CC 34-28-65

HALLIBURTON
LOGGING SERVICES, INC.

FINAL PRINT

COMPENSATED ACOUSTIC VELOCITY LOG

5" = 100'

COMPANY ____________
WELL ____________
FIELD ____________
COUNTY ________ ST __

COMPANY ARCO OIL AND GAS COMPANY

WELL DEEP CREEK PROSPECT
CC NO. 34-28-65

FIELD MIST

COUNTY COLUMBIA

STATE OR

API NO. NA
LOCATION 1003.69 FT. NORTH
AND 2843.76 FT. WEST FROM
THE SOUTHEAST CORNER OF

SEC. 28 TWP 6N RGE 5W

OTHER SERVICES

DIGL
COL/DSN/GR

PERMANENT DATUM G.L. ELEV. 732.1
LOG MEASURED FROM K.B. 11.5 FT.ABOVE PERM.DATUM
DRILLING MEASURED FROM K.B.

ELEV.:K.B. 743.6
D.F.
G.L. 732.1

DATE	10/27/89			
RUN NO.	ONE			
DEPTH-DRILLER	2240			
DEPTH- LOGGER	2229			
BTM. LOG INTER.	2225			
TOP LOG INTER.	CASING			
CASING-DRILLER	9.625@449	@	@	@
CASING- LOGGER	448			
BIT SIZE	6.25			
TYPE FLUID IN HOLE	LSND/POLYMR			
DENS. : VISC	10.7 :45	:	:	:
PH : FLUID LOSS	9.0 :4.4	:	:	:
SOURCE OF SAMPLE	CIRCULATED			
RM @ MEAS. TEMP.	2.74 @75	@	@	@
RMF @ MEAS. TEMP.	2.50 @75	@	@	@
RMC @ MEAS. TEMP.	3.08 @75	@	@	@
SOURCE RMF : RMC	MEAS.:MEAS.	:	:	:
RM @ BHT	2.00 @105	@	@	@
TIME SINCE CIRC.	3.5 HOURS			
TIME ON BOTTOM	07:55			
MAX. REC. TEMP.	105 @TD	@	@	@
EQUIP. : LOCATION	50632:BKFLD	:	:	:
RECORDED BY	DOMBROWSKI			
WITNESSED BY	J. EASTER			

Fold Here

Service Ticket No.: 28521 API Serial No.: NA PGM Version: 2.20 E

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	2.00 @105	@
Rmf @ BHT	1.83 @105	@
Rmc @ BHT	2.25 @105	@

RESISTIVITY SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
		NONE	

RESISTIVITY EQUIPMENT DATA

Run No	Tool Type & No	Pad Type	Tool Pos.	Other
ONE	DSTU #111527	M430		

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.		Run No.	
Serial No.	W108579	Serial No.	W112468	Serial No.		Serial No.	
Model No.	432	Model No.	305	Model No.		Model No.	
Diameter	3.625	No.of Cent.	2	Diameter		Diameter	
Detector Model No.	NA	Spacing	1 FT.	Log Type		Log Type	
Type	SCINT			Source Type		Source Type	
Length	4"	LSA	Y	Serial No.		Serial No.	
Distance To Source	NA	FWDA	N	Strength		Strength	

