Burris CC-24-08

HALLIBURTON LOGGING SERVICES, INC.

FINAL PRINT

DUAL INDUCTION ACOUSTIC VELOCITY LOG

5" = 100'   2" = 100'

COMPANY ______________
WELL ______________
FIELD ______________
COUNTY __________ ST __

COMPANY D Y OIL INC.

WELL BURRIS CC 24-8

FIELD MIST

COUNTY COLUMBIA

STATE OR OTHER SERVICES

NONE

API NO. 36-009-00258
LOCATION :
1223.29 FEET NORTH AND
2040.84 FEET EAST FROM THE
SOUTHWEST CORNER OF:
SEC. 8 TWP 5N RGE 4W

PERMANENT DATUM G.L. ELEV. 1102.0
LOG MEASURED FROM K.B 11.4FT.ABOVE PERM.DATUM
DRILLING MEASURED FROM KELLY BUSHING

ELEV.:K.B. 1113.4
D.F. ----
G.L. 1102.0

DATE	08/21/89			
RUN NO.	ONE			
DEPTH-DRILLER	2684			
DEPTH- LOGGER	2673			
BTM. LOG INTER.	2670			
TOP LOG INTER.	385			
CASING-DRILLER	8 5/8●385	●	●	●
CASING- LOGGER	385			
BIT SIZE	7 7/8			
TYPE FLUID IN HOLE	GEL LIGNO-	SULFONATE		
DENS. ¦ VISC	9.8 ¦75	¦	¦	¦
PH ¦ FLUID LOSS	8.5 ¦6.5	¦	¦	¦
SOURCE OF SAMPLE	CIRCULATED			
RM ● MEAS. TEMP.	4.0 ●65	●	●	●
RMF ● MEAS. TEMP.	4.5 ●61	●	●	●
RMC ● MEAS. TEMP.	2.0 ●62	●	●	●
SOURCE RMF ¦ RMC	MEAS.¦MEAS.	¦	¦	¦
RM ● BHT	2.85 ●104	●	●	●
TIME SINCE CIRC.	3 HOURS			
TIME ON BOTTOM	5:50 AM			
MAX. REC. TEMP.	104 ●BHT	●	●	●
EQUIP. ¦ LOCATION	2890 ¦WDLND	¦	¦	¦
RECORDED BY	B.JOHNSON			
WITNESSED BY	B.PORTWOOD			

Fold Here

Service Ticket No.: 12121   API Serial No.: 36-009-00258   PGM Version: 1.31 PC

Change in Mud Type or Additional Samples		
Date/Sample No.	/ / ¦	/ / ¦
Depth-Driller		
Type Fluid in Hole		
Dens. ¦ Visc.	¦	¦
pH. ¦ Fluid Loss	¦	¦
Source of Sample		
Rm @ Meas.Temp.	@	@
Rmf @ Meas.Temp.	@	@
Rmc @ Meas.Temp.	@	@
Source: Rmf¦Rmc	¦	¦
Rm @ BHT	2.85 @104	@
Rmf @ BHT	2.75 @104	@
Rmc @ BHT	1.24 @104	@

RESISTIVITY SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA

Run No	Tool Type & No	Pad Type	Tool Pos.	Other
ONE	DUAL #W109437	N/A	1.5 S.O.	---
ONE	SGRD #W108946	N/A	1.5 S.O.	---

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	N/A	Run No.	N/A
Serial No.	W108594	Serial No.	W112458	Serial No.	W109740	Serial No.	W108749
Model No.	432	Model No.	305	Model No.	465	Model No.	434
Diameter	3 5/8	No.of Cent.	FOUR	Diameter	4 1/2	Diameter	3 5/8
Detector Model No.	N/A	Spacing	1 FOOT	Log Type	GAMMA	Log Type	NEUTRON
Type	SCINT.			Source Type	CS137	Source Type	AM241BE
Length	4 IN.	LSA	Y	Serial No.	118	Serial No.	66
Distance To Source	N/A	FWDA	N	Strength	1.5 CU.	Strength	19.5 CU

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	2673	385	35	0	150	150.	50.	57.						
					API			US/FT						

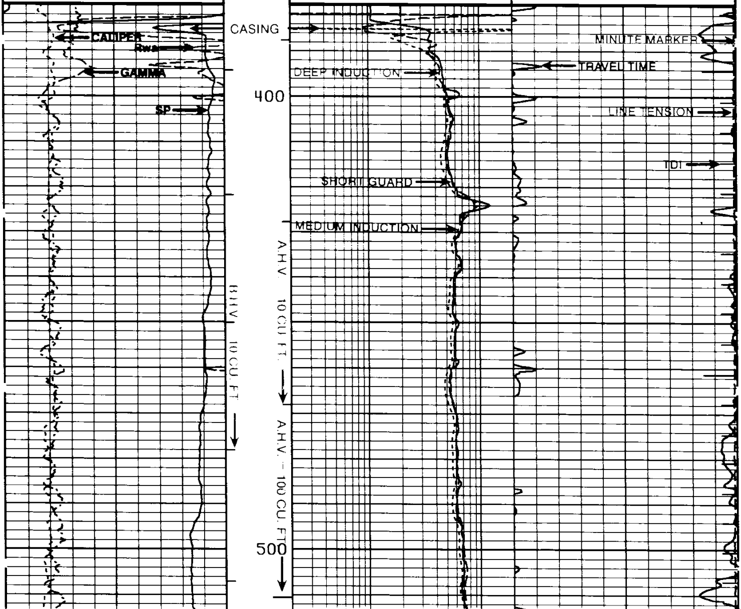
Remarks: ANNULAR HOLE VOLUME CALCULATED USING 4 1/2 INCH CASING.

