FORM 925322 REV. (8-80)

Western Atlas International

Atlas Wireline Services

Compensated Densilog® Compensated Neutron Gamma Ray

FILE NO.

API NO.

5" = 100'

COMPANY OREGON NATURAL GAS CORPORATION

WELL IW 33D-3

FIELD MIST

COUNTY COLUMBIA STATE OREGON

LOCATION: 1013' S. & 1653' W. OF THE E/4 CORNER OF:

SEC 3 TWP 6N RGE 5W

Other Services
DIFL
BHC

Permanent Datum GL Elev. 1078.3'

Log Measured from KB , 11.4 Ft. Above Permanent Datum

Drilling Measured from KB

Elev. KB 1089.7'
DF
GL 1078.3'

Date	6-6-88			
Run No.	TWO			
Service Order	158836			
Depth—Driller	2962'			
Depth—Logger	2954'			
Bottom Logged Interval	2952'			
Top Logged Interval	566'			
Casing—Driller	13 3/8"@ 568	@	@	@
Casing—Logger	566'			
Bit Size	8 1/2" X 12 1/4"			
Type Fluid in Hole	GEL/DRISPAC			
Density and Viscosity	9.9 47			
pH and Fluid Loss	10.0 4.5 cc	cc	cc	cc
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	1.32 @ 64 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	0.8 @ 64 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	1.91 @ 64 °F	@ °F	@ °F	@ °F
Source of Rmf and Rmc	M M			
Rm @ BHT	0.78 @ 108 °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HRS.			
Max. Rec. Temp. Deg. F.	108 °F	°F	°F	°F
Equip. No. and Location	6406 SAC.			
Recorded By	B. WELCH			
Witnessed By	MR. THOMAS			

FINAL PRINT

FOLD HERE

In making interpretations of logs our employees will give Customer the benefit of their best judgment, but since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or the correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the Customer resulting from any interpretation made by any of our employees.

Remarks BIT SIZE CHANGE @ 2850'

CORRECTED TO BIT SIZE 12 1/4"

EQUIPMENT DATA

	RUN NO. 1			RUN NO. 2			RUN NO. 3		
	CDL	CNLog	GR	CDL	CNLog	GR	CDL	CNLog	GR
Tool Series No.	2212	2435	1309						
Serial No.	57833	56094	73467						

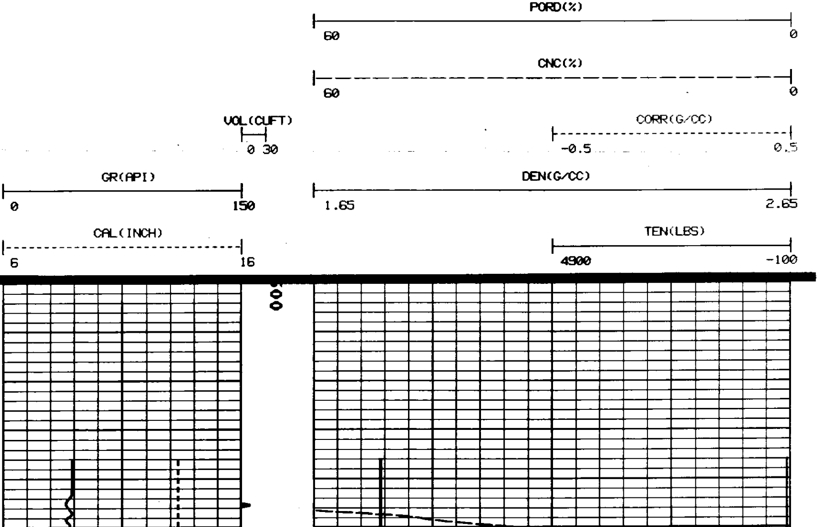
PARAMETERS

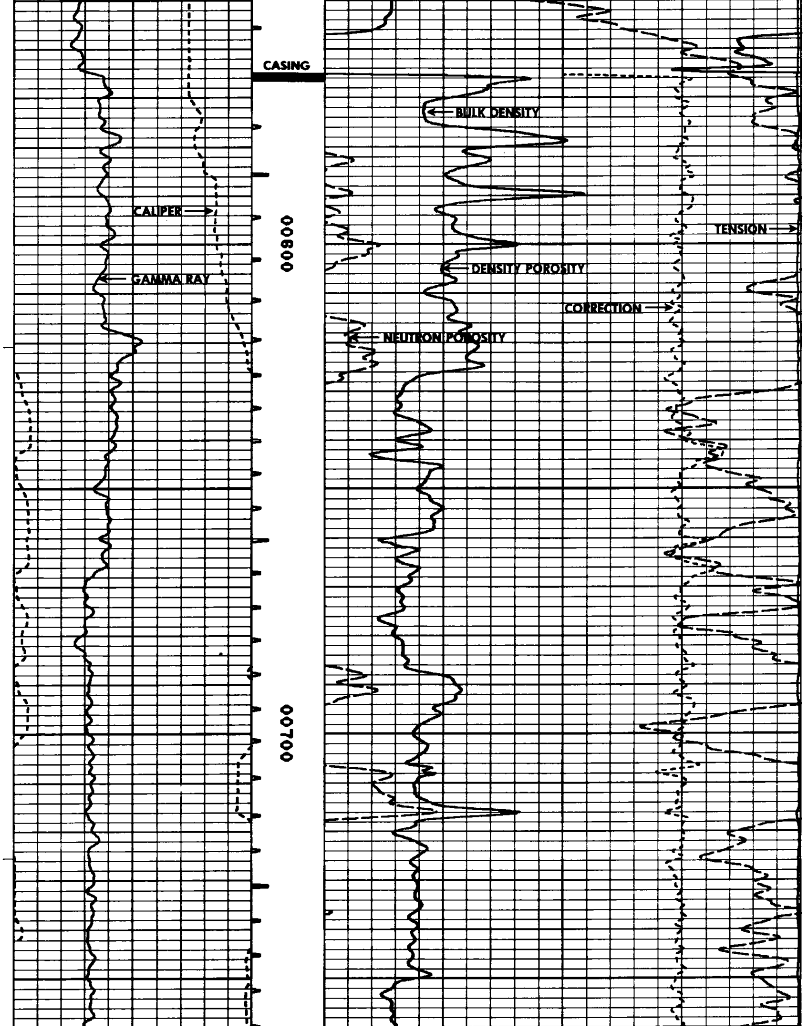
NAME	DEPTH INTERVAL	VALUE	UNITS
A	2960 TO 537	1.000	
CAL CORR	2960 TO 537	12.250	INCH
CHI SMTH	2960 TO 537	ACTIVE	
M	2960 TO 537	2.000	
MATRIX	2960 TO 537	SANDSTONE	
O.D.	2960 TO 537	0.000	INCH
RHO F	2960 TO 537	0.980	G/CC
RHO M	2960 TO 537	2.650	G/CC
SALINITY	2960 TO 537	0.000	PPK