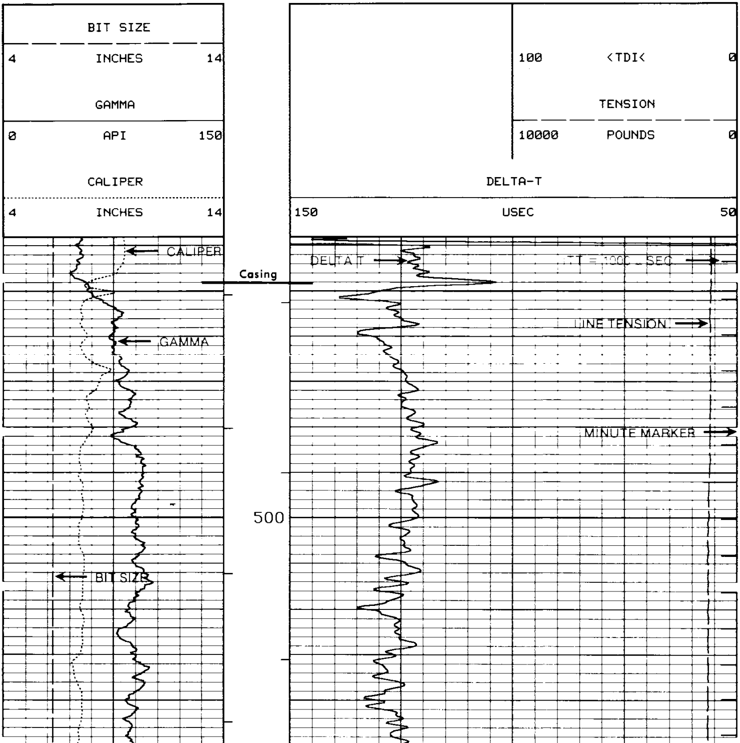
LOGGING DATA

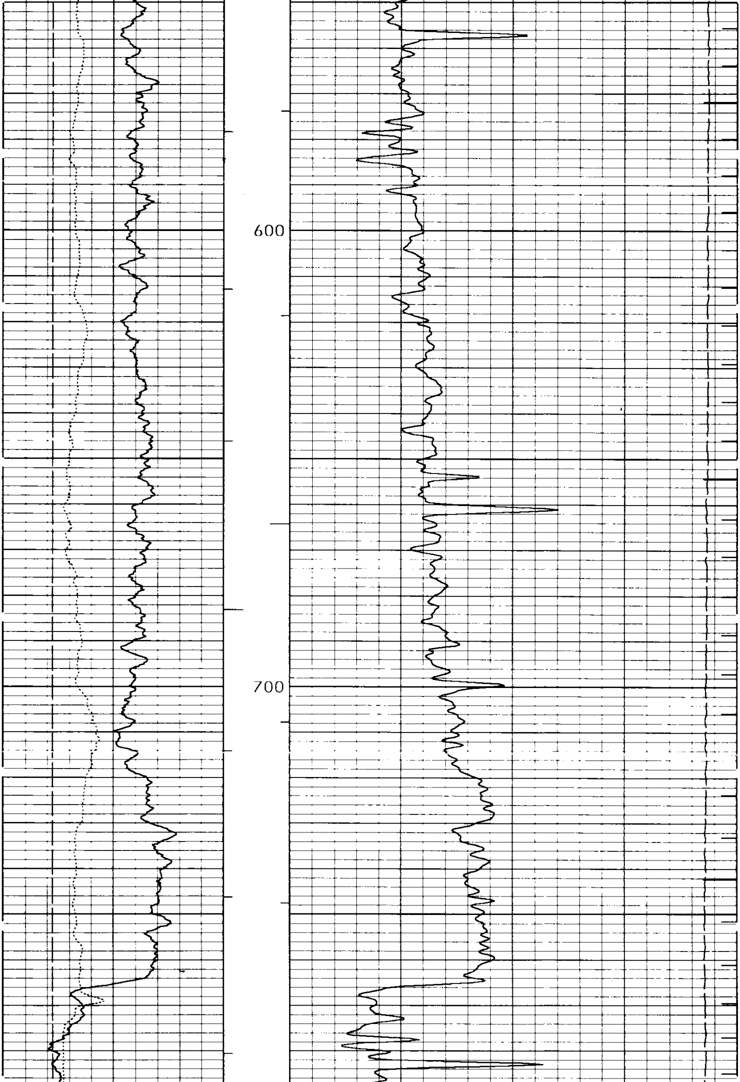
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale			Scale			Scale		
No.	From	To	Ft/Min	L	R	L	R	Matrix	L	R	Matrix	L	R	Matrix
ONE	TD	CSG	30	0	150	150	50	57						
				API	API			US/FT						

