FORM 925322 REV. (8-80)

Western Atlas International
A Litton/Dresser Company
Atlas Wireline Services

Compensated Densilog®
Compensated Neutron
Gamma Ray

FILE NO.

API NO.

5" = 100'

COMPANY OREGON NATURAL GAS CORPORATION

WELL IW 42D 10

FIELD MIST

COUNTY COLUMBIA STATE OREGON

LOCATION: 451' W. & 221' N. FROM E/4 CORNER OF:

SEC 10 TWP 6N RGE 5W

Other Services
DIFL BHC/AL
DIP

Permanent Datum GL Elev. 804.38'
Log Measured from KB 11.4 Ft. Above Permanent Datum
Drilling Measured from KB

Elev.
KB 815.78'
DF
GL 804.38'

Date	7-24-88		7 28 88					
Run No.	ONE		TWO					
Service Order	159026		159030					
Depth—Driller	2087'		2770'					
Depth—Logger	2089'		2766'					
Bottom Logged Interval	2087'		2764'					
Top Logged Interval	532'		2070'					
Casing—Driller	13 3/8" @ 532'		8 5/8" @ 2070'		@		@	
Casing—Logger	532'		2070'					
Bit Size	12 1/4"		7 7/8"					
Type Fluid in Hole	GEL/DRISPAC		GEL/DRISPAC					
Density and Viscosity	10.2	42	9.2	55				
pH and Fluid Loss	9.0	5.0 cc	11.7	6.8 cc		cc		cc
Source of Sample	FLOWLINE		FLOWLINE					
Rm @ Meas. Temp.	1.65	@ 65 °F	3.02	@ 76 °F	@	°F	@	°F
Rmf @ Meas. Temp.	1.20	@ 65 °F	2.18	@ 76 °F	@	°F	@	°F
Rmc @ Meas. Temp.	1.90	@ 65 °F	3.67	@ 76 °F	@	°F	@	°F
Source of Rmf and Rmc	M	M	M	M				
Rm @ BHT	1.02	@ 105°F	2.07	@ 111°F	@	°F	@	°F
Time Since Circ.	6 HRS.		3 HRS.					
Max. Rec. Temp. Deg. F.	105	°F	112	°F		°F		°F
Equip. No. and Location	6406	SAC.	6406	SAC.				
Recorded By	M. HINDS		B. WELCH					
Witnessed By	MR. THOMAS		MR. THOMAS					

FOLD HERE

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASURMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR 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.

Western Atlas International
A Litton/Dresser Company

ATLAS WIRELINE SERVICES

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REMARKS RUN (1)

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1	1	CDL	72541	2212	DE-CENT
1	1	CAL	72541	2212	VAR
1	1	CN	56094	2435	DE-CENT
1	1	GR	73467	1309	DE-CENT

REMARKS RUN (2)

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
2	1	CDL	72541	2218	DECENT
2	1	CAL	72541	2218	DECENT
2	1	CN	53264	2435	DECENT
2	1	GR	73467	1309	DECENT

