WELL STATION IDENTIFICATION

FORM RP-37 – Rev. 10/78

PAGE 1 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

WELL LOCATION CARD ONE

1 10 16 20 37 54 57 59 63 66 68 71

STATION I.D.	SURVEY DATE	AC	CARD	WELL NO.	COUNTY	LAT DEG	LAT MIN	LAT SEC	LON DEG	LON MIN	LON SEC
025000001	110383		W11	DF-1	DADE						

WELL LOCATION CARD TWO

1 17 20 37 39 42 45 61

STATION I.D.	SURVEY DATE	AC	CARD	QUARTERSECTIONS	SEC	TOWNSHIP	RANGE	WATER MANAGEMENT DISTRICT PLANNING AREA
			W12	1/4; 1/4; 1/4	25	55S	37E	LOWER EAST COAST

WELL DATUM CARD

1 17 20 26 32 38 44 59

STATION I.D.	SURVEY DATE	AC	CARD	KELLY BUSHING (FEET)	LAND SURFACE (FT)	TOP OF CASING (FT)	OTHER (FT) (SEE NOTES)	DATUM (CHECK ONE)
			W21			42		MSL- ;LS- ;TOC-X

WELL OWNERSHIP CARD

1 17 20 37 54 57 64 80

STATION I.D.	SURVEY DATE	AC	CARD	NAME OF OWNER	GROVE/PROPERTY NAME	AREA CODE	TELEPHONE	WELL USE
			W31	STATE OF FLORIDA				EXPLORATORY

WELL ORIGIN CARD

1 17 20 37 54 71 76

STATION I.D.	SURVEY DATE	AC	CARD	DRILLER/ DRILLING COMPANY	OFFICE OF DRILLER (CITY)	DRILLING METHOD	DATE COMPLETED
			W41			CABLE TOOL	46

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD), 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).

WELL STATION IDENTIFICATION

FORM RP-38 - Rev. 10/78

PAGE 2 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

WELL DESCRIPTION - CONSTRUCTION CARD ONE

1	10	16		20	27	34	41	48	54	59 – 68
STATION I. D.	SURVEY DATE	AC	CARD	TOTAL DEPTH -DRILLER (FT)	TOTAL DEPTH -LOGGER (FT)	CASING DEPTH -DRILLER (FT)	CASING DEPTH -LOGGER (FT)	CASING I.D. (INCHES)	BIT SIZE (INCHES)	DRILLER LOG AVAIL.
025000001	110383		W51	1249	1246		486	118		YES- ;NO-

WELL DESCRIPTION - CONSTRUCTION CARD TWO

1			17	20	37	54	59	64	69	73
STATION I. D.	SURVEY DATE	AC	CARD	TYPE OF SCREEN	TYPE OF PACKING	DIA. OF SCREEN	SLOT SIZE (INCHES)	SCREEN BEGINS	SCREEN ENDS (FT)	
			W52	OPEN HOLE						

WELL DESCRIPTION - CONFIGURATION CARD. SECTION ONE (TOP)

1			17	20	22	39	44	49	54	59 – 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W61	0	STEEL					

WELL DESCRIPTION - CONFIGURATION CARD. SECTION TWO

1			17	20	22	39	44	49	54	59 – 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W62	02						

WELL DESCRIPTION - CONFIGURATION CARD. SECTION THREE

1			17	20	22	39	44	49	54	59 – 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W63	03						

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD).
2 (CHANGE ALL VALUES). OR 9 (DELETE OLD RECORD).
CARD TYPES <W64>, <W65>, ... <W69> MAY ALSO BE USED TO PROVIDE DATA FOR A TOTAL OF NINE SECTIONS.

WELL SURVEY REPORT

FORM RP-39 -- Rev. 10/78

(USE ONE FORM/DAY/WELL)

SURVEY CARD

1 STATION I.D.	10 SURVEY DATE	16 A C	CARD	20 LOGGED BY	37 WITNESSED BY	54 * A	* B	56 * C	* D	58 * E	* F	60 * G	* H	62 * I	* J	64 * K	* L	66 * M	* N	68 * O	* P	70 * Q	* R	72 * S	* T
025000001	110383		W71	P DAUENHAUER	S ANDERSON	X					X					X	X								

*INSERT AN <X> IN EACH COLUMN FOR WHICH A SURVEY WAS CONDUCTED. SURVEY CODES ARE LISTED BELOW:

A = CALIPER
B = FLOWMETER
C = 16-INCH NORMAL RESISTIVITY
D = 64-INCH NORMAL RESISTIVITY
E = NEUTRON POROSITY
F = NATURAL GAMMA
G = FLUID RESISTIVITY
H = GAMMA GAMMA DENSITY
I = CASING COLLAR LOCATOR
J = FLUID SAMPLER
K = TEMPERATURE GRADIENT
L = DELTA TEMPERATURE
M = SPONTANEOUS POTENTIAL
N = POINT RESISTANCE
O = 6-FOOT LATERAL RESISTIVITY

FLUID QUALITY CARD ONE

1 STATION I.D.	SURVEY DATE	A C	17 CARD	20 SAMPLE SOURCE (WELLHEAD, ETC.)	37 TYPE FLUID	54 DATE SAMPLED	60 63 TIME SAMPLED
			W81	WELLHEAD	FORMATION WATER	110383	1530

FLUID QUALITY CARD TWO

1 STATION I.D.	SURVEY DATE	A C	17 CARD	20 TEMP. OF SAMPLE	25. C F	FIELD SP. GRAVITY	32 FIELD PH	35 CHLORIDE (MG/L)	41 DISSOLVED SOLIDS	47 SPEC. COND. (U-MHO/CM)	53 STATIC WATER LEVEL (FEET)	60 W/L REF FROM	64 FLOW RATE (GAL/MIN)	70 75 PUMP RATE (GAL/MIN)
			W82	760	F			9620		4170				

COMMENT CARDS

1 STATION I.D.	SURVEY DATE	A C	17 CARD	20 COMMENTS - LINE 1	40 COMMENTS - LINE 2	60 76 COMMENTS - LINE 3
			W91			

1 STATION I.D.	SURVEY DATE	A C	17 CARD	20 COMMENTS - LINE 4	40 COMMENTS - LINE 5	60 76 COMMENTS - LINE 6
			W92			

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD), 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).
CARD TYPES <W93>, <W94>, ... <W99> MAY ALSO BE USED TO PROVIDE UP TO A TOTAL OF TWENTY-SEVEN COMMENT LINES.

W E L L   S U R V E Y   R E P O R T

FORM RP-39 -- Rev. 10/78

(USE ONE FORM/DAY/WELL)

SURVEY CARD

1 STATION I. D.	10 SURVEY DATE	16 AC	CARD	20 LOGGED BY	37 WITNESSED BY	54 *A	*B	56 *C	*D	58 *E	*F	60 *G	*H	62 *I	*J	64 *K	*L	66 *M	*N	68 *O	*P	70 *Q	*R	72 *S	*T
025000001	110383		W71	P. DAUENHAUER	S. ANDERSON	X					X					X	X								

*INSERT AN <X> IN EACH COLUMN FOR WHICH A SURVEY WAS CONDUCTED. SURVEY CODES ARE LISTED BELOW:

A = CALIPER
B = FLOWMETER
C = 16-INCH NORMAL RESISTIVITY
D = 64-INCH NORMAL RESISTIVITY
E = NEUTRON POROSITY
F = NATURAL GAMMA
G = FLUID RESISTIVITY
H = GAMMA GAMMA DENSITY
I = CASING COLLAR LOCATOR
J = FLUID SAMPLER
K = TEMPERATURE GRADIENT
L = DELTA TEMPERATURE
M = SPONTANEOUS POTENTIAL
N = POINT RESISTANCE
O = 6-FOOT LATERAL RESISTIVITY

FLUID QUALITY CARD ONE

1 STATION I. D.	SURVEY DATE	AC	17 CARD	20 SAMPLE SOURCE (WELLHEAD, ETC.)	37 TYPE FLUID	54 DATE SAMPLED	60 TIME SAMPLED 63
			W81	WELLHEAD	FORMATION WATER	110383	1530

FLUID QUALITY CARD TWO

1 STATION I. D.	SURVEY DATE	AC	17 CARD	20 TEMP. OF SAMPLE	25. CF	FIELD SP. GRAVITY	32 FIELD PH	35 CHLORIDE (MG/L)	41 DISSOLVED SOLIDS	47 SPEC. COND. (U-MHO/CM)	53 STATIC WATER LEVEL (FEET)	60 W/L REF FROM	64 FLOW RATE (GAL/MIN)	70 PUMP RATE (GAL/MIN) 75
			W82	760°	F			9620		41700			1000	

COMMENT CARDS

1 STATION I. D.	SURVEY DATE	AC	17 CARD	20 COMMENTS - LINE 1	40 COMMENTS - LINE 2	60 COMMENTS - LINE 3 76
			W91	CABLE HEAD SHORT.	RECABLEHEADED	

1 STATION I. D.	SURVEY DATE	AC	17 CARD	20 COMMENTS - LINE 4	40 COMMENTS - LINE 5	60 COMMENTS - LINE 6 76
			W92			

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD), 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).
CARD TYPES <W93>, <W94>, ... <W99> MAY ALSO BE USED TO PROVIDE UP TO A TOTAL OF TWENTY-SEVEN COMMENT LINES.

WELL STATION IDENTIFICATION

FORM RP-37 – Rev. 10/78

PAGE 1 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

WELL LOCATION CARD ONE

1	10	16		20	37	54	57	59	63	66	68	71
STATION I.D.	SURVEY DATE	AC	CARD	WELL NO.	COUNTY	LAT DEG	LAT MIN	LAT SEC	LON DEG	LON MIN	LON SEC	
025000001	110383		W11	DF-1	DADE							

WELL LOCATION CARD TWO

			17	20	37	39	42	45	61
STATION I.D.	SURVEY DATE	AC	CARD	QUARTERSECTIONS	SEC	TOWNSHIP	RANGE	WATER MANAGEMENT DISTRICT PLANNING AREA	
			W12	1/4; 1/4; 1/4	23	55S	37E	LOWER EAST COAST	

WELL DATUM CARD

1			17	20	26	32	38	44	59
STATION I.D.	SURVEY DATE	AC	CARD	KELLY BUSHING (FEET)	LAND SURFACE (FT)	TOP OF CASING (FT)	OTHER (FT) (SEE NOTES)	DATUM (CHECK ONE)	
			W21			42		MSL- ;LS- ;TOC-X	

WELL OWNERSHIP CARD

1			17	20	37	54	57	64	80
STATION I.D.	SURVEY DATE	AC	CARD	NAME OF OWNER	GROVE/PROPERTY NAME	AREA CODE	TELEPHONE	WELL USE	
			W31	STATE OF FLA	CHEKIKA STA. PARK			EXPLORATORY	

WELL ORIGIN CARD

1			17	20	37	54	71	76
STATION I.D.	SURVEY DATE	AC	CARD	DRILLER/ DRILLING COMPANY	OFFICE OF DRILLER (CITY)	DRILLING METHOD	DATE COMPLETED	
			W41			CABLE TOOL	1946	

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES – 1 (CREATE NEW RECORD).
2 (CHANGE ALL VALUES). OR 9 (DELETE OLD RECORD).

