Century 7880

QHR 88018 DEVIATION

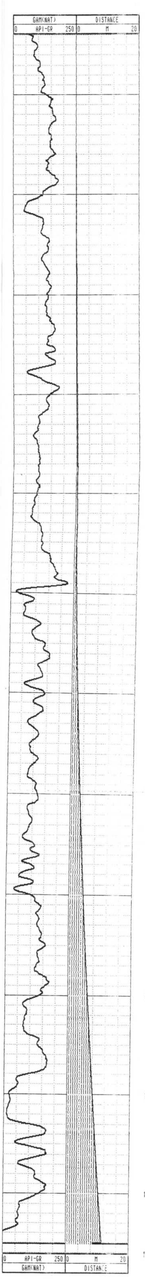
COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES	
WELL	: QHR 88018 DEVIATION	DEN-NEUT	
LOCATION/FIELD	:	DATA PAC.	
COUNTY	:	CAL-LOG	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

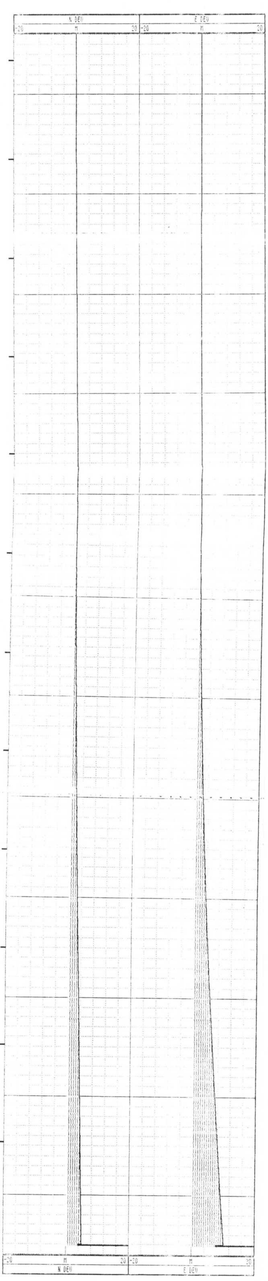
DATE	: 09/11/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 107 M	ELEV. PERM. DATUM: 0		KB	: 0
LOG BOTTOM	: 125.16	LOG MEASURED FROM: 0		DF	: 0
LOG TOP	: 5.90	DRL MEASURED FROM: 0		GL	: 0
CASING DRILLER	: M	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS: 0		RECORDED BY	: E.SVEDLUND		

BIT SIZE	: 15.6	DRILLING FLUID	: WATER	FLUID PROPERTIES	
MAGNETIC DECL.	: 24.500	PH	: 0	TYPE : WATER	
MATRIX DENSITY	: 2.68	PH TEMPERATURE	: 0	LOSS : 0	
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	FLUID : 0MM 6	
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 620	VISCOSITY 2500	

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS





COMPU-LOG II - VERTICAL DEVIATION

CLIENT	: QUINTETTE COAL LTD.	WELL ID.	: FREE-DRIFT DEV
FIELD/AREA	: CALGARY	DATE	: 09/11/88
DATA TAKEN	:	PROBE	: VOYAGER 46
MAG. DECL.	: 24.500	DEPTH UNIT	: FEET LOG 4

Delta Depth	True Depth	North Dev.	East Dev.	Dir	Accu	Rate	Dogleg	Severity
4.0	4.00	0.00	0.00	0	0		0.0	0.0
5.0	9.00	0.02	-0.01	-0.9	-0.5		0.3	331.9
14.0	13.00	0.04	-0.02	-0.7	-0.4		0.3	340.1
17.0	10.00	0.07	-0.04	-1.1	-0.7		0.7	315.2
24.0	24.00	0.11	-0.07	-1.1	-0.6		0.8	324.7
29.0	29.00	0.16	-0.10	-1.2	-0.7		0.5	328.6
34.6	34.00	0.19	-0.14	-1.2	-0.7		0.6	319.2
39.6	39.00	0.23	-0.17	-1.3	-0.8		0.9	340.7
44.0	44.00	0.31	-0.14	-0.5	-0.3		1.6	36.8
49.0	48.99	0.45	-0.00	0.4	0.0		2.7	48.3
54.0	53.98	0.63	0.22	1.2	0.7		3.2	59.7
59.0	58.98	0.81	0.40	1.6	1.0		4.1	57.9
64.0	63.96	1.03	0.80	1.8	1.2		5.5	56.7
69.0	68.93	1.31	1.22	1.8	1.2		6.3	56.9
74.0	73.90	1.63	1.72	1.8	1.2		6.9	56.7
79.0	78.86	1.98	2.26	1.8	1.2		7.7	58.8
84.0	83.81	2.33	2.85	1.8	1.2		7.8	60.4
89.0	88.78	2.69	3.59	1.8	1.2		8.9	63.9
94.0	93.68	3.03	4.29	1.8	1.2		9.8	66.9
99.0	98.61	3.36	5.07	1.8	1.2		10.4	68.0
104.0	103.52	3.68	5.91	1.8	1.2		11.1	73.1
109.0	108.42	3.98	6.68	1.8	1.2		11.4	72.7
114.0	113.32	4.28	7.45	1.8	1.2		12.1	72.4
119.0	118.20	4.60	8.20	1.8	1.2		12.8	73.7
124.0	123.06	4.91	9.06	1.8	1.2		14.0	75.0
125.2	124.28	4.97	9.26	1.8	1.2		0.0	0.0

#880

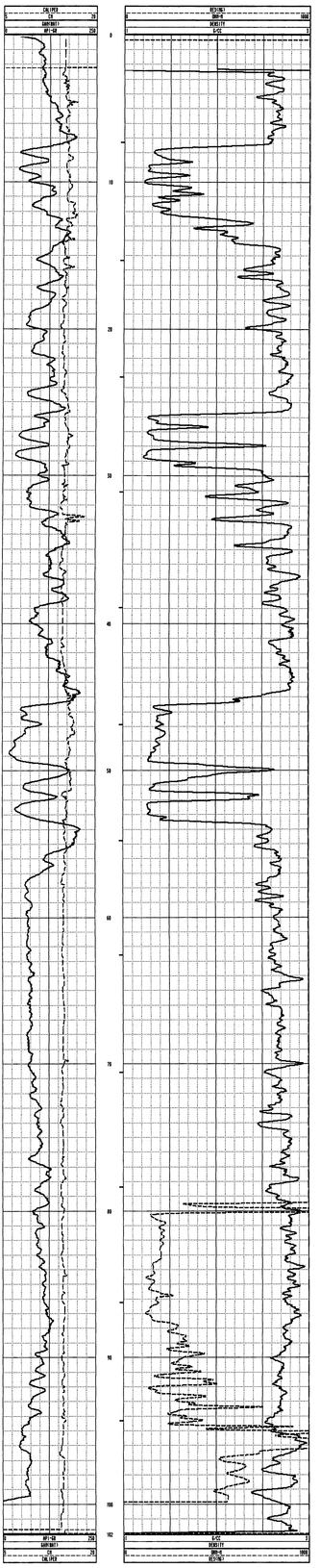
Century

GAMMA-RES-DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88019 GAMMA-DENSITY	DEN.NEUT	
LOCATION/FIELD	: BL 2045015L 2845 TRANSFER W	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP : RANGE :		
DATE	: 09/11/88 PERMANENT DATUM : 1375	ELEVATIONS	
DEPTH DRILLER	: 102.6 M ELEV. PERM. DATUM: 1375	KB : 1375	
LOG BOTTOM	: 102.04 LOG MEASURED FROM: 1375	DF : 1375	
LOG TOP	: 0.14 DRL MEASURED FROM: 1375	GL : 1375	
CASING DRILLER	: 7 LOGGING UNIT : 8401		
CASING TYPE	: STEEL FIELD OFFICE : CALGARY		
CASING THICKNESS: 0	RECORDED BY : E.SVEDLUND		
BIT SIZE	: 15.6 BOREHOLE FLUID : WATER	FILE : ORIGINAL	
MAGNETIC DECL.	: 24.500 PH : 0	TYPE : 9030AA	
MATRIX DENSITY	: 2.68 RM TEMPERATURE : 0	LOG : 7	
FLUID DENSITY	: 1.0 MATRIX DELTA T : 173	PLOT : TESTHOLE 1	
NEUTRON MATRIX	: SANDSTONE FLUID DELTA T : 650	THRESH: 2500	

REMARKS :
ANGLE HOLE AZIMUTH 37 INCLINATION 60
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 450

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/06/88	22:48:27	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/06/88	22:48:27	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/06/88	22:55:50	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/06/88	22:55:50	0	DENSITY	2230.000 CPS	2.120 G/CC
4	09/06/88	22:48:27	0	RESIS(N)	0.000 CPS	0.000 OHM-M
5	09/06/88	22:48:27	0	RESIS(N)	0.000 CPS	0.000 OHM-M
6	09/06/88	22:59:05	0	CALIPER	213.400 CPS	7.600 CM
7	09/06/88	22:59:05	0	CALIPER	1842.500 CPS	17.800 CM
8	09/06/88	22:48:27	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/06/88	22:48:27	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/06/88	22:48:27	0	CALIPER1	0.000 CPS	0.000 CM
11	09/06/88	22:48:27	0	CALIPER1	0.000 CPS	0.000 CM

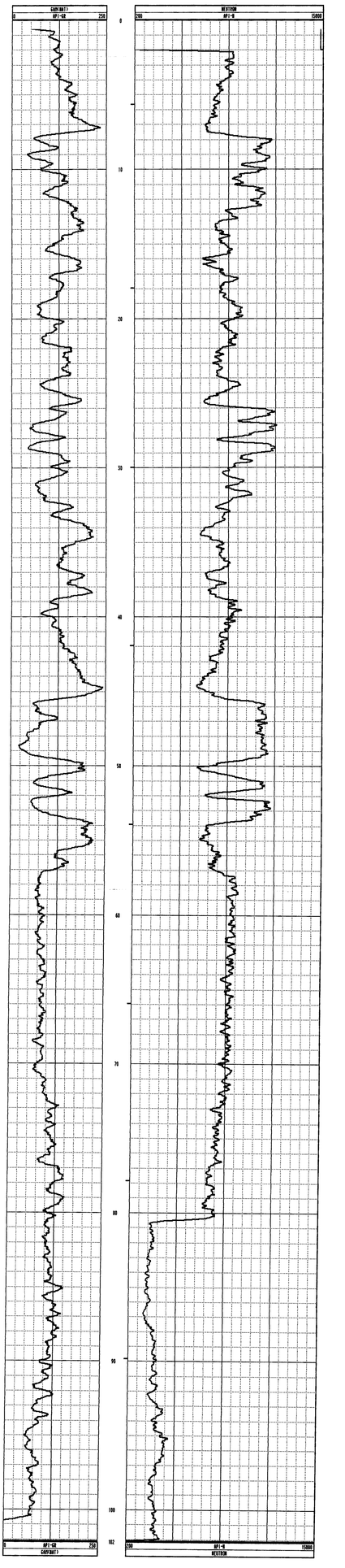
Century #888

GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88019 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	: BL 20450:SL 20450 TRANSFER W			GRH.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/11/88	PERMANENT DATUM	: 1375	ELEVATIONS	
DEPTH DRILLER	: 102.6 M	ELEV. PERM. DATUM:	1375	KB	: 1375
LOG BOTTOM	: 102.14	LOG MEASURED FROM:	1375	DF	: 1375
LOG TOP	: 0.60	DRL MEASURED FROM:	1375	GL	: 1375
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0	RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: TESTHOLE 1
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500

REMARKS :
ANGLE HOLE AZIMUTH 37 INCLINATION 60
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:28:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

Century

QHR 88020 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QHR 88020 GAMMA-DENSITY		
LOCATION/FIELD	: DL 20300:SL 28300 TRANSFER W		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