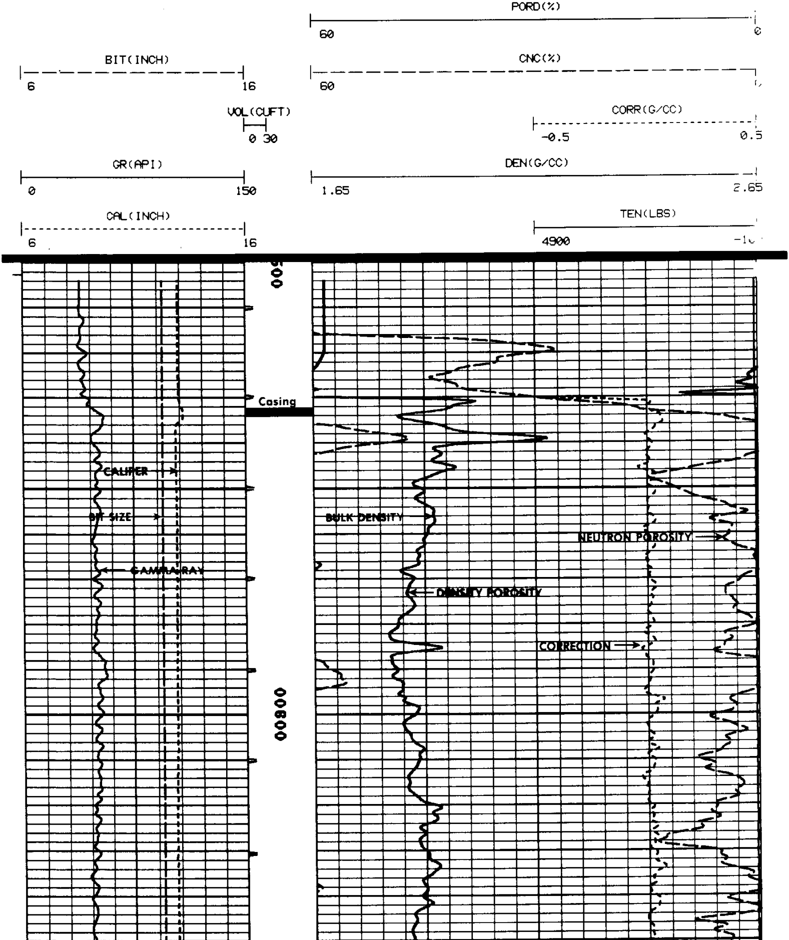
PARAMETERS

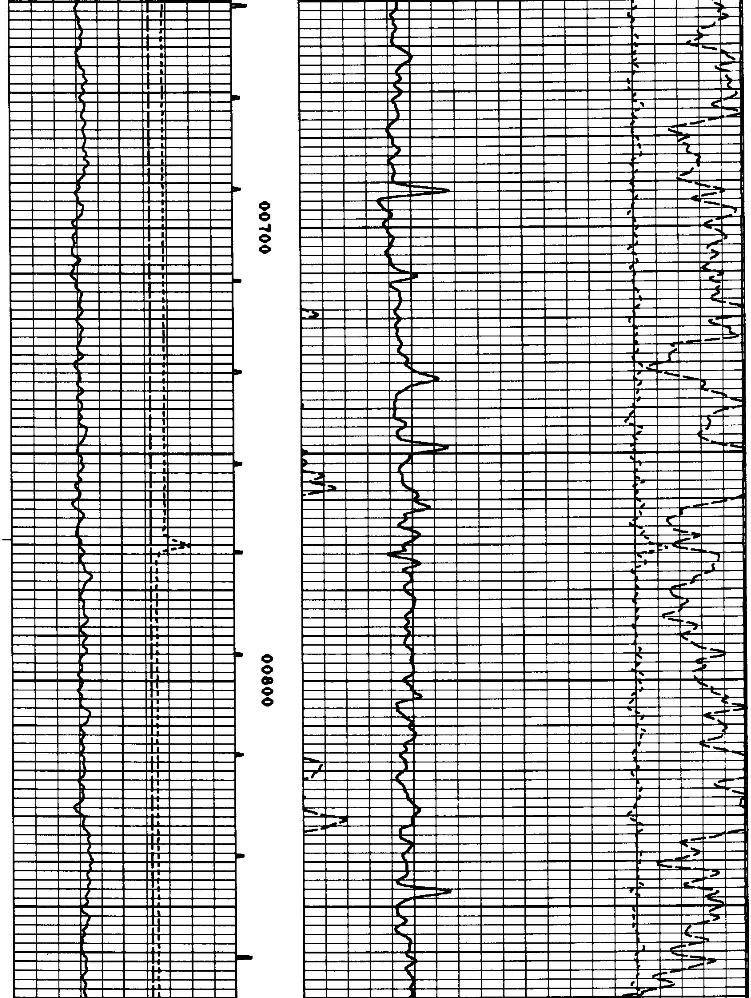
NAME	DEPTH INTERVAL	VALUE	UNITS
A	2088 TO 505	0.000	
CAL CORR	2088 TO 505	12.250	INCH
CHI SMTH	2088 TO 505	ACTIVE	
M	2088 TO 505	0.000	
MATRIX	2088 TO 505	SANDSTONE	
O.D.	2088 TO 505	8.625	INCH
RHO F	2088 TO 505	0.980	G/CC
RHO M	2088 TO 505	2.650	G/CC
SALINITY	2088 TO 505	0.000	PPK