WELL STATION IDENTIFICATION

FORM RP-38 - Rev. 10/78

PAGE 2 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

WELL DESCRIPTION - CONSTRUCTION CARD ONE

1	10	16		20	27	34	41	48	54	59 … 68
STATION I. D.	SURVEY DATE	AC	CARD	TOTAL DEPTH -DRILLER (FT)	TOTAL DEPTH -LOGGER (FT)	CASING DEPTH -DRILLER (FT)	CASING DEPTH -LOGGER (FT)	CASING I.D. (INCHES)	BIT SIZE (INCHES)	DRILLER LOG AVAIL.
025000001	110383		W51	1249	1246		486	118		YES- ;NO-

WELL DESCRIPTION - CONSTRUCTION CARD TWO

1			17	20	37	54	59	64	69	73
STATION I. D.	SURVEY DATE	AC	CARD	TYPE OF SCREEN	TYPE OF PACKING	DIA. OF SCREEN	SLOT SIZE (INCHES)	SCREEN BEGINS	SCREEN ENDS (FT)	
			W52	OPEN HOLE						

WELL DESCRIPTION - CONFIGURATION CARD, SECTION ONE (TOP)

1			17	20	22	39	44	49	54	59 … 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W61	0	SteEL	180	0	486	02	

WELL DESCRIPTION - CONFIGURATION CARD, SECTION TWO

1			17	20	22	39	44	49	54	59 … 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W62	02						

WELL DESCRIPTION - CONFIGURATION CARD, SECTION THREE

1			17	20	22	39	44	49	54	59 … 75
STATION I. D.	SURVEY DATE	AC	CARD	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
			W63	03						

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.
COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD).
2 (CHANGE ALL VALUES). OR 9 (DELETE OLD RECORD).
CARD TYPES <W64>. <W65> <W68> MAY ALSO BE USED TO

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

FORM GW-3
Sept 1982

WELL LOG

WELL LOCATION

County DADE
Station I. D. 0 2 5 0 0 0 0 0 1
Date 11/03/83 Well No. DF-1
Latitude ____ Longitude ____
__ ¼ __ ¼ __ ¼ __ Section 25 Township 55S Range 37E
Owner STATE OF FLORIDA Phone ____
Driller ____ Date Drilled 1946

WELL CONSTRUCTION

Drilling Method: Rot. __ Air __ CT X Auger __ Other ____
T. Depth - Driller 1249' T. Depth - Logger 1246'
Casing Depth Driller ____ Casing Depth Logger 486'
Bit Size ____ Casing Dia. I.D. 11.8"
Hole Dia. 8" From 0' To 80' Dia. 12" From 80' To 486'
14" FROM 486' TO 1246'
Type of Casing STEEL/PVC LINING Casing Thickness 0.2"
Type of Screen OPEN HOLE Screen Int. From ____ To ____
Type of Packing ____ Well Use EXPLORATORY
Static Water Level ____ Date ____
Yield Flow APPOX: 1000 GPM Pump ____

DATUM

K.B. ____ L.S. ____ T.O.C. 4.2'

FLUID QUALITY

Date 11/03/83 Time 1530 Source of Sample WELLHEAD
Cl 962.0 mg/l Type of Fluid FORMATION WATER
Temp. 76.0 °F ~~°C~~ Field Density ____ @ ____ °C
T.D.S. ____ mg/l Spec. Cond. 4170.0 µmhos/cm
Logged By: P. DAUENHAUER Witnessed By: S. ANDERSON
Comments: SHORT IN CABLE HEAD. RECABLE-HEADED

TYPE OF SURVEYS RUN

Lateral 6'	( )	Density	( )
Caliper	(X)	ccl	( )
Flow meter	( )	Fluid Sampler	( )
16", 64" normals	( )	Temperature	(X)
Neutron	( )	Delta Temp.	(X)
Natural Gamma	●	SP	( )
Fluid Resistivity	( )		

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4. Make sure that the **Use User Image** is checked.
5. Click on the **User Image** button to select your logo.

This image will be displayed in the **About** dialog, and on various plots!

File Name: Z.npd
Well Name: DF-1
Date: Friday, August 31, 2001, at 06:01:40 AM
Plot: Plot created from: Z.npd

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DIGITAL
FORMATION

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File Name: Z1.npd
Well Name: DF-1
Date: Friday, August 31, 2001, at 06:02:17 AM
Plot: Plot created from: Z1.npd

Add your own company logo here!

1. Go to the **Options** menu
2. Select **Global Preferences**
3. Select the **Imaging** tab (it may not be visible, use the arrows to view additional tabs)
4. Make sure that the **Use User Image** is checked
5. Click on the **User Image** button to select your logo

This image will be displayed in the **About** dialog and on various plots!

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FORM GW-3
Sept 1982

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WELL LOG

WELL LOCATION

County DADE
Station I. D. 0 2 5 0 0 0 0 0 1 _ _ _
Date 11/03/83 Well No. DF-1
Latitude ____ Longitude ____
__ ¼ __ ¼ __ ¼ __ Section 25 Township 55S Range 37E
Owner STATE OF FLORIDA Phone ____
Driller ____ Date Drilled 1946

WELL CONSTRUCTION

Drilling Method: Rot.__ Air__ CT X Auger__ Other ____
T. Depth - Driller 1249' T. Depth - Logger 1246'
Casing Depth Driller ____ Casing Depth Logger 486'
Bit Size ____ Casing Dia. I.D. 11.8"
Hole Dia. 8" From 0' To 80' Dia. 12" From 80' To 486'
14" FROM 486' TO 1246'
Type of Casing STEEL/PVC LINING Casing Thickness 0.2"
Type of Screen OPEN HOLE Screen Int. From ____ To ____
Type of Packing ____ Well Use EXPLORATORY
Static Water Level ____ Date ____
Yield Flow APPOX: 1000 GPM Pump ____

DATUM

K.B. ____ L.S. ____ T.O.C. 4.2'

FLUID QUALITY

Date 11/03/83 Time 1530 Source of Sample WELLHEAD
Cl 962.0 mg/l Type of Fluid FORMATION WATER
Temp. 76.0 °F ~~°C~~ Field Density ____ @ ____ °C
T.D.S. ____ mg/l Spec. Cond. 4170.0 µmhos/cm
Logged By: P. DAUENHAUER Witnessed By: S. ANDERSON
Comments: SHORT IN CABLE HEAD. RECABLE-HEADED

TYPE OF SURVEYS RUN

Lateral 6'	( )	Density	( )
Caliper	(XX)	ccl	( )
Flow meter	( )	Fluid Sampler	( )
16", 64" normals	( )	Temperature	●
Neutron	( )	Delta Temp.	●
Natural Gamma	(XX)	SP	( )
Fluid Resistivity	( )		

FORM GW-3
Sept 1982

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WELL LOG

WELL LOCATION

County DADE
Station I. D. 0 2 5 0 0 0 0 0 1 _ _ _
Date 11/03/83 Well No. DF-1
Latitude ____ Longitude ____
__ ¼ __ ¼ __ ¼ __ Section 25 Township 55S Range 37E
Owner STATE OF FLORIDA Phone ____
Driller ____ Date Drilled 1946

WELL CONSTRUCTION

Drilling Method: Rot. __ Air __ CT X Auger __ Other ____
T. Depth - Driller 1249' T. Depth - Logger 1246'
Casing Depth Driller ____ Casing Depth Logger 486'
Bit Size ____ Casing Dia. I.D. 11.8"
Hole Dia. 8" From 0' To 80' Dia. 12" From 80' To 486'
14" FROM 486' TO 1246'
Type of Casing STEEL/PVC LINING Casing Thickness 0.2"
Type of Screen OPEN HOLE Screen Int. From ____ To ____
Type of Packing ____ Well Use EXPLORATORY
Static Water Level ____ Date ____
Yield Flow APPOX: 1000 GPM Pump ____

DATUM

K.B. ____ L.S. ____ T.O.C. 4.2'

FLUID QUALITY

Date 11/03/83 Time 1530 Source of Sample WELLHEAD
Cl 962.0 mg/l Type of Fluid FORMATION WATER
Temp. 76.0 °F XX Field Density ____ @ ____ °C
T.D.S. ____ mg/l Spec. Cond. 4170.0 µmhos/cm
Logged By: P. DAUENHAUER Witnessed By: S. ANDERSON
Comments: SHORT IN CABLE HEAD. RECABLE-HEADED

TYPE OF SURVEYS RUN

Lateral 6'	( )	Density	( )
Caliper	●	ccl	( )
Flow meter	( )	Fluid Sampler	( )
16", 64" normals	( )	Temperature	(X)
Neutron	( )	Delta Temp.	(X)
Natural Gamma	(X)	SP	( )
Fluid Resistivity	( )		

Schlumberger

FULLBORE SPINNER SURVEY

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

API SERIAL NO.	SECT.	TWP.	RANGE
N/A	--	--	--

Other Services:
LDT/CNL
BHC SONIC
CALIPER
DIL
-
AMS

ermanent Datum	GROUND LEVEL	Elev.	15.0 F	Elev.: K.B.24.5 F
g Measured From	KELLY BUSHING	9.5 F	above Perm. Datum	D.F.23.5 F
illing Measured From	KELLY BUSHING			G.L.15.0 F

ate	07-OCT-1993				
n No.	ONE				
epth Driller	2743.0 F				
epth Logger (Schl.)	2743.0 F				
m. Log Interval	2650.0 F				
p Log Interval	920.0 F				
asing-Driller	12"	@ 920.0 F	@		@
asing-Logger	920.0 F				
t Size	8 3/4"	@	@		@
pe Fluid in Hole	SALT H20 & MUD				
ens. / Visc.	9.30 LB/G	35.0 S			
/ Fld. Loss					
urce of Sample	CIRC. TANK				
n @ Meas. Temp.	3.420 OHMM	@ 82.0 DEGF		@	
nf @ Meas. Temp.	.840 OHMM	@ 85.0 DEGF		@	
nc @ Meas. Temp.		@		@	
urce: Rmf / Rmc	MEASURED	NONE			
n @ BHT	4.348 OHMM	@ 63.0 DEGF		@	
Circulation Ended	11:00 10/05/93				
Logger on Bottom	22:00 10/07/93				
ax. Rec. Temp.	63.0 DEGF				
uip. / Location	8170	NATCHEZ, MS.			
corded By	BLIZNIK/JONES				
itnessed 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

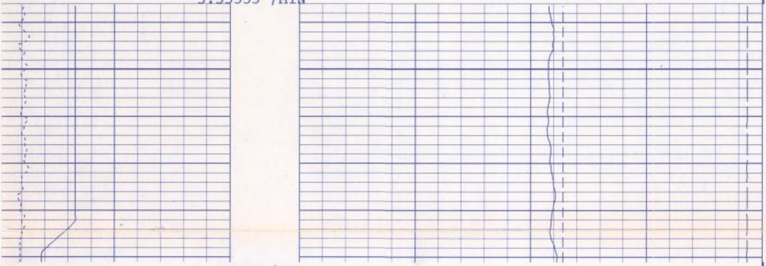
DEPTH = 900'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 899.900 F