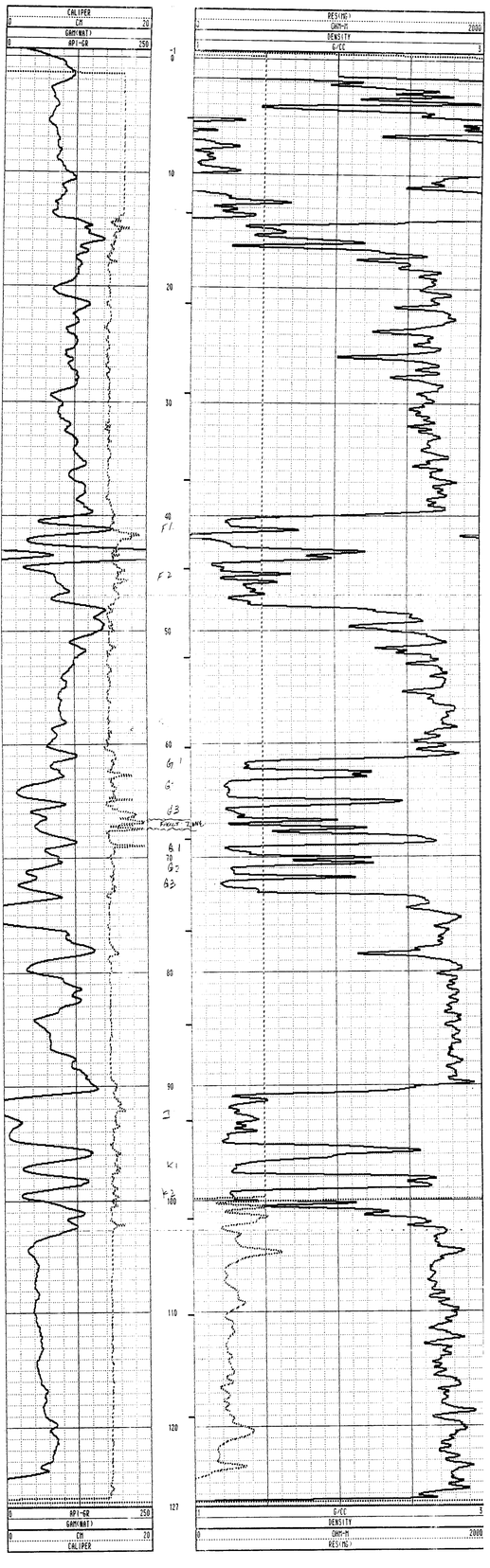
OTHER SERVICES:
DEN.NEUT
GMM.RES.
CAL.DEV

DATE	: 09/12/88	PERMANENT DATUM	: 1259	ELEVATIONS	
DEPTH DRILLER	: 127 M	ELEV. PERM. DATUM:	1250	KB	: 1250
LOG BOTTOM	: 126.70	LOG MEASURED FROM:	1250	DF	: 1250
LOG TOP	: -.60	DRL MEASURED FROM:	1250	GL	: 1250
CASING DRILLER	: 15	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0	RECORDED BY	: E.SWEDLUND		
BIT SIZE	: 10.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 450

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/06/88	22:48:27	0	GAMCNAT)	0.000 CPS	0.000 API-GR
1	09/06/88	22:48:27	0	GAMCNAT)	0.000 CPS	0.000 API-GR
2	09/06/88	22:55:50	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/06/88	22:55:50	0	DENSITY	2230.000 CPS	2.120 G/CC
4	09/06/88	22:48:27	0	RESCNAT)	0.000 CPS	0.000 OHM-M
5	09/06/88	22:48:27	0	RESCNAT)	0.000 CPS	0.000 OHM-M
6	09/06/88	22:59:05	0	CALIPER	213.400 CPS	7.600 CM
7	09/06/88	22:59:05	0	CALIPER	1842.500 CPS	17.800 CM
8	09/06/88	22:48:27	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/06/88	22:48:27	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/06/88	22:48:27	0	CALIPERL	0.000 CPS	0.000 CM
11	09/06/88	22:48:27	0	CALIPERL	0.000 CPS	0.000 CM

Century

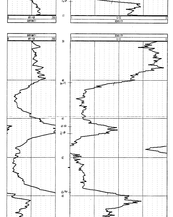
QUR 88020 GAMMA-DENSITY

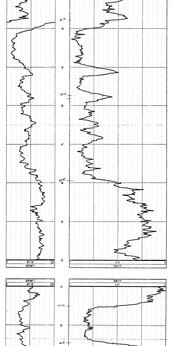
COMPANY	: ASCENSION ENGY.LTD.	OTHER SERVICES	
WELL	: QUR 88020 DEPTH:3881FT	RUN:ONE	
FIELD/LOCATION	: QUR 88020 DEPTH:3881FT	DATE:1988	
COUNTY	:		
STATE	: SECTION:SECTION		
SECTION	: TOWNSHIP	RANGE	
DATE	: 15/12/88	ELEVATIONS: DATUM : 1258	ELEV:1258
DEPTH DRILLER	: 3881 FT	ELEV:KB/RKB/ DERRICK FLOOR : 1258	GR : 1258
DEPTH LOGGER	: 3881 FT	ELEV:KB/RKB/ GROUND LEVEL : 1258	DF : 1258
CASE FROM	: 0 FT	ALL MEASURED FROM: KB	ALL : 1258
CASING DRILLER	: FT	CASING/MUD WT. : 0 LB/G	
CASING LOGGER	: 3881 FT	BIT SIZE : 8.5 INCHES	
CASING THICKNESS	:	DIAMETER: ST : 8.5INCHES	
M.D.T.D.D.	: FT.S	VISCOSITY FLUID : WATER	FILT : SECONDS
MAX.REC.TEMP.	: 0.000	PH : 0	FLUID LOSS :
SOURCE SAMPLE	: LB	RM TEMPERATURE : 0	LOG : 0.0
RM @ MEAS TEMP	: LB	RMF @ MEAS TEMP : 0.0	RMC @ MEAS : 0
RECEIVED PACKS	: 1HRSATTIME	FILTR: CCL/K : 448	THRESH: 2566
TIME	:		

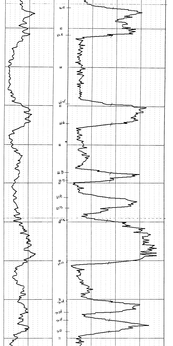
SAMPLE RULE WITH PIP'S INCLUDED/1:240.00

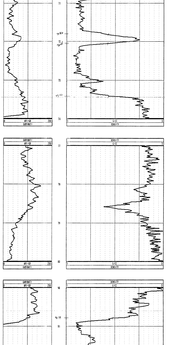
ALL SERVICES PERFORMED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

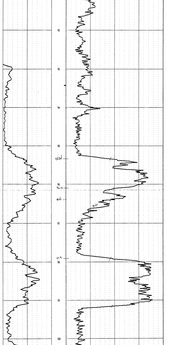
#880

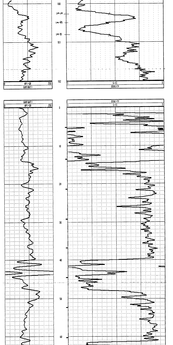


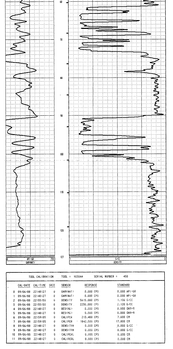












SEQ. NO.	DEPTH	CODE	FEATURE	COMMENTS
1.	09/06/88 22:00:57	1	3889.5FT	0.000 API-GR
2.	09/06/88 22:00:52	1	3888.5FT	0.000 API-GR
3.	09/06/88 22:00:47	1	3887.5FT	0.000 API-GR
4.	09/06/88 22:00:42	1	3886.5FT	0.000 API-GR
5.	09/06/88 22:00:37	1	3885.5FT	0.000 API-GR
6.	09/06/88 22:00:32	1	3884.5FT	0.000 API-GR
7.	09/06/88 22:00:27	1	3883.5FT	0.000 API-GR
8.	09/06/88 22:00:22	1	3882.5FT	0.000 API-GR
9.	09/06/88 22:00:17	1	3881.5FT	0.000 API-GR
10.	09/06/88 22:00:12	1	3880.5FT	0.000 API-GR
11.	09/06/88 22:00:07	1	3879.5FT	0.000 API-GR

TOOL ID/ORIGIN : TOOL : 92044 SERIAL NUMBER # : 459

#880

CGC

Century #880

QHR 88020 DEVIATION

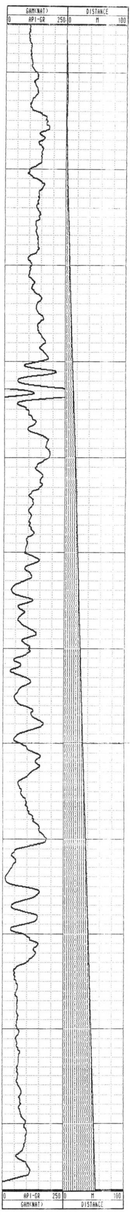
COMPANY	: QUINTETTE COAL LTD.		OTHER SERVICES: DEN./NEUT GAM./RES. CAL./DEV.
WELL	: QHR 88020 DEVIATION		
LOCATION/FIELD	: 6L 2050.0SL 1550 TRANSFER W		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

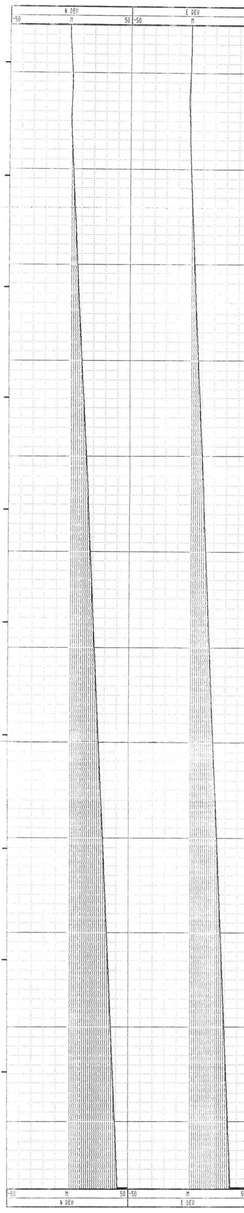
DATE	: 09/12/88	PERMANENT DATUM	: 1259	ELEVATIONS	
DEPTH DRILLER	: 127 M	ELEV. PERM. DATUM:	1250	KB	: 1259
LOG BOTTOM	: 127.38	LOG MEASURED FROM:	1250	DF	: 1250
LOG TOP	: 4.86	DRL MEASURED FROM:	1250	GL	: 1250
CASING DRILLER	: 15	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	9	RECORDED BY	: E.SWEDLUND		

BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	PH	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	MF TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0WIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS





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Century #880

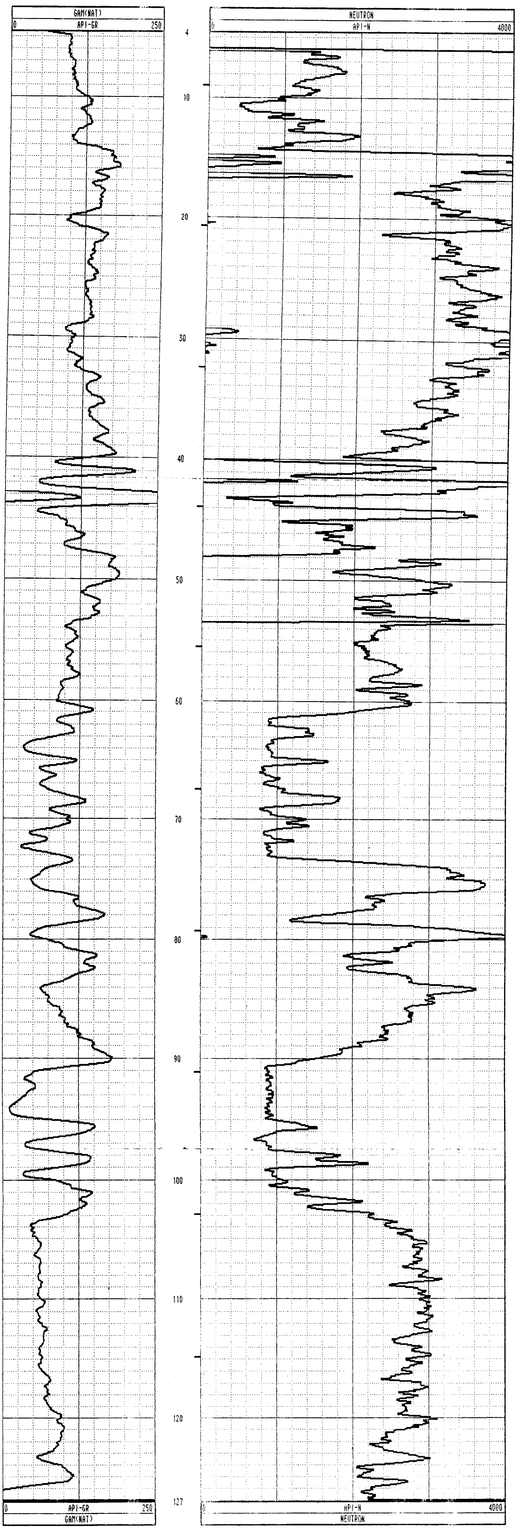
QHR 88020 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88020 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	: AT 20300'SL 28300 TRANSFER W			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE :	
DATE	: 09/12/88	PERMANENT DATUM	: 1259	ELEVATIONS	
DEPTH DRILLER	: 127 M	ELEV. PERM. DATUM:	1250	KB :	1250
LOG BOTTOM	: 127.38	LOG MEASURED FROM:	1250	DF :	1250
LOG TOP	: 4.66	DRL MEASURED FROM:	1250	GL :	1250
CASING DRILLER	: 15	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0	RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	PH	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.66	PIT TEMPERATURE	: 0	LOG	: 7
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	250u
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#8 0



