



July 6, 2023

Mr. Jim Totten  
General Manager  
Lost Pines Groundwater Conservation District  
PO Box 1027  
Smithville, Texas 78957

Re: Additional information for Operating Permit Application  
Aqua Water Supply Corporation – Watterson Well #2

Dear Mr. Totten:

At the request of Lost Pines Groundwater Conservation District, we would like to provide you with additional information regarding our Watterson Well # 2 so that you may continue to process the operating permit application. Additional documentation and clarification on the requested information items is detailed below.

1. Additional drilling information attached.
2. An additional map is attached.
3. Not applicable.
4. Completing a new pump test for this well was not feasible. Attached is a technical memorandum written by Aqua WSC Hydrogeologist explaining rationale for requested production capacity.
5. 3226 acre-ft/year or 1,051,200,000 gallons/year

If you have any questions, please do not hesitate to contact me.

Kind regards,

A handwritten signature in black ink, appearing to read "Emily Poston", with a long, sweeping flourish extending to the right.

Emily Poston, P.E.  
Manager of Engineering



## EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

October 31, 2002

Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

### LABORATORY ANALYSIS REPORT

Sample Site: Aqua WSC Watterson Rd. TH #2

Sample Date: 10/4/02

PARAMETER	RESULT	UNITS	DATE	TECH	TIME	METHOD
Chlorine Residual	0.0	mg/L	CME	10/7/02	1400	50060
pH	8.33	Std. Units	CME	10/7/02	1450	00400
Alkalinity, Phenol.	1.00	mg/L	CME	10/7/02	1450	00410
Alkalinity, Total	528	mg/L	CME	10/7/02	1450	00410
Carbonate	1.33	mg/L	CME	10/7/02	1450	00410
Bicarbonate	642	mg/L	CME	10/7/02	1450	00410
Hardness, Total	23.0	mg/L	CME	10/7/02	1330	00900
Hardness, Calcium	12.4	mg/L	CME	10/7/02	1330	00900
Hardness, Magnesium	10.6	mg/L	CME	10/7/02	1330	00927
Calcium	4.96	mg/L	CME	10/7/02	1330	00910
Magnesium	2.58	mg/L	CME	10/7/02	1330	00927
Specific Cond.	1,113	umhos/cm	CME	10/7/02	1405	00095
Residue, Total	1,344	mg/L	SRS	10/9/02	1450	00500
Residue, Suspended	2.0	mg/L	SRS	10/9/02	1505	00530
Residue, Dissolved	1,342	mg/L	SRS	10/9/02	1450	70300
Chloride	218	mg/L	CME	10/8/02	1100	00940
Fluoride	0.9	mg/L	CME	10/10/02	1510	00951
Iron	0.485	mg/L	KMP	10/14/02	1630	01045
Manganese	0.021	mg/L	KMP	10/14/02	1700	01055
Nitrates	1.1	mg/L	CEW	10/9/02	1655	00620
Sulfate	207	mg/L	WGK	10/14/02	1000	00945
Sodium	471	mg/L	TJM	10/31/02	1200	00929

Method Reference: Standard Methods for the Examination of Water and Wastewater, 18th ed.

  
Paul Hughes  
Laboratory Manager



# EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

October 31, 2002

Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

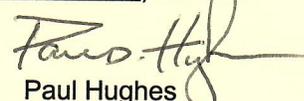
## LABORATORY ANALYSIS REPORT

Sample Site: Aqua WSC Watterson Rd. TH #2

Sample Date: 10/4/02

PARAMETER	RESULT	UNIT	TECH	DATE	TIME	METHOD
<b>METALS</b>						
Aluminum	0.013	mg/L	KMP	10/11/02	1526	3111D
Arsenic	<0.005	mg/L	KMP	10/15/02	1811	3113B
Barium	0.0348	mg/L	KMP	10/14/02	1527	3111D
Beryllium	<0.001	mg/L	KMP	10/14/02	1825	3111D
Cadmium	<0.001	mg/L	KMP	10/14/02	1825	3111B
Chromium	<0.004	mg/L	KMP	10/11/02	1526	3111B
Copper	<0.005	mg/L	KMP	10/14/02	0832	3111B
Lead	<0.005	mg/L	KMP	10/14/02	1825	3111B
Nickel	<0.010	mg/L	KMP	10/11/02	1526	3111B
Selenium	<0.005	mg/L	KMP	10/15/02	1526	3113B
Silver	<0.0002	mg/L	KMP	10/14/02	1825	3111B
Zinc	0.011	mg/L	KMP	10/14/02	1115	3111B
Dissolved Iron	0.143	mg/L	KMP	10/14/02	1630	3111B
Potassium	2.9	mg/L	KMP	10/18/02	1630	3111B
Dissolved Aluminum	<0.010	mg/L	KMP	10/11/02	1130	3111D
<b>SPECIAL MISC.</b>						
Color	15	ptCo	JGH	10/8/02	1600	2120C
Turbidity	0.77	NTU	CM	10/9/02	1347	2130B
Nitrites	0.17	mg/L	PDH	10/9/02	1655	4500N02B

Method Reference: Standard Methods for the Examination of Water and Wasetwater, 18th ed.

  
Paul Hughes  
Laboratory Manager

Rec'd  
11-4-02  
Pj



## EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

December 3, 2002

Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

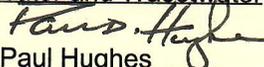
### LABORATORY ANALYSIS REPORT

Sample Site: Aqua Watterson Rd. TH#2

Sample Date: 11/1/02

PARAMETER	RESULT	UNITS	DATE	TECH	TIME	METHOD
Chlorine Residual	0.0	mg/L	CME	11/4/02	1550	50060
pH	8.07	Std. Units	CME	11/4/02	1340	00400
Alkalinity, Phenol.	0.0	mg/L	CME	11/4/02	1340	00410
Alkalinity, Total	471	mg/L	CME	11/4/02	1340	00410
Carbonate	0.0	mg/L	CME	11/4/02	1340	00410
Bicarbonate	575	mg/L	CME	11/4/02	1340	00410
Hardness, Total	40	mg/L	CME	11/5/02	1135	00900
Hardness, Calcium	21	mg/L	CME	11/5/02	0810	00900
Hardness, Magnesium	19	mg/L	CME	11/5/02	0810	00927
Calcium	8.4	mg/L	CME	11/5/02	0810	00910
Magnesium	4.62	mg/L	CME	11/5/02	0810	00927
Specific Cond.	2,090	umhos/cm	CME	11/4/02	1555	00095
Residue, Total	1,400	mg/L	RWC	11/6/02	1630	00500
Residue, Suspended	15	mg/L	RWC	11/6/02	1520	00530
Residue, Dissolved	1,385	mg/L	RWC	11/6/02	1630	70300
Chloride	203	mg/L	CME	11/5/02	1000	00940
Fluoride	0.9	mg/L	CME	11/5/02	1100	00951
Iron	0.211	mg/L	KMP	11/10/02	1300	01045
Manganese	<0.010	mg/L	KMP	11/10/02	1400	01055
Nitrates	1.1	mg/L	PDH	11/6/02	1600	00620
Sulfate	159.5	mg/L	WGK	11/11/02	0900	00945
Sodium	404	mg/L	TJM	11/25/02	1605	00929

Method Reference: Standard Methods for the Examination of Water and Wastewater, 18th ed.

