Century WIRELINE SERVICES

GAMMA - NEUTRON
DHGH-14-37

COMPANY : ATRUM COAL
WELL : DHGH-14-37
FIELD : GROUNDHOG
COUNTRY : CANADA
PROVINCE : BRITISH COLUMBIA

OTHER SERVICES:
DENSITY

LSD : GROUNDHOG
SECTION : N/A
TOWNSHIP : N/A
RANGE : N/A
LICENSE NO. : N/A
UNIQUE WELL ID. : N/A

PERMANENT DATUM : GL
LOG MEASURED FROM : GL
DRL MEASURED FROM : GL
ELEVATION KB : N/A
ELEVATION DF : N/A
ELEVATION GL : N/A

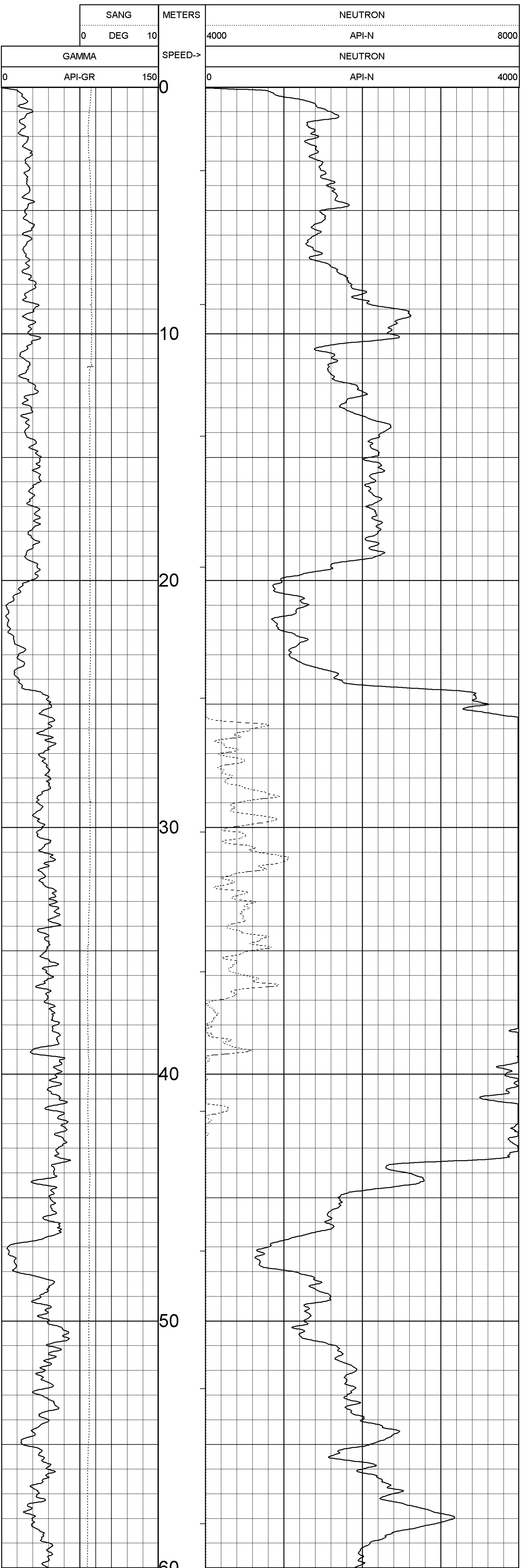
DATE : 08/15/14
DEPTH DRILLER : 350.21
BIT SIZE : 76.2
LOG TOP : -1.48
LOG BOTTOM : 349.84
CASING LOGGER : 25.91
CASING DRILLER : 25.91
CASING TYPE : STEEL
BOREHOLE FLUID : WATER
RM TEMPERATURE : N/A
MUD RES : N/A
MUD WEIGHT : 1.00
WITNESSED BY : N/A
RECORDED BY : T. NEAL
REMARKS 1 : VERTICAL
REMARKS 2 : IN-PIPE
RIG NUMBER :
LOGGER TD : 350.23
ARRIVAL TIME : 9:00
DEPARTURE TIME : 14:30
CIRC STOPPED : N/A