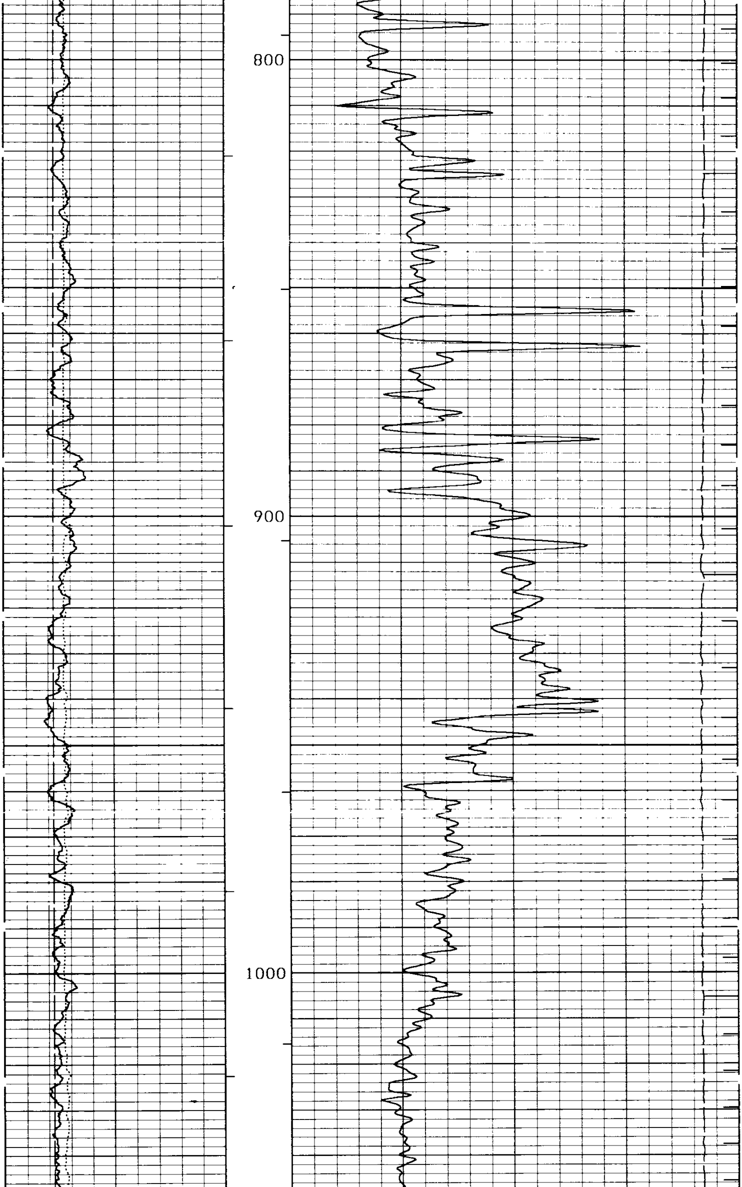
Remarks: TWO REPEAT SECTIONS ATTACHED AT CUSTOMER REQUEST.
SIGNAL DROPPED OUT COMPLETELY FROM 2158 - 2150 FT. BECAUSE OF FORMATION, AND
CYCLE SKIPPED AREA RESULTED.