  
Paul Hughes  
Laboratory Manager

RECEIVED  
11-5-02



## EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

December 3, 2002

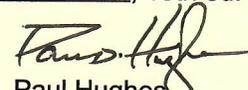
Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

### LABORATORY ANALYSIS REPORT

Sample Site: Aqua Watterson Rd. TH#2  
Sample Date: 11/1/02

PARAMETER	RESULT	UNIT	TECH	DATE	TIME	METHOD
<b>METALS</b>						
Aluminum	0.229	mg/L	KMP	11/7/02	0951	3111D
Arsenic	<0.005	mg/L	KMP	11/14/02	1612	3113B
Barium	0.093	mg/L	KMP	11/9/02	1152	3111D
Beryllium	<0.001	mg/L	KMP	11/13/02	0807	3111D
Cadmium	<0.001	mg/L	KMP	11/13/02	0807	3111B
Chromium	<0.004	mg/L	KMP	11/9/02	1152	3111B
Copper	<0.005	mg/L	KMP	11/11/02	0800	3111B
Lead	<0.005	mg/L	KMP	11/12/02	0825	3111B
Nickel	<0.010	mg/L	KMP	11/9/02	1202	3111B
Selenium	<0.005	mg/L	KMP	11/14/02	1612	3113B
Silver	<0.0002	mg/L	KMP	11/12/02	0825	3111B
Zinc	0.027	mg/L	KMP	11/11/02	1110	3111B
Dissolved Iron	0.081	mg/L	KMP	11/10/02	1300	3111B
Potassium	3.63	mg/L	KMP	11/12/02	1700	3111B
Dissolved Aluminum	0.0196	mg/L	KMP	11/7/02	0951	3111D
<b>SPECIAL MISC.</b>						
Color	<10.0	ptCo	JGH	11/5/02	1030	2120C
Turbidity	8.18	NTU	CM	11/5/02	1523	2130B
Nitrites	0.2	mg/L	PDH	11/6/02	1600	4500N02B

Method Reference: Standard Methods for the Examination of Water and Wasetwater, 18th ed.

  
Paul Hughes  
Laboratory Manager

RECEIVED  
12-5-2



## EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

November 20, 2002

Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

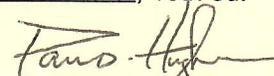
### LABORATORY ANALYSIS REPORT

Sample Site: Aqua WSC Watterson Rd. TH #2

Sample Date: 11/12/02

PARAMETER	RESULT	UNIT	TECH	DATE	TIME	METHOD
<b>METALS</b>						
Aluminum	0.0175	mg/L	KMP	11/18/02	1532	3111D
Arsenic	<0.005	mg/L	KMP	11/14/02	1612	3113B
Barium	0.0989	mg/L	KMP	11/18/02	1535	3111D
Beryllium	<0.001	mg/L	KMP	11/16/02	1018	3111D
Cadmium	<0.001	mg/L	KMP	11/17/02	1129	3111B
Chromium	<0.004	mg/L	KMP	11/18/02	1535	3111B
Copper	<0.005	mg/L	KMP	11/18/02	1535	3111B
Lead	<0.005	mg/L	KMP	11/16/02	1018	3111B
Nickel	<0.010	mg/L	KMP	11/18/02	1535	3111B
Selenium	<0.005	mg/L	KMP	11/14/02	1612	3113B
Silver	<0.0002	mg/L	KMP	11/16/02	1018	3111B
Zinc	<0.005	mg/L	KMP	11/19/02	0930	3111B
Dissolved Iron	0.153	mg/L	KMP	11/18/02	1400	3111B
Potassium	3.57	mg/L	KMP	11/19/02	0830	3111B
Dissolved Aluminum	<0.010	mg/L	KMP	11/18/02	1535	3111D
<b>SPECIAL MISC.</b>						
Color	15	ptCo	JGH	11/13/02	1100	2120C
Turbidity	0.77	NTU	CM	11/14/02	1420	2130B
Nitrites	0.17	mg/L	PDH	11/13/02	1610	4500N02B

Method Reference: Standard Methods for the Examination of Water and Wasetwater, 18th ed.

  
Paul Hughes  
Laboratory Manager

RECEIVED  
11-22-02



# EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

December 3, 2002

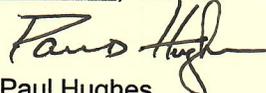
Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

## LABORATORY ANALYSIS REPORT

Sample Site: Aqua TH#1 Test #2                      Depth 730-752  
Sample Date: 11/13/02

PARAMETER	RESULT	UNIT	TECH	DATE	TIME	METHOD
<b>METALS</b>						
Aluminum	0.058	mg/L	KMP	11/25/02	0746	3111D
Arsenic	<0.005	mg/L	KMP	11/20/02	1200	3113B
Barium	0.0605	mg/L	KMP	11/25/02	0746	3111D
Beryllium	<0.001	mg/L	KMP	11/21/02	1719	3111D
Cadmium	<0.001	mg/L	KMP	11/21/02	1719	3111B
Chromium	<0.004	mg/L	KMP	11/25/02	0746	3111B
Copper	<0.005	mg/L	KMP	11/25/02	0746	3111B
Lead	<0.005	mg/L	KMP	11/21/02	1719	3111B
Nickel	<0.010	mg/L	KMP	11/25/02	0746	3111B
Selenium	<0.005	mg/L	KMP	11/20/02	1200	3113B
Silver	<0.0002	mg/L	KMP	11/21/02	1719	3111B
Zinc	<0.005	mg/L	KMP	11/25/02	0930	3111B
Dissolved Iron	<0.05	mg/L	KMP	11/22/02	1600	3111B
Potassium	2.86	mg/l.	KMP	11/22/02	1200	3111B
Dissolved Aluminum	<0.010	mg/L	KMP	11/25/02	0746	3111D
<b>SPECIAL MISC.</b>						
Color	<10.0	ptCo	JGH	11/19/02	1430	2120C
Turbidity	1.01	NTU	KM	11/20/02	1550	2130B
Nitrites	0.2	mg/L	PDH	11/20/02	1640	4500N02B

Method Reference: Standard Methods for the Examination of Water and Wasetwater, 18th ed.

  
Paul Hughes  
Laboratory Manager



# EASTEX ENVIRONMENTAL LABORATORY, INC.

P.O. Box 1089  
Coldspring, Texas 77331  
1-800-525-0508 • (936) 653-3249

P.O. Box 631375  
Nacogdoches, Texas 75963-1375  
(936) 569-8879

December 3, 2002

Russell Drilling  
15286 US HWY 259  
Nacogdoches, TX 75965

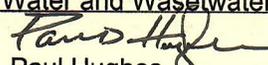
## LABORATORY ANALYSIS REPORT

Sample Site: Aqua TH#1 Test #2  
Sample Date: 11/13/02

Depth 730-752

PARAMETER	RESULT	UNITS	DATE	TECH	TIME	METHOD
Chlorine Residual	0.0	mg/L	CME	11/18/02	1435	50060
pH	8.20	Std. Units	CME	11/18/02	1310	00400
Alkalinity, Phenol.	0.0	mg/L	CME	11/18/02	1310	00410
Alkalinity, Total	601	mg/L	CME	11/18/02	1310	00410
Carbonate	0.0	mg/L	CME	11/18/02	1310	00410
Bicarbonate	733	mg/L	CME	11/18/02	1310	00410
Hardness, Total	21	mg/L	CME	11/18/02	1540	00900
Hardness, Calcium	12	mg/L	CME	11/18/02	1540	00900
Hardness, Magnesium	9.0	mg/L	CME	11/18/02	1540	00927
Calcium	4.8	mg/L	CME	11/18/02	1540	00910
Magnesium	2.19	mg/L	CME	11/18/02	1540	00927
Specific Cond.	1,989	umhos/cm	CME	11/18/02	1510	00095
Residue, Total	1.388	mg/L	RWC	11/20/02	1425	00500
Residue, Suspended	2.0	mg/L	RWC	11/20/02	1445	00530
Residue, Dissolved	1,386	mg/L	RWC	11/20/02	1425	70300
Chloride	218	mg/L	CME	11/21/02	1310	00940
Fluoride	1.3	mg/L	CME	11/21/02	1350	00951
Iron	0.079	mg/L	KMP	11/22/02	1600	01045
Manganese	<0.010	mg/L	KMP	11/22/02	1630	01055
Nitrates	1.1	mg/L	PDH	11/20/02	1640	00620
Sulfate	116.8	mg/L	WGK	11/22/02	0930	00945
Sodium	462	mg/L	TJM	12/2/02	1400	00929

Method Reference: Standard Methods for the Examination of Water and Wasetwater, 18th ed.