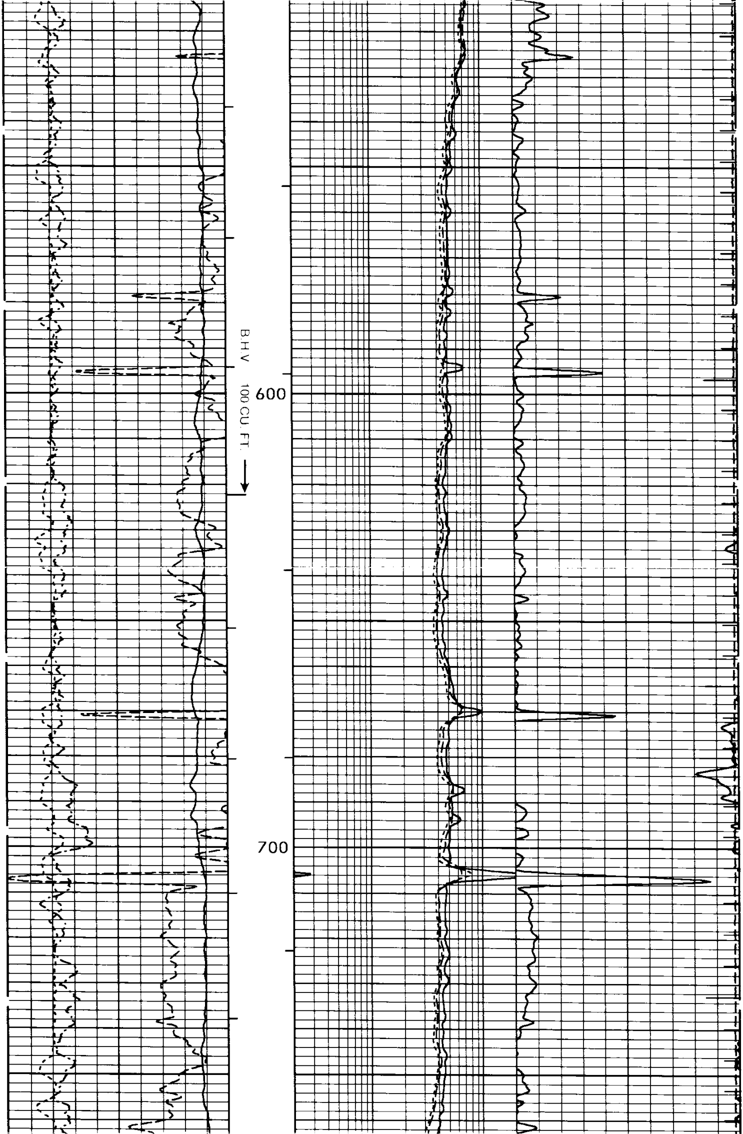
CREW ON LOCATION: EMERSON, JEFFREY

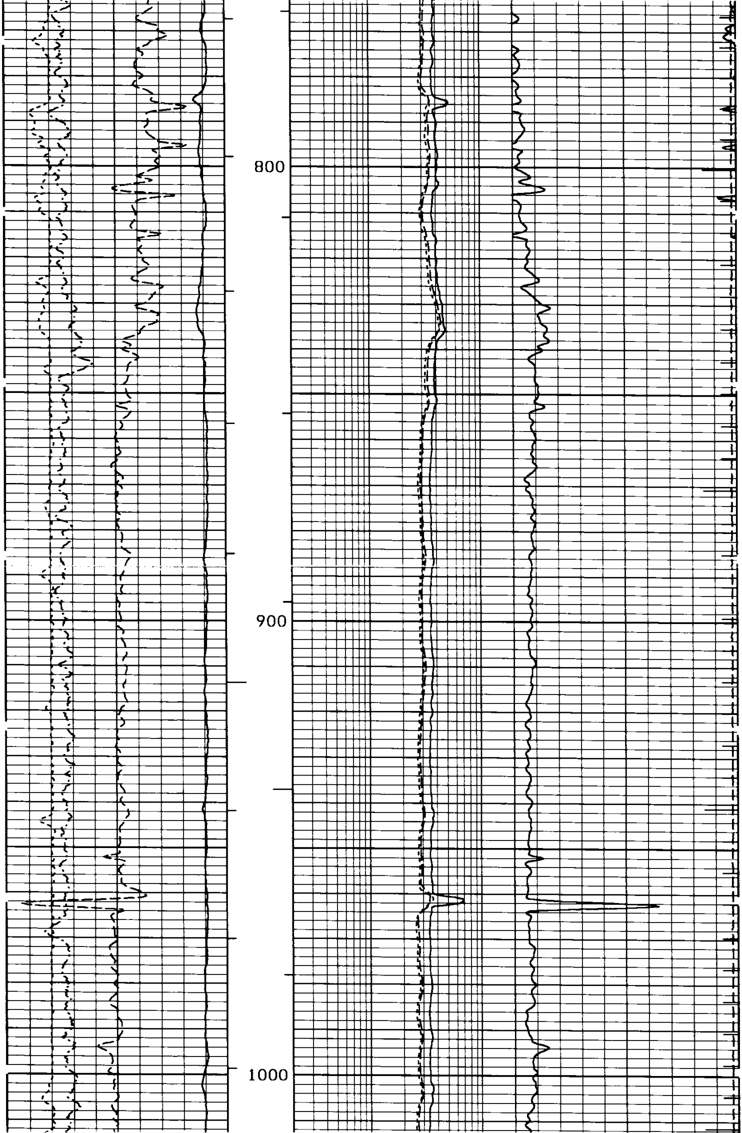
THANK YOU FOR USING HALLIBURTON LOGGING SERVICES!!

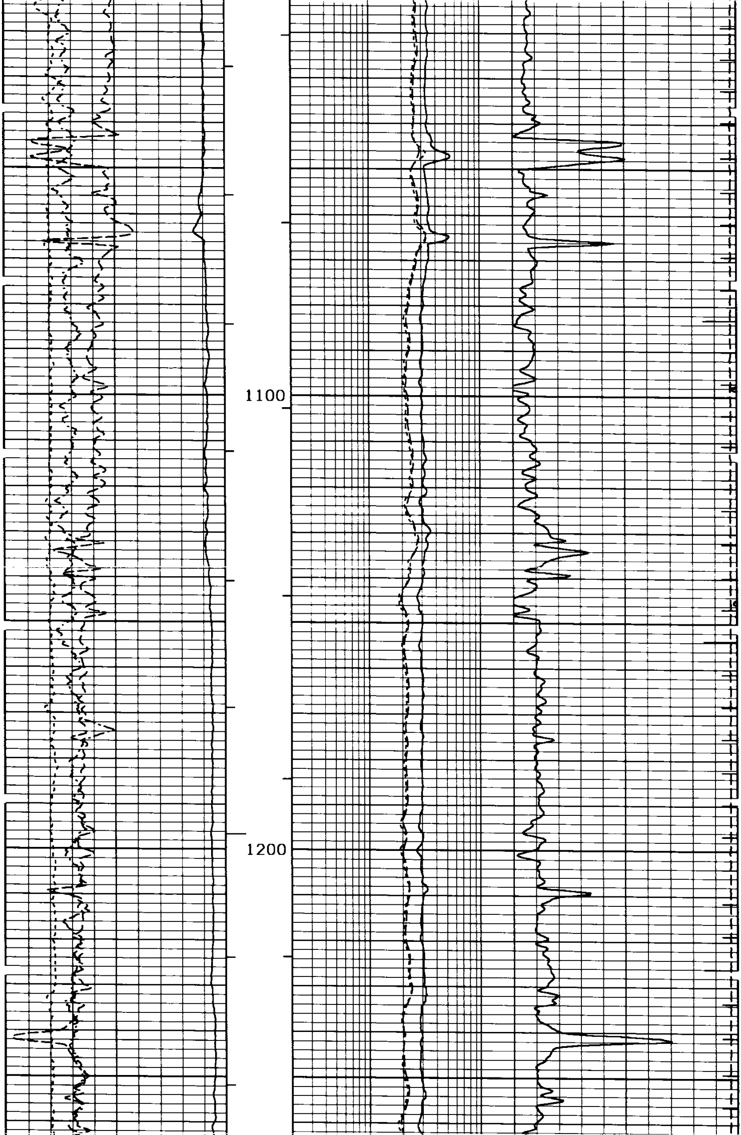
Halliburton Logging Services, Inc. does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that HLS is not responsible except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.