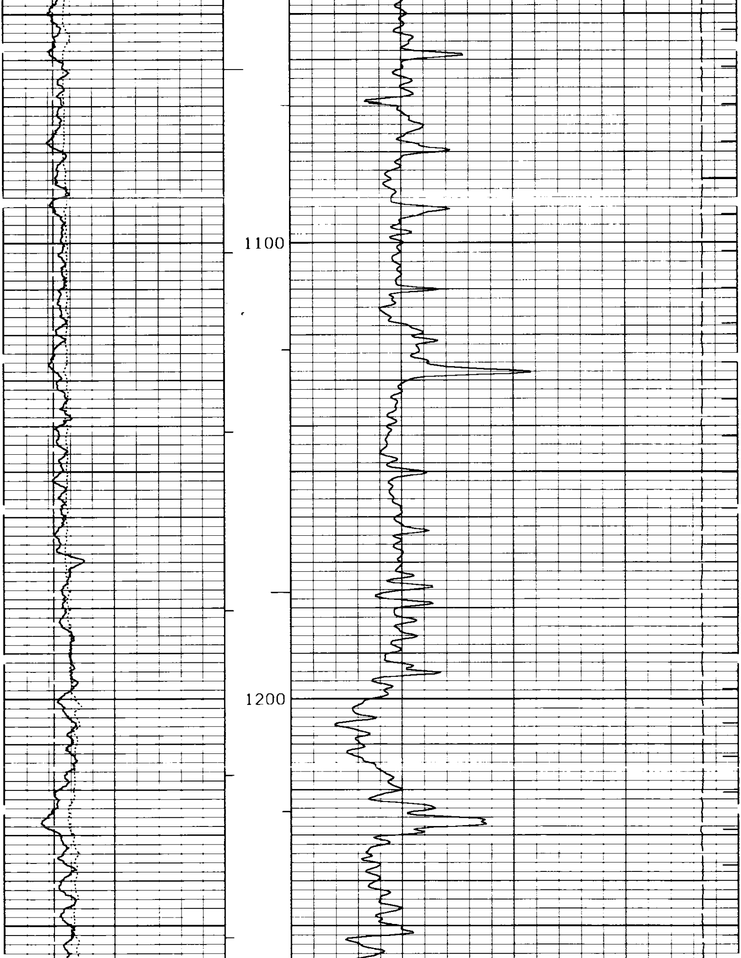
CREW: J. HARES, W. LARSON

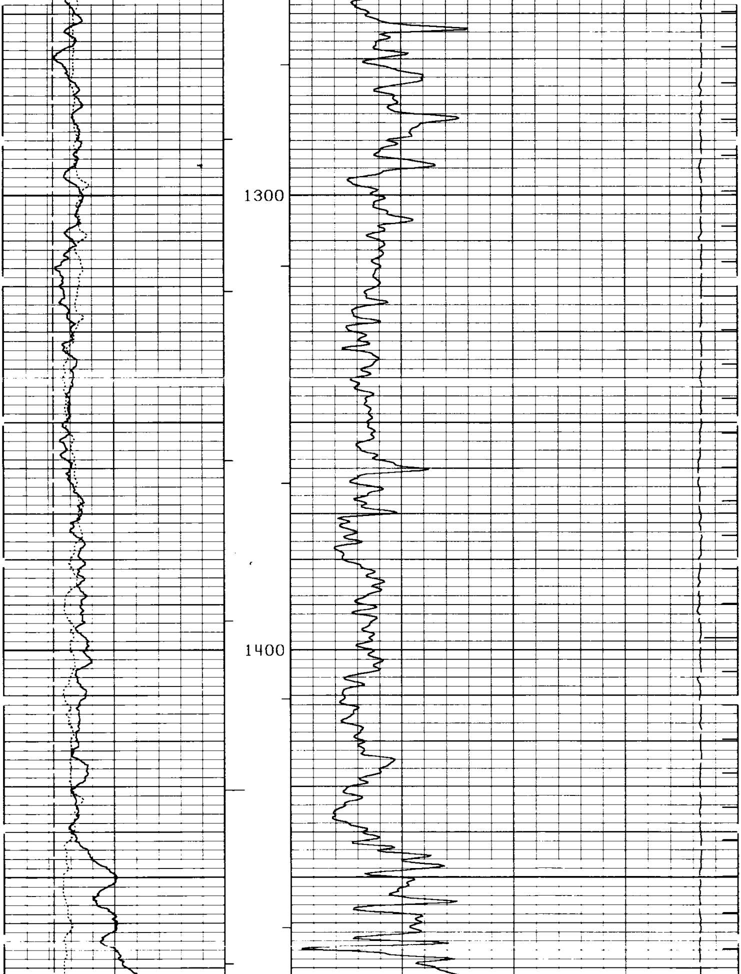
Halliburton Logging Services, Inc. does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, 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.

