Report: **Well Logs from J Luke's archives**

Well	**Log Name**	**Date**	**Depths**	
			Bottom	Top
DF-1	Digital BHC Sonic, Caliper - Gamma Ray	10/07/1993	2630	0930
	Fluid Properties	10/05/1993	2737	0920
	Phasor Induction - SFL, Gamma Ray	10/05/1993	2737	0920
	High Resolution Temperature	10/07/1993	2650	0920
	Fullbore Spinner Survey	10/07/1993	2650	0920
	Litho Density Compensated Neutron	10/08/1993	1950	0920

COUNTY	DADE
FIELD	NORTHWEST L-31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF No. 1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

Schlumberger

DIGITAL BHC SONIC
CALIPER - GAMMA RAY

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.		
WELL	SFWMD DF No. 1		
FIELD	NORTHWEST L-31 CANAL		
COUNTY	DADE	**STATE**	FLORIDA

LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			**Other Services:** LDT/CNL DIL CALIPER FLOWMETER TEMP AMS
API SERIAL NO. N/A	**SECT.** --	**TWP.** --	**RANGE** --	

Permanent Datum	GROUND LEVEL	**Elev.** 15.0 F		**Elev.: K.B.**24.5 F
Log Measured From	KELLY BUSHING	9.5 F	**above Perm. Datum**	**D.F.**23.5 F
Drilling Measured From	KELLY BUSHING			**G.L.**15.0 F

Date	07-OCT-1993					
Run No.	ONE					
Depth Driller	2743.0 F					
Depth Logger (Schl.)	2743.0 F					
Btm. Log Interval	2630.0 F					
Top Log Interval	920.0 F					
Casing-Driller	12"	@ 920.0 F		@		@
Casing-Logger	920.0 F					
Bit Size	8 3/4"	@		@		@
Type Fluid in Hole	SALT H20 & MUD					
Dens. | **Visc.**	9.30 LB/G	35.0 S				
pH | **Fld. Loss**						
Source of Sample	CIRC. TANK					
Rm @ Meas. Temp.	3.420 OHMM	@ 82.0 DEGF		@		
Rmf @ Meas. Temp.	.840 OHMM	@ 85.0 DEGF		@		
Rmc @ Meas. Temp.		@		@		
Source: Rmf | **Rmc**	MEASURED	NONE				
Rm @ BHT	4.348 OHMM	@ 63.0 DEGF		@		
TIME **Circulation Ended**	11:00 10/05/93					
TIME **Logger on Bottom**	9:00 10/07/93					
Max. Rec. Temp.	63.0 DEGF					
Equip. | **Location**	8170	NATCHEZ, MS.				
Recorded By	BLIZNIK/JONES					
Witnessed By	JOHN LUKASIEWICZ					

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

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 interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	ONE				
Service Order No.	607441				
Drilling Fluid Level					
Salinity	20000.0 PPM				
Rmf @ BHT	1.104 OHMM	@	63.0 DEGF		@
Rmc @ BHT		@	63.0 DEGF		@
Logging Speed	5000.0 F/HR				
EQUIPMENT DATA					
Tool Number 1	SLS 1684				
Tool Number 2	SDC 622				
Tool Number 3	MCDG 3807				
Tool Number 4	SGT				
Tool Number 5	TCC				
Tool Number 6	-				
Tool Number 7					
Tool Number 8					
Tool Number 9					
Tool Number 10					
Tool Number 11					
Tool Number 12					

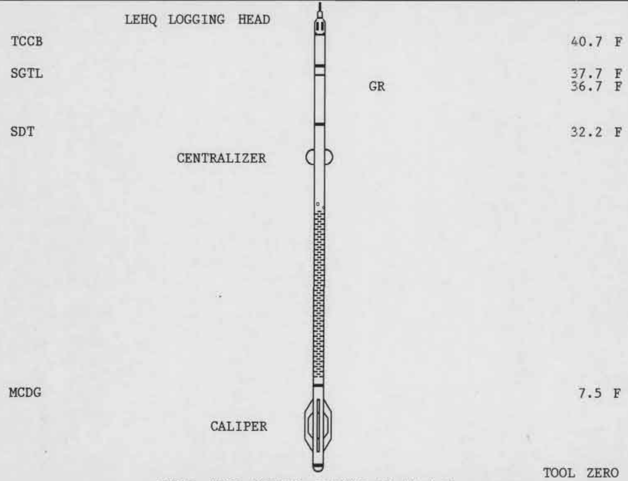
REMARKS:

THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN

TD NOT FULLY REACHED GOT STUCK ON BOTTOM.

LOG WAS LOGGING TLC WITH DRILL PIPE AS WE CAME OUT OF
HOLE WITH THE FISHING TOOL ATTACHED TO OUR TOOL STRING
LOG LOSES ABOUT 2' THOUGHOUT THE PASS.

LOGGING TOOL STRING SKETCH



TOTAL TOOL STRING LENGTH IS 44.2 F.
TOTAL TOOL STRING WEIGHT IS 587. LB IN AIR.

PIPE CONNECTION SUMMARY

#	DEPTH	TIME	#	DEPTH	TIME
1	2629.0 F	07-OCT-1993 09:23	2	1794.5 F	07-OCT-1993 10:46
3	1733.0 F	07-OCT-1993 10:50	4	1610.0 F	07-OCT-1993 11:04
5	1547.5 F	07-OCT-1993 11:07	6	1360.0 F	07-OCT-1993 11:19
7	923.5 F	07-OCT-1993 12:06			

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume:	1402.85 F3	FROM 2629.50 F	TO 920.000 F
Integrated Transit Time:	.178650 S	FROM 2629.50 F	TO 920.000 F
USFC:	6.00000	FROM 2629.50 F	TO 895.500 F

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Transit Time	.00100000 S	RIGHT EDGE
USFC	1.00000	LEFT EDGE

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
DTM	47.6000	US/F	2568.0				

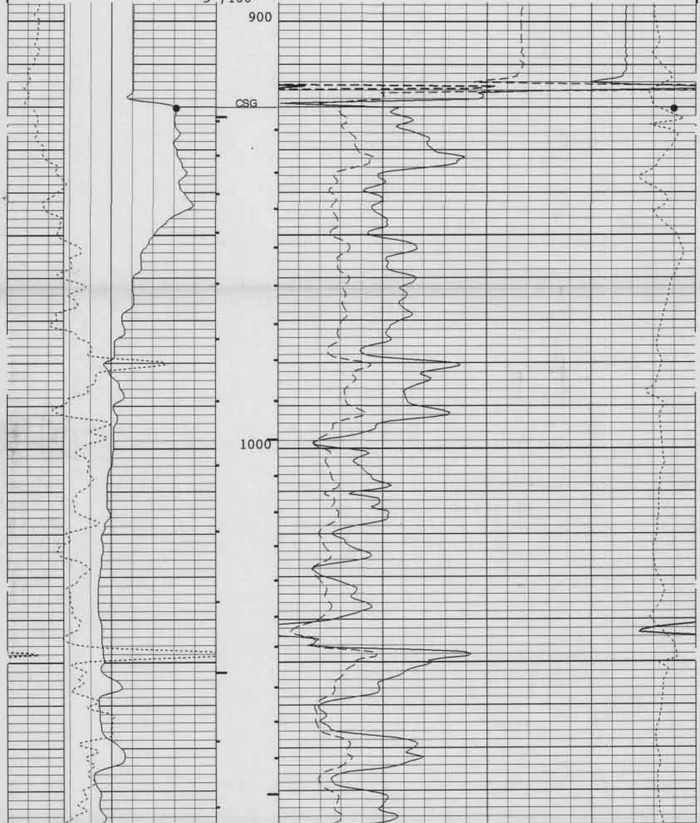
BS(IN)
6.0000 16.000
HD(IN)
6.0000 16.000
GR(GAPI)
0.0 150.00

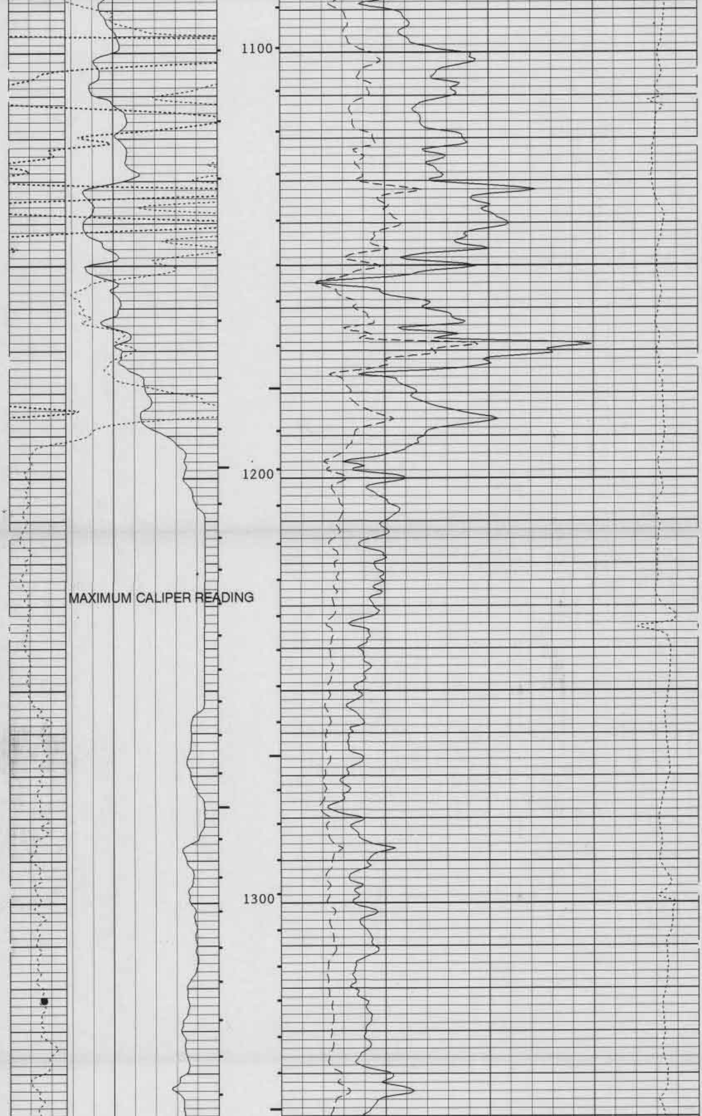
TENS(LBF)
10000. 0.0
SPHI(V/V)
.45000 -.1500
DT(US/F)
140.00 40.000

WASHOUT

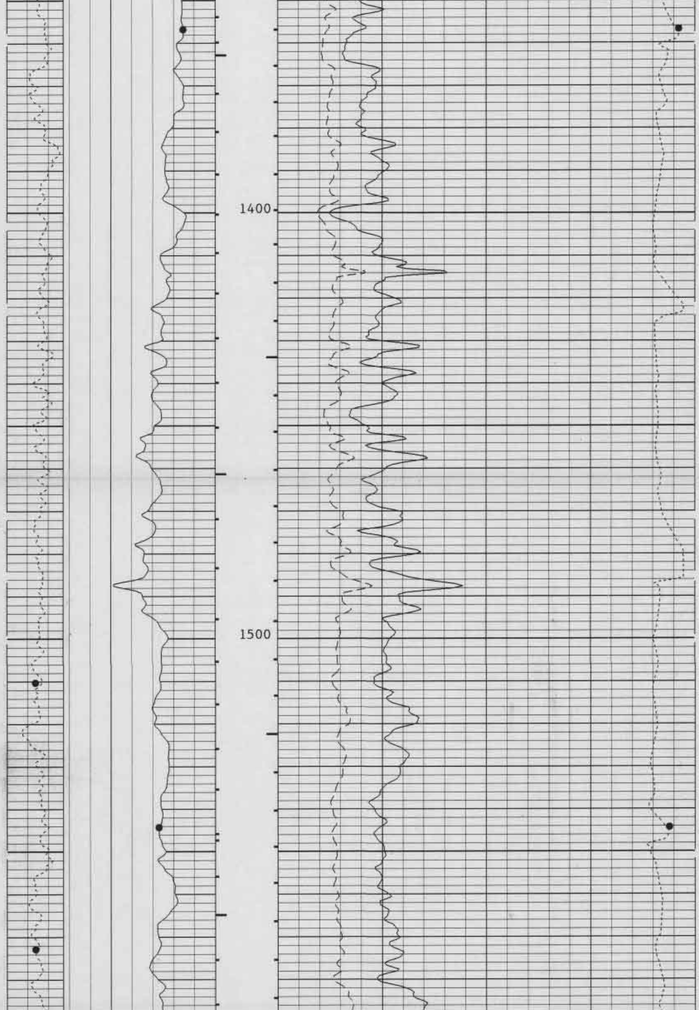
```
CP 38.2            FILE   12       07-OCT-1993 12:58

                   INPUT FILE(S)   CREATION DATE
                        3          07-OCT-1993 09:19
```

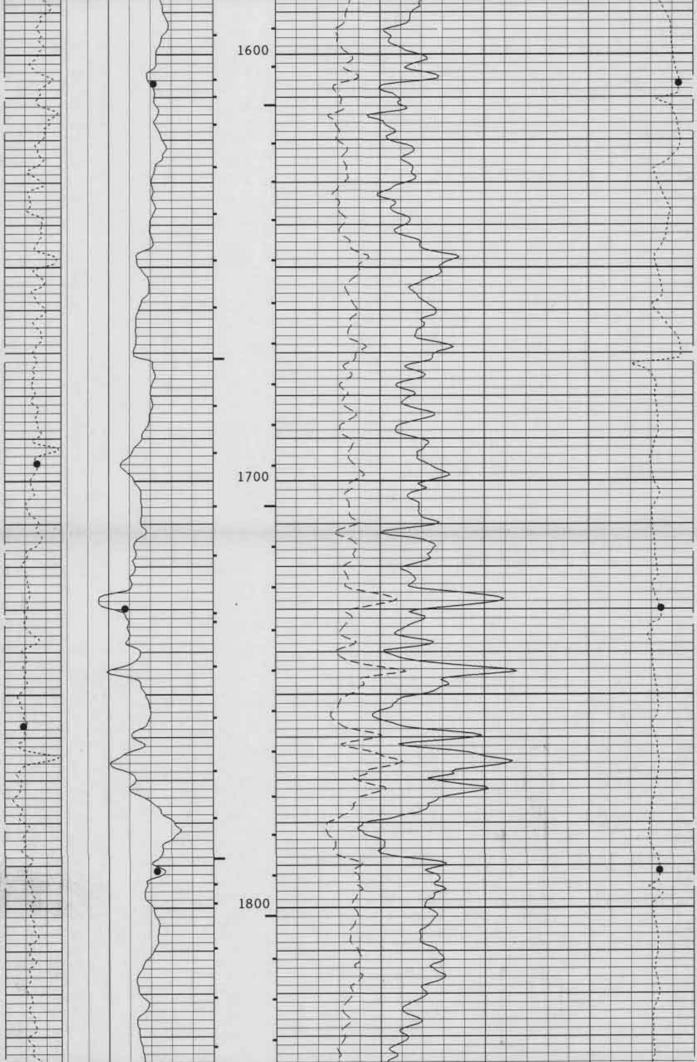
5"/100'

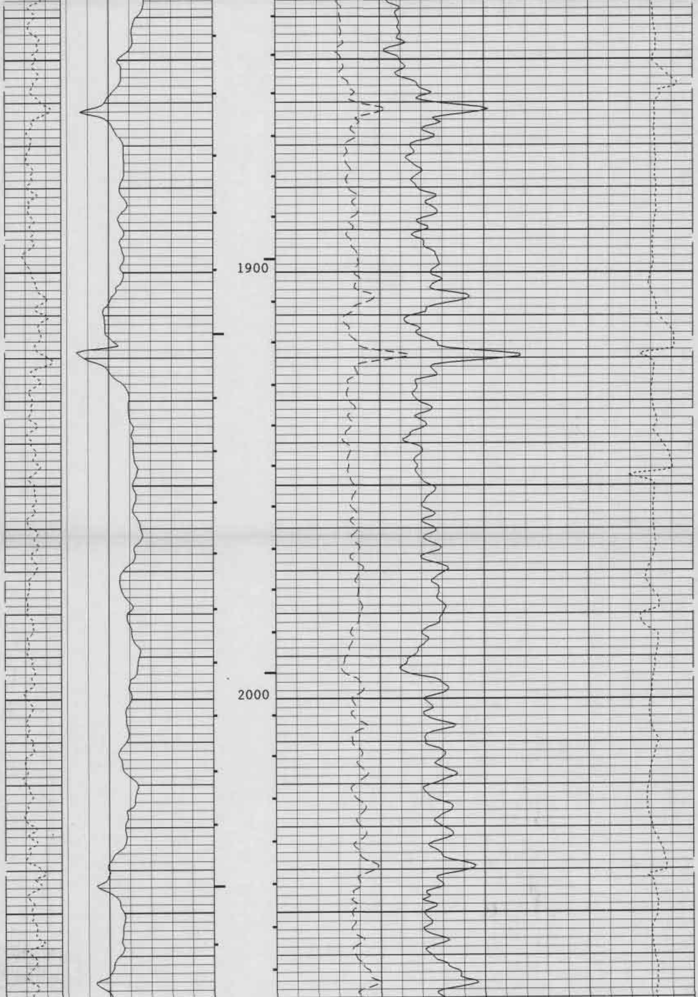


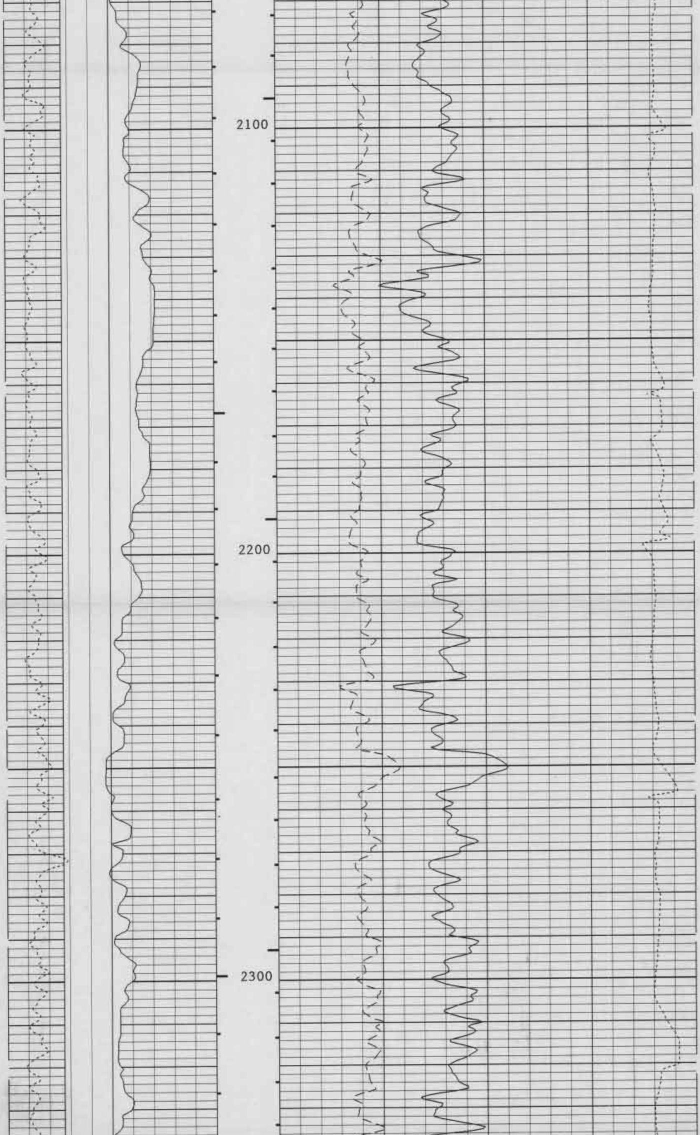


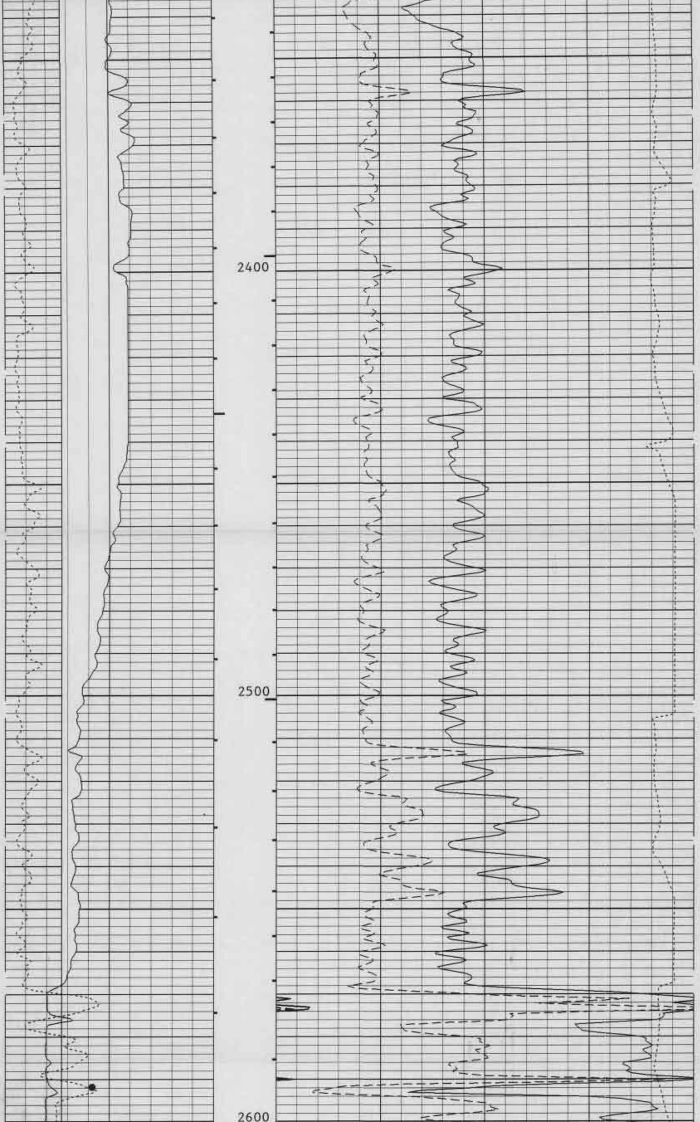
MAXIMUM CALIPER READING

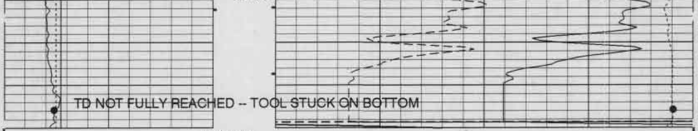












5"/100'

CP 38.2 FILE 12 07-OCT-1993 12:35

INPUT FILE(S) 3 CREATION DATE 07-OCT-1993 09:19

WASHOUT

BS(IN)	6.0000	16.000
HD(IN)	6.0000	16.000
GR(GAPI)	0.0	150.00
TENS(LBF)	10000.	0.0
SPHI(V/V)	.45000	-.1500
DT(US/F)	140.00	40.000

SENSOR MEASURE POINT TO TOOL ZERO

GR	36.7	FEET	HD	3.0	FEET
TT3	11.9	FEET	TT4	10.9	FEET
TT1	14.7	FEET	TT2	15.7	FEET
TENS	3.0	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SMB	DISA		VDLR	2IN	
PP	NORM		DO	14.5000	F
FCD	4.00000	IN	FNUM	.620000	
FEXP	2.15000		FPHI	SPHI	
TOCA	ALLO		MODE	BHC	
DETE	E2		MGAI	4000.00	
AGC	ALLO		SLEV	5000.00	MV
GAI	40.0000		SFAF	0.0	DB/F
SGAD	ALLO		SGW	80	US
NMSG	180	US	SGDT	50	US/F
DTCM	NORM		SLC	C	
SLS	WA		SPLE	0	IN
RATE	15	HZ	SOAD	AUTO	
DDEL	0	US	DSIN	10	US
DWCO	500		RMOD	B	
WMOD	BHC		WAGC	ALLO	
WGDT	240.000	US/F	WGAI	20.0000	
ITTS	DT		SPSO	DT	
SPFS	R-H		DTM	38.4000	US/F
SVS	DT		NCJT	GSRY	
AOFF	0.0		BS	8.75000	IN
BHS	OPEN				

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.		**SCHL.**	**FR**	2630.0 F
			SCHL.	**TD**	2743.0 F
WELL	SFWMD DF No. 1		**DRLR.**	**TD**	2743.0 F
			Elev:	**KB**	24.5 F
FIELD	NORTHWEST L-31 CANAL			**DF**	23.5 F
COUNTY	DADE	**STATE** FLORIDA		**GL**	15.0 F

Schlumberger

DIGITAL BHC SONIC
CALIPER - GAMMA RAY

COUNTY	DADE
FIELD	NORTHWEST L-31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF No. 1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

Schlumberger

FLUID PROPERTIES LOG

COMPANY SOUTH FLORIDA WATER MANAGEMENT DIST.

