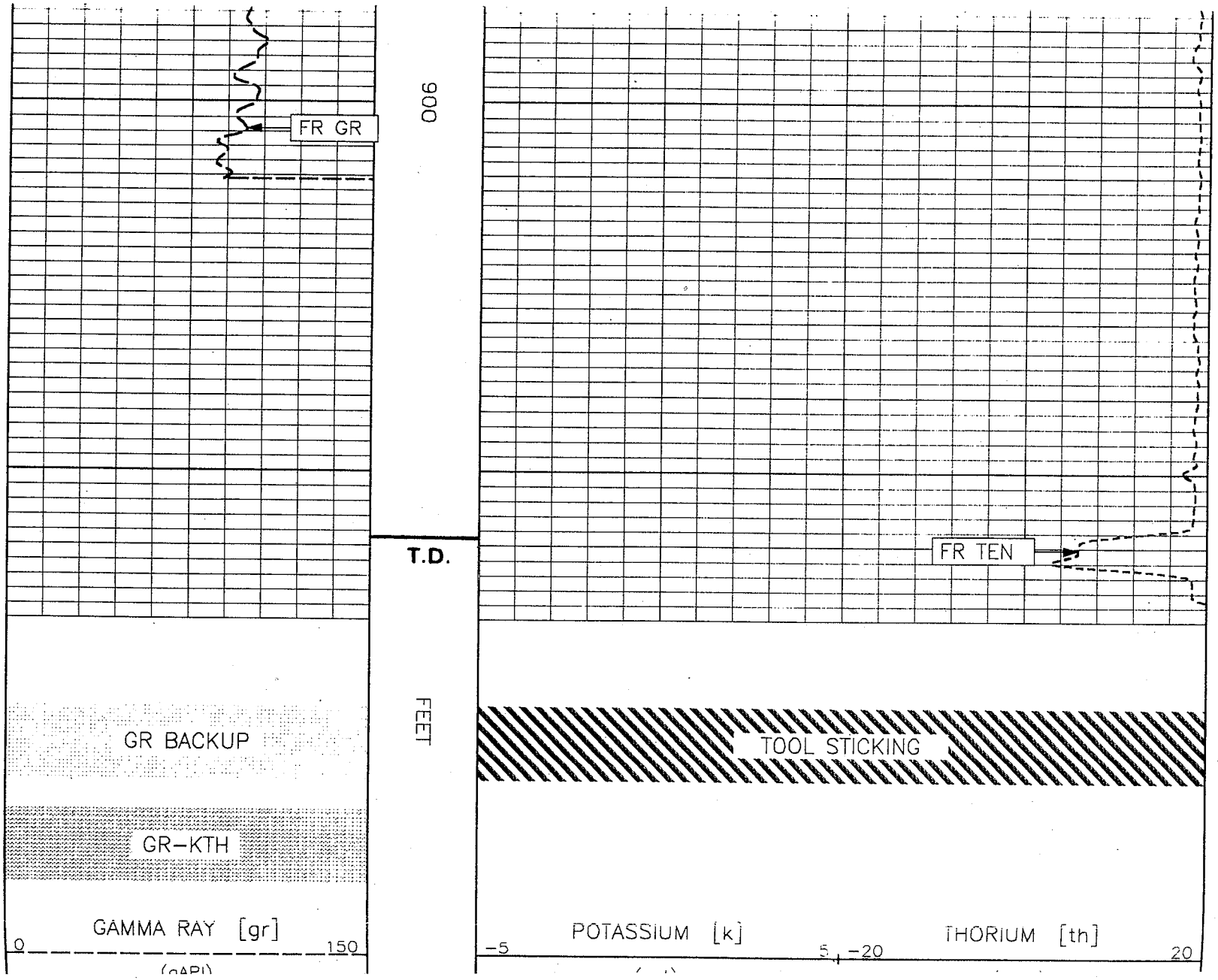


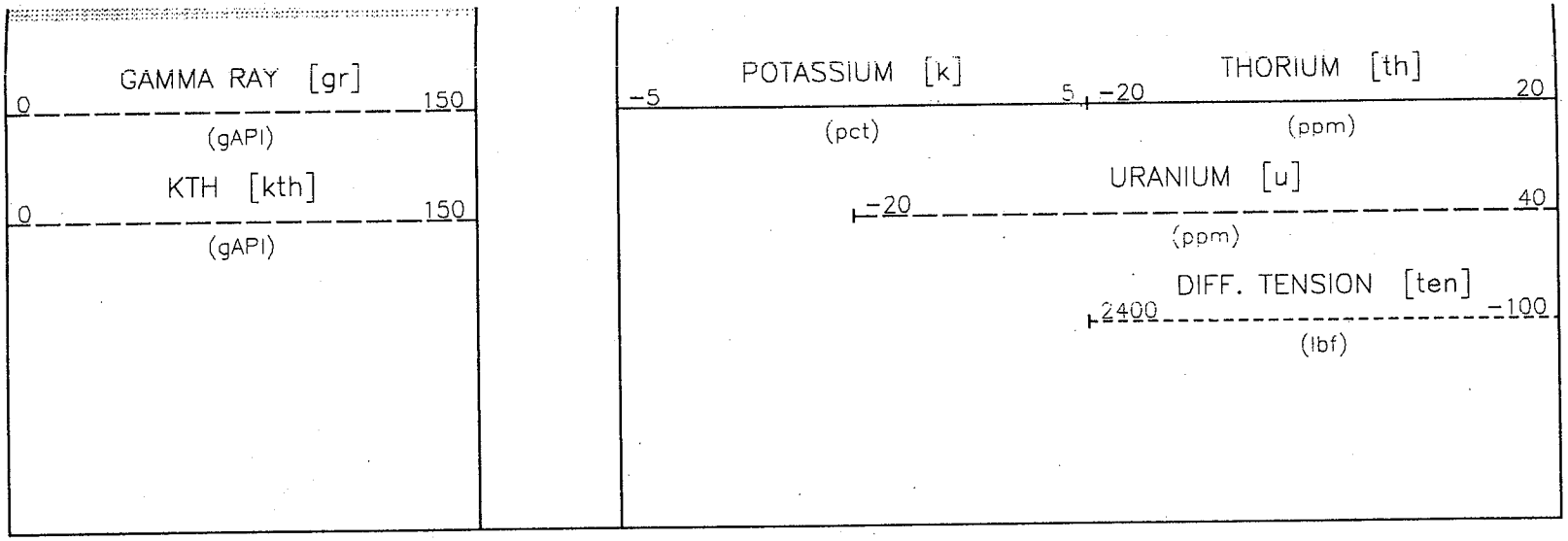
700



008




FR GR
900
T.D.
FEET
FR TEN
GR BACKUP
TOOL STICKING
GR-KTH
GAMMA RAY [gr]
0
150
(gAPI)
POTASSIUM [k]
-5
5
THORIUM [th]
-20
20



REPEAT LOG

Release:3.0 May 05, 1997
Updates:1

Plotmgr 3.48
Pcrplt /main/35

Cplot /main/27
Pdf_cpp /main/12

Tue Dec 9 14:29:47 1997

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
gr	56.75	kth	56.75	th	56.75		
k	56.75	ten	0.00	u	56.75		

Presentation : sl.log
Data File : plt1:/dat1a/pass/layne/repeat.xtf
Company : layne texas

CNN#:12434

1010920 B

Send original copy by certified mail to: **Texas Water Commission, P.O. Box 13087, Austin, Texas 78711**

Please use black ink.

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

State of Texas WELL REPORT

Texas Water Well Drillers Board
P.O. Box 13087
Austin, Texas 78711

1) **OWNER** Windwood WATER SYSTEMS INC (Name) **ADDRESS** 12502 CREEKWAY DRIVE (Street or RFD) Cypress (City) (State) 77429 (Zip)

2) **LOCATION OF WELL:**
County Harris , _____ miles in _____ (NE, SW, etc.) direction from _____ (Town)

Driller must complete the legal description below with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ **LEGAL DESCRIPTION:**
Section No. _____ Block No. _____ Township _____ Abstract No. 10 Survey Name J.No.H.Callahan
Distance and direction from two intersecting section or survey lines _____

☒ **SEE ATTACHED MAP**

3) **TYPE OF WORK (Check):**
☒ New Well ☐ Deepening ☐ Reconditioning ☐ Plugging

4) **PROPOSED USE (Check):**
☐ Domestic ☐ Industrial ☐ Monitor ☒ Public Supply ☐ Irrigation ☐ Test Well ☐ Injection ☐ De-Watering

5) **DRILLING METHOD (Check):**
☒ Mud Rotary ☐ Air Hammer ☐ Jetted ☐ Bored ☐ Driven ☐ Air Rotary ☐ Cable Tool ☐ Other _____

6) **WELL LOG:**
Date Drilling:
Started 8-26- 19 94
Completed 8-31- 19 94

DIAMETER OF HOLE

Dia. (in.)	From (ft.)	To (ft.)
8½	Surface	385'
4 7/8"	265'	385'

7) **BOREHOLE COMPLETION:**
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other COMENTED
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

From (ft.)	To (ft.)	Description and color of formation material
0	20	Sand + Clay
20	80	Sand
80	100	CLAY 20
100	160	Sand + Rock
160	220	SHALE 60
220	265	Rock + Sand
265	345	SAND
345	371	SHALE 26
371	385	Sand + Rock

(Use reverse side if necessary)

8) **CASING, BLANK PIPE, AND WELL SCREEN DATA:**

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.) From	Setting (ft.) To	Gage Casting Screen
5"	N	SDR-17	0	265	
2½	N	SCREEN	265	345	

9) **CEMENTING DATA** [Rule 287.44(1)]
Cemented from 0 ft. to 265 ft. No. of Sacks Used 18
_____ ft. to _____ ft. No. of Sacks Used _____
Method used Halliburton
Cemented by ALLEN Rutherford

10) **SURFACE COMPLETION**
☒ Specified Surface Slab Installed [Rule 287.44(2)(A)]
☐ Specified Steel Sleeve Installed [Rule 287.44(3)(A)]
☐ Pitless Adapter Used [Rule 287.44(3)(B)]
☐ Approved Alternative Procedure Used [Rule 287.71]

11) **WATER LEVEL:**
Static level 115 ft. below land surface Date 8-31-94
Artesian flow _____ gpm. Date _____

12) **PACKERS:**

	Type	Depth
2½ X 5"	K	260'

13) **TYPE PUMP:**
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., 231 ft.

14) **WELL TESTS:**
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 70 gpm with 20 ft. drawdown after 4 hrs.

15) **WATER QUALITY:**
Did you knowingly penetrate any strata which contained undesirable constituents?
☐ Yes ☐ No If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? GOOD Depth of strata 345'
Was a chemical analysis made? ☐ Yes ☒ No

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME Tom Bell WATER WELL SER (Type or print) **WELL DRILLER'S LICENSE NO.** W 1366

ADDRESS 26014 Hoffsmith - CONROE (Street or RFD) MAGNOLIA (City) TEXAS (State) 77355 (Zip)

(Signed) Allen Rutherford (Licensed Well Driller) **(Signed)** _____ (Registered Driller Trainee)

Please attach electric log, chemical analysis, and other pertinent information, if available.

For TWC use only: Well No. _____ Located on map _____

TWC-0199 (Rev. 05-18-90)

WELL OWNER'S COPY

November 3, 1994

Edward R. Block V
Environmental Quality Specialist
Monitoring & Enforcement Section
Water Utilities Division
TNRCC
P.O. Box 13087
Austin, TX. 78711-3087

Dear Mr. Block

Enclosed is the driller log on the replacement well recently drilled for the Windwood Water System.

Please accept this data to satisfy the waiver requirements for chemical monitoring.

Sincerely,

Robert Gateley

Robert Gateley
Treasurer
Windwood Water System, Inc.

1012097 2045 OF FILE

Schlumberger

DUAL INDUCTION/DENSITY/NEUTRON/GR

CSU Field Log

RECEIVED
OCT - 1 1993
TEXAS WATER COMMISSION
PLANS REVIEW UNIT
LOG NO.

COMPANY: KEY DRILLING COMPANY

WELL: HARRIS COUNTY MUD CO. #1 [illegible]

FIELD: WILDCAT
COUNTY: HARRIS
STATE: TEXAS
NATION: USA
LOCATION: UNAVAILABLE AT WELLSITE

SEC: TWP: RGE:

PWS 1012097

PERMANENT DATUM: GROUND LEVEL ELEVATIONS-
ELEV. OF PERM. DATUM: KB:
LOG MEASURED FROM: RKB DF:
11.0 ' ABOVE PERM. DATUM GL:
DRLG. MEASURED FROM: RKB

DATE: 21 APR 1983
RUN NO: 1

Daniel Yeska
water system
whispering oaks
Caldwell County

DEPTH-DRILLER: 1845.0 '
DEPTH-LOGGER: 1843.0 '
BTM. LOG INTERVAL: 1836.0 '
TOP LOG INTERVAL: 50.0 '

CASING-DRILLER: 50 '
CASING-LOGGER: 50 '
CASING: 8.625

BIT SIZE: 7.875
DEPTH: 1845 '

HER SERVICES-

OGRAM
PE NO:
22.2A
RVICE
DER NO:
401987

TYPE FLUID IN HOLE:	GEL- WATER
DENSITY:	9.2 LB/G
VISCOSITY:	40.0 S
PH:	8.0
FLUID LOSS:	8.8 C3
SOURCE OF SAMPLE:	MUD PIT
RM:	3.128 OHMM AT 75.0 DEGF
RMF:	2.346 OHMM AT 75.0 DEGF
RMC:	3.518 OHMM AT 75.0 DEGF
SOURCE RMF/RMC:	MEAS/CALC
RM AT BHT:	2.331 OHMM AT 103. DEGF
RMF AT BHT:	1.748 OHMM AT 103. DEGF
RMC AT BHT:	2.622 OHMM AT 103. DEGF
TIME CIRC. STOPPED:	2400 20 APRI
TIME LOGGER ON BTM.:	0230
MAX. REC. TEMP:	103.0 DEGF
LOGGING UNIT NO:	8173
LOGGING UNIT LOC:	VICTORIA
RECORDED BY:	W. EVERETT
WITNESSED BY:	R. COATS

REMARKS:

ELEVATIONS(G.L.) & LOCATION INFO UNAVAILABLE AT WELLSITE.
THANK YOU FOR CALLING SCHLUMBERGER.

EQUIPMENT NUMBERS-

DIS 1308	DIC 1078	PGS 588	PGC 610
CNC 2291	SGC 3249		

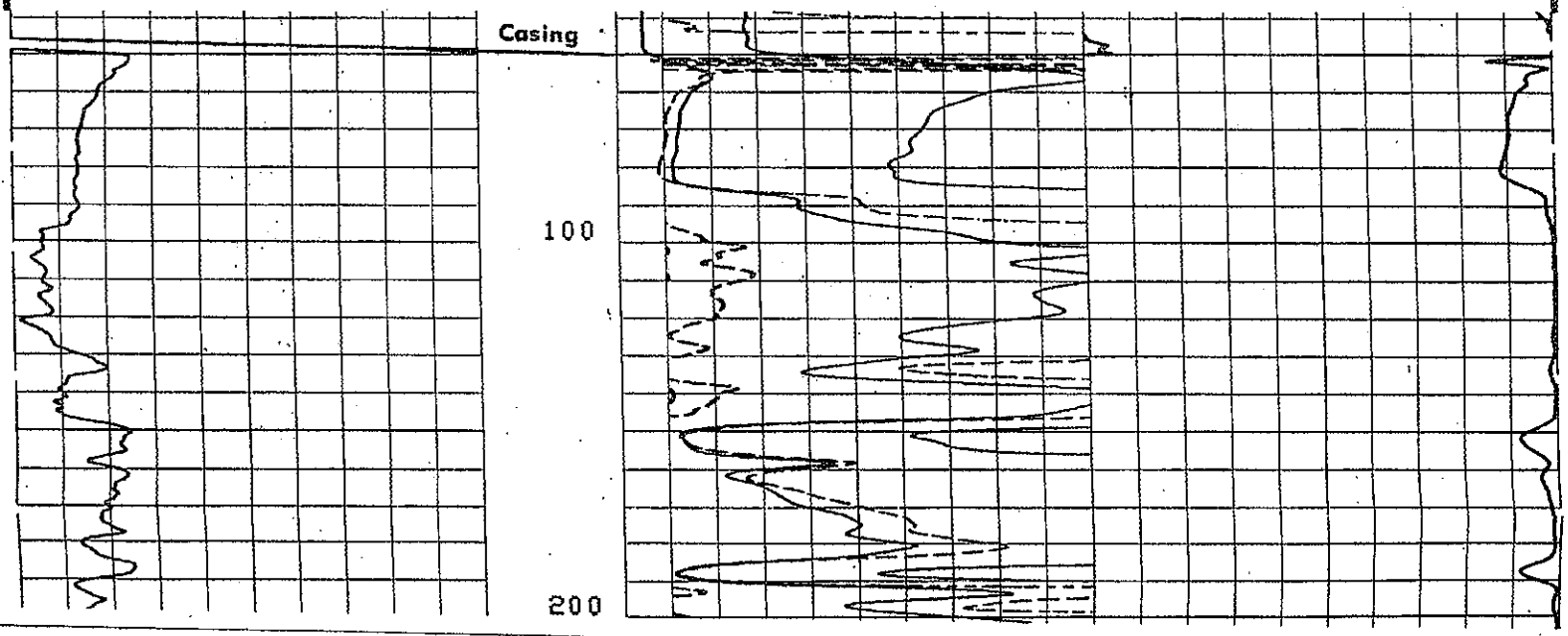
DIS 1308 DIC 1078 PGS 588 PGC 610
CNC 2291 SGC 3249

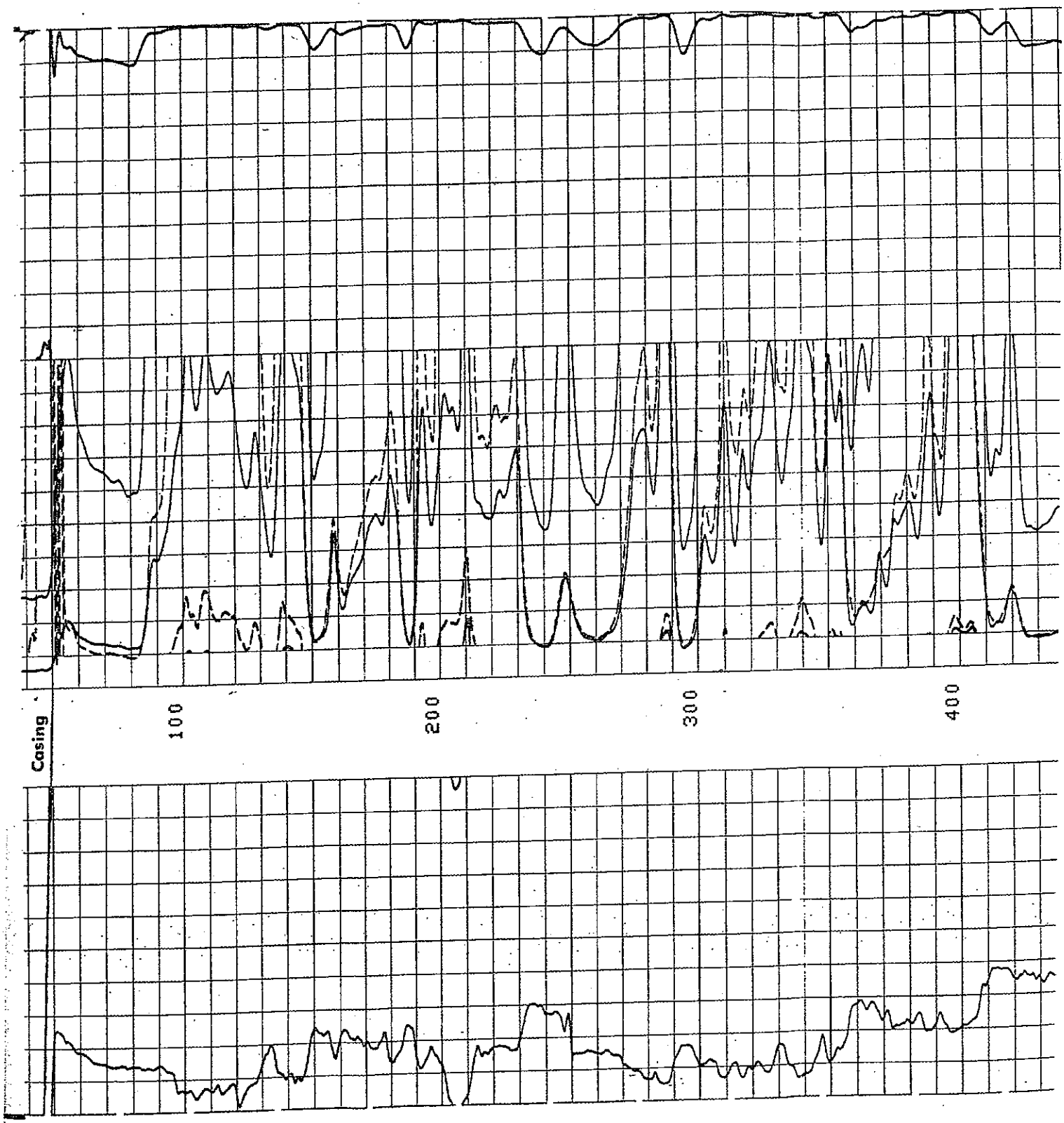
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