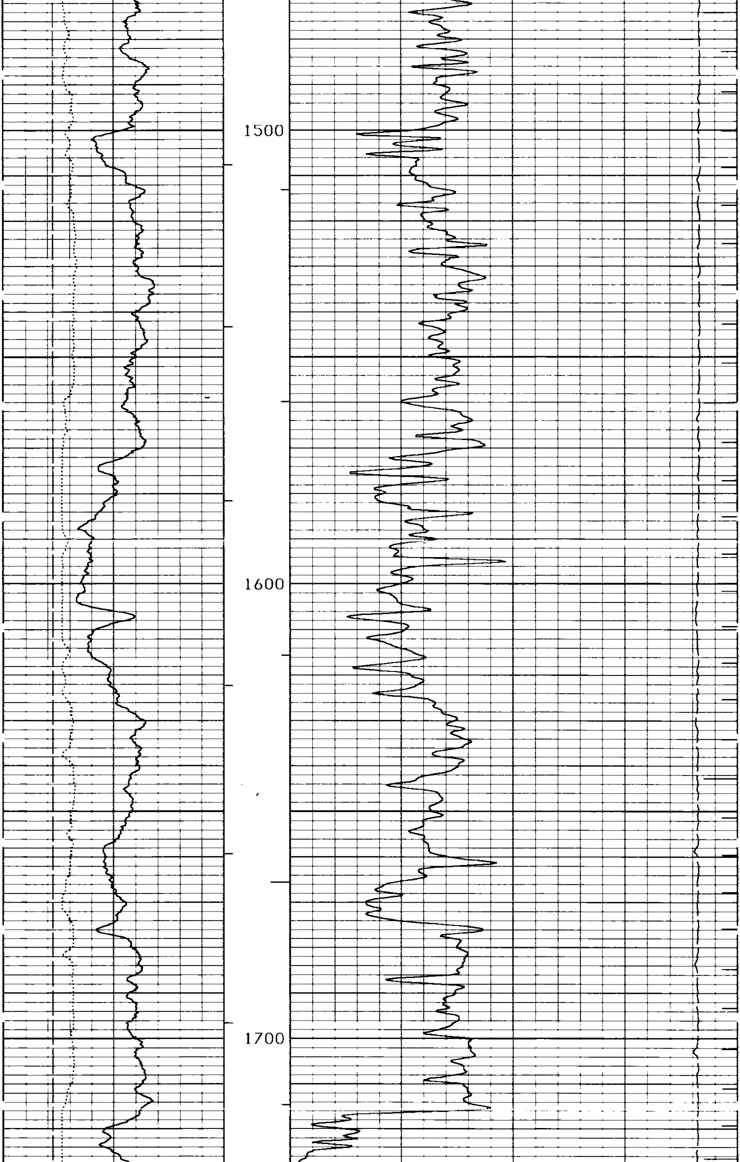


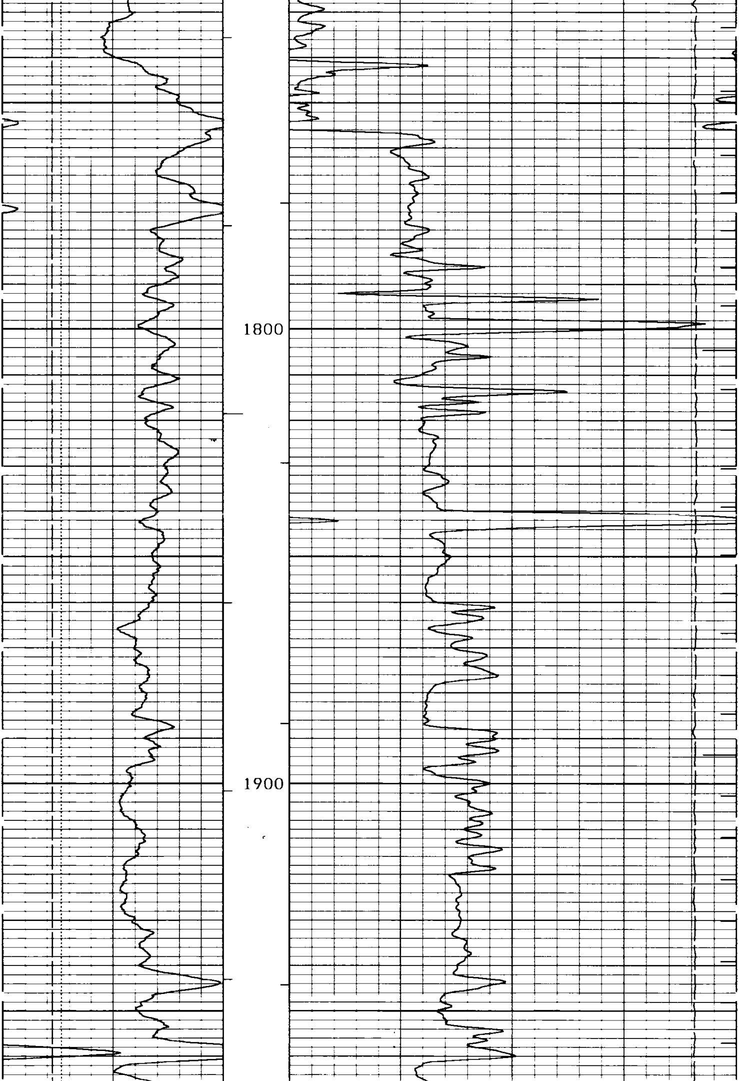


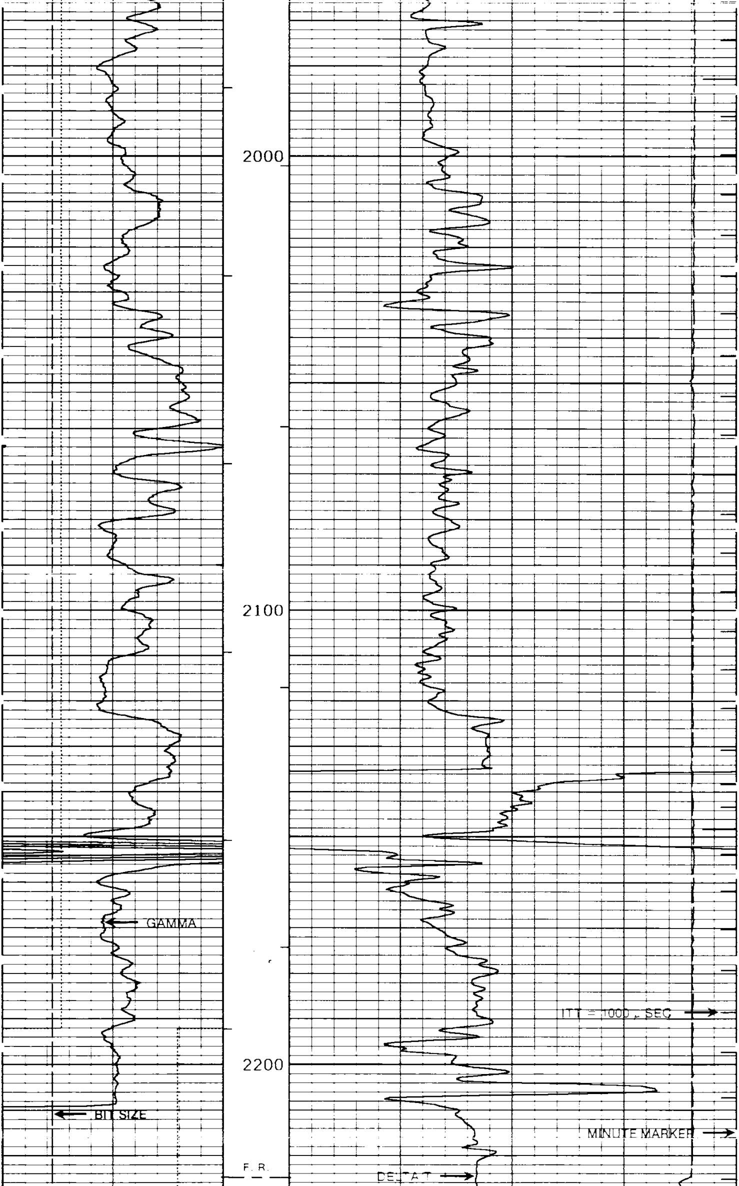


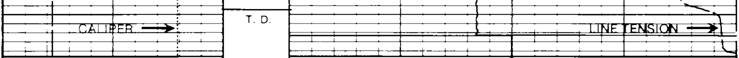












BIT SIZE			
4	INCHES	14	
GAMMA			
0	API	150	