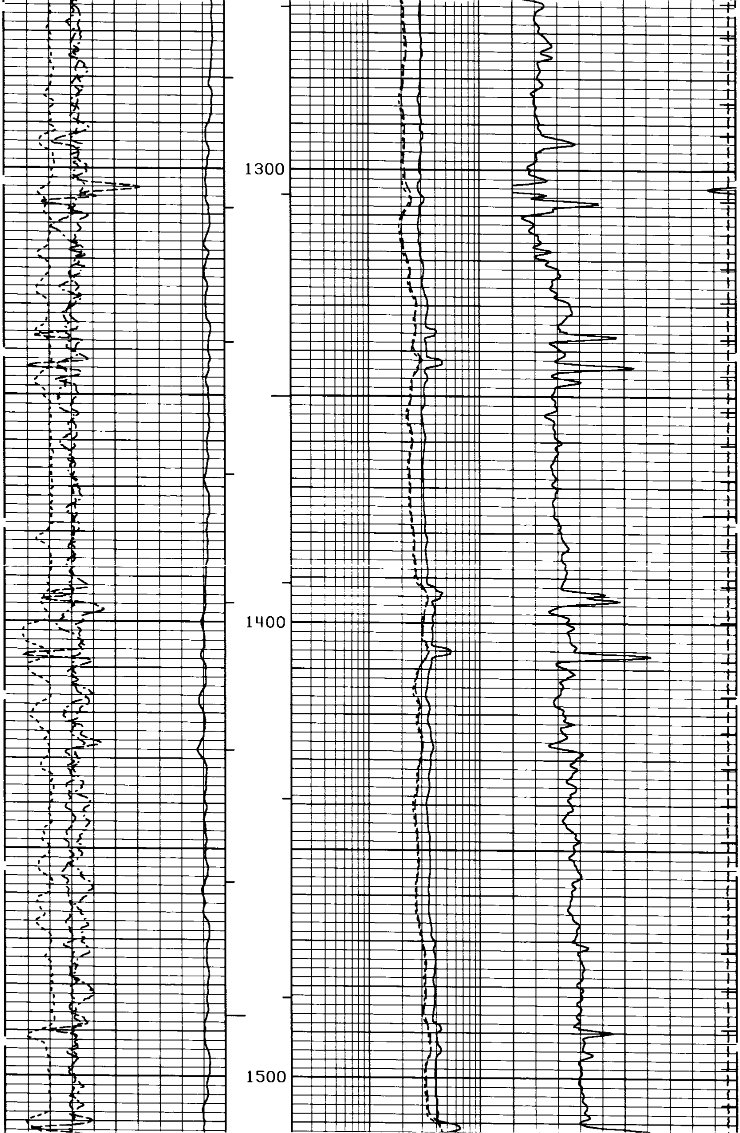
GAMMA		
0 API 150		
CALIPER	DEEP	TENSION
6 INCHES 16	.2 OHM-M 20	11000 POUNDS 1000
SP	MEDIUM	
-]10[+	.2 OHM-M 20	100 <TDI< 0
RWA	GUARD	DELTA-T
0 OHM-M 3	.2 OHM-M 20	150 USEC 50