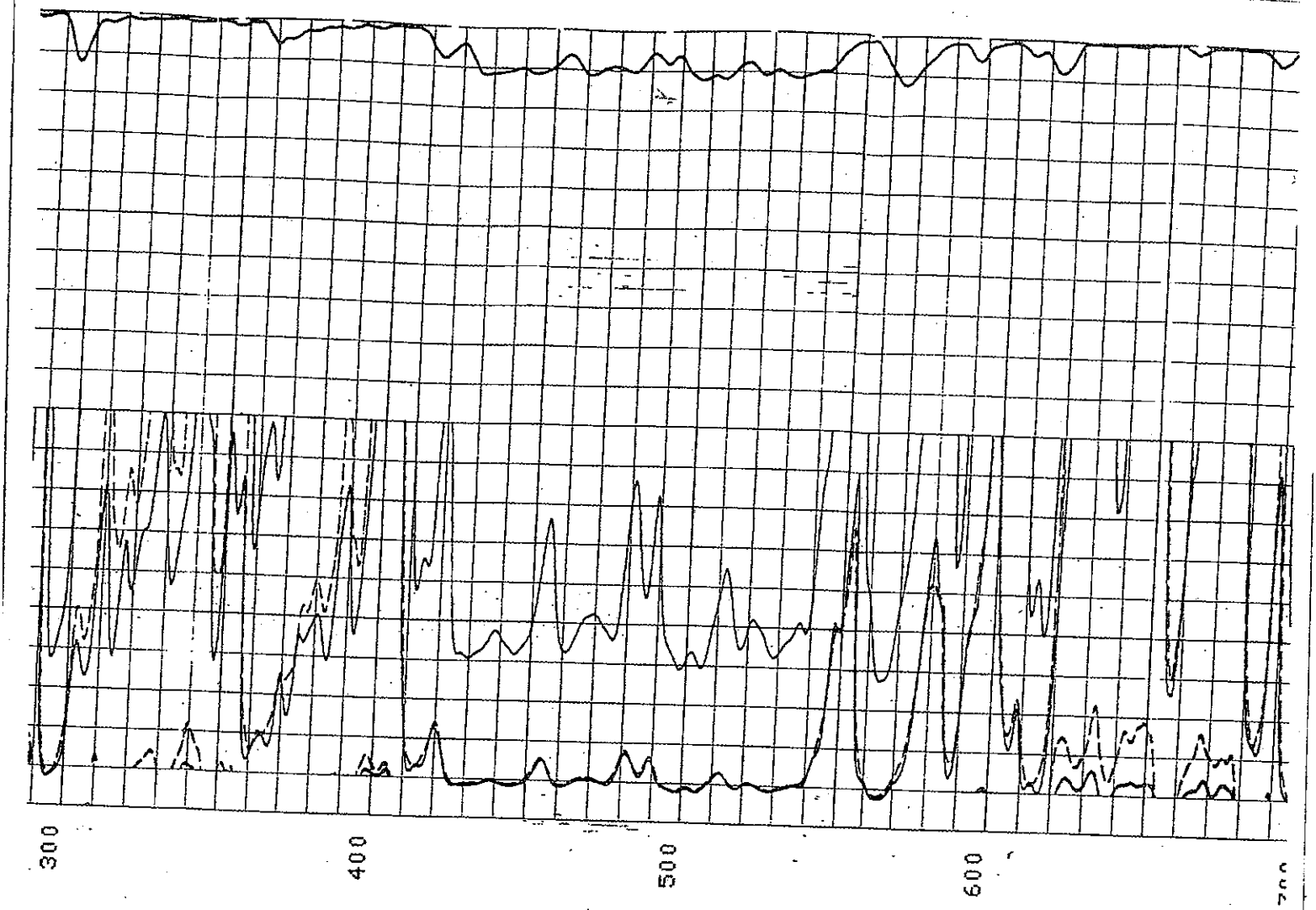
FILE 7

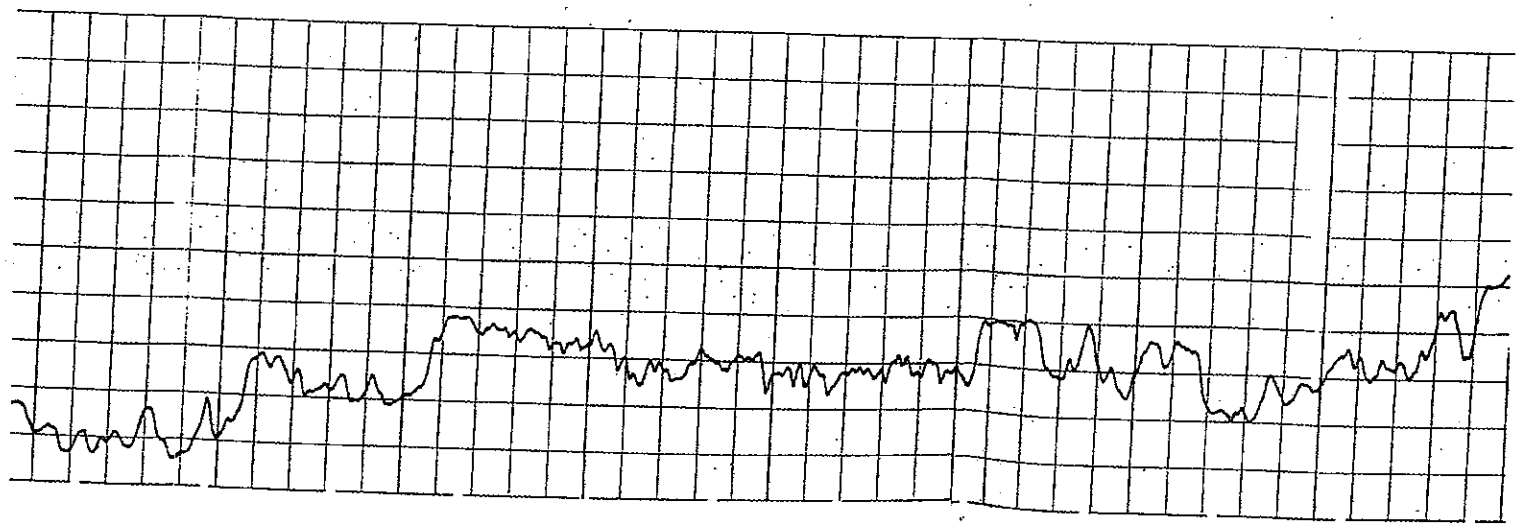
SP (MV)	ILD (OHMM)	SFLA(OHMM)	CILD(MMHO)
-80.00 20.000	0.0 50.000	0.0 10.000	2000.0 0.0
		0.0 50.000	

