STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
BRIAN J. BOYLE, Commissioner of Public Lands
JAMES A. STEARNS, Department Supervisor

DIVISION OF GEOLOGY AND EARTH RESOURCES
Raymond Lasmanis, State Geologist

FLUID-TEMPERATURE LOGS FOR SELECTED WELLS IN EASTERN WASHINGTON

Compiled by

Keith L. Stoffel
Department of Natural Resources
Division of Geology and Earth Resources
Olympia, Washington 98504

and

Scott Widness
Department of Civil and Environmental Engineering
Geological Engineering Section
Washington State University
Pullman, Washington 99164

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Introduction

This Open-File Report consists of fluid temperature logs compiled during studies of the geohydrology and low temperature geothermal resources of eastern Washington. The work was carried out by personnel of the Geological Engineering Section, Department of Civil and Environmental Engineering, Washington State University and the Division of Geology and Earth Resources, Department of Natural Resources, with funding provided by the U.S. Department of Energy.

The fluid temperature logs are divided into two groups. Part A consists of wells which were studied by Scott Widness, Washington State University, and are concentrated in the Moses Lake-Ritzville-Connell area. Full geophysical log suites for many of these wells are presented in Stoffel and Widness (1983) and discussed in Widness (1983, 1984). Part B consists of wells outside of the Moses Lake-Ritzville-Connell study area.

Additional fluid temperature logs are available as part of full suites of geophysical logs for other eastern Washington wells. They are presented in Stoffel and Widness (1983).

A previous study of eastern Washington geohydrology by John Biggane, Washington State University, examined well logs for the Yakima area. Fluid temperature and other geophysical logs for these wells are presented and discussed in Biggane (1982a, 1982b, 1983).

PART A

Fluid Temperature Logs for Wells in the

Moses Lake-Ritzville-Connell Area

Part A:

Fluid Temperature Logs for portions of Adams, Franklin, Grant, southern Douglas, and southern Lincoln Counties. These logs were collected as part of a geohydrologic-geothermal study of the Moses Lake-Ritzville-Connell area (see figure 1). They are organized by ascending township, range, and section. For additional information about the study see Widness (1983 and 1984).

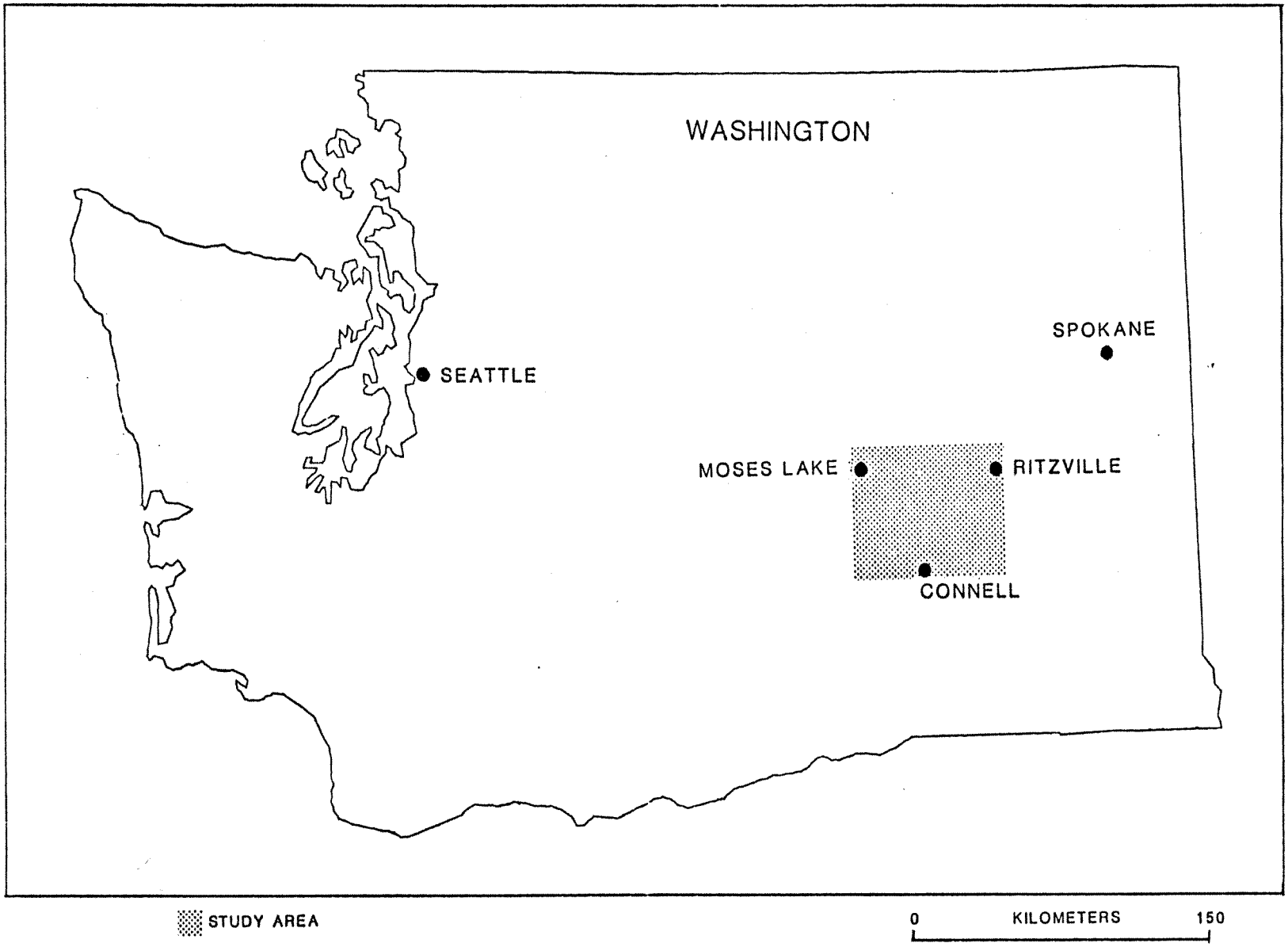

FIGURE 1 LOCATION OF THE STUDY AREA

Table 1. List of Wells with Fluid Temperature Logs for Part A.

Location T./R.-Sec.	Well Name	Elevation (meters)	Depth Logged (meters)	BHT[1/] (°C)
14N/31E-08H1	Rathbun, Corrin	333.8	196.3	16.0
14N/31E-08M1	Rathbun, Corrin	347.5	758.0	43.1
14N/31E-09J1	Rathbun, Corrin, #3	342.9	332.2	22.2
14N/31E-15C1	Kummer Farms	339.9	413.3	20.3
14N/32E-02P1	Hart, Frank	376.4	235.6	27.1
14N/32E-13E1	Hart, Dick	386.2	232.2	23.7
14N/32E-30P1	Connell City #7	265.2	252.4	17.8
14N/32E-31D1	Connell City #6	259.4	302.3	29.0
14N/33E-21N1	Heider, Walter	423.7	351.1	28.2
15N/29E-03P1	Othello City #5	320.7	298.4	29.4
15N/29E-04A1	Othello City #6	321.6	367.3	24.7
15N/30E-01L1	Matthews, Clyde #1	387.7	216.6	6.4
15N/30E-02H1	Matthews, Clyde #2	379.5	278.0	14.8
15N/30E-12K1	Meldrin, Ted	382.5	408.7	17.8
15N/31E-05L1	McKay, Ed	379.5	404.4	26.8
15N/31E-11E1	Lyle Enterprises #3	381.0	211.5	19.0
15N/31E-19A1	Johnson, Arthur	378.6	341.7	27.6
15N/31E-32M1	Kummer, Clarence #4	344.4	364.5	26.0
15N/32E-04B1	Damon, Don	381.0	266.2	21.9
15N/32E-16M1	Hatton Test #1 (DNR)	381.0	335.6	15.2
15N/32E-20D1	Hatton City #2	365.8	214.9	18.2
15N/32E-35E1	Hart, Cyril	376.4	307.8	22.9
15N/33E-02A1	Tompkins, Robert	452.6	252.1	24.9
15N/33E-15Q1	Strohmaier, Albert	438.6	202.4	18.1
15N/34E-27R1	Watson, Leroy	455.7	242.6	19.9
15N/36E-34F1	Blauert, Fred	323.1	213.0	25.3
16N/29E-34R1	Othello City #3	340.5	260.0	25.0
16N/30E-24D1	Kliphardt, G. W.	426.7	219.8	26.1
16N/30E-36K1	Damon, Mike	384.1	209.7	20.2
16N/30E-36K2	Damon (DNR)	381.0	241.4	24.7
16N/31E-15B1	Lyle, Rex	426.7	200.5	22.6
16N/31E-15Q1	Lyle, Rex (South)	429.2	409.9	27.5
16N/32E-11D1	Phillips, D. E., #12	446.5	310.0	28.2
16N/32E-14C1	Phillips, B., House	429.8	154.5	21.1
16N/32E-14D1	Phillips, D. E., #11	420.6	312.7	20.0
16N/32E-15D1	Phillips, D. E., #17	455.7	439.5	34.0
16N/32E-20N1	Phillips, R. V.	448.1	372.1	28.8
16N/32E-21E1	Phillips, D. E., #10	460.3	282.5	26.9
16N/32E-25D1	Phillips, D. E., #2	454.8	431.3	29.1
16N/32E-25N1	Phillips, D. E., #16	402.3	381.9	31.4
16N/32E-34E1	Phillips, D. E., C-34	424.6	772.6	41.4
16N/32E-35D1	Phillips, D. E., #9	448.7	272.2	24.2
16N/33E-20A1	Phillips, J. Boyd	484.6	444.4	19.8
16N/35E-31Q1	Baumann Farms	484.6	599.5	22.4
17N/30E-10P1	Warden City #6	390.1	253.3	14.8
17N/31E-12D1	Phillips, D. E., C-12	384.0	591.9	27.5
17N/31E-13N1	Burgeson, Jim	365.8	230.7	16.6

1/BHT: Bottom Hole Temperature or Maximum Temperature.

Table 1. (Cont'd)

Location T./R.-Sec.	Well Name	Elevation (meters)	Depth Logged (meters)	BHT[1/] (°C)
17N/32E-16R1	Kulm (DNR)	417.6	356.9	19.3
17N/33E-23A1	Baumgard, Carl	506.0	202.4	16.9
17N/35E-12L1	Kison, Rachel	499.9	135.6	19.3
17N/36E-07N1	Kautz, William B.	527.3	274.3	13.3
18N/29E-06Q1	American Potato #2	355.1	204.8	21.7
18N/31E-30K1	Dyck, Leo	396.9	188.1	15.0
18N/31E-33D1	Phillips, D. E., C-33	432.8	727.5	30.2
18N/36E-04A1	Heinemann, Don	539.2	281.0	16.3
19N/28E-23D1	Moses Lake City #7	324.6	282.2	23.8
19N/28E-23J1	Moses Lake City #5	358.1	210.3	17.7
19N/28E-28K1	Moses Lake City #4	327.7	293.5	16.2
19N/28E-29M1	Moses Lake City #31	321.6	140.2	20.6
19N/29E-03F2	Fode, Roy, #2	413.6	322.2	29.0
19N/29E-04H1	Shinn, Frank, #2	399.9	280.7	25.7
19N/29E-09H1	Shinn, Frank, #1	395.6	175.3	14.1
19N/29E-14J1	Jett-Aero #2	411.5	218.2	21.5
19N/29E-15A1	Masto Farms	416.1	288.6	21.1
19N/30E-15L1	Radach, Jerry	439.5	359.6	16.6
19N/30E-16J1	Sparks, Dave, (East)	442.6	279.2	15.9
19N/30E-16M1	Sparks, Dave, (West)	438.9	289.2	18.8
19N/30E-17M1	Schmidt, Reuben	432.8	224.6	21.9
19N/30E-20D1	Jett-Aero #1	435.0	311.8	25.8
19N/30E-28E1	Basin Produce	420.0	211.8	18.5
19N/31E-24G1	Kagele, Norman	449.0	164.6	20.0
19N/32E-24K1	S & K Farms	530.4	242.9	20.8
19N/32E-24N1	J & M Farms	510.2	694.9	32.5
19N/33E-08Q1	Hoefel, Paul	561.4	231.3	20.7
19N/33E-08Q2	Hoefel, Paul, #2	556.3	745.2	42.3
19N/34E-20B1	Kagele, Melvin	566.0	341.7	19.7
19N/36E-09K1	Gering, Gale	566.9	229.2	21.1
19N/36E-15A1	Gering, Gale	580.6	380.4	19.7
19N/36E-22J1	Templin, Del	568.2	197.8	16.2
19N/36E-34M1	Heinemann, Don	539.2	136.5	18.9
19N/36E-34N1	Heinemann, Don, #2	539.2	102.4	20.8
20N/29E-07H1	Cole, E. B.	94.7	214.9	21.0
20N/29E-15H1	Cole, Ivan	416.1	158.2	14.3
20N/29E-25C1	Reinke Farms	433.4	405.7	26.3
20N/29E-35A1	Powers, Tom	408.4	292.6	26.6
20N/30E-21G1	Claassen, Clint	475.5	469.7	28.7
20N/30E-23A1	Franz, Herb, #2	500.2	218.5	21.9
20N/30E-23E1	Franz, Herb, #1	484.0	335.9	26.6
20N/30E-28R1	Stucky, J. Jantz	464.8	178.3	20.3
20N/30E-32K1	Neibaur/West	445.0	382.5	21.1
20N/31E-05C1	Kissler, Merlin	501.4	172.5	19.0
20N/33E-16E1	Odessa Test (DOE)	507.5	225.5	14.5
20N/33E-19B1	Schorzman, Ray	541.0	238.0	19.5
20N/34E-02Q1	Weber, John	594.4	201.5	21.0
20N/34E-10F1	Weizel, Leroy	583.7	236.8	18.3

[1/]BHT: Bottom Hole Temperature or Maximum Temperature.

Table 1. (Cont'd)

Location T./R.-Sec.	Well Name	Elevation (meters)	Depth Logged (meters)	BHT[1/] (°C)
20N/35E-17D1	Hardung, Lavine	604.1	227.1	15.3
20N/35E-24D1	Ahern, Cliff	592.8	157.0	20.6
20N/35E-27A1	Kagele, Richard	611.1	364.8	15.6
21N/31E-10M1	Basalt Explorer #1	490.7	1340.1	64.5
21N/31E-22L1	Bates, Don, #2	533.4	477.9	17.8
21N/31E-30L1	Kissler, Bob	512.1	143.2	15.9
21N/31E-30R1	Kissler, Bob	502.0	263.3	23.8
21N/31E-32D1	Kissler, Fred	508.7	209.4	19.6
21N/31E-32D2	Kissler, Bob	509.0	365.7	18.9
21N/32E-23F1	Schaffer, Jerry	552.3	297.2	23.8
21N/33E-09E1	Odessa City	490.7	201.2	14.5
21N/34E-33C1	Hardung, Joe	585.2	241.7	24.7

1/BHT: Bottom Hole Temperature or Maximum Temperature.

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CORRIN RATHBUN
DATE LOGGED	01/20/77
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/31E-08H1
SURFACE ELEVATION	1095
TOTAL DEPTH LOGGED	644
DEPTH TO WATER LEVEL	200

CASING & LINERS:

0- 18=16

LEGEND

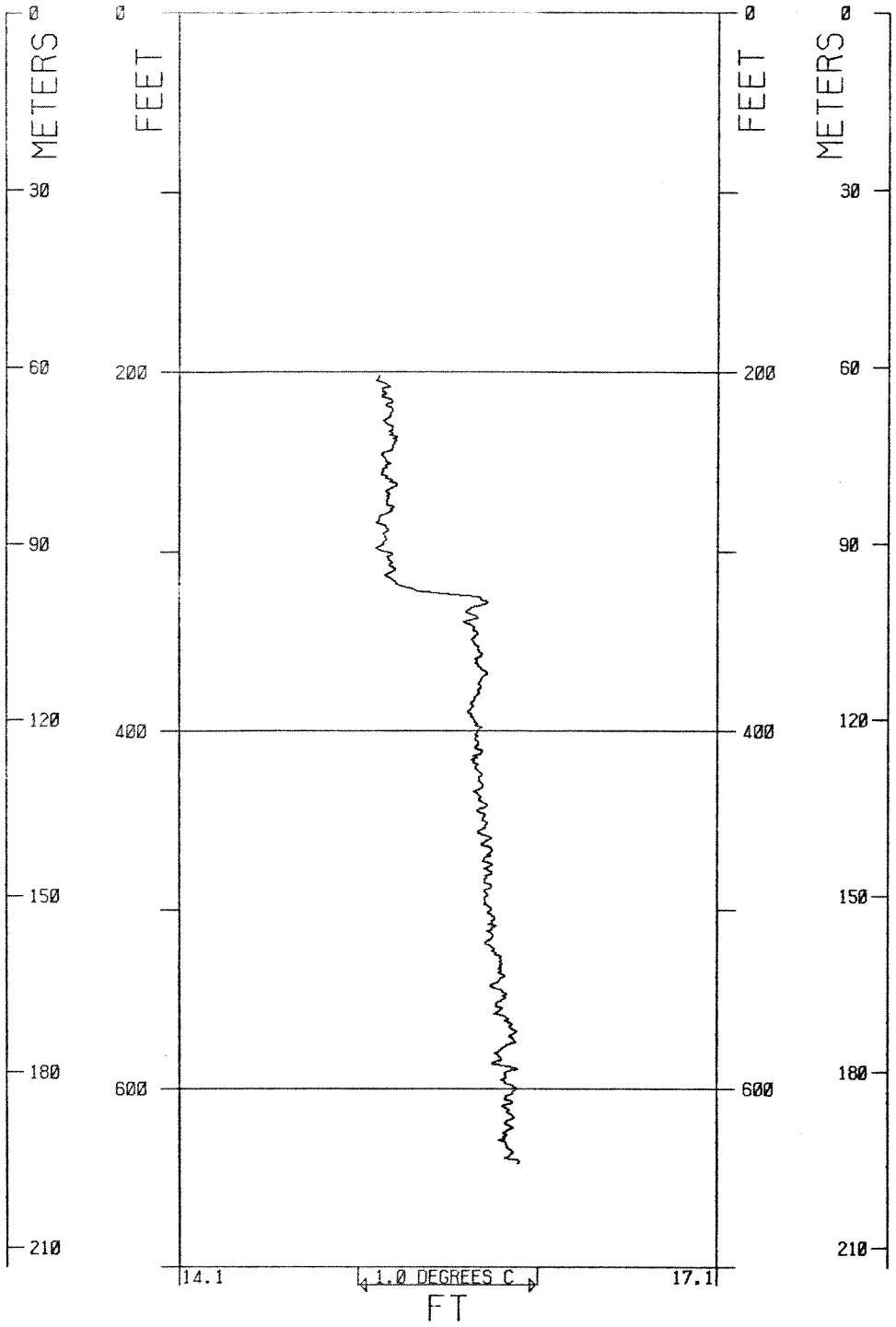
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW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14N/31E-08H1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CORRIN RATHBUN
DATE LOGGED	03/18/80
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/31E-08M1
SURFACE ELEVATION	1140
TOTAL DEPTH LOGGED	2487
DEPTH TO WATER LEVEL	216

CASING & LINERS:
0- 115=20

LEGEND

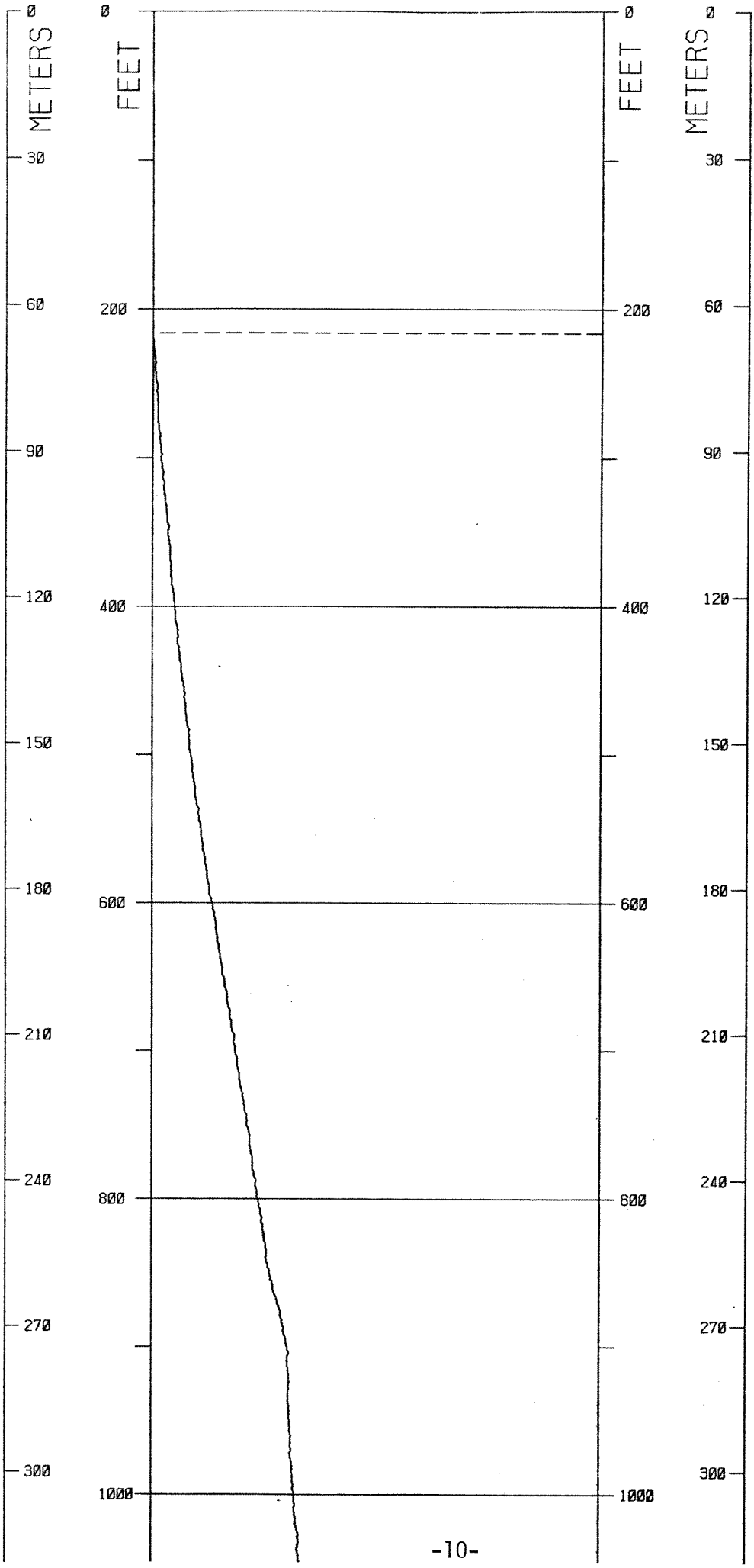
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/20/83 SEW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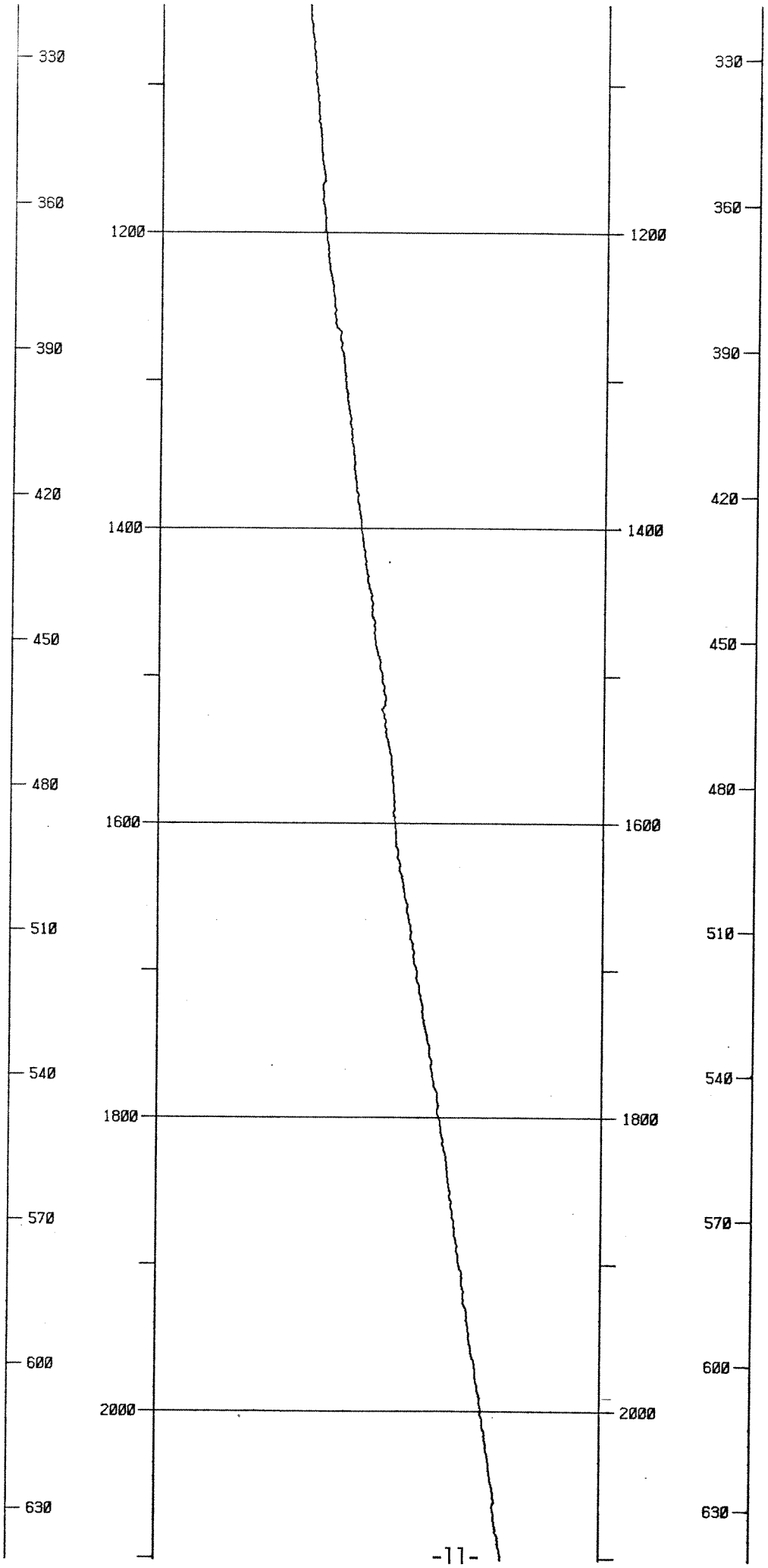
14N/31E-08M1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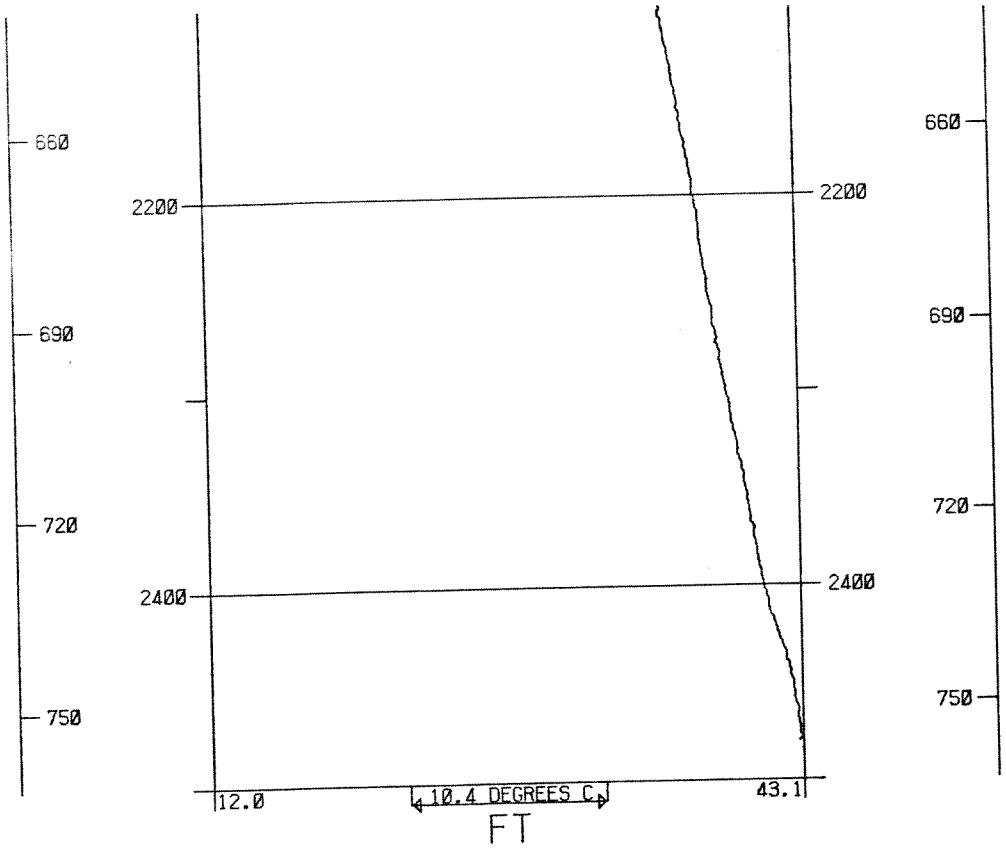

14N/31E-08M1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RATHBUN #3
DATE LOGGED	07/11/79
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/31E-09J1
SURFACE ELEVATION	1125
TOTAL DEPTH LOGGED	1090
DEPTH TO WATER LEVEL	500

CASING & LINERS:
0- 19=16

LEGEND

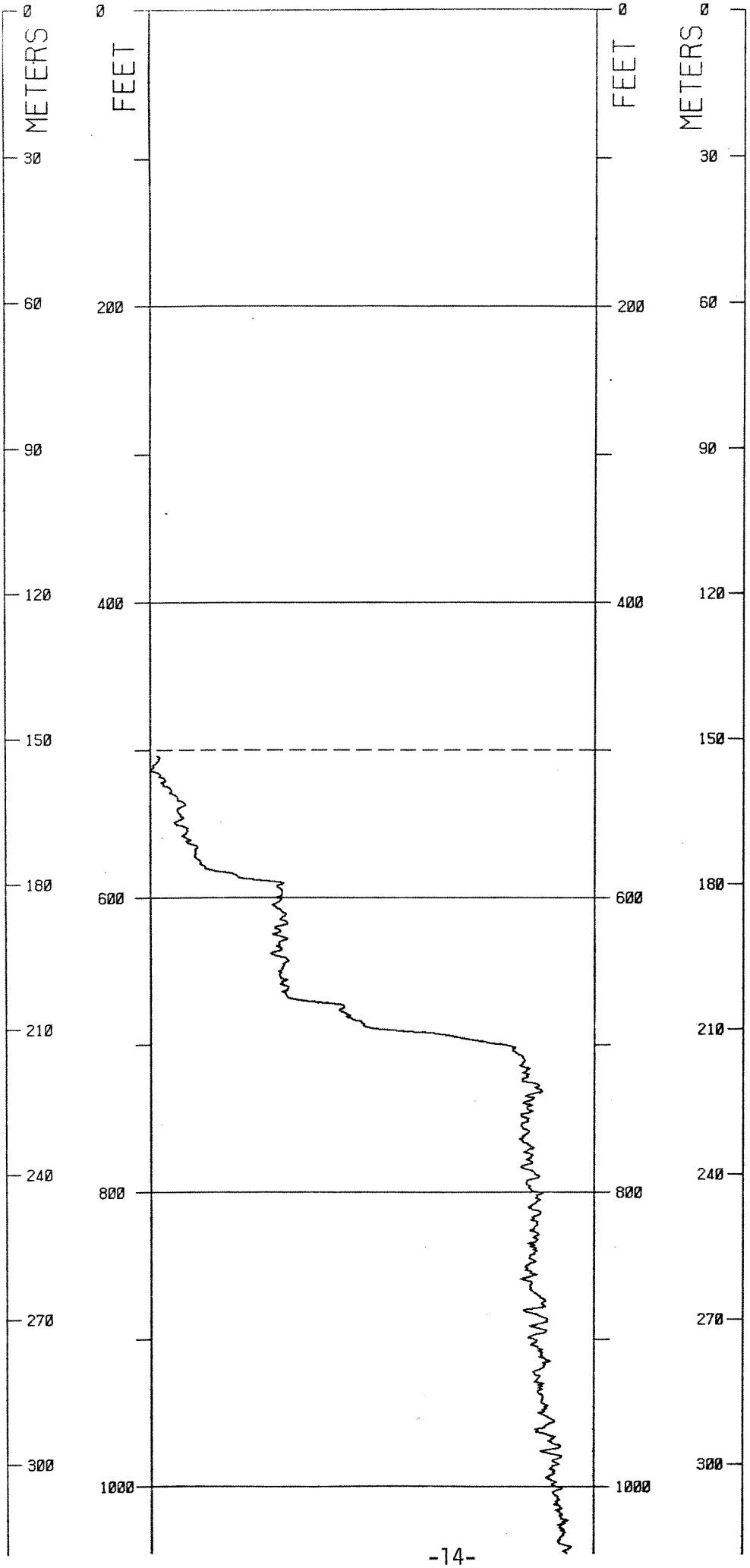
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/20/83 SEW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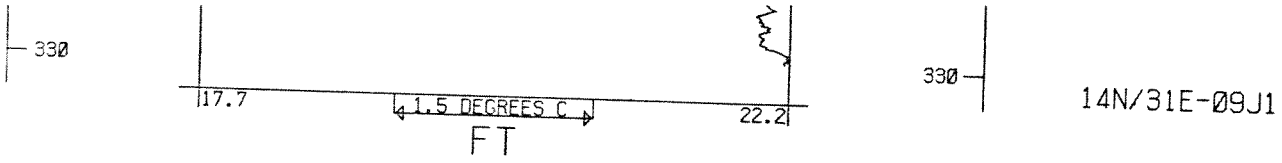
14N/31E-09J1



14N/31E-09J1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	KUMMER FARMS
DATE LOGGED	11/13/79
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/31E-15C1
SURFACE ELEVATION	1115
TOTAL DEPTH LOGGED	1356
DEPTH TO WATER LEVEL	385
CASING & LINERS:	
Ø- 1Ø=16	

LEGEND

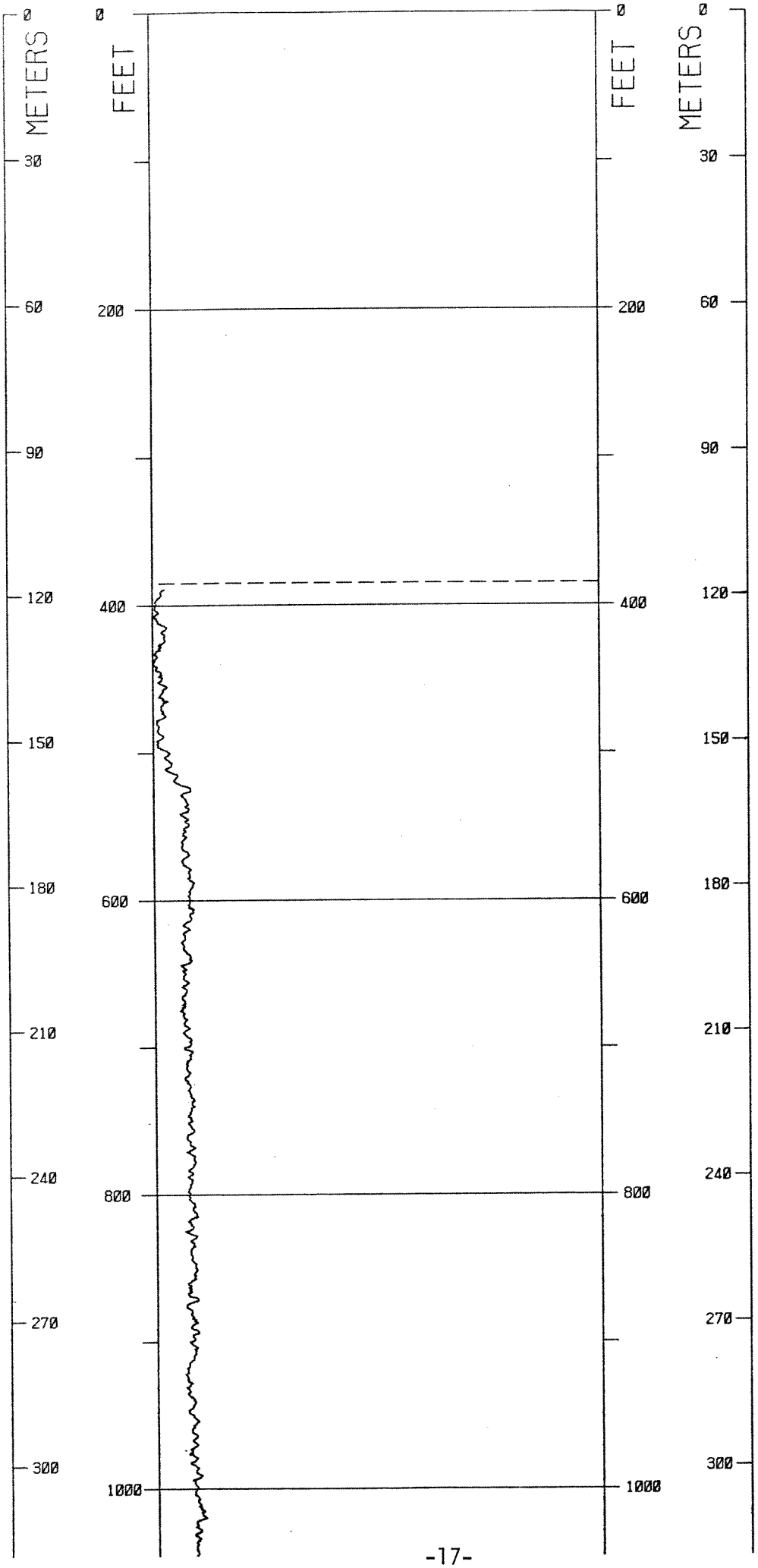
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/2Ø/83 SEW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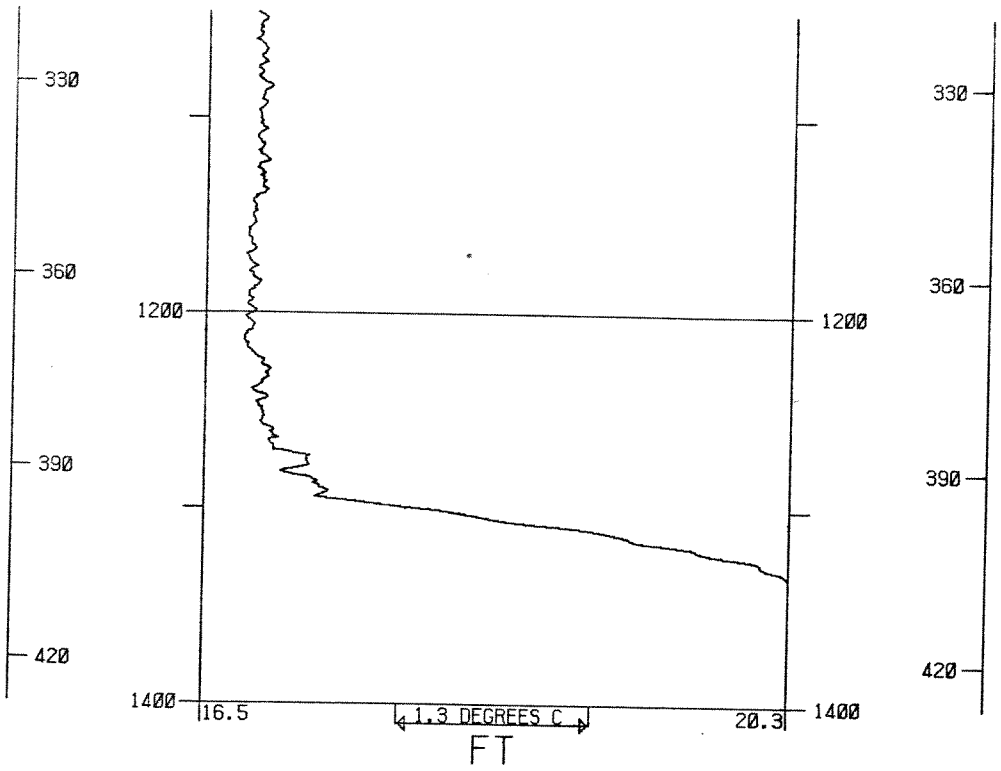

14N/31E-15C1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	FRANKLIN HART
DATE LOGGED	06/20/69
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/32E-02P1
SURFACE ELEVATION	1235
TOTAL DEPTH LOGGED	773
DEPTH TO WATER LEVEL	550

CASING & LINERS:
0- 21=15 780- 871=9

LEGEND

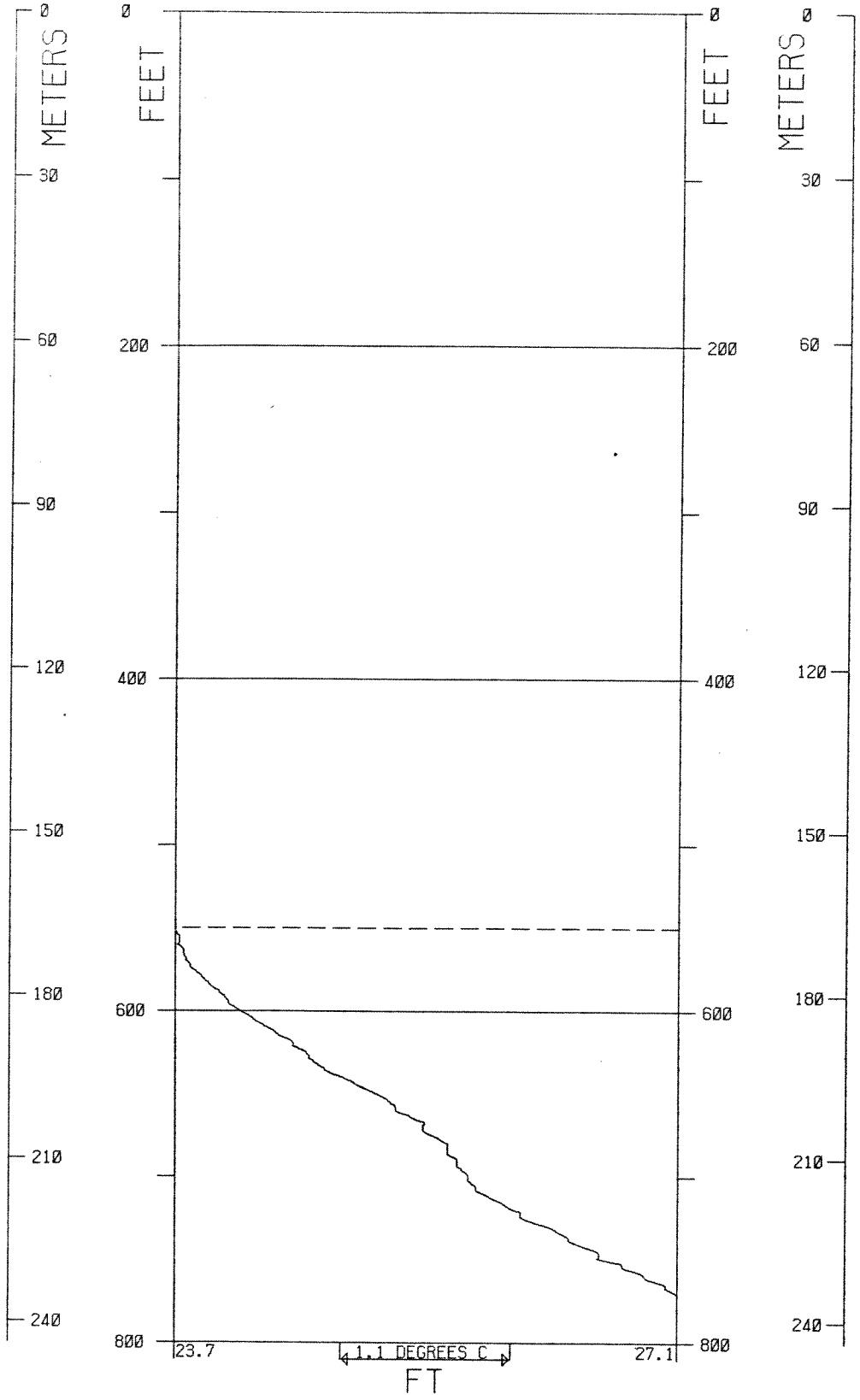
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/15/83 SEW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14N/32E-02P1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DICK HART
DATE LOGGED	11/10/71
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/32E-13E1
SURFACE ELEVATION	1267
TOTAL DEPTH LOGGED	762
DEPTH TO WATER LEVEL	586
CASING & LINERS:	

LEGEND

LOG TITLES

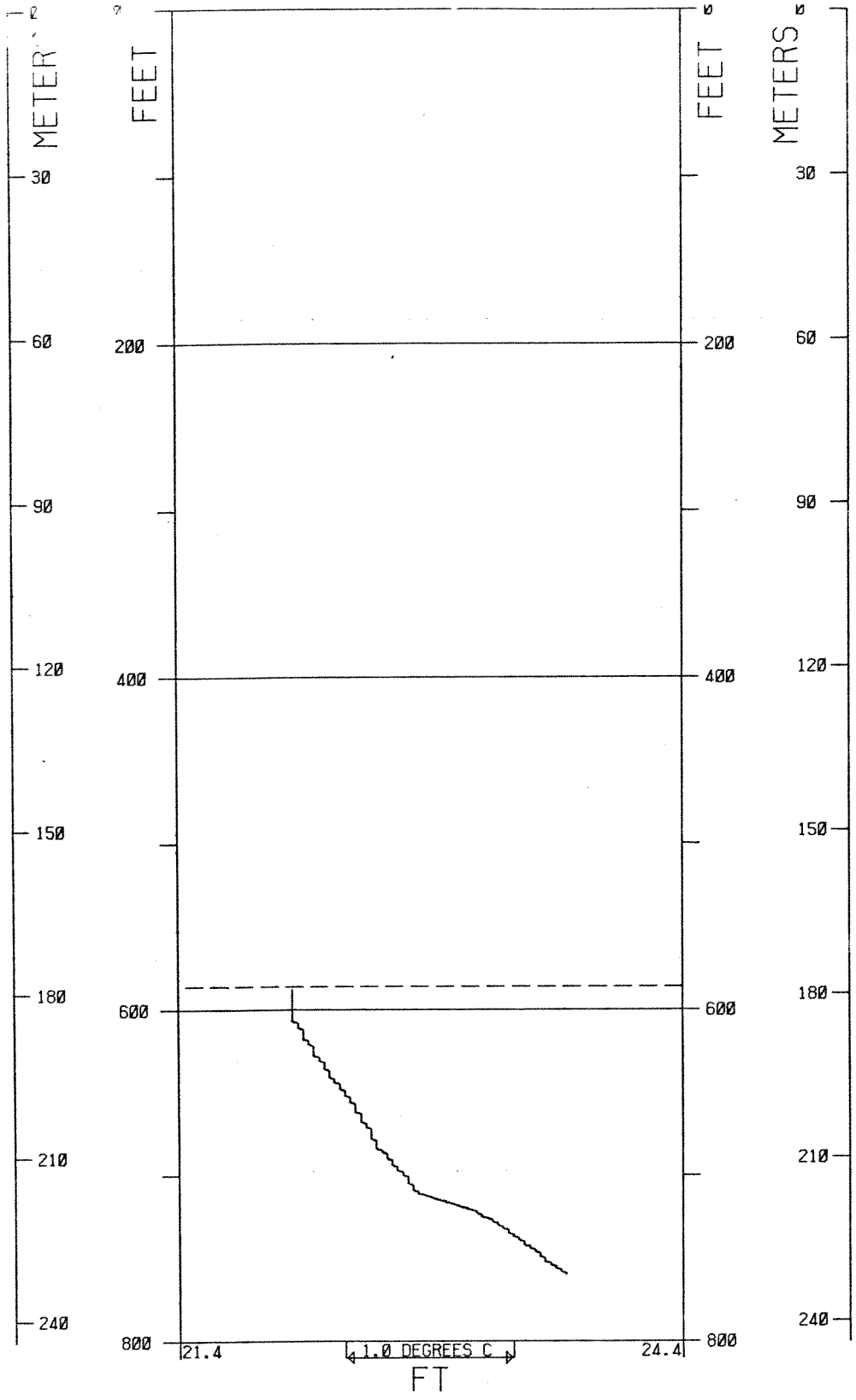
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

14N/32E-13E1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FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CONNELL CITY #7
DATE LOGGED	06/18/76
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/32E-30P1
SURFACE ELEVATION	840
TOTAL DEPTH LOGGED	828
DEPTH TO WATER LEVEL	205
CASING & LINERS:	
0- 105=12	

LEGEND

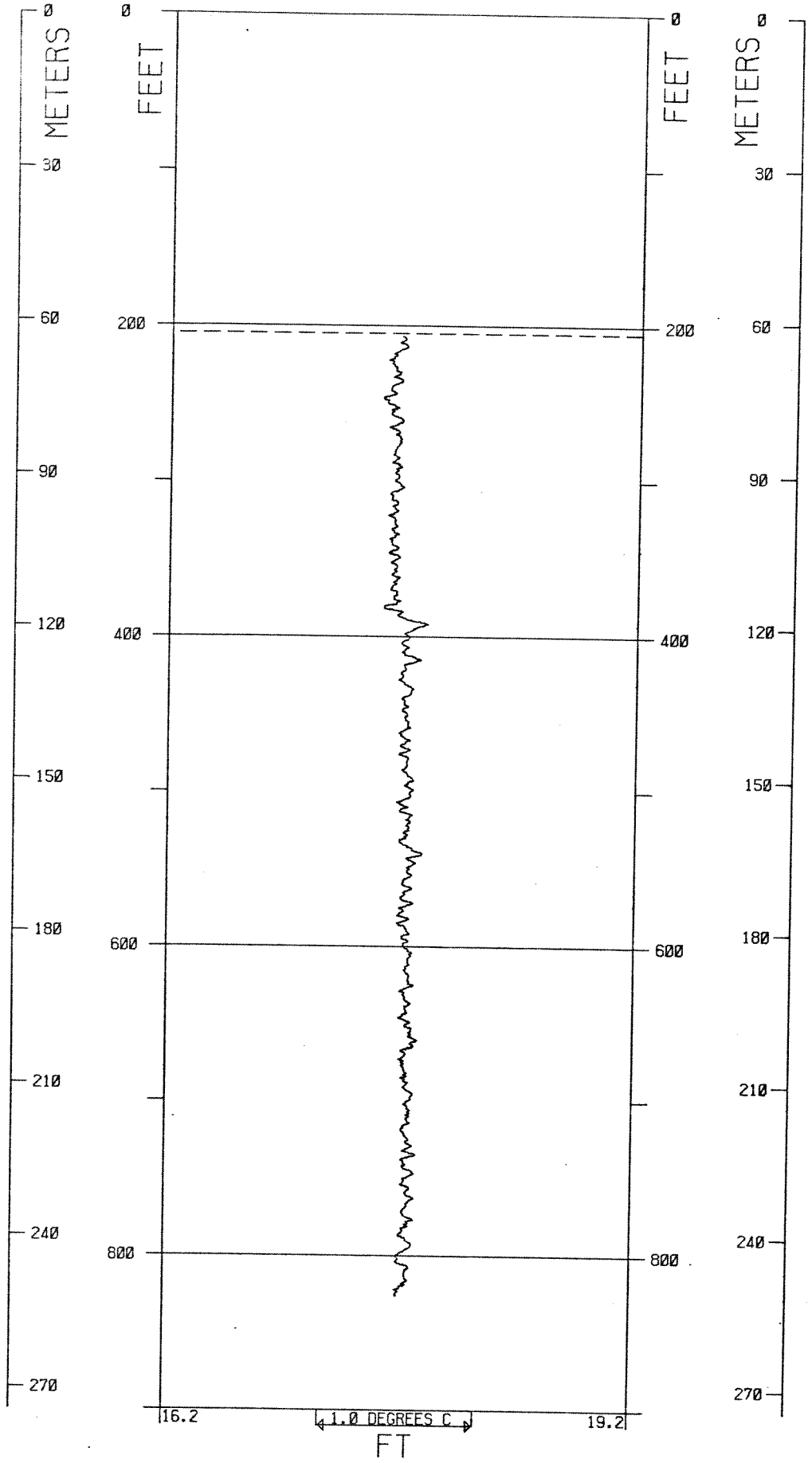
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/19/83 SEW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16.2
1.0 DEGREES C
19.2
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14N/32E-30P1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CONNELL CITY #6
DATE LOGGED	01/20/72
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/32E-31D1
SURFACE ELEVATION	851
TOTAL DEPTH LOGGED	992
DEPTH TO WATER LEVEL	214

CASING & LINERS:
0- 147=14

LEGEND

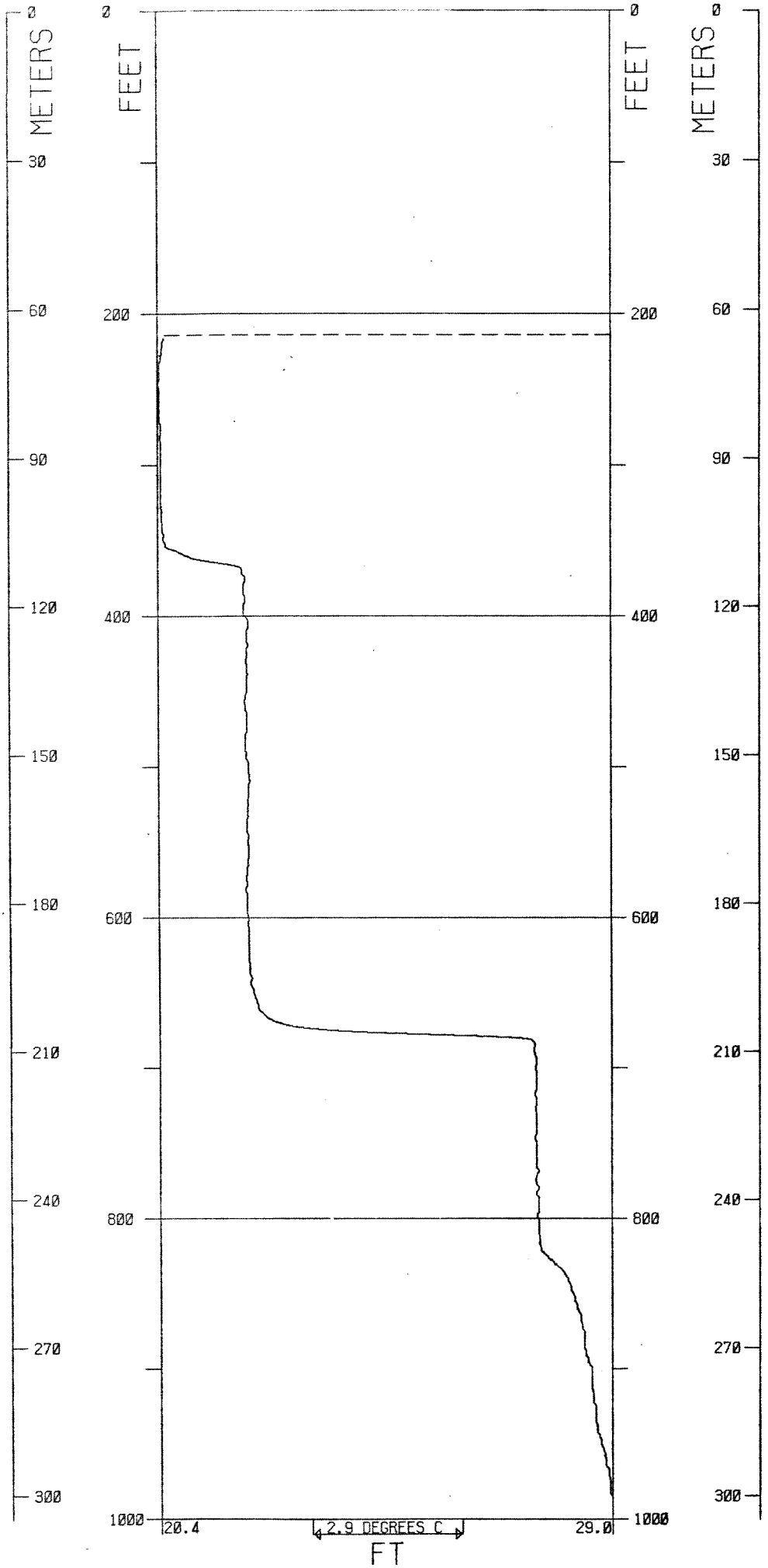
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW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14N/32E-31D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	WALTER HEIDER
DATE LOGGED	Ø2/15/75
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	14N/33E-21N1
SURFACE ELEVATION	139Ø
TOTAL DEPTH LOGGED	1152
DEPTH TO WATER LEVEL	929

CASING & LINERS:
Ø- 13Ø= 6

LEGEND

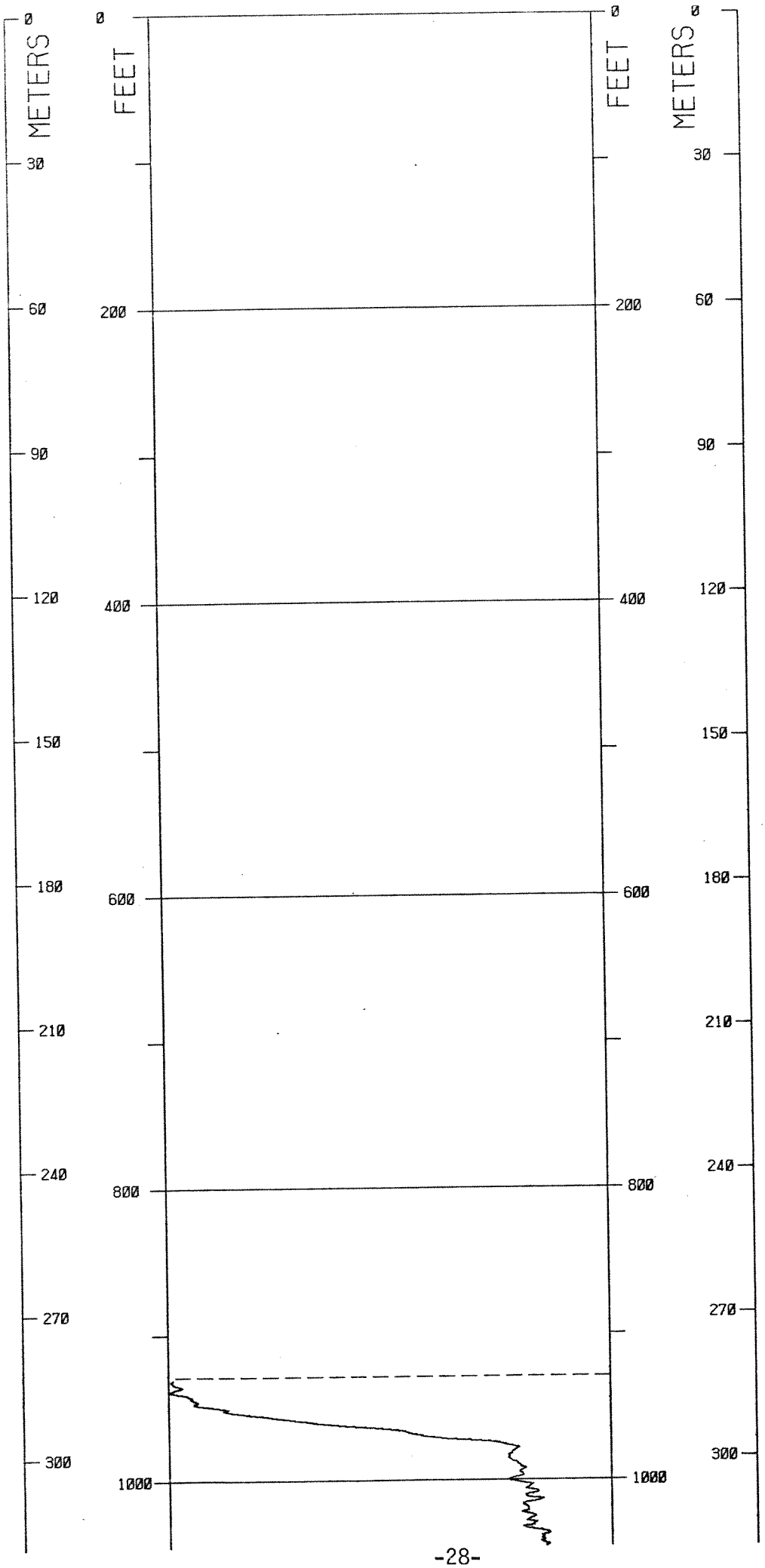
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/2Ø/83 SEW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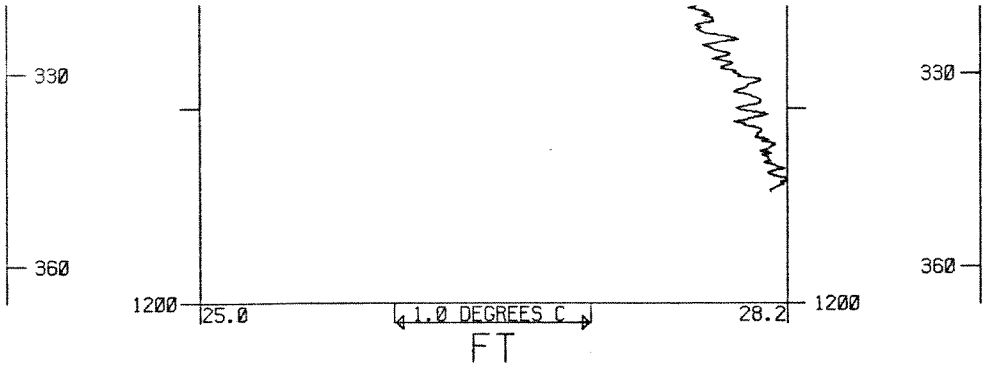
14N/33E-21N1



14N/33E-21N1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	OTHELLO CITY #5
DATE LOGGED	05/06/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/29E-03P1
SURFACE ELEVATION	1050
TOTAL DEPTH LOGGED	979
DEPTH TO WATER LEVEL	252

CASING & LINERS:

0- 81=30 0- 192=24 0- 372=20
0- 666=16

LEGEND

LOG TITLES

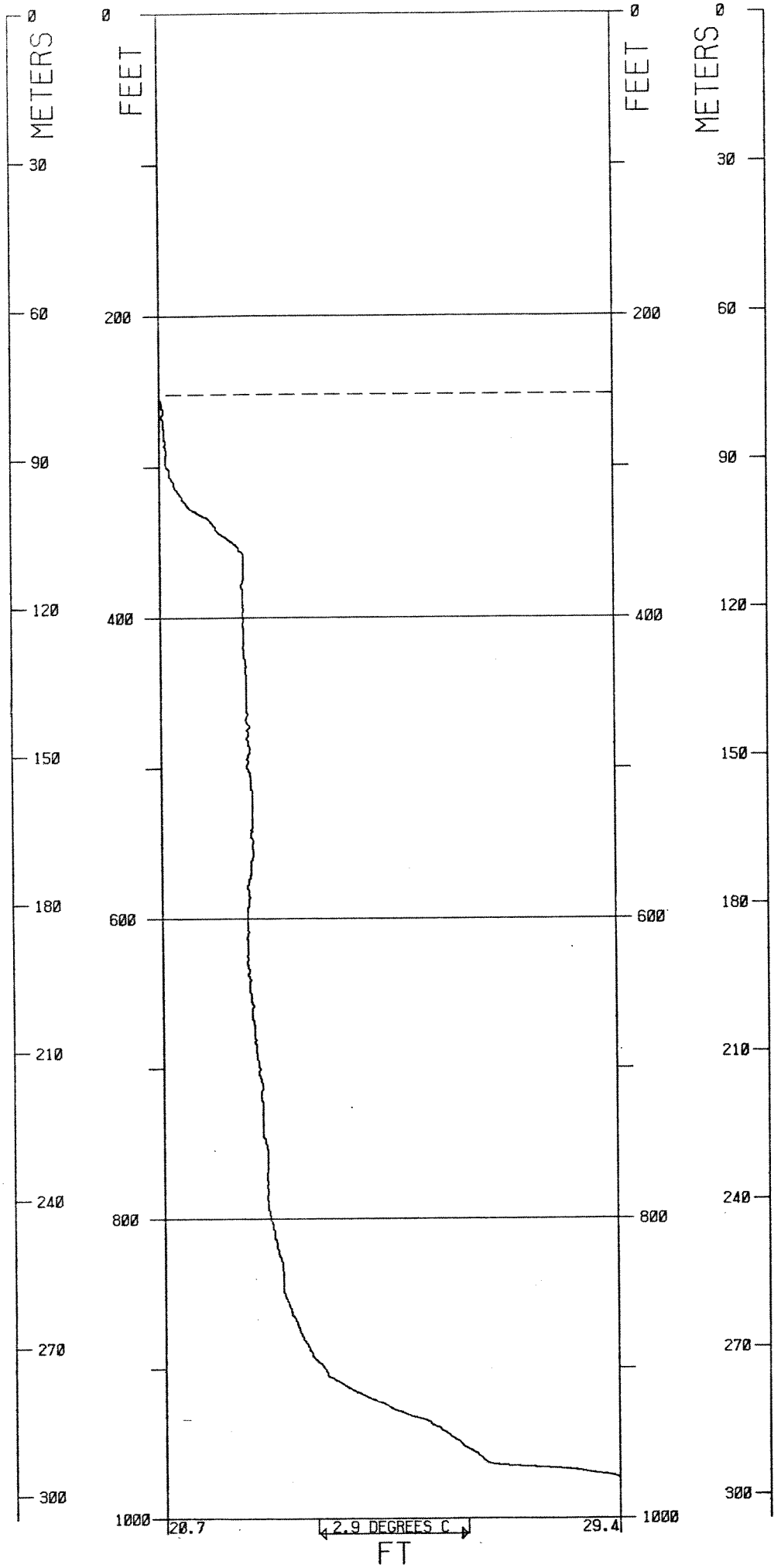
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW

15N/29E-03P1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2.9 DEGREES C
29.4
FT

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	OTHELLO CITY #6
DATE LOGGED	02/15/79
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/29E-04A1
SURFACE ELEVATION	1055
TOTAL DEPTH LOGGED	1199
DEPTH TO WATER LEVEL	247
CASING & LINERS:	
0- 220=20	

LEGEND

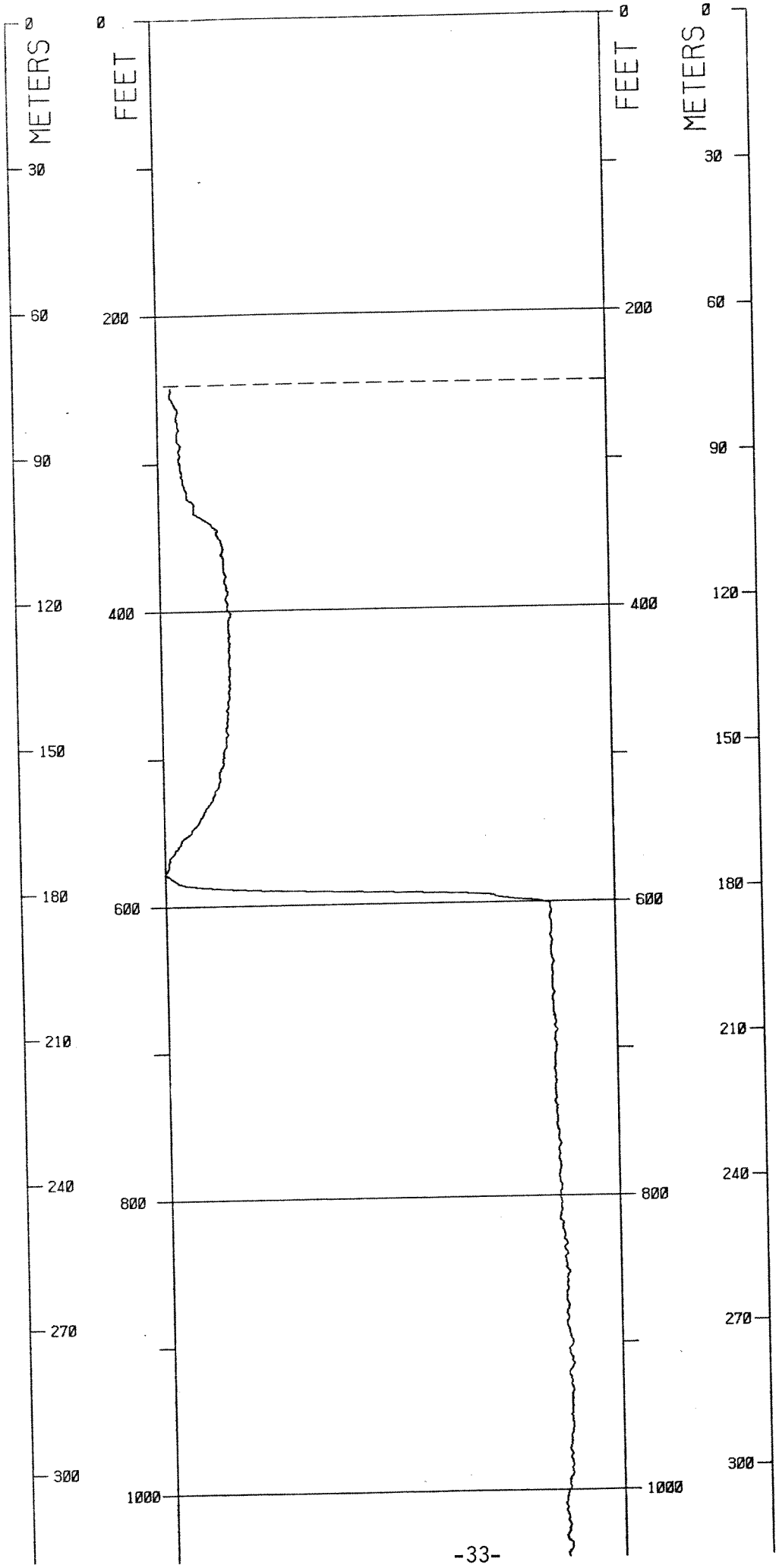
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW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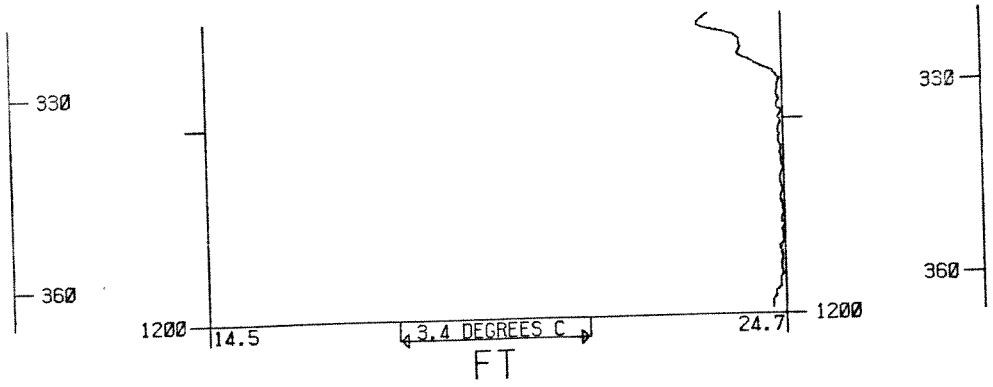
15N/29E-04A1



15N/29E-04A1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CLYDE MATTHEWS #1
DATE LOGGED	12/11/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/30E-01L1
SURFACE ELEVATION	1272
TOTAL DEPTH LOGGED	678
DEPTH TO WATER LEVEL	182
CASING & LINERS:	
0- 62=15	

LEGEND

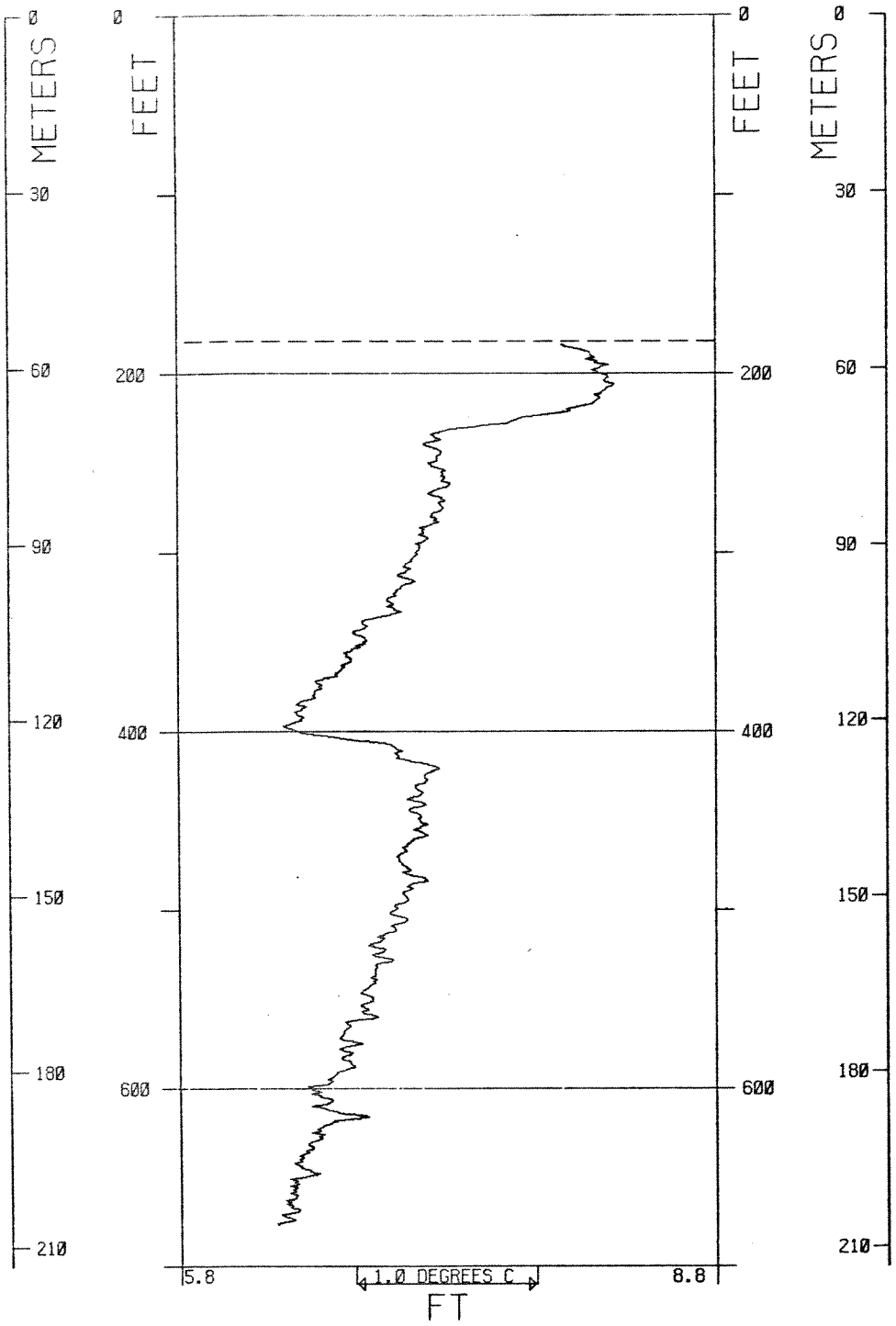
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW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15N/30E-01L1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CLYDE MATTHEWS #2
DATE LOGGED	12/09/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/30E-02H1
SURFACE ELEVATION	1245
TOTAL DEPTH LOGGED	912
DEPTH TO WATER LEVEL	81

CASING & LINERS:
0- 92=17

LEGEND

LOG TITLES

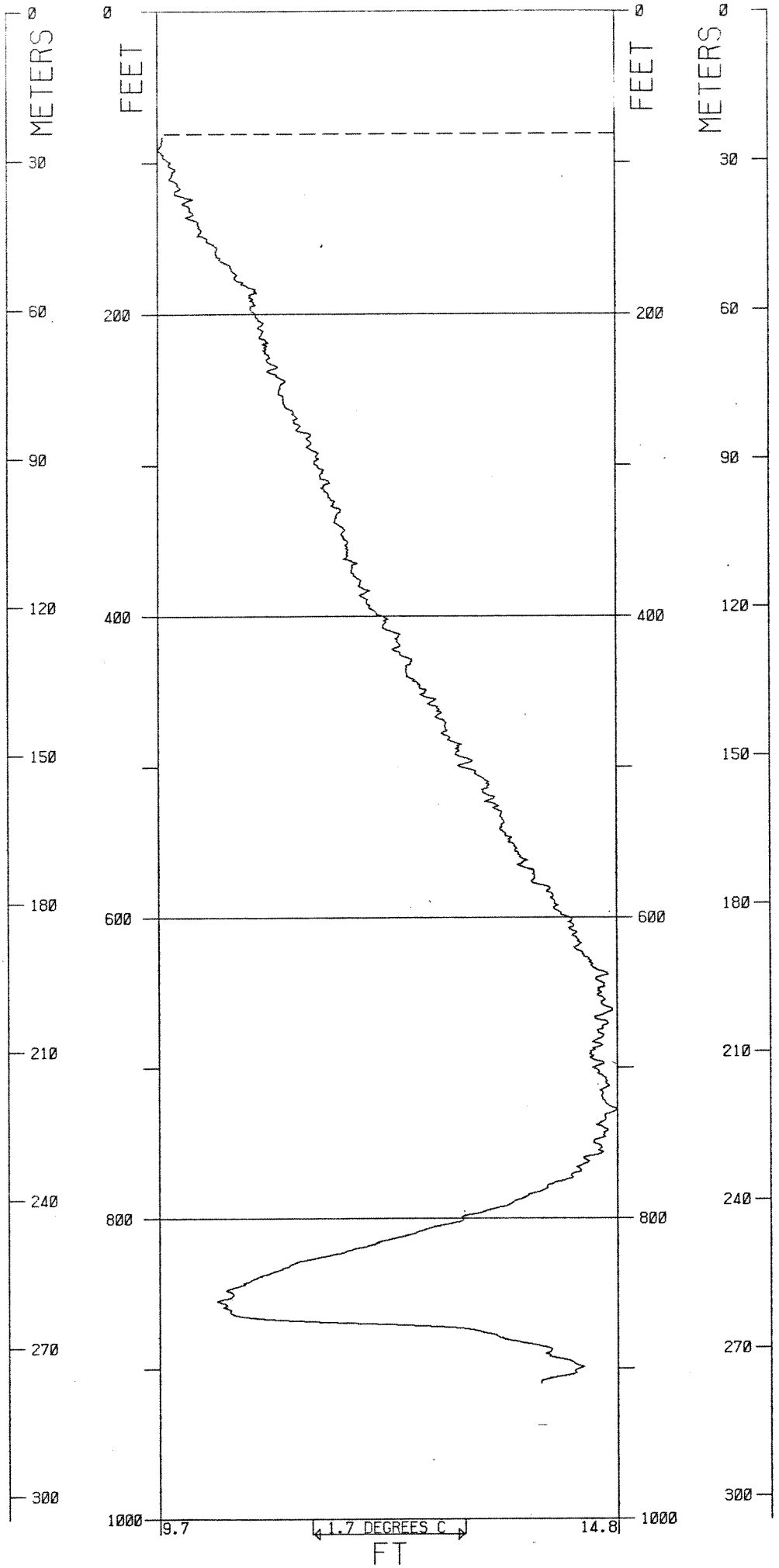
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/15/83 SEW

15N/30E-02H1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1000
9.7
1.7 DEGREES C
14.8
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	TED MELDRIN
DATE LOGGED	02/12/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/30E-12K1
SURFACE ELEVATION	1255
TOTAL DEPTH LOGGED	1341
DEPTH TO WATER LEVEL	139

CASING & LINERS:
0- 425=16

LEGEND

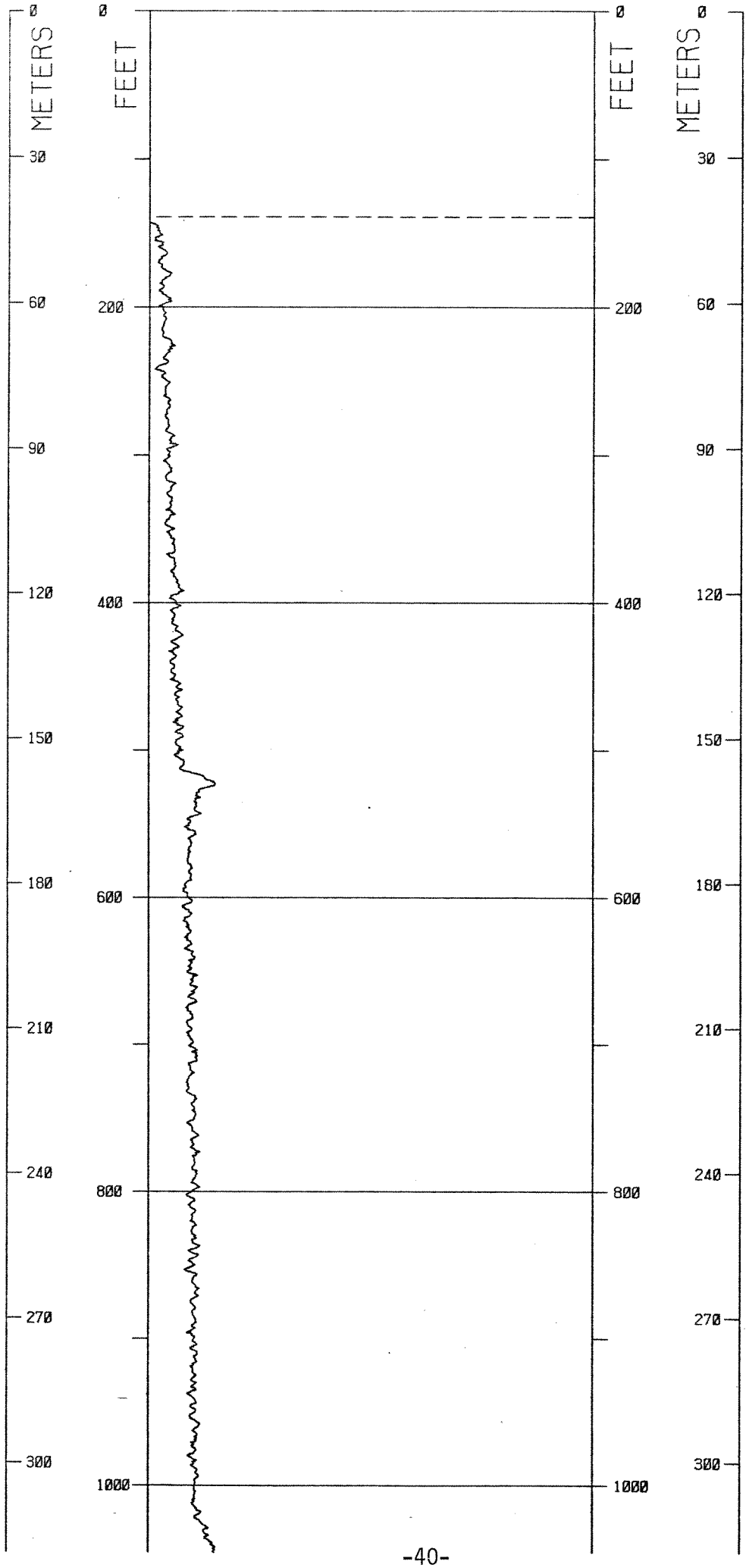
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW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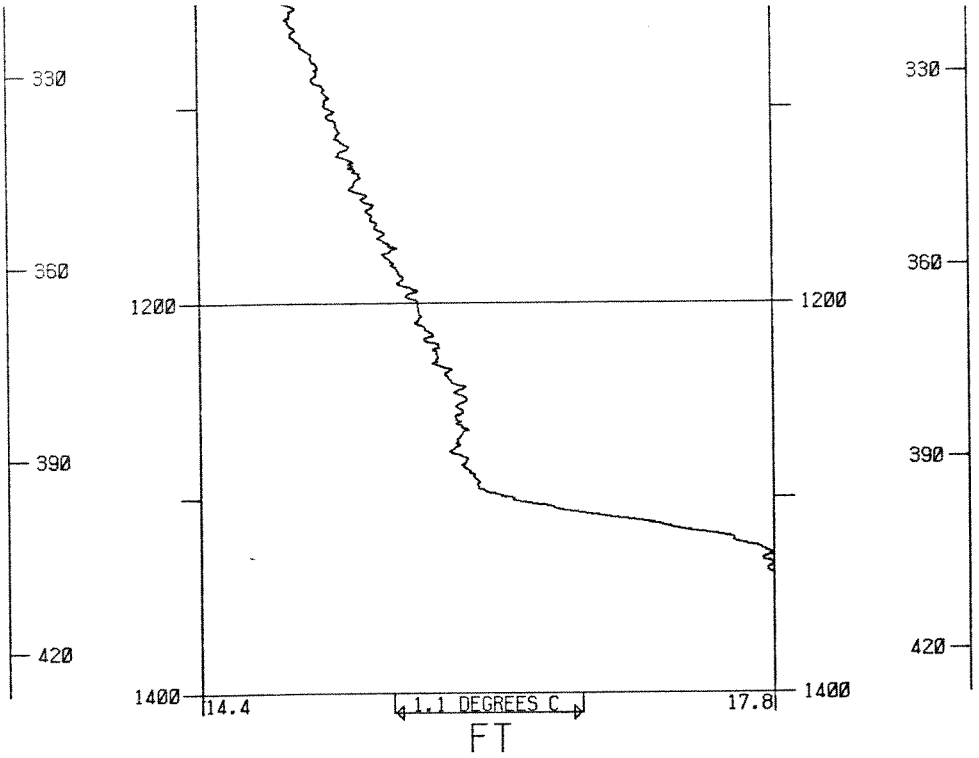
15N/30E-12K1



15N/30E-12K1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ED MCKAY
DATE LOGGED	05/19/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/31E-05L1
SURFACE ELEVATION	1245
TOTAL DEPTH LOGGED	1327
DEPTH TO WATER LEVEL	597
CASING & LINERS:	

LEGEND

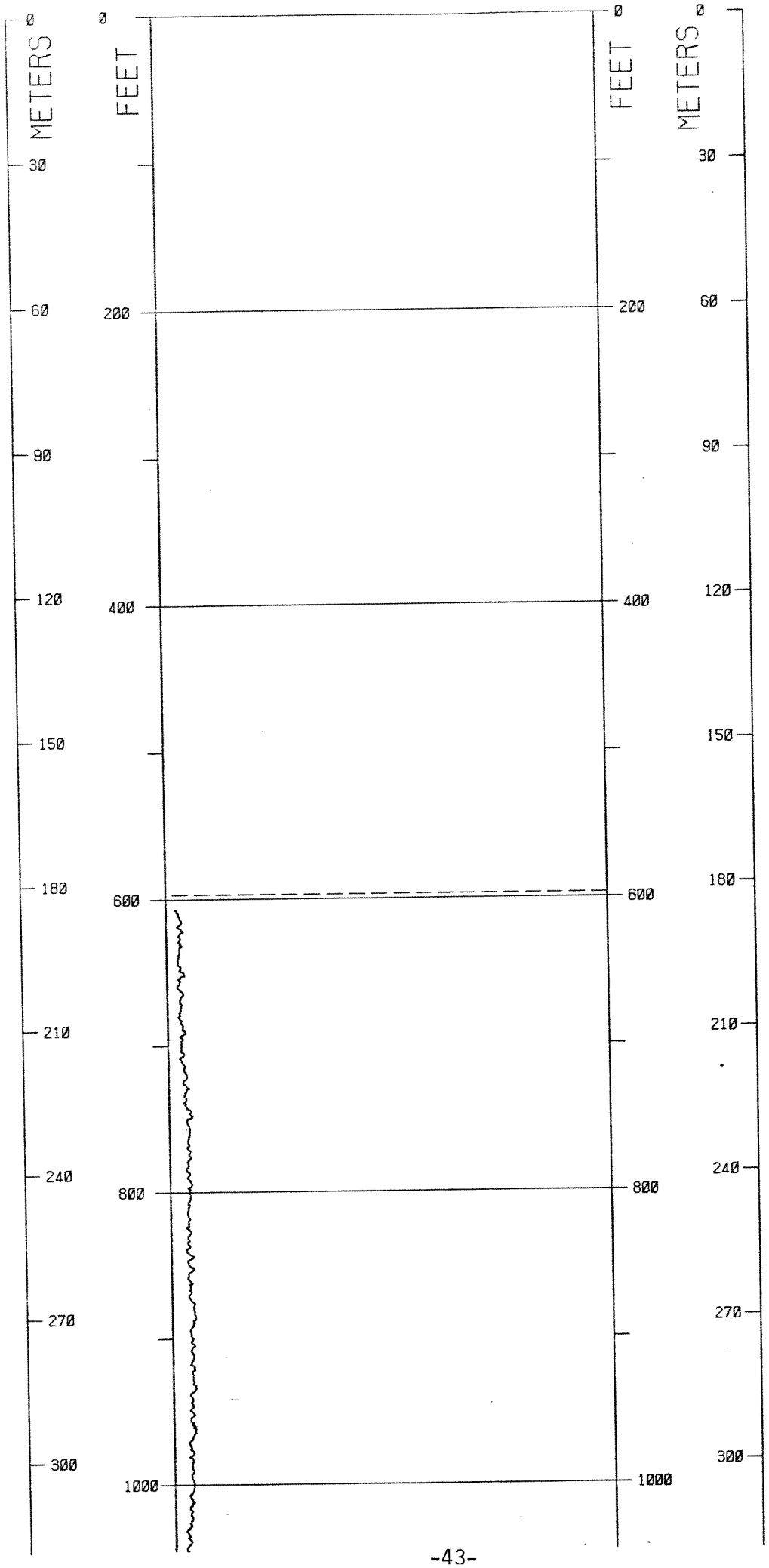
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▷
POROSITY (NN-LOG) INCREASES ◁——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW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15N/31E-05L1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LYLE #3
DATE LOGGED	09/05/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/31E-11E1
SURFACE ELEVATION	1250
TOTAL DEPTH LOGGED	694
DEPTH TO WATER LEVEL	319

CASING & LINERS:
0- 42=15

HAND DIGITIZED.