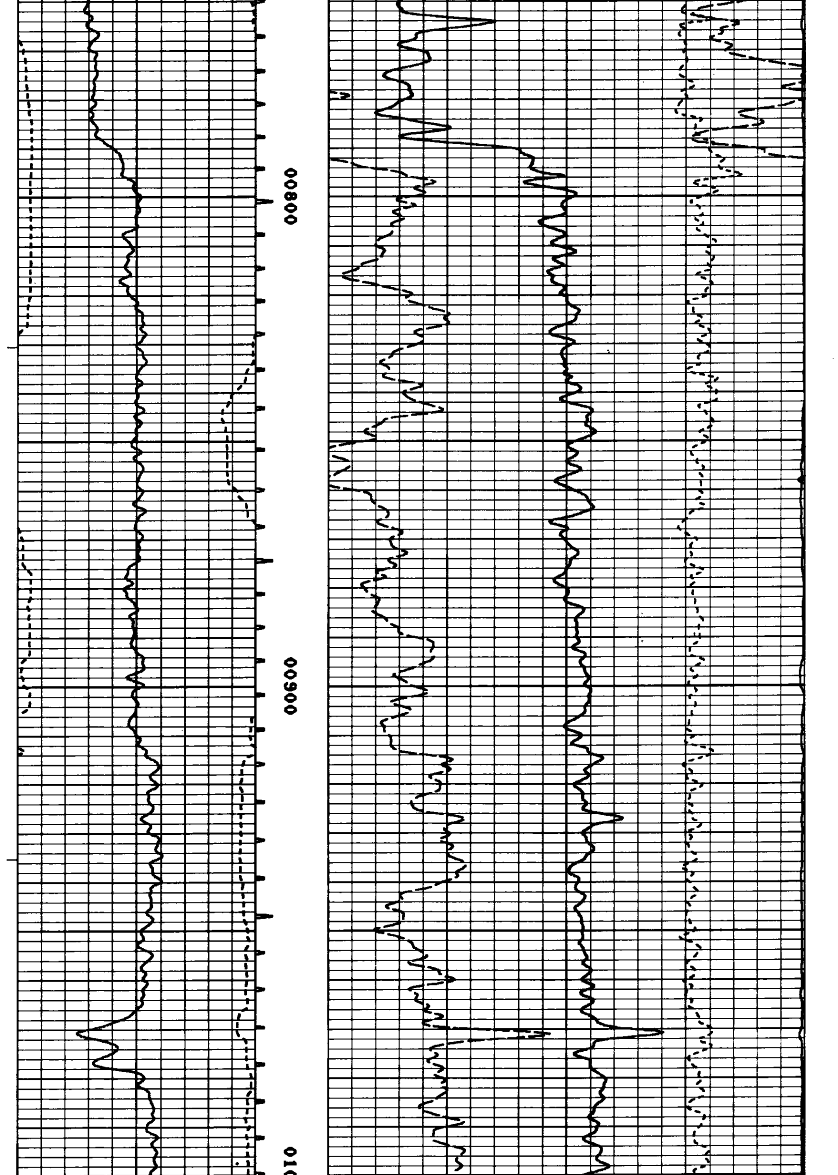
DISPLAY SCALE CHANGES

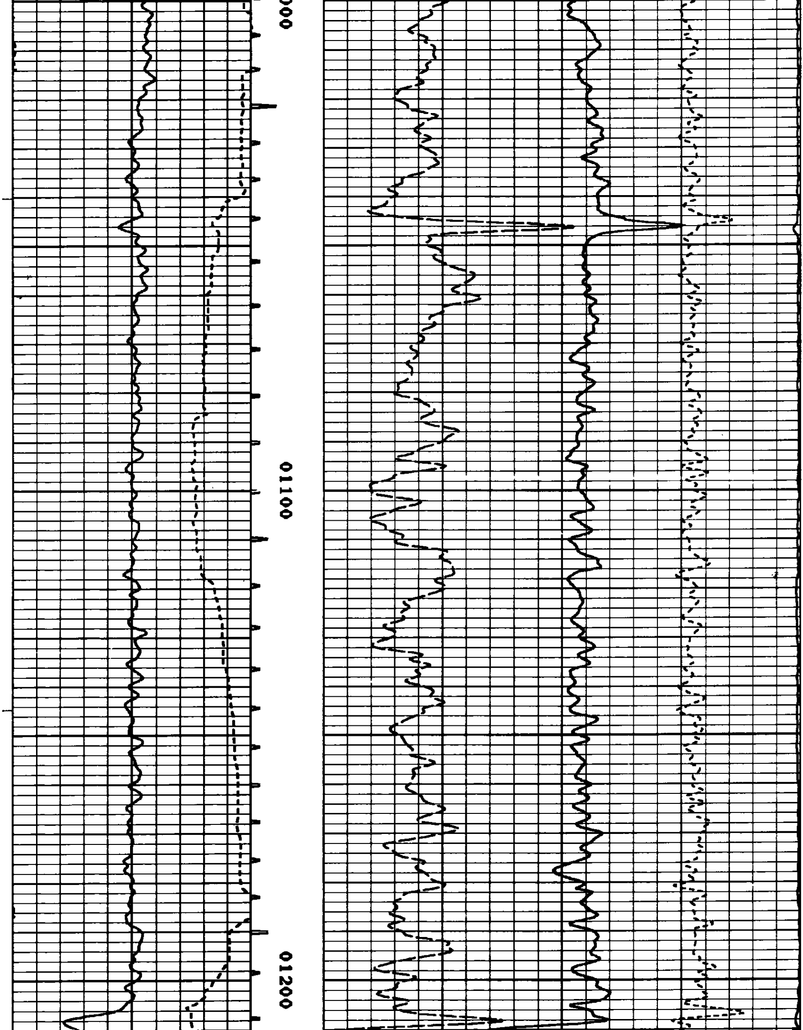
*** NONE ***

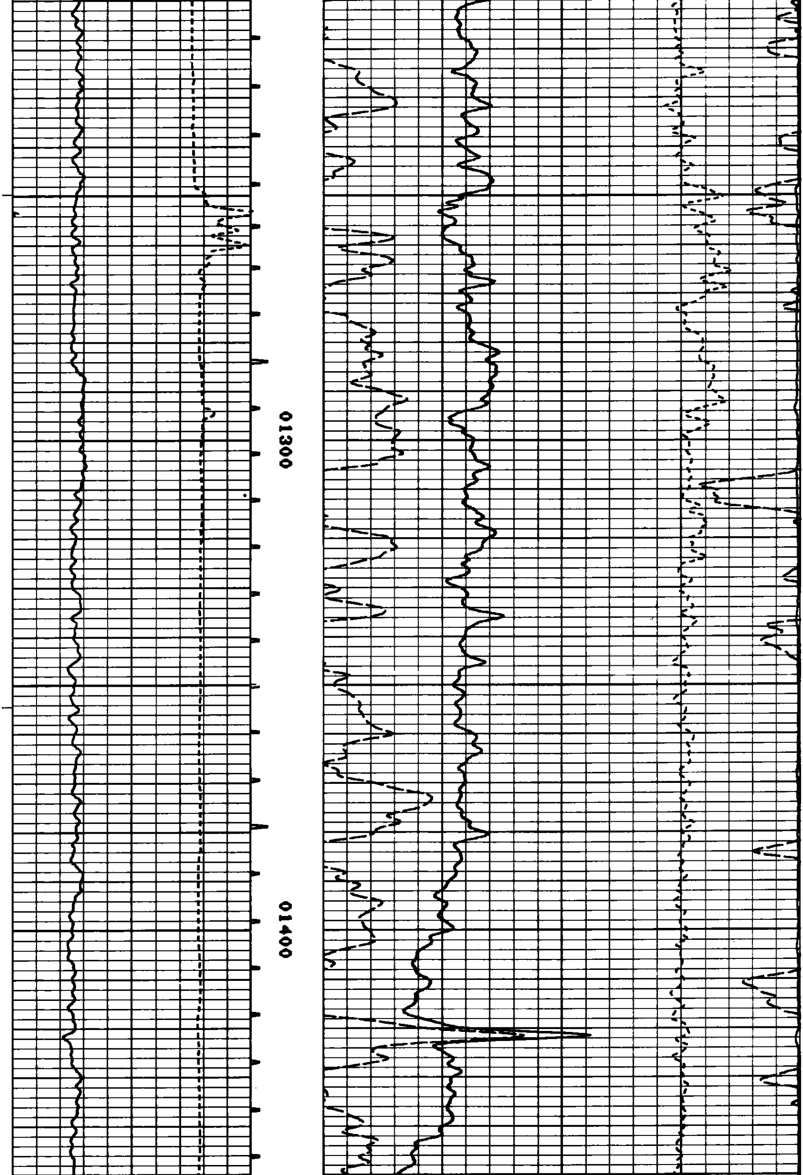
COMPANY: OREGON NATURAL GAS CORP
RUN: 1
WELL NAME: IW 33D-3
TRIP: 1
SERVICE: KC287B FILE: 2 DATE: 6/ 6/88 TIME: 8:50:55
REVISION: FSYSAL REV GS08 VER+2
MODE: PLAYBACK

