Rec'd 11.10.07 MLR

HALLIBURTON

QUAD COMBO
HRI/BCS/SDL/DSN

5" = 100'

COMPANY ENERFIN RESOURCES
WELL MCCOON CC 24-29-75
FIELD MIST
COUNTY COLUMBIA STATE OR

COMPANY ENERFIN RESOURCES
WELL MCCOON CC 24-29-75
FIELD MIST
COUNTY COLUMBIA STATE OR

API No. 36-009-00356
Location X=1280130
Y=883827

Other Services
NONE

Sect 29 Twp 7N Rge 5W

Permanent Datum G.L. Elev 951.0'
Log measured from K.B. , 14.0' above perm. datum
Drilling measured from K.B.

Elev.: K.B. 965'
D.F.
G.L. 951'

Date	NOV-11-2007		
Run No.	ONE		
Depth – Driller	3023'		
Depth – Logger	3020'		
Bottom – Logged Interval	3010'		
Top – Logged Interval	524'		
Casing – Driller	8.625" @ 524'	@	@
Casing – Logger	524'		
Bit Size	7.875"		
Type Fluid in Hole	CYPAN		
Dens. | Visc.	9.5 | 40.0	|	|
Ph | Fluid Loss	8.7 | 5.6	|	|
Source of Sample	FLOWLINE		
Rm @ Meas. Temp.	2.12 @ 55 F	@	@
Rmf @ Meas. Temp.	2.38 @ 59 F	@	@
Rmc @ Meas. Temp.	1.48 @ 59 F	@	@
Source Rmf | Rmc	MEAS | MEAS	|	|
Rm @ BHT	0.911 @ 137 F	@	@
Time Since Circ.	0630 11-11		
Time on Bottom	1415 11-11		
Max. Rec. Temp.	137 F @ TD	@	@
Equip. | Location	49599 | WDLD	|	|
Recorded By	J.OBIKOYA		
Witnessed By	D.HUGGINS	R.VICHARY	

Fold Here

Service Ticket No 5487488		API Serial No 36-009-00356		PGM Version X_v5.8		
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLES			RESISTIVITY SCALE CHANGES			
Date | Sample No.	|		Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth – Driller						
Type Fluid						
in Hole						
Dens. | Visc.	|	|				
Ph | Fluid Loss	|	|				

Source of Sample			RESISTIVITY EQUIPMENT DATA					
Rm @ Meas. Temp.	@	@	Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.	@	@	ONE	HRIT #211_132	NA	1.50" SO	NA
Rmc @ Meas. Temp.	@	@					
Source Rmf | Rmc	|	|					
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	A-180	Serial No.	4601 264	Serial No.	I714M741	Serial No.	05
Model No.	NGRT	Model No.	305B BCS	Model No.	SDLT-DA	Model No.	DSNT-X
Diameter	3.625"	No. of Cent.	TWO	Diameter	5.500"	Diameter	3.625'
Detector Model No.	432	Spacing	2 FEET	Log Type	GAM-GAM	Log Type	NEU-NEU
Type	SCINT			Source Type	CS-137	Source Type	AM241 BE
Length	4.00"	LSA [Y / N]	NO	Serial No.	2694 GW	Serial No.	DSN-307
Distance to Source	18.0'	FWDA [Y / N]	NO	Strength	1.5 CI	Strength	15.0 CI

LOGGING DATA

GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale			Scale			Scale		
No.	From	To	Ft / Min	L	R	L	R	Matrix	L	R	Matrix	L	R	Matrix
ONE	3020'	524'	60	0	200	150	50	55.5	1.65	2.65	2.65	60	0	SAND
				API	API	USEC	USEC	USEC	GMCC	GMCC	GMCC	%	%	

DIRECTIONAL INFORMATION

Maximum Deviation		deg. @		KOP	

Remarks:

ANNULAR HOLE VOLUME CALCULATED USING 4.500" CASING.
HRID-BCSD-SDLT-ML-DSNT-NGRT-RWCH RUN IN COMBINATION.

CREW:ROSENSTEEL,PYLES

RIG: TD 101

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

HALLIBURTON

MAIN PASS 5"=100'

HALLIBURTON

Version No: 5.8 | hc:3.0
Data File: 1111_mcco_24_29.3.cls
Format File: plot_1.3.spc
Plot Time: 2007-11-11 18:08:12
Log Time: 2007-11-11 14:13:55

Top Depth: 500.00
Bottom Depth: 3023.75

GR
0 API 200

CALI
6 INCH 16

BS
6 INCH 16

SP
-]10[+

RWA
0 OHMM 3

AHV
100 FT3 0

BHV
0 FT3 100

STEN
10500 500

CTEN
10000 0

NOR
0 OHMM 20

LAT
0 OHMM 20

1:240
FT.