TOOL CALIBRATION		TOOL	9055A	SERIAL NUMBER :	46	
	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAMMART	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAMMART	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

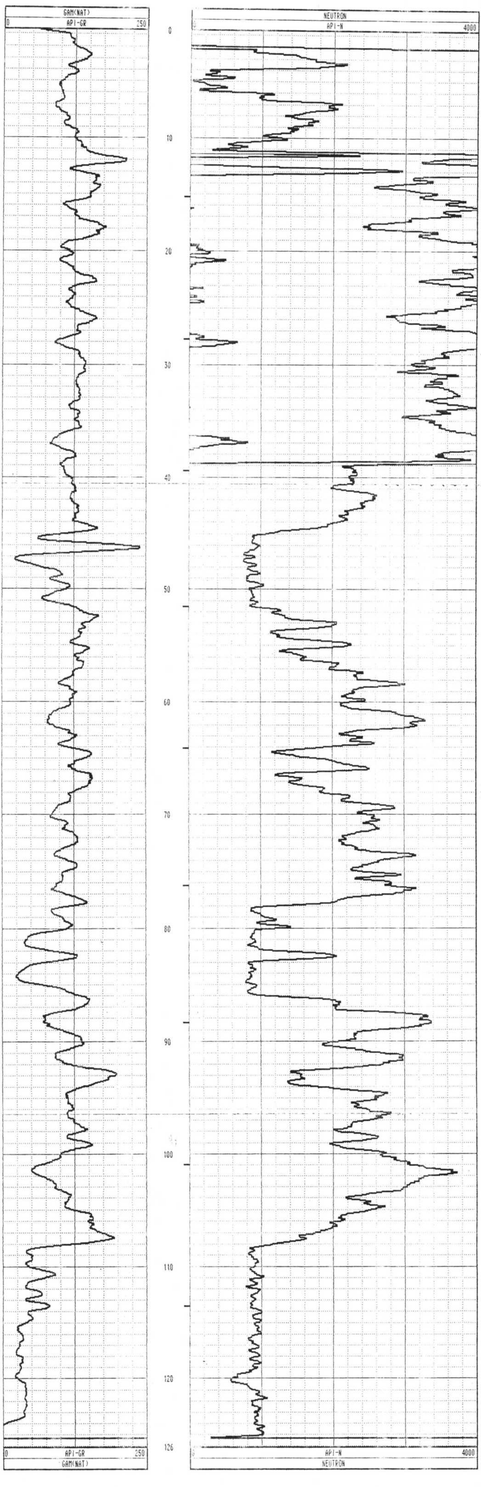
QHR 88021 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QHR 88021 GAMMA-NEUTRON		
LOCATION/FIELD	: BL 20300:SL 28300 TRANSFER H		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP	:
		RANGE	:

OTHER SERVICES:
GEN.GAMMA
GAMMA-NEUTRON
FAC.GAMMA

DATE	: 09/13/88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 163 M	ELEV. PERM. DATUM	: 1250	KB	: 1250
LOG BOTTOM	: 125.38	LOG MEASURED FROM	: 1250	DF	: 1250
LOG TOP	: 0.72	DRL MEASURED FROM	: 1250	GL	: 1250
CASING DRILLER	: 11	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SHEPLAND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 175	PLOT	: 0010 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500
REMARKS	:				
VERTICAL HOLE					

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL : 9055A SERIAL NUMBER : 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:16	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

088#

#880

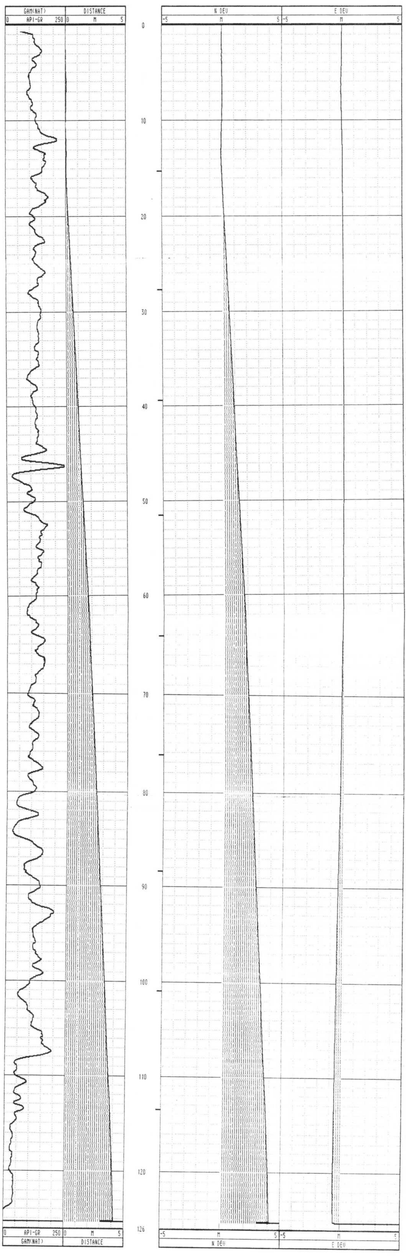
Century

QHR 88021 DEVIATION

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88021 DEVIATION			DEN.NEUT	
LOCATION/FIELD	: BL 2030015L 28500 TRANSFER W			GMM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	: TOWNSHIP		:	RANGE :	
DATE	: 09-17-88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 163 M	ELEV. PERM. DATUM:	1250	KB	: 1250
LOG BOTTOM	: 125.58	LOG MEASURED FROM:	1250	DF	: 1250
LOG TOP	: 0.72	DRL MEASURED FROM:	1250	GL	: 1250
CASING DRILLER	: 11	LOGGING UNIT	: 0401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS: 0		RECORDED BY	: E.SWEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 183	FLUI	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRSH1	2500
REMARKS	:				
VERTICAL HOLE					

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



* * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88021 GAM
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/17/88
DATA FROM	:	PROBE	: 9055A , SN 46
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 3

Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGD
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
5.0	5.00	0.03	.03	0.0	311.6	0.2	310.1
10.0	9.99	0.02	0.00	0.0	7.5	0.3	261.4
15.0	14.99	-.01	0.05	0.1	100.2	1.9	15.0
20.0	19.98	0.19	0.08	0.2	22.9	2.4	4.6
25.0	24.98	0.38	0.08	0.4	12.3	2.2	5.8
30.0	29.98	0.58	0.09	0.6	8.6	2.2	354.4
35.0	34.97	0.77	0.09	0.8	6.9	2.2	356.7
40.0	39.97	0.95	0.10	1.0	5.9	2.2	355.8
45.0	44.97	1.13	0.08	1.1	3.9	2.3	350.8
50.0	49.96	1.33	0.05	1.3	2.0	2.3	347.9
55.0	54.96	1.54	0.01	1.5	0.5	2.3	344.4
60.0	59.96	1.72	-.02	1.7	359.1	1.3	326.1
65.0	64.95	1.90	-.09	1.9	357.2	2.0	339.4
70.0	69.95	2.09	-.13	2.1	356.4	1.7	354.6
75.0	74.94	2.27	-.19	2.3	355.2	2.1	343.7
80.0	79.94	2.43	-.25	2.4	354.1	2.3	330.8
85.0	84.94	2.62	-.34	2.6	353.2	2.2	331.2
90.0	89.93	2.81	-.37	2.8	352.4	2.3	345.9
95.0	94.93	3.00	-.43	3.0	351.9	2.5	357.5
100.0	99.93	3.20	-.48	3.2	351.1	2.5	340.3
105.0	104.92	3.36	-.52	3.4	351.2	2.2	345.1
110.0	109.92	3.57	-.55	3.6	351.2	2.6	338.1
115.0	114.91	3.77	-.59	3.8	351.1	2.0	356.3
120.0	119.91	3.94	-.62	4.0	351.1	1.9	5.2
125.0	124.91	4.09	-.58	4.1	352.0	1.7	27.0
125.4	125.29	4.10	-.57	4.1	352.0	0.0	0.0

#880

163.12

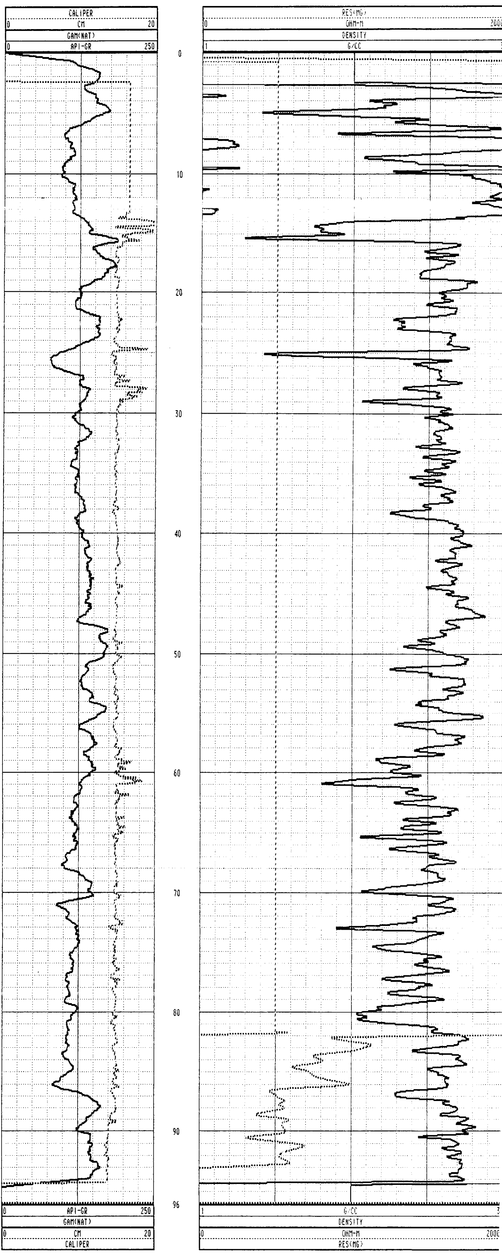
Century

QHR 88022 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88022 GAMMA-DENSITY	DEN.NEU.	
LOCATION/FIELD	: BL 20300:SL 28300 TRANSFER W	GAM.RES.	
COUNTY	:	CAL.DEN	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/12/88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 95.5	ELEV. PERM. DATUM: 1250	KB	: 1250
LOG BOTTOM	: 96.00	LOG MEASURED FROM: 1250	DF	: 1250
LOG TOP	: 0.00	DRL MEASURED FROM: 1250	GL	: 1250
CASING DRILLER	: 14	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS: 0		RECORDED BY	: E.SUTCLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 4
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 001N 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH: 2500	
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAMMAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAMMAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