LEGEND

LOG TITLES

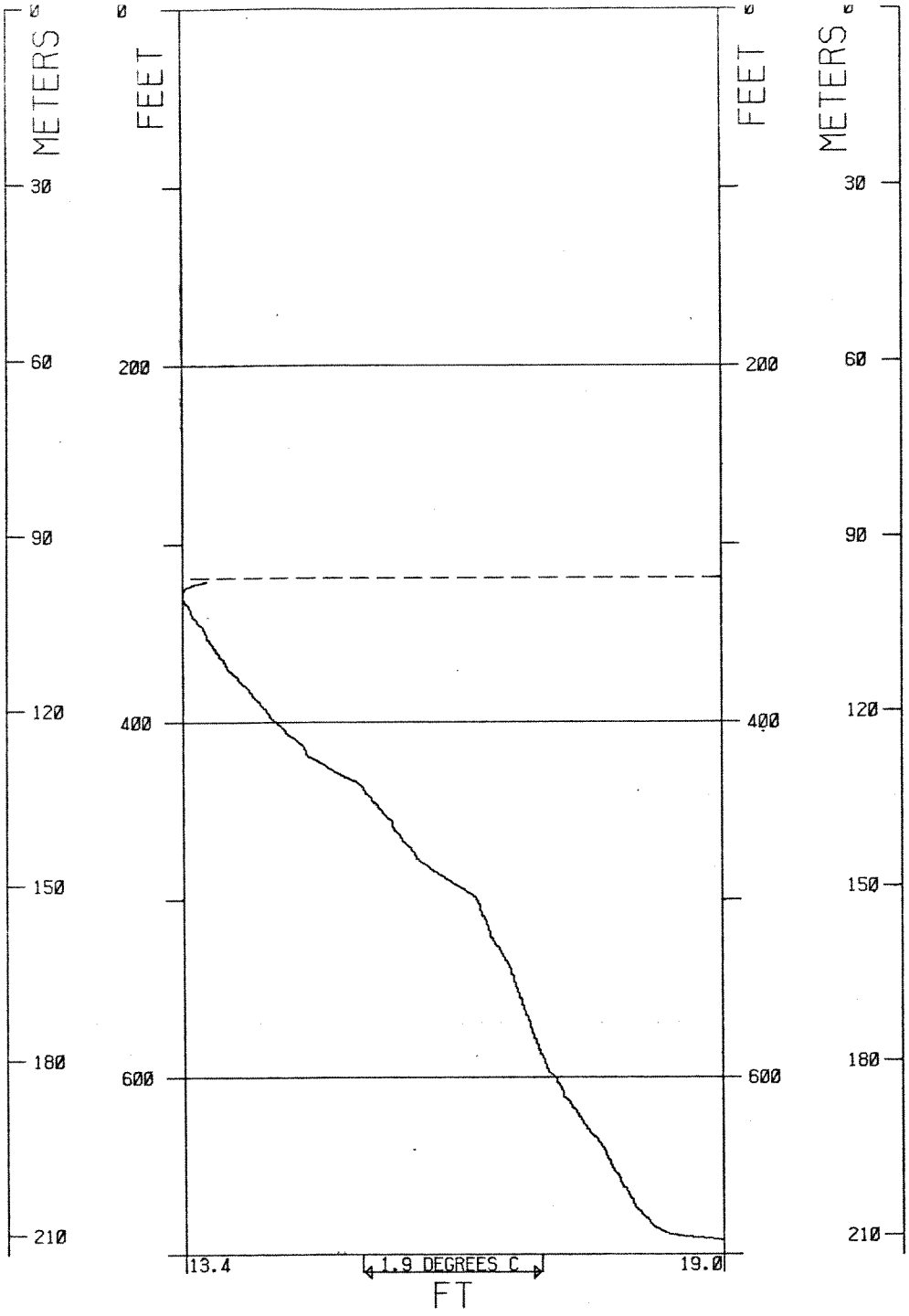
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▷
POROSITY (NN-LOG) INCREASES ◁——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

15N/31E-11E1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1.9 DEGREES C
19.0
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ARTHUR JOHNSON
DATE LOGGED	Ø5/11/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/31E-19A1
SURFACE ELEVATION	1242
TOTAL DEPTH LOGGED	1121
DEPTH TO WATER LEVEL	255

CASING & LINERS:
Ø- 57=19 Ø- 425=15

LEGEND

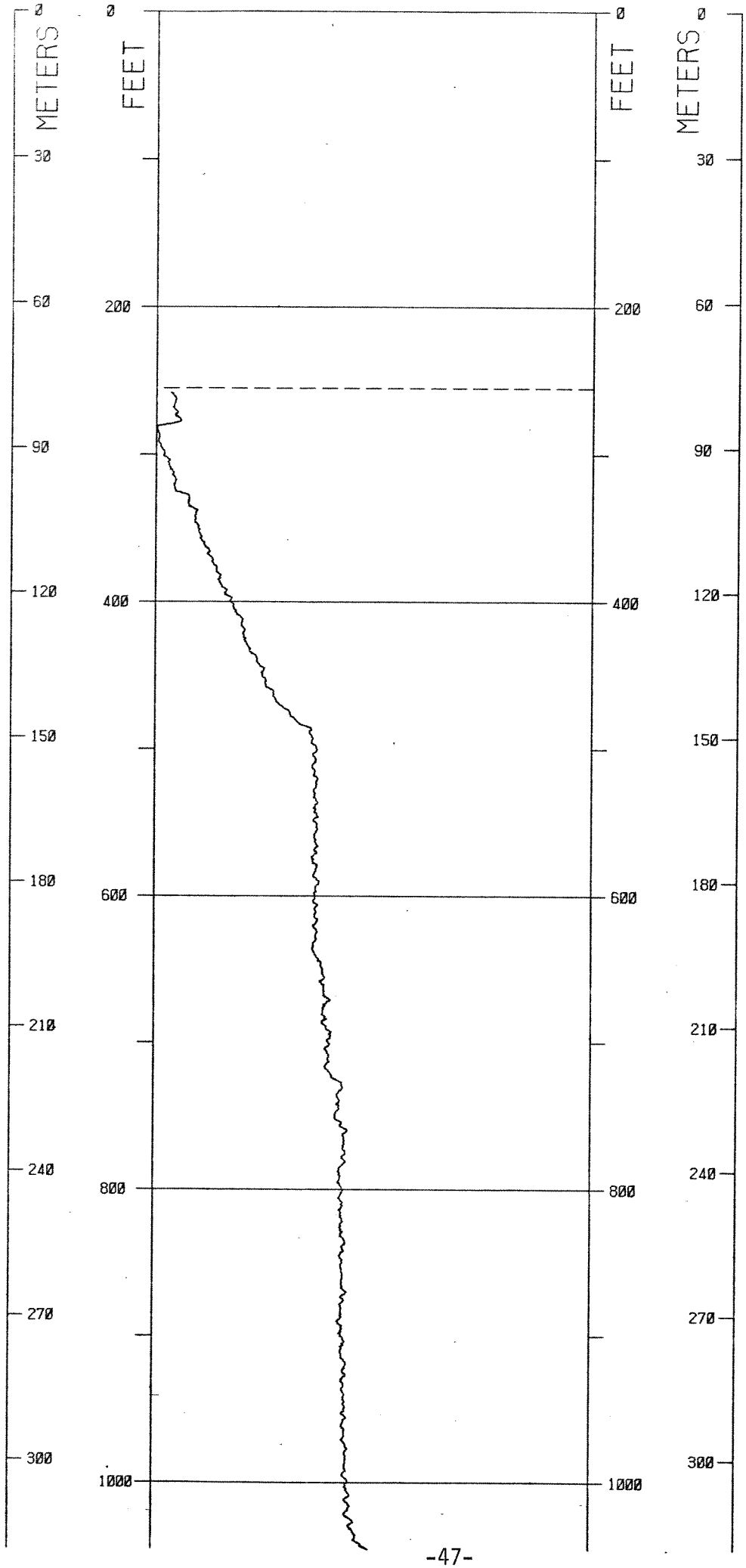
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/21/83 SEW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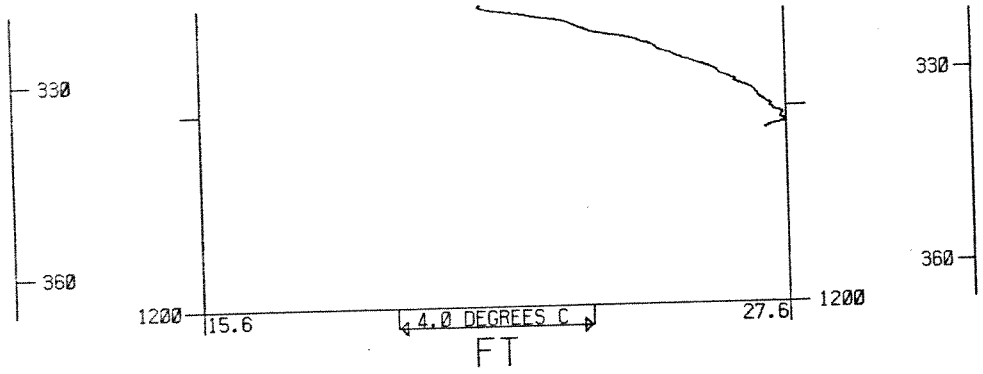
15N/31E-19A1



15N/31E-19A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CLARENCE KUMMER #4
DATE LOGGED	03/20/80
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/31E-32M1
SURFACE ELEVATION	1130
TOTAL DEPTH LOGGED	1196
DEPTH TO WATER LEVEL	347

CASING & LINERS:
0- 34=19

LEGEND

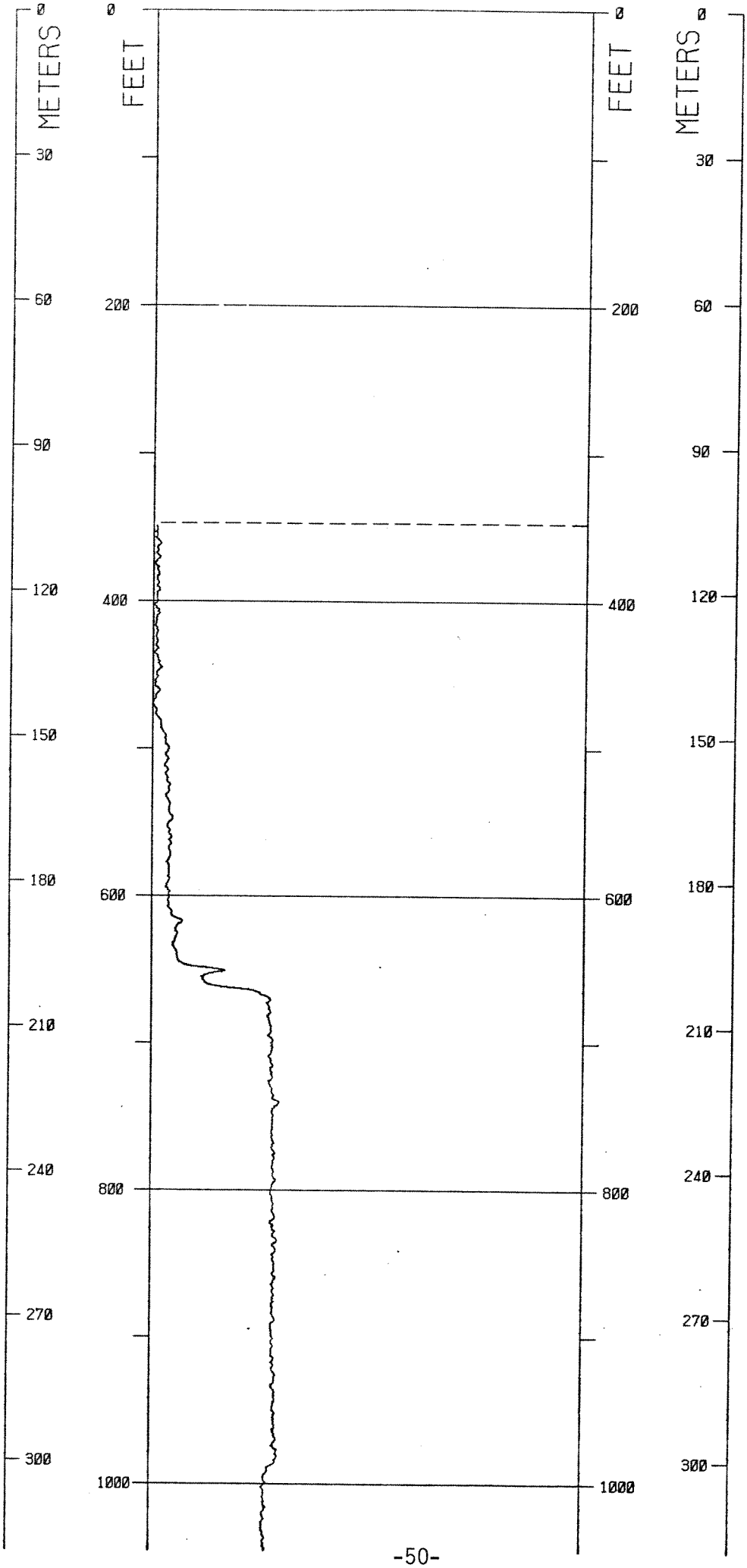
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW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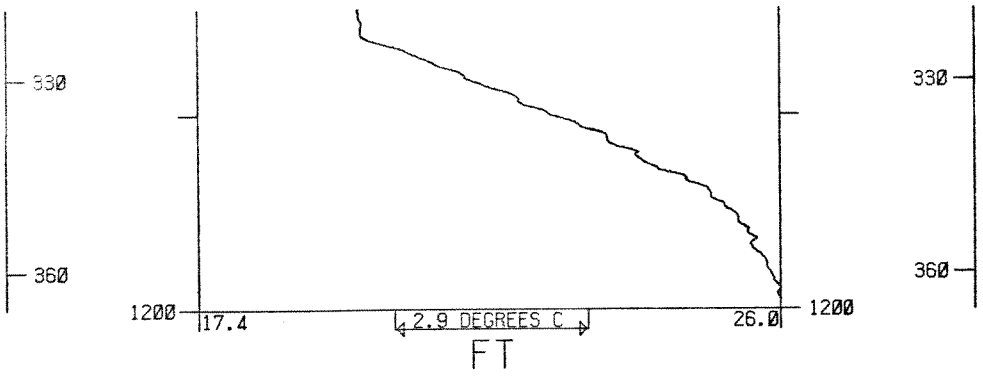
15N/31E-32M1



15N/31E-32M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON DAMON
DATE LOGGED	11/09/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/32E-04B1
SURFACE ELEVATION	1250
TOTAL DEPTH LOGGED	874
DEPTH TO WATER LEVEL	461

CASING & LINERS:

0- 30=17

LEGEND

LOG TITLES

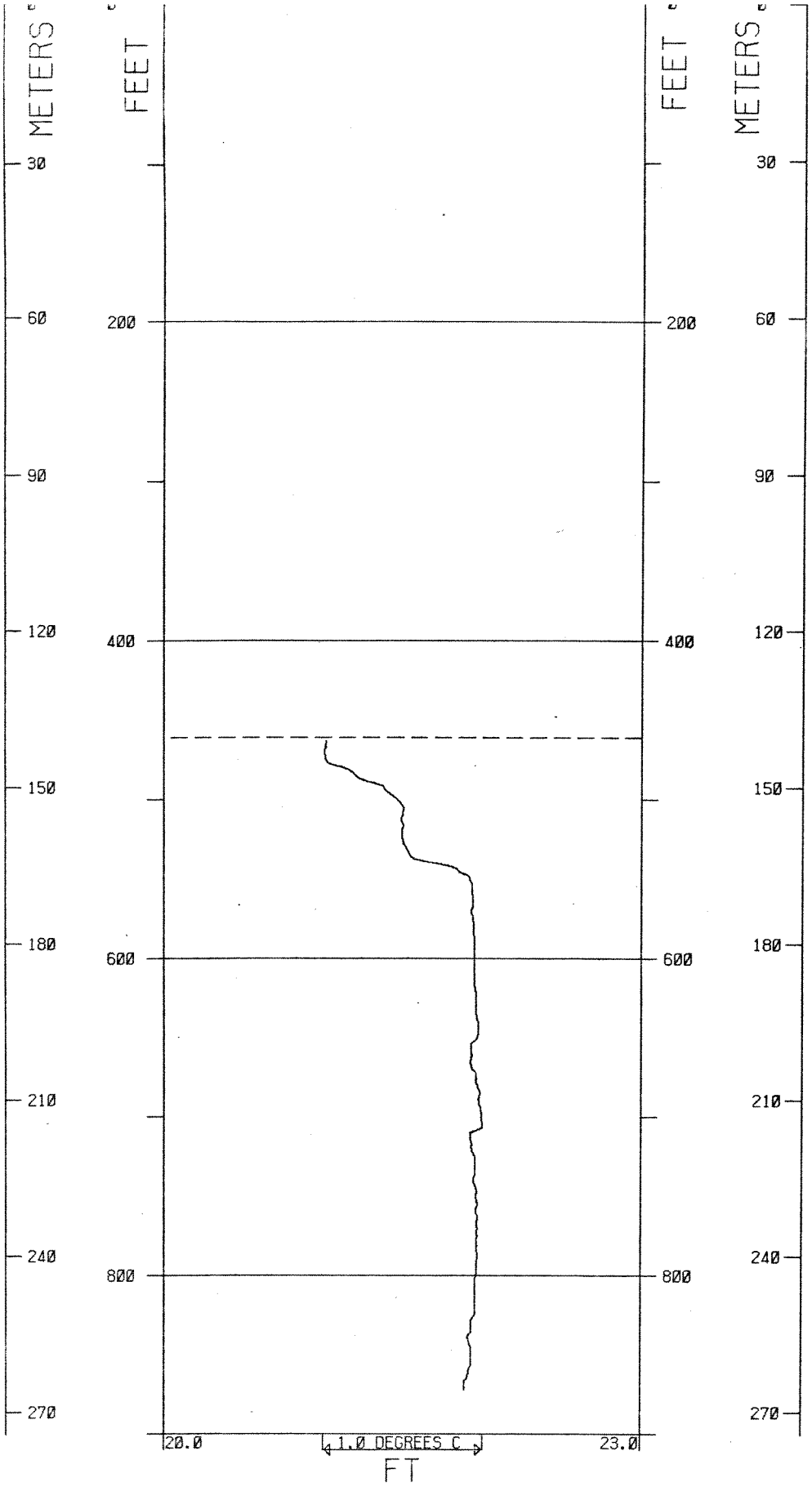
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

15N/32E-04B1


METERS
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20.0
1.0 DEGREES C
23.0
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HATTON #1 (DNR)
DATE LOGGED	Ø1/11/78
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/32E-16M1
SURFACE ELEVATION	790
TOTAL DEPTH LOGGED	1101
DEPTH TO WATER LEVEL	428
CASING & LINERS:	
Ø- 64= 15	

TOTAL DEPTH REPORTED TO BE 1480 FT.
OBSTRUCTION AT 1130 FT.

LEGEND

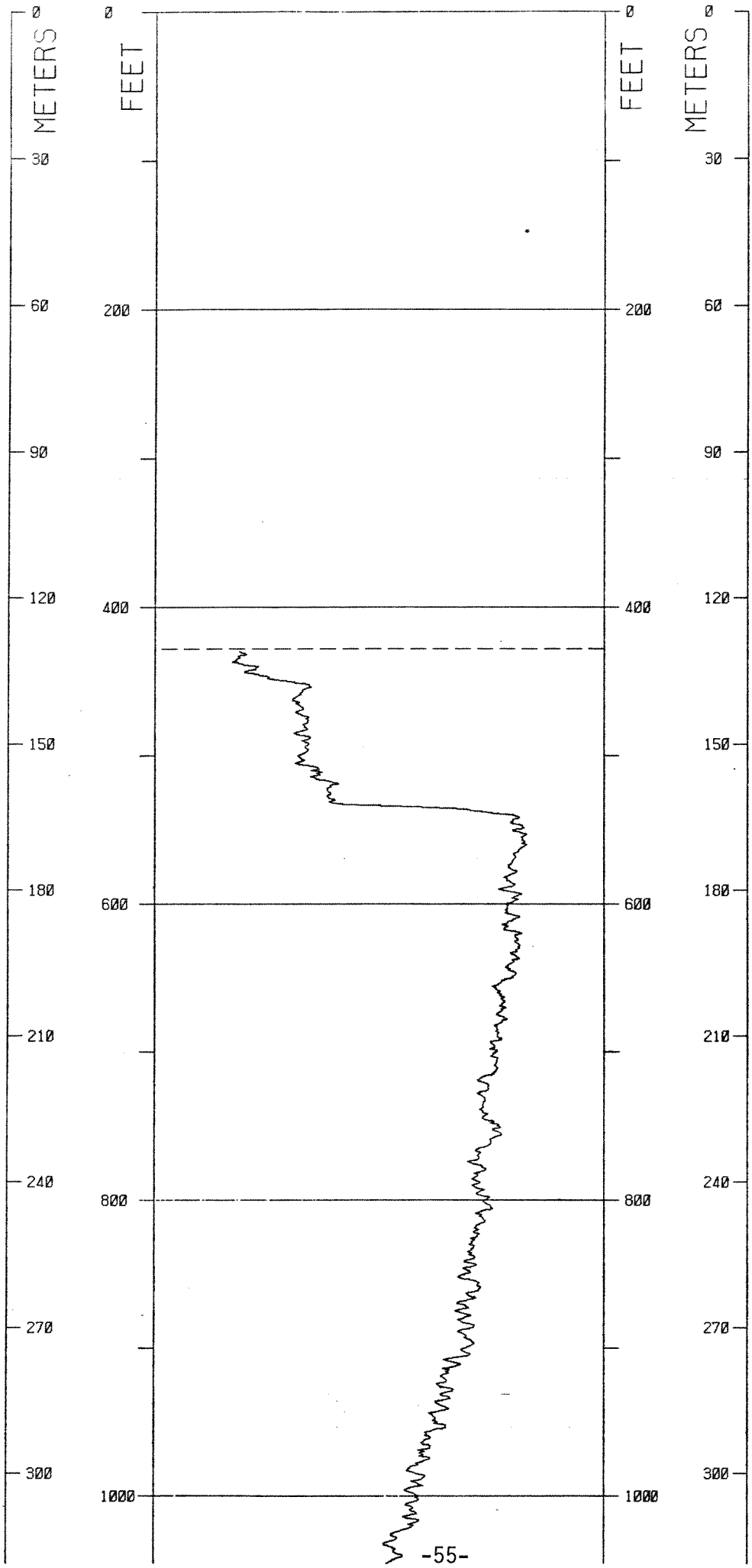
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ⟶
POROSITY (NN-LOG) INCREASES ⟵
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/28/83 SEW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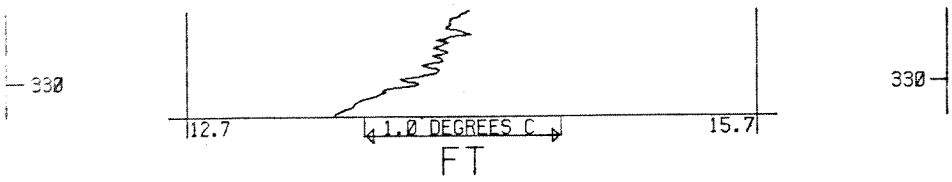
15N/32E-16M1



15N/32E-16M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HATTON CITY #2
DATE LOGGED	Ø4/Ø3/79
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/32E-2ØD1
SURFACE ELEVATION	12ØØ
TOTAL DEPTH LOGGED	7Ø5
DEPTH TO WATER LEVEL	37Ø
CASING & LINERS:	
Ø- 165=12	

LEGEND

LOG TITLES

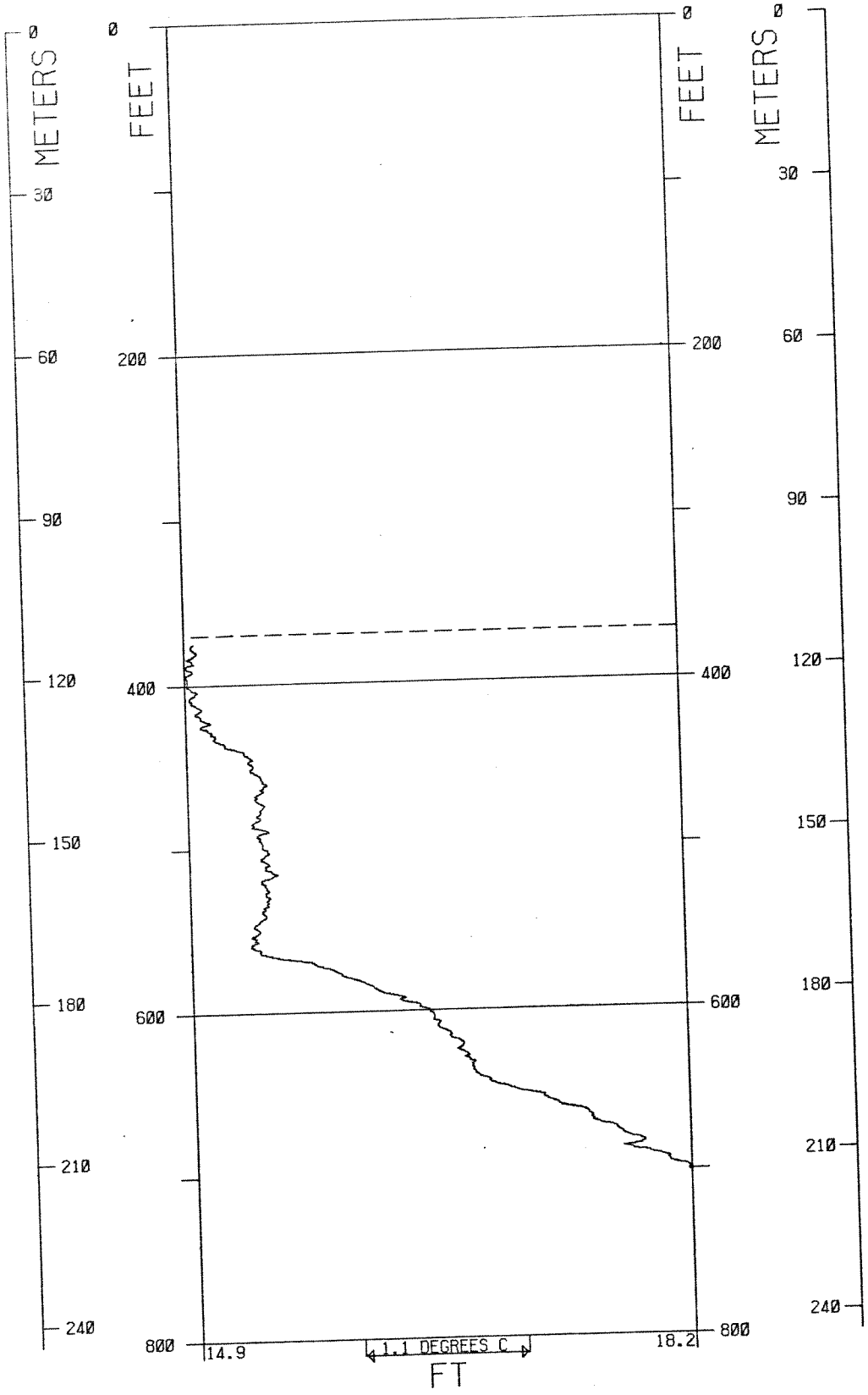
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/22/83 SEW

15N/32E-20D1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1.1 DEGREES C
18.2
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CYRIL HART
DATE LOGGED	09/03/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/32E-35E1
SURFACE ELEVATION	1235
TOTAL DEPTH LOGGED	1010
DEPTH TO WATER LEVEL	556

CASING & LINERS:
0- 36=15

LEGEND

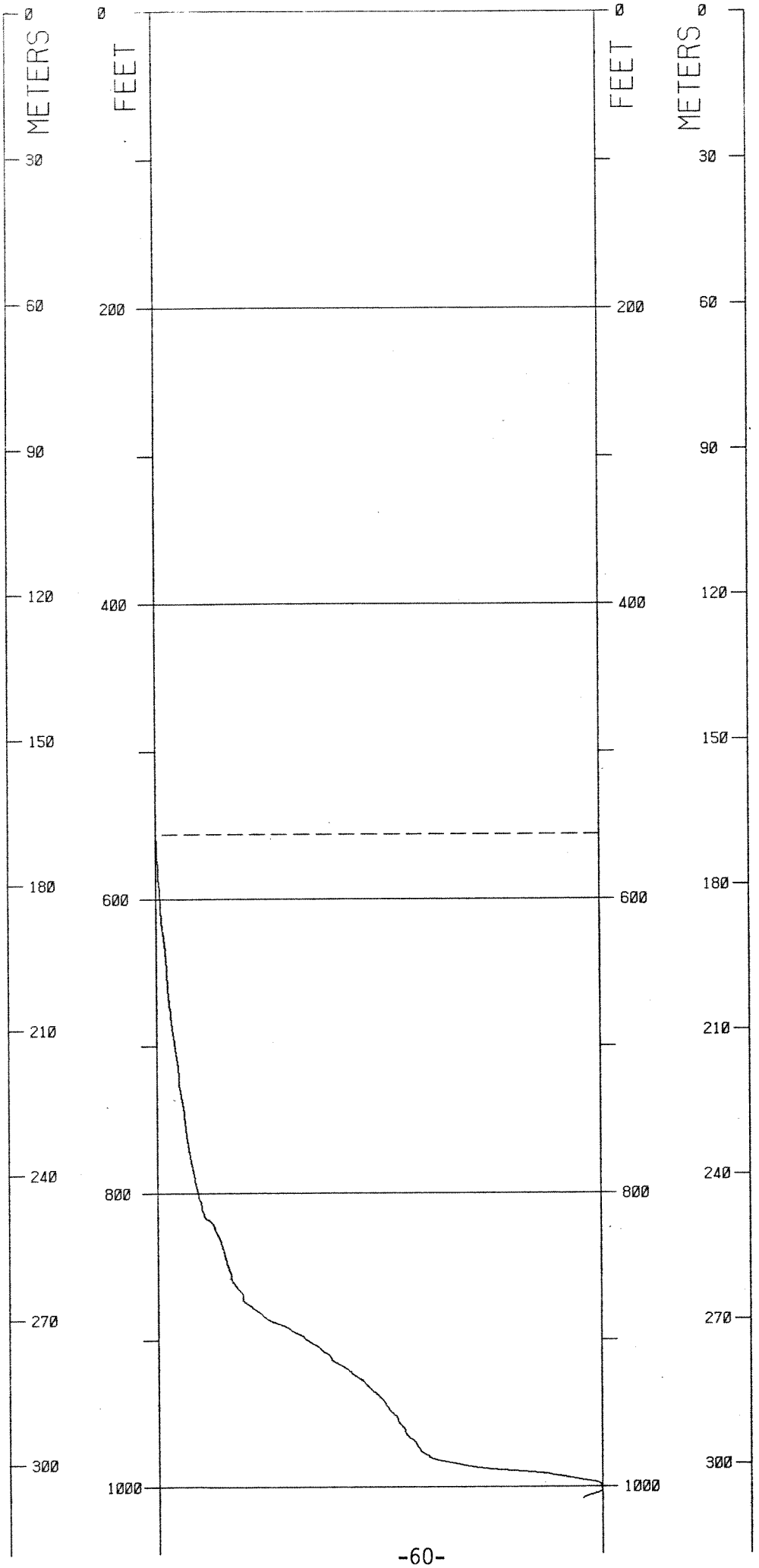
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/15/83 SEW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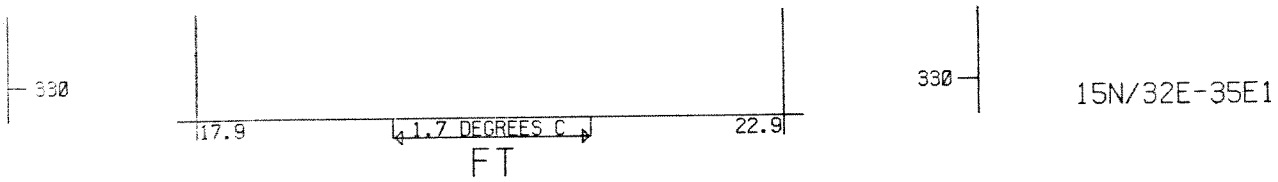
15N/32E-35E1



15N/32E-35E1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ROBERT TOMPKINS
DATE LOGGED	05/24/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/33E-02A1
SURFACE ELEVATION	1485
TOTAL DEPTH LOGGED	827
DEPTH TO WATER LEVEL	630
CASING & LINERS:	
0- 46= 7	

LEGEND

LOG TITLES

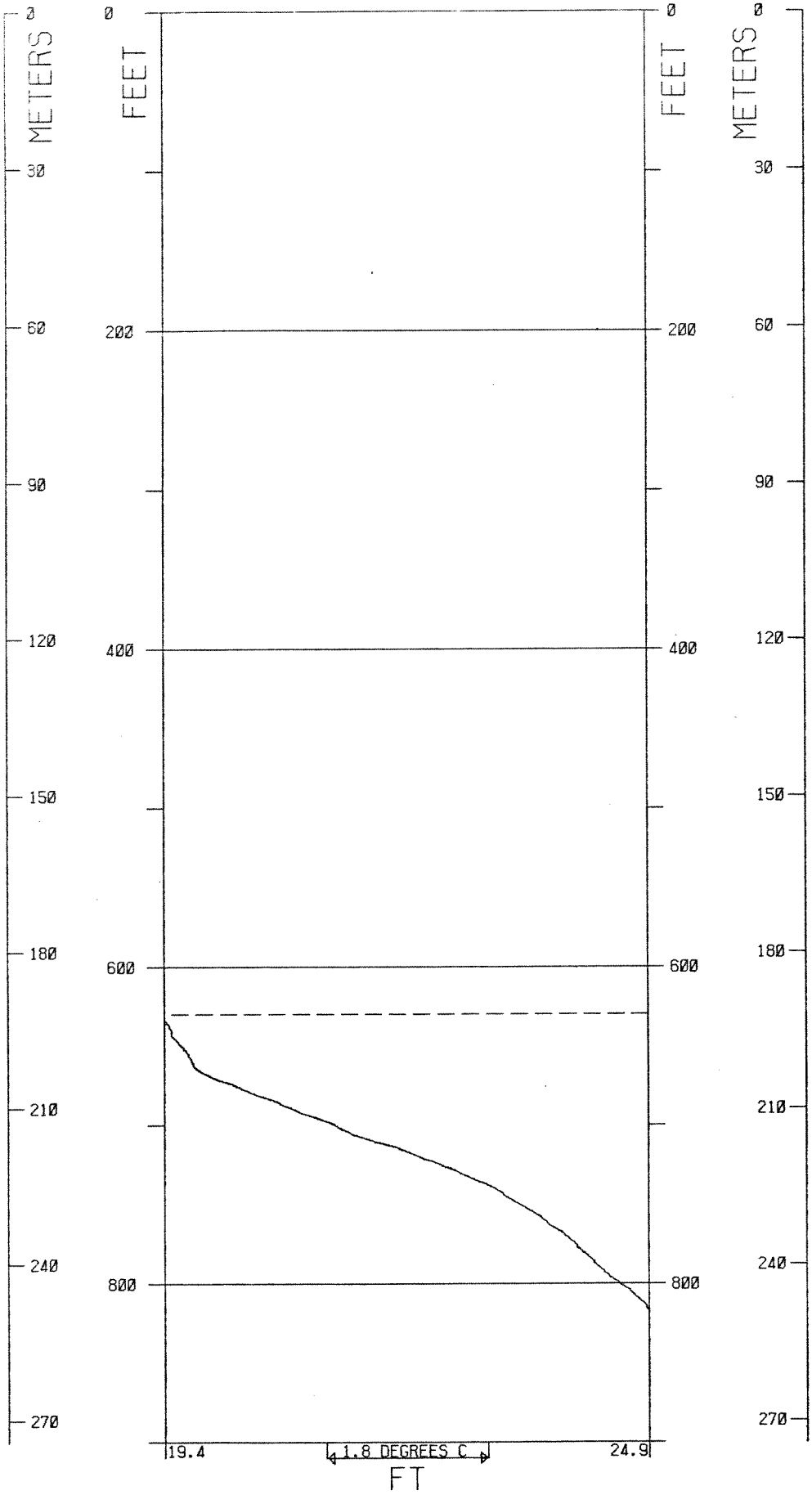
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/29/83 SEW

15N/33E-02A1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19.4
1.8 DEGREES C
24.9
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ALBERT STROHMAIER
DATE LOGGED	Ø3/15/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/33E-15Q1
SURFACE ELEVATION	1439
TOTAL DEPTH LOGGED	664
DEPTH TO WATER LEVEL	467
CASING & LINERS:	
Ø- 18=15	

HAND DIGITIZED.

LEGEND

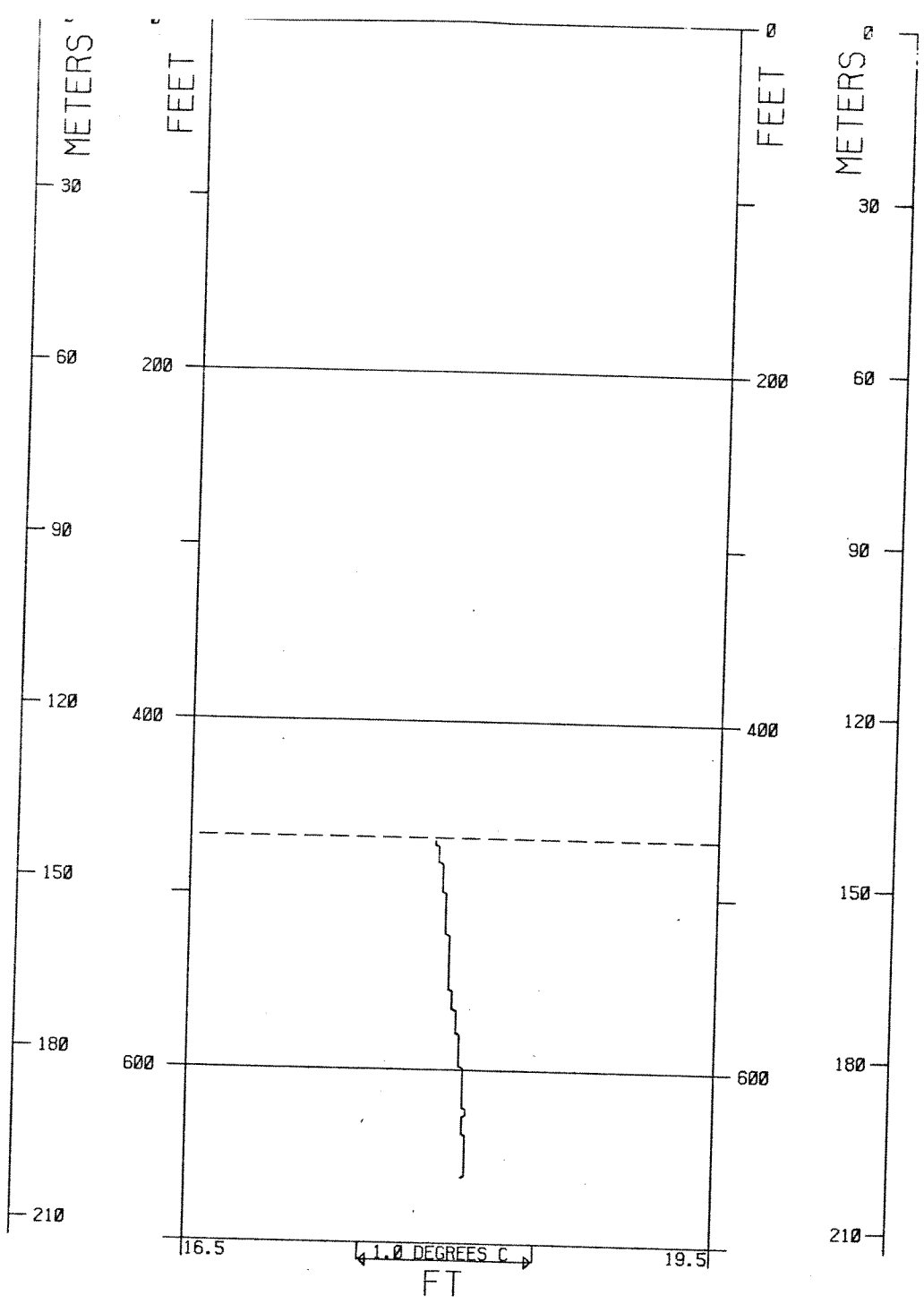
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW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1.0 DEGREES C
19.5
FT

15N/33E-15Q1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LEROY WATSON
DATE LOGGED	11/30/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/34E-27R1
SURFACE ELEVATION	1495
TOTAL DEPTH LOGGED	796
DEPTH TO WATER LEVEL	276
CASING & LINERS:	

LEGEND

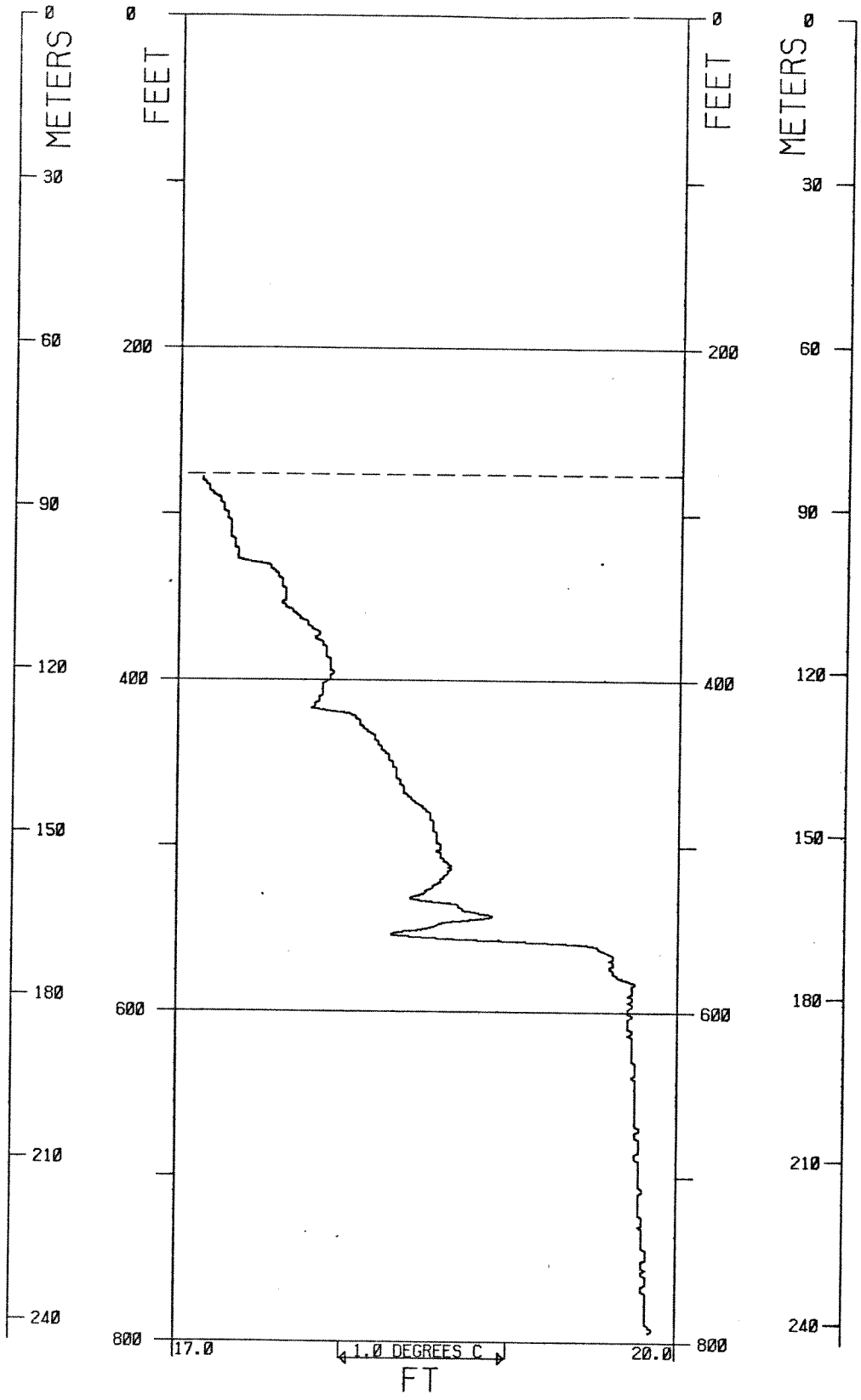
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW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17.0
1.0 DEGREES C
20.0
FT

15N/34E-27R1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	FRED BLAUERT
DATE LOGGED	Ø3/23/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	15N/36E-34F1
SURFACE ELEVATION	1Ø6Ø
TOTAL DEPTH LOGGED	699
DEPTH TO WATER LEVEL	55

CASING & LINERS:

Ø- 77=11 4Ø2- 565= 8

LEGEND

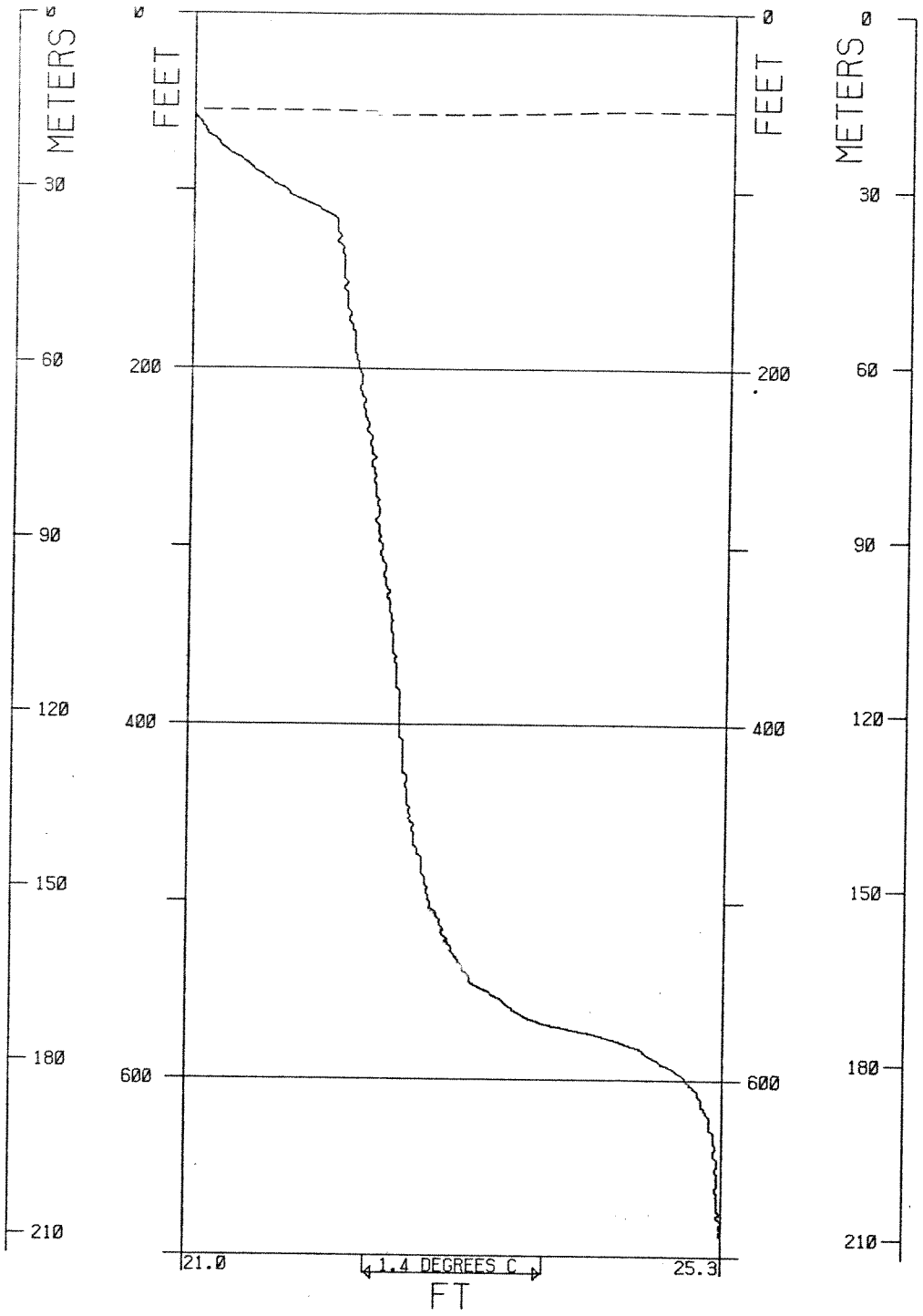
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/Ø5/83 SEW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21.0
1.4 DEGREES C
25.3
FT

15N/36E-34F1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	OTHELLO CITY #3
DATE LOGGED	01/06/77
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/29E-34R1
SURFACE ELEVATION	1130
TOTAL DEPTH LOGGED	853
DEPTH TO WATER LEVEL	331
CASING & LINERS:	

LEGEND

LOG TITLES

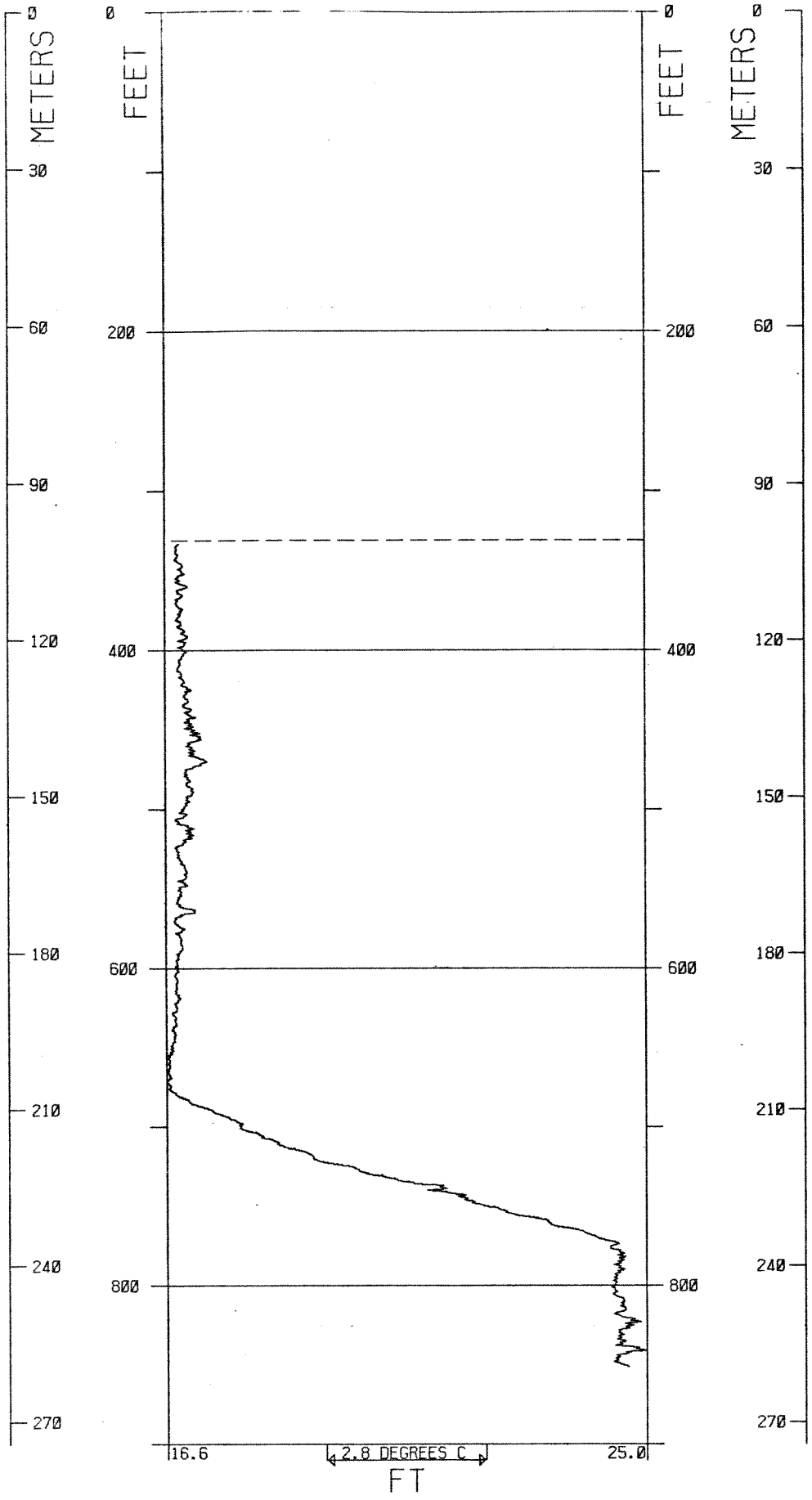
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

16N/29E-34R1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METERS
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180
210
240
270
16.6
2.8 DEGREES C
25.0
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	G.W. KLIPHARDT
DATE LOGGED	Ø3/14/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/3ØE-24D1
SURFACE ELEVATION	14ØØ
TOTAL DEPTH LOGGED	721
DEPTH TO WATER LEVEL	358
CASING & LINERS:	

LEGEND

LOG TITLES

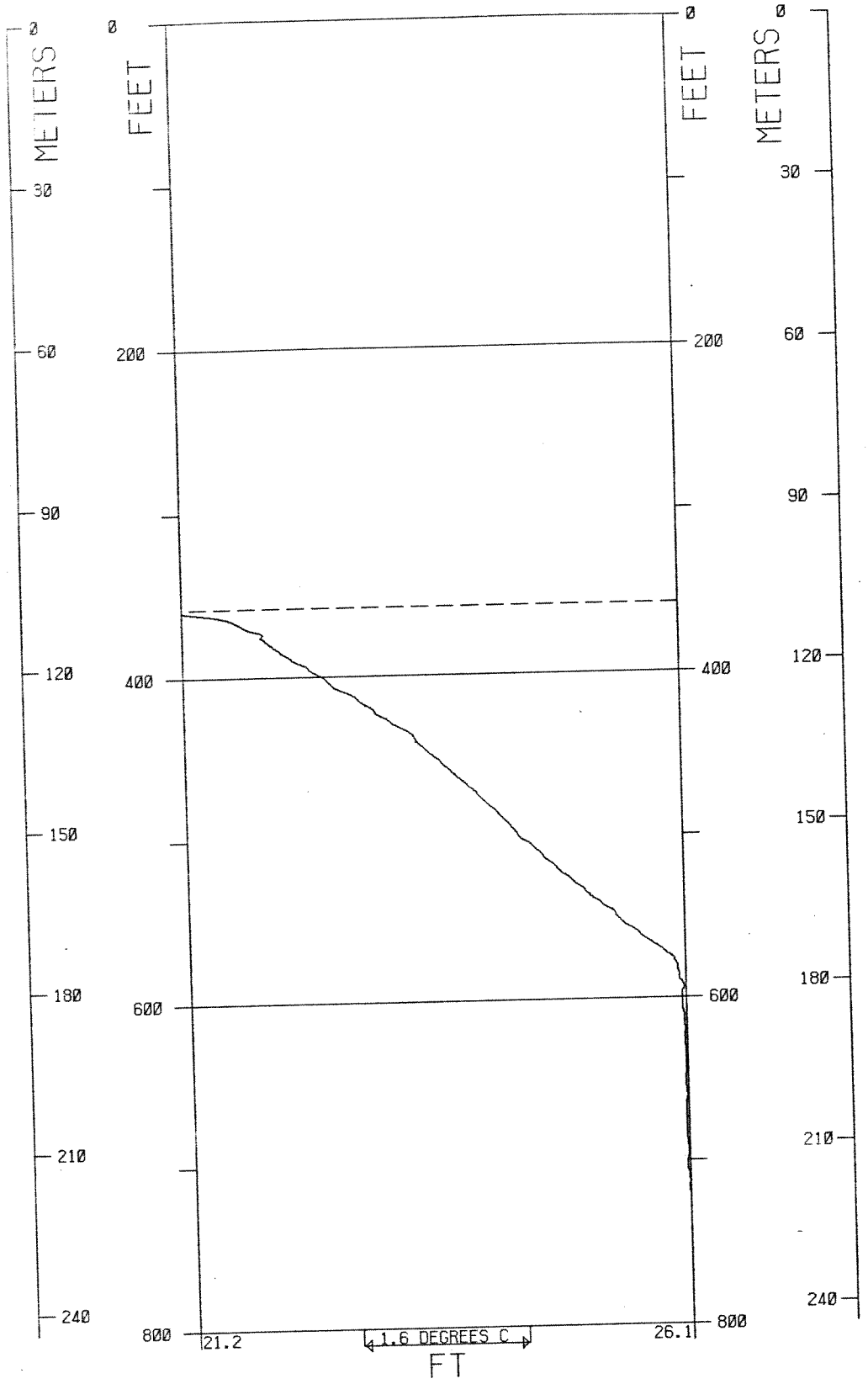
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/15/83 SEW

16N/30E-24D1


METERS
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21.2
1.6 DEGREES C
26.1
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MIKE DAMON
DATE LOGGED	Ø3/Ø9/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/3ØE-36K1
SURFACE ELEVATION	126Ø
TOTAL DEPTH LOGGED	687
DEPTH TO WATER LEVEL	97

CASING & LINERS:
Ø- 66=15 547- 621=11

LEGEND

LOG TITLES

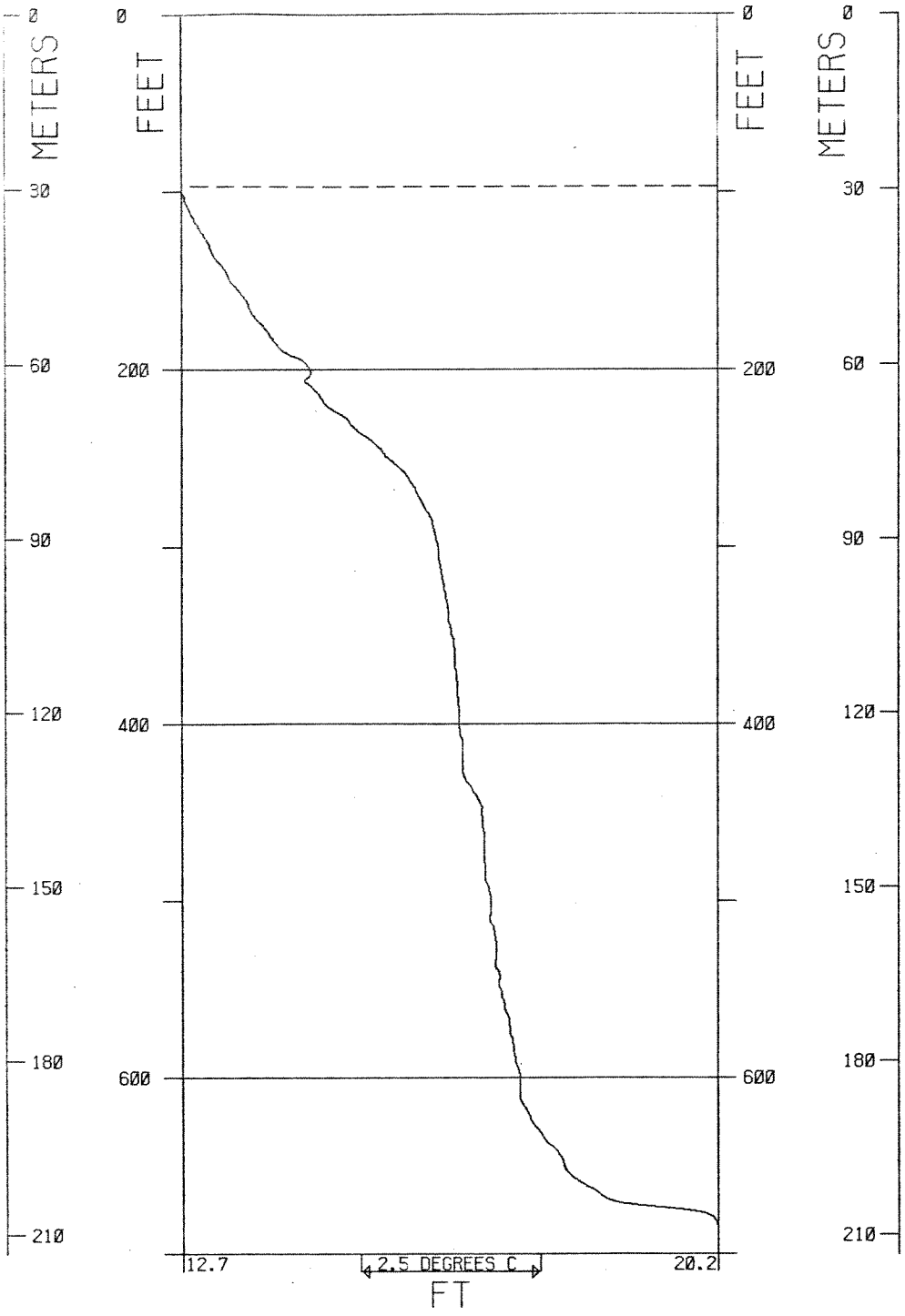
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/15/83 SEW

16N/30E-36K1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METERS
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210
12.7
2.5 DEGREES C
20.2
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DAMON (DNR)
DATE LOGGED	07/16/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/30E-36K2
SURFACE ELEVATION	1250
TOTAL DEPTH LOGGED	792
DEPTH TO WATER LEVEL	180

CASING & LINERS:
0- 324=15 610- 671= 9

LEGEND

LOG TITLES

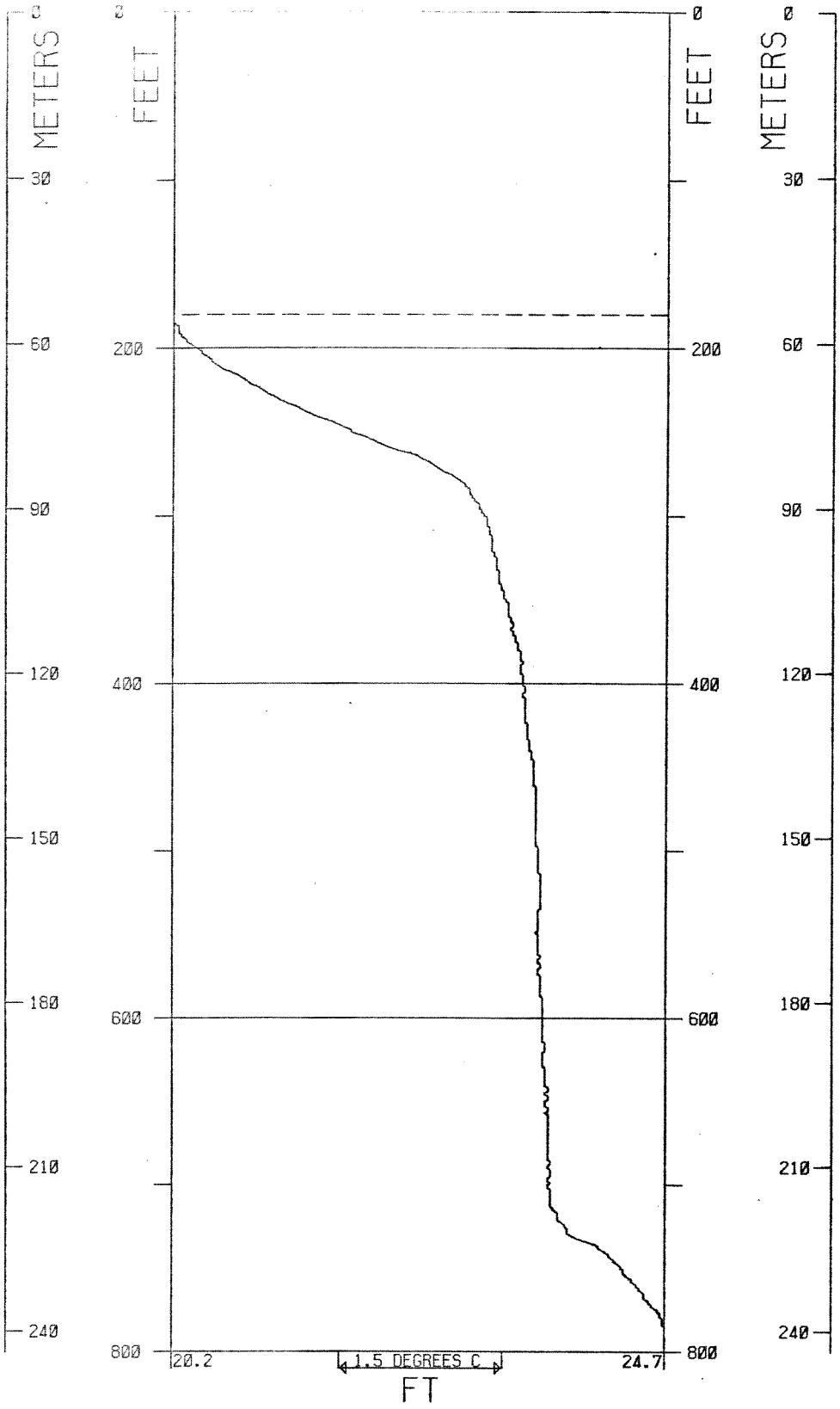
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW

16N/30E-36K2


METERS
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WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	REX LYLE
DATE LOGGED	05/10/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/31E-15B1
SURFACE ELEVATION	1400
TOTAL DEPTH LOGGED	658
DEPTH TO WATER LEVEL	318
CASING & LINERS:	

HAND DIGITIZED.

LEGEND

LOG TITLES

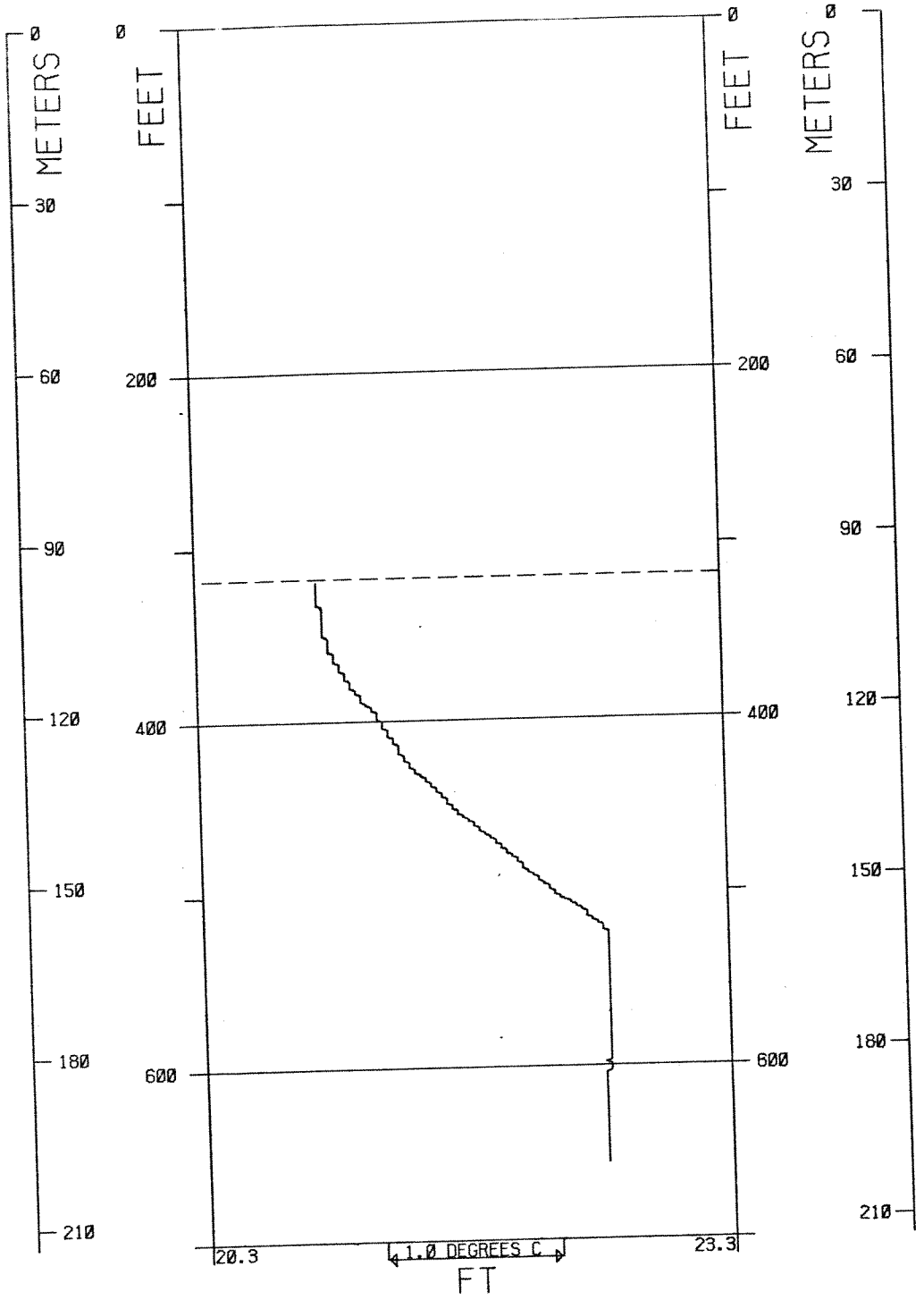
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

16N/31E-15B1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METERS
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150
180
210

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	REX LYLE (SOUTH)
DATE LOGGED	Ø7/Ø8/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/31E-15Q1
SURFACE ELEVATION	1408
TOTAL DEPTH LOGGED	1345
DEPTH TO WATER LEVEL	376

CASING & LINERS:
Ø- 62=19

LEGEND

LOG TITLES

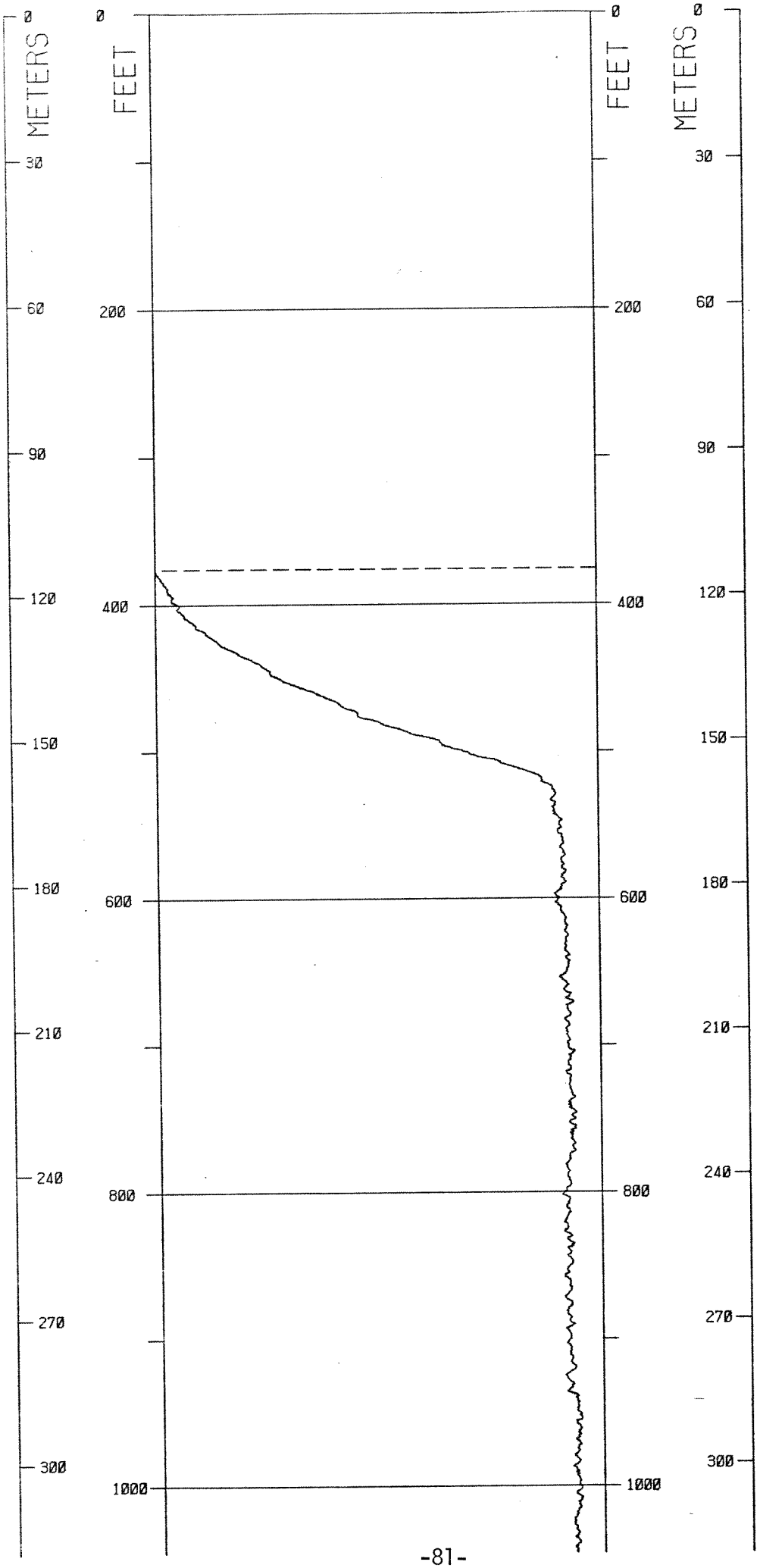
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/22/83 SEW

16N/31E-15Q1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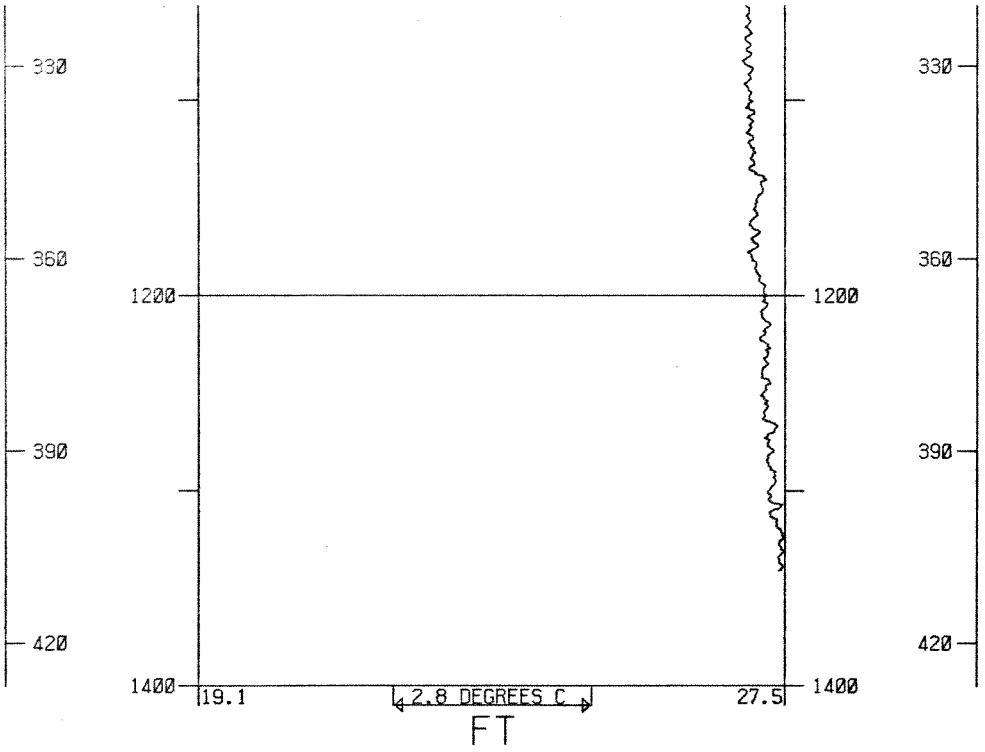


16N/31E-15Q1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #12
DATE LOGGED	05/07/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-11D1
SURFACE ELEVATION	1465
TOTAL DEPTH LOGGED	1017
DEPTH TO WATER LEVEL	384

CASING & LINERS:

0- 58=20 0- 869=15 869-1245=13

LEGEND

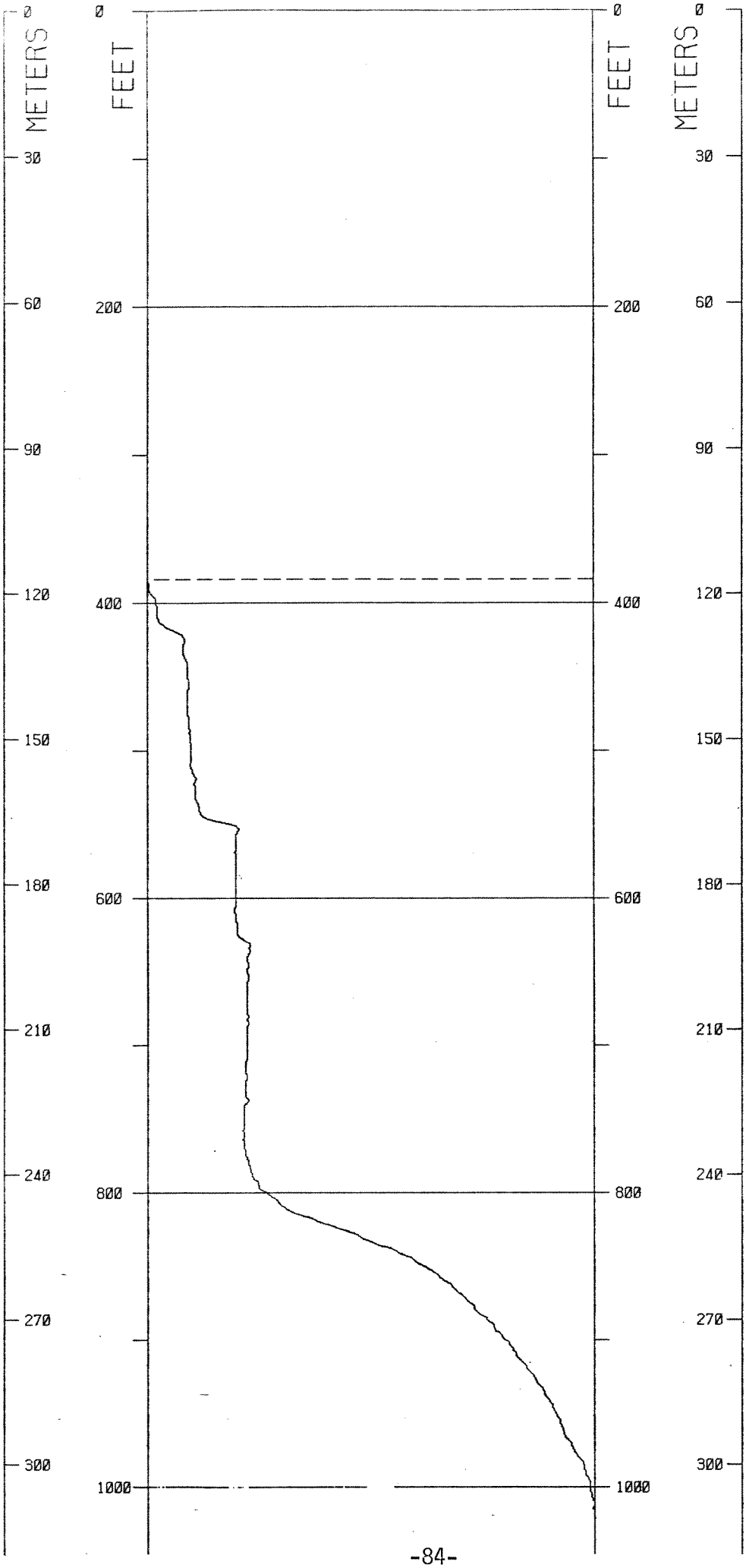
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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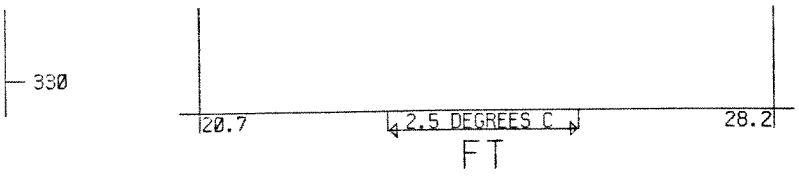
16N/32E-11D1



16N/32E-11D1

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PHILLIPS, B. HOUSE
DATE LOGGED	05/05/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-14C1
SURFACE ELEVATION	1410
TOTAL DEPTH LOGGED	507
DEPTH TO WATER LEVEL	266

CASING & LINERS:

UNKNOWN DIA. CASING TO 509 FT.