HDR1
1 OHMM 100

HMR1
1 OHMM 100

DFL
1 OHM 100

DT
150 US/F 50

SPHI
60. % 0

NPHI
60. % 0

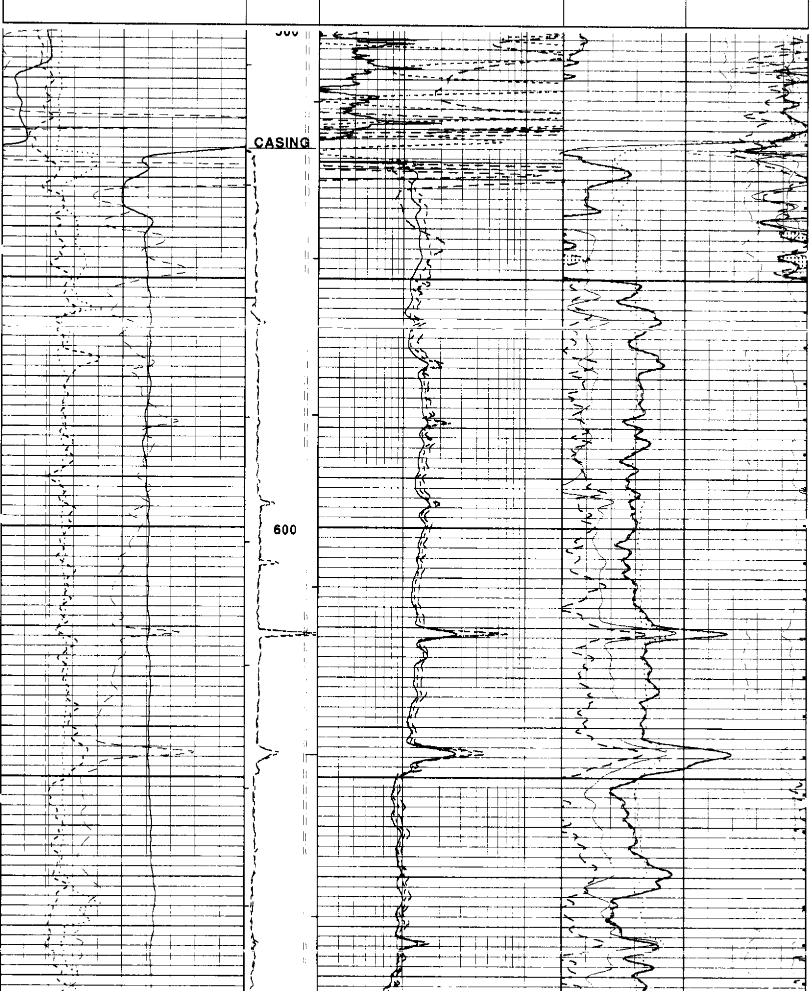
DPHI
60. % 0

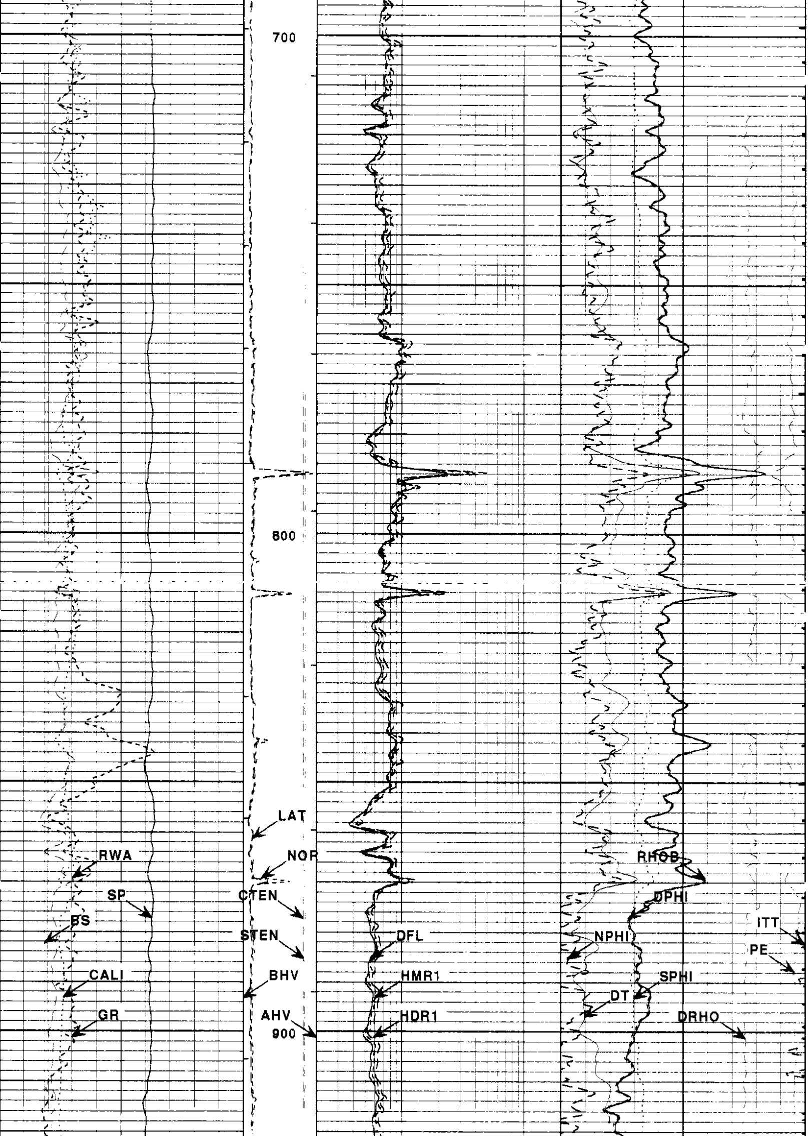
RHOB
1.65 G/CC 2.65

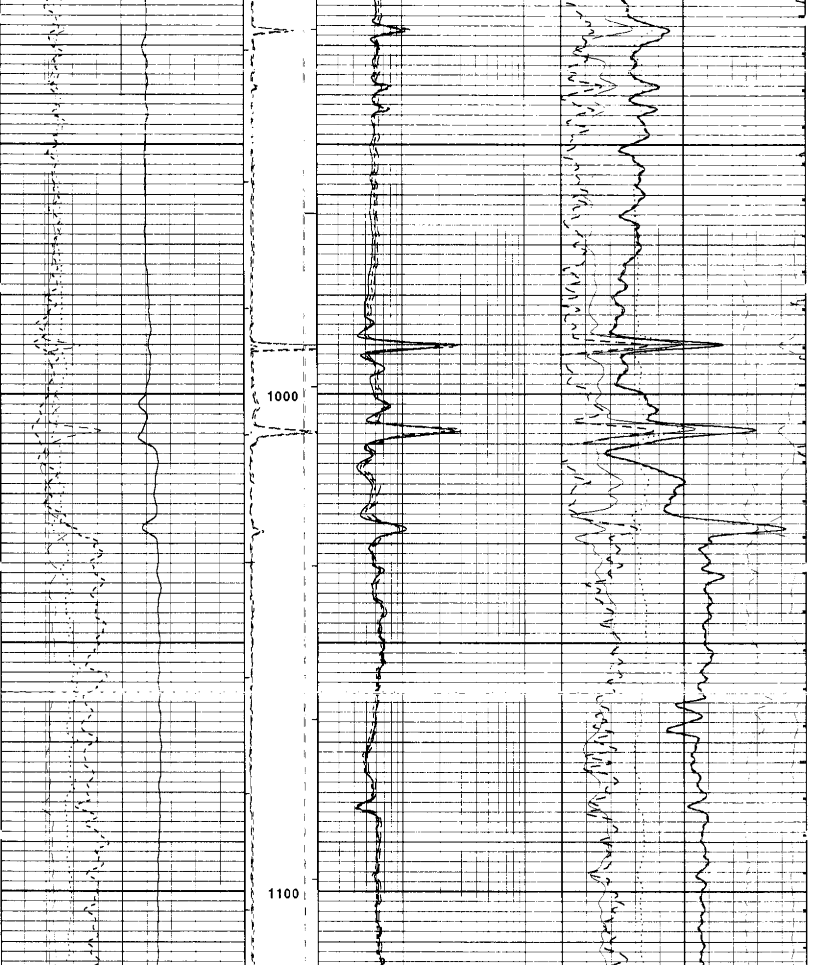
DRHO
-0.5 G/CC 0.5

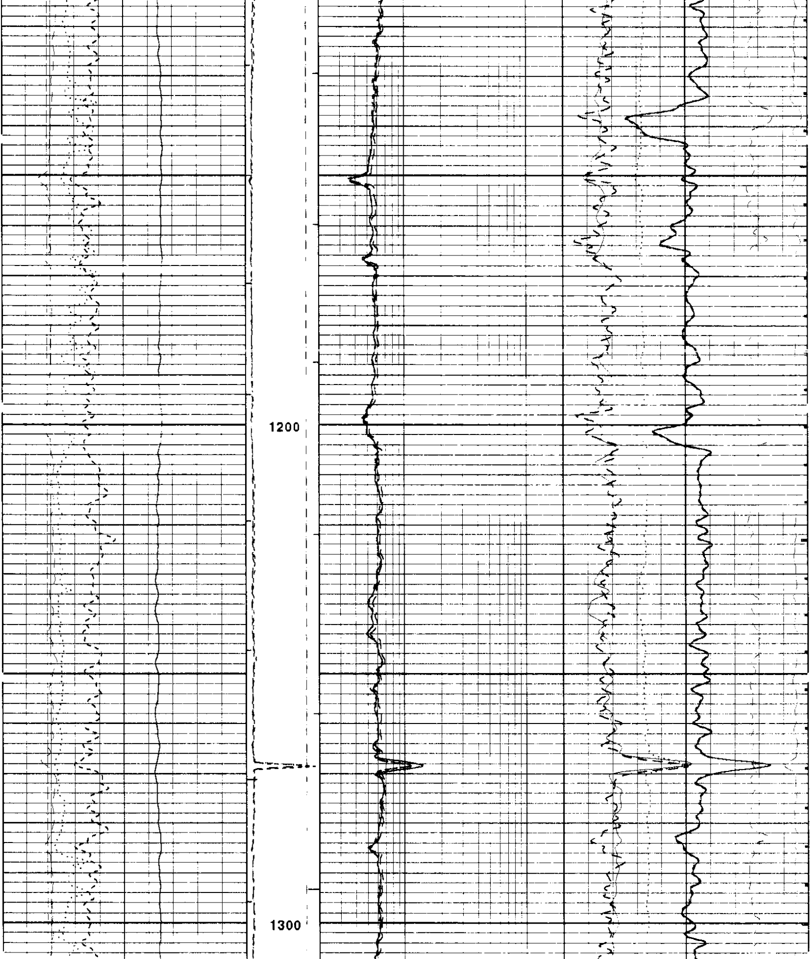
PE
12 2

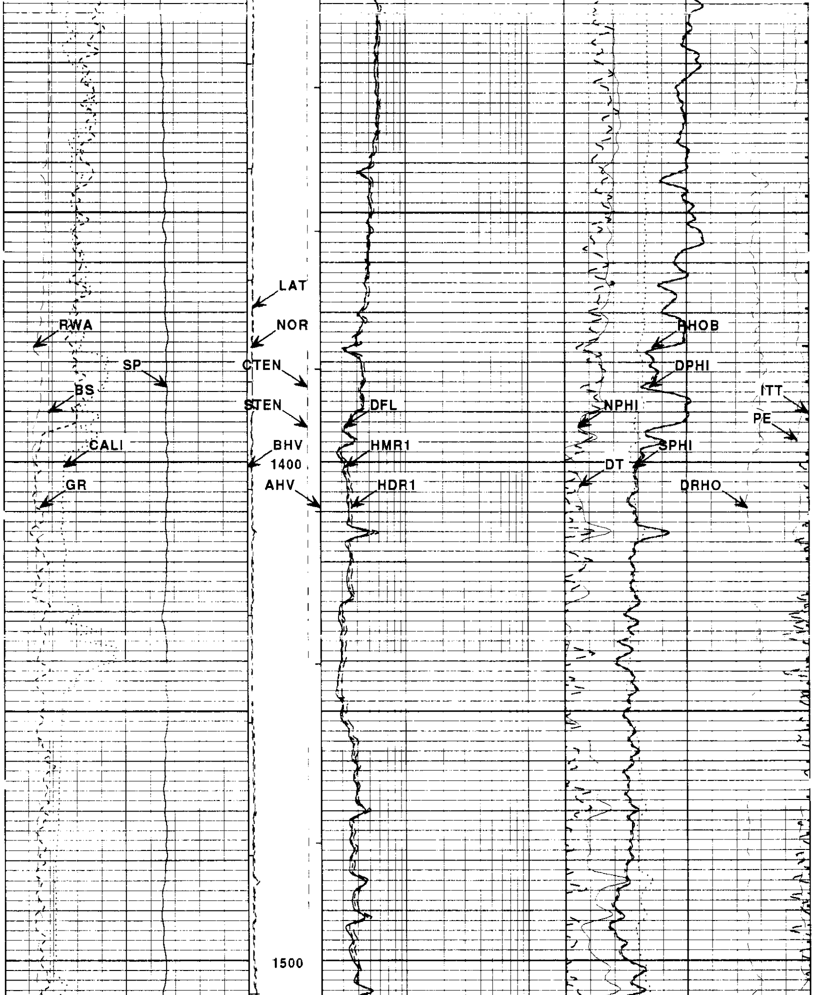
ITT

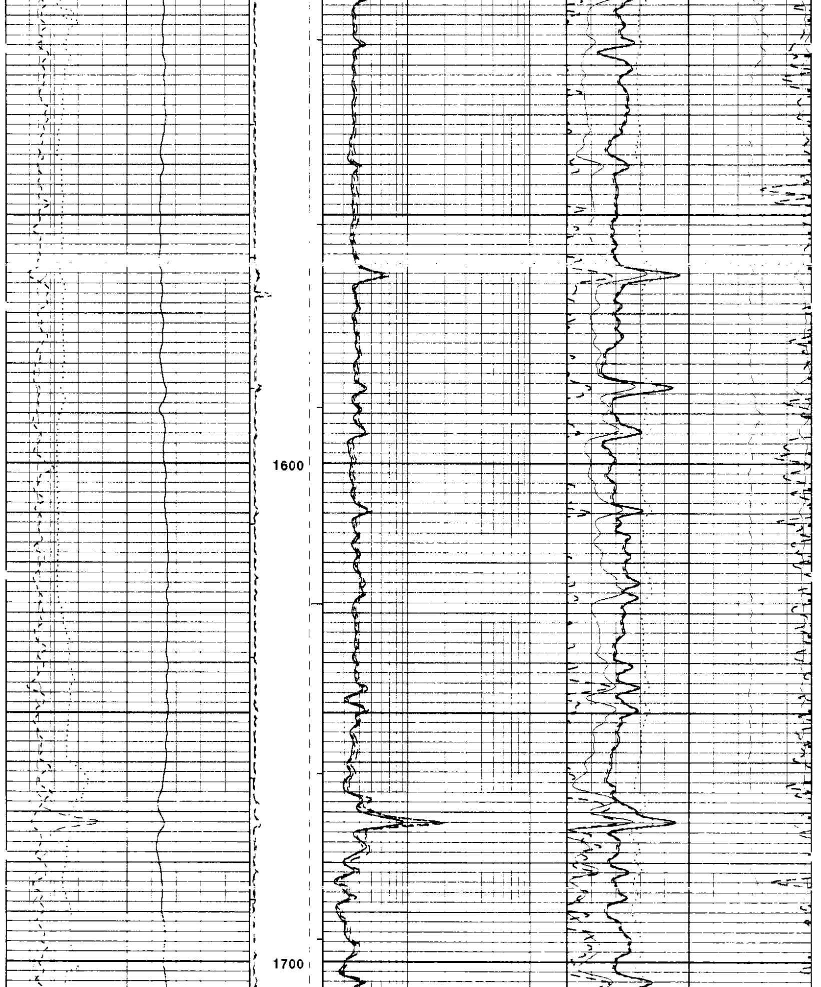


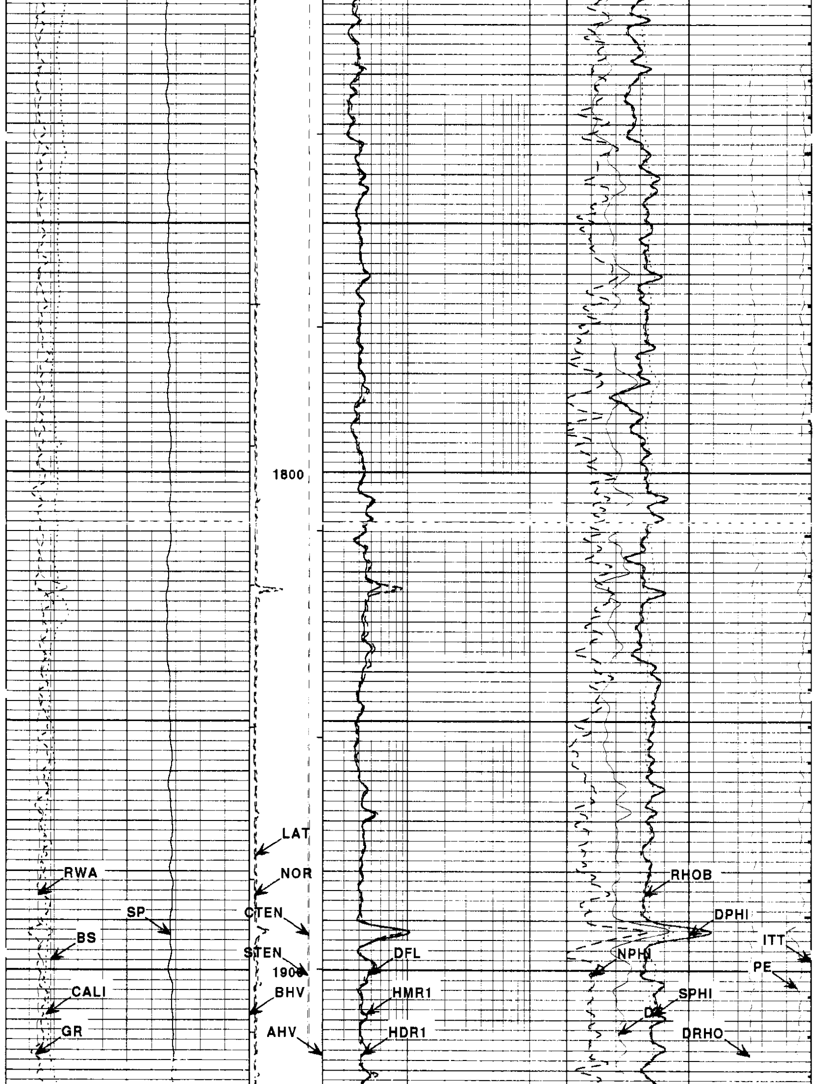


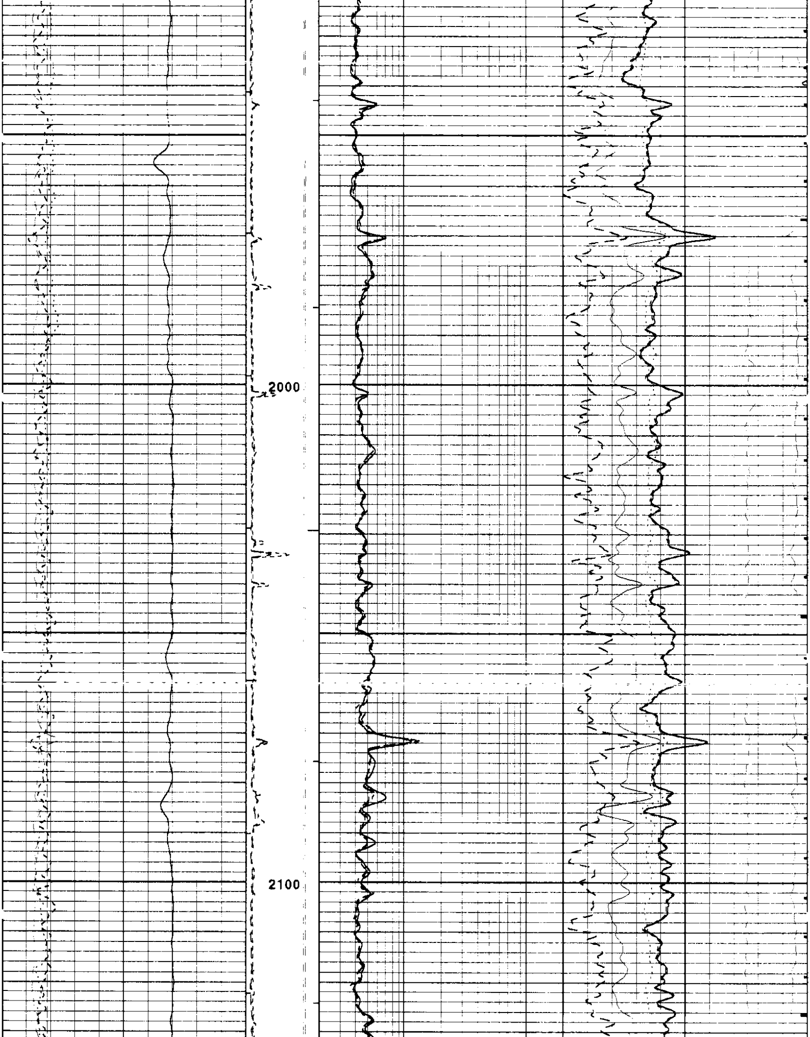


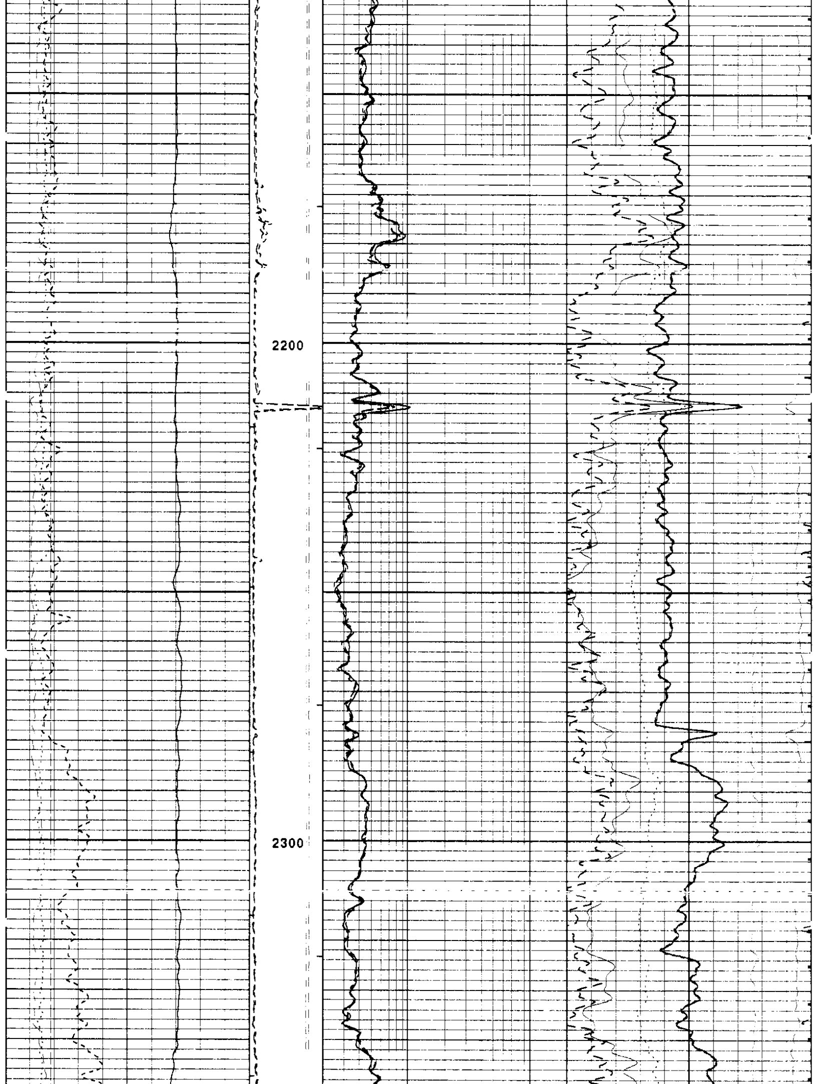