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

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)	0.0	200.00	TENS(LBF)	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

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'

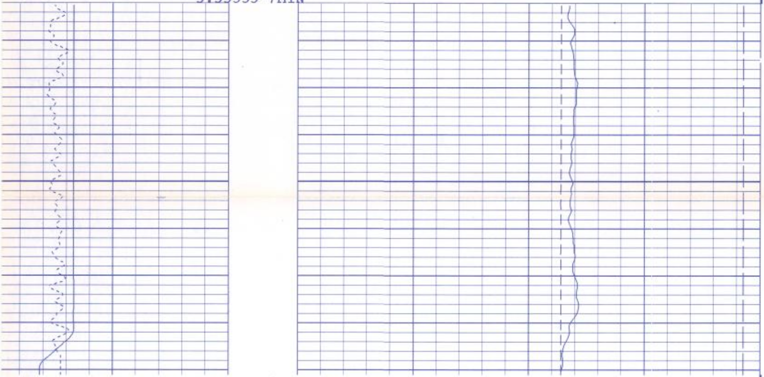
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 973.700 F

CVEL(F/MN)
.0 200.00
CVEL(F/MN)
.0 -200.0
GR(GAPI)
.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)
.0 200.00
CVEL(F/MN)
.0 -200.0
GR(GAPI)
.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				

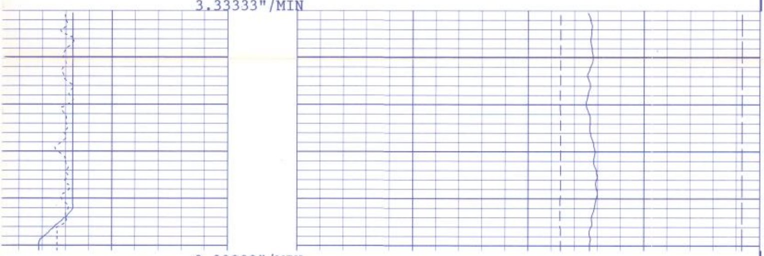
DEPTH = 1072'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1071.90 F

CVEL(F/MN) .0 200.00
CVEL(F/MN) .0 -200.0
GR(GAPI) .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) .0 200.00
CVEL(F/MN) .0 -200.0
GR(GAPI) .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
```

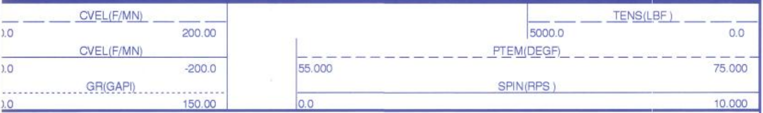
PARAMETERS

```
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



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

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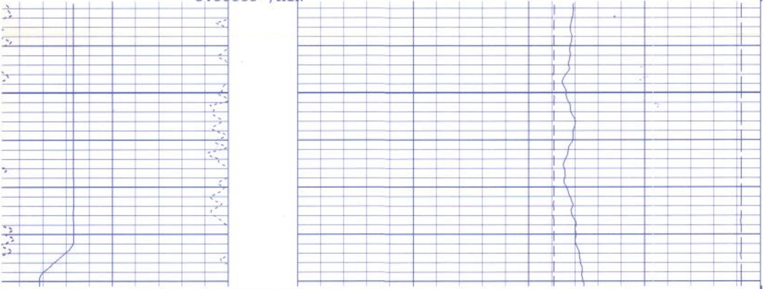


3.33333"/MIN

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

CVEL(F/MN)		
.0	200.00	
CVEL(F/MN)		
.0	-200.0	
GR(GAPI)		
.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'

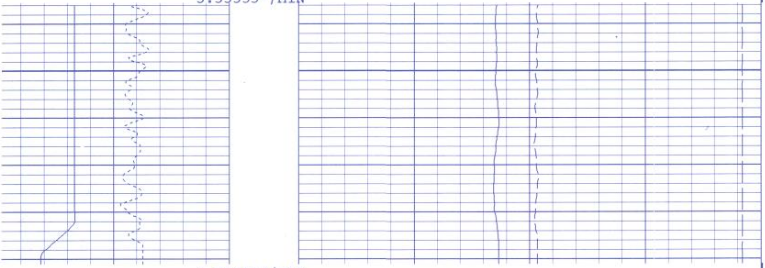
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1181.80 F

CVEL(F/MN)		
.0	200.00	
CVEL(F/MN)		
.0	-200.0	
GR(GAPI)		
.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)

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'

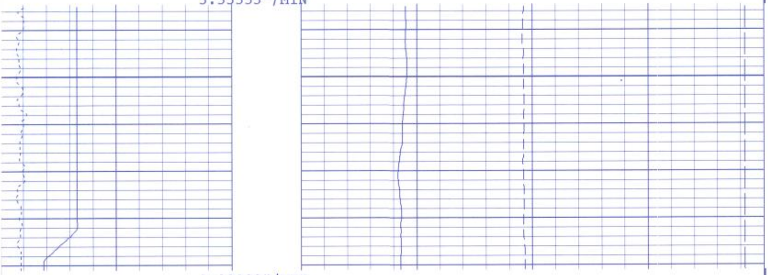
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1209.80 F

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		TENS(LBF) 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

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				

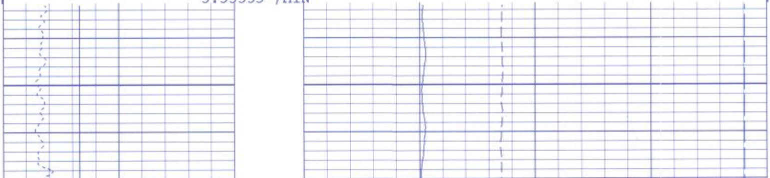
DEPTH = 1500'

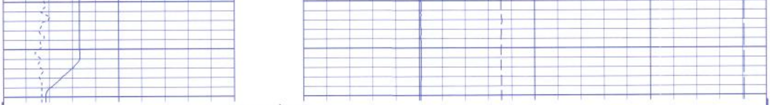
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1500.00 F

CVEL(F/MN) 0.0 – 200.00		TENS(LBF) 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

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

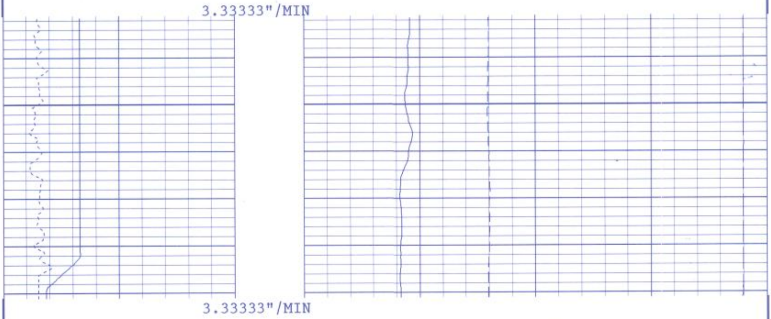
NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPEE	4000	F/HR	WMUD	8.40000	LB/G
PDSH	0.0	G/C3	SGSN	0000A-00011	
CDAT			NCJT	GSRE	
FCHD	CSID		PTHR	10.0000	F/MN
NTHR	-10.0000	F/MN	TIRA	.500000	
VPCF	.830000		DEVI	0.0	DEG
FDSH	0.0	G/C3	QIOP	FLOW	
TCSH	0.0	IN	BS	8.75000	IN
BHS	OPEN				

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)



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

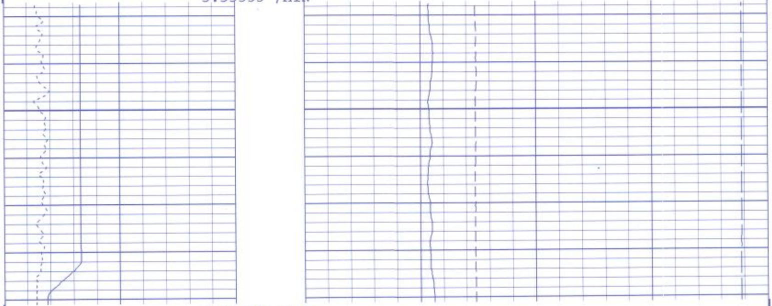
DEPTH = 1712'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1711.80 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 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)			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 = 1754'

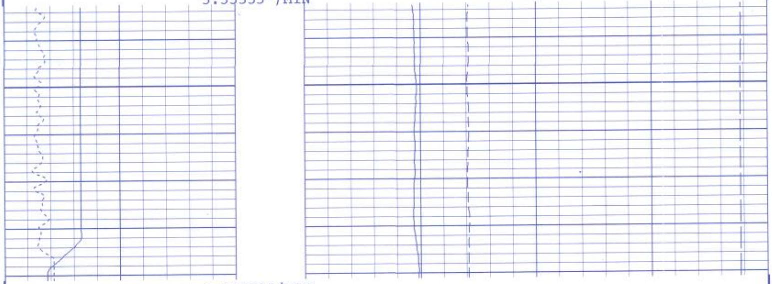
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1753.80 F

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 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)
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				

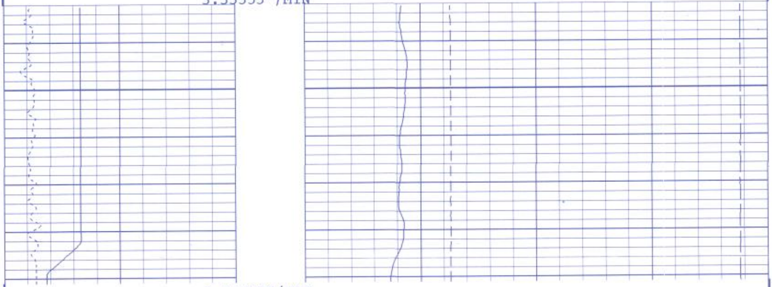
DEPTH = 1796'

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'

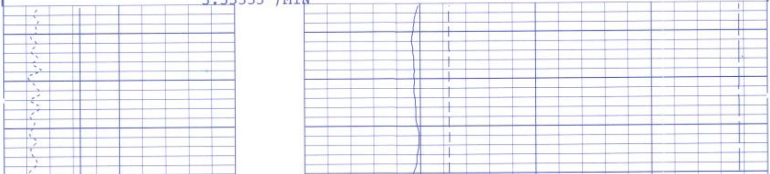
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1850.00 F

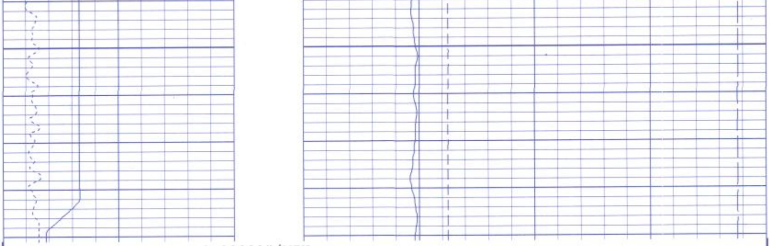
CVEL(F/MN)
0.0 200.00
CVEL(F/MN)
0.0 -200.0
GR(GAPI)
0.0 150.00