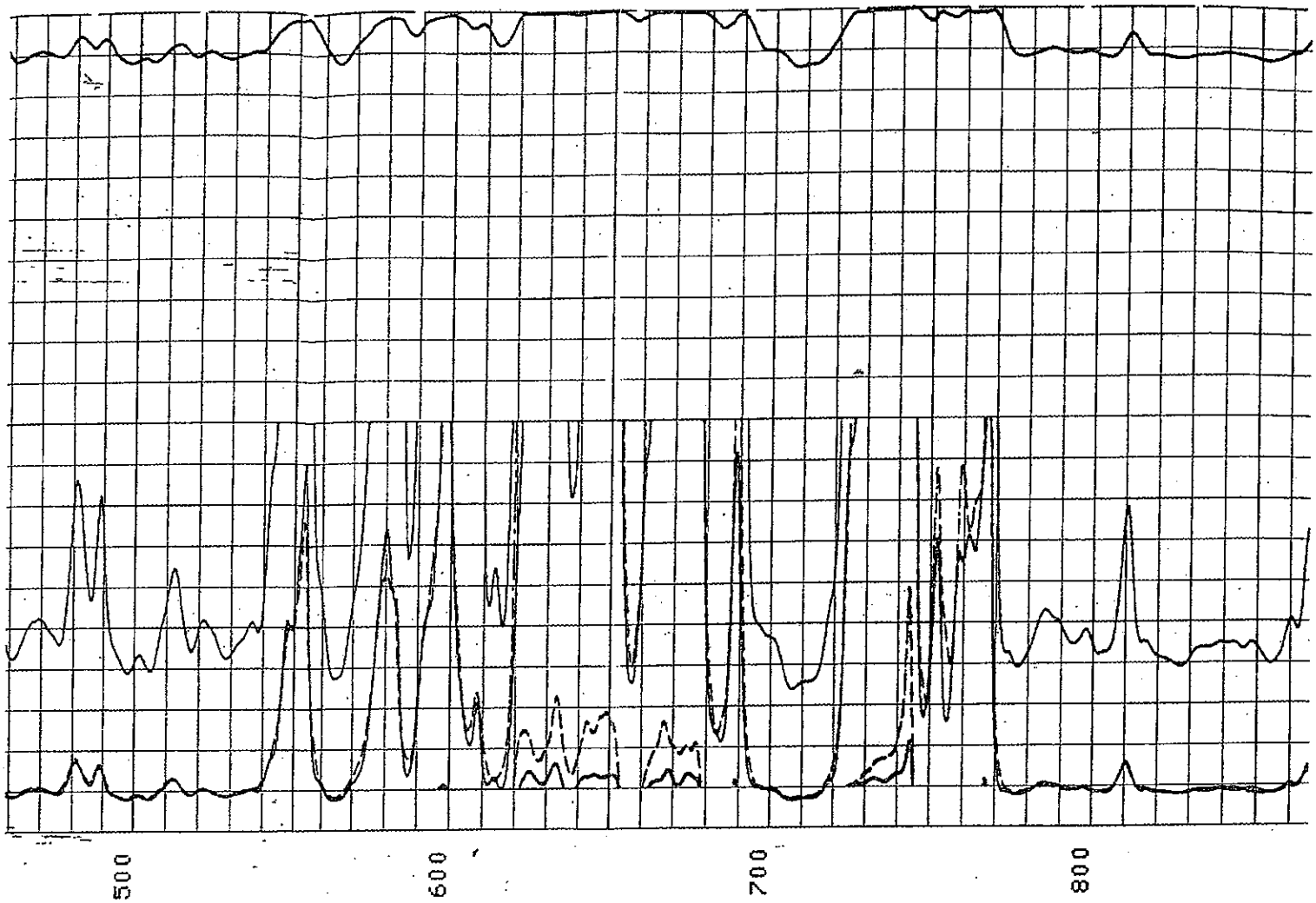
FILE 4

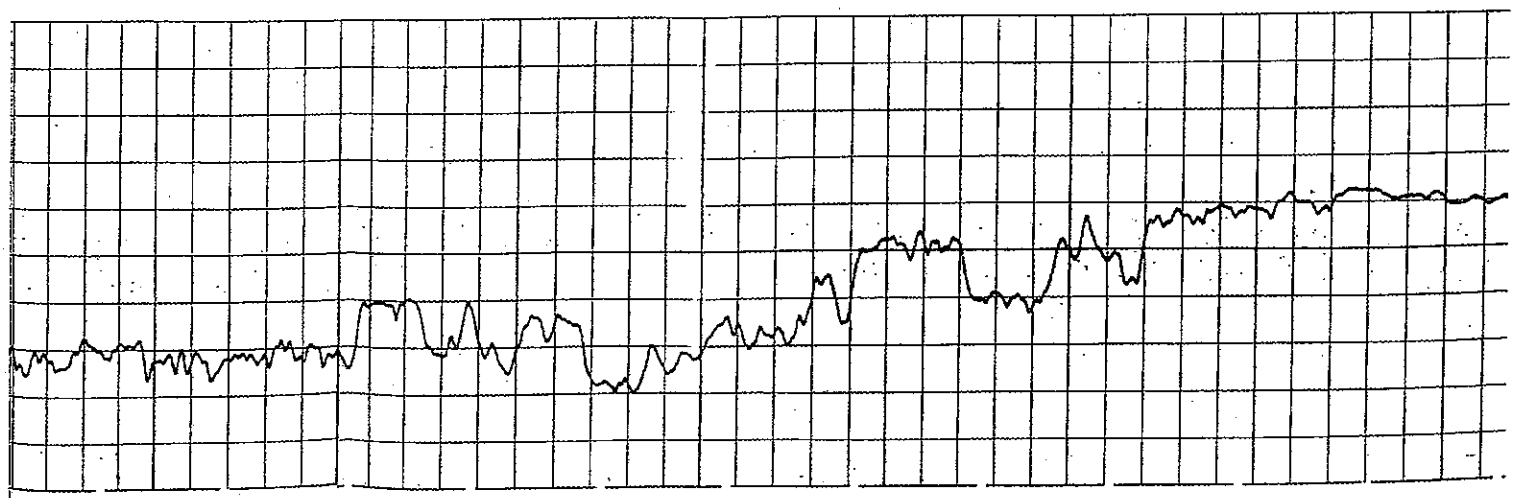


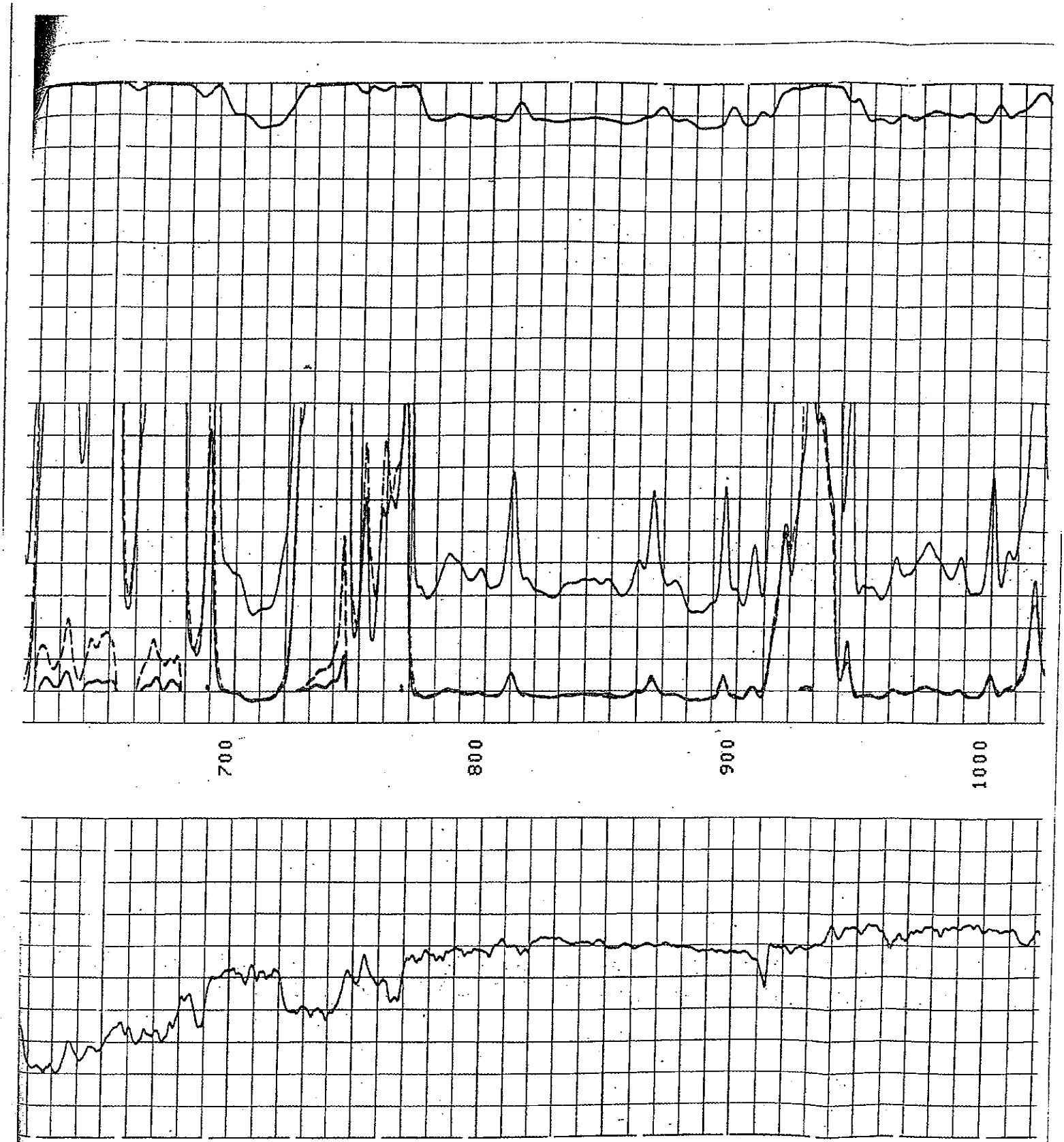

Casing
100
200
300
400

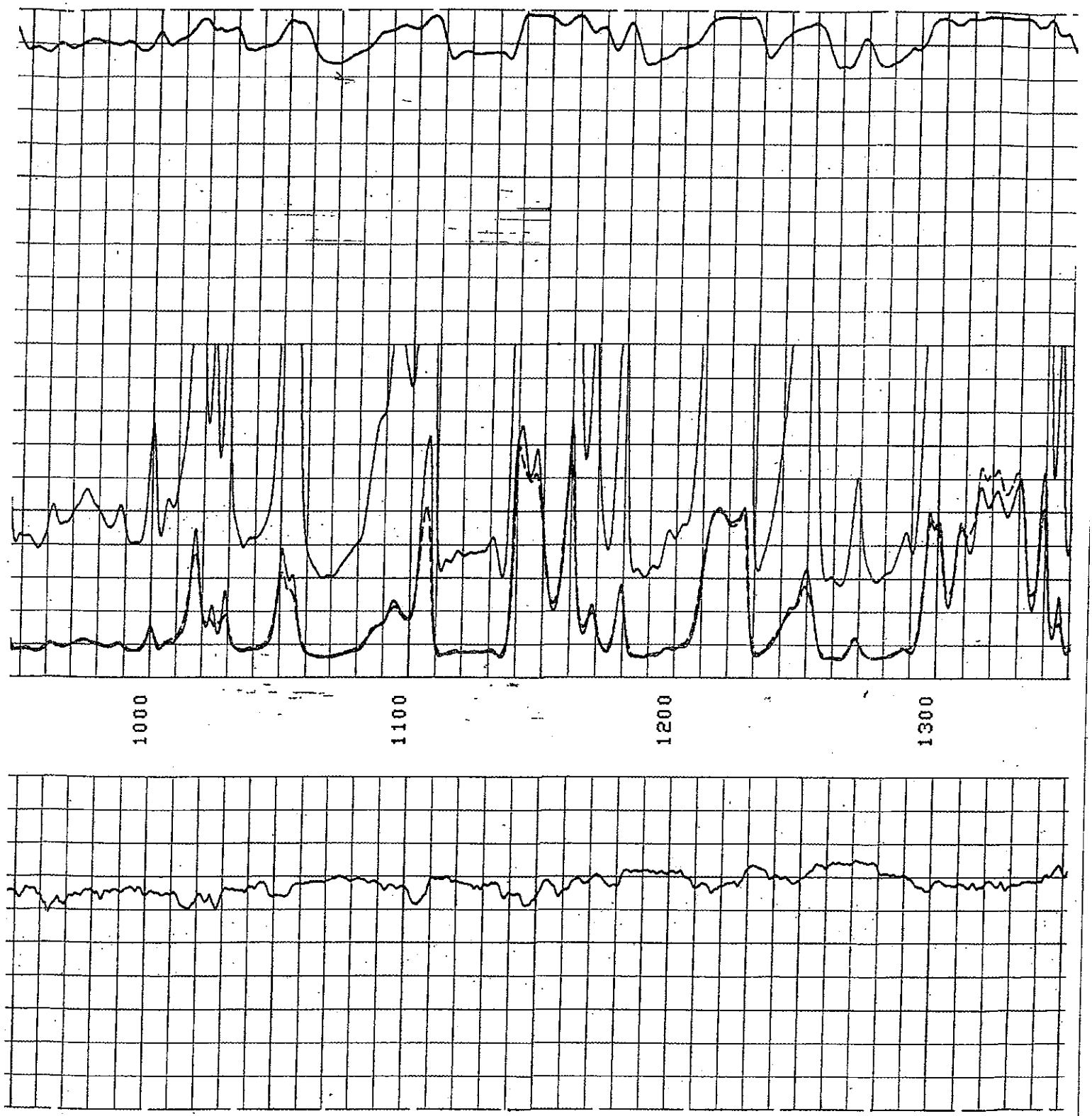

300
400
500
600

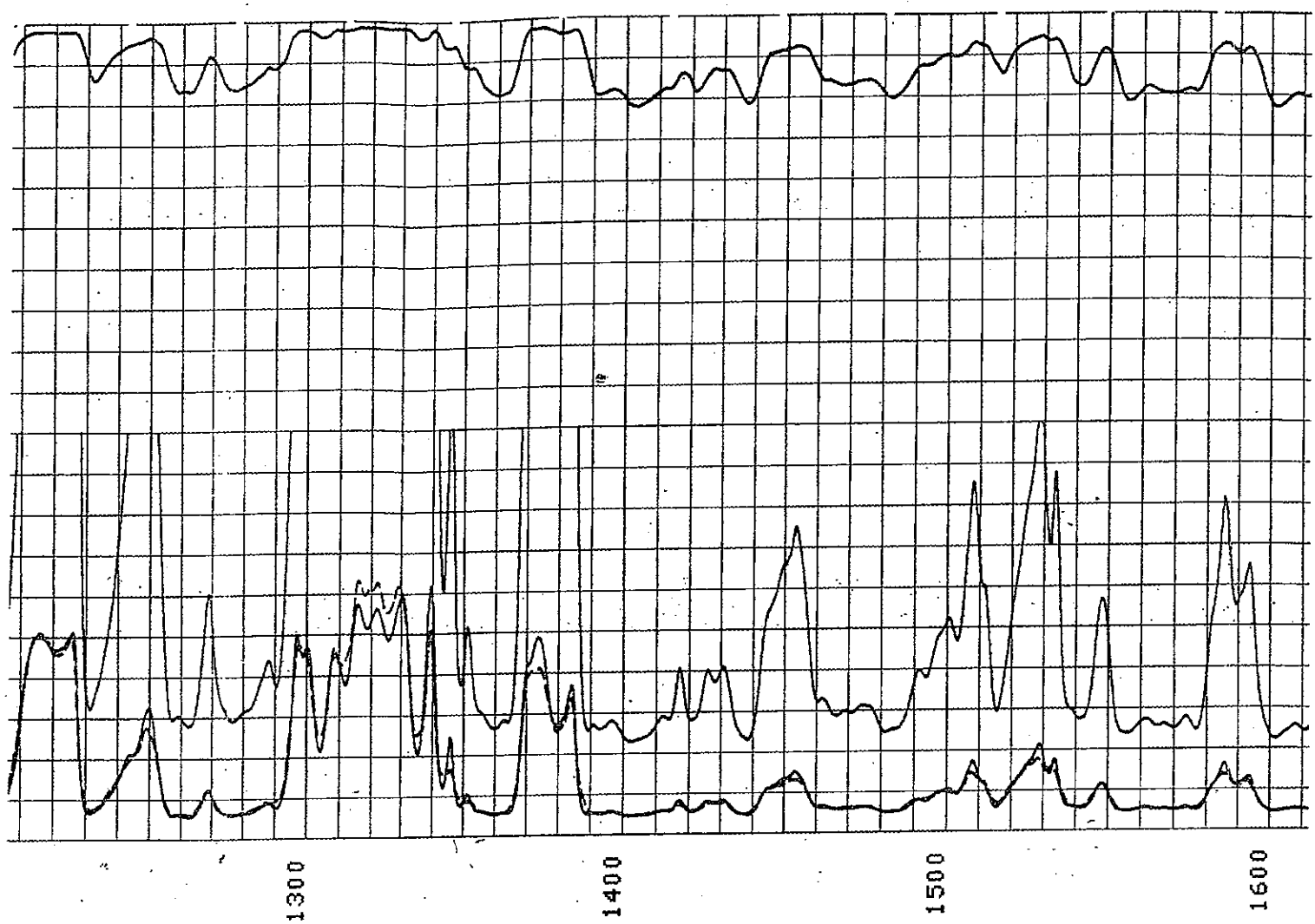


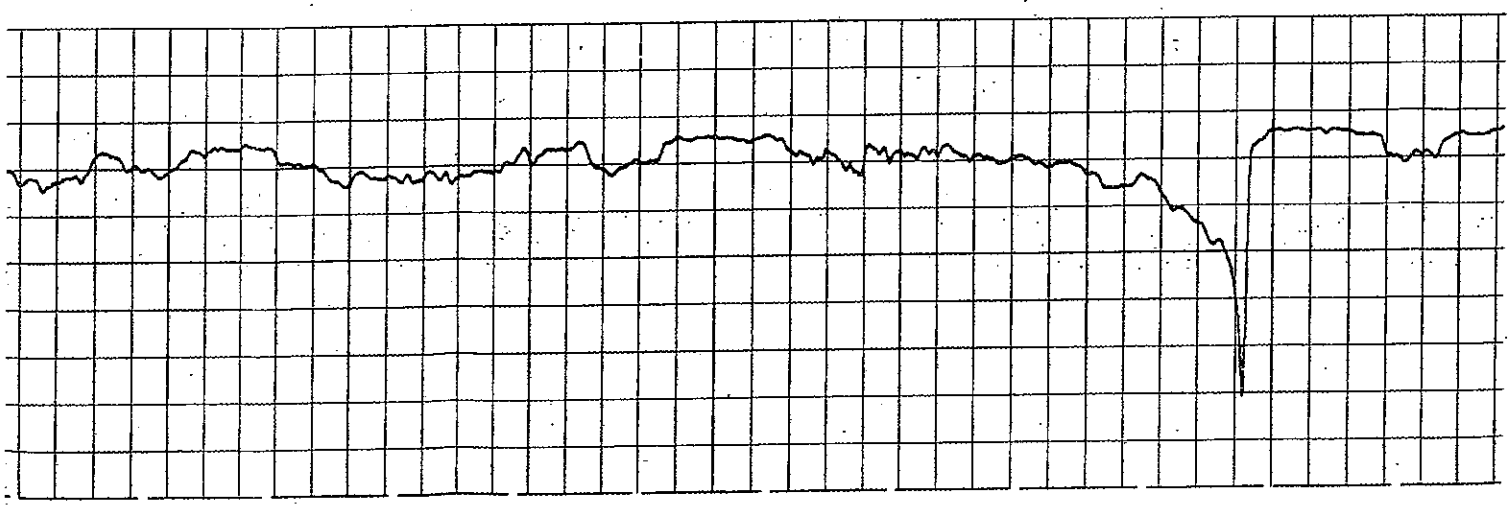

500
600
700
800

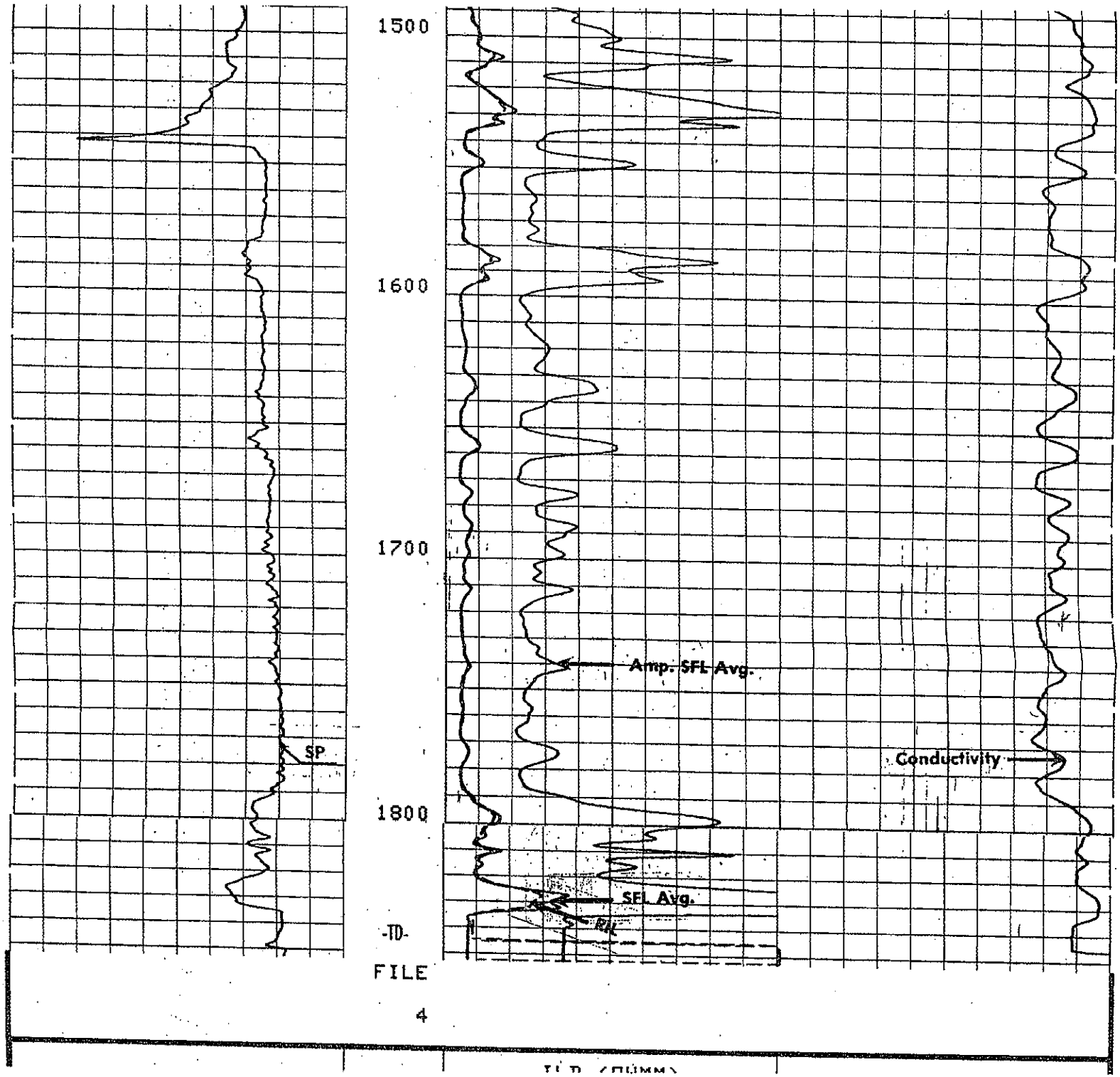


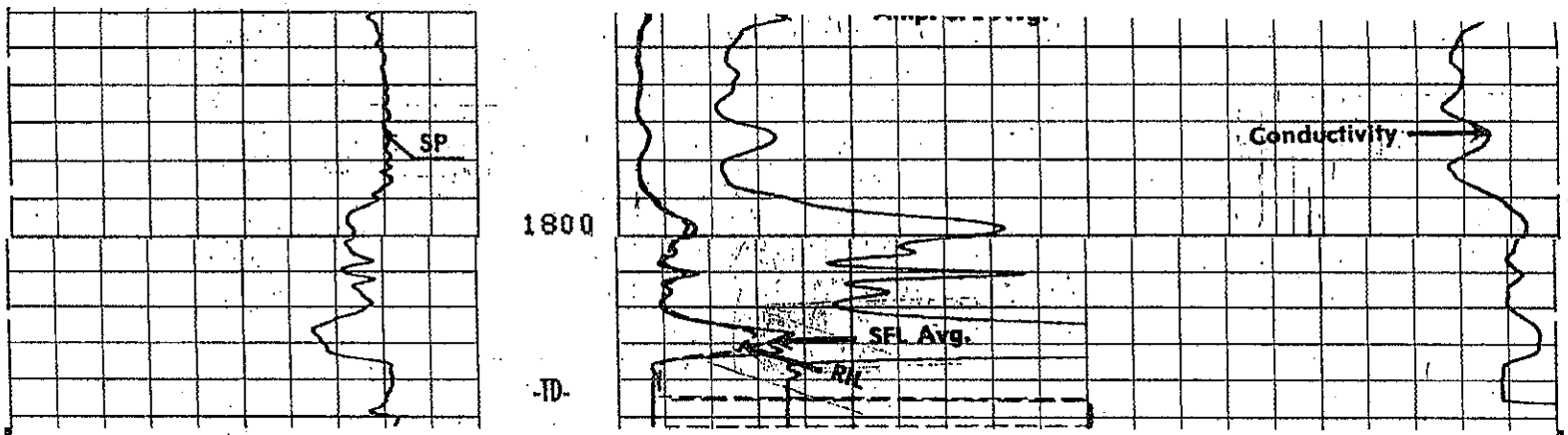

700
800
900
1000


1000
1100
1200
1300


1300
1400
1500
1600




1500
1600
1700
1800
-TD-
FILE
4
SP
Amp. SFL Avg.
Conductivity
SFL Avg.
RIL



FILE

4

SP (MV)	ILD (OHMM)	SFLA(OHMM)	CILD(MMHO)
-80.00 20.000	0.0 50.000	0.0 10.000	2000.0 0.0
		0.0 50.000	

SENSOR MEASURE POINT TO TENSION REFERENCE POINT

NCNL	44.4	FEET	GR	52.9	FEET
FFDC	29.1	FEET	FCNL	44.4	FEET
CALI	29.1	FEET	NFDC	29.1	FEET
SFL	3.9	FEET	ILD	6.9	FEET
SP	.0	FEET	ILM	3.3	FEET
TENS	.0	FEET	SPAR	.0	FEET
NRAT	44.4	FEET			

PARAMETERS

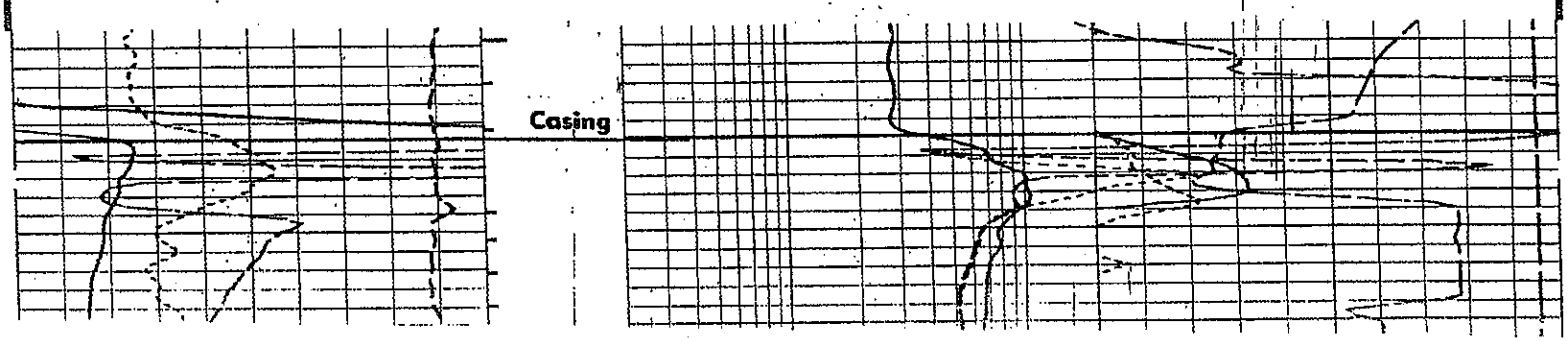
NAME	VALUE	UNIT	NAME	VALUE	UNIT
PSNR	2.20900		BS	7.87500	IN
MATR	SAND		HC	CALI	
MDEN	2.65000	G/C3	FD	1.00000	G/C3
BHF	WATE		FDCC	ALLO	
SBR	1.00000	OHMM	DSEC	-1.20000	MMHO
FPHI	DPHI		MSEC	3.90000	MMHO
BHS	OPEN		FNUM	0.810000	

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PSNR	2.20900		BS	7.87500	IN
MATR	SAND		HC	CALI	
MDEN	2.65000	G/C3	FD	1.00000	G/C3
BHF	WATE		FDCC	ALLO	
SBR	1.00000	OHMM	DSEC	-1.20000	MMHO
FPHI	DPHI		MSEC	3.90000	MMHO
BHS	OPEN		FNUM	0.810000	
DO	0.0	F			

RWA (OHMM)		DPHI( )	
0.0	10.000	0.6000	0.0
DRHO(G/C3)		NPHI( )	
-0.900	0.1000	0.6000	0.0
GR (GAPI)		TENS(LB)	
0.0	150.00	20000.	0.0
SP (MV)		DCAL(IN)	
-80.00	20.000	-20.00	20.000
		SFLU(OHMM)	
		0.2000	2000.0
		ILD (OHMM)	
		0.2000	2000.0
		ILM (OHMM)	
		0.2000	2000.0

FILE

4



1012740

COMPANY: **ALSAY, INC.**

WELL: **HARRIS COUNTY M.U.D. #230**

FIELD: **MANDOLIN**

COUNTY **HARRIS** STATE **TEXAS**

COUNTY HARRIS
Field: MANDOLIN
Location: SEE REMARKS
Well: HARRIS COUNTY M.U.D.
Company: ALSAY, INC.

Schlumberger

PHASOR INDUCTION
SFL - NGT

LOCATION: SEE REMARKS

Elev.: K.B.
G.L.
D.F.

Permanent Datum: GROUND LEVEL
Log Measured From: RKB 6.0
Drilling Measured From: RKB

Elev.: _____ above Perm. Datum

API Serial No.	SECTION	TOWNSHIP	RANGE

Logging Date		2-OCT-90			
Run Number		ONE			
Depth Driller		1365 FT			
Schlumberger Depth		1345 FT			
Bottom Log Interval		1336 FT			
Top Log Interval		100 FT			
Casing Driller Size @ Depth		0 IN	@35 FT		@
Casing Schlumberger					
Bit Size		9.875 IN			
Type Fluid In Hole		NATIVE			
MUD Density	Viscosity	10 LB/G	36 S		
MUD Fluid Loss	PH				
Source Of Sample		MUD PIT			
RM @ Measured Temperature		13.100 OHMM	@ 75 DEGF		@
RMF @ Measured Temperature		13.100 OHMM	@ 75 DEGF		@
RMC @ Measured Temperature		19.700 OHMM	@ 75 DEGF		@
Source RMF	RMC	MEAS.	CALC.		
RM @ BHT	RMF @ BHT	11.069 @90	11.069 @90	@	@
Maximum Recorded BHT		90	90	90	
Circulation Stopped	Time	10-2-90		6:00	
Logger On Bottom	Time	10-2-90		10:00	
Unit Number	Location	8406	VICTORIA		
Recorded By		HELWIG			
Witnessed By		WILLIAMS/ENGLAND/ROLLIE/NEUMAN			

OP System Version: 3B0-134

Output LIS Files

1012740

DEFAULT DITE .003 FIELD 2-OCT-1990 11:55 1356.0 FT 45.5 FT

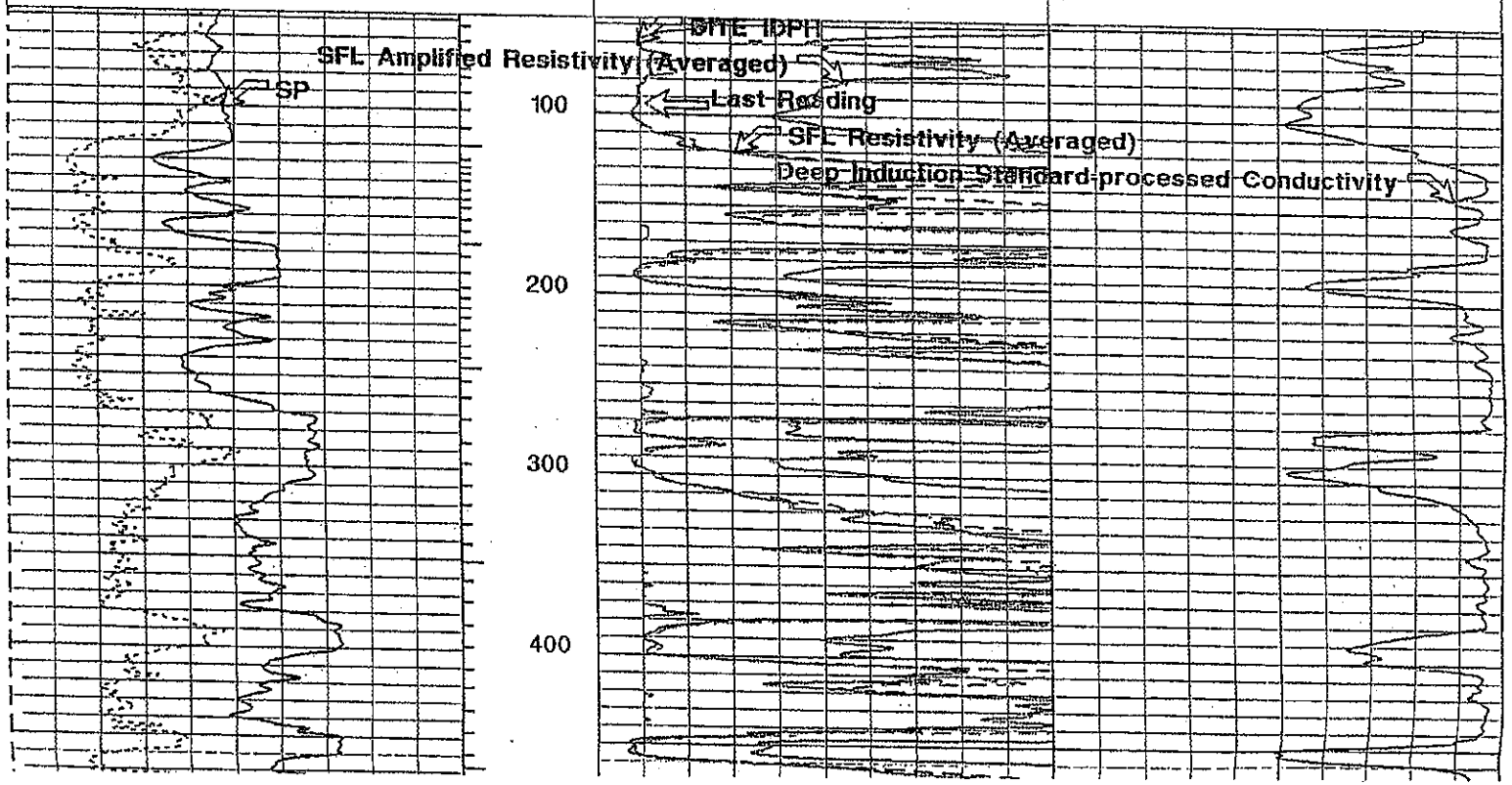
SP (SP) -80.0 (MV) 20.0	Integrated Hole Volume Minor Pip Every 10.0 F3	Deep Induction Standard-processed Conductivity (CILD) 500.0 (MM/M) 0.0
Gamma Ray (SGR) 0.0 (GAPI) 150.0	Integrated Hole Volume Major Pip Every 100.0 F3	