  
Paul Hughes  
Laboratory Manager

HOUSTON WELL SCREEN COMPANY  
SAND ANALYSIS II

For: RUSSELL DRILLING

Location: WATERSON ROAD WELL #2

Date: 10/04/02

DEPTH FEET	600	610	620	630	640	640	650	650	660	670	680	680	690	700	710	720	730	730	740	750	760	780	790	
GAUGE																								
0.0331	0	1	2	5	7	10	15	8	5	3	0	9												
0.0234	0	3	5	9	13	16	27	19	10	8	0	15												
0.0165	5	12	21	28	31	39	47	38	26	23	10	29												
0.0117	26	37	52	57	61	65	73	64	57	51	43	55												
0.0098	42	56	70	74	76	79	84	81	74	70	65	71												
0.0083	58	70	83	86	87	90	92	90	86	85	82	83												
0.0070	73	82	92	94	94	95	97	96	94	94	93	91												
0.0059	84	91	98	99	99	99	99	99	99	99	99	97												
0.0029	100	100	100	100	100	100	100	100	100	100	100	100												
PAN	100	100	100	100	100	100	100	100	100	100	100	100												

\*\*Values are in cumulative grams retained.

**HOUSTON WELL SCREEN COMPANY  
SAND ANALYSIS II**

For: RUSSELL DRILLING

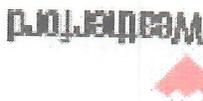
Date: 10/04/02

Location: WATERSON ROAD WELL #2

DEPTH FEET	600	610	620	630	640	640	650	650	660	670	680	680	690	700	700	710	720	720	730	730	740	750	750	760	760	780	780	
GAUGE																												
0.0331	0	1	2	5	7	10	15	8	5	3	0	9																
0.0234	0	3	5	9	13	16	27	19	10	8	0	15																
0.0165	5	12	21	28	31	39	47	38	26	23	10	29																
0.0117	26	37	52	57	61	65	73	64	57	51	43	55																
0.0098	42	56	70	74	76	79	84	81	74	70	65	71																
0.0083	58	70	83	86	87	90	92	90	86	85	82	83																
0.0070	73	82	92	94	94	95	97	96	94	94	93	91																
0.0059	84	91	98	99	99	99	99	99	99	99	99	97																
0.0029	100	100	100	100	100	100	100	100	100	100	100	100																
PAN	100	100	100	100	100	100	100	100	100	100	100	100																

\*\*Values are in cumulative grams retained.

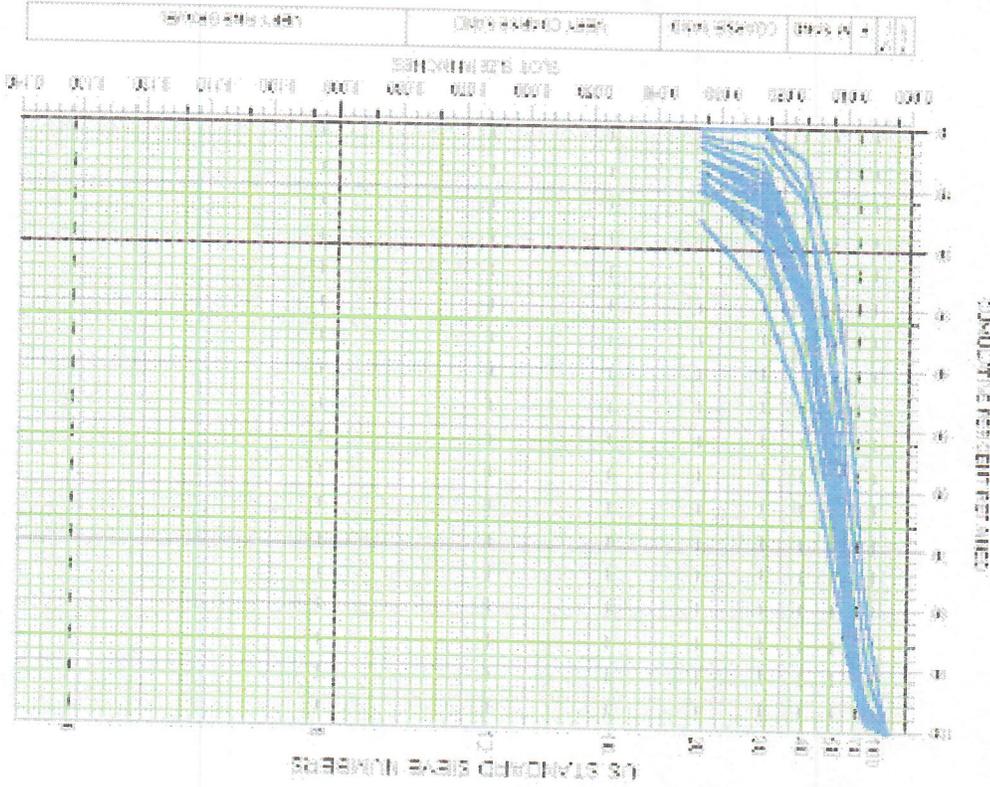
**Houston Well Screen**  
 11939 A BILTMOUTH RD.  
 HOUSTON, TEXAS 77061  
 800-237-7593  
 FAX: 281-442-0903



**SAND ANALYSIS PLOT**

DATE SAMPLE ANALYZED: \_\_\_\_\_  
 JOB NAME: \_\_\_\_\_  
 CITY: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_  
 SAMPLE NO.: \_\_\_\_\_  
 SCREEN SLOT SIZE (INCHES): \_\_\_\_\_  
 SCREEN SLOT SIZE (MILLIMETERS): \_\_\_\_\_  
 SCREEN SLOT SIZE (MESH): \_\_\_\_\_  
 GRAVEL PACK REQUIRED: \_\_\_\_\_

US SIEVE NUMBER	STANDARD SIEVE NUMBER	STANDARD SIEVE NUMBER	STANDARD SIEVE NUMBER
#10	1.675	1.675	1.675
#20	0.850	0.850	0.850
#40	0.425	0.425	0.425
#60	0.250	0.250	0.250
#80	0.188	0.188	0.188
#100	0.150	0.150	0.150
#200	0.075	0.075	0.075
#400	0.0375	0.0375	0.0375
#600	0.025	0.025	0.025
#800	0.0188	0.0188	0.0188
#1000	0.015	0.015	0.015