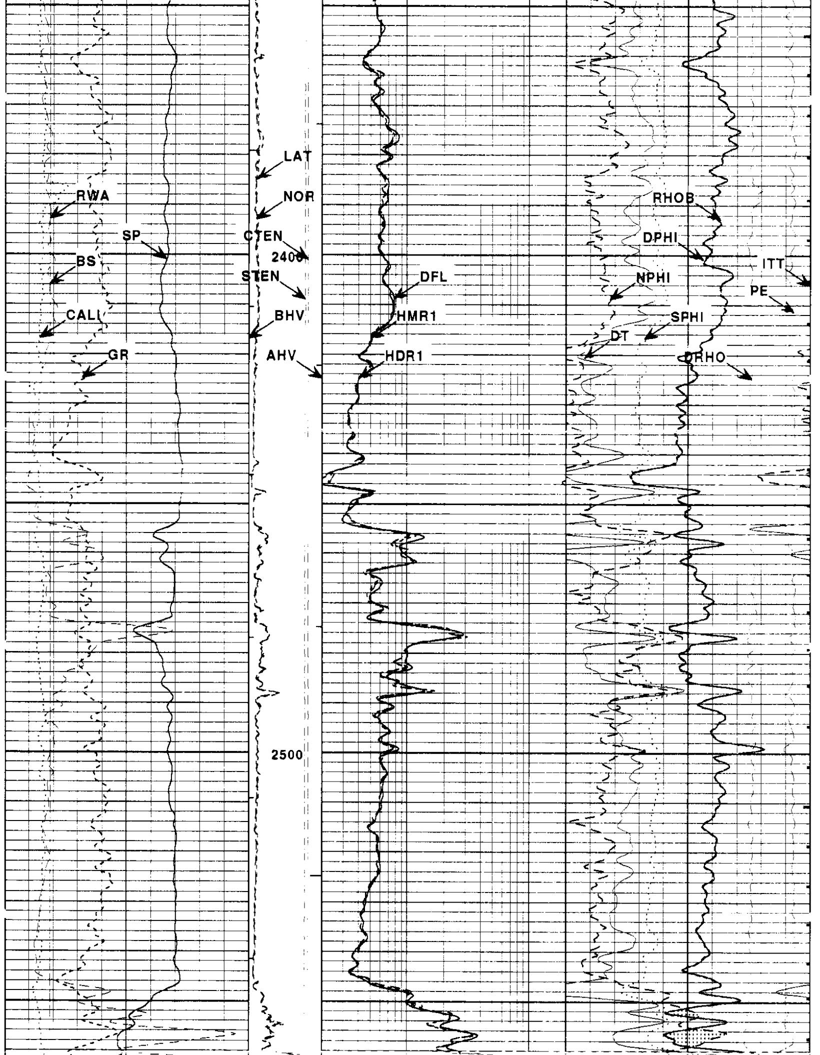


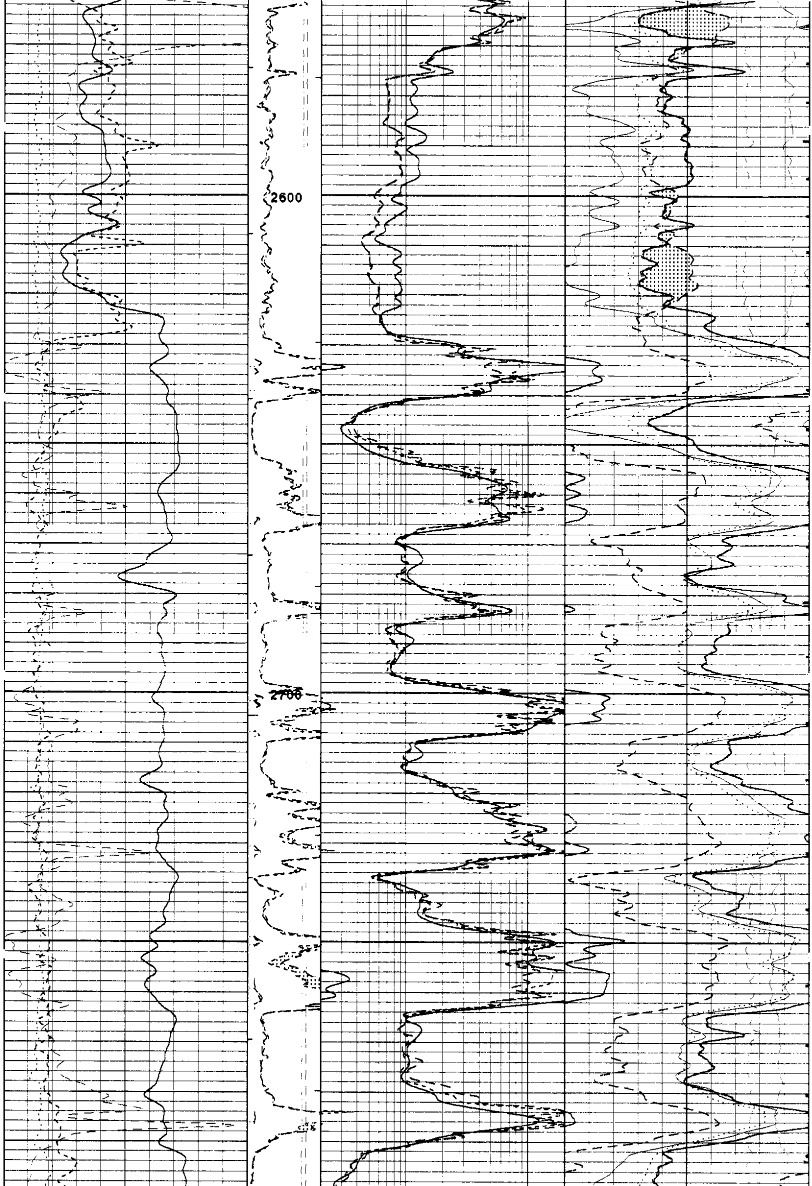


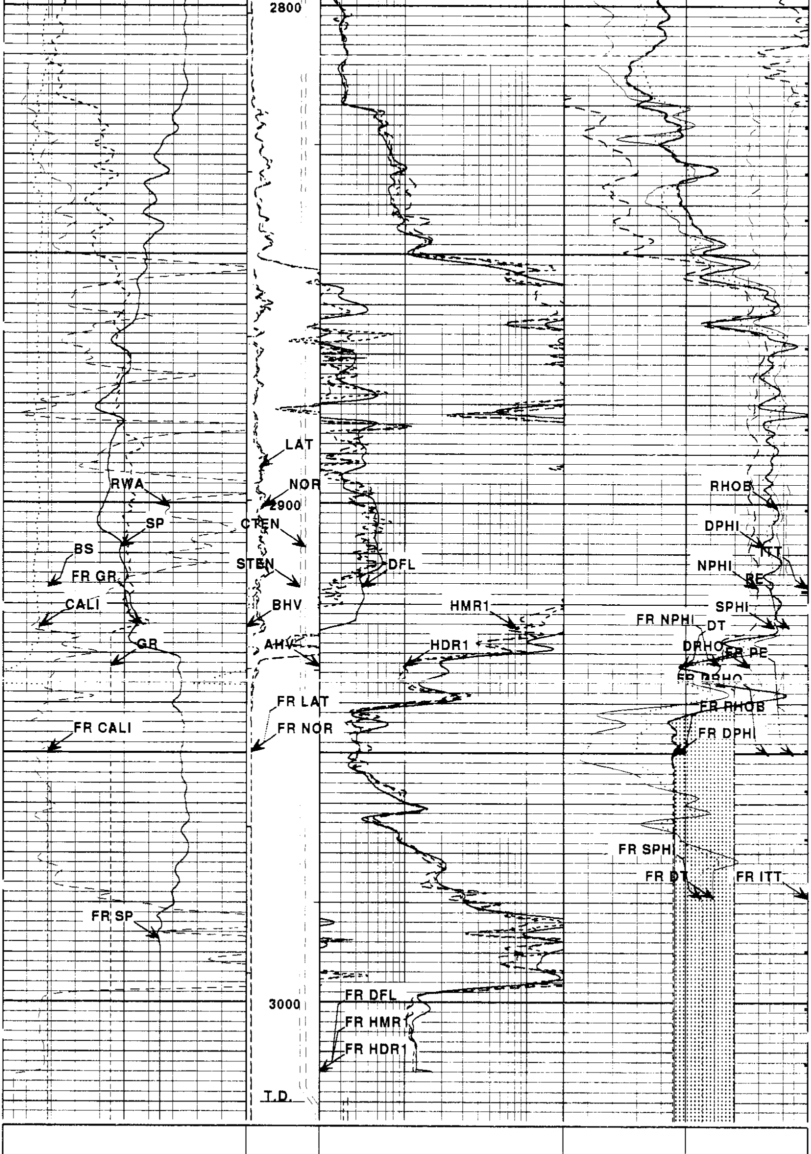












			ITT
	1:240 FT.		PE 12 2
	LAT 0 OHMM 20		DRHO -0.5 G/CC 0.5
RWA 0 OHMM 3	NOR 0 OHMM 20		RHOB 1.65 G/CC 2.65
SP -]10[+	CTEN 10000 0		DPHI 60. % 0
BS 6 INCH 16	STEN 10500 500	DFL 1 OHM 100	NPHI 60. % 0
CALI 6 INCH 16	BHV 0 FT3 100	HMR1 1 OHMM 100	SPHI 60. % 0
GR 0 API 200	AHV 100 FT3 0	HDR1 1 OHMM 100	DT 150 US/F 50

HALLIBURTON

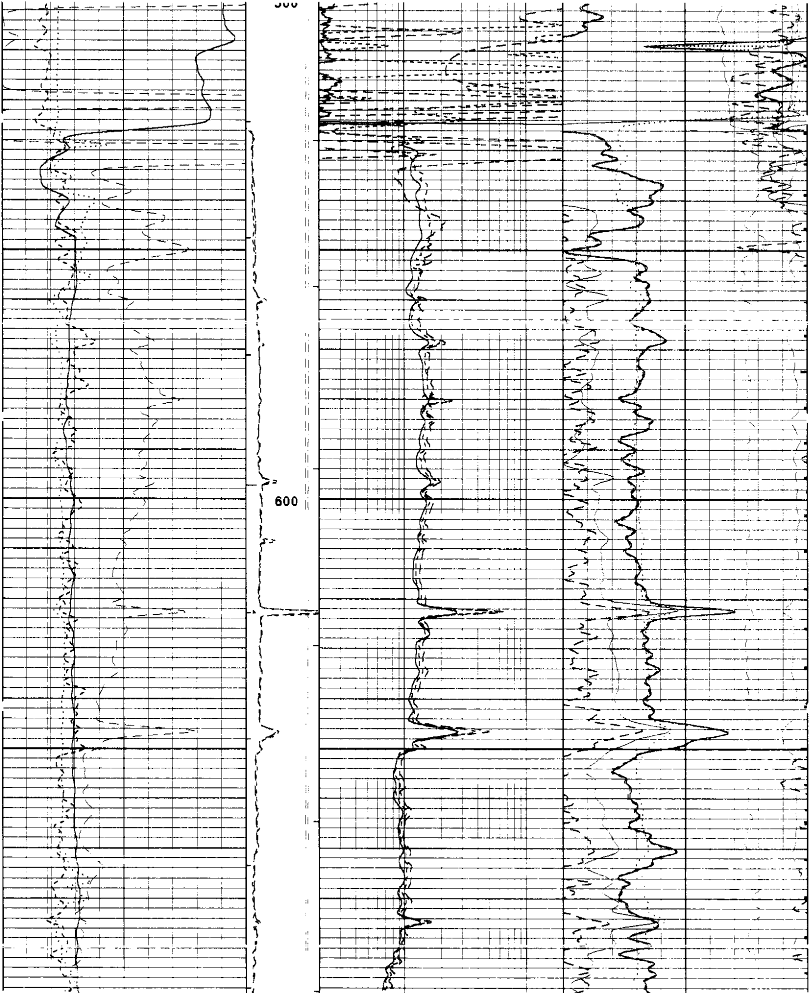