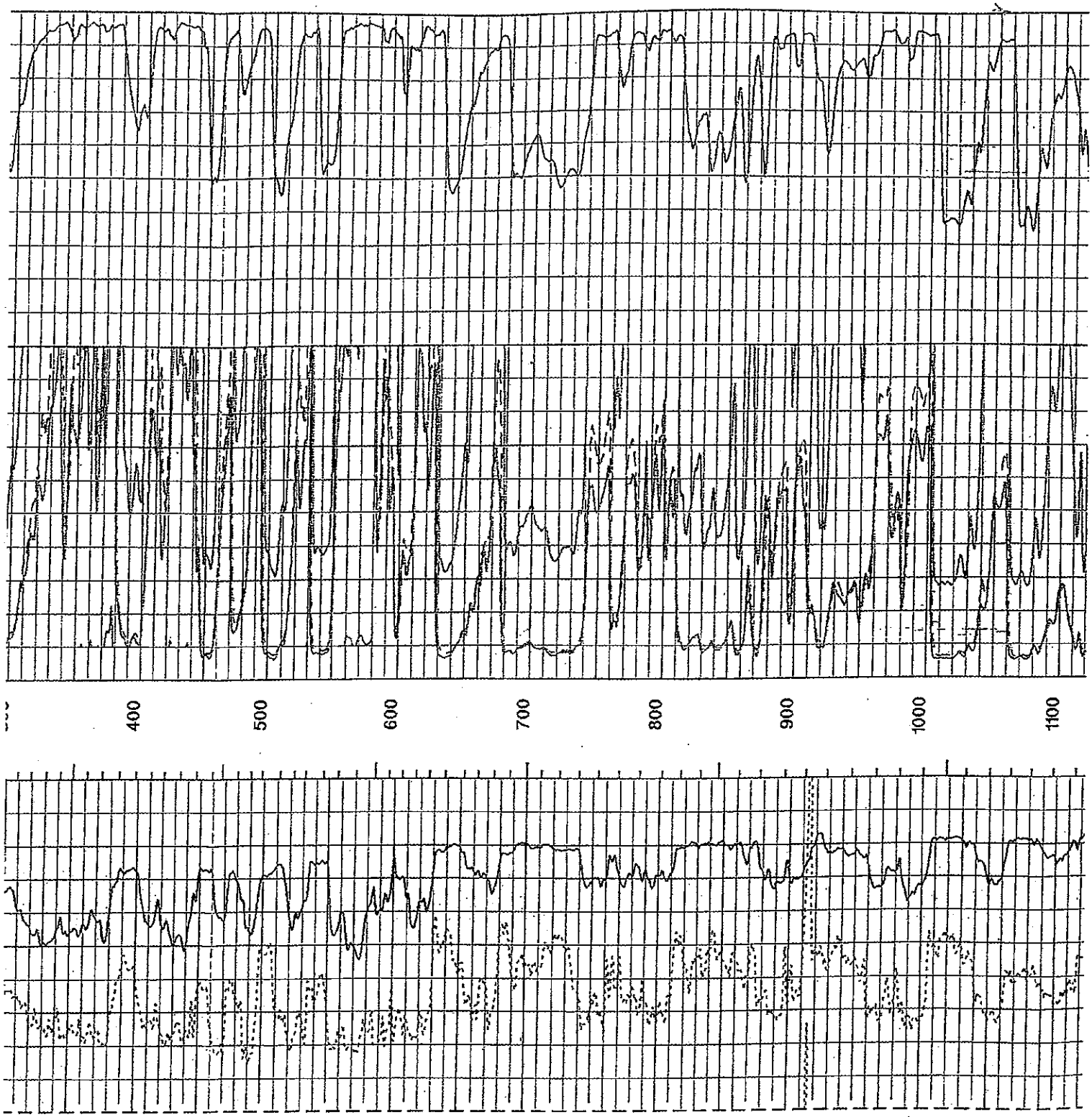
SECOND PASS

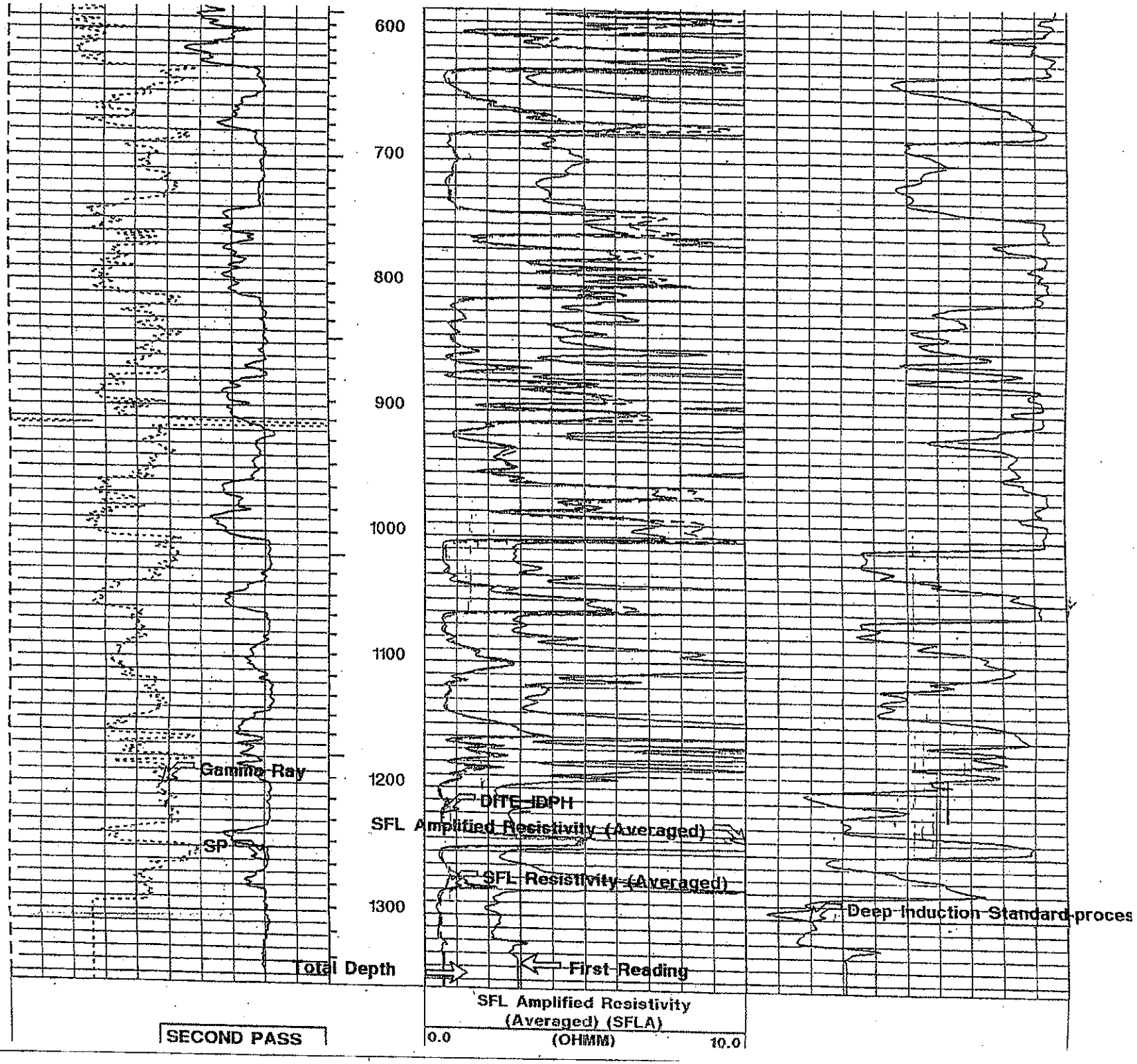
SFL Resistivity (Averaged) (SFLA) 0.0 (OHMM) 50.0

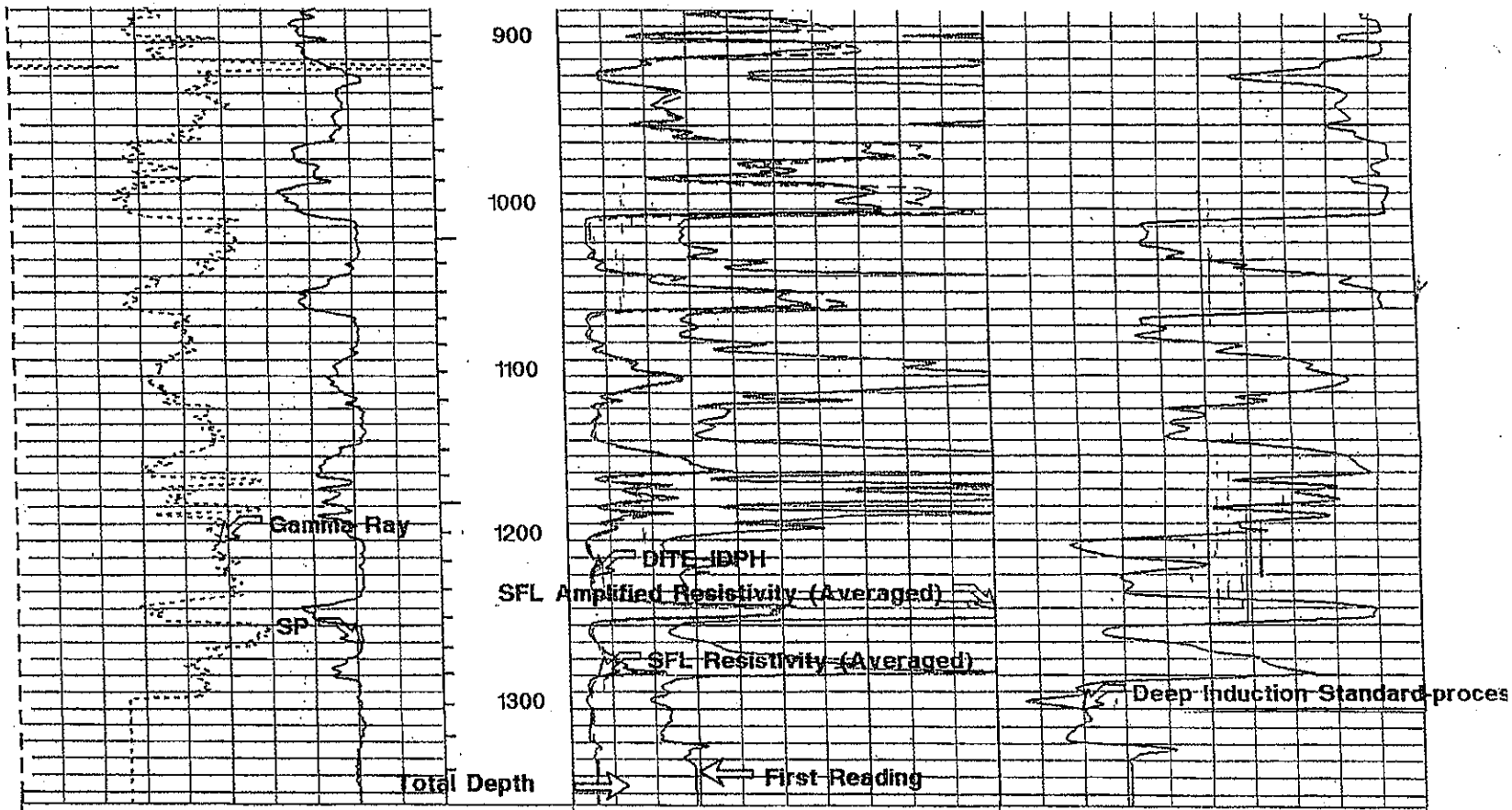
DITE IDPH (IDPH) 0.0 (OHMM) 50.0

SFL Amplified Resistivity (Averaged) (SFLA) 0.0 (OHMM) 10.0




400
500
600
700
800
900
1000
1100


600
700
800
900
1000
1100
1200
1300
Gamma Ray
SP
Total Depth
DITE IDPH
SFL Amplified Resistivity (Averaged)
SFL Resistivity (Averaged)
Deep Induction Standard-proces
First Reading
SFL Amplified Resistivity
(Averaged) (SFLA)
0.0
(OHMM)
10.0
SECOND PASS



SECOND PASS

SFL Amplified Resistivity (Averaged) (SFLA)		
0.0	(OHMM)	10.0

DITE IDPH (IDPH)		
0.0	(OHMM)	50.0

SFL Resistivity (Averaged) (SFLA)		
0.0	(OHMM)	50.0

1012740

Gamma Ray (SGR)		
0.0	(GAPI)	150.0

Integrated Hole Volume Major Pip Every 100.0 F3

SP (SP)		
-80.0	(MV)	20.0

Integrated Hole Volume Minor Pip Every 10.0 F3

Deep Induction Standard-processed Conductivity (CILD)		
500.0	(MM/M)	0.0

OP System Version: 3B0-134

Output LIS Files

COMPANY: **ALSAY, INC.**

WELL: **HARRIS COUNTY M.U.D. #230**

FIELD: **MANDOLIN**

COUNTY: **HARRIS** STATE: **TEXAS**

Field: MANDOLIN
Location: SEE REMARKS
Well: HARRIS COUNTY M.U.D.
Company: ALSAY, INC.

Schlumberger

PHASOR INDUCTION
SFL - NGT

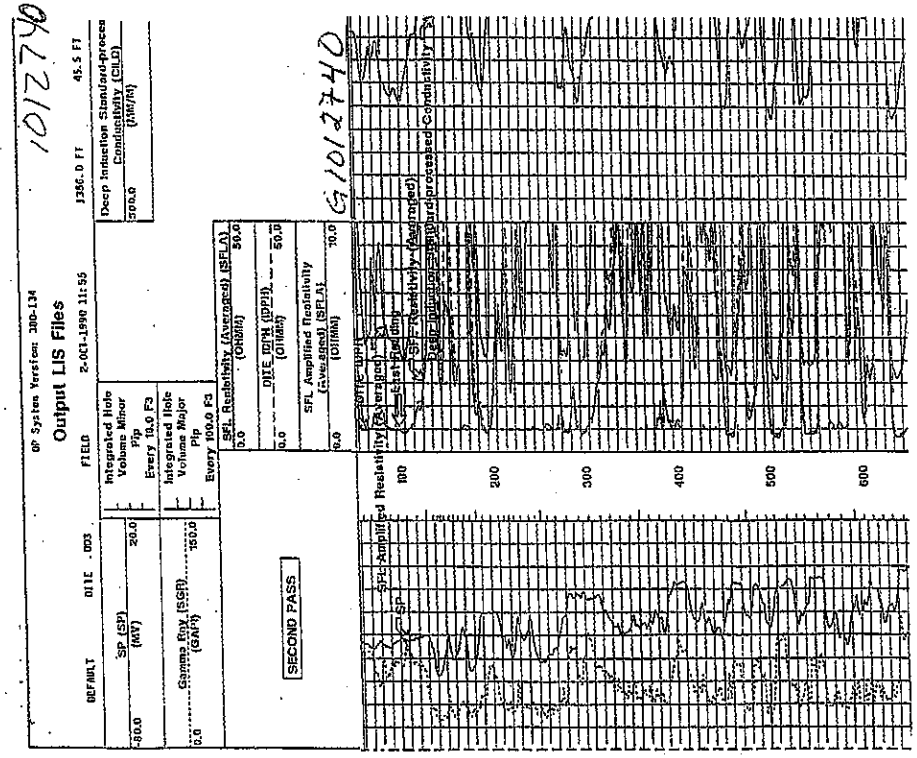
LOCATION: SEE REMARKS

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

Permanent Datum: GROUND LEVEL — Elev.:
Log Measured From: RKB 8.0 — above Perm. Datum
Drilling Measured From: RKB

API Serial No.	SECTION	TOWNSHIP	RANGE

Logging Date	2-OCT-90		
Run Number	ONE		
Depth Driller	1365 FT		
Schlumberger Depth	1345 FT		
Bottom Log Interval	1336 FT		
Top Log Interval	100 FT		
Casing Driller Size @ Depth	0 IN @35 FT	@	
Casing Schlumberger			
Bit Size	9.875 IN		
Type Fluid in Hole	NATIVE		
Density / Viscosity	10 LB/G / 36 S		
Fluid Loss / PH			
Source Of Sample	MUD PIT		
RM @ Measured Temperature	13.100 OHMM @ 75 DEGF	@	
RMF @ Measured Temperature	13.100 OHMM @ 75 DEGF	@	
RMC @ Measured Temperature	13.700 OHMM @ 75 DEGF	@	
Source RMF / RMC	MEAS. / CALC.		
RM @ BHT / RMF @ BHT	11.069 @90 / 11.069 @90	@	@
Maximum Recorded BHT	90 / 90 / 90		
Circulation Stopped / Time	10-2-90 / 6:00		
Logger On Bottom / Time	10-2-90 / 10:00		
Unit Number / Location	8406 / VICTORIA		
Recorded By	HELWIG		
Witnessed By	WILLIAMS/ENGLAND/ROLLIE/NEUMAN		



OP System Version: 380-134

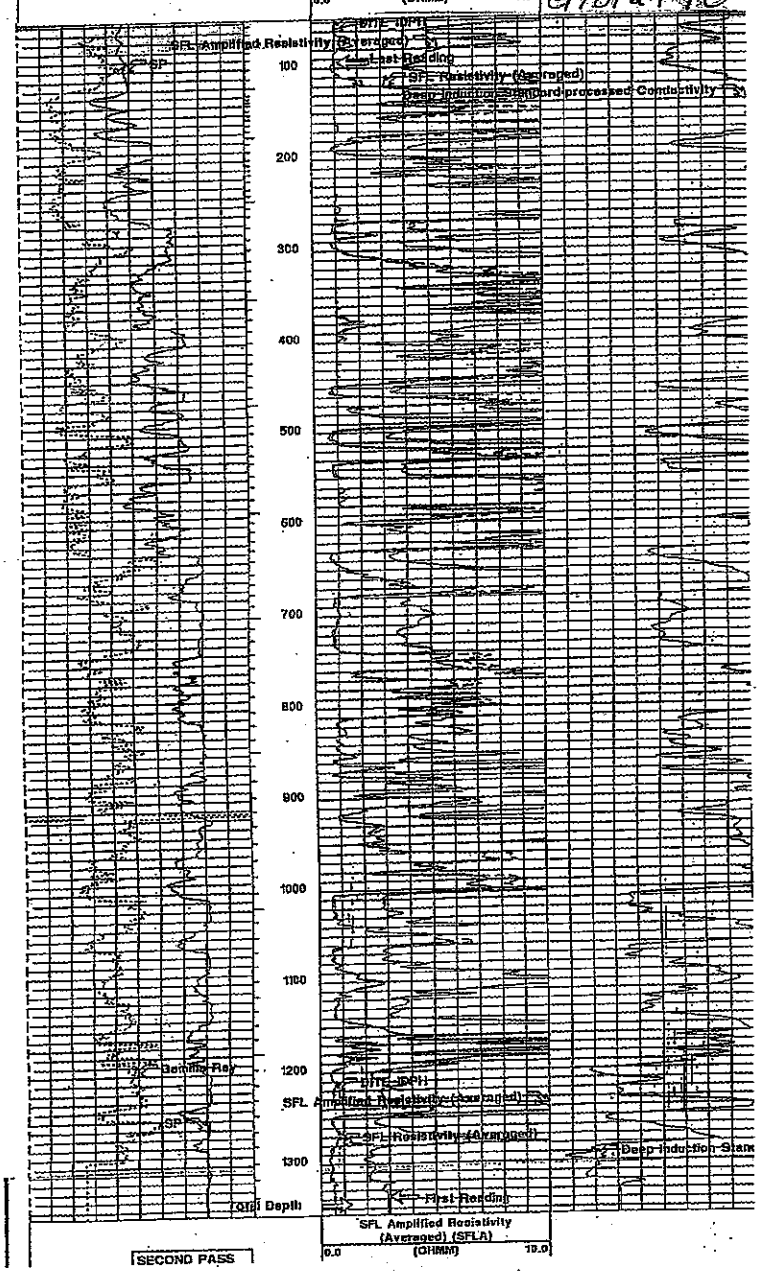
1012740

Output LIS Files

DEFAULT DITE .003 FIELD 2-OCT-1990 11:55 1356.0 FT 45.5 FT

SP (SP) -80.0 (MV) 20.0	Integrated Hole Volume Minor Pip Every 10.0 F3	Deep Induction Standard-proces Conductivity (CILD) 500.0 (MM/M)
Gamma Ray (SGR) 0.0 (GAPI) 150.0	Integrated Hole Volume Major Pip Every 100.0 F3	
SECOND PASS	SFL Resistivity (Averaged) (SFLA) 0.0 (OHMM) 50.0	
	DITE IDPH (IDPH) 0.0 (OHMM) 50.0	
	SFL Amplified Resistivity (Averaged) (SFLA) 0.0 (OHMM) 10.0	