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

CP 38.2 FILE 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	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 = 1884'

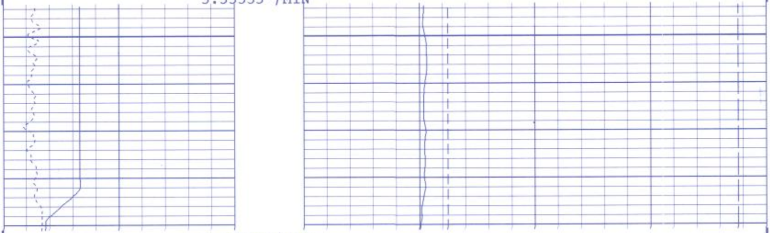
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1883.90 F

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)

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				

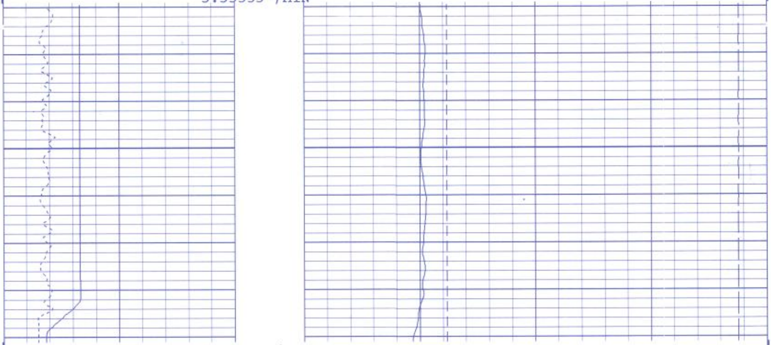
DEPTH = 1930'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 1929.70 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 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)		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				

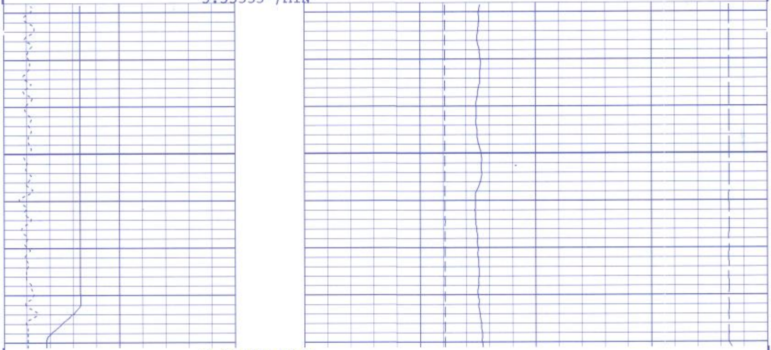
DEPTH = 2510'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2509.90 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 11 07-OCT-1993 21:02 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 11 07-OCT-1993 21:01 (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 = 2560'

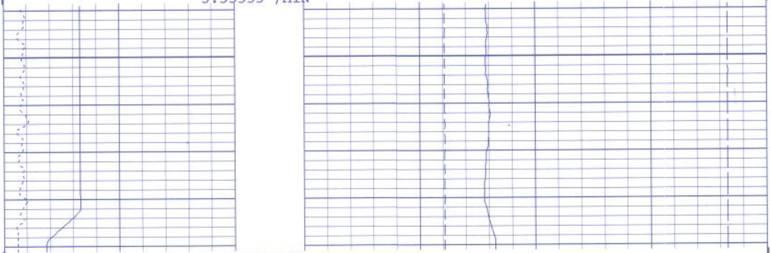
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2559.90 F

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 10 07-OCT-1993 21:00 (UP)

3.33333"/MIN



3.33333"/MIN

CP 38.2 FILE 10 07-OCT-1993 20:59 (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 = 2572'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2572.00 F

CVEL(F/MN)	
0.0	200.00

CVEL(F/MN)	
0.0	-200.0

GR(GAPI)	
0.0	150.00

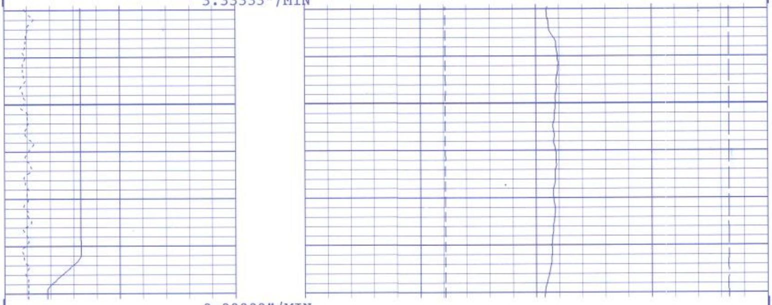
TENS(LBF)	
5000.0	0.0

PTEM(DEGF)	
55.000	75.000

SPIN(RPS)	
0.0	10.000

CP 38.2 FILE 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				

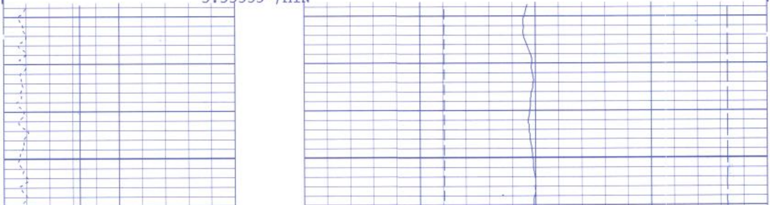
DEPTH = 2590'

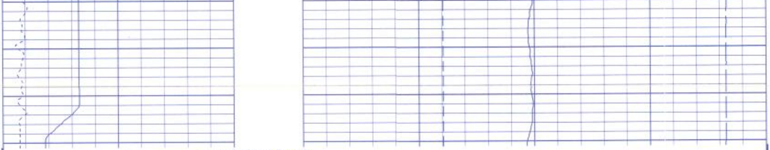
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2590.00 F

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 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)
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 = 2620'

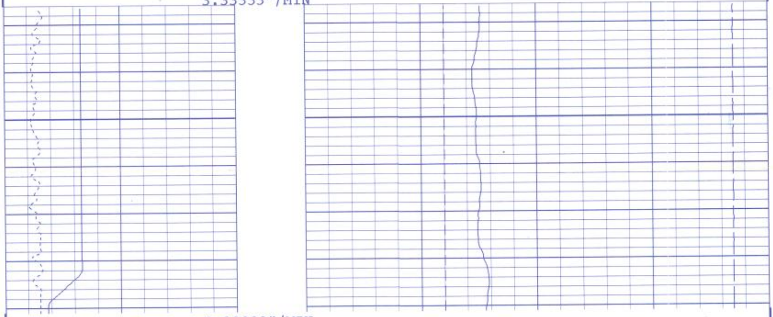
DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2620.00 F

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

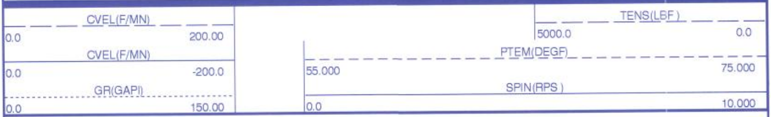
CP 38.2 FILE 6 07-OCT-1993 20:51 (UP)

3.33333"/MIN



3.33333"/MIN

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



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				

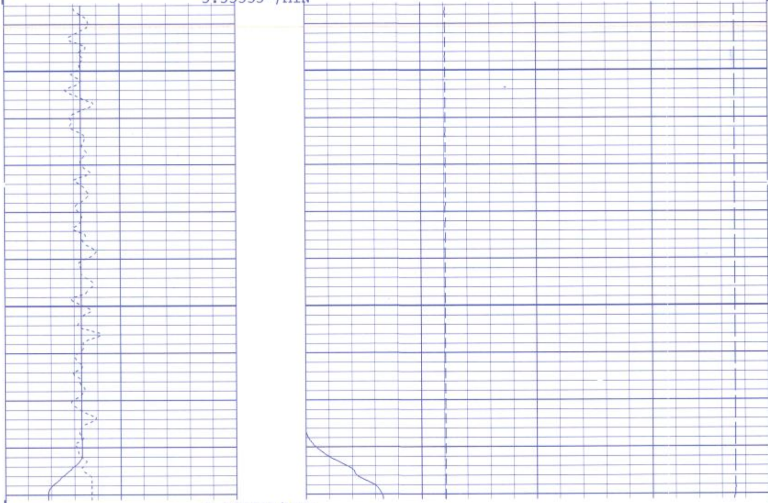
DEPTH = 2650'

DATA ACQUIRED LOGGING ON INTERNAL DRIVE
TOOL DEPTH : 2650.00 F

CVEL(F/MN)	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 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)
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

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	NAME	VALUE	UNIT
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

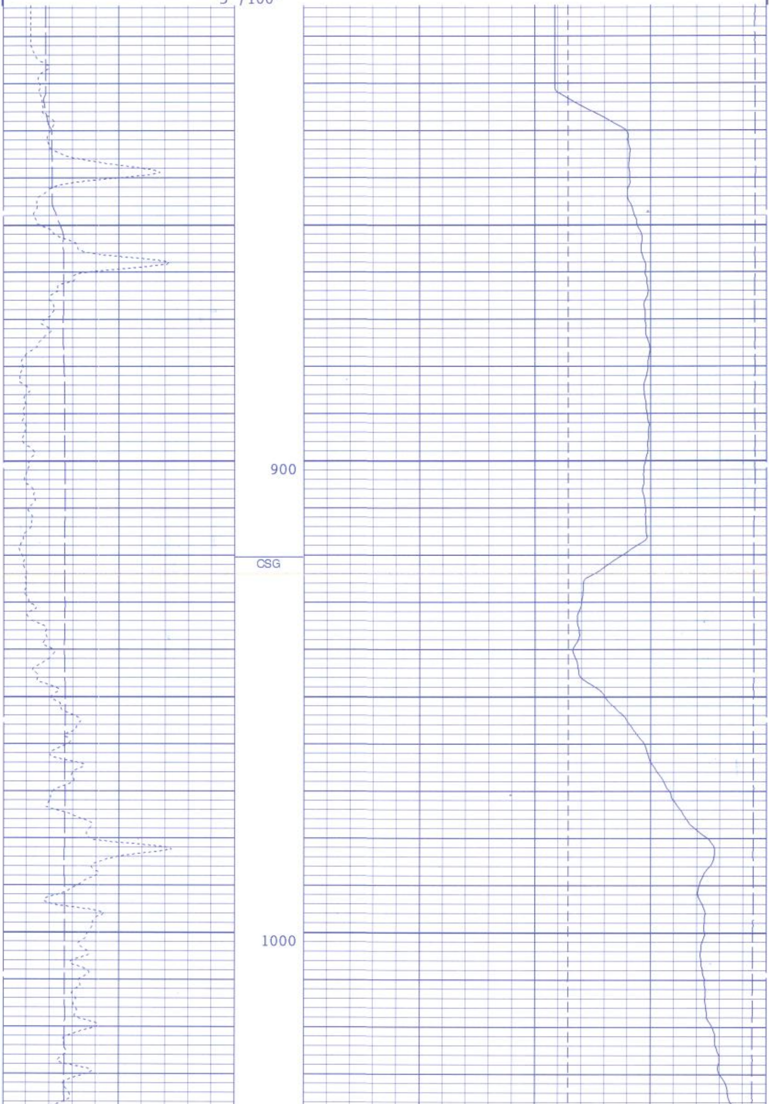
CCL	23.0	FEET	TENS	23.0	FEET
EXP1	0.0	FEET	EXP2	0.0	FEET
EXP3	0.0	FEET	EXT	0.0	FEET
SPIN	1.0	FEET	SVFG	1.0	FEET
PRVC	4.8	FEET	PPVC	6.8	FEET
PTVC	5.8	FEET	GR	14.1	FEET
CVEL	1.0	FEET			