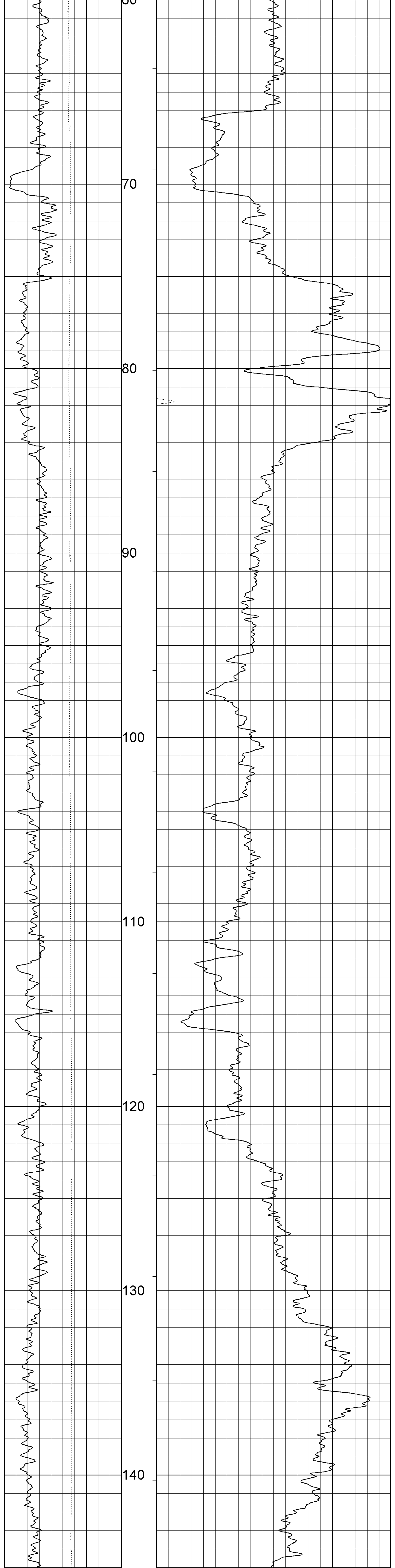
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

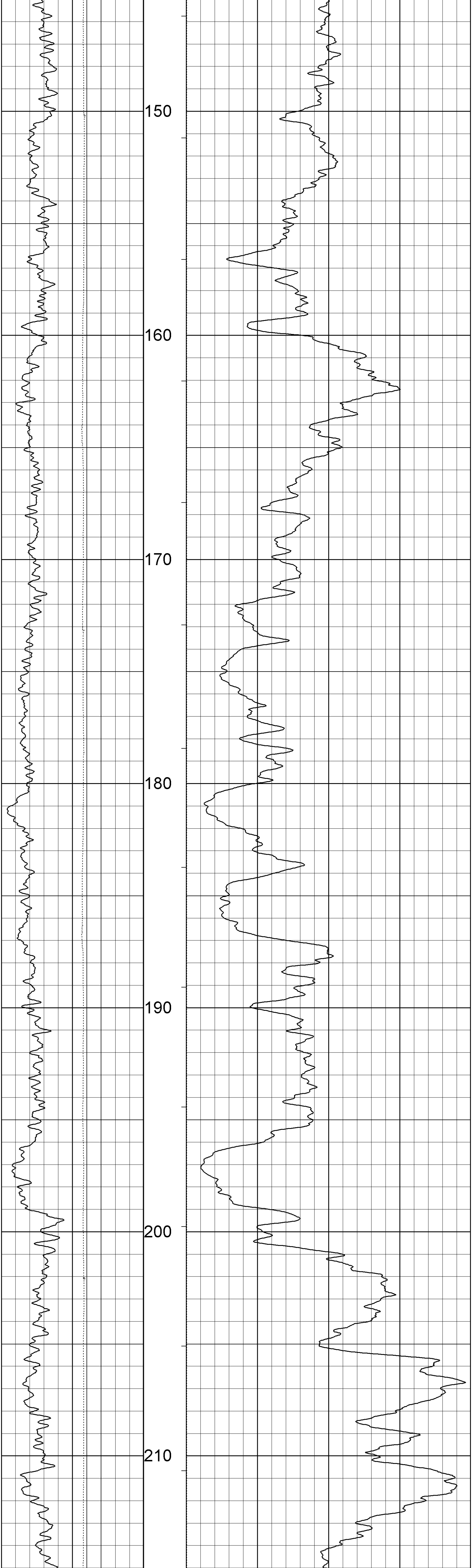
NEUTRON LOG 1:100 (THRU-PIPE) DHGH-14-37 08/15/14