G1012740



****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	0440
RECIPIENT ADDRESS	917139964401
DESTINATION ID	
ST. TIME	06/30 09:41
TIME USE	04'32
PAGES SENT	13
RESULT	OK

TCEQ

Protecting Texas by Reducing and Preventing Pollution

FAX TRANSMITTAL

DATE: 6/30/05 NUMBER OF PAGES *(including this cover sheet)*: 13

TO:
Name: Greg Long
Organization: Shaw
FAX Number: 713/996-4401

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name: M. Long
Division/Region: SCS
Telephone Number: 512/239-0761
FAX Number: 512/239-2450

NOTES:

LOGS - Jones Rd Area

1. Western Atlas #G1010447C (PWS well) (7 pages)
Located ~3+ miles SE of Finch Well at Race Track

Timberlake Imp. Dist. Well #1A
Location
3+ miles NW of Finch Well

TCEQ

Protecting Texas by Reducing and Preventing Pollution

FAX TRANSMITTAL

DATE: 6/30/05 NUMBER OF PAGES *(including this cover sheet)*: 13

TO: Name Greg Long
Organization Shaw
FAX Number 713/996-4401

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name M. Long
Division/Region SCS
Telephone Number 512/239-0761
FAX Number 512/239-2450

NOTES:

LOGS - Jones Rd Area

1. Western Atlas #G10104470 (PWS well) (7 pages)
Located ~3+ miles SE of Finch well at Race Track
Timberlake Imp. Dist. Well #1A
Location
3+ miles NW of Finch Well

2. Schlumberger #G10128882 (PWS well) (5 pages)
Located
W. Harris Co MUD 21 #1

From G10104470 to G10128882 → dip section (NW to SE)

G1010447C

WESTERN ATLAS

DUAL INDUCTION FOCUSED LOG
GAMMA RAY LOG

FILE NO: 97205

API NO: 42-201-ZZZZZ

COMPANY: LAYNE-TEXAS
WELL: TIMBERLAKE IMPROVEMENT DISTRICT WELL#1A
FIELD: RAVENS WAY SUBDIVISION
COUNTY: HARRIS STATE: TEXAS

FINAL PRINT

LOCATION:
OLD HICKORY ROAD

OTHER SERVICES
SPECTRALOG
ZDL/CN/GR

PERMANENT DATUM: GL ELEVATION 138 FT
LOG MEASURED FROM: GL 0 FT ABOVE P.D.
DRILL. MEAS. FROM: GL

ELEVATIONS
KB 11 FT
DF 10 FT
GL 138 FT

DATE	09-DECEMBER-1997		
RUN	1		
SERVICE ORDER	236180		
DEPTH DRILLER	960 FT		
DEPTH LOGGER	959 FT		
BOTTOM LOGGED INTERVAL	957 FT		
TOP LOGGED INTERVAL	50 FT		
CASING - DRILLER	30 IN @50 FT		@
CASING LOGGER	50 FT		
BIT SIZE	9.875 IN		
TYPE OF FLUID IN HOLE	GEL		
DENSITY / VISCOSITY	10 LB/G	32 S	
PH / FLUID LOSS	7	9 C3	
SOURCE OF SAMPLE	MEASURED		
RM AT MEAS. TEMP.	7.13 OHMM @75 DEGF		@
RMF AT MEAS. TEMP.	6.82 OHMM @75 DEGF		@
RMC AT MEAS. TEMP.	7.82 OHMM @75 DEGF		@
SOURCE OF RMF / RMC	MEASURED	MEASURED	
RM AT BHT	5.7 OHMM @94 DEGF		@
TIME SINCE CIRCULATION	3 HOURS		
MAX. RECORDED TEMP.	94 DEGF		
EQUIP. NO. / LOCATION	HL-6515	PEARLAND	
RECORDED BY	C.ROSS		
WITNESSED BY	ALLBRITTON/CRAVENS		

FOLD HERE

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

BIT SIZE	FROM	TO
9.875	0	960

SIZE	WEIGHT	GRADE	FROM	T
30			0	50

REMARKS

RUN 1: BVOL = BOREHOLE VOLUME

THANK YOU FOR CALLING WESTERN ATLAS LOGGING SERVICES
CREW: C.ROSS, J.QUINTANILLA, L.CASTRO

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	COM REMOTE	3510XA	180153	FREE
1	1	GR	1329XA	166387	DECENTRALIZED
1	1	CN	2438XA	153072	[illegible]
1	1	DENSITY	2228MA	153006	PAD
1	1	DIFL	1503MA	052692	1.5" STAND-OFF

MAIN LOG 2"/100FT SCALE

Release:3.0 May 05, 1997 Plotmgr 3.48 Cplot /main/27 Tue Dec 9 15:43:04 19
Updates:1 Perplt /main/35 Pdf_cpp /main/12

CURVE MEASURE POINT OFFSET

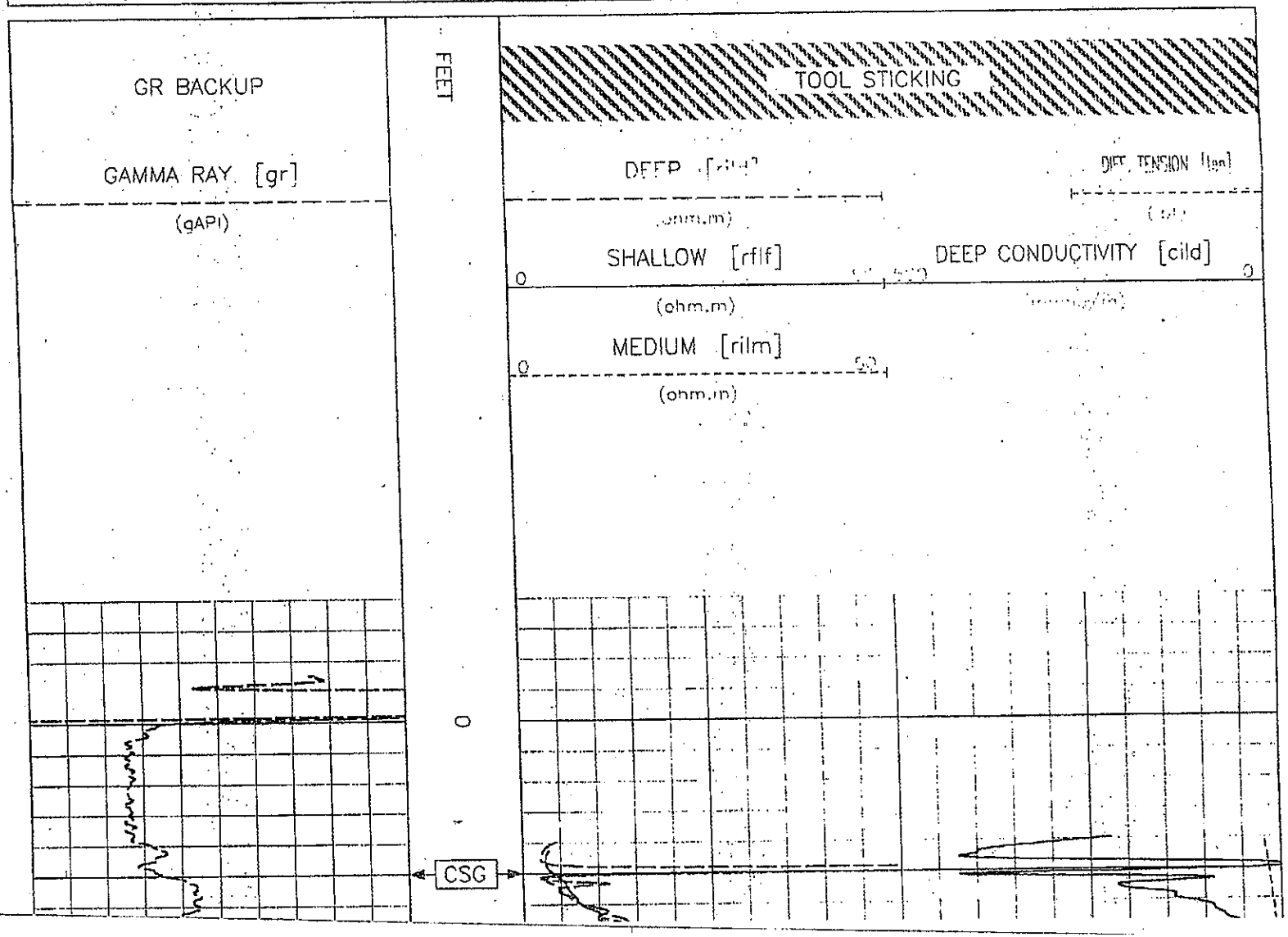
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSE

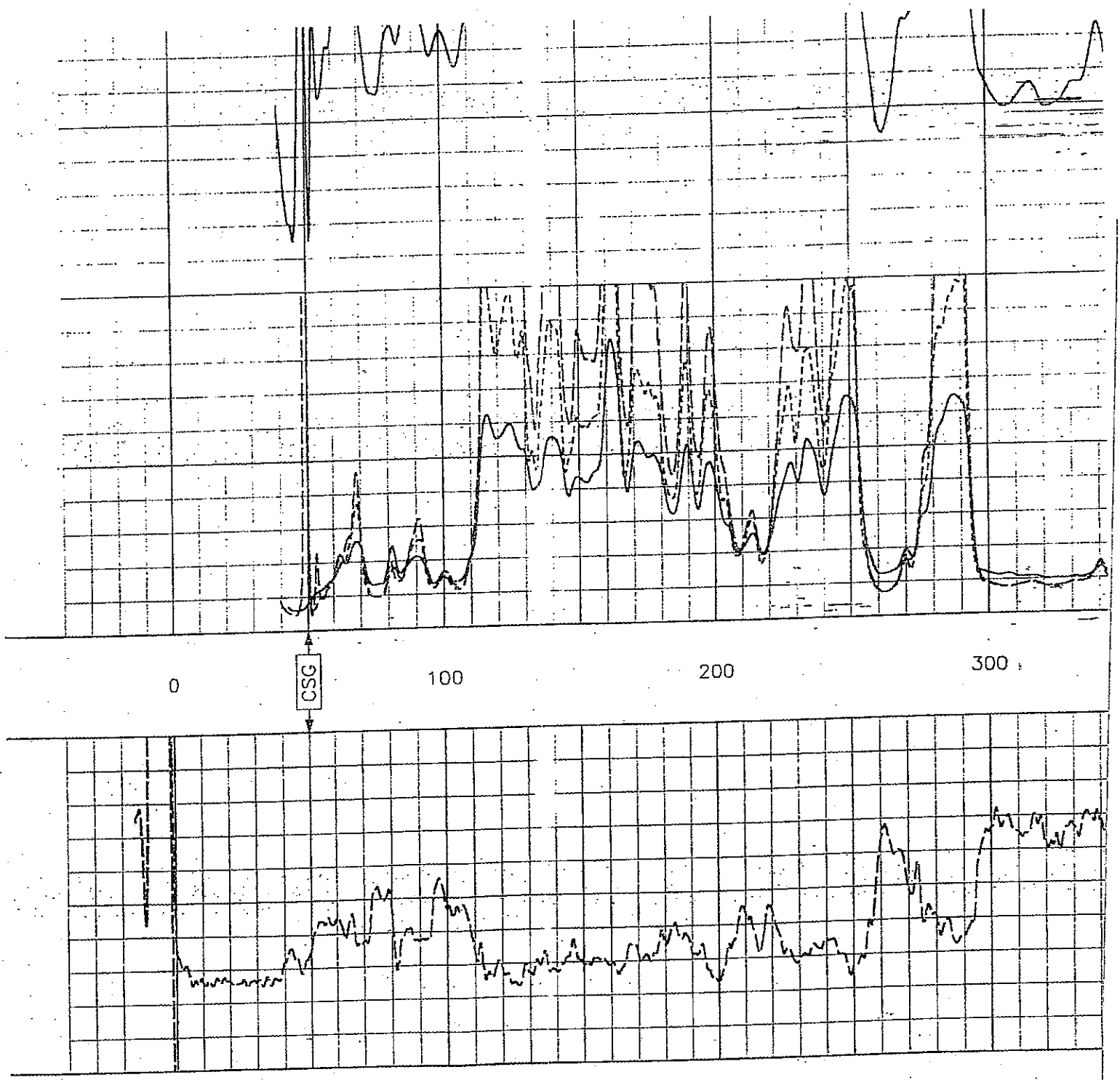
Updates:1 Perplt /main/35 Pdt_cpp /main/12

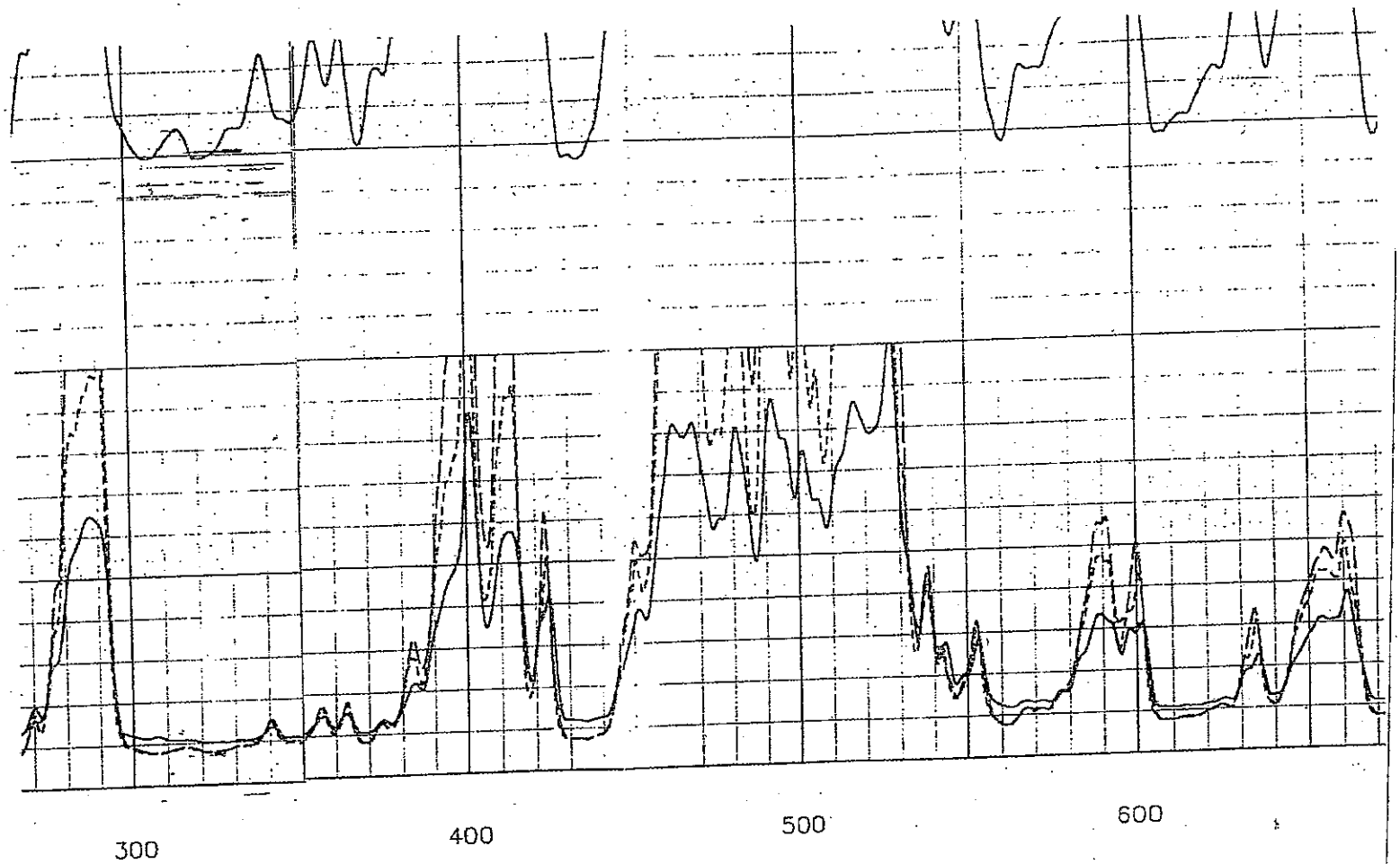
CURVE MEASURE POINT OFFSET

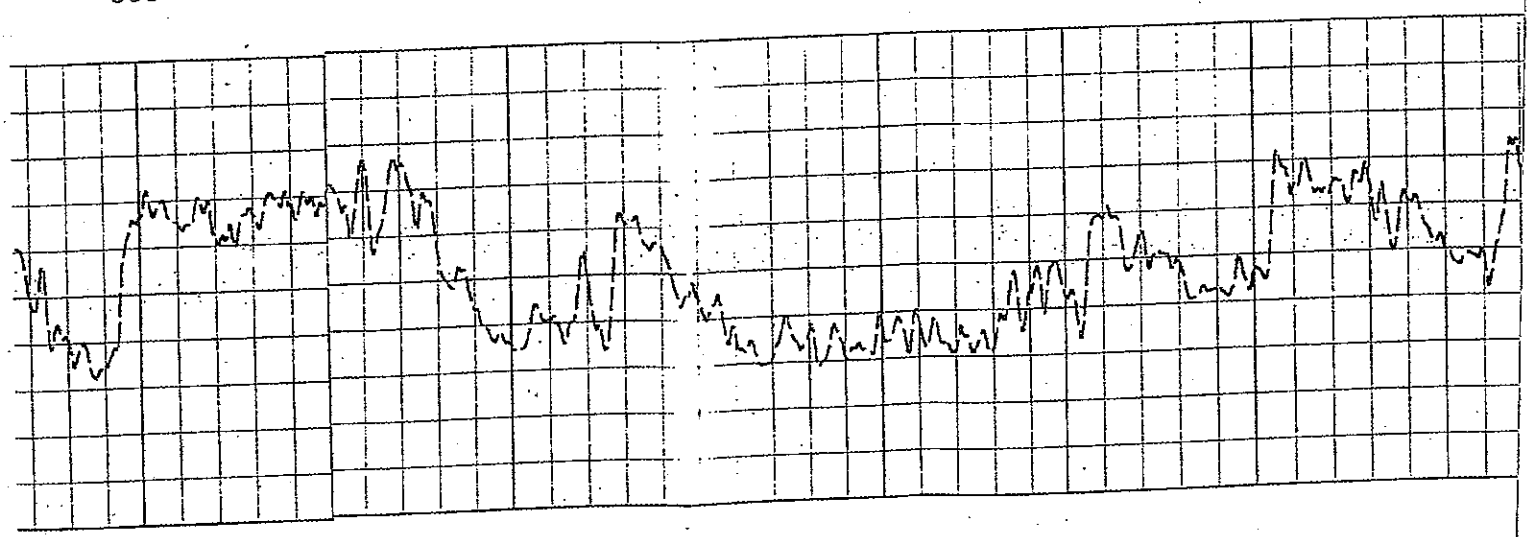
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
cild	11.00	rflf	1.75	rilm	7.75		
gr	56.75	rild	11.00	ten	0.00		