WELL SFWMD DF No. 1

FIELD NORTHWEST L-31 CANAL

COUNTY DADE **STATE** FLORIDA

LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			**Other Services:** LDT/CNL BHC SONIC CALIPER FLOWMETER TEMP AMS
API SERIAL NO.	**SECT.**	**TWP.**	**RANGE**	
N/A	--	--	--	

Permanent Datum	GROUND LEVEL	**Elev.**	15.0 F	**Elev.: K.B.**24.5 F
Log Measured From	KELLY BUSHING	9.5 F	**above Perm. Datum**	**D.F.**23.5 F
Drilling Measured From	KELLY BUSHING			**G.L.**15.0 F

Date		05-OCT-1993					
Run No.		ONE					
Depth Driller		2743.0 F					
Depth Logger (Schl.)		2743.0 F					
Btm. Log Interval		2737.0 F					
Top Log Interval		920.0 F					
Casing-Driller		12"	@ 920.0 F		@		@
Casing-Logger		920.0 F					
Bit Size		8 3/4"	@		@		@
Type Fluid in Hole		SALT H20 & MUD					
Dens.	**Visc.**	9.30 LB/G	35.0 S				
pH	**Fld. Loss**						
Source of Sample		CIRC. TANK					
Rm @ Meas. Temp.		3.420 OHMM	@ 82.0 DEGF		@		
Rmf @ Meas. Temp.		.840 OHMM	@ 85.0 DEGF		@		
Rmc @ Meas. Temp.			@		@		
Source: Rmf	**Rmc**	MEASURED	NONE				
Rm @ BHT		4.348 OHMM	@ 63.0 DEGF		@		
TIME	**Circulation Ended**	11:00 10/05/93					
	Logger on Bottom	11:30 10/05/93					
Max. Rec. Temp.		63.0 DEGF					
Equip.	**Location**	8170	NATCHEZ, MS.				
Recorded By		BLIZNIK/JONES					
Witnessed By		JOHN LUKASIEWICZ					

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

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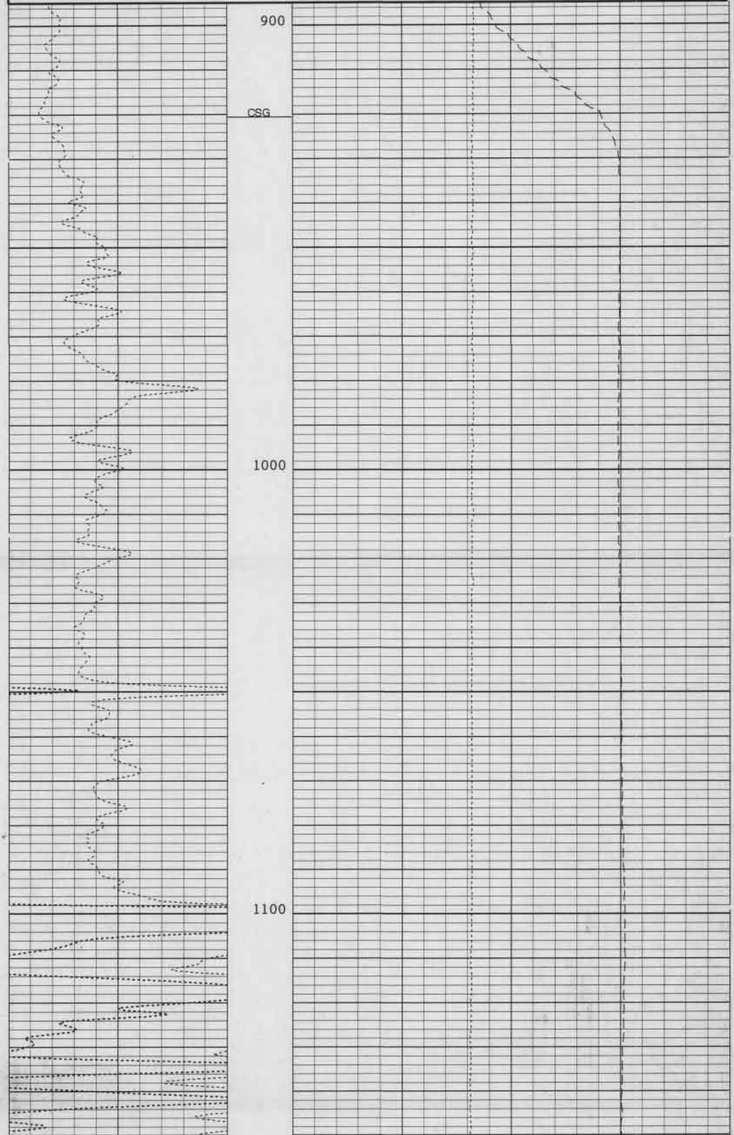
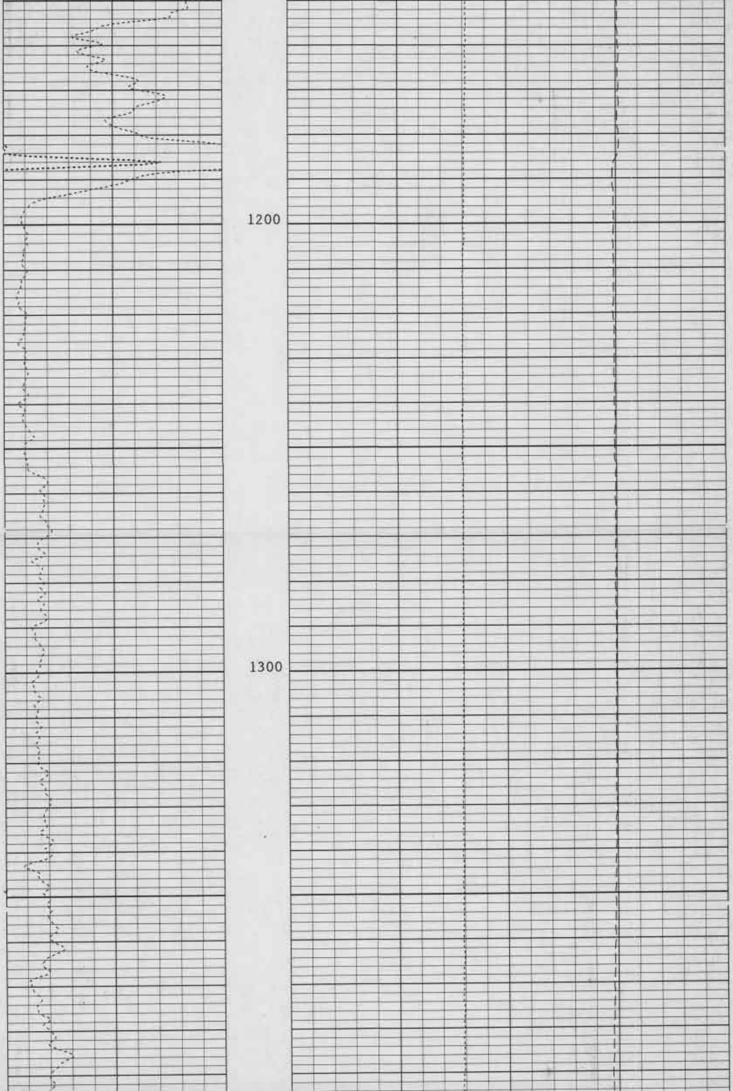
Run No.	ONE			
Service Order No.	607441			
Drilling Fluid Level				
Salinity	20000.0 PPM			
Rmf @ BHT	1.104 OHMM	@	63.0 DEGF	@
Rmc @ BHT		@	63.0 DEGF	@
Logging Speed	5000.0 F/HR			
EQUIPMENT DATA				
Tool Number 1	DIS 484			
Tool Number 2	DIC 480			
Tool Number 3	SGT			
Tool Number 4	TCC			
Tool Number 5	AMS			
Tool Number 6	-			
Tool Number 7				
Tool Number 8				
Tool Number 9				
Tool Number 10				
Tool Number 11				
Tool Number 12				

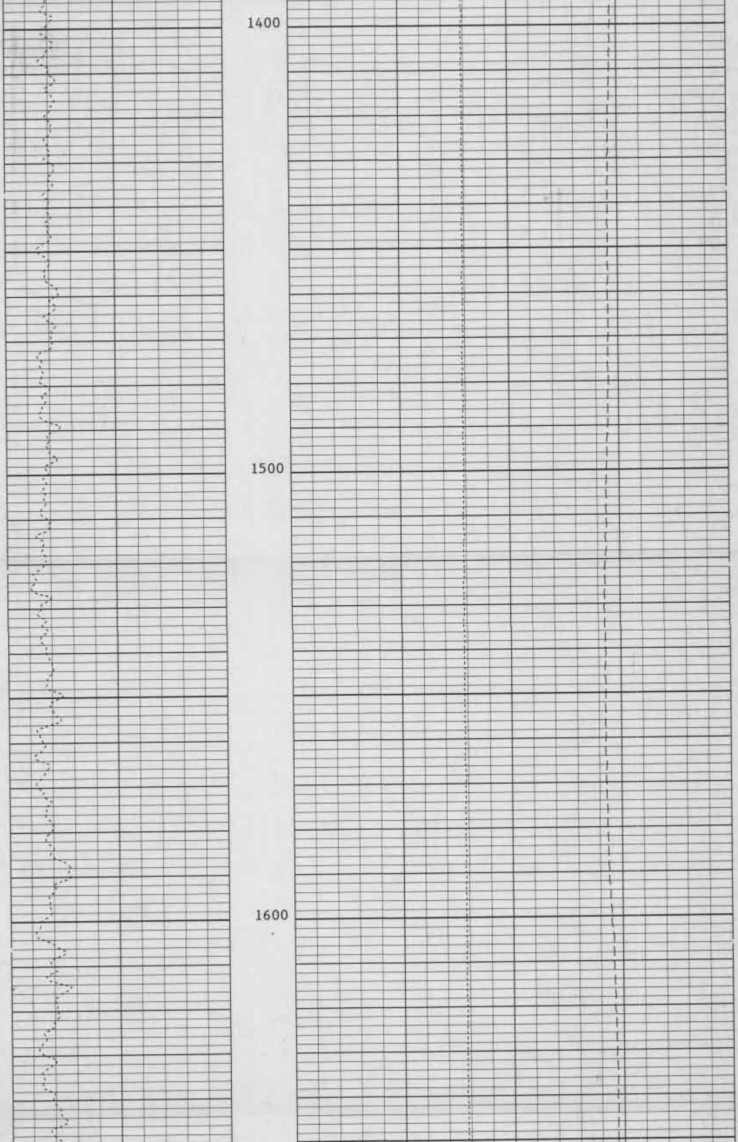
REMARKS:

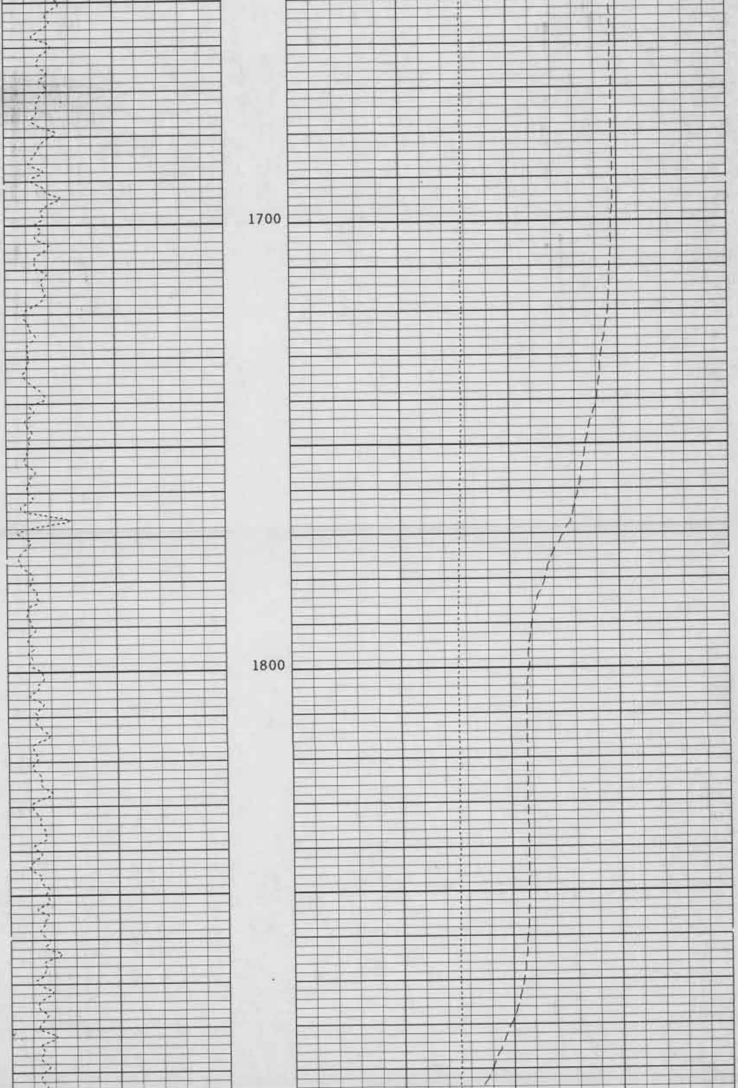
THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN

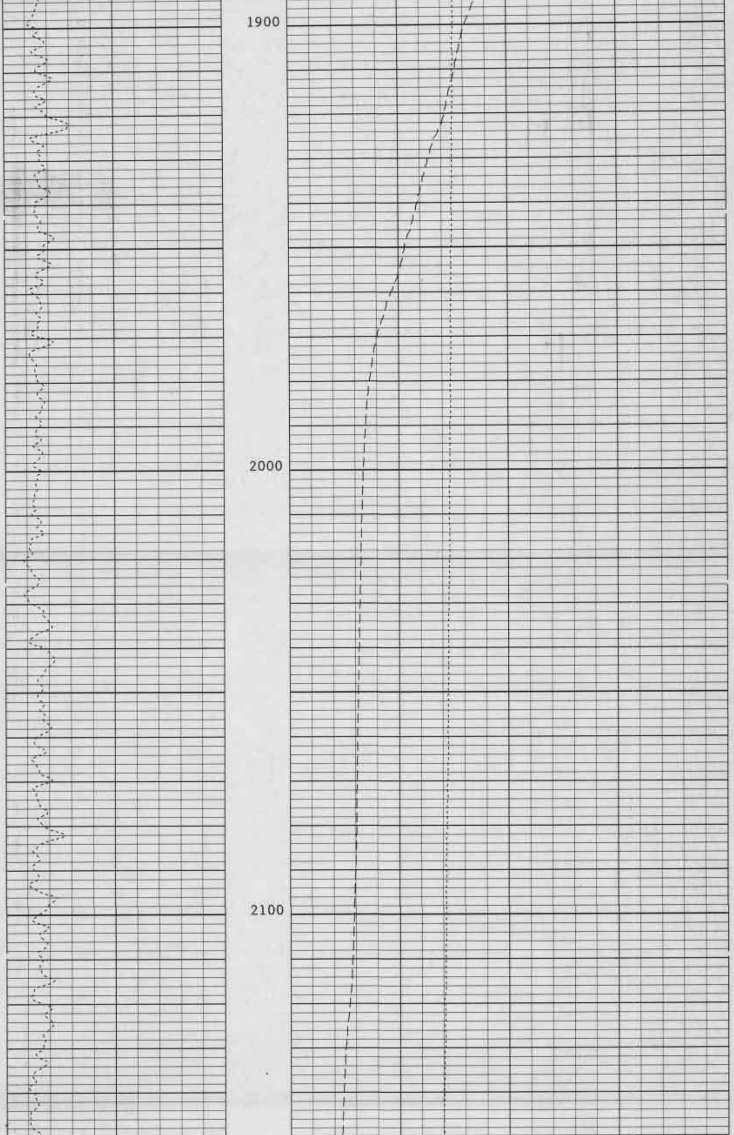
TD NOT FULLY REACHED ON MAIN PASS

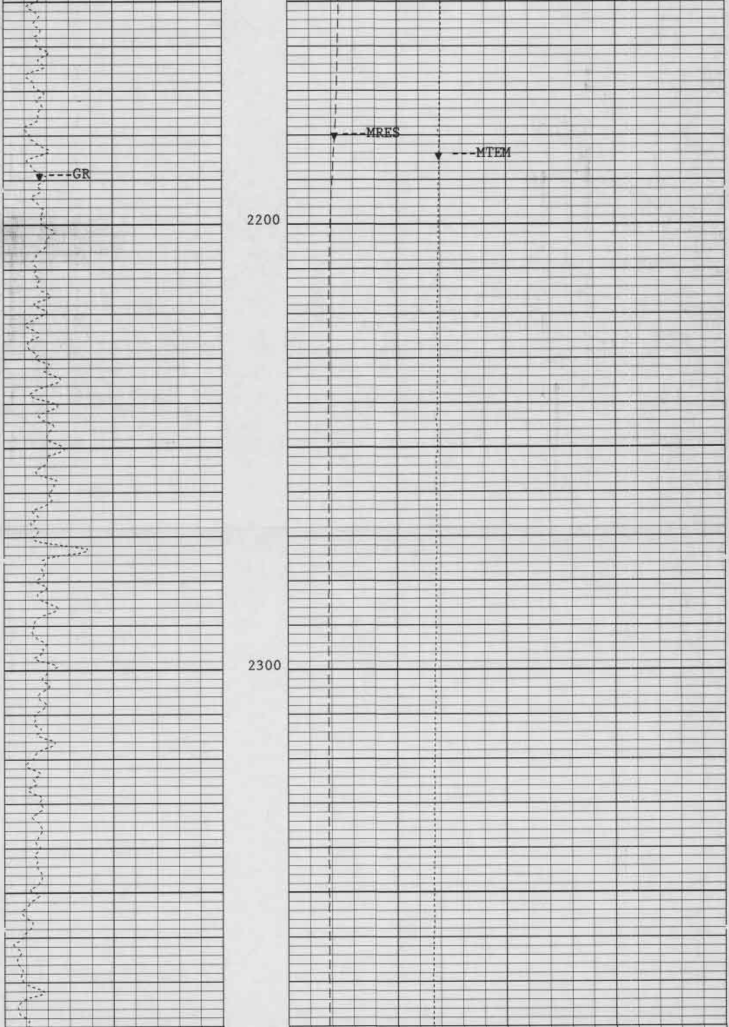


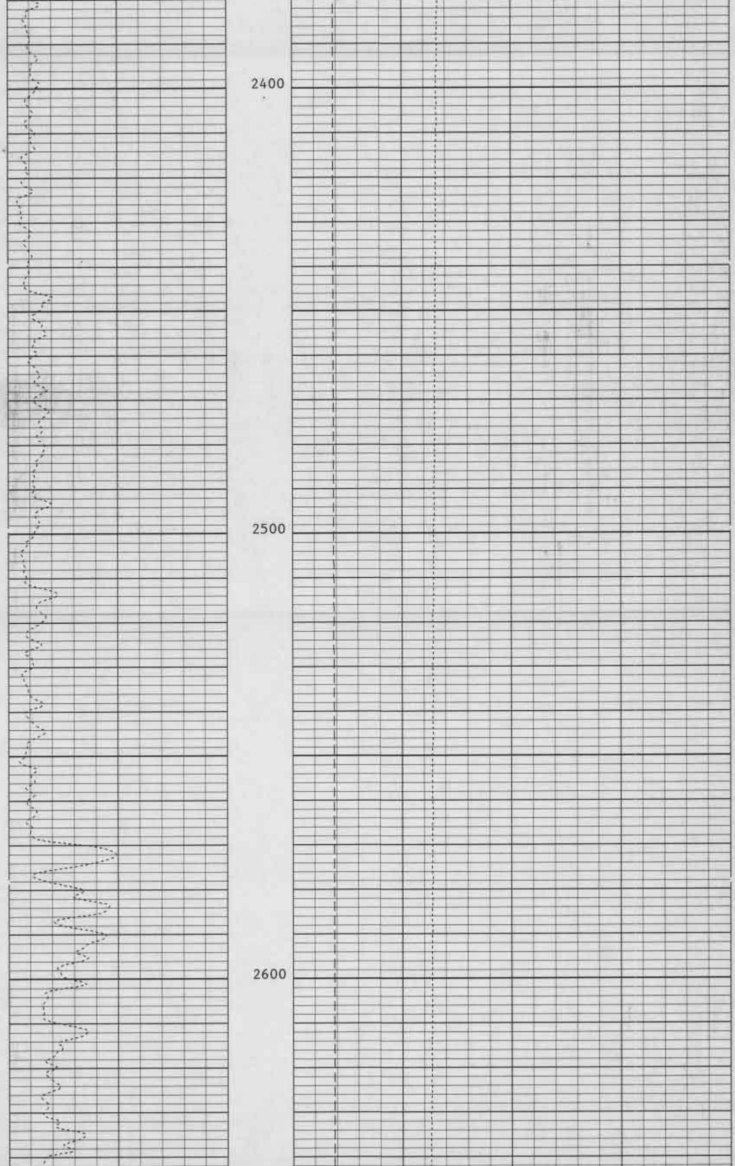


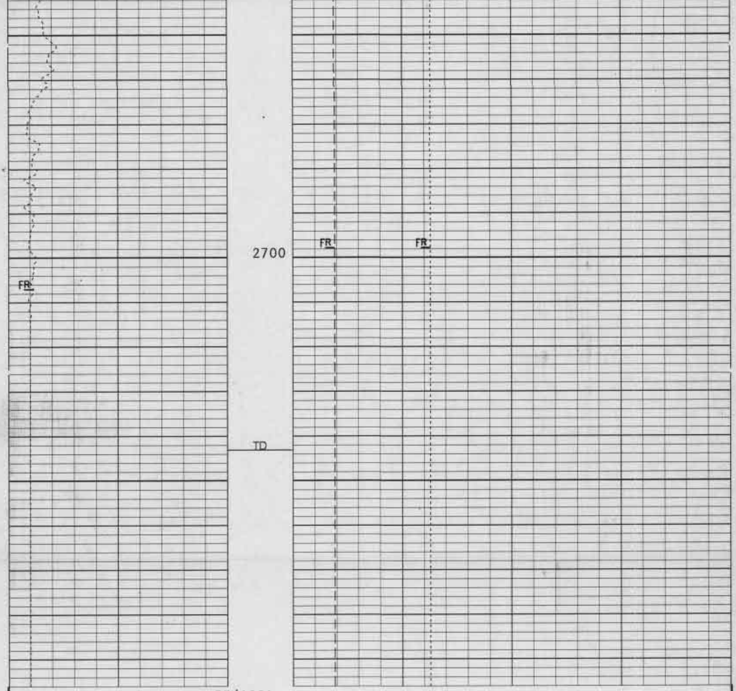












5"/100'

CP 38.2 FILE 4 05-OCT-1993 11:29 (UP)

GR(GAPI)		MRES(OHMM)	
0.0	150.00	0.0	2.0000
		MTEM(DEGC)	
		0.0	50.000

SENSOR MEASURE POINT TO TOOL ZERO

DITE	10.3	FEET	SGTL	35.9	FEET
AMS	45.2	FEET	DTT	-47.0	FEET

PARAMETERS

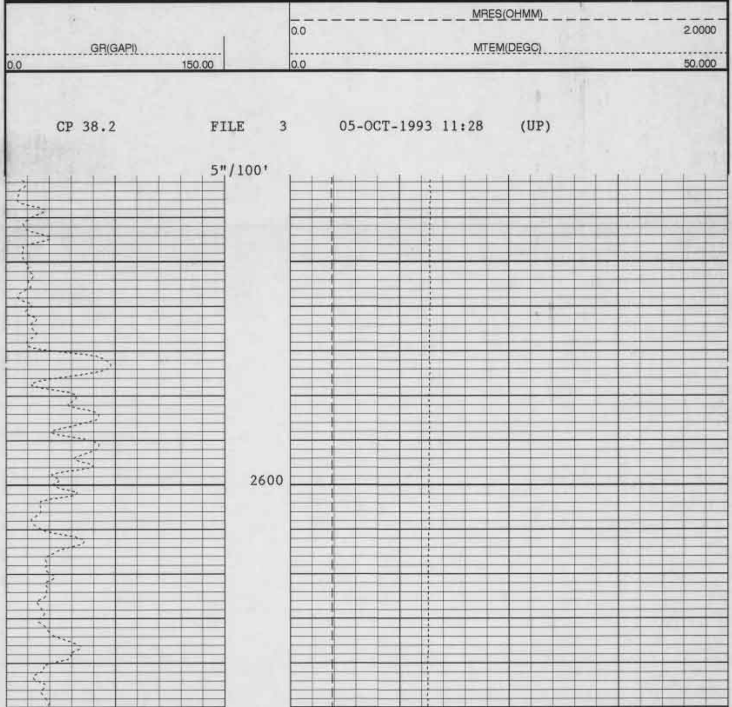
NAME	VALUE	UNIT	NAME	VALUE	UNIT

WMUD	9.30000	LB/G	TD	2743.00	F
IFRS	40	KHZ	SBR	1.00000	OHMM
MXE4	45.7529	MM/M	DXE4	23.9101	MM/M
MRE4	-.599453	MM/M	DRE4	2.58380	MM/M
MPH4	-2.37585	DEG	DPH4	-1.08922	DEG
MGF4	1.02098		DGF4	1.01995	
DESP	DISA		SFLE	ALLO	
DCAS	1500.00	F	ITEN	ALLO	
DEVI	0.0	DEG	DSES	H48	
IPRO	PHAS		IPHA	NORM	
NCJT	GSRY		GTSE	TEMP	
SHT	80.0000	DEGF	BHT	100.000	DEGF
DTCI	0.0	F	SPAE	ALLO	
BS	8.75000	IN	BHS	OPEN	

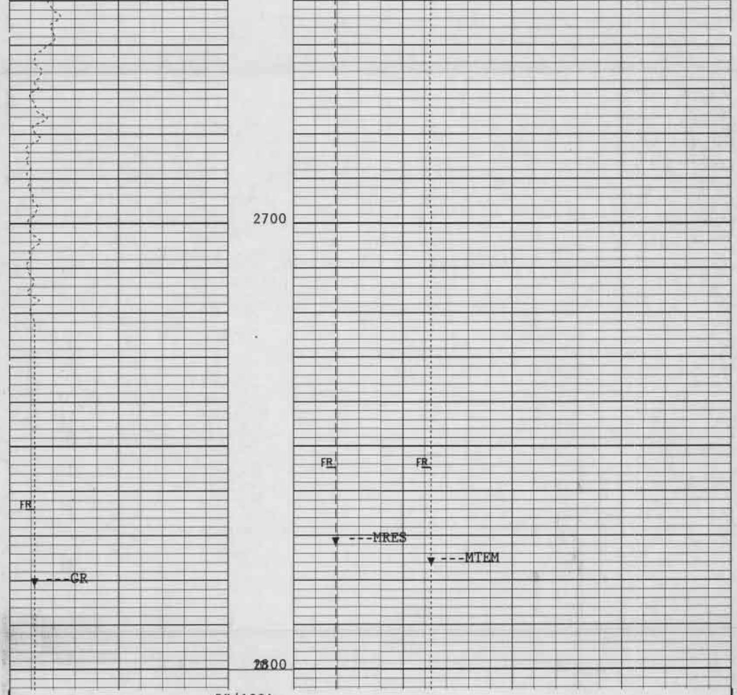
REPEAT SECTION

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
TD	2743.00	F	2711.0				



CP 38.2 FILE 3 05-OCT-1993 11:28 (UP)



5"/100'

CP 38.2 FILE 3 05-OCT-1993 11:25 (UP)

MRES(OHMM) 0.0 2.0000

GR(GAPI) 0.0 150.00

MTEM(DEGC) 0.0 50.000

SENSOR MEASURE POINT TO TOOL ZERO

DITE	10.3	FEET	SGTL	35.9	FEET
AMS	45.2	FEET	DTT	-47.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT

```
WMUD 9.30000     LB/G               TD   2800.00     F
IFRS 40          KHZ                SBR  1.00000     OHMM
MXE4 45.7529     MM/M               DXE4 23.9101     MM/M
MRE4 -.599453    MM/M               DRE4 2.58380     MM/M
MPH4 -2.37585    DEG                DPH4 -1.08922    DEG
MGF4 1.02098                        DGF4 1.01995
DESP DISA                           SFLE ALLO
DCAS 1500.00     F                  ITEN ALLO
DEVI 0.0         DEG                DSES H48
IPRO PHAS                           IPHA NORM
NCJT GSRY                           GTSE TEMP
SHT  80.0000     DEGF               BHT  100.000     DEGF
DTCI 0.0         F                  SPAE ALLO
BS   8.75000     IN                 BHS  OPEN
```

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.			**SCHL.**	**FR**	2737.0 F
				SCHL.	**TD**	2743.0 F
WELL	SFWMD DF No. 1			**DRLR.**	**TD**	2743.0 F
FIELD	NORTHWEST L-31 CANAL			**Elev:**	**KB**	24.5 F
					DF	23.5 F
COUNTY	DADE	**STATE**	FLORIDA		**GL**	15.0 F

Schlumberger

FLUID PROPERTIES LOG

COUNTY	DADE
FIELD	NORTHWEST L-31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF No. 1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

Schlumberger

PHASOR INDUCTION - SFL
GAMMA RAY

COMPANY SOUTH FLORIDA WATER MANAGEMENT DIST.