Version No: 5.8 | hc:3.0
Data File: 1111_mcco_24_29.3.cls
Format File: plot_1.3.spc
Plot Time: 2007-11-11 18:07:56
Log Time: 2007-11-11 14:13:55
Top Depth: 500.00
Bottom Depth: 3023.75

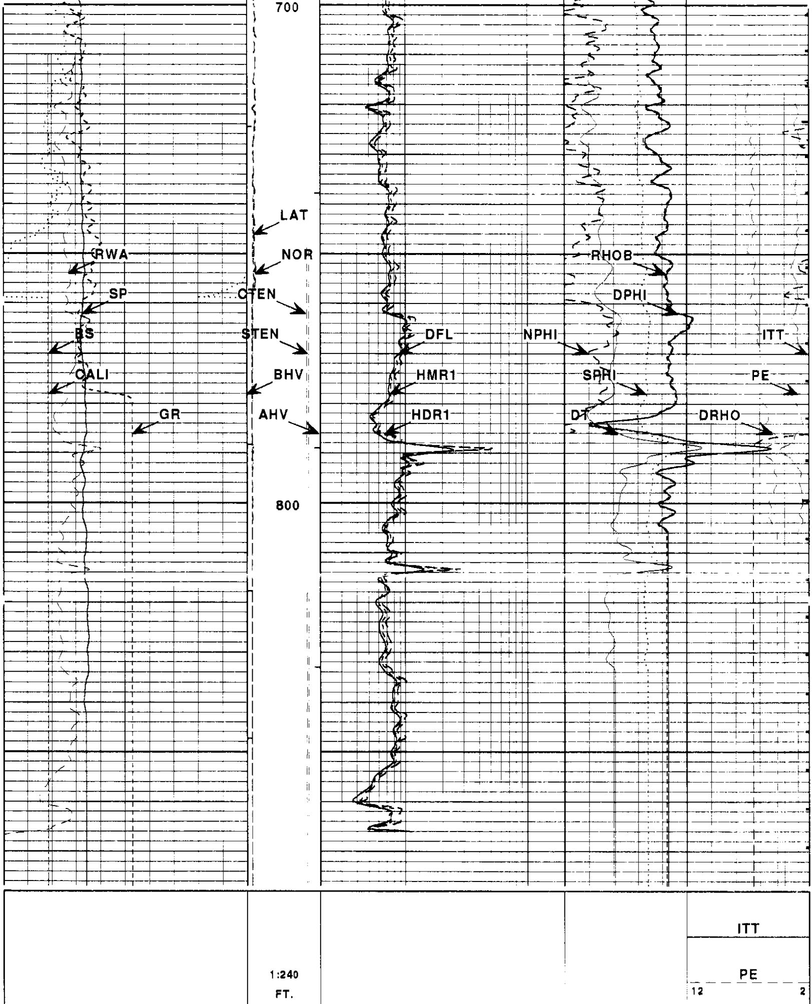
REPEAT PASS 5"=100'

HALLIBURTON

Version No: 5.8 | hc:3.0
Data File: 1111_mcco_24_29.1.cls
Format File: plot_1.3.spc
Plot Time: 2007-11-11 18:08:48
Log Time: 2007-11-11 13:53:47
Top Depth: 500.00
Bottom Depth: 876.75

GR 0 API 200	AHV 100 FT3 0	HDR1 1 OHMM 100	DT 150 US F 50
CALI 6 INCH 16	BHV 0 FT3 100	HMR1 1 OHMM 100	SPHI 60. % 0
BS 6 INCH 16	STEN 10500 500	DFL 1 OHM 100	NPHI 60. % 0
SP -]10[+	CTEN 10000 0		DPHI 60. % 0
RWA 0 OHMM 3	NOR 0 OHMM 20		RHOB 1.65 G CC 2.65
	LAT 0 OHMM 20		DRHO -0.5 G/CC 0.5
	1:240 FT.		PE 12 2
			ITT





	LAT 0 OHMM 20		DRHO -0.5 G/CC 0.5
RWA 0 OHMM 3	NOR 0 OHMM 20		RHOB 1.65 G/CC 2.65
SP -]10[+	CTEN 10000 0		DPHI 60. % 0
BS 6 INCH 16	STEN 10500 500	DFL 1 OHM 100	NPHI 60. % 0
CALI 6 INCH 16	BHV 0 FT3 100	HMR1 1 OHMM 100	SPHI 60. % 0
GR 0 API 200	AHV 100 FT3 0	HDR1 1 OHMM 100	DT 150 US/F 50