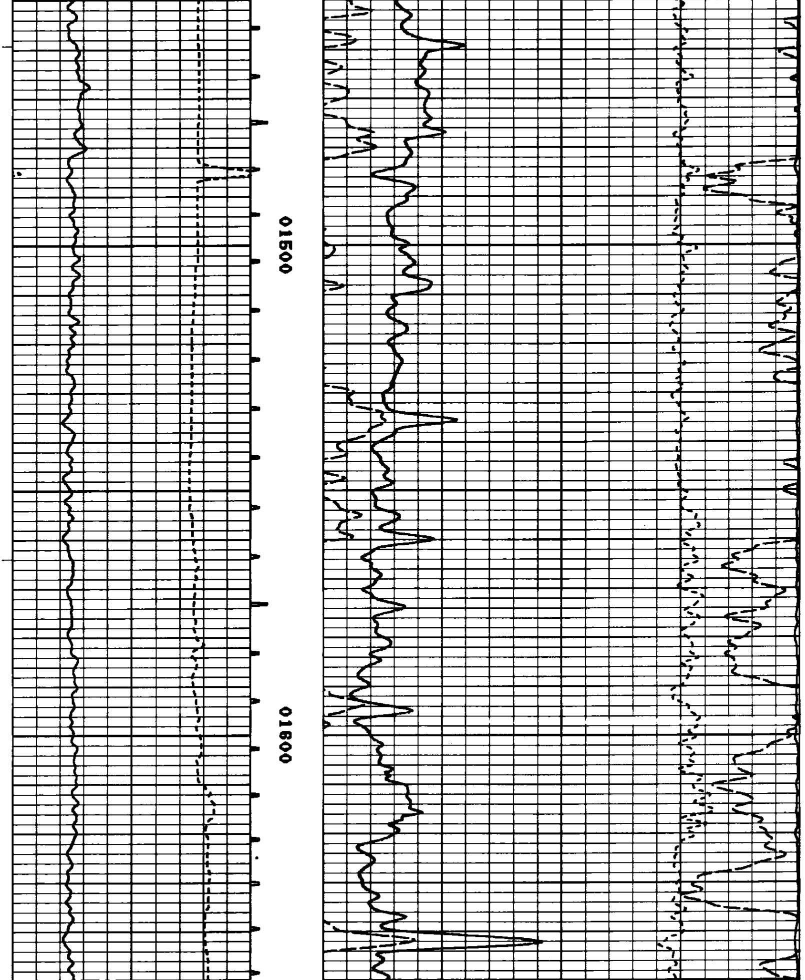


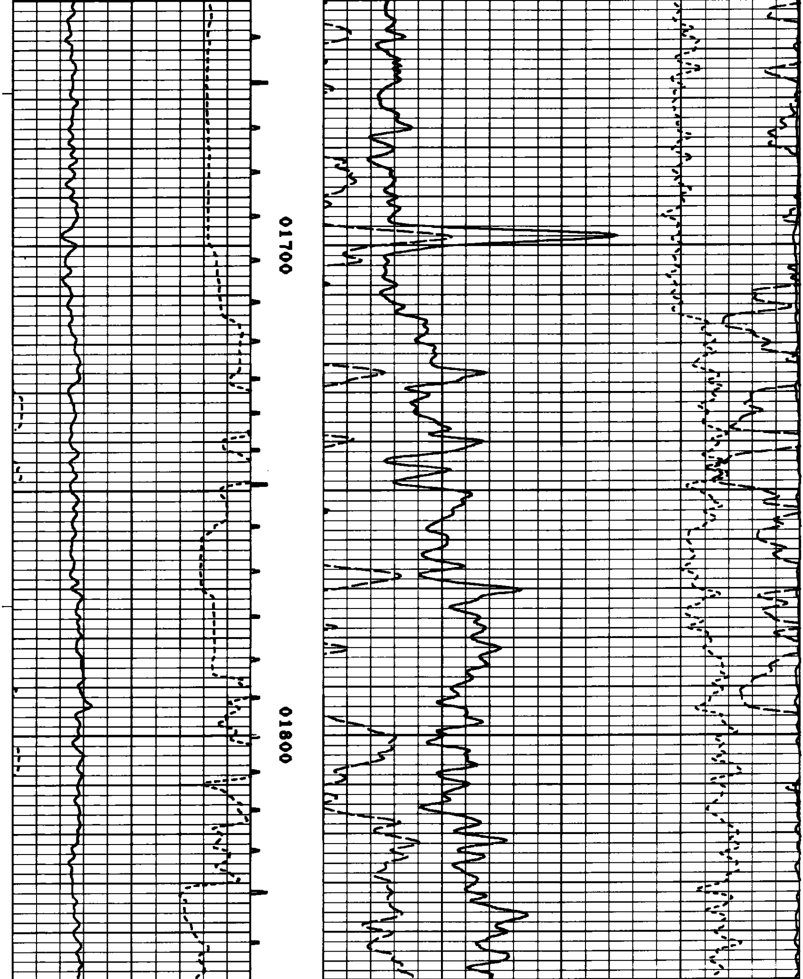


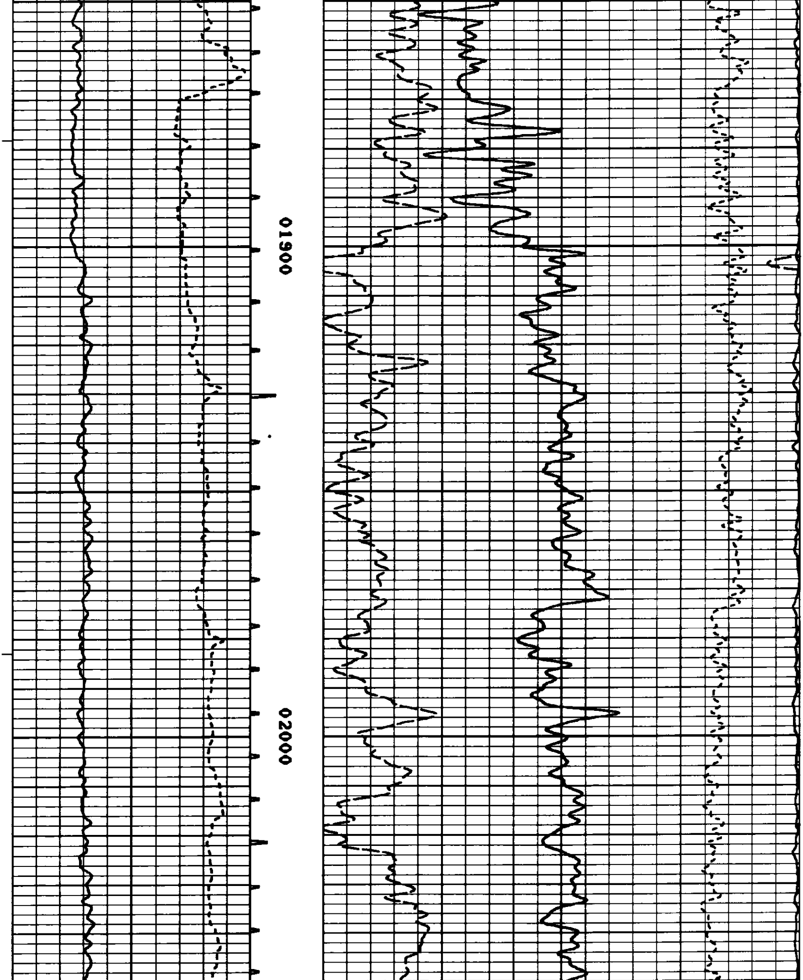


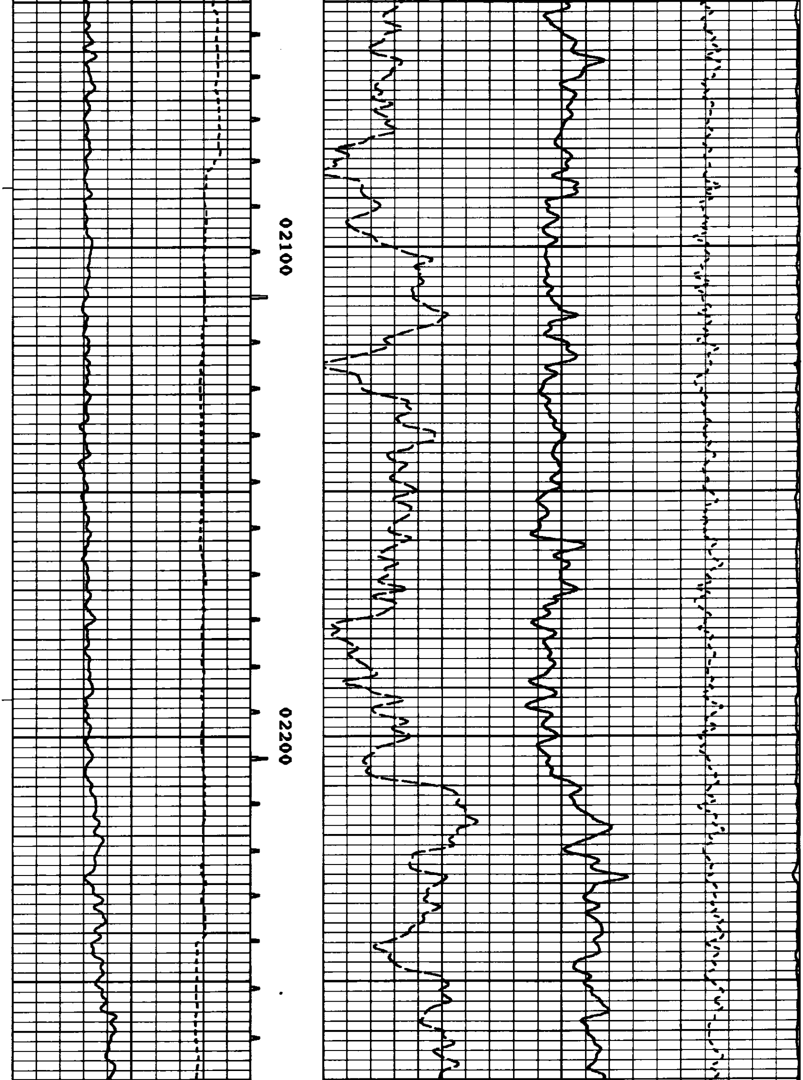


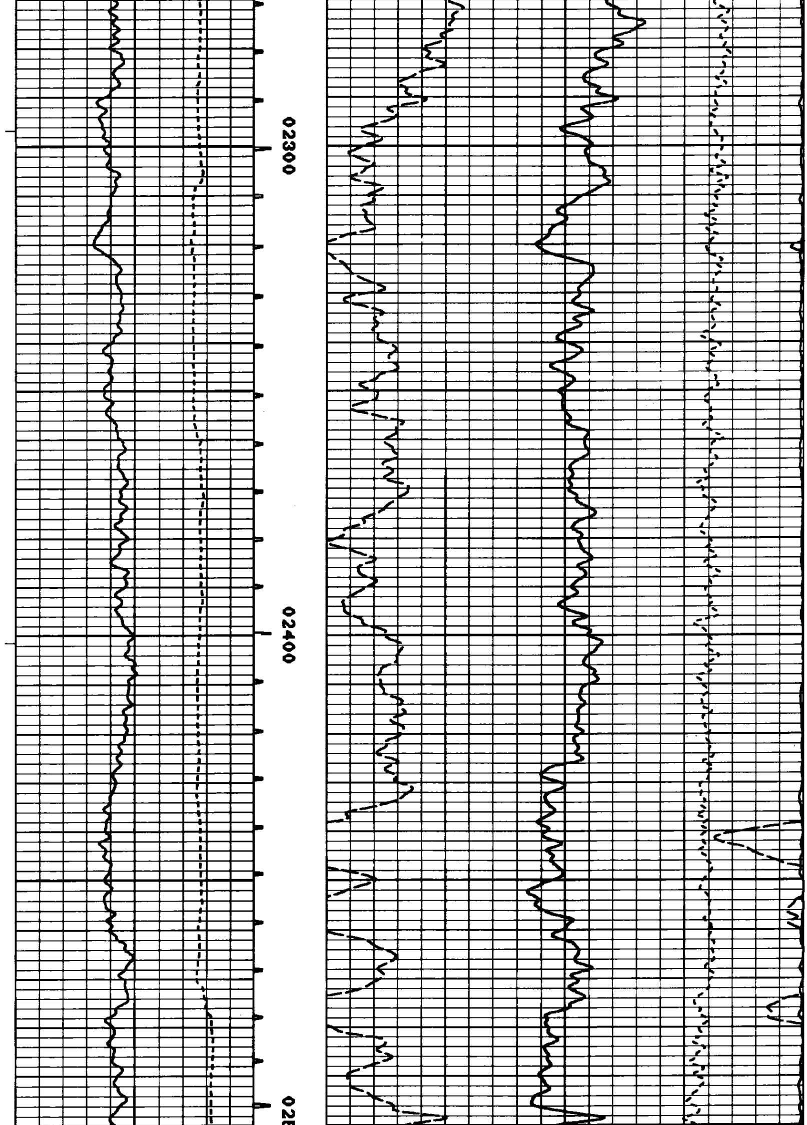


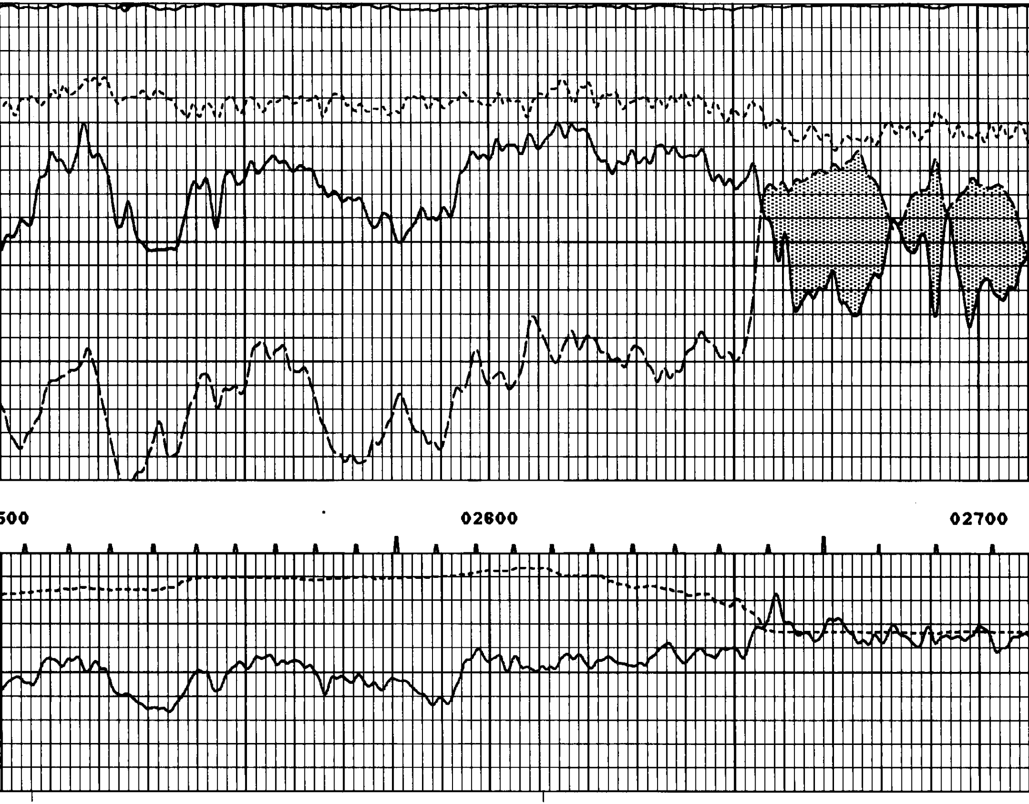


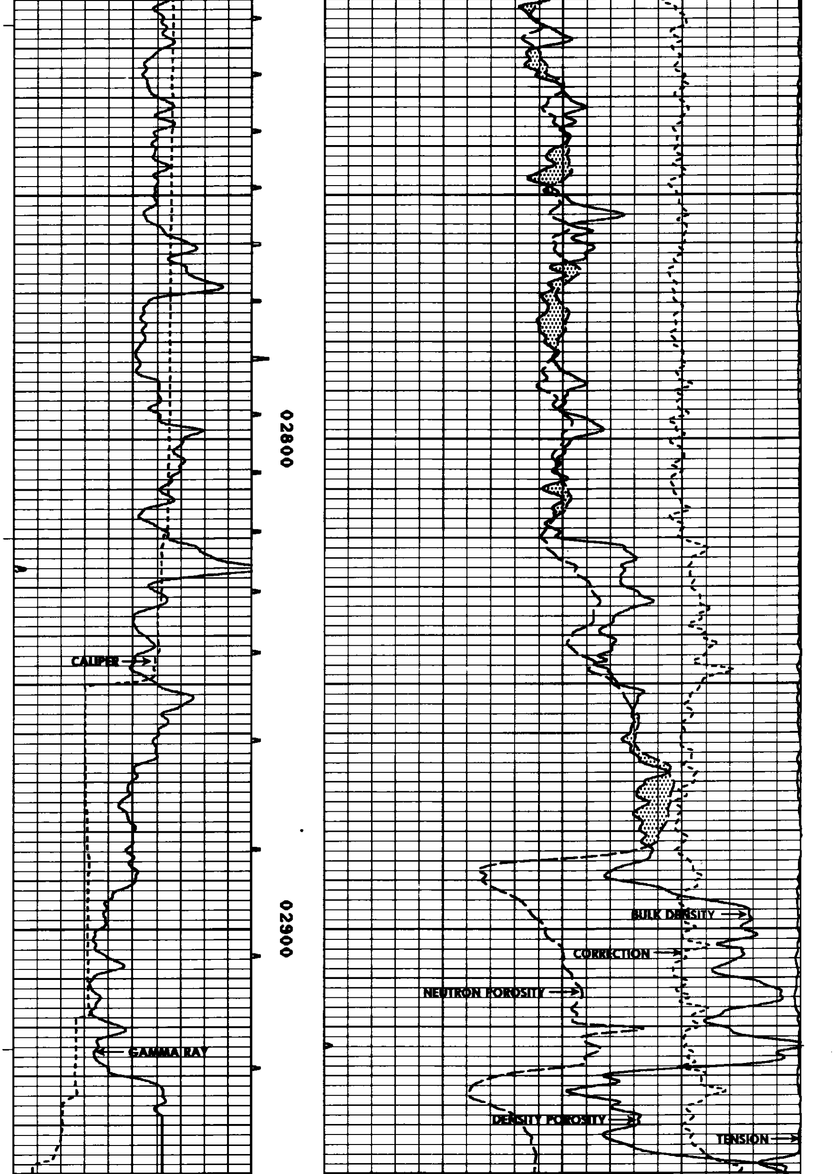


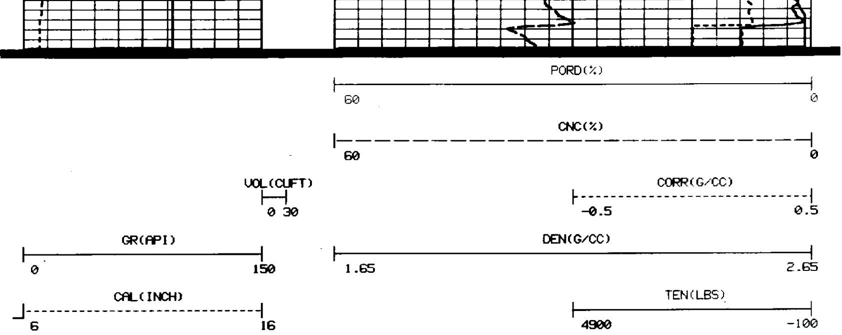












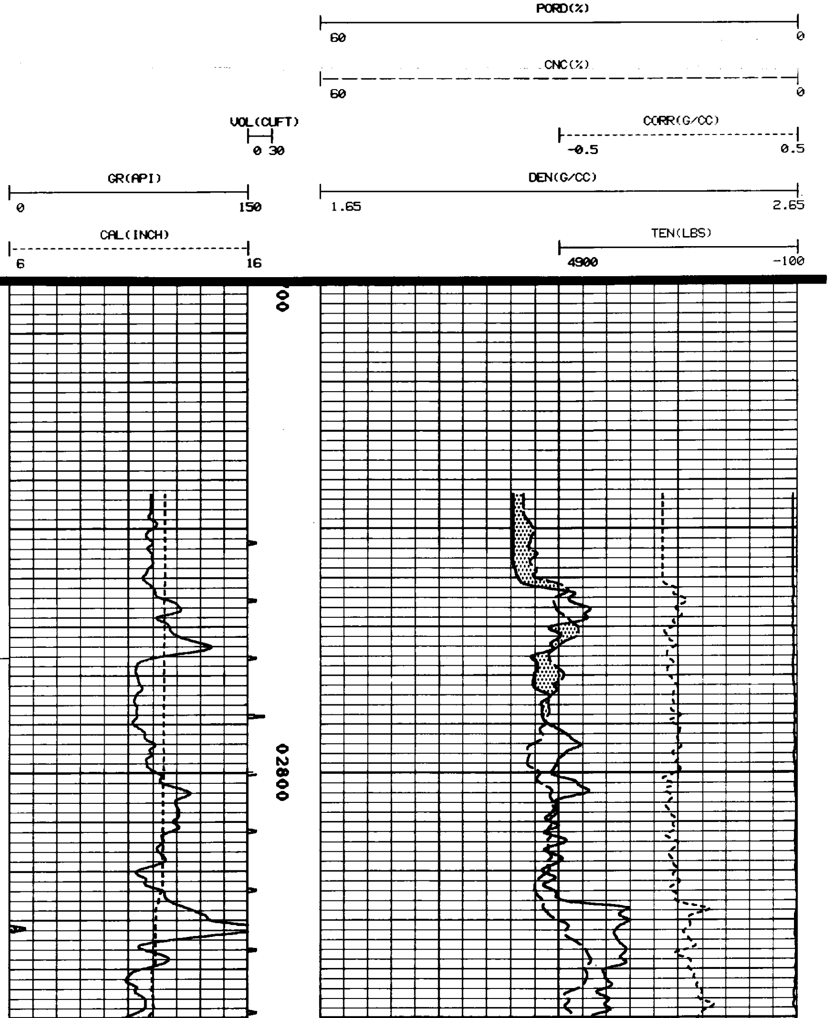
PARAMETERS

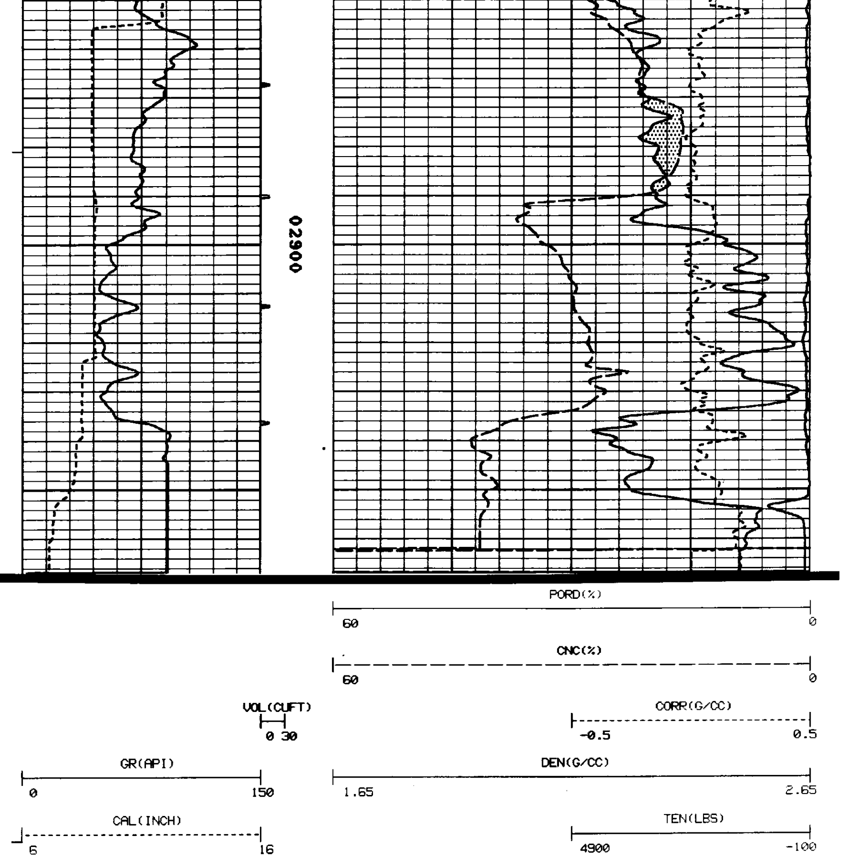
NAME	DEPTH INTERVAL	VALUE	UNITS
A	2967 TO 2744	1.000	
CAL CORR	2967 TO 2744	12.250	INCH
CHI SMTH	2967 TO 2744	ACTIVE	
M	2967 TO 2744	2.000	
MATRIX	2967 TO 2744	SANDSTONE	
O.D.	2967 TO 2744	0.000	INCH
RHO F	2967 TO 2744	0.980	G/CC
RHO M	2967 TO 2744	2.650	G/CC
SALINITY	2967 TO 2744	0.000	PPK

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: OREGON NATURAL GAS CORP   RUN: 1
WELL NAME: IW 33D-3   TRIP: 1