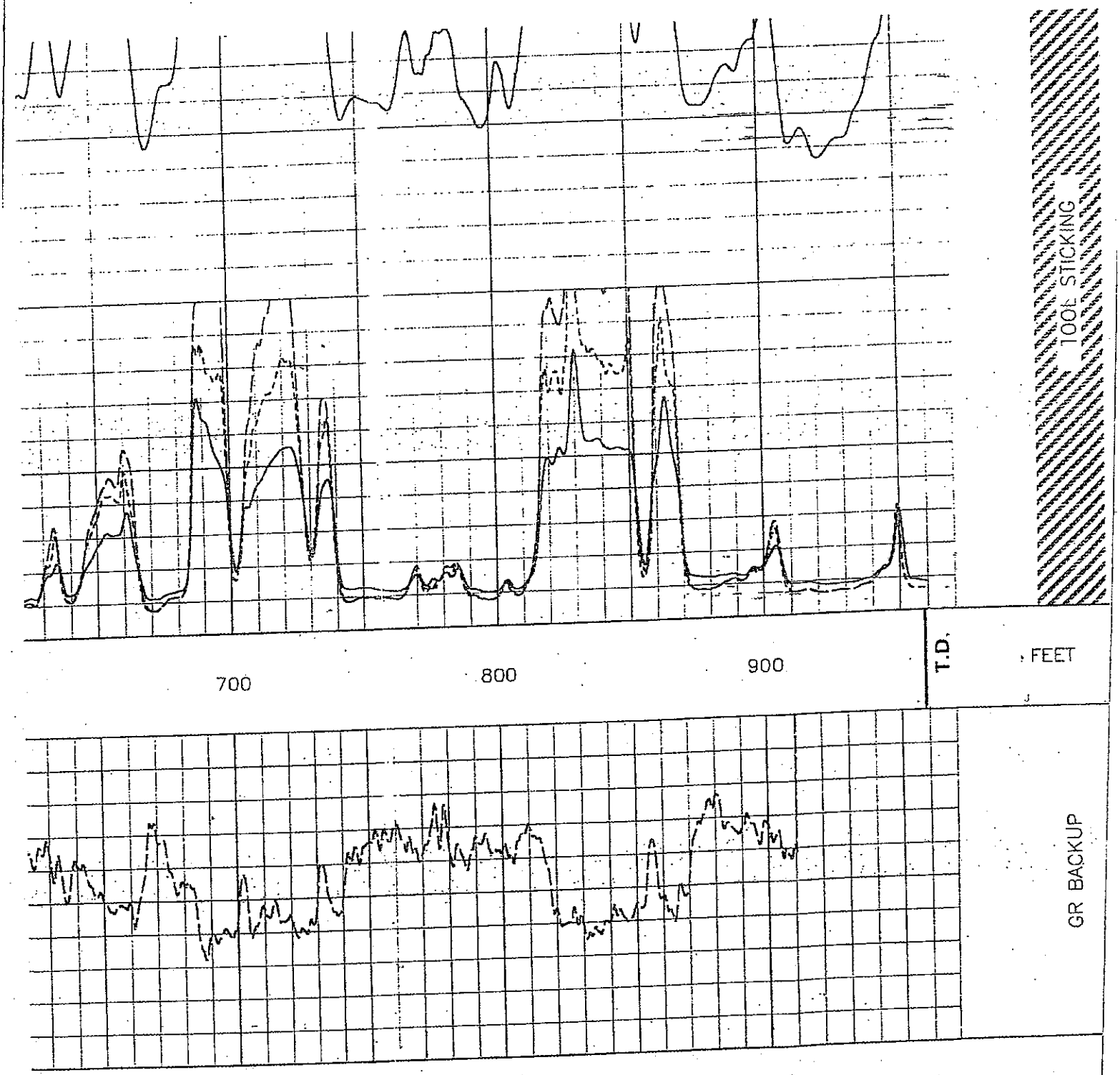
Presentation : difflin.log
Data File : pit1:/datta/pass/layne/main.xtf
Company : layne texas
Interval : -38.50 - 969.00 Feet
Oct : c764a

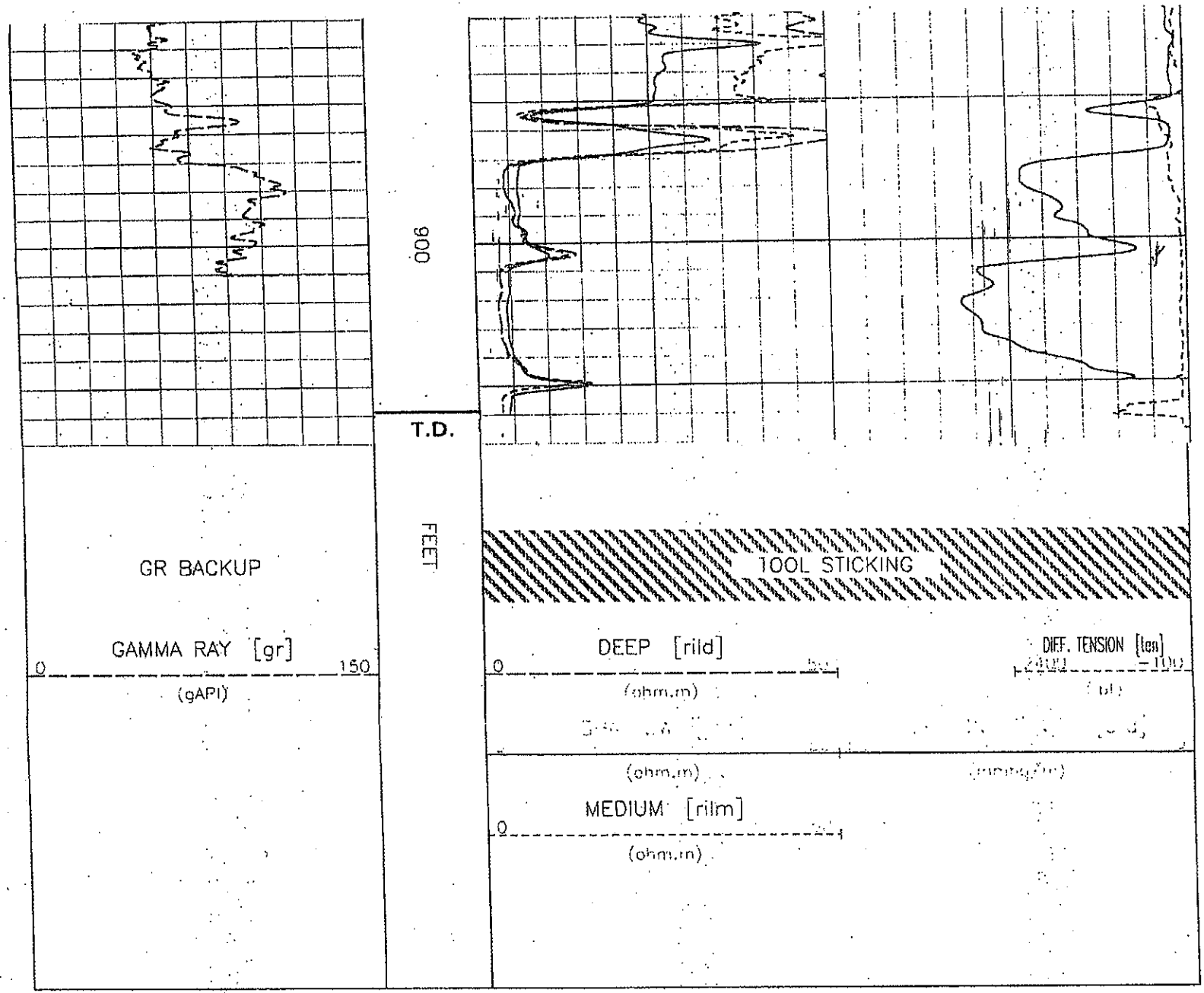



0
CSG
100
200
300


300
400
500
600




100k STICKING
700
800
900
T.D.
FEET
GR BACKUP



MAIN LOG 5"/100FT SCALE

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	0440
RECIPIENT ADDRESS	917139964401
DESTINATION ID	
ST. TIME	06/30 09:41
TIME USE	04'32
PAGES SENT	13
RESULT	OK

TCEQ

Protecting Texas by Reducing and Preventing Pollution

FAX TRANSMITTAL

DATE: 6/30/05 NUMBER OF PAGES *(including this cover sheet)*: 13

TO:
Name: Greg Long
Organization: Shaw
FAX Number: 713/996-4401

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name: M. Long
Division/Region: SCS
Telephone Number: 512/239-0761
FAX Number: 512/239-2450

NOTES:

LOGS - Jones Rd Area

1. Western Atlas #G1010447C (PWS well) (7 pages)
Located ~3+ miles SE of Finch Well at Race Track

Timberlake Imp. Dist. Well #1A
Location
3+ miles NW of Finch Well

COMPANY: Alsay, Inc.

WELL: West Harris County M.U.D. 21 #1

FIELD: Race Track

COUNTY: Harris STATE: Texas

101 2882

COUNTY: Harris
Field: Race Track
Location: N/A
Well: West Harris County M.U.D. 21 #
Company: Alsay, Inc.

Schlumberger

Phasor Induction/SFL
Gamma Ray

LOCATION: N/A

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

Permanent Datum: GROUND LEVEL
Log Measured From: R.K.B.
Drilling Measured From: R.K.B.

Elev.: 32.0 F above Perm. Datum

API Serial No.	SECTION	TOWNSHIP	RANGE

Logging Date		July 29, 1993			
Run Number		One			
Depth Driller		1278 F			
Schlumberger Depth		1278 F			
Bottom Log Interval		1272 F			
Top Log Interval		70 F			
Casing Driller Size @ Depth		30.000 IN @ 36 F		@	
Casing Schlumberger					
Bit Size		9.875 IN			
Type Fluid In Hole		Native Gel			
Density	Viscosity	9.3 LB/G	38 S		
Fluid Loss	PH	6.5 C3	8.4		
Source Of Sample		Measured			
RM @ Measured Temperature		2.490 OHMM @ 75 DEGF		@	
RMF @ Measured Temperature		3.750 OHMM @ 75 DEGF		@	
RMC @ Measured Temperature		4.860 OHMM @ 75 DEGF		@	
Source RMF	RMC	Calculated	Calculated		
RM @ BHT	RMF @ BHT	1.606 @ 120	2.419 @ 120	@	@
Maximum Recorded BHT		120 DEGF			
Circulation Stopped	Time	July 29, 1993	6:00		
Logger On Bottom	Time	July 29, 1993	16:00		
Unit Number	Location	2008	Liberty, Tx.		
Recorded By		Deutch			
Witnessed By		Neil Rollie			

101 2882

Output DLIS Files

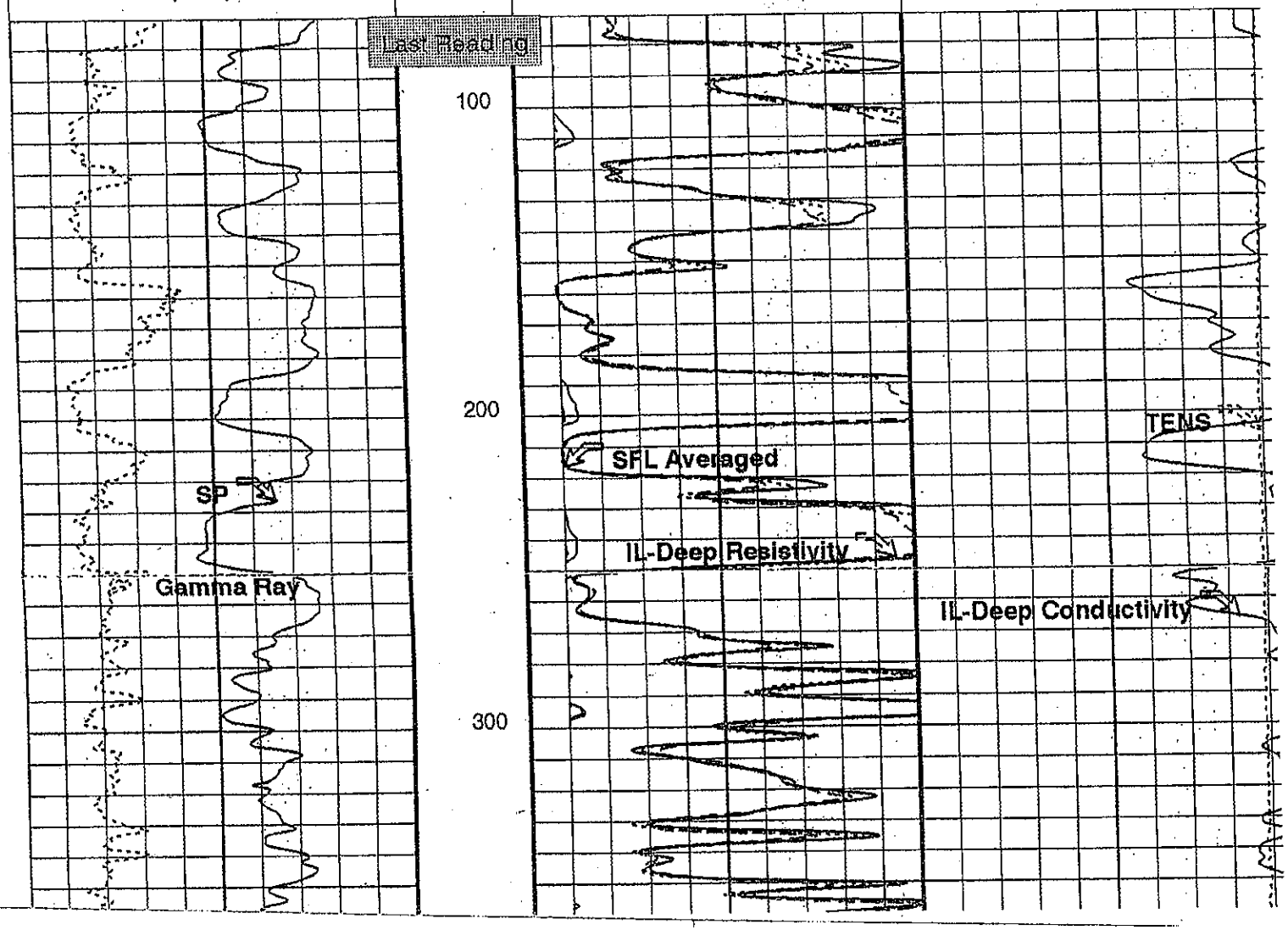
PAUL DITE .004 CUST 29-JUL-1993 15:08 1279.5 FT 70.0 FT