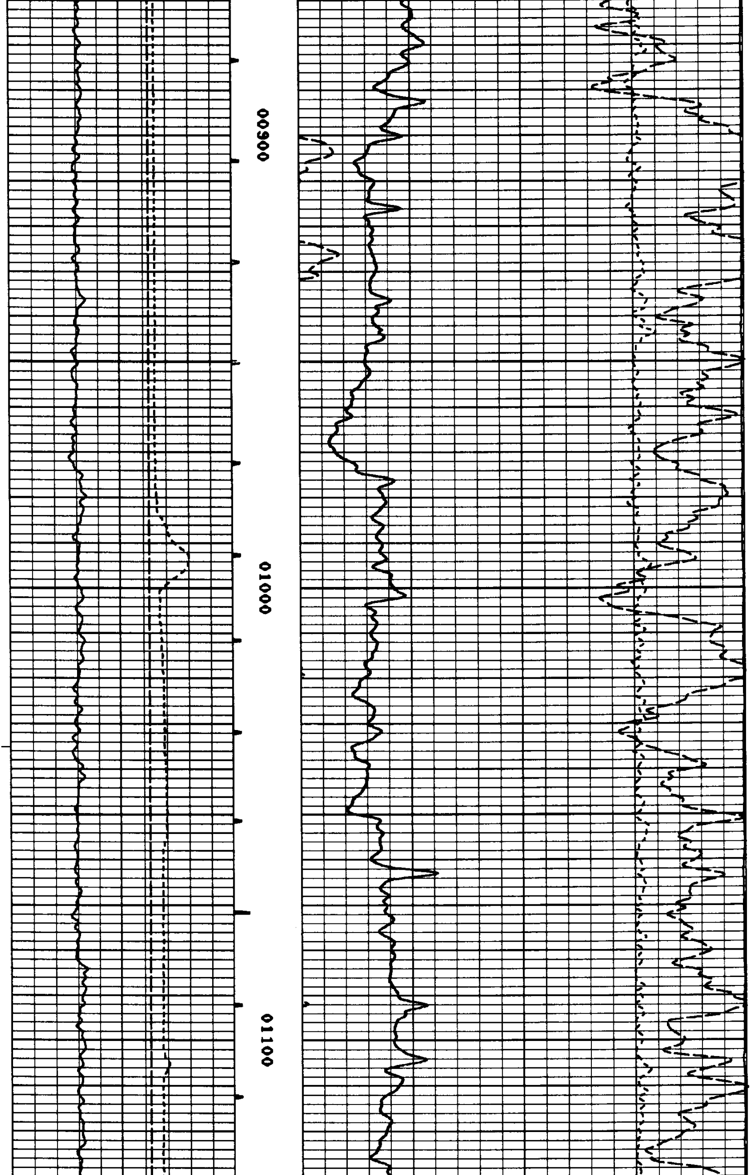
DISPLAY SCALE CHANGES

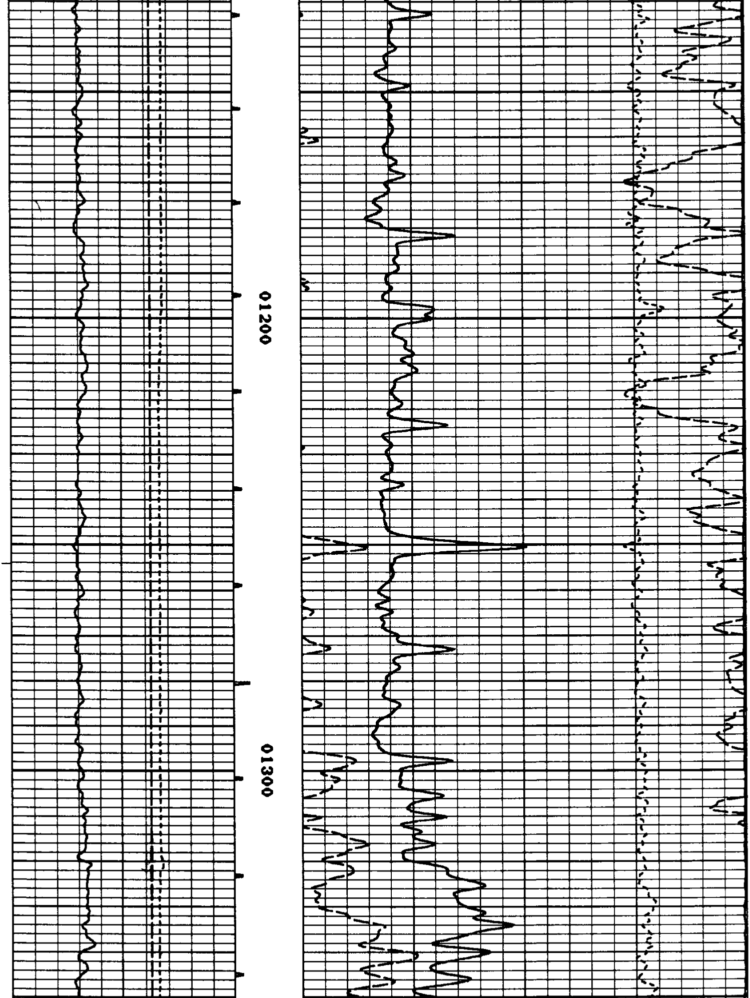
*** NONE ***

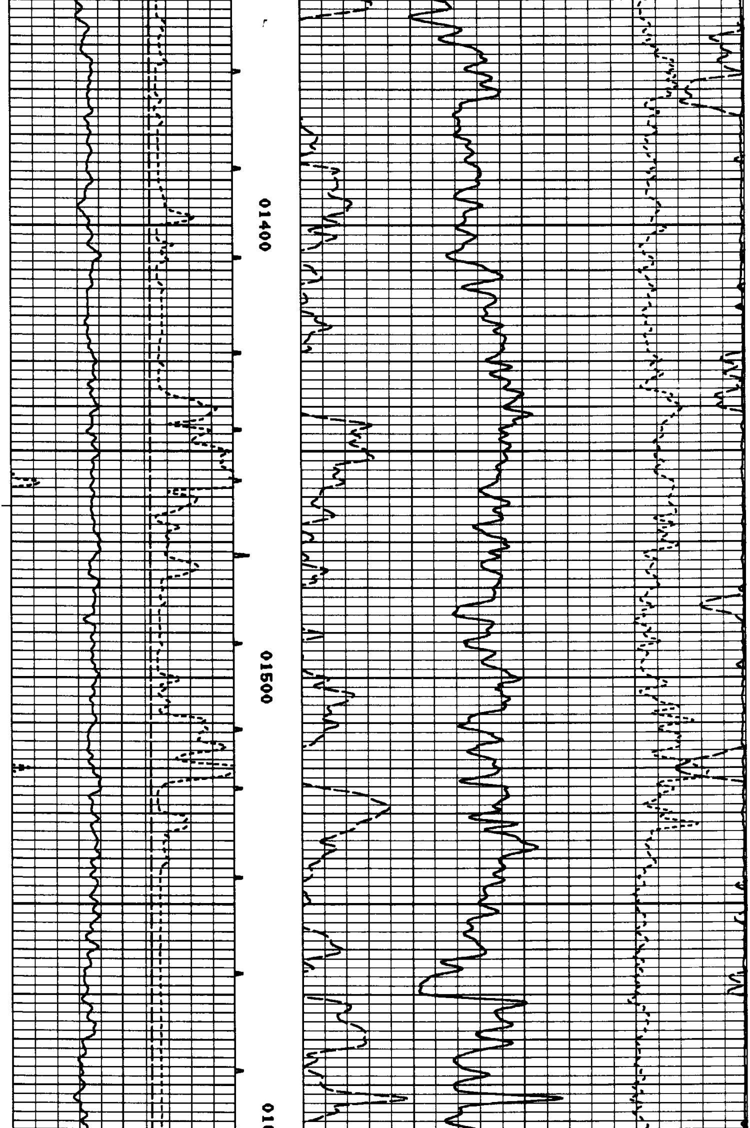
COMPANY: OREGON NATURAL GAS CORP.
RUN: 1
WELL NAME: IW 42C-10
TRIP: 1
SERVICE: KC287B FILE: 3 DATE: 7/24/88
TIME: 14:14:47
REVISION: FSYSAL REV GS08 VER+2
MODE: PLAYBACK