WELL SFWMD DF No. 1

FIELD NORTHWEST L-31 CANAL

COUNTY DADE **STATE** FLORIDA

LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			**Other Services:** LDT/CNL BHC SONIC CALIPER FLOWMETER TEMP AMS
API SERIAL NO. N/A	**SECT.** --	**TWP.** --	**RANGE** --	

Permanent Datum	GROUND LEVEL	**Elev.**	15.0 F	**Elev.: K.B.** 24.5 F
Log Measured From	KELLY BUSHING	9.5 F	**above Perm. Datum**	**D.F.** 23.5 F
Drilling Measured From	KELLY BUSHING			**G.L.** 15.0 F

Date	05-OCT-1993		
Run No.	ONE		
Depth Driller	2743.0 F		
Depth Logger (Schl.)	2743.0 F		
Btm. Log Interval	2737.0 F		
Top Log Interval	920.0 F		
Casing-Driller	12" @ 920.0 F	@	@
Casing-Logger	920.0 F		
Bit Size	8 3/4" @	@	@
Type Fluid in Hole	SALT H20 & MUD		
Dens. | **Visc.**	9.30 LB/G | 35.0 S		
pH | **Fld. Loss**			
Source of Sample	CIRC. TANK		
Rm @ Meas. Temp.	3.420 OHMM @ 82.0 DEGF	@	
Rmf @ Meas. Temp.	.840 OHMM @ 85.0 DEGF	@	
Rmc @ Meas. Temp.	@	@	
Source: Rmf | **Rmc**	MEASURED | NONE		
Rm @ BHT	4.348 OHMM @ 63.0 DEGF	@	
TIME **Circulation Ended**	11:00 10/05/93		
TIME **Logger on Bottom**	11:30 10/05/93		
Max. Rec. Temp.	63.0 DEGF		
Equip. | **Location**	8170 | NATCHEZ, MS.		
Recorded By	BLIZNIK/JONES		
Witnessed By	JOHN LUKASIEWICZ		

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

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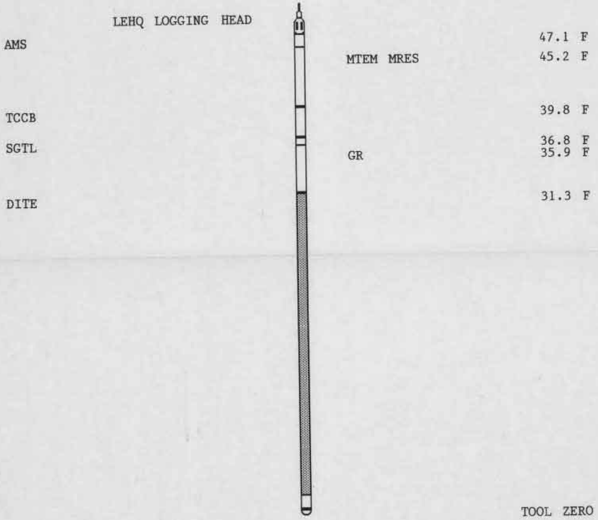
Run No.	ONE	
Service Order No.	607441	
Drilling Fluid Level		
Salinity	20000.0 PPM	
Rmf @ BHT	1.104 OHMM @ 63.0 DEGF	@
Rmc @ BHT	@ 63.0 DEGF	@
Logging Speed	5000.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	DIS 484	
Tool Number 2	DIC 480	
Tool Number 3	SGT	
Tool Number 4	TCC	
Tool Number 5	AMS	
Tool Number 6	-	
Tool Number 7		
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

REMARKS:

THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN

TD NOT FULLY REACHED ON MAIN PASS

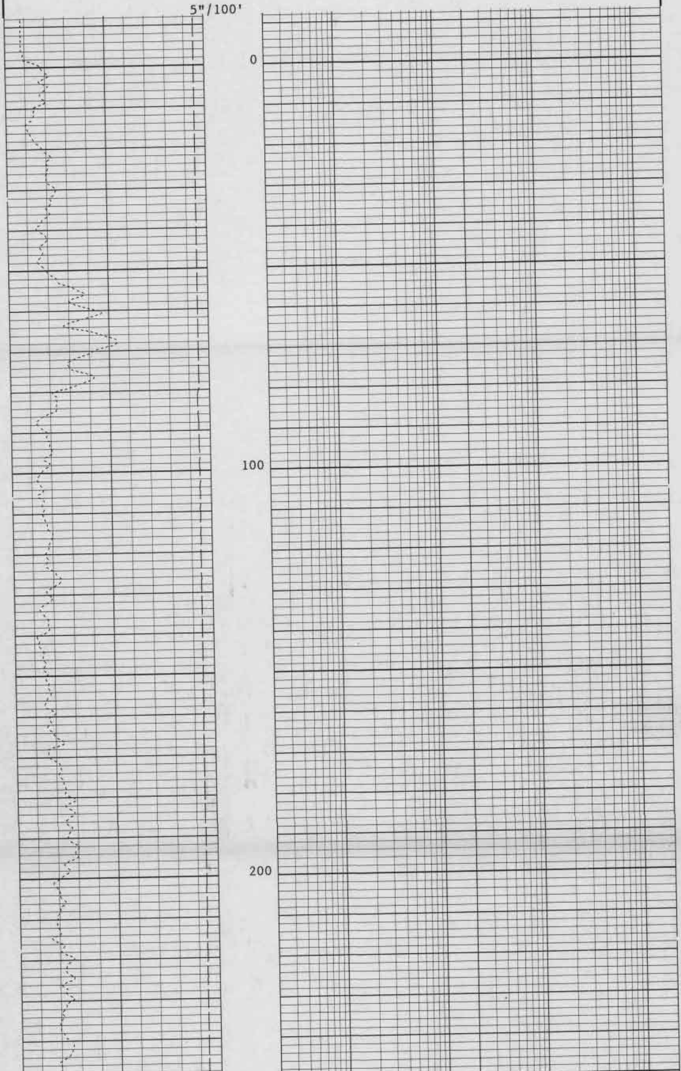
LOGGING TOOL STRING SKETCH

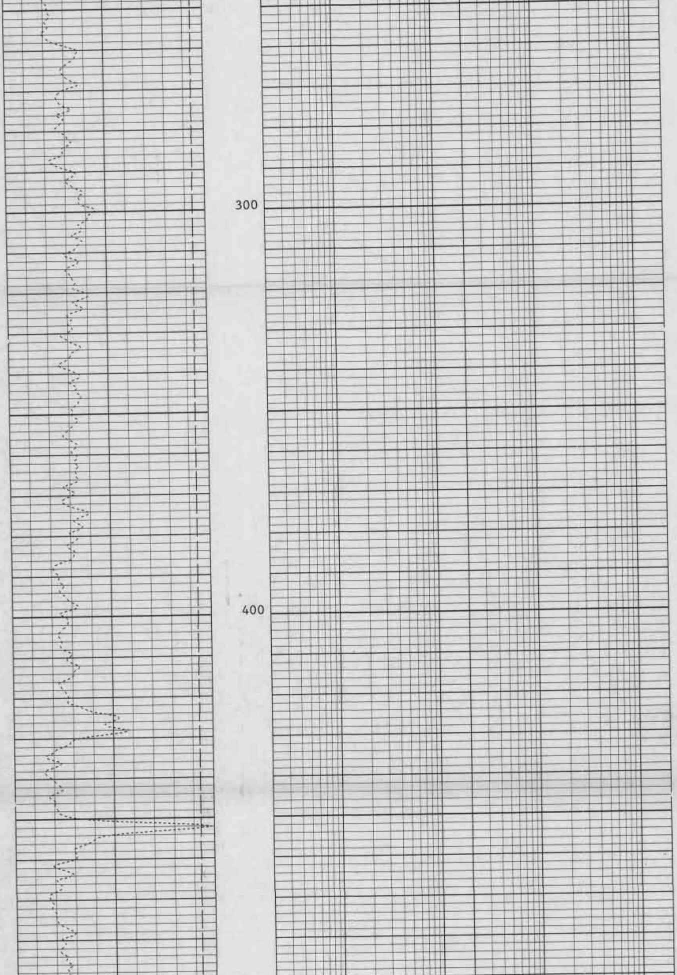


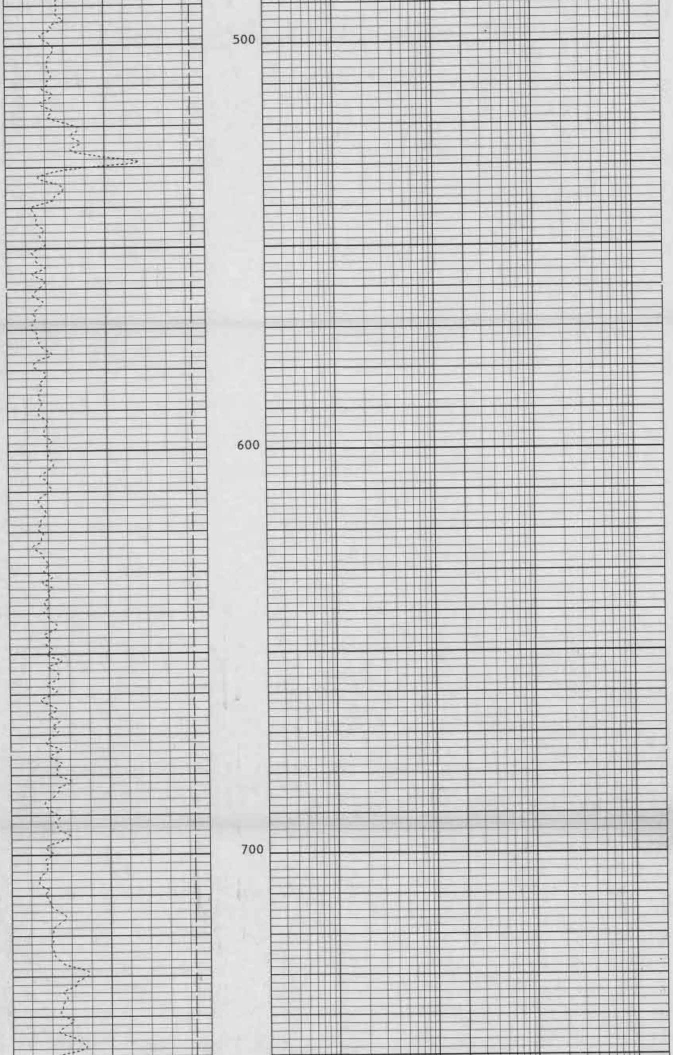
TOTAL TOOL STRING LENGTH IS 50.6 F.
TOTAL TOOL STRING WEIGHT IS 757. LB IN AIR.

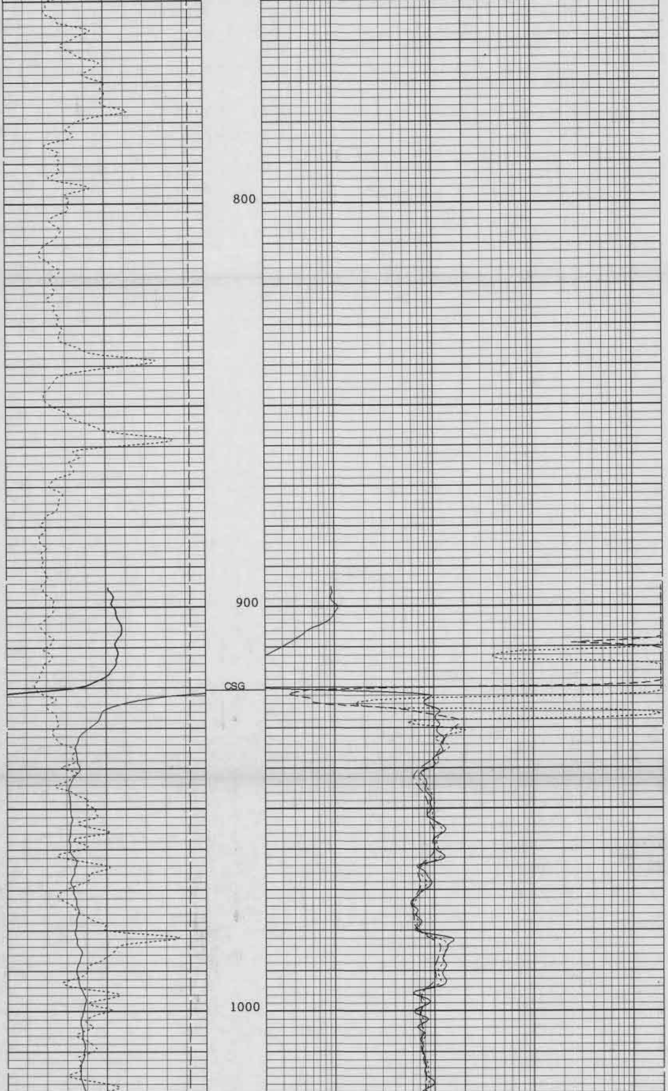
TENS(LBF)	
10000.	0.0
GR(GAPI)	
0.0	150.00

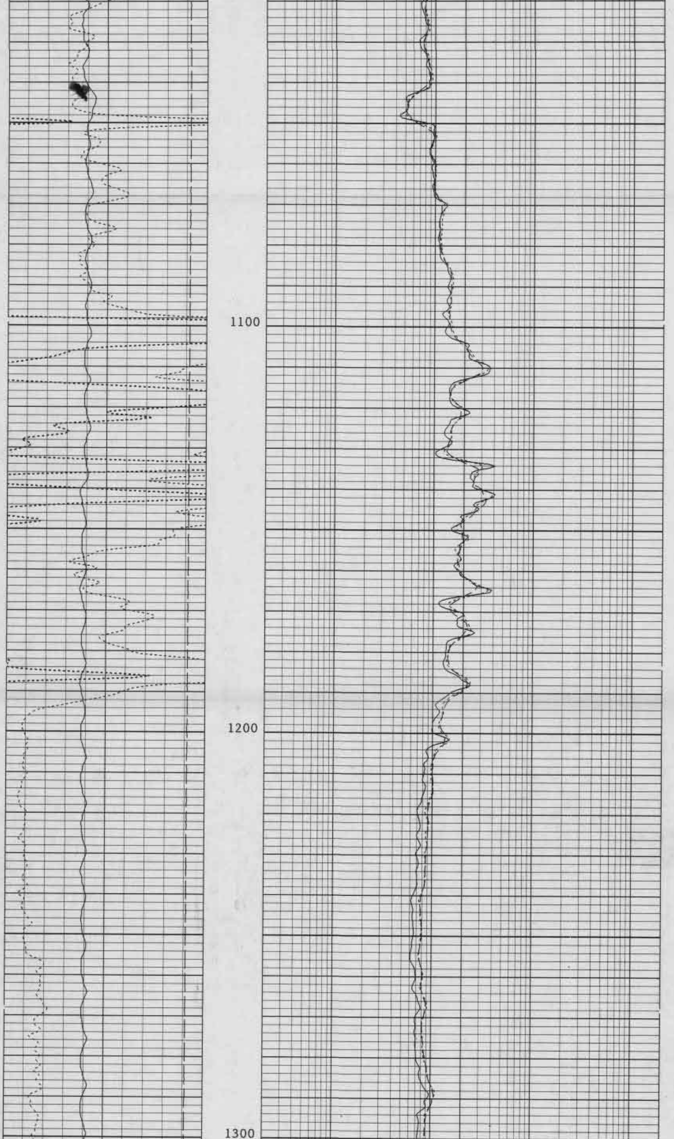
CP 38.2 FILE 4 05-OCT-1993 12:03 (UP)

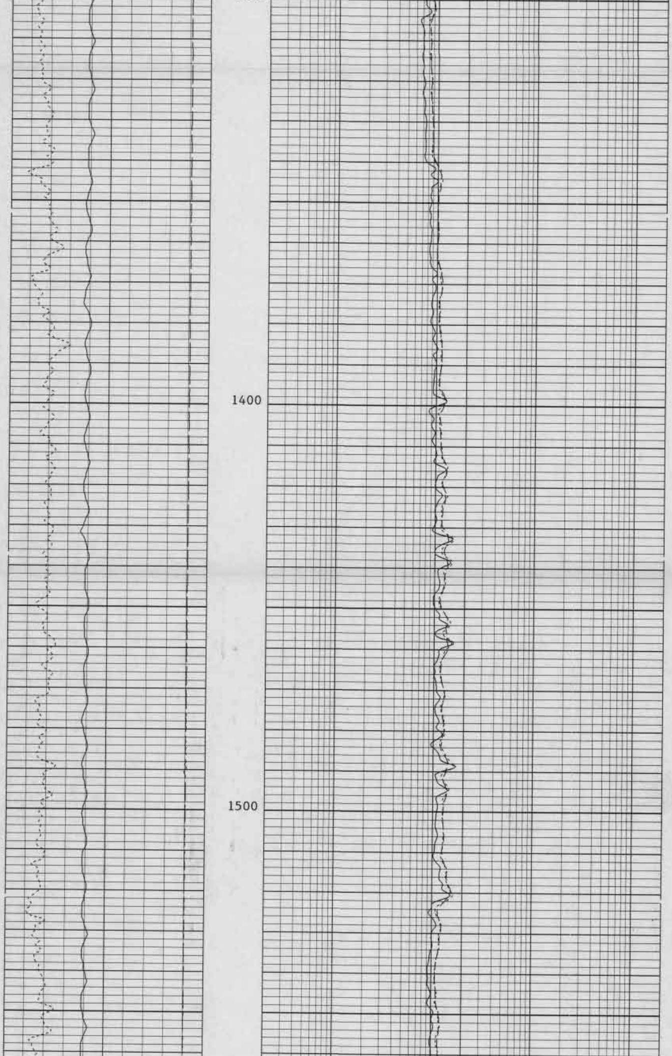


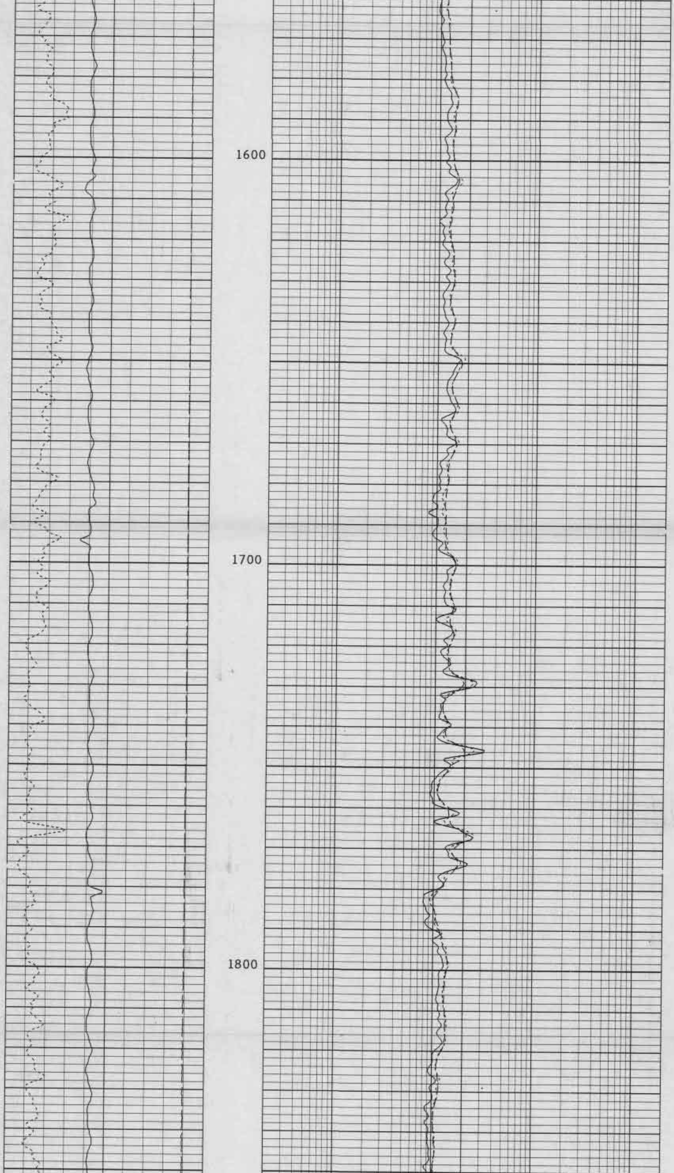


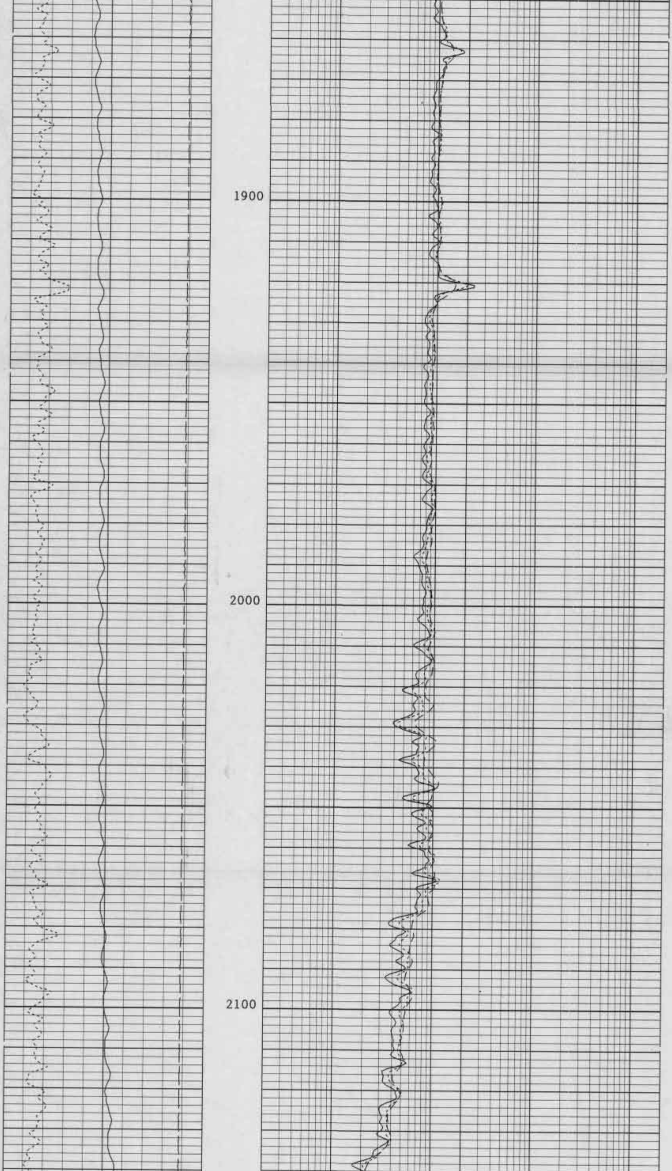


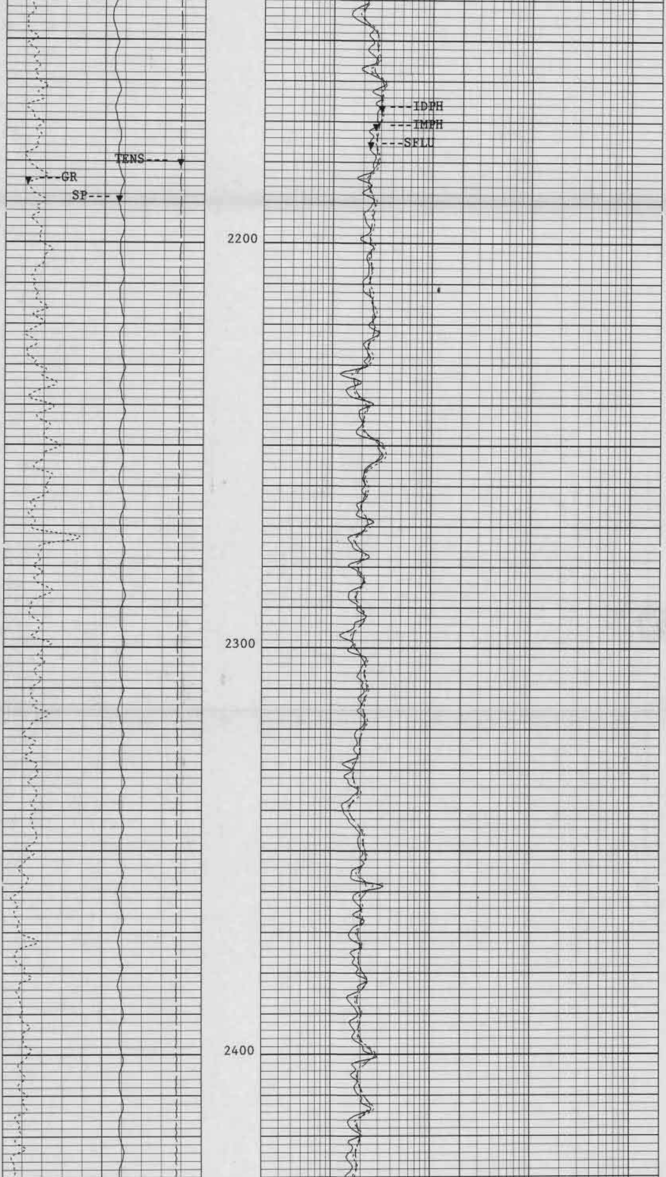


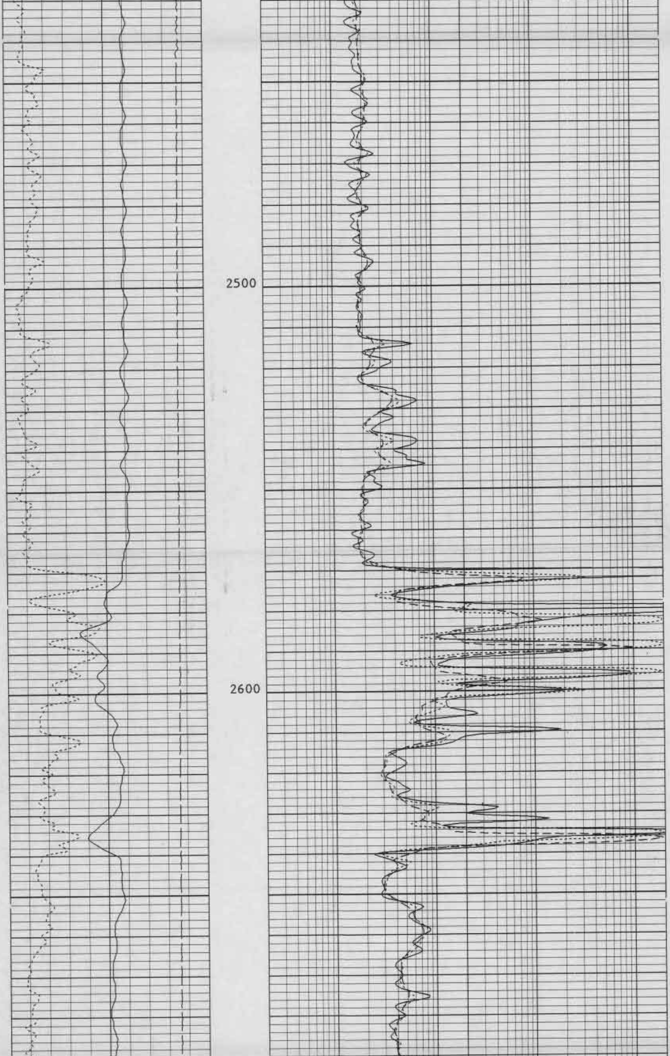


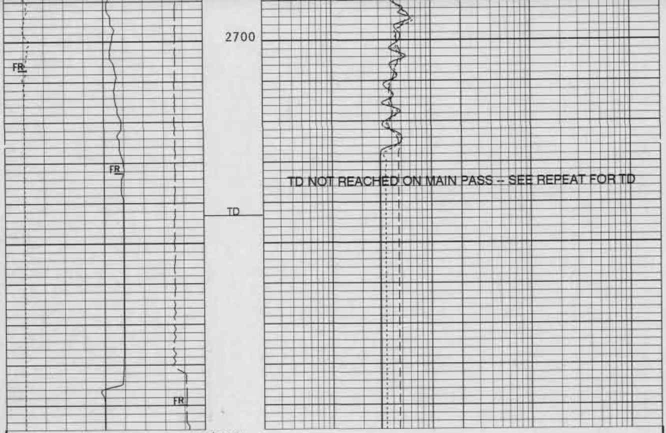












TD NOT REACHED ON MAIN PASS -- SEE REPEAT FOR TD

5"/100'