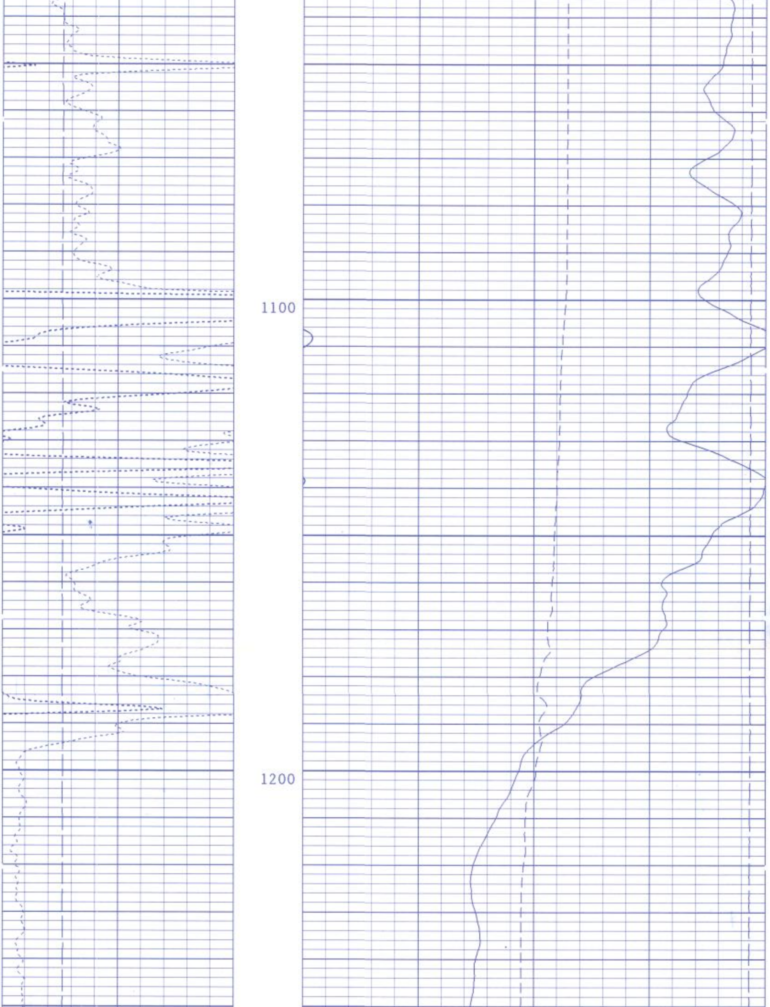
0.0 150.00
GR(GAPI)
0.0 -200.0
CVEL(F/MN)
0.0 200.00
CVEL(F/MN)

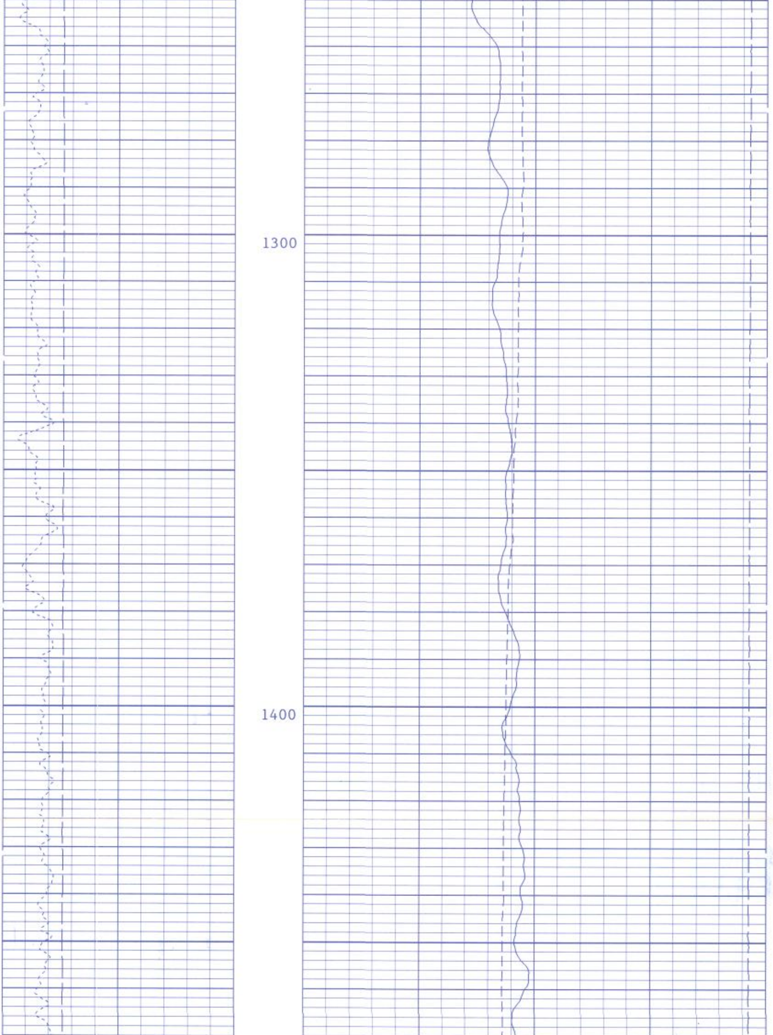
0.0 10.000
SPIN(RPS)
55.000 75.000
PTEM(DEGF)
5000.0 0.0
TENS(LBF)

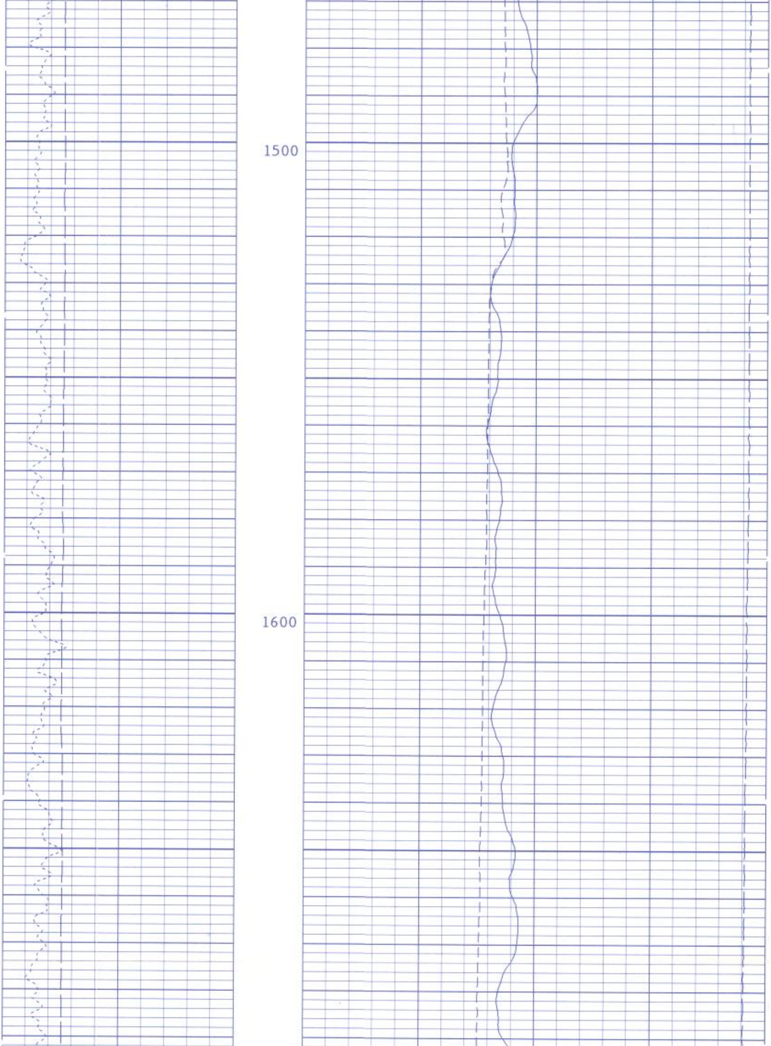
CP 38.2 FILE 4 07-OCT-1993 20:08 (DOWN)

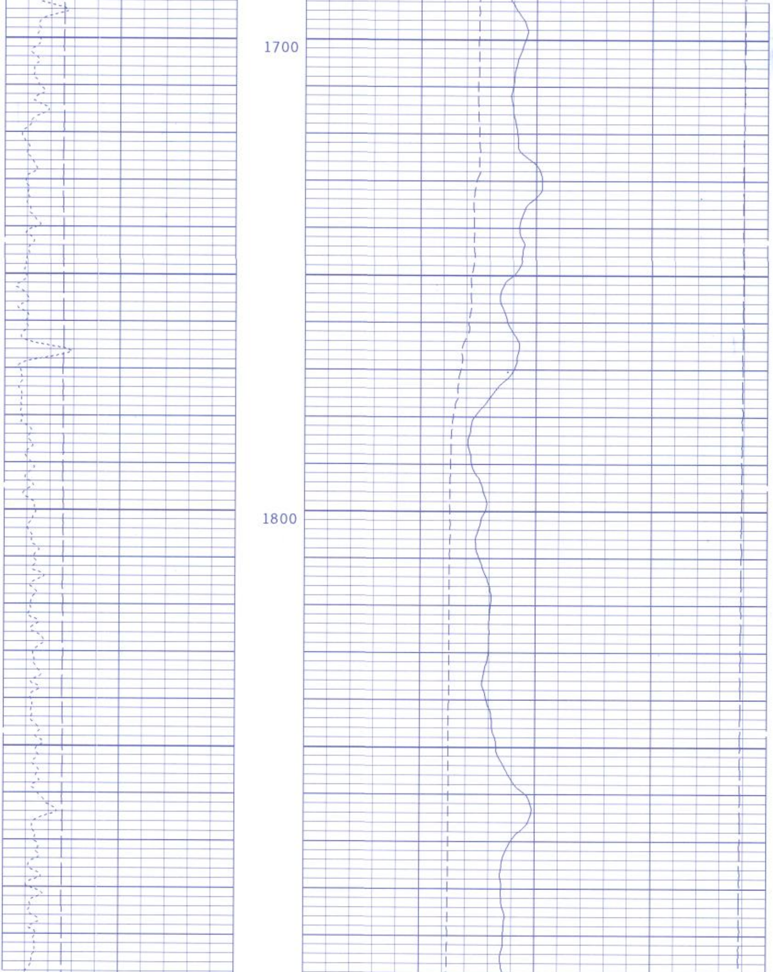
5"/100'