OP System Version: 6B0-439

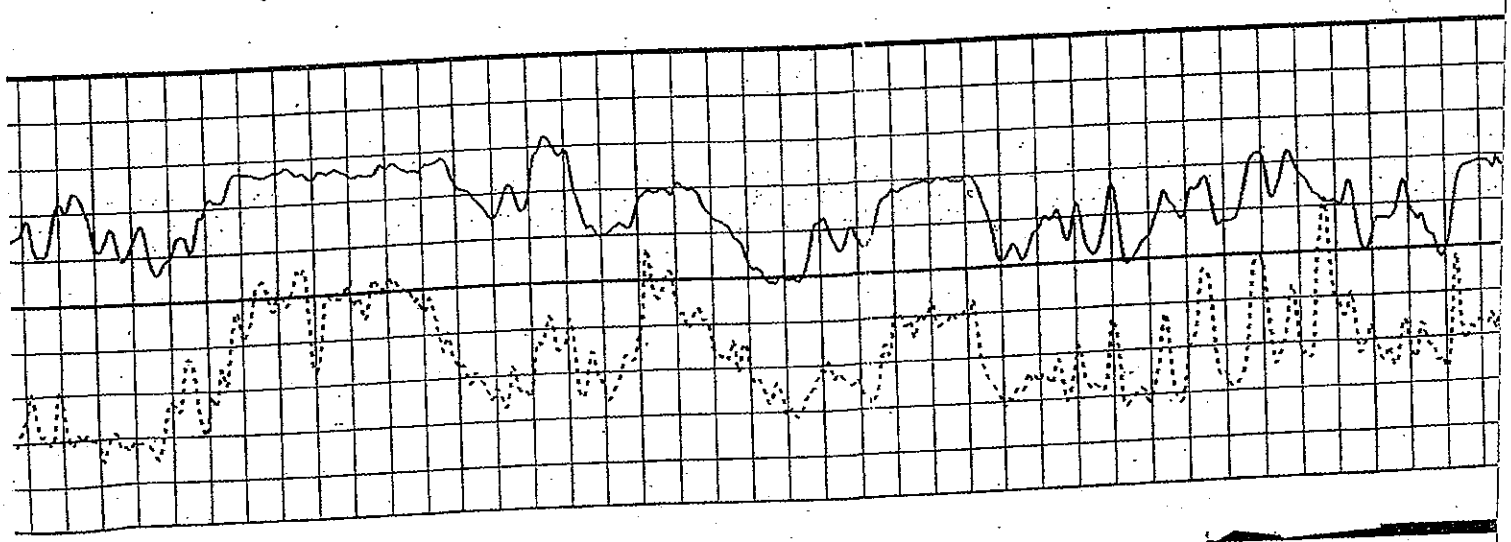
1012882

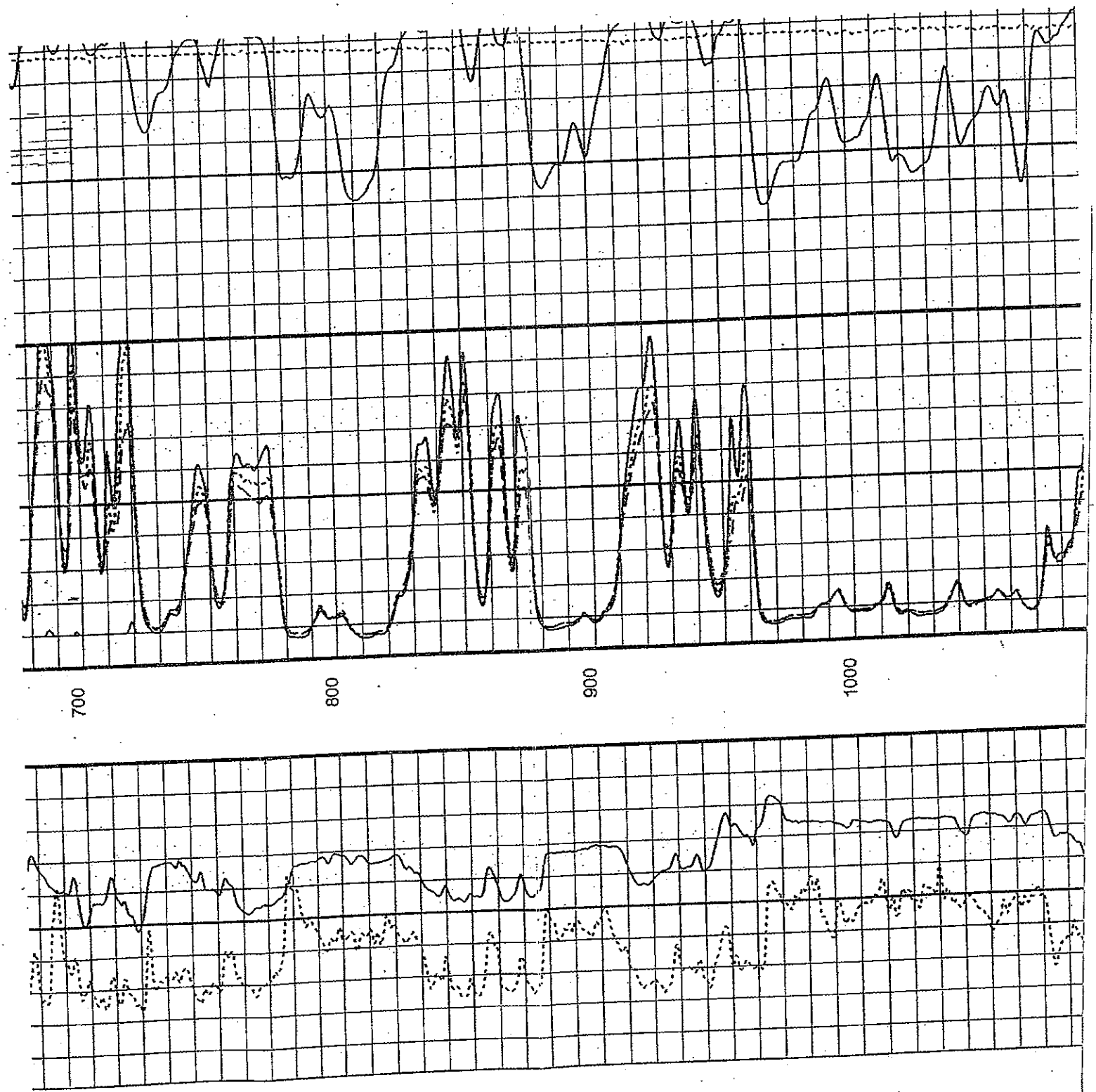
2" CORRELATION LOG

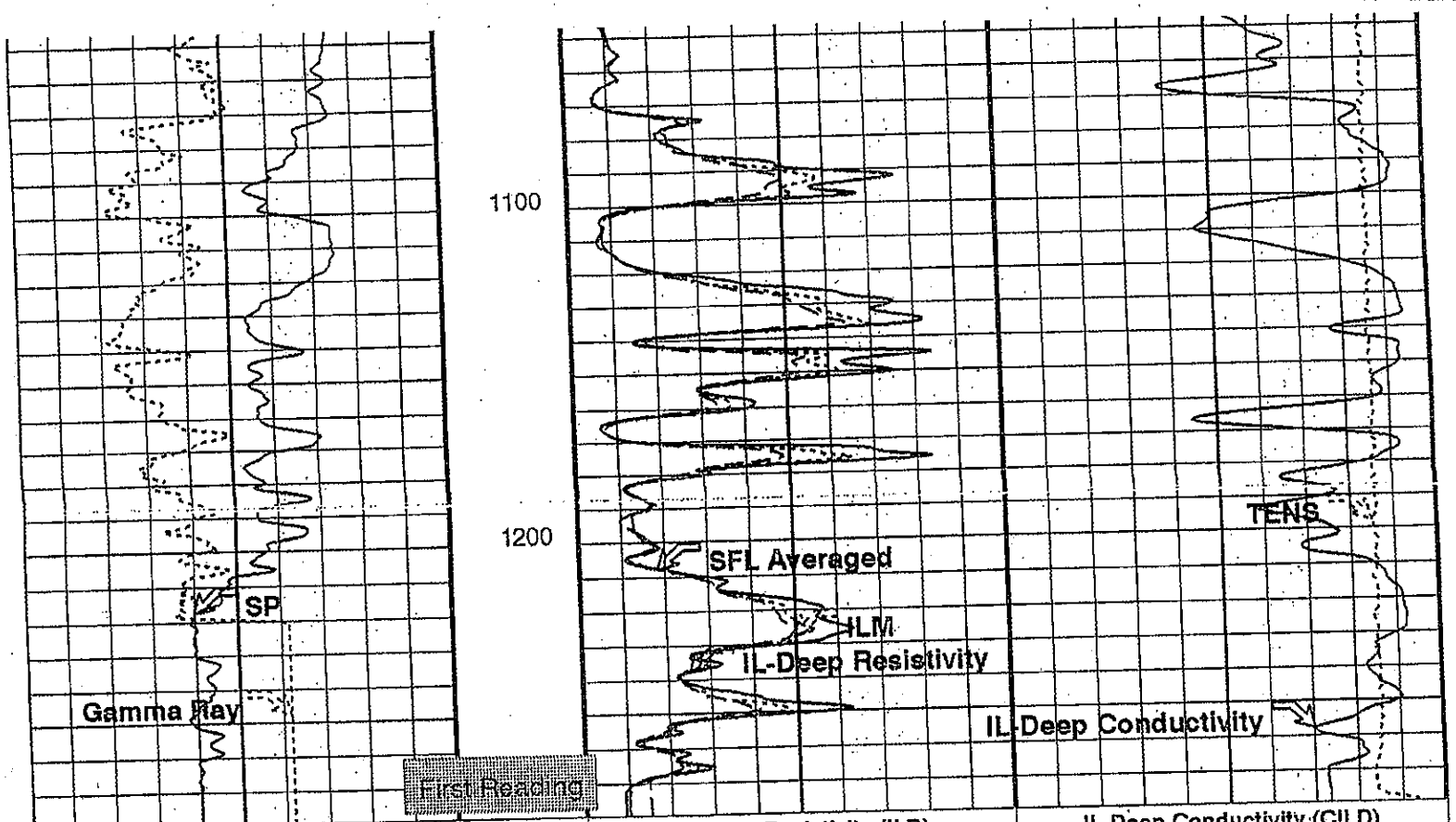
SP (SP)	-80.0 (MV) 20.0	
Gamma Ray (GR)	0.0 (GAPI) 150.0	
SFL Averaged (SFLA)	0.0 (OHMM) 50.0	
IL-Medium Resistivity (ILM)	0.0 (----) 50.0	
IL-Deep Resistivity (ILD)	0.0 (OHMM) 50.0	
Tension (TENS)	10000.0 (----)	
IL-Deep Conductivity (CILD)	500.0 (MMHO)	



400
500
600
700




700
800
900
1000



Gamma Ray (GR)	IL-Deep Resistivity (ILD)	IL-Deep Conductivity (CILD)
0.0 (GAPI) 150.0	0.0 (OHMM) 50.0	500.0 (MMHO) 0.0
SP (SP)	IL-Medium Resistivity (ILM)	Tension (TENS)
-80.0 (MV) 20.0	0.0 (----) 50.0	10000.0 (----) 0.0
	SFL Averaged (SFLA)	
	0.0 (OHMM) 50.0	

2" CORRELATION LOG

1012882

Format: 2IN Vertical Scale: 2.0" per 100.0' Graphics File Created: 29-JUL-1993 15:08

OP System Version: 6B0-439

Output DLIS Files

PAUL DITE .004 CUST 29-JUL-1993 15:08

Output DLIS Files

PAUL DITE .004 CUST 29-JUL-1993 15:08 1279.5 FT 70.0 FT

COMPANY: Alsay, Inc.

WELL: West Harris County M.U.D. 21 #1

FIELD: Race Track

COUNTY: Harris STATE: Texas

101 2882

COUNTY: Harris
Field: Race Track
Location: N/A
Well: West Harris County M.U.D. 21 #
Company: Alsay, Inc.

Schlumberger

Phasor Induction/SFL
Gamma Ray

LOCATION: N/A

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

Permanent Datum: GROUND LEVEL
Log Measured From: R.K.B.
Drilling Measured From: R.K.B.

Elev.: 32.0 F above Perm. Datum

API Serial No.	SECTION	TOWNSHIP	RANGE

Logging Date		July 29, 1993			
Run Number		One			
Depth Driller		1278 F			
Schlumberger Depth		1278 F			
Bottom Log Interval		1272 F			
Top Log Interval		70 F			
Casing Driller Size @ Depth		30.000 IN @ 36 F		@	
Casing Schlumberger					
Bit Size		9.875 IN			
Type Fluid In Hole		Native Gel			
Density	Viscosity	9.3 LB/G	38 S		
Fluid Loss	PH	6.5 C3	8.4		
Source Of Sample		Measured			
RM @ Measured Temperature		2.490 OHMM @ 75 DEGF		@	
RMF @ Measured Temperature		3.750 OHMM @ 75 DEGF		@	
RMC @ Measured Temperature		4.860 OHMM @ 75 DEGF		@	
Source RMF	RMC	Calculated	Calculated		
RM @ BHT	RMF @ BHT	1.606 @ 120	2.419 @ 120	@	@
Maximum Recorded BHT		120 DEGF			
Circulation Stopped	Time	July 29, 1993	6:00		
Logger On Bottom	Time	July 29, 1993	16:00		
Unit Number	Location	2008	Liberty, Tx.		
Recorded By		Deutch			
Witnessed By		Neil Rollie			

101 2882

Output DLIS Files

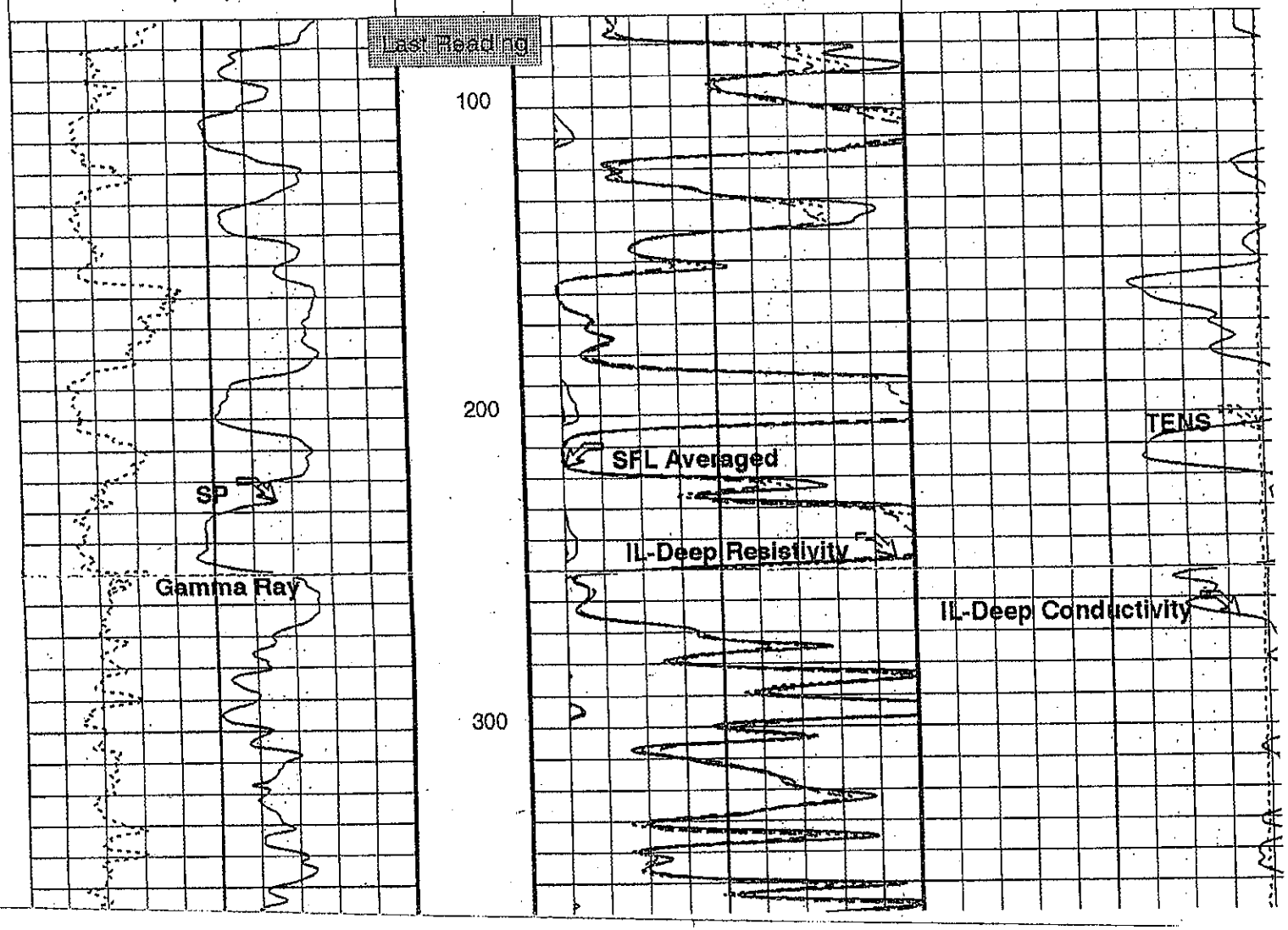
PAUL DITE .004 CUST 29-JUL-1993 15:08 1279.5 FT 70.0 FT

OP System Version: 6B0-439

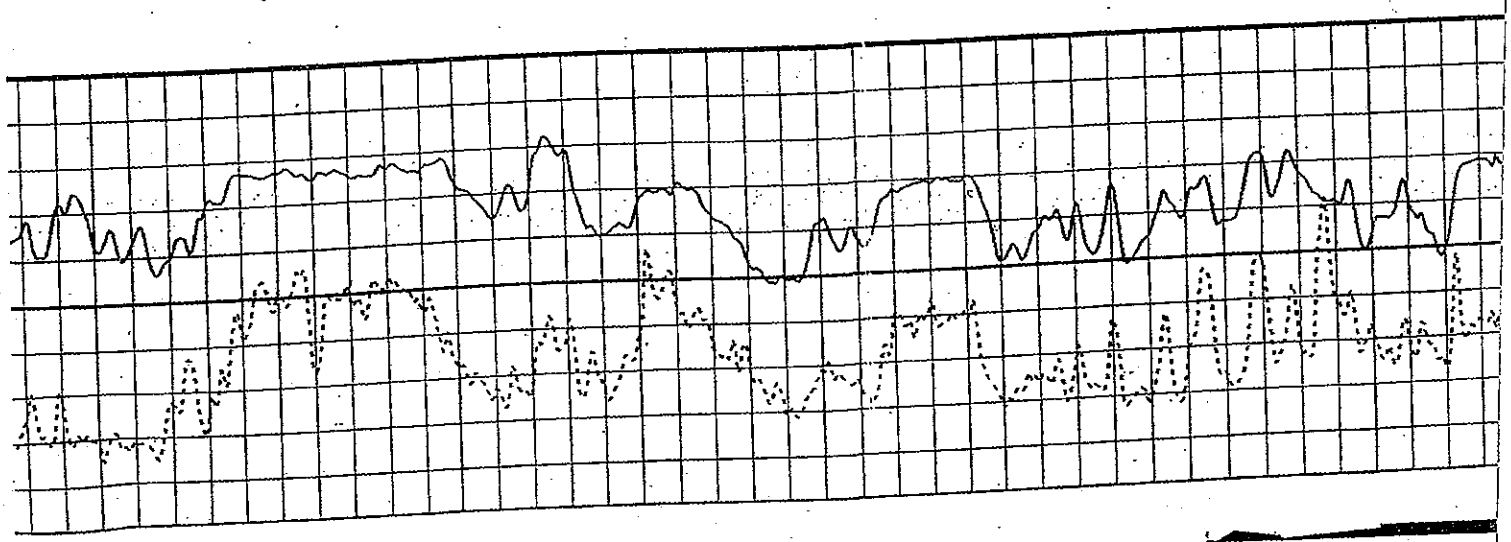
1012882

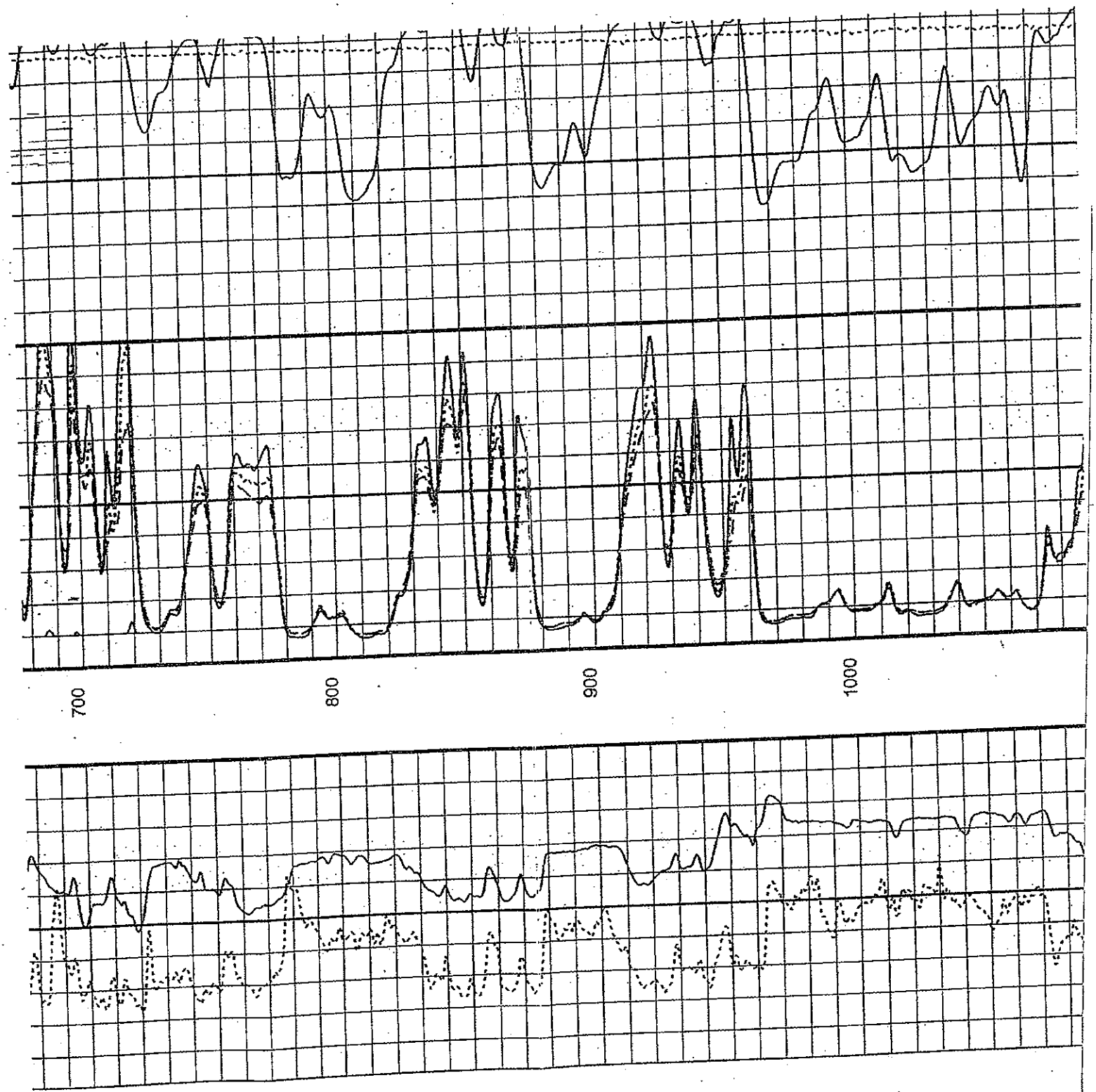
2" CORRELATION LOG

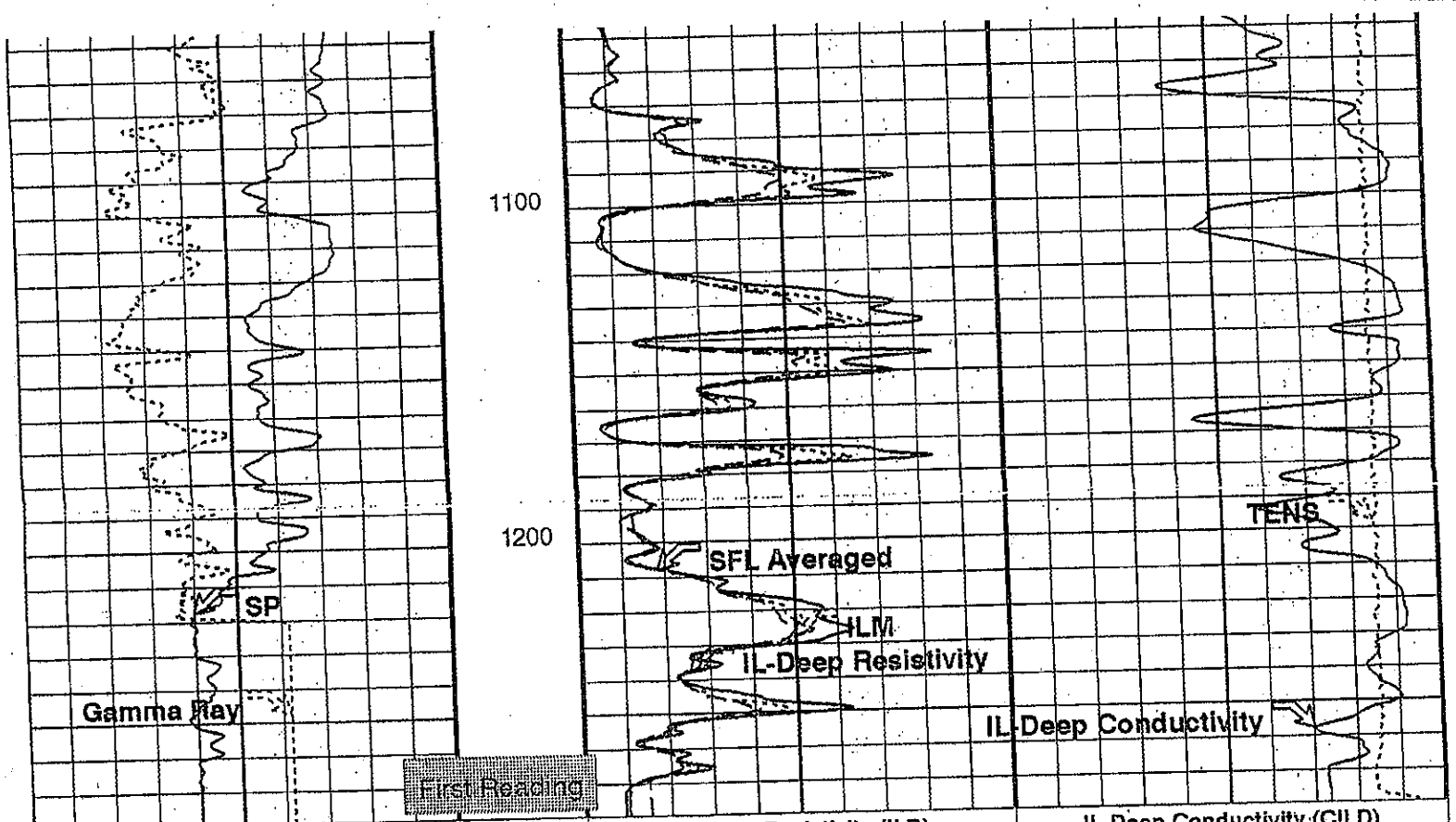
SP (SP)	-80.0 (MV) 20.0	
Gamma Ray (GR)	0.0 (GAPI) 150.0	
SFL Averaged (SFLA)	0.0 (OHMM) 50.0	
IL-Medium Resistivity (ILM)	0.0 (----) 50.0	
IL-Deep Resistivity (ILD)	0.0 (OHMM) 50.0	
Tension (TENS)	10000.0 (----)	
IL-Deep Conductivity (CILD)	500.0 (MMHO)	



400
500
600
700




700
800
900
1000



Gamma Ray (GR)	IL-Deep Resistivity (ILD)	IL-Deep Conductivity (CILD)
0.0 (GAPI) 150.0	0.0 (OHMM) 50.0	500.0 (MMHO) 0.0
SP (SP)	IL-Medium Resistivity (ILM)	Tension (TENS)
-80.0 (MV) 20.0	0.0 (----) 50.0	10000.0 (----) 0.0
	SFL Averaged (SFLA)	
	0.0 (OHMM) 50.0	