STANDARD SIEVE NUMBERS

**Houston Well Service**  
 11930 Ashland Way, Houston, TX 77060  
 800-237-7595  
 FAX: 281-442-0883

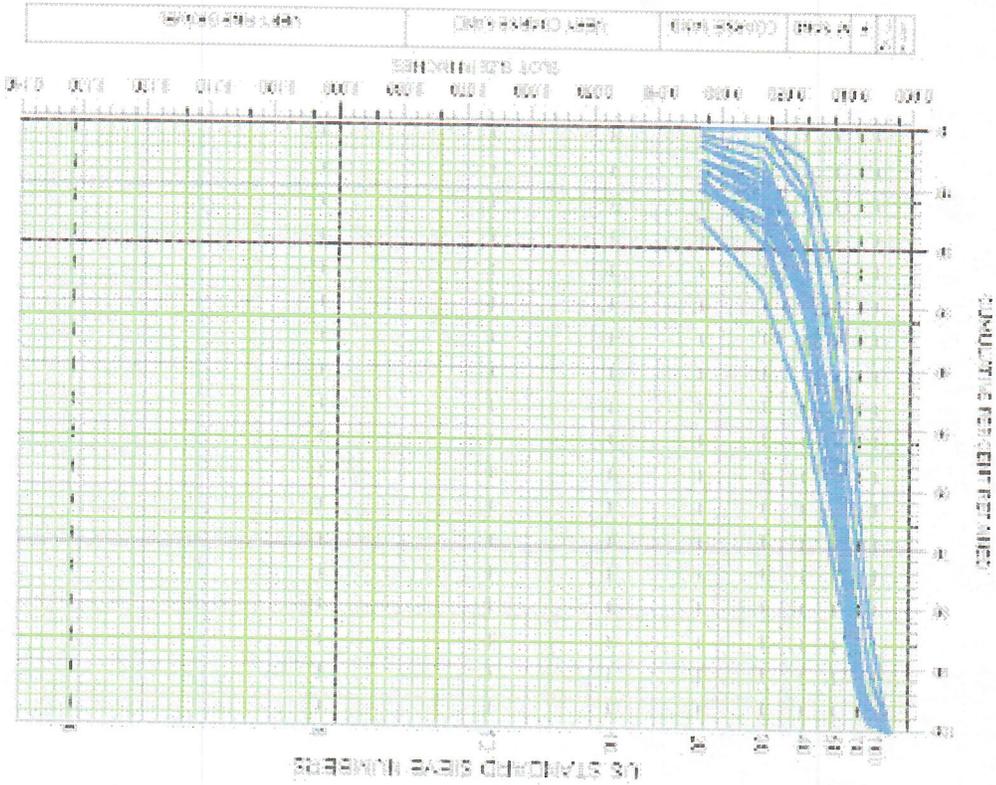


**SAND ANALYSIS PLOT**

DATE SAMPLE ANALYZED: \_\_\_\_\_  
 JOB NAME: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_  
 CONTRACTOR: RUSSELL DRILLING CO., INC.  
 SAMPLE NO: \_\_\_\_\_  
 SCREEN SLOT SIZE (INCHES): \_\_\_\_\_  
 SCREEN SLOT SIZE (MILLIMETERS): \_\_\_\_\_  
 GRAVEL PACK BEING DRILLED: \_\_\_\_\_

US SIEVE NUMBER	SLOT SIZE (INCHES)	PERCENT RETAINED	ADJUSTED
#20	0.075	0.000	0.000
#40	0.0375	0.000	0.000
#60	0.025	0.000	0.000
#80	0.01875	0.000	0.000
#100	0.015	0.000	0.000
#120	0.0125	0.000	0.000
#140	0.010625	0.000	0.000
#160	0.009375	0.000	0.000
#180	0.008333	0.000	0.000
#200	0.0075	0.000	0.000
#250	0.006	0.000	0.000
#300	0.005	0.000	0.000
#400	0.00375	0.000	0.000
#500	0.003	0.000	0.000
#600	0.0025	0.000	0.000
#750	0.002	0.000	0.000
#1000	0.0015	0.000	0.000

FOR A COMPLETE LIST OF STANDARD SIEVE SIZES AND APERTURES, REFER TO ASTM D 4751.



**HOUSTON WELL SCREEN COMPANY  
SAND ANALYSIS II**

For: RUSSELL DRILLING

Date: 10/04/02

Location: WATERSON ROAD WELL #2

DEPTH FEET	800	810	820	830														
GAUGE																		
0.0331	3	7	7	5														
0.0234	7	12	12	11														
0.0165	22	28	28	29														
0.0117	52	61	61	59														
0.0098	70	73	73	74														
0.0083	83	82	82	84														
0.0070	92	91	91	92														
0.0059	98	97	97	96														
0.0029	100	99	99	98														
PAN	100	100	100	100														

Y:\excel\sandana.xls Values are in cumulative grams retained.

**HOUSTON WELL SCREEN COMPANY  
SAND ANALYSIS II**

**For: RUSSELL DRILLING**

**Location: WATERSON ROAD WELL #2**

**Date: 10/04/02**

DEPTH FEET	800	810	820	830														
<b>GAUGE</b>																		
0.0331	3	7	5															
0.0234	7	12	11															
0.0165	22	28	29															
0.0117	52	61	59															
0.0098	70	73	74															
0.0083	83	82	84															
0.0070	92	91	92															
0.0059	98	97	96															
0.0029	100	99	98															
PAN	100	100	100															

Y:\excel\sandana.xls Values are in cumulative grams retained.

# Tepco Logging Inc.

LECTRI

CO. Aqua WSC	COMPANY Aqua WSC
WELL Watterson Rd 2	WELL Watterson Rd 2
FLD	FIELD
CTY Bastrop	COUNTY Bastrop
STATE Texas	STATE
FILING NO	FILING NO
PERMANENT DATUM	SEC TWP RGE ELEVATION 497

LOCATION:

SEC	TWP	RGE	ELEVATION 497
-----	-----	-----	---------------

LOG MEAS. FROM 9 1 FT. ABOVE PERM DAT

DRILLING MEASURED FROM	9 1
DATE	9-27-02
RUN NO. DIV	1
TYPE LOG	sp gr res
DEPTH-DRILLER	830
DEPTH-LOGGER	830
BIM LOGGED INTERVAL	
TOP LOGGED INTERVAL	
TYPE FLUID IN HOLE	gel
SALINITY	
DENSITY	9.0
LEVEL	full
MAX. REC. TEMP. DEG F.	
OPERATING RIG TIME	1 1/2 hr
RECORDED BY	T Russell
WITNESSED BY	R. Morris

RUN NO.	BOREHOLE RECORD		SIZE	WGT.
	BIT	FROM TO		
1	7 7/8	0 830		

C LOG

ATE TEXAS

OTHER SERVICES

K.B.

D.F.

G.L.

LOG RECORD

FROM TO

EQUIPMENT DATA

SP

RESISTIVITY

RUN NO.		RUN NO.	
TOOL MODEL NO.		LOG TYPE	
DIAMETER		TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	
TYPE		DETECTOR MODEL NO.	
LENGTH		TYPE	
DISTANCE TO N. SOURCE		LENGTH	
		SOURCE MODEL NO.	
GENERAL		SERIAL NO.	
HOIST TRUCK NO.		SPACING	
INSTRUMENT TRUCK NO.		TYPE	
TOOL SERIAL NO.		STRENGTH	

LOGGING DATA

GENERAL

SP

RESISTIVITY

RUN NO.	DEPTHS		SPEED FT/MIN	T. C. SEC.	SENS. SETTINGS	ZERO L OR R	API SP UNITS PER LOG DIV	T. C. SEC.	SENS. SETTINGS	ZERO L OR R	API RES UNITS PER LOG DIV
	FROM	TO									

REFERENCE LITERATURE : N 29-59.67 W 97-22.08

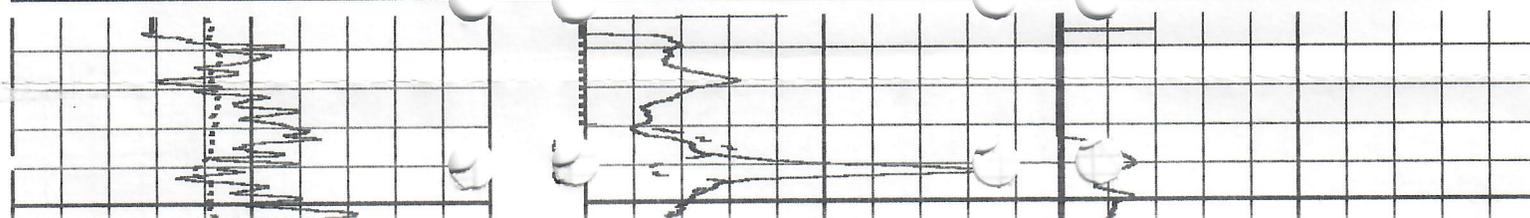
REMARKS Test hole on Watterson Rd.