SERVICE: KC287B   FILE: 1   DATE: 6/ 6/88   TIME: 8:33:48
REVISION: FSYSAL REV GS08 VER+2   **REPEAT SECTION**   MODE: PLAYBACK





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*                                           *
*  CALIBRATION/VERIFICATION SUMMARIES       *
*  DATE 06/06/88          TIME 11:18:58     *
*  RUN  2                 TRIP 1            *
*                                           *
*********************************************


      LOG NAME CDL    ASSET NO. 57833    UNIT NO. HL 6406
   CALIBRATION ENTERED ON  06/06/88 AT 08:23:18         LARGE TOOL
                          SOURCE NUMBER 767

  CURVE   COUNTS/SEC.      SCALING FACTORS    RATIO     ENG. VALUE  UNITS
          BLOCK  VALUE     ADD.     MULT.     MG/AL
  -----   ------------     ----------------   -------   ----------  -----

     DATE 05/18/88         CALIBRATION           TIME 12:43:36
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LSD     MG      265.6
SSD             404.1
DEN                                                        2.200  G/CC
CORR                                                       0.000  G/CC
LSD     AL       93.3    0.000     1.0000    2.8469
SSD             271.5    0.000     1.0000    1.4885
DEN                                                        2.800  G/CC
CORR                                                       0.000  G/CC
LSD     MGRV    246.5
SSD             435.3
DEN                                                        2.480  G/CC
CORR                                                       0.236  G/CC

     DATE 06/02/88    PRIMARY VERIFICATION       TIME 21:15:00

LSD     JIG      90.1    0.000     1.0000
SSD             267.3    0.000     1.0000
DEN                                                        2.816  G/CC
CORR                                                      -0.004  G/CC

                    BEFORE LOG VERIFICATION           NOT DONE

     DATE 06/06/88    AFTER LOG VERIFICATION     TIME 10:26:22

LSD     JIG      89.3    0.000     1.0000
SSD             269.3    0.000     1.0000
DEN                                                        2.844  G/CC
CORR                                                       0.019  G/CC



      LOG NAME CAL     ASSET NO. 57833    UNIT NO. HL 6406
   CALIBRATION ENTERED ON  06/06/88 AT 08:24:34

CURVE   MILLIVOLTS      SCALING FACTORS    ENGINEERING VALUES   UNITS
          LOW   HIGH     ADD.    MULT.         LOW        HIGH
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     DATE 06/02/88         CALIBRATION           TIME 20:54:29