LEGEND

LOG TITLES

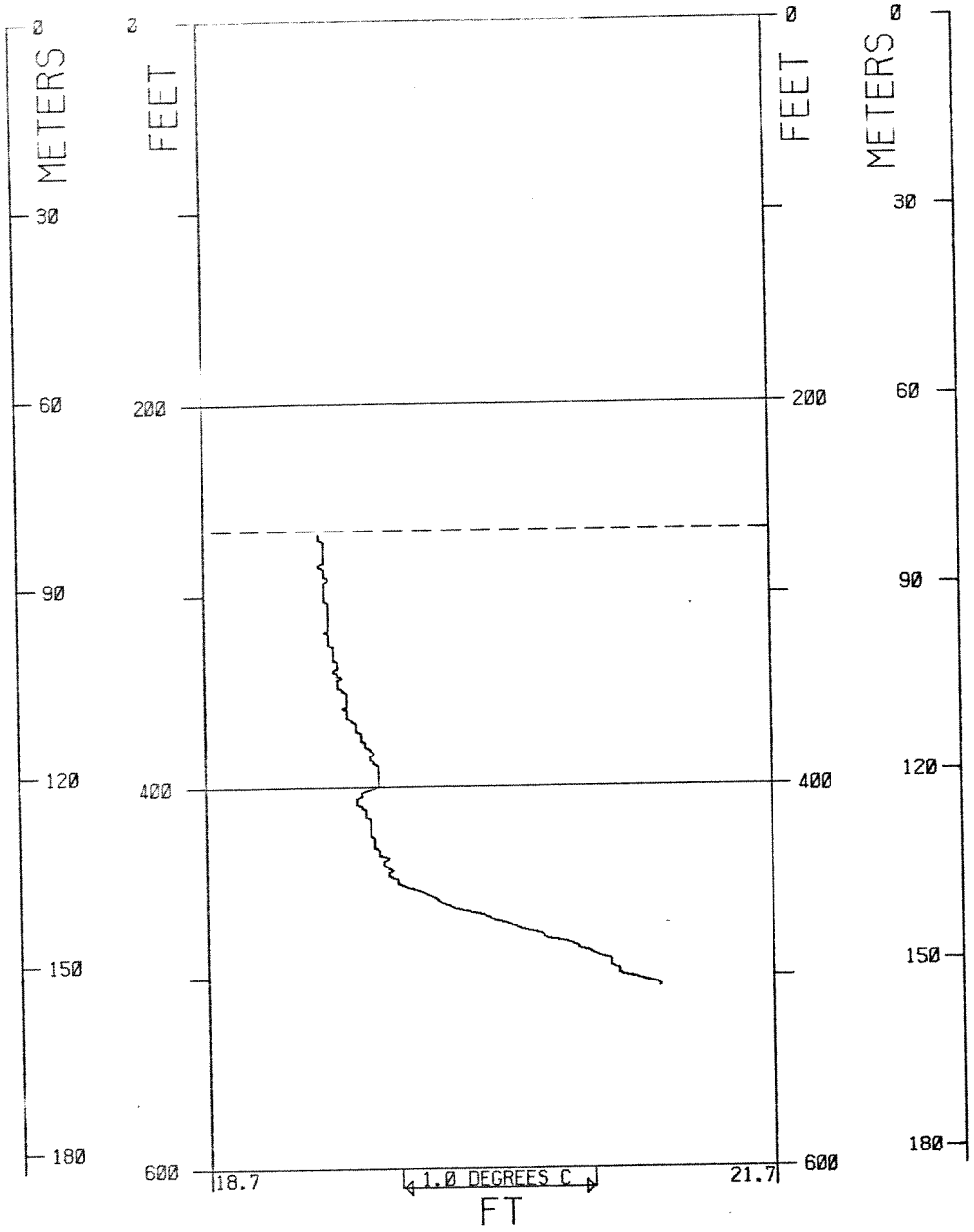
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW

16N/32E-14C1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180
18.7
1.0 DEGREES C
21.7
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #11
DATE LOGGED	Ø3/Ø4/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-14D1
SURFACE ELEVATION	138Ø
TOTAL DEPTH LOGGED	1Ø26
DEPTH TO WATER LEVEL	28Ø

CASING & LINERS:
Ø- 44=19

LEGEND

LOG TITLES

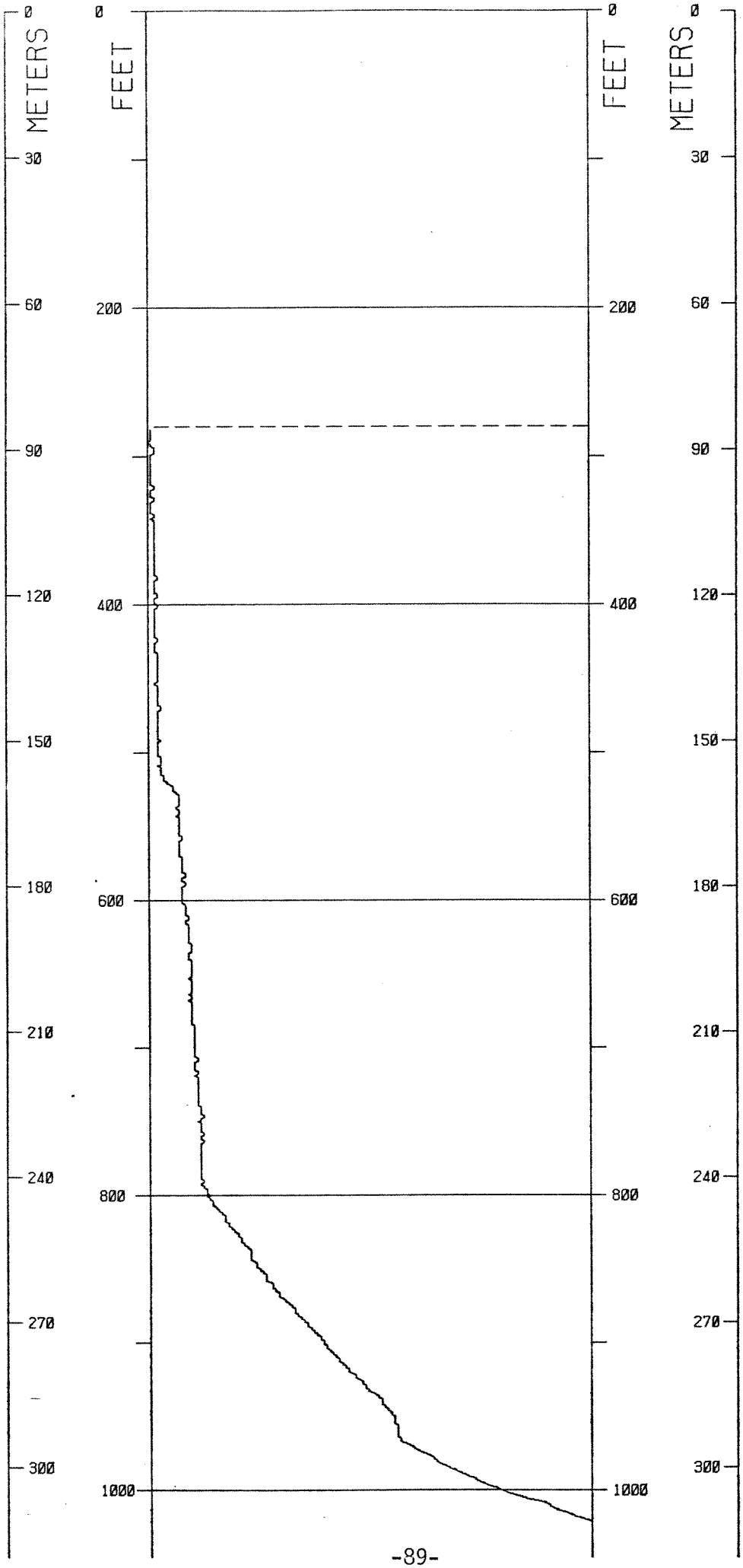
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW

16N/32E-14D1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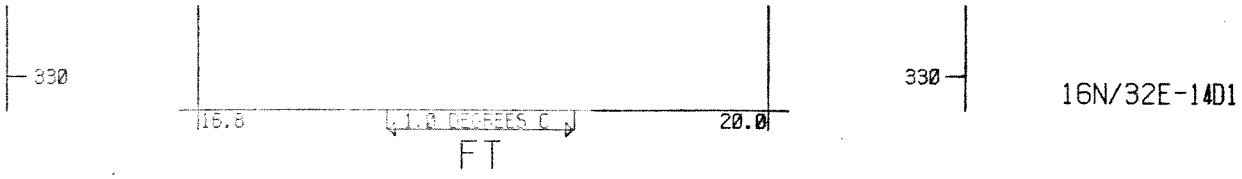

16N/32E-14D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #17
DATE LOGGED	Ø3/1Ø/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-15D1
SURFACE ELEVATION	1495
TOTAL DEPTH LOGGED	1442
DEPTH TO WATER LEVEL	394

CASING & LINERS:
Ø- 36=2Ø

LEGEND

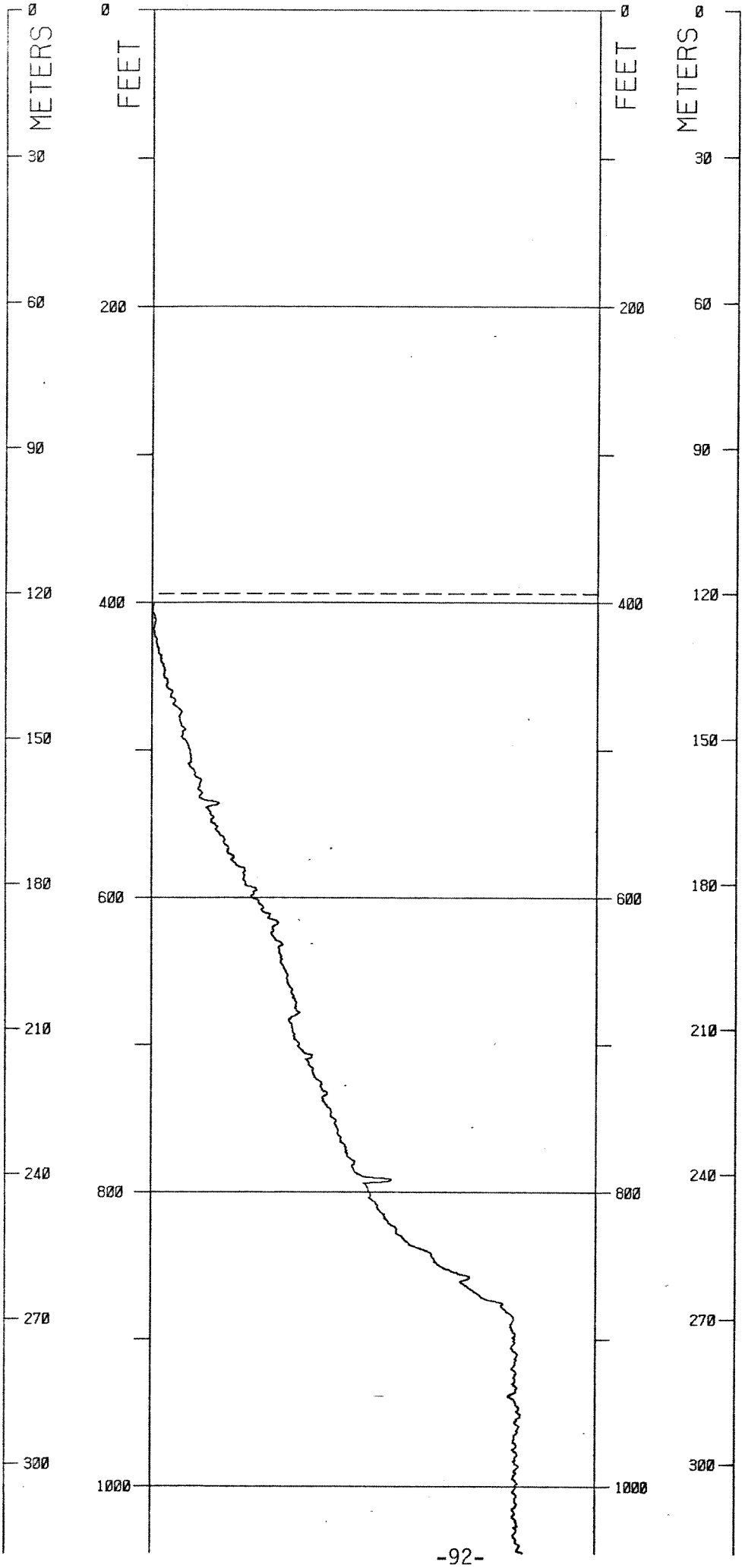
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/21/83 SEW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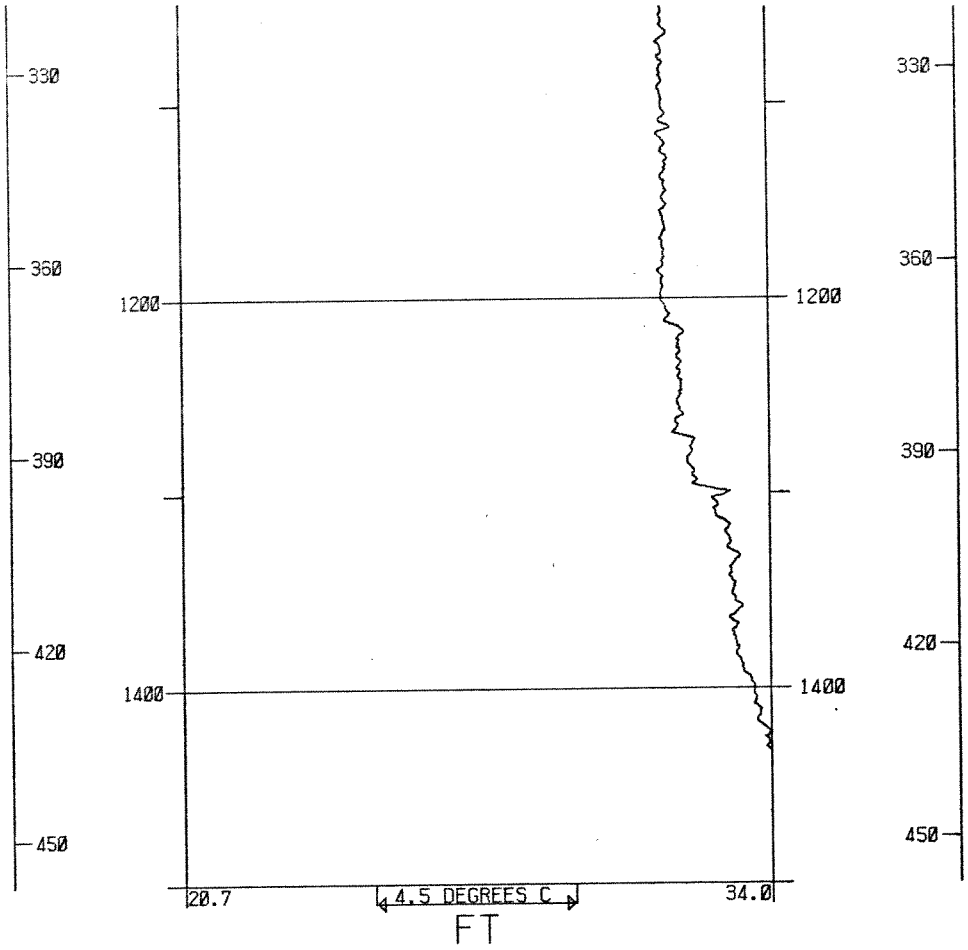
16N/32E-15D1



16N/32E-15D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	R.V. PHILLIPS
DATE LOGGED	03/05/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-20N1
SURFACE ELEVATION	1488
TOTAL DEPTH LOGGED	1221
DEPTH TO WATER LEVEL	376

CASING & LINERS:

0- 39=17 718- 836=9

LEGEND

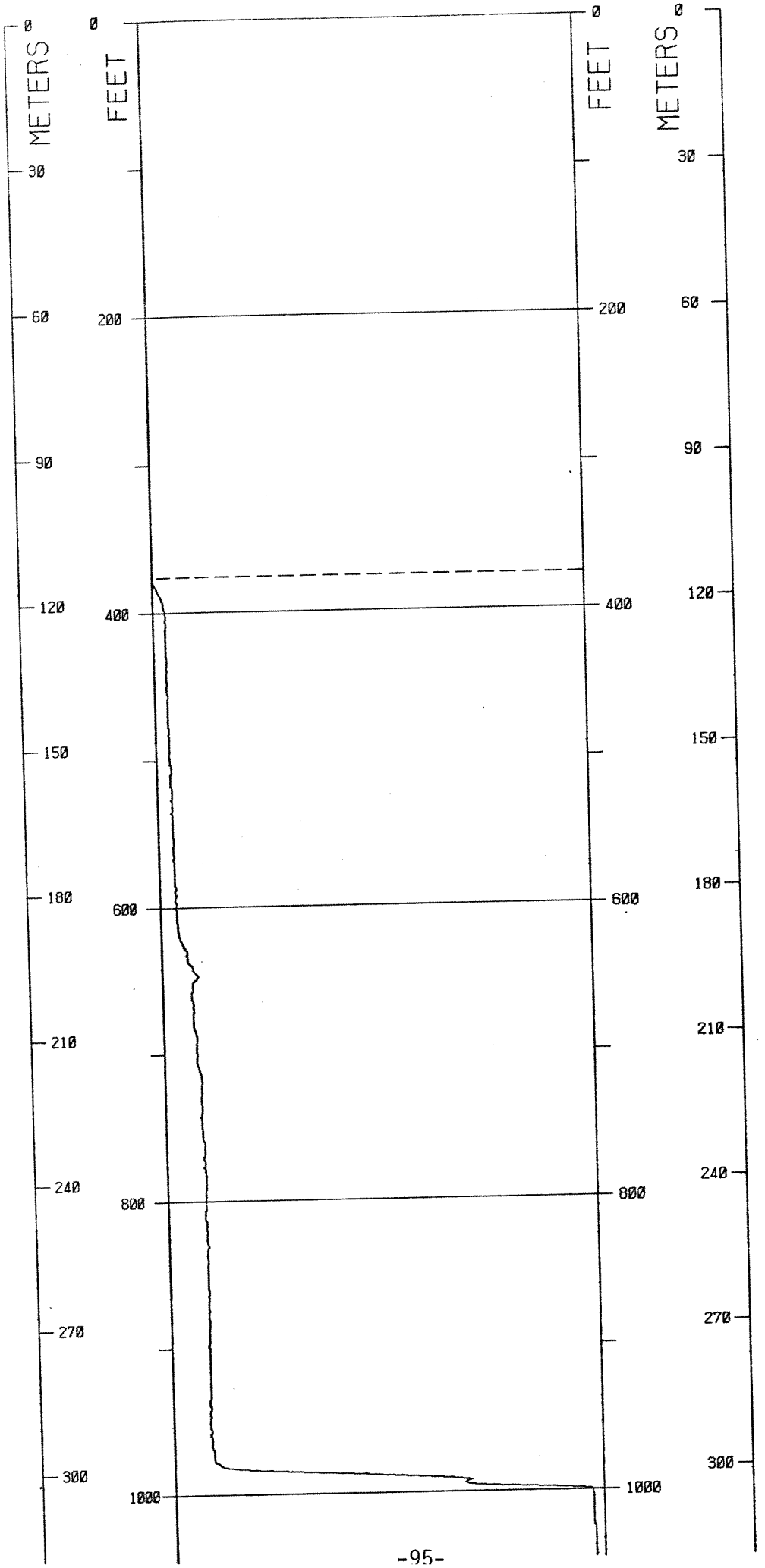
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW


16N/32E-20N1
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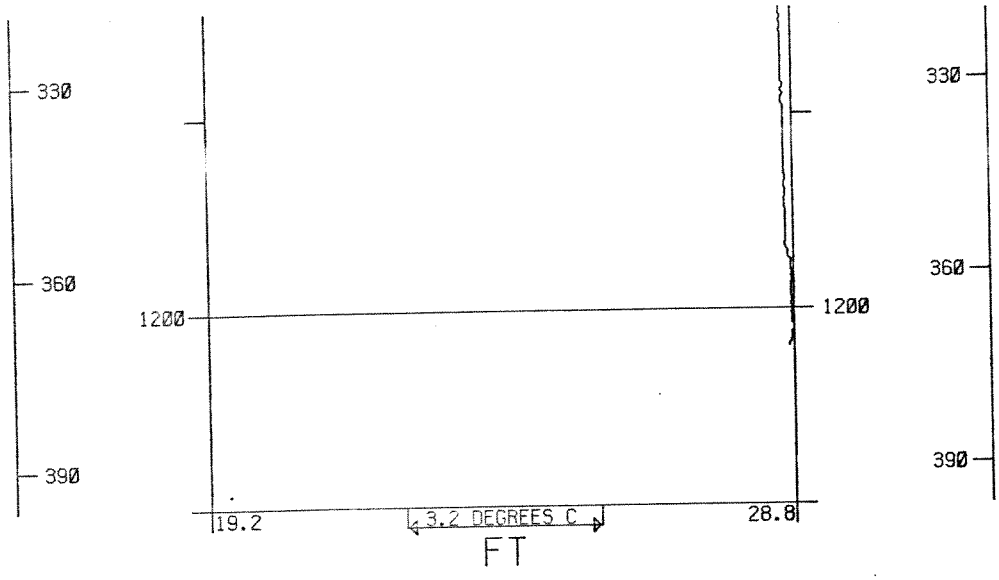


16N/32E-20N1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #10
DATE LOGGED	01/19/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-21E1
SURFACE ELEVATION	1510
TOTAL DEPTH LOGGED	927
DEPTH TO WATER LEVEL	385

CASING & LINERS:
0- 70=19

LEGEND

LOG TITLES

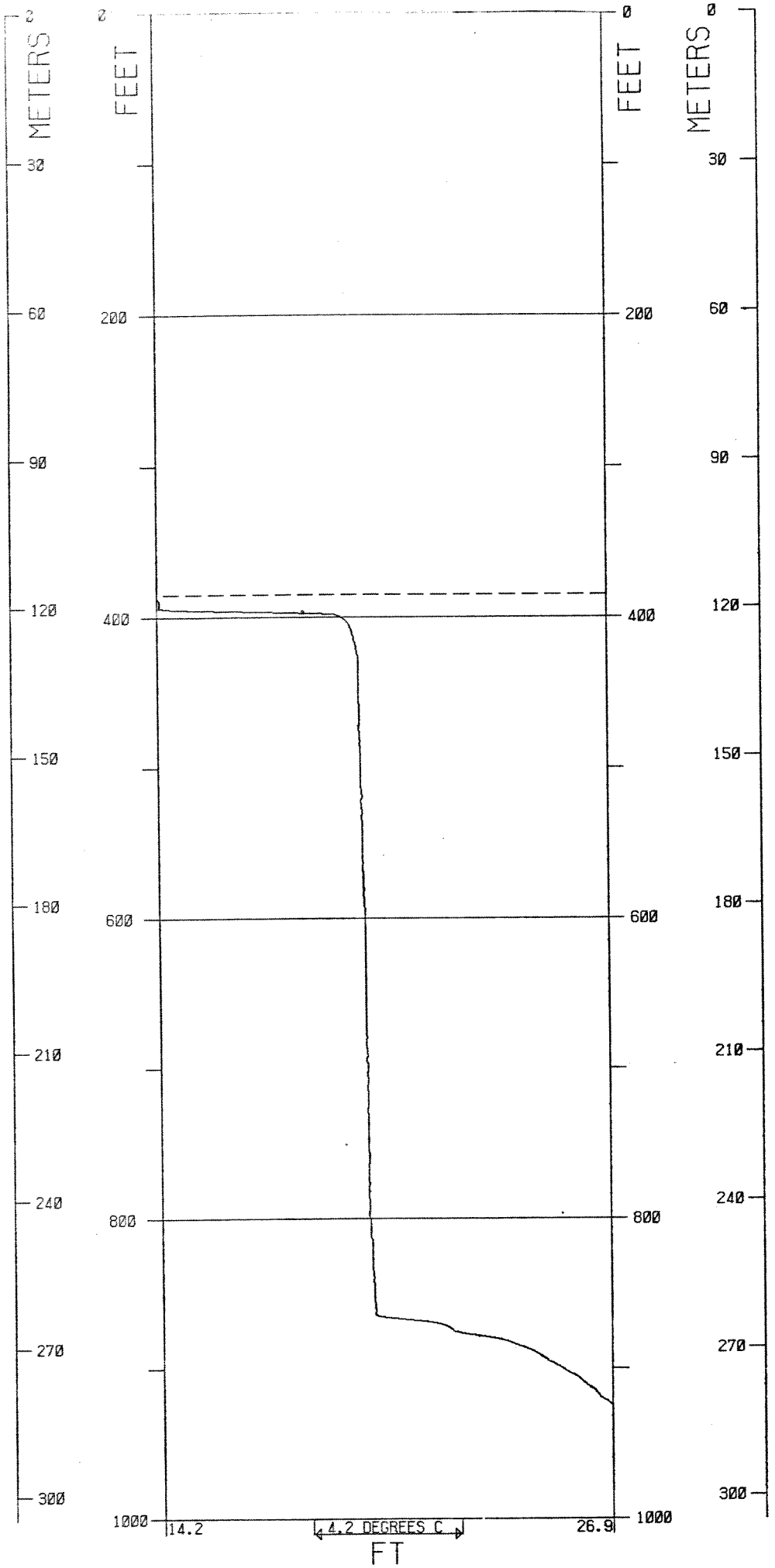
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW

16N/32E-21E1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1000
14.2
4.2 DEGREES C
26.9
FT

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #2
DATE LOGGED	06/23/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-25D1
SURFACE ELEVATION	1492
TOTAL DEPTH LOGGED	1415
DEPTH TO WATER LEVEL	486

CASING & LINERS:
0- 57=18 500- 549=12

LEGEND

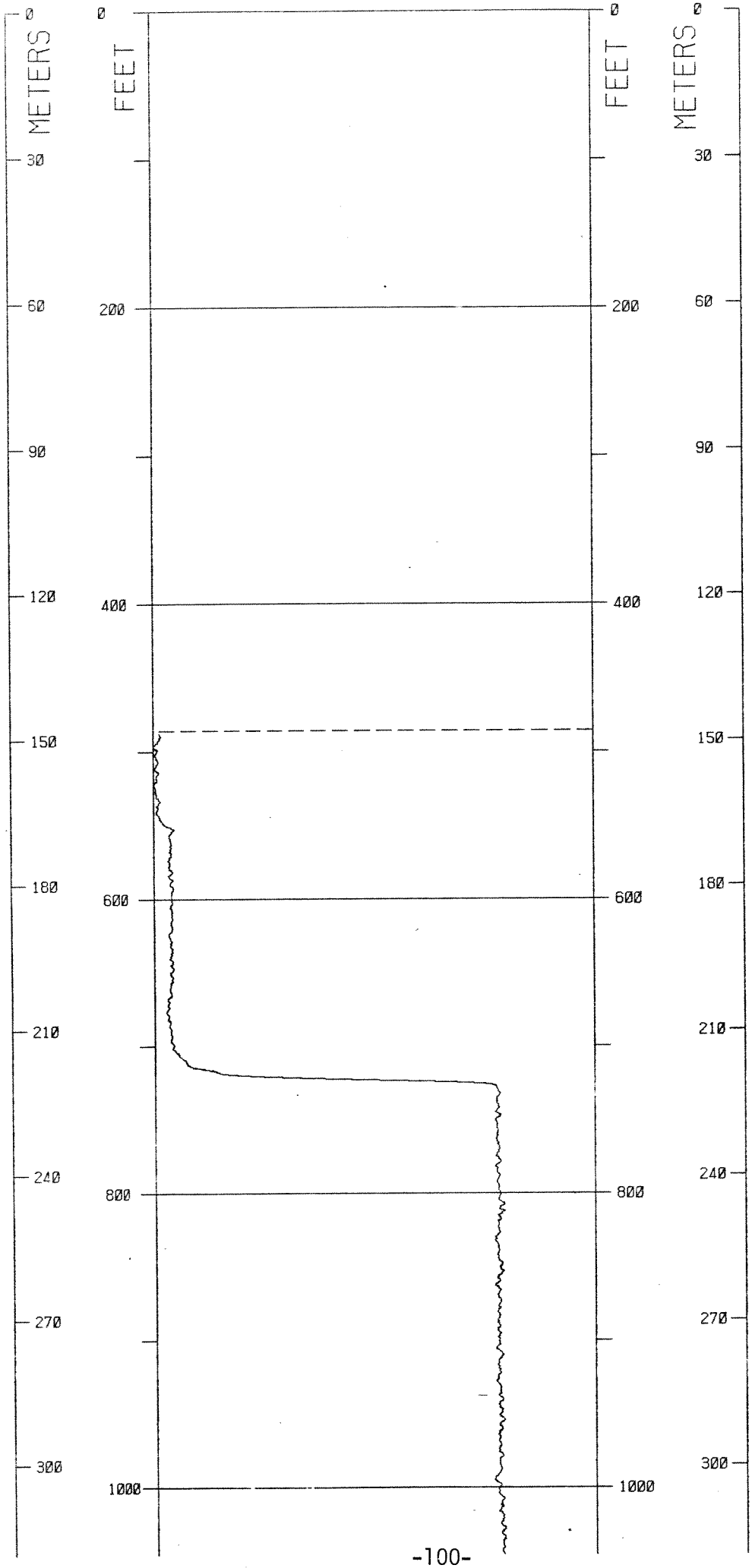
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW


METERS
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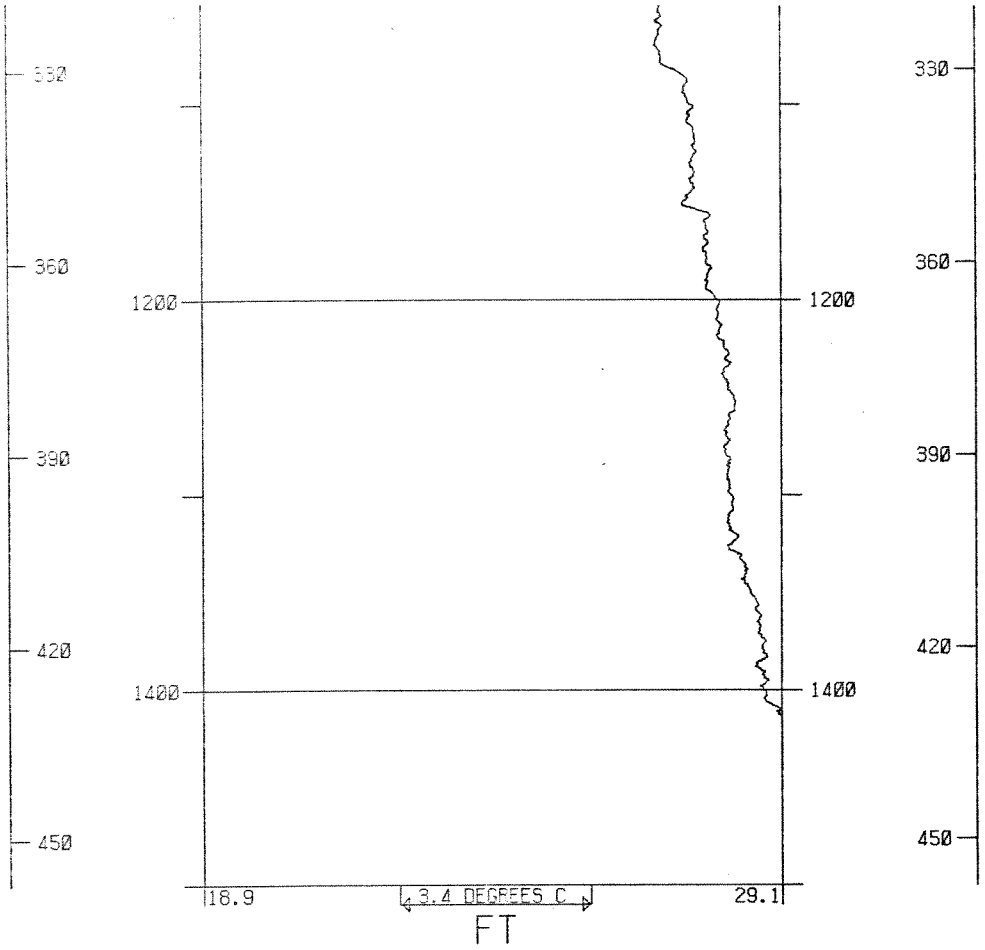
16N/32E-25D1



16N/32E-25D1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	D.E. PHILLIPS #16
DATE LOGGED	03/08/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-25N1
SURFACE ELEVATION	1320
TOTAL DEPTH LOGGED	1253
DEPTH TO WATER LEVEL	217

CASING & LINERS:
0- 19=20

LEGEND

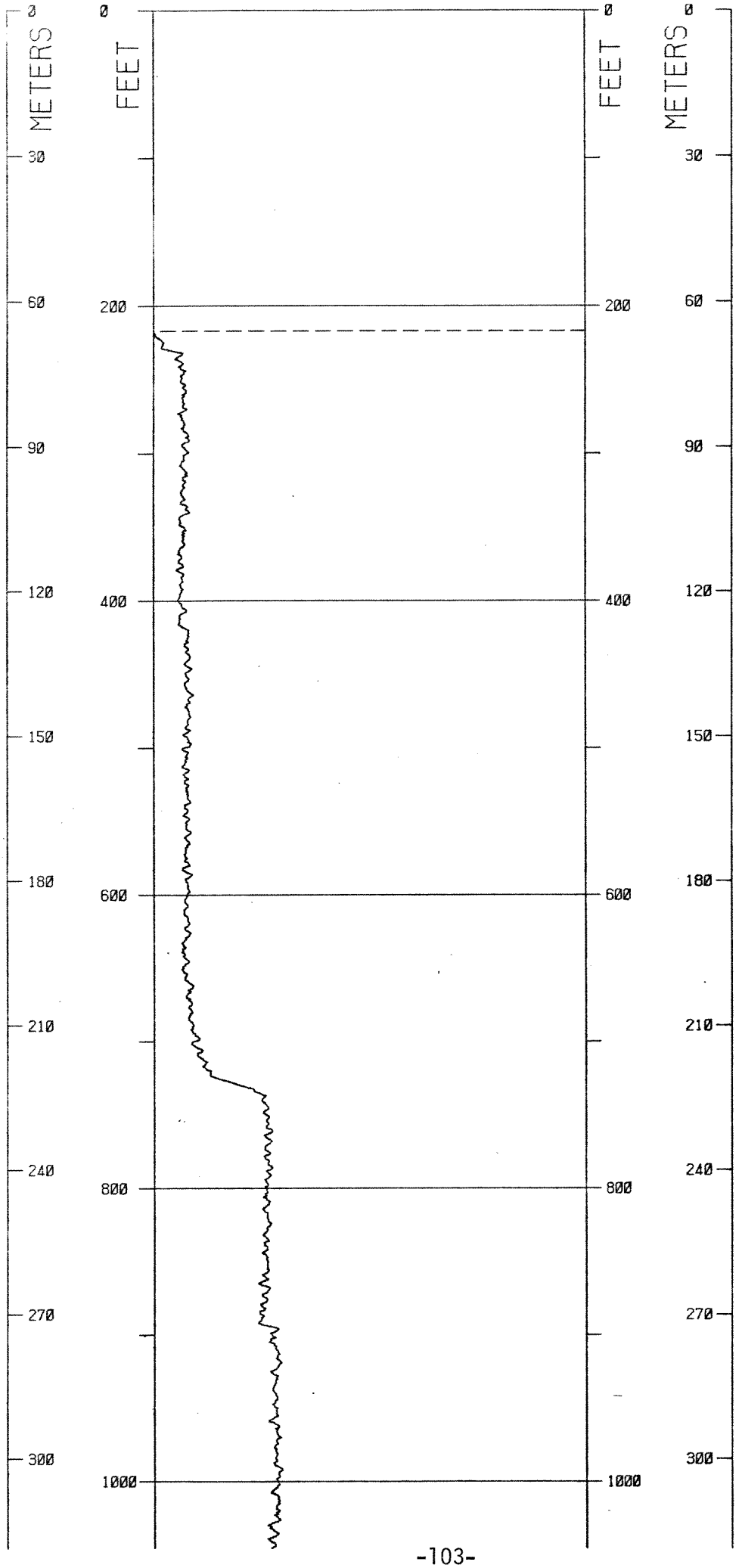
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW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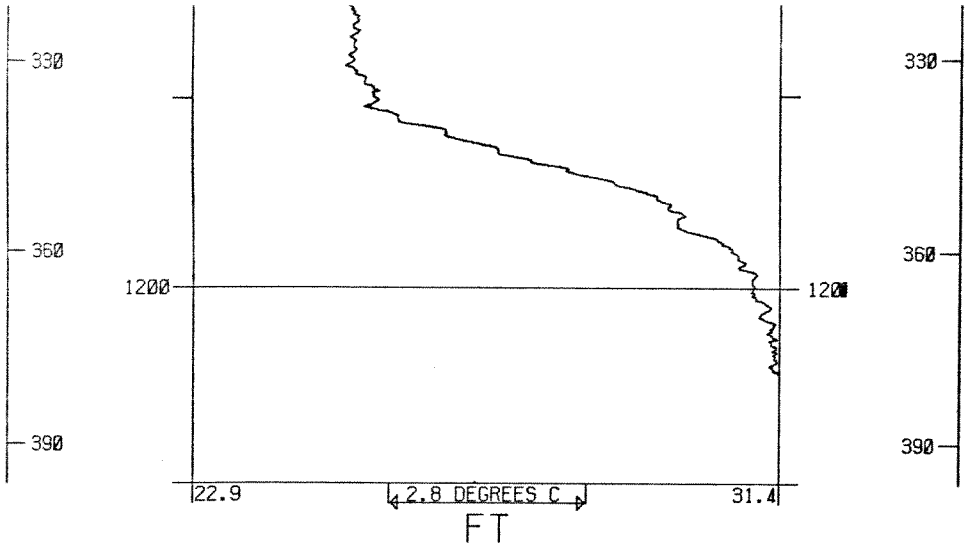
16N/32E-25N1



16N/32E-25N1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PHILLIPS, C-34
DATE LOGGED	Ø9/13/78
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-34E1
SURFACE ELEVATION	1393
TOTAL DEPTH LOGGED	2535
DEPTH TO WATER LEVEL	38Ø

CASING & LINERS:
Ø- 868=15 868-1368=13

LEGEND

LOG TITLES

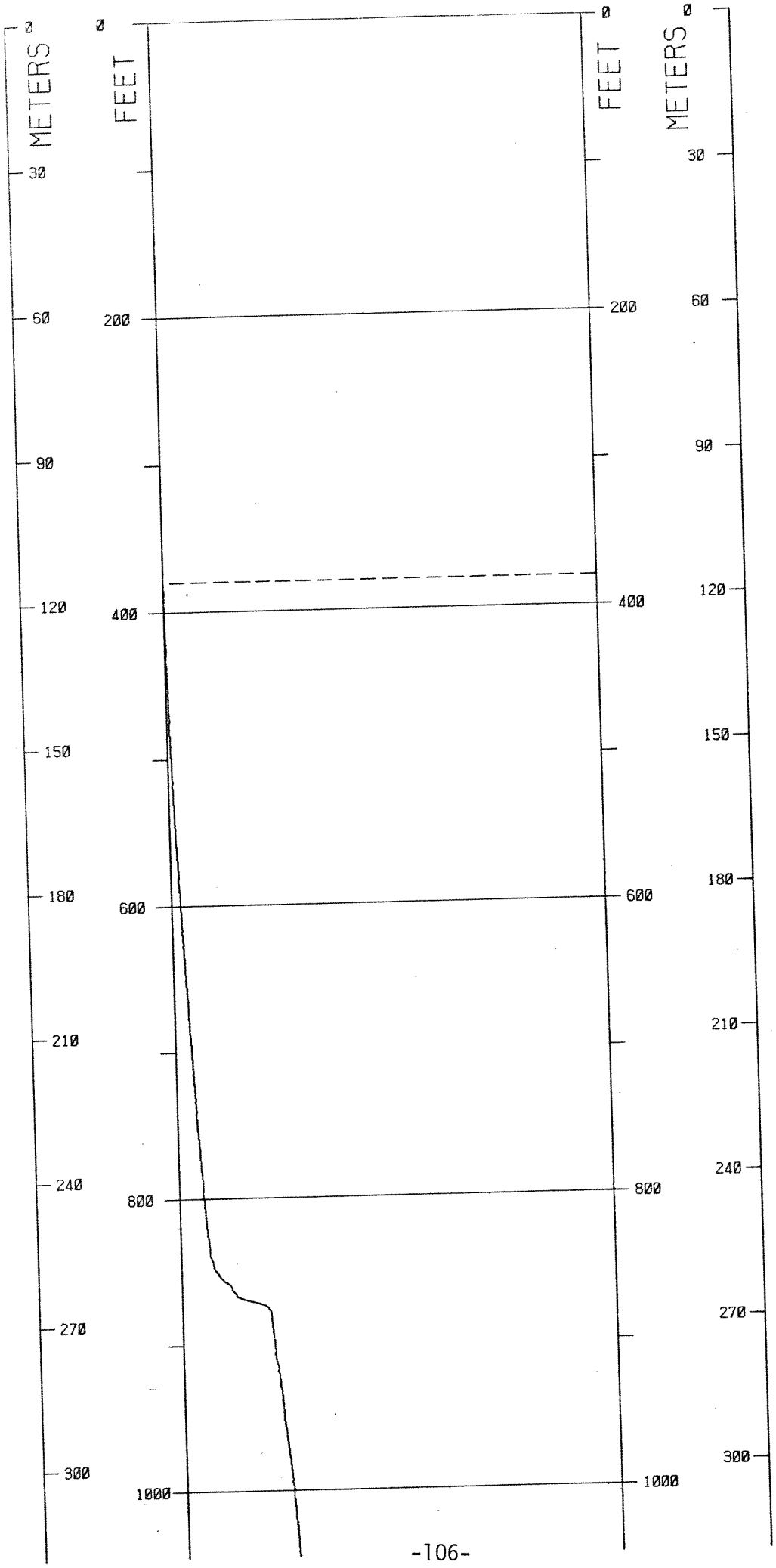
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/21/83 SEW

16N/32E-34E1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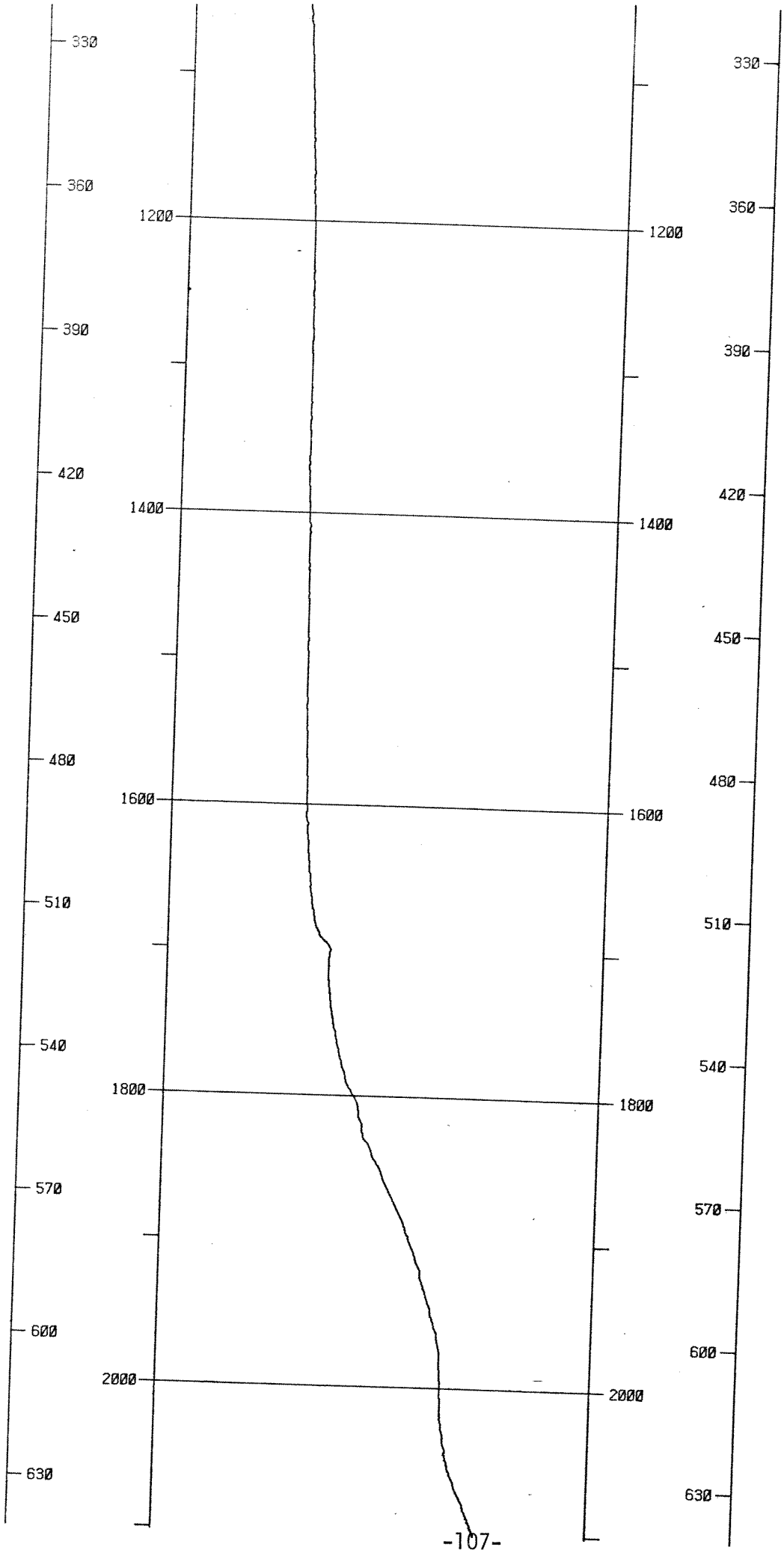
16N/32E-34E1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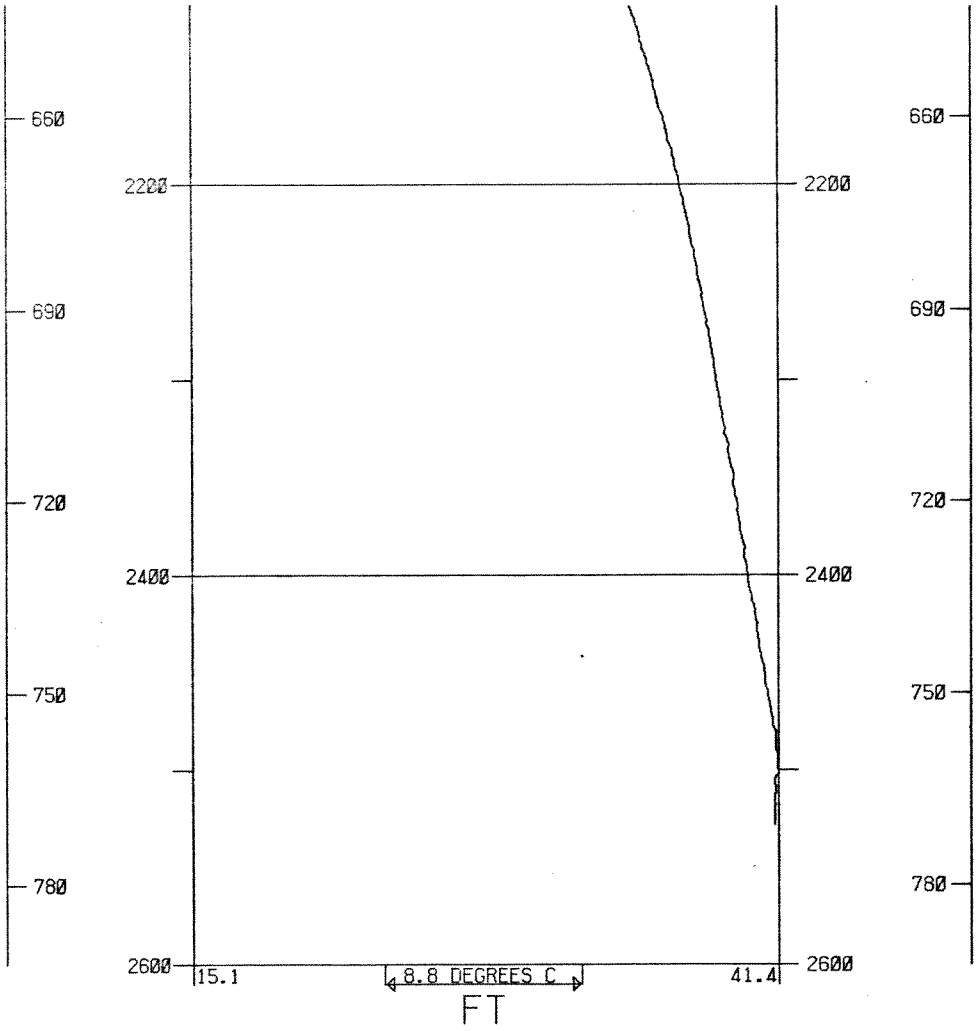
16N/32E-34E1



WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PHILLIPS #9
DATE LOGGED	08/03/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/32E-35D1
SURFACE ELEVATION	1472
TOTAL DEPTH LOGGED	893
DEPTH TO WATER LEVEL	397

CASING & LINERS:
0- 83=15

LEGEND

LOG TITLES

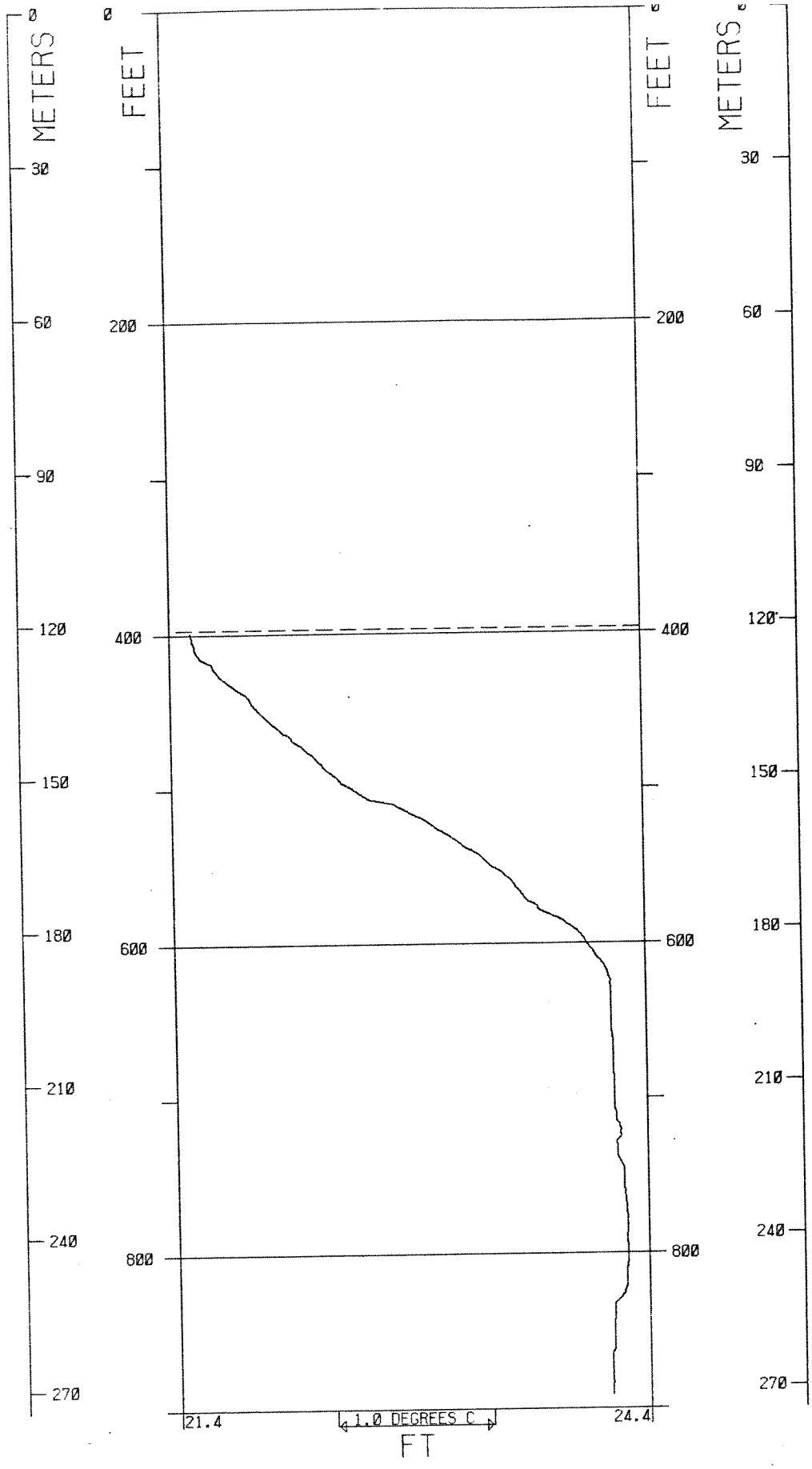
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

16N/32E-35D1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21.4
1.0 DEGREES C
24.4
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BOYD PHILLIPS
DATE LOGGED	04/18/78
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/33E-20A1
SURFACE ELEVATION	1590
TOTAL DEPTH LOGGED	1457
DEPTH TO WATER LEVEL	510

CASING & LINERS:

0- 75=16

HAND DIGITIZED

LEGEND

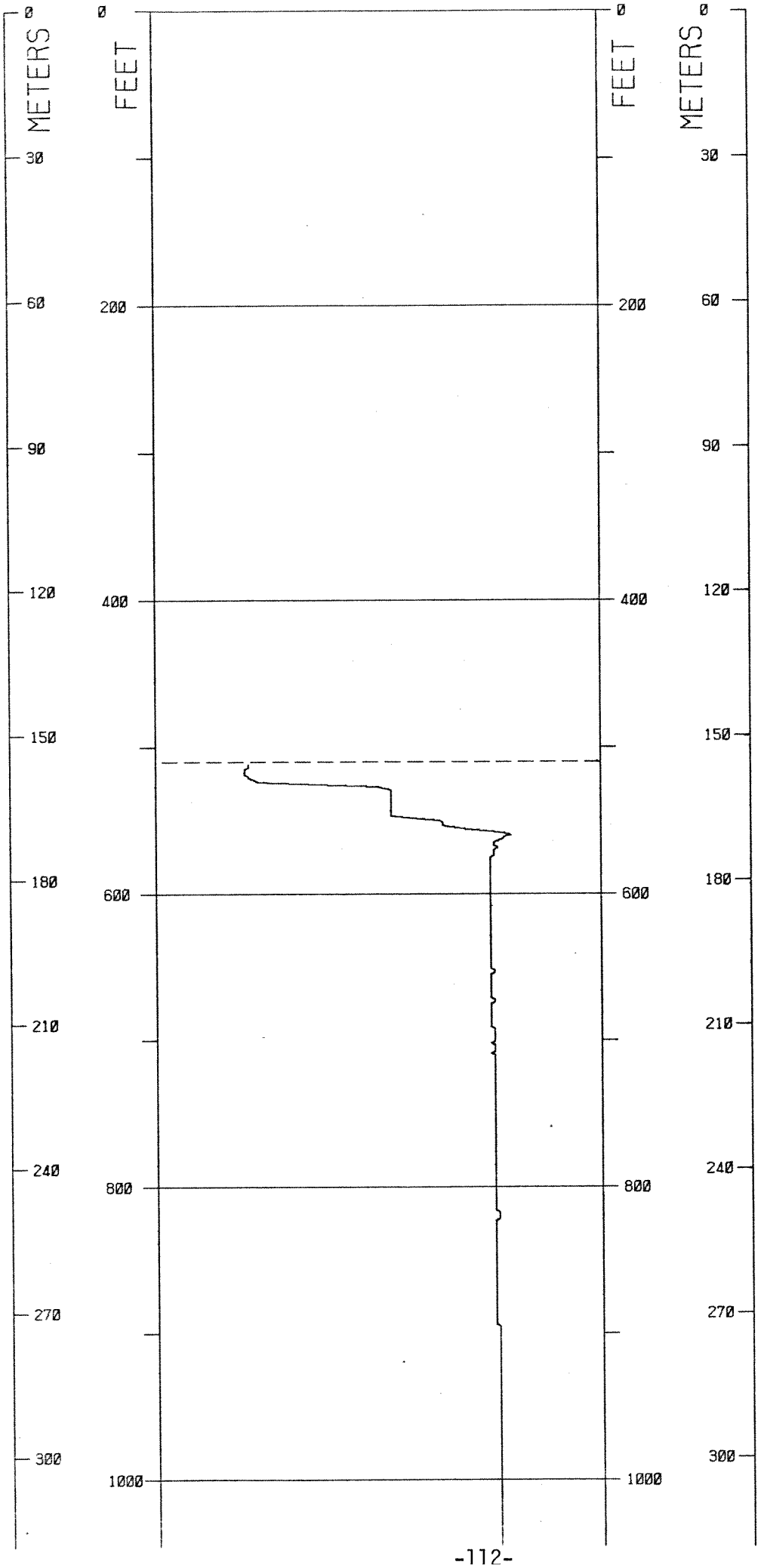
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/14/83 SEW


0
METERS
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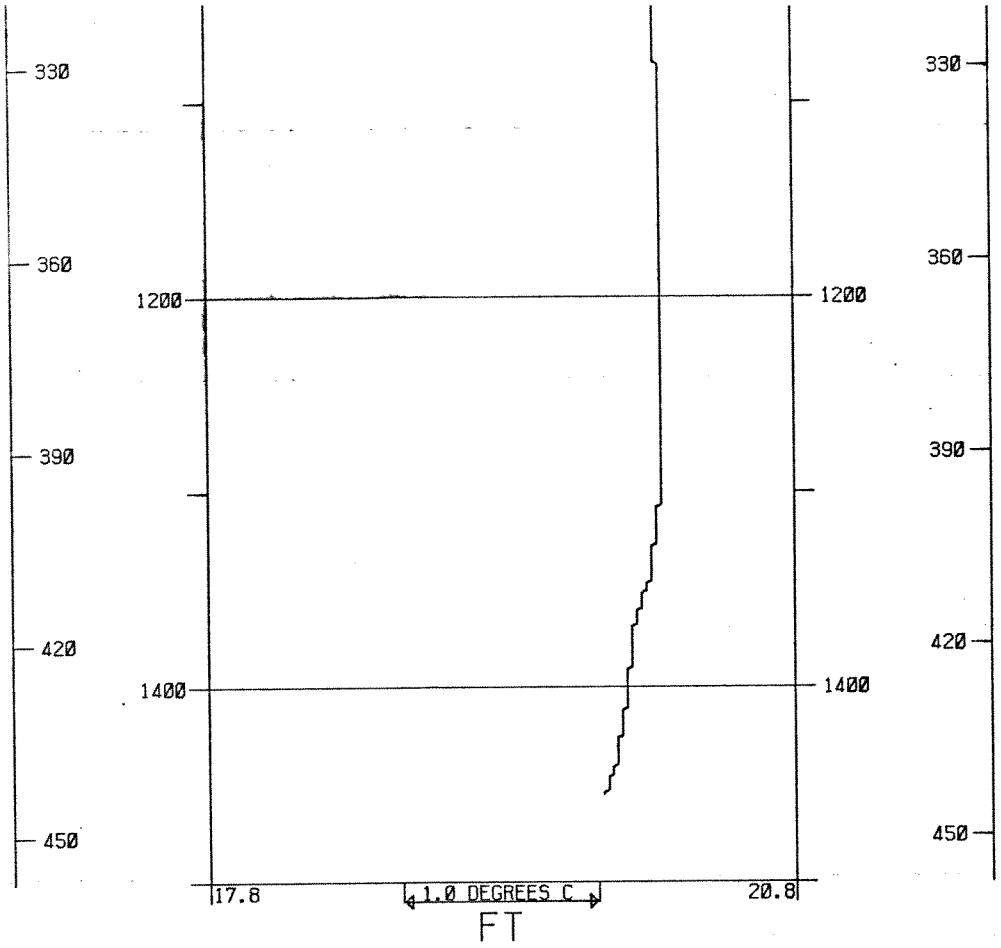
16N/33E-20A1



16N/33E-20A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BAUMANN FARMS
DATE LOGGED	02/19/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	16N/35E-31Q1
SURFACE ELEVATION	1590
TOTAL DEPTH LOGGED	1967
DEPTH TO WATER LEVEL	997
CASING & LINERS:	
0- 63=20	

LEGEND

LOG TITLES

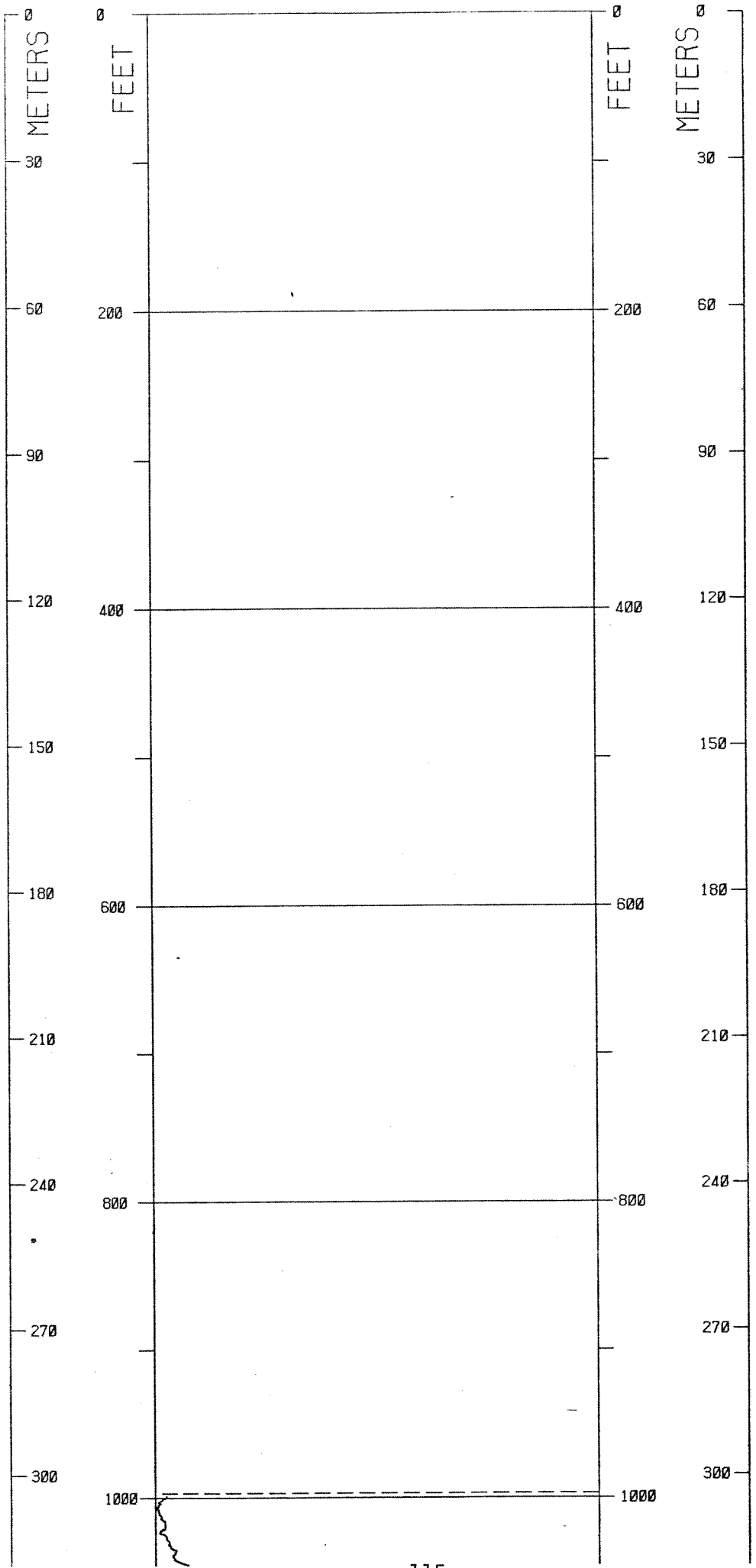
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW

16N/35E-31Q1


METERS
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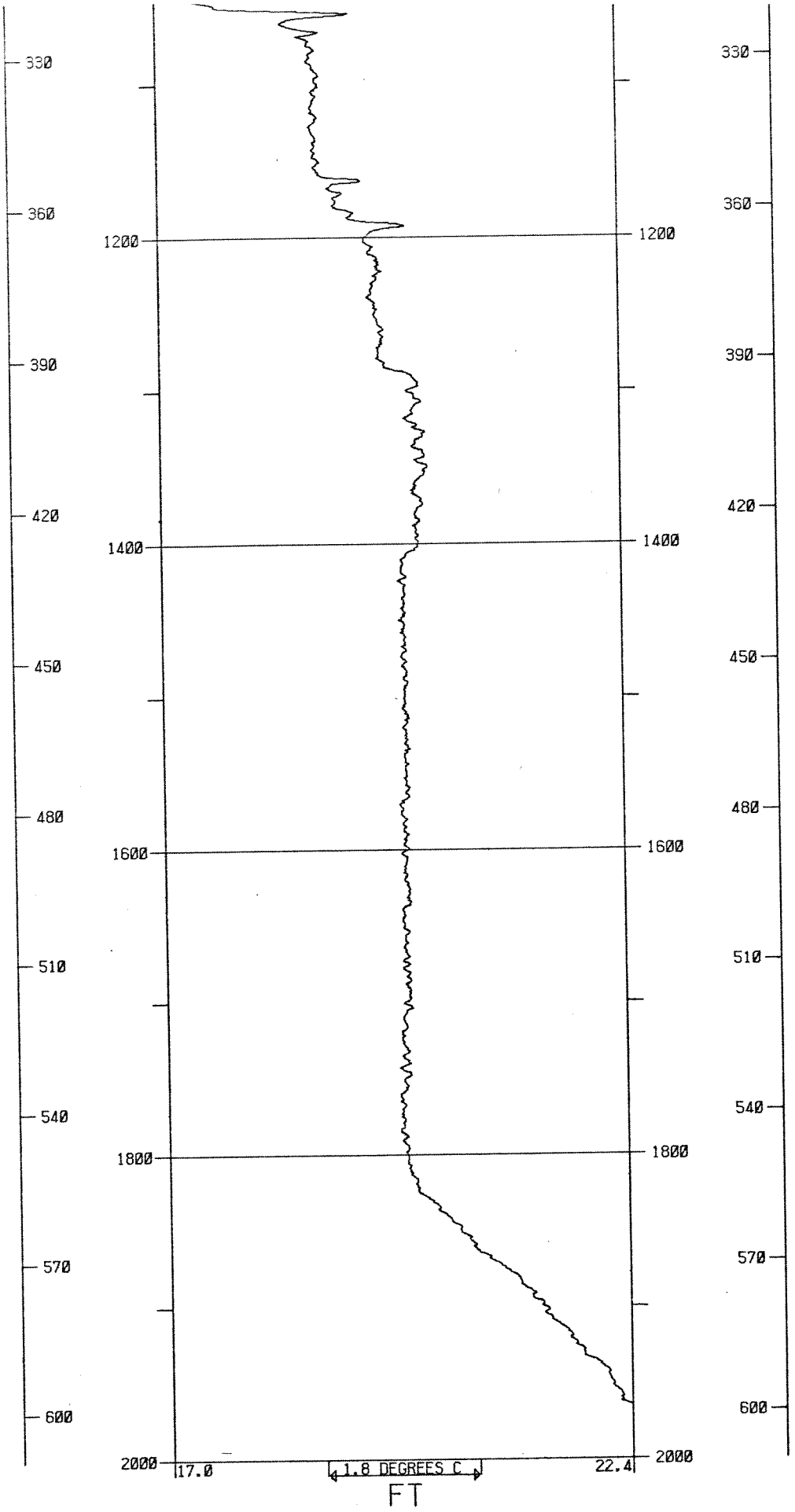
16N/35E-31Q1


330
360
390
420
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17.0
1.8 DEGREES C
22.4
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	WARDEN #6
DATE LOGGED	04/06/79
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	17N/30E-10P1
SURFACE ELEVATION	1280
TOTAL DEPTH LOGGED	831
DEPTH TO WATER LEVEL	160

CASING & LINERS:

0- 97=19 0- 386=15

LEGEND

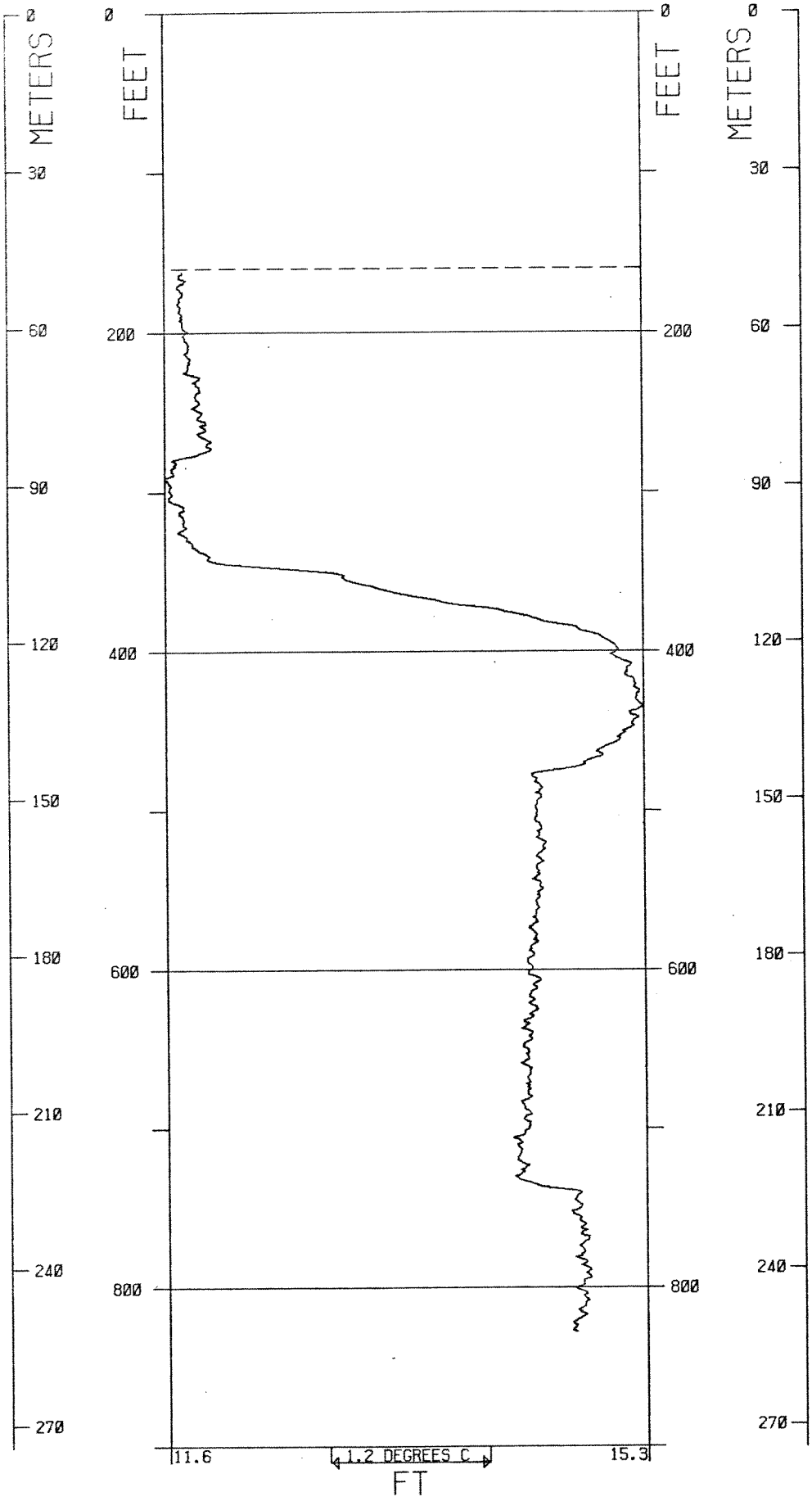
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW


METERS
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11.6
1.2 DEGREES C
15.3
FT

17N/30E-10P1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PHILLIPS, C-12
DATE LOGGED	Ø6/25/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/31E-12D1
SURFACE ELEVATION	126Ø
TOTAL DEPTH LOGGED	1942
DEPTH TO WATER LEVEL	2Ø9

CASING & LINERS:
Ø- 58=2Ø Ø- 869=16 869-1245=13

LEGEND

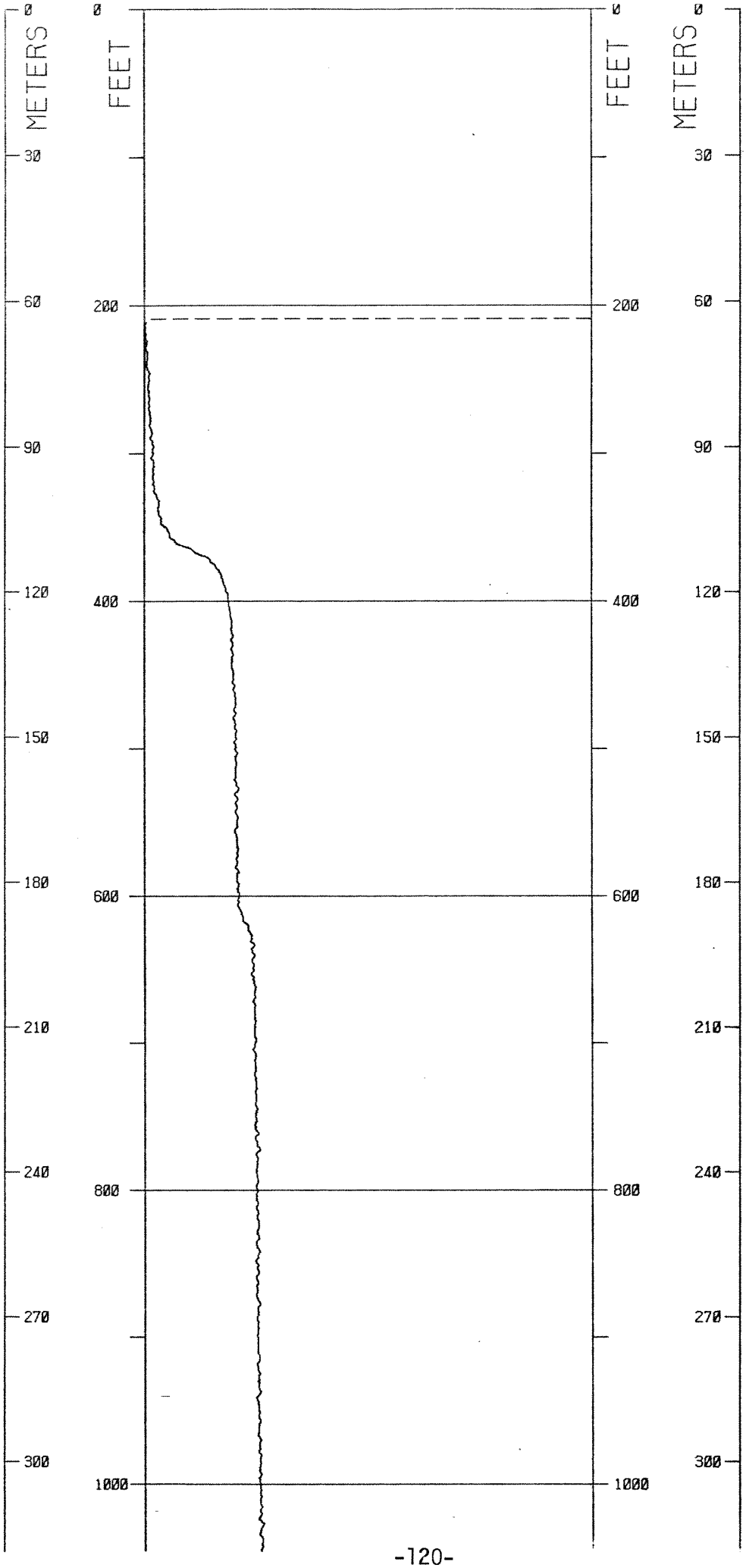
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/22/83 SEW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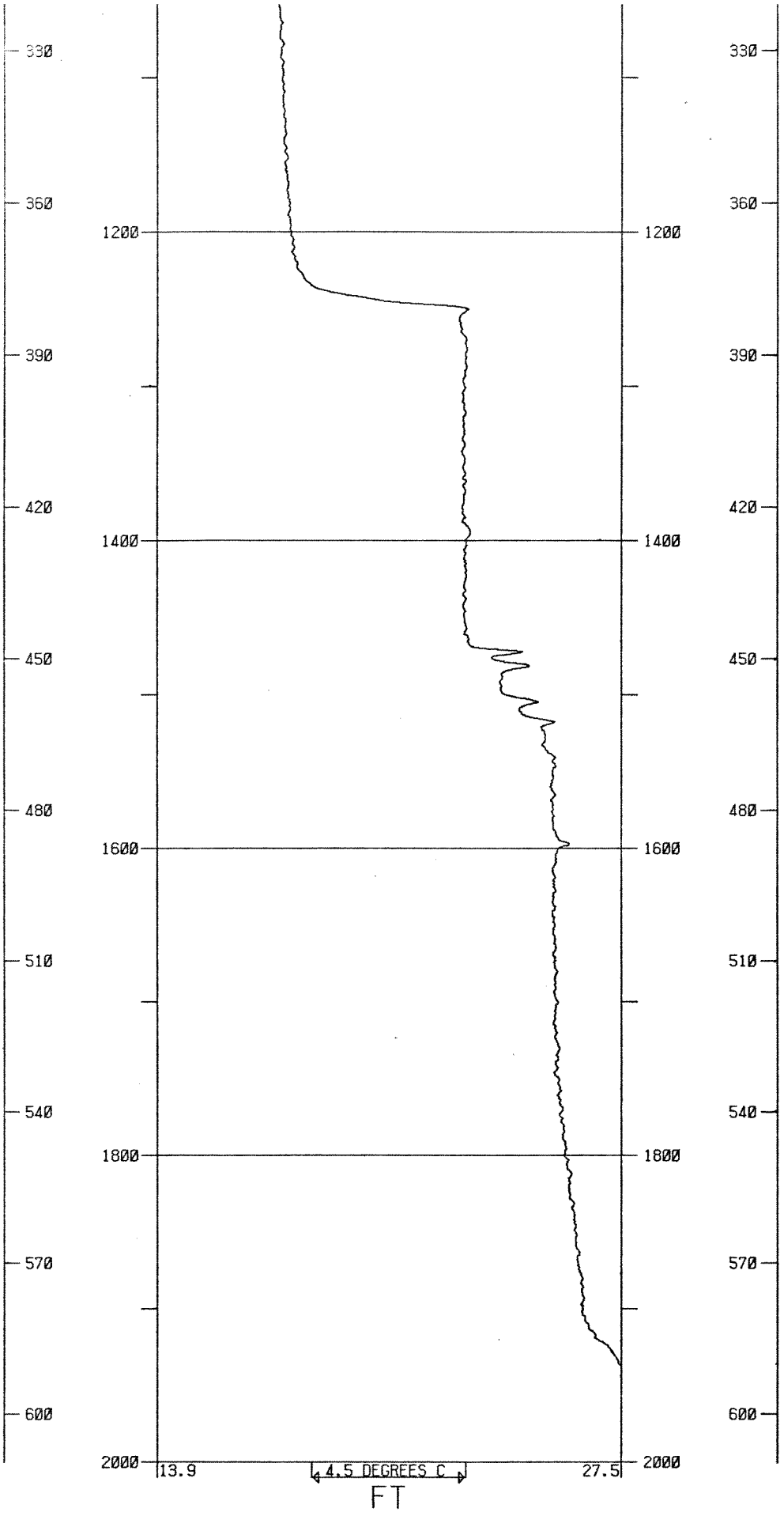
17N/31E-12D1


330
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13.9
4.5 DEGREES C
27.5
FT

17N/31E-12D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JIM BURGESON
DATE LOGGED	Ø2/12/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/31E-13N1
SURFACE ELEVATION	12ØØ
TOTAL DEPTH LOGGED	757
DEPTH TO WATER LEVEL	112

CASING & LINERS:
Ø- 23=19

HAND DIGITIZED.

LEGEND

LOG TITLES

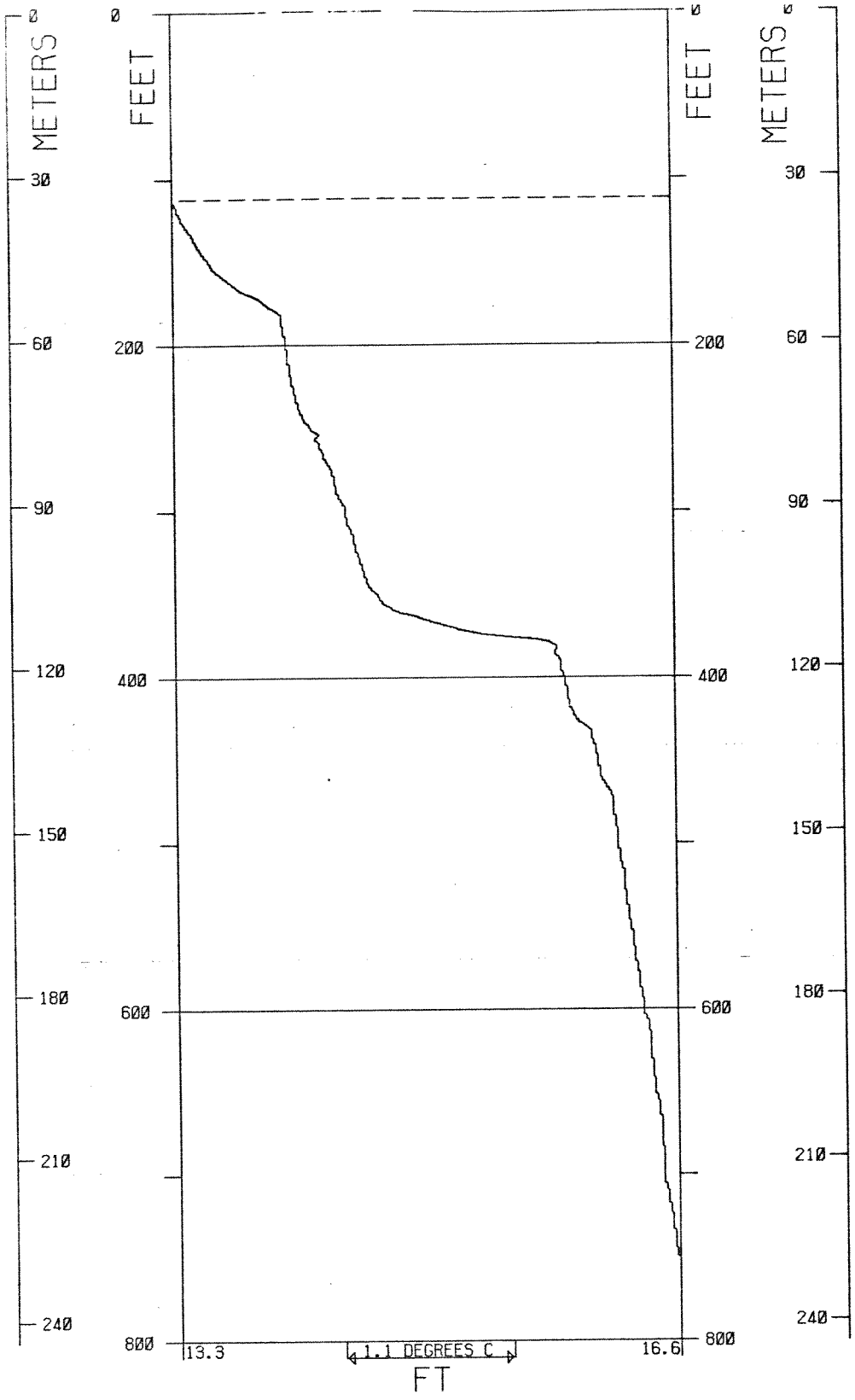
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

17N/31E-13N1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13.3
1.1 DEGREES C
16.6
FT

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	KULM (DNR)
DATE LOGGED	10/21/77
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/32E-16R1
SURFACE ELEVATION	1370
TOTAL DEPTH LOGGED	1171
DEPTH TO WATER LEVEL	350

CASING & LINERS:
0- 24=19

LEGEND

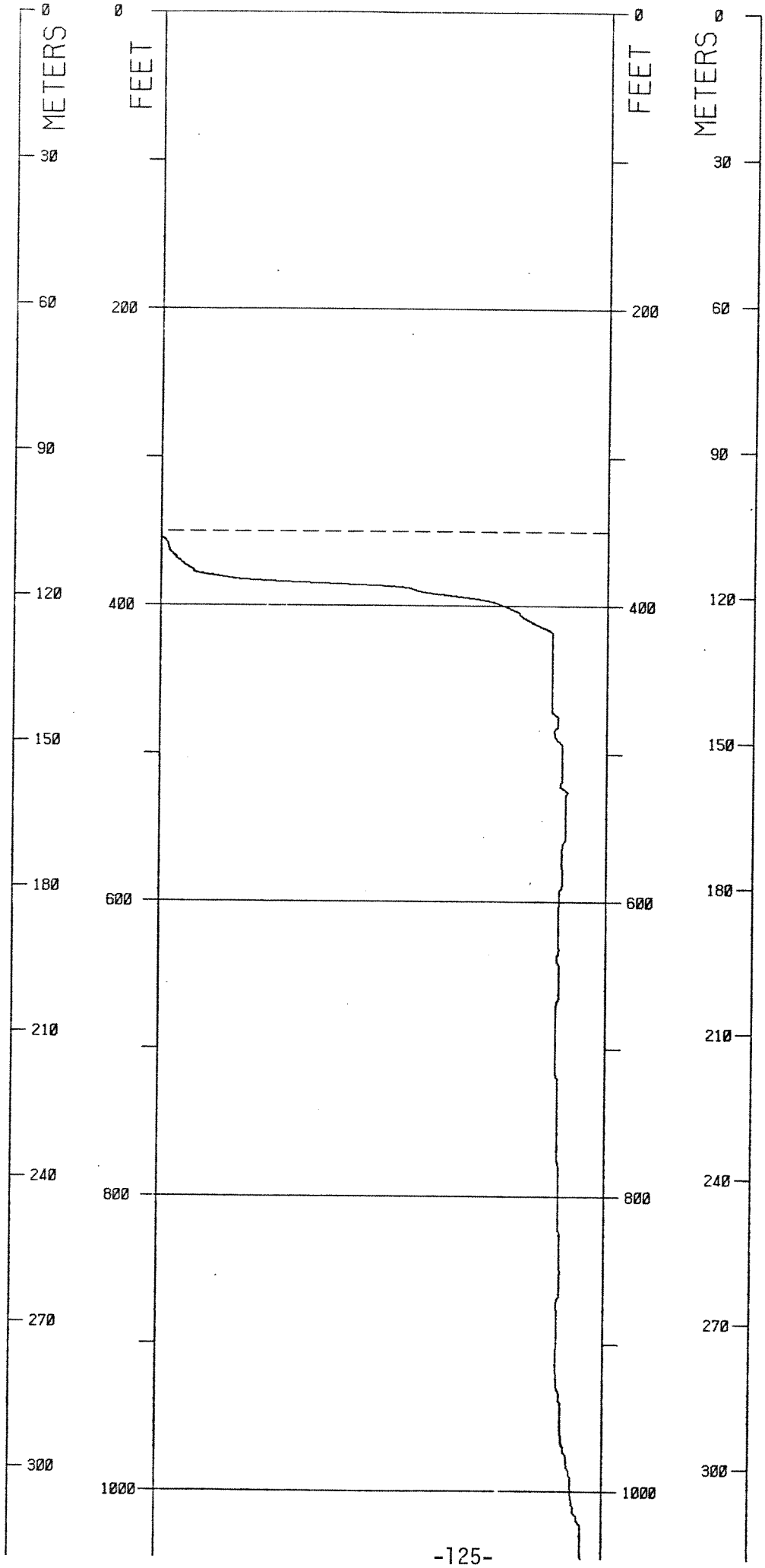
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/27/83 SEW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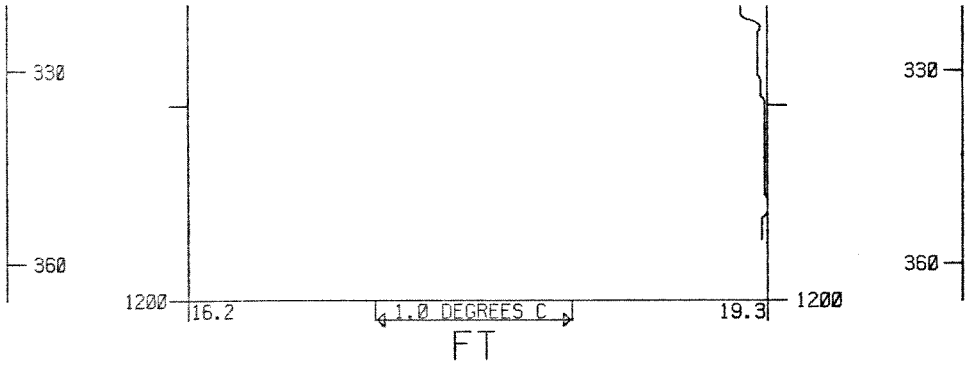
17N/32E-16R1



17N/32E-16R1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CARL BAUMGARD
DATE LOGGED	09/26/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/33E-23A1
SURFACE ELEVATION	1660
TOTAL DEPTH LOGGED	664
DEPTH TO WATER LEVEL	399

CASING & LINERS:
0- 40=15

LEGEND

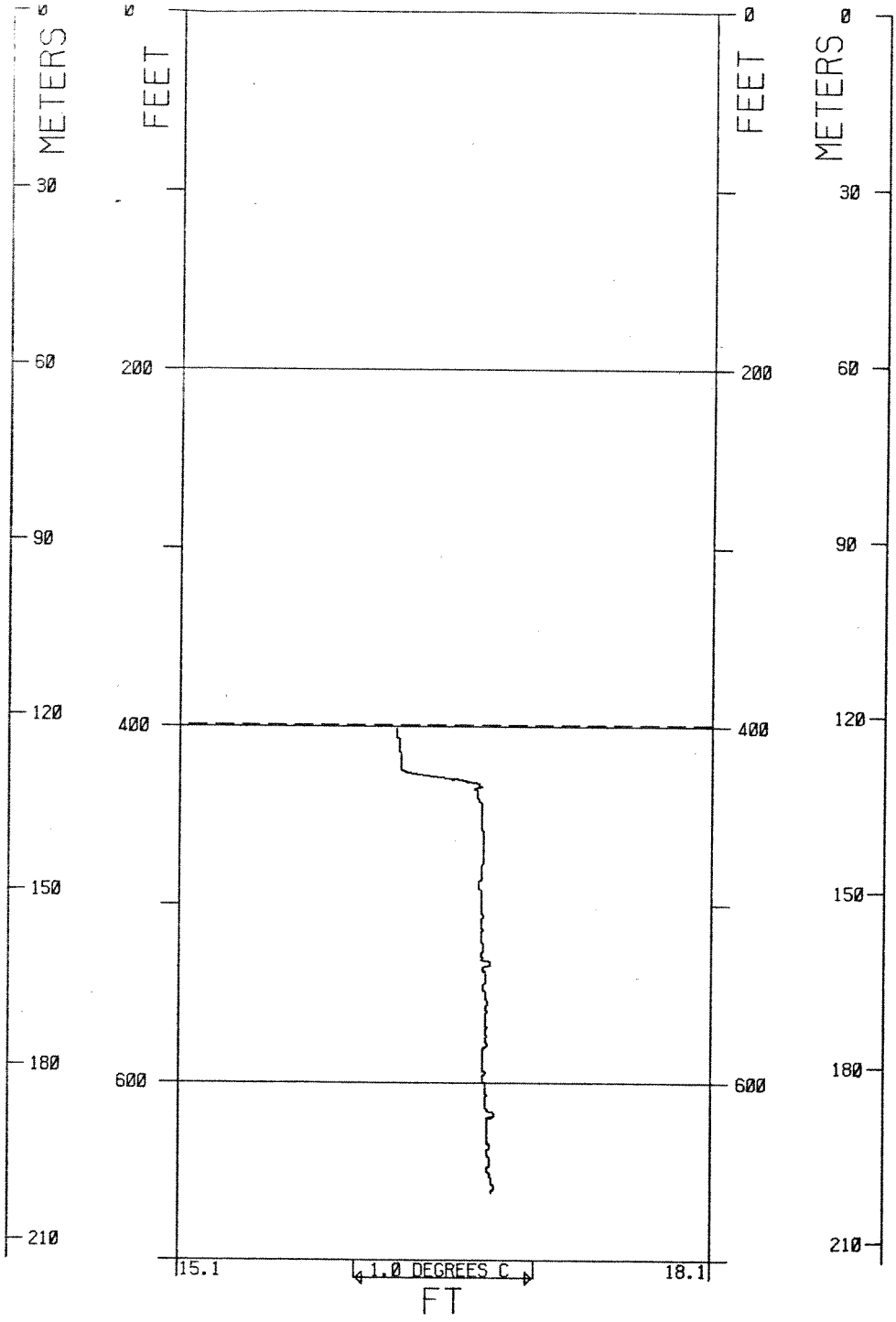
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW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METERS
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120
150
180
210
15.1
1.0 DEGREES C
18.1
FT

17N/33E-23A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RACHEL KISON
DATE LOGGED	12/16/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/35E-12L1
SURFACE ELEVATION	1640
TOTAL DEPTH LOGGED	445
DEPTH TO WATER LEVEL	76

CASING & LINERS:

Ø- 22=15 Ø- 112=12

LEGEND

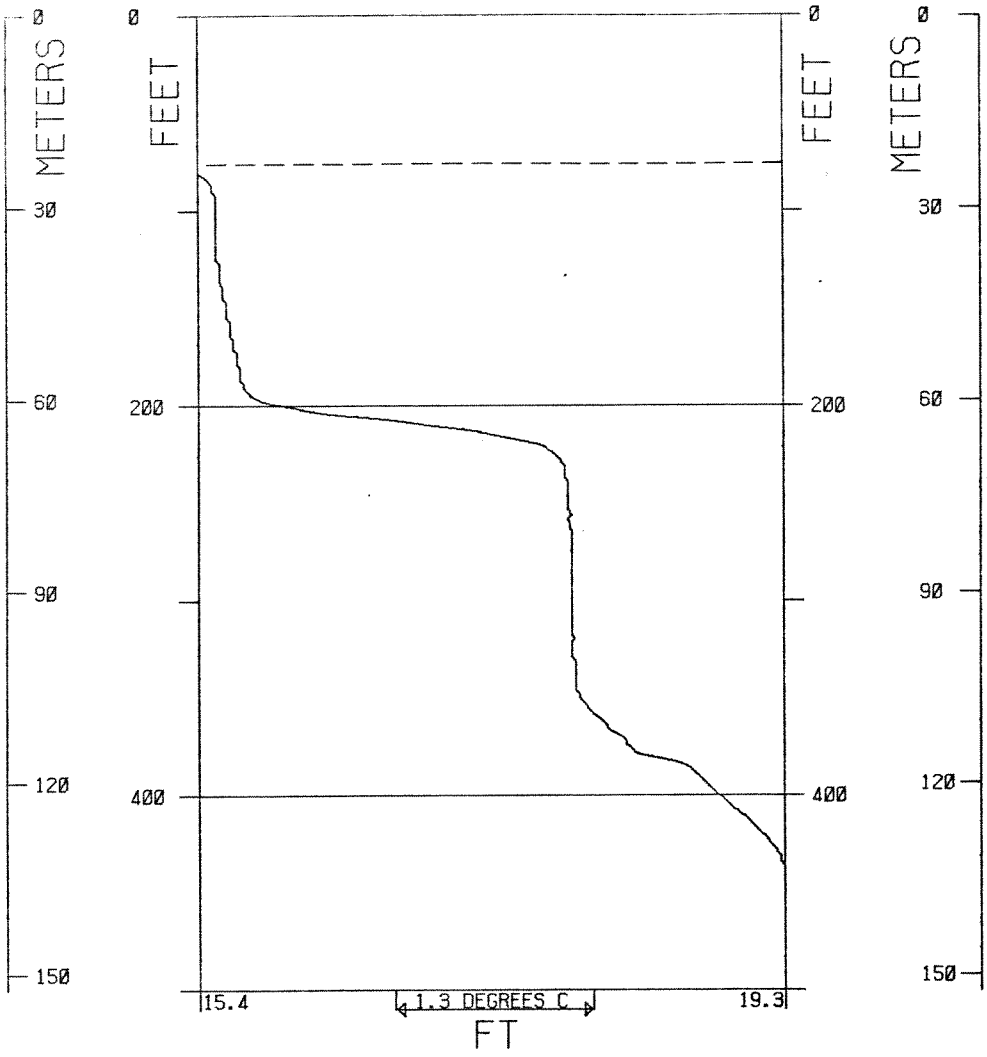
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/28/83 SEW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METERS
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90
120
150
15.4
1.3 DEGREES C
19.3
FT

17N/35E-12L1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	KAUTZ, WILLIAM B.
DATE LOGGED	09/19/78
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	17N/36E-07N1
SURFACE ELEVATION	1730
TOTAL DEPTH LOGGED	900
DEPTH TO WATER LEVEL	524
CASING & LINERS:	
0- 77=15	

LEGEND

LOG TITLES

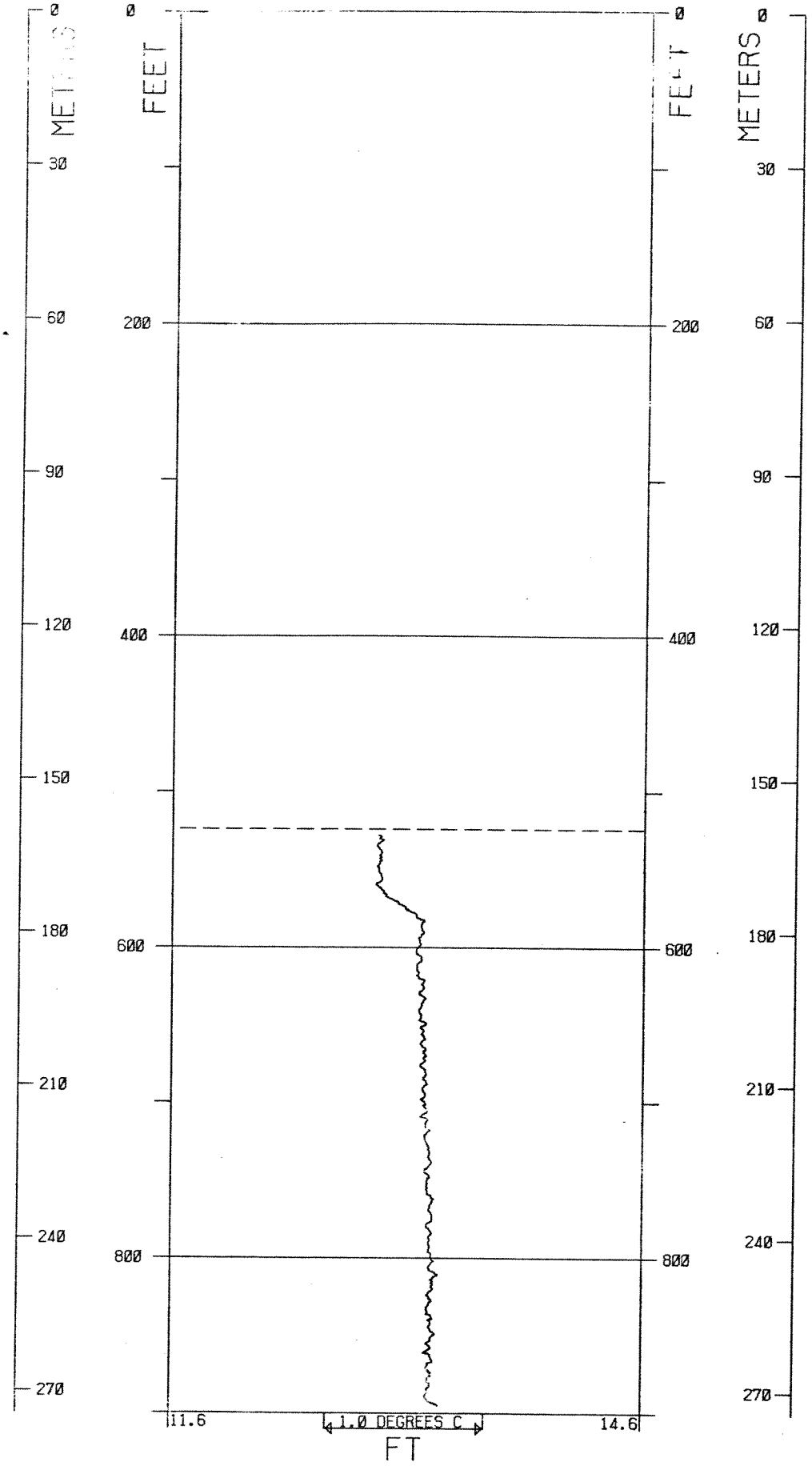
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW

17N/36E-07N1


METERS
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800
METERS
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30
60
90
120
150
180
210
240
270
11.6
1.0 DEGREES C
14.6
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	AMERICAN POTATO #2
DATE LOGGED	Ø1/23/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	18N/29E-Ø6Q1
SURFACE ELEVATION	1165
TOTAL DEPTH LOGGED	672
DEPTH TO WATER LEVEL	114

CASING & LINERS:
Ø- 25Ø=15

MUD BELOW 662 FT.