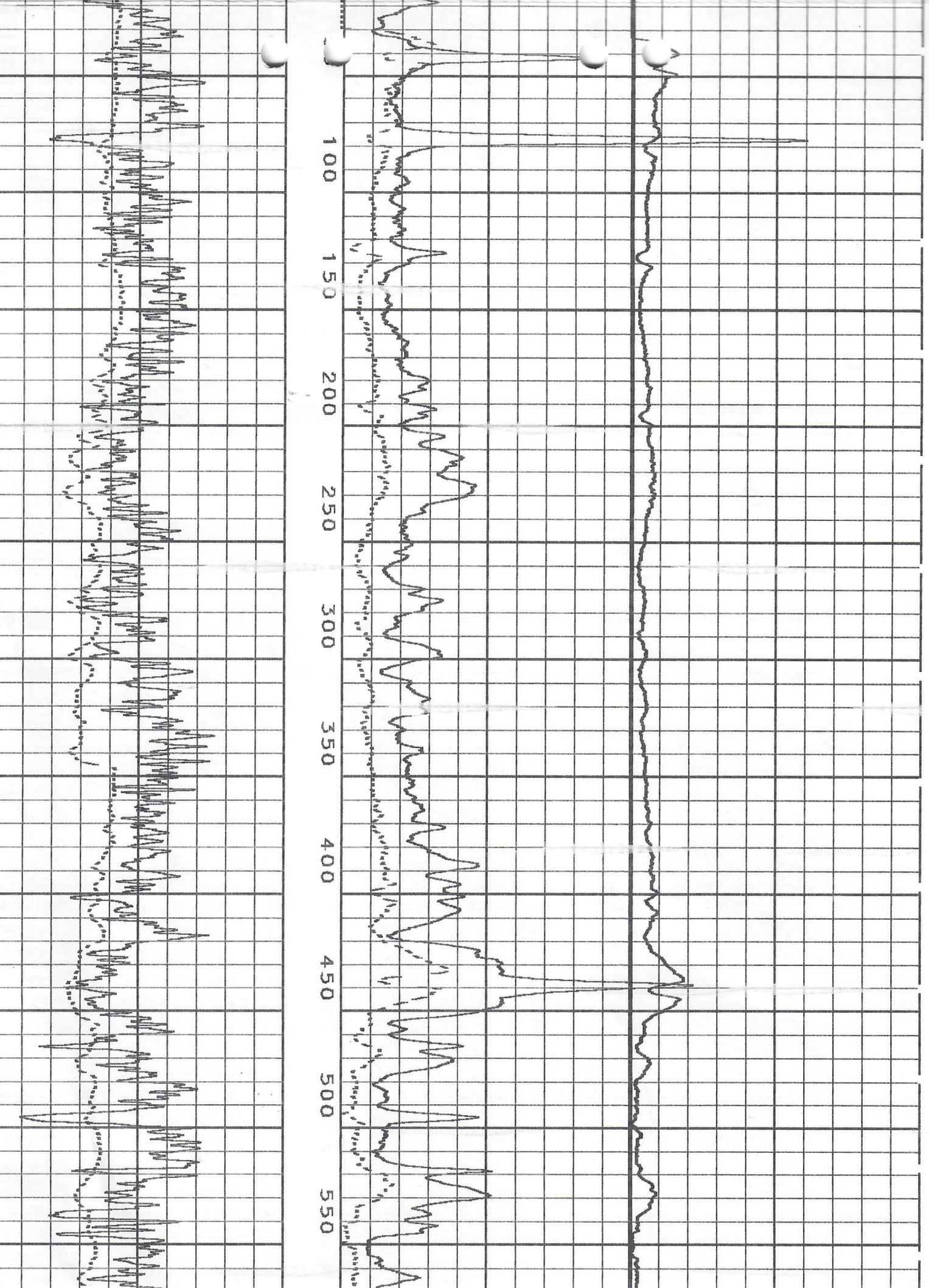
CHART SCALING			CHART SCALING		
0.00	SP	100.00	0.00	SN	100.00
	MVS			OHMS/M	
0.00	GR	100.00	0.00	LN	100.00
	CPS			OHMS/M	
			0.00	LN2	100.00
				OHMS/M	

STOP : 5.48

DEPTHS Fri Sep 27 11:33:55 2002

LOG UP





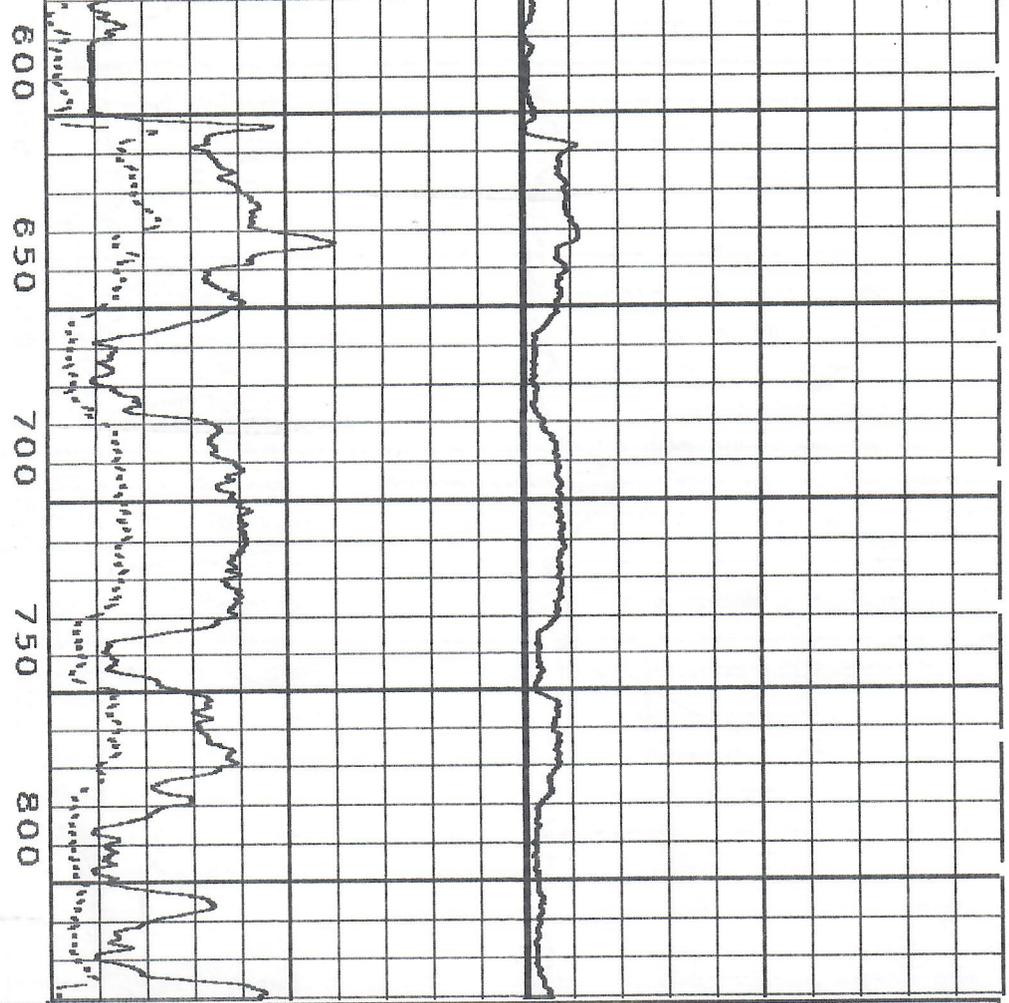
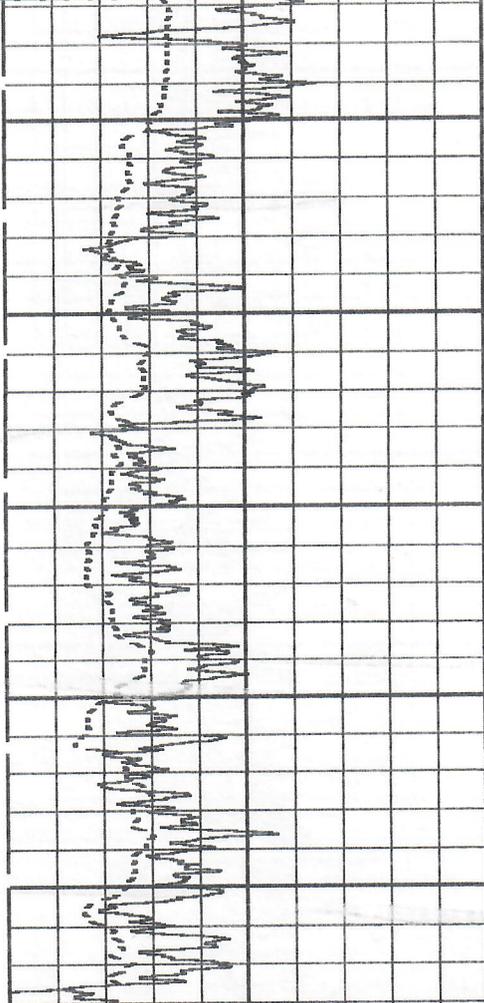