CP 38.2 FILE 4 05-OCT-1993 11:29 (UP)

TENS(LBF)	10000.	0.0	IDPH(OHMM)	.20000	2000.0
GR(GAPI)	0.0	150.00	IMPH(OHMM)	.20000	2000.0
SP(MV)	-80.00	20.000	SFLU(OHMM)	.20000	2000.0

SENSOR MEASURE POINT TO TOOL ZERO

DITE 10.3 FEET
AMS 45.2 FEET

SGTL 35.9 FEET
DTT -47.0 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	9.30000	LB/G	TD	2743.00	F
IFRS	40	KHZ	SBR	1.00000	OHMM
MXE4	45.7529	MM/M	DXE4	23.9101	MM/M
MRE4	-.599453	MM/M	DRE4	2.58380	MM/M
MPH4	-2.37585	DEG	DPH4	-1.08922	DEG
MGF4	1.02098		DGF4	1.01995	
DESP	DISA		SFLE	ALLO	
DCAS	1500.00	F	ITEN	ALLO	
DEVI	0.0	DEG	DSES	H48	
IPRO	PHAS		IPHA	NORM	
NCJT	GSRY		GTSE	TEMP	
SHT	80.0000	DEGF	BHT	100.000	DEGF
DTCI	0.0	F	SPAE	ALLO	
BS	8.75000	IN	BHS	OPEN	

REPEAT SECTION

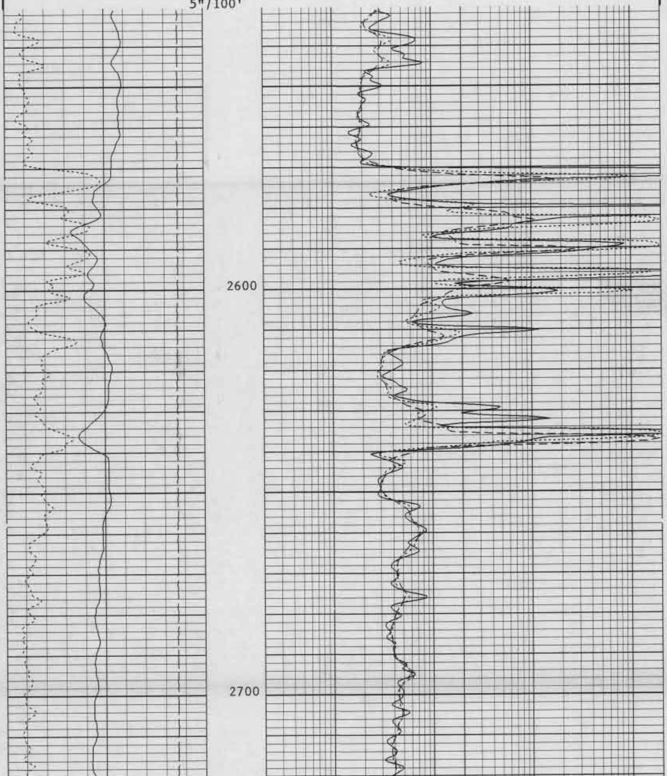
CHANGED PARAMETERS

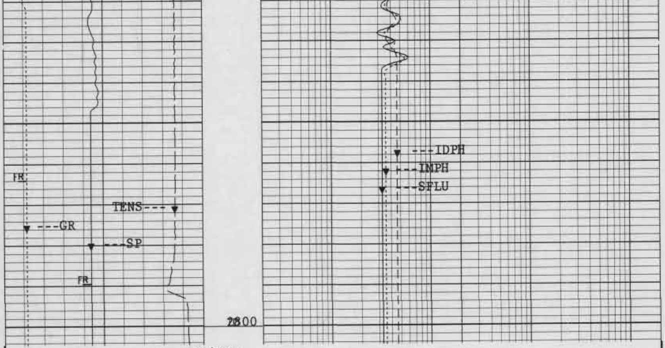
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
TD	2743.00	F	2711.0				

TENS(LBF)	10000.	0.0
GR(GAPI)	0.0	150.00
SP(MV)	-80.00	20.000
IDPH(OHMM)	.20000	2000.0
IMPH(OHMM)	.20000	2000.0
SFLU(OHMM)	.20000	2000.0

CP 38.2 FILE 3 05-OCT-1993 11:28 (UP)

5"/100'





5"/100'

CP 38.2 FILE 3 05-OCT-1993 11:25 (UP)

TENS(LBF)			IDPH(OHMM)	
10000.	0.0		.20000	2000.0
GR(GAPI)			IMPH(OHMM)	
0.0	150.00		.20000	2000.0
SP(MV)			SFLU(OHMM)	
-80.00	20.000		.20000	2000.0

SENSOR MEASURE POINT TO TOOL ZERO

```
DITE 10.3  FEET                         SGTL 35.9  FEET
AMS  45.2  FEET                         DTT  -47.0 FEET
```

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	9.30000	LB/G	TD	2800.00	F
IFRS	40	KHZ	SBR	1.00000	OHMM
MXE4	45.7529	MM/M	DXE4	23.9101	MM/M
MRE4	-.599453	MM/M	DRE4	2.58380	MM/M
MPH4	-2.37585	DEG	DPH4	-1.08922	DEG
MGF4	1.02098		DGF4	1.01995	
DESP	DISA		SFLE	ALLO	
DCAS	1500.00	F	ITEN	ALLO	
DEVI	0.0	DEG	DSES	H48	
IPRO	PHAS		IPHA	NORM	
NCJT	GSRY		GTSE	TEMP	
SHT	80.0000	DEGF	BHT	100.000	DEGF
DTCI	0.0	F	SPAE	ALLO	
BS	8.75000	IN	BHS	OPEN	

AFTER SURVEY TOOL CHECK SUMMARY

```
PERFORMED:     05-OCT-1993 12:05
PROGRAM FILE: TOH    (VERSION    38.2    92/10/12  92/10/12)
```

DITE TOOL CHECK

```
SONDE SERIAL NUMBER: 484
CARTRIDGE SERIAL NUMBER: 480
FILE:    3      DEPTH INTERVAL:  2804.5 -  2530.5    F
         4                       2796.0 -   -12.5    F

                          MEAN CALIBRATION CHANGE

    ABSOLUTE CHANGE FOR        PERCENT CHANGE FOR      SFL ABS. CHANGE FOR
  RESISTIVITY > 27 OHM-M    RESISTIVITY < 27 OHM-M   RESISTIVITY < 1 OHM-M
  ----------------------    ----------------------   ---------------------

       CHANGE   TOLERANCE       CHANGE   TOLERANCE        CHANGE   TOLERANCE
       (MM/M)     (MM/M)          (%)       (%)           (OHMM)     (OHMM)

DEEP      .03     < 0.75          .03     < 2.0                   N/A

MEDIUM    .02     < 0.75          .03     < 2.0                   N/A

SFL       .00     < 0.75          .05     < 2.0            0.0       < 0.02

NOTE: Log quality flags in depth track indicate when electronic calibration
      is out of tolerance.  Flagged values ARE now included in this table.

   CP 38.2            FILE    6      05-OCT-1993 12:04


                BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:      05-OCT-1993 11:21
  PROGRAM FILE: TOH     (VERSION     38.2     92/10/12  92/10/12)


SGTL                DETECTOR CALIBRATION SUMMARY

              MEASURED
           BKGD     JIG           CALIBRATED              UNITS
    GR      21      178              165                  GAPI

BACK: 25-SEP-1993 13:54   JIG: 25-SEP-1993 13:55  COMP: 25-SEP-1993 13:55


DITE                ELECTRONICS CALIBRATION SUMMARY

SONDE SERIAL NUMBER: 484
CARTRIDGE SERIAL NUMBER: 480
INDUCTION FREQUENCY: 40  KHZ

INDUCTION ELECTRONICS:

      OFFSET   VALID RANGE      GAIN  VALID RANGE       PHASE   VALID RANGE
      (MM/M )    (MM/M )        (--)     (---)          (DEG.)    (DEG.)

  IRD    7.3  -77. =>  93.      .973   .84 => 1.18
  IXD    7.9  -77. =>  93.      .976   .84 => 1.18      22.54    3.85 => 43.85
  IRM   11.1 -119. => 141.      .968   .83 => 1.18
  IXM    3.3 -126. => 134.      .962   .83 => 1.17      23.96    5.44 => 45.44

SFL ELECTRONICS:

       OFFSET  VALID RANGE      UNITS       GAIN   VALID RANGE

  SFV   -2.2  -17.2 => 12.8      MV         1.00   .85 => 1.20
  SFC     .0     -.6 =>  .6      MA         1.02   .87 => 1.23

   CP 38.2            FILE    0      05-OCT-1993 11:21


                  SHOP SUMMARY


  PERFORMED:      20-SEP-1993 09:30
  PROGRAM FILE: CCSHOP (VERSION     38.2     92/10/12  92/10/12)


DITE                CALIBRATION SUMMARY

SONDE SERIAL NUMBER: 484
CARTRIDGE SERIAL NUMBER: 480


                               SHOP CONSTANTS
```

```
TEST LOOP CALIBRATION:  CALIBRATION OF INTERNAL REFERENCE
                        TO TEST LOOP STANDARD

          CONS.   GAIN     VALID RANGE        CONS.   PHASE   VALID RANGE
                  (---)      (---)                   ( DEG )    ( DEG )

 10KHZ:
   ILD:  DGF1      .994   .900 => 1.100    DPH1       .10   -1.50 =>  1.50
   ILM:  MGF1     1.007   .900 => 1.100    MPH1      -.24   -1.50 =>  1.50

 20KHZ:
   ILD:  DGF2     1.004   .900 => 1.100    DPH2       .03   -2.00 =>  2.00
   ILM:  MGF2     1.009   .900 => 1.100    MPH2      -.96   -3.00 =>  1.00

 40KHZ:
   ILD:  DGF4     1.020   .900 => 1.100    DPH4     -1.09   -4.00 =>  2.00
   ILM:  MGF4     1.021   .900 => 1.100    MPH4     -2.38   -5.00 =>  1.00


 SONDE ERROR CORRECTIONS:  CORRECTION FOR SONDE RESPONSE IN ZERO
                           CONDUCTIVITY ENVIRONMENT

              CONS.  SONDE ERROR    VALID RANGE
                      CORRECTION
                       (MM/M )        (MM/M )

 10KHZ:
   IRD SEC:  DRE1       35.55      -50.0 => 125.0
   IXD SEC:  DXE1        5.27     -250.0 => 350.0
   IRM SEC:  MRE1       58.68      -50.0 => 140.0
   IXM SEC:  MXE1       45.14    -1300.0 =>1300.0

 20KHZ:
   IRD SEC:  DRE2       13.60      -30.0 =>  30.0
   IXD SEC:  DXE2       13.17     -125.0 => 200.0
   IRM SEC:  MRE2       11.31      -50.0 =>  50.0
   IXM SEC:  MXE2       33.17     -650.0 => 650.0

 40KHZ:
   IRD SEC:  DRE4        2.58      -15.0 =>  15.0
   IXD SEC:  DXE4       23.91      -75.0 => 125.0
   IRM SEC:  MRE4        -.60      -30.0 =>  30.0
   IXM SEC:  MXE4       45.75     -350.0 => 350.0

 NOTE: ALL SONDE ERROR CORRECTIONS HAVE BEEN NORMALIZED TO 25 DEGC.

                    SHOP ELECTRONIC CALIBRATION SUMMARY

 ELECTRONIC CALIBRATION:  CALIBRATION OF SYSTEM ELECTRONICS
                          USING THE INTERNAL REFERENCE

 INDUCTION ELECTRONICS:

       OFFSET   VALID RANGE     GAIN  VALID RANGE     PHASE   VALID RANGE
       (MM/M )    (MM/M )       (--)     (---)        (DEG.)     (DEG.)

 10 KHZ:
   IRD    28.9 -375. => 375.    .957   .75 => 1.25
   IXD    30.4 -375. => 375.    .960   .75 => 1.25    10.31   -5.00 => 20.00
   IRM    43.6 -900. => 900.    .937   .75 => 1.25
   IXM    15.0 -900. => 900.    .931   .75 => 1.25     9.12   -5.00 => 20.00

 20 KHZ:
   IRD    11.4 -150. => 150.    .987   .75 => 1.25
   IXD    12.3 -150. => 150.    .990   .75 => 1.25     8.30   -5.00 => 20.00
   IRM    17.6 -350. => 350.    .967   .75 => 1.25
   IXM     6.2 -350. => 350.    .962   .75 => 1.25     8.60   -5.00 => 20.00

 40 KHZ:
   IRD     7.5 -100. => 100.    .983   .75 => 1.25
   IXD     8.2 -100. => 100.    .986   .75 => 1.25    23.85 -10.00 => 35.00
   IRM    11.5 -200. => 200.    .981   .75 => 1.25
   IXM     4.1 -200. => 200.    .975   .75 => 1.25    25.44 -10.00 => 35.00

 SFL ELECTRONICS:

         OFFSET  VALID RANGE     UNITS      GAIN   VALID RANGE

   SFV    -2.2   -16.0 => 16.0    MV         .999   .75 => 1.25
   SFC      .0     -.7 =>   .7    MA        1.027   .75 => 1.25

    CP 38.2          FILE   11        20-SEP-1993 09:29
```

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.			SCHL. FR	2737.0 F
				SCHL. TD	2743.0 F
WELL	SFWMD DF No. 1			DRLR. TD	2743.0 F
				Elev: KB	24.5 F
FIELD	NORTHWEST L-31 CANAL			DF	23.5 F
COUNTY	DADE	**STATE**	FLORIDA	GL	15.0 F

Schlumberger

PHASOR INDUCTION - SFL
GAMMA RAY

COUNTY	DADE
FIELD	NORTHWEST L-31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF-1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

Schlumberger

HIGH RESOLUTION TEMPERATURE LOG

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.			
WELL	SFWMD DF-1			
FIELD	NORTHWEST L-31 CANAL			
COUNTY	DADE	**STATE**	FLORIDA	
LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			**Other Services:** LDT/CNL BHC SONIC CALIPER DIL - AMS
API SERIAL NO.	**SECT.**	**TWP.**	**RANGE**	
N/A	--	--	--	

Permanent Datum	GROUND LEVEL	**Elev.**	15.0 F	**Elev.:** K.B.24.5 F
Log Measured From	KELLY BUSHING	9.5 F	**above Perm. Datum**	D.F.23.5 F
Drilling Measured From	KELLY BUSHING			G.L.15.0 F

Date	07-OCT-1993		
Run No.	ONE		
Depth Driller	2743.0 F		
Depth Logger (Schl.)	2743.0 F		
Btm. Log Interval	2650.0 F		
Top Log Interval	920.0 F		
Casing-Driller	12" @ 920.0 F	@	@
Casing-Logger	920.0 F		
Bit Size	8 3/4" @	@	@
Type Fluid in Hole	SALT H20 & MUD		
Dens. / **Visc.**	9.30 LB/G / 35.0 S		
pH / **Fld. Loss**			
Source of Sample	CIRC. TANK		
Rm @ Meas. Temp.	3.420 OHMM @ 82.0 DEGF	@	
Rmf @ Meas. Temp.	.840 OHMM @ 85.0 DEGF	@	
Rmc @ Meas. Temp.	@	@	
Source: Rmf / **Rmc**	MEASURED / NONE		
Rm @ BHT	4.348 OHMM @ 63.0 DEGF	@	
TIME **Circulation Ended**	11:00 10/05/93		
TIME **Logger on Bottom**	22:00 10/07/93		
Max. Rec. Temp.	63.0 DEGF		
Equip. / **Location**	8170 / NATCHEZ, MS.		
Recorded By	BLIZNIK/JONES		
Witnessed By	JOHN LUKASIEWICZ		

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

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 interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	ONE	
Service Order No.	607441	
Drilling Fluid Level		
Salinity	20000.0 PPM	
Rmf @ BHT	1.104 OHMM @ 63.0 DEGF	@
Rmc @ BHT	@ 63.0 DEGF	@
Logging Speed	5000.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	--	
Tool Number 2	--	
Tool Number 3	--	
Tool Number 4	--	
Tool Number 5	--	
Tool Number 6	-	
Tool Number 7		
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

REMARKS:

THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN

TD NOT FULLY REACHED ON MAIN PASS

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PP	NORM		DO	0.0	F
WMUD	8.40000	LB/G	PDSH	0.0	G/C3
SGSN	0000A-00011		CDAT		
NCJT	GSRE		FCHD	CSID	
PTHR	10.0000	F/MN	NTHR	-10.0000	F/MN
TIRA	.500000		VPCF	.830000	
DEVI	0.0	DEG	FDSH	0.0	G/C3
QIOP	FLOW		TCSH	0.0	IN
BS	8.75000	IN	BHS	OPEN	

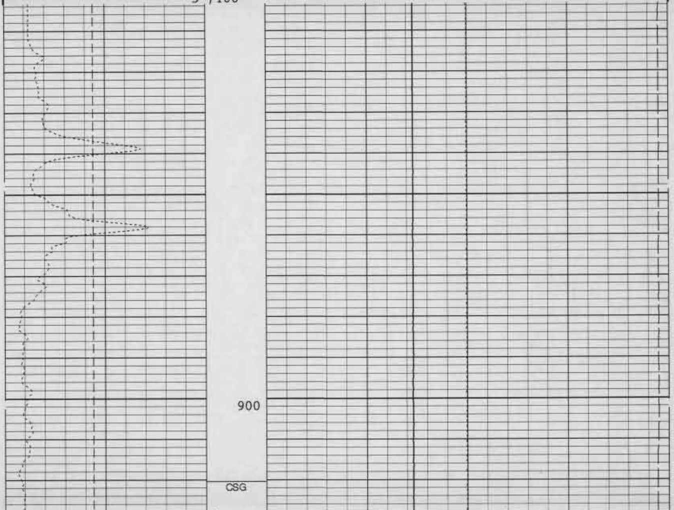
SENSOR MEASURE POINT TO TOOL ZERO

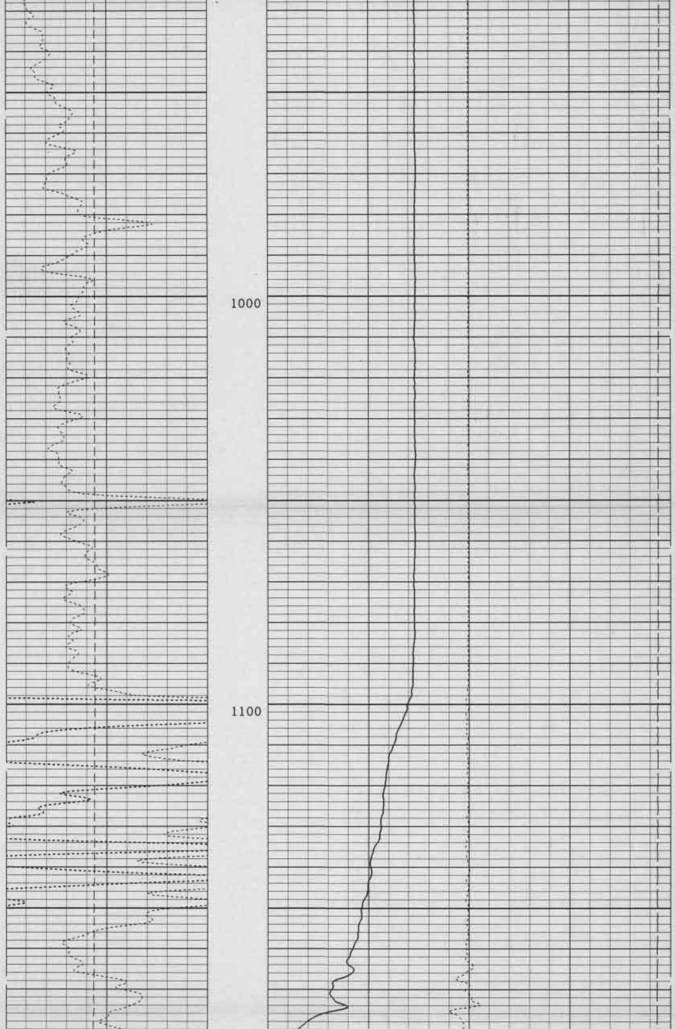
CALU	23.0	FEET	DTT	23.0	FEET
EXP	23.0	FEET	FBSB	1.0	FEET
PTSA	6.8	FEET	ATTB	14.1	FEET

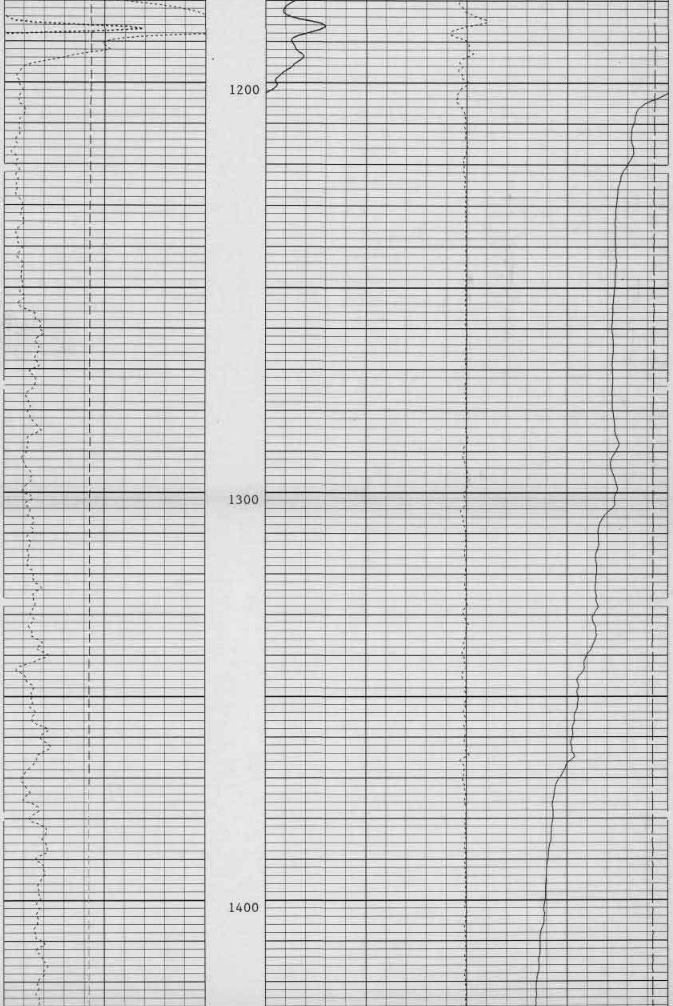
Left	Curve	Right
0.0	GR(GAPI)	150.00
0.0	PTEM(DEGF)	150.00
-1.000	PDTE(DF/F)	1.0000
61.000	PTEM(DEGF)	65.000
5000.0	TENS(LBF)	0.0

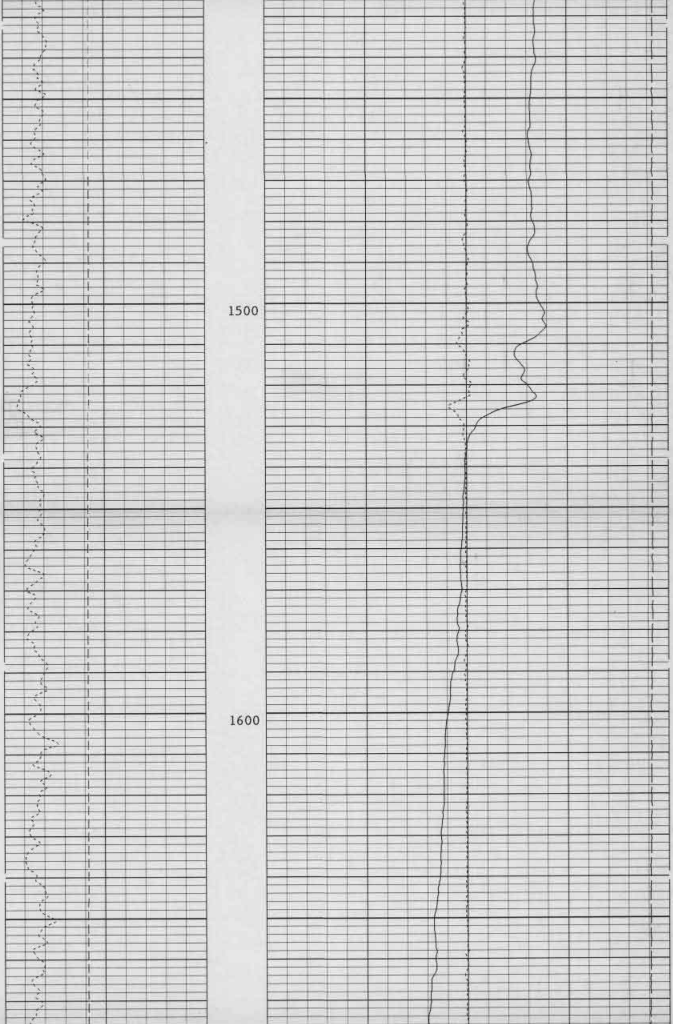
	INPUT FILE(S)	CREATION DATE
	4	07-OCT-1993 20:06
CP 38.2	FILE 31	07-OCT-1993 22:50