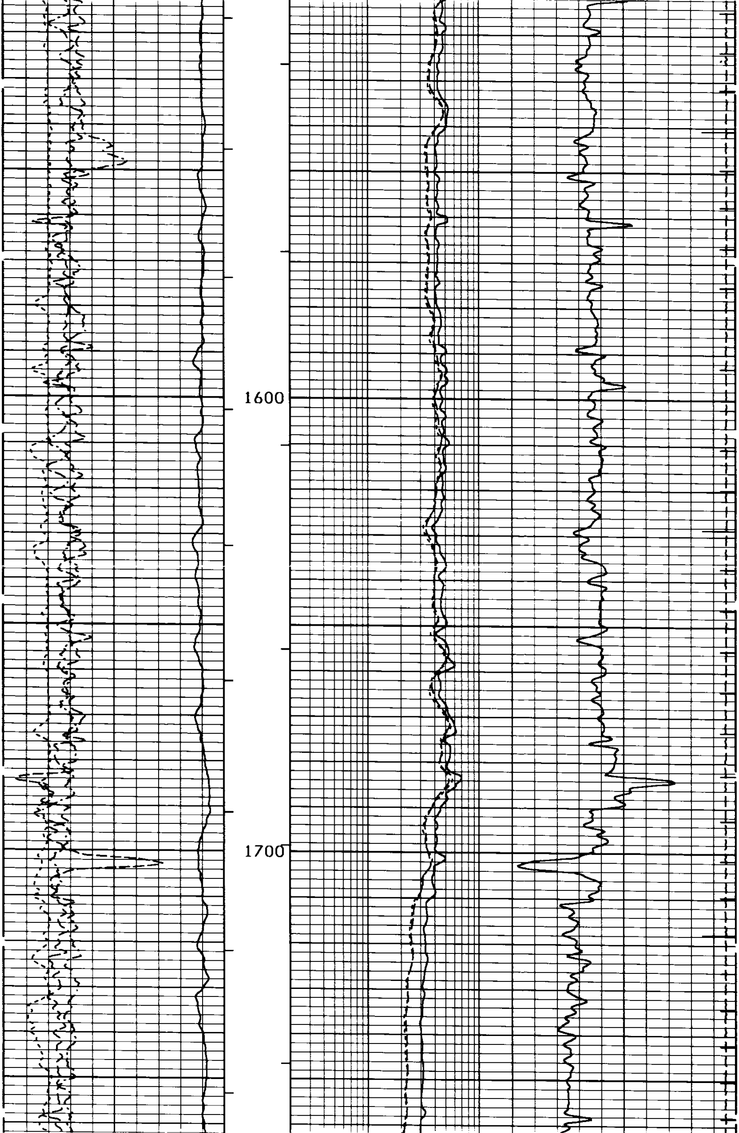


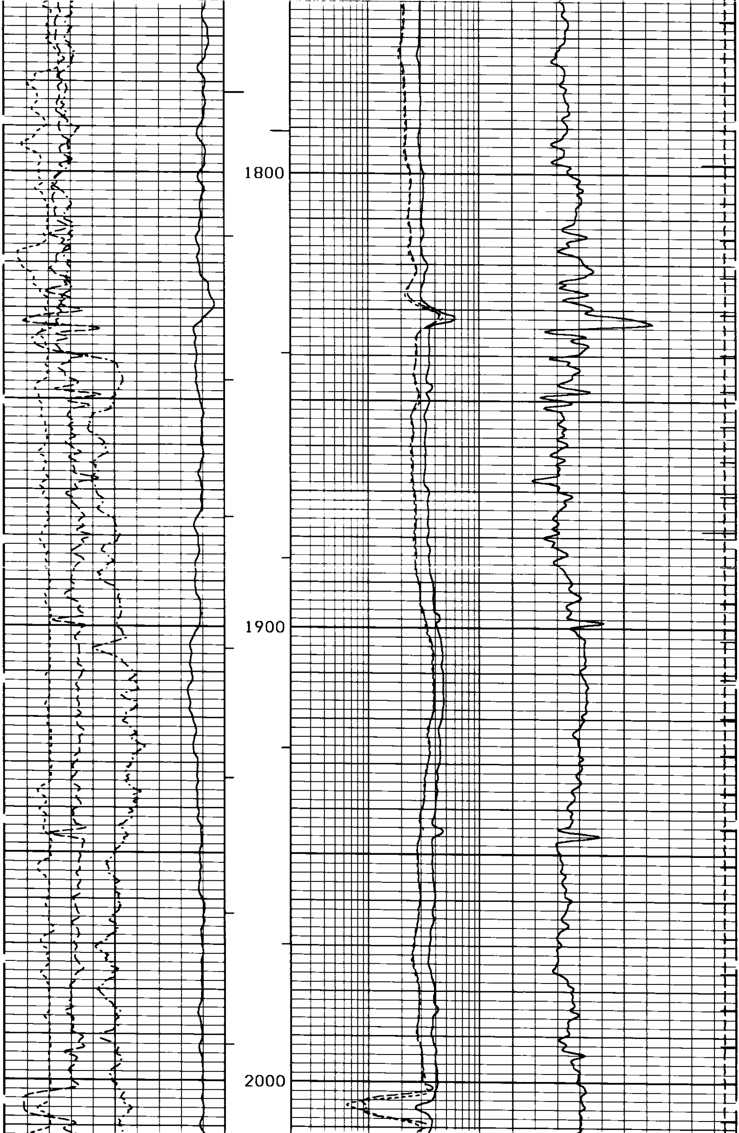


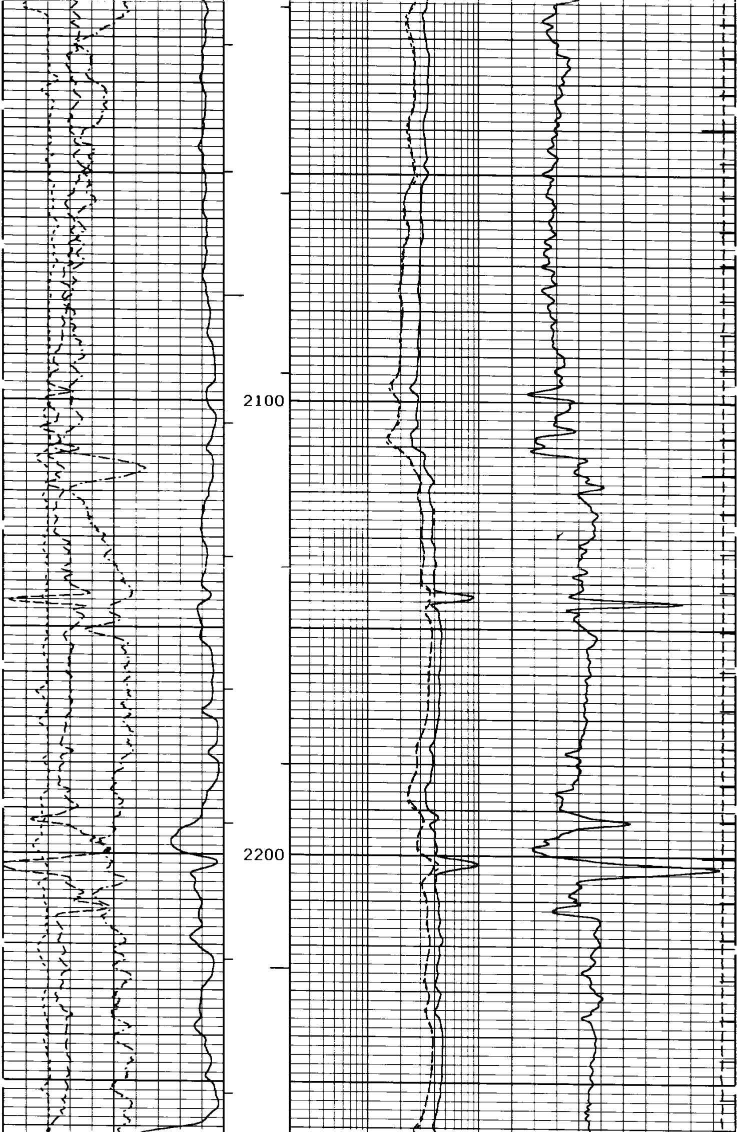


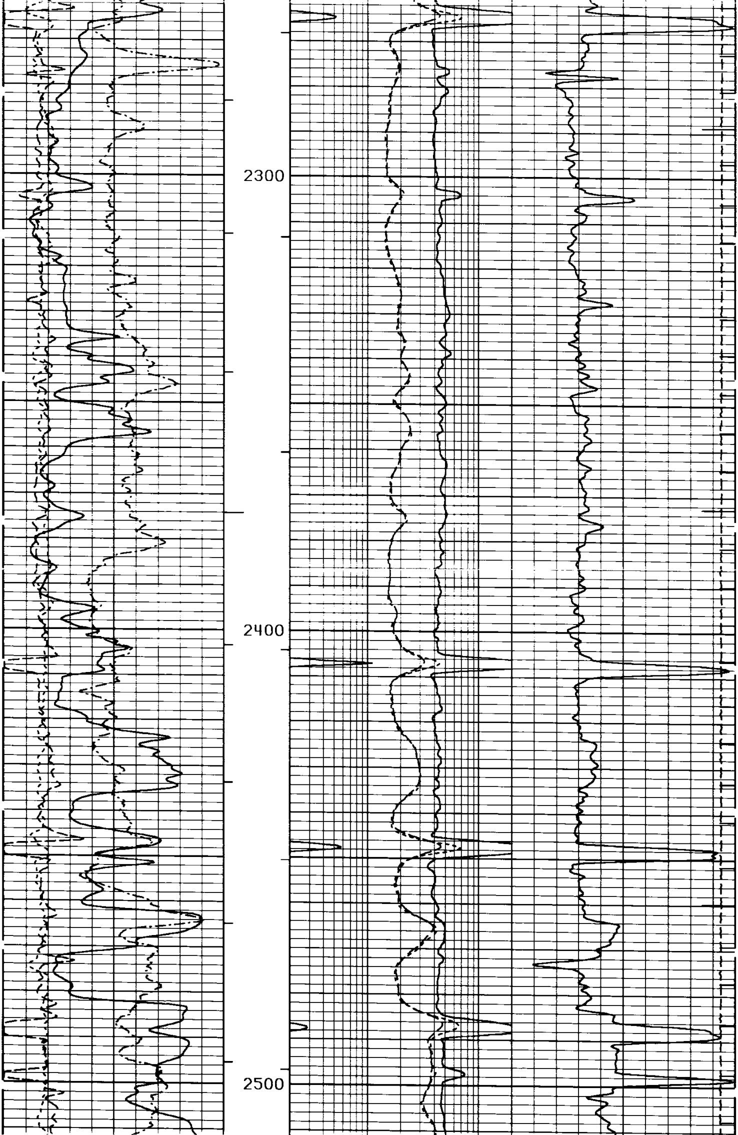


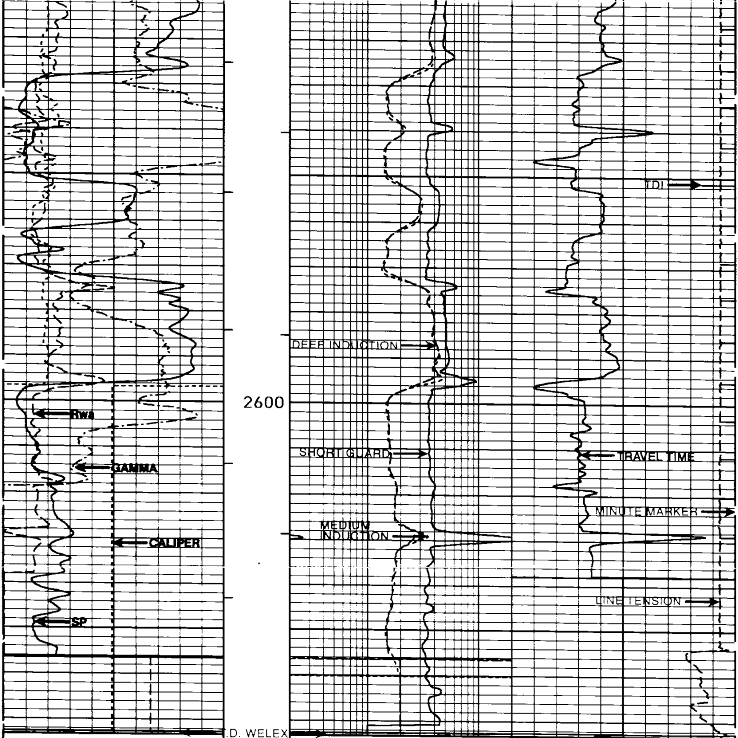