CHART SCALING		
0.00	SP	100.00
-----		
	MVS	
0.00	GR	100.00
-----		
	CPS	

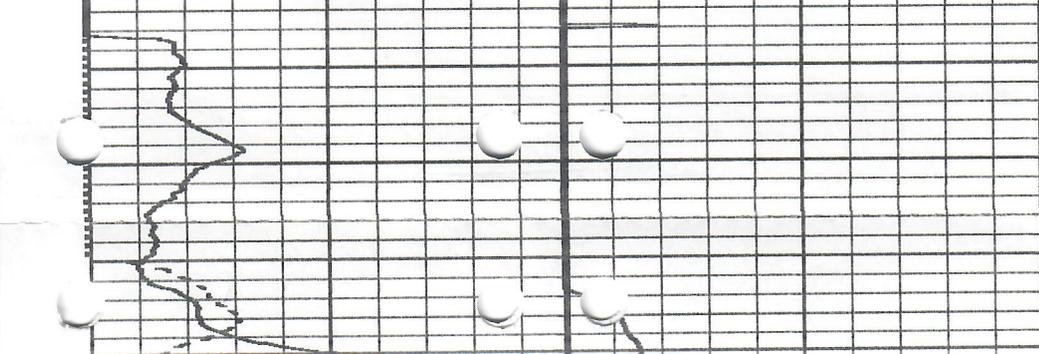
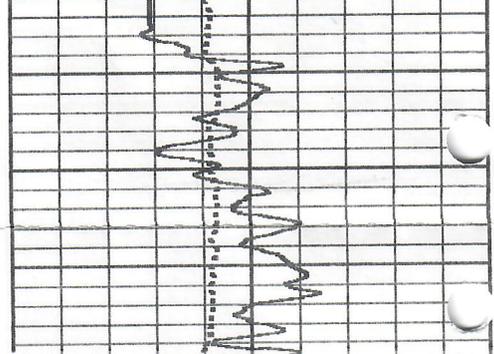
CHART SCALING		
0.00	SN	100.00
-----		
	OHMS/M	
0.00	LN	100.00
-----		
	OHMS/M	
0.00	LN2	100.00
-----		
	OHMS/M	

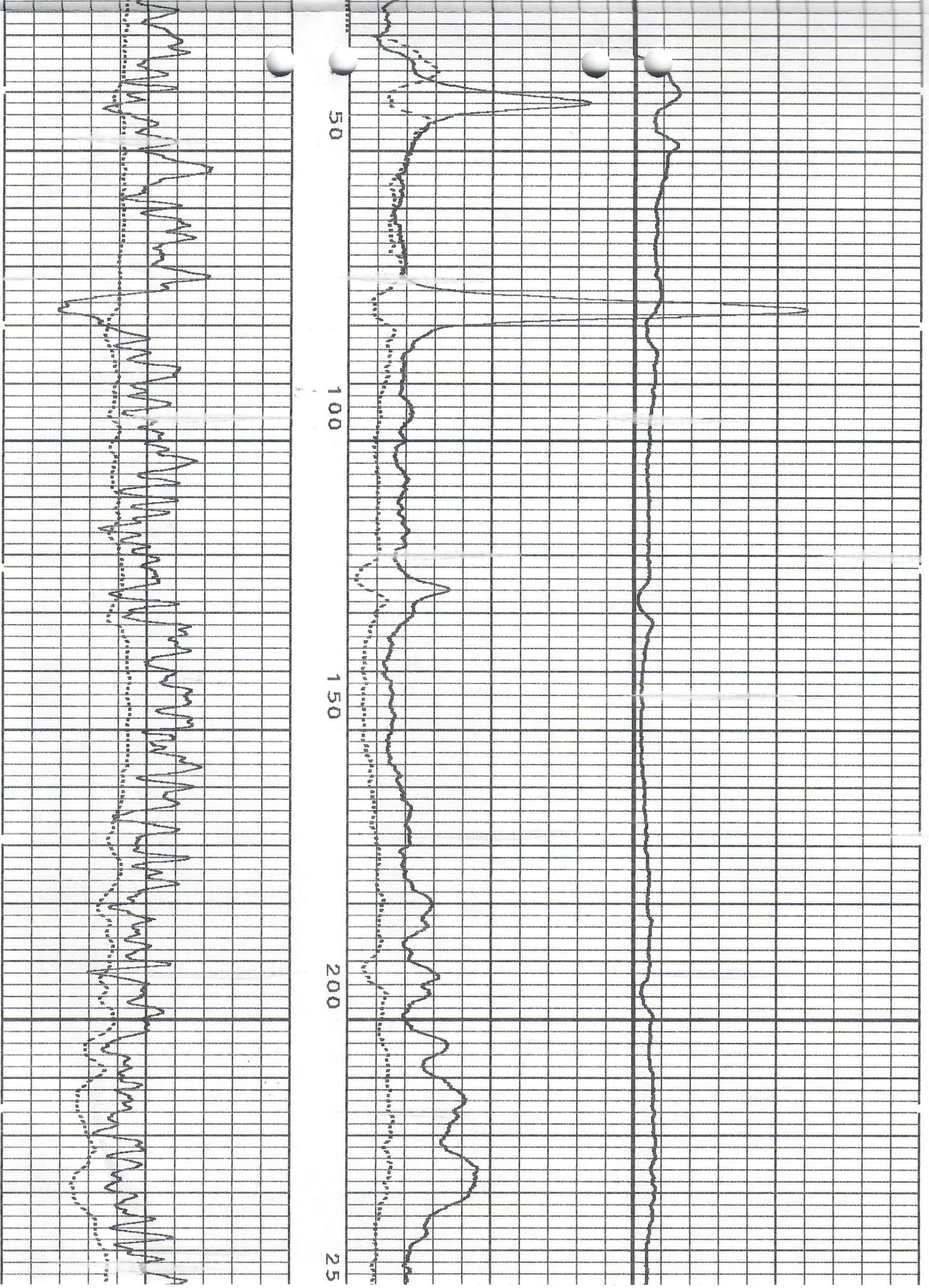
START DEPTH: 830.68      DEPTHS      Fri Sep 27 11:13:00 2002      LOG      UP