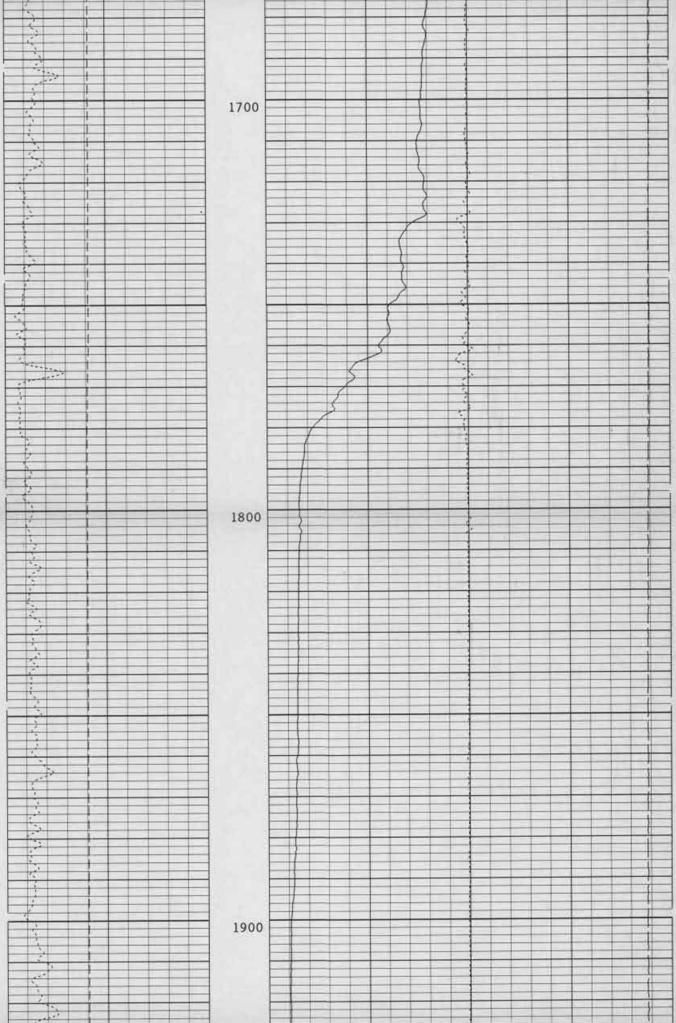
5"/100'

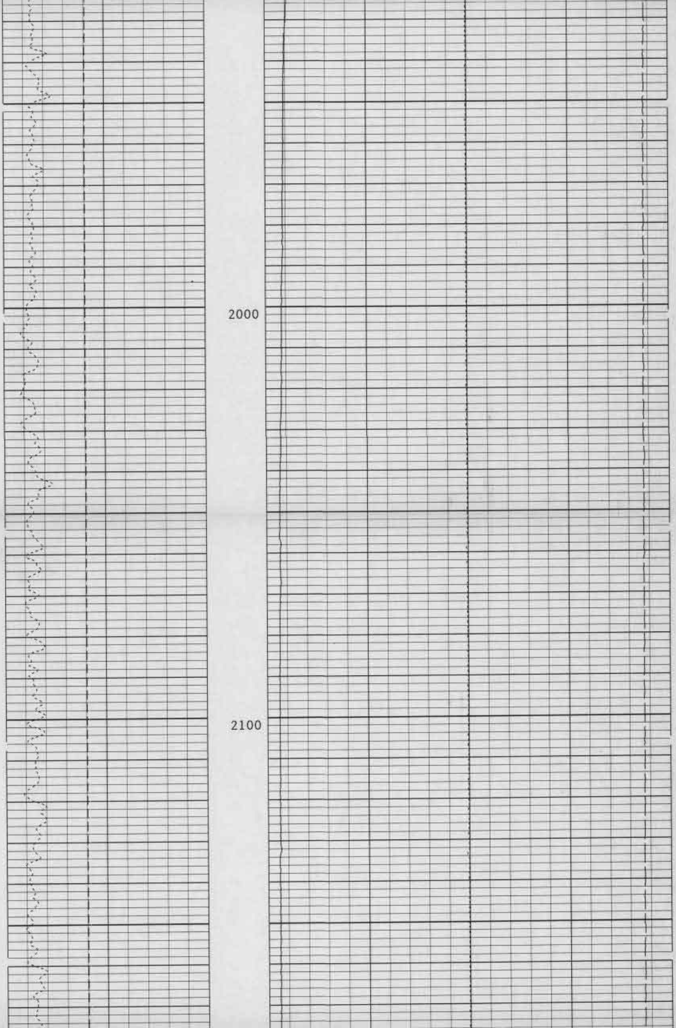


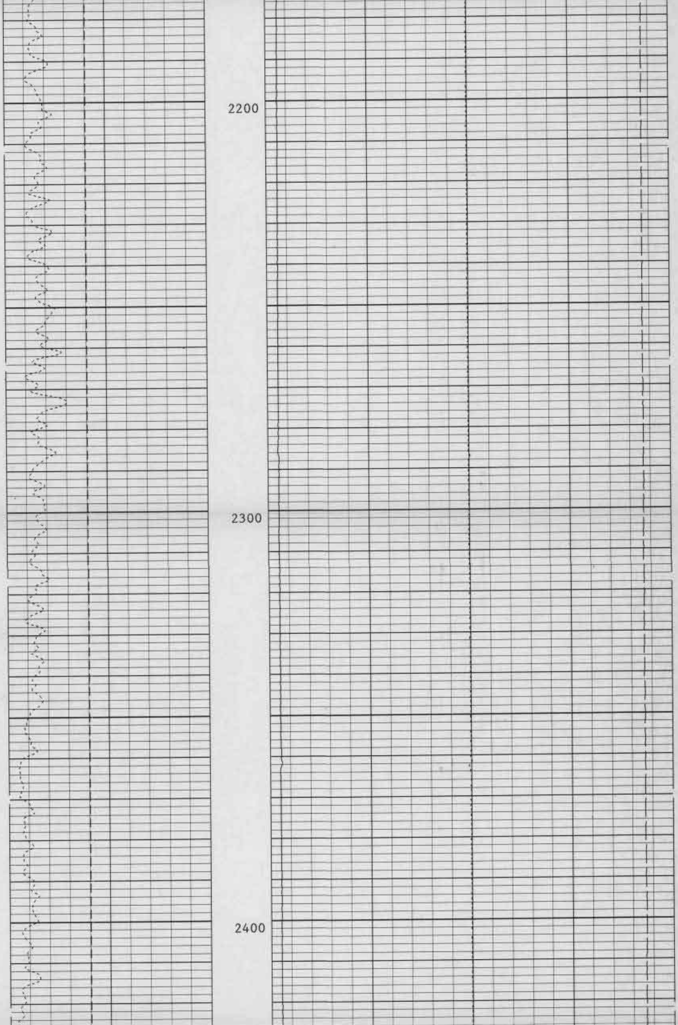


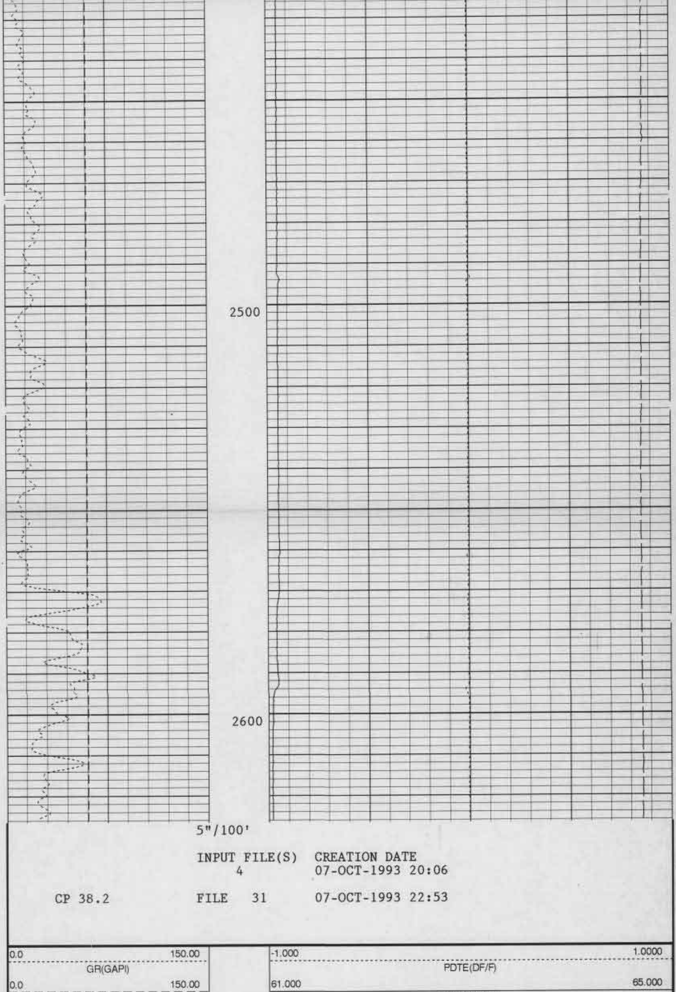












5"/100'

INPUT FILE(S) CREATION DATE
4 07-OCT-1993 20:06

CP 38.2 FILE 31 07-OCT-1993 22:53

0.0 GR(GAPI) 150.00
0.0 PTEM(DEGF) 150.00

-1.000 PDTE(DF/F) 1.0000
61.000 PTEM(DEGF) 65.000
5000.0 TENS(LBF) 0.0

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.			**SCHL.**	**FR**	2650.0 F
				SCHL.	**TD**	2743.0 F
WELL	SFWMD DF-1			**DRLR.**	**TD**	2743.0 F
				Elev:	**KB**	24.5 F
FIELD	NORTHWEST L-31 CANAL				**DF**	23.5 F
COUNTY	DADE	**STATE**	FLORIDA		**GL**	15.0 F

Schlumberger

HIGH RESOLUTION TEMPERATURE LOG

Schlumberger

FULLBORE SPINNER SURVEY

COUNTY	DADE
FIELD	NORTHWEST L 31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF-1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

COMPANY SOUTH FLORIDA WATER MANAGEMENT DIST.

WELL SFWMD DF-1

FIELD NORTHWEST L-31 CANAL

COUNTY DADE **STATE** FLORIDA

LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			Other Services: LDT/CNL BHC SONIC CALIPER DIL - AMS
API SERIAL NO.	SECT.	TWP.	RANGE	
N/A	--	--	--	

Permanent Datum	GROUND LEVEL	Elev.	15.0 F		Elev.: K.B.24.5 F
Log Measured From	KELLY BUSHING	9.5 F	above Perm. Datum		D.F.23.5 F
Drilling Measured From	KELLY BUSHING				G.L.15.0 F

Date		07-OCT-1993					
Run No.		ONE					
Depth Driller		2743.0 F					
Depth Logger (Schl.)		2743.0 F					
Btm. Log Interval		2650.0 F					
Top Log Interval		920.0 F					
Casing-Driller		12"	@ 920.0 F		@		@
Casing-Logger		920.0 F					
Bit Size		8 3/4"	@		@		@
Type Fluid in Hole		SALT H20 & MUD					
Dens.	Visc.	9.30 LB/G	35.0 S				
pH	Fld. Loss						
Source of Sample		CIRC. TANK					
Rm @ Meas. Temp.		3.420 OHMM	@ 82.0 DEGF		@		
Rmf @ Meas. Temp.		.840 OHMM	@ 85.0 DEGF		@		
Rmc @ Meas. Temp.			@		@		
Source: Rmf	Rmc	MEASURED	NONE				
Rm @ BHT		4.348 OHMM	@ 63.0 DEGF		@		
TIME	Circulation Ended	11:00 10/05/93					
	Logger on Bottom	22:00 10/07/93					
Max. Rec. Temp.		63.0 DEGF					
Equip.	Location	8170	NATCHEZ, MS.				
Recorded By		BLIZNIK/JONES					
Witnessed By		JOHN LUKASIEWICZ					

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

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 interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	ONE				
Service Order No.	607441				
Drilling Fluid Level					
Salinity	20000.0 PPM				
Rmf @ BHT	1.104 OHMM	@	63.0 DEGF		@
Rmc @ BHT		@	63.0 DEGF		@
Logging Speed	5000.0 F/HR				
EQUIPMENT DATA					
Tool Number 1	-				
Tool Number 2	-				
Tool Number 3	-				
Tool Number 4	-				
Tool Number 5	-				
Tool Number 6	-				
Tool Number 7					
Tool Number 8					
Tool Number 9					
Tool Number 10					
Tool Number 11					
Tool Number 12					

REMARKS:

THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN

TD NOT FULLY REACHED ON MAIN PASS

CLIENT DID NOT WANT A UPLOG

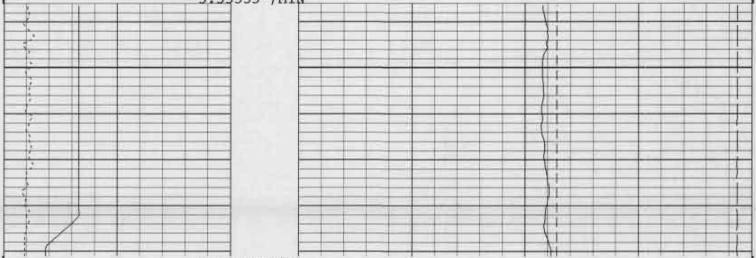
DEPTH = 900'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 899.900 F

CVEL(F/MN)			TENS(LBF)	
0.0	200.00		5000.0	0.0
CVEL(F/MN)			PTEM(DEGF)	
0.0	-200.0		55.000	75.000
GR(GAPI)			SPIN(RPS)	
0.0	150.00		0.0	10.000

CP 38.2 FILE 25 07-OCT-1993 21:52 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 25 07-OCT-1993 21:51 (UP)

CVEL(F/MN)			TENS(LBF)	
0.0	200.00		5000.0	0.0
CVEL(F/MN)			PTEM(DEGF)	
0.0	-200.0		55.000	75.000
GR(GAPI)			SPIN(RPS)	
0.0	150.00		0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 974'

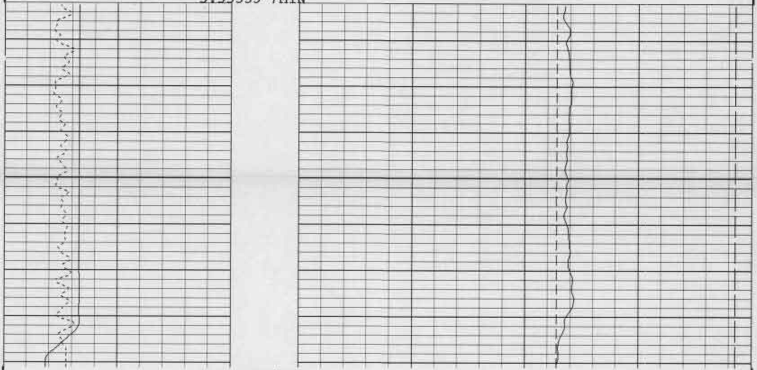
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 973.700 F

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 24 07-OCT-1993 21:50 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 24 07-OCT-1993 21:48 (UP)

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA 6.8 FEET
EXP -5.0 FEET
CALU 23.0 FEET

ATTB 14.1 FEET
FBSB 1.0 FEET
DTT -5.0 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

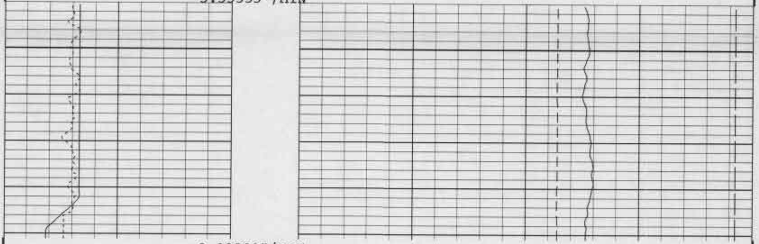
DEPTH = 1072'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1071.90 F

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00
TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

CP 38.2 FILE 23 07-OCT-1993 21:46 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 23 07-OCT-1993 21:45 (UP)

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00
TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1128'

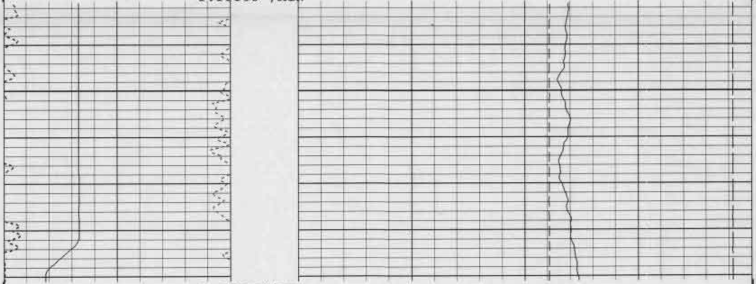
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1127.80 F

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 22 07-OCT-1993 21:44 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 22 07-OCT-1993 21:43 (UP)

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

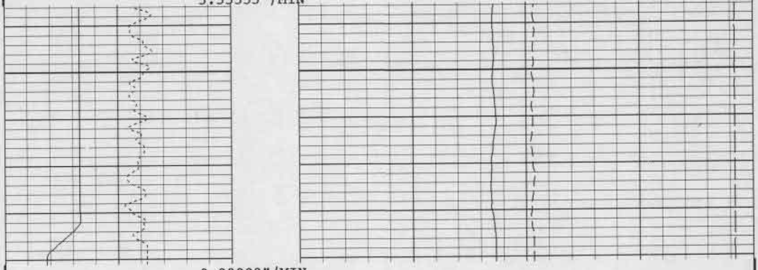
DEPTH = 1182'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1181.80 F

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

CP 38.2 FILE 21 07-OCT-1993 21:42 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 21 07-OCT-1993 21:41 (UP)

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

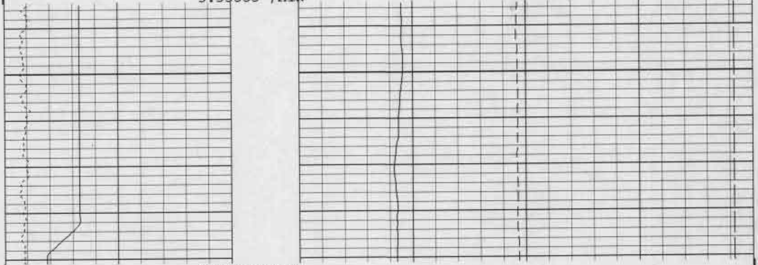
DEPTH = 1210'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1209.80 F

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

CP 38.2 FILE 20 07-OCT-1993 21:39 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 20 07-OCT-1993 21:35 (UP)

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1500'

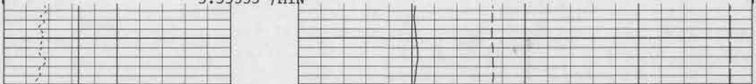
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1500.00 F

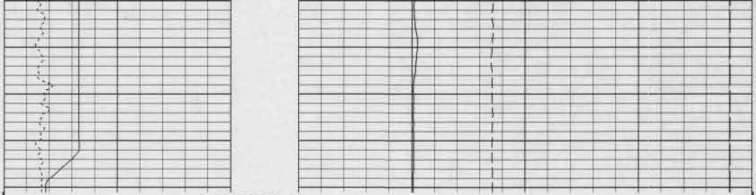
CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 19 07-OCT-1993 21:33 (UP)

3.33333"/MIN





```
                    3.33333"/MIN

      CP 38.2           FILE   19      07-OCT-1993 21:32     (UP)
```

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00
TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

```
               SENSOR MEASURE POINT TO TOOL ZERO

       PTSA  6.8  FEET                        ATTB 14.1  FEET
       EXP  -5.0  FEET                        FBSB  1.0  FEET
       CALU 23.0  FEET                        DTT  -5.0  FEET
```

```
                              PARAMETERS

     NAME  VALUE        UNIT                NAME  VALUE        UNIT

     SPEE 4000          F/HR                WMUD 8.40000       LB/G
     PDSH 0.0           G/C3                SGSN 0000A-00011
     CDAT                                   NCJT GSRE
     FCHD CSID                              PTHR 10.0000       F/MN
     NTHR -10.0000      F/MN                TIRA .500000
     VPCF .830000                           DEVI 0.0           DEG
     FDSH 0.0           G/C3                QIOP FLOW
     TCSH 0.0           IN                  BS   8.75000       IN
     BHS  OPEN
```

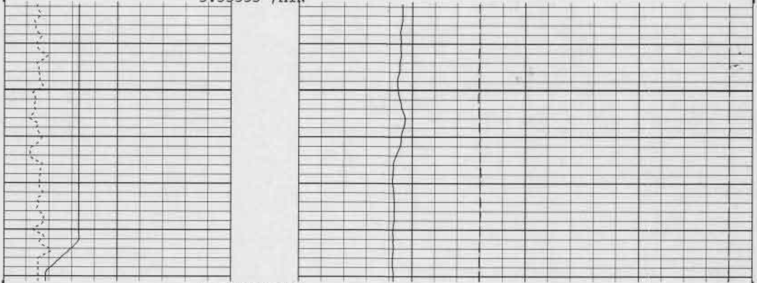
DEPTH = 1530'

```
             DATA ACQUIRED LOGGING ON INTERNAL DRIVE
             TOOL DEPTH : 1530.00 F
```

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00
TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

CP 38.2 FILE 18 07-OCT-1993 21:30 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 18 07-OCT-1993 21:27 (UP)

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1712'

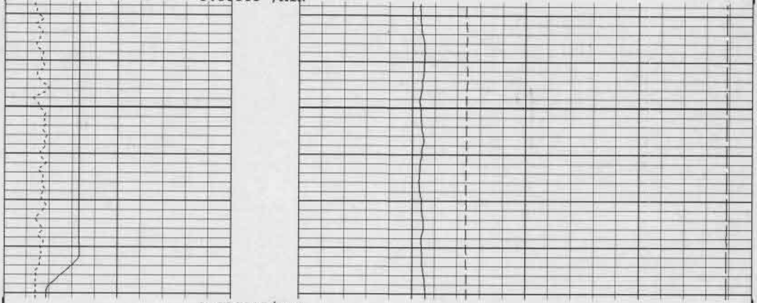
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1711.80 F

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00

TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

CP 38.2 FILE 17 07-OCT-1993 21:26 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 17 07-OCT-1993 21:25 (UP)

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00

TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

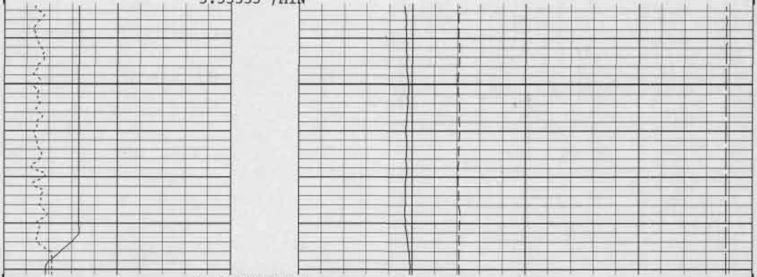
DEPTH = 1754'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1753.80 F

CVEL(F/MN)		TENS(LBF)	
0.0	200.00	5000.0	0.0
CVEL(F/MN)		PTEM(DEGF)	
0.0	-200.0	55.000	75.000
GR(GAPI)		SPIN(RPS)	
0.0	150.00	0.0	10.000

CP 38.2 FILE 16 07-OCT-1993 21:24 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 16 07-OCT-1993 21:23 (UP)

CVEL(F/MN)		TENS(LBF)	
0.0	200.00	5000.0	0.0
CVEL(F/MN)		PTEM(DEGF)	
0.0	-200.0	55.000	75.000
GR(GAPI)		SPIN(RPS)	
0.0	150.00	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1796'

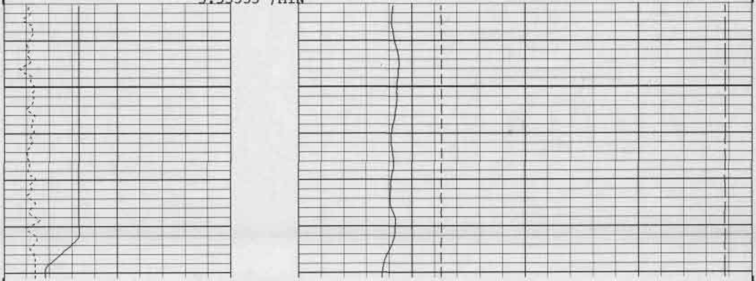
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1795.80 F

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00

TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

CP 38.2 FILE 15 07-OCT-1993 21:21 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 15 07-OCT-1993 21:20 (UP)

CVEL(F/MN) 0.0 200.00
CVEL(F/MN) 0.0 -200.0
GR(GAPI) 0.0 150.00

TENS(LBF) 5000.0 0.0
PTEM(DEGF) 55.000 75.000
SPIN(RPS) 0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

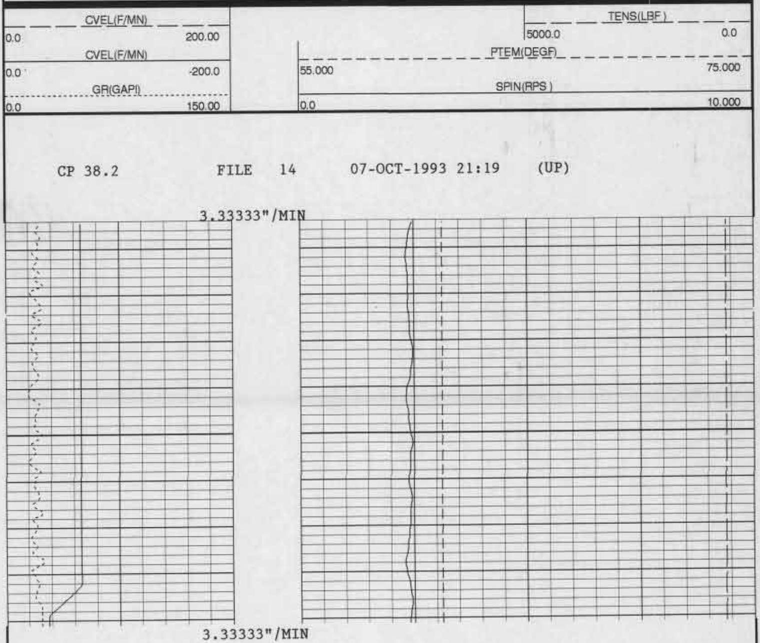
PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1850'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1850.00 F



CP 38.2 FILE 14 07-OCT-1993 21:19 (UP)

3.33333"/MIN

3.33333"/MIN

CP 38.2 FILE 14 07-OCT-1993 21:18 (UP)

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA 6.8 FEET
EXP -5.0 FEET
CALU 23.0 FEET

ATTB 14.1 FEET
FBSB 1.0 FEET
DTT -5.0 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1884'

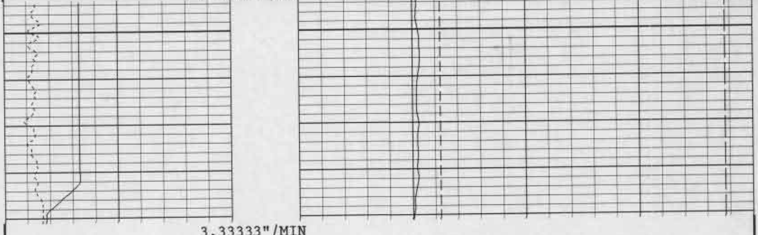
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1883.90 F