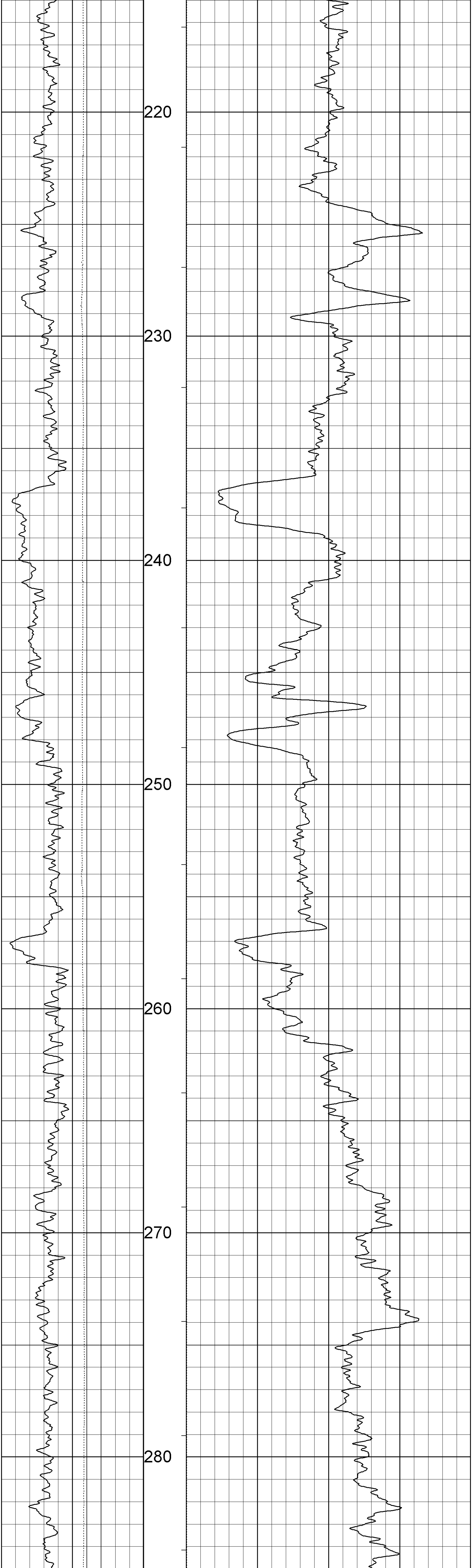
LOG PARAMETERS

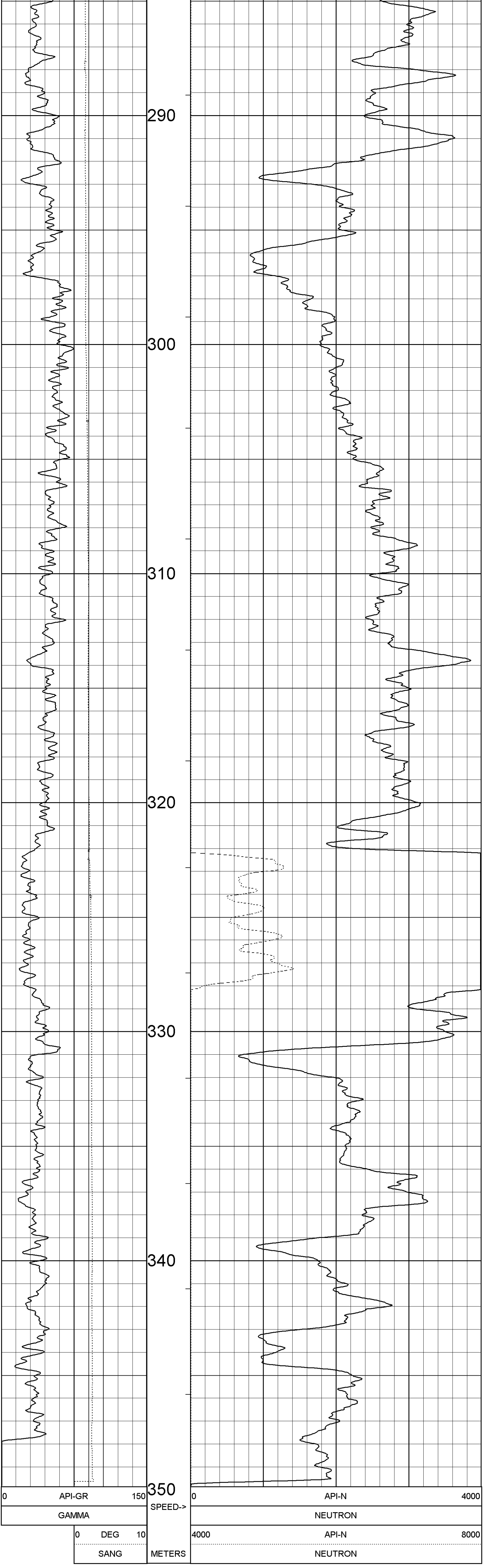
MATRIX DENSITY : 2.65
NEUTRON MATRIX : SANDSTONE
MATRIX DELTA T : 177
MAGNETIC DECL : 19.5
ELECT. CUTOFF : 75000
BIT SIZE : 76.2
PRESENTATION NAME/DATE = Atrum_9058_(IN-PIPE)_(100 scale).0 06/13/2014
VERSION = 3.64KX











NEUTRON LOG 1:100 (THRU-PIPE) DHGH-14-37 08/15/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
NEUTRON MATRIX : SANDSTONE
MATRIX DELTA T : 177
MAGNETIC DECL : 19.5
ELECT. CUTOFF : 75000
BIT SIZE : 76.2
PRESENTATION NAME/DATE = Atrum_9058_(IN-PIPE)_(100 scale).0 06/13/2014
VERSION = 3.64KX

```
TOOL CALIBRATION  DHGH-14-37 08/15/14 12:59
TOOL  9057A     TM VERSION 2
SERIAL NUMBER    4430
     DATE        TIME                SENSOR        STANDARD                       RESPONSE
1    Jul31,13    10:08:47            GAMMA      0.000    [API-GR  ]          0.100     [CPS]
     Jul31,13    10:08:47            GAMMA    545.000    [API-GR  ]        608.000     [CPS]
2    May20,14    14:08:03            NEUTRON    0.000    [API-N   ]          1.000     [CPS]