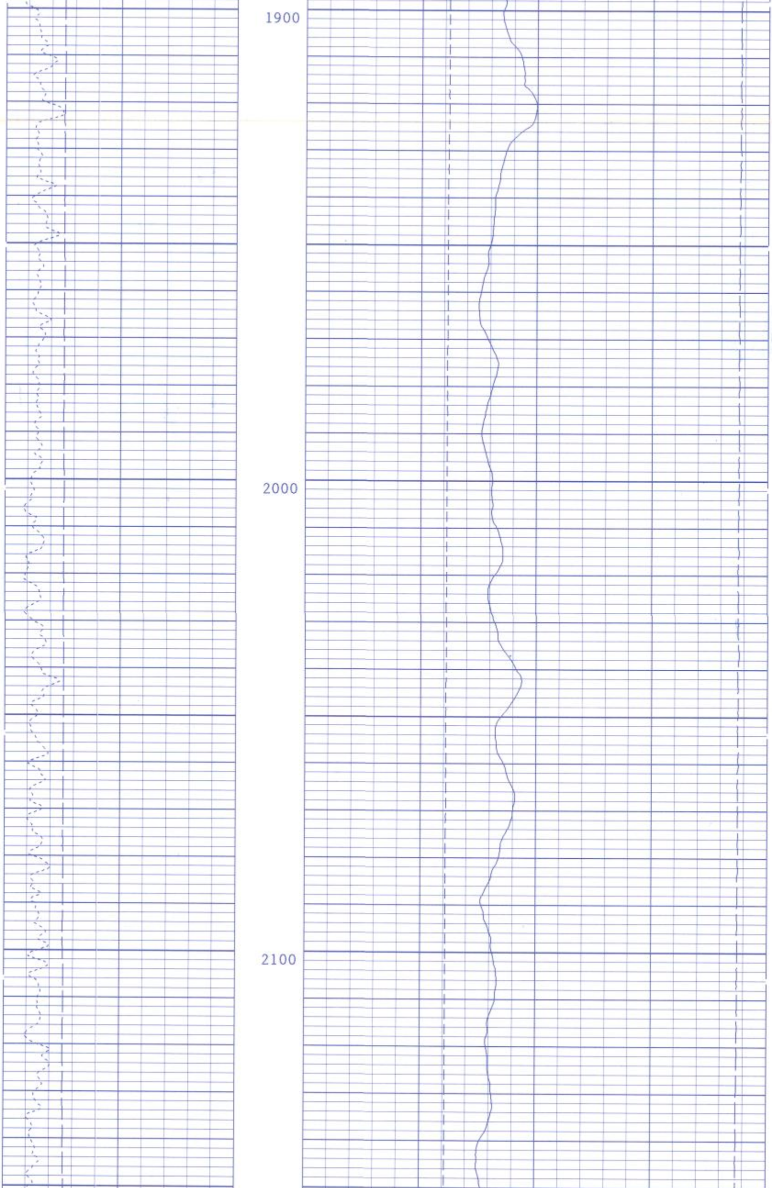


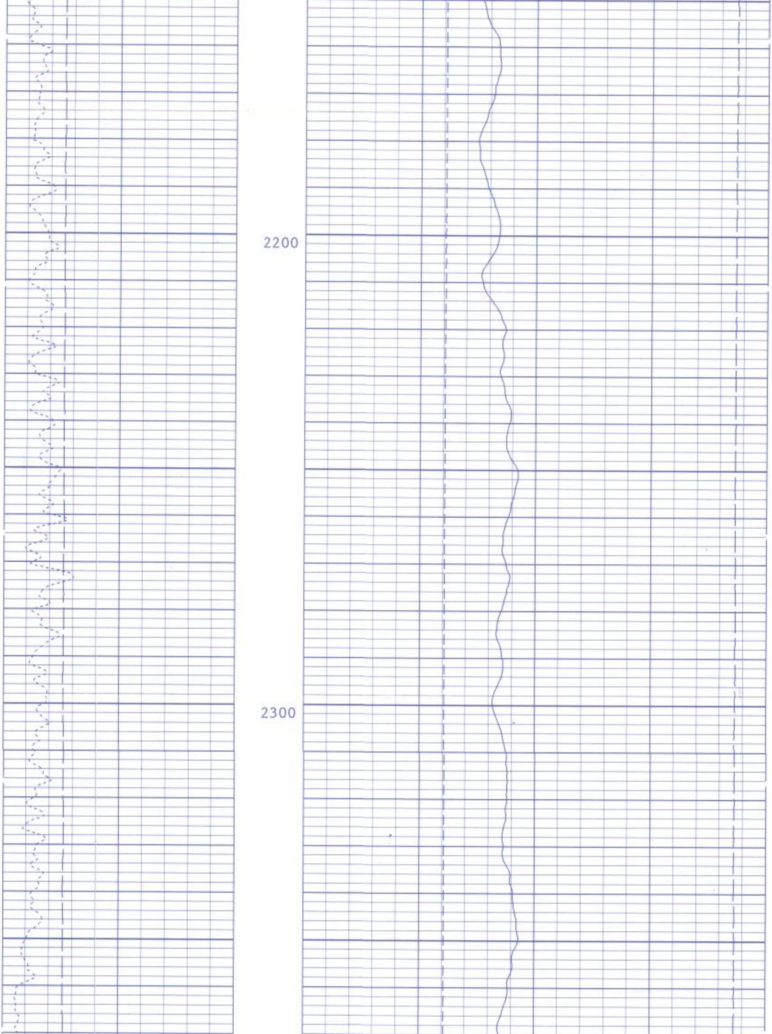


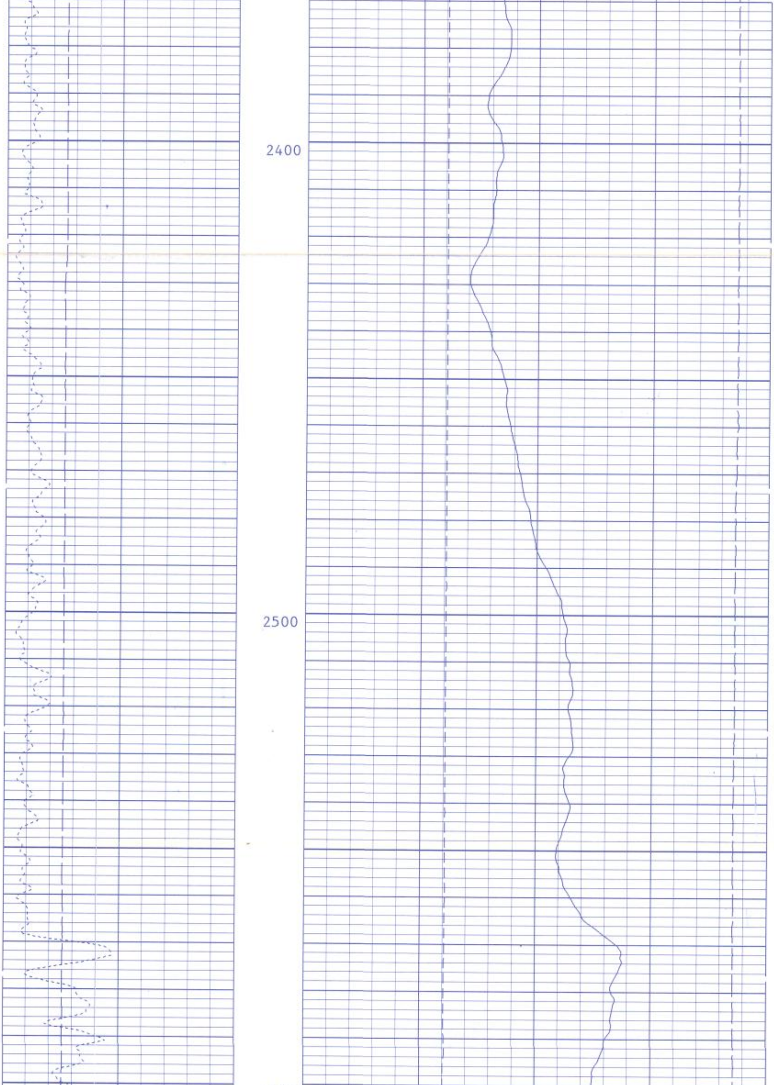


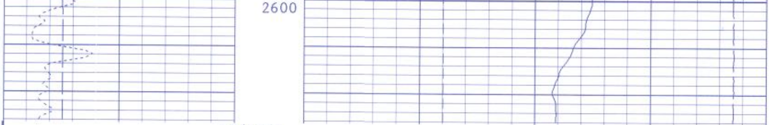












5"/100'

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
FIELD	NORTHWEST L-31 CANAL			**Elev:** **KB**	24.5 F
				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-1
COMPANY	SOUTH FLORIDA WATER MANAGEMENT DIST.