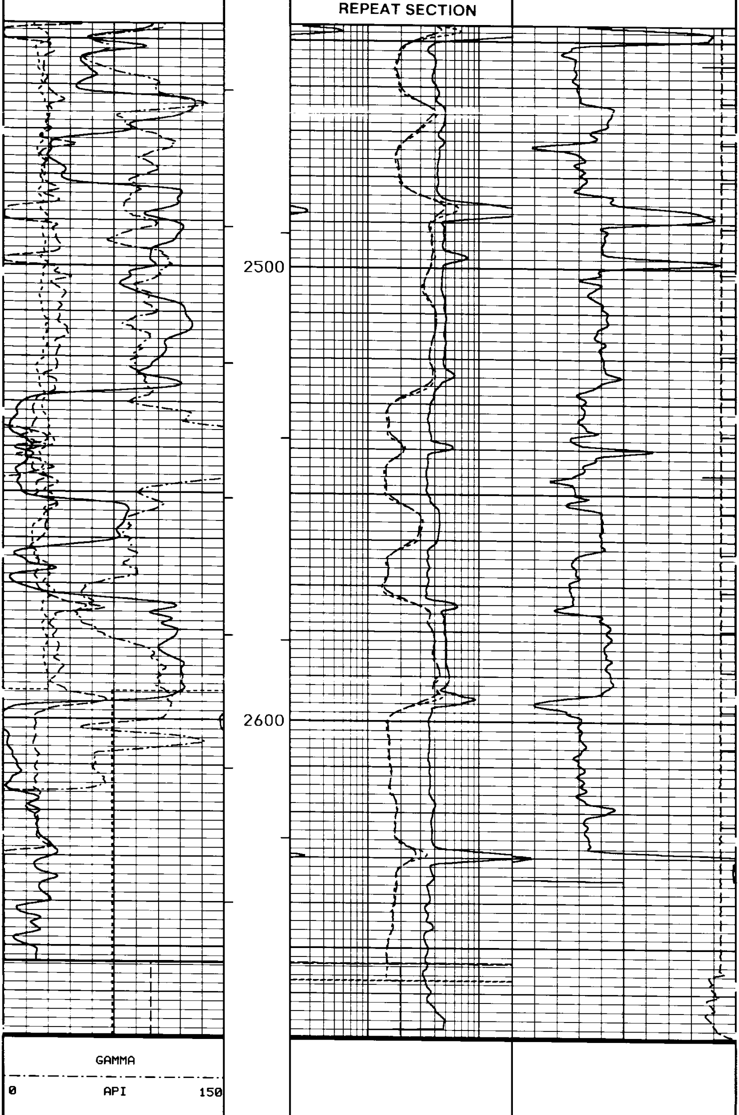








GAMMA		
0 API 150		
CALIPER	DEEP	TENSION
6 INCHES 16	.2 OHM-M 20	11000 POUNDS 1000
SP	MEDIUM	
-]10[+	.2 OHM-M 20	100 <TDI< 0
RWA	GUARD	DELTA-T
0 OHM-M 3	.2 OHM-M 20	150 USEC 50