HALLIBURTON

Version No: 5.8 | hc:3.0
Data File: 1111_mcco_24_29.1.cls
Format File: plot_1.3.spc
Plot Time: 2007-11-11 18:08:45
Log Time: 2007-11-11 13:53:47

Top Depth: 500.00
Bottom Depth: 876.75

EXCELL-2000 Calibration Report

Date: 11-Nov-2007 15:25:

GAMMA RAY TOOL SHOP CALIBRATION SUMMARY

PERFORMED: 24-Oct-2007 17:46 LAST SHOP CALIBRATION: 19-Sep-2007 09:49
SERIAL NUMBER: 180 MODEL: NGRT-A
BLANKET #: 67
TRUCK UNIT NUMBER: 10549599 PROGRAM VERSION: 5.8
PERFORMED BY: G. ROUSSEAU

	MEASURED	CALIBRATED	UNITS
BACKGROUND	18	18	GAPI
BACKGROUND+CALIBRATOR	225	223	GAPI
CALIBRATOR	207	205	GAPI
GAPI CONVERSION FACTOR	0.484		GAPI/CPS

GAMMA RAY TOOL BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 08-Nov-2007 04:16 LAST SHOP CALIBRATION: 24-Oct-2007 17:46

	SHOP	FIELD	UNITS
BACKGROUND	18	29	GAPI
BACKGROUND+CALIBRATOR	223	241	GAPI
CALIBRATOR	205	213	GAPI

GAMMA RAY TOOL AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 11-Nov-2007 15:54 LAST SHOP CALIBRATION: 24-Oct-2007 17:46

	BEFORE	AFTER	UNITS
BACKGROUND	29	30	GAPI
BACKGROUND+CALIBRATOR	241	245	GAPI
CALIBRATOR	213	215	GAPI

DUAL SPACED NEUTRON--GIBRALTAR SHOP CALIBRATION SUMMARY

```
PERFORMED: 24-Oct-2007 18:40   LAST SHOP CALIBRATION: 19-Sep-2007 10:22
SERIAL NUMBER: 05              MODEL: DSNT-X
SOURCE NUM: DSN-16
TRUCK UNIT NUMBER: 10549599    PROGRAM VERSION: 5.8
PERFORMED BY: G. ROUSSEAU
```

```
                ** NEUTRON CALIBRATION SUMMARY **


                      CALIBRATION CONSTANTS

                Prev.      New      Control Limit
                Value     Value      On New Value
                -----     -----     -------------
       Gain     1.017     1.014      0.90 - 1.10


                              WATER TANK SUMMARY
                          (Horizontal Water Tank)

                 Current
                 Reading        Calib.                    Control
                 (Previous      (New                       Limit
                 Coef.)         Coef.)       Change      On Change
                 --------       ------       ------     ----------
Porosity           23.92         23.83        -0.09      +/- 0.20
Calibrated Ratio   9.799         9.769       -0.031      +/- 0.050

Reference value assigned to tank: 52.720

                               VERIFIER

                                 Value     Control Limits
                                 -----     --------------
          Snow-block porosity     6.71        2.0 -  9.0


                    PASS/FAIL SUMMARY

             Background Check:           PASSED
             Gain-Range Check:           PASSED
             Snow-block Check:           PASSED
```

DUAL SPACED NEUTRON--GIBRALTAR BEFORE SURVEY FIELD CHECK SUMMARY

```
PERFORMED: 08-Nov-2007 04:17   LAST SHOP CALIBRATION: 24-Oct-2007 18:40
```

```
                     ** NEUTRON FIELD-CHECK SUMMARY **


                                                      Control Limit
                           Shop     Before   Change    On Change
                           ----     ------   ------   -------------
     Snow-Block Por.(pu)   6.71      6.83     0.12       +/- 1.50

                        PASS/FAIL SUMMARY

                 Snow Block Change:          PASSED
                 Snow Block Stats:           PASSED
```

DUAL SPACED NEUTRON--GIBRALTAR AFTER SURVEY FIELD CHECK SUMMARY

```
PERFORMED: 11-Nov-2007 15:53   LAST SHOP CALIBRATION: 24-Oct-2007 18:40
```

```
                     ** NEUTRON POST-CHECK SUMMARY **


                                                      Control Limit
                           Before    After   Change    On Change
                           ------    -----   ------   -------------
```

```
          Snow-Block Por.(pu)        6.83        6.82     -0.00        +/- 1.50


                                 PASS/FAIL SUMMARY

                         Snow Block Change:              PASSED
                         Snow Block Stats:               PASSED
```

```
              SDL (D) WITH (A) MANDREL w/EVR SHOP CALIBRATION SUMMARY
     PERFORMED: 24-Oct-2007 18:12  LAST SHOP CALIBRATION: 19-Sep-2007 11:22
     SERIAL NUMBER: I714M741       MODEL: SDL_DA
     SOURCE NUM: 2694 GW
     TRUCK UNIT NUMBER: 10549599   PROGRAM VERSION: 5.8
     PERFORMED BY: G. ROUSSEAU
```

```
                          DENSITY CALIBRATION SUMMARY

                                                          CONTROL LIMIT
                        PREV VALUE        NEW VALUE       ON NEW VALUES
                        ----------        ---------       -------------
  NEAR BAR   GAIN         0.9949            0.9922          0.90 - 1.10
  NEAR DENS GAIN          0.9868            0.9876          0.90 - 1.10
  NEAR PEAK GAIN          0.9785            0.9695          0.90 - 1.10
  NEAR LITH GAIN          0.9898            0.9801          0.90 - 1.10

  FAR  BAR   GAIN         1.0093            1.0080          0.90 - 1.10
  FAR  DENS GAIN          1.0018            1.0020          0.90 - 1.10
  FAR  PEAK GAIN          0.9994            1.0003          0.90 - 1.10
  FAR  LITH GAIN          0.9969            0.9979          0.90 - 1.10

  NEAR BAR  OFFSET        0.1656            0.1979              NONE
  NEAR DENS OFFSET        0.2013            0.1971              NONE
  NEAR PEAK OFFSET        0.2463            0.3287              NONE
  NEAR LITH OFFSET        0.1315            0.2167              NONE

  FAR  BART OFFSET        0.0755            0.0962              NONE
  FAR  DENS OFFSET        0.1440            0.1481              NONE
  FAR  PEAK OFFSET        0.1625            0.1602              NONE
  FAR  LITH OFFSET        0.1499            0.1402              NONE

  NEAR BART BKG           1023.4            1020.9           700 -1500
  NEAR DENS BKG            422.6             424.0           290 - 600
  NEAR PEAK BKG            187.3             187.1           130 - 280
  NEAR LITH BKG            176.8             177.7           125 - 270

  FAR  BART BKG            538.7             535.9           350 - 750
  FAR  DENS BKG            210.9             211.2           140 - 300
  FAR  PEAK BKG             89.1              89.6            50 - 130
  FAR  LITH BKG             88.8              88.2            50 - 130


                             CALIBRATION-BLOCK SUMMARY

                           CURRENT
                           READING        CALIB.                     CONTROL
                          (PREVIOUS       (NEW                        LIMIT
                           COEF.)         COEF.)       CHANGE       ON CHANGE
                          ---------      -------      --------     ---------
  MAGNESIUM
     Density  g/cc           1.679         1.678        -0.001      +/- 0.015
     Pe                      2.549         2.594         0.045      +/- 0.15
  ALUMINUM
     Density  g/cc           2.602         2.603         0.001      +/- 0.015
     Pe                      3.167         3.200         0.033      +/- 0.15


                                  TOOL SUMMARY

                               NEAR DETECTOR                 FAR DETECTOR
                      --------------------------   --------------------------
                       VALUE     CONTROL LIMITS      VALUE     CONTROL LIMITS
                       -----    ---------------      -----    ---------------
 Quality
    Background         0.0003     +/- 0.0110         0.0037     +/- 0.0140
    Mag Block         -0.0106     +/- 0.0110         0.0032     +/- 0.0140
    Alum Block        -0.0039     +/- 0.0110        -0.0024     +/- 0.0140
```

```
Resolution               9.1     6.0  - 11.0              9.6      6.0 - 11.0
Verifier (B+D+P+L)      1810    1250  - 2700              925      600 - 1300

Pad temperature =  25.2


                    PASS/FAIL SUMMARY

             Bkg Quality Check:            PASSED
             Bkg Range Check:              PASSED
             Bkg Resolution Check:         PASSED
             Bkg Verification Check:       PASSED
             Magnesium Quality Check:      PASSED
             Aluminum Quality Check:       PASSED
             Gains Check:                  PASSED
             Changes in Cal. Block:        PASSED
```