LEGEND

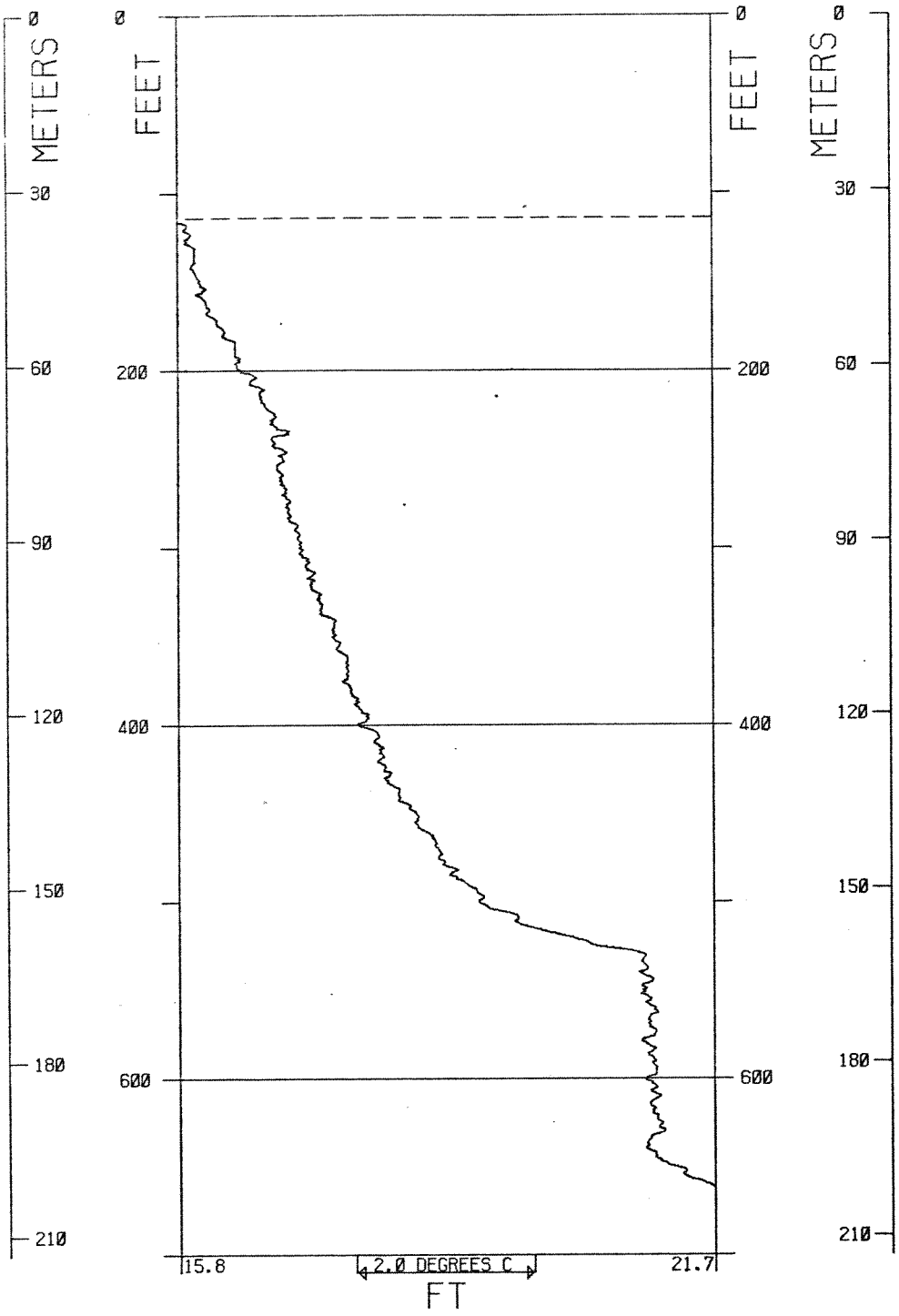
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/21/83 SEW


0
METERS
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FEET
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15.8
2.0 DEGREES C
21.7
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180
210

18N/29E-06Q1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LEO DYCK
DATE LOGGED	12/07/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	18N/31E-30K1
SURFACE ELEVATION	1302
TOTAL DEPTH LOGGED	617
DEPTH TO WATER LEVEL	130

CASING & LINERS:
0- 59=15

LEGEND

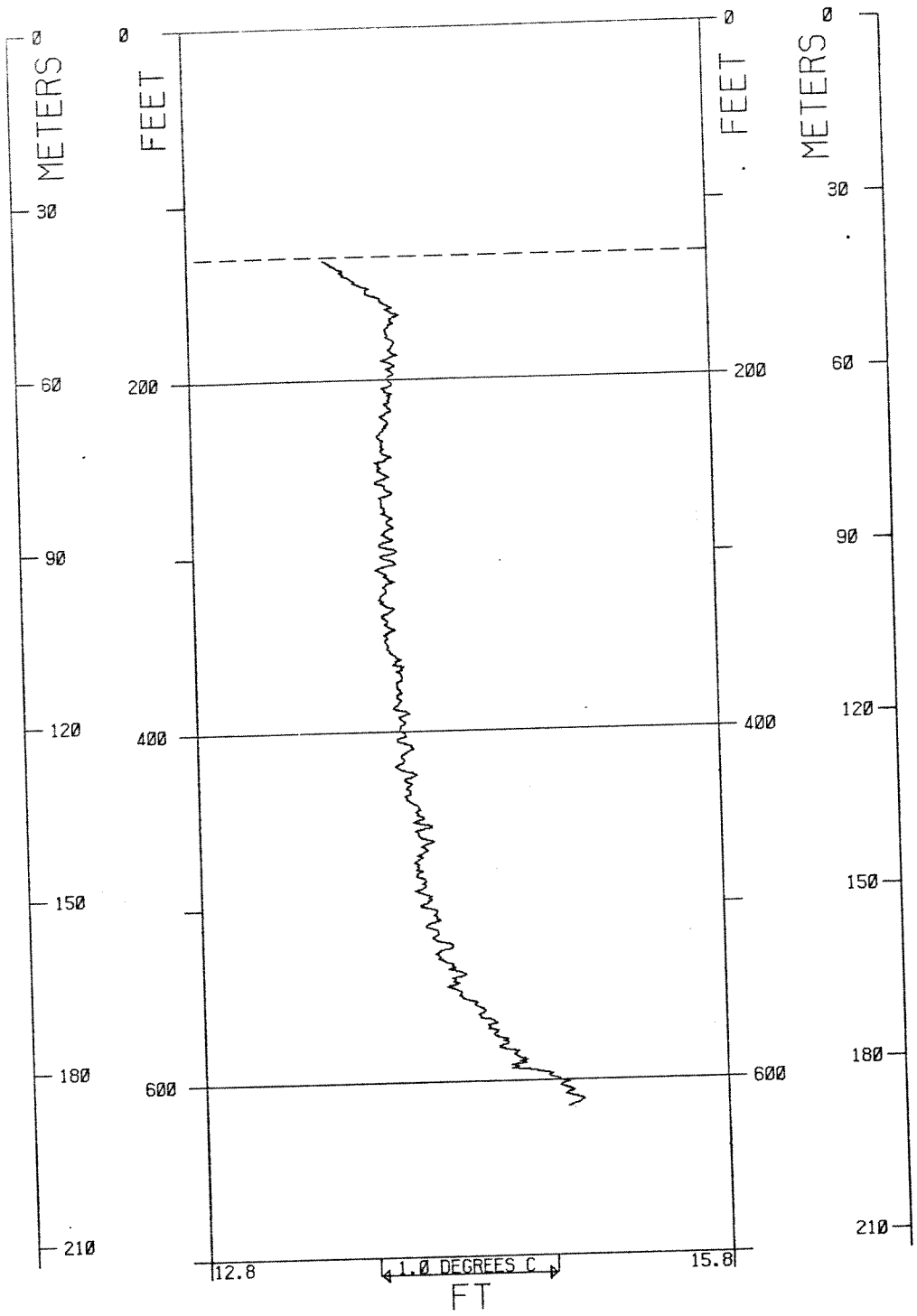
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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1.0 DEGREES C
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18N/31E-30K1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PHILLIPS, C-33
DATE LOGGED	08/12/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	18N/31E-33D1
SURFACE ELEVATION	1420
TOTAL DEPTH LOGGED	2387
DEPTH TO WATER LEVEL	376

CASING & LINERS:
0- 23=20 0- 845=16 845-1368=13

LEGEND

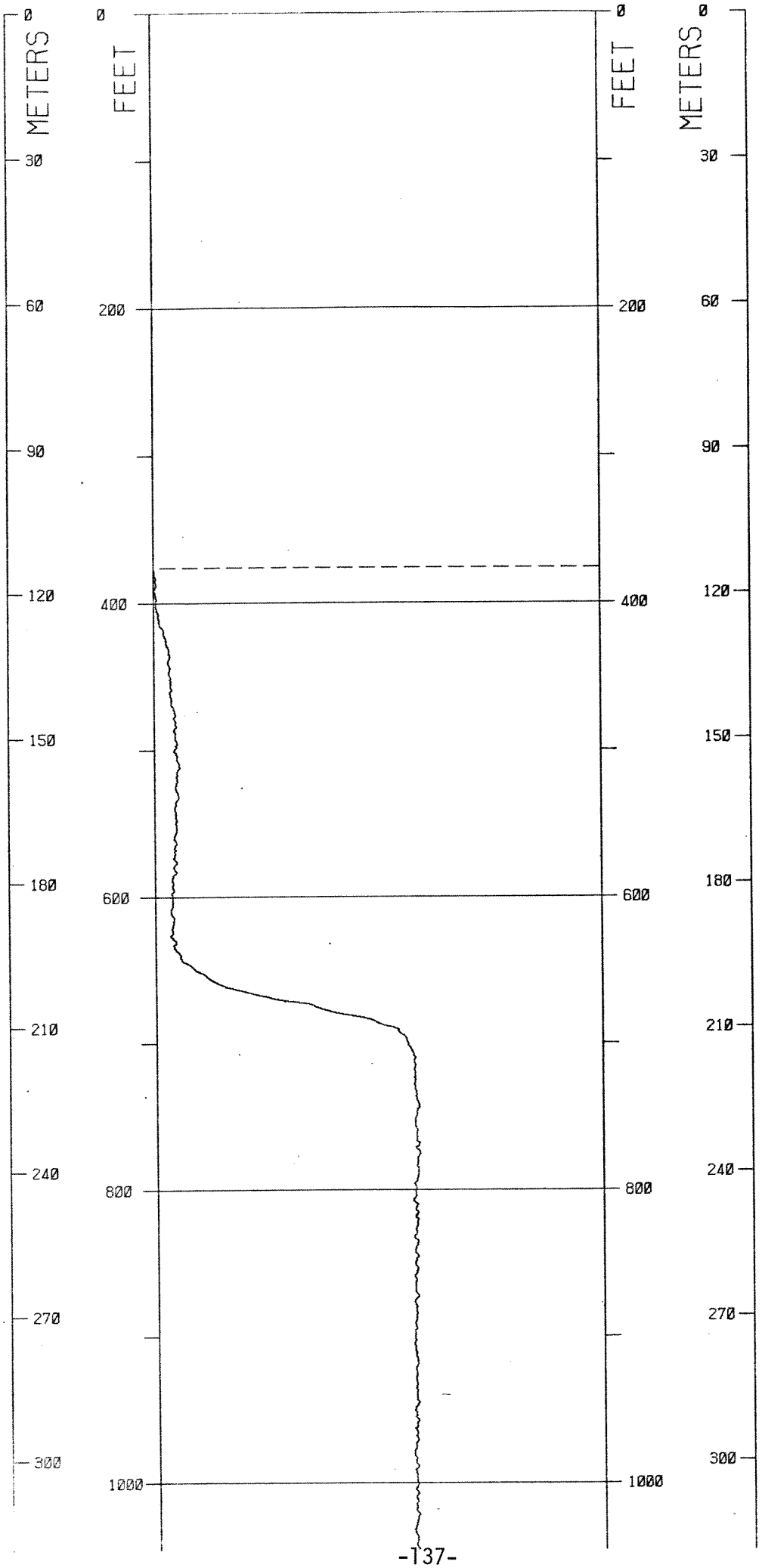
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW


METERS
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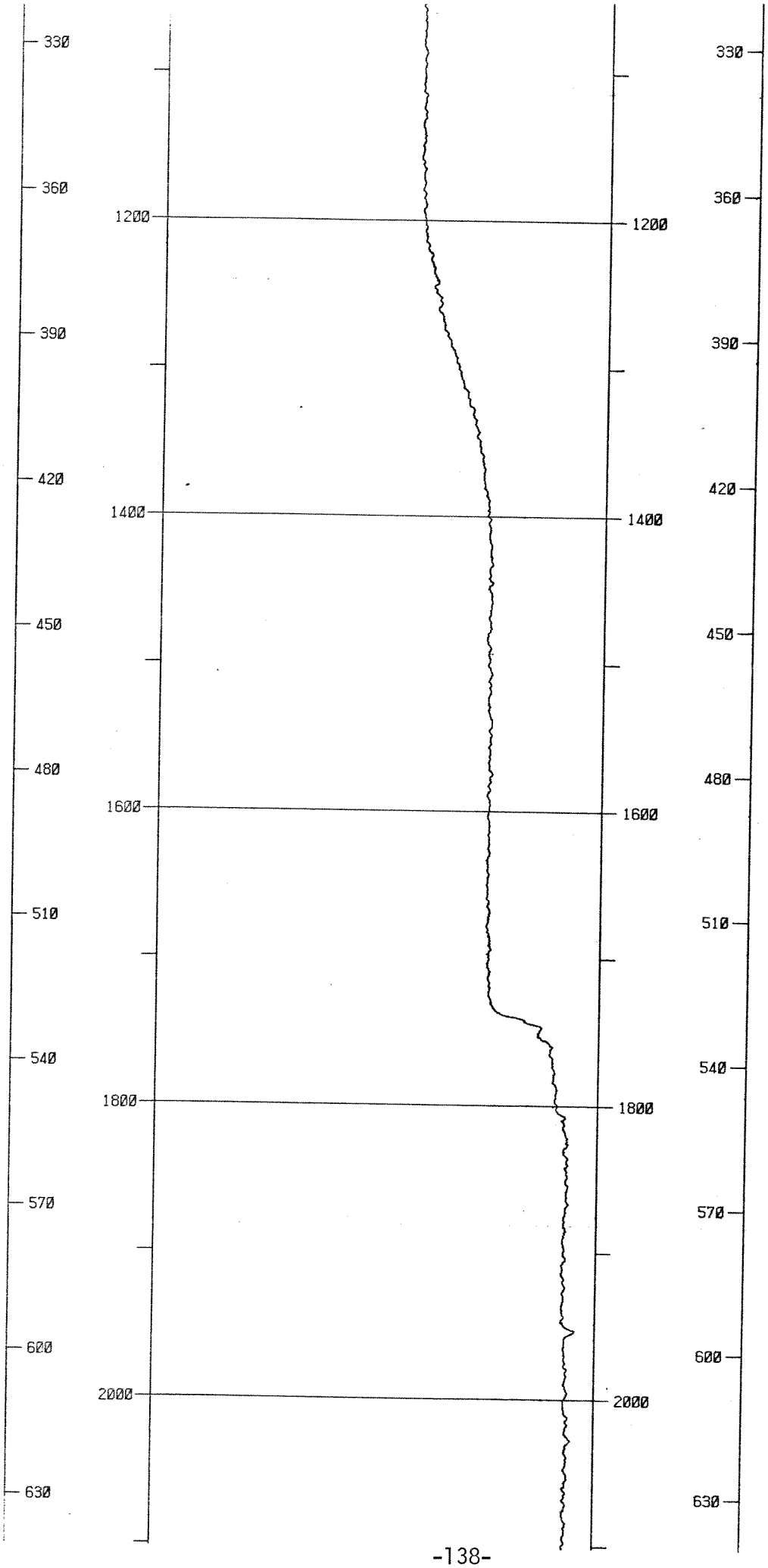
18N/31E-33D1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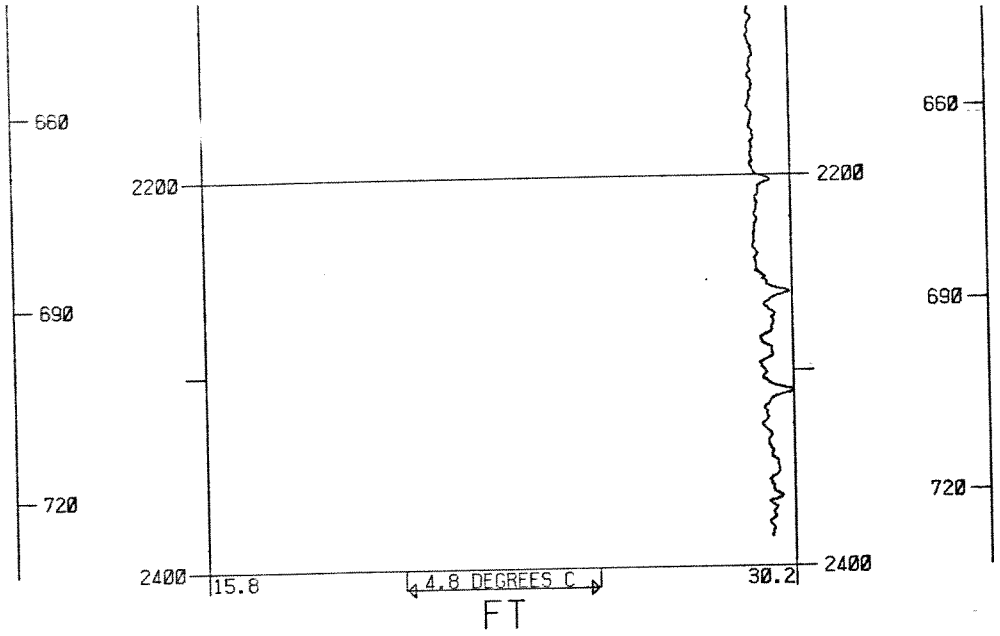
18N/31E-33D1

18N/31E-33D1



WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON HEINEMANN
DATE LOGGED	02/19/76
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	18N/36E-04A1
SURFACE ELEVATION	1769
TOTAL DEPTH LOGGED	922
DEPTH TO WATER LEVEL	231

CASING & LINERS:
0- 10= 15

LEGEND

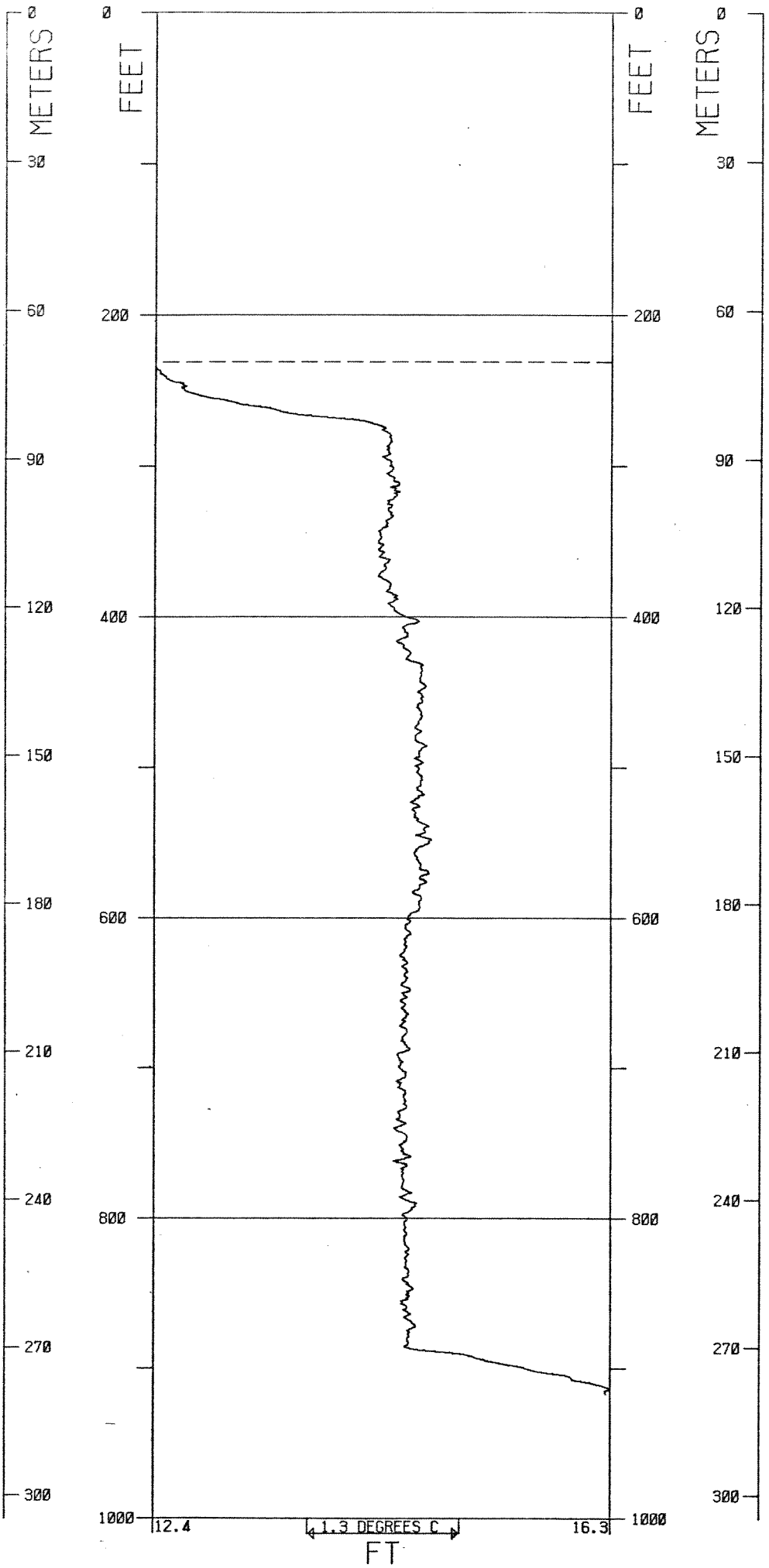
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
270
300
0
200
400
600
800
1000
12.4
1.3 DEGREES C
16.3
FT

18N/36E-04A1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MOSES LAKE CITY #7
DATE LOGGED	09/27/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/28E-23D1
SURFACE ELEVATION	1065
TOTAL DEPTH LOGGED	926
DEPTH TO WATER LEVEL	67
CASING & LINERS:	
0- 14=24	

LEGEND

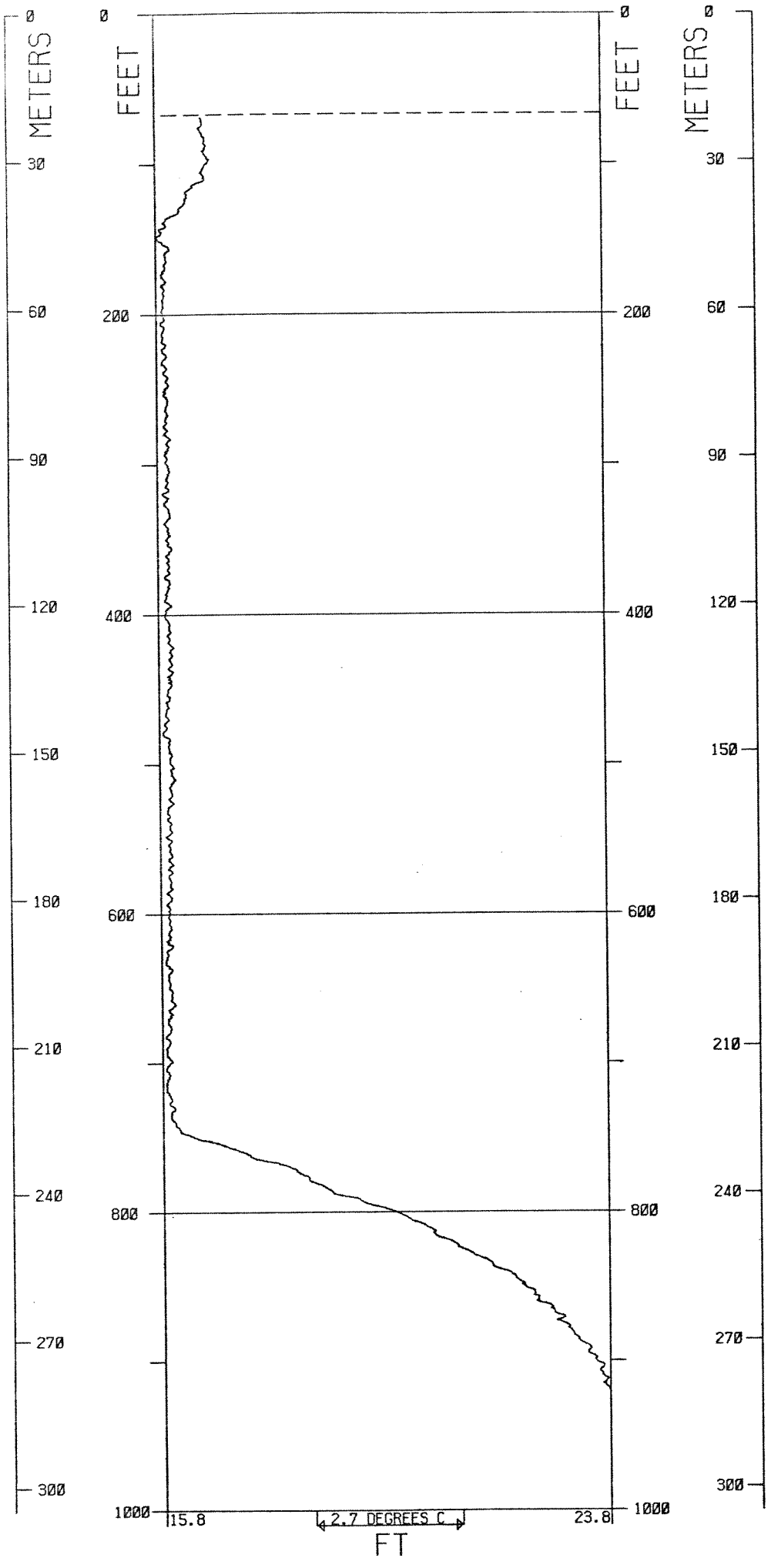
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW


METERS
FEET
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120
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180
210
240
270
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400
600
800
1000
15.8
2.7 DEGREES C
23.8
FT

19N/28E-23D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MOSES LAKE #5
DATE LOGGED	09/28/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/28E-23J1
SURFACE ELEVATION	1175
TOTAL DEPTH LOGGED	690
DEPTH TO WATER LEVEL	167

CASING & LINERS:
0- 106=15

LEGEND

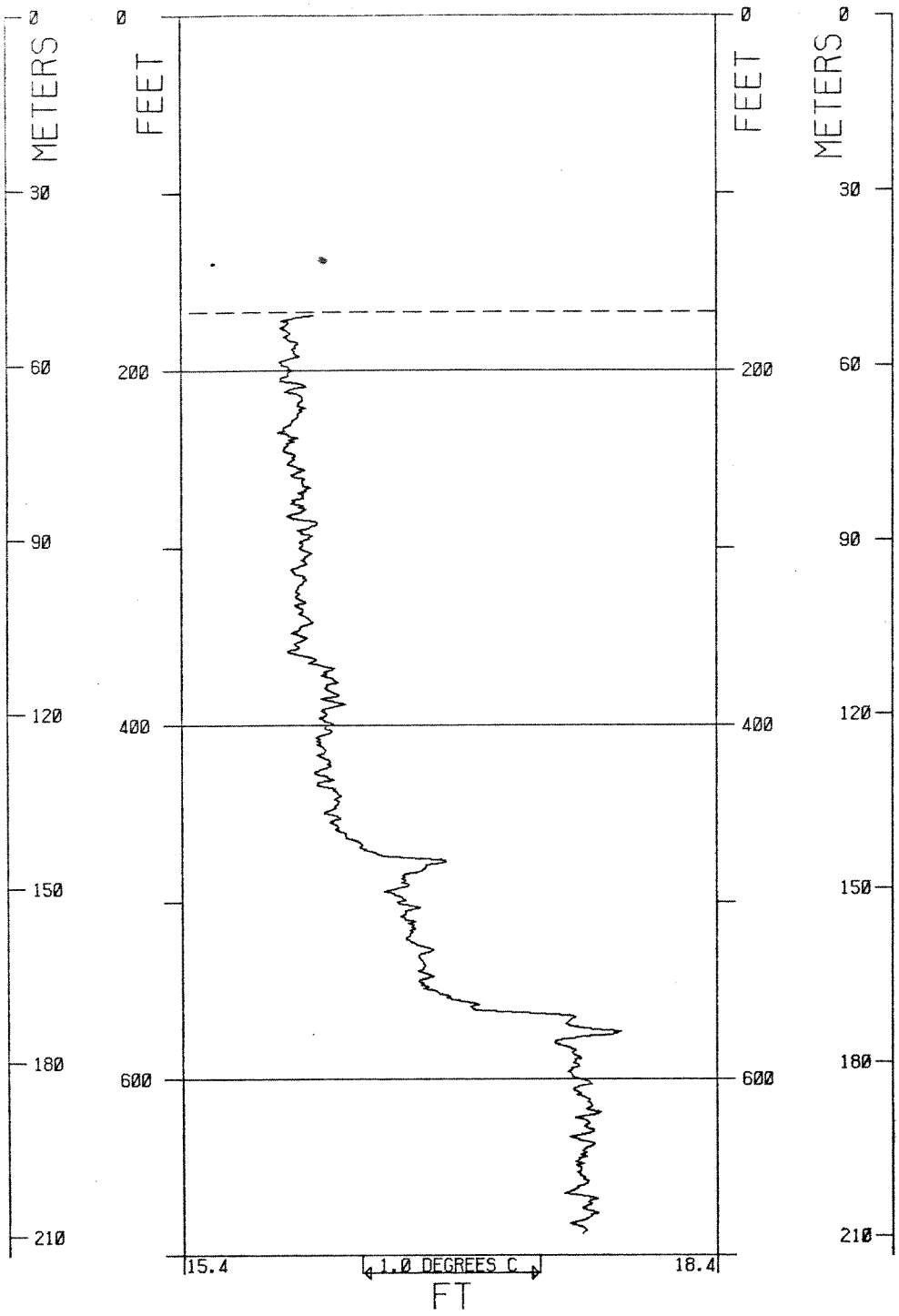
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW


0
METERS
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60
90
120
150
180
210
0
FEET
200
400
600
15.4
1.0 DEGREES C
18.4
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180
210

19N/28E-23J1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MOSES LAKE #4
DATE LOGGED	09/26/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/28E-28K1
SURFACE ELEVATION	1075
TOTAL DEPTH LOGGED	963
DEPTH TO WATER LEVEL	72

CASING & LINERS:

0- 395=12 362- 711= 8

LEGEND

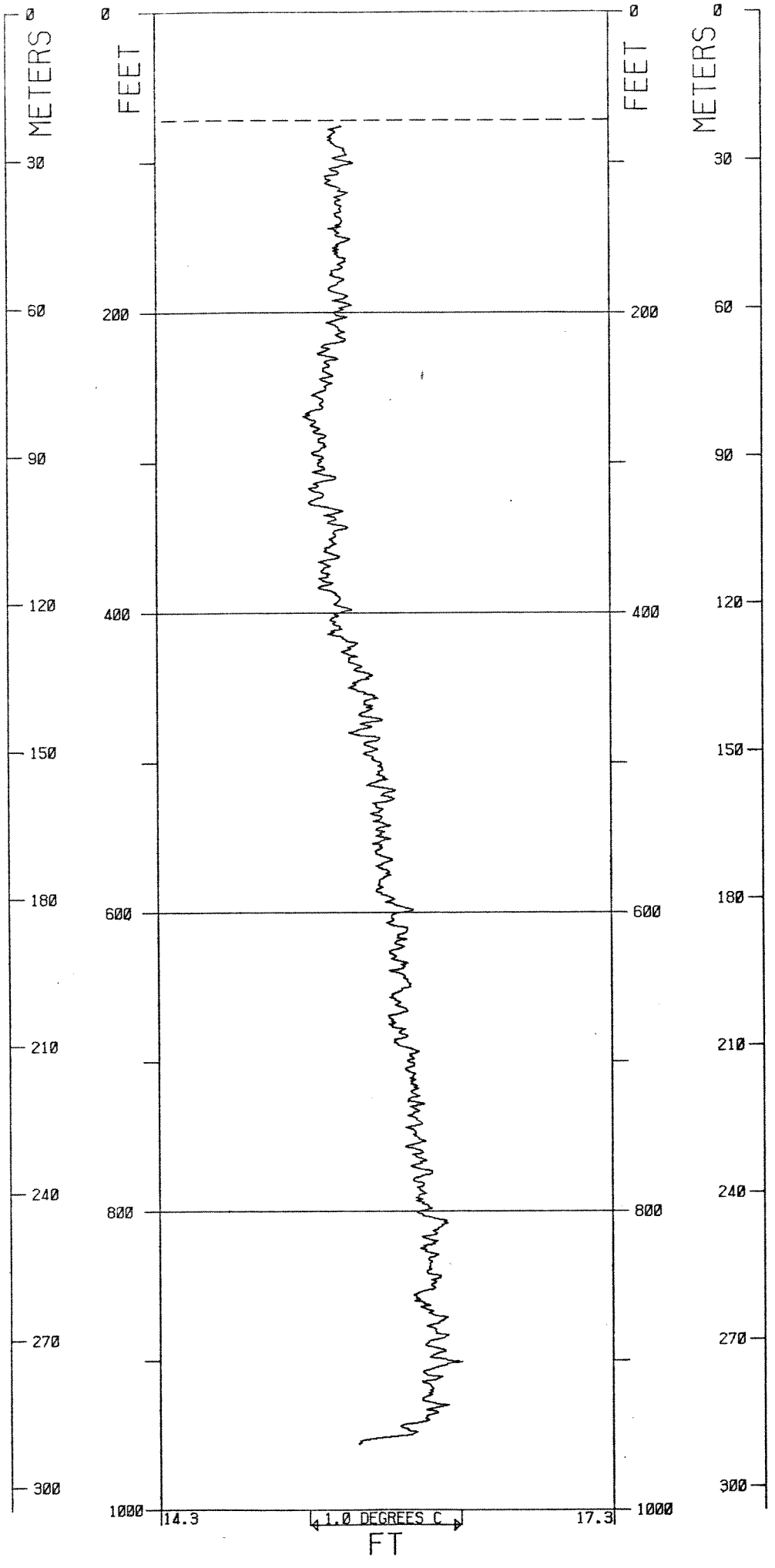
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/20/83 SEW


METERS
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METERS
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120
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210
240
270
300
200
400
600
800
1000
14.3
1.0 DEGREES C
17.3
FT

19N/28E-28K1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MOSES LAKE #31
DATE LOGGED	Ø3/Ø4/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/28E-29M1
SURFACE ELEVATION	1Ø55
TOTAL DEPTH LOGGED	46Ø
DEPTH TO WATER LEVEL	Ø

CASING & LINERS:

Ø- 78=15 Ø- 33Ø=11

LEGEND

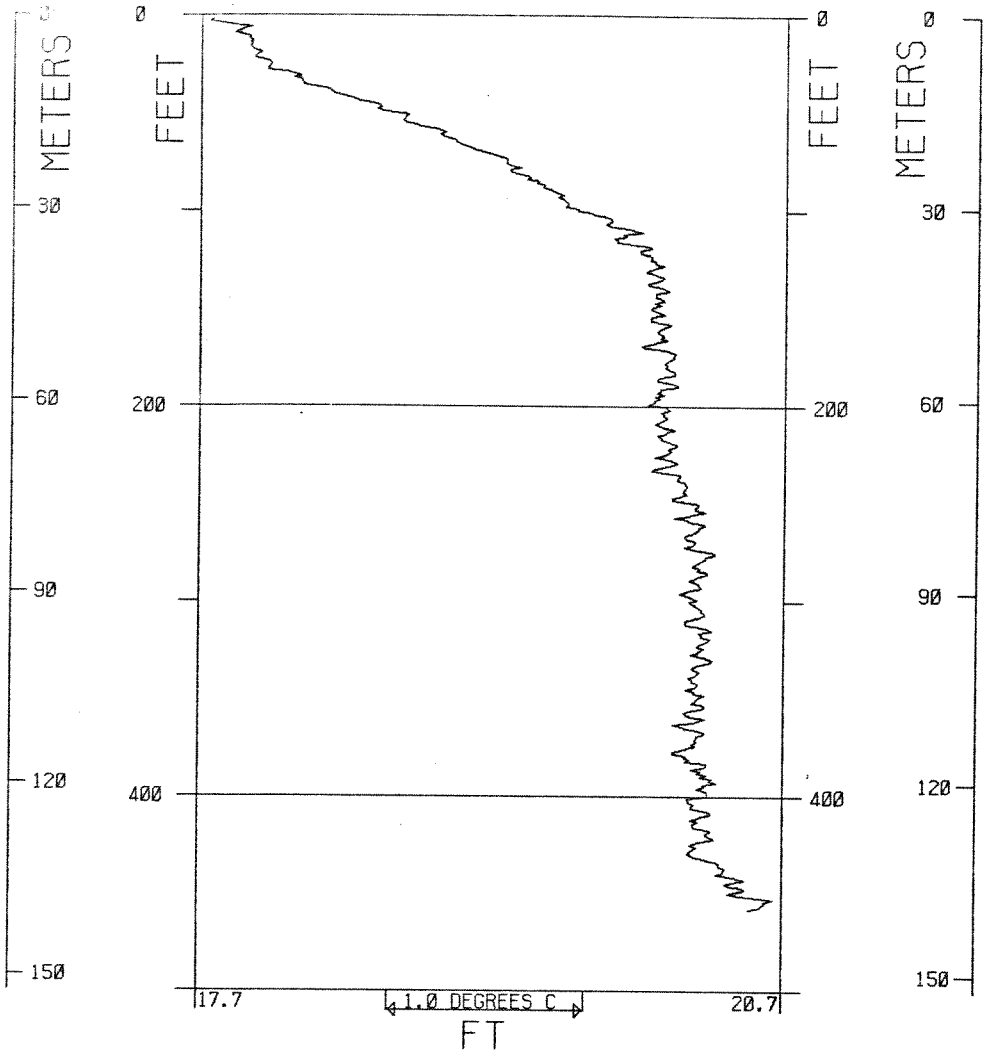
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/29/83 SEW


METERS
0
30
60
90
120
150
FEET
0
200
400
17.7
1.0 DEGREES C
20.7
FT
0
200
400
FEET
METERS
0
30
60
90
120
150

19N/28E-29M1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ROY FODE #2
DATE LOGGED	Ø1/16/76
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/29E-Ø3F2
SURFACE ELEVATION	1357
TOTAL DEPTH LOGGED	1Ø57
DEPTH TO WATER LEVEL	263
CASING & LINERS:	
Ø- 21=2Ø	

LEGEND

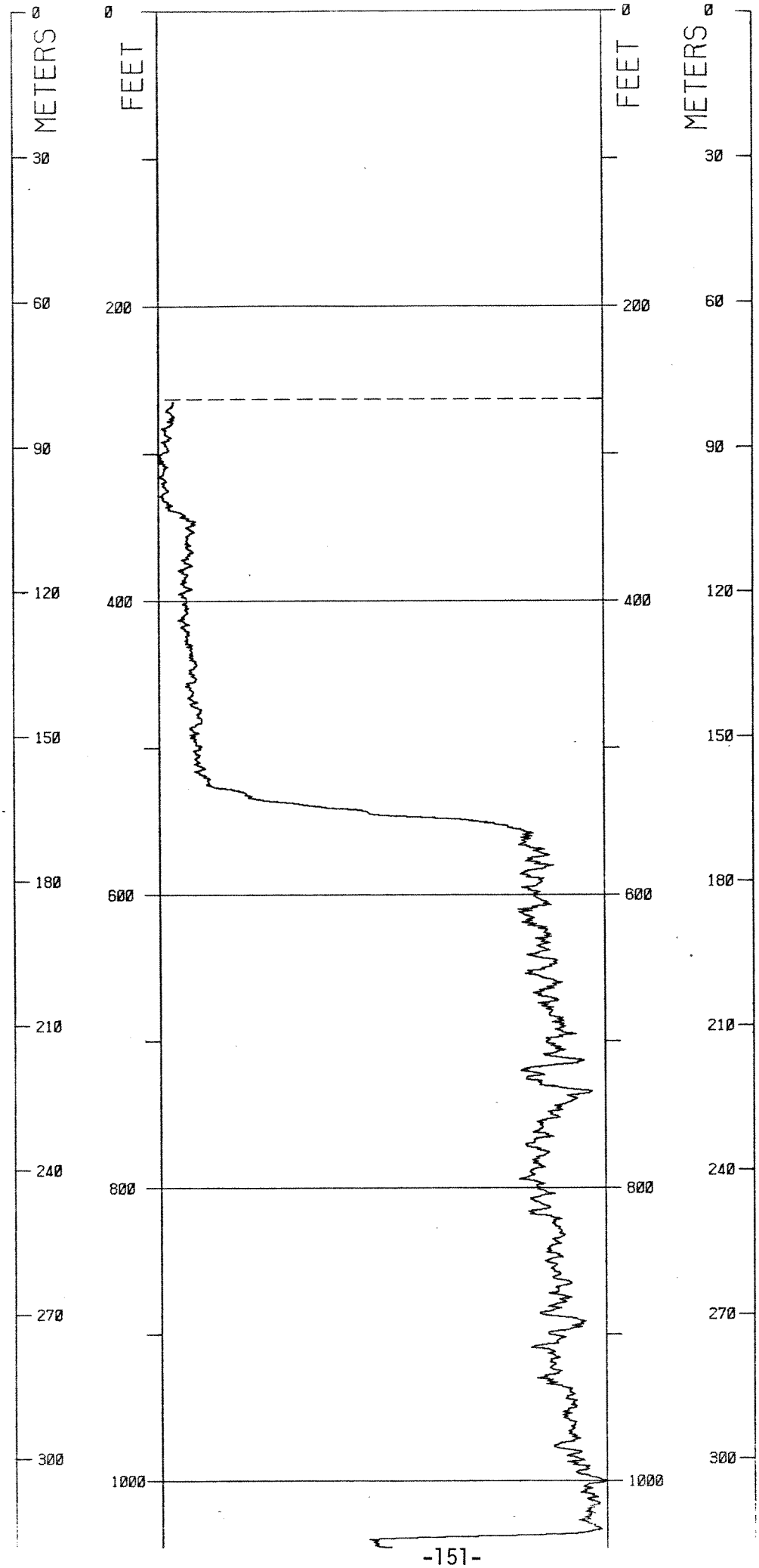
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW


19N/29E-03F2
METERS
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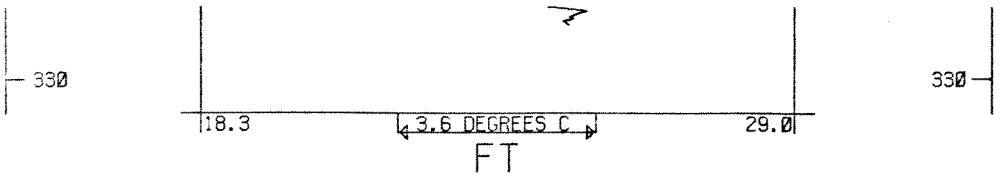

19N/29E-03F2

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	FRANK SHINN #2
DATE LOGGED	Ø3/Ø3/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/29E-Ø4H1
SURFACE ELEVATION	1312
TOTAL DEPTH LOGGED	921
DEPTH TO WATER LEVEL	2ØØ
CASING & LINERS:	
Ø- 52=15	

LEGEND

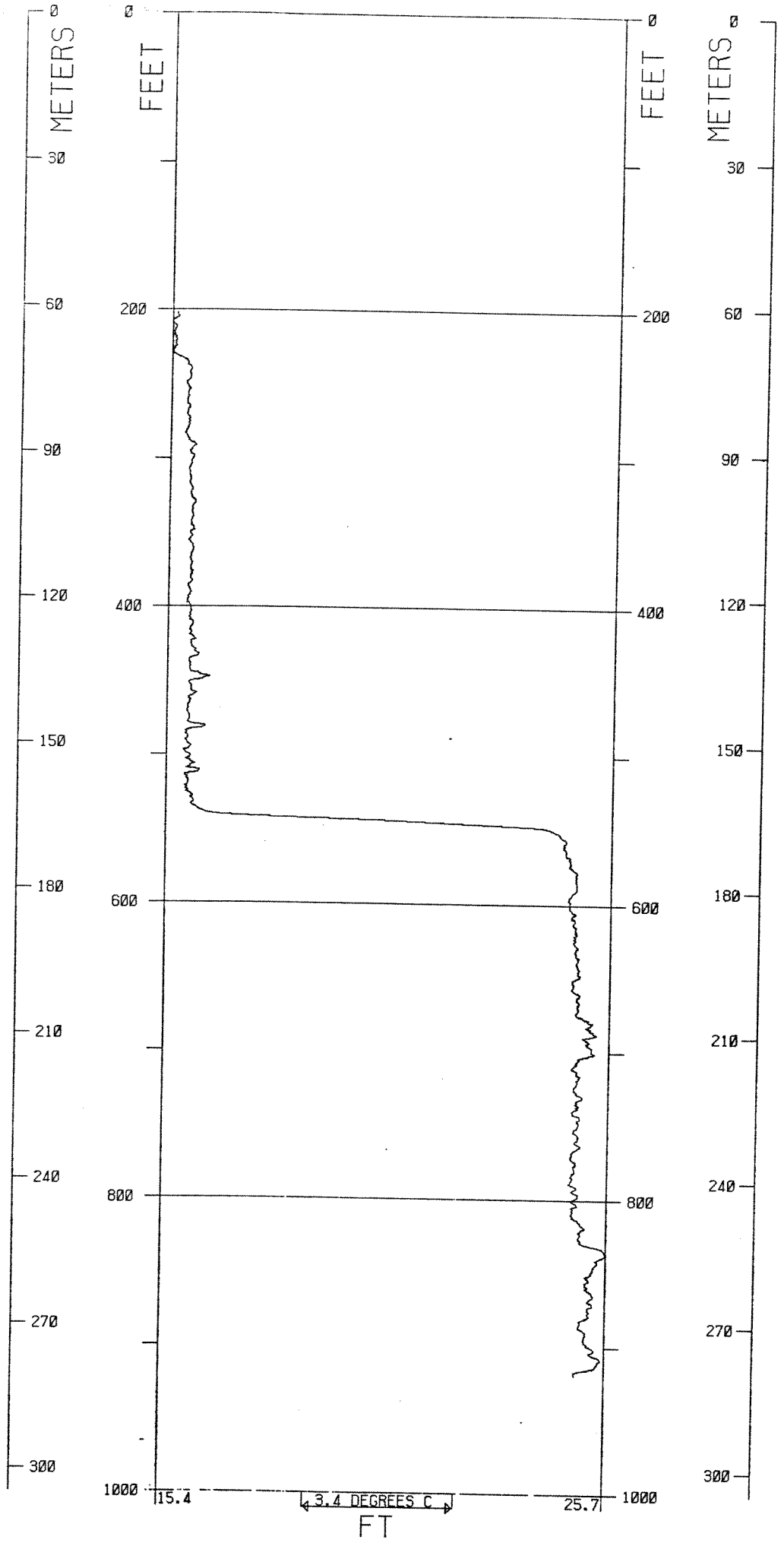
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/29/83 SEW


METERS
FEET
FEET
METERS
0
30
60
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120
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180
210
240
270
300
200
400
600
800
1000
15.4
3.4 DEGREES C
25.7
FT

19N/29E-04H1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	FRANK SHINN #1
DATE LOGGED	Ø1/3Ø/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/29E-Ø9H1
SURFACE ELEVATION	1298
TOTAL DEPTH LOGGED	575
DEPTH TO WATER LEVEL	68

CASING & LINERS:
Ø- 581=17

LEGEND

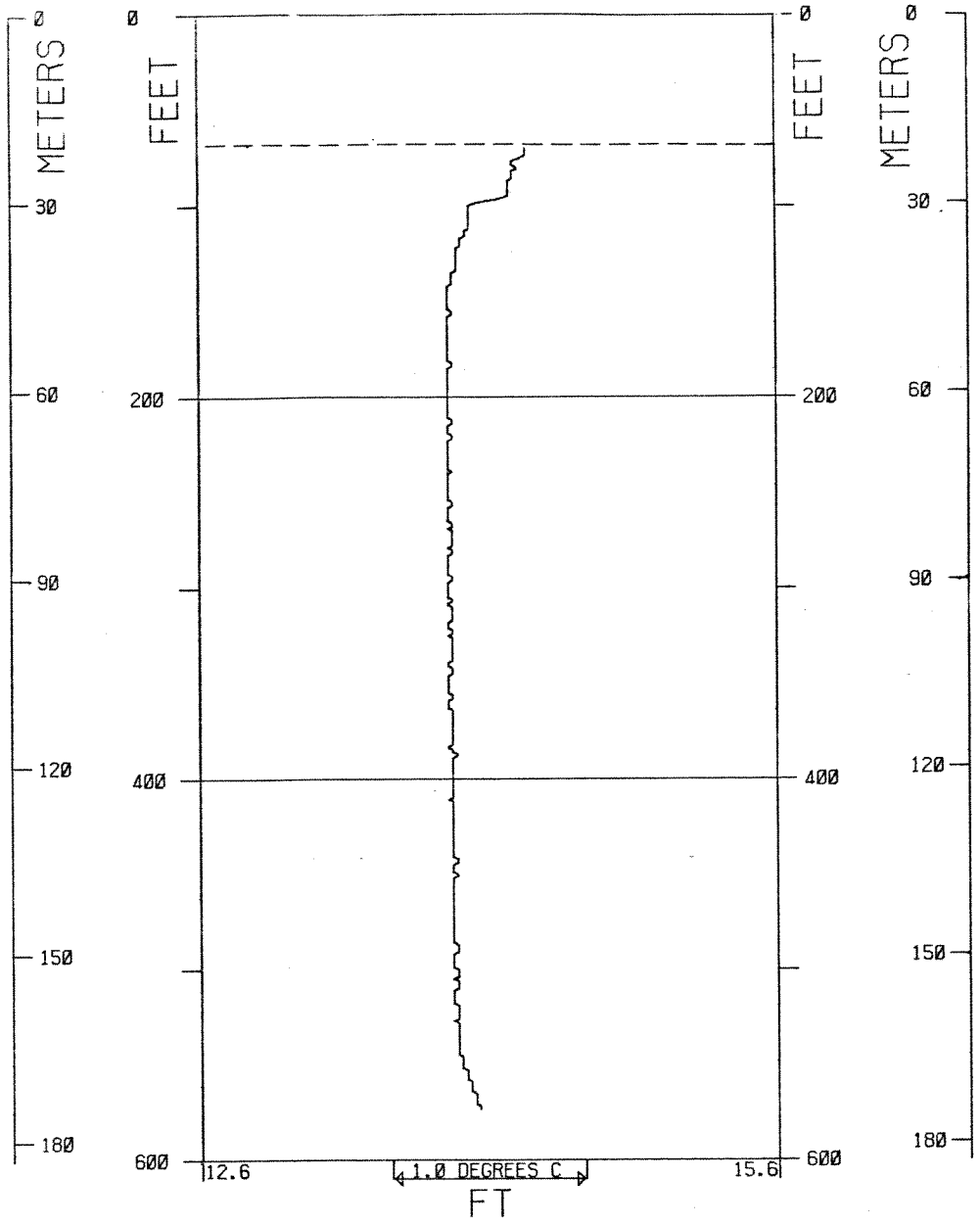
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW


0
METERS
30
60
90
120
150
180
0
FEET
200
400
600
12.6
1.0 DEGREES C
15.6
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180

19N/29E-09H1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JETT-AERO #2
DATE LOGGED	Ø3/Ø3/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/29E-14J1
SURFACE ELEVATION	135Ø
TOTAL DEPTH LOGGED	716
DEPTH TO WATER LEVEL	115
CASING & LINERS:	
Ø- 336=12	

LEGEND

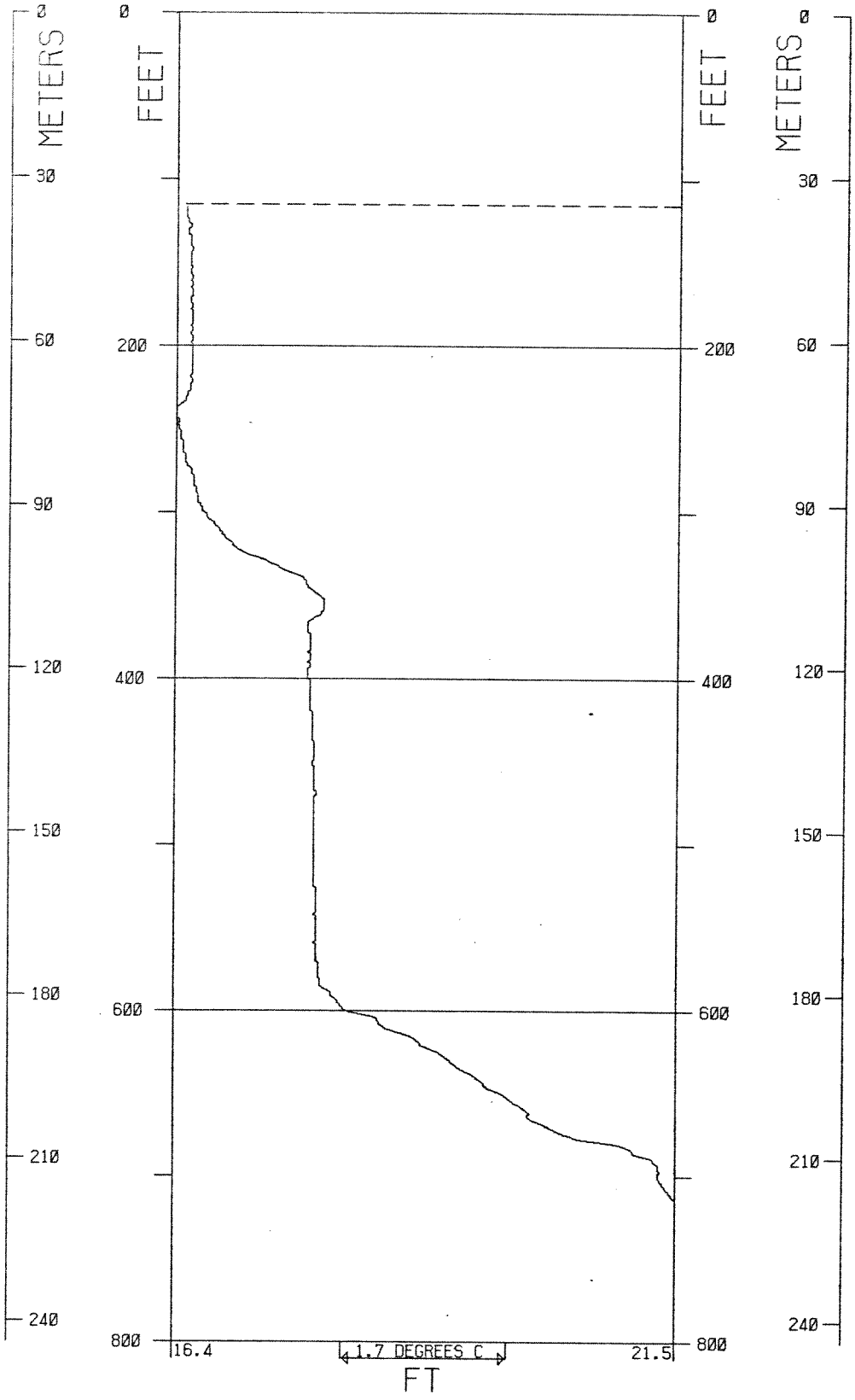
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/15/83 SEW


0
METERS
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60
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210
240
0
FEET
200
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16.4
1.7 DEGREES C
21.5
FT
0
FEET
200
400
600
800
0
METERS
30
60
90
120
150
180
210
240

19N/29E-14J1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MASTO FARMS
DATE LOGGED	11/26/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/29E-15A1
SURFACE ELEVATION	1365
TOTAL DEPTH LOGGED	947
DEPTH TO WATER LEVEL	277
CASING & LINERS:	
Ø- 114=15	

LEGEND

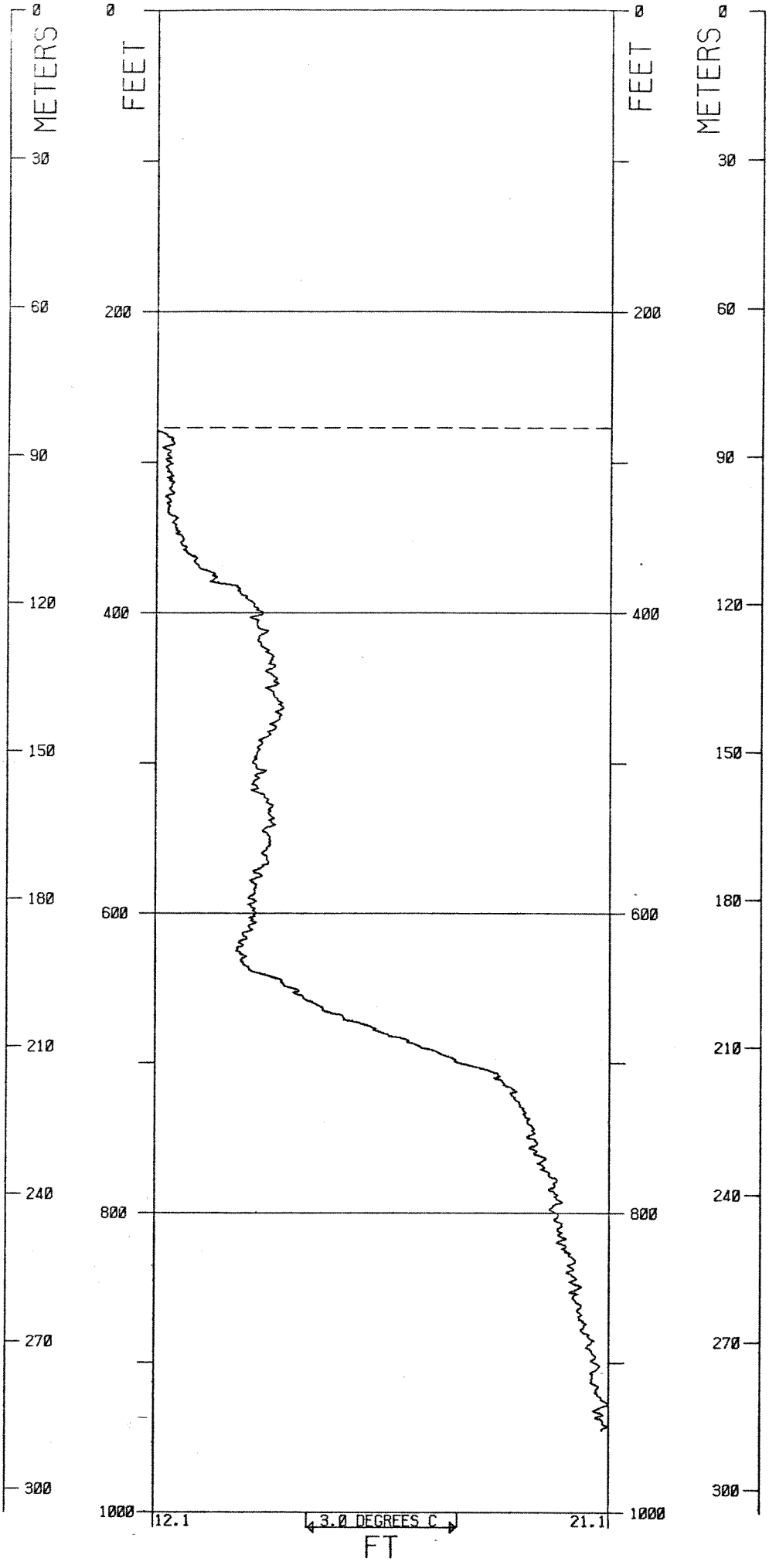
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/20/83 SEW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METERS
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FEET
200
400
600
800
1000
12.1
3.0 DEGREES C
21.1
FT
0
FEET
200
400
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1000
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METERS
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90
120
150
180
210
240
270
300

19N/29E-15A1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JERRY RADACH
DATE LOGGED	12/Ø8/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/3ØE-15L1
SURFACE ELEVATION	1445
TOTAL DEPTH LOGGED	118Ø
DEPTH TO WATER LEVEL	371
CASING & LINERS:	
Ø- 26=19	

LEGEND

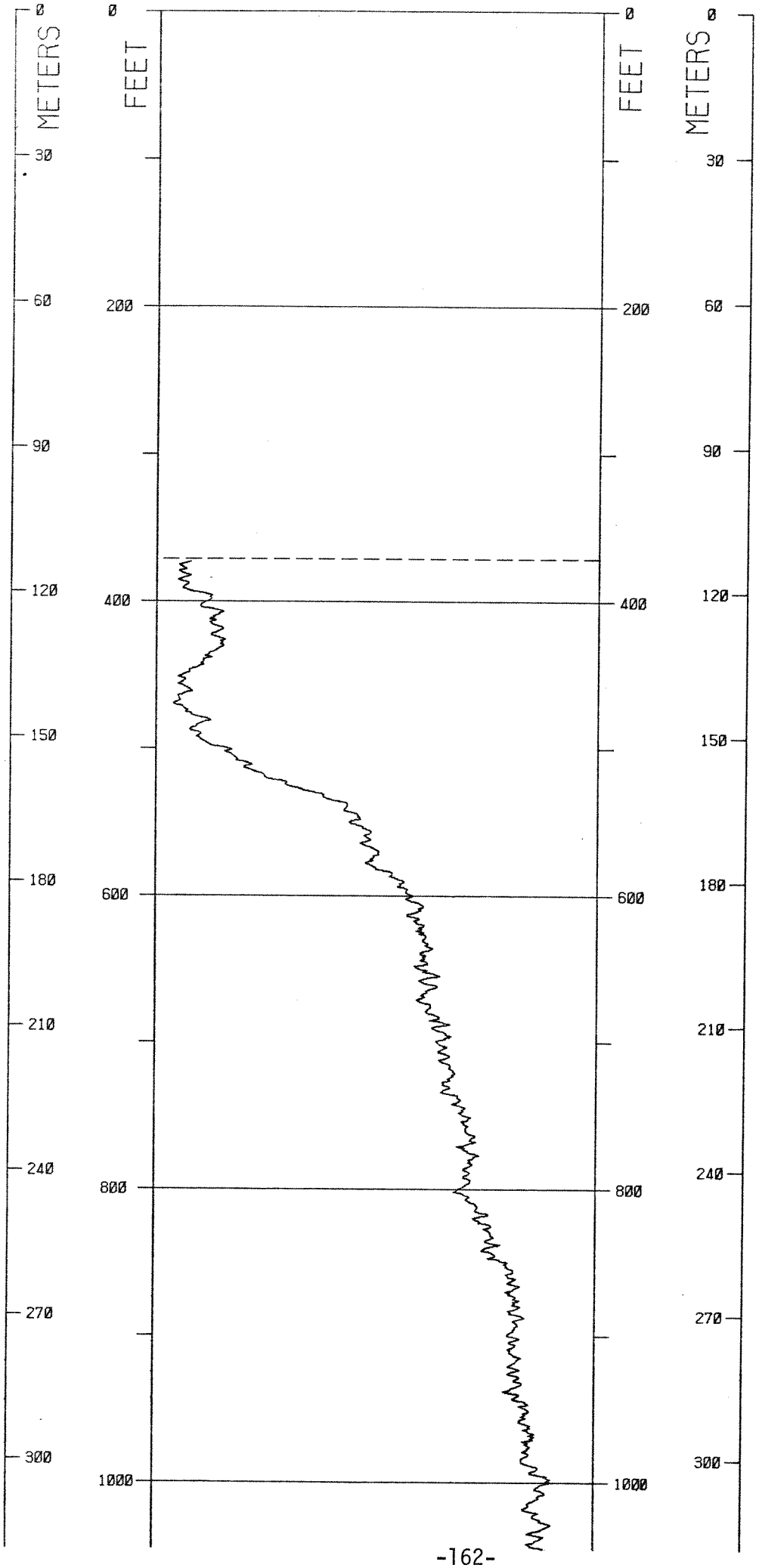
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/22/83 SEW


METERS
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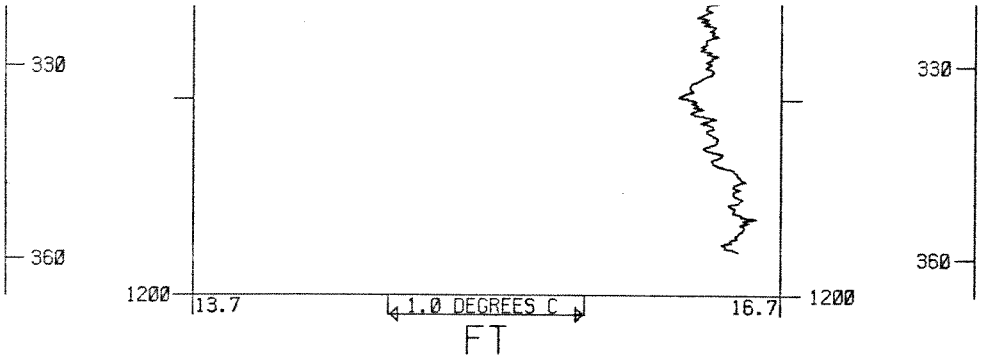
19N/30E-15L1



19N/30E-15L1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DAVE SPARKS (EAST)
DATE LOGGED	12/07/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/30E-16J1
SURFACE ELEVATION	1452
TOTAL DEPTH LOGGED	916
DEPTH TO WATER LEVEL	380

CASING & LINERS:
0- 20=19

LEGEND

LOG TITLES

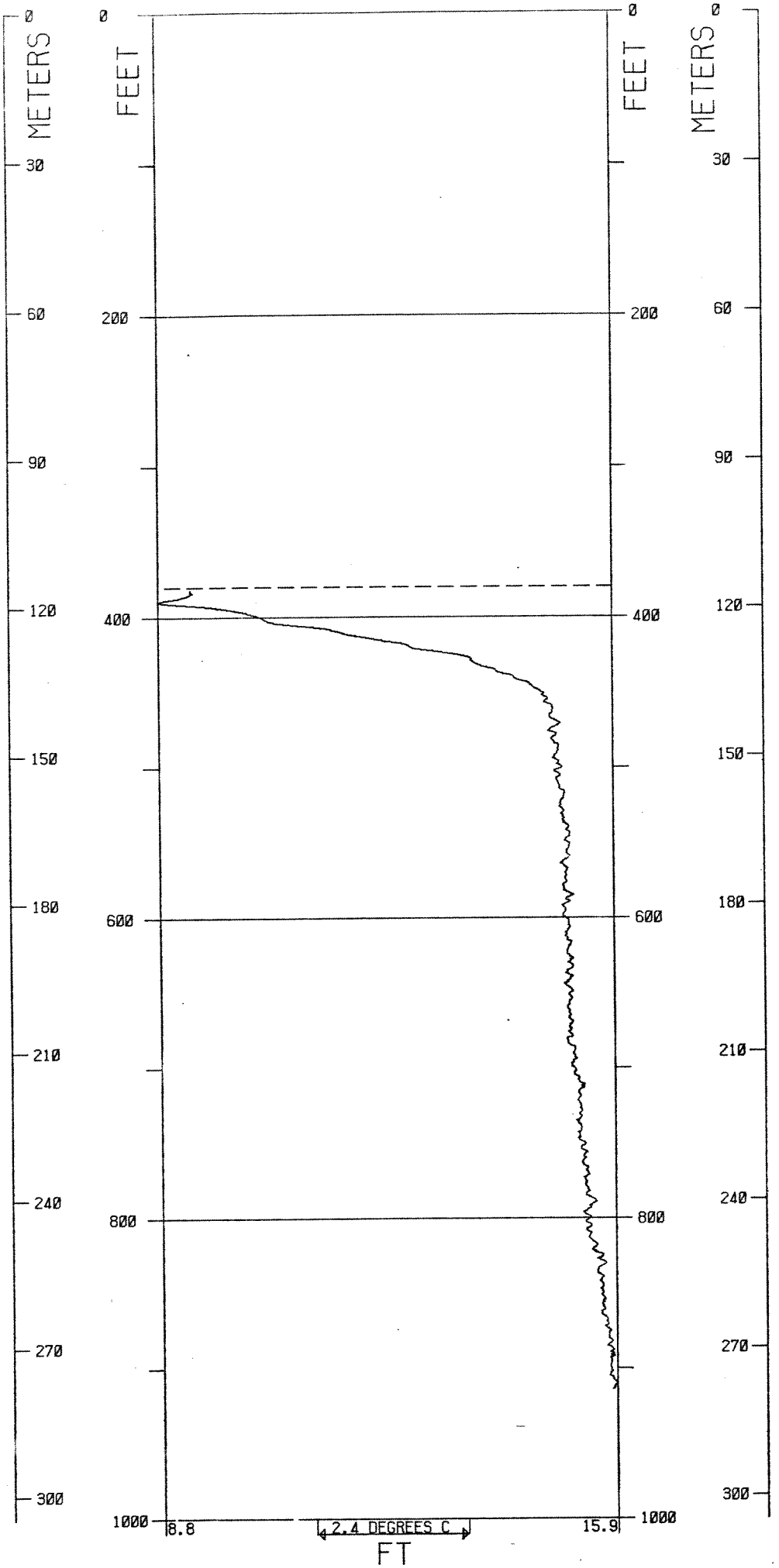
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW

19N/30E-16J1


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
270
300
200
400
600
800
1000
8.8
2.4 DEGREES C
15.9
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DAVE SPARKS (WEST)
DATE LOGGED	12/06/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/30E-16M1
SURFACE ELEVATION	1440
TOTAL DEPTH LOGGED	949
DEPTH TO WATER LEVEL	342

CASING & LINERS:
0- 20=19

LEGEND

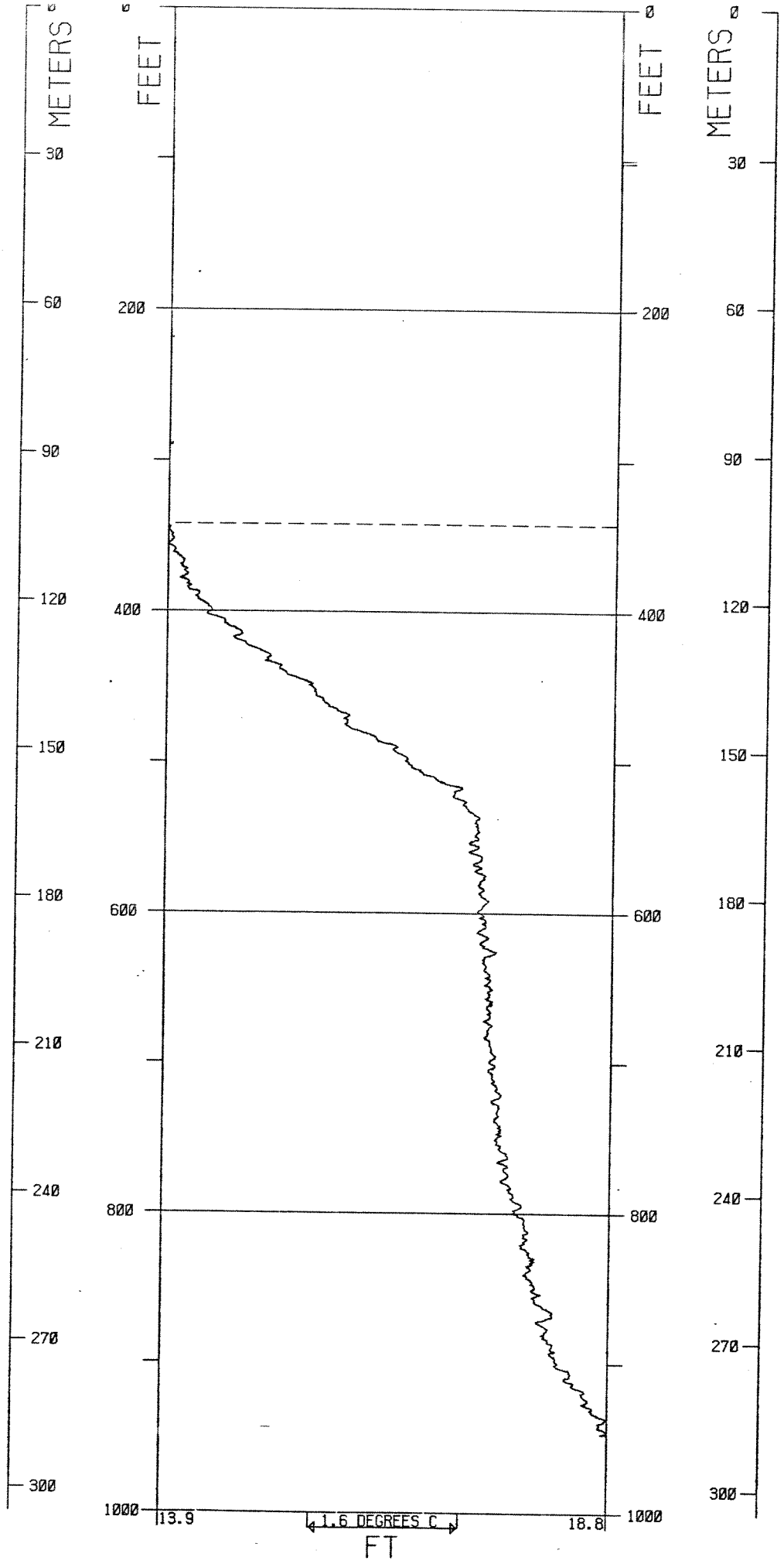
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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13.9
1.6 DEGREES C
18.8
FT

19N/30E-16M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	REUBEN SCHMIDT
DATE LOGGED	11/01/72
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/30E-17M1
SURFACE ELEVATION	1420
TOTAL DEPTH LOGGED	737
DEPTH TO WATER LEVEL	351

CASING & LINERS:
0- 76=13

LEGEND

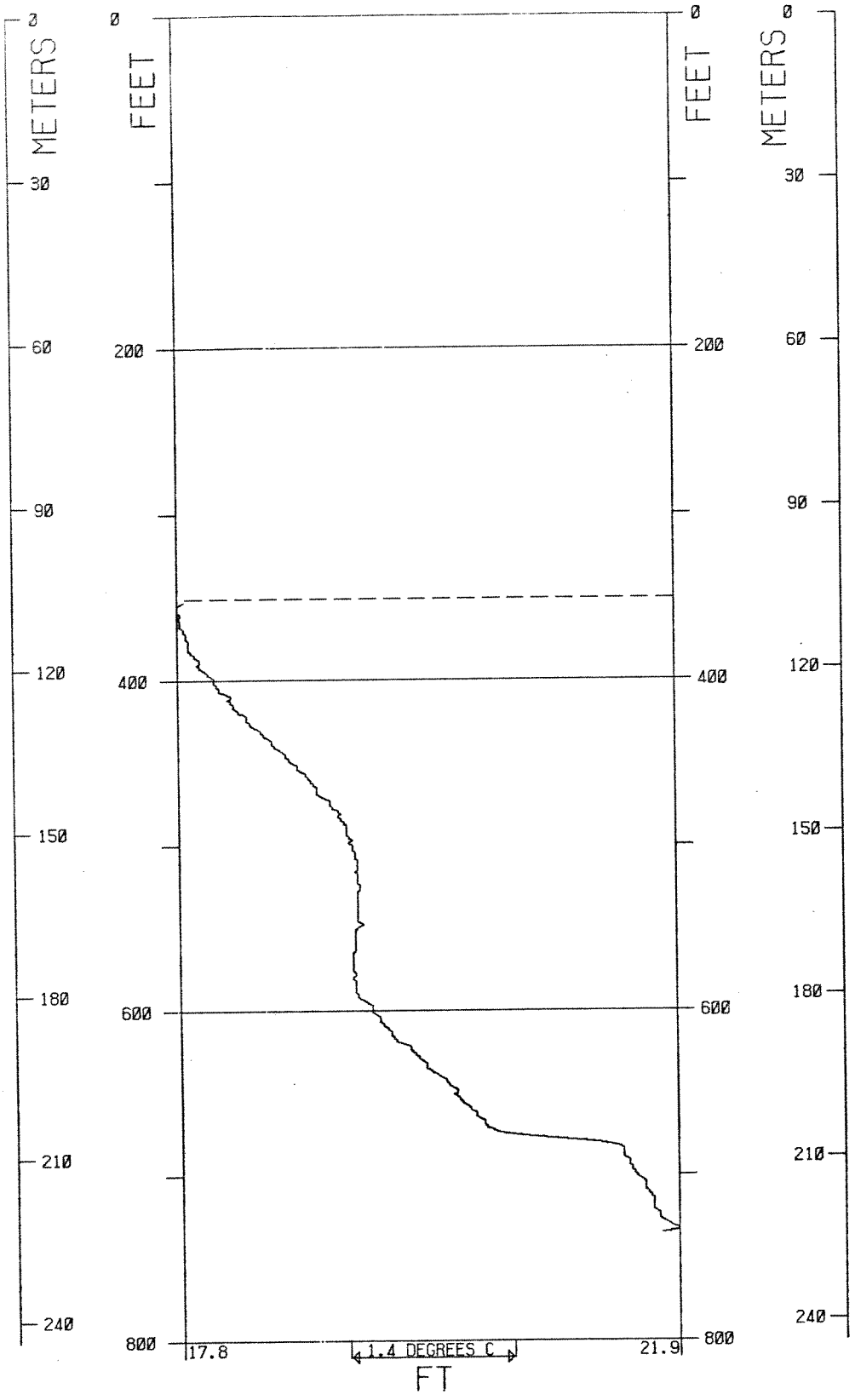
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▶
POROSITY (NN-LOG) INCREASES ◀——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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17.8
1.4 DEGREES C
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FEET
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240

19N/30E-17M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JETT-AERO #1
DATE LOGGED	02/01/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/30E-20D1
SURFACE ELEVATION	1427
TOTAL DEPTH LOGGED	1023
DEPTH TO WATER LEVEL	320
CASING & LINERS:	
0- 34=15	

LEGEND

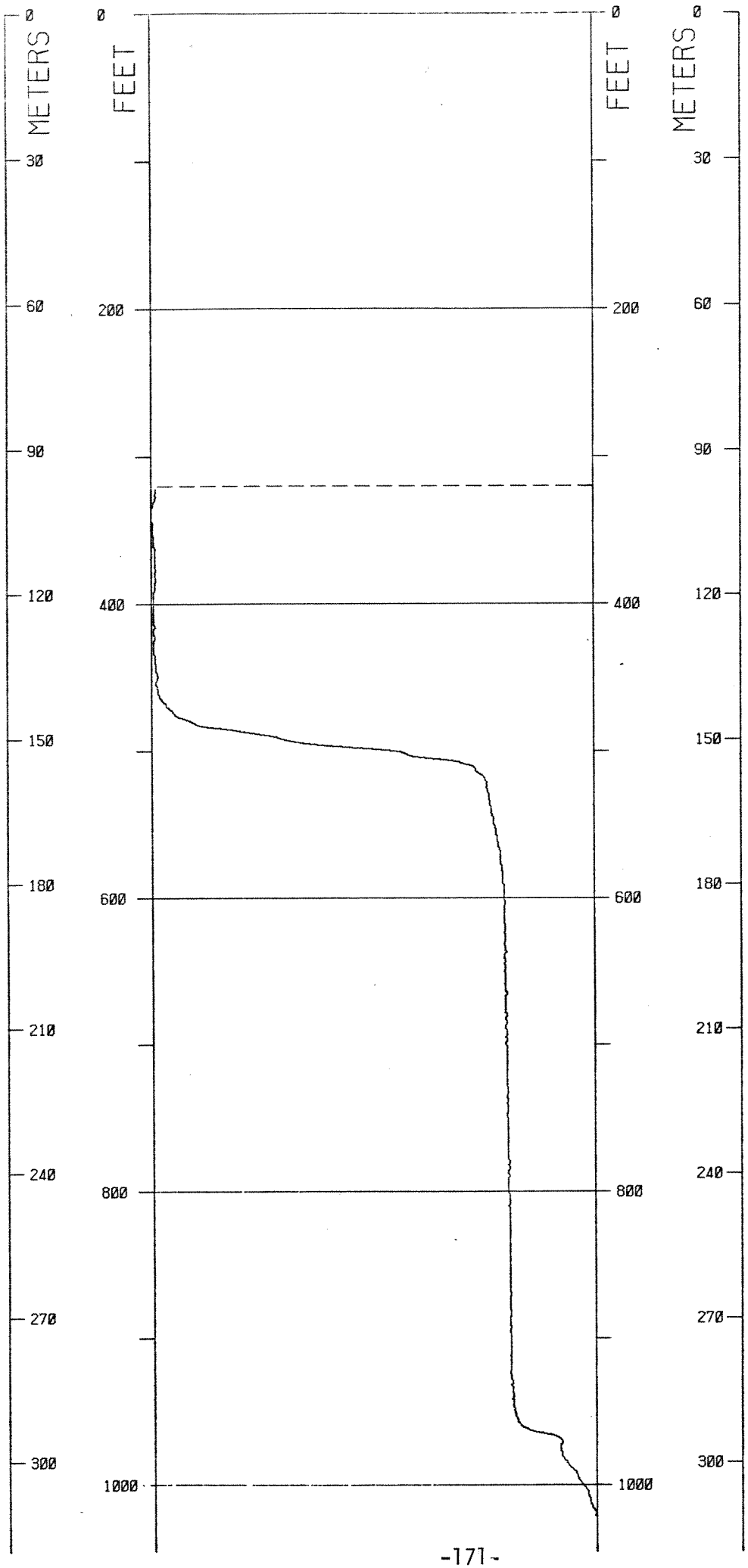
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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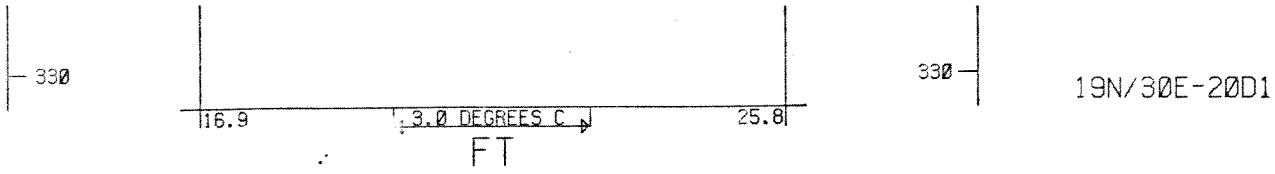
19N/30E-20D1



19N/30E-20D1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BASIN PRODUCE
DATE LOGGED	02/16/72
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/30E-28E1
SURFACE ELEVATION	1378
TOTAL DEPTH LOGGED	695
DEPTH TO WATER LEVEL	236

CASING & LINERS:
0- 36=15

LEGEND

LOG TITLES

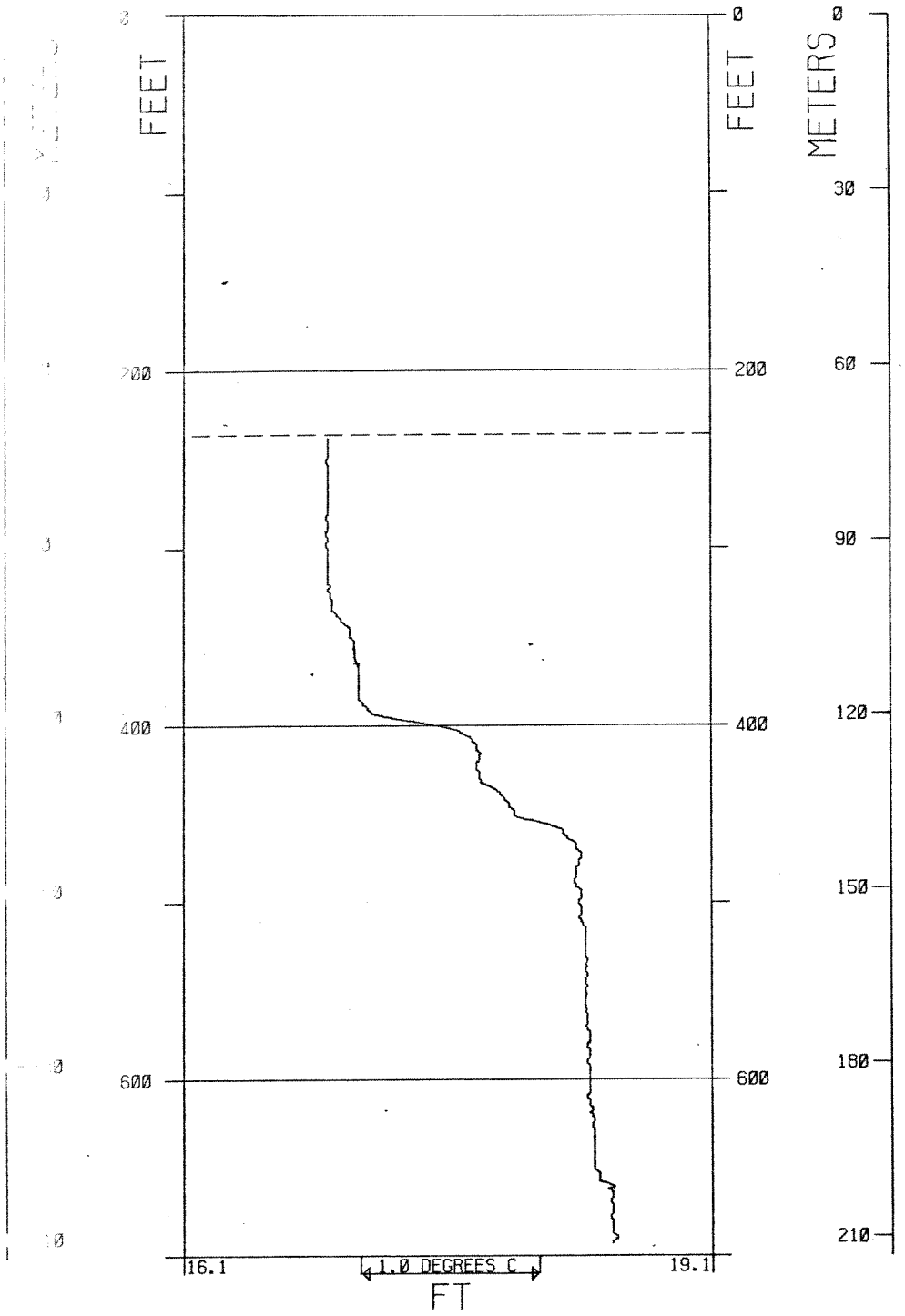
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/29/83 SEW

19N/30E-28E1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120
150
180
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16.1
1.0 DEGREES C
19.1
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	NORMAN KAGELE
DATE LOGGED	02/15/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/31E-24G1
SURFACE ELEVATION	1473
TOTAL DEPTH LOGGED	540
DEPTH TO WATER LEVEL	404
CASING & LINERS:	
0- 20=15	

LEGEND

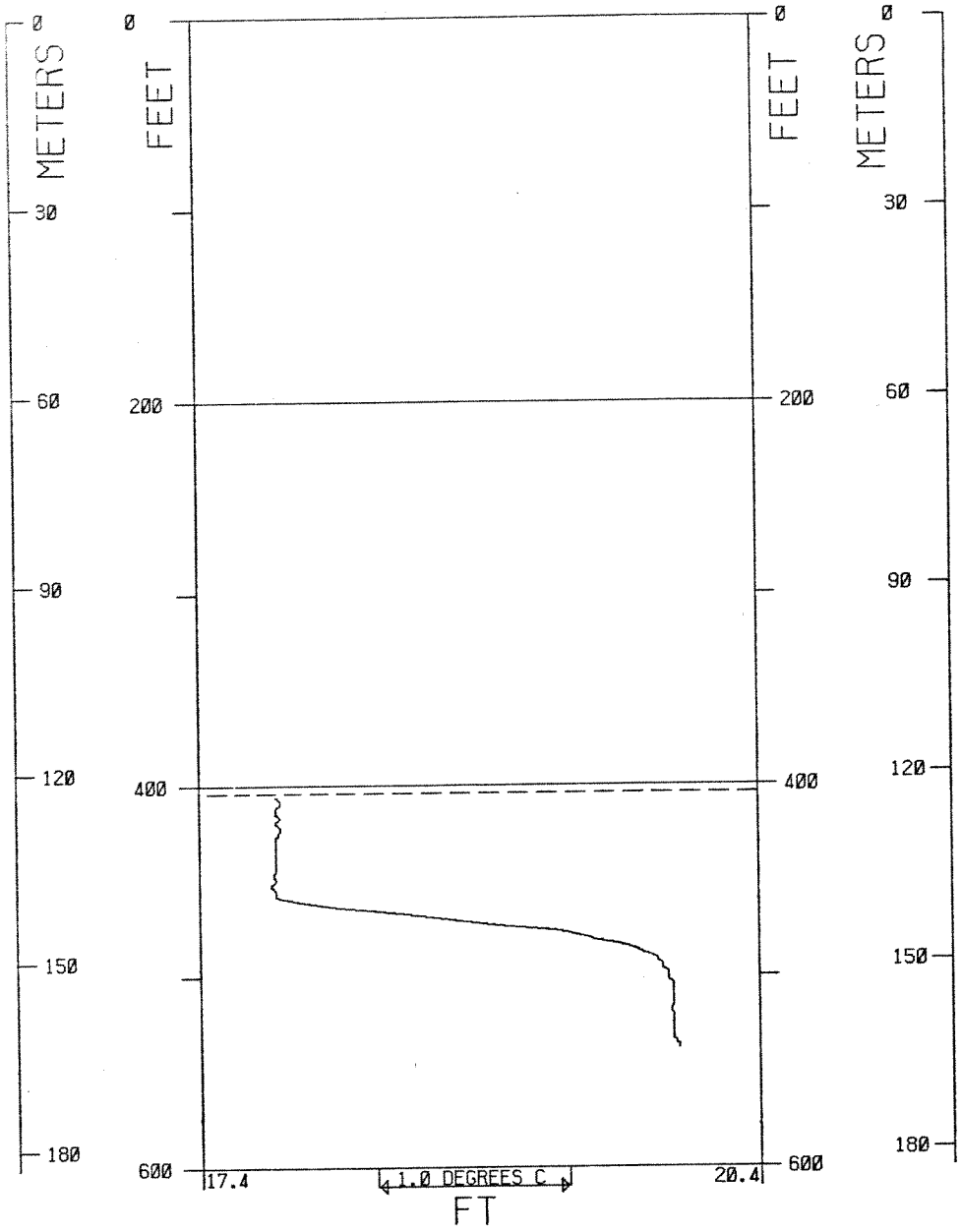
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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FEET
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17.4
1.0 DEGREES C
FT
20.4
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FEET
200
400
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0
METERS
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19N/31E-24G1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	S & K FARMS
DATE LOGGED	01/02/73
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/32E-24K1
SURFACE ELEVATION	1740
TOTAL DEPTH LOGGED	797
DEPTH TO WATER LEVEL	462
CASING & LINERS:	

HAND DIGITIZED.