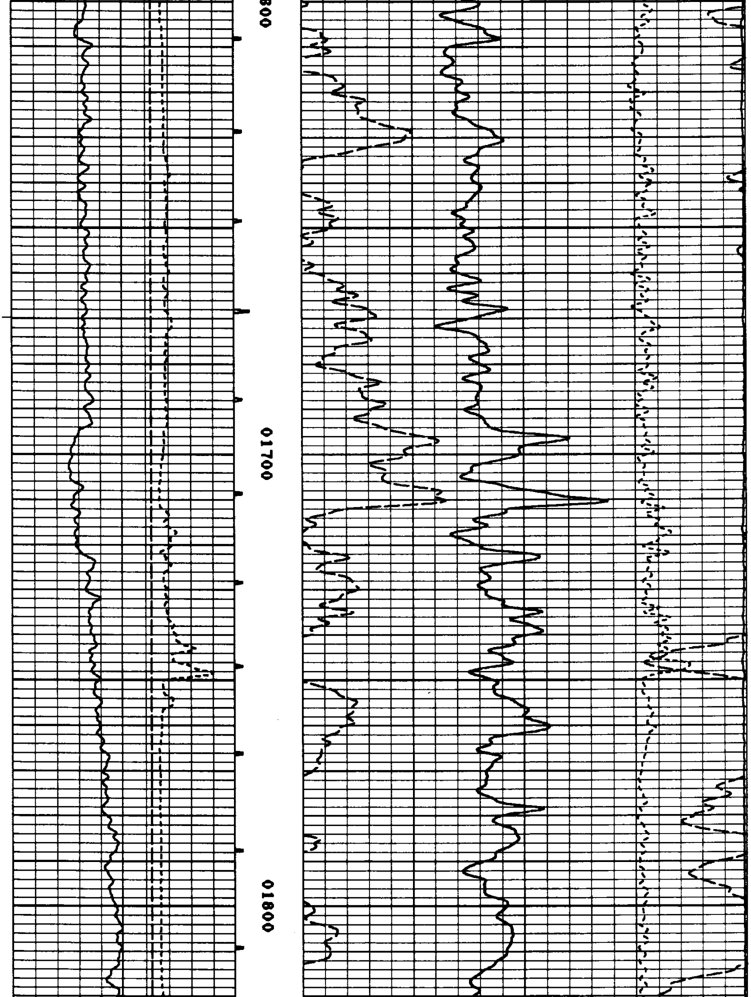


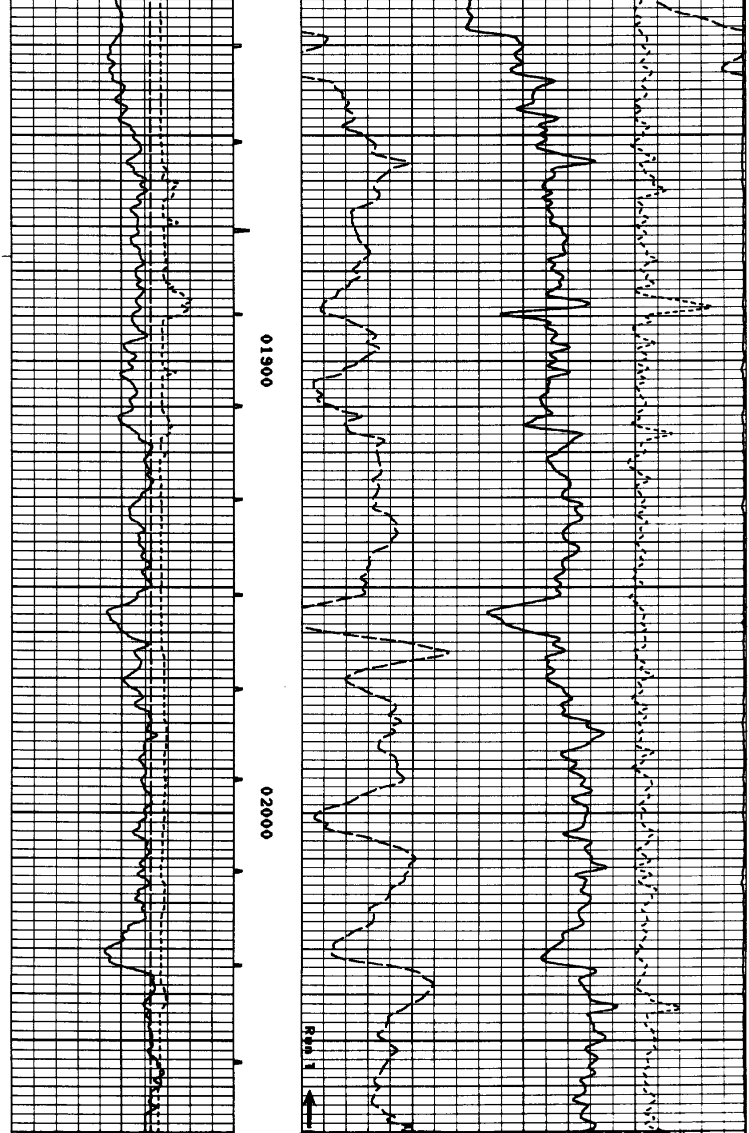


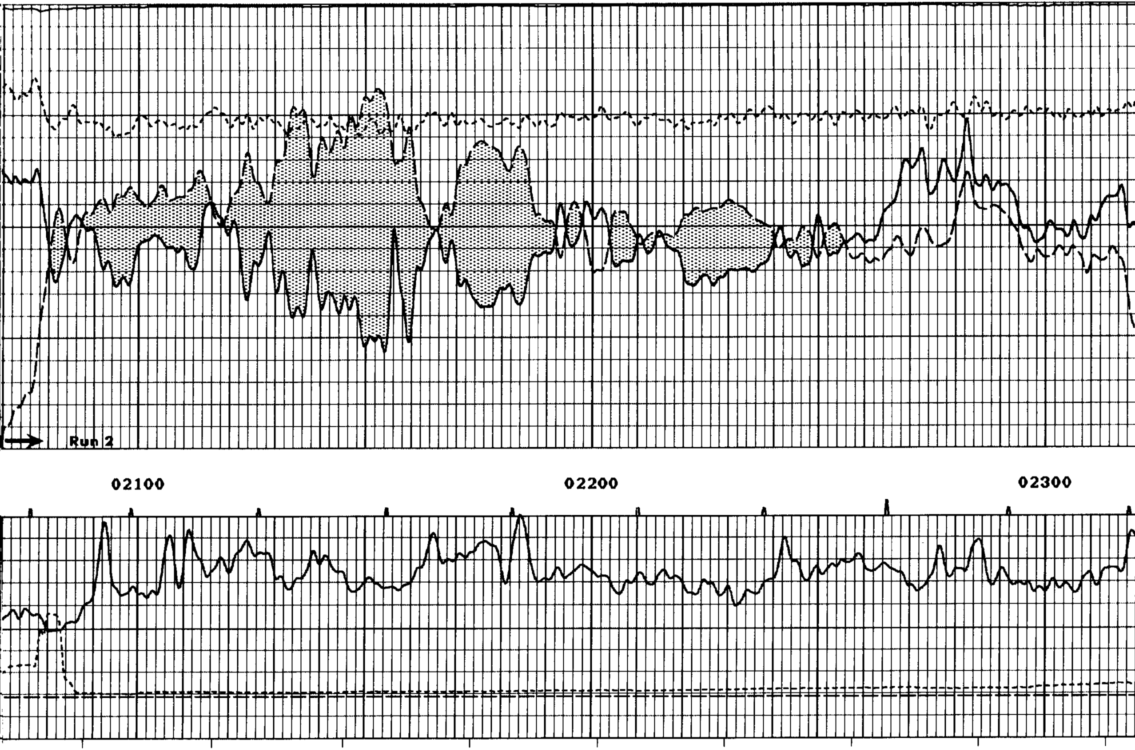


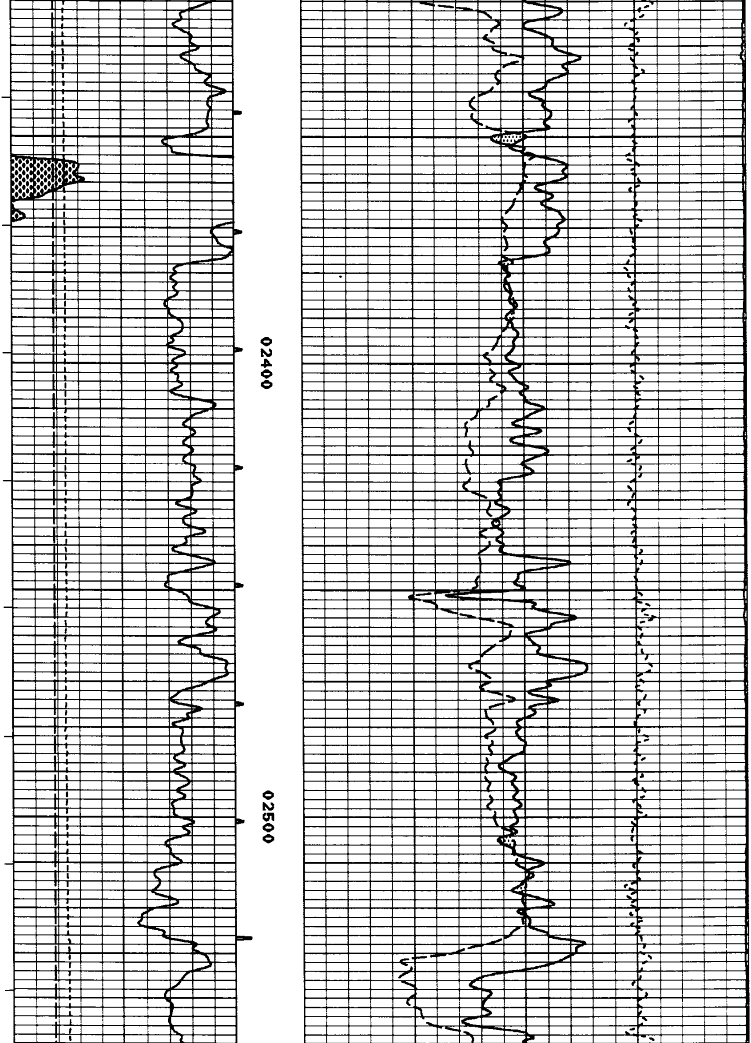


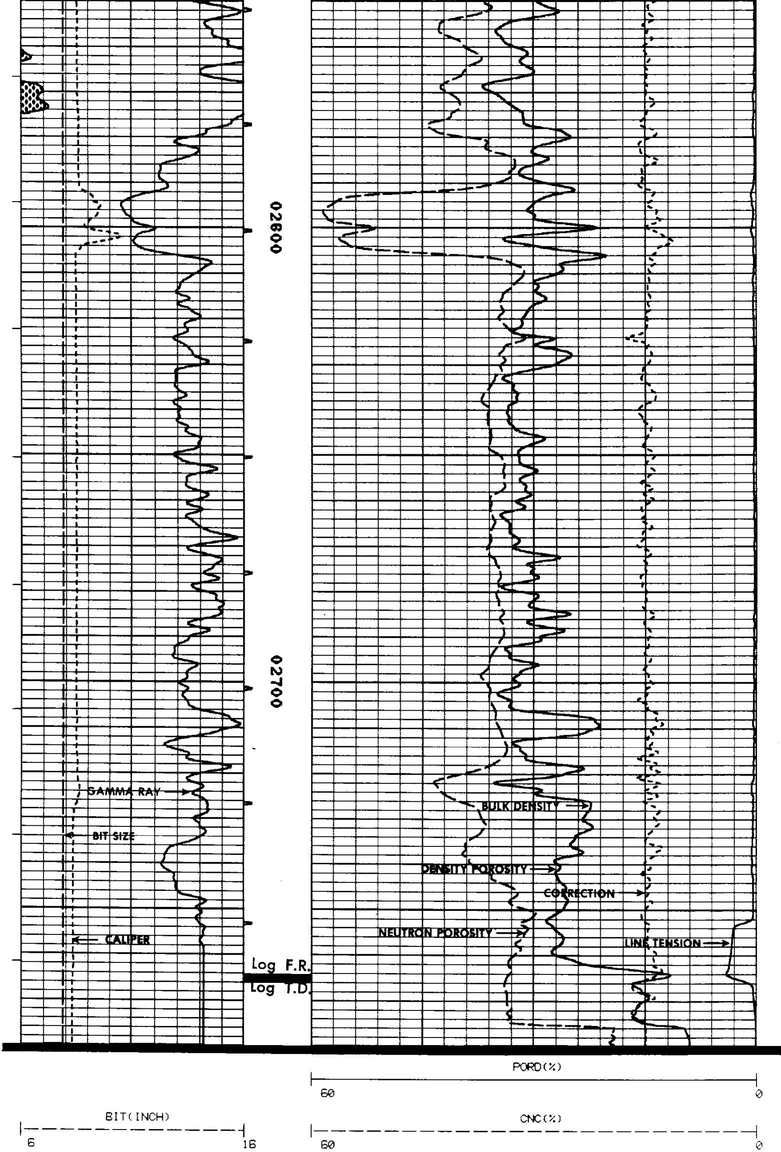












VOL(CUFT)
0 30

CORR(G/CC)
-0.5 0.5

GR(API)
0 150

DEN(G/CC)
1.65 2.65

CAL(INCH)
6 16

TEN(LBS)
4900 -100

CURVE DELAYS

CURVE	DELAY	UNITS
SSD	0,3	FT,IN
LSD	0	FT,IN
CAL	0,0	FT,IN
SSN	9,9	FT,IN
LSN	10,3	FT,IN
GR	16,6	FT,IN
TTEN	0,0	FT,IN
TEN	0,0	FT,IN
SPD	0,0	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	2780 TO 2529	0.000	
CAL CORR	2780 TO 2529	7.875	INCH
CHI SMTH	2780 TO 2529	ACTIVE	
M	2780 TO 2529	0.000	
MATRIX	2780 TO 2529	SANDSTONE	
O.D.	2780 TO 2529	0.000	INCH
RHO F	2780 TO 2529	0.980	G/CC
RHO M	2780 TO 2529	2.650	G/CC
SALINITY	2780 TO 2529	0.000	PPK