2" CORRELATION LOG

1012882

Format: 2IN Vertical Scale: 2.0" per 100.0' Graphics File Created: 29-JUL-1993 15:08

OP System Version: 6B0-439

Output DLIS Files

PAUL DITE .004 CUST 29-JUL-1993 15:08

Output DLIS Files

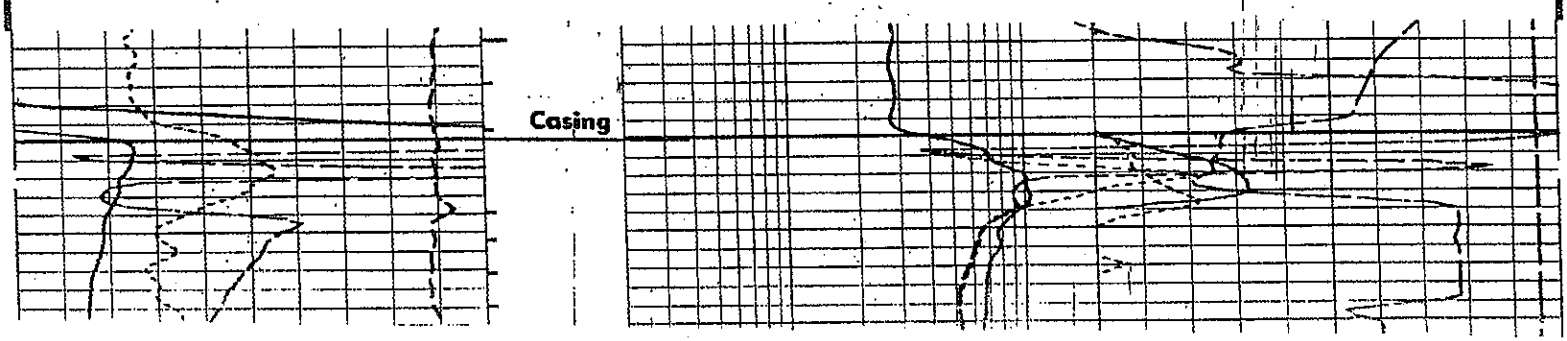
PAUL DITE .004 CUST 29-JUL-1993 15:08 1279.5 FT 70.0 FT

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PSNR	2.20900		BS	7.87500	IN
MATR	SAND		HC	CALI	
MDEN	2.65000	G/C3	FD	1.00000	G/C3
BHF	WATE		FDCC	ALLO	
SBR	1.00000	OHMM	DSEC	-1.20000	MMHO
FPHI	DPHI		MSEC	3.90000	MMHO
BHS	OPEN		FNUM	0.810000	
DO	0.0	F			

RWA (OHMM)		DPHI( )	
0.0	10.000	0.6000	0.0
DRHO(G/C3)		NPHI( )	
-0.900	0.1000	0.6000	0.0
GR (GAPI)		TENS(LB)	
0.0	150.00	20000.	0.0
SP (MV)		DCAL(IN)	
-80.00	20.000	-20.00	20.000
		SFLU(OHMM)	
		0.2000	2000.0
		ILD (OHMM)	
		0.2000	2000.0
		ILM (OHMM)	
		0.2000	2000.0

FILE

4



Rec'd 8/14/92

Putney, Moffatt & Easley

CONSULTING ENGINEERS

G10100116C

CNN#: P0690

August 10, 1992

Robert H. Blodgett
Texas Water Commission
Water Utilities Division
P.O. Box 13087
Austin, Texas 78711-3087

RE: HARRIS COUNTY M.U.D. NO. 247
WATER WELL INFORMATION

Dear Mr. Blodgett:

In accordance with Texas Water Commission (TWC) letter of June 30, 1992, please find enclosed the following requested information:

1) Driller's well report of well construction and screen setting.

2) Geological log.

3) Texas Department of Health approval letter dated June 1, 1983.

4) Well location plotted on quadrangle map.

This well is documented on the State Well Report.

Hopefully, this information is sufficient to determine if this District qualifies for a waiver to the sampling requirements of Phase II of the Natural Drinking Water Regulations for Public Water Systems.

Very truly yours,

James E. Moffatt

James E. Moffatt, P.E.

JEM:rl

cc: Harris County M.U.D. No. 247

A SUBSIDIARY OF MOFFATT-EASLEY, INC.

1303 SHERWOOD FOREST HOUSTON, TEXAS 77043 (713) 932-6666

THE LAYNE TEXAS COMPANY, LTD.

HOUSTON -:- DALLAS

REPORT NO.
S. O. 1102-1951
PAGE 1 OF 1
FILE NO. 4111
DATE 12/2/83

MATERIAL SETTING

CUSTOMER LOCATION

FOR Harris Co. M.U.D. #247

LOCATION WELL ½ Mi. N.W. of Jones Rd. & 100 Yds. S.E. of West Road

SURVEY

FIELD

COUNTY Harris

STATE Texas

OTHER LAND MARKS

WELL DATA

NAME WELL

WELL NO. 1

ELEVATION

DATUM

TYPE WELL Gravel Wall

SURFACE CASING CEMENTED Yes NO. SACKS 500+8% (

SIZE HOLE UNDERREAMED 30" DEPTH 890'-1385'

GRAVEL TYPE 365 NO. CU. YDS. 145

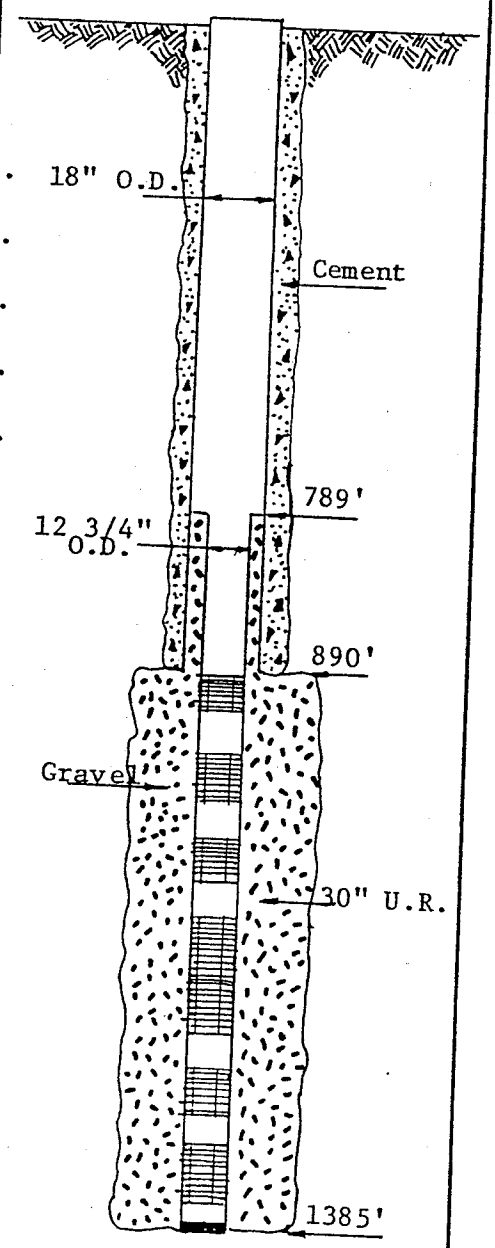
TYPE SCREEN SSWW Barlug GAGE .035

DRILLER Heffernan RIG NO. 2

OTHER Prather - Tilley

DEPTH	LENGTH	SIZE, KIND, WEIGHT MATERIAL
+4'		18" O.D. surface casing 70.53#
0		Surface
45.00'	45.00'	30" O.D. conductor pipe 79.43#
788.89'		Top of 12 3/4" O.D. liner
890.00'	894.00'	18" O.D. surface casing 70.53#
899.15'	111.26'	12 3/4" O.D. blank liner 49.56#
934.25'	35.10'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
964.87'	30.62'	12 3/4" O.D. blank liner 49.56#
989.87'	25.00'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1024.77'	34.90'	12 3/4" O.D. blank liner 49.56#
1060.00'	35.23'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1080.00'	20.00'	12 3/4" O.D. blank liner 49.56#
1220.10'	140.10'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1270.15'	50.05'	12 3/4" O.D. blank liner 49.56#
1300.25'	30.10'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1310.18'	9.93'	12 3/4" O.D. blank liner 49.56#
1325.18'	15.00'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1350.08'	24.90'	12 3/4" O.D. blank liner 49.56#
1370.23'	20.15'	12 3/4" O.D. SSWW Barlug scr..035 Ga.
1382.80'	12.57'	12 3/4" O.D. blank liner 49.56#
1385.00'	2.20'	Set nipple & B.P.V.

SKETCH



LAYNE TEXAS COMPANY,

HOUSTON -:- DALLAS

WELL LOG

S. O. 1102-1951
PAGE 1 of 1
FILE NO. 4111
DATE 10/24/83

CUSTOMER LOCATION

FOR Harris Co. M.U.D. #247

LOCATION WELL ½ Mi. N.W. of Jones Rd. & 100 yds. S.E. of West Road

SURVEY FIELD

COUNTY Harris STATE Texas

OTHER LAND MARKS

WELL DATA

NAME WELL WELL NO. 1

ELEVATION DATUM

RT C GR

TEST HOLE SIZE 9 7/8" TD 1403'

DATE STARTED DRILLING 10/19/83

DATE FINISHED DRILLING 10/27/83

DRILLER Heffernan RIG NO. 2

TYPE MUD Gel NO. SACKS 60

ELECTRIC LOG Yes TYPE G.O.

SURVEY Eastman TYPE Single Shot

OTHER Prather

DEPTH STRATA	EACH STRATUM	DESCRIPTION FORMATION	SAMPLES DEPTH	SAMPLES TYPE	SAMPLES NUMBER
0		Surface			
4'	4'	Top soil			
9'	5'	Black gumbo			
73'	64'	Clay			
92'	19'	Sand			
100'	8'	Clay			
174'	74'	Coarse sand & gravel, clay stks.			
231'	57'	Coarse sand			
275'	44'	Shale			
370'	95'	Shale & sand stks.			
412'	42'	Sand			
439'	27'	Shale			
476'	37'	Sand			
483'	7'	Hard shale			
530'	47'	Sand with shale stks.			
580'	50'	Shale			
612'	32'	Fine sand			
646'	34'	Fine sand & shale stks.			
677'	31'	Fine sand & lime stks.			
739'	62'	Fine sand & shale stks.			
777'	38'	Sand			
896'	119'	Shale & sand stks.			
928'	32'	Shale & sand, lime stks.			
959'	31'	Shale & sand stks.			
990'	31'	Sandy shale			
1074'	84'	Shale			
1086'	12'	Shale & sand stks.			
1100'	14'	Shale			
1231'	130'	Sand & shale stks.			
1245'	14'	Shale			
1273'	28'	Shale, clay & sand stks.			
1358'	85'	Sand & shale stks.			
1360'	2'	Hard lime			
1382'	22'	Sand & shale stks.			
1403'	21'	Shale			

Texas Department of Health

Robert Bernstein, M.D., F.A.C.P.
Commissioner

1100 West 49th Street
Austin, Texas 78756
(512) 458-7111

Robert A. MacLean, M.D.
Deputy Commissioner
Professional Services

Hermas L. Miller
Deputy Commissioner
Management and Administration

June 1, 1983

Mr. Kamlesh Parekh, P.E.
Putney, Moffatt & Ealsey
Consulting Engineers
1303 Sherwood Forest
Houston, Texas 77043

SUBJECT: Public Drinking Water System
Harris County M.U.D. No. 247
Harris County, Texas

Dear Mr. Parekh:

Reference your letter of April 29, 1983, transmitting planning material for the water plant to serve the subject water system. The initial plant facilities will consist of a water well, approximately 1,000 feet deep, a 1,500 gpm well pump, equipped with a right angle drive for a future diesel engine, a 500,000-gallon ground storage tank, master meter, gas chlorinator, chlorinator and pump building, one 250 gpm, one 750 gpm, and one 1,000 gpm booster pumps, a 25,000-gallon pressure tank, piping, valves, controls and related appurtenances at the well site.

We have completed our review of the planning material for the above water plant facilities, and it appears to have been prepared in general conformity with good public health engineering practices and this Department's Standards.

When we have received a copy of the Driller's log showing the geological formations, material setting data, and sealing report along with a copy of the chemical analysis report of the water from the well, we will then be in a position to evaluate this well as a supply for a public water system.

If we can be of assistance in the meantime, please let us know.

Sincerely,

C. W. McCarty

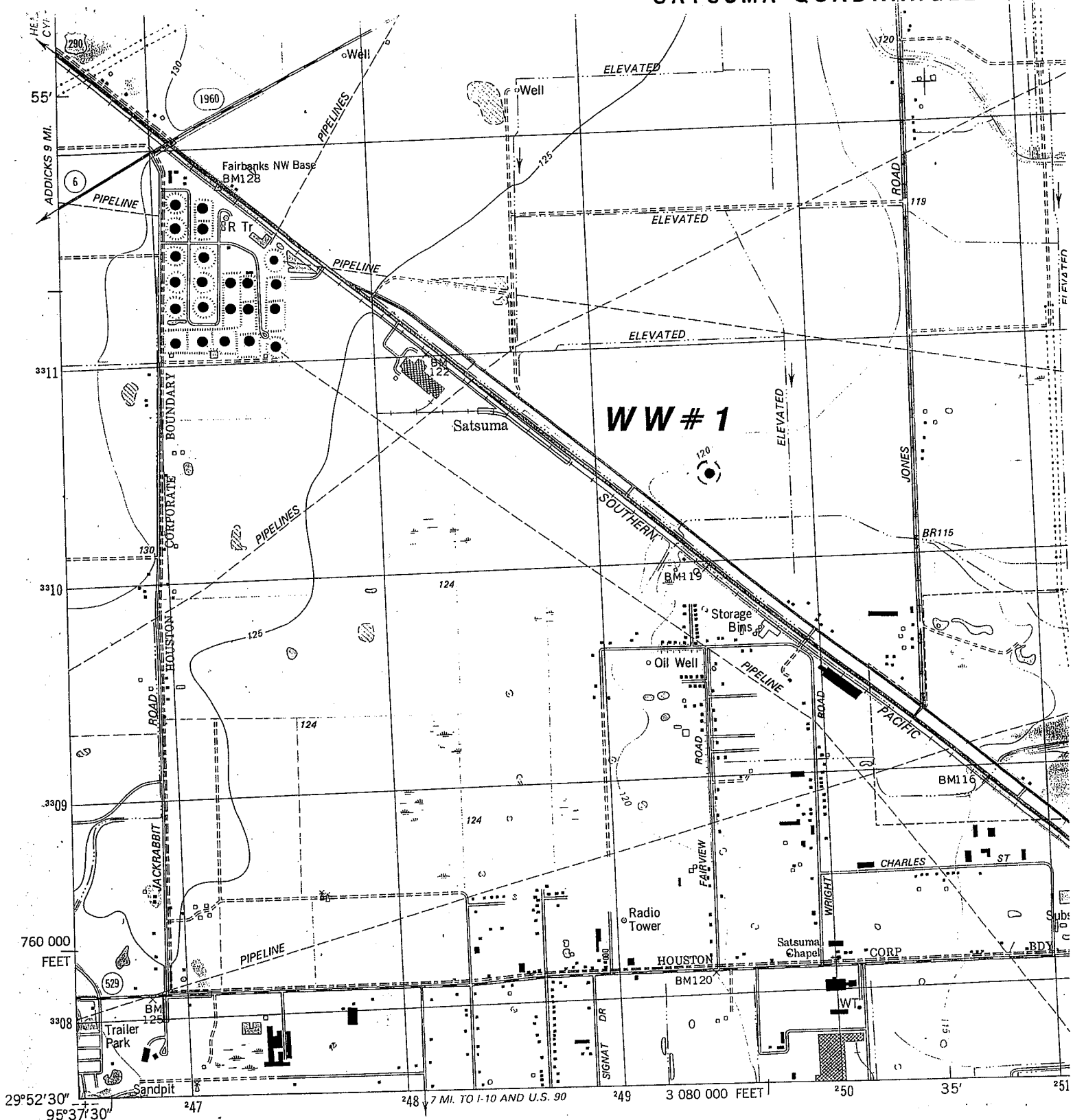
C. W. McCarty, P.E.
Plan Review and Wastewater Branch
Division of Water Hygiene

c.c. Jim

CWM/re

ccs: City of Houston - Mr. Tim Lincoln
Harris County Health Department
Public Health Region 11
Harris County M.U.D. No. 247

SATSUMA QUADRANGLE



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

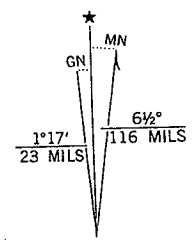
Topography by photogrammetric methods from aerial photographs taken 1976. Field checked 1976. Map edited 1982

Projection and 10,000-foot grid ticks: Texas coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 15
1927 North American datum

To place on the predicted North American Datum 1983 move the projection lines 20 meters south and 22 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

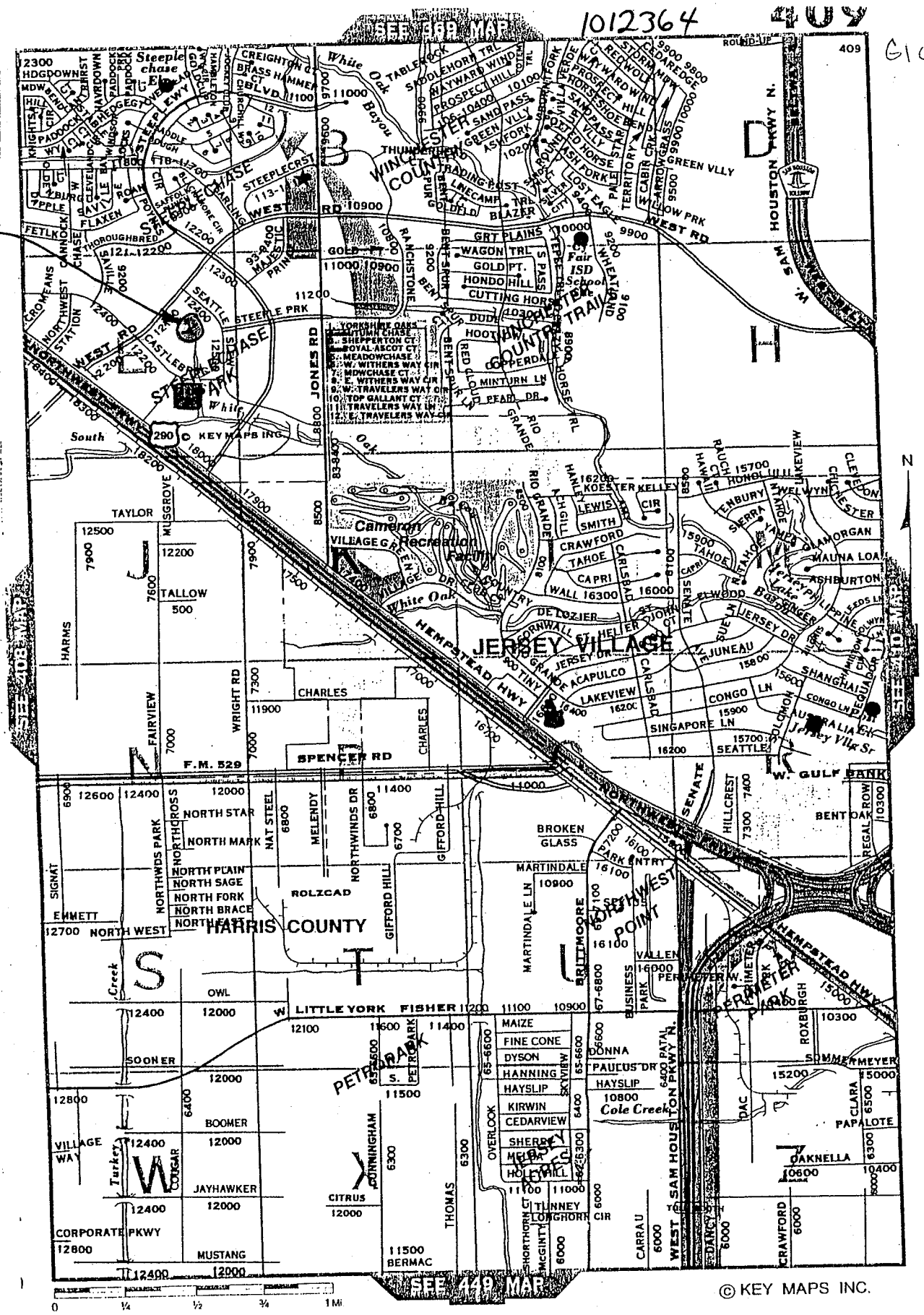
Red tint indicates areas in which only landmark buildings are shown



UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

FOR S.

1012364 409

G10100016C

HARRIS Co. MUD 247
KATER PLANT