SDL (D) WITH (A) MANDREL w/EVR BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 08-Nov-2007 04:28 LAST SHOP CALIBRATION: 24-Oct-2007 18:12

```
                                                          CONTROL LIMIT
                            SHOP      BEFORE    CHANGE     ON CHANGE
                           ______    ________   ______    ____________

    Near (B+D+P+L) cps     1809.8     1804.9     -4.9      +/-  17.0
    Far  (B+D+P+L) cps      925.0      925.1      0.1      +/-  16.5
    Near Resolution          9.11       9.16     0.05      +/-   0.5
    Far  Resolution          9.58       9.69     0.10      +/-   1.0

Pad temperature =  16.5


                    PASS/FAIL SUMMARY

             Bkg Quality Check:            PASSED
             Bkg Resolution Check:         PASSED
             Bkg Verification Check:       PASSED
```

SDL (D) WITH (A) MANDREL w/EVR AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 11-Nov-2007 15:58 LAST SHOP CALIBRATION: 24-Oct-2007 18:12

```
                                                          CONTROL LIMIT
                           BEFORE     AFTER     CHANGE     ON CHANGE
                           ______    _______    ______   ____________

    Near (B+D+P+L) cps     1804.9     1807.8      2.9      +/-  18.9
    Far  (B+D+P+L) cps      925.1      921.5     -3.6      +/-  17.8
    Near Resolution           9.2        9.2     -0.0      +/-   0.5
    Far  Resolution           9.7        9.6     -0.1      +/-   1.0

Pad temperature =  16.5


                    PASS/FAIL SUMMARY

             Bkg Quality Check:            PASSED
             Bkg Resolution Check:         PASSED
             Bkg Verification Check:       PASSED
```

SDL-D CALIPER: A MANDREL SHOP CALIBRATION SUMMARY

PERFORMED: 26-Oct-2007 05:13 LAST SHOP CALIBRATION: 26-Oct-2007 05:12
SERIAL NUMBER: I714M741 MODEL: SDL-DA
TRUCK UNIT NUMBER: 10549599 PROGRAM VERSION: 5.8
PERFORMED BY: HAFIZ

	MEASURED	CALIBRATED	UNITS
VALUE 1	8.139	8.000	INCH
VALUE 2	16.008	16.000	INCH
GAIN	0.00809		
OFFSET	-11.06		

SDL-D CALIPER: A MANDREL BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 08-Nov-2007 04:09 LAST SHOP CALIBRATION: 26-Oct-2007 05:13

	SHOP	FIELD	UNITS
VALUE 1	8.000	7.805	INCH

SDL-D CALIPER: A MANDREL AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 11-Nov-2007 15:51 LAST SHOP CALIBRATION: 26-Oct-2007 05:13

	BEFORE	AFTER	UNITS
VALUE 1	7.805	7.917	INCH

MICROLOG SHOP CALIBRATION SUMMARY

PERFORMED: 26-Oct-2007 05:04 LAST SHOP CALIBRATION: 19-Sep-2007 11:38
SERIAL NUMBER: I714M741 MODEL: SDL_DA
TRUCK UNIT NUMBER: 10549599 PROGRAM VERSION: 5.8
PERFORMED BY: HAFIZ

	MICROLOG NORMAL		MICROLOG LATERAL		
	MEASURED	CALIBRATED	MEASURED	CALIBRATED	UNITS
TOOL ZERO	-0.02	-0.04	0.00	0.03	OHM-M
CAL POINT #1	0.02	0.00	-0.03	0.00	OHM-M
CAL POINT #2	19.99	20.00	20.03	20.00	OHM-M
INTERNAL REFERENCE	20.03	20.04	20.13	20.11	OHM-M

MICROLOG BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 07-Nov-2007 04:01 LAST SHOP CALIBRATION: 26-Oct-2007 05:04

	MICROLOG NORMAL		MICROLOG LATERAL		
	SHOP	FIELD	SHOP	FIELD	UNIT
TOOL ZERO	-0.04	-0.06	0.03	0.06	OHM-M
INTERNAL REFERENCE	20.04	20.06	20.11	20.10	OHM-M

MICROLOG AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 11-Nov-2007 15:48 LAST SHOP CALIBRATION: 26-Oct-2007 05:04

	MICROLOG NORMAL		MICROLOG LATERAL		
	BEFORE	AFTER	BEFORE	AFTER	UNIT
TOOL ZERO	-0.06	-0.05	0.06	0.09	OHM-M
INTERNAL REFERENCE	20.06	20.07	20.10	20.07	OHM-M

ENHANCED HIGH RESOLUTION IND. SHOP CALIBRATION SUMMARY

```
PERFORMED: 07-Nov-2007 08:51  LAST SHOP CALIBRATION: 19-Sep-2007 12:28
SERIAL NUMBER: 211_132        MODEL: HRI
TRUCK UNIT NUMBER: 10549599   PROGRAM VERSION: 5.8
PERFORMED BY: G. ROUSSEAU
```

HRI MASTER CALIBRATION SUMMARY

```
        TEST LOOP RESPONSE:

             1 - TEST LOOP CLOSED
                        MEASURED SIGNAL             NOMINAL
                           R          X          R          X
             HRD          1977       1972       1977       1972      MMHOS
             HRM          2839       2832       2839       2832      MMHOS

             2 - TEST LOOP OFF(SONDE ERROR)
                        MEASURED SIGNAL             NOMINAL
                           R          X          R          X
             HRD            -5        -12      +/-15      +/- 100    MMHOS
             HRM            -9        -61      +/-15      +50/-150   MMHOS

        ELECTRONICS RELATIVE GAIN:

                            SET                     NOMINAL
                        MAGNITUDE    PHASE   MAGNITUDE    PHASE
             HRD          1.01       -1.46   1. +/-0.1   0. +/-5
             HRM          1.01       -1.43   1. +/-0.1   0. +/-5

        Temperature at time of calibration was      61.0   DEG F


             ##########################################################
             #                     **** NOTICE ****                   #
             #      THE HIGH RESOLUTION INDUCTION TOOL (HRID) IS A    #
             #   CONTINUAL SELF-CALIBRATING TOOL.  DURING LOGGING, THE #
             #    TOOL CONSTANTLY SELF-UPDATES ITS COEFFICIENTS.  THE #
             #    SHOP CALIBRATION IS PERFORMED UNDER VERY STRINGENT  #
             #   CONDITIONS, AND SINCE THE TOOL IS SELF-CALIBRATING   #
             #     DURING LOGGING, NO FIELD OR POST CALIBRATIONS ARE  #
             #         AVAILABLE OR NECESSARY FOR THE HRID TOOL.      #
             ##########################################################
```

EXCELL-2000 Calibration Summary Table

Date: 11-Nov-2007 15:25:

Service or Signal	Shop	Before	After	Change	Tolerance
GAMMA	205	213	215	-2	+/- 9.0
Snow-Block Por.(pu)	6.71	6.83	6.82	-0.00	+/- 1.50
DENSITY NEAR(B-D+P-L)	1809.8	1804.9	1807.8	2.9	+/- 18.9
DENSITY FAR (B+D+P+L)	925.0	925.1	921.5	-3.6	+/- 17.8
CALIPER VALUE 1	8.000	7.805	7.917	-0.112	+/-0.5
MICLOG NORMAL	20.04	20.06	20.07	-0.01	+/- 0.8
MICLOG LATERAL	20.11	20.10	20.07	0.03	+/- 0.8