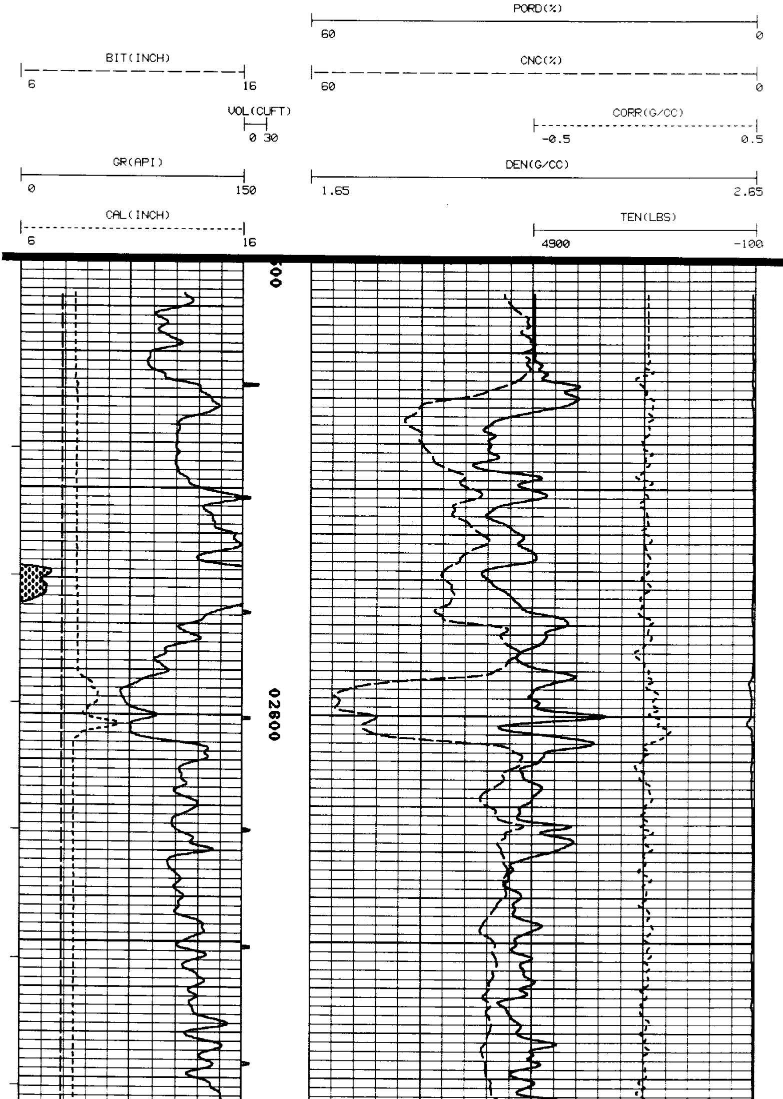
DISPLAY SCALE CHANGES

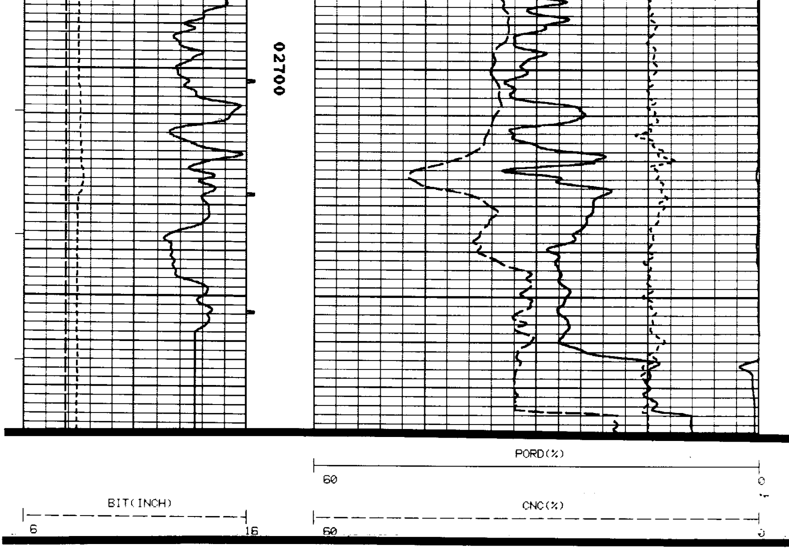
*** NONE ***

COMPANY: OREGON NATURAL GAS CORP
RUN: 2
WELL NAME: IW 42C-10
TRIP: 1
SERVICE: KC287B FILE: 3
DATE: 07/28/88
TIME: 10:17:12
REVISION: FSYSAL REV GS08 VER+2

REPEAT SECTION

MODE: RECORD





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      ****************************************
      *                                      *
      *  CALIBRATION/VERIFICATION SUMMARIES  *
      *  DATE 07/28/88         TIME 11:38:57 *
      *  RUN  2                TRIP 1        *
      *                                      *
      ****************************************


        LOG NAME CDL     ASSET NO. 72541     UNIT NO. BAKLAB
     CALIBRATION ENTERED ON  07/28/88 AT 09:27:08        LARGE TOOL
                              SOURCE NUMBER 845

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

      DATE 07/06/88        CALIBRATION          TIME 14:03:48

  LSD    MG      346.3
  SSD            463.5
  DEN                                                    2.200   G/CC
  CORR                                                   0.000   G/CC
  LSD    AL      118.2    0.000    1.0000    2.9293
  SSD            298.2    0.000    1.0000    1.5546
  DEN                                                    2.800   G/CC
  CORR                                                   0.000   G/CC
  LSD    MGRV    320.6
  SSD            503.3
  DEN                                                    2.480   G/CC
  CORR                                                   0.235   G/CC

      DATE 07/23/88    PRIMARY VERIFICATION     TIME 17:14:49

  LSD    JIG     121.0    0.000    1.0000
  SSD            306.0    0.000    1.0000
  DEN                                                    2.818   G/CC
  CORR                                                   0.030   G/CC

      DATE 07/28/88   BEFORE LOG VERIFICATION   TIME 09:46:17
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LSD     JIG      120.4    0.000     1.0000
SSD              306.1    0.000     1.0000
DEN                                                       2.824  G/CC
CORR                                                      0.034  G/CC

     DATE 07/28/88    AFTER LOG VERIFICATION     TIME 11:18:49

LSD     JIG      121.7    0.000     1.0000
SSD              309.8    0.000     1.0000
DEN                                                       2.833  G/CC
CORR                                                      0.048  G/CC



      LOG NAME CAL      ASSET NO. 72541     UNIT NO. HL 6406
  CALIBRATION ENTERED ON  07/28/88 AT 09:50:10

CURVE   MILLIVOLTS     SCALING FACTORS   ENGINEERING VALUES    UNITS
          LOW    HIGH   ADD.     MULT.       LOW         HIGH
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     DATE 07/23/88         CALIBRATION           TIME 17:22:02

CAL    2326.7  4215.4   -1.392    0.0233      6.000      12.000 INCH

     DATE 07/23/88    PRIMARY VERIFICATION       TIME 17:22:46

CAL      E      4214.6   -1.392    0.0233      E          11.998 INCH

     DATE 07/28/88   BEFORE LOG VERIFICATION     TIME 10:09:45

CAL      E      3134.8   -1.792    0.0233      E           8.167 INCH

     DATE 07/28/88    AFTER LOG VERIFICATION     TIME 10:59:44

CAL      E      3176.6   -1.792    0.0233      E           8.300 INCH



      LOG NAME CN       ASSET NO. 53264     UNIT NO. 8678
  CALIBRATION ENTERED ON  07/28/88 AT 09:28:12              2435
                         SOURCE NUMBER VENT

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

     DATE 07/19/88         CALIBRATION           TIME 18:08:03

LSN          85.2        0.000     1.0000
SSN         165.2        0.000     1.0000
CN                                          0.1290       24.558  %

     DATE 07/28/88    PRIMARY VERIFICATION       TIME 09:30:16

LSN          82.5        0.000     1.0000
SSN         121.6        0.000     1.0000
CN                                          0.1697       15.034  %