     May20,14    14:08:03            NEUTRC   271.000    [API-N   ]         58.000     [CPS]
3    Apr30,08    13:54:38            SP         0.000    [MV      ]     325650.000     [CPS]
     Apr30,08    13:54:38            SP        97.000    [MV      ]     277560.000     [CPS]
4    Jul02,07    07:07:18            RES(16N)   0.000    [OHM-M   ]       3892.000     [CPS]
     Jul02,07    07:07:18            RES(16N 1996.000    [OHM-M   ]     421781.000     [CPS]
5    Jul02,07    07:07:23            RES(64N)   0.000    [OHM-M   ]       3324.000     [CPS]
     Jul02,07    07:07:23            RES(64N 1990.000    [OHM-M   ]     426303.000     [CPS]
6    Jul31,13    12:32:13            TEMP      10.000    [DEG_F   ]     343298.000     [CPS]
     Jul31,13    12:32:13            TEMP      71.000    [DEG_F   ]     423631.000     [CPS]
7    Jul02,07    07:07:32            RES        0.000    [OHM     ]       4438.000     [CPS]
     Jul02,07    07:07:32            RES      989.000    [OHM     ]     162986.000     [CPS]
8    Jun26,07    13:31:00            POR(NEU  Default    [CPS]             Default     [CPS]
```