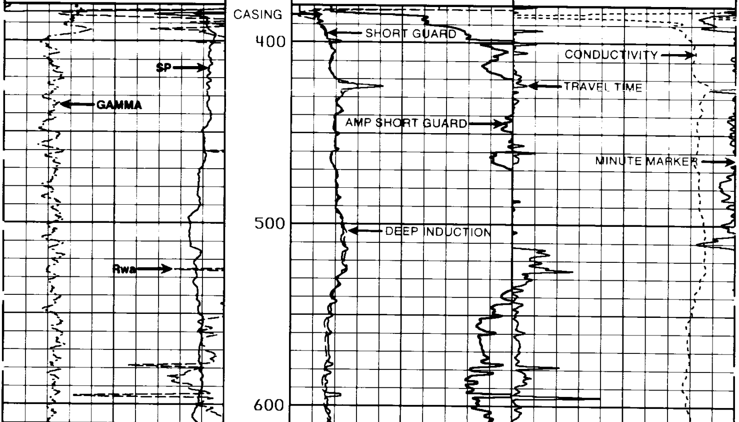
	CALIPER	
6	INCHES	16
	SP	
	-]10[+	
	RWA	
0	OHM-M	3

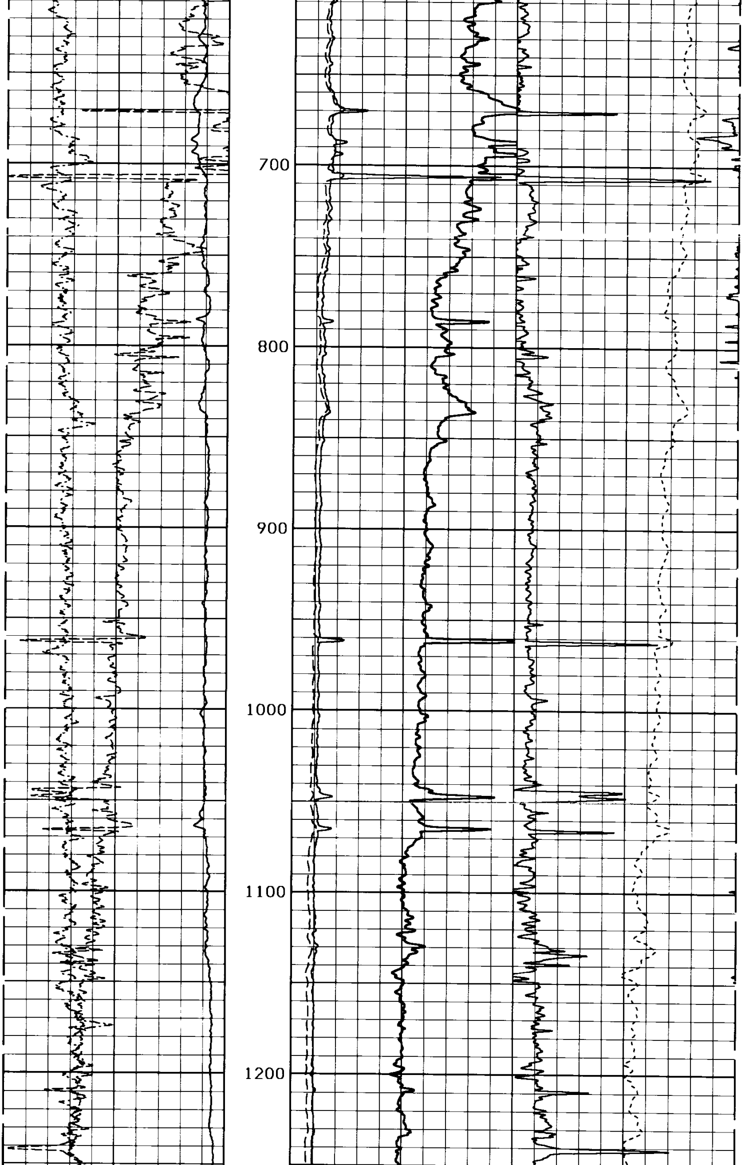
	DEEP			TENSION	
.2	OHM-M	20	11000	POUNDS	1000
	MEDIUM				-
.2	OHM-M	20	100	<TDI<	0
	GUARD			DELTA-T	
.2	OHM-M	20	150	USEC	50