     DATE 07/28/88   BEFORE LOG VERIFICATION     TIME 09:34:11

LSN          82.5        0.000     1.0000
SSN         121.8        0.000     1.0000
CN                                          0.1692       15.132  %

     DATE 07/28/88    AFTER LOG VERIFICATION     TIME 11:29:19

LSN          81.9        0.000     1.0000
SSN         121.6        0.000     1.0000
CN                                          0.1683       15.299  %



      LOG NAME GR       ASSET NO. 73467     UNIT NO. HL 6406
  CALIBRATION ENTERED ON  07/28/88 AT 09:38:37

CURVE   MILLIVOLTS     SCALING FACTORS   ENGINEERING VALUES    UNITS
          LOW    HIGH   ADD.     MULT.       LOW         HIGH
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     DATE 07/08/88         CALIBRATION           TIME 12:22:32

GR     2196.3  6310.6   0.000     0.0890      0.000     150.000 API

                      PRIMARY VERIFICATION             NOT DONE

     DATE 07/28/88   BEFORE LOG VERIFICATION     TIME 09:40:23

GR     3669.3  7778.0   0.000     0.0890    133.774     283.570 API
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          DATE 07/28/88     AFTER LOG VERIFICATION     TIME 11:33:48

      GR     2601.5  6310.7    0.000     0.0890      94.846    230.076 API
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                  *****************************************
                  *                                       *
                  *  CALIBRATION/VERIFICATION SUMMARIES   *
                  *  DATE 07/24/88          TIME 15:47:51 *
                  *  RUN  1                 TRIP 1        *
                  *                                       *
                  *****************************************



             LOG NAME CDL      ASSET NO. 72541     UNIT NO. BAKLAB
         CALIBRATION ENTERED ON  07/24/88 AT 08:58:13         LARGE TOOL
                                  SOURCE NUMBER 845

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

             DATE 07/06/88           CALIBRATION           TIME 14:03:48

        LSD      MG       346.3
        SSD               463.5
        DEN                                                        2.200  G/CC
        CORR                                                       0.000  G/CC
        LSD      AL       118.2    0.000     1.0000    2.9293
        SSD               298.2    0.000     1.0000    1.5546
        DEN                                                        2.800  G/CC
        CORR                                                       0.000  G/CC
        LSD      MGRV     320.6
        SSD               503.3
        DEN                                                        2.480  G/CC
        CORR                                                       0.235  G/CC

             DATE 07/23/88     PRIMARY VERIFICATION       TIME 17:14:49

        LSD      JIG      121.0    0.000     1.0000
        SSD               306.0    0.000     1.0000
        DEN                                                        2.818  G/CC
        CORR                                                       0.030  G/CC

             DATE 07/24/88    BEFORE LOG VERIFICATION     TIME 09:00:41

        LSD      JIG      120.2    0.000     1.0000
        SSD               306.4    0.000     1.0000
        DEN                                                        2.829  G/CC
        CORR                                                       0.037  G/CC

             DATE 07/24/88     AFTER LOG VERIFICATION     TIME 15:35:34

        LSD      JIG      120.0    0.000     1.0000
        SSD               307.1    0.000     1.0000
        DEN                                                        2.834  G/CC
        CORR                                                       0.042  G/CC



             LOG NAME CAL      ASSET NO. 72541     UNIT NO. 6406
         CALIBRATION ENTERED ON  07/24/88 AT 08:59:42

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

             DATE 07/23/88           CALIBRATION           TIME 17:22:02

        CAL    2326.7  4215.4   -1.392    0.0233      6.000     12.000 INCH

             DATE 07/23/88     PRIMARY VERIFICATION       TIME 17:22:46

        CAL       E    4214.6   -1.392    0.0233      E         11.998 INCH

             DATE 07/24/88    BEFORE LOG VERIFICATION     TIME 13:37:18

        CAL       E    4431.5   -1.392    0.0233      E         12.687 INCH

             DATE 07/24/88     AFTER LOG VERIFICATION     TIME 15:22:25

        CAL       E    4512.1   -1.392    0.0233      E         12.943 INCH



             LOG NAME CN       ASSET NO. 56094     UNIT NO. VENT/TP
         CALIBRATION ENTERED ON  07/24/88 AT 09:23:08              2435
                                  SOURCE NUMBER S17S20
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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 07/24/88      PRIMARY VERIFICATION     TIME 09:24:57

LSN         72.4         0.000     1.0000
SSN        123.3         0.000     1.0000
CN                                          0.1469       16.889  %

     DATE 07/24/88    BEFORE LOG VERIFICATION    TIME 09:29:01

LSN         73.8         0.000     1.0000
SSN        123.8         0.000     1.0000
CN                                          0.1490       16.448  %

     DATE 07/24/88     AFTER LOG VERIFICATION    TIME 15:39:59

LSN         72.0         0.000     1.0000
SSN        122.9         0.000     1.0000
CN                                          0.1465       16.966  %



      LOG NAME GR      ASSET NO. 73467    UNIT NO. HL 6406
  CALIBRATION ENTERED ON  07/24/88 AT 08:42:17

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

     DATE 07/08/88          CALIBRATION          TIME 12:22:32

GR     2196.3  6310.6    0.000     0.0890      0.000     150.000 API

                       PRIMARY VERIFICATION            NOT DONE

     DATE 07/24/88    BEFORE LOG VERIFICATION    TIME 08:47:42

GR     2166.1  6092.1    0.000     0.0890     78.970     222.105 API

     DATE 07/24/88     AFTER LOG VERIFICATION    TIME 15:44:05

GR     1177.6  5120.0    0.000     0.0890     42.931     186.664 API
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