CALIPER			
4	INCHES	14	

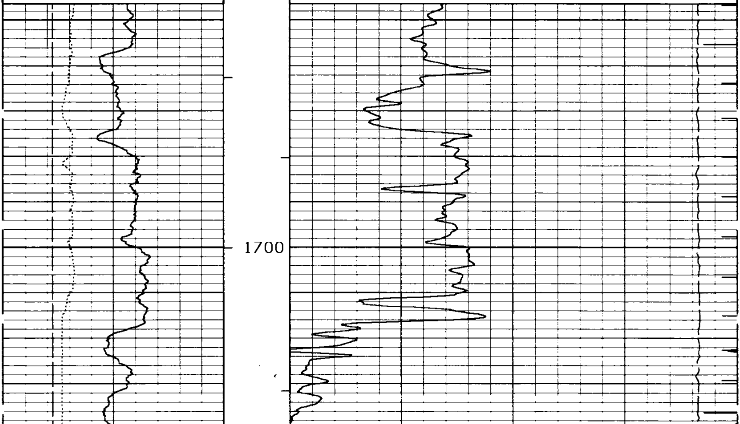
			100	<TDI<	0
			TENSION		
			10000	POUNDS	0
DELTA-T					
150	USEC	50			

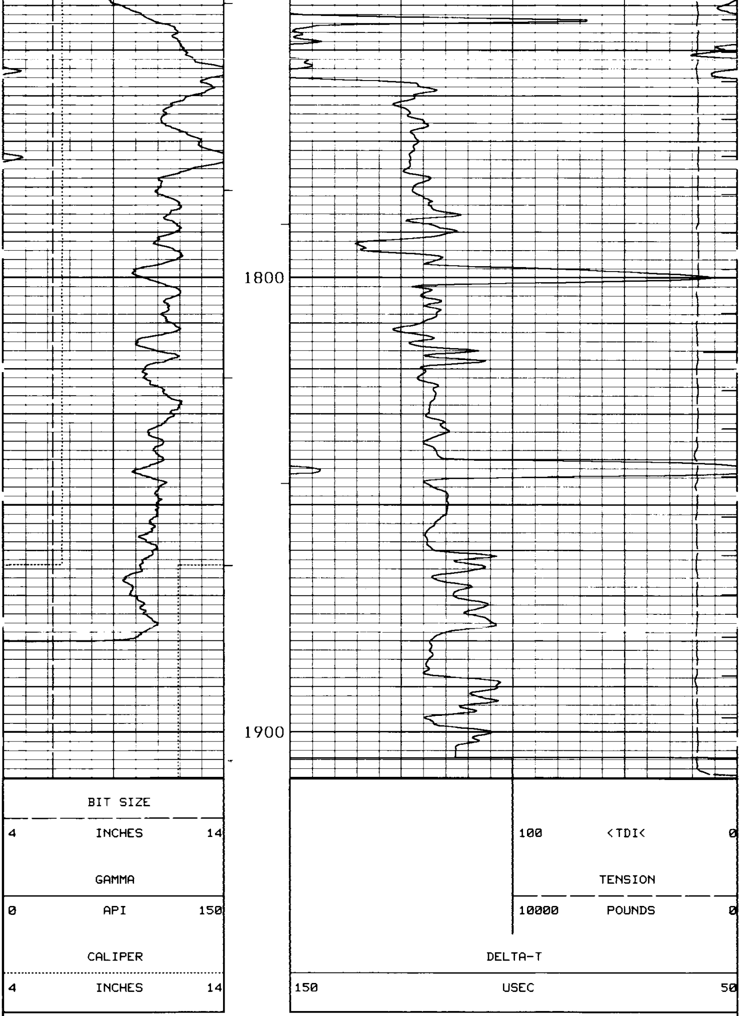
SECTION # 4 Date:10/27/89 Time: 8:34 Version:2.20 E