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

Log Measured From KELLY BUSHING 9.5 F above Perm. Datum

Drilling Measured From KELLY BUSHING

Elev.: K.B. 24.5 F
D.F. 23.5 F
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                    FBSR   1.0  FEET
       PTSA  6.8  FEET                    ATTB  14.1  FEET
```

0.0 GR(GAPI) 150.00		-1.000 PDTE(DF/F) 1.0000
0.0 PTEM(DEGF) 150.00		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
```

```
                  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		-1.000 PDTE(DF/F) 1.0000
0.0 PTEM(DEGF) 150.00		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
FIELD	NORTHWEST L-31 CANAL		Elev:	KB	24.5 F
				DF	23.5 F
COUNTY	DADE	STATE FLORIDA		GL	15.0 F

Schlumberger

HIGH RESOLUTION TEMPERATURE LOG

Schlumberger

PHASOR INDUCTION - SFL
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 DI

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
API SERIAL NO. N/A SECT. -- TWP. -- RANGE --
Other Services: LDT/CNL BHC SONIC CALIPER FLOWMETER TEMP AMS
Permanent Datum GROUND LEVEL Elev. 15.0 F
Log Measured From KELLY BUSHING 9.5 F above Perm. Datum
Drilling Measured From KELLY BUSHING
Elev.: K.B. 24.5 F D.F. 23.5 F 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.

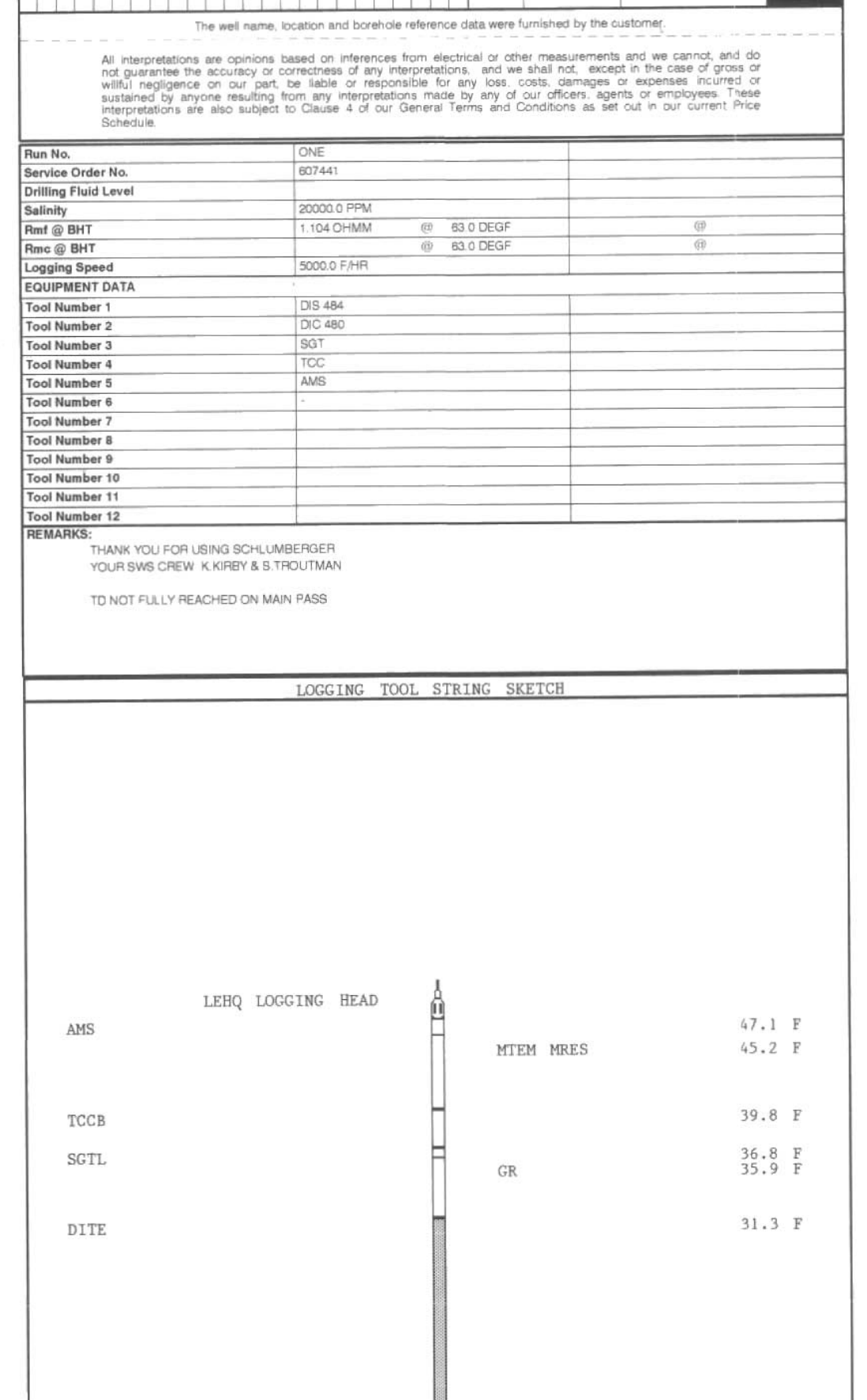
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, 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	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)

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

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

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
```

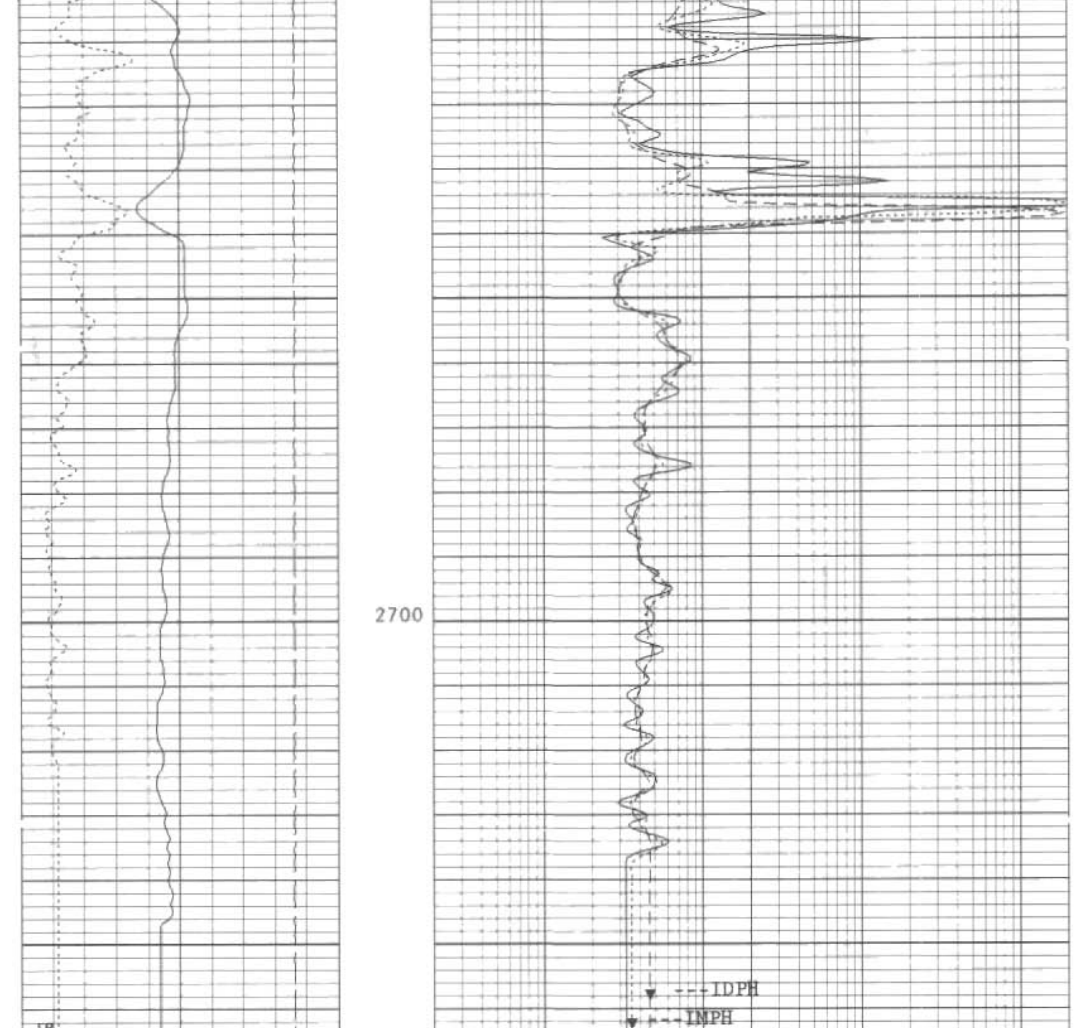
REPEAT SECTION

CHANGED PARAMETERS

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

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)



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

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

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
WELL	SFWMD DF No. 1		SCHL. TD	2743.0 F
			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
PHASOR INDUCTION - SFL
GAMMA RAY

Schlumberger

LITHO DENSITY COMPENSATED NEUTRON

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		

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 D.F. 23.5 F G.L. 15.0 F
Log Measured From	KELLY BUSHING	9.5 F above Perm. Datum	
Drilling Measured From	KELLY BUSHING		
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)
```

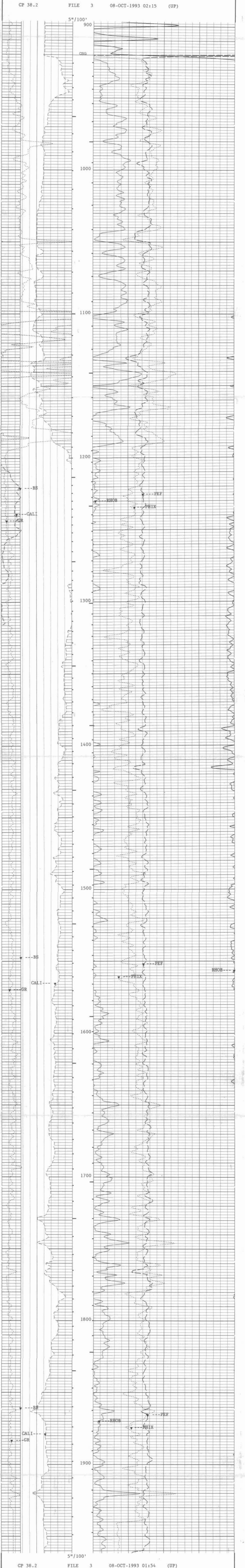
```
EVENT MARK SUMMARY:

OUTPUT                        INTERVAL        DEPTH TRACK
                              BETWEEN PIPS    EDGE

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

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)
```



```
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                    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
```

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)
```

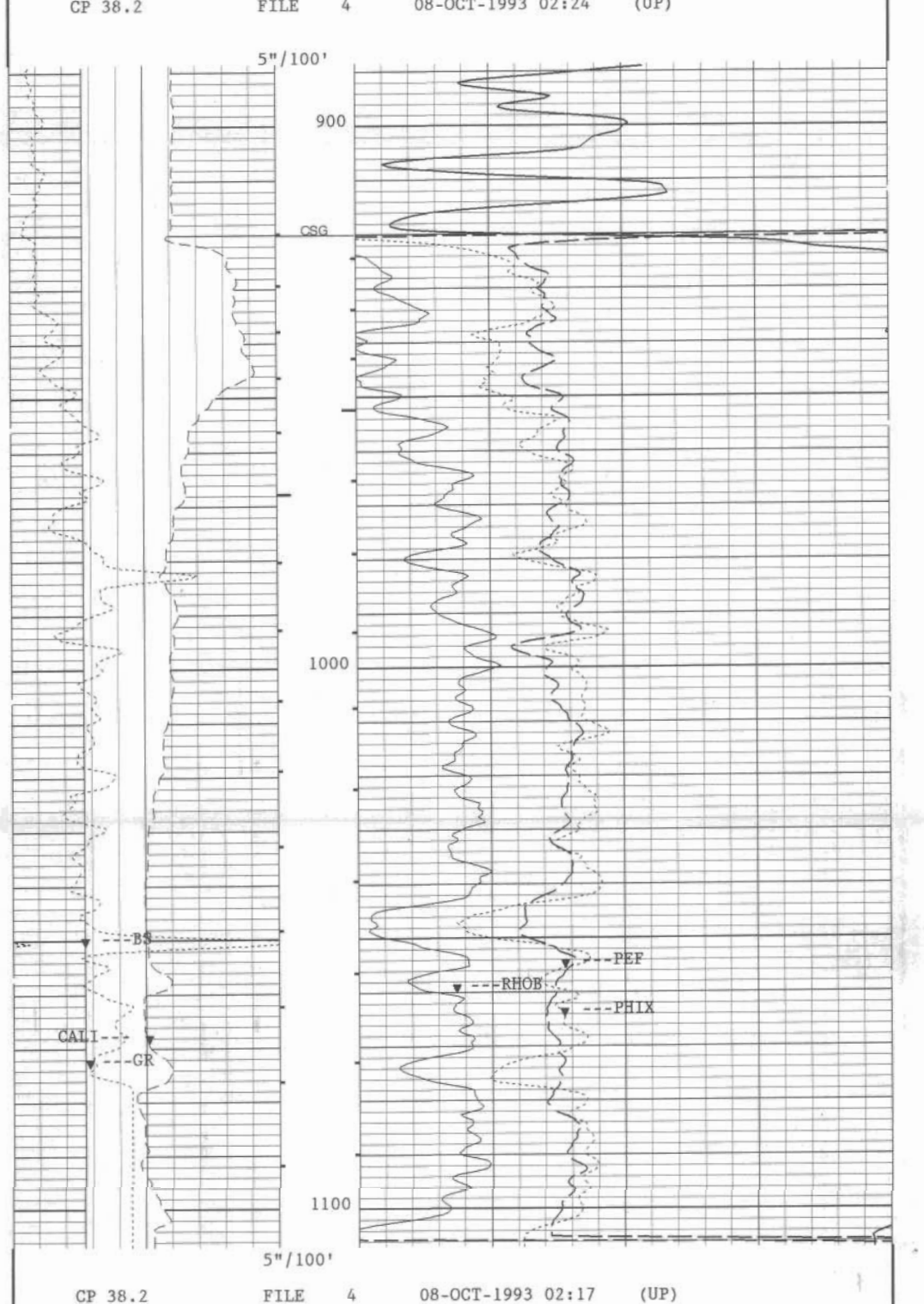
```
EVENT MARK SUMMARY:

OUTPUT                        INTERVAL        DEPTH TRACK
                              BETWEEN PIPS    EDGE

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

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    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                    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
```

```
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)
```