CAL     1353.8  3735.5   2.589    0.0185      6.000     12.000 INCH

                     PRIMARY VERIFICATION             NOT DONE

                    BEFORE LOG VERIFICATION           NOT DONE

     DATE 06/06/88    AFTER LOG VERIFICATION     TIME 10:22:53

CAL       E     4264.5   2.589    0.0185        E       13.333 INCH



      LOG NAME CN      ASSET NO. 56094    UNIT NO. VENT/TP
   CALIBRATION ENTERED ON  06/06/88 AT 08:23:55          2435
                         SOURCE NUMBER S17520

CURVE   COUNTS/SEC.     SCALING FACTORS    RATIO     ENG. VALUE  UNITS
                         ADD.      MULT.  LSN/(SSN*4)
----    -------        --------------    -------   --------    ----

     DATE 05/18/88         CALIBRATION           TIME 15:02:35

LSN         78.6         0.000     1.0000
SSN        165.9         0.000     1.0000
CN                                        0.1185       24.558  %

     DATE 06/02/88    PRIMARY VERIFICATION       TIME 21:37:12

LSN         71.9         0.000     1.0000
SSN        121.2         0.000     1.0000
CN                                        0.1484       16.572  %

                    BEFORE LOG VERIFICATION           NOT DONE

     DATE 06/06/88    AFTER LOG VERIFICATION     TIME 10:32:13

LSN         72.0         0.000     1.0000
SSN        120.9         0.000     1.0000
CN                                        0.1488       16.482  %
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      LOG NAME GR      ASSET NO. 73467     UNIT NO. HL 6406
  CALIBRATION ENTERED ON  06/06/88 AT 08:24:59

CURVE   MILLIVOLTS      SCALING FACTORS     ENGINEERING VALUES    UNITS
          LOW    HIGH    ADD.     MULT.        LOW        HIGH
-----   -------------   ----------------   ------------------    -----

      DATE 06/02/88          CALIBRATION           TIME 20:44:50

GR       1411.7  4742.6    0.000    0.1099       0.000     150.000 API

                         PRIMARY VERIFICATION              NOT DONE

                        BEFORE LOG VERIFICATION            NOT DONE

      DATE 06/06/88     AFTER LOG VERIFICATION     TIME 10:45:22

GR       1015.0  4236.2    0.000    0.1099      45.710     190.771 API



              ****************************************
              *                                      *
              *  CALIBRATION/VERIFICATION SUMMARIES  *
              *  DATE 06/06/88          TIME 01:10:38 *
              *  RUN  2                 TRIP 1       *
              *                                      *
              ****************************************



       LOG NAME CDL     ASSET NO. 57833    UNIT NO. HL 6406
   CALIBRATION ENTERED ON  06/06/88 AT 08:29:52          LARGE TOOL
                          SOURCE NUMBER 787

CURVE   COUNTS/SEC.     SCALING FACTORS    RATIO     ENG. VALUE  UNITS
        BLOCK  VALUE    ADD.     MULT.     MG/AL
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      DATE 05/12/88         CALIBRATION           TIME 12:43:36

LSD     MG      285.6
SSD             404.1
DEN                                                    2.200   G/CC
CORR                                                   0.000   G/CC
LSD     AL       93.3     0.000    1.0000   2.8469
SSD             271.5     0.000    1.0000   1.4865
DEN                                                    2.800   G/CC
CORR                                                   0.000   G/CC
LSD     MGAV    248.5
SSD             435.3
DEN                                                    2.400   G/CC
CORR                                                   0.236   G/CC

      DATE 06/02/88    PRIMARY VERIFICATION       TIME 21:15:00

LSD     JIG      90.1     0.000    1.0000
SSD             267.3     0.000    1.0000
DEN                                                    2.816   G/CC
CORR                                                  -0.004   G/CC

      DATE 06/06/88   BEFORE LOG VERIFICATION     TIME 01:01:32

LSD     JIG      89.9     0.000    1.0000
SSD             268.5     0.000    1.0000
DEN                                                    2.828   G/CC
CORR                                                   0.007   G/CC

                        AFTER LOG VERIFICATION            NOT DONE



       LOG NAME CAL     ASSET NO. 57833    UNIT NO. HL 6406
   CALIBRATION ENTERED ON  06/06/88 AT 08:32:05

CURVE   MILLIVOLTS      SCALING FACTORS     ENGINEERING VALUES    UNITS
          LOW    HIGH    ADD.     MULT.        LOW        HIGH
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     DATE 06/02/88          CALIBRATION          TIME 20:54:29

CAL     1353.8  3735.5    2.500    0.0185      6.000      12.000 INCH

                          PRIMARY VERIFICATION            NOT DONE

                         BEFORE LOG VERIFICATION          NOT DONE

                          AFTER LOG VERIFICATION          NOT DONE




      LOG NAME CN       ASSET NO. 50004    UNIT NO. VENT/TP
   CALIBRATION ENTERED ON  06/06/88 AT 00:34:06              2435
                           SOURCE NUMBER S17520

CURVE   COUNTS/SEC.     SCALING FACTORS    RATIO     ENG. VALUE  UNITS
                          ADD.     MULT.  LSN/(SSN*4)
-----   -----------    ------------------ ---------  ----------  -----

     DATE 05/18/88           CALIBRATION          TIME 15:02:35

LSN          78.6         0.000     1.0000
SSN         165.9         0.000     1.0000
CN                                         0.1185        24.558  X

     DATE 06/02/88     PRIMARY VERIFICATION       TIME 21:37:12

LSN          71.9         0.000     1.0000
SSN         121.2         0.000     1.0000
CN                                         0.1484        16.572  X

     DATE 06/06/88   BEFORE LOG VERIFICATION      TIME 00:54:11

LSN          73.3         0.000     1.0000
SSN         121.2         0.000     1.0000
CN                                         0.1511        16.001  X

                          AFTER LOG VERIFICATION          NOT DONE




      LOG NAME GR       ASSET NO. 73457    UNIT NO. HL 0400
   CALIBRATION ENTERED ON  06/06/88 AT 00:30:31

CURVE   MILLIVOLTS      SCALING FACTORS    ENGINEERING VALUES   UNITS
          LOW    HIGH    ADD.     MULT.       LOW        HIGH
-----  -------------  ------------------  ------------------  -----

     DATE 06/02/88           CALIBRATION          TIME 20:44:50

GR      1411.7  4742.8    0.000    0.1000      0.000     150.000 API

                          PRIMARY VERIFICATION            NOT DONE

     DATE 06/06/88   BEFORE LOG VERIFICATION      TIME 00:47:34

GR      1284.3  4685.7    0.000    0.1000     57.835     211.463 API
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