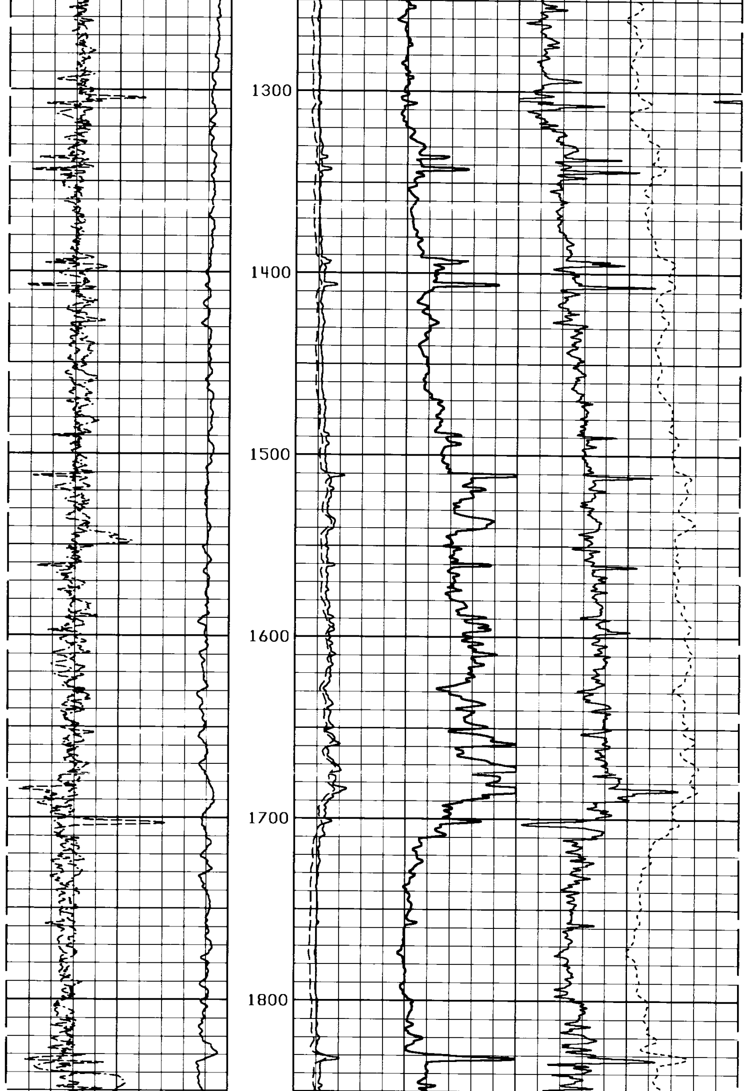
2″=100′

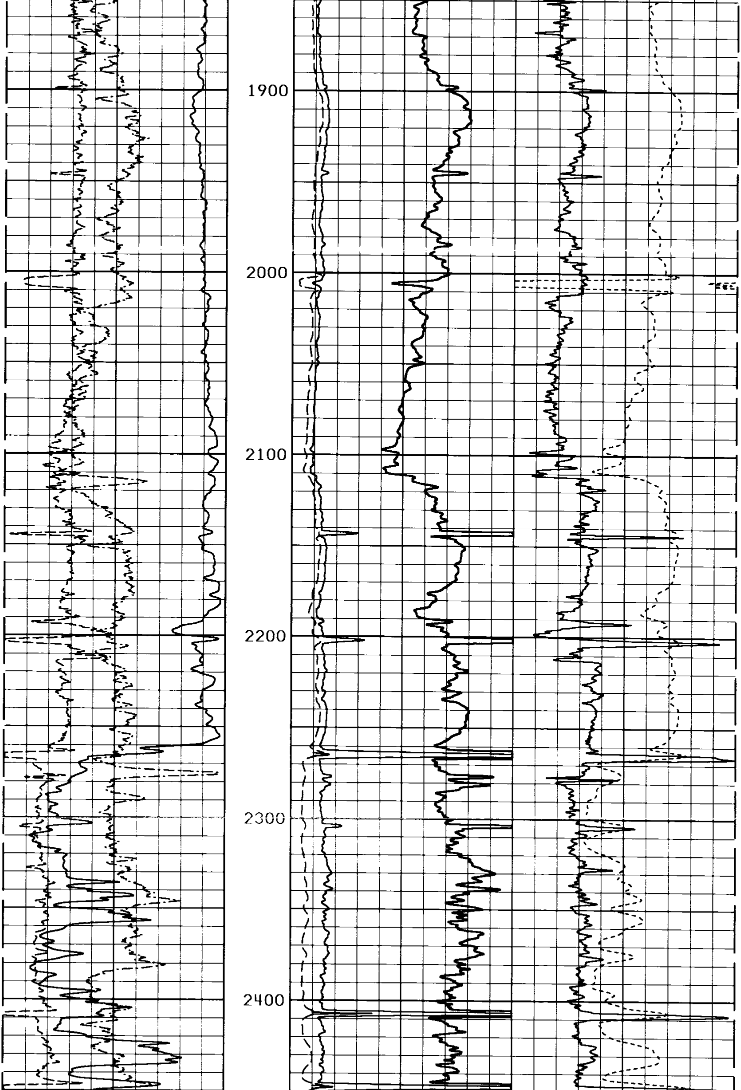
	GAMMA	
0	API	150
	SP	
	-]10[+	
	RWA	
0	OHM-M	3

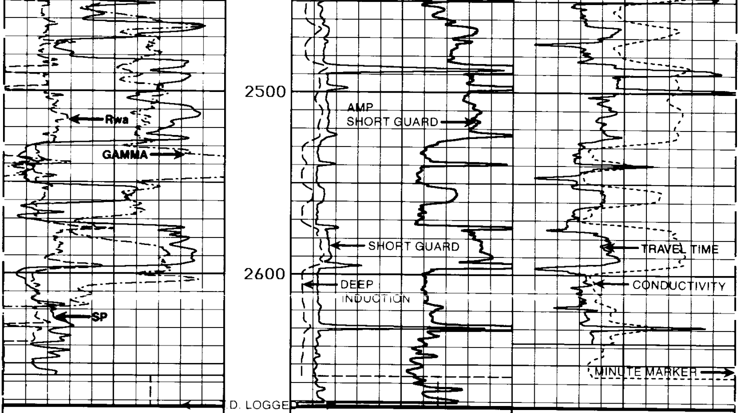
	DEEP				
0	OHM-M	30			
	GUARD			DELTA-T	
0	OHM-M	30	150	USEC	50
	AMP GUARD			COND	
0	OHM-M	6	1000	MMHO-M	0





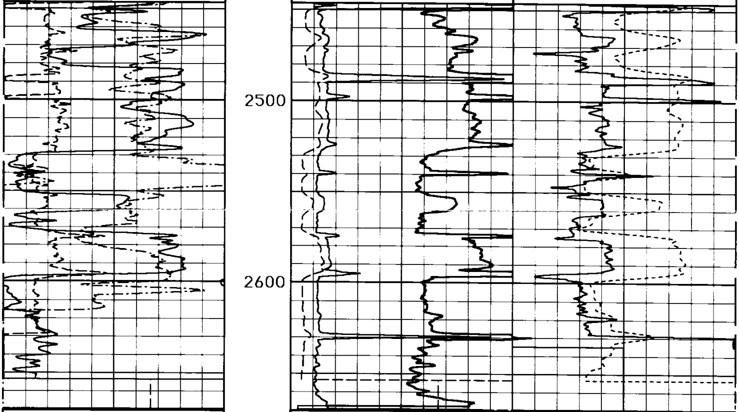






GAMMA	DEEP	
0 API 150	0 OHM-M 30	
SP	GUARD	DELTA-T
-]10[+	0 OHM-M 30	150 USEC 50
RWA	AMP GUARD	COND
0 OHM-M 3	0 OHM-M 6	1000 MMHO-M 0

REPEAT SECTION



GAMMA	DEEP	
0 API 150	0 OHM-M 30	

SP
-]10[+
RWA
0 OHM-M 3

GUARD	DELTA-T
0 OHM-M 30	150 USEC 50
AMP GUARD	COND
0 OHM-M 6	1000 MMHO-M 0

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                  SHORT GUARD   SHOP CALIBRATION SUMMARY
PERFORMED:  10:45:39  07/31/89    LAST SHOP CALIBRATION:   11:08:07  06/19/89
SERIAL NUMBER: 108946             PROGRAM VERSION: 1.31 PC
MODEL: #405
PERFORMED BY: JOHNSON
                        MEASURED        CALIBRATED          UNITS
                        --------        ----------          -----
EXT. CAL. POINT #1         1.999             2.000          OHM-M
EXT. CAL. POINT #2        20.007            20.000          OHM-M
EXT. CAL. POINT #3       200.216           200.000          OHM-M
INTERNAL REFERENCE        19.697            19.689          OHM-M

                  SHORT GUARD  BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  04:34:01  08/21/89    LAST SHOP CALIBRATION:   10:45:39  07/31/89

                          SHOP            FIELD             UNITS
                        --------        ---------          ------
INTERNAL REFERENCE        19.689           19.702           OHM-M


                  SHORT GUARD  AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  06:58:39  08/21/89    LAST SHOP CALIBRATION:   10:45:39  07/31/89

                         BEFORE           AFTER             UNITS
                        --------        ---------           -----
INTERNAL REFERENCE        19.702           19.656           OHM-M


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                 DUAL INDUCTION  SHOP CALIBRATION SUMMARY
PERFORMED:  11:01:10  07/31/89    LAST SHOP CALIBRATION:   11:12:37  06/19/89
SERIAL NUMBER: 109437             PROGRAM VERSION: 1.31 PC
MODEL: #412
PERFORMED BY: JOHNSON