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 13 07-OCT-1993 21:17 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 13 07-OCT-1993 21:16 (UP)

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA 6.8 FEET
EXP -5.0 FEET
CALU 23.0 FEET

ATTB 14.1 FEET
FBSB 1.0 FEET
DTT -5.0 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 1930'

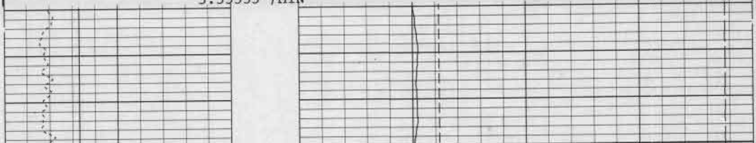
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1929.70 F

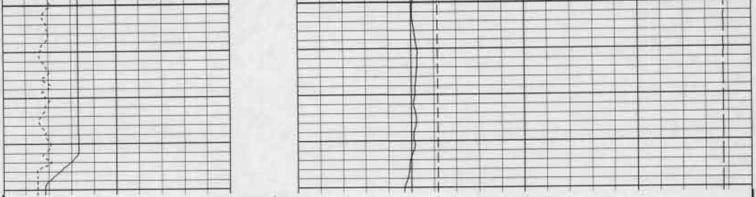
CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 12 07-OCT-1993 21:14 (UP)

3.33333"/MIN





3.33333"/MIN

CP 38.2 FILE 12 07-OCT-1993 21:04 (UP)

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 2510'

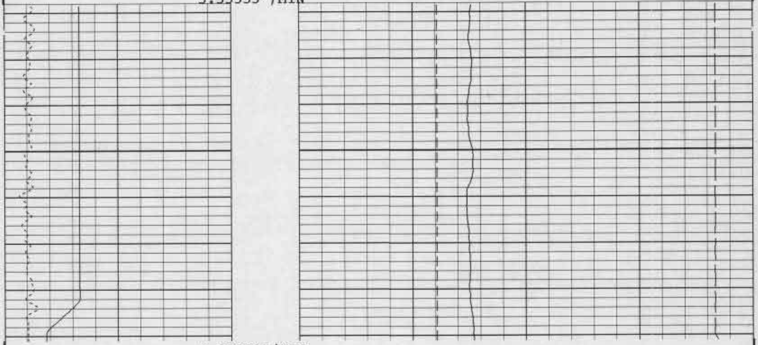
DATA ACOUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2509.90 F

CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

TENS(LBF)
5000.0 0.0
PTEM(DEGF)
55.000 75.000
SPIN(RPS)
0.0 10.000

CP 38.2 FILE 11 07-OCT-1993 21:02 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 11 07-OCT-1993 21:01 (UP)

CVEL(F/MN) 0.0 200.00

CVEL(F/MN) 0.0 -200.0

GR(GAPI) 0.0 150.00

TENS(LBF) 5000.0 0.0

PTEM(DEGF) 55.000 75.000

SPIN(RPS) 0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

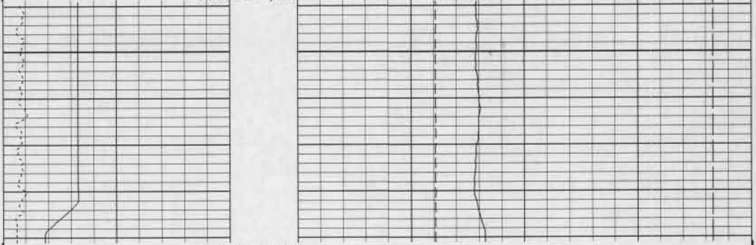
DEPTH = 2560'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2559.90 F

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

CP 38.2 FILE 10 07-OCT-1993 21:00 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 10 07-OCT-1993 20:59 (UP)

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

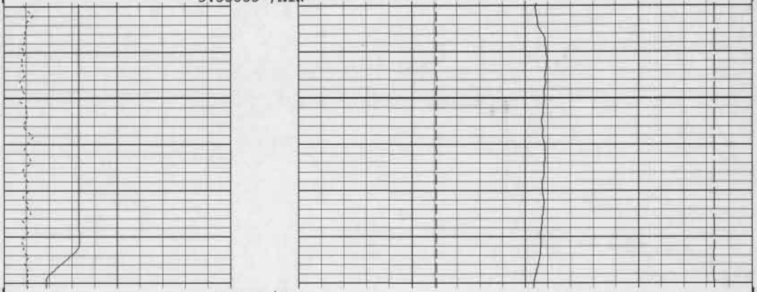
DEPTH = 2572'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2572.00 F

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

CP 38.2 FILE 9 07-OCT-1993 20:58 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 9 07-OCT-1993 20:57 (UP)

Curve	Left	Right
CVEL(F/MN)	0.0	200.00
CVEL(F/MN)	0.0	-200.0
GR(GAPI)	0.0	150.00
TENS(LBF)	5000.0	0.0
PTEM(DEGF)	55.000	75.000
SPIN(RPS)	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

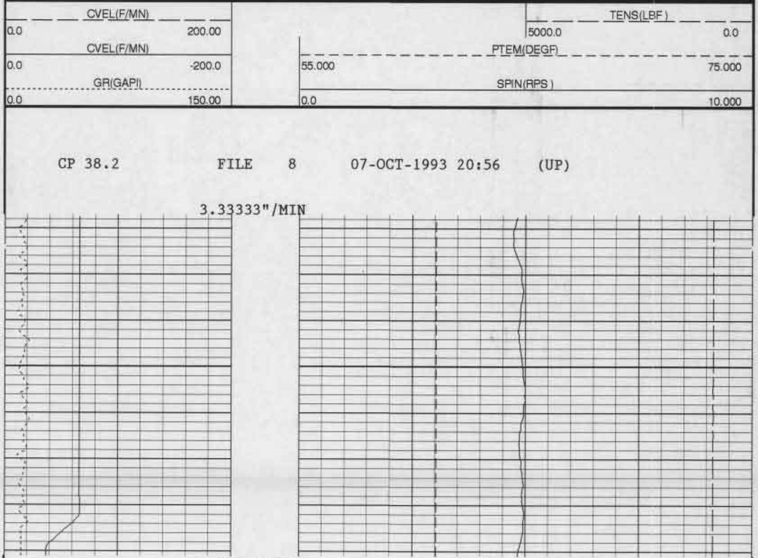
PTSA	6.8	FEET	ATTB	14.1	FEET
EXP	-5.0	FEET	FBSB	1.0	FEET
CALU	23.0	FEET	DTT	-5.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DEPTH = 2590'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2590.00 F



CP 38.2 FILE 8 07-OCT-1993 20:56 (UP)

3.33333"/MIN

3.33333"/MIN

CP 38.2 FILE 8 07-OCT-1993 20:54 (UP)

CVEL(F/MN)	TENS(LBF)
0.0 200.00	5000.0 0.0
CVEL(F/MN)	PTEM(DEGF)
0.0 -200.0	55.000 75.000
GR(GAPI)	SPIN(RPS)
0.0 150.00	0.0 10.000

SENSOR MEASURE POINT TO TOOL ZERO

```
PTSA  6.8  FEET                  ATTB 14.1  FEET
EXP  -5.0  FEET                  FBSB  1.0  FEET
CALU 23.0  FEET                  DTT  -5.0  FEET
```

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

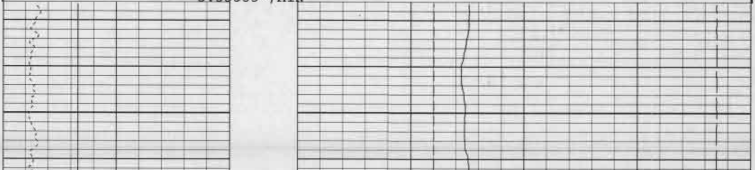
DEPTH = 2620'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2620.00 F

CVEL(F/MN)	TENS(LBF)
0.0 200.00	5000.0 0.0
CVEL(F/MN)	PTEM(DEGF)
0.0 -200.0	55.000 75.000
GR(GAPI)	SPIN(RPS)
0.0 150.00	0.0 10.000

CP 38.2 FILE 6 07-OCT-1993 20:51 (UP)

3.33333"/MIN



3.33333"/MIN

```
CP 38.2            FILE    6     07-OCT-1993 20:49     (UP)
```

CVEL(F/MN)		TENS(LBF)	
0.0	200.00	5000.0	0.0
CVEL(F/MN)		PTEM(DEGF)	
0.0	-200.0	55.000	75.000
GR(GAPI)		SPIN(RPS)	
0.0	150.00	0.0	10.000

SENSOR MEASURE POINT TO TOOL ZERO

```
GR    14.1  FEET                 CVEL  1.0  FEET
PPVC   6.8  FEET                 PTVC  5.8  FEET
SVFG   1.0  FEET                 PRVC  4.8  FEET
EXT    0.0  FEET                 SPIN  1.0  FEET
EXP2   0.0  FEET                 EXP3  0.0  FEET
TENS  -5.0  FEET                 EXP1  0.0  FEET
CCL   23.0  FEET
```

PARAMETERS

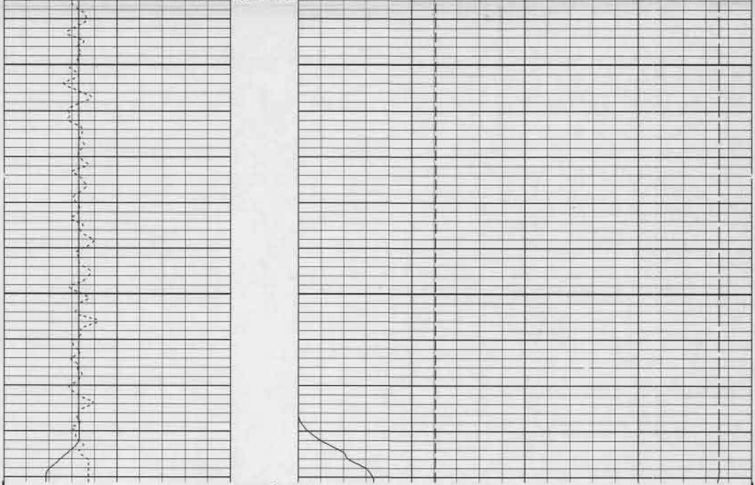
```
NAME  VALUE        UNIT          NAME  VALUE         UNIT

SPEE 4000          F/HR          WMUD 8.40000        LB/G
PDSH 0.0           G/C3          SGSN 0000A-00011
CDAT                             NCJT GSRE
FCHD CSID                        PTHR 10.0000        F/MN
NTHR -10.0000      F/MN          TIRA .500000
VPCF .830000                     DEVI 0.0            DEG
FDSH 0.0           G/C3          QIOP FLOW
TCSH 0.0           IN            BS   8.75000        IN
BHS  OPEN
```

DEPTH = 2650'

```
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2650.00 F
```

CVEL(F/MN)		TENS(LBF)	
0.0	200.00	5000.0	0.0
CVEL(F/MN)		PTEM(DEGF)	
0.0	-200.0	55.000	75.000
GR(GAPI)		SPIN(RPS)	
0.0	150.00	0.0	10.000

```
CP 38.2            FILE    5     07-OCT-1993 20:48     (UP)

                  3.33333"/MIN
```



3.33333"/MIN

CP 38.2 FILE 5 07-OCT-1993 20:45 (UP)

CVEL(F/MN)			TENS(LBF)	
0.0	200.00		5000.0	0.0

CVEL(F/MN): 0.0 – -200.0

PTEM(DEGF): 55.000 – 75.000

GR(GAPI): 0.0 – 150.00

SPIN(RPS): 0.0 – 10.000

SENSOR MEASURE POINT TO TOOL ZERO

GR	14.1	FEET	CVEL	1.0	FEET
PPVC	6.8	FEET	PTVC	5.8	FEET
SVFG	1.0	FEET	PRVC	4.8	FEET
EXT	0.0	FEET	SPIN	1.0	FEET
EXP2	0.0	FEET	EXP3	0.0	FEET
TENS	-5.0	FEET	EXP1	0.0	FEET
CCL	23.0	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

DOWNLOG

PARAMETERS

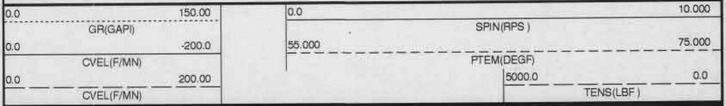
NAME	VALUE	UNIT
WMUD	8.40000	LB/G
SGSN	0000A-00011	
NCJT	GSRE	
PTHR	10.0000	F/MN
TIRA	.500000	
DEVI	0.0	DEG
QIOP	FLOW	
BS	8.75000	IN

NAME	VALUE	UNIT
PDSH	0.0	G/C3
CDAT		
FCHD	CSID	
NTHR	-10.0000	F/MN
VPCF	.830000	
FDSH	0.0	G/C3
TCSH	0.0	IN
BHS	OPEN	

SENSOR MEASURE POINT TO TOOL ZERO

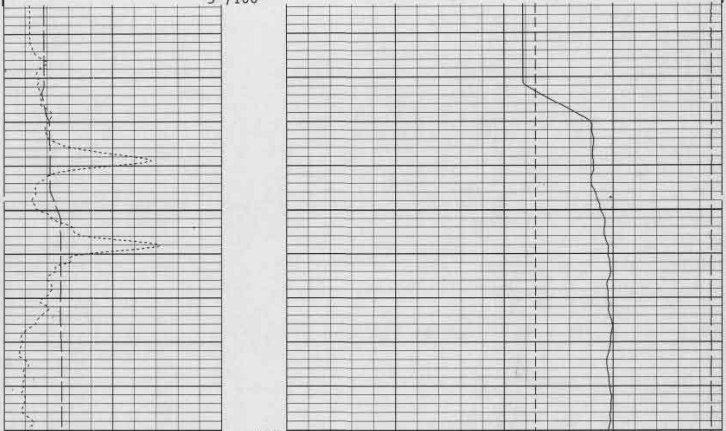
CCL	23.0	FEET
EXP1	0.0	FEET
EXP3	0.0	FEET
SPIN	1.0	FEET
PRVC	4.8	FEET
PTVC	5.8	FEET
CVEL	1.0	FEET

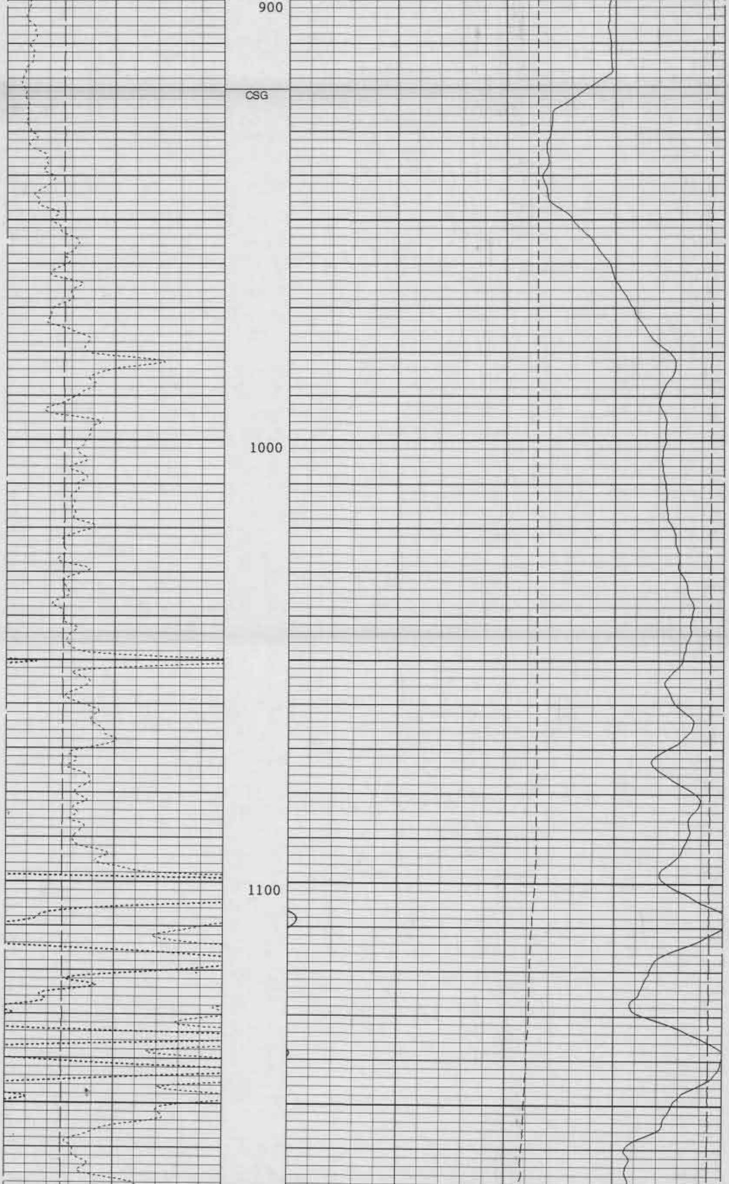
TENS	23.0	FEET
EXP2	0.0	FEET
EXT	0.0	FEET
SVFG	1.0	FEET
PPVC	6.8	FEET
GR	14.1	FEET

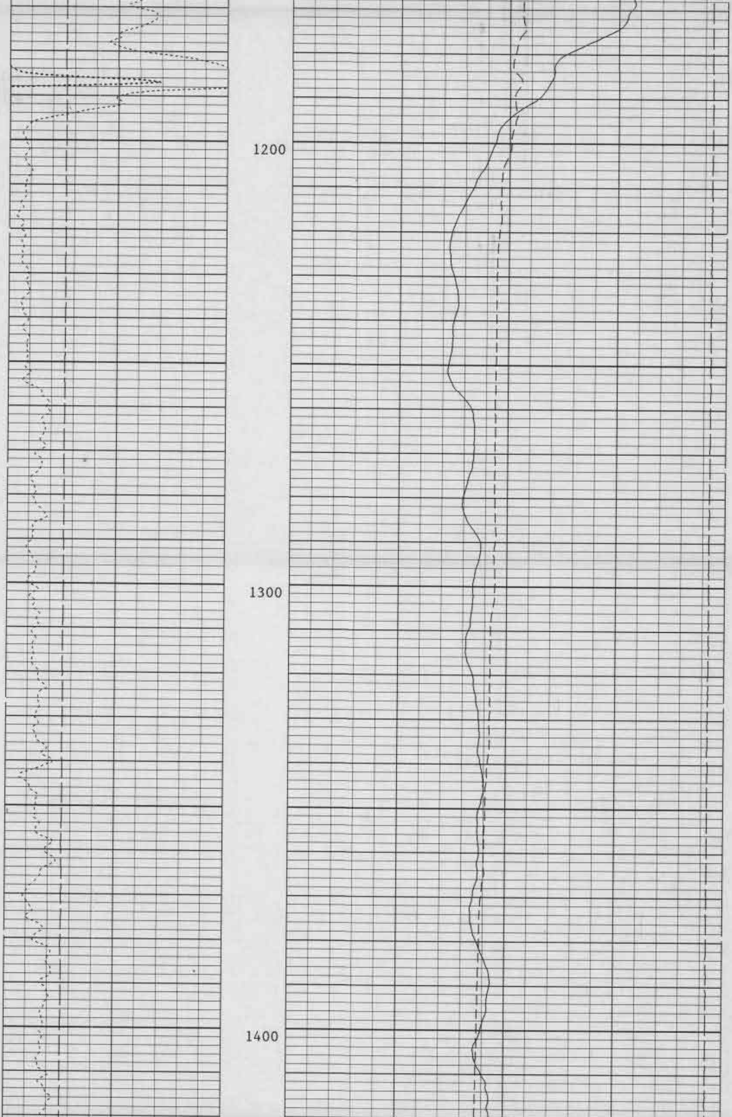

0.0
150.00
GR(GAPI)
0.0
-200.0
CVEL(F/MN)
0.0
200.00
CVEL(F/MN)
0.0
10.000
SPIN(RPS)
55.000
75.000
PTEM(DEGF)
5000.0
0.0
TENS(LBF)

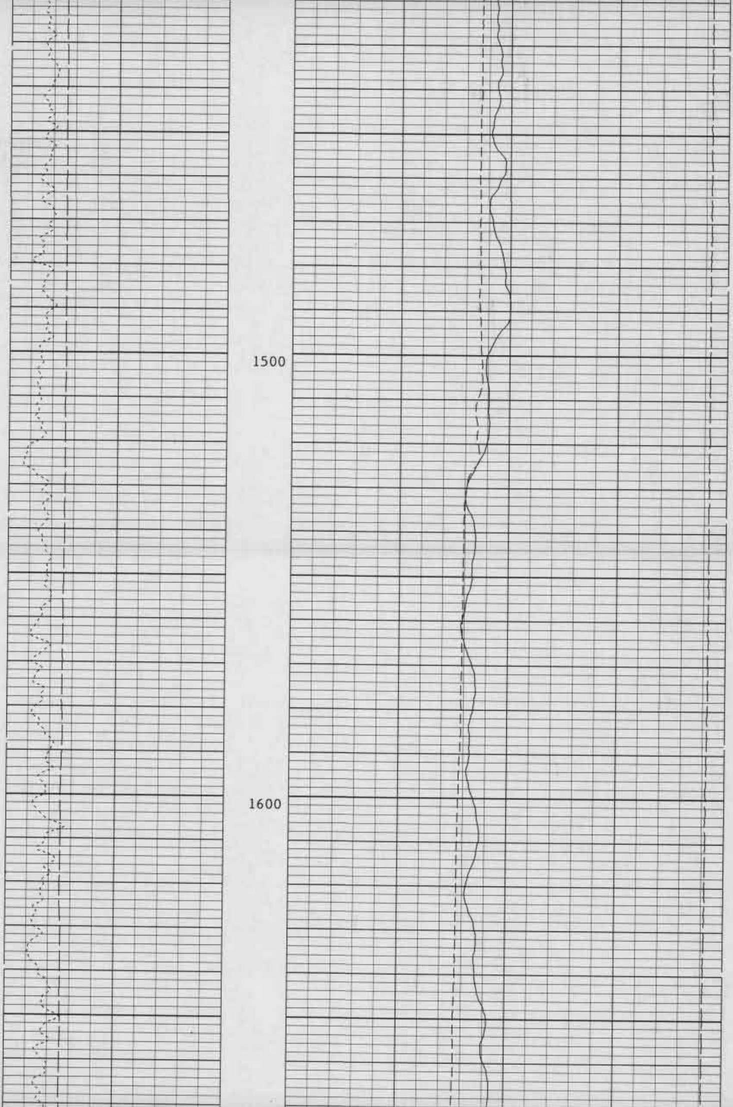
CP 38.2 FILE 4 07-OCT-1993 20:08 (DOWN)

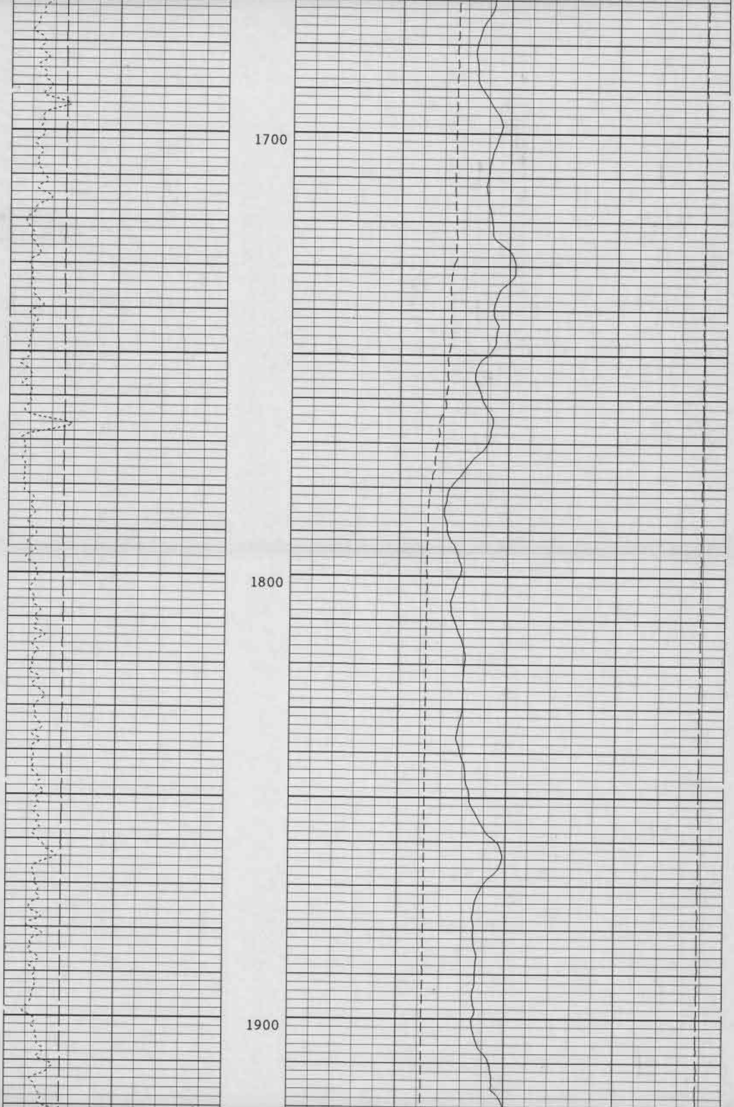
5"/100'