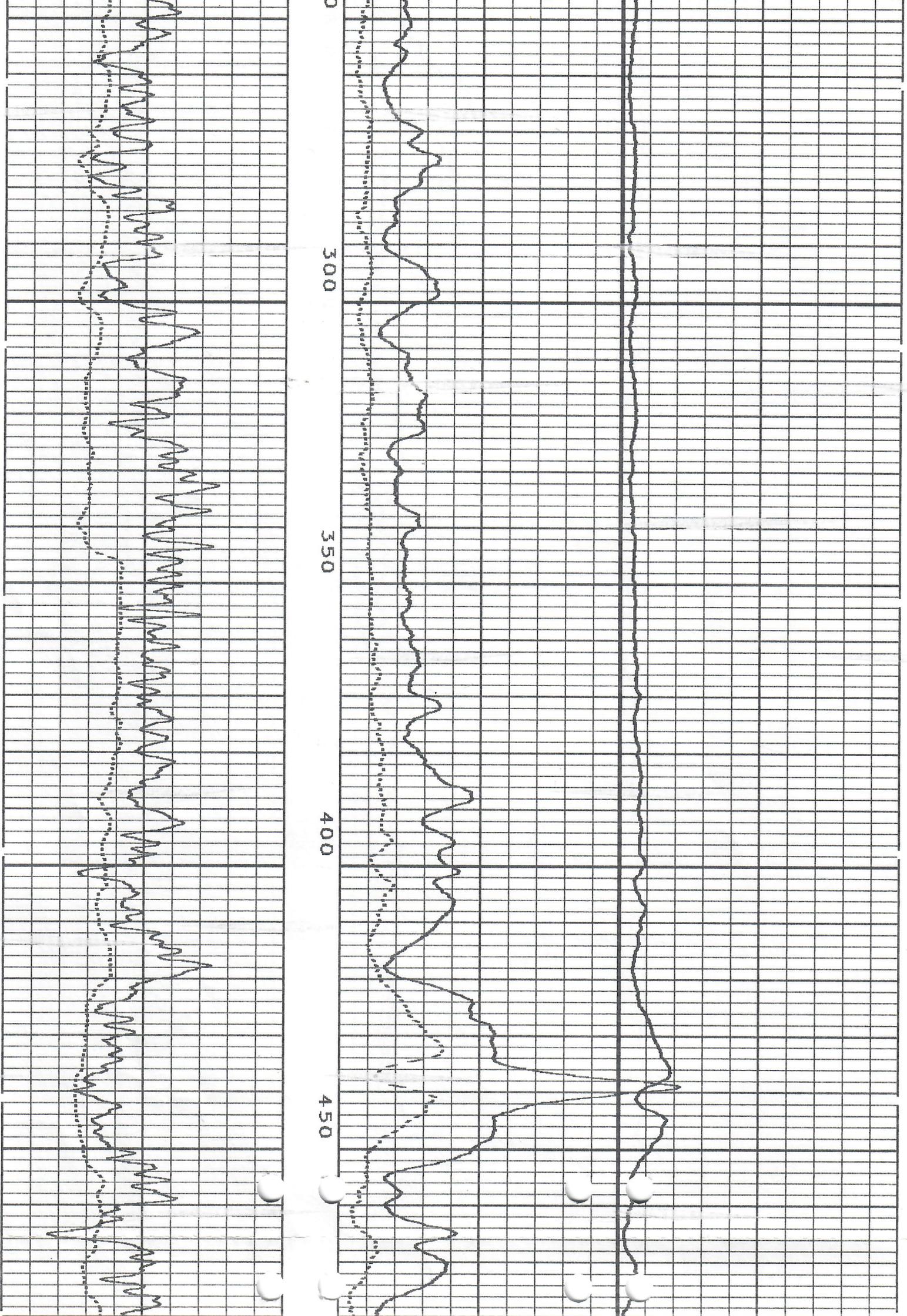
CHART SCALING		
0.00	SP	100.00
-----		
	MVS	
0.00	GR	100.00
-----		
	CPS	