LEGEND

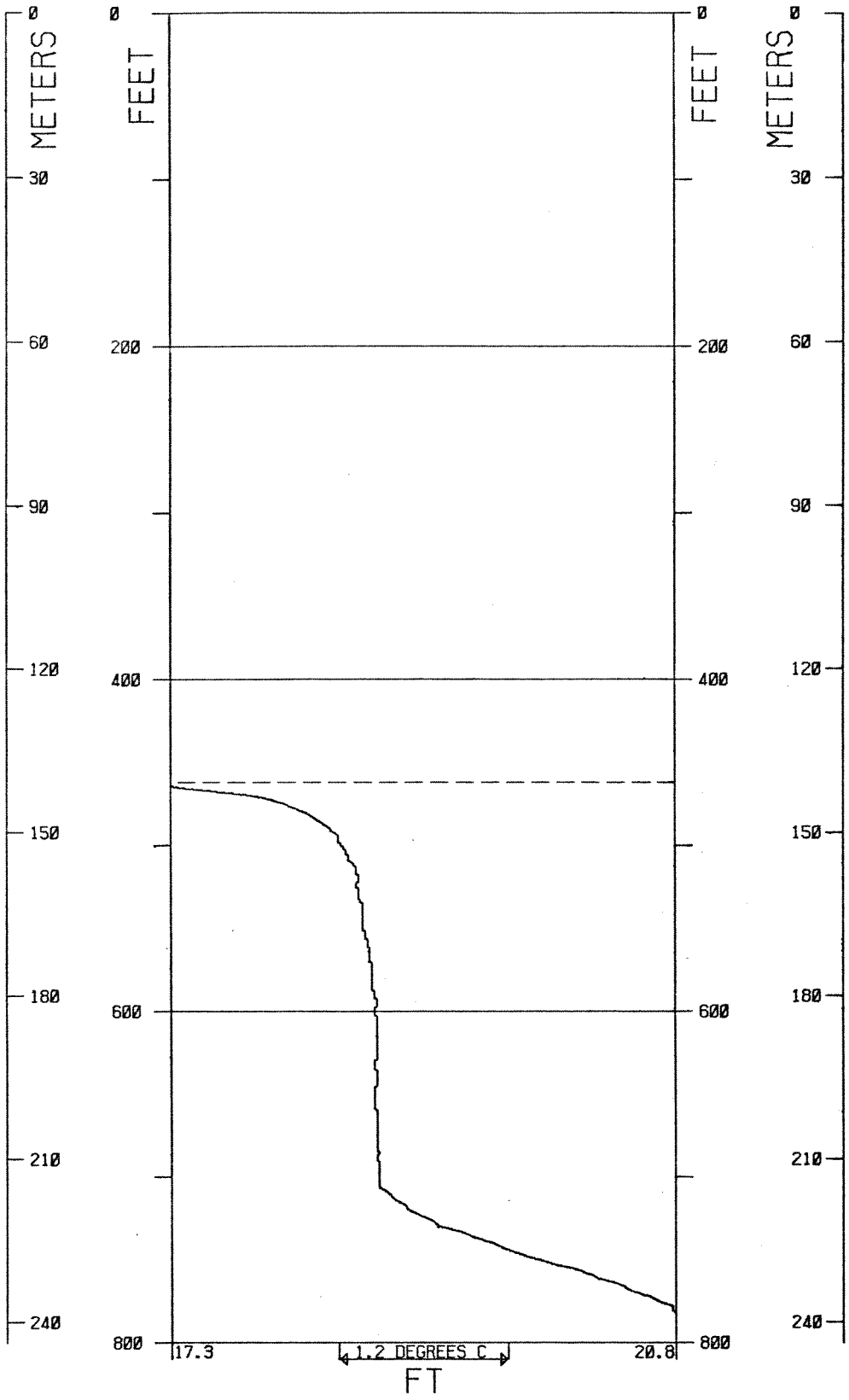
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/10/83 SEW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20.8
FT

19N/32E-24K1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	J & M FARMS
DATE LOGGED	08/07/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/32E-24N1
SURFACE ELEVATION	1674
TOTAL DEPTH LOGGED	2280
DEPTH TO WATER LEVEL	630

CASING & LINERS:
0- 80=20 0- 848=16 848-1648=13

LEGEND

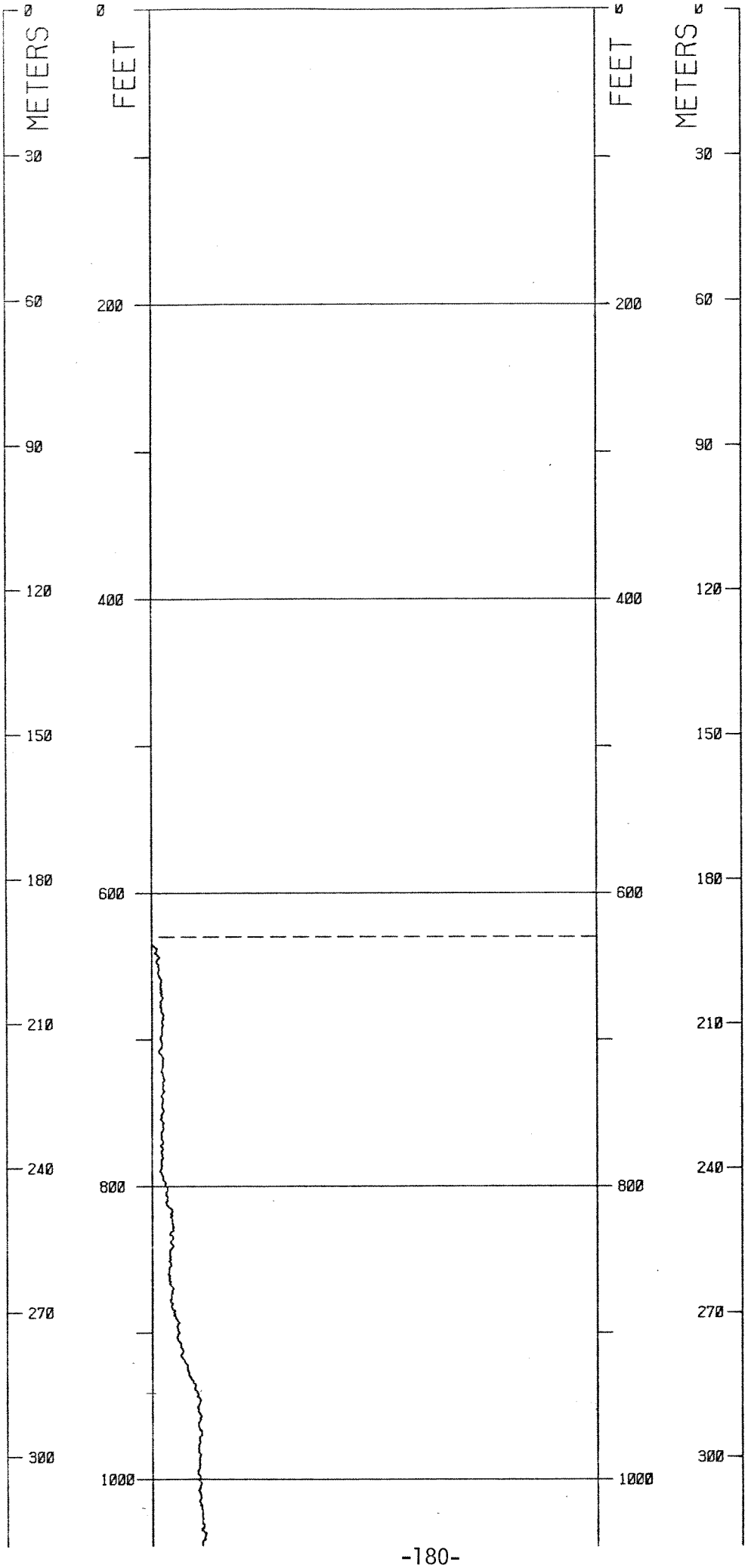
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW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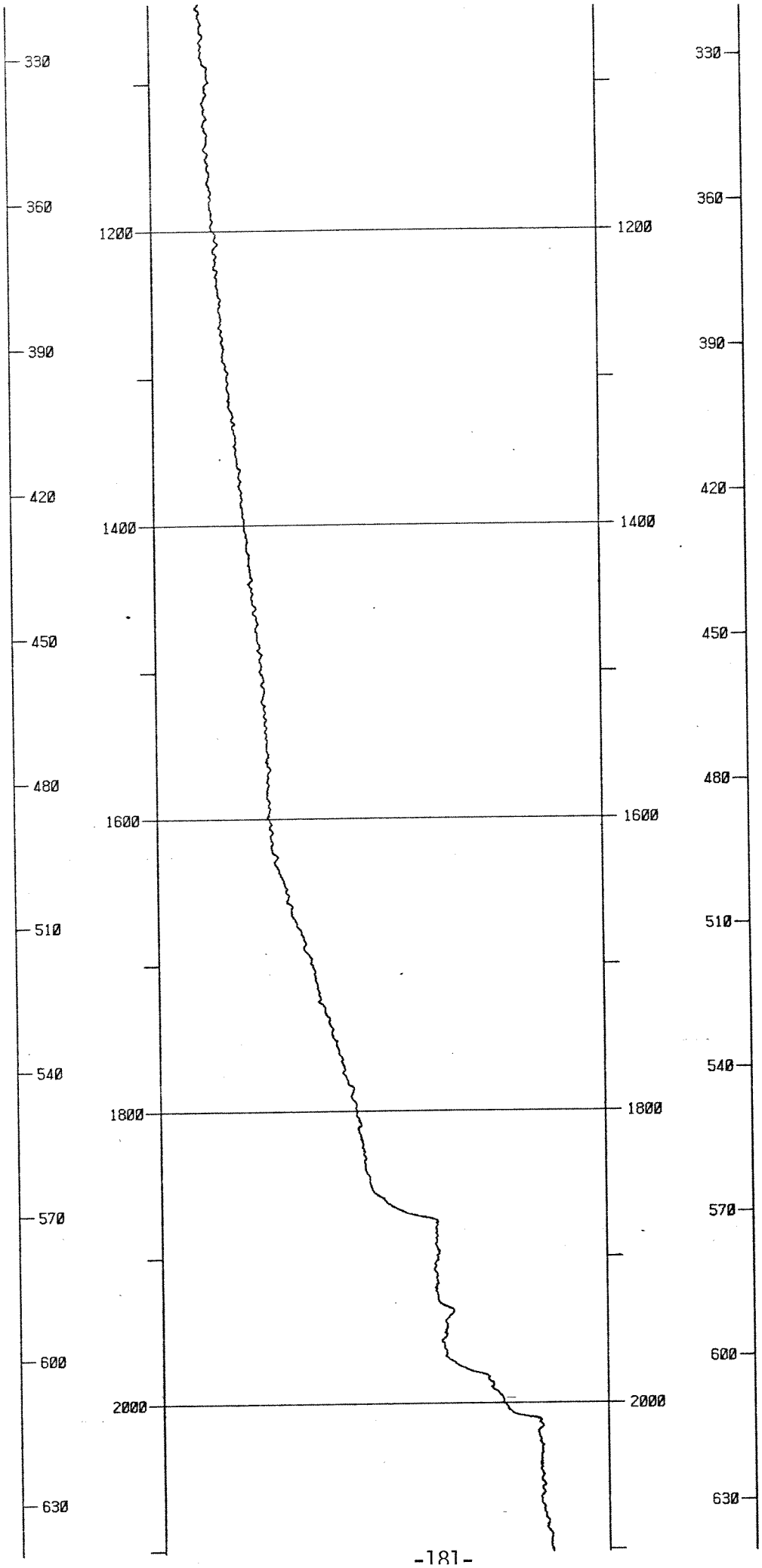
19N/32E-24N1


19N/32E-24N1
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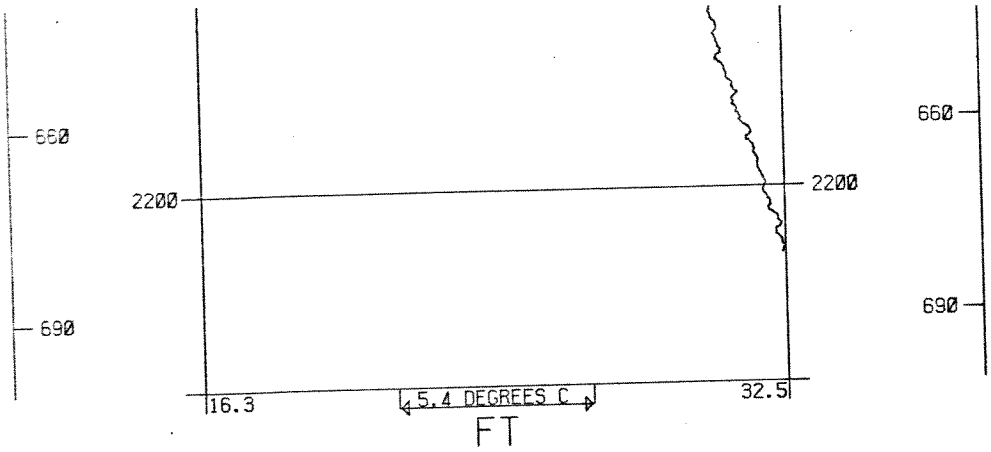


19N/32E-24N1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PAUL HOEFEL
DATE LOGGED	12/15/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/33E-08Q1
SURFACE ELEVATION	1842
TOTAL DEPTH LOGGED	759
DEPTH TO WATER LEVEL	384
CASING & LINERS:	
0- 80=11	

LEGEND

LOG TITLES

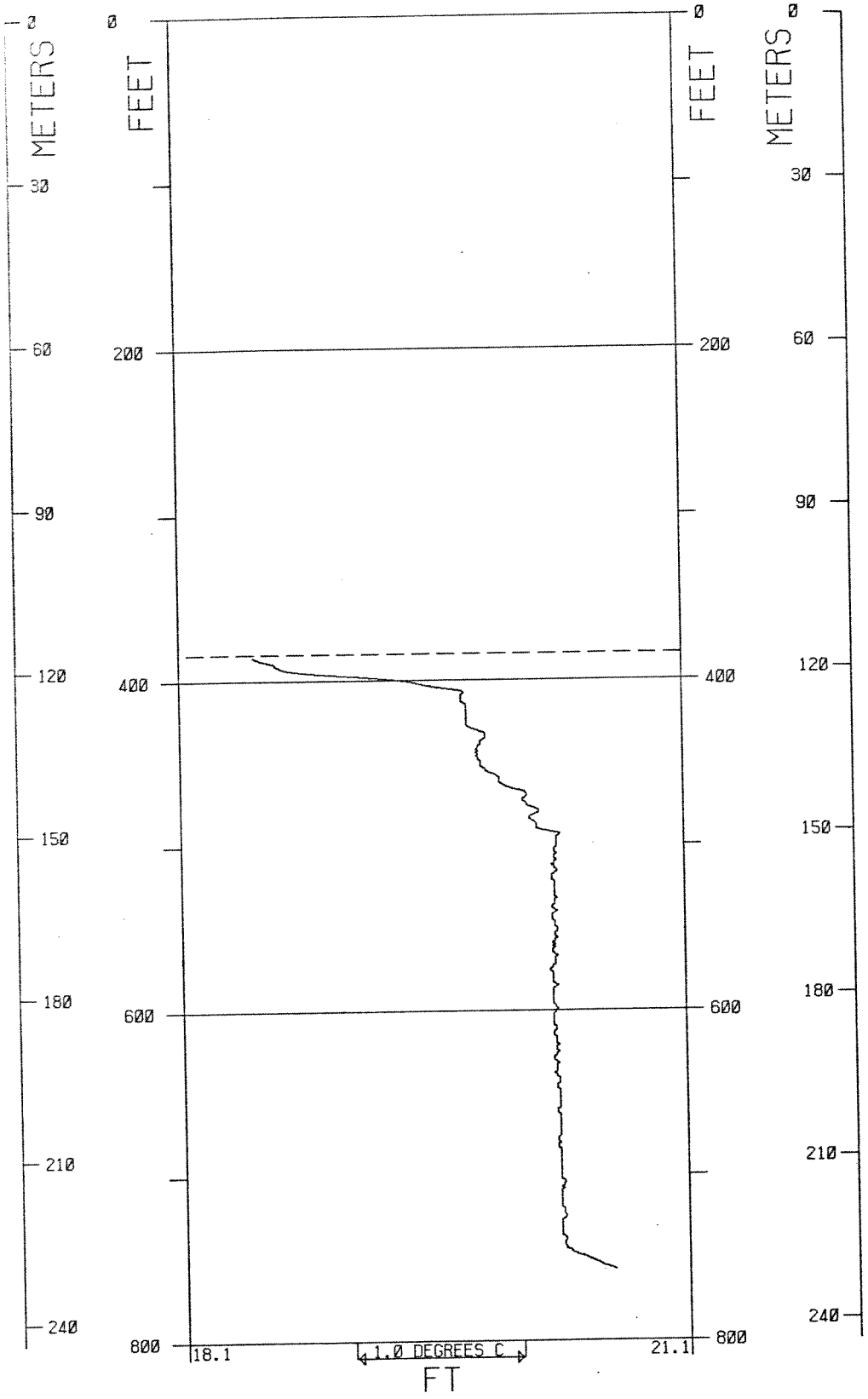
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/10/83 SEW

19N/33E-08Q1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18.1
1.0 DEGREES C
21.1
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HOEFEL #2
DATE LOGGED	Ø1/18/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/33E-Ø8Q2
SURFACE ELEVATION	1825
TOTAL DEPTH LOGGED	2445
DEPTH TO WATER LEVEL	583

CASING & LINERS:

Ø- 78=19 Ø- 7Ø3=15 7Ø3-1552=13

LEGEND

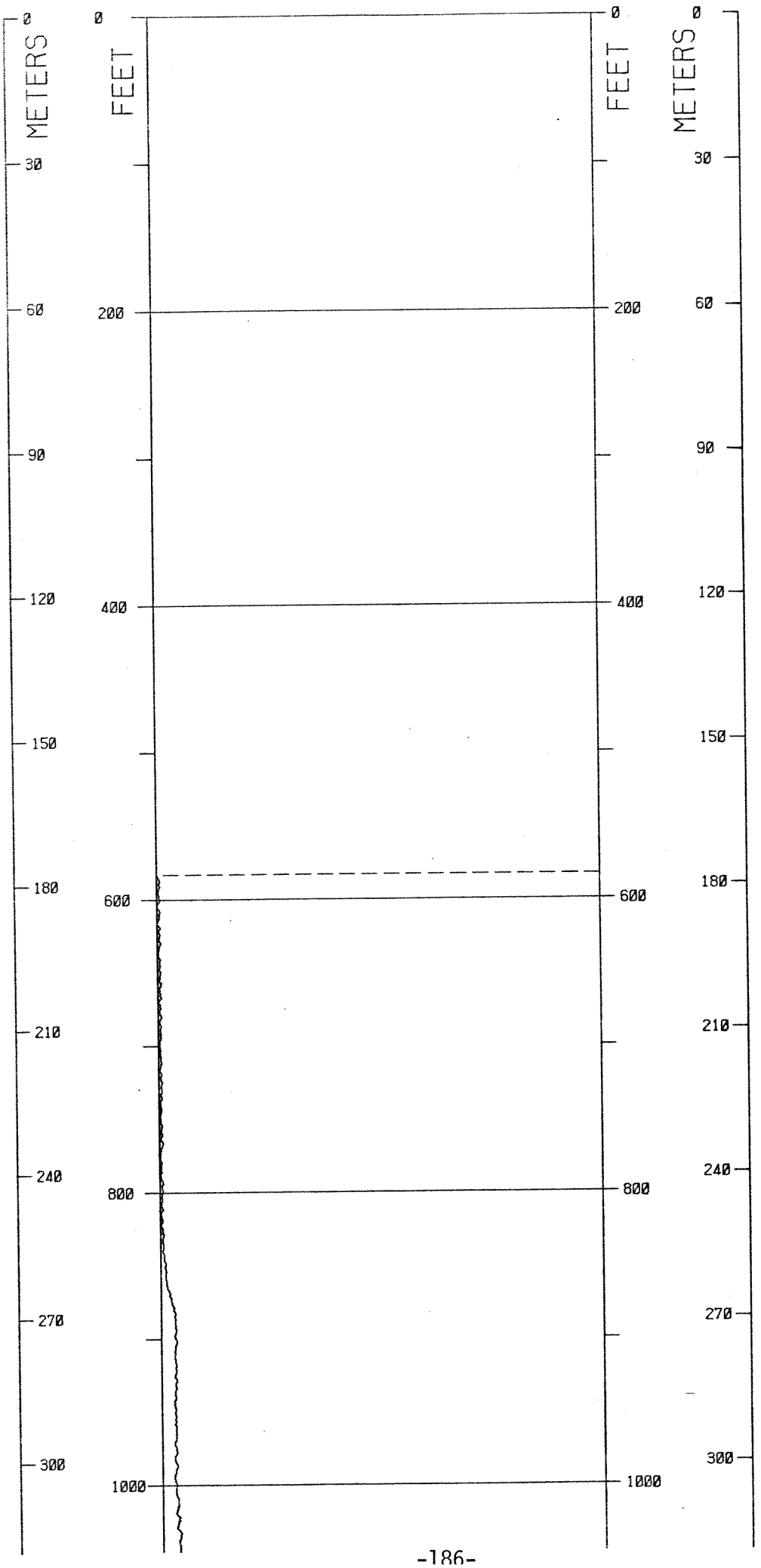
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/22/83 SEW


METERS
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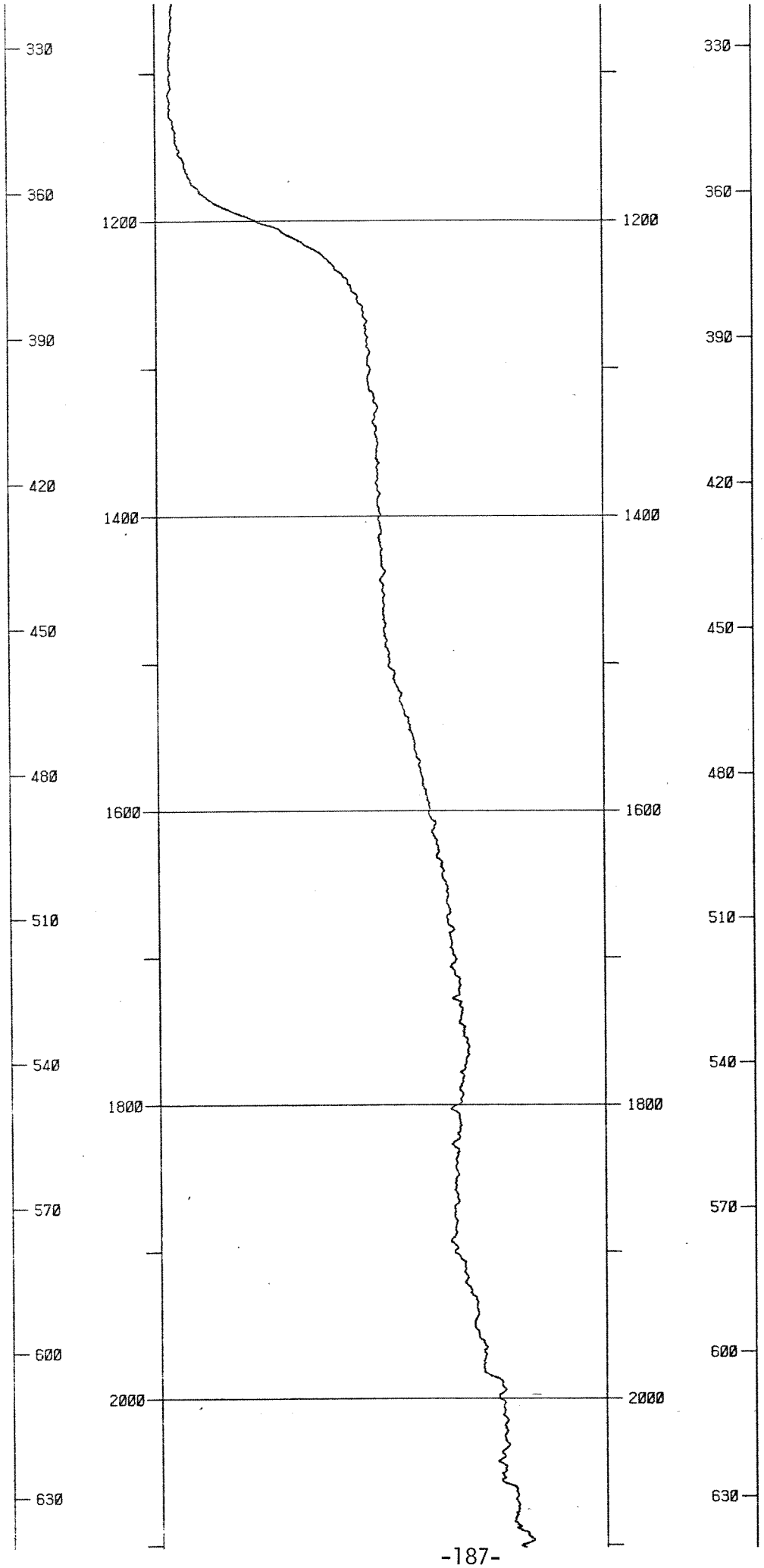
19N/33E-08Q2


19N/33E-08Q2
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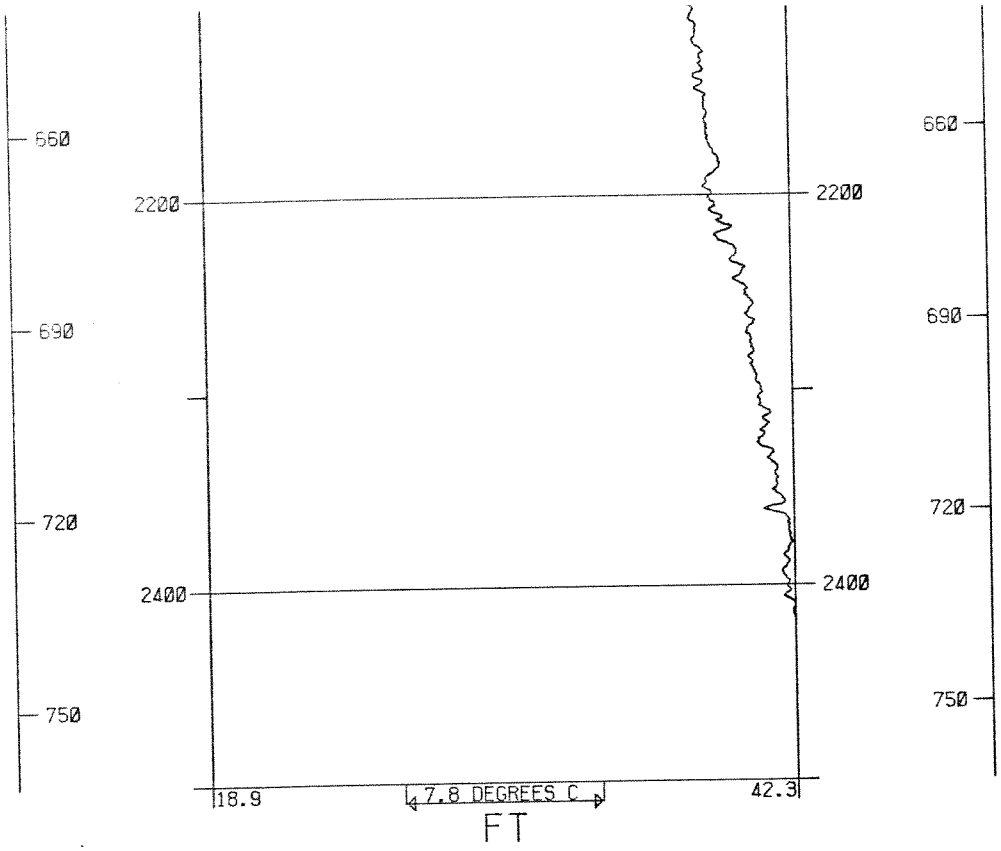
19N/33E-08Q2



WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MELVIN KAGELE
DATE LOGGED	Ø1/14/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/34E-2ØB1
SURFACE ELEVATION	1857
TOTAL DEPTH LOGGED	1120
DEPTH TO WATER LEVEL	6Ø7

CASING & LINERS:
Ø- 7Ø=19

HAND DIGITIZED

LEGEND

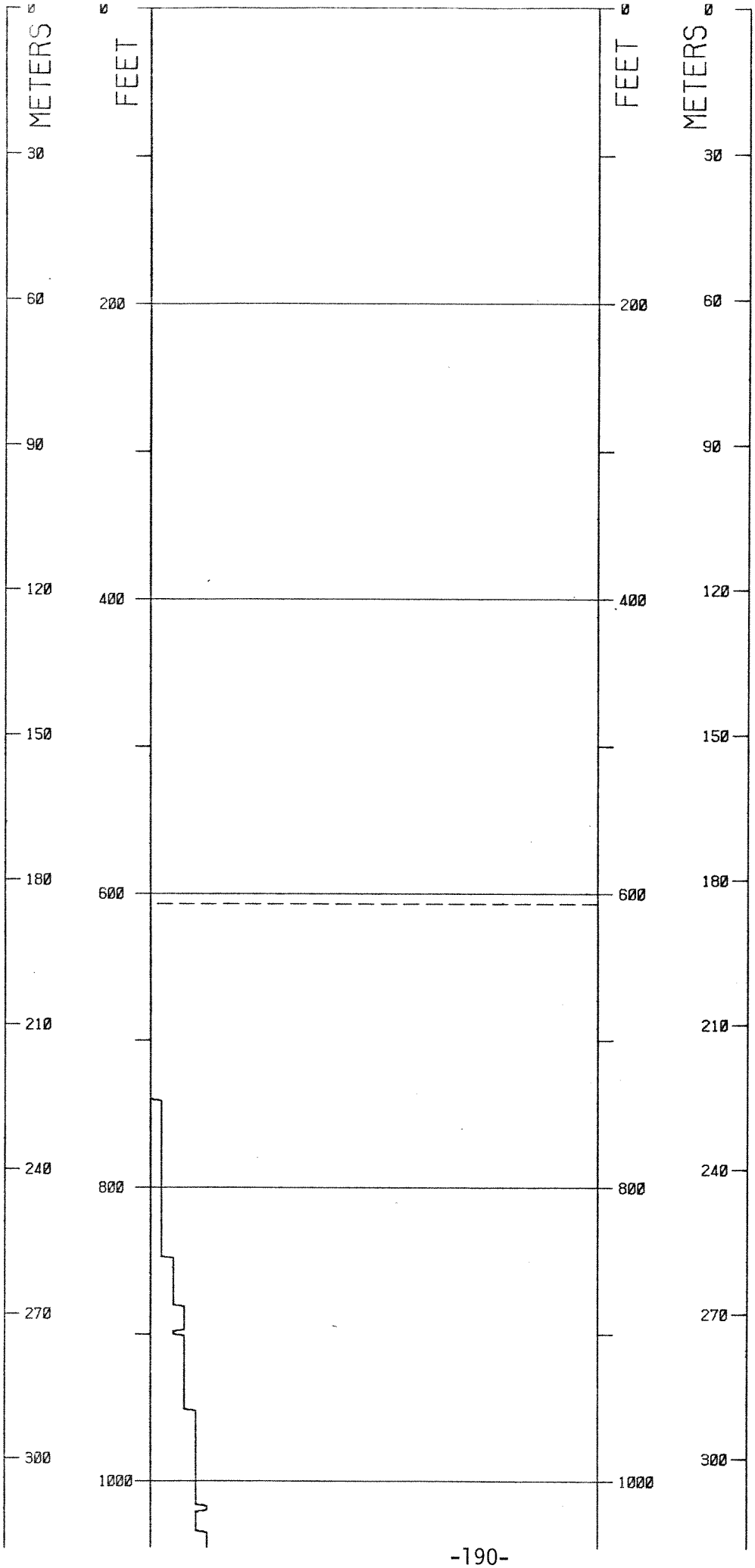
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/14/83 SEW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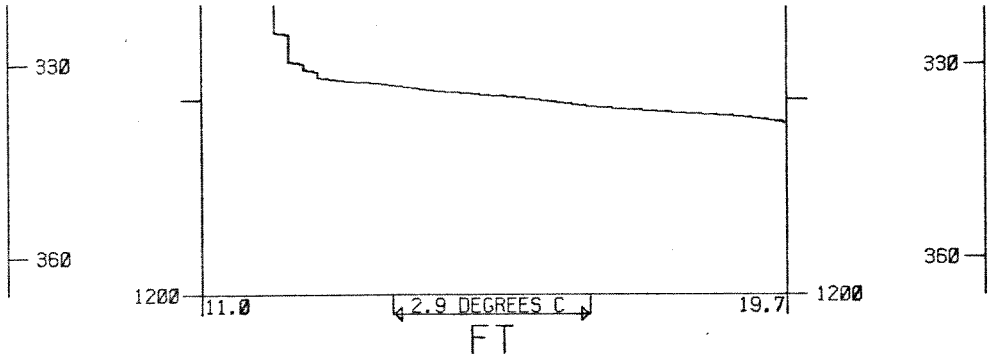
19N/34E-20B1



19N/34E-20B1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	GAYLE GERING
DATE LOGGED	03/20/78
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/36E-09K1
SURFACE ELEVATION	1860
TOTAL DEPTH LOGGED	752
DEPTH TO WATER LEVEL	232
CASING & LINERS:	
0- 15=15	

CASCADING WATER FROM 200' TO 233'.

LEGEND

LOG TITLES

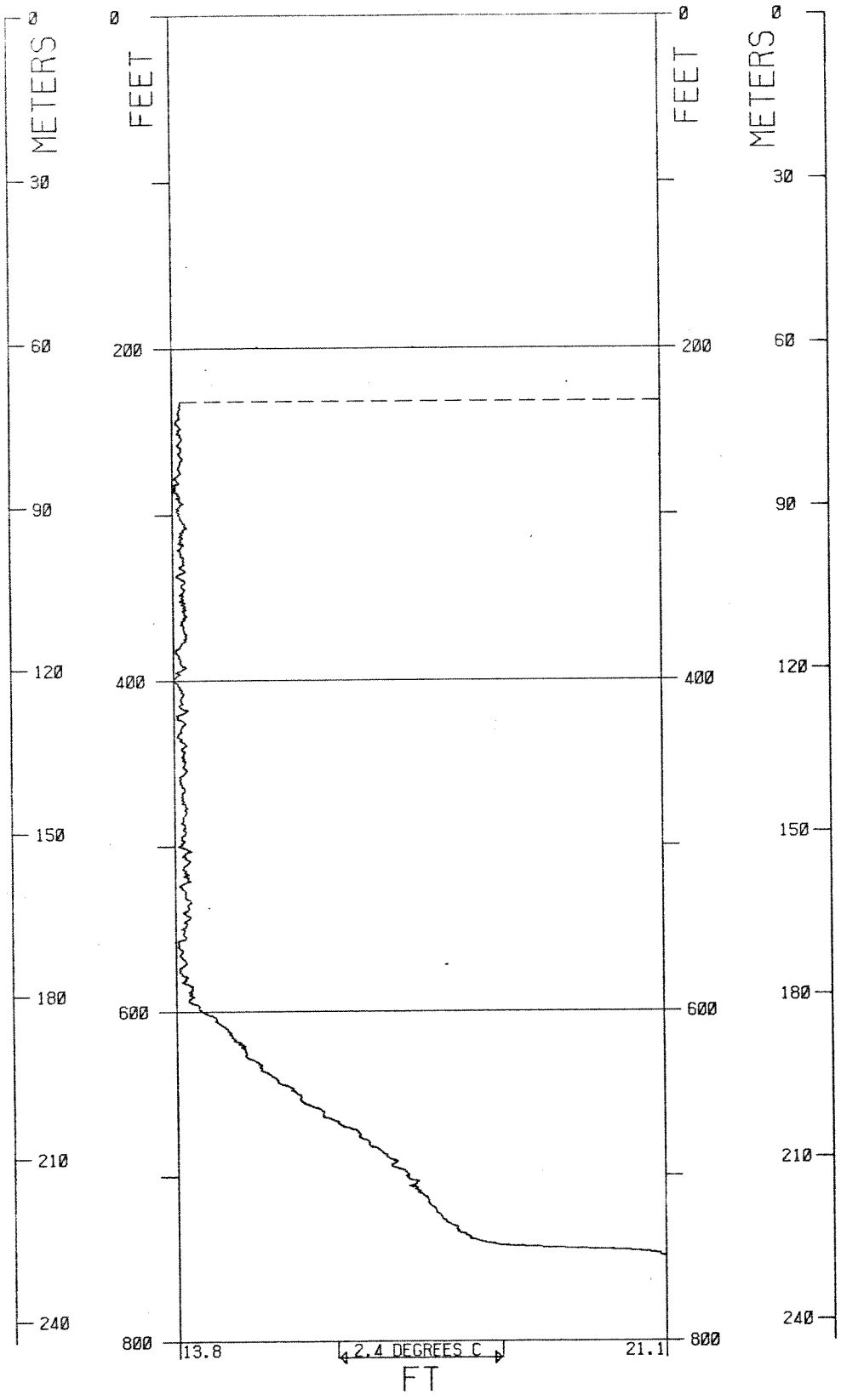
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW

19N/36E-09K1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2.4 DEGREES C
21.1
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	GAYLE GERING
DATE LOGGED	11/20/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/36E-15A1
SURFACE ELEVATION	1905
TOTAL DEPTH LOGGED	1240
DEPTH TO WATER LEVEL	444
CASING & LINERS:	
0- 56=19	

HAND DIGITIZED.

LEGEND

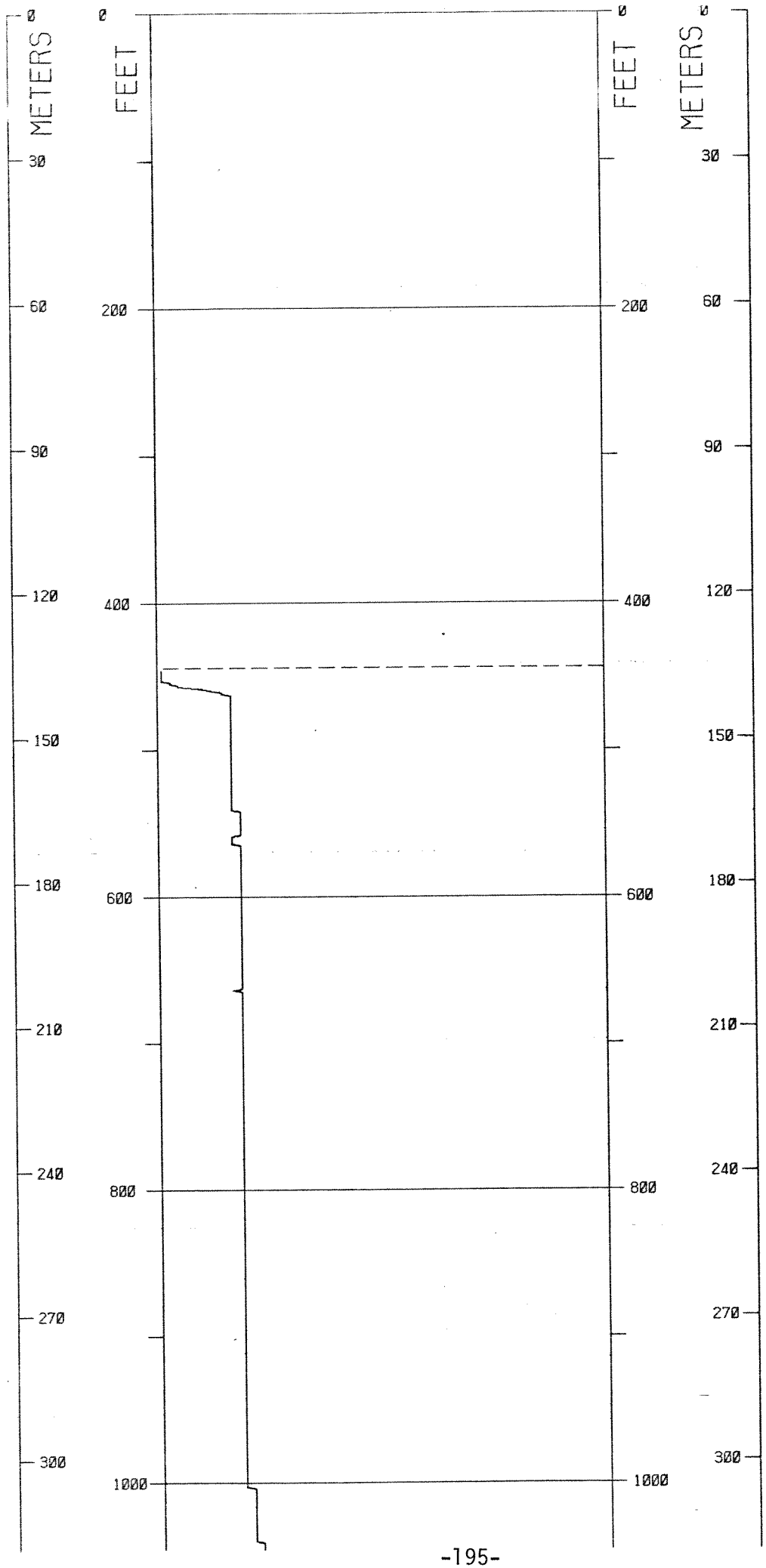
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/14/83 SEW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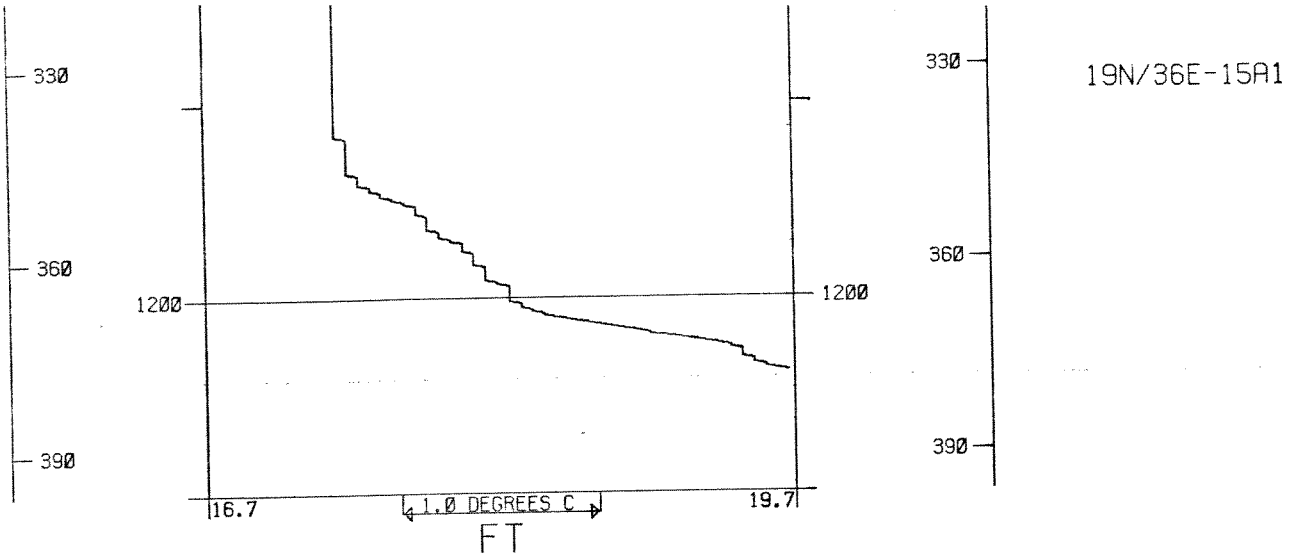
19N/36E-15A1



19N/36E-15A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DEL TEMPLIN
DATE LOGGED	Ø1/24/75
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/36E-22J1
SURFACE ELEVATION	1864
TOTAL DEPTH LOGGED	649
DEPTH TO WATER LEVEL	227

CASING & LINERS:

Ø- 82=15 Ø- 292=12

LEGEND

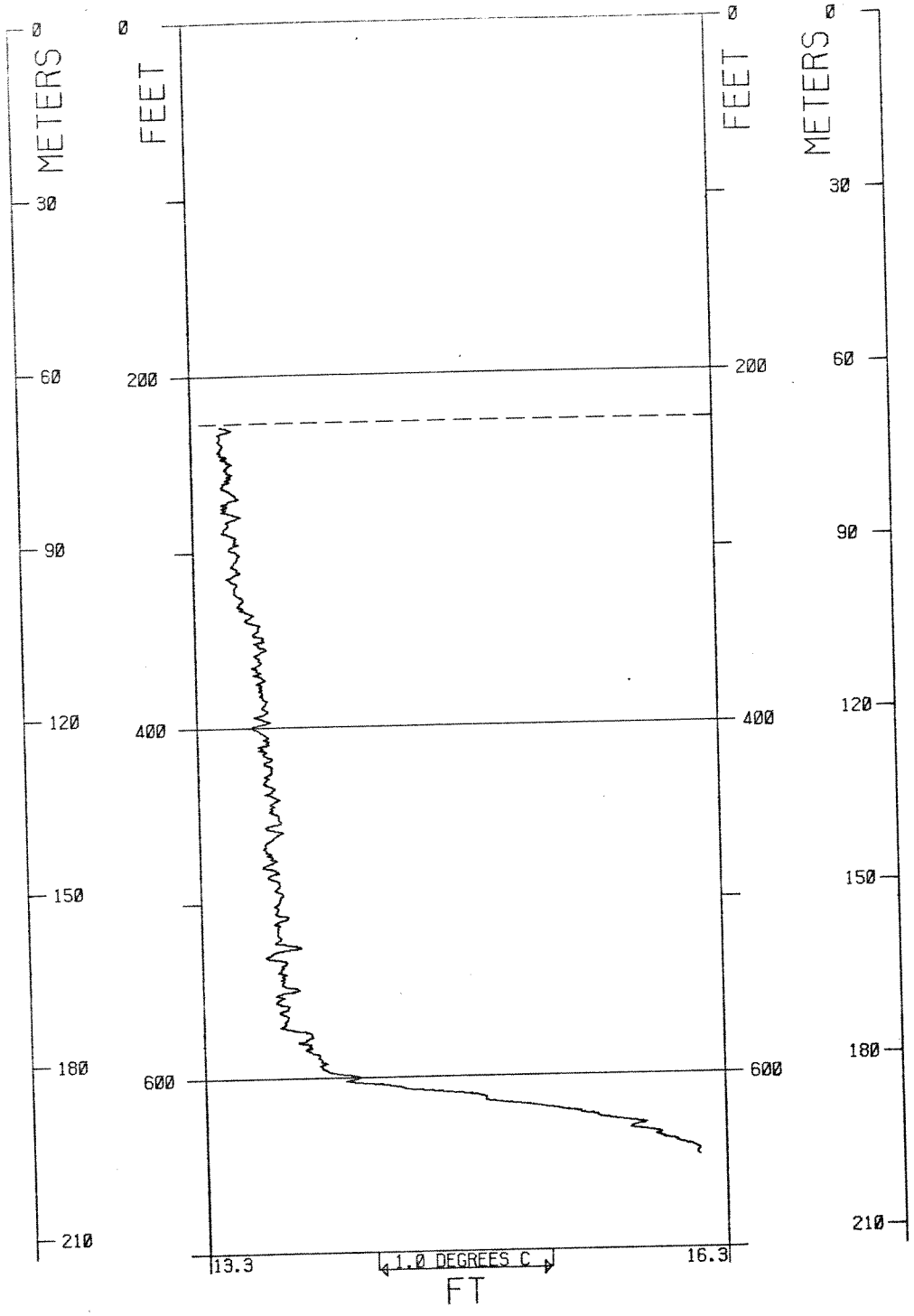
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/28/83 SEW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METERS
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FEET
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13.3
1.0 DEGREES C
16.3
FT
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FEET
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METERS
30
60
90
120
150
180
210

19N/36E-22J1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON HEINEMANN
DATE LOGGED	04/09/73
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/36E-34M1
SURFACE ELEVATION	1769
TOTAL DEPTH LOGGED	448
DEPTH TO WATER LEVEL	138

CASING & LINERS:

CASING AND LINERS UNKNOWN.

LEGEND

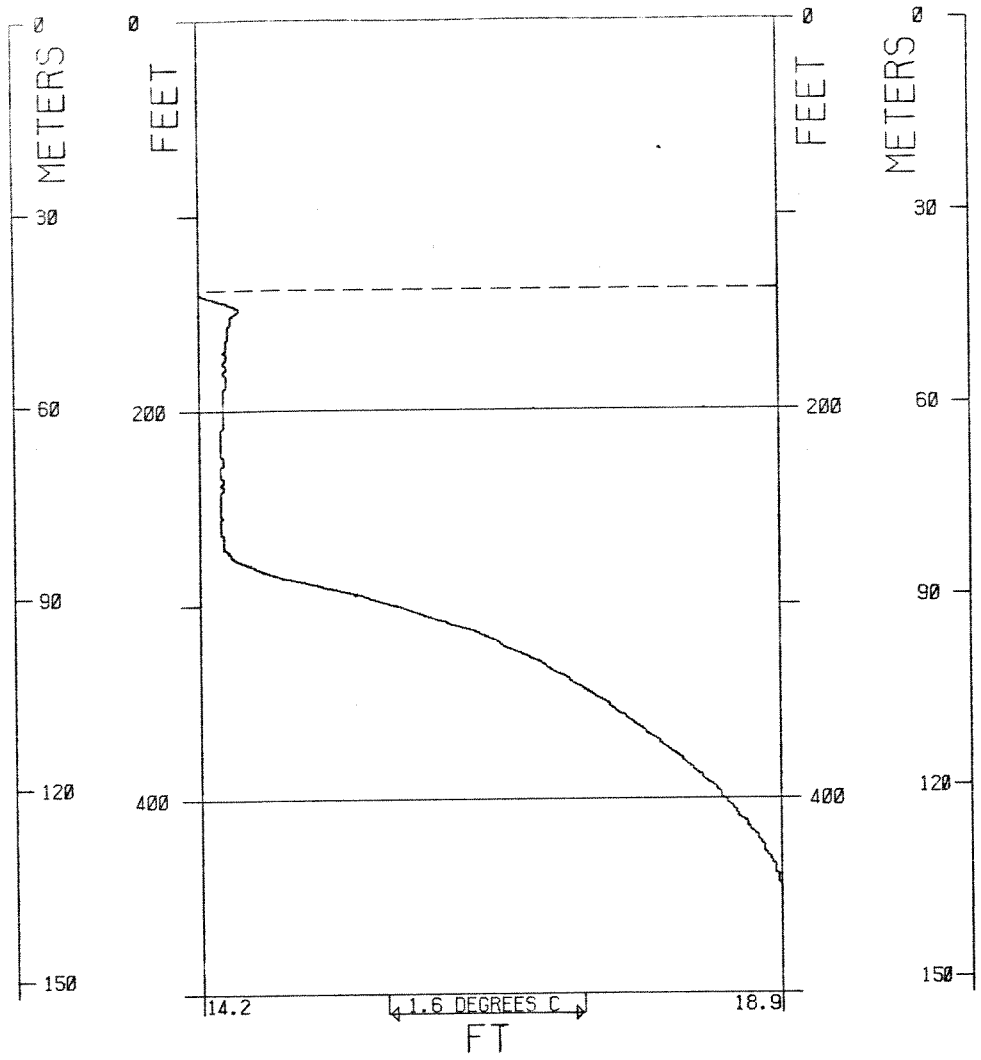
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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FEET
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14.2
1.6 DEGREES C
18.9
FT
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FEET
200
400
0
METERS
30
60
90
120
150

19N/36E-34M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON HEINEMANN #2
DATE LOGGED	06/05/73
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	19N/36E-34N1
SURFACE ELEVATION	1769
TOTAL DEPTH LOGGED	336
DEPTH TO WATER LEVEL	232
CASING & LINERS:	

CASING AND LINERS UNKNOWN.

LEGEND

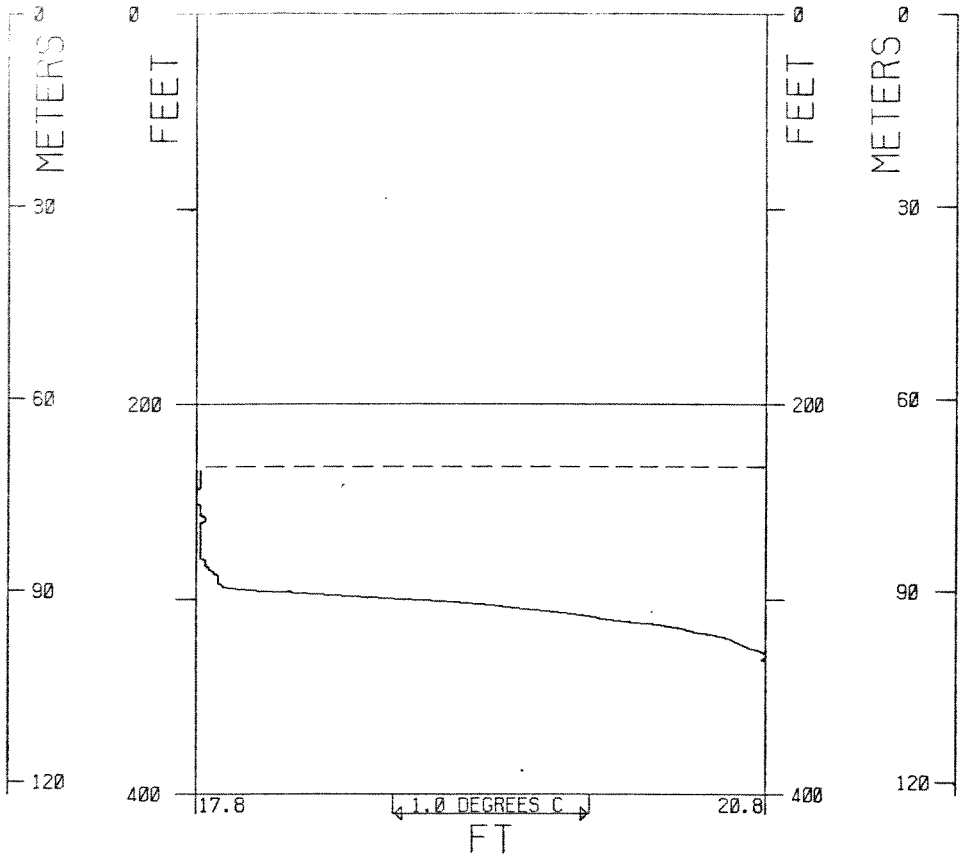
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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17.8
1.0 DEGREES C
20.8
FT
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FEET
200
400
0
METERS
30
60
90
120

19N/36E-34N1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	E.B. COLE
DATE LOGGED	05/13/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/29E-07H1
SURFACE ELEVATION	1295
TOTAL DEPTH LOGGED	705
DEPTH TO WATER LEVEL	182

CASING & LINERS:
0- 20=19

NOT LOGGED TO TOTAL DEPTH.
OBSTRUCTION AT 700 FT.

LEGEND

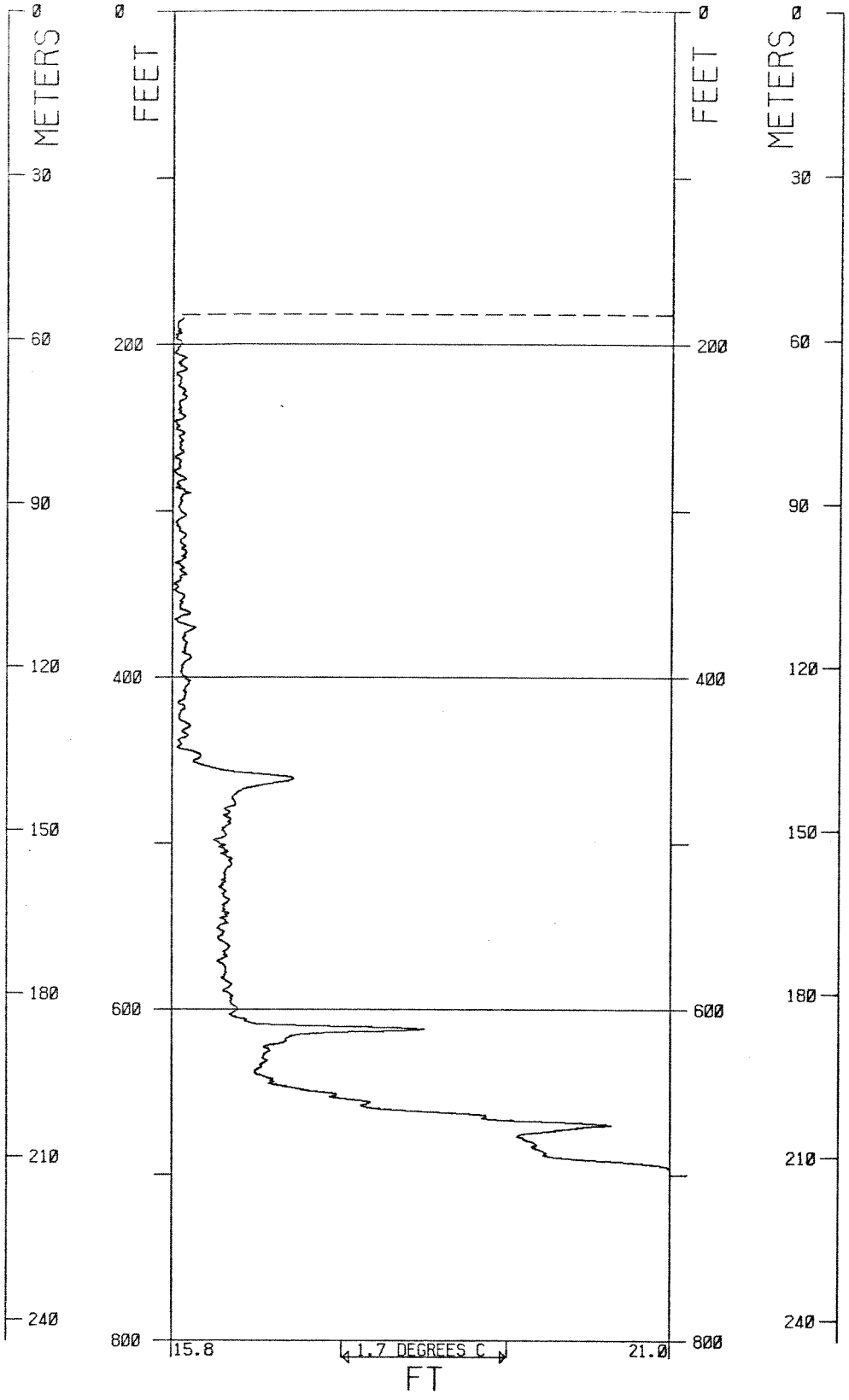
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW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METERS
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FEET
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800
15.8
1.7 DEGREES C
21.0
FT
0
FEET
200
400
600
800
0
METERS
30
60
90
120
150
180
210
240

20N/29E-07H1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	IVAN COLE
DATE LOGGED	Ø1/31/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	2ØN/29E-15H1
SURFACE ELEVATION	1365
TOTAL DEPTH LOGGED	519
DEPTH TO WATER LEVEL	224

CASING & LINERS:
Ø- 13=15

LEGEND

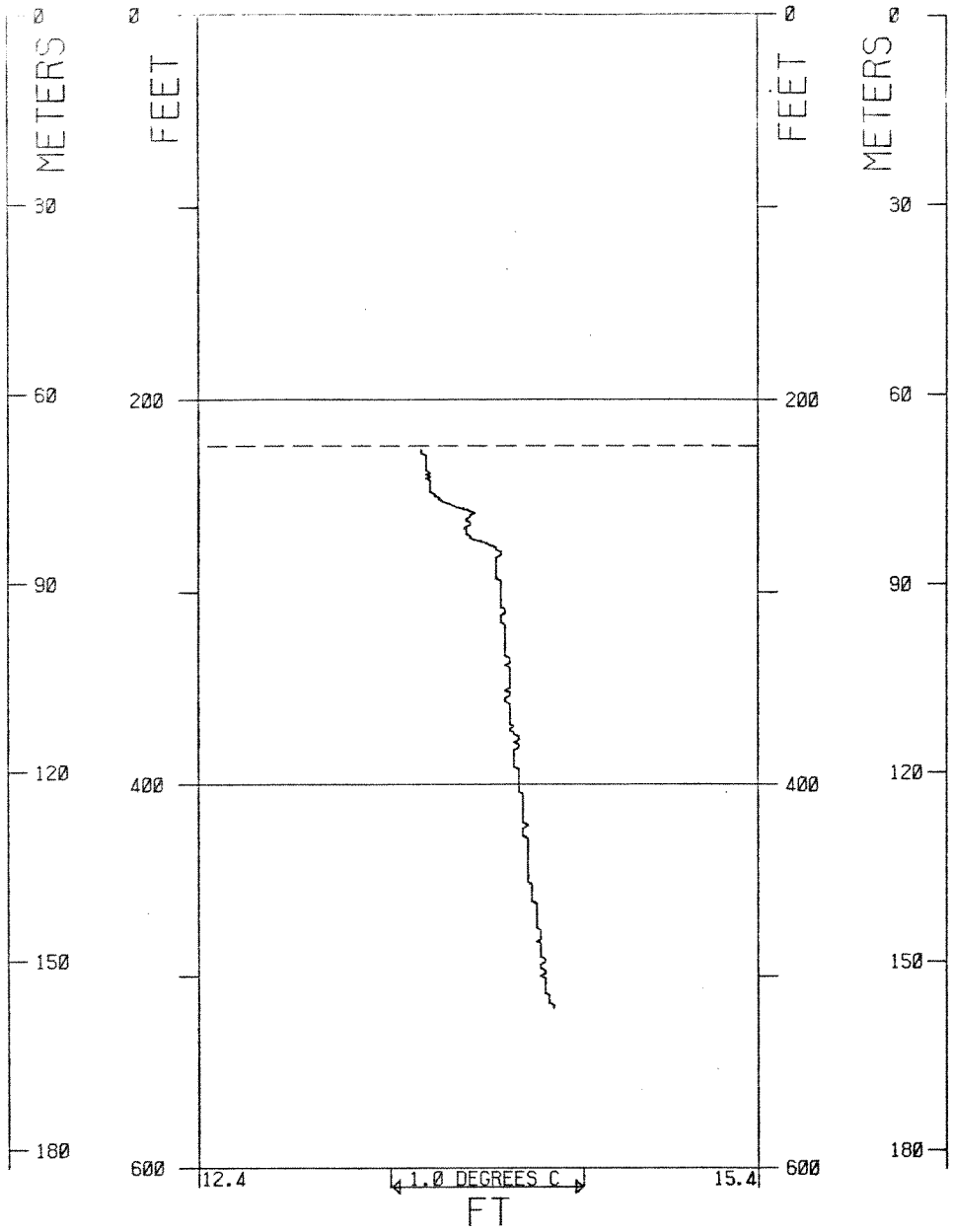
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/28/83 SEW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METERS
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12.4
1.0 DEGREES C
15.4
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180

20N/29E-15H1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	REINKE FARM CO.
DATE LOGGED	Ø1/21/76
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	2ØN/29E-25C1
SURFACE ELEVATION	1422
TOTAL DEPTH LOGGED	1331
DEPTH TO WATER LEVEL	335

CASING & LINERS:
Ø- 598=16

LEGEND

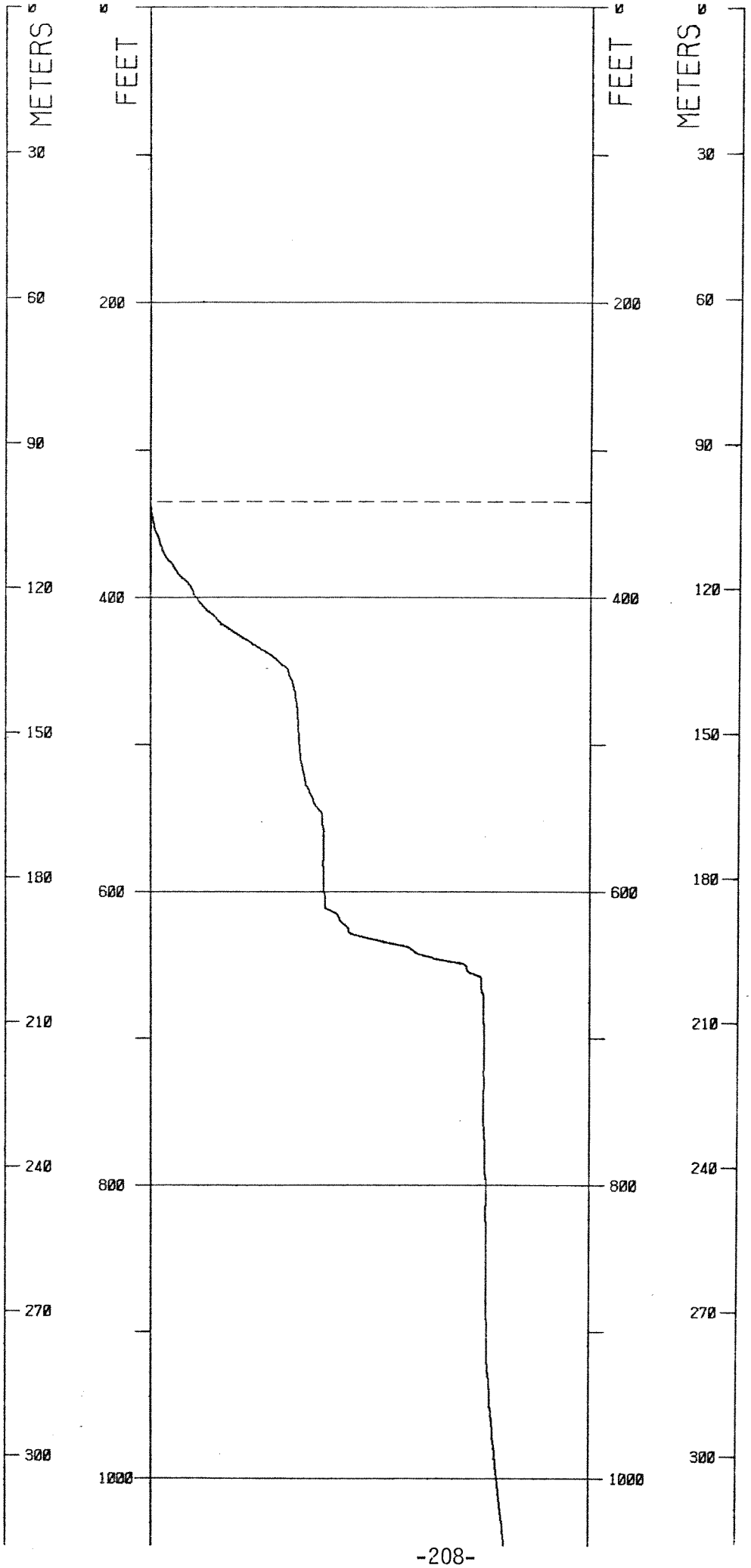
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/16/83 SEW


METERS
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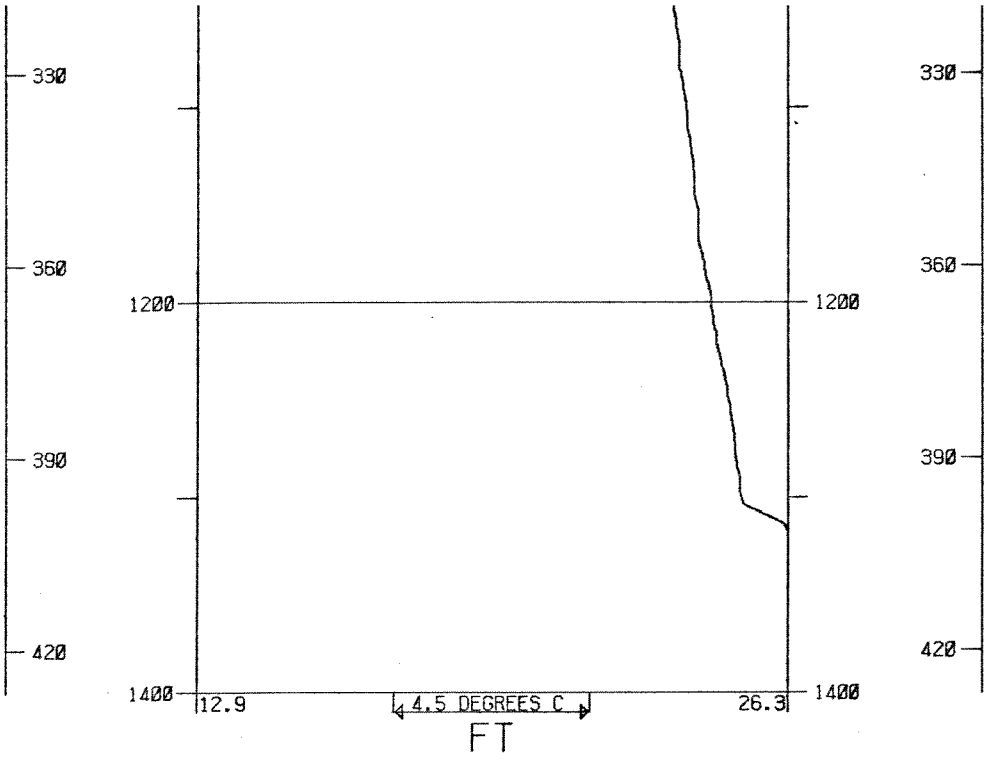
20N/29E-25C1



20N/29E-25C1

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	TOM POWERS
DATE LOGGED	05/12/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/29E-35A1
SURFACE ELEVATION	1340
TOTAL DEPTH LOGGED	960
DEPTH TO WATER LEVEL	254

CASING & LINERS:
0- 16=18

LEGEND

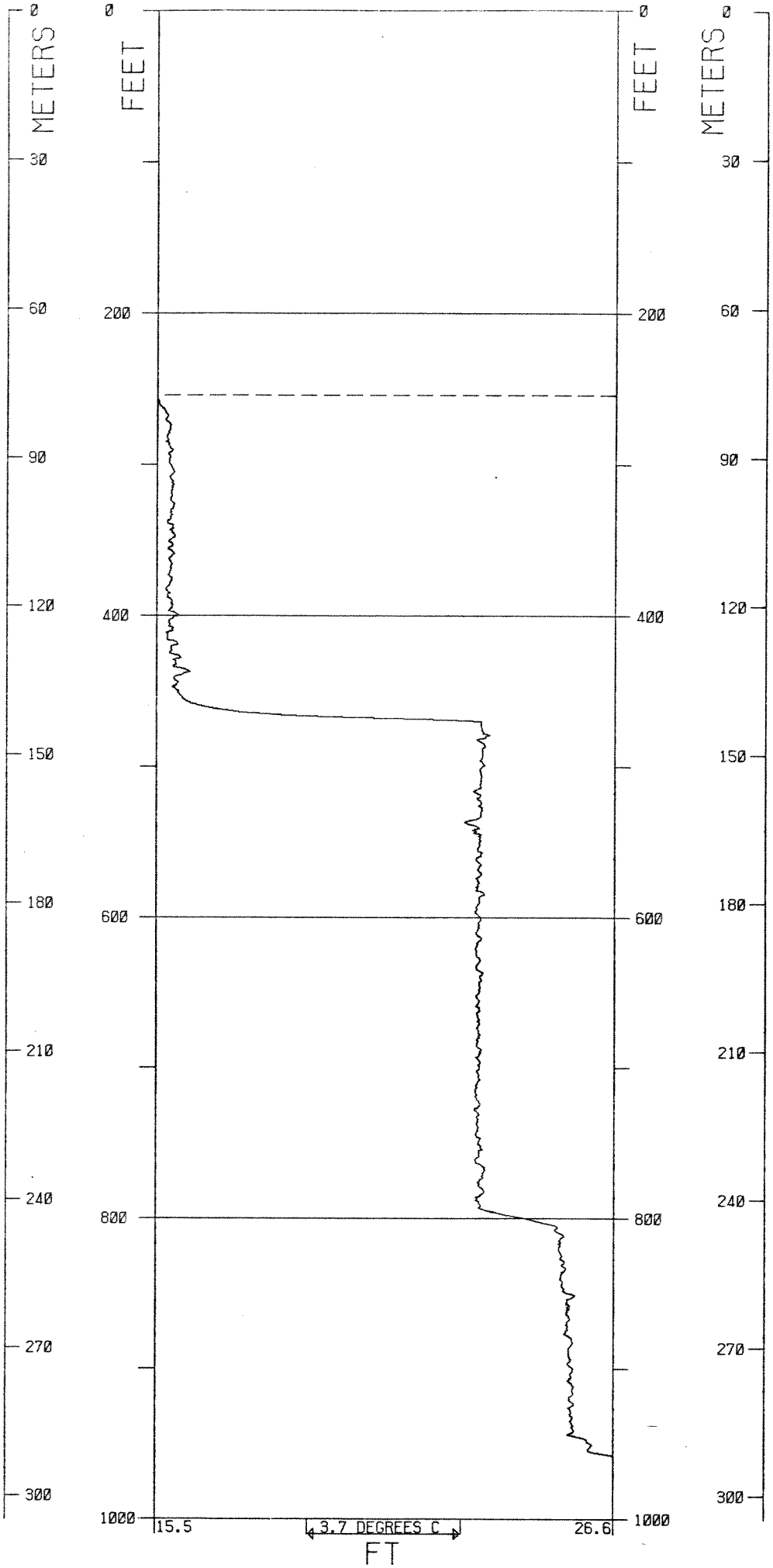
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/29/83 SEW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METERS
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15.5
3.7 DEGREES C
26.6
FT
0
FEET
200
400
600
800
1000
0
METERS
30
60
90
120
150
180
210
240
270
300

20N/29E-35A1

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CLINT CLAASSEN
DATE LOGGED	12/28/77
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/30E-21G1
SURFACE ELEVATION	1560
TOTAL DEPTH LOGGED	1541
DEPTH TO WATER LEVEL	498

CASING & LINERS:
0- 49=15

LEGEND

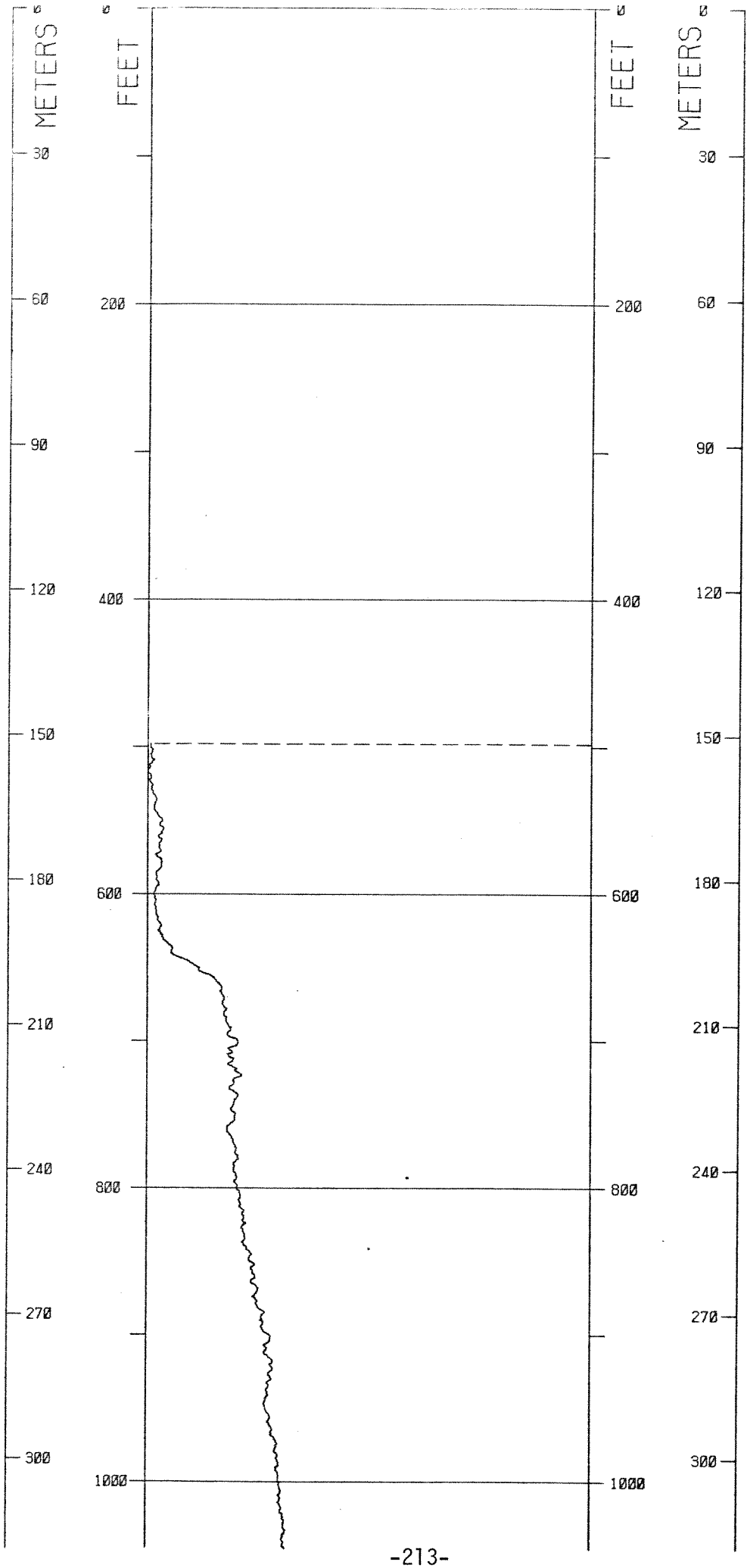
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW


METERS
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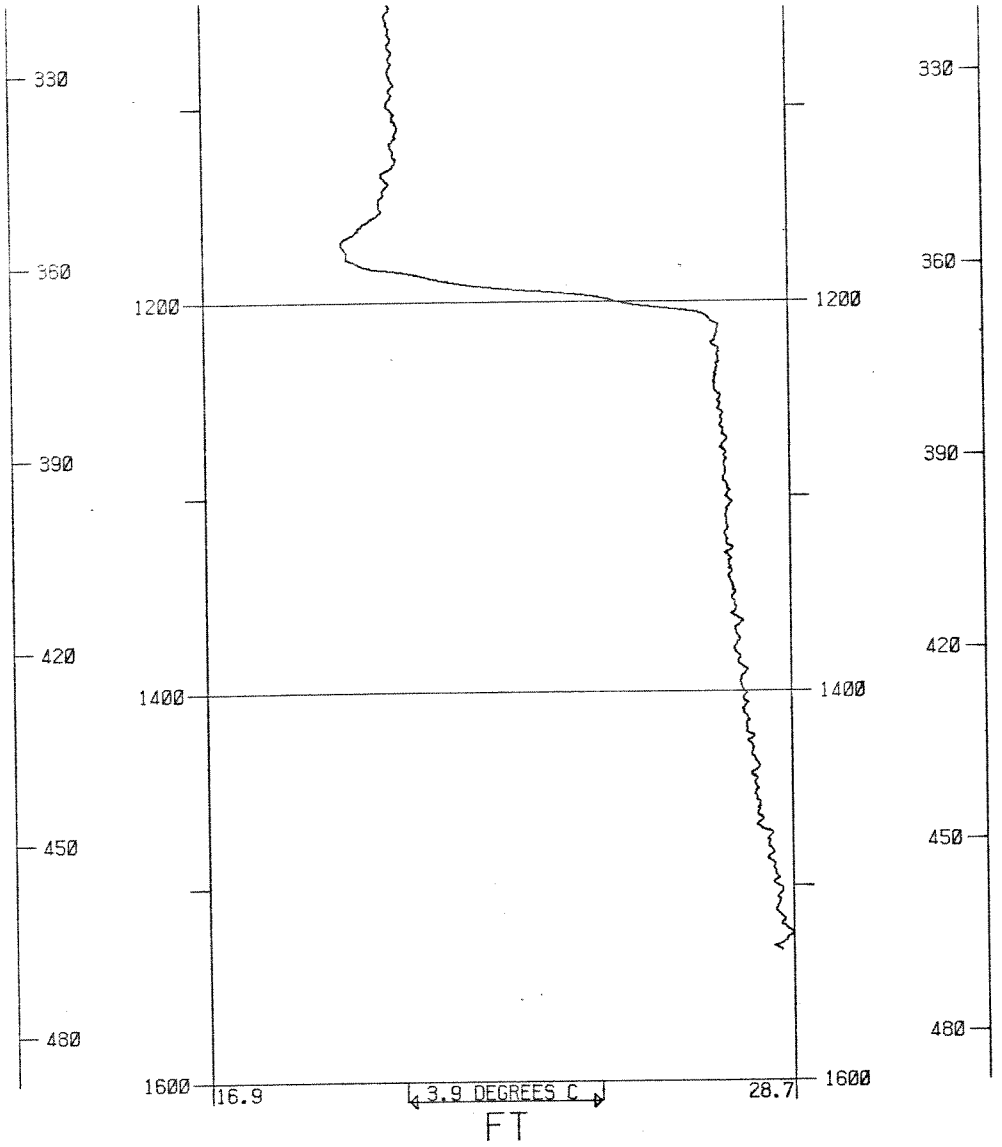
20N/30E-21G1



20N/30E-21G1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HERB FRANZ #2
DATE LOGGED	02/13/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/30E-23A1
SURFACE ELEVATION	1641
TOTAL DEPTH LOGGED	717
DEPTH TO WATER LEVEL	375

CASING & LINERS:

0- 45=17 0- 398=15

LEGEND

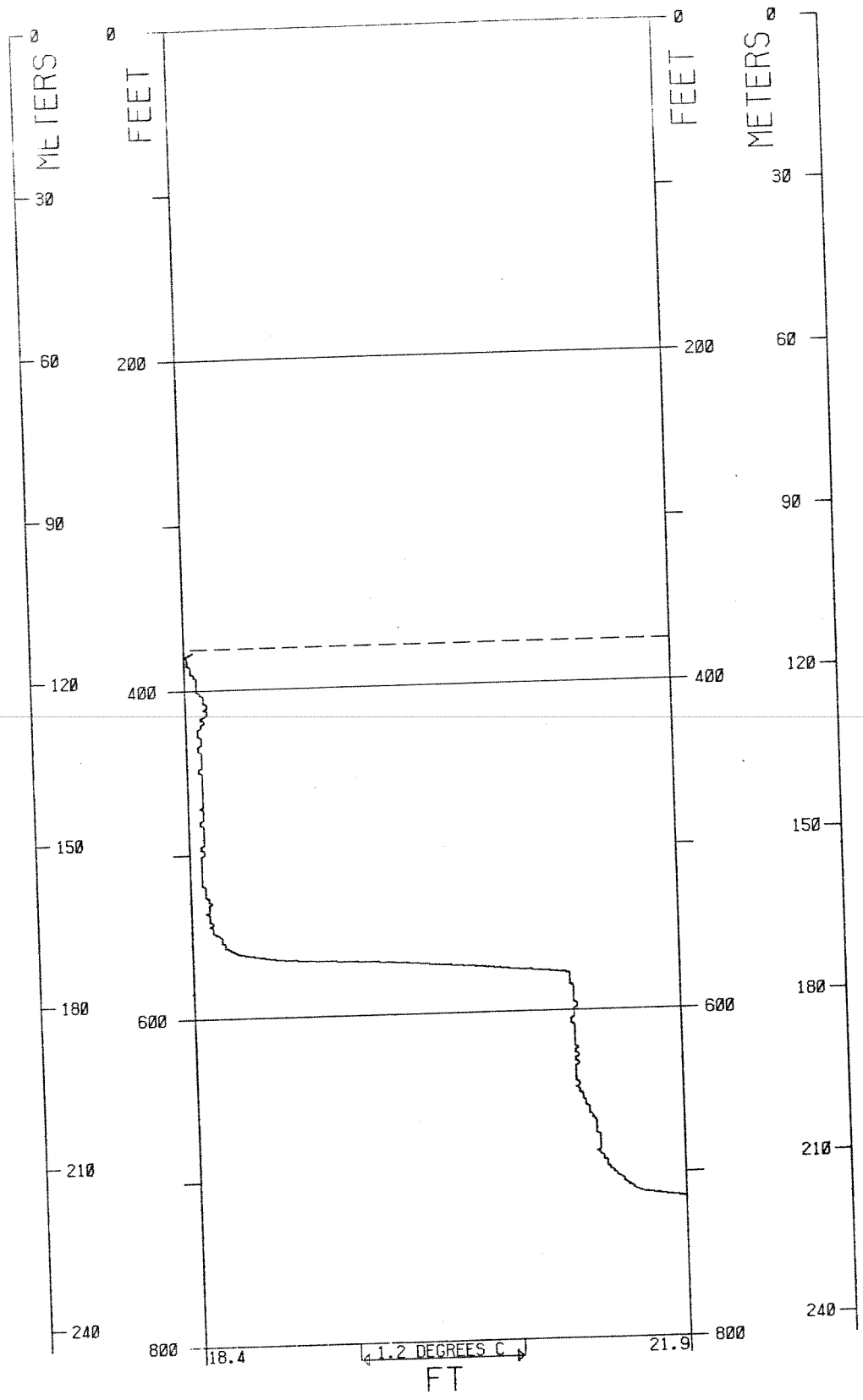
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW


20N/30E-23A1
METERS
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METERS
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30
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200
400
600
800
18.4
1.2 DEGREES C
21.9
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HERB FRANZ #1
DATE LOGGED	Ø3/22/72
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	2ØN/3ØE-23E1
SURFACE ELEVATION	1588
TOTAL DEPTH LOGGED	11Ø2
DEPTH TO WATER LEVEL	3Ø1

CASING & LINERS:
Ø- 54=15

LEGEND

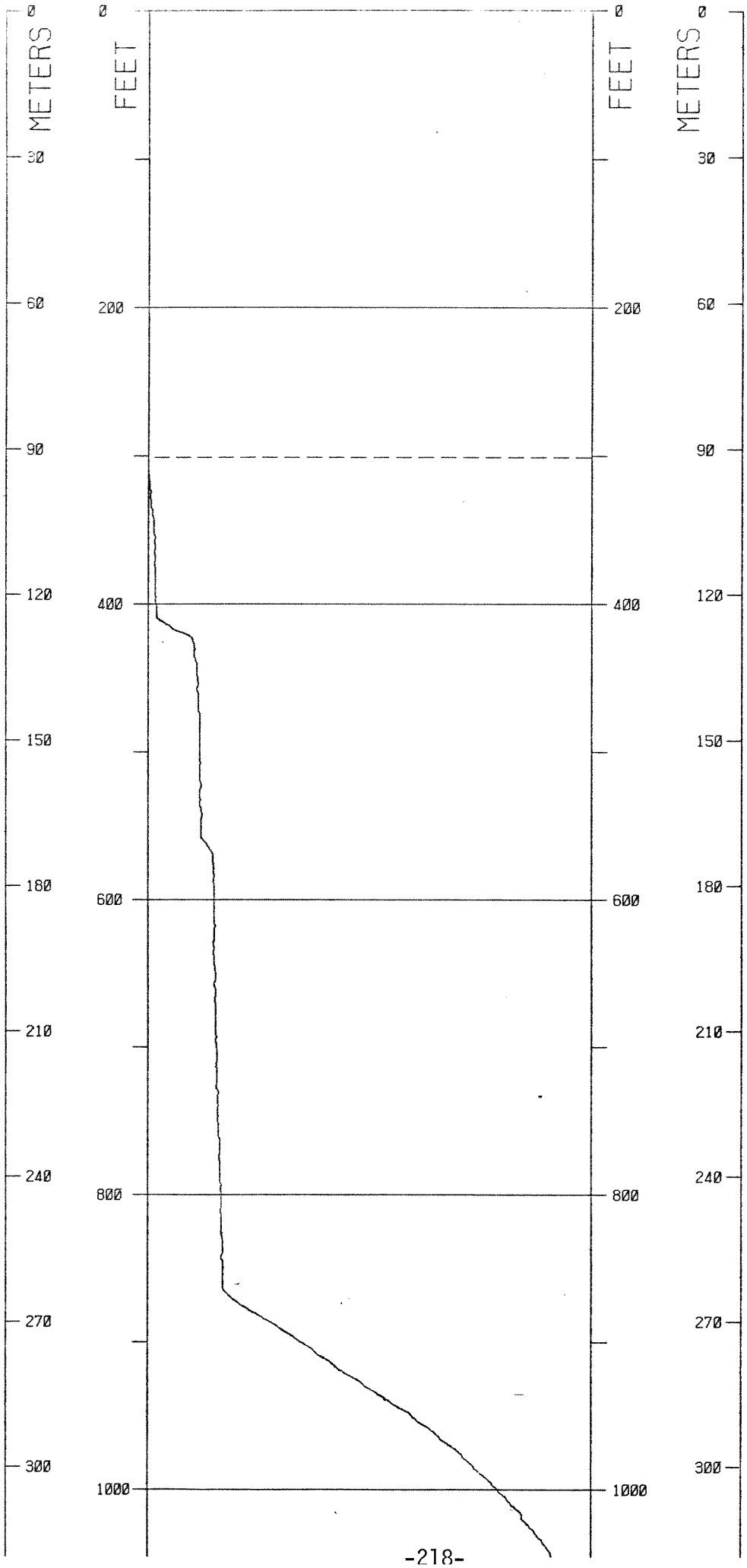
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/28/83 SEW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METERS
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FEET
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METERS
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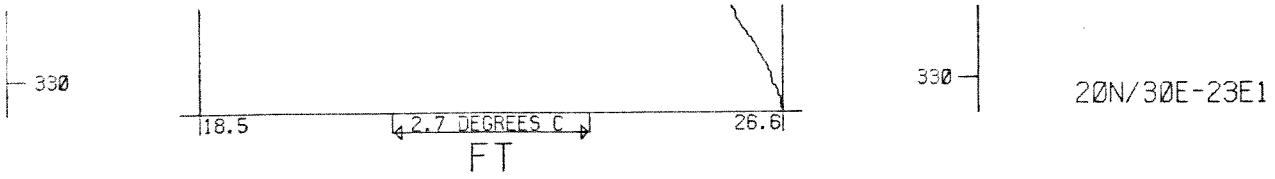
240
270
300

20N/30E-23E1



20N/30E-23E1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	STUCKY (J. JANTZ)
DATE LOGGED	04/12/72
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/30E-28R1
SURFACE ELEVATION	1525
TOTAL DEPTH LOGGED	585
DEPTH TO WATER LEVEL	260
CASING & LINERS:	
0- 15=7	

LEGEND

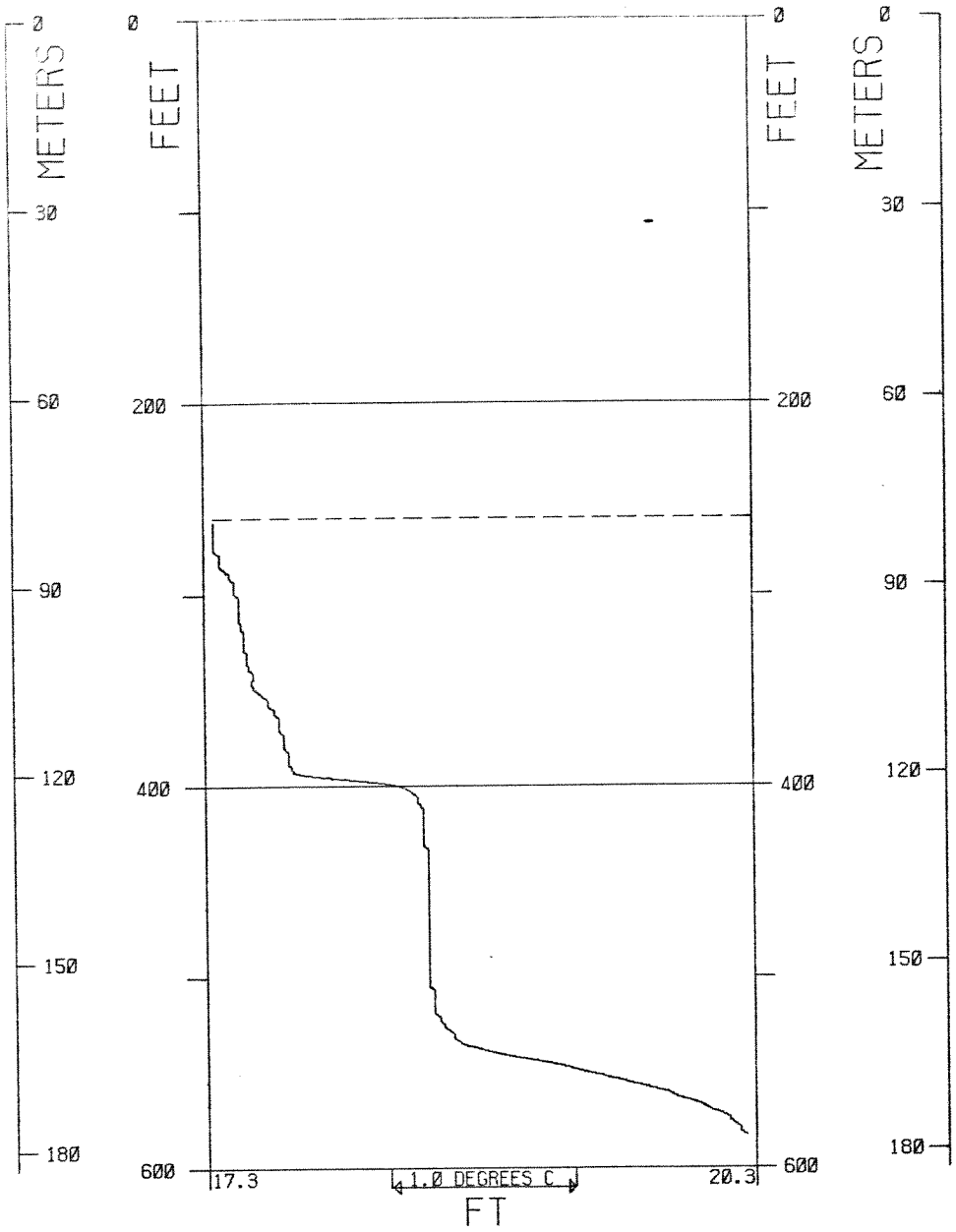
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW


METERS
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180
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600
17.3
1.0 DEGREES C
20.3
FT

20N/30E-28R1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	NEIBAUR/WEST
DATE LOGGED	02/13/76
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	20N/30E-32K1
SURFACE ELEVATION	1460
TOTAL DEPTH LOGGED	1255
DEPTH TO WATER LEVEL	364

CASING & LINERS:
0- 20=20

LEGEND

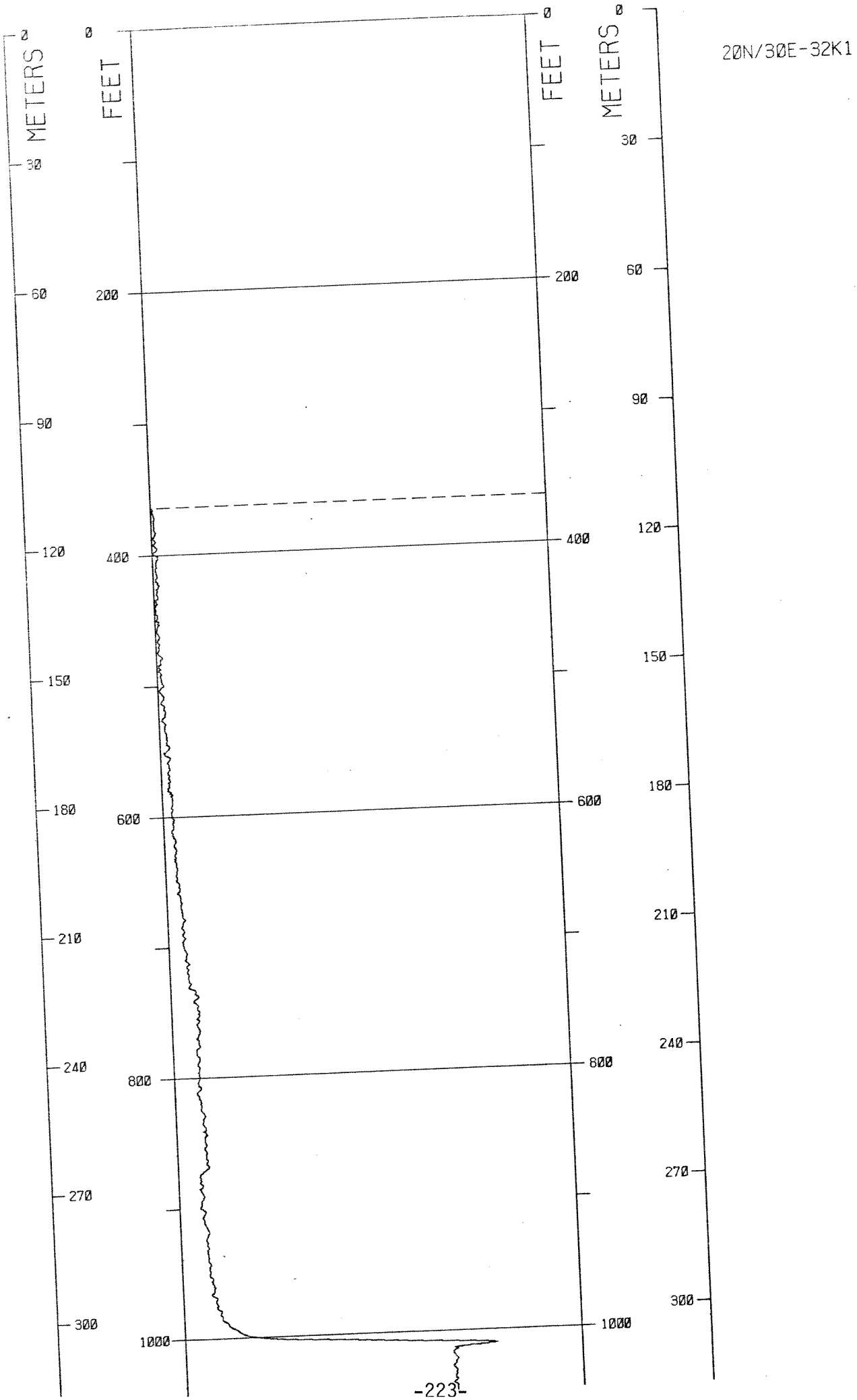
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/22/83 SEW


20N/30E-32K1
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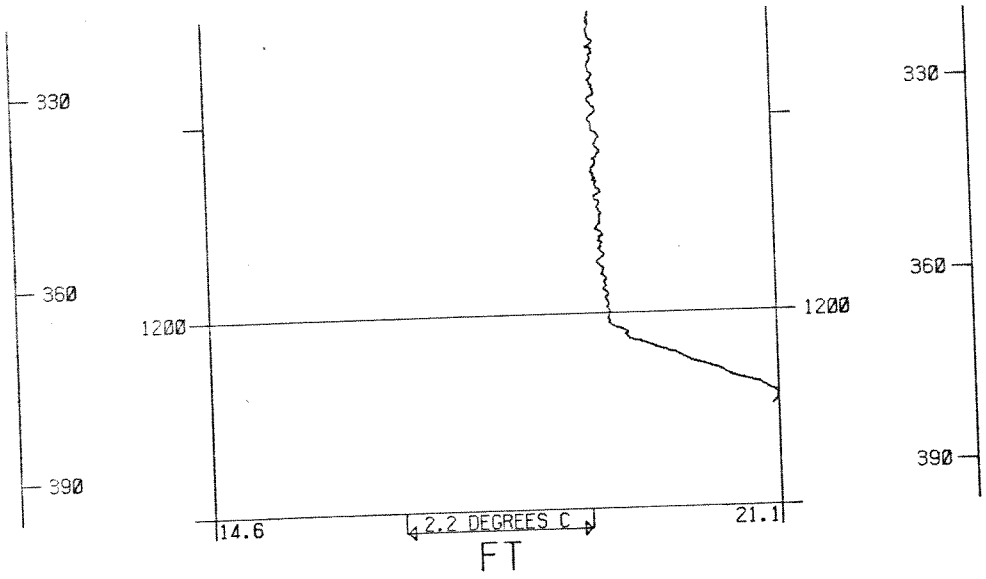


20N/30E-32K1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MERLIN KISSLER
DATE LOGGED	01/06/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/31E-05C1
SURFACE ELEVATION	1645
TOTAL DEPTH LOGGED	566
DEPTH TO WATER LEVEL	107

CASING & LINERS:
0- 30= 9

LEGEND

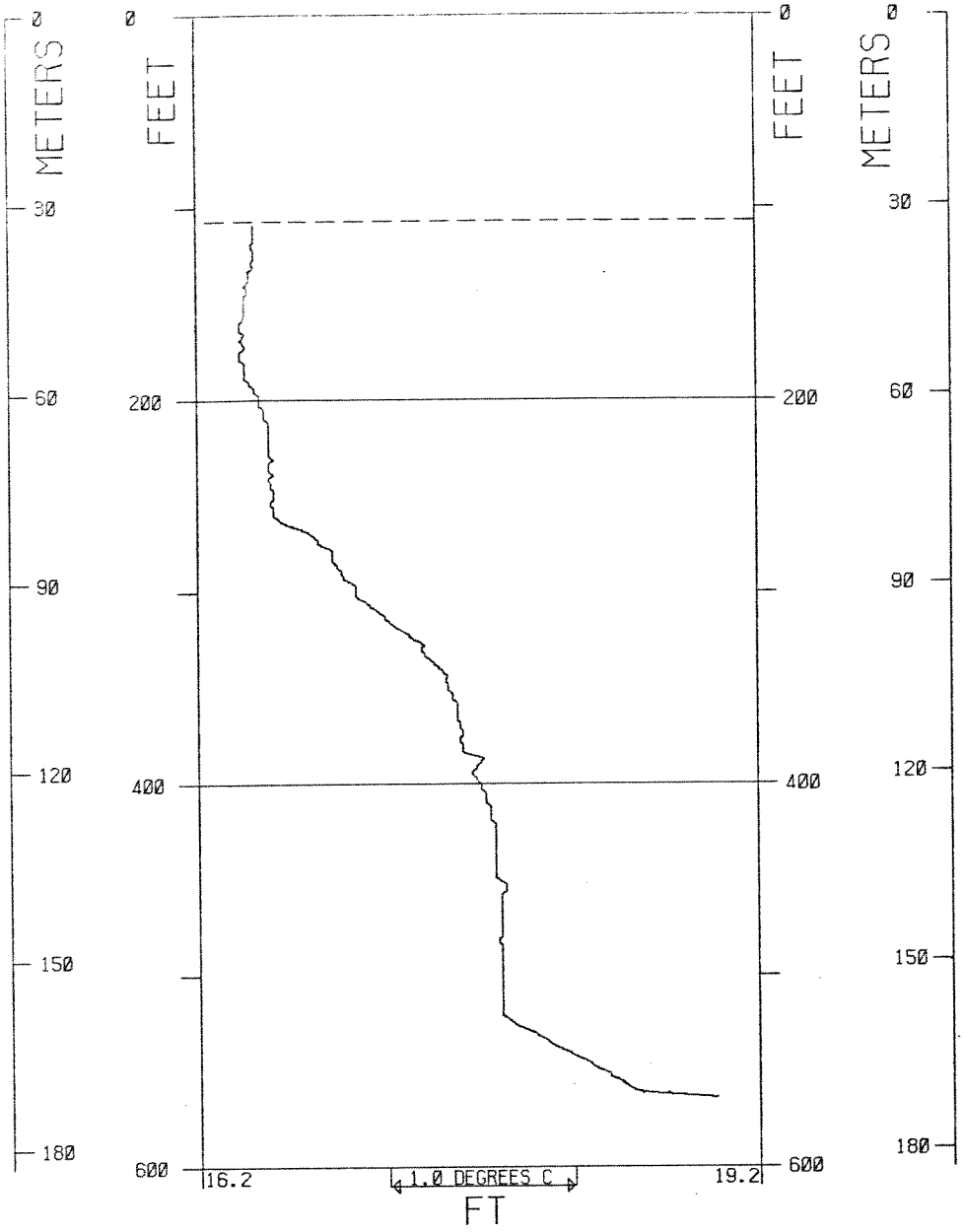
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW


0
METERS
30
60
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0
FEET
200
400
600
16.2
1.0 DEGREES C
19.2
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180

20N/31E-05C1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ODESSA TEST (DOE)
DATE LOGGED	Ø3/Ø4/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	2ØN/33E-16E1
SURFACE ELEVATION	1665
TOTAL DEPTH LOGGED	74Ø
DEPTH TO WATER LEVEL	116
CASING & LINERS:	
Ø- 61= 9	

LEGEND

LOG TITLES

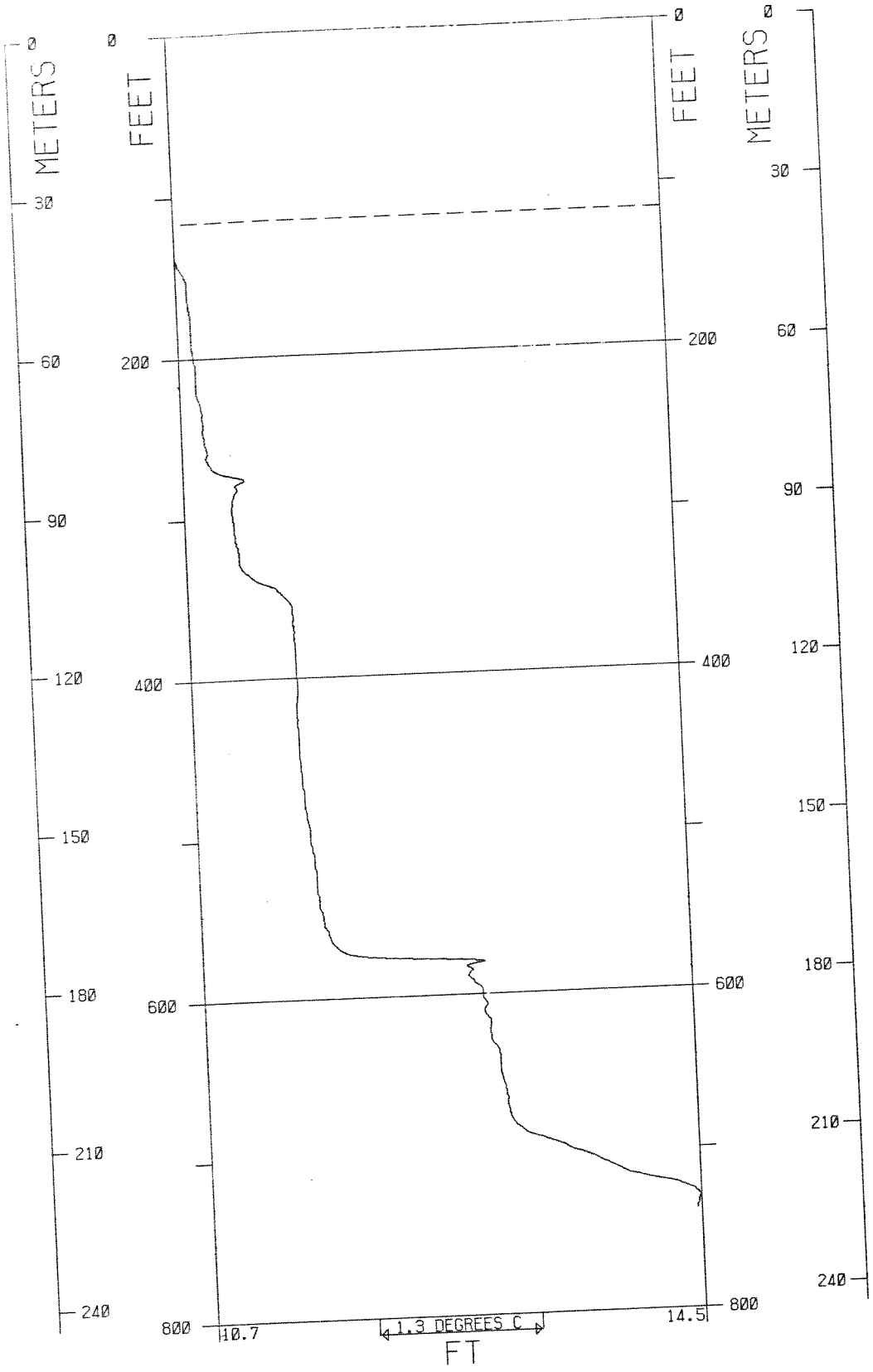
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/15/83 SEW

20N/33E-16E1


METERS
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METERS
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240
200
400
600
800
10.7
1.3 DEGREES C
14.5
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RAY SCHORZMAN
DATE LOGGED	08/29/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/33E-19B1
SURFACE ELEVATION	1775
TOTAL DEPTH LOGGED	777
DEPTH TO WATER LEVEL	221
CASING & LINERS:	
0- 45=17	

FT INSTRUMENTATION PROBLEMS.