REPEAT SECTION

BIT SIZE			
4	INCHES	14	
GAMMA			
0	API	150	
CALIPER			
4	INCHES	14	

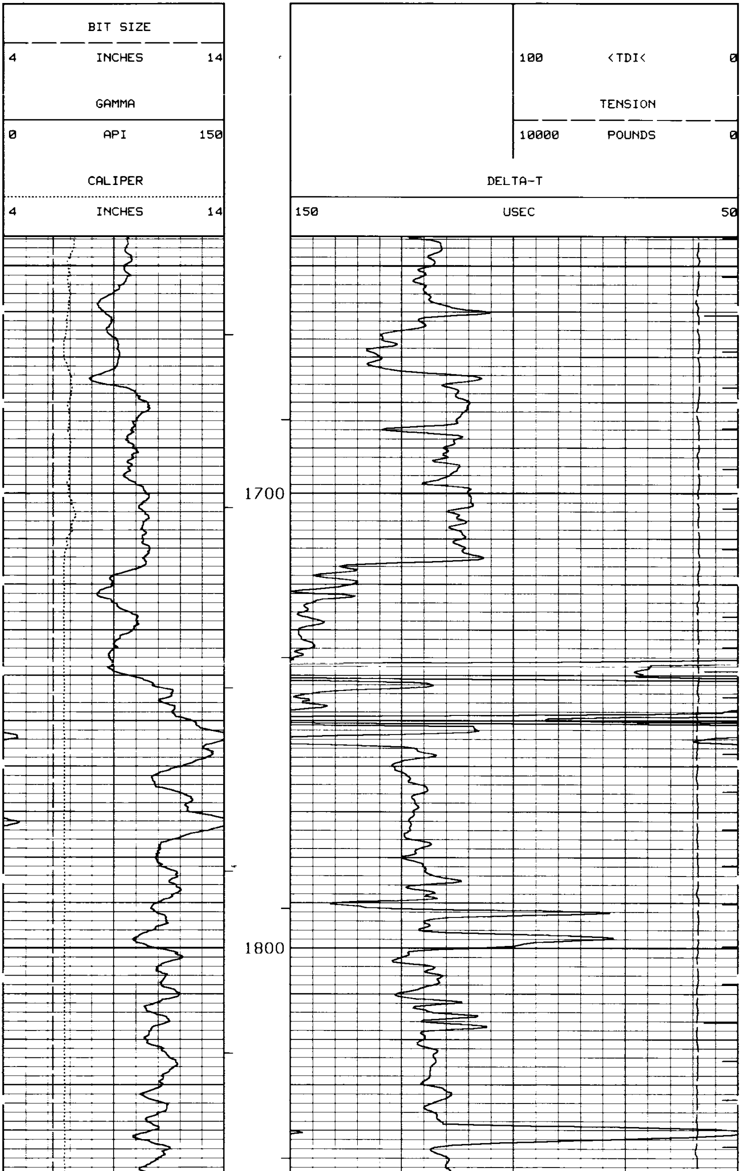
			100	<TDI<	0
			TENSION		
			10000	POUNDS	0
DELTA-T					
150	USEC	50			