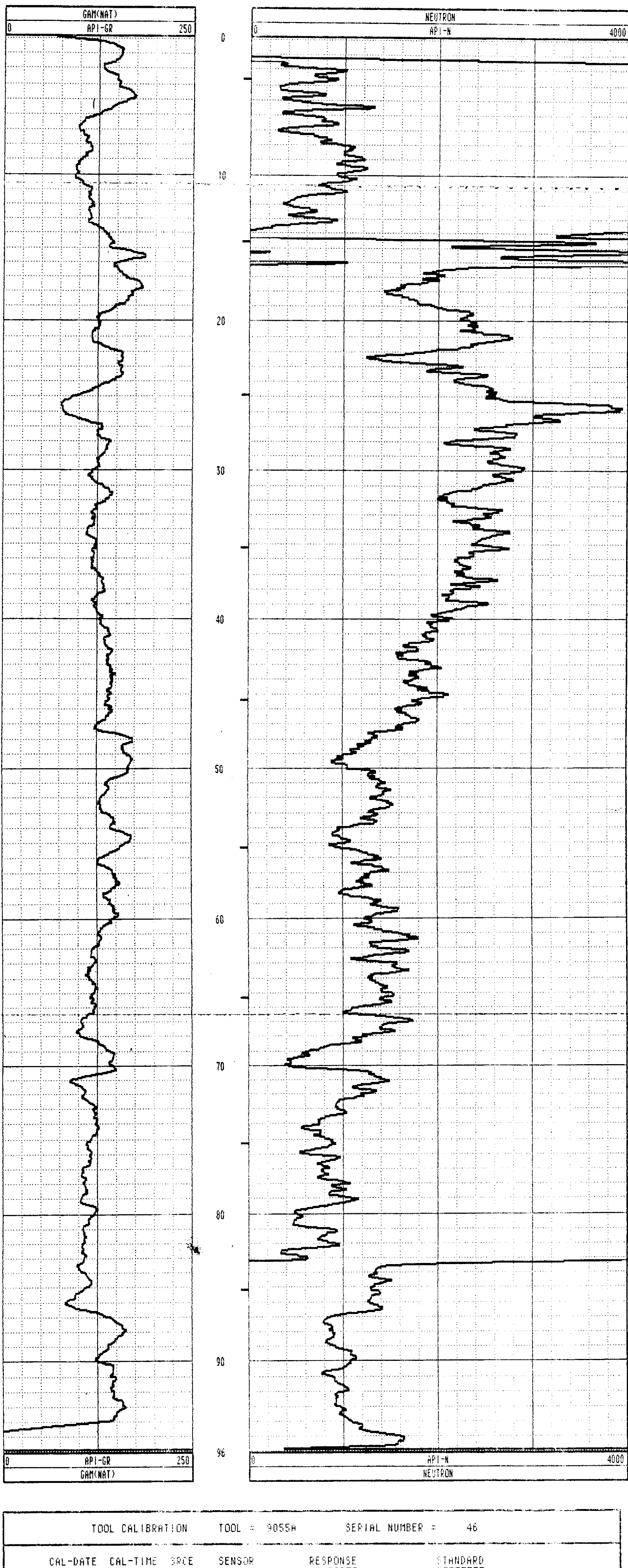
Century

QHR 88022 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88022 GAMMA-NEUTRON			DEN,NEUT	
LOCATION/FIELD	: BL 20300:SL 28300 TRANSFER W			GAM,RES,	
COUNTY	:			CAL,DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/14/88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 95.5	ELEV. PERM. DATUM	: 1250	KB	: 1250
LOG BOTTOM	: 95.92	LOG MEASURED FROM	: 1250	DF	: 1250
LOG TOP	: 0.96	DRL MEASURED FROM	: 1250	GL	: 1250
CASING DRILLER	: 14	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SUEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: MAIN
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0010 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#0[illegible]

Century

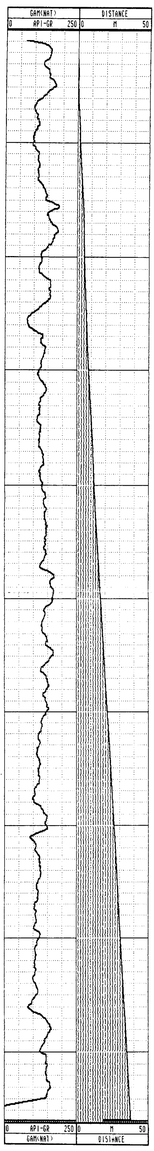
QHR 88022 DEVIATION

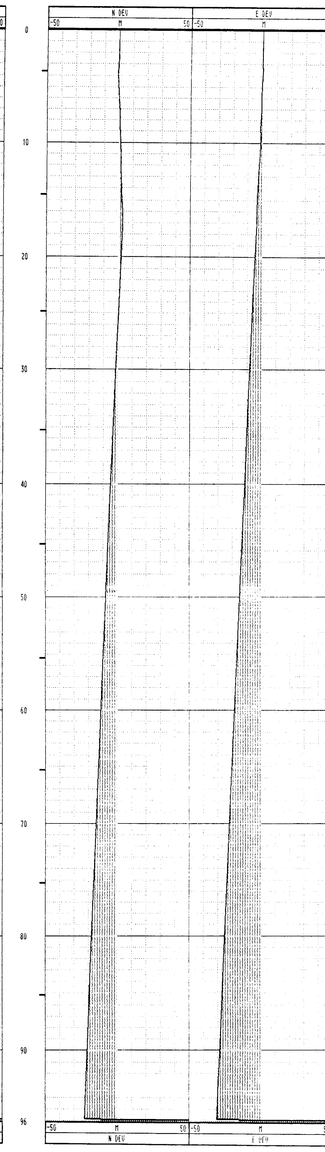
COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88022 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: BL 20300:SL 28300 TRANSFER W	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 09/17/88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 95.5	ELEV. PERM. DATUM	: 1250	KB	: 1250
LOG BOTTOM	: 95.92	LOG MEASURED FROM	: 1250	DF	: 1250
LOG TOP	: 0.96	DRL MEASURED FROM	: 1250	GL	: 1250
CASING DRILLER	: 14	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 6
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS





* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88022
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/17/88
DATA FROM	:	PROBE	: 9055A . 46
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 6

Sble Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
5.0	4.63	-.24	-.31	0.4	232.1	32.5	312.0
10.0	8.87	1.29	-1.28	1.8	315.3	33.1	180.1
15.0	13.11	2.52	-3.24	4.1	307.9	32.2	338.2
20.0	17.38	2.26	-4.59	5.1	296.3	30.9	226.9
25.0	21.68	0.53	-6.44	6.5	274.7	32.2	201.7
30.0	25.97	-1.25	-8.05	8.1	261.1	30.9	227.7
35.0	30.27	-3.02	-9.87	10.3	256.6	29.8	234.8
40.0	34.58	-4.69	-11.23	12.2	247.3	29.3	176.1
45.0	38.90	-6.32	-12.99	14.4	244.1	29.7	234.2
50.0	43.24	-7.98	-14.81	16.8	241.7	29.7	226.1
55.0	47.60	-9.71	-16.51	19.2	239.5	30.0	222.6
60.0	51.95	-11.28	-18.32	21.5	238.4	29.1	228.6
65.0	56.33	-12.91	-20.11	23.9	237.3	28.5	225.8
70.0	60.71	-14.54	-21.81	26.2	236.3	28.7	232.7
75.0	65.12	-16.12	-23.46	28.5	235.5	27.9	237.9
80.0	69.54	-17.69	-25.05	30.6	234.8	27.8	229.3
85.0	73.96	-19.24	-26.75	32.9	234.3	27.5	233.2
90.0	78.40	-20.73	-28.47	35.2	233.9	27.9	225.9
95.0	82.82	-22.23	-30.22	37.5	233.7	28.0	230.8
95.9	83.64	-22.51	-30.50	37.9	233.6	0.0	0.0

088#

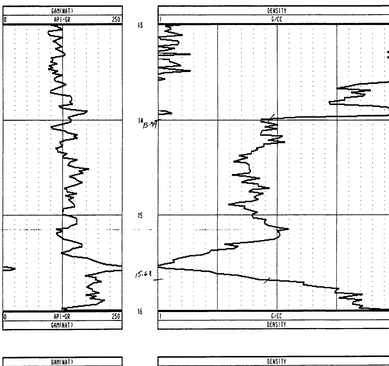
CGC #880 Century

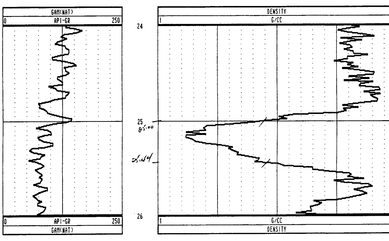
QHR 88022 GAMMA-DENSITY

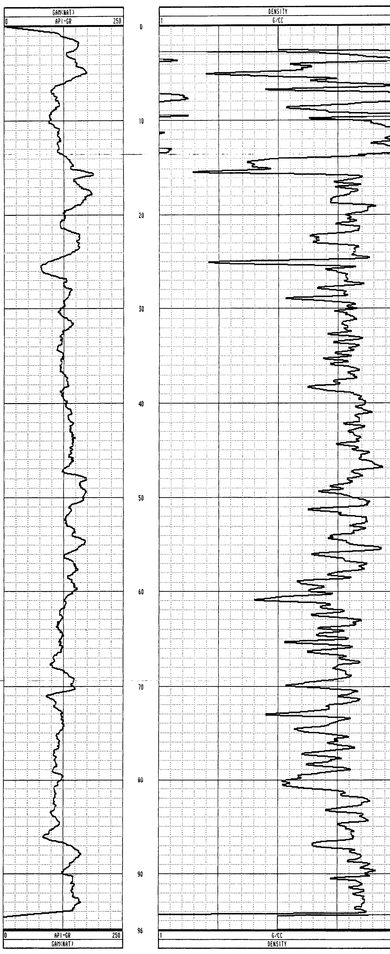
COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88022 GAMMA-DENSITY			DEN,NEUT	
LOCATION/FIELD	: BL 2030-1SL 2830 TRANSFER W			GAM,RES.	
COUNTY	:			CAL,DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/17/88	PERMANENT DATUM	: 1250	ELEVATIONS	
DEPTH DRILLER	: 95.5	ELEV. PERM. DATUM:	1250	KB	: 1250
LOG BOTTOM	: 96.00	LOG MEASURED FROM:	1250	DF	: 1250
LOG TOP	: 0.00	DRL MEASURED FROM:	1250	GL	: 1250
CASING DRILLER	: 14	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS: 0		RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 4
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN S
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500
REMARKS	:				

ANGLE HOLE AZIMUTH 37 INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS







TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:28:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

Century

GAMMA RAY/ SONIC/ DENSITY

公司 COMPANY:		测井日期 LOGGING DATE:	
井号 WELL:		钻井液类型 MUD TYPE:	
区块 FIELD:		钻井液密度 MUD DENSITY:	
县 COUNTY:		钻井液粘度 MUD VISCOSITY:	
省 STATE:		钻井液失水 MUD PH:	
其他服务 OTHER SERVICES:		最大井温 MAX REC. TEMP:	
位置 LOCATION:		设备编号 EQUIP. NO.:	
记录人 RECORDED BY:		基地 BASE:	
见证人 WITNESSED BY:			

钻头 BIT:	从 FROM:	至 TO:	钻头 BIT:	从 FROM:	至 TO:
钻头 BIT:	从 FROM:	至 TO:	钻头 BIT:	从 FROM:	至 TO:
套管 CASING:	从 FROM:	至 TO:	套管 CASING:	从 FROM:	至 TO:
套管 CASING:	从 FROM:	至 TO:	套管 CASING:	从 FROM:	至 TO:
套管 CASING:	从 FROM:	至 TO:	套管 CASING:	从 FROM:	至 TO:
套管 CASING:	从 FROM:	至 TO:	套管 CASING:	从 FROM:	至 TO:

测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:		
测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:		
测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:		
测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:		
测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:		
测井深度 LOGGED DEPTH:			测井深度 LOGGED DEPTH:	

#880

Century

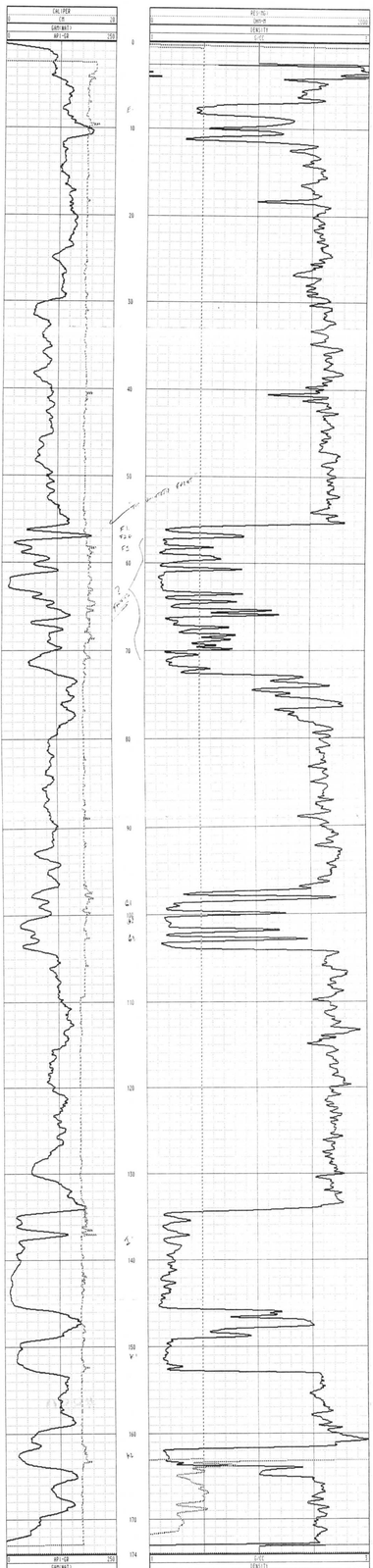
QHR 88023 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QHR 88023 GAMMA-DENSITY		
LOCATION/FIELD	:		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

DATE	: 09/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 171 M	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 174.00	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.00	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 0	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0010 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2000
REMARKS	:				
VERTICAL HOLE					
LOGGED OPEN HOLE					

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

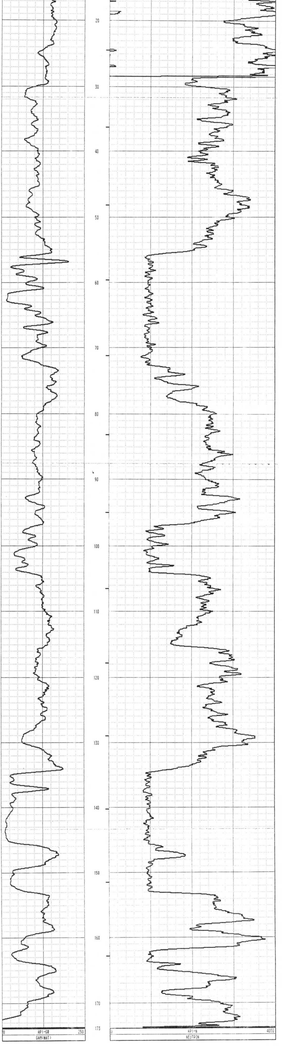
QHR 88023 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.		OTHER SERVICES:
WELL	: QHR 88023 GAMMA-NEUTRON		DEN.NEUT
LOCATION/FIELD	:		GAM.RES.
COUNTY	:		CAL.DEV
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 09/15/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 171 M	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 173.78	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 0.66	SPL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 0	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : E.SHEDLUND	

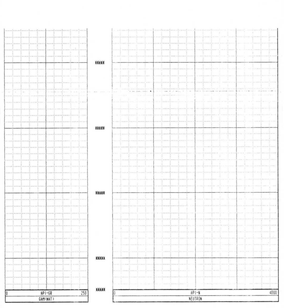
BIT SIZE	: 95.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	PH : 0	TYPE : NOSSA
MATRIX DENSITY	: 2.68	PH TEMPERATURE : 0	LOG : 6
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : DPTH 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 680	TAPE:NT 2500
REMARKS	:		
VERTICAL HOLE	:		
LOGGED OPEN HOLE			

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL : NOSSA SERIAL NUMBER : 46

	CAL-DATE	CAL-TIME	SPCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:11	0	GAMMA1	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:11	0	GAMMA1	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:11	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:11	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:11	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:11	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N



TOOL CALIBRATION TOOL : NOSSA SERIAL NUMBER : 46

	CAL-DATE	CAL-TIME	SPCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:11	0	GAMMA1	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:11	0	GAMMA1	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:11	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:11	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:11	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:11	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

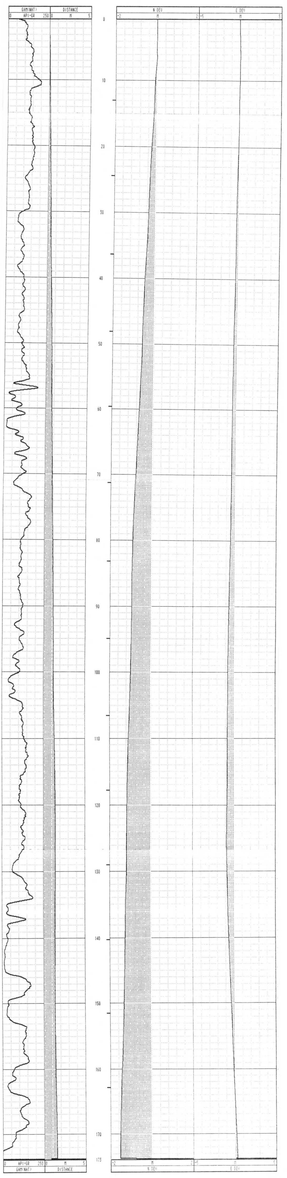
Century

QHR 88023 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88023 DEVIATION	DENSITY	
LOCATION/FIELD	:	GAMMA	
COUNTY	:	CALIPER	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 09/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 171.0	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 173.70	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.60	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 0	LOGGING UNIT	: 0401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SHEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 171	PLOT	: DUAL 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500
REMARKS	:				
VERTICAL HOLE					
LOGGED OPEN HOLE					

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



#880

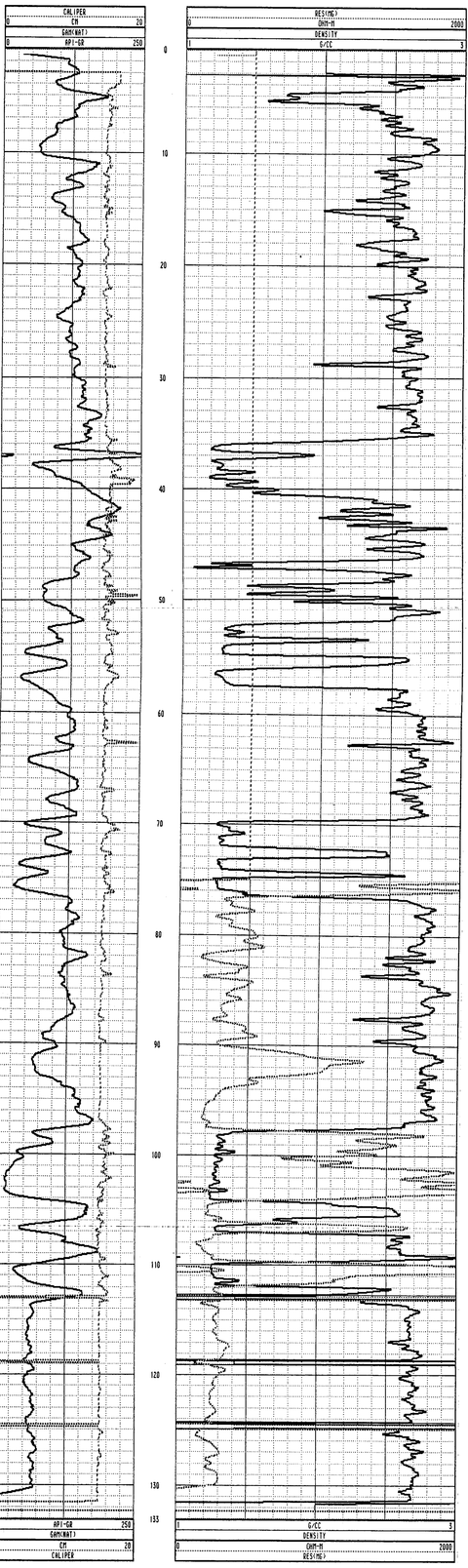
Century

QHR 88024 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88024 GAMMA-DENSITY			DEN.NEUT	
LOCATION/FIELD	: BL:20275:BL:27800			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/27/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 133 M	ELEV. PERM. DATUM: 0		KB	: 0
LOG BOTTOM	: 132.39	LOG MEASURED FROM: 0		DF	: 0
LOG TOP	: 1.39	DRL MEASURED FROM: 0		GL	: 0
CASING DRILLER	: 0	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS: 0		RECORDED BY	: E.SUEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500
REMARKS	:				

ANGLE HOLE AT 60 DEGREES TO THE HORIZONTAL
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

#880

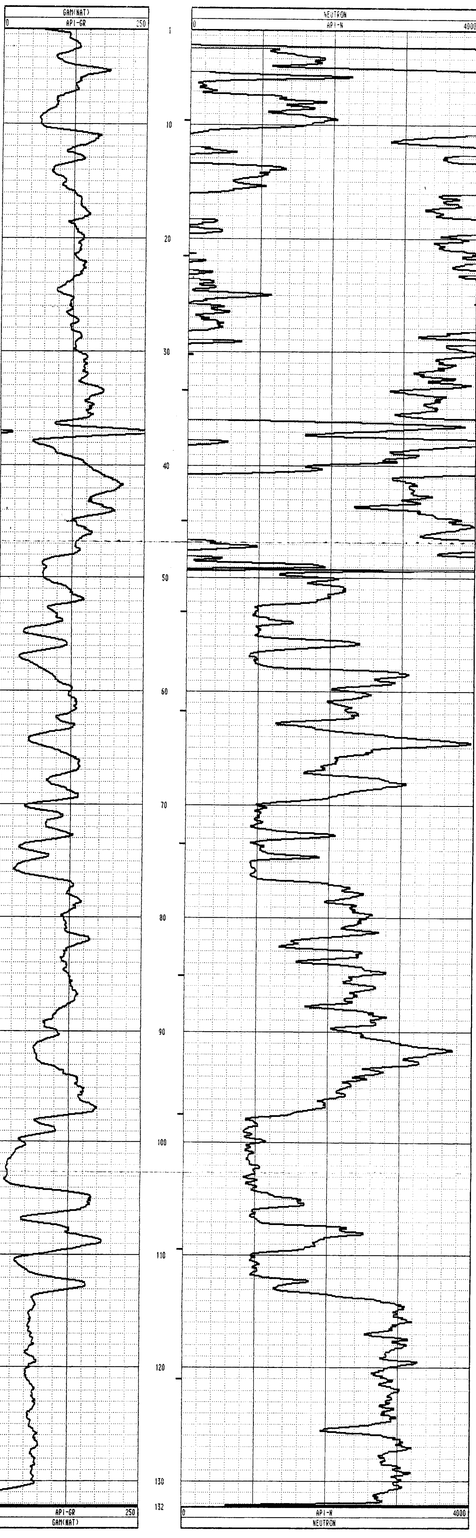
Century

QHR 88024 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88024 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	: BL:20275:BL:27800			GAM.PES.	
COUNTY	:			CAL.DEN	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/16/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 133 M	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 132.22	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.60	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 0	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: E.SVEDLUND		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055N
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 172	PLOT	: QUIN 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH.	2500
REMARKS	:				

ANGLE HOLE AT 60 DEGREES TO THE HORIZONTAL
LOGGED OPEN HOLE

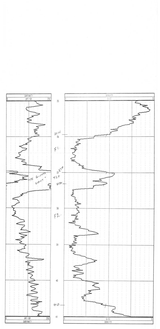
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

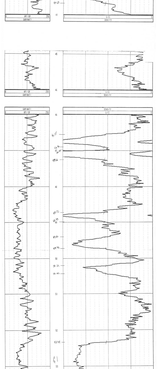


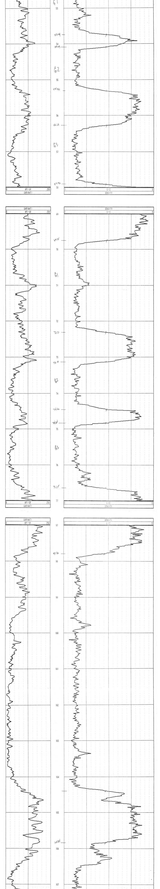
TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

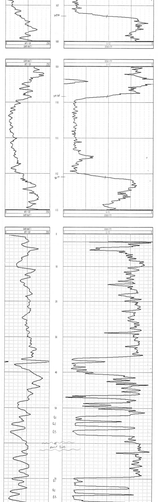
	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	150.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

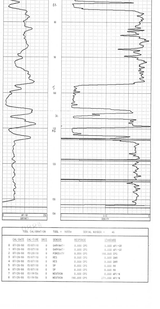
CGG
Century 2880
GR 8824 GUNA-DENSITY











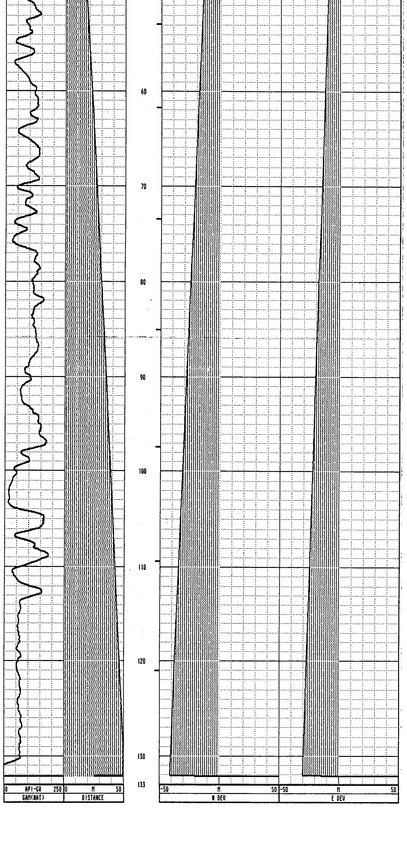
Century 880

QHR 88024 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88024 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: BL120275:BL127800	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/17/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 133 M	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 132.22	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.60	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 0	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS: 0		RECORDED BY : E.SVEDLUND	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 4
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 2500
REMARKS	:		

ANGLE HOLE AT 60 DEGREES TO THE HORIZONTAL
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * *

CLIENT : QUINTETTE COAL LTD.
FIELD OFFICE : CALGARY
DATA FROM :
MAG. DECL. : 24.500

HOLE ID. : QHR 88024 GAM
DATE OF LOG : 09/17/88
PROBE : 9055A . 46
DEPTH UNITS : METER LOG 4

Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB	
2.0	2.00	0.00	0.00	0.0	-.0	0.0	0.0	
7.0	6.51	0.76	0.74	1.1	44.4	28.5	67.7	
12.0	10.92	-.87	-.67	1.1	217.6	28.2	217.2	← ok
17.0	15.35	-2.74	-1.95	3.4	215.4	27.7	211.8	
22.0	19.78	-4.58	-3.29	5.6	215.6	26.9	213.0	
27.0	24.23	-6.37	-4.34	7.7	214.3	27.0	203.7	
32.0	28.69	-8.16	-5.70	10.0	214.9	25.7	222.3	
37.0	33.15	-9.93	-6.85	12.1	214.4	28.0	244.0	
42.0	37.60	-11.72	-8.07	14.2	214.6	26.9	216.4	←
47.0	42.06	-13.54	-9.42	16.5	214.8	26.8	215.6	←
52.0	46.54	-15.33	-10.74	18.7	215.0	26.5	213.2	
57.0	51.01	-17.08	-12.03	20.9	215.2	26.7	212.5	
62.0	55.51	-18.84	-13.33	23.1	215.3	25.6	220.6	
67.0	60.01	-20.48	-14.46	25.1	215.2	25.6	217.7	←
72.0	64.52	-22.07	-15.57	27.0	215.2	25.3	218.4	
77.0	69.05	-23.76	-16.85	29.1	215.3	25.1	232.0	
82.0	73.58	-25.41	-18.15	31.2	215.5	25.0	216.7	←
87.0	78.12	-27.07	-19.42	33.3	215.6	24.6	217.6	←
92.0	82.68	-28.72	-20.67	35.4	215.7	24.1	217.4	←
97.0	87.24	-30.22	-21.68	37.2	215.7	24.0	220.8	
102.0	91.81	-31.63	-22.91	39.2	215.7	24.1	204.1	
107.0	96.38	-33.45	-24.09	41.2	215.8	24.6	208.7	
112.0	100.94	-34.99	-25.18	43.1	215.7	23.8	212.6	
117.0	105.52	-36.54	-26.41	45.1	215.9	23.7	224.1	
122.0	110.12	-38.08	-27.64	47.0	216.0	22.9	218.1	←
127.0	114.73	-39.58	-28.83	49.0	216.1	22.5	217.8	←
132.0	119.35	-41.07	-29.94	50.8	216.1	21.4	235.8	
132.24	119.56	-41.12	-29.98	50.9	216.1	0.0	0.0	

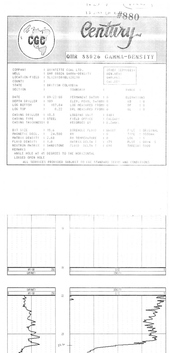
CGG

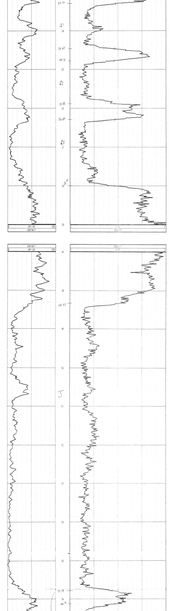
Century

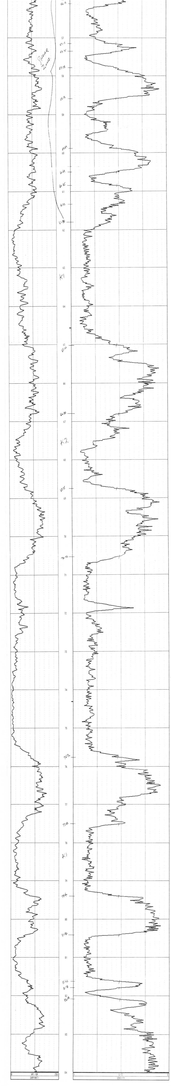
GDM 88276 GAMMA-DENSITY

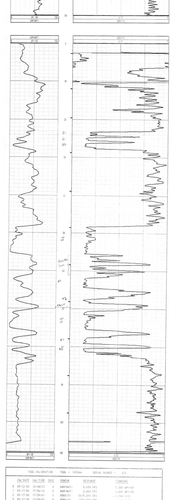
COMPANY	: CENTURY GEOPHYSICAL CORP.		
WELL	: GMP 88276 GAMMA-DENSITY	API#	:
FIELD/BLOCK	: TAYLOR/GRAHAM	LOCATION	:
COUNTY	:		
STATE	: BRITISH COLUMBIA		
COUNTRY	:		
DATE	: 09/27/88	STRUCTURE	:
DEPTH DRILLER	: 1900	SEC. TWP. RGE.	:
DEPTH LOGGER	: 1914	PERM. DATUM	:
LOG TOP	: 0	LOG MEASURED FROM	:
CASING DRILLER	: 178.3	ELEVATION (KB)	:
CASING LOGGER	: 178.3	ELEVATION (DF)	:
CASING THICKNESS	: 0	ELEVATION (GL)	:
BIT SIZE	: 155.6	ELEVATION (DATUM)	:
DRILLING MEDIUM	: WATER BASED	TIME SINCE CIRC.	:
MATRIX DENSITY	: 2.65	MAX. REC. TEMP.	:
FLUID DENSITY	: 1.0	EQUIP. NUMBER	:
VISCOSITY	: SAME/COMP.	LOCATION	:
REMARKS	:		

RUN NO. ONE AS REQUIRED TO THE MARITIMES.
LOGGED FROM MAIN.
MULTI-SENSOR PRESSURE SENSOR TO USE STANDARD CEMENT AND CONCRETE.









#886

Century

QHR 88026 GAMMA-NEUTRON

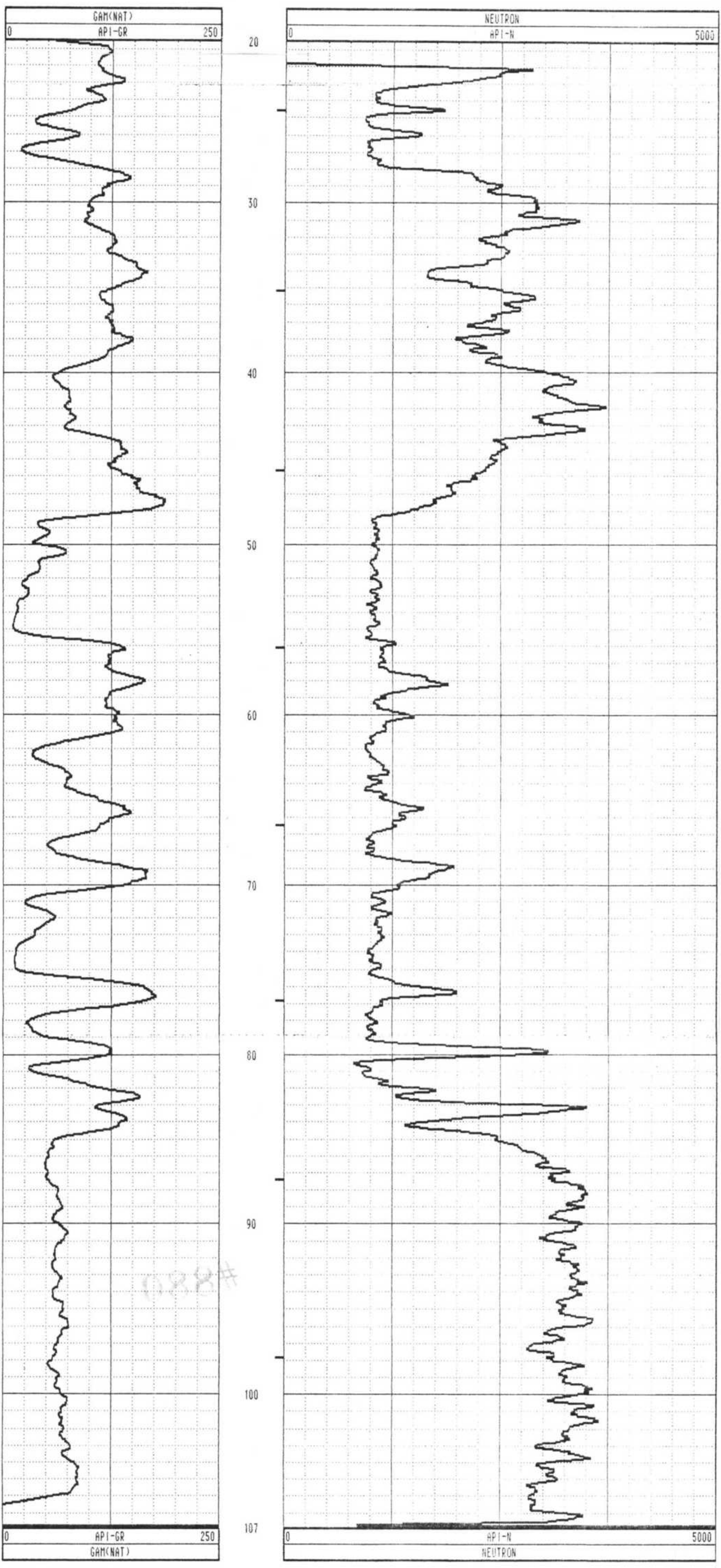
COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88026 GAMMA-NEUTRON	DEN.NEUT	
LOCATION/FIELD	: SL:20130:BL:28210	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/22/88 PERMANENT DATUM : 0	ELEVATIONS	
DEPTH DRILLER	: 109 ELEV. PERM. DATUM: 0	KB : 0	
LOG BOTTOM	: 107.84 LOG MEASURED FROM: 0	DF : 0	
LOG TOP	: 20.62 DRL MEASURED FROM: 0	GL : 0	
CASING DRILLER	: 13.3 LOGGING UNIT : 8401		
CASING TYPE	: STEEL FIELD OFFICE : CALGARY		
CASING THICKNESS	: 0 RECORDED BY : D.ZANKL		
BIT SIZE	: 15.6 BOREHOLE FLUID : WATER	FILE : ORIGINAL	
MAGNETIC DECL.	: 24.500 RM : 0	TYPE : 9055A	
MATRIX DENSITY	: 2.68 RM TEMPERATURE : 0	LOG : 2	
FLUID DENSITY	: 1.0 MATRIX DELTA T : 173	PLOT : QUIN 2	
NEUTRON MATRIX	: SANDSTONE FLUID DELTA T : 690	THRESH: 2500	

REMARKS :

ANGLE HOLE AT 45 DEGREES TO THE HORIZONTAL

LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	130.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	221.000 API-N

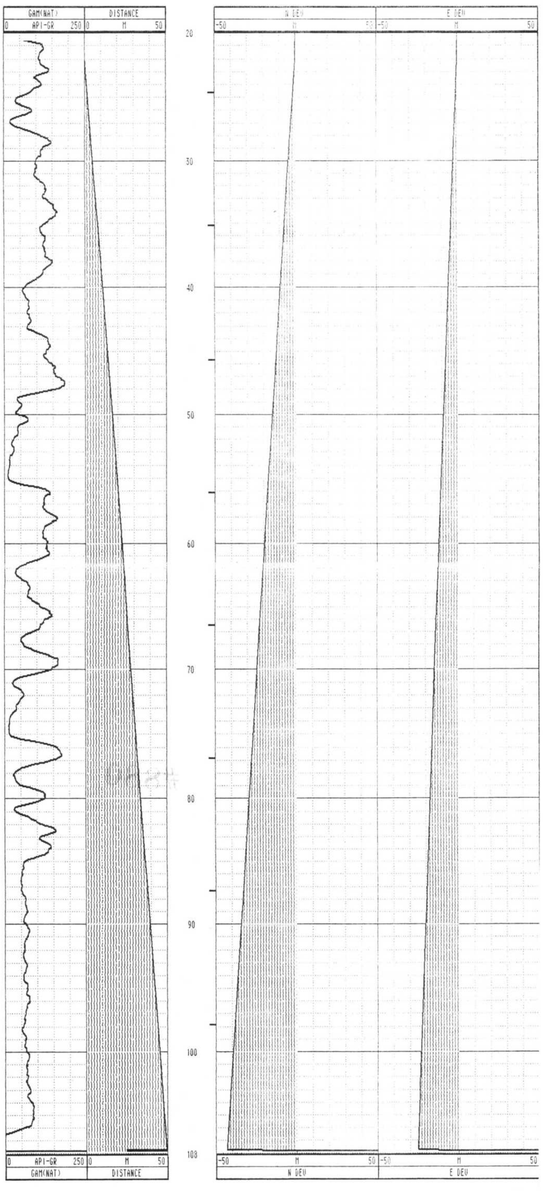
#880 Century

QHR 88026 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88026 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: SL:20130:BL:28210	GAM.RES.	
COUNTY	:	CAL.DEV.	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/22/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 109	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 107.84	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 20.62	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 13.3	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : [illegible]	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : [illegible]
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 0
FLUID DENSITY	: 1.0	MATRIX DELTA T : 55	PLOT : SCALE 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 190	TIMESCALE 0

REMARKS :
ANGLE HOLE AT 45 DEGREES TO THE HORIZONTAL
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



+ + + + + + + + + + COMPU-LOG II - VERTICAL DEVIATION + + + + + + + + + +

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88026 GGM
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/22/88
DATA FROM.	:	PROBE	: 9805SI
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 4

Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
20.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
25.0	24.37	-1.51	-.90	1.8	210.7	38.2	206.4
30.0	28.31	-4.17	-2.44	4.8	210.4	37.9	212.6
35.0	32.28	-6.80	-3.97	7.9	210.3	37.5	212.1
40.0	36.21	-9.37	-5.57	10.9	210.7	38.1	211.7
45.0	40.17	-11.81	-7.14	13.8	211.2	38.6	207.6
50.0	44.11	-14.33	-8.68	16.7	211.2	37.4	207.2
55.0	48.13	-16.87	-10.15	19.7	211.0	36.1	208.9
60.0	52.16	-19.33	-11.66	22.6	211.1	36.5	231.7
65.0	56.19	-21.79	-13.03	25.3	211.6	34.4	199.0
70.0	60.22	-24.01	-14.48	28.0	211.1	35.7	200.4
75.0	64.29	-26.46	-15.81	30.8	210.9	35.0	208.4
80.0	68.37	-28.98	-17.22	33.7	210.7	35.7	205.6
85.0	72.43	-31.49	-18.69	36.6	210.7	36.1	209.8
90.0	76.49	-34.03	-20.13	39.5	210.6	36.0	220.1
95.0	80.52	-36.59	-21.57	42.5	210.5	36.1	213.4
100.0	84.57	-39.16	-23.00	45.4	210.4	35.7	211.4
105.0	88.66	-41.60	-24.15	48.1	210.1	35.3	209.4
107.8	90.92	-43.02	-24.93	49.7	210.1	0.0	0.0

Century

#880

COMPANY	: [illegible]
WELL	: [illegible]
LOCATION FIELD	: [illegible]
COUNTY	: TF-NSFER
STATE	: [illegible]
SECTION	:
DATE	: 09-25-88
DEPTH DRILLER	: 59
LOG BOTTOM	: 58.44
LOG TOP	: 0.32
CASING DRILLER	: 13.3
CASING TYPE	: STEEL
CASING THICKNESS	: 0
BIT SIZE	: [illegible]
MAGNETIC DECL.	: 24.500
MATRIX DENSITY	: 2.68
FLUID DENSITY	: 1.0
NEUTRON MATRIX	: SANDSTONE

REMARKS :

VERTICAL HOLE

LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT [illegible]

4.

K1.

K2.

TOOL CALIBRATION TOOL = [illegible]

	CAL DATE	CAL TIME	TYP	SENS
0	[illegible]			
1	[illegible]			
2	[illegible]			
3	[illegible]			
4	[illegible]			
5	[illegible]			
6	[illegible]			
7	[illegible]			
8	[illegible]			
9	[illegible]			
10	[illegible]			

Century

QHR 88027 GAMMA-DENSITY

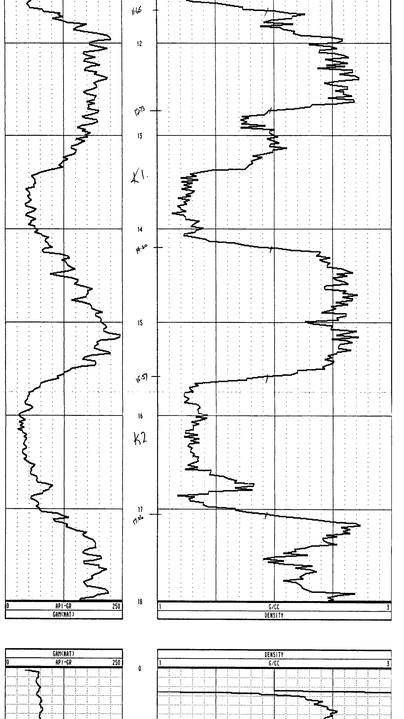
COMPANY	: QUINTETTE COAL LTD.		
WELL	: QHR 88027 GAMMA-DENSITY		
LOCATION/FIELD	: BL:20130:SL:27800		
COUNTY	: TRANSFER		
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/23/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 54	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 53.44	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 0.32	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 13.3	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : D.ZANKL	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 7
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 2500
REMARKS	:		

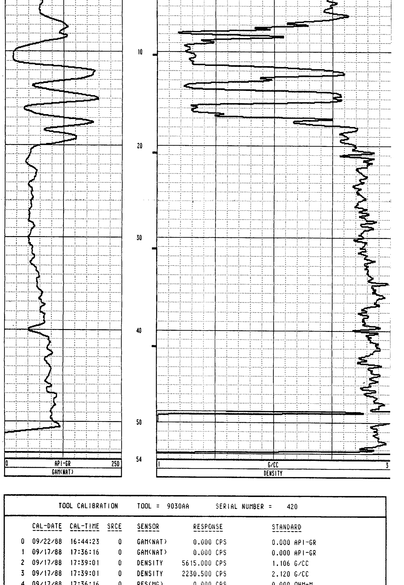
OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#8C





TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:25	0	GAMMA(AT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAMMA(AT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(HG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(HG)	0.000 CPS	0.000 OHM-M
6	09/22/88	15:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	15:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	15:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	15:37:57	0	CALIPERL	0.000 CPS	0.000 CM

CGC

#880 Century

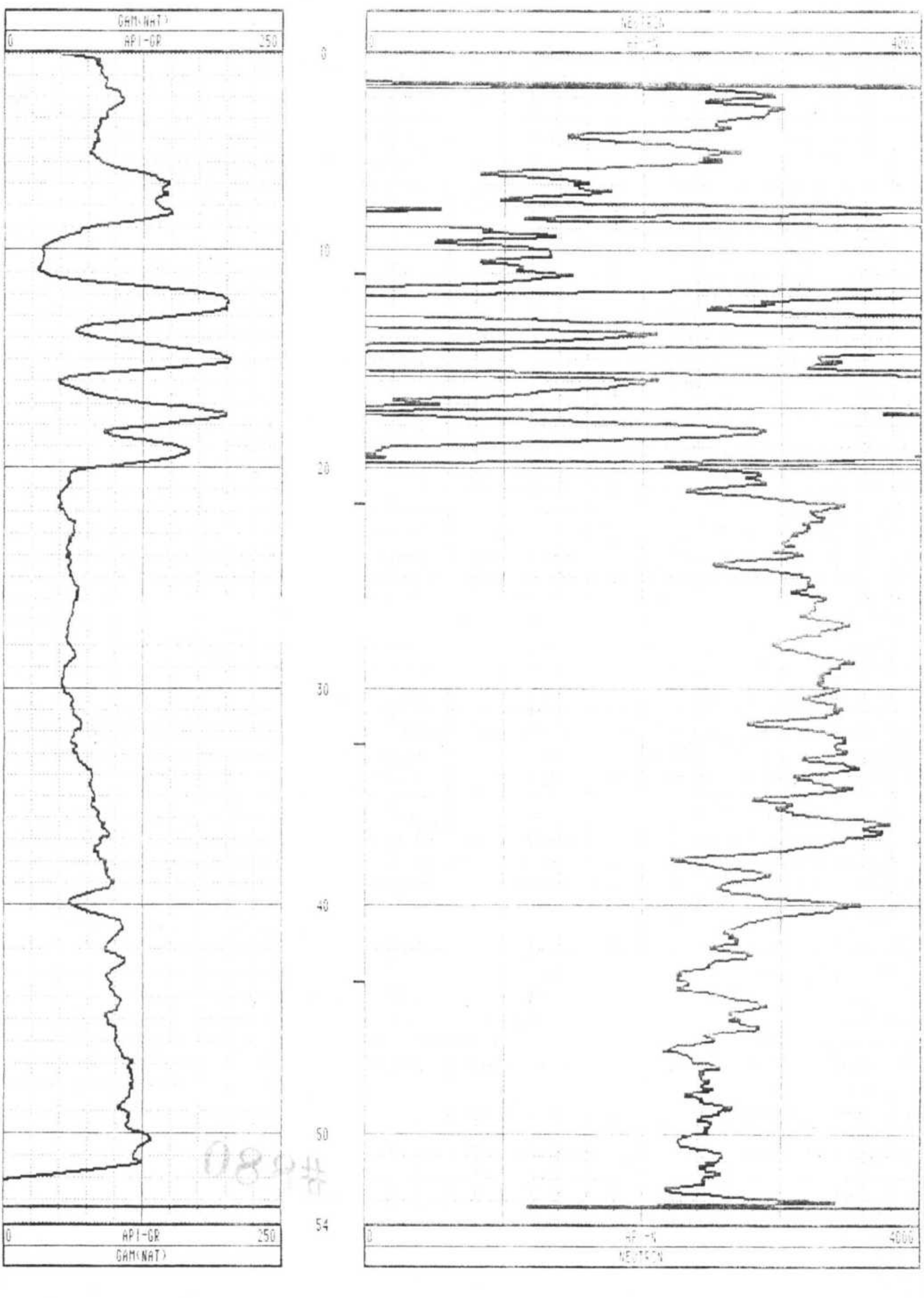
GR/N 80127 GAMMA NEUTRON

COMPANY : QUINTETTE COAL LTD.
WELL : DH 88027 SHELBURNE
LOCATION/FIELD : BL:20130:SL
COUNTY : FRASER
STATE : BRITISH COLUMBIA
SECTION :

DATE : 07-28-88
DEPTH DRILLER : 54
LOG BOTTOM : 53.40
LOG TOP : 1.08

CASING DRILLER : 15.3
CASING TYPE : STEEL
CASING THICKNESS: 0

BIT SIZE : 15.0
MAGNETIC DECL. : 24.500
MATRIX DENSITY : 2.65
FLUID DENSITY : 1.0
NEUTRON MATRIX : SANDSTONE
REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE
NO SERVICES PROVIDED



TOOL CALIBRATION TOOL = 9057

	CAL-DATE	CAL-TIME	FILE	SENSOR
0	07-28-88	15:07:18	0	GAM(NAT)
1	07-28-88	15:07:18	0	GAM(NAT)
2	07-28-88	15:20:10	0	POROSITY
3	07-28-88	15:07:18	0	RES
4	07-28-88	15:07:18	0	RES
5	07-28-88	15:07:18	0	SP
6	07-28-88	15:07:18	0	SP
7	07-28-88	15:19:56	0	NEUT
8	07-28-88	15:19:56	0	NEUT

#88

Century

GHR 88027 DEVIATION

COMPANY : QUINTETTE COAL LTD.
WELL : GHR 88027 DEVIATION
LOCATION-FIELD : BL:20130:SL:27800
COUNTY : TRANSFER
STATE : BRITISH COLUMBIA
SECTION :

DATE : 09-23-88
DEPTH DRILLER : 54
LOG BOTTOM : 53.40
LOG TOP : 1.08

CASING DRILLER : 17.2
CASING TYPE : STEEL
CASING THICKNESS: 0

BIT SIZE : 15.2
MAGNETIC DECL. : -21.500
MATRIX DENSITY : 2.65
FLUID DENSITY : 1.0
NEUTRON MATRIX : SANDSTONE
REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE
ALL SERVICES PROVIDED SUBJECT TO

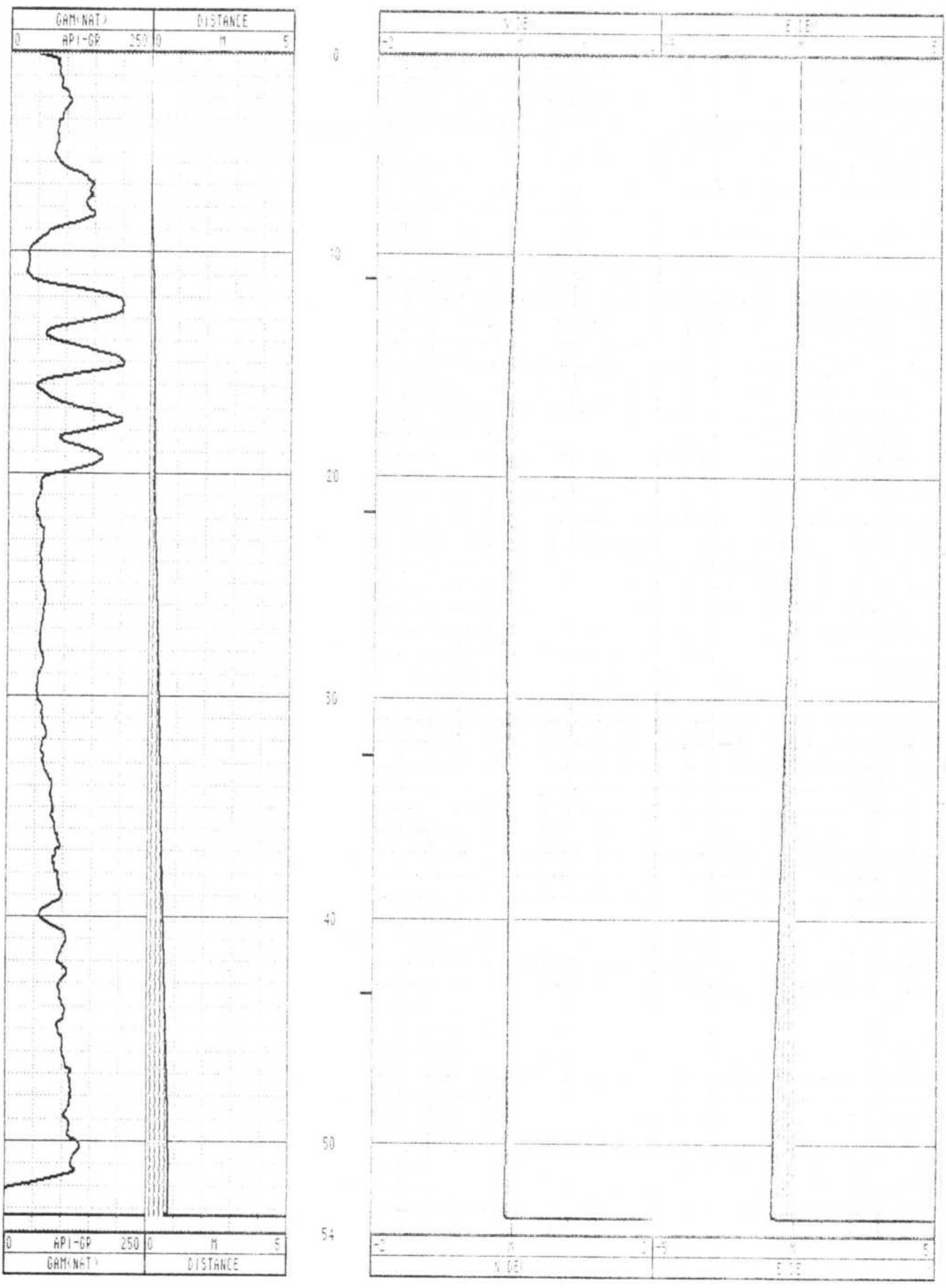


Table Depth	Corr. Depth	North Dev.	East Dev.	Course Length	Angle	Dogleg	DMEGLG
1.0	1.00	0.00	0.00	0.0	0.0	0.0	0.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

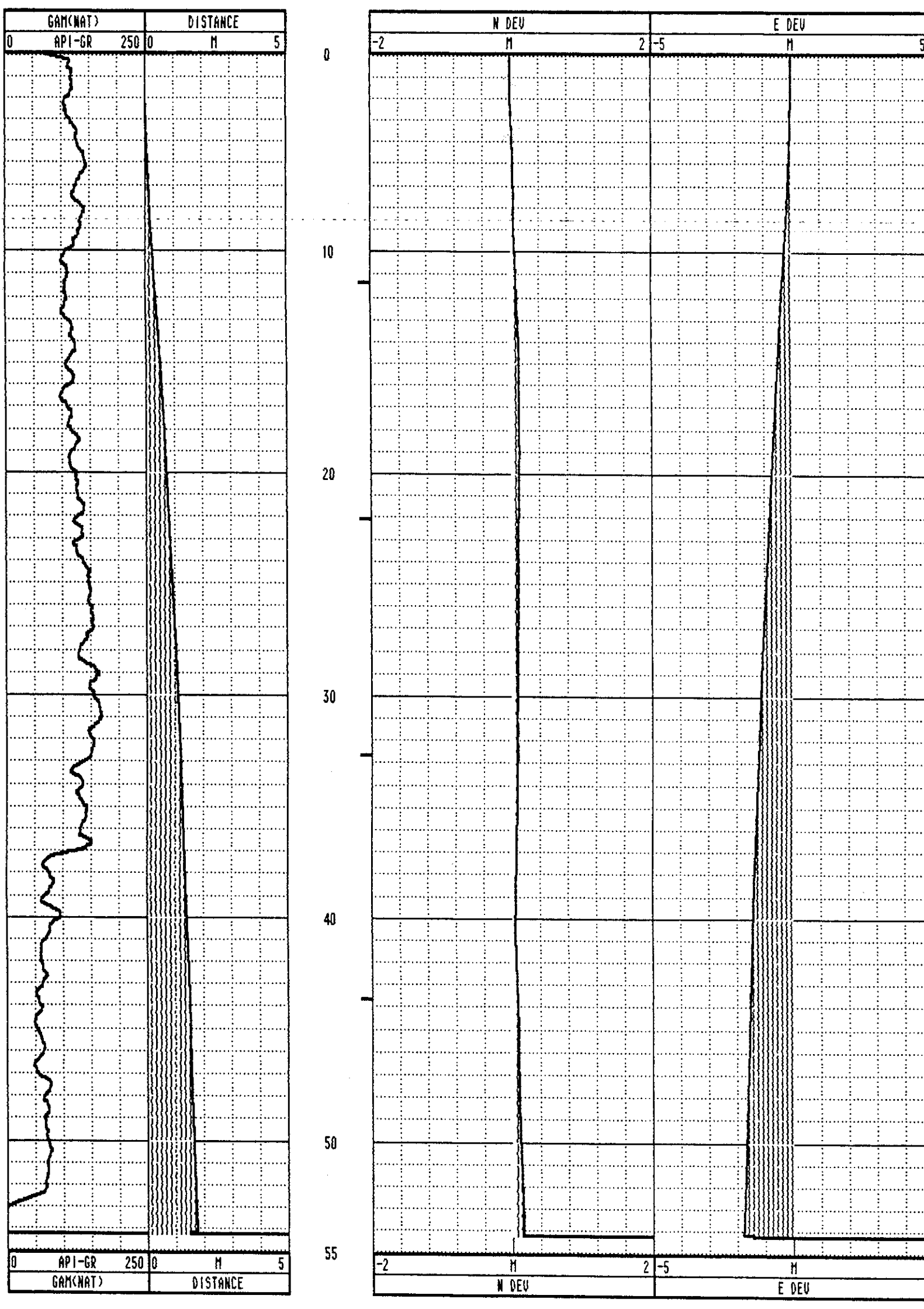
Century #880

QHR 88028 DEVIATION

COMPANY	: QUINTETTE COAL LTD.		OTHER SERVICES:
WELL	: QHR 88028 DEVIATION		DEN.NEUT
LOCATION/FIELD	: BL:20120:SL:27600		GAM.RES.
COUNTY	: TRANSFER		CAL.DEV
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :
DATE	: 09/24/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 55	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 54.32	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.02	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 13.3	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : D.ZANKL	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 7
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88028 DEV
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/24/88
DATA FROM	:	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: FEET LOG 7

able Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
1.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
6.0	6.00	0.03	-.07	0.1	294.3	2.4	285.0
11.0	10.99	0.08	-.29	0.3	284.6	2.9	295.0
16.0	15.99	0.11	-.54	0.5	281.8	2.9	271.3
21.0	20.98	0.11	-.75	0.8	278.5	1.9	282.5
26.0	25.98	0.10	-.96	1.0	275.9	2.2	277.3
31.0	30.97	0.09	-1.14	1.1	274.3	1.8	269.2
36.0	35.97	0.07	-1.29	1.3	273.2	1.7	265.5
41.0	40.97	0.05	-1.44	1.4	272.0	1.3	291.1
46.0	45.97	0.09	-1.55	1.6	273.5	1.2	283.2
51.0	50.97	0.13	-1.67	1.7	274.4	1.6	294.3
54.3	54.28	0.16	-1.76	1.8	275.2	0.0	0.0

#880

Century

QHR 88028 GAMMA-NEUTRON