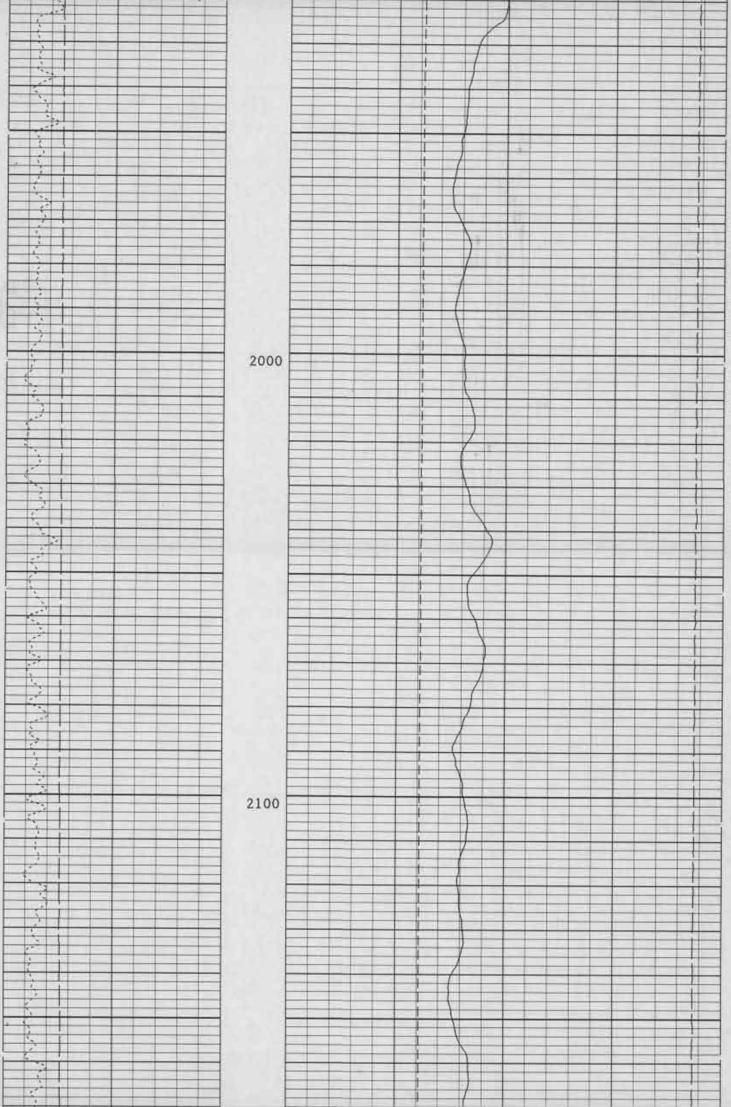


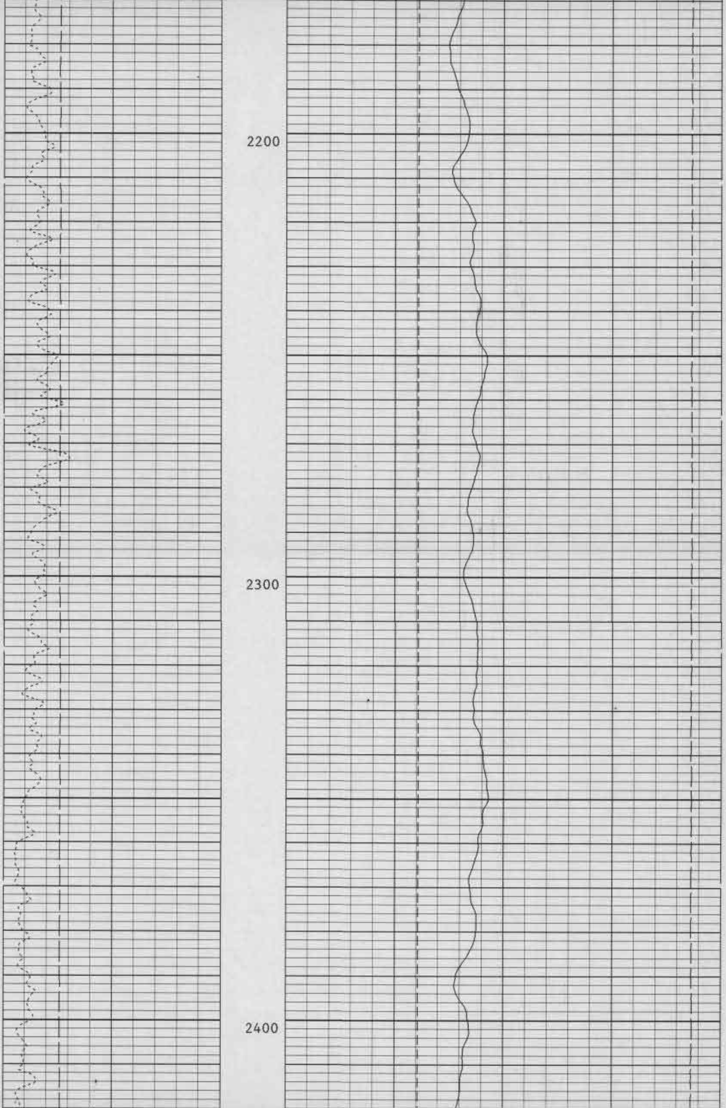


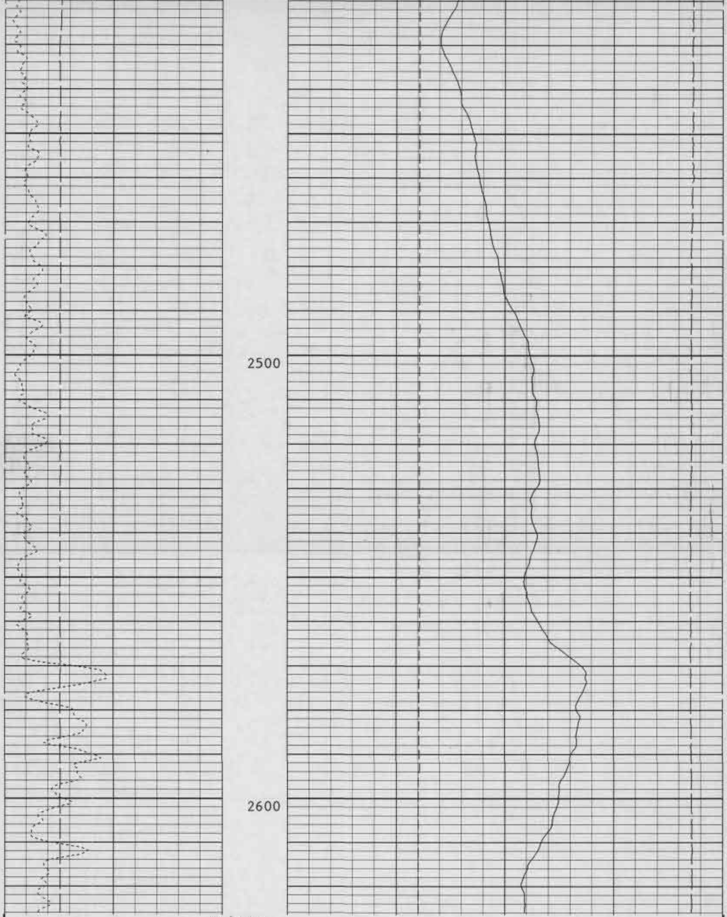












5"/100'

CP 38.2 FILE 4 07-OCT-1993 20:43 (DOWN)

0.0	GR(GAPI)	150.00
0.0	CVEL(F/MN)	-200.0
0.0	CVEL(F/MN)	200.00
0.0	SPIN(RPS)	10.000
55.000	PTEM(DEGF)	75.000
5000.0	TENS(LBF)	0.0

DATA ACQUIRED LOGGING DOWN

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.	**SCHL.**	**FR**	2650.0 F
		SCHL.	**TD**	2743.0 F
WELL	SFWMD DF-1	**DRLR.**	**TD**	2743.0 F
		Elev:	**KB**	24.5 F
FIELD	NORTHWEST L-31 CANAL		**DF**	23.5 F
COUNTY	DADE **STATE** FLORIDA		**GL**	15.0 F

Schlumberger

FULLBORE
SPINNER SURVEY

COUNTY	DADE
FIELD	NORTHWEST L-31 CANAL
LOCATION	SOUTHEAST BANK OF L-31 CANAL
WELL	SFWMD DF No. 1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT D

Schlumberger

LITHO DENSITY
COMPENSATED NEUTRON

COMPANY SOUTH FLORIDA WATER MANAGEMENT DIST.

WELL SFWMD DF No. 1

FIELD NORTHWEST L-31 CANAL

COUNTY DADE **STATE** FLORIDA

LOCATION	SOUTHEAST BANK OF L-31 CANAL CHROME AVENUE			**Other Services:** SONIC DIL CALIPER FLOWMETER TEMP AMS
API SERIAL NO. N/A	**SECT.** --	**TWP.** --	**RANGE** --	

Permanent Datum	GROUND LEVEL	**Elev.** 15.0 F		**Elev.: K.B.** 24.5 F
Log Measured From	KELLY BUSHING	9.5 F	**above Perm. Datum**	**D.F.** 23.5 F
Drilling Measured From	KELLY BUSHING			**G.L.** 15.0 F

Date	08-OCT-1993			
Run No.	ONE			
Depth Driller	2743.0 F			
Depth Logger (Schl.)	2743.0 F			
Btm. Log Interval	1950.0 F			
Top Log Interval	920.0 F			
Casing-Driller	12"	@ 920.0 F	@	@
Casing-Logger	920.0 F			
Bit Size	8 3/4"	@	@	@
Type Fluid in Hole	SALT H20 & MUD			
Dens. | Visc.	9.30 LB/G	35.0 S		
pH | Fld. Loss				
Source of Sample	CIRC. TANK			
Rm @ Meas. Temp.	3.420 OHMM	@ 82.0 DEGF	@	
Rmf @ Meas. Temp.	.840 OHMM	@ 85.0 DEGF	@	
Rmc @ Meas. Temp.		@	@	
Source: Rmf | Rmc	MEASURED	NONE		
Rm @ BHT	4.348 OHMM	@ 63.0 DEGF	@	
TIME Circulation Ended	11:00 10/05/93			
TIME Logger on Bottom	9:00 10/07/93			
Max. Rec. Temp.	63.0 DEGF			
Equip. | Location	8170	NATCHEZ, MS.		
Recorded By	BLIZNIK/JONES			
Witnessed By	JOHN LUKASIEWICZ			

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

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 interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	ONE				
Service Order No.	607441				
Drilling Fluid Level					
Salinity	20000.0 PPM				
Rmf @ BHT	1.104 OHMM	@	63.0 DEGF		@
Rmc @ BHT		@	63.0 DEGF		@
Logging Speed	5000.0 F/HR				
EQUIPMENT DATA					
Tool Number 1	LDT				
Tool Number 2	CNTH				
Tool Number 3	SGTL				
Tool Number 4	TCCB				
Tool Number 5	-				
Tool Number 6	-				
Tool Number 7					
Tool Number 8					
Tool Number 9					
Tool Number 10					
Tool Number 11					
Tool Number 12					

REMARKS:

THANK YOU FOR USING SCHLUMBERGER
YOUR SWS CREW: K.KIRBY & S.TROUTMAN
POROSITY RUN ON LIMESTON MATRIX
TD NOT ATTEMPTED DUE TO HOLE CONDITIONS

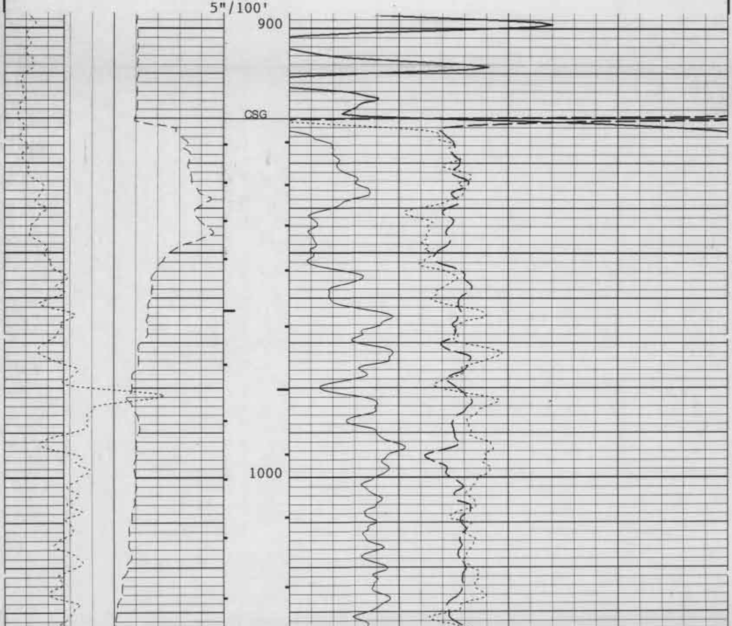
```
ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume:   1046.24 F3    FROM 1961.50 F     TO 920.000 F
Integrated Cement Volume: 955.399 F3    FROM 1961.50 F     TO 920.000 F
  (ASSUMING 4.00000 IN   O.D. CASING)
```

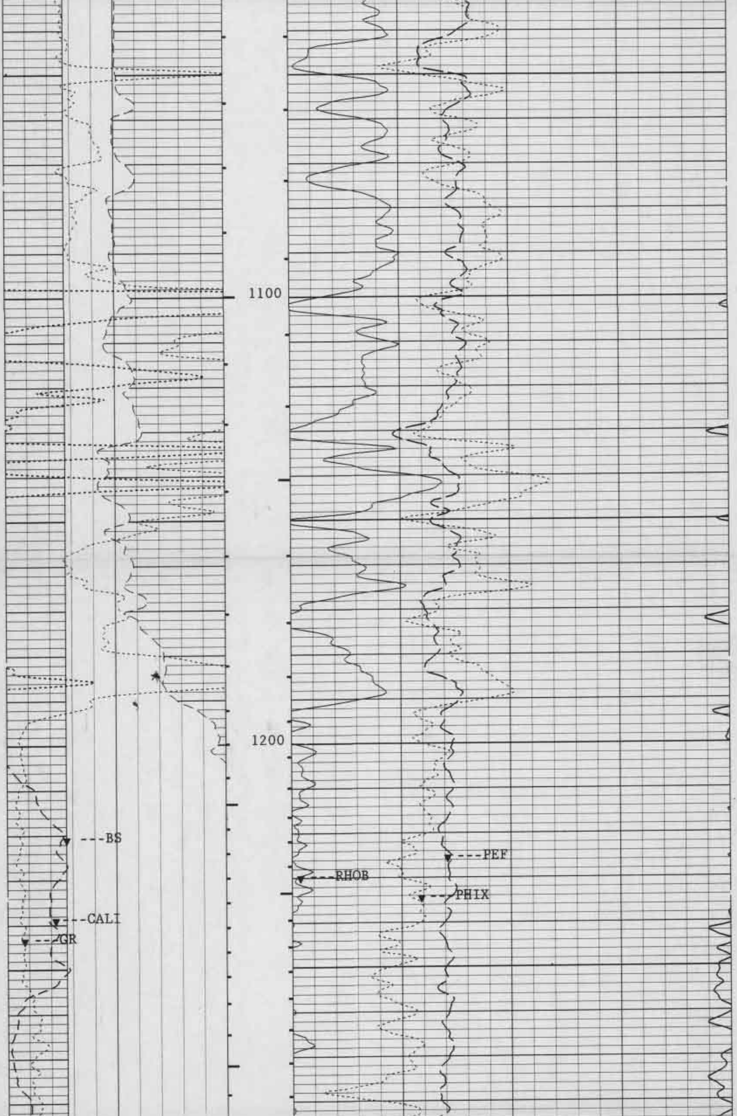
```
EVENT MARK SUMMARY:

OUTPUT                           INTERVAL        DEPTH TRACK
                                 BETWEEN PIPS    EDGE

Integrated Hole Volume           10.0000 F3      LEFT EDGE
Integrated Cement Volume         10.0000 F3      RIGHT EDGE
```

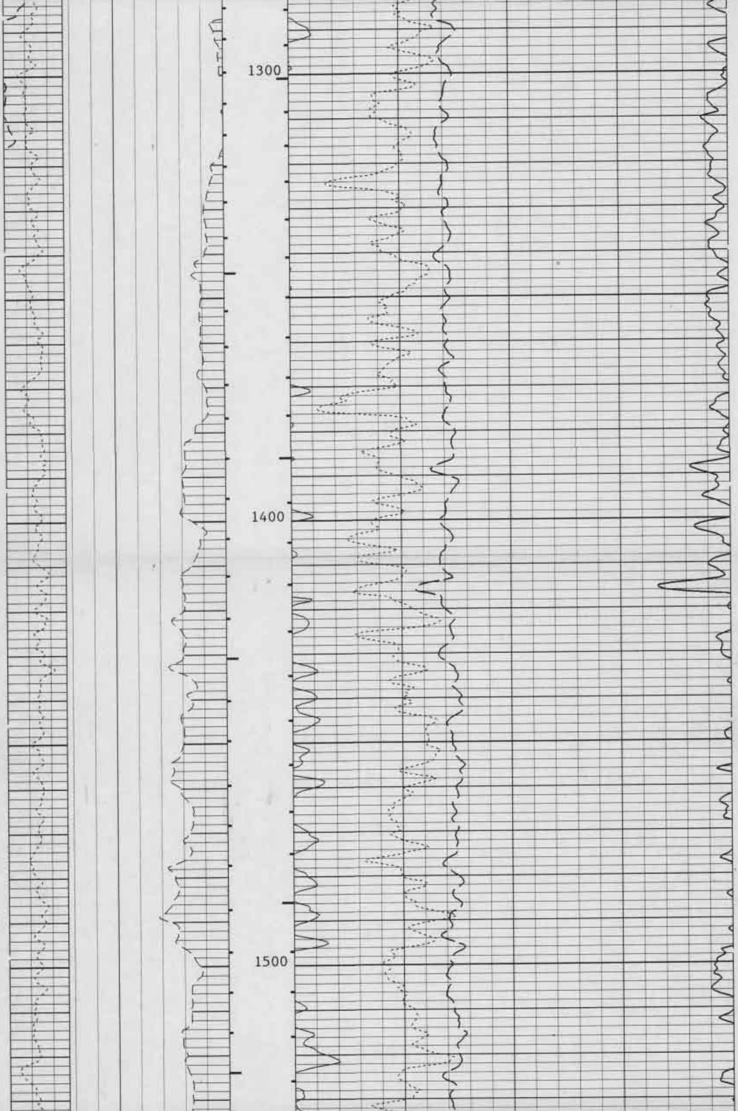
Curve	Left	Right
BS(IN)	6.0000	16.000
CALI(IN)	6.0000	16.000
GR(GAPI)	0.0	150.00
PEF	0.0	10.000
RHOB(G/C3)	2.0000	3.0000
PHIX(V/V)	.60000	0.0

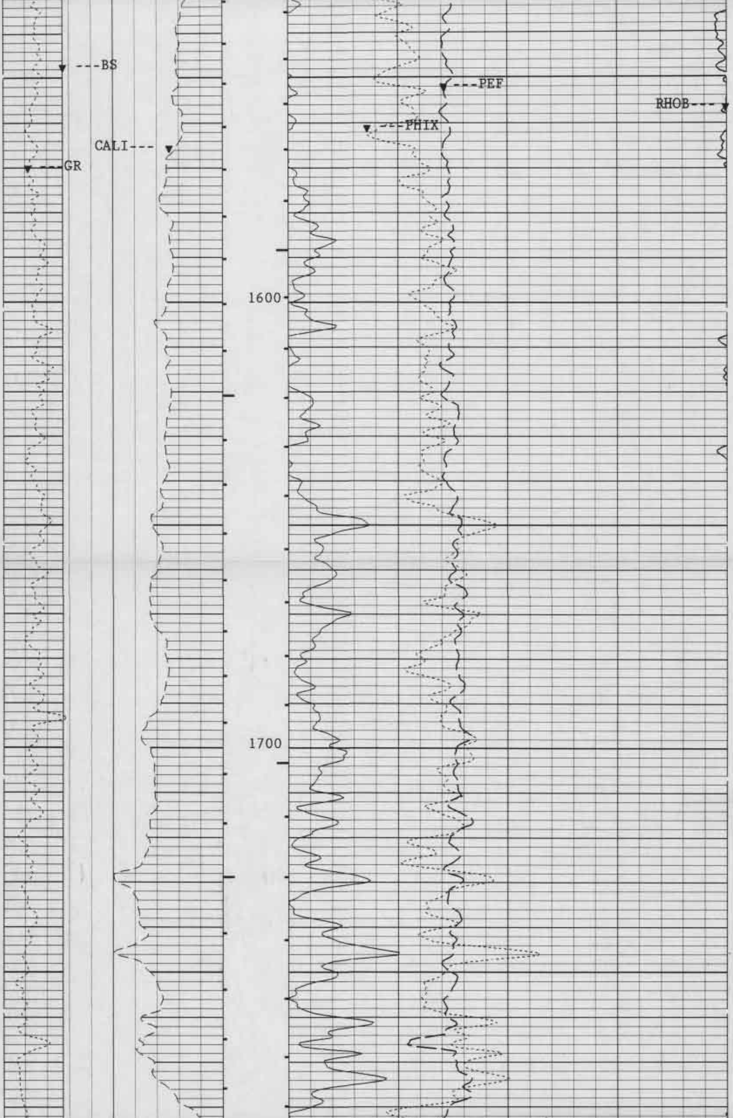
WASHOUT

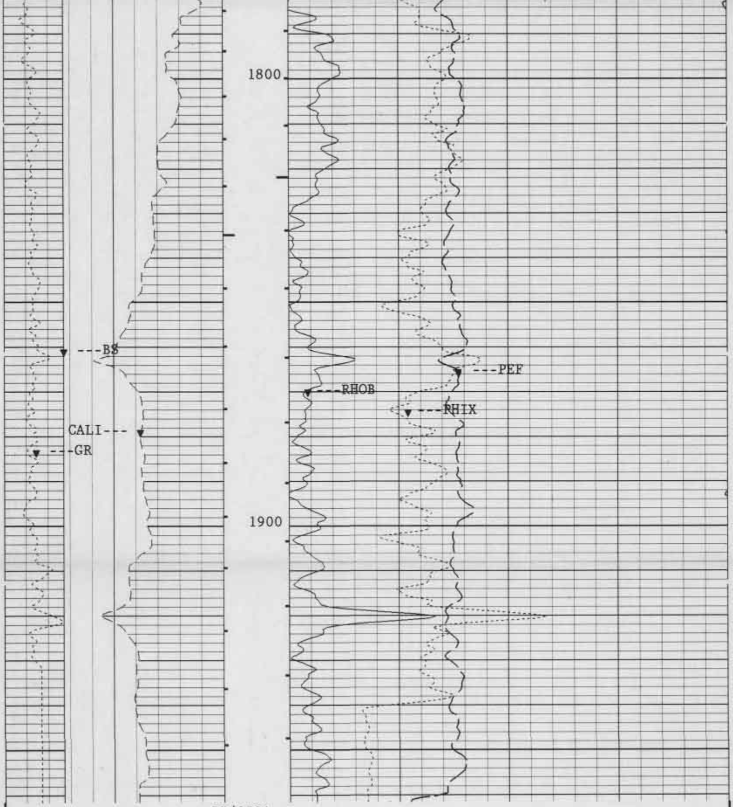
CP 38.2   FILE   3   08-OCT-1993 02:15   (UP)











5"/100'

CP 38.2 FILE 3 08-OCT-1993 01:54 (UP)

WASHOUT

BS(IN)
6.0000 16.000
CALI(IN)
6.0000 16.000
GR(GAPI)
0.0 150.00

PEF
0.0 10.000
RHOB(G/C3)
2.0000 3.0000
PHIX(V/V)
.60000 0.0

SENSOR MEASURE POINT TO TOOL ZERO

LDTD 2.7 FEET
CNTH 20.7 FEET

SGTL 29.2 FEET
DTT -.9 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	8.40000	LB/G	TD	2743.00	F
FCD	4.00000	IN	DHC	BS	
BFM	LIQU		MDEN	2.71000	G/C3
FD	1.00000	G/C3	DPPM	HISP	
MATR	LIME		HC	CALI	
NPDC	2		HSCO	YES	
SOCO	NO		MCCO	NO	
BSCO	NO		FSCO	NO	
MWCO	NO		PTCO	NO	
CCCO	NO		SDAT	SOCN	
MCOR	NATU		SOCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
FNUM	.620000		FEXP	2.15000	
FPHI	PHIX		CDSE	RHOB	
CNPS	NPHI		NCJT	GSRY	
GTSE	TEMP		SHT	80.0000	DEGF
BHT	100.000	DEGF	STEM	-50000.0	DEGF
DFD	-50000.0	LB/G	RMFS	-50000.0	OHMM
RMS	-50000.0	OHMM	MST	-50000.0	DEGF
MFST	-50000.0	DEGF	BS	8.75000	IN
BHS	OPEN				

REPEAT SECTION

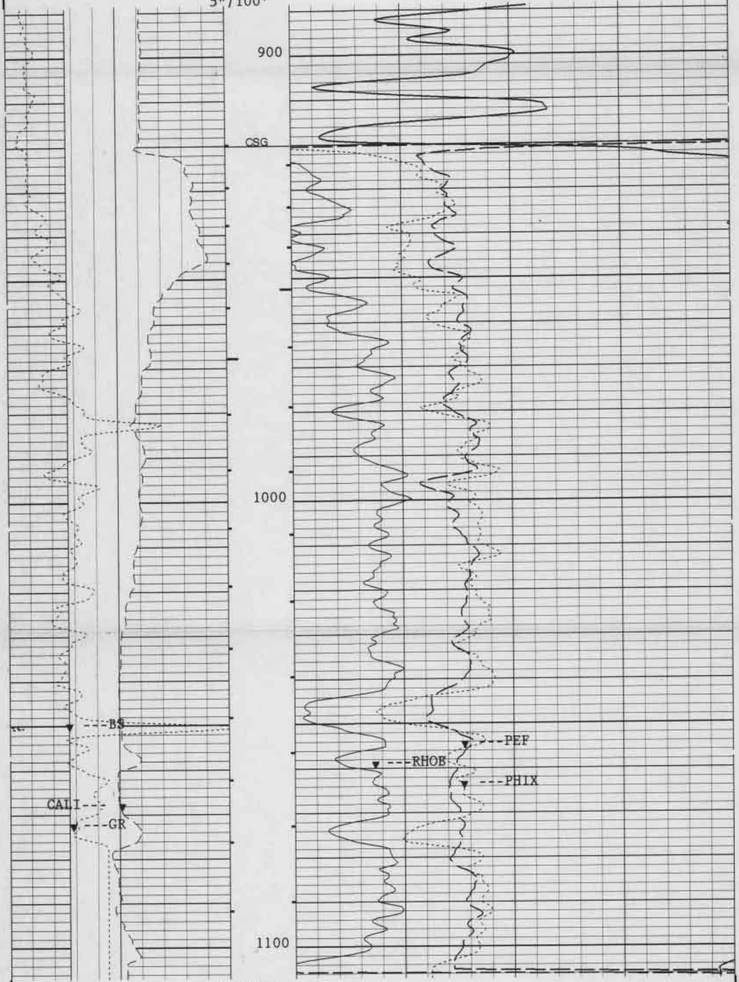
```
ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume:    150.129 F3    FROM 1107.00 F    TO 920.000 F
Integrated Cement Volume: 133.854 F3    FROM 1107.00 F    TO 920.000 F
  (ASSUMING 4.00000 IN   O.D. CASING)
```

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE

6.0000	BS(IN)	16.000	0.0	PEF	10.000
6.0000	CALI(IN)	16.000	2.0000	RHOB(G/C3)	3.0000
0.0	GR(GAPI)	150.00	.60000	PHIX(V/V)	0.0
	WASHOUT				

CP 38.2 FILE 4 08-OCT-1993 02:24 (UP)



CP 38.2 FILE 4 08-OCT-1993 02:17 (UP)