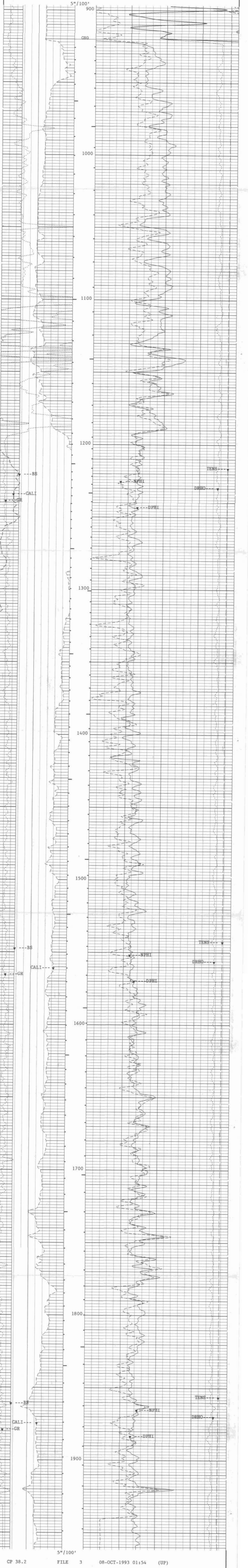
```
EVENT MARK SUMMARY:

OUTPUT                        INTERVAL        DEPTH TRACK
                              BETWEEN PIPS    EDGE

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

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                    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
```

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)
```

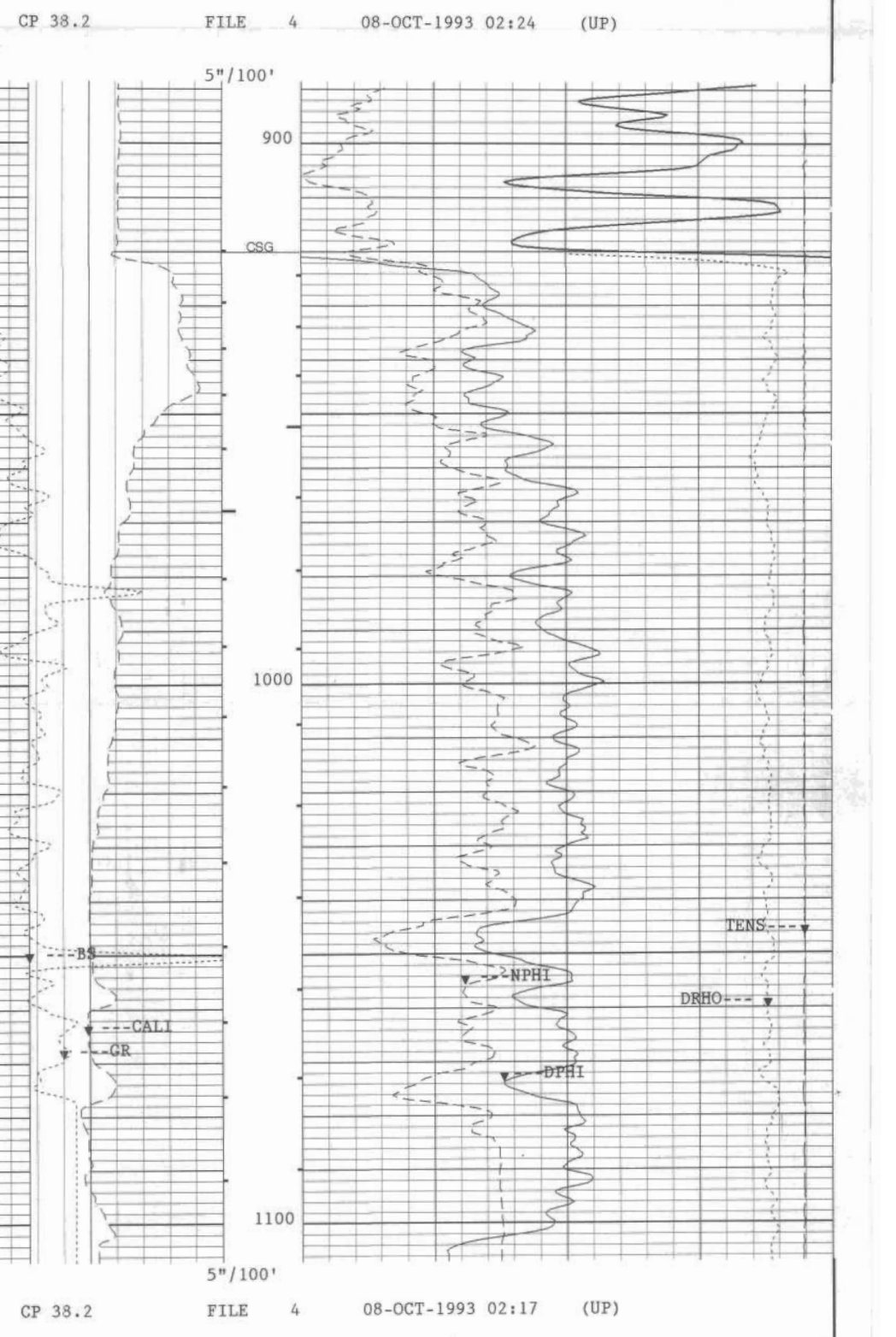
```
EVENT MARK SUMMARY:

OUTPUT                        INTERVAL        DEPTH TRACK
                              BETWEEN PIPS    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       SHOP      SHOP      GAIN
                   REFERENCE    TANK      JIG
                    COUNTS     COUNTS    COUNTS

           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.		SCHL. FR	1950.0 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

LITHO DENSITY
COMPENSATED NEUTRON

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 DIST.

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.	SECT.	TWP.	RANGE
N/A	--	--	--

Permanent Datum GROUND LEVEL **Elev.** 15.0 F
Log Measured From KELLY BUSHING 9.5 F above Perm. Datum
Drilling Measured From KELLY BUSHING

Elev.: K.B. 24.5 F
D.F. 23.5 F
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		@	
Circulation Ended	11:00 10/05/93			
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		

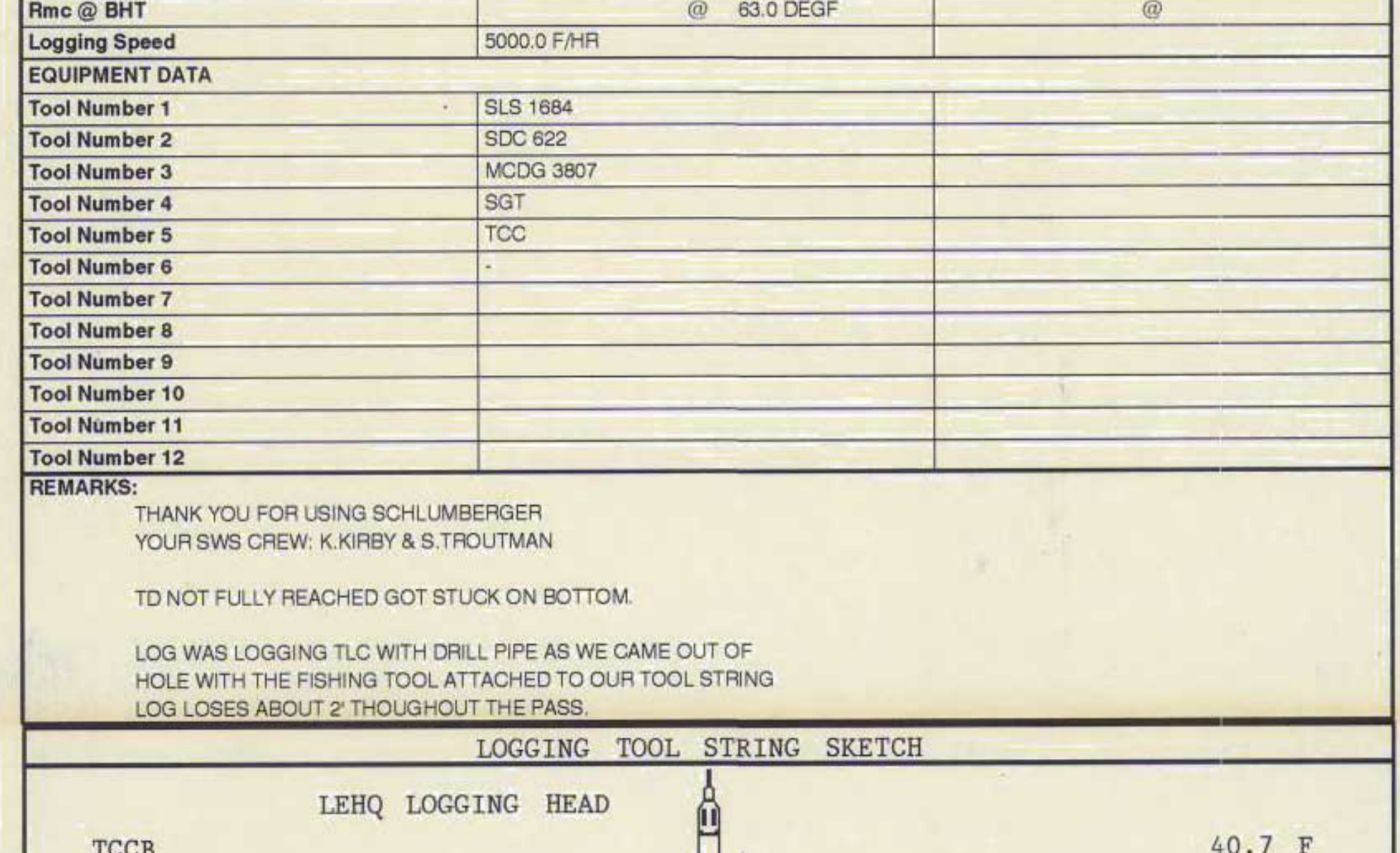
REMARKS:

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       DEPTH TRACK
                              BETWEEN PIPS   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'

5"/100'

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

                 INPUT FILE(S)    CREATION DATE
                       3          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