LEGEND

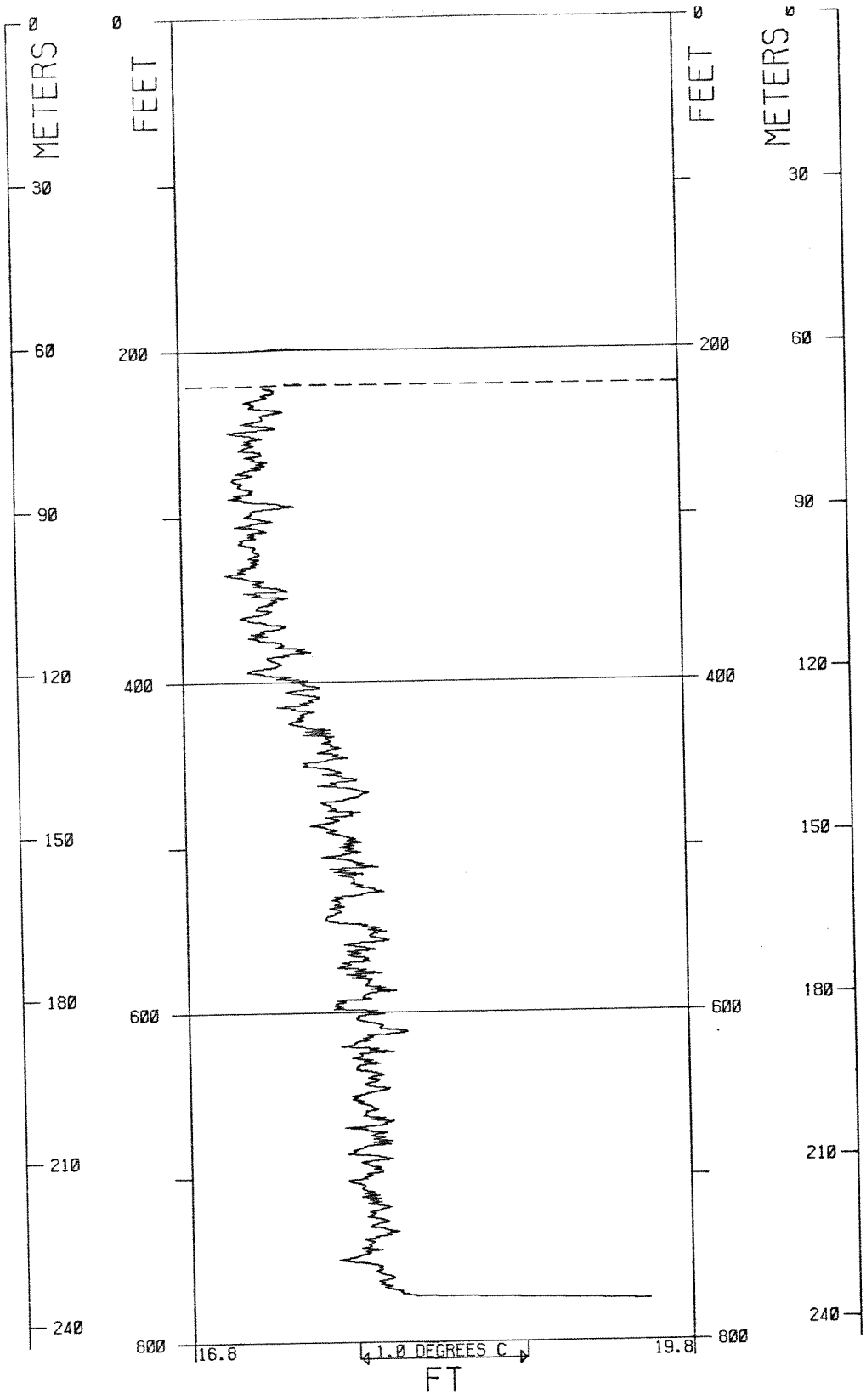
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▷
POROSITY (NN-LOG) INCREASES ◁——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/14/83 SEW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METERS
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16.8
1.0 DEGREES C
19.8
FT
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FEET
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800
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150
180
210
240

20N/33E-19B1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JOHN WEBER
DATE LOGGED	04/11/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/34E-02Q1
SURFACE ELEVATION	1950
TOTAL DEPTH LOGGED	661
DEPTH TO WATER LEVEL	314
CASING & LINERS:	

HAND DIGITIZED.

LEGEND

LOG TITLES

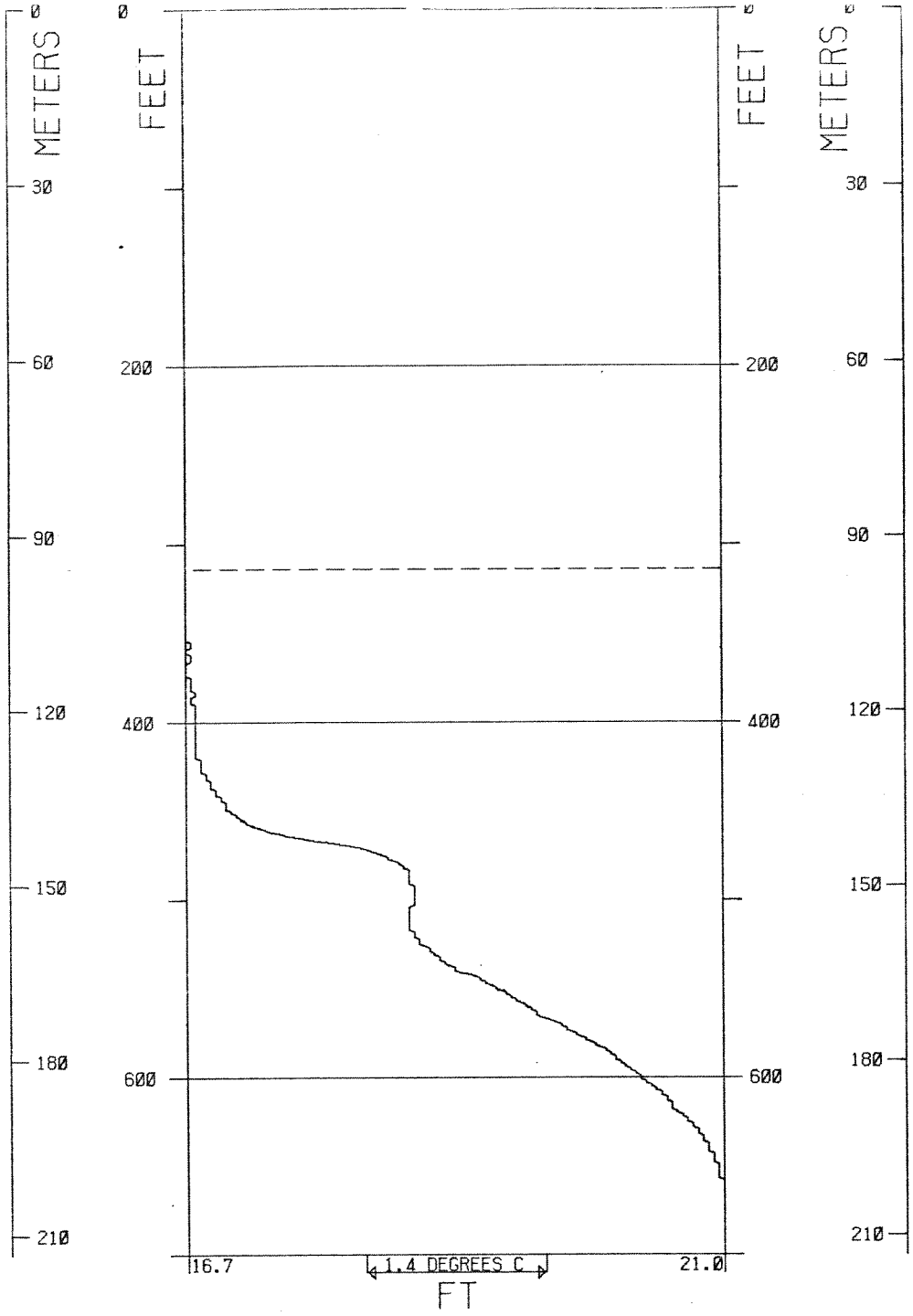
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

20N/34E-02Q1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FEET
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200
400
600
METERS
0
30
60
90
120
150
180
210
16.7
1.4 DEGREES C
21.0
FT

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LEROY WEIZEL
DATE LOGGED	03/06/72
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/34E-10F1
SURFACE ELEVATION	1915
TOTAL DEPTH LOGGED	777
DEPTH TO WATER LEVEL	418

CASING & LINERS:
0- 56=15

LEGEND

LOG TITLES

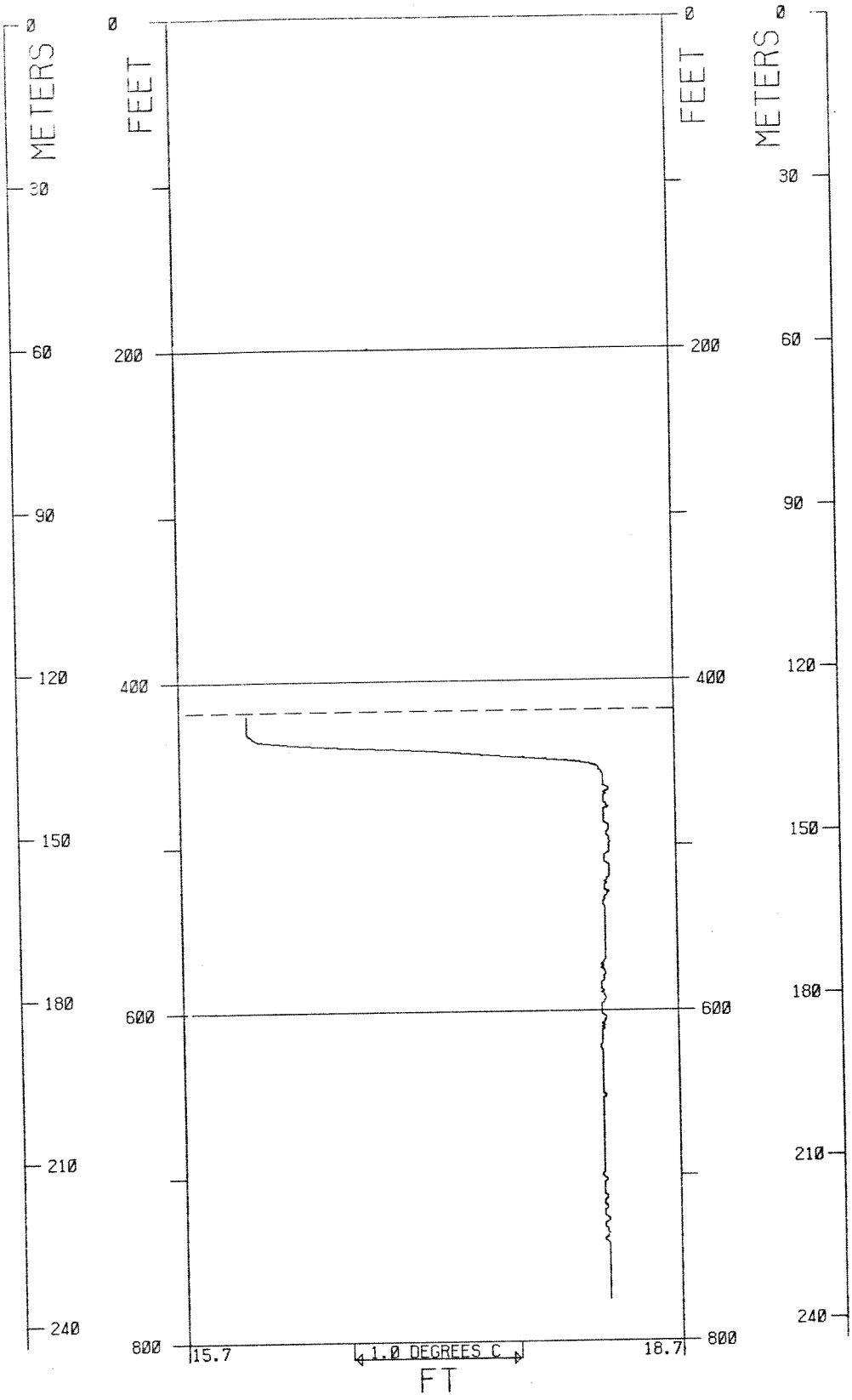
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW

20N/34E-10F1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METERS
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240
200
400
600
800
15.7
1.0 DEGREES C
18.7
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LAVINE HARDUNG
DATE LOGGED	09/04/71
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/35E-17D1
SURFACE ELEVATION	1982
TOTAL DEPTH LOGGED	745
DEPTH TO WATER LEVEL	188
CASING & LINERS:	

LEGEND

LOG TITLES

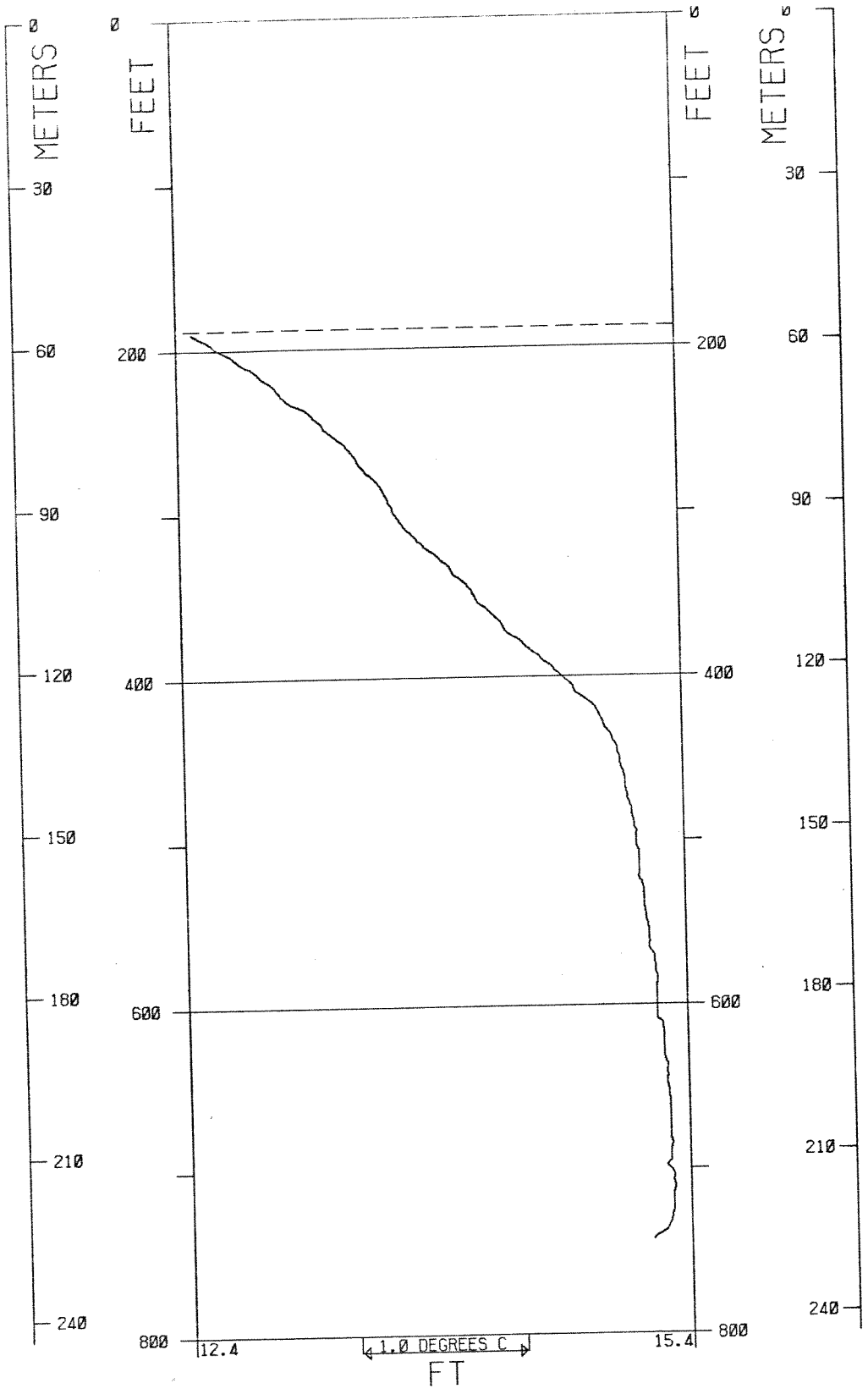
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11/12/83 SEW

20N/35E-17D1


METERS
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METERS
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120
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210
240
200
400
600
800
12.4
1.0 DEGREES C
15.4
FT

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	CLIFF AHERN
DATE LOGGED	05/04/74
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	20N/35E-24D1
SURFACE ELEVATION	1945
TOTAL DEPTH LOGGED	515
DEPTH TO WATER LEVEL	177

CASING & LINERS:
0- 152=15

LEGEND

LOG TITLES

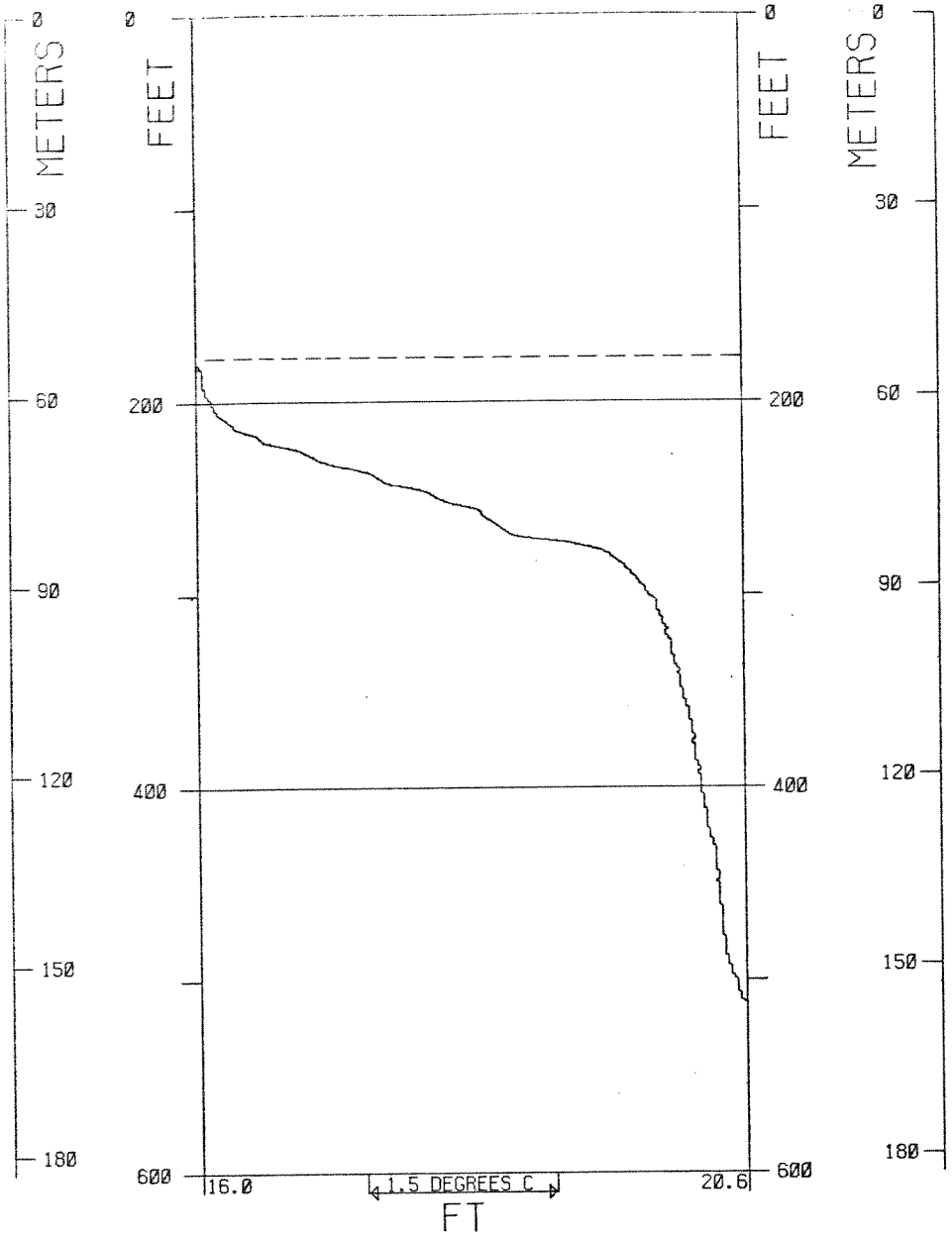
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW

20N/35E-24D1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400
600
16.0
1.5 DEGREES C
20.6
FT

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	R. KAGELE
DATE LOGGED	Ø1/Ø7/77
STATE	WASHINGTON
COUNTY	ADAMS
LOCATION	2ØN/35E-27A1
SURFACE ELEVATION	2ØØ5
TOTAL DEPTH LOGGED	1197
DEPTH TO WATER LEVEL	7Ø4
CASING & LINERS:	
Ø- 56=19	

CASCADING WATER FROM 624 FT.

LEGEND

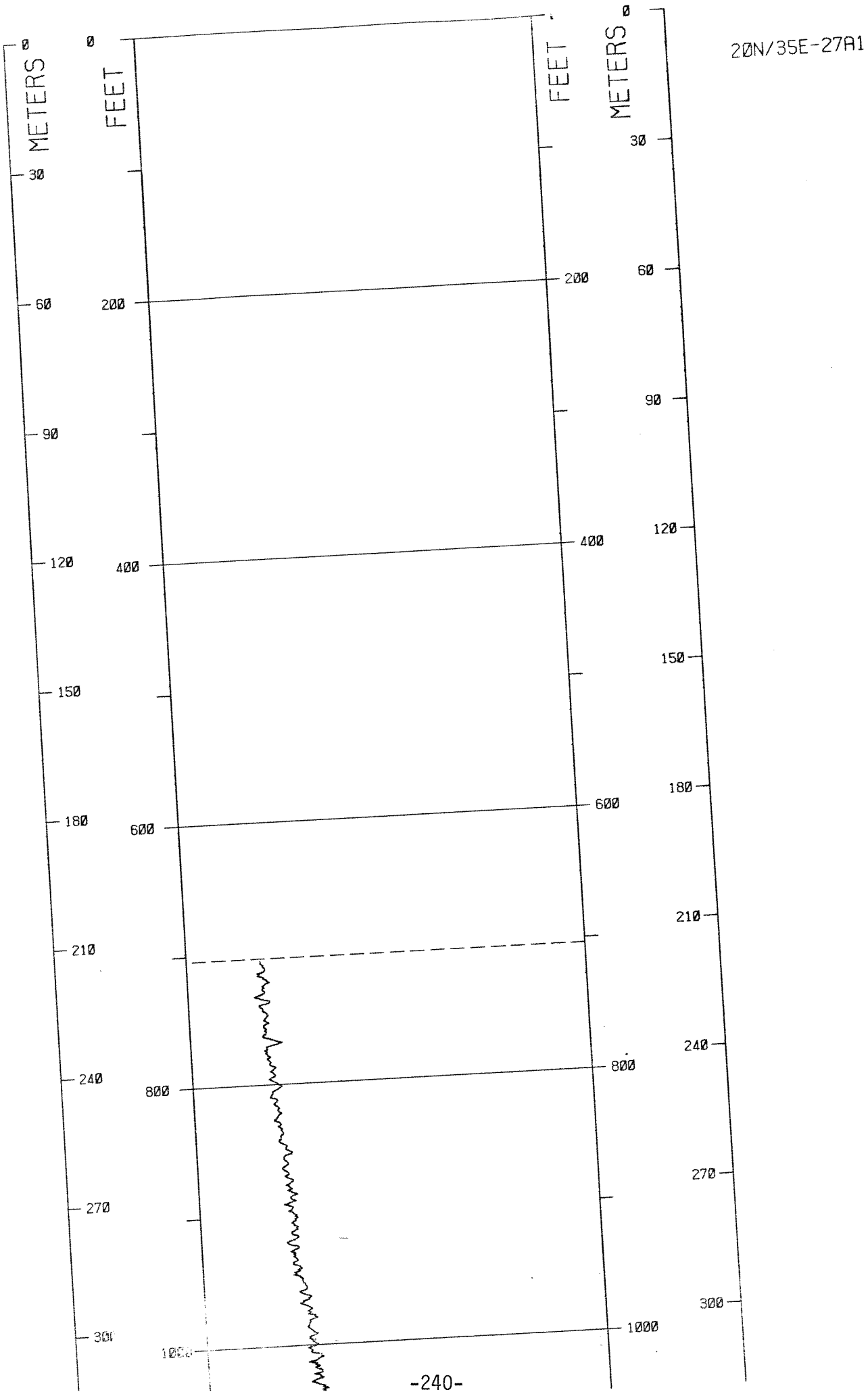
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

11-12/83 SEW


20N/35E-27A1
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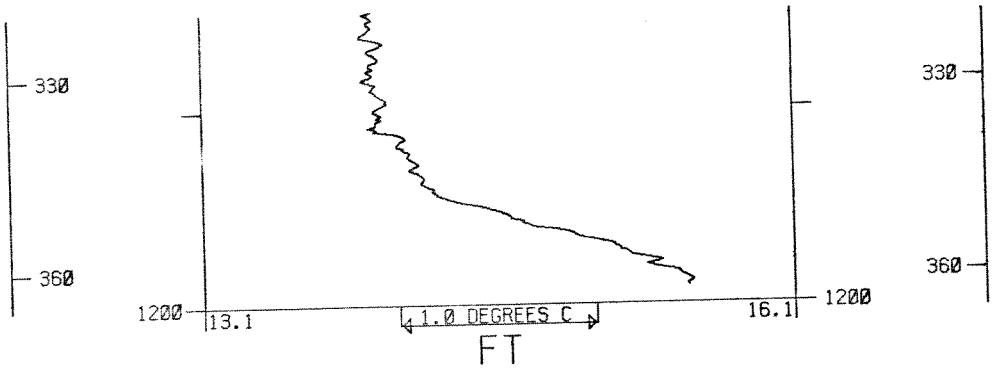


20N/35E-27A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BASALT EXPLORER
DATE LOGGED	06/14/72
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-10M1
SURFACE ELEVATION	1610
TOTAL DEPTH LOGGED	4397
DEPTH TO WATER LEVEL	222

CASING & LINERS:
0- 100=10

LEGEND

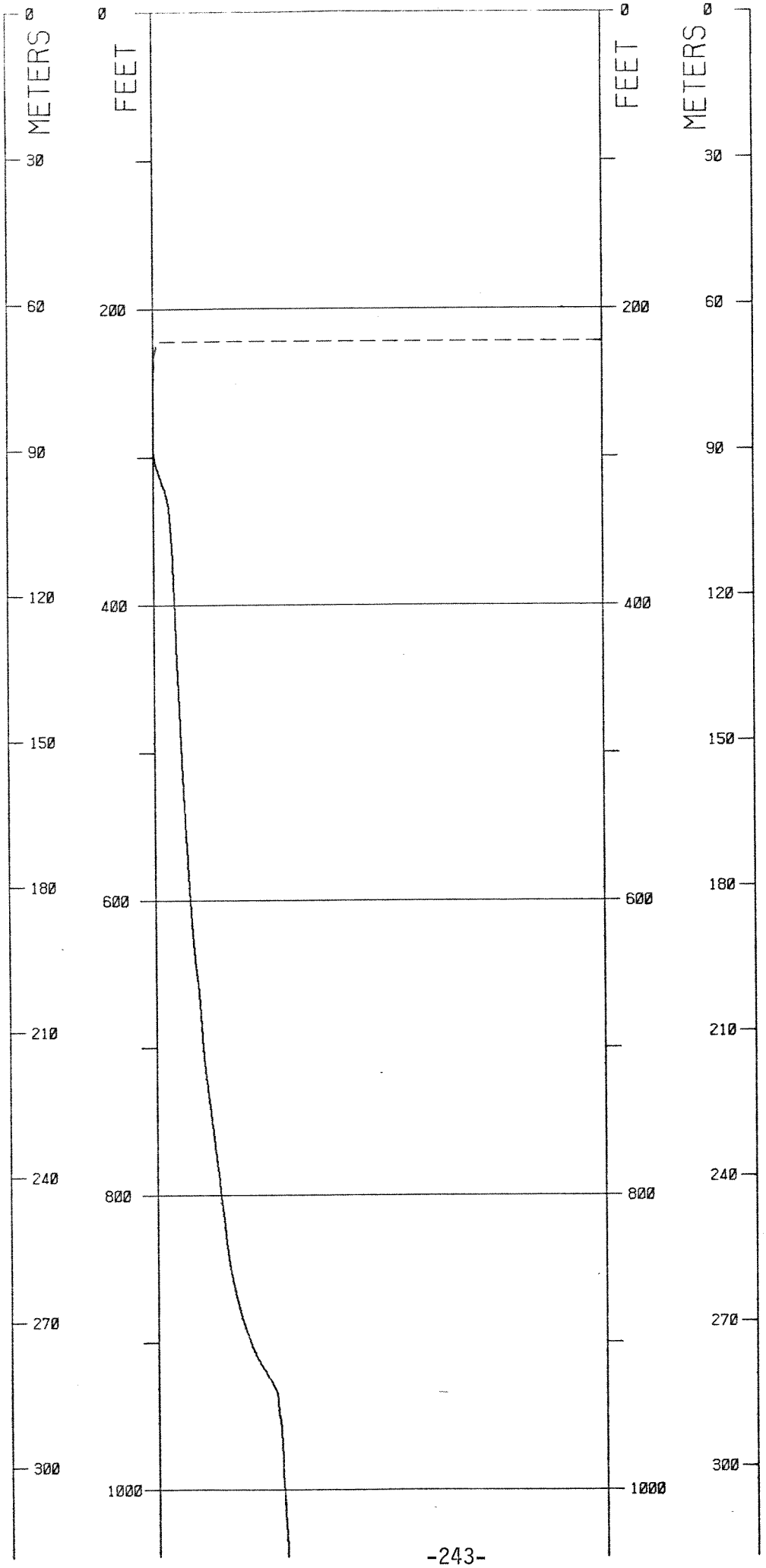
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/21/83 SEW


METERS
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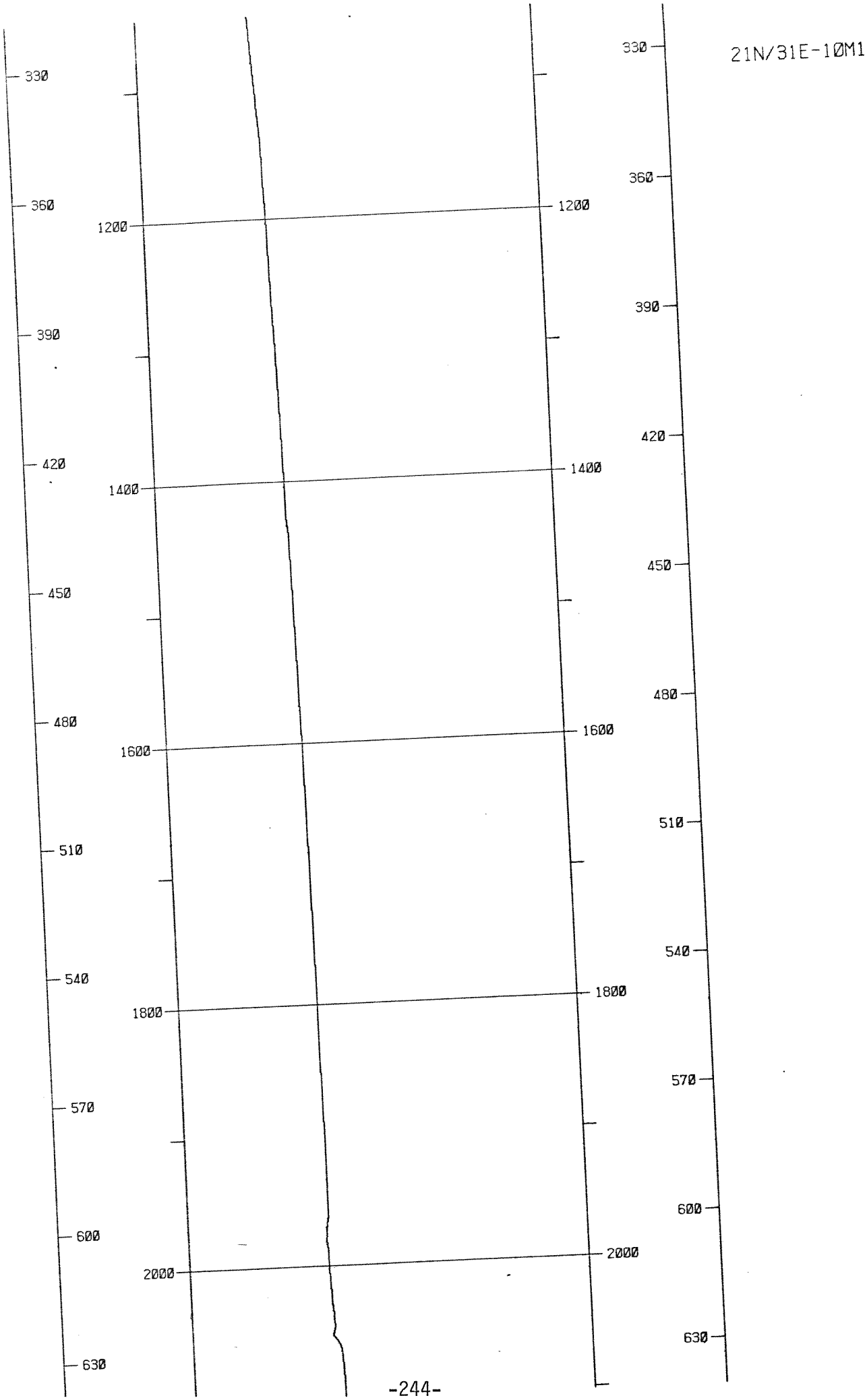
21N/31E-10M1


21N/31E-10M1
330
360
390
420
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480
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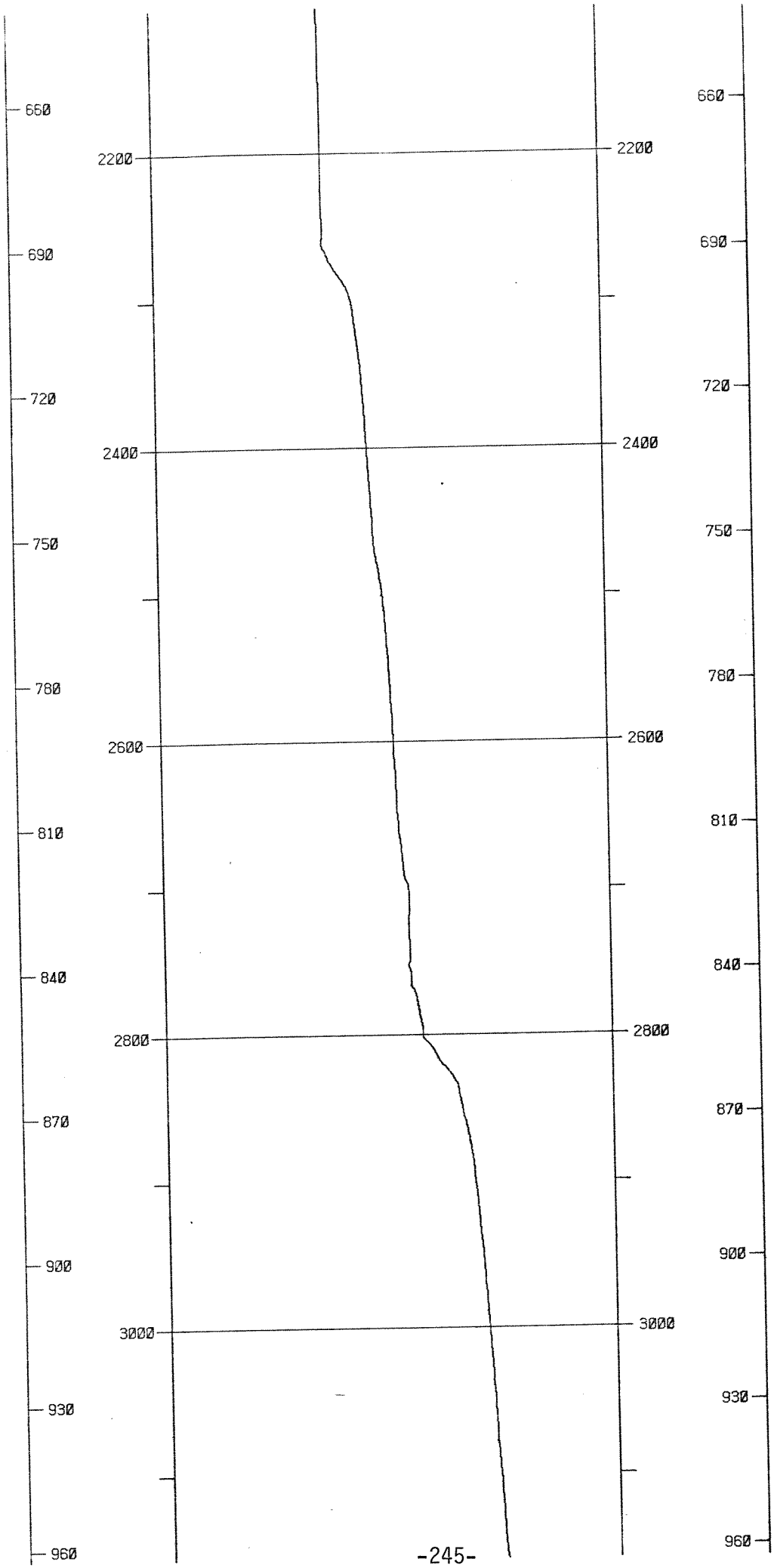
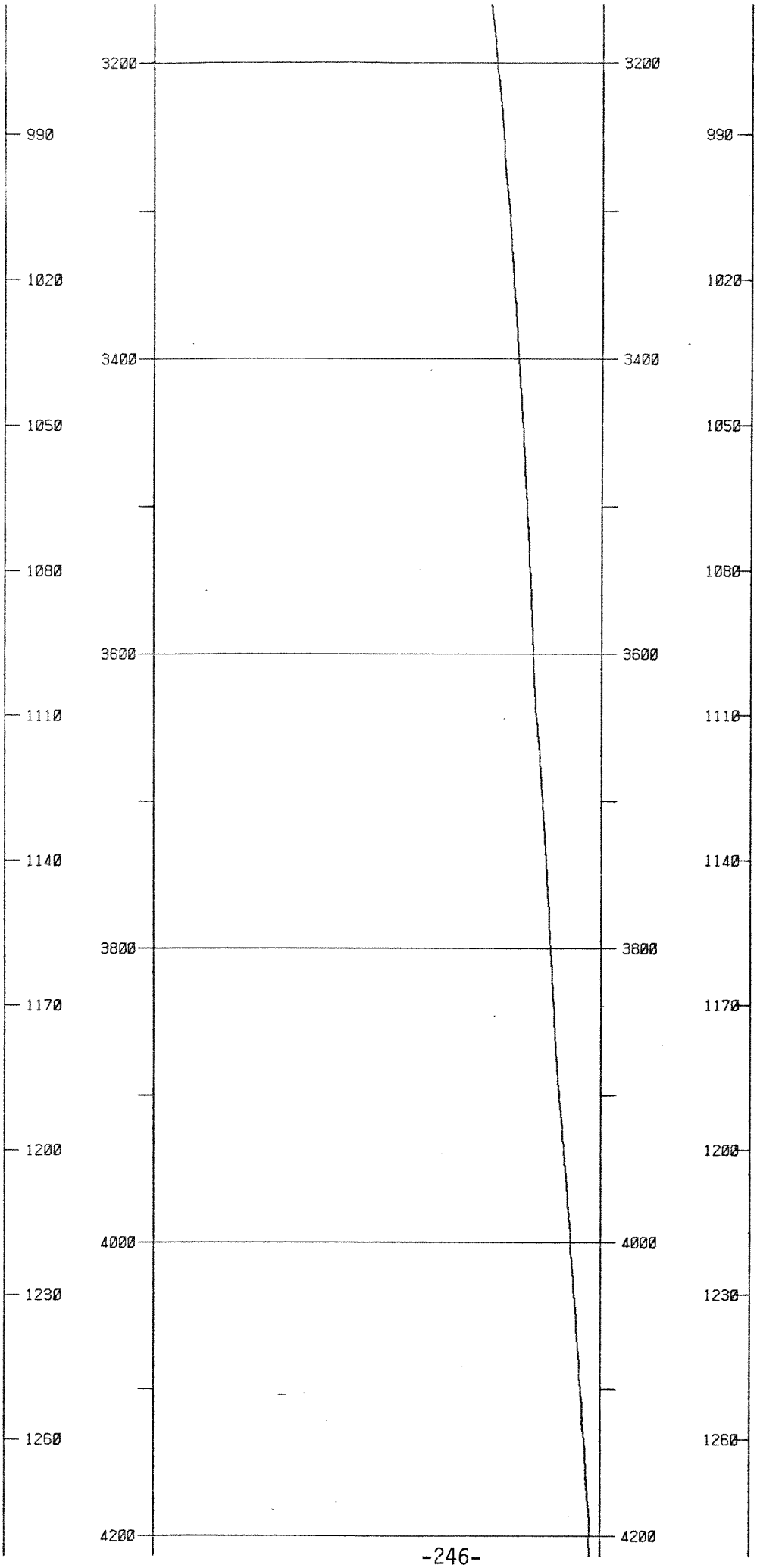
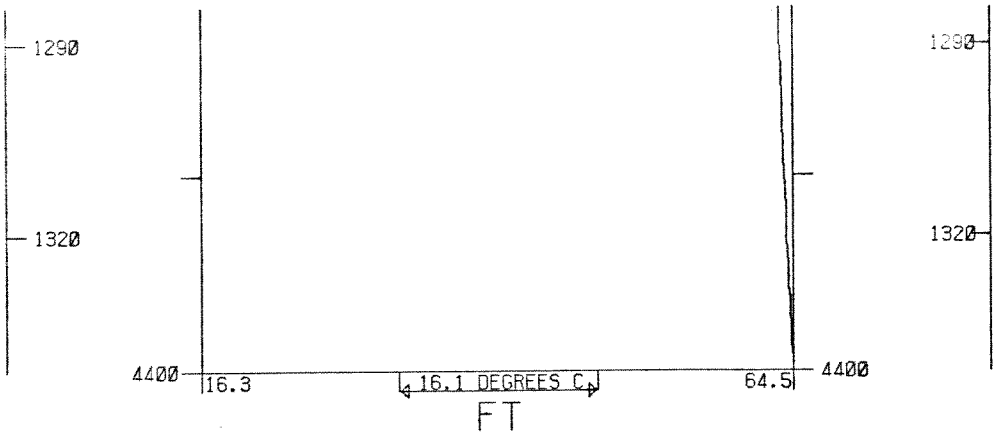
630
1200
1400
1600
1800
2000

21N/31E-10M1


660
690
720
750
780
810
840
870
900
930
960
2200
2400
2600
2800
3000


3200
990
1020
3400
1050
1080
3600
1110
1140
3800
1170
1200
4000
1230
1260
4200

21N/31E-10M1



21N/31E-10M1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON BATES #2
DATE LOGGED	09/23/76
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-22L1
SURFACE ELEVATION	1750
TOTAL DEPTH LOGGED	1568
DEPTH TO WATER LEVEL	494

CASING & LINERS:
0- 67=12

LEGEND

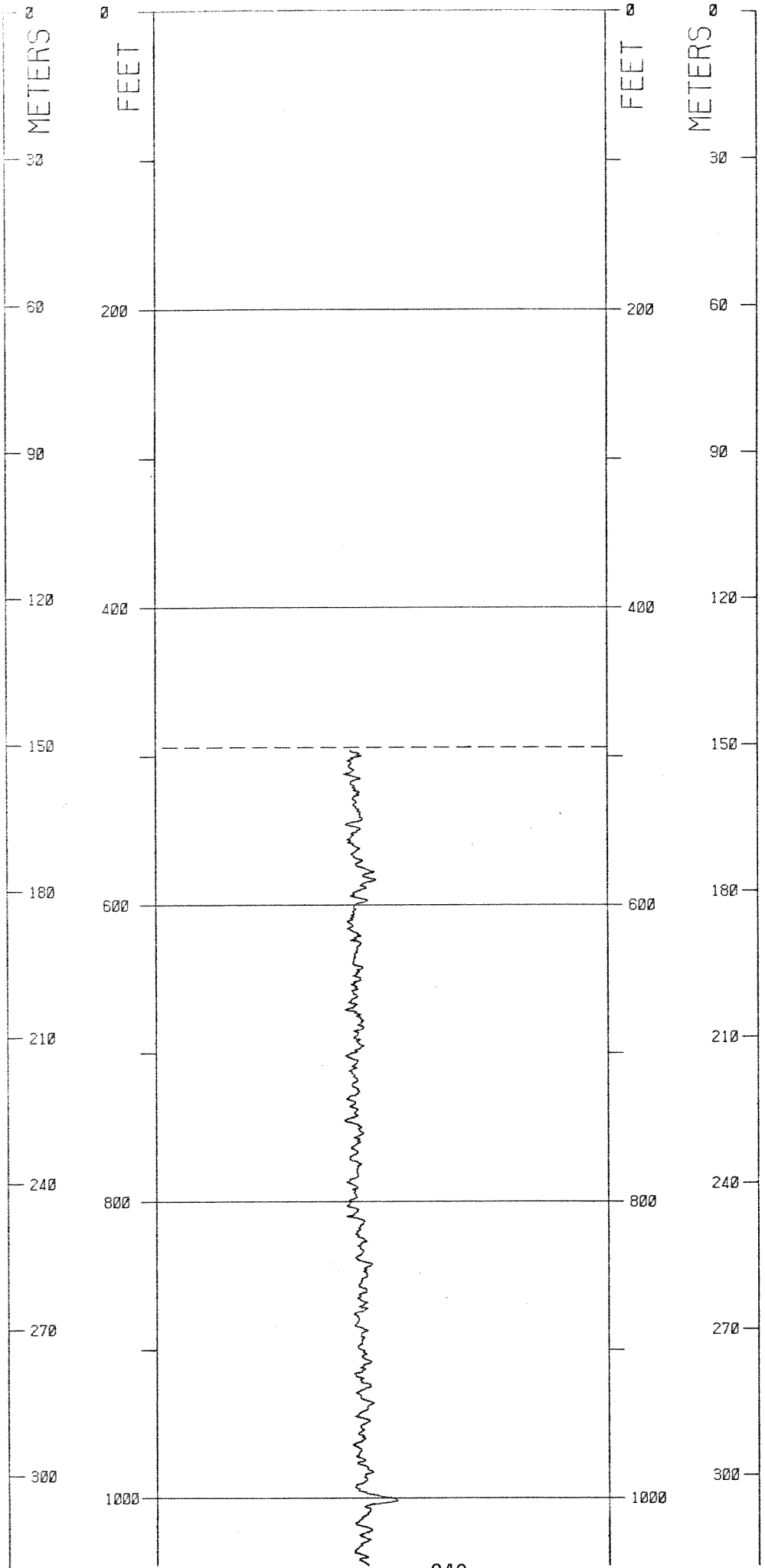
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/10/83 SEW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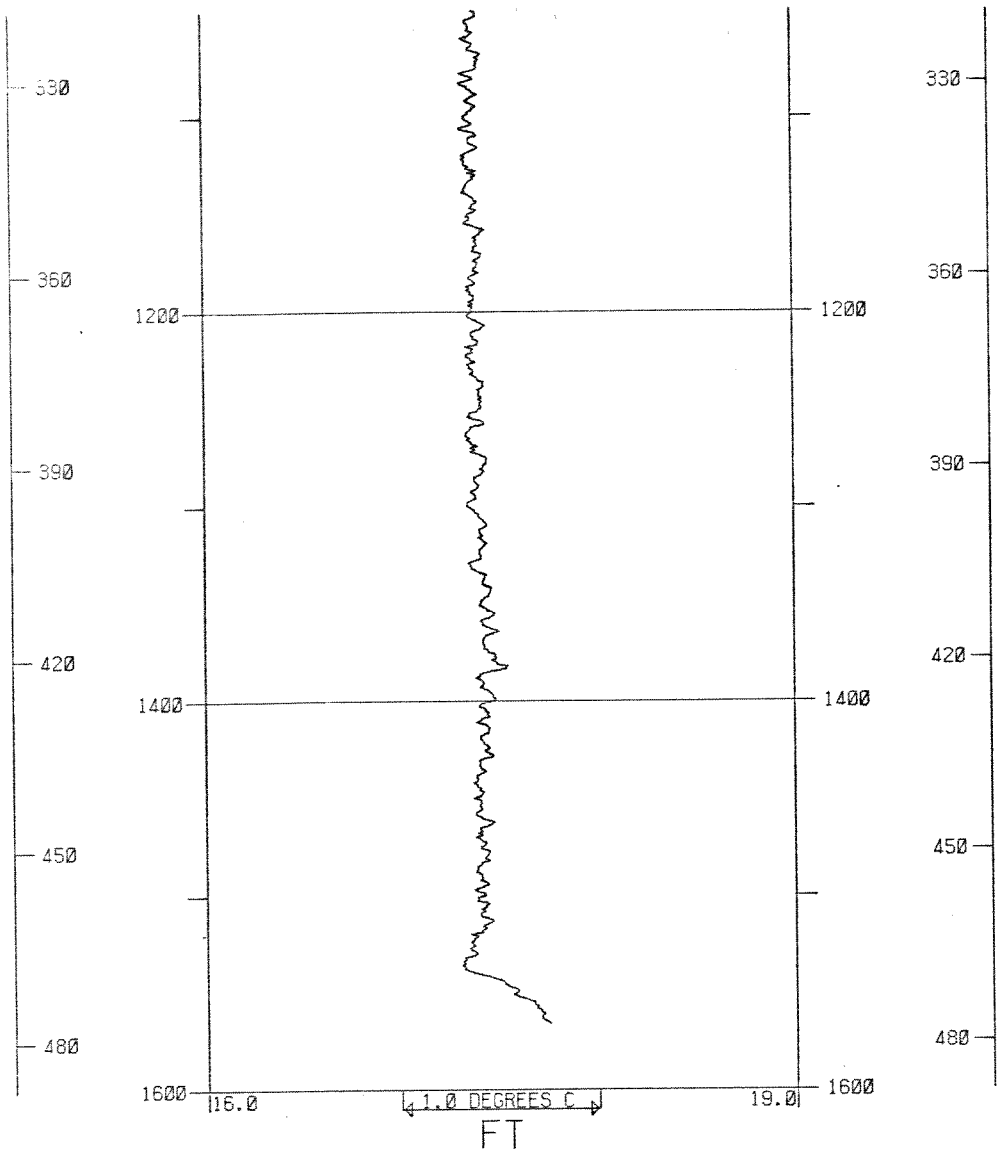
21N/31E-22L1



21N/31E-22L1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BOB KISSLER
DATE LOGGED	03/20/73
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-30L1
SURFACE ELEVATION	1680
TOTAL DEPTH LOGGED	470
DEPTH TO WATER LEVEL	230

CASING & LINERS:
0- 25=12

LEGEND

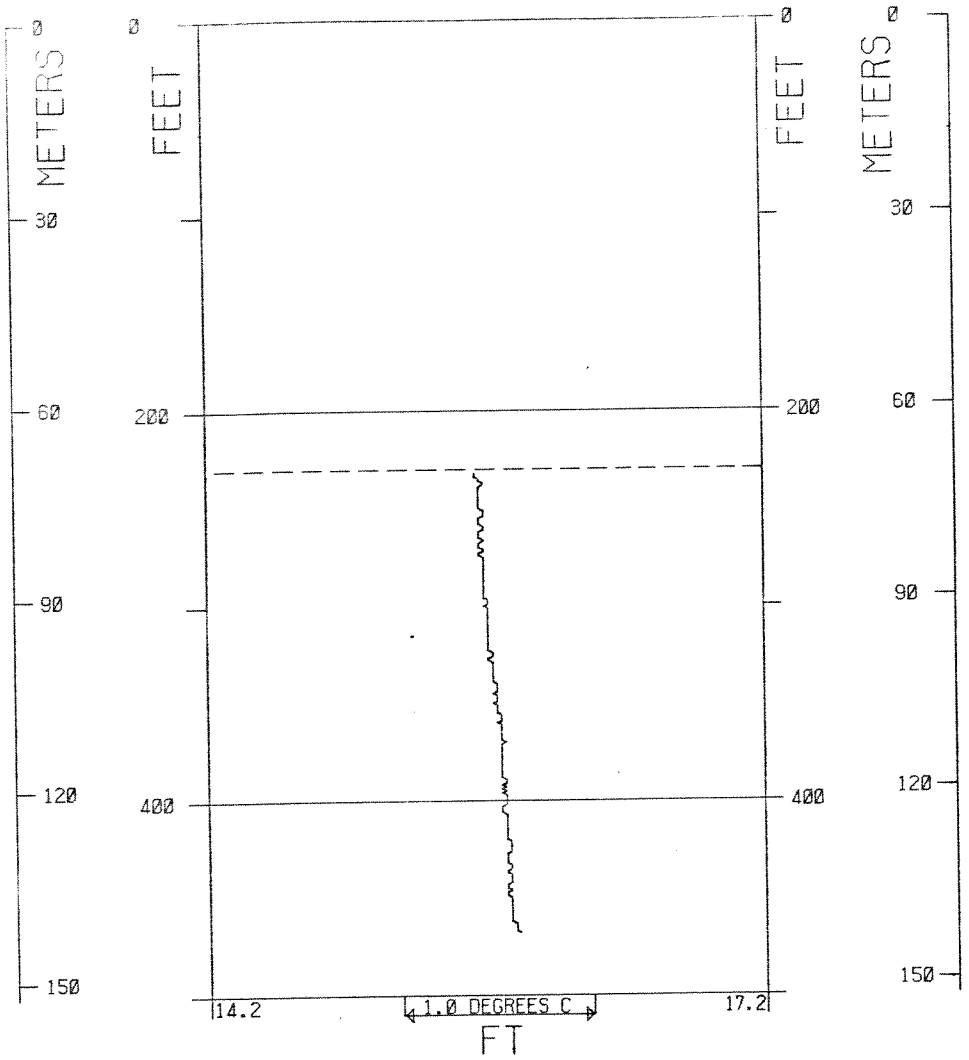
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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METERS
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14.2
1.0 DEGREES C
17.2
FT

21N/31E-30L1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BOB KISSLER
DATE LOGGED	03/19/73
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-30R1
SURFACE ELEVATION	1647
TOTAL DEPTH LOGGED	864
DEPTH TO WATER LEVEL	173

CASING & LINERS:
0- 56=15

LEGEND

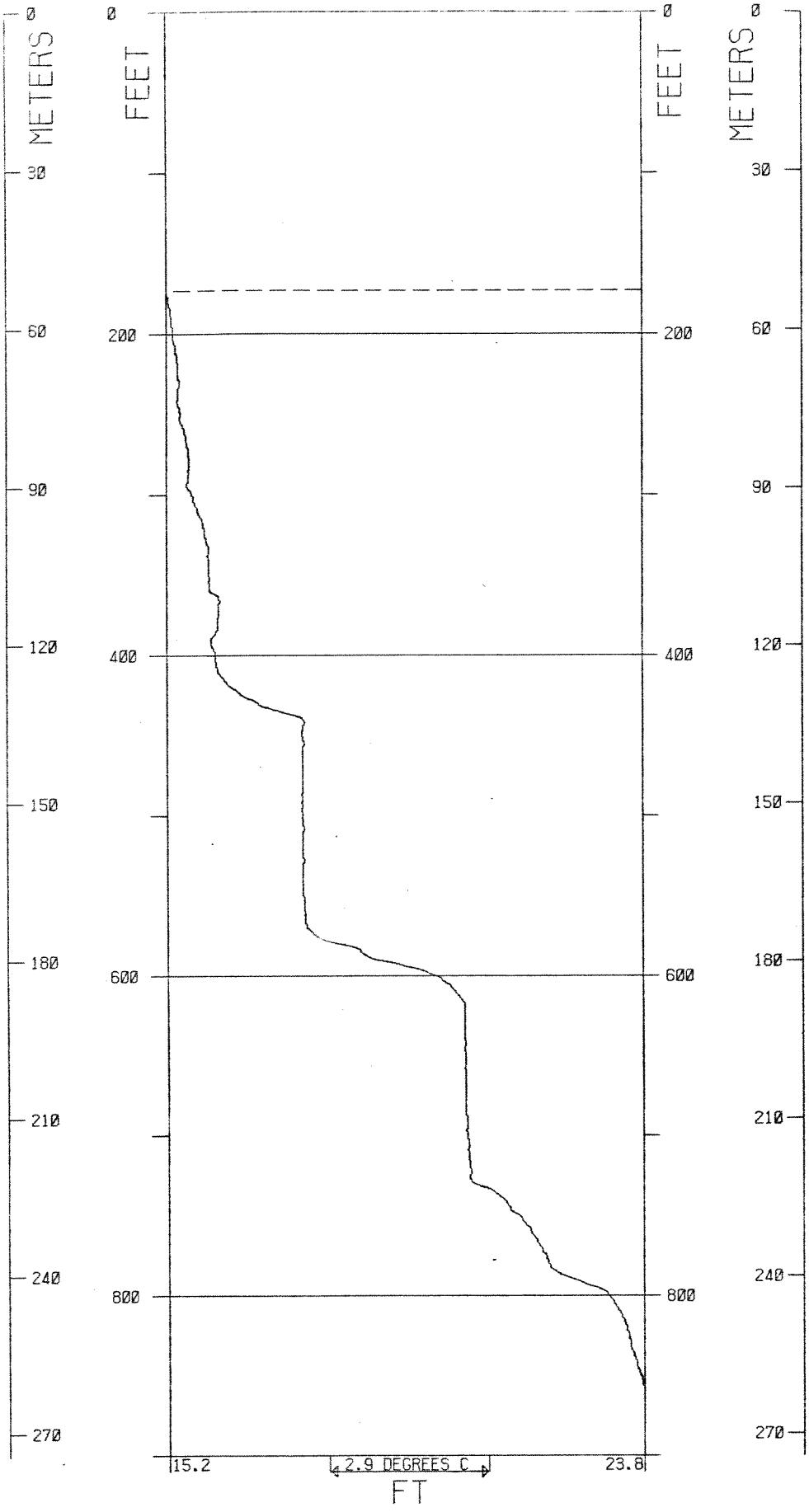
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/28/83 SEW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METERS
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120
150
180
210
240
270
0
FEET
200
400
600
800
FEET
METERS
15.2
2.9 DEGREES C
23.8
FT

21N/31E-30R1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	FRED KISSLER
DATE LOGGED	02/14/72
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-32D1
SURFACE ELEVATION	1669
TOTAL DEPTH LOGGED	687
DEPTH TO WATER LEVEL	348
CASING & LINERS:	
0- 26=11	

LEGEND

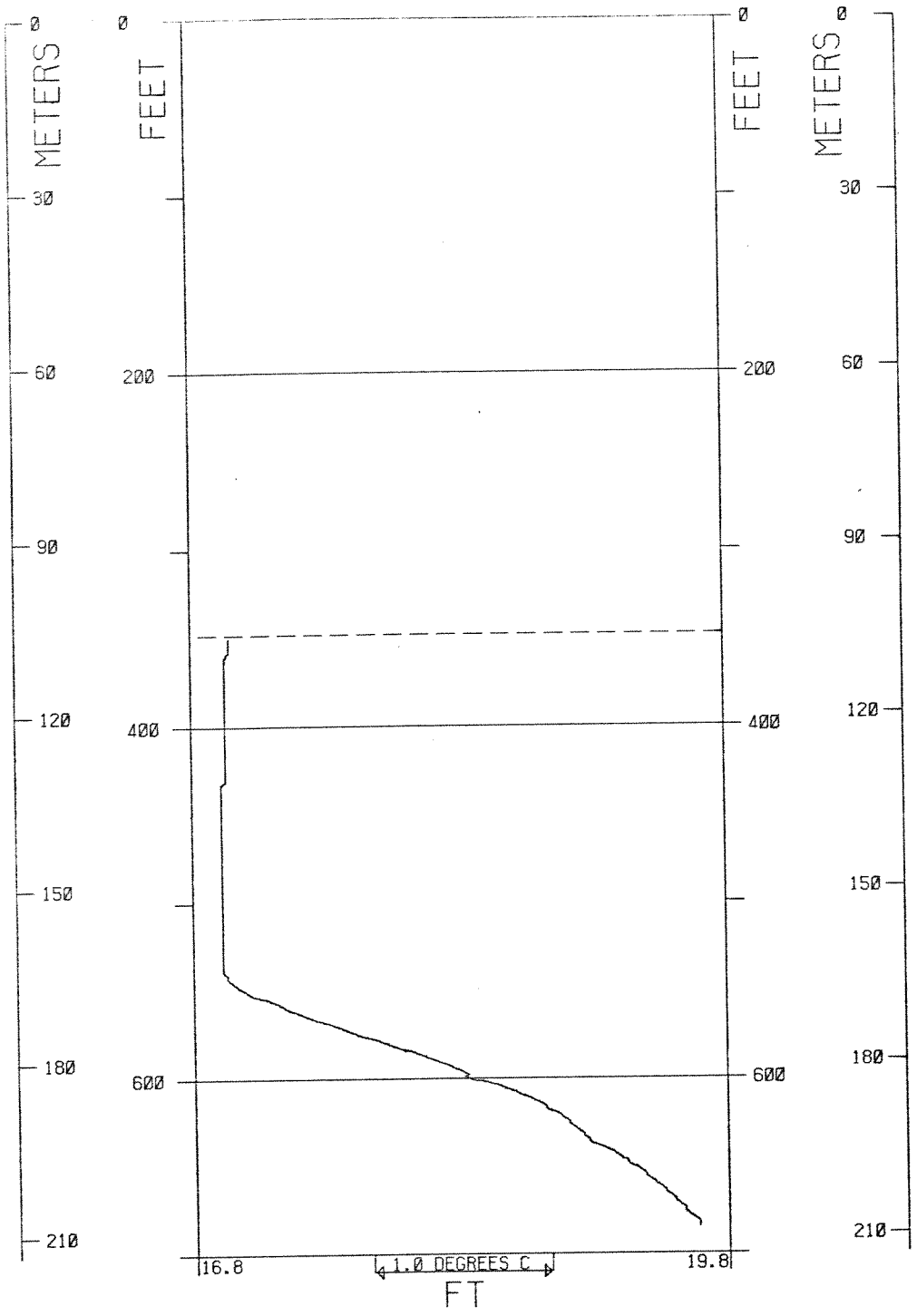
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/29/83 SEW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METERS
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210
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FEET
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400
600
16.8
1.0 DEGREES C
19.8
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180
210

21N/31E-32D1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BOB KISSLER
DATE LOGGED	Ø4/Ø3/77
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/31E-32D2
SURFACE ELEVATION	167Ø
TOTAL DEPTH LOGGED	12ØØ
DEPTH TO WATER LEVEL	456
CASING & LINERS:	
Ø- 42=16	

LEGEND

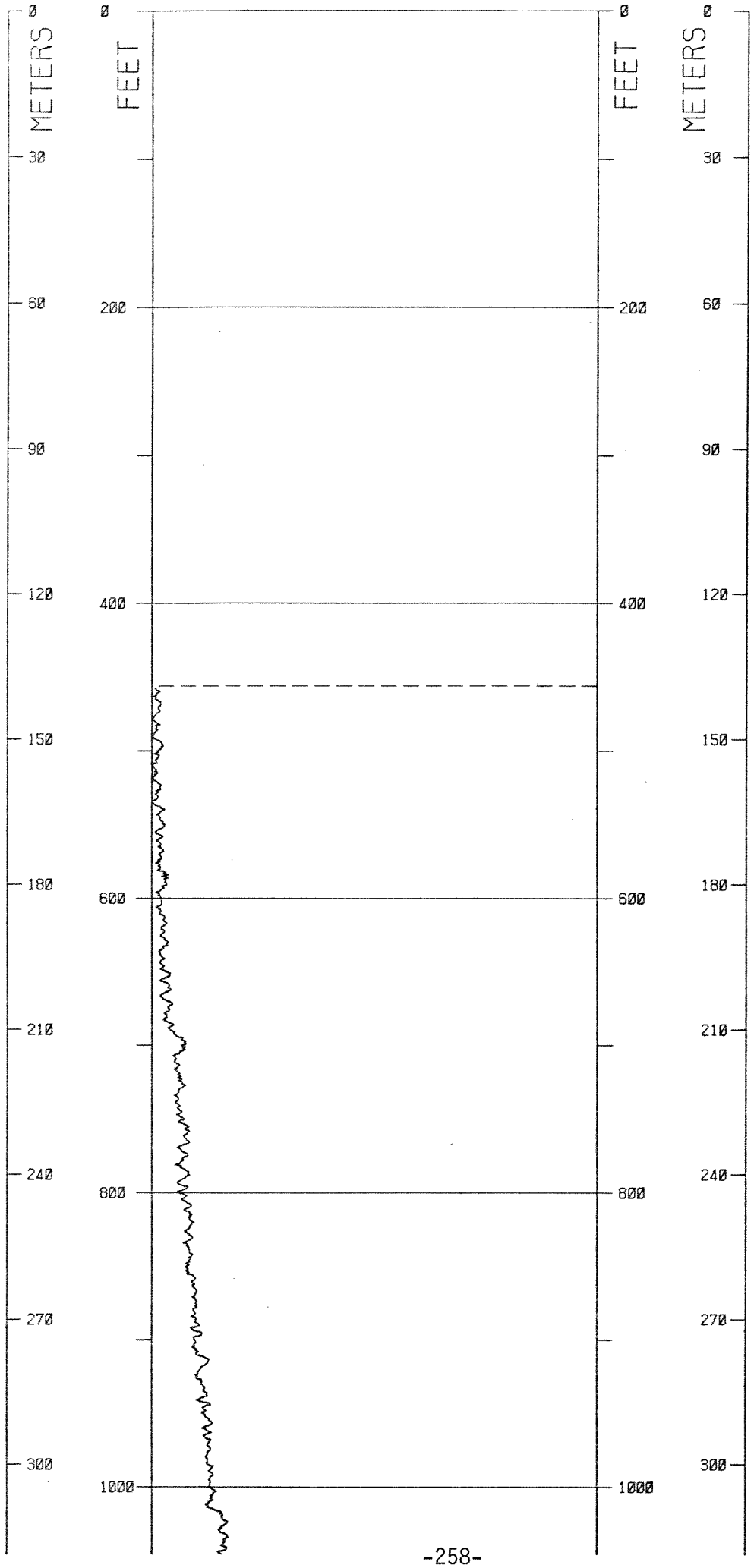
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø7/2Ø/83 SEW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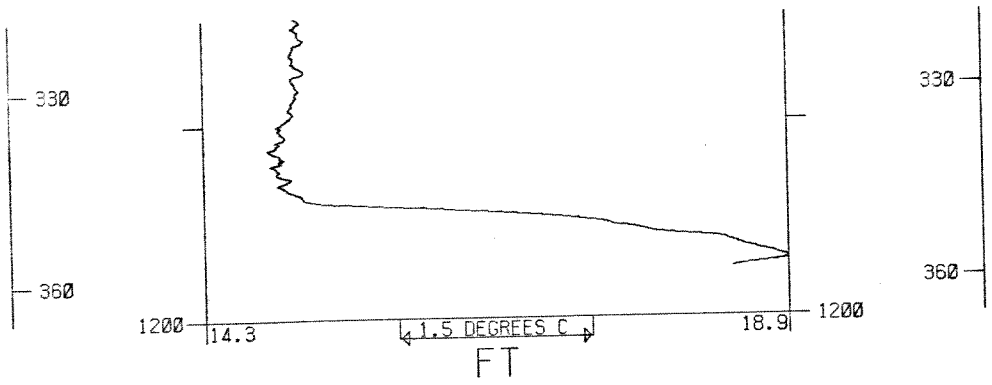
21N/31E-32D2



21N/31E-32D2

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JERRY SCHAFFER
DATE LOGGED	02/01/72
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/32E-23F1
SURFACE ELEVATION	1812
TOTAL DEPTH LOGGED	975
DEPTH TO WATER LEVEL	340
CASING & LINERS:	

LEGEND

LOG TITLES

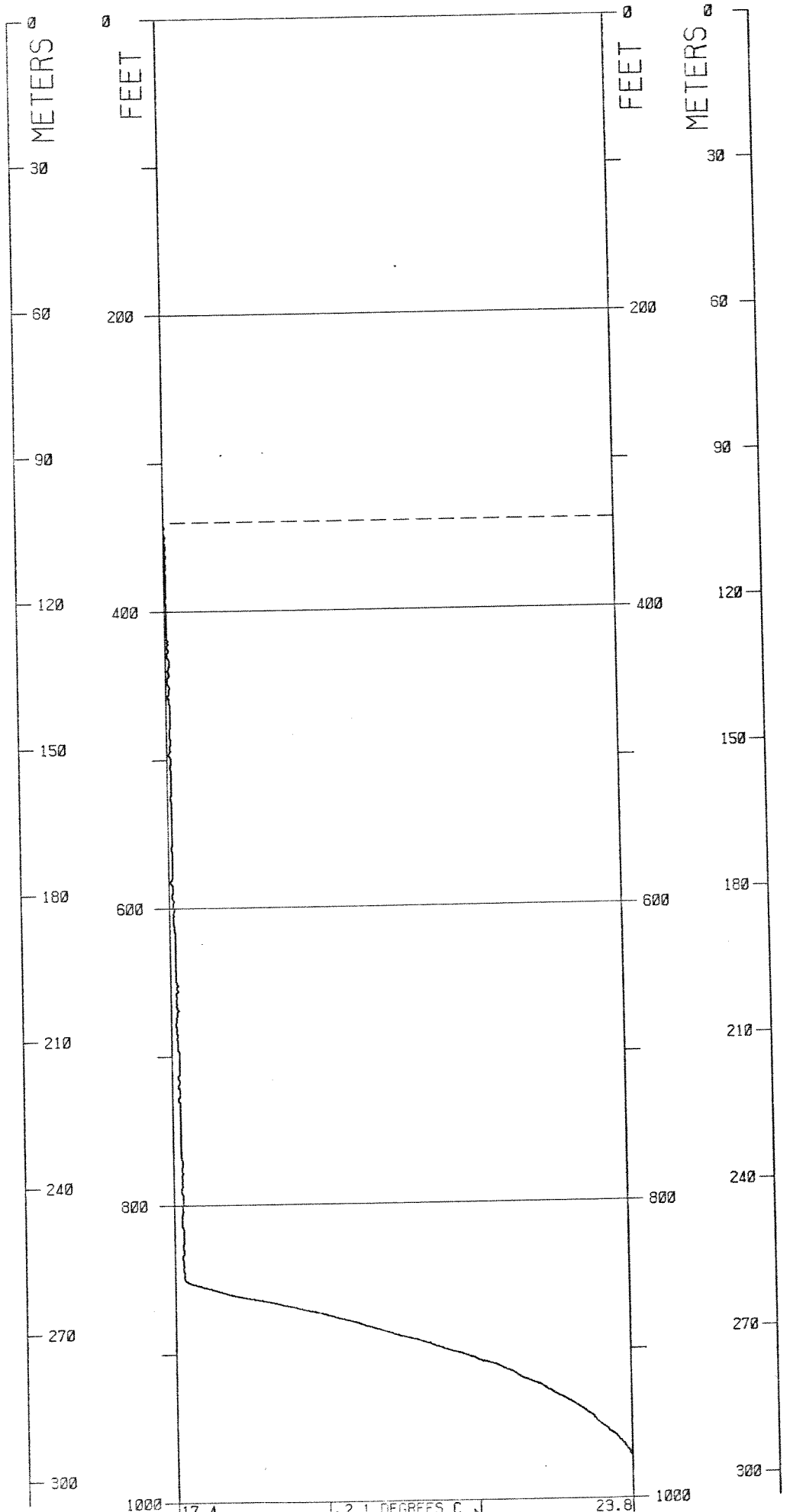
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/11/83 SEW

21N/32E-23F1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2.1 DEGREES C
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FT
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METERS
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180
210
240
270
300

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ODESSA CITY
DATE LOGGED	11/22/77
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/33E-09E1
SURFACE ELEVATION	1610
TOTAL DEPTH LOGGED	660
DEPTH TO WATER LEVEL	117

CASING & LINERS:
0- 160=15

LEGEND

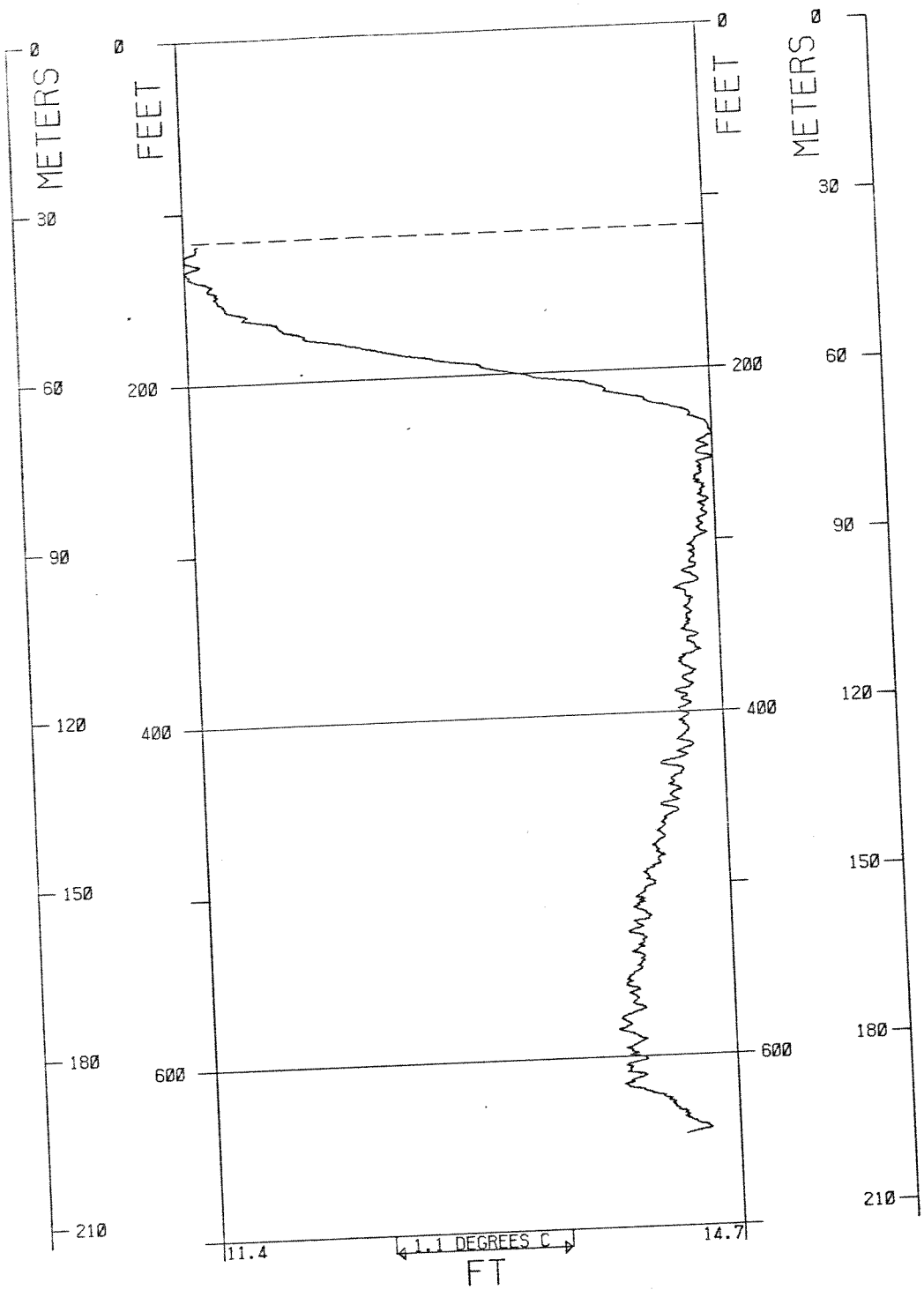
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

07/20/83 SEW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1.1 DEGREES C
14.7
FT

WASHINGTON STATE UNIVERSITY

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JOE HARDUNG
DATE LOGGED	Ø3/Ø9/69
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/34E-33C1
SURFACE ELEVATION	192Ø
TOTAL DEPTH LOGGED	793
DEPTH TO WATER LEVEL	355
CASING & LINERS:	

LEGEND

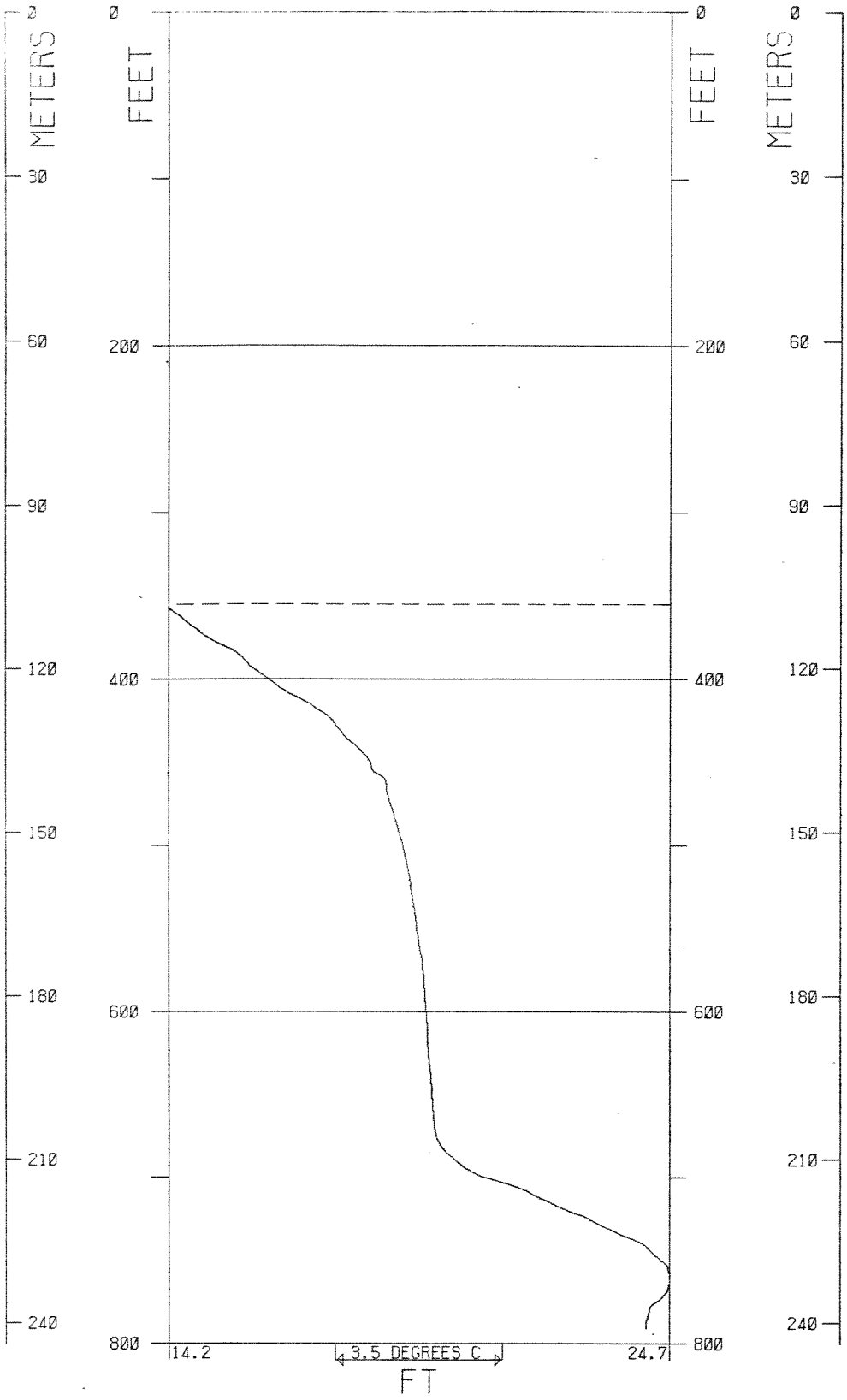
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/15/83 SEW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3.5 DEGREES C
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METERS
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180
210
240

21N/34E-33C1

PART B

Fluid Temperature Logs for Wells Throughout

the Rest of Eastern Washington

Part B:

Fluid Temperature Logs for wells throughout the rest of eastern Washington (i.e., areas outside the study area of Part A). The wells are listed in table 2 and arranged by county and ascending township, range, and section.