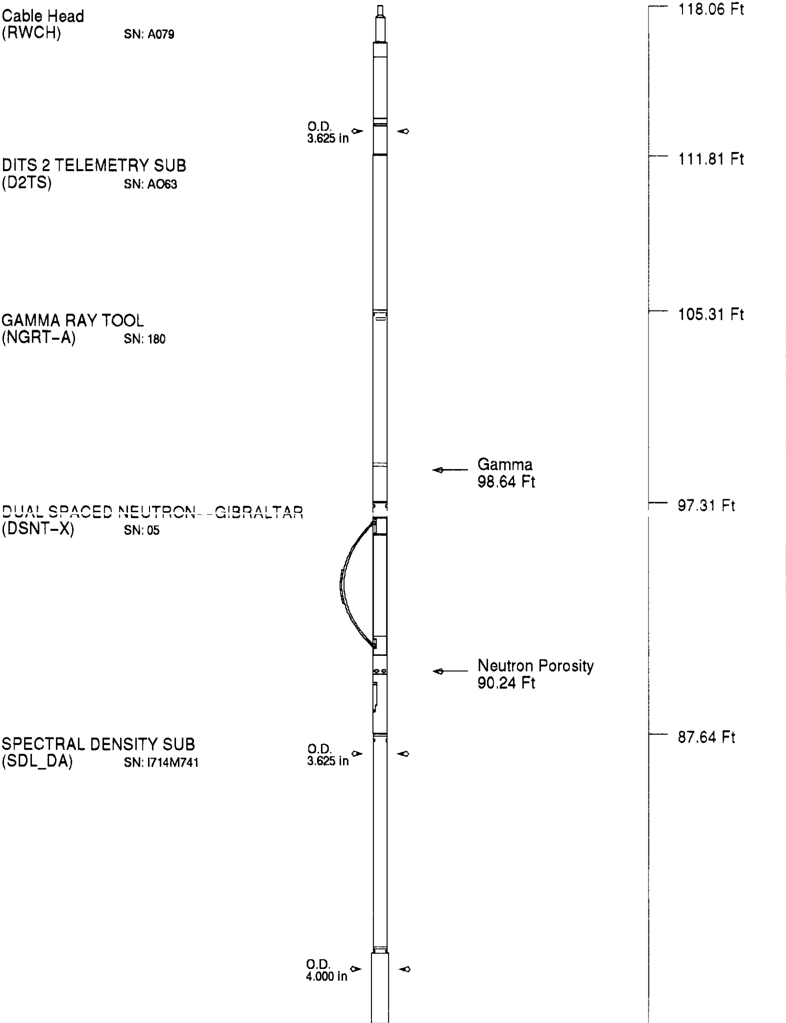
Current EXCELL-2000 Parameter Values

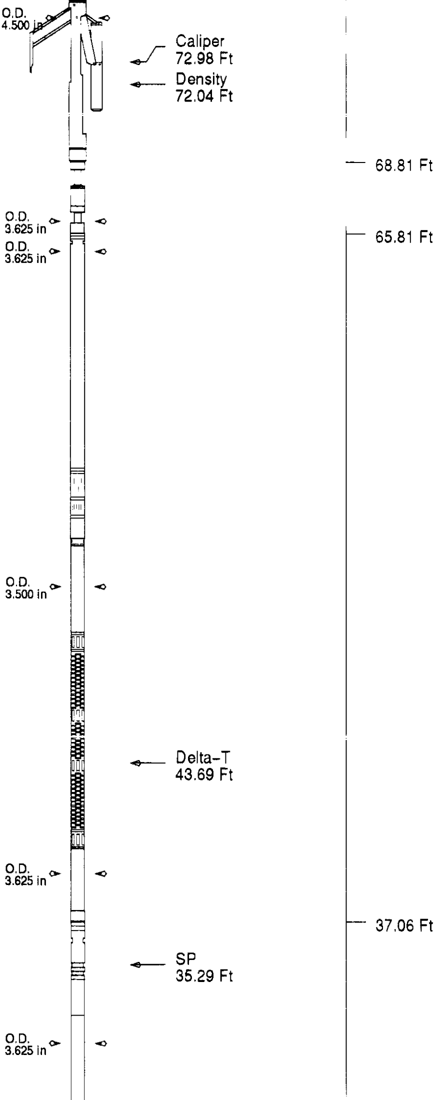
Depth: 94.333
Date: 11-Nov-2007 15:10:
Service Number: 2241
Software Version: 5.8

Mnemonic	Tool	Parameter Description	Value	Units
PERF	DITSHD	PERFORATED INTERVAL	NO	
TD	DITSHD	TOTAL DEPTH	3020.	FT
CS_ANT	DITSHD	CASING DEPTH (FOR ANNOTATION)	0.	FT
ANTSPA	DITSHD	ANNOTATION LABEL SPACING	500.	Ft
GR_OK	GAMMA	DO GAMMA CALCULATIONS?	YES	
CASED	SHARED	CASED HOLE?	NO	
CASEOD	SHARED	CASING DIAMETER (OD)	4.5	Inches
MUDWT	SHARED	BOREHOLE FLUID WEIGHT	9.5	Pounds/Gal.
GRSO	GAMMA	GAMMA RAY STANDOFF	0.	Inches
BS	SHARED	BIT SIZE	7.875	Inches
DSN_OK	DSNT_X	DO DSNT_X CALCULATIONS?	YES	
DRILL	DSNT_X	TPL - NEUTRON IN SLEEVE?	NO	
BADHOL	DSNT_X	DSNT_X BAD HOLE CORRECTION	NO	
NLITH	DSNT_X	NEUTRON LITHOLOGY	SAND	
DSNSO	DSNT_X	DSNT_X STANDOFF	0.	Inches
DSNTMP	DSNT_X	DSNT_X TEMPERATURE CORRECTION	NONE	
DSNPRS	DSNT_X	DSNTX PRESSURE CORRECTION	NONE	
VLDTMP	DSNT_X	IS DSNT_X TEMPERATURE VALID?	YES	
SDL_OK	SDL_DA	DO SDL CALCULATIONS?	YES	
EVR_OK	SDL_DA	DO SDL EVR CALCULATIONS?	YES	
AIR	SDL_DA	AIR FILLED BOREHOLE?	NO	
LOGB	SDL_DA	LOGGING CAL BLOCKS?	NO	
SDLTC	SDL_DA	SDL TEMPERATURE CORRECTION?	YES	
MUDT	SDL_DA	MUD CORRECTION TYPE?	BARI	
RHOMAT	SHARED	MATRIX DENSITY	2.65	Grams/CC
RHOFLU	SHARED	FLUID DENSITY	1.	Grams/CC
CAL_OK	CAL_DA	DO CALIPER CALCULATIONS?	YES	
AHVOK	CAL_DA	DO ANNULAR VOLUME CALCULATION?	YES	
MLOGOK	MIC_SD	DO MICRO-LOG CALCULATIONS?	YES	
FWSTOK	BCS	DO FWST CALCULATIONS?	YES	
WYLIE	BCS	ACOUSTIC POROSITY EQUATION	HLSP	
DTSHA	BCS	DELTA T SHALE	100.	uSec/Ft.
DTMAT	BCS	DELTA T MATRIX	55.5	uSec/Ft.
DTFLU	BCS	DELTA T FLUID?	189.	uSec/Ft.
DTFT	BCS	USE 1 OR 2 FT DT FOR POROSITY	2	Feet
ARCHA	SHARED	ARCHIE A	0.81	
ARCHM	SHARED	ARCHIE M	2.	
FSEL	SHARED	POROSITY SELECTION FOR F	ACOU	
USEFIX	BCS	USE MINIMUM FIXED THRESHOLD.	NO	
USENOI	BCS	USE NOISE THRESHOLD FOR PICK.	NO	
TDU_OK	TDUF	USE TDU DISPLAY CONTROLS?	YES	
HRI_OK	HRIDE	DO HRI INDUCTION CALCULATION?	YES	
DFL_OK	HRIDE	DO DFL CALCULATIONS?	YES	
PYRITE	HRIDE	PYRITE SWITCH	NO	OHMM
CASING	HRIDE	CASING DEPTH	0.	Feet
HRIDSP	HRIDE	SPIKE REDUCTION FILTER TYPE?	DELT	
HRITC	HRIDE	HRI TEMPERATURE CORRECTION	NONE	
CTEM	HRIDE	CONST TEMPERATURE	75.	DegF
BHT	HRIDE	BOTTOM HOLE TEMPERATURE	175.	Degrees F.
TSURF	HRIDE	SURFACE TEMPERATURE	60.	Degrees F
BHD	HRIDE	BOTTOM HOLE DEPTH	3020.	Feet
SP	HRIDE	USE DIGITAL SP?	NO	
SP_OF	HRIDE	SPONTANEOUS POTENTIAL OFFSET	0.	
RMUD	HRIDE	MUD RESIST AT SURFACE (0=Air)	2.	OHMM
TRM	HRIDE	TEMPERATURE OF MUD	75.	DEGF
RRMIN	HRIDE	MINIMUM RESISTIVITY FOR MAP?	0.2	OHMM
RRMAX	HRIDE	MAXIMUM RESISTIVITY FOR MAP?	200.	OHMM
XPHLOC	XP_RWA	CROSSPLOT SELECTION FOR XPOR	XPLT	

QUAD COMBO
HRI/BCS/SDL/DSN

Excell 2000 Tool String Diagram

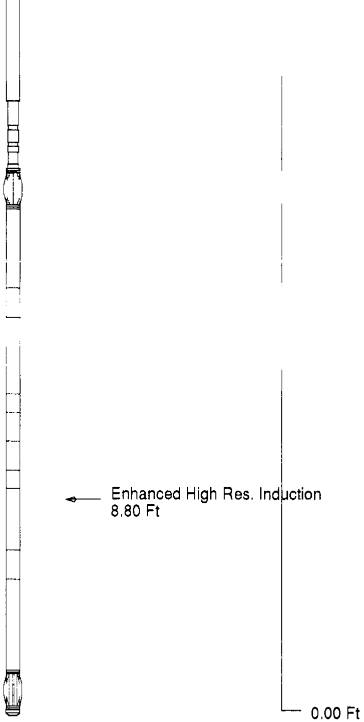




KNUCKLE JOINT
(KNUC)

M305B BCS 2XMTR - 2RCVR
(BCSD) SN: 264

ENHANCED HIGH RESOLUTION IND.
(HRI) SN: 211_132



Tool Mnemonic	Length (Ft)	Weight In Air (lbs)	Logging Speed (Ft/min)
RWCH	6.25	135.00	N/A
D2TS	6.50	100.00	N/A
NGRT-A	8.00	151.80	60.00
DSNT-X	9.67	150.00	60.00
SDL_DA	18.83	475.00	60.00
KNUC	3.00	75.00	N/A
BCSD	28.75	515.00	60.00
HRI	37.06	445.00	100.00
Tool String	118.06	2046.80	60.00

COMPANY	ENERFIN RESOURCES		
WELL	MCCOON CC 24-29-75		
FIELD	MIST		
COUNTY	COLUMBIA	**STATE**	OR

HALLIBURTON

QUAD COMBO
HRI/BCS/SDL/DSN

5"=100