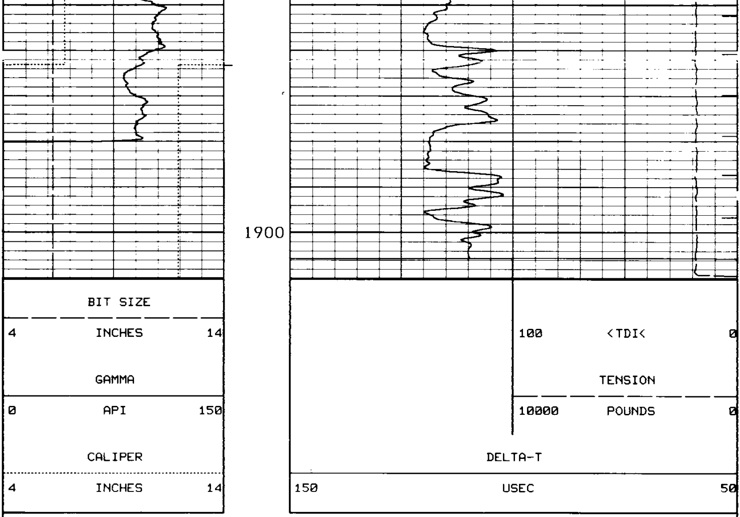




SECTION # 3 Date:10/27/89 Time: 8:17 Version:2.20 E

REPEAT SECTION





SECTION # 2 Date:10/27/89 Time: 8: 2 Version:2.20 E

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                    GAMMA   SHOP CALIBRATION SUMMARY
PERFORMED:  11:10:49  10/04/89     LAST SHOP CALIBRATION:    10:31:50  09/25/89
SERIAL NUMBER: 108579              PROGRAM VERSION: 2.20 G
MODEL: #432           FIELD CALIBRATOR: #2121
PERFORMED BY: DOMBROWSKI

                          MEASURED         CALIBRATED          UNITS
                          --------         ----------          -----
BACKGROUND                   62                61               GAPI
BACKGROUND+CALIBRATOR       335               329               GAPI
CALIBRATOR                  273               268               GAPI

                    GAMMA  BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  00:45:31  10/27/89     LAST SHOP CALIBRATION:    11:10:49  10/04/89
FIELD CALIBRATOR: #2121

                            SHOP             FIELD             UNITS
                          --------         ----------          -----
BACKGROUND                   61                20             API-CPS
BACKGROUND+CALIBRATOR       329               281             API-CPS
CALIBRATOR                  268               261             API-CPS

                    GAMMA  AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  10:02:47  10/27/89     LAST SHOP CALIBRATION:    11:10:49  10/04/89

                           BEFORE            AFTER             UNITS
                          --------         ----------          -----
BACKGROUND                   20                19             API-CPS
BACKGROUND+CALIBRATOR       281               282             API-CPS
CALIBRATOR                  261               263             API-CPS

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                   CALIPER   SHOP CALIBRATION SUMMARY
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PERFORMED:  00:37:34  10/27/89     LAST SHOP CALIBRATION:    00:36:03  10/27/89
SERIAL NUMBER: 104149              PROGRAM VERSION: 2.20 E
MODEL: #202
PERFORMED BY: DOMBROWSKI

                        MEASURED        CALIBRATED          UNITS
                        --------        ----------          -----
VALUE 1                   6.986            7.000            INCHES
VALUE 2                  12.926           13.000            INCHES

                    CALIPER  BEFORE SURVEY FIELD CHECK SUMMARY
PERFORMED:  00:39:32  10/27/89     LAST SHOP CALIBRATION:    00:37:34  10/27/89

                          SHOP            FIELD             UNITS
                        --------        ---------           -----
VALUE 1                   7.000            6.997            INCHES

                    CALIPER  AFTER SURVEY FIELD CHECK SUMMARY
PERFORMED:  09:53:00  10/27/89     LAST SHOP CALIBRATION:    00:37:34  10/27/89

                         BEFORE           AFTER             UNITS
                        --------        ---------           -----
VALUE 1                   6.997            6.560            INCHES


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

   SERVICE or SIGNAL          SHOP      BEFORE      AFTER     CHANGE   TOLERANCE
-----------------------    ---------  ---------   ---------  --------  ---------
GAMMA                         268       261         263        -2        +/- 9.0
CALIPER VALUE 1                  7.000     6.997       6.560     .437    +/- 0.50
PER VALUE 1                7.000     6.997      6.560      .437     +/- 0.50
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#	TIME	FT	EVENT	REMARKS
			PRE-LOGGING DATA	
1	7: 7:59	00000	DATE OF LOG: MMDD 1027	
2	7:12:23	00000	PLS SOFTWARE REVISION 2.20	
3	7:48:48	00550	LOGGING SECTION NO. 1	
4	8: 2:44	01910	LOGGING SECTION NO. 2	
5	8:18: 5	01910	LOGGING SECTION NO. 3	
6	8:35:25	02239	LOGGING SECTION NO. 4	

-END-