Table 2. List of Wells with Fluid Temperature Logs for Part B.

County	Name	Location T./R.-Sec.	Bottom Hole Temperature	Total Depth Logged feet (meters)
Benton	IRRIGRO	06N/30E-19N1	20.7	583 (177.7)
	O.B. SHAW	10N/26E-27Q1	17.3	778 (237.1)
	J.D. TRAMEL	12N/24E-05A1	23.1	833 (253.9)
Columbia	L. FERRELL	12N/38E-01E1	21.7	786 (239.6)
Douglas	SAGEBRUSH FLATS	23N/25E-27L1	33.0	1300 (396.2)
	WATERVILLE CITY #5	25N/22E-28B1	18.1	609 (185.6)
Franklin	H. NAKAMURA	09N/31E-07E1	22.1	549 (167.3)
Grant	METRO. MORTGAGE	17N/25E-01F1	25.3	780 (237.7)
	PAUL LAUZIER	19N/27E-31D1	24.5	764 (232.9)
	E.B. COLE	20N/29E-07H1	21.0	705 (214.9)
	JERRY SCHAFER	22N/28E-25Q1	18.8	544 (165.8)
	TOM MCPHERSON	24N/29E-01A1	19.6	1044 (318.2)
	LARRY ISAAK #1	25N/28E-24L1	16.7	618 (188.4)
Kittitas	RYEGRASS REST AREA	17N/21E-21G1	18.8	636 (193.9)
Klickitat	RANDY ENYEART	03N/15E-02R1	13.4	400 (121.9)
	HORSE HEAVEN (WEST)	05N/21E-16L1	27.6	1499 (456.9)
Lincoln	ODESSA CITY	21N/33E-09E1	14.4	660 (201.2)
	ALMIRA TEST WELL	24N/31E-16E1	19.4	739 (225.2)
	DARWIN NEALEY	24N/34E-30P1	20.9	760 (231.6)
	DAVENPORT CITY #6	25N/37E-21L2	15.4	528 (160.9)
	RICHARD DREGER	25N/34E-29J1	17.5	1222 (372.5)

Table 2. (Cont'd)

County	Name	Location T./R.-Sec.	Bottom Hole Temperature	Total Depth Logged feet (meters)
Lincoln	REARDAN CITY	25N/39E-15D1	20.3	840 (256.0)
	NORMAN GEIB	26N/32E-10H1	16.5	740 (225.6)
Walla Walla	TOM COPELAND	06N/36E-14A1	14.3	911 (277.7)
	JIM MCDOLE #3	07N/33E-31K1	27.4	883 (269.1)
	WALLA WALLA COMM. COLLEGE	07N/36E-14P1	26.6	1334 (406.6)
	ROSS PETERSON	08N/31E-14F1	24.7	1104 (336.5)
	BILL GLUCK #2	08N/33E-21R1	31.0	778 (237.1)
	DON ANDERSON	12N/36E-26H1	22.7	598 (182.3)
Whitman	W.S.U. #6	14N/45E-04D1	14.6	659 (200.9)
	MERRILL CAMP	16N/39E-24Q1	17.4	485 (147.8)
	DAN HARWOOD	18N/41E-06L1	19.0	584 (178.0)
	TOWN OF OAKESDALE	19N/44E-22J1	12.1	482 (146.9)
	BURLINGTON NORTHERN (LAMONT #1)	20N/39E-28F1	17.0	692 (210.9)
Yakima	BILL FLOWER	08N/22E-11J1	21.8	538 (164.0)
	BILL EVANS	10N/23E-36A1	27.0	1315 (400.8)
	W. ZIRKLE	14N/18E-20G1	29.5	1069 (325.8)

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	IRRIGO
DATE LOGGED	03/04/73
STATE	WASHINGTON
COUNTY	BENTON
LOCATION	06N/30E-19N1
SURFACE ELEVATION	980
TOTAL DEPTH LOGGED	583
DEPTH TO WATER LEVEL	467

CASING & LINERS:
0- 95= 8

LEGEND

LOG TITLES

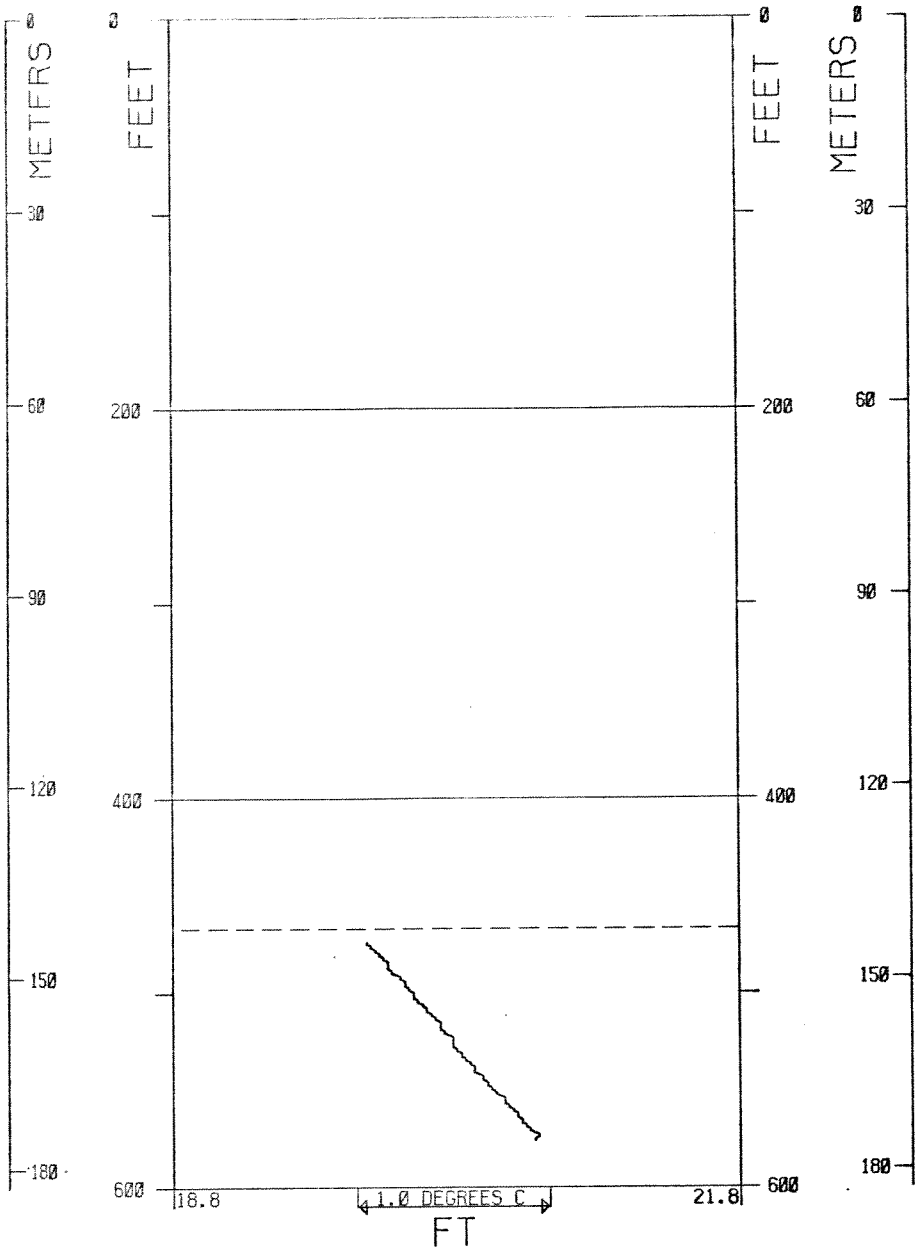
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW

06N/30E-19N1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1.0 DEGREES C
21.8
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	O. B. SHAW
DATE LOGGED	Ø6/Ø7/77
STATE	WASHINGTON
COUNTY	BENTON
LOCATION	1ØN/26E-27Q1
SURFACE ELEVATION	1Ø5Ø
TOTAL DEPTH LOGGED	778
DEPTH TO WATER LEVEL	265

CASING & LINERS:

CASING UNKNOWN.

LEGEND

LOG TITLES

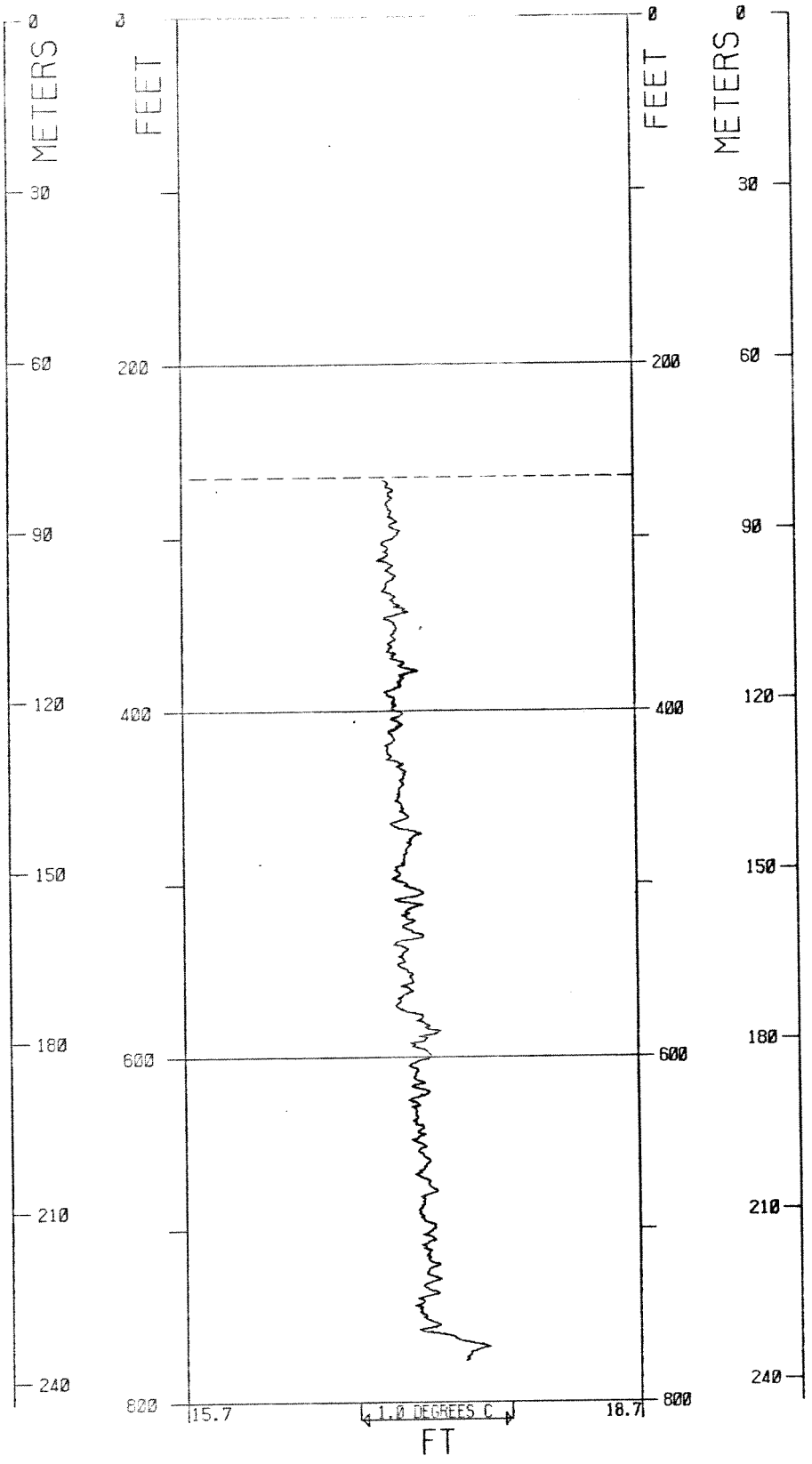
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/22/83 ISW

10N/26E-27Q1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400
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15.7
1.0 DEGREES C
18.7
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	J. D. TRAMEL
DATE LOGGED	07/16/74
STATE	WASHINGTON
COUNTY	BENTON
LOCATION	12N/24E-05A1
SURFACE ELEVATION	1380
TOTAL DEPTH LOGGED	833
DEPTH TO WATER LEVEL	400

CASING & LINERS:
0- 635=12 635- 670= 8

LEGEND

LOG TITLES

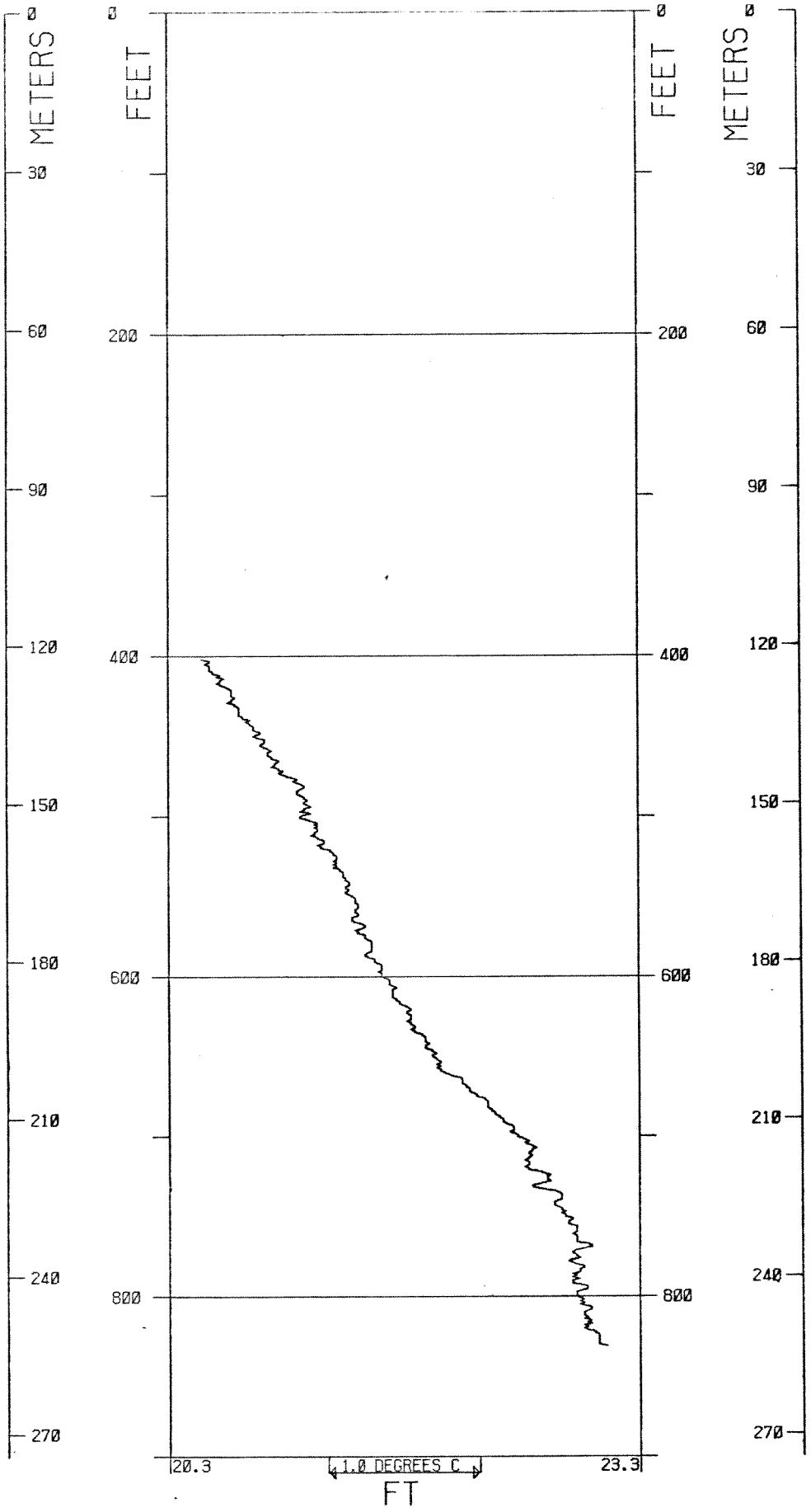
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/22/83 ISW

12N/24E-05A1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270
20.3
1.0 DEGREES C
23.3
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	L. FERRELL
DATE LOGGED	10/04/72
STATE	WASHINGTON
COUNTY	COLUMBIA
LOCATION	12N/38E-01E1
SURFACE ELEVATION	1470
TOTAL DEPTH LOGGED	786
DEPTH TO WATER LEVEL	652

CASING & LINERS:

CASING UNKNOWN.

LEGEND

LOG TITLES

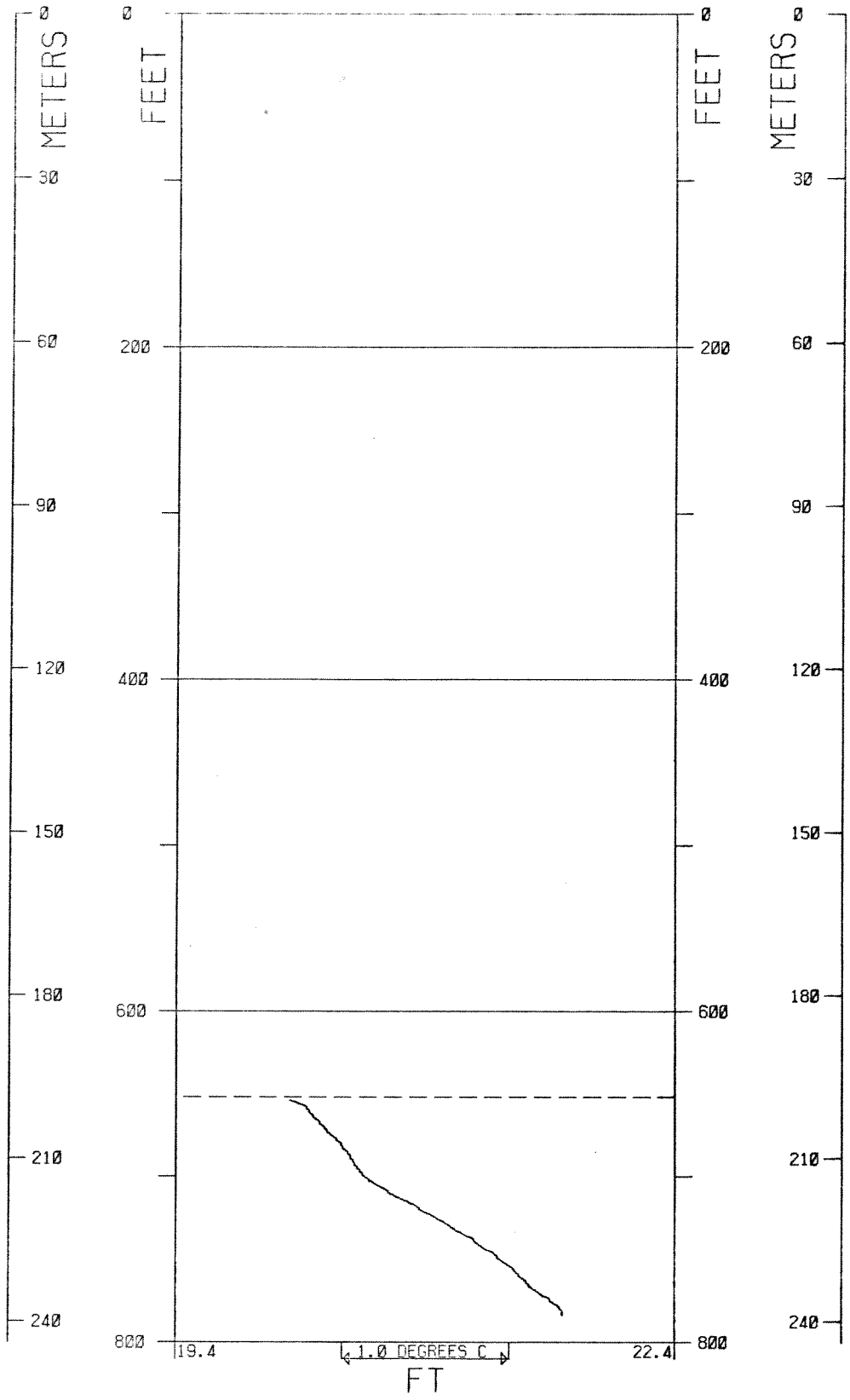
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/22/83 ISW

12N/38E-01F1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1.0 DEGREES C
22.4
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	SAGEBRUSH FLATS
DATE LOGGED	06/11/80
STATE	WASHINGTON
COUNTY	DOUGLAS
LOCATION	23N/25E-27L1
SURFACE ELEVATION	1680
TOTAL DEPTH LOGGED	1300
DEPTH TO WATER LEVEL	440

CASING & LINERS:
0- 250=15 250- 785=12

LEGEND

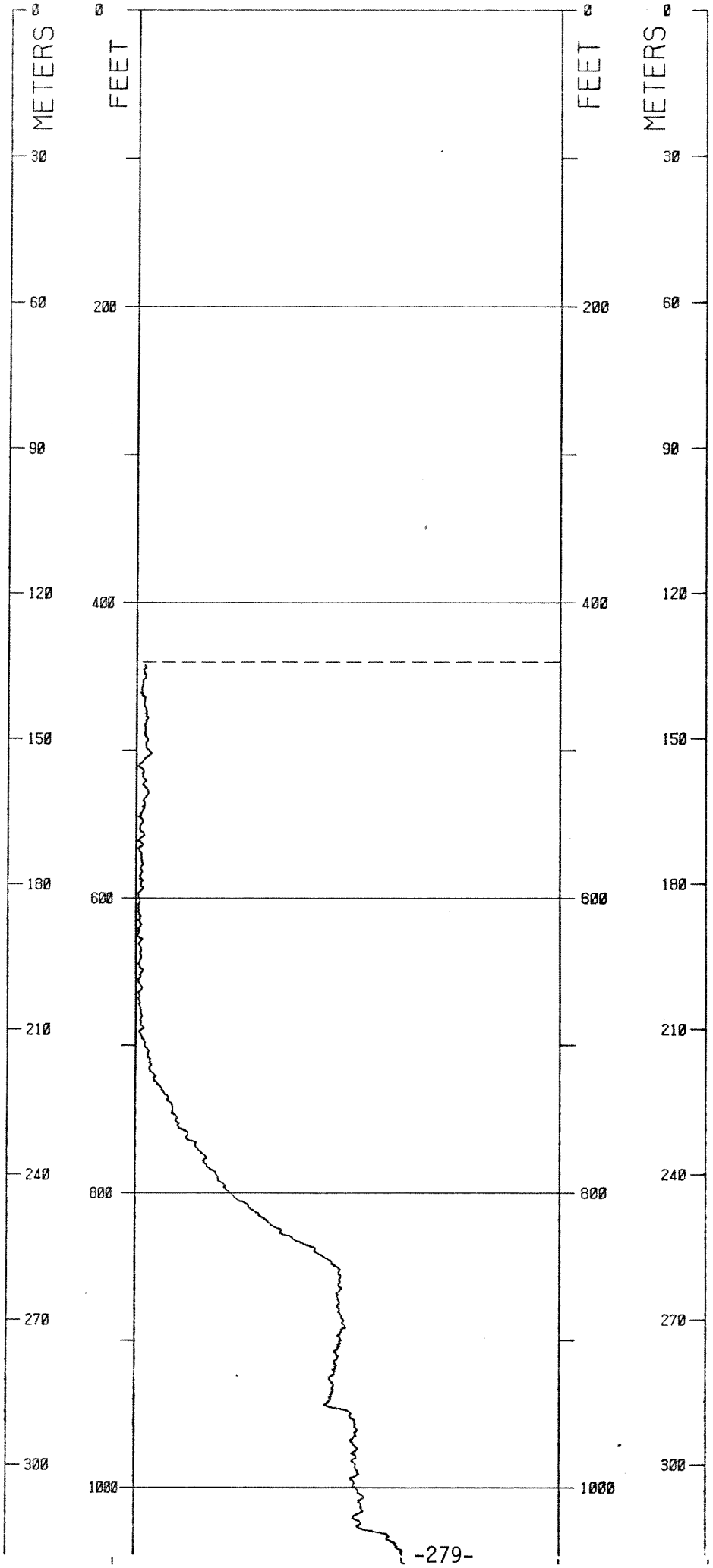
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW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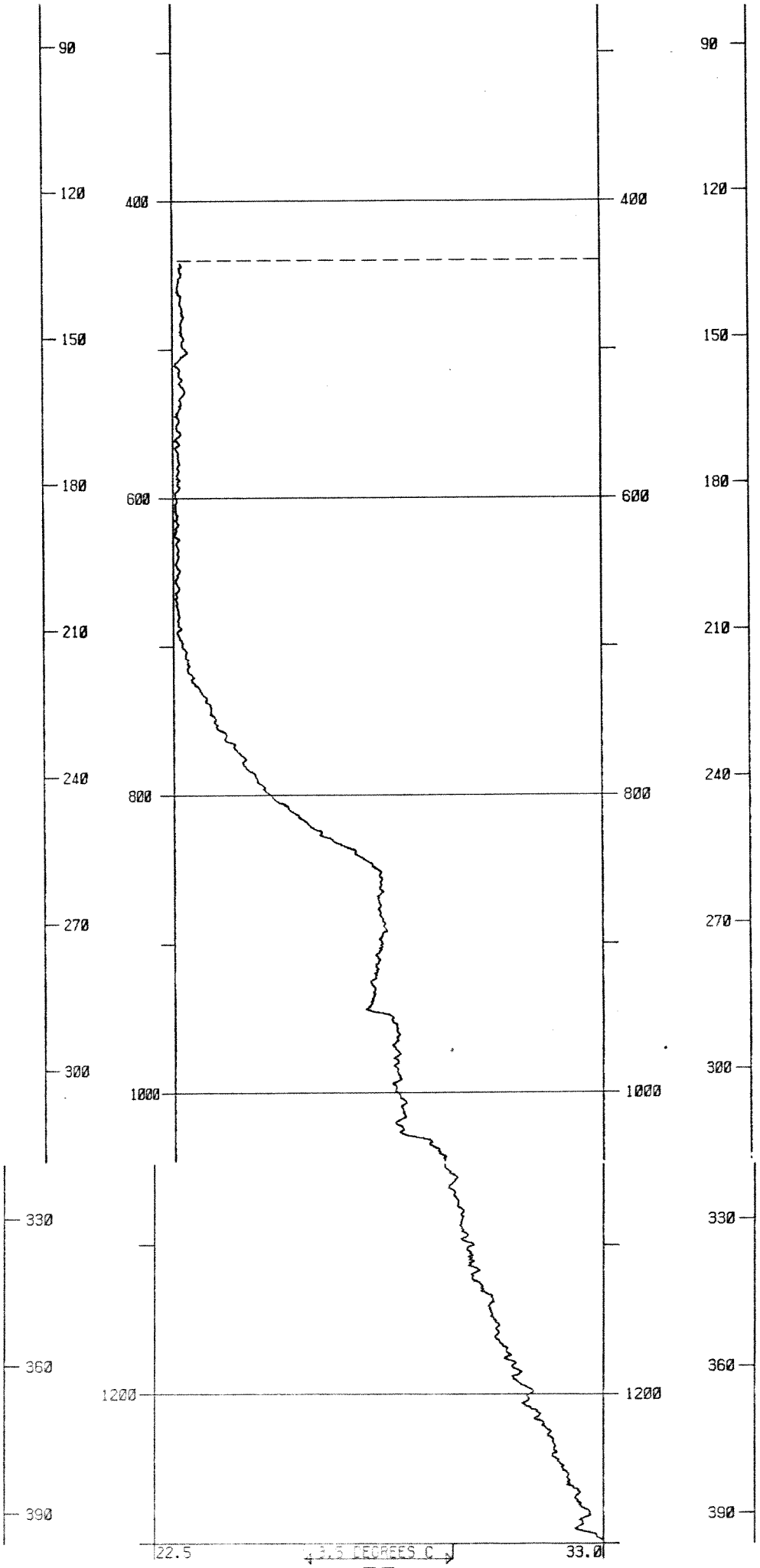
23N/25E-27L1



23N/25E-27L1

FT -280-

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	WATERVILLE CITY #5
DATE LOGGED	03/22/73
STATE	WASHINGTON
COUNTY	DOUGLAS
LOCATION	25N/22E-28B1
SURFACE ELEVATION	2564
TOTAL DEPTH LOGGED	609
DEPTH TO WATER LEVEL	0

CASING & LINERS:
0- 16= 8

LEGEND

LOG TITLES

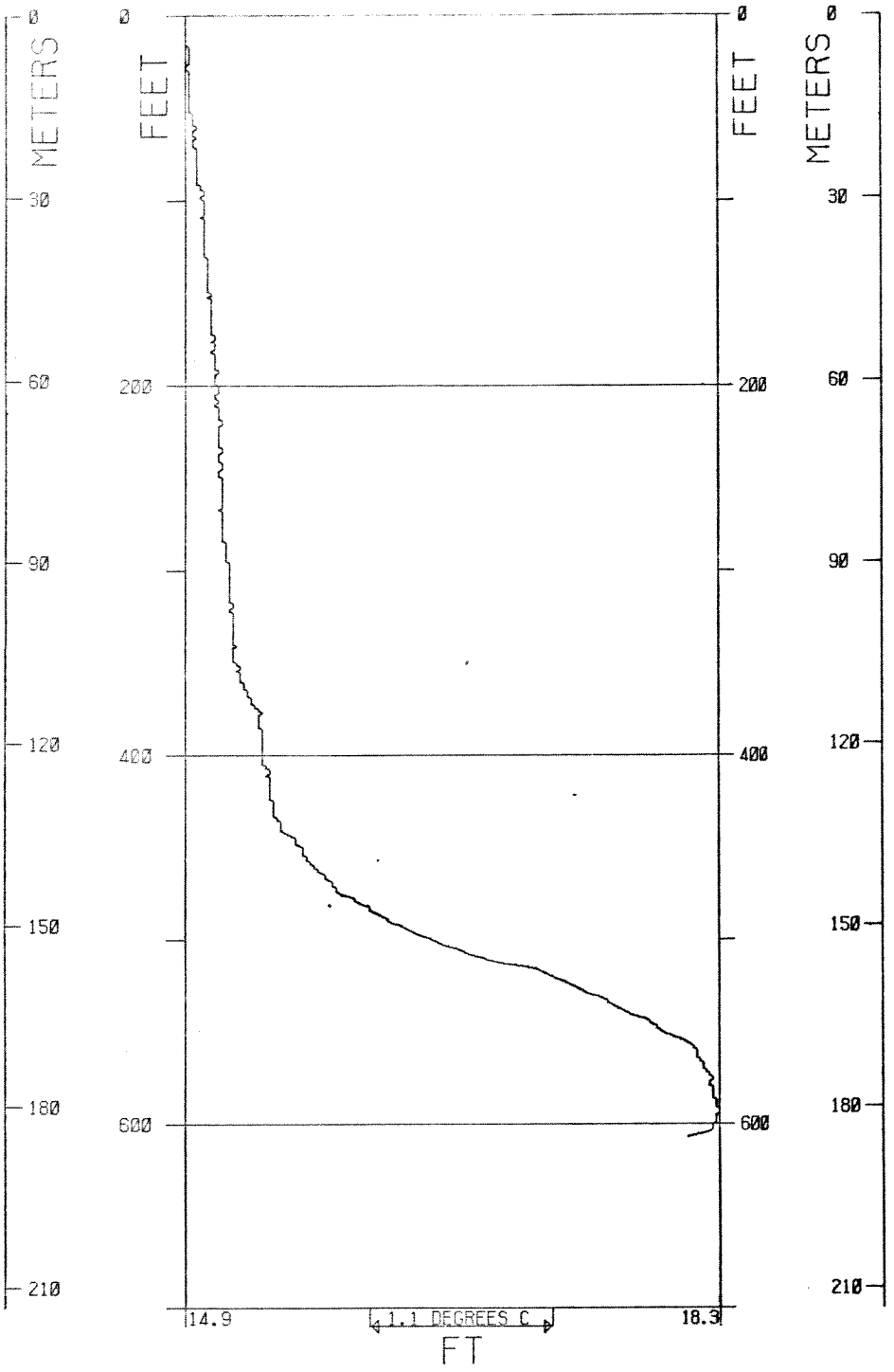
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

25N/22E-28B1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1.1 DEGREES C
18.3
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	H. NAKAMURA
DATE LOGGED	Ø2/11/73
STATE	WASHINGTON
COUNTY	FRANKLIN
LOCATION	Ø9N/31E-Ø7E1
SURFACE ELEVATION	5ØØ
TOTAL DEPTH LOGGED	549
DEPTH TO WATER LEVEL	115
CASING & LINERS:	
Ø- 115= 6	

LEGEND

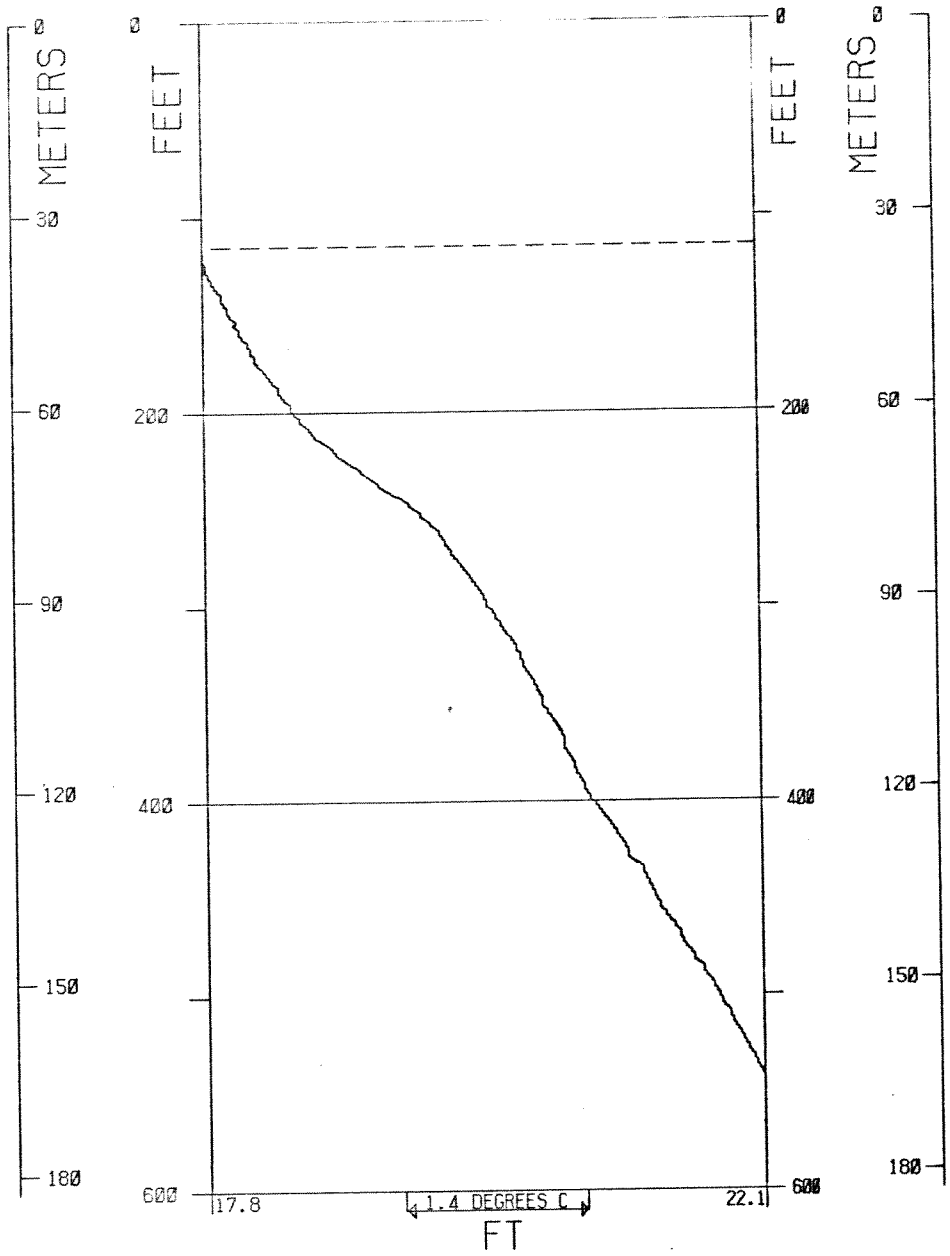
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/21/83 ISW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180
200
400
600
17.8
1.4 DEGREES C
22.1
FT

09N/31E-07E.1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	METRO. MORTGAGE
DATE LOGGED	12/08/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	17N/25E-01F1
SURFACE ELEVATION	1132
TOTAL DEPTH LOGGED	780
DEPTH TO WATER LEVEL	40

CASING & LINERS:
0- 235=18 460- 540= 8

LEGEND

LOG TITLES

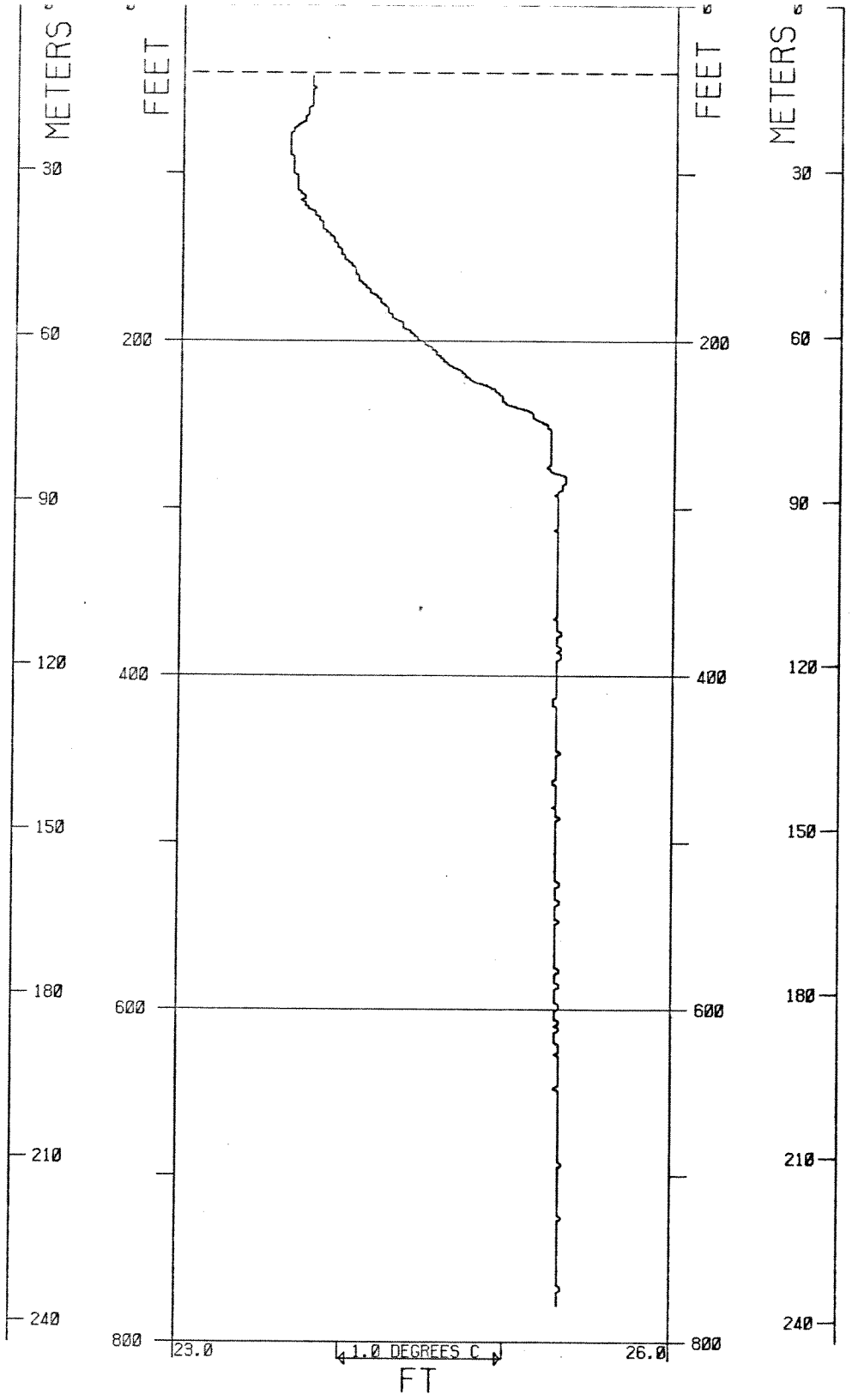
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

17N/25E-01F1


METERS
FEET
0
30
60
90
120
150
180
210
240
200
400
600
800
23.0
1.0 DEGREES C
26.0
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	PAUL LAUZIER
DATE LOGGED	Ø1/17/74
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	19N/27E-31D1
SURFACE ELEVATION	123Ø
TOTAL DEPTH LOGGED	764
DEPTH TO WATER LEVEL	142

CASING & LINERS:

Ø- 38=36 Ø- 287=15

LEGEND

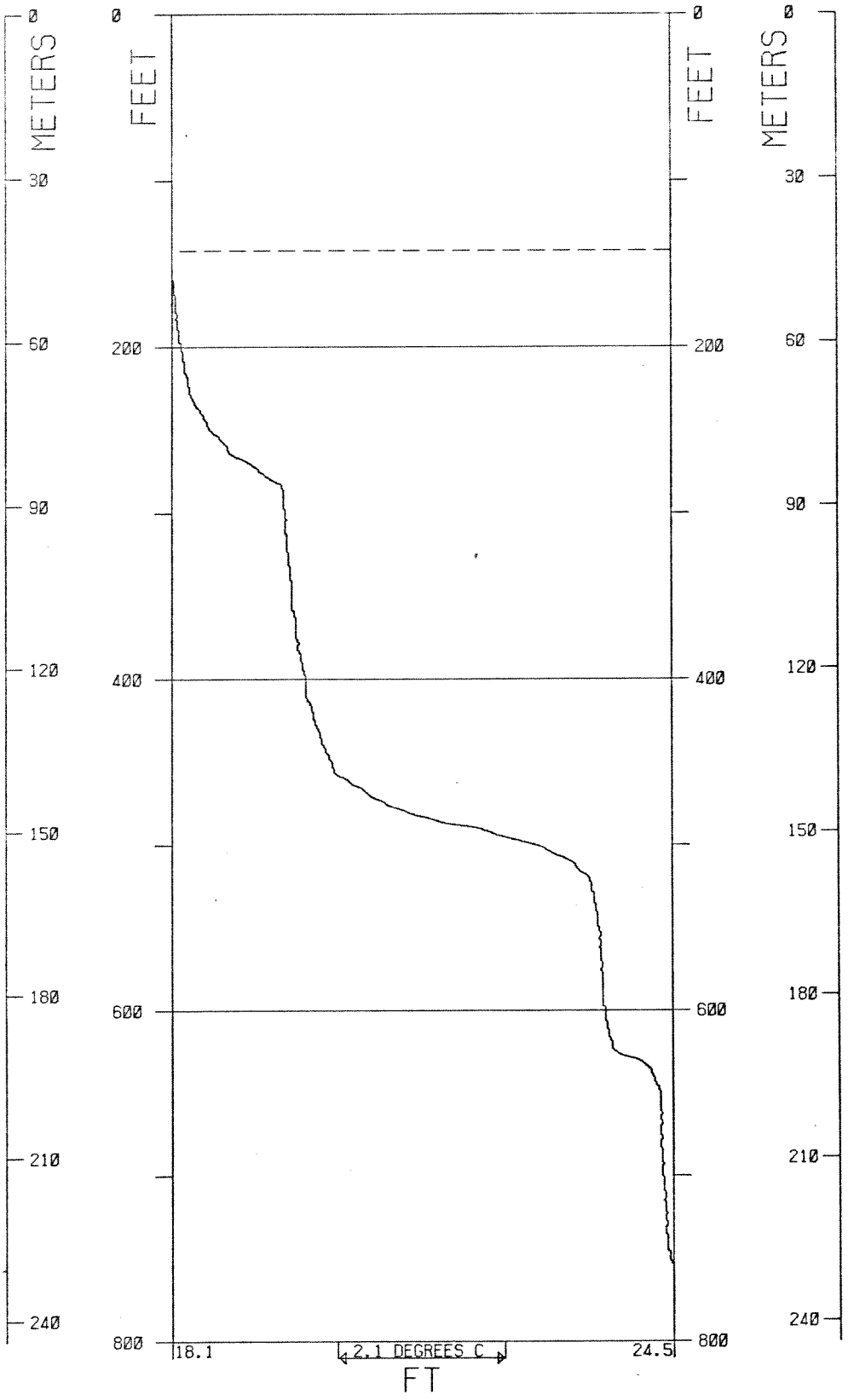
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø8/Ø3/83 SEW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
200
400
600
800
18.1
2.1 DEGREES C
24.5
FT

19N/27E-31D1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	E.B. COLE
DATE LOGGED	Ø5/13/75
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	2ØN/29E-Ø7H1
SURFACE ELEVATION	1295
TOTAL DEPTH LOGGED	7Ø5
DEPTH TO WATER LEVEL	182

CASING & LINERS:
Ø- 2Ø=19

TOTAL DEPTH REPORTED TO BE 1225 FT.
OBSTRUCTION AT 7ØØ FT.

LEGEND

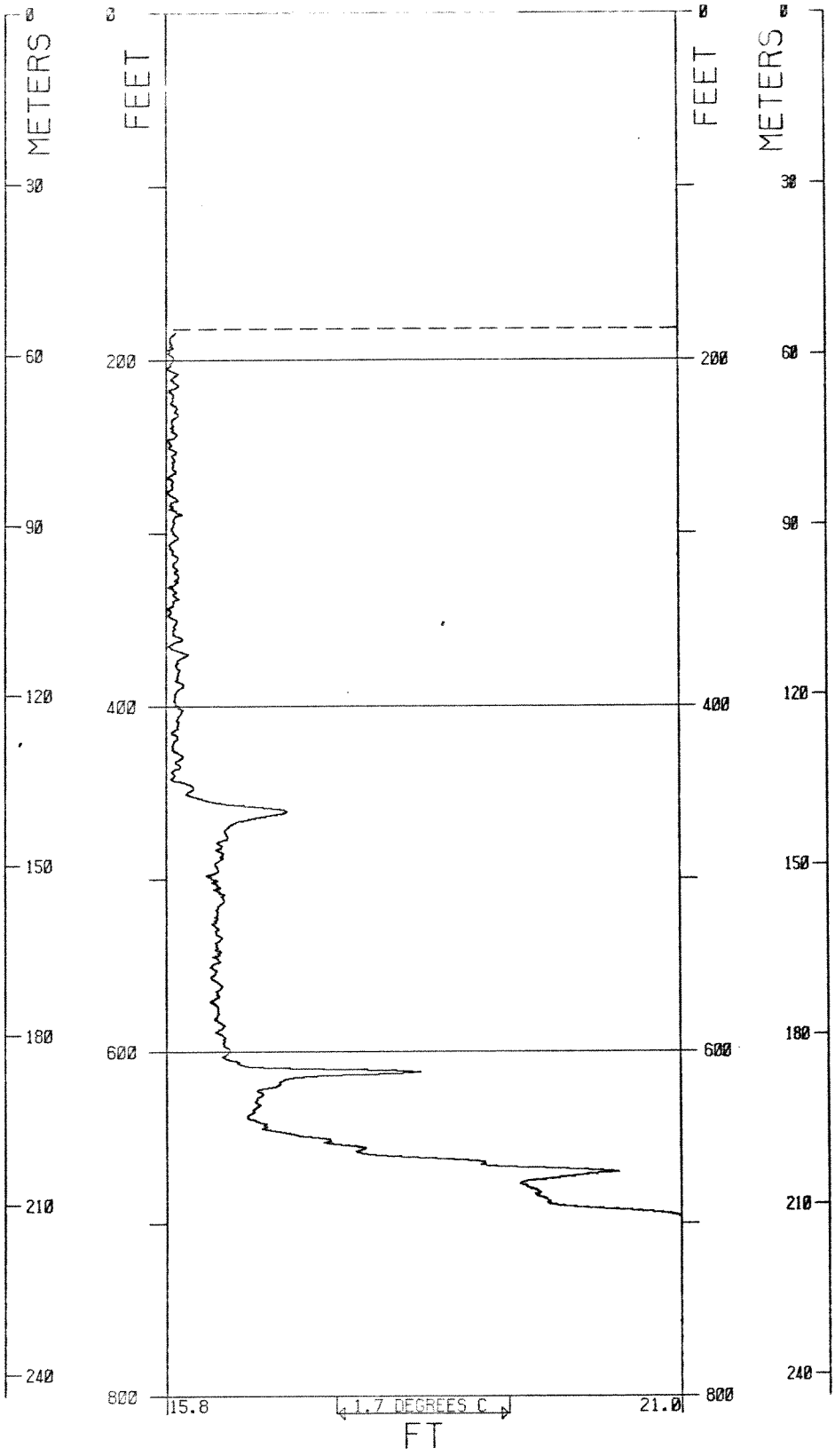
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/2Ø/83 ISW


METERS
FEET
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30
60
90
120
150
180
210
240
200
400
600
800
15.8
1.7 DEGREES C
21.0
FT

20N/29E-07H1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JERRY SCHAFER
DATE LOGGED	01/07/80
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	22N/28E-25Q1
SURFACE ELEVATION	1380
TOTAL DEPTH LOGGED	544
DEPTH TO WATER LEVEL	262

CASING & LINERS:

CASING UNKNOWN.

LEGEND

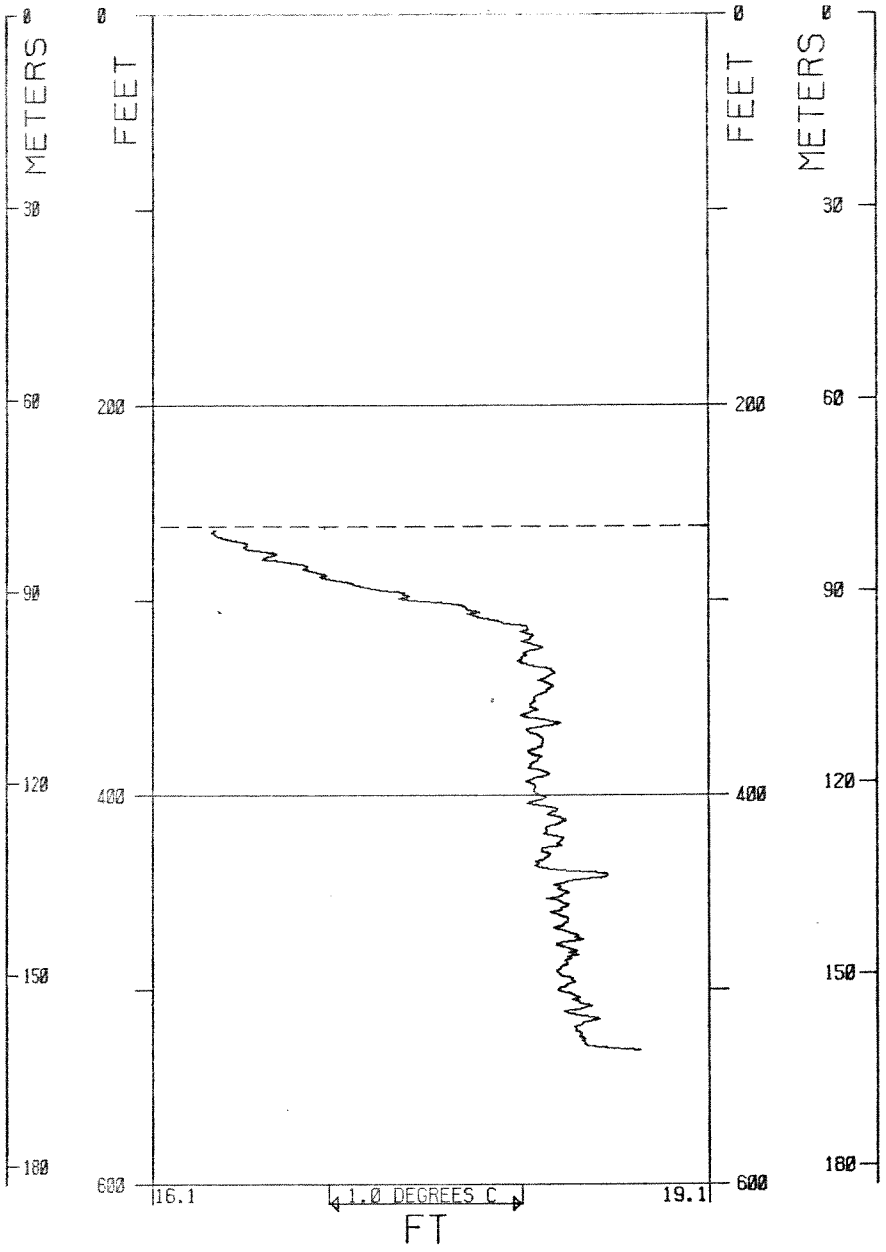
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW


METERS
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FEET
METERS
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120
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180
200
400
600
16.1
1.0 DEGREES C
19.1
FT

22N/28E-25Q1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	TOM MCPHERSON
DATE LOGGED	03/18/76
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	24N/29E-01A1
SURFACE ELEVATION	1805.
TOTAL DEPTH LOGGED	1044
DEPTH TO WATER LEVEL	435

CASING & LINERS:
0- 597=12

LEGEND

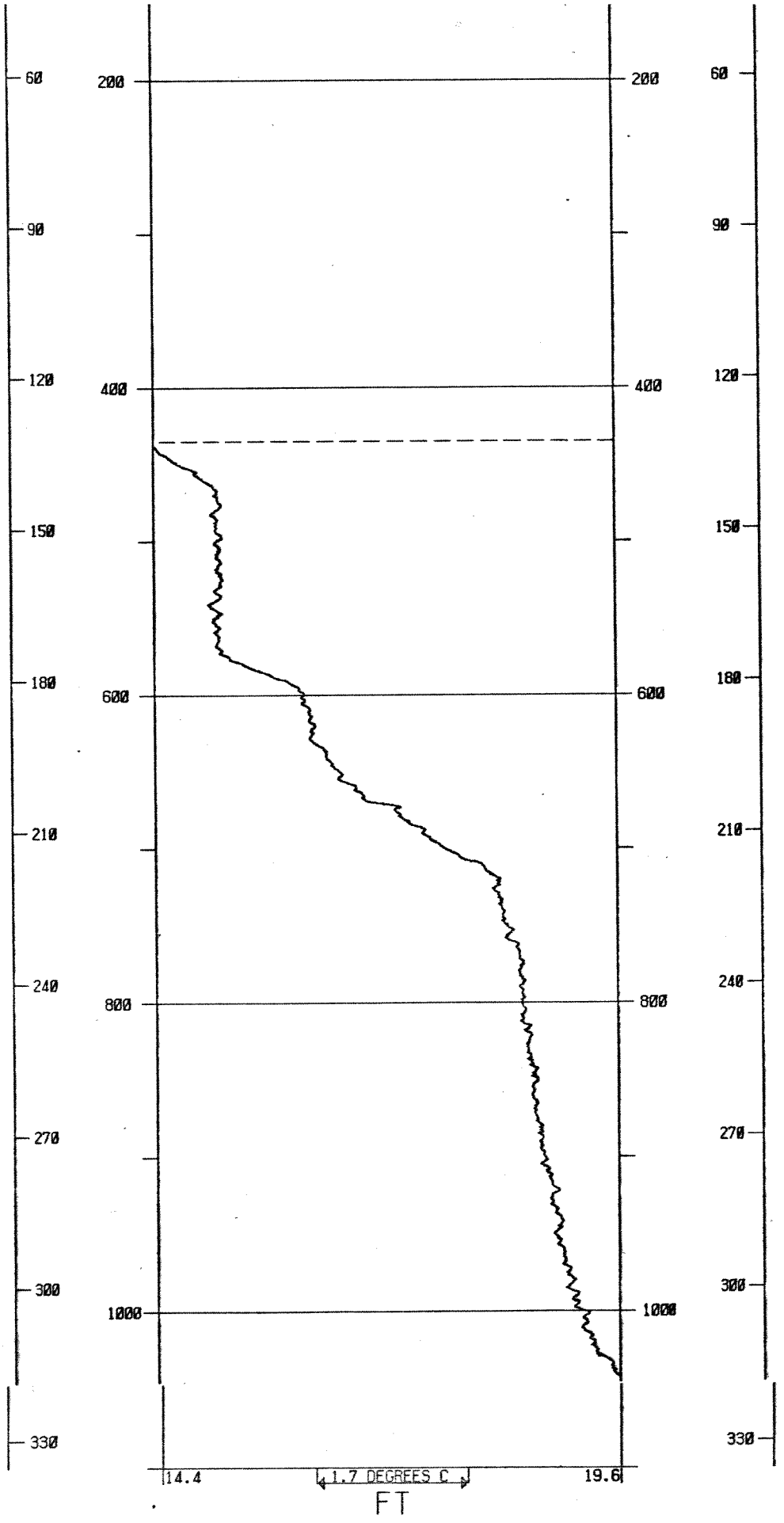
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW


60
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150
180
210
240
270
300
330
200
400
600
800
1000
14.4
1.7 DEGREES C
19.6
FT

24N/29E-01A1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	LARRY ISAAK #1
DATE LOGGED	12/07/73
STATE	WASHINGTON
COUNTY	GRANT
LOCATION	25N/28E-24L1
SURFACE ELEVATION	1818
TOTAL DEPTH LOGGED	618
DEPTH TO WATER LEVEL	440

CASING & LINERS:
0- 155=12

LEGEND

LOG TITLES

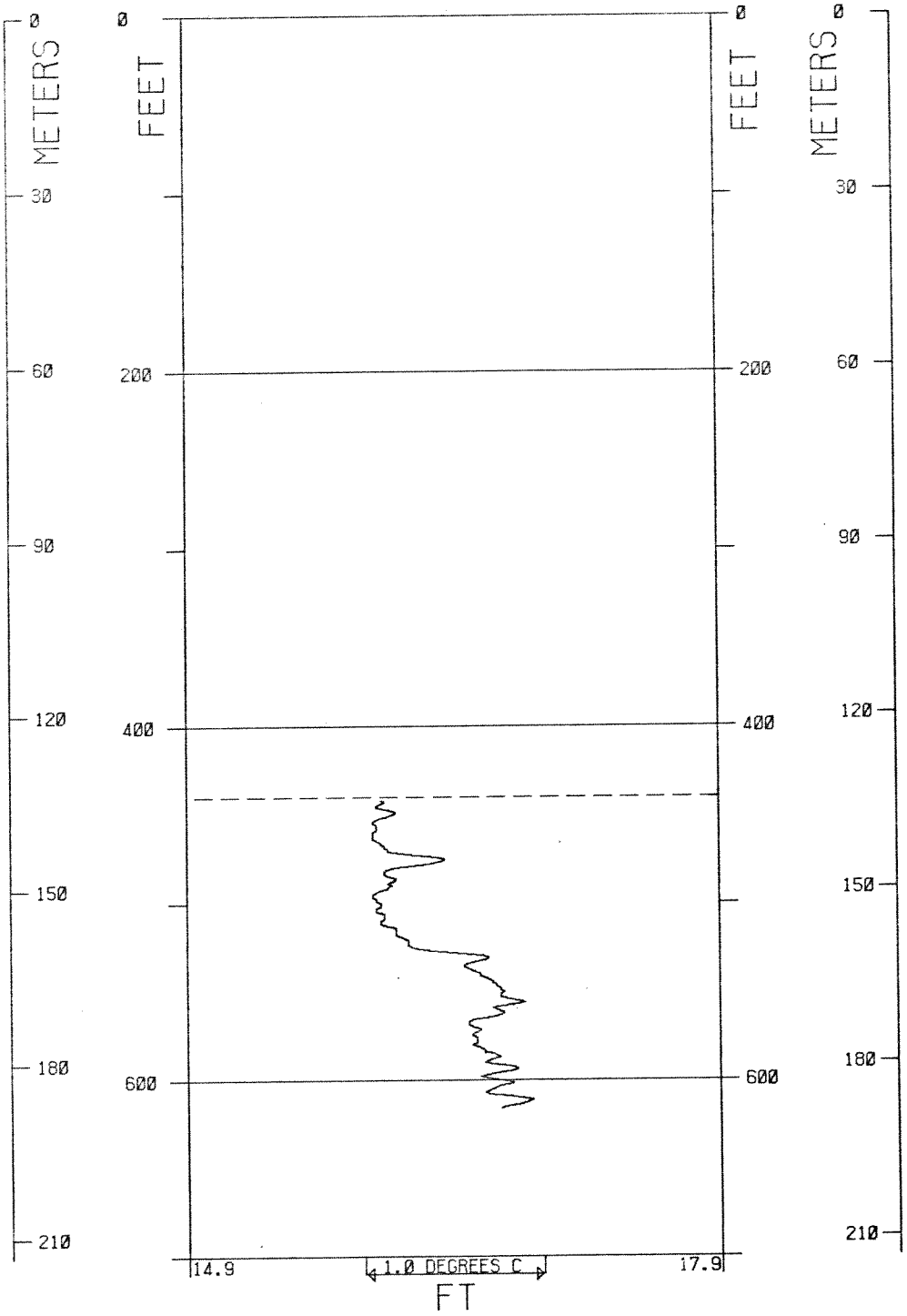
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/03/83 SEW

25N/28E-24L1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METERS
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210
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FEET
200
400
600
14.9
1.0 DEGREES C
17.9
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180
210

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RYEGRASS REST AREA
DATE LOGGED	03/12/74
STATE	WASHINGTON
COUNTY	KITTITAS
LOCATION	17N/21E-21G1
SURFACE ELEVATION	2580
TOTAL DEPTH LOGGED	636
DEPTH TO WATER LEVEL	526

CASING & LINERS:
0- 220= 8

LEGEND

LOG TITLES

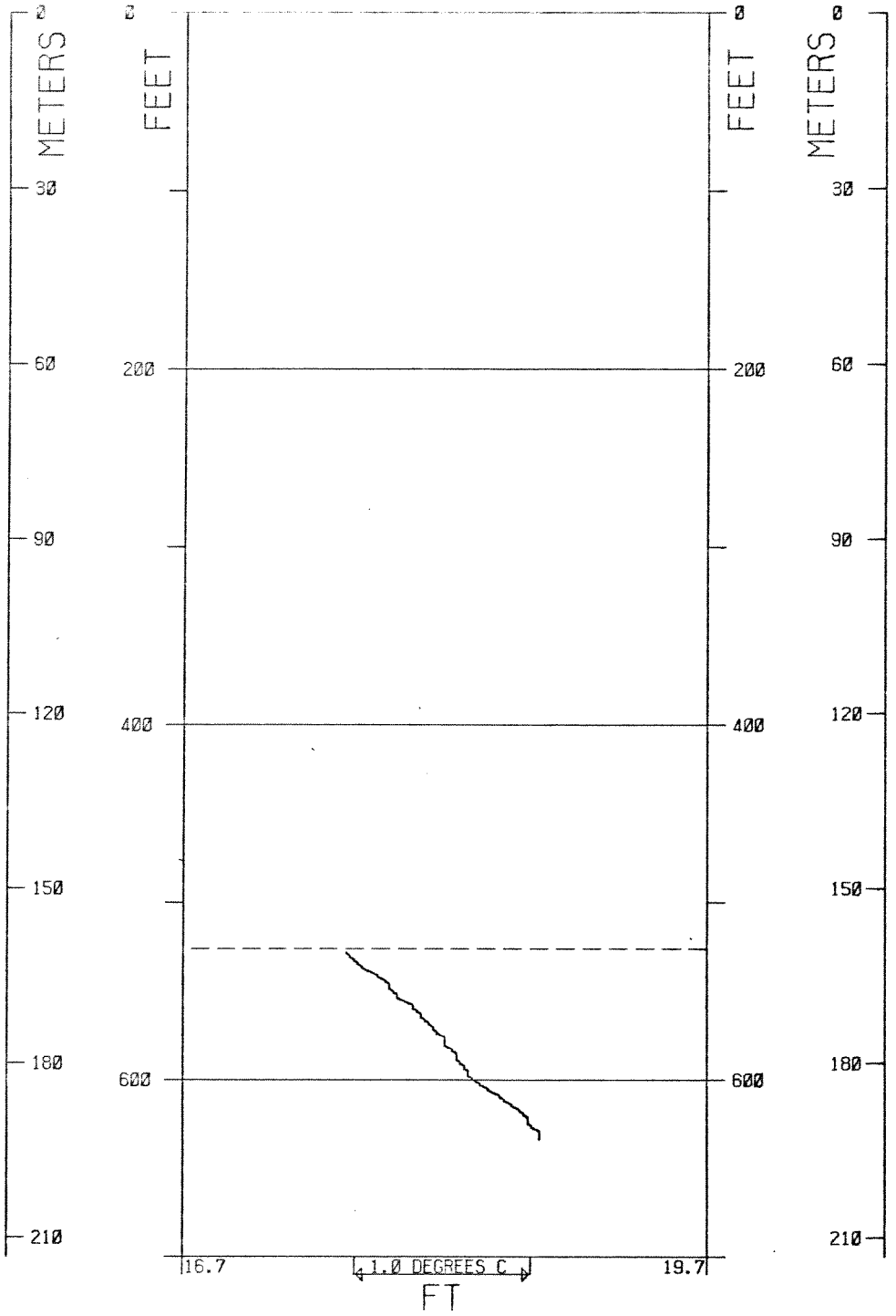
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ⟶
POROSITY (NN-LOG) INCREASES ⟵
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

17N/21E-21G1


METERS
0
30
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120
150
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210
FEET
0
200
400
600
FEET
0
200
400
600
METERS
0
30
60
90
120
150
180
210
16.7
1.0 DEGREES C
19.7
FT

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RANDY ENYEART
DATE LOGGED	09/28/76
STATE	WASHINGTON
COUNTY	KLICKITAT
LOCATION	03N/15E-02R1
SURFACE ELEVATION	1630
TOTAL DEPTH LOGGED	400
DEPTH TO WATER LEVEL	8

CASING & LINERS:
0- 20= 6

LEGEND

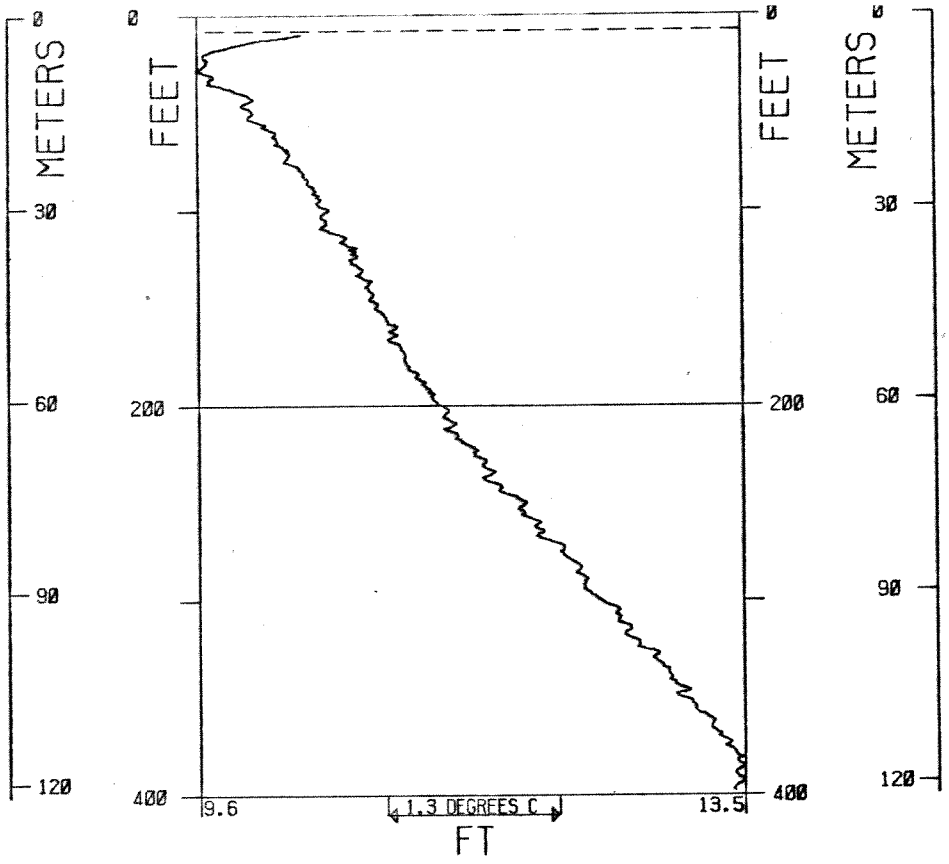
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/20/83 ISW


0
METERS
30
60
90
120
0
FEET
200
400
9.6
1.3 DEGREES C
13.5
FT
0
FEET
200
400
0
METERS
30
60
90
120

03N/15E-02R1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	HORSE HEAVEN(WEST)
DATE LOGGED	09/11/80
STATE	WASHINGTON
COUNTY	KLICKITAT
LOCATION	05N/21E-16L1
SURFACE ELEVATION	2300
TOTAL DEPTH LOGGED	1499
DEPTH TO WATER LEVEL	683

CASING & LINERS:
0- 320=16

RADIATION LOGS ARE FROM FIRST LOGGING OF 7/30/80.

LEGEND

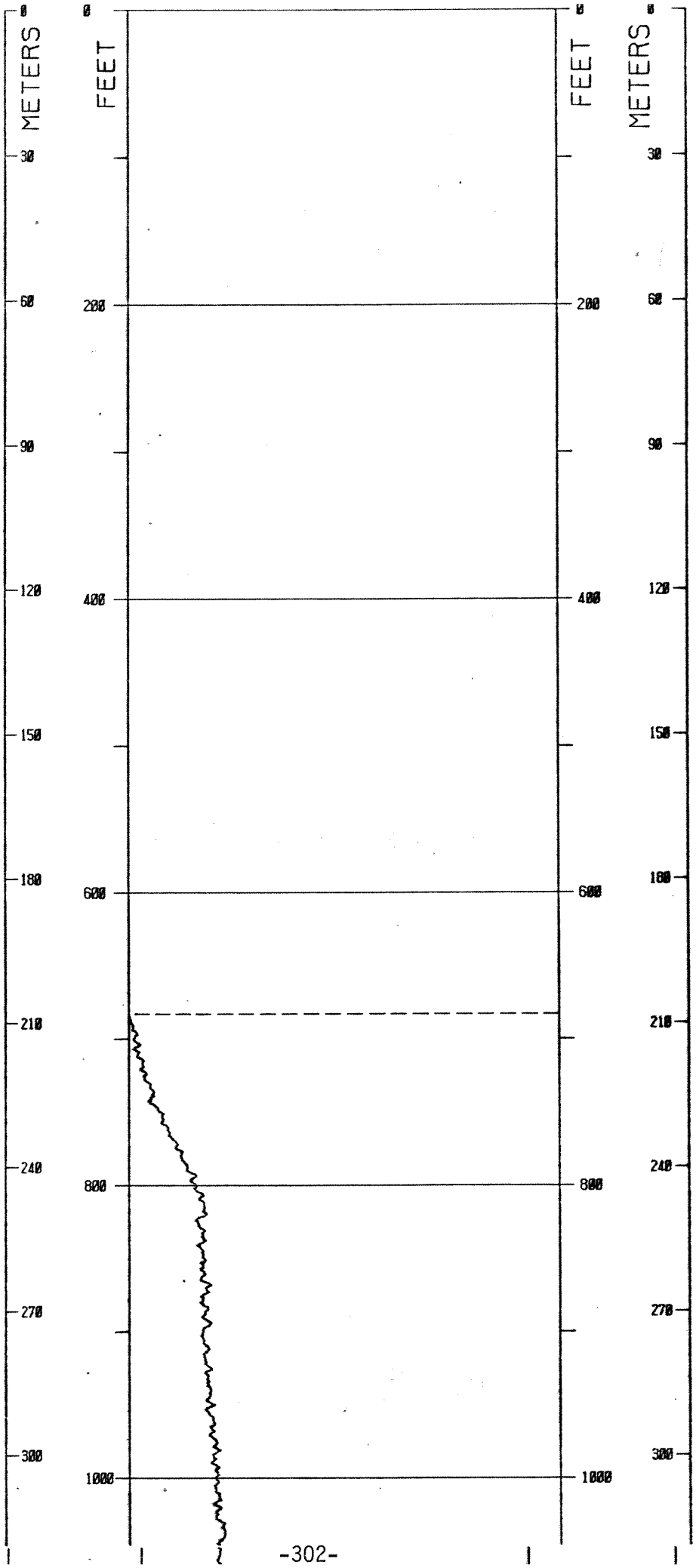
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/20/83 ISW


METERS
FEET
FEET
METERS
0
30
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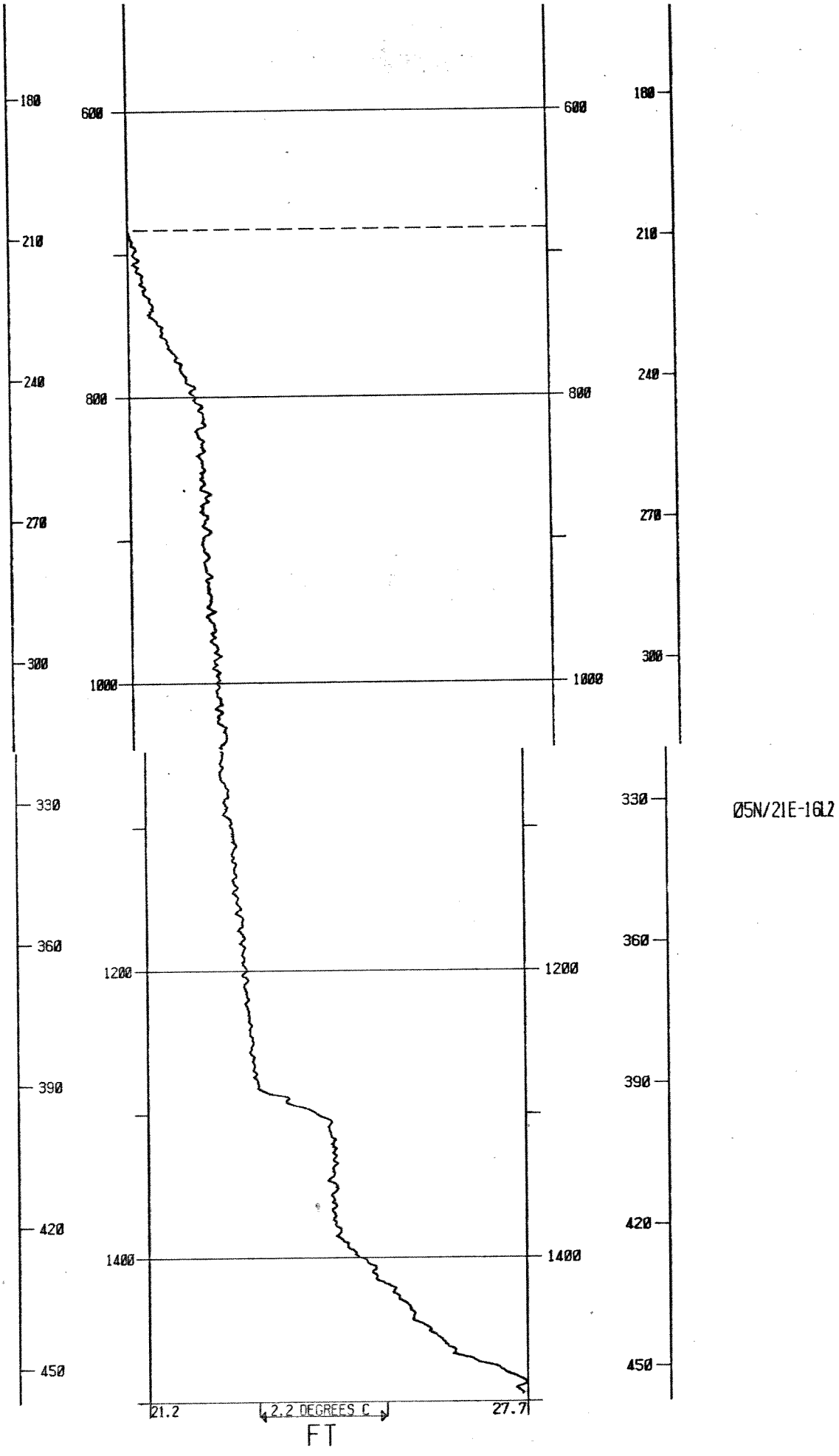
120
150
180
210
240
270
300
200
400
600
800
1000


180
210
240
270
300
330
360
390
420
450
600
800
1000
1200
1400
21.2
2.2 DEGREES C
27.7
FT

Ø5N/21E-16L2

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ODESSA CITY
DATE LOGGED	11/22/77
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	21N/33E-09E1
SURFACE ELEVATION	1610
TOTAL DEPTH LOGGED	660
DEPTH TO WATER LEVEL	117

CASING & LINERS:
0- 160=15

LEGEND

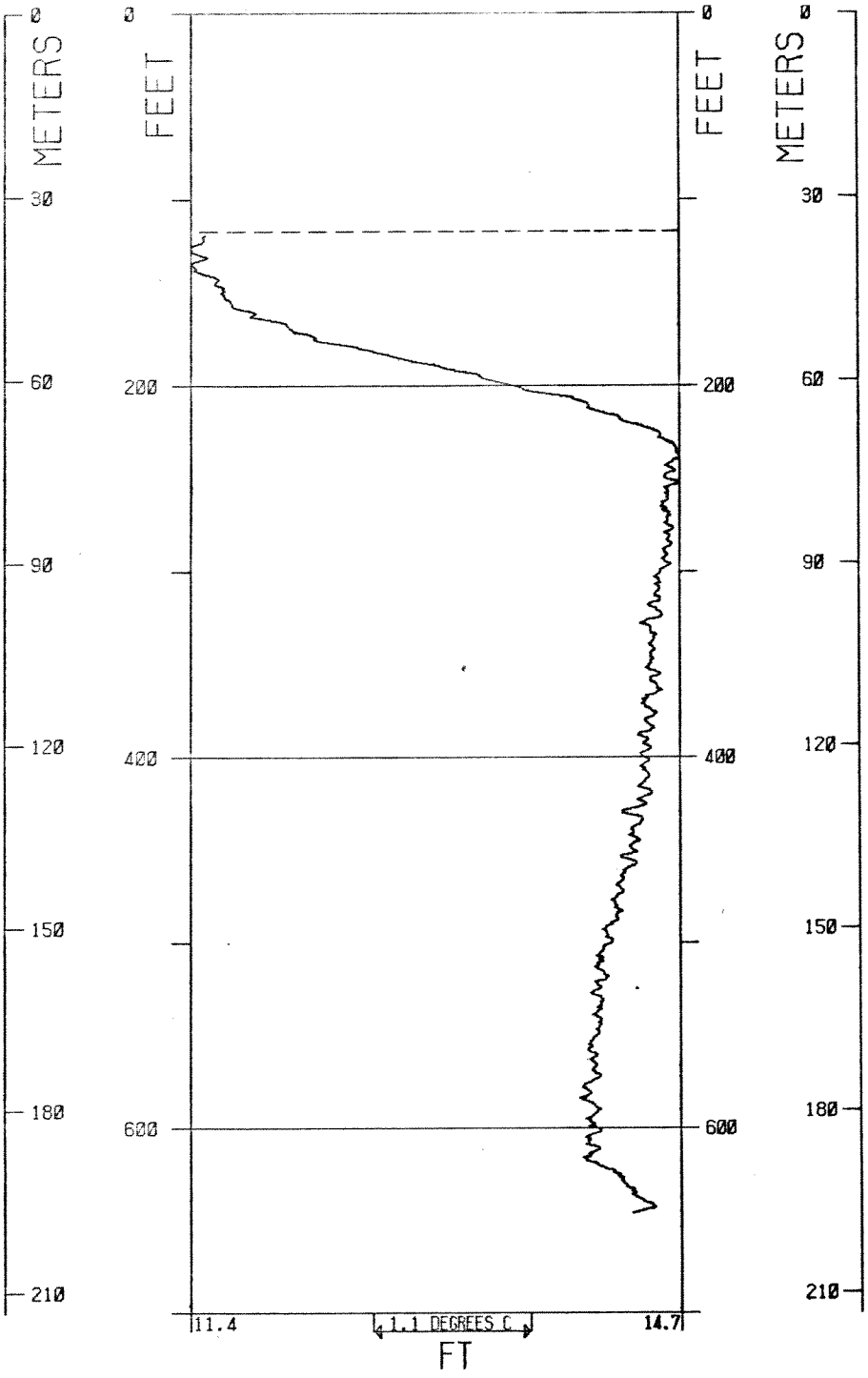
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL ----

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW


0
METERS
30
60
90
120
150
180
210
0
FEET
200
400
600
11.4
1.1 DEGREES C
14.7
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180
210

21N/33E-09E1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ALMIRA TEST WELL
DATE LOGGED	03/10/71
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	24N/31E-16E1
SURFACE ELEVATION	1840
TOTAL DEPTH LOGGED	739
DEPTH TO WATER LEVEL	350

CASING & LINERS:
0- 60=10

FT HAND DIGITIZED.