WASHOUT

BS(IN)	6.0000	16.000
CALI(IN)	6.0000	16.000
GR(GAPI)	0.0	150.00

PEF	0.0	10.000
RHOB(G/C3)	2.0000	3.0000
PHIX(V/V)	.60000	0.0

SENSOR MEASURE POINT TO TOOL ZERO

LDTD 2.7 FEET
CNTH 20.7 FEET
SGTL 29.2 FEET
DTT -.9 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	8.40000	LB/G	TD	2743.00	F
FCD	4.00000	IN	DHC	BS	
BFM	LIQU		MDEN	2.71000	G/C3
FD	1.00000	G/C3	DPPM	HISP	
MATR	LIME		HC	CALI	
NPDC	2		HSCO	YES	
SOCO	NO		MCCO	NO	
BSCO	NO		FSCO	NO	
MWCO	NO		PTCO	NO	
CCCO	NO		SDAT	SOCN	
MCOR	NATU		SOCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
FNUM	.620000		FEXP	2.15000	
FPHI	PHIX		CDSE	RHOB	
CNPS	NPHI		NCJT	GSRY	
GTSE	TEMP		SHT	80.0000	DEGF
BHT	100.000	DEGF	STEM	-50000.0	DEGF
DFD	-50000.0	LB/G	RMFS	-50000.0	OHMM
RMS	-50000.0	OHMM	MST	-50000.0	DEGF
MFST	-50000.0	DEGF	BS	8.75000	IN
BHS	OPEN				

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume: 1046.24 F3 FROM 1961.50 F TO 920.000 F
Integrated Cement Volume: 955.399 F3 FROM 1961.50 F TO 920.000 F
(ASSUMING 4.00000 IN O.D. CASING)

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE

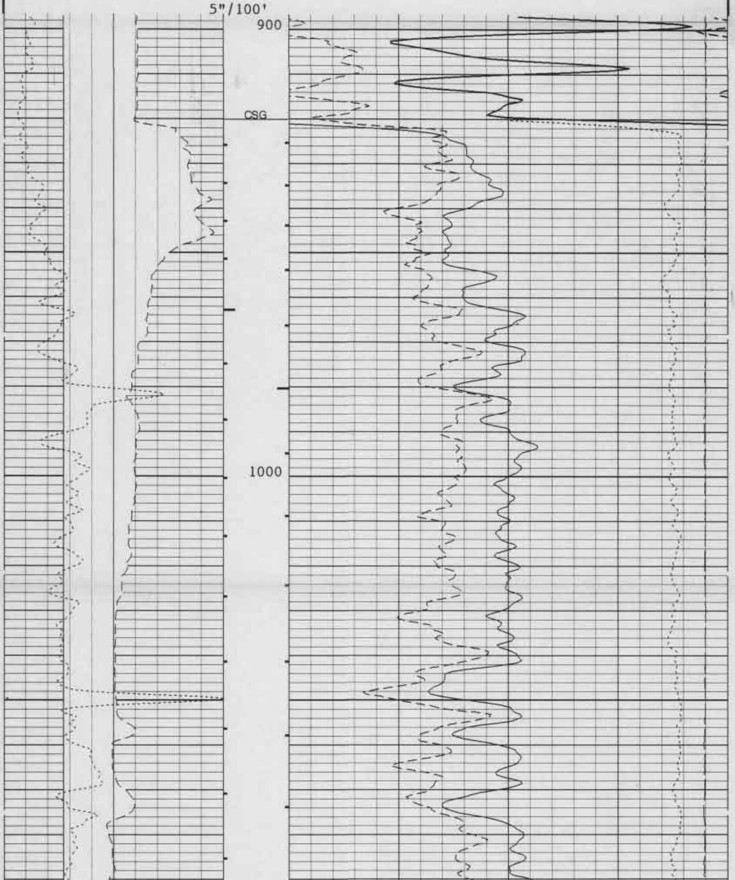
TENS(LBF)	10000.	0.0
DRHO(G/C3)	-.6000	.15000

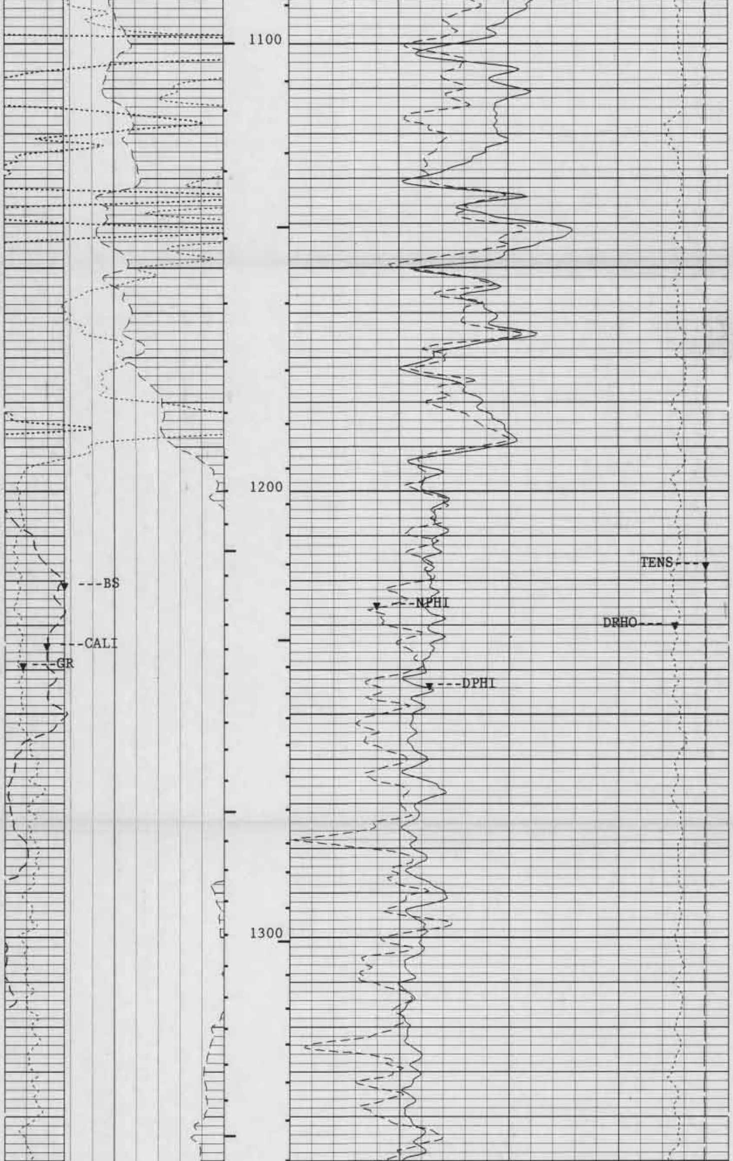
BS(IN)	6.0000	16.000
CALI(IN)	6.0000	16.000
GR(GAPI)	0.0	150.00

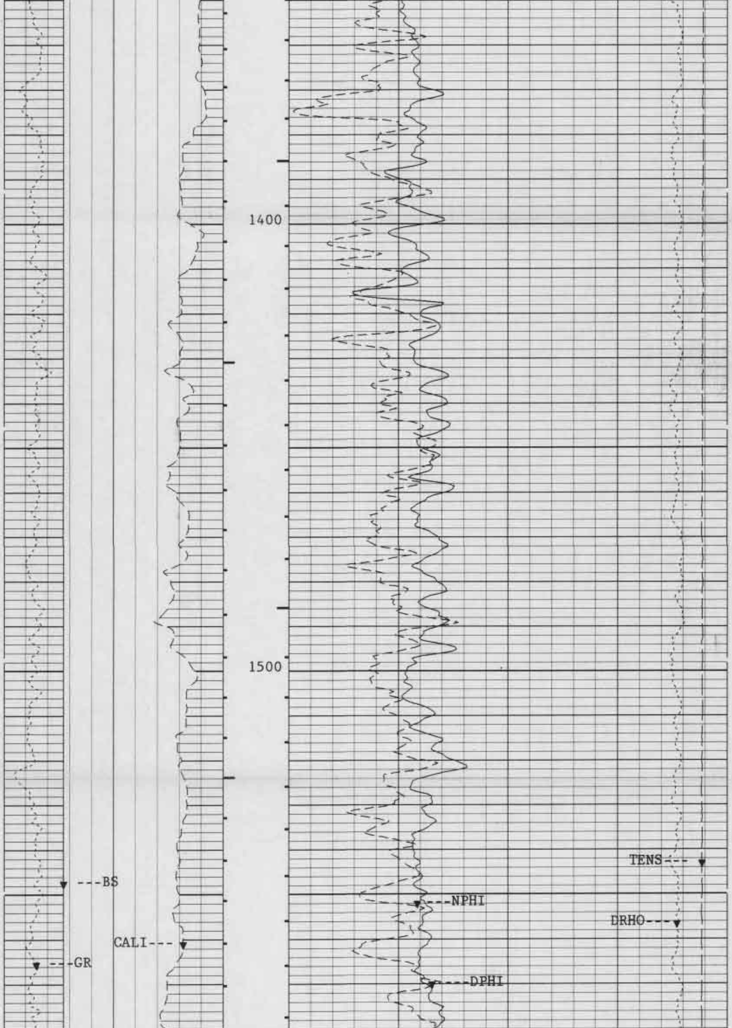
NPHI(V/V)	.60000	0.0
DPHI(V/V)	.60000	0.0

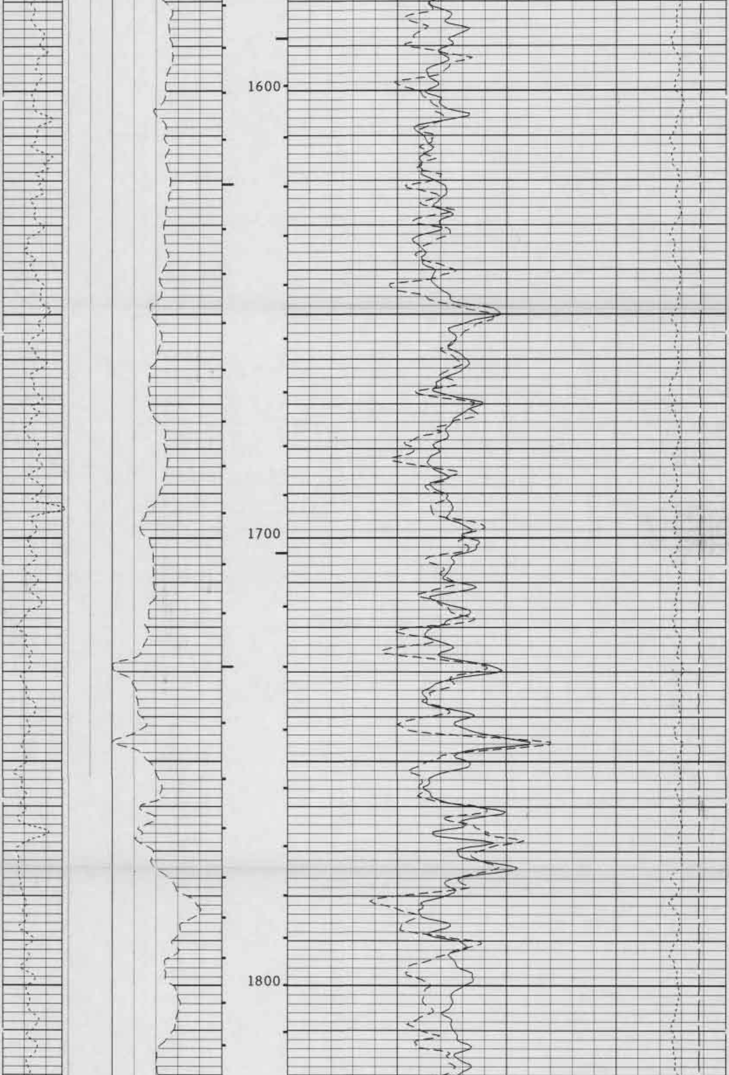
WASHOUT

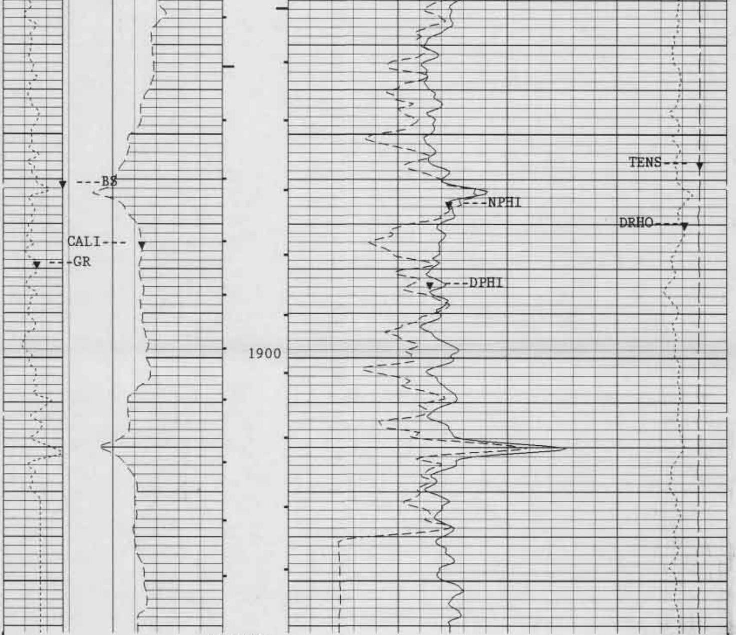
CP 38.2 FILE 3 08-OCT-1993 02:15 (UP)











CP 38.2 FILE 3 08-OCT-1993 01:54 (UP)

WASHOUT

TENS(LBF)
10000. 0.0
DRHO(G/C3)
-.6000 .15000

BS(IN)
6.0000 16.000
CALI(IN)
6.0000 16.000
GR(GAPI)
0.0 150.00

NPHI(V/V)
.60000 0.0
DPHI(V/V)
.60000 0.0

SENSOR MEASURE POINT TO TOOL ZERO

LDTD 2.7 FEET
CNTH 20.7 FEET

SGTL 29.2 FEET
DTT -.9 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	8.40000	LB/G	TD	2743.00	F
FCD	4.00000	IN	DHC	BS	
BFM	LIQU		MDEN	2.71000	G/C3
FD	1.00000	G/C3	DPPM	HISP	
MATR	LIME		HC	CALI	
NPDC	2		HSCO	YES	
SOCO	NO		MCCO	NO	
BSCO	NO		FSCO	NO	
MWCO	NO		PTCO	NO	
CCCO	NO		SDAT	SOCN	
MCOR	NATU		SOCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
FNUM	.620000		FEXP	2.15000	
FPHI	PHIX		CDSE	RHOB	
CNPS	NPHI		NCJT	GSRY	
GTSE	TEMP		SHT	80.0000	DEGF
BHT	100.000	DEGF	STEM	-50000.0	DEGF
DFD	-50000.0	LB/G	RMFS	-50000.0	OHMM
RMS	-50000.0	OHMM	MST	-50000.0	DEGF
MFST	-50000.0	DEGF	BS	8.75000	IN
BHS	OPEN				

REPEAT SECTION

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume: 150.129 F3 FROM 1107.00 F TO 920.000 F
Integrated Cement Volume: 133.854 F3 FROM 1107.00 F TO 920.000 F
(ASSUMING 4.00000 IN O.D. CASING)

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE

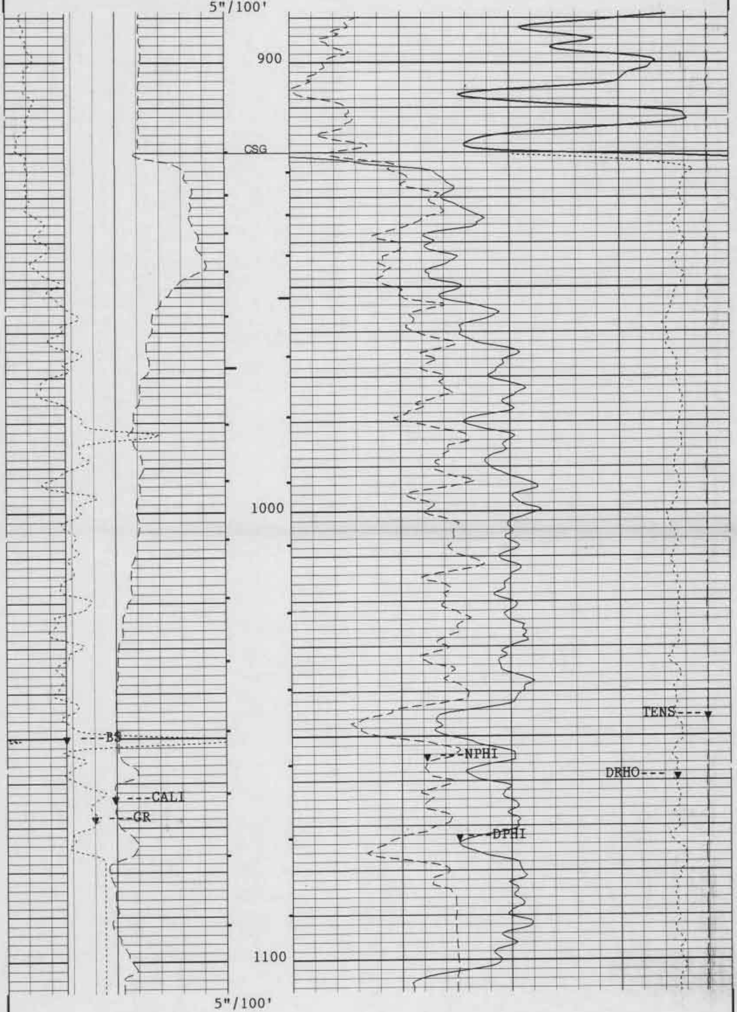
TENS(LBF)
10000. 0.0
DRHO(G/C3)
-.6000 .15000

BS(IN)
6.0000 16.000
CALI(IN)
6.0000 16.000
GR(GAPI)
0.0 150.00

NPHI(V/V)
.60000 0.0
DPHI(V/V)
.60000 0.0

WASHOUT

CP 38.2 FILE 4 08-OCT-1993 02:24 (UP)



CP 38.2 FILE 4 08-OCT-1993 02:17 (UP)

WASHOUT

TENS(LBF)
10000. 0.0
DRHO(G/C3)
-.6000 .15000

BS(IN)
6.0000 16.000
CALI(IN)
6.0000 16.000
GR(GAPI)
0.0 150.00

NPHI(V/V)
.60000 0.0
DPHI(V/V)
.60000 0.0

SENSOR MEASURE POINT TO TOOL ZERO

LDTD	2.7	FEET	SGTL	29.2	FEET
CNTH	20.7	FEET	DTT	-.9	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	8.40000	LB/G	TD	2743.00	F
FCD	4.00000	IN	DHC	BS	
BFM	LIQU		MDEN	2.71000	G/C3
FD	1.00000	G/C3	DPPM	HISP	
MATR	LIME		HC	CALI	
NPDC	2		HSCO	YES	
SOCO	NO		MCCO	NO	
BSCO	NO		FSCO	NO	
MWCO	NO		PTCO	NO	
CCCO	NO		SDAT	SOCN	
MCOR	NATU		SOCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	
FNUM	.620000		FEXP	2.15000	
FPHI	PHIX		CDSE	RHOB	
CNPS	NPHI		NCJT	GSRY	
GTSE	TEMP		SHT	80.0000	DEGF
BHT	100.000	DEGF	STEM	-50000.0	DEGF
DFD	-50000.0	LB/G	RMFS	-50000.0	OHMM
RMS	-50000.0	OHMM	MST	-50000.0	DEGF
MFST	-50000.0	DEGF	BS	8.75000	IN
BHS	OPEN				

SHOP SUMMARY

PERFORMED: 20-SEP-1993 12:08
PROGRAM FILE: CCSHOP (VERSION 38.2 92/10/12 92/10/12)

CNTH DETECTOR CALIBRATION SUMMARY

NEUTRON COMPENSATED CARTRIDGE NUMBER: 181
NEUTRON SOURCE SERIAL NUMBER : 2526
THERMAL HOUSING NUMBER : 3113
THERMAL CALIBRATED NEUTRON BOX : 4410

INPUT	PLUS REFERENCE COUNTS	SHOP TANK COUNTS	SHOP JIG COUNTS	GAIN
CNTC	6031.00	6323.31	2946.68	.954
CFTC	2793.00	2698.44	1299.81	1.035
RATIO	2.159	2.343	2.267	

SHOP COUNTS TEMPERATURE AND HOUSING SIZE CORRECTED

BKGD: 20-SEP-1993 11:21 TANK: 20-SEP-1993 11:36 COMP: 20-SEP-1993 11:36

```
   CP 38.2            FILE    7      20-SEP-1993 12:08


                    SHOP SUMMARY


  PERFORMED:     20-SEP-1993 11:06
  PROGRAM FILE: CCSHOP (VERSION     38.2     92/10/12  92/10/12)


LDTD                DETECTOR CALIBRATION SUMMARY

        DENSITY RESISTIVITY SONDE NUMBER      :  2993
        NUCLEAR SERVICE CARTRIDGE NUMBER      :  1761
        POWERED DETECTOR HOUSING NUMBER       :  3793
        POWERED GAMMA-GAMMA DETECTOR NUMBER :  3794
        LDT LOGGING SOURCE NUMBER             :  1927
        LDT CALIBRATION MODE                  :  WATE

                      MASTER CALIBRATED
                     BKGD    AL+FE      AL   UNITS
               LL     17.4     88.8    100.5    CPS
               LU     66.0    132.7    151.2    CPS
               LS     50.5    155.2    176.1    CPS
             LITH      5.0     41.5     64.7    CPS
              SS1     12.7    167.4    189.4    CPS
              SS2      8.7    245.7    273.6    CPS

          HV SETTINGS            DETECTOR RESOLUTIONS
        HV LS:  1246.0 V             LS:  8.6 %
        HV SS:  1218.5 V             SS:  8.4 %

                    SPECTRUM QUALITY RATIOS
          COMPUTED VALUE          NOMINAL VALUE    TOLERANCE
    QRLS         .664                  0.65         +/- 0.05
    QRSS         .692                  0.72         +/- 0.10
    QRLI         .368                  0.39         +/- 0.06
    QLIR        1.373                  1.39         +/- 0.06
    QR          1.003                  1.00         +/- 0.02

BKGD: 20-SEP-1993 10:16   AL: 20-SEP-1993 10:42  AL+FE: 20-SEP-1993 11:03

   CP 38.2            FILE    7      20-SEP-1993 11:05


                 BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:     08-OCT-1993 02:51
  PROGRAM FILE: TOH    (VERSION     38.2     92/10/12  92/10/12)


SGTL                DETECTOR CALIBRATION SUMMARY

             MEASURED
           BKGD    JIG        CALIBRATED          UNITS
    GR      18     181           165              GAPI

BACK: 25-SEP-1993 11:39   JIG: 25-SEP-1993 11:59  COMP: 25-SEP-1993 12:00


LDTD                DETECTOR CALIBRATION SUMMARY
```

```
        DENSITY RESISTIVITY SONDE NUMBER        :     2993
        NUCLEAR SERVICE CARTRIDGE NUMBER        :     1761
        POWERED DETECTOR HOUSING NUMBER         :     3793
        POWERED GAMMA-GAMMA DETECTOR NUMBER :         3794
        LDT LOGGING SOURCE NUMBER               :     1927
        LDT CALIBRATION MODE                    :     WATE

                 MEASURED        SHOP  VALUES
                   BKGD          AL+FE   AL       UNITS
            LL     17.2           88.8  100.5      CPS
            LU     66.3          132.7  151.2      CPS
            LS     50.4          155.2  176.1      CPS
           LITH     4.8           41.5   64.7      CPS
            SS1    12.8          167.4  189.4      CPS
            SS2     8.7          245.7  273.6      CPS

             HV SETTINGS           DETECTOR RESOLUTIONS
           HV LS:  1247.9 V             LS:  8.6 %
           HV SS:  1222.0 V             SS:  8.4 %

BKGD: 25-SEP-1993 11:39


CNTH                DETECTOR CALIBRATION SUMMARY

       NEUTRON COMPENSATED CARTRIDGE NUMBER: 181
       NEUTRON SOURCE SERIAL NUMBER          : 2526
       THERMAL HOUSING NUMBER                : 3113
       THERMAL CALIBRATED NEUTRON BOX        : 4410

            INPUT      PLUS        SHOP        SHOP       BEFORE     GAIN
                    REFERENCE      TANK        JIG         JIG
                      COUNTS      COUNTS      COUNTS      COUNTS

            CNTC     6031.00     6323.31     2946.68     2979.98     .954
            CFTC     2793.00     2698.44     1299.81     1298.69    1.035

            RATIO      2.159       2.343       2.267       2.295

BACK: 25-SEP-1993 11:39   JIG: 25-SEP-1993 11:59   COMP: 25-SEP-1993 11:35


LDTD                CALIPER CALIBRATION SUMMARY

               MEASURED                           CALIBRATED
             SMALL    LARGE                     SMALL      LARGE          UNITS
    CALI      5.60     9.91                      8.00      12.00            IN

SMALL: 25-SEP-1993 12:01 LARGE: 25-SEP-1993 12:03 COMP: 25-SEP-1993 12:03

   CP 38.2            FILE    6       08-OCT-1993 02:50



                   AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:     08-OCT-1993 02:49
   PROGRAM FILE: TOH     (VERSION     38.2     92/10/12  92/10/12)


LDTD                        TOOL  CHECK

        DENSITY RESISTIVITY SONDE NUMBER        :     2993
        NUCLEAR SERVICE CARTRIDGE NUMBER        :     1761
        POWERED DETECTOR HOUSING NUMBER         :     3793
        POWERED GAMMA-GAMMA DETECTOR NUMBER :         3794
        LDT LOGGING SOURCE NUMBER               :     1927
        LDT CALIBRATION MODE                    :     WATE

             MEASURED BACKGROUND                     TOLERANCE ON
              BEFORE           AFTER       UNITS     BEFORE-AFTER
        LL     17.2             16.9        CPS        +/- 1.0
        LU     66.3             64.2        CPS        +/- 1.0
        LS     50.4             48.9        CPS        +/- 1.0
       LITH     4.8              4.8        CPS        +/- 0.3
        SS1    12.8             12.3        CPS        +/- 0.5
        SS2     8.7              8.4        CPS        +/- 0.5
```

```
              HV SETTINGS            DETECTOR RESOLUTIONS
            HV LS:  1247.9 V               LS:  8.6 %
            HV SS:  1222.0 V               SS:  8.4 %

     BKGD                            BKGD
       BEFORE SURVEY: 25-SEP-1993 11:39   AFTER SURVEY: 08-OCT-1993 02:44


     CNTH                      TOOL  CHECK


                INPUT    BEFORE JIG   AFTER JIG


                CNTC       2979.98     3007.38

                CFTC       1298.69     1311.37


     CHANGE IN THERMAL POROSITY AT 20 PU IS   -.019  PU


     BEFORE SURVEY:             BACK: 25-SEP-1993 11:39   JIG: 25-SEP-1993 11:59
     AFTER SURVEY CHECK:        BACK:                     JIG: 08-OCT-1993 02:47

        CP 38.2          FILE    6       08-OCT-1993 02:48
```

COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.		
WELL	SFWMD DF No. 1		
FIELD	NORTHWEST L-31 CANAL		
COUNTY	DADE	**STATE**	FLORIDA

SCHL.	**FR**	1950.0 F
SCHL.	**TD**	2743.0 F
DRLR.	**TD**	2743.0 F
Elev:	**KB**	24.5 F
	DF	23.5 F
	GL	15.0 F

Schlumberger

LITHO DENSITY
COMPENSATED NEUTRON