                           DEEP INDUCTION         MEDIUM INDUCTION
                        MEASURED  CALIBRATED   MEASURED  CALIBRATED    UNITS
                        ---------------------  ---------------------  -------
TOOL ZERO                  -.031        .000       .194        .000   MMHOS/M
INTERNAL REFERENCE       503.967     501.010    504.701     502.217   MMHOS/M
WHEEL                    502.938     500.000    501.031     500.000   MMHOS/M
MANDREL BASE               2.254       2.302      2.791       1.668   MMHOS/M

                 DUAL INDUCTION BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  04:35:48  08/21/89    LAST SHOP CALIBRATION:   11:01:10  07/31/89

                           DEEP INDUCTION         MEDIUM INDUCTION
                           SHOP     FIELD          SHOP      FIELD         UNITS
                        ---------------------  ---------------------  -------
TOOL ZERO                   .000      -.149       .000       -.230    MMHOS/M
INTERNAL REFERENCE       501.008    499.303    502.216     499.600    MMHOS/M
MANDREL BASE               2.302      2.302      1.668       1.668    MMHOS/M
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                  DUAL INDUCTION AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  07:00:21  08/21/89    LAST SHOP CALIBRATION:   11:01:10  07/31/89

                            DEEP INDUCTION        MEDIUM INDUCTION
                          BEFORE     AFTER       BEFORE       AFTER        UNITS
                         --------------------   --------------------      -------

TOOL ZERO                   -.149       .233      -.230        -.105      MMHOS/M
INTERNAL REFERENCE        499.303    504.173    499.599      504.178      MMHOS/M
MANDREL BASE                2.302      2.302      1.668        1.668      MMHOS/M


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                     GAMMA   SHOP CALIBRATION SUMMARY
PERFORMED:  14:24:17  08/08/89    LAST SHOP CALIBRATION:   08:37:05  07/07/89
SERIAL NUMBER: 108594             PROGRAM VERSION: 1.31 PC
MODEL: #432          FIELD CALIBRATOR: #2141
PERFORMED BY: MCDANIEL

                        MEASURED        CALIBRATED          UNITS
                        --------        ----------          -----
BACKGROUND                 13               13              API-CPS
BACKGROUND+CALIBRATOR     269              271              API-CPS
CALIBRATOR                257              258              API-CPS

                     GAMMA  BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  04:42:06  08/21/89    LAST SHOP CALIBRATION:   14:24:17  08/08/89
FIELD CALIBRATOR: #2141

                          SHOP            FIELD             UNITS
                        --------        ----------          -----
BACKGROUND                 13               34              API-CPS
BACKGROUND+CALIBRATOR     271              291              API-CPS
CALIBRATOR                258              256              API-CPS

                     GAMMA  AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  07:12:26  08/21/89    LAST SHOP CALIBRATION:   14:24:17  08/08/89

                         BEFORE            AFTER            UNITS
                        --------        ----------          -----
BACKGROUND                 34               21              API-CPS
BACKGROUND+CALIBRATOR     291              281              API-CPS
CALIBRATOR                256              260              API-CPS


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                    CALIPER   SHOP CALIBRATION SUMMARY
PERFORMED:  14:00:58  08/07/89    LAST SHOP CALIBRATION:   10:24:30  05/29/89
SERIAL NUMBER: TAN                PROGRAM VERSION: 1.31 PC
MODEL: #202
PERFORMED BY: JOHNSON

                        MEASURED        CALIBRATED          UNITS
                        --------        ----------          -----
VALUE 1                    8.038           8.000            INCHES
VALUE 2                   16.000          16.000            INCHES

                    CALIPER  BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  04:32:16  08/21/89    LAST SHOP CALIBRATION:   14:00:58  08/07/89

                          SHOP            FIELD             UNITS
                        --------        ---------           -----
VALUE 1                    8.000           7.976            INCHES

                    CALIPER  AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  07:04:53  08/21/89    LAST SHOP CALIBRATION:   14:00:58  08/07/89

                         BEFORE            AFTER            UNITS
                        --------        ---------           -----
VALUE 1                    7.976           7.991            INCHES

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                          TENSION   SHOP CALIBRATION SUMMARY
PERFORMED:  05:13:20  08/21/89    LAST SHOP CALIBRATION:   17:57:31  08/19/89
SERIAL NUMBER: TOP                PROGRAM VERSION: 1.31 PC


                          H L S CALIBRATION SUMMARY TABLE
                          -------------------------------

  SERVICE or SIGNAL          SHOP       BEFORE      AFTER      CHANGE    TOLERANCE
------------------------   ----------  ---------  ---------   --------  ---------
GUARD                         19.689     19.702     19.656       .046     +/-.80
DEEP INDUCTION              501.008    499.303    504.173     -4.869     +/- 20
MEDIUM INDUCTION            502.216    499.599    504.178     -4.578     +/- 20
GAMMA                       258        256        260         -3          +/- 9.0
CALIPER VALUE 1               8.000      7.976      7.991     -.014      +/- 0.50
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EVENTS

```
  1  4:45:21 00000 >DATE OF LOG: MMDD                  821
  2  4:48:19 00000 >PLS SOFTWARE REVISION             1.31
  3  4:48:19 00000 >CURRENT REVISION UPDATE NUMBER PC
  4  5:20:29 00504 >CASING SIZE O.D. (INCHES)         5.500+0
  5  5:20:29 00504 >BIT SIZE? (INCHES)                7.875+0
  6  5:20:31 00504 >DT-MATRIX(40=DOL<DT<70=SHALY)     5.700+1
  7  5:20:32 00504 >DT-SHALE (100=MIN<DT<160=MAX)     1.000+2
  8  5:20:32 00504 >FOR FORMATION FACTOR(.5<A<2.5)    1.000+0
  9  5:20:32 00504 >FOR FORMATION FACTOR(1.2<M<2.5)   2.000+0
 10  5:20:43 00504 >FOR FORMATION FACTOR(.5<A<2.5)    8.100-1
 11  5:20:45 00504 >>LOG PARAMETERS UPDATED HERE
 12  5:37:23 00368 >CASING SIZE O.D. (INCHES)         4.500+0
 13  5:37:28 00368 >>LOG PARAMETERS UPDATED HERE
 14  5:38:52 02670 >LOGGING SECTION NO.                   2
 15  5:46:14 02445 >"HALTING" END OF SECTION
 16  5:48:39 02673 >LOGGING SECTION NO.                   3
 17  6:54:48 00379 >"HALTING" END OF SECTION
 18  6:54:48 00378 >"HALTING" END OF SECTION
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