LEGEND

LOG TITLES

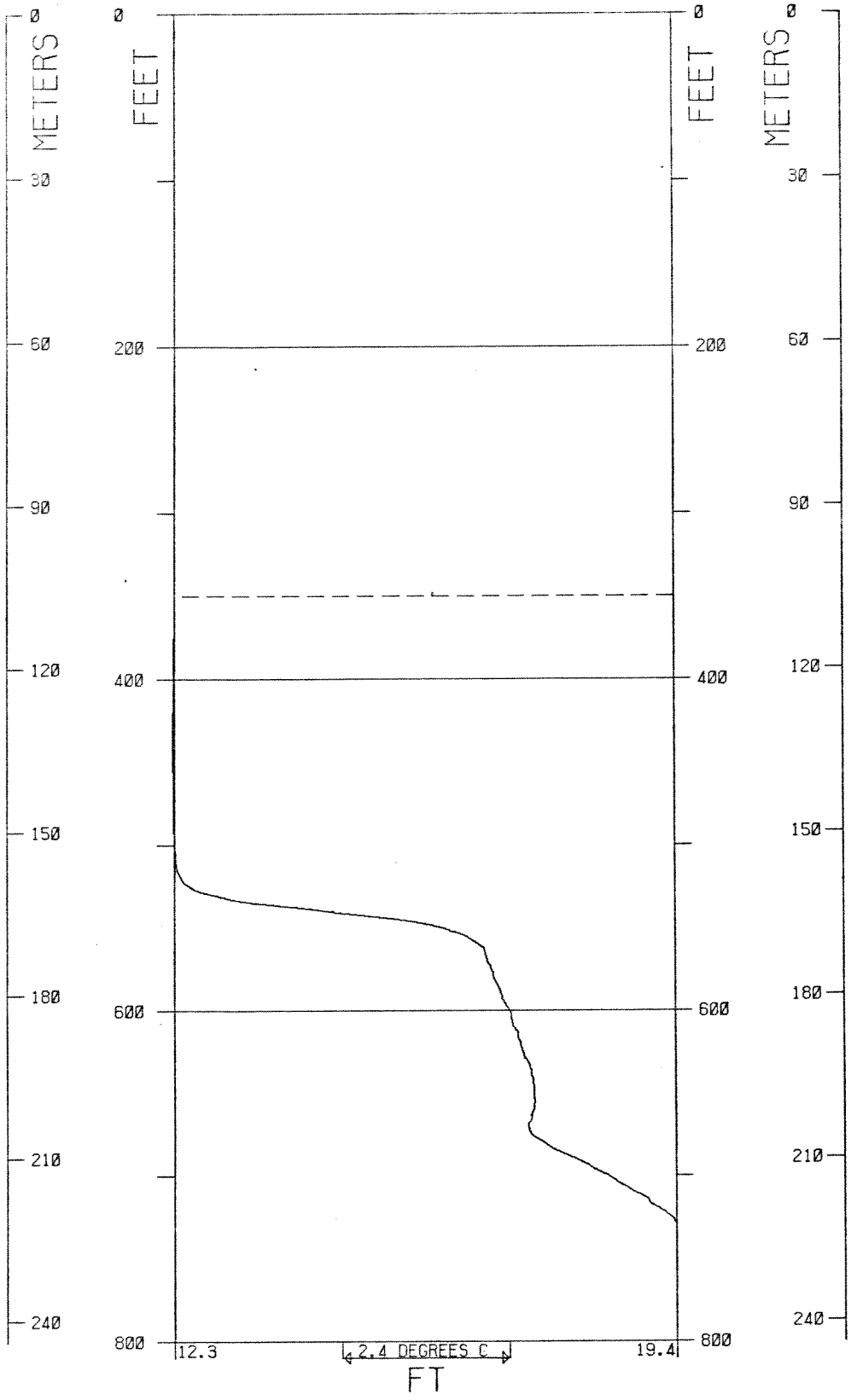
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/11/83 SEW

24N/31E-16E1


METERS
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FEET
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800
12.3
2.4 DEGREES C
19.4
FT
FEET
0
200
400
600
800
METERS
0
30
60
90
120
150
180
210
240

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DARWIN NEALEY
DATE LOGGED	11/25/74
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	24N/34E-30P1
SURFACE ELEVATION	2115
TOTAL DEPTH LOGGED	760
DEPTH TO WATER LEVEL	294

CASING & LINERS:
0- 70=14

LEGEND

LOG TITLES

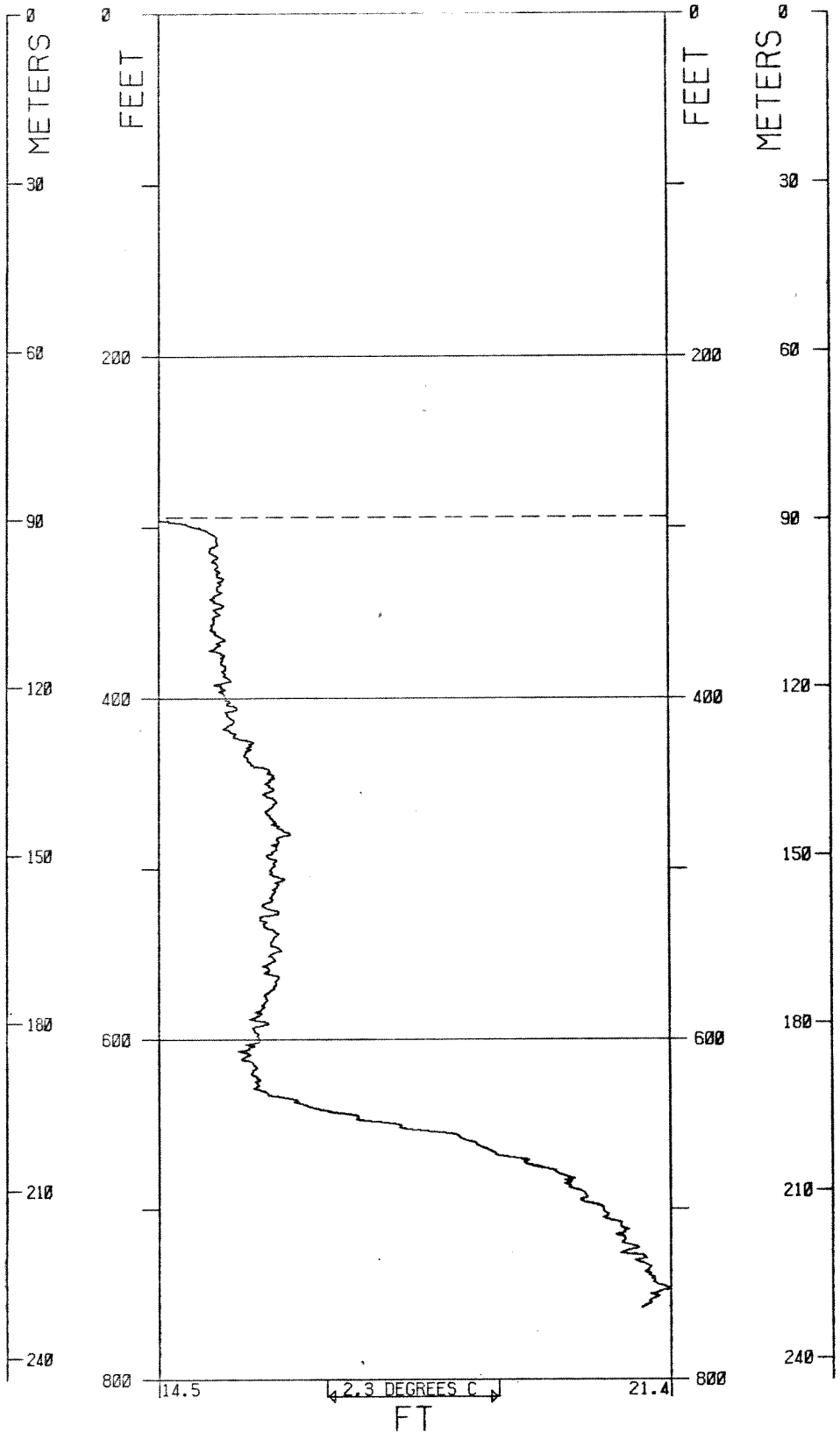
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

24N/34E-30P1


METERS
FEET
FEET
METERS
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30
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400
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800
14.5
2.3 DEGREES C
21.4
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DAVENPORT CITY #6
DATE LOGGED	08/27/74
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	25N/37E-21L2
SURFACE ELEVATION	2410
TOTAL DEPTH LOGGED	528
DEPTH TO WATER LEVEL	32
CASING & LINERS:	
0- 445=18	

LEGEND

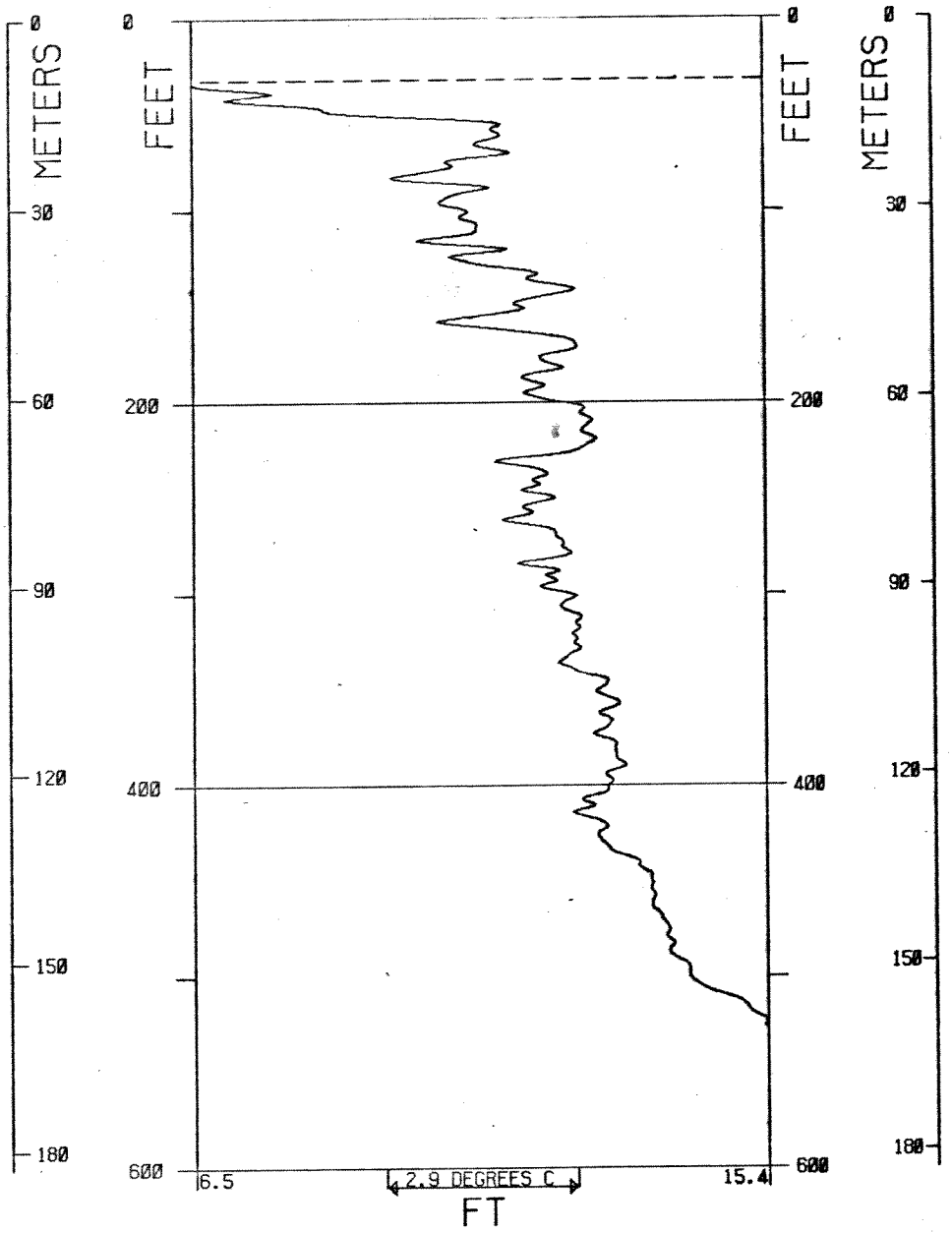
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW


0
METERS
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180
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FEET
200
400
600
6.5
2.9 DEGREES C
15.4
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180

25N/37E-21L2

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	RICHARD DREGER
DATE LOGGED	10/21/82
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	25N/34E-29J1
SURFACE ELEVATION	2282
TOTAL DEPTH LOGGED	1222
DEPTH TO WATER LEVEL	624

CASING & LINERS:
0- 40=15 470- 680=10

LEGEND

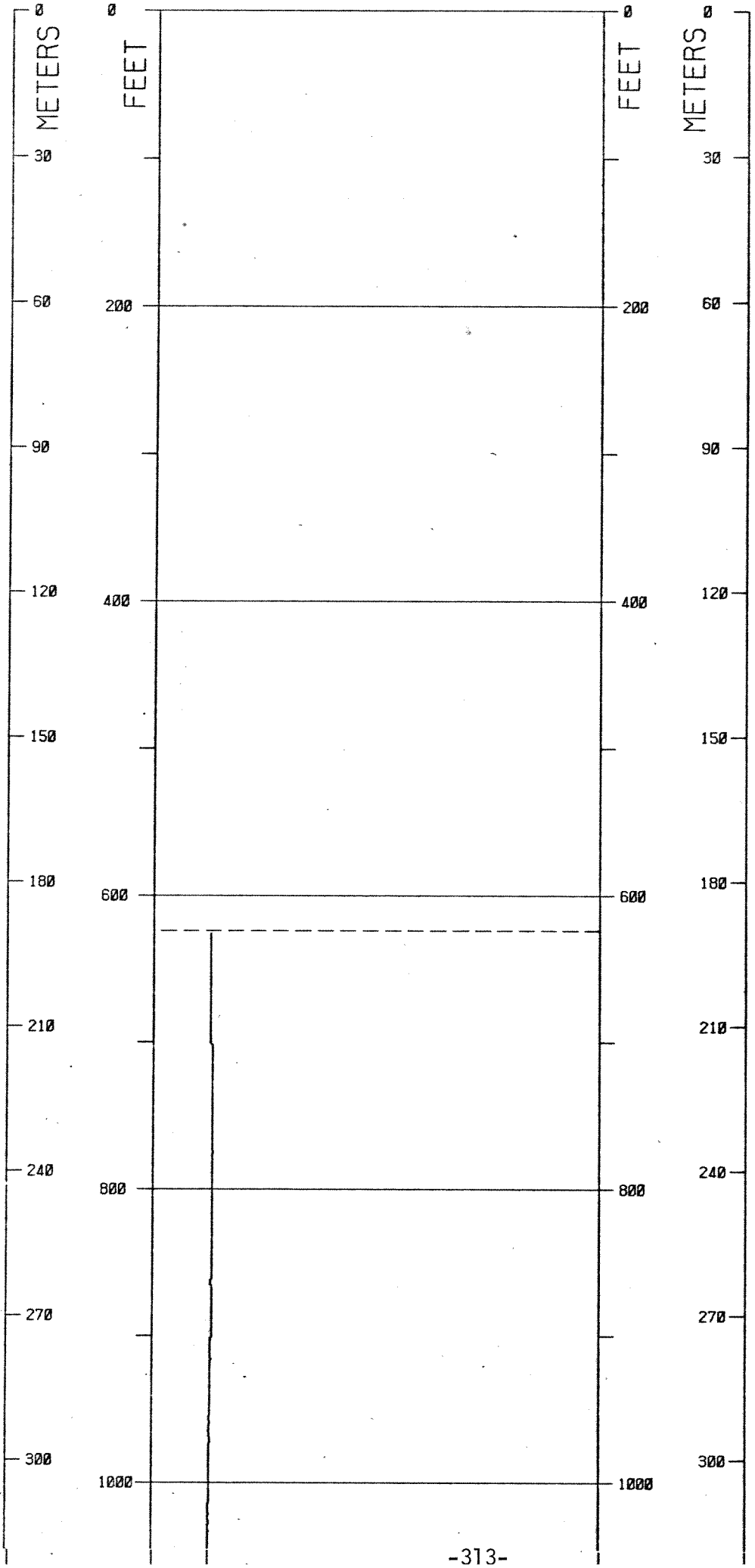
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

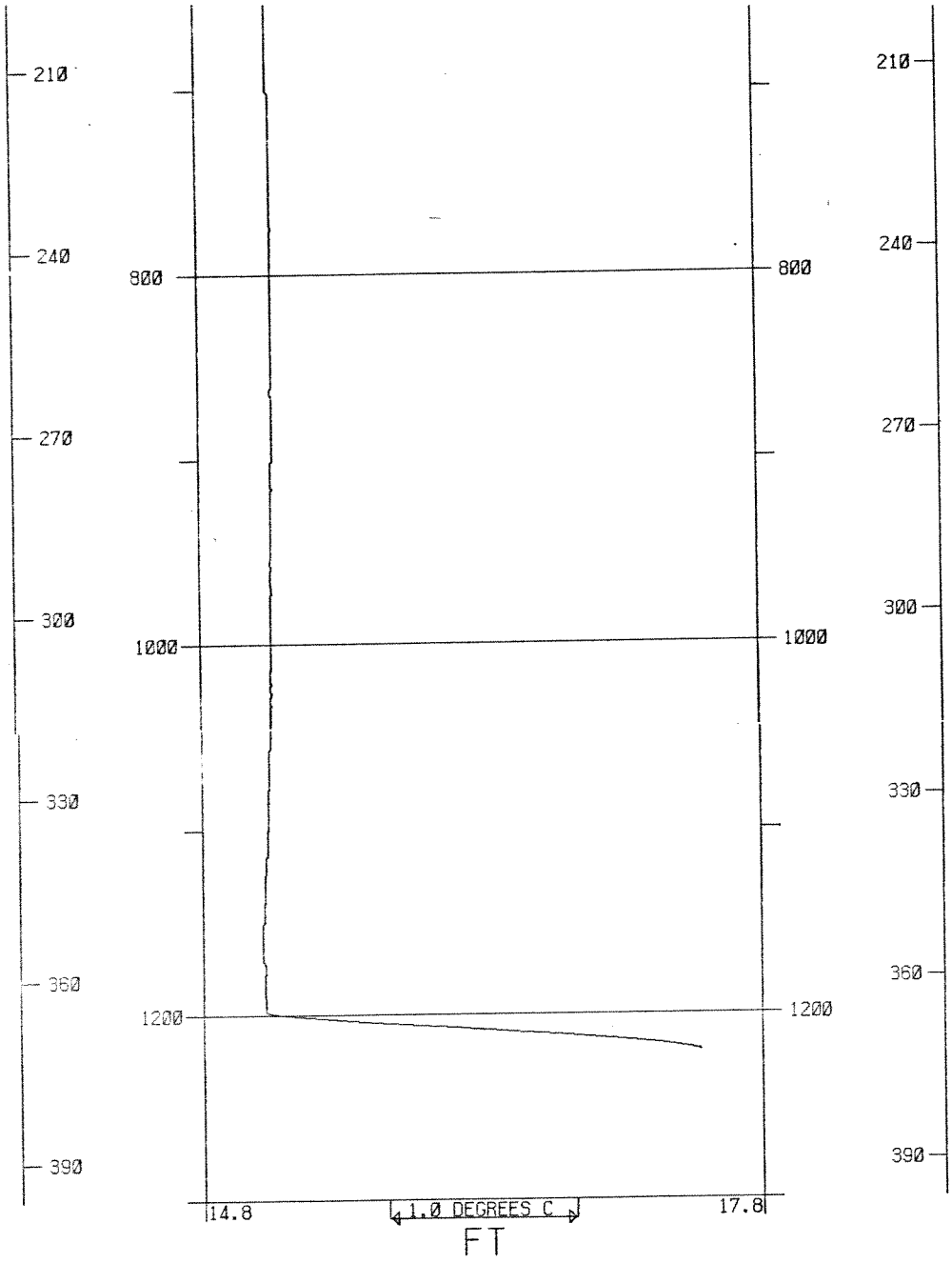
DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/03/83 SEW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
270
300
200
400
600
800
1000

25N/34E-29J1


210
240
270
300
330
360
390
800
1000
1200
14.8
1.0 DEGREES C
17.8
FT

25N/34E-29J1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	REARDAN CITY
DATE LOGGED	07/12/74
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	25N/39E-15D1
SURFACE ELEVATION	2500
TOTAL DEPTH LOGGED	840
DEPTH TO WATER LEVEL	27

CASING & LINERS:
0- 22=12

LEGEND

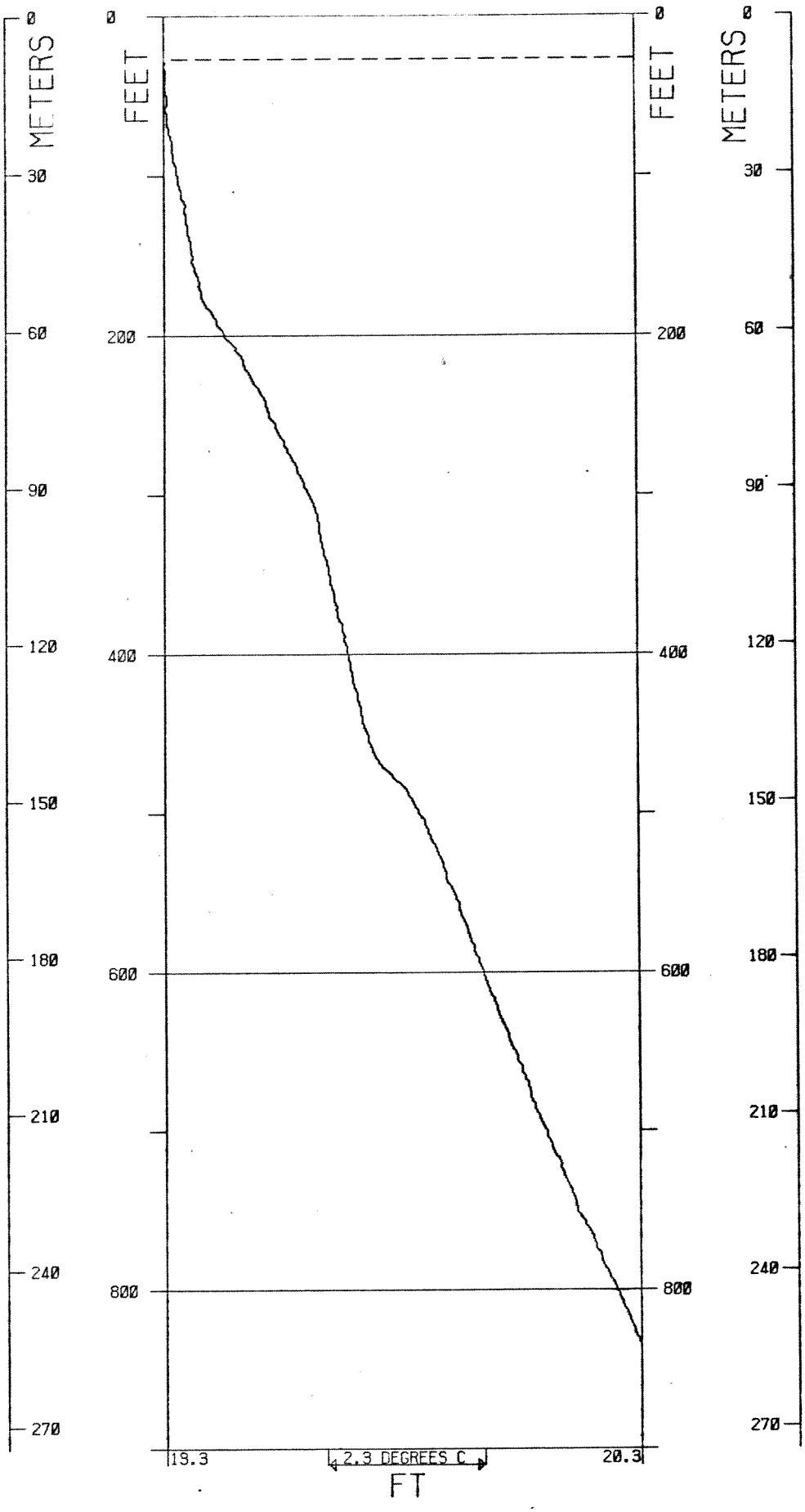
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW


METERS
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200
400
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800
19.3
2.3 DEGREES C
20.3
FT

25N/39E-15D1

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COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	NORMAN GEIB
DATE LOGGED	05/11/72
STATE	WASHINGTON
COUNTY	LINCOLN
LOCATION	26N/32E-10H1
SURFACE ELEVATION	2240
TOTAL DEPTH LOGGED	740
DEPTH TO WATER LEVEL	240

CASING & LINERS:
0- 21=12

LEGEND

LOG TITLES

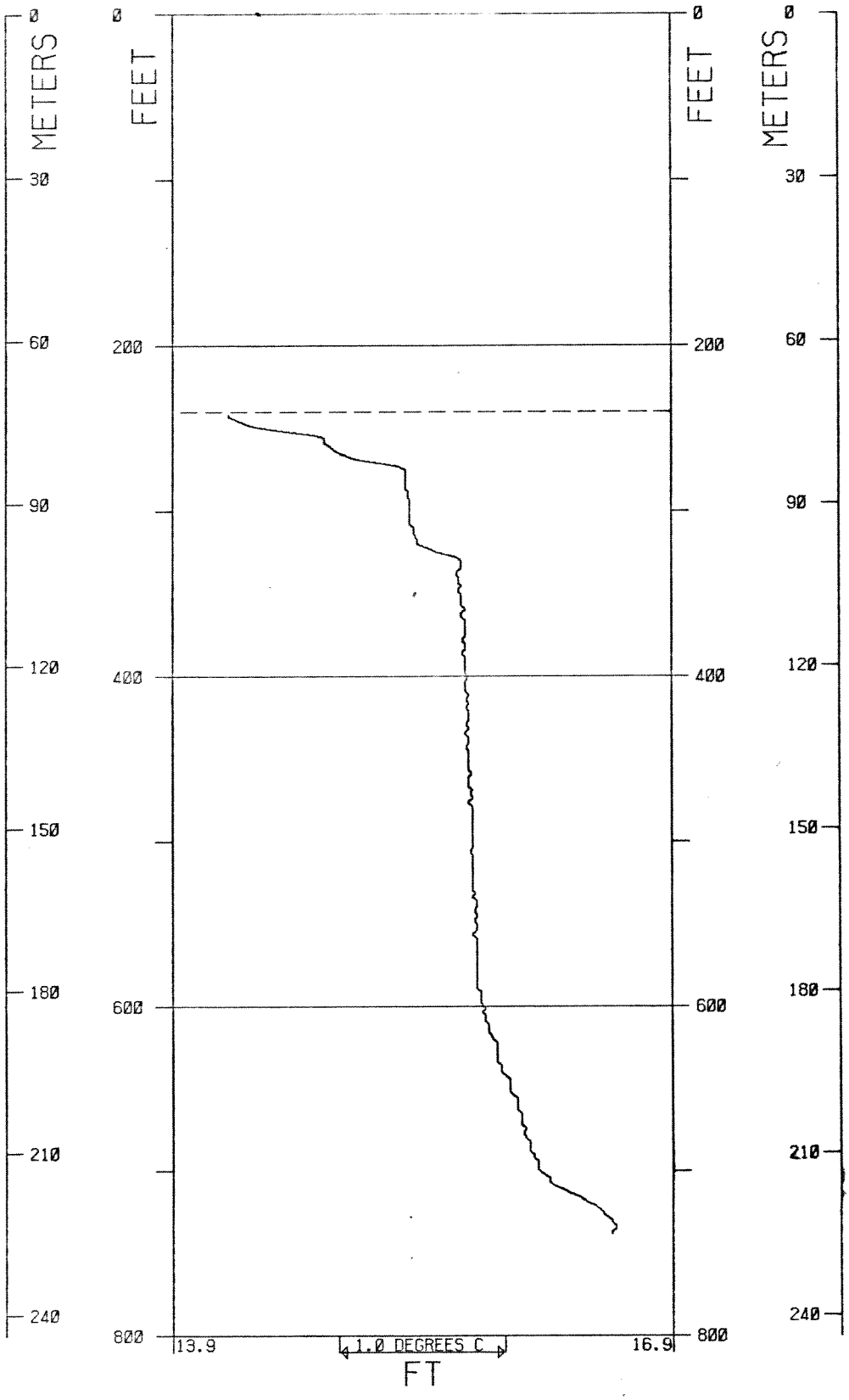
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

26N/32E-10H1


METERS
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200
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600
800
FEET
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200
400
600
800
METERS
0
30
60
90
120
150
180
210
240
13.9
1.0 DEGREES C
16.9
FT

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	TOM COPELAND
DATE LOGGED	12/12/72
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	06N/36E-14A1
SURFACE ELEVATION	1250
TOTAL DEPTH LOGGED	911
DEPTH TO WATER LEVEL	80

CASING & LINERS:
0- 250=20

LEGEND

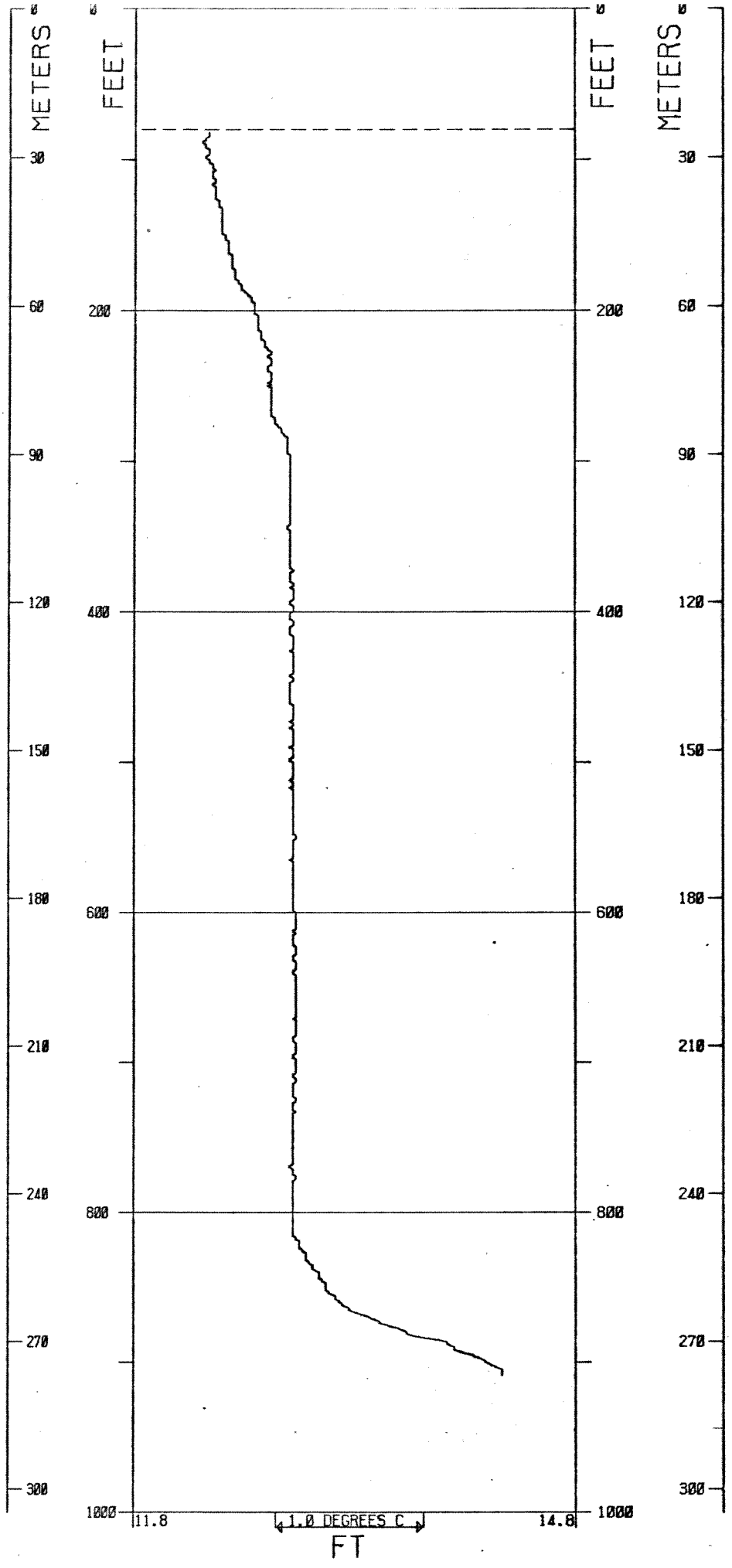
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/20/83 ISW


METERS
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METERS
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210
240
270
300
200
400
600
800
1000
11.8
1.0 DEGREES C
14.8
FT

06N/36E-14A1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	JIM MCDOLE #3
DATE LOGGED	03/20/74
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	07N/33E-31K1
SURFACE ELEVATION	515
TOTAL DEPTH LOGGED	883
DEPTH TO WATER LEVEL	105

CASING & LINERS:
0- 80=14

LEGEND

LOG TITLES

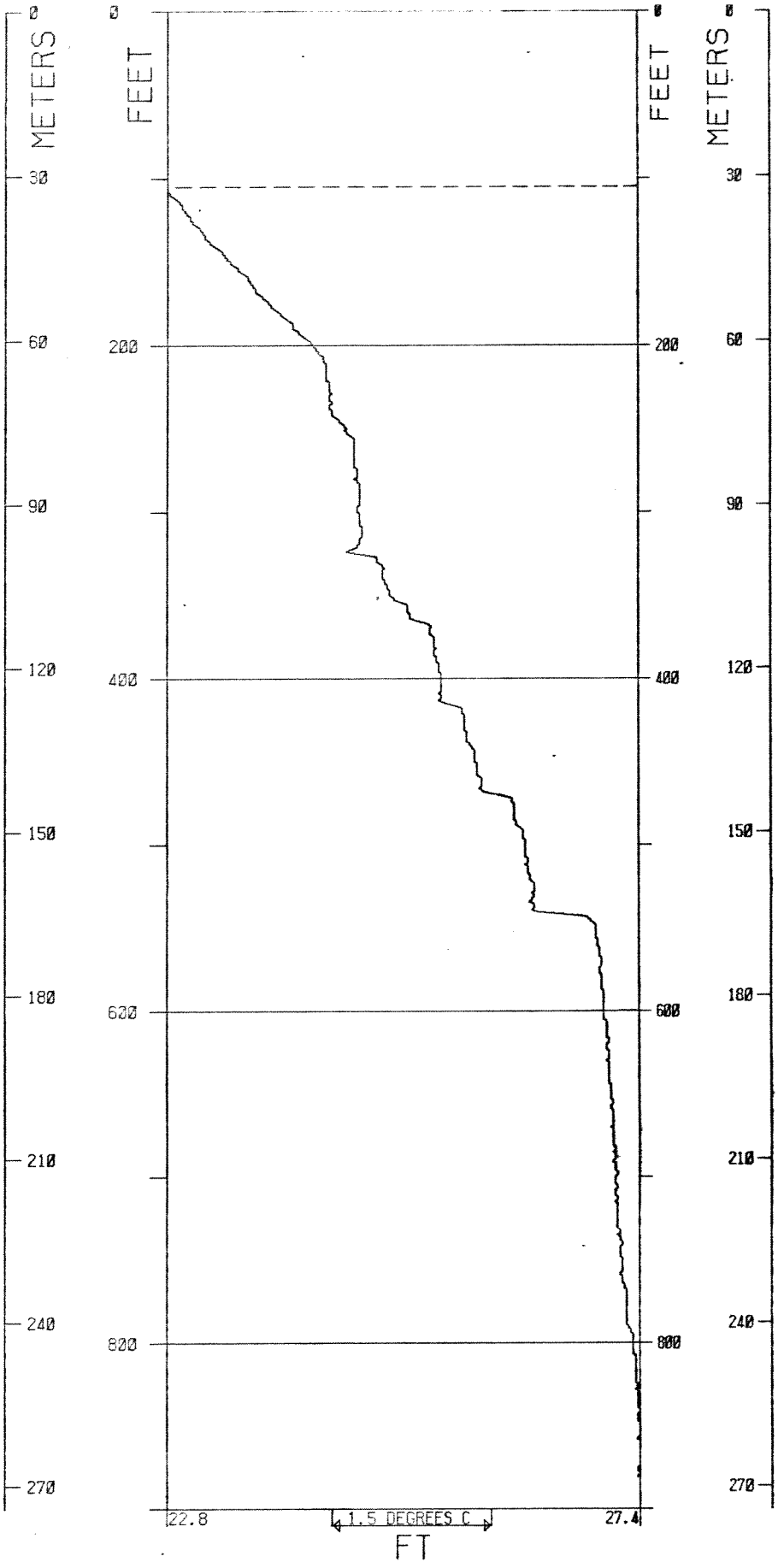
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW

07N/33E-31K1


METERS
FEET
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METERS
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150
180
210
240
270
200
400
600
800
22.8
1.5 DEGREES C
27.4
FT

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	WALLA COM. COLLEGE
DATE LOGGED	06/02/73
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	07N/36E-14P1
SURFACE ELEVATION	1165
TOTAL DEPTH LOGGED	1334
DEPTH TO WATER LEVEL	155
CASING & LINERS:	
0- 390=15	

LEGEND

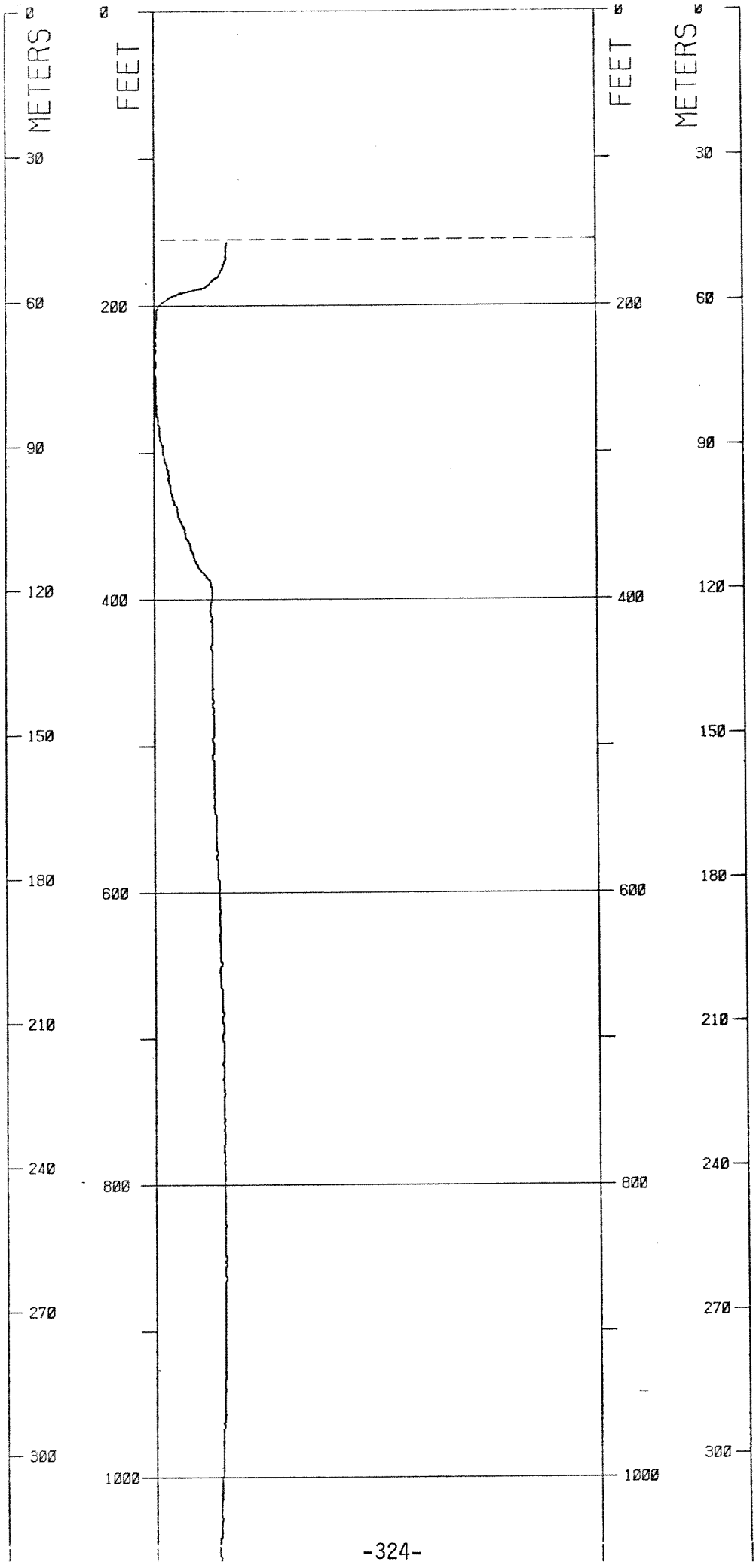
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——▷
POROSITY (NN-LOG) INCREASES ◁——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW


07N/36E-14P1
METERS
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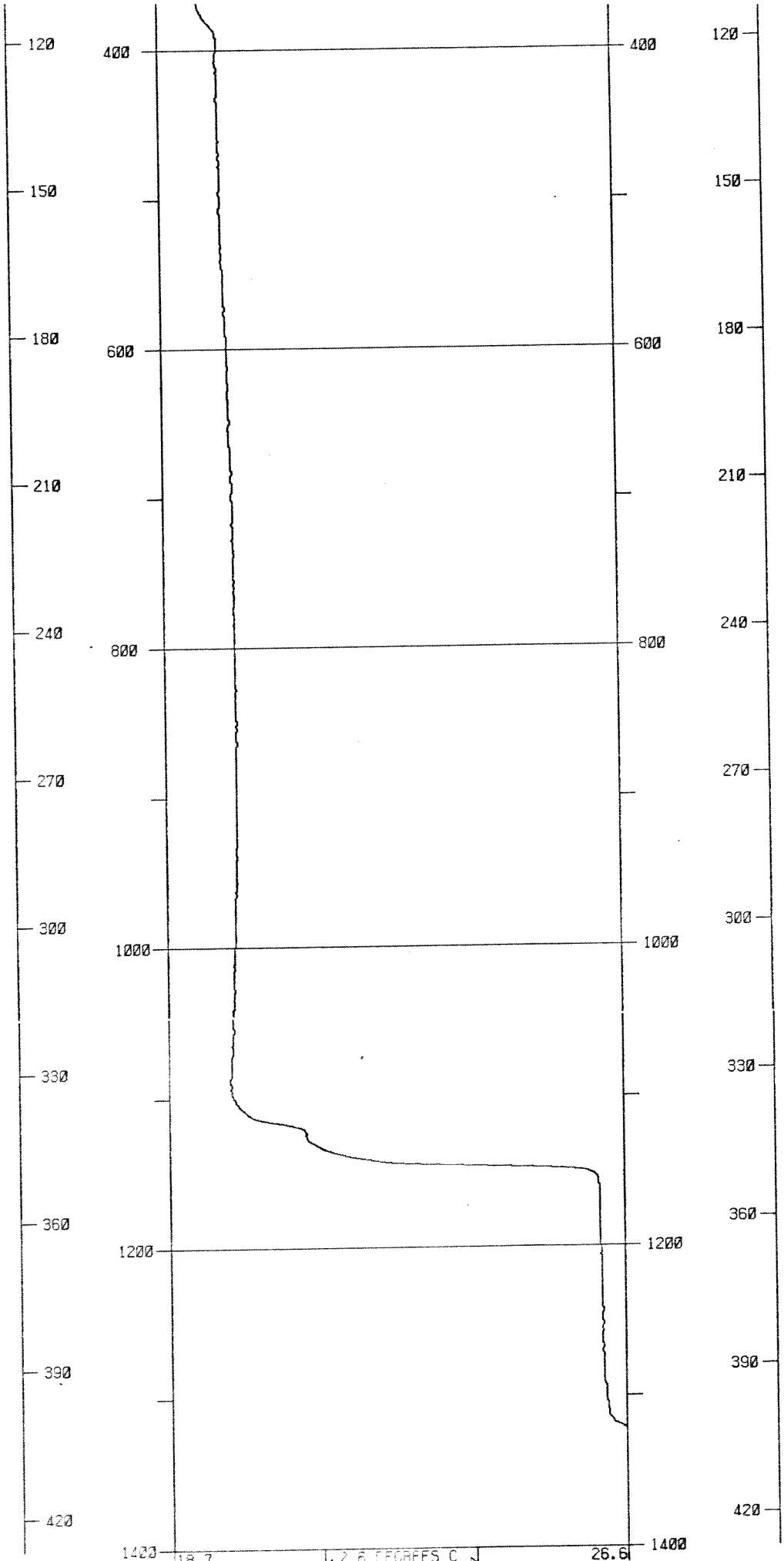

07N/36E-1

FF325-

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ROSS PETERSON
DATE LOGGED	05/12/78
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	08N/31E-14F1
SURFACE ELEVATION	570
TOTAL DEPTH LOGGED	1104
DEPTH TO WATER LEVEL	228

CASING & LINERS:
0- 150=15 230- 410=11

LEGEND

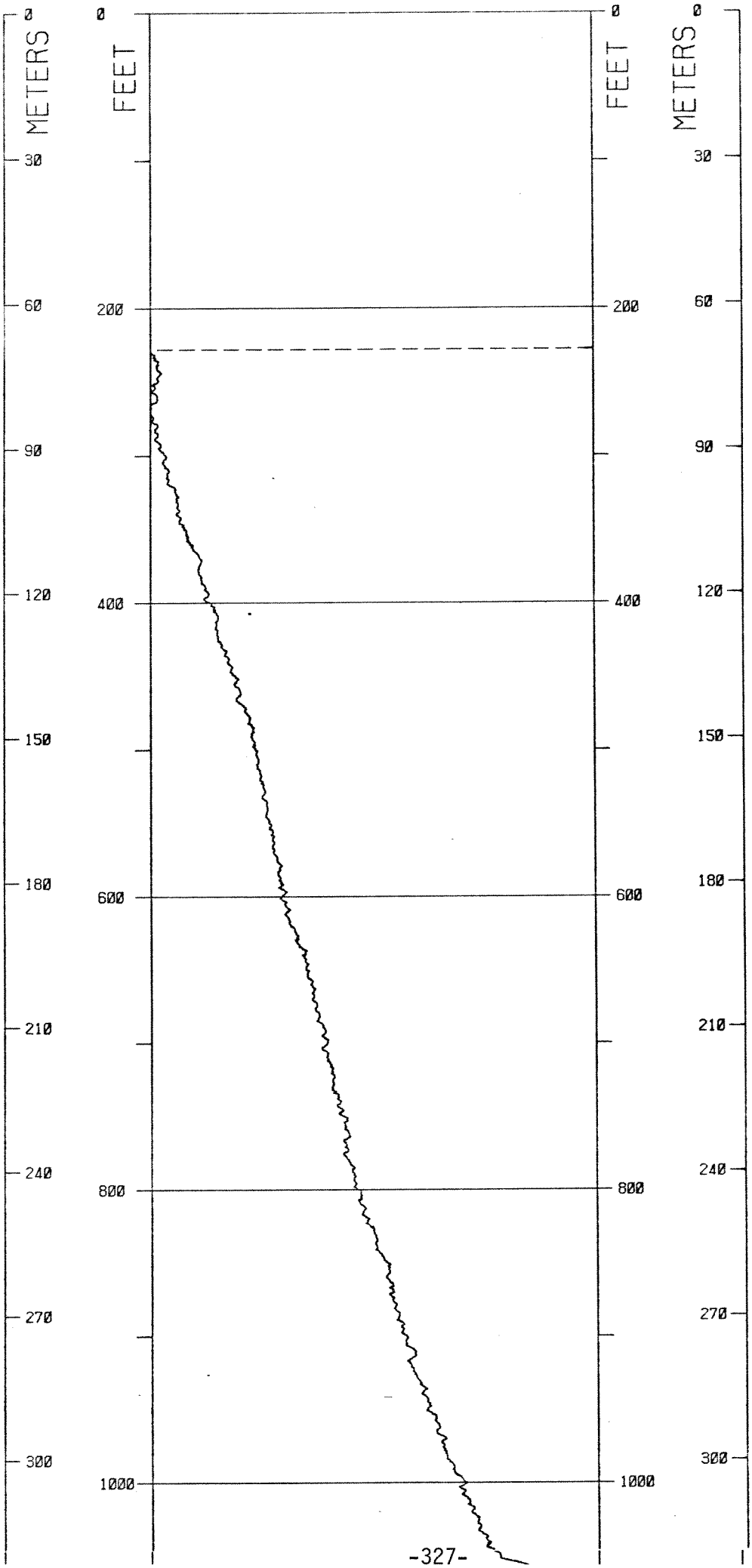
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/21/83 ISW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
270
300
200
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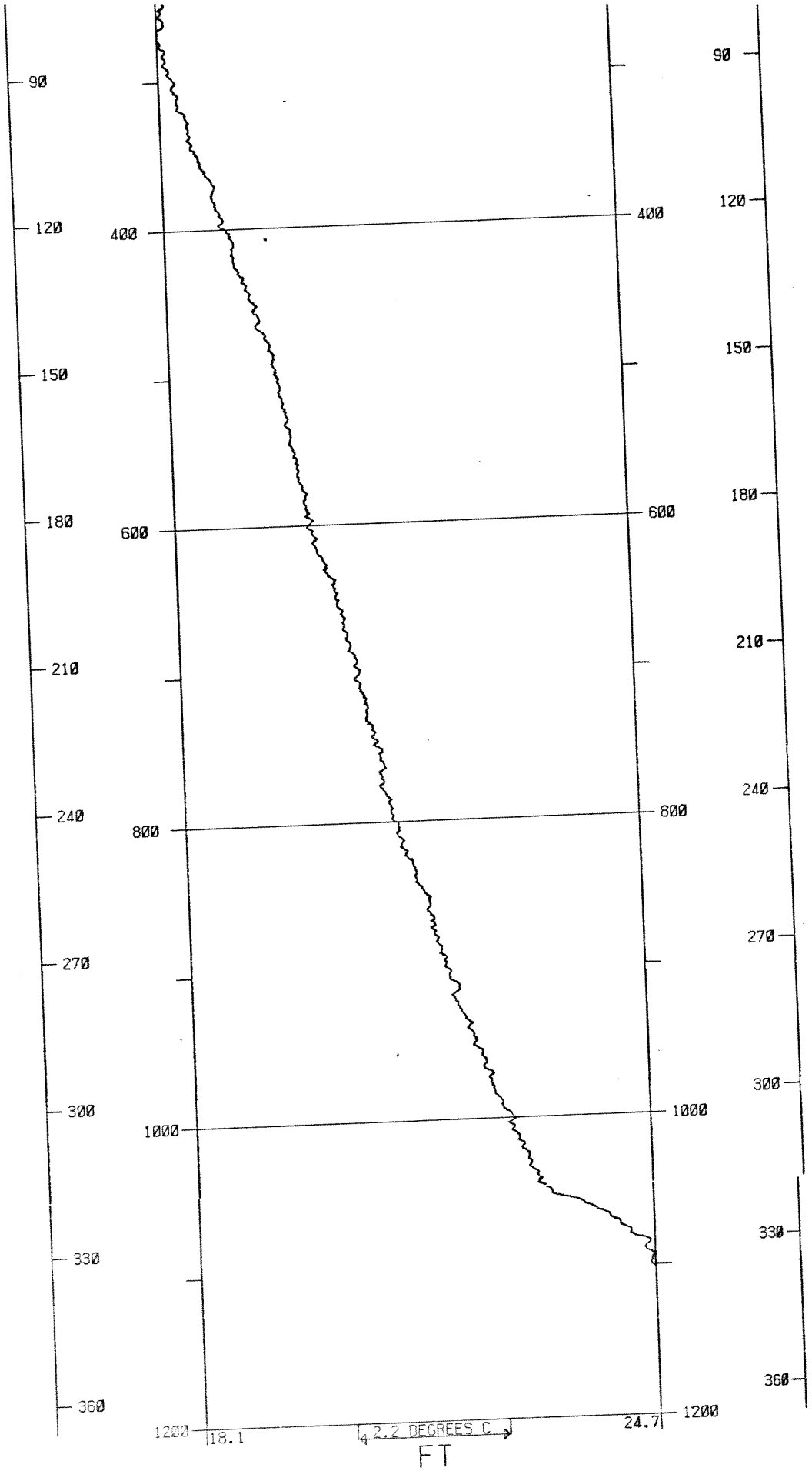
1000

08N/31E-14F1


90
120
150
180
210
240
270
300
330
360
400
600
800
1000
1200
18.1
2.2 DEGREES C
24.7
FT

08N/31E-14F

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BILL GLUCK #2
DATE LOGGED	12/12/73
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	08N/33E-21R1
SURFACE ELEVATION	800
TOTAL DEPTH LOGGED	778
DEPTH TO WATER LEVEL	372

CASING & LINERS:

0- 10= 8

LEGEND

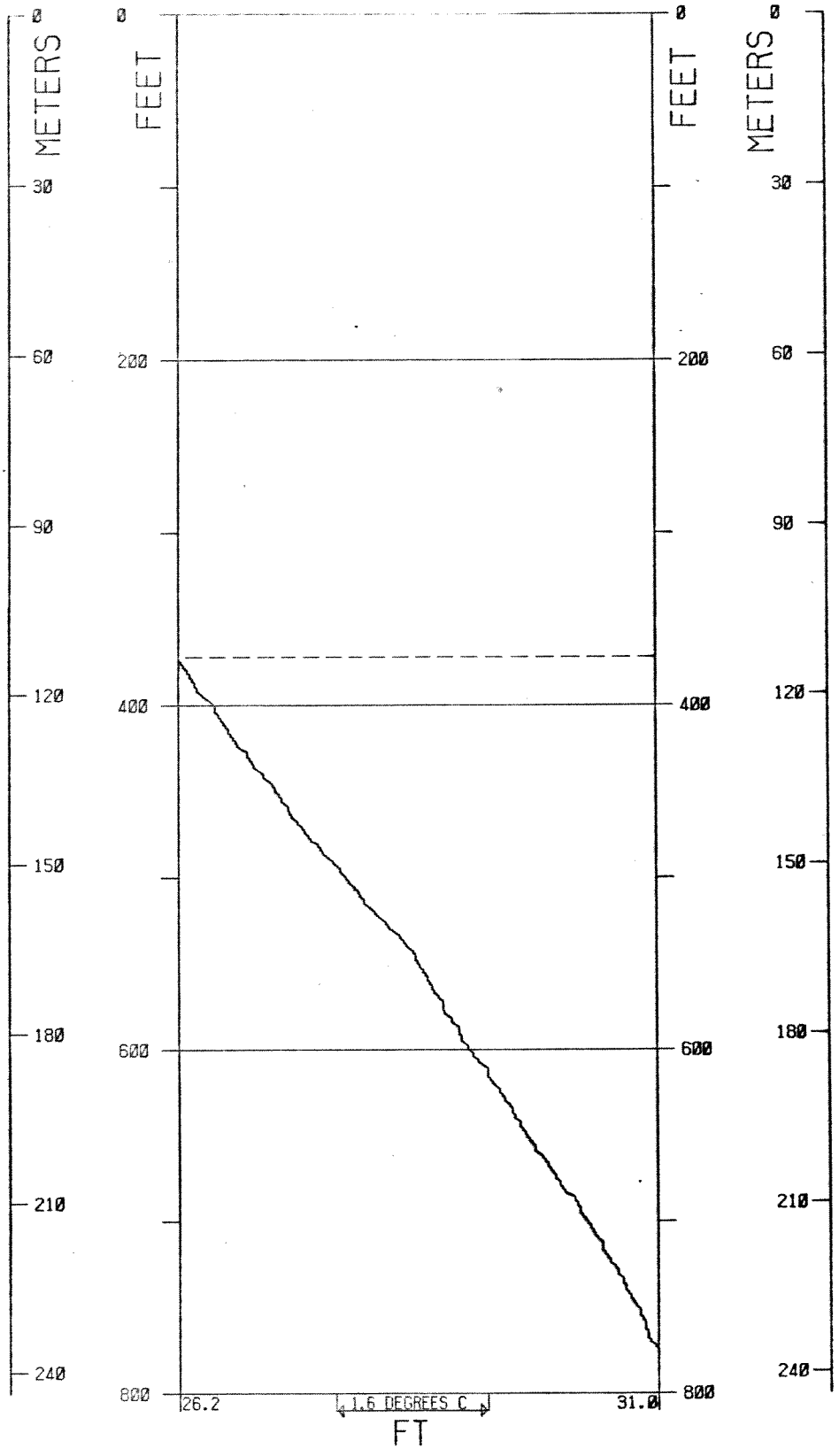
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/22/83 ISW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
200
400
600
800
26.2
1.6 DEGREES C
31.0
FT

08N/33E-21R1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DON ANDERSON
DATE LOGGED	Ø3/Ø7/75
STATE	WASHINGTON
COUNTY	WALLA
LOCATION	12N/36E-26H1
SURFACE ELEVATION	1Ø1Ø
TOTAL DEPTH LOGGED	598
DEPTH TO WATER LEVEL	456

CASING & LINERS:
Ø- 444= 8

LEGEND

LOG TITLES

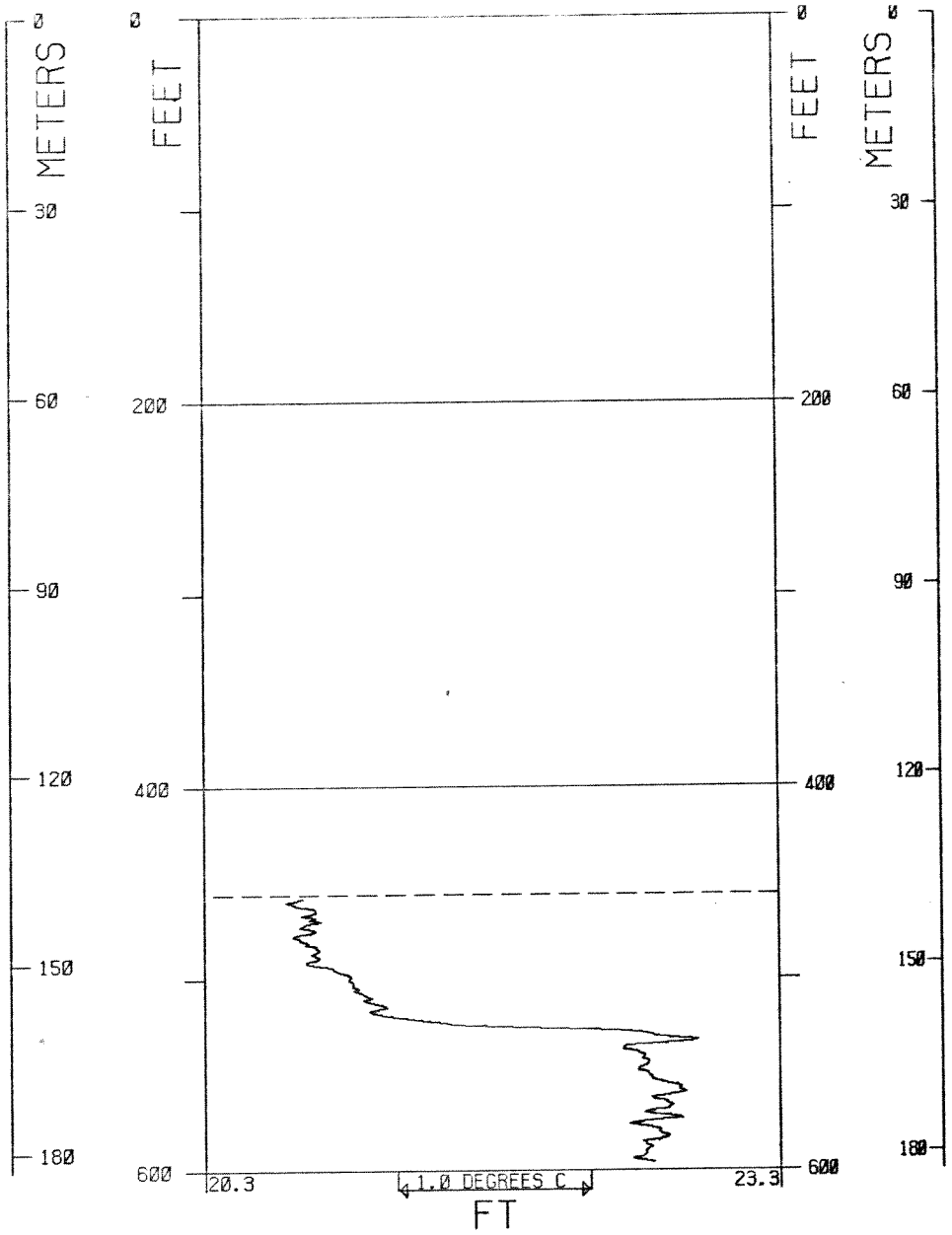
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/22/83 ISW

12N/36E-26H1


0
METERS
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60
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120
150
180
0
FEET
200
400
600
20.3
1.0 DEGREES C
23.3
FT
0
FEET
200
400
600
0
METERS
30
60
90
120
150
180

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	W. S. U. #6
DATE LOGGED	07/17/75
STATE	WASHINGTON
COUNTY	WHITMAN
LOCATION	14N/45E-04D1
SURFACE ELEVATION	2530
TOTAL DEPTH LOGGED	659
DEPTH TO WATER LEVEL	252

CASING & LINERS:

0- 395=16

THIRD LOGGING.

LEGEND

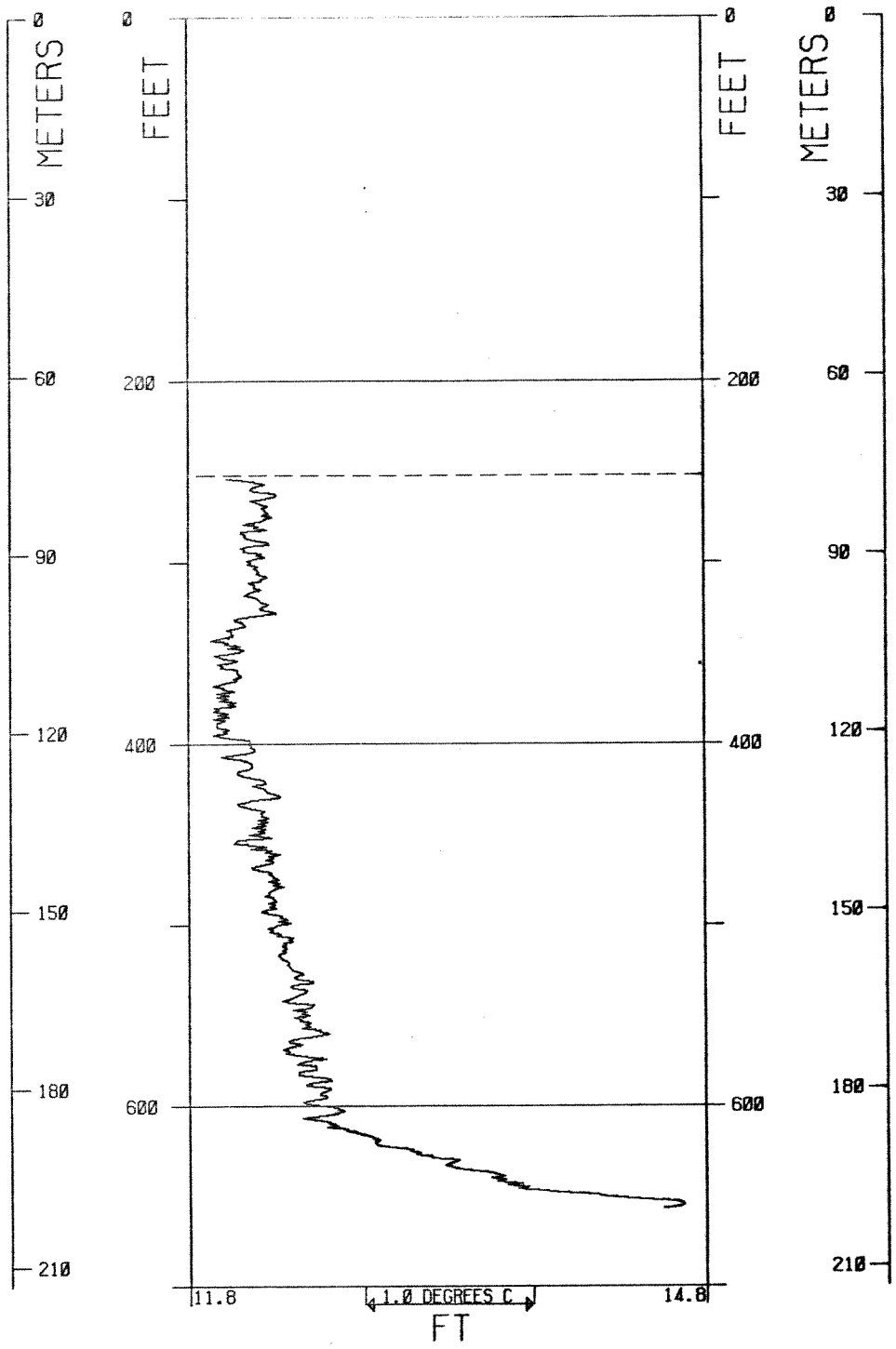
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW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METERS
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120
150
180
210
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FEET
200
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600
0
FEET
200
400
600
11.8
1.0 DEGREES C
14.8
FT
0
METERS
30
60
90
120
150
180
210

14N/45E-04D1

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	MERRILL CAMP
DATE LOGGED	09/27/72
STATE	WASHINGTON
COUNTY	WHITMAN
LOCATION	16N/39E-24Q1
SURFACE ELEVATION	1480
TOTAL DEPTH LOGGED	485
DEPTH TO WATER LEVEL	93

CASING & LINERS:
0- 80=12

LEGEND

LOG TITLES

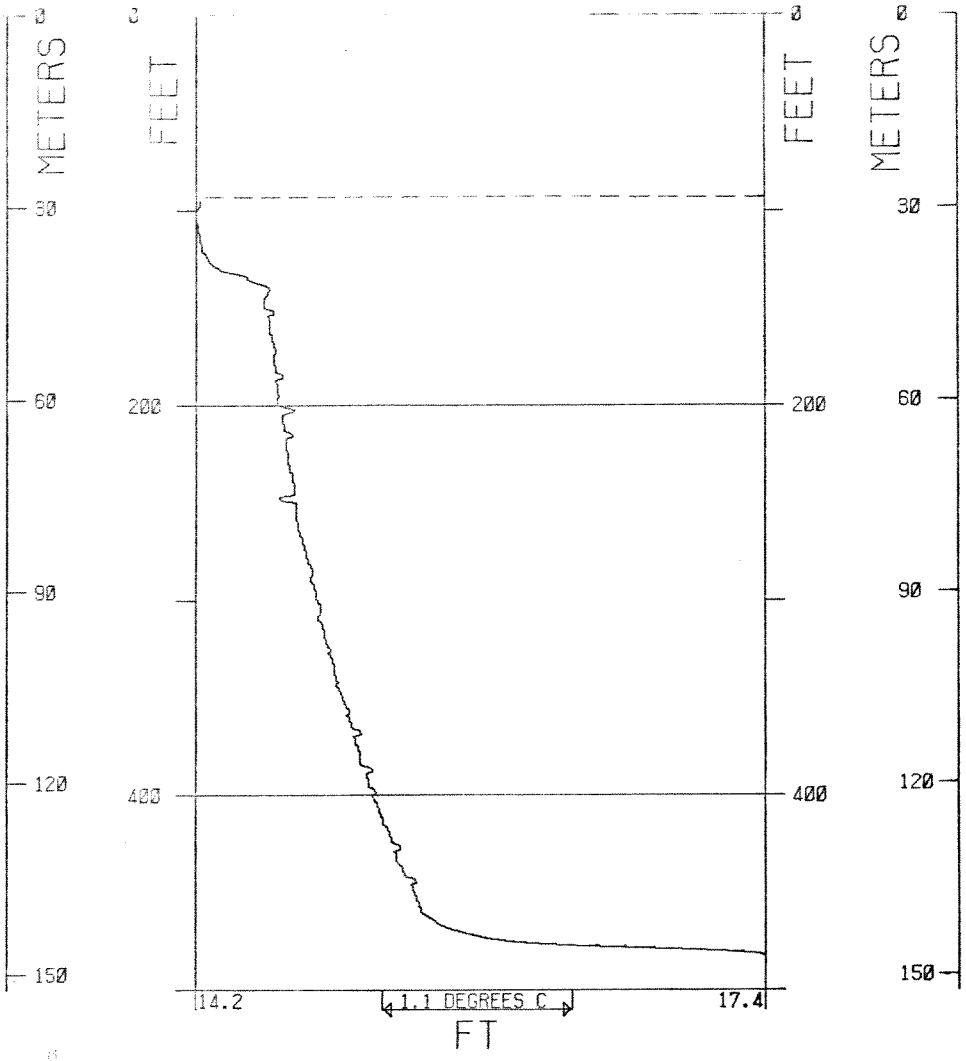
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW

16N/39E-24Q1


METERS
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FEET
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400
METERS
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30
60
90
120
150
14.2
1.1 DEGREES C
17.4
FT

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GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	DAN HARWOOD
DATE LOGGED	01/09/79
STATE	WASHINGTON
COUNTY	WHITMAN
LOCATION	18N/41E-06L1
SURFACE ELEVATION	1940
TOTAL DEPTH LOGGED	584
DEPTH TO WATER LEVEL	68

CASING & LINERS:

0- 114=16 257- 427=12

LEGEND

LOG TITLES

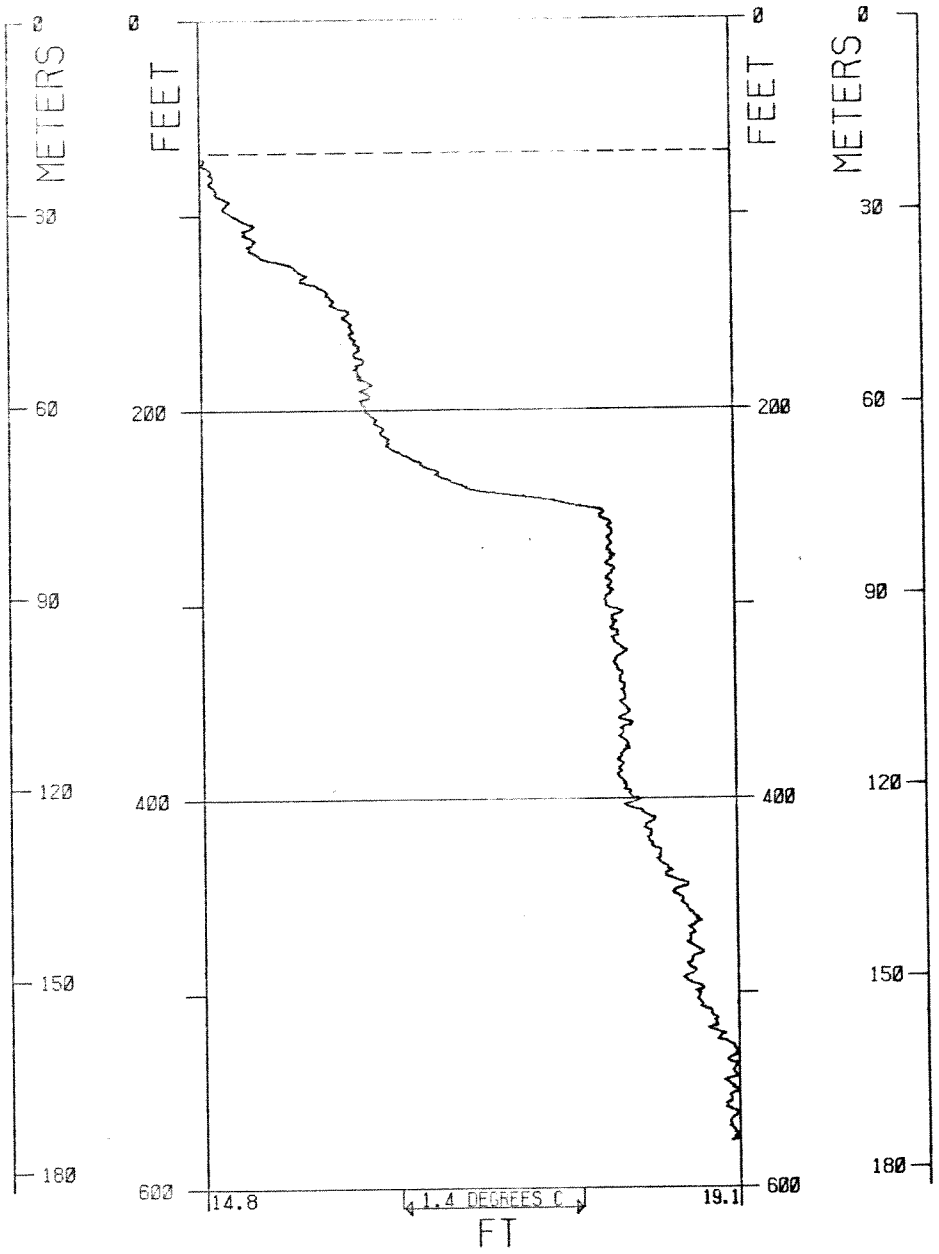
NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/20/83 ISW

18N/41E-06L1


METERS
0
30
60
90
120
150
180
FEET
0
200
400
600
14.8
1.4 DEGREES C
19.1
FT

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	TOWN OF OAKESDALE
DATE LOGGED	12/21/77
STATE	WASHINGTON
COUNTY	WHITMAN
LOCATION	19N/44E-22J1
SURFACE ELEVATION	2450
TOTAL DEPTH LOGGED	482
DEPTH TO WATER LEVEL	100

CASING & LINERS:

0- 20=14

LEGEND

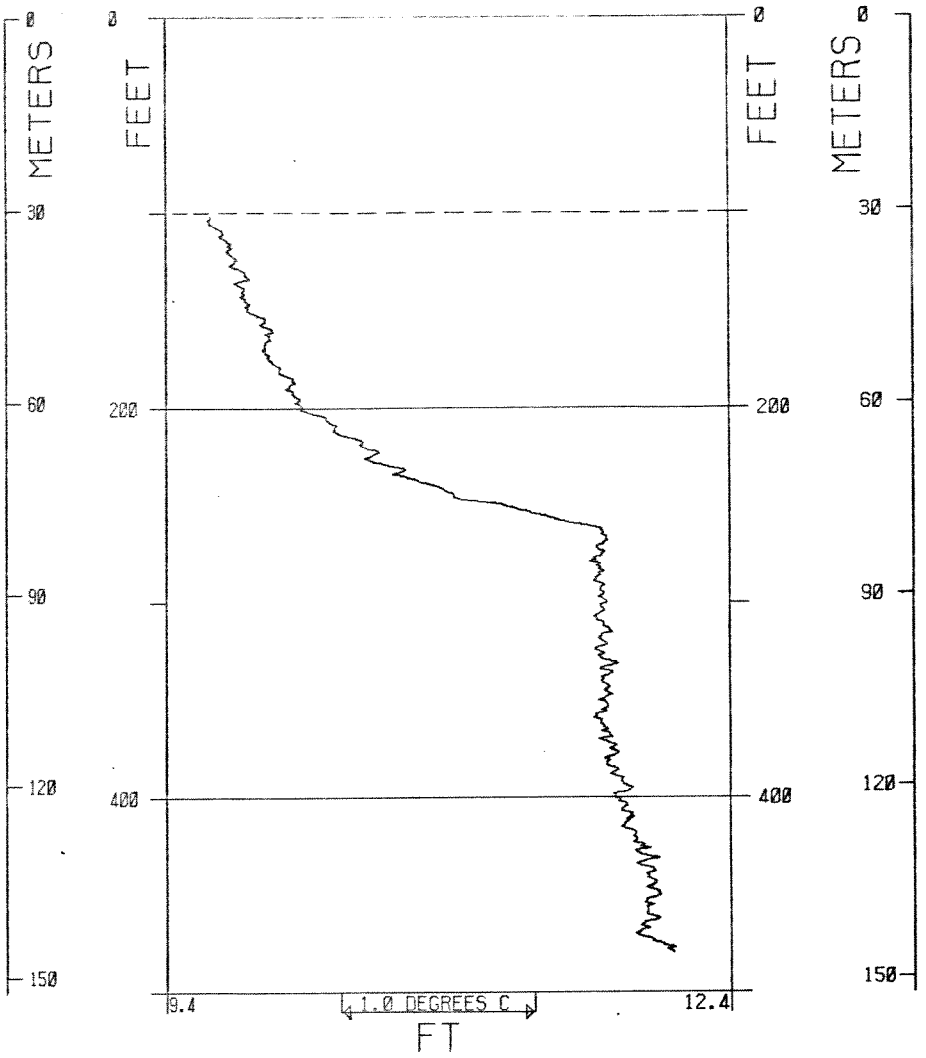
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER. + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES ——→
POROSITY (NN-LOG) INCREASES ←——
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW


0
METERS
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150
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FEET
200
400
9.4
1.0 DEGREES C
12.4
FT
0
FEET
200
400
0
METERS
30
60
90
120
150

19N/44E-22J1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BURL. N. LAMONT #1
DATE LOGGED	05/17/72
STATE	WASHINGTON
COUNTY	WHITMAN
LOCATION	20N/39E-28F1
SURFACE ELEVATION	1960
TOTAL DEPTH LOGGED	692
DEPTH TO WATER LEVEL	20

CASING & LINERS:

CASING UNKNOWN.

LEGEND

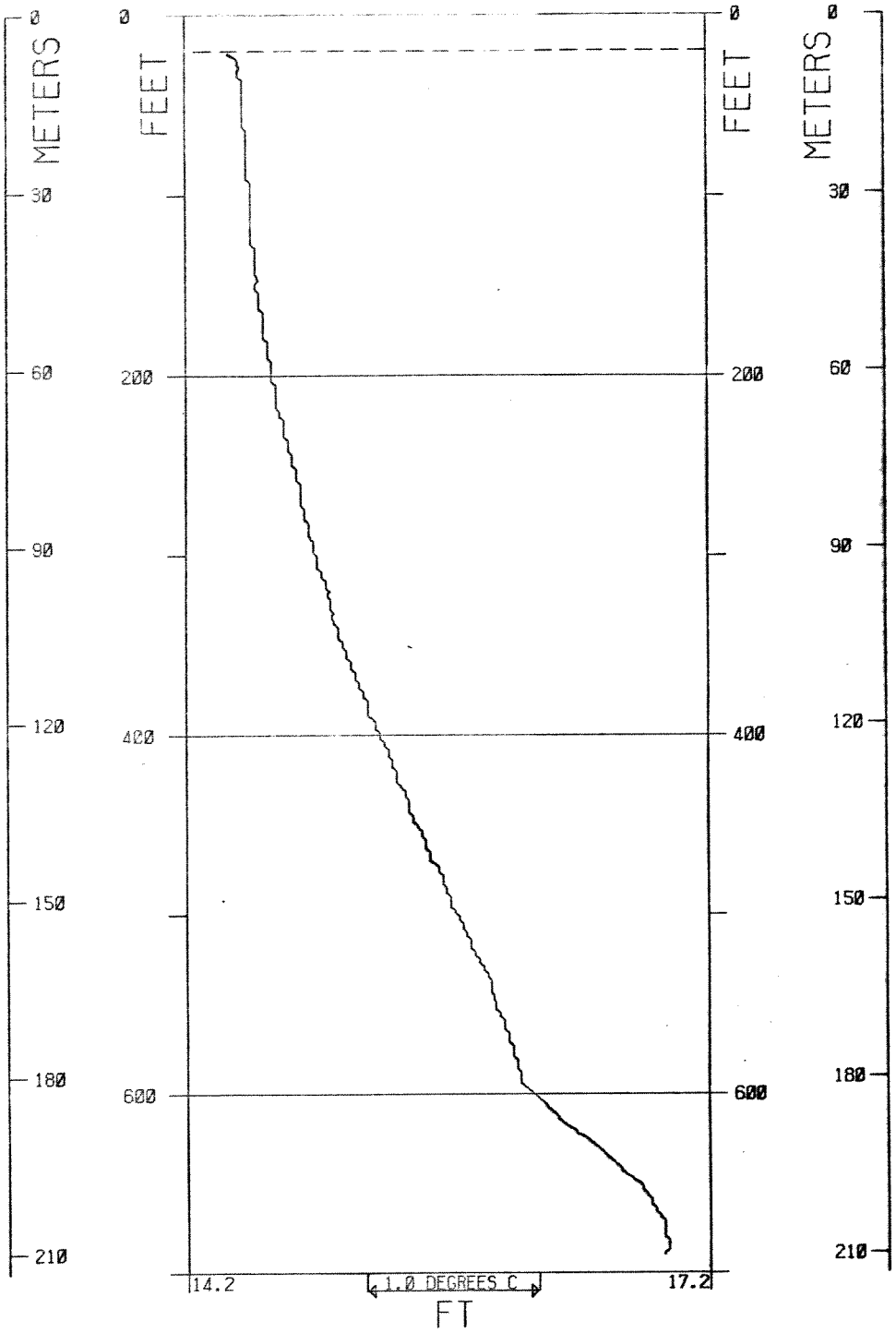
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/24/83 ISW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
200
400
600
14.2
1.0 DEGREES C
17.2
FT

20N/39E-26F1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BILL FLOWER
DATE LOGGED	Ø2/Ø7/73
STATE	WASHINGTON
COUNTY	YAKIMA
LOCATION	Ø8N/22E-11J1
SURFACE ELEVATION	758
TOTAL DEPTH LOGGED	538
DEPTH TO WATER LEVEL	9Ø

CASING & LINERS:

Ø- 139=16 Ø- 317=14

LEGEND

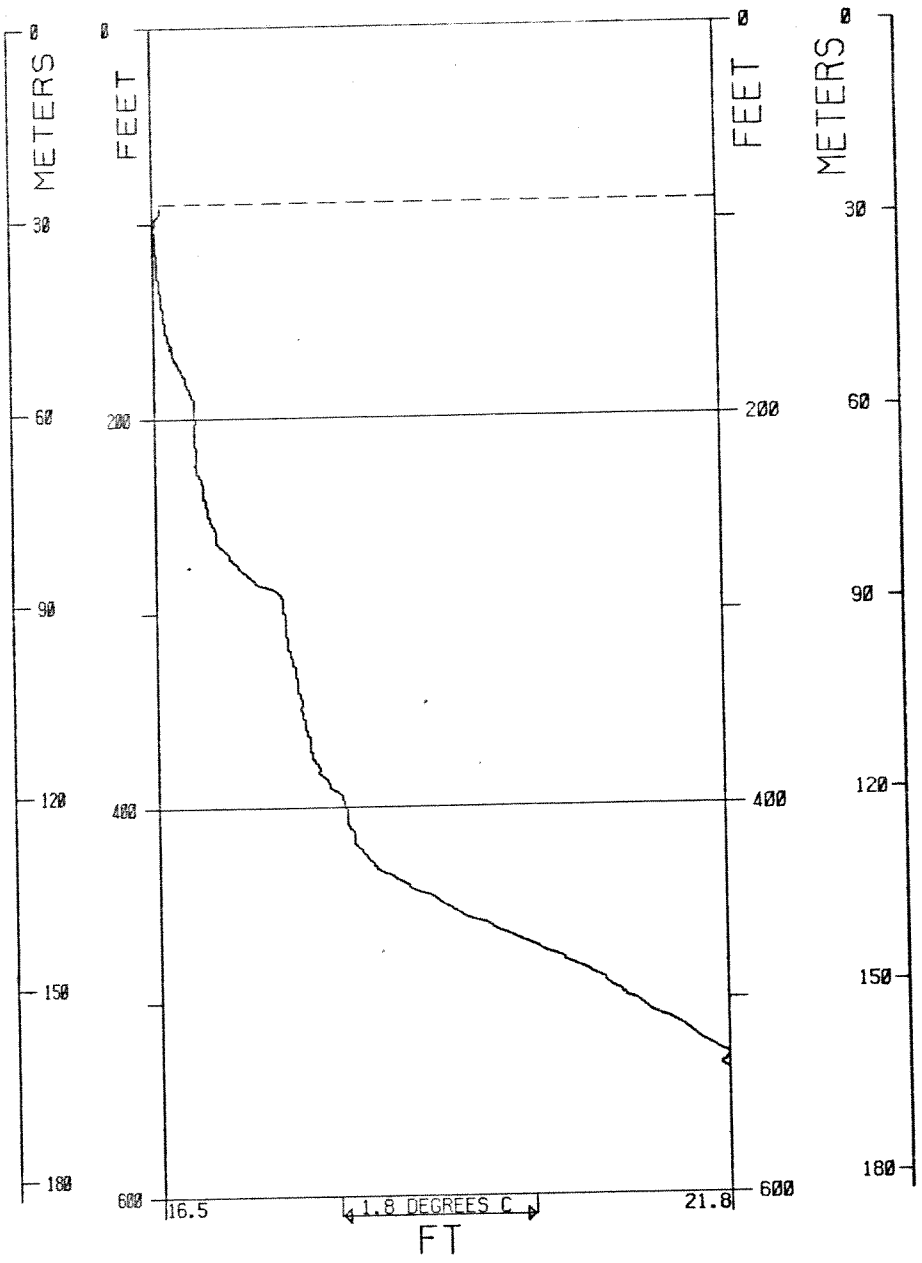
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

Ø6/21/83 ISW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
200
400
600
16.5
1.8 DEGREES C
21.8
FT

08N/22E-11J1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	BILL EVANS
DATE LOGGED	05/25/77
STATE	WASHINGTON
COUNTY	YAKIMA
LOCATION	10N/23E-36A1
SURFACE ELEVATION	1220
TOTAL DEPTH LOGGED	1315
DEPTH TO WATER LEVEL	563

CASING & LINERS:
0- 310=13 470- 578=10

LEGEND

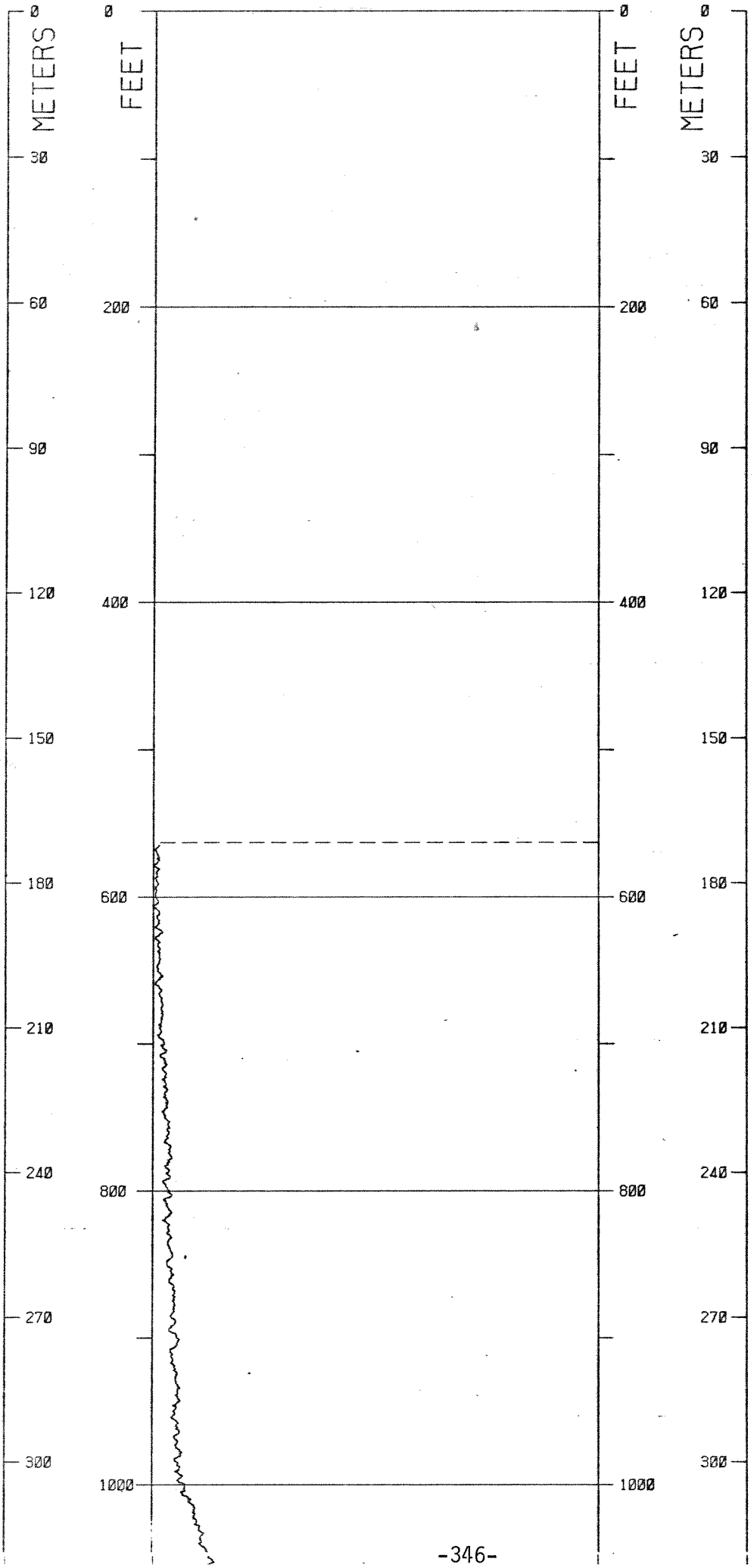
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

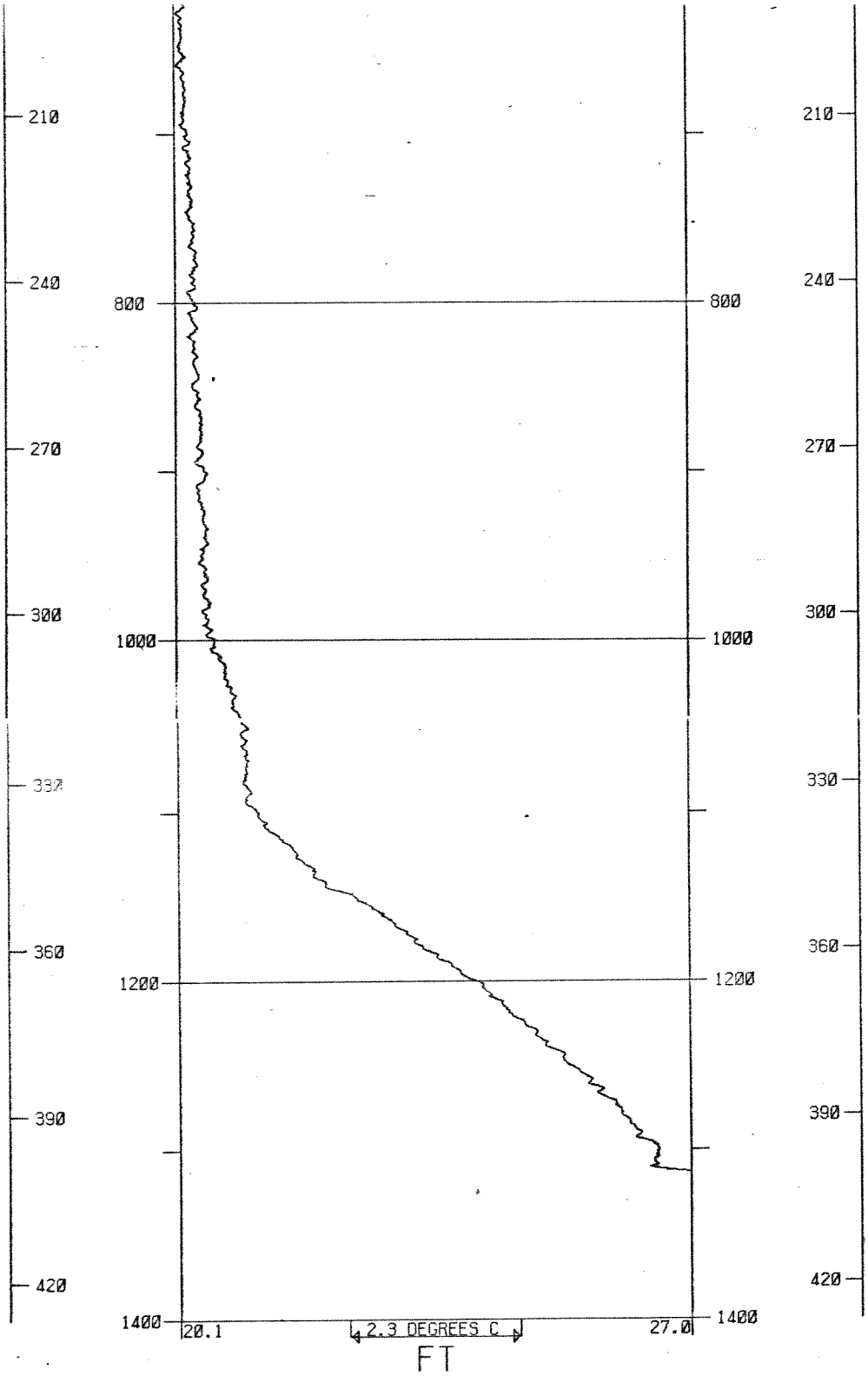
DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

08/04/83 SEW


METERS
0
30
60
90
120
150
180
210
240
270
300
FEET
0
200
400
600
800
1000
FEET
0
200
400
600
800
1000
METERS
0
30
60
90
120
150
180
210
240
270
300

10N/23E-36A1


210
240
270
300
330
360
390
420
800
1000
1200
1400
20.1
2.3 DEGREES C
27.0
FT

10N/23E-36A1

WASHINGTON STATE UNIVERSITY

COLLEGE OF ENGINEERING

GEOLOGICAL ENGINEERING SECTION
WELL LOG PROCESSING SYSTEM

NAME OF WELL	ZIRKLE,W
DATE LOGGED	07/11/77
STATE	WASHINGTON
COUNTY	YAKIMA
LOCATION	14N/18E-20G1
SURFACE ELEVATION	1620
TOTAL DEPTH LOGGED	1069
DEPTH TO WATER LEVEL	243

CASING & LINERS:
0- 730=12

GROUTED TO 730 FT.

LEGEND

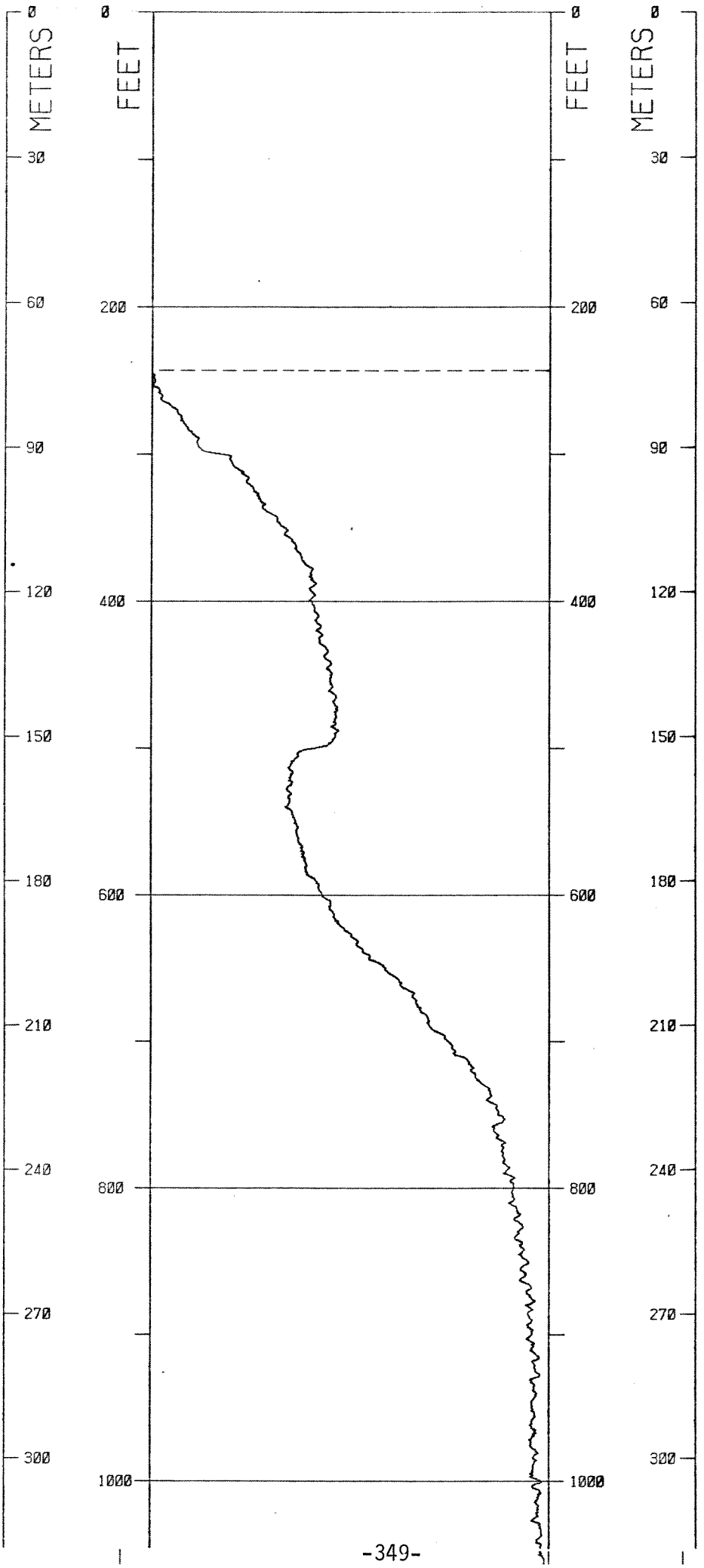
LOG TITLES

NATG - - NATURAL GAMMA
GG - - - GAMMA GAMMA
NN - - - NEUTRON NEUTRON
NG - - - NEUTRON GAMMA
FT - - - FLUID TEMPERATURE
FR - - - FLUID RESISTIVITY
CALP - - CALIPER
SP - - - SPONTANEOUS POTENTIAL
WRES - - WALL RESISTIVITY
FMTR - - FLOW METER, + = DOWN
SNIC - - SONIC
LN - - - LONG NORMAL
SN - - - SHORT NORMAL

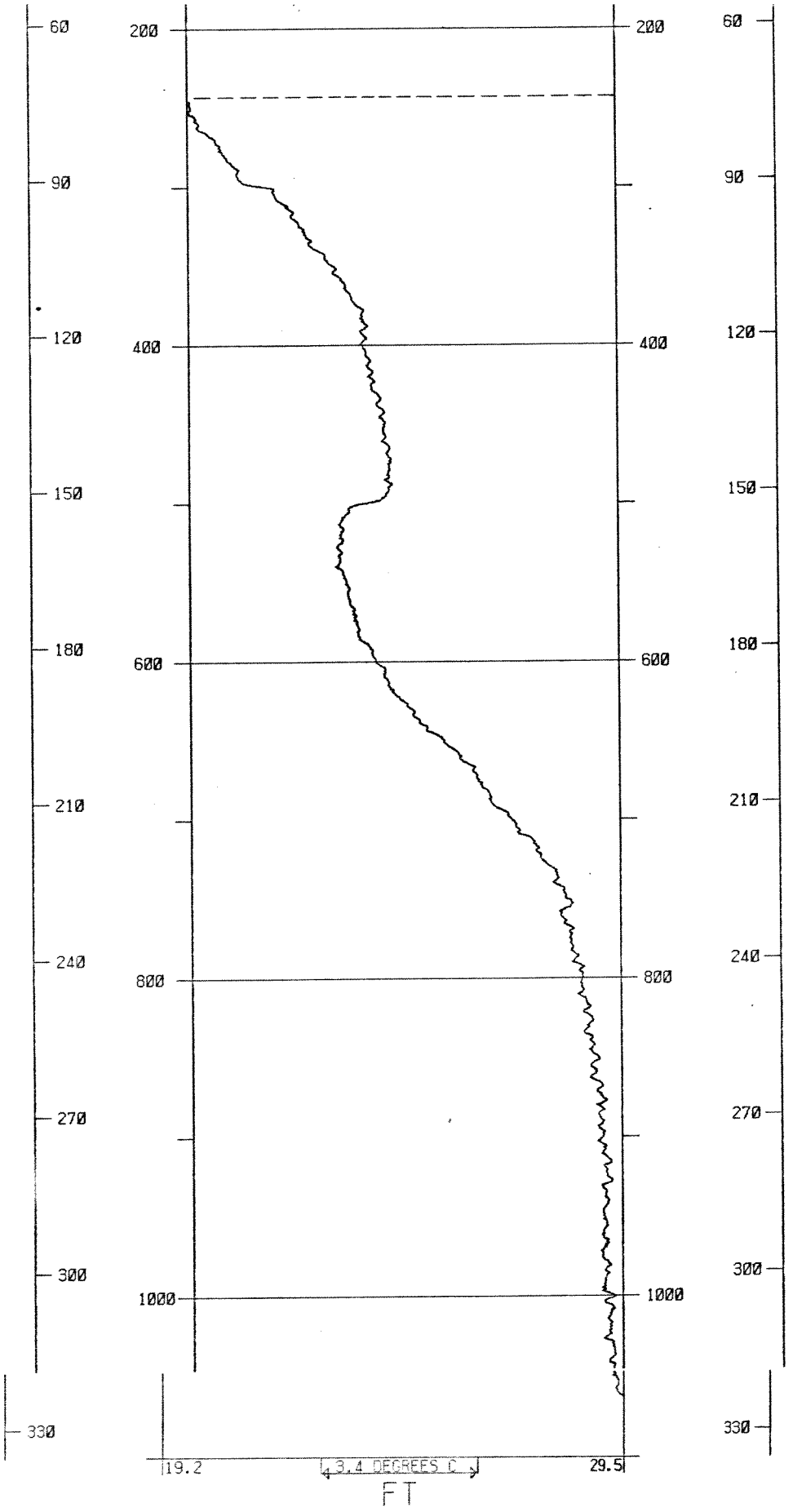
DENSITY (GG-LOG) INCREASES →
POROSITY (NN-LOG) INCREASES ←
WATER LEVEL - - - -

NOTE: SCALE MAY CHANGE ABOVE WATER LEVEL

06/20/83 ISW


METERS
FEET
FEET
METERS
0
30
60
90
120
150
180
210
240
270
300
200
400
600
800
1000

14N/18E-20G1


60
90
120
150
180
210
240
270
300
330
200
400
600
800
1000
19.2
3.4 DEGREES C
29.5
FT

14N/18E-20G1

References

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