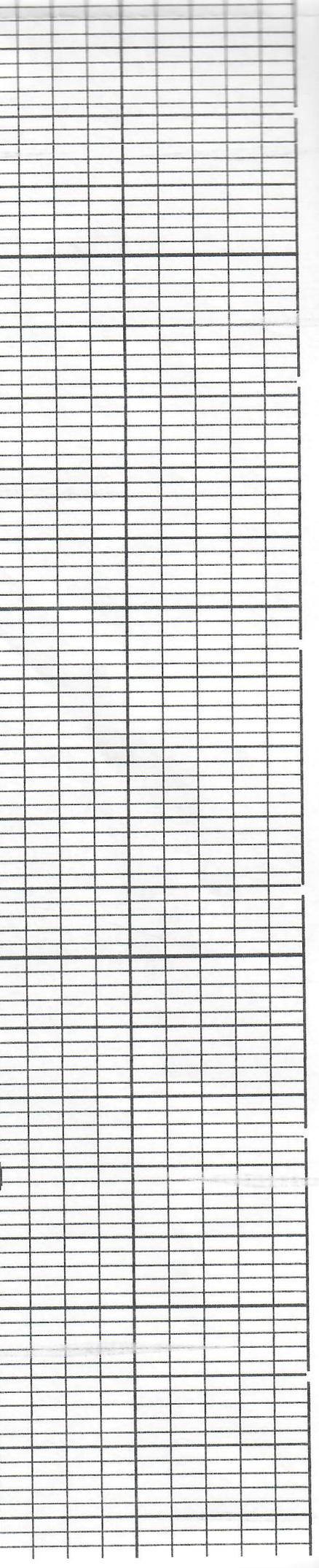
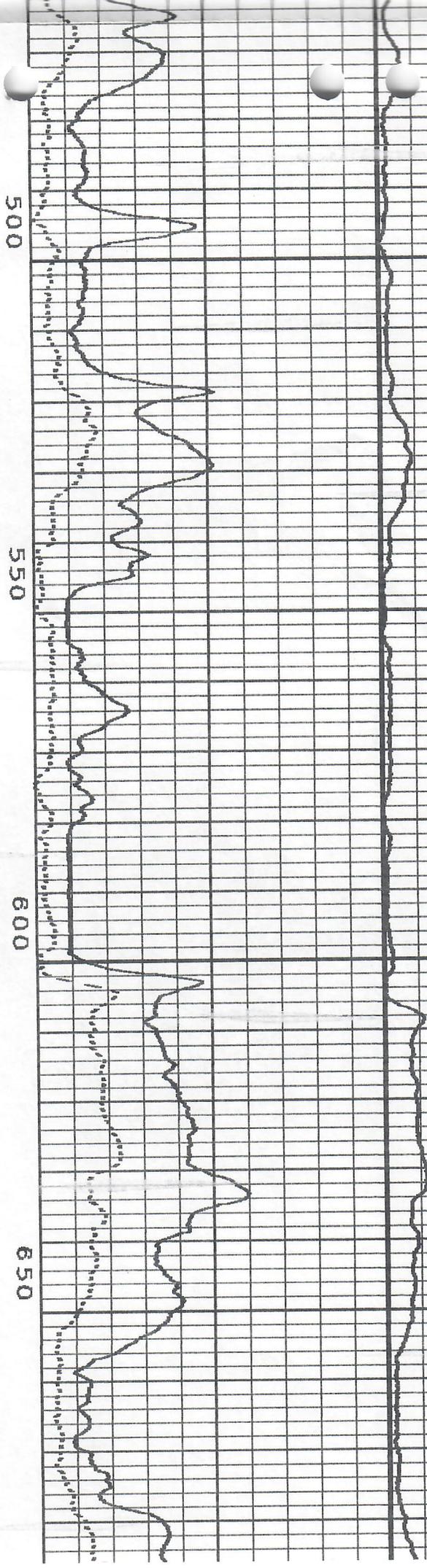
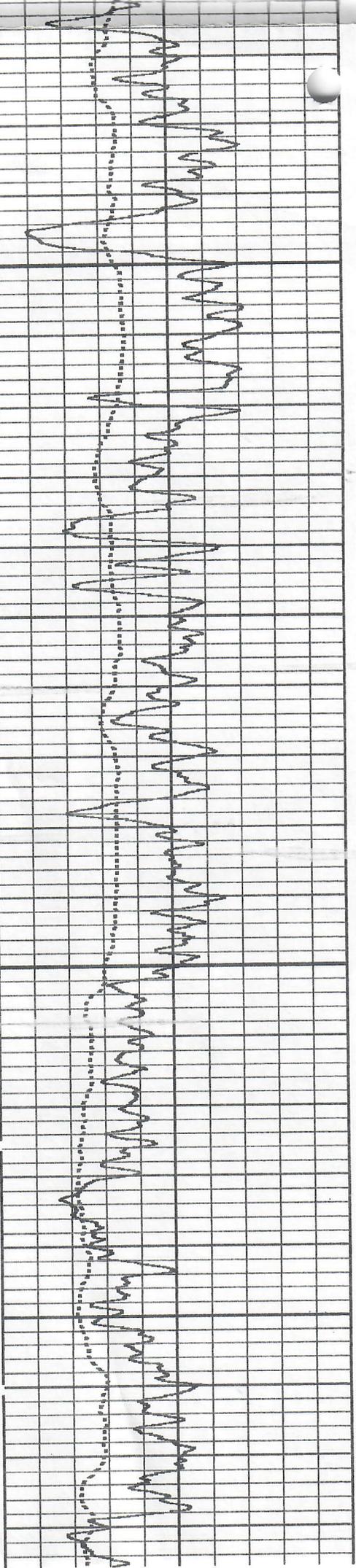
CHART SCALING		
0.00	SN	100.00
-----		
	OHMS/M	
0.00	LN	100.00
-----		
	OHMS/M	
0.00	LN2	100.00
-----		
	OHMS/M	

STOP : 5.48      DEPTHS      Fri Sep 27 11:33:55 2002      LOG      UP









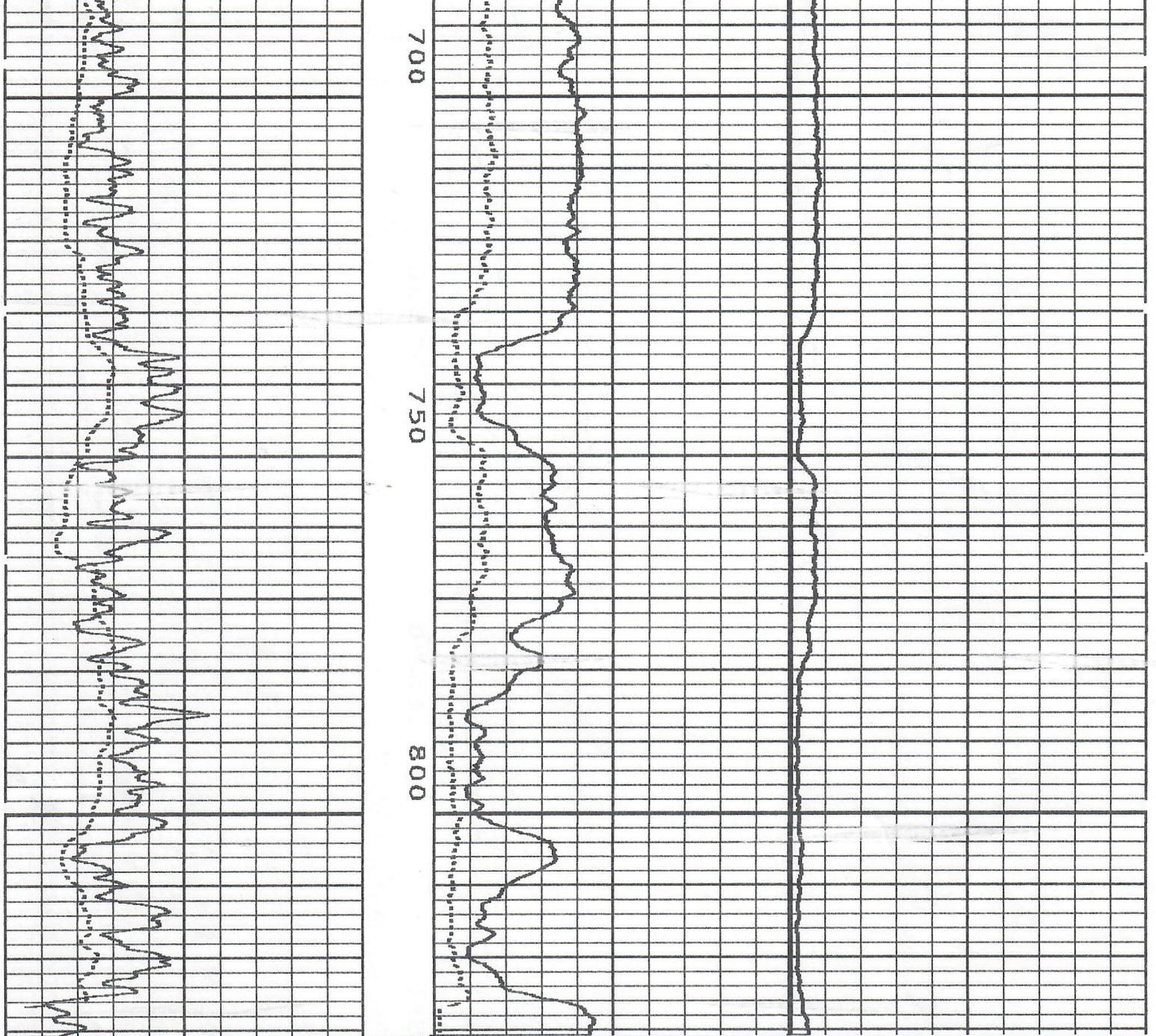


CHART SCALING		
0.00	SP	100.00
-----		
	MVS	
0.00	GR	100.00
-----		
	CPS	

CHART SCALING		
0.00	SN	100.00
-----		
	OHMS/M	
0.00	LN	100.00
-----		
	OHMS/M	
0.00	LN2	100.00
-----		
	OHMS/M	

START DEPTH: 830.68      DEPTHS      Fri Sep 27 11:13:00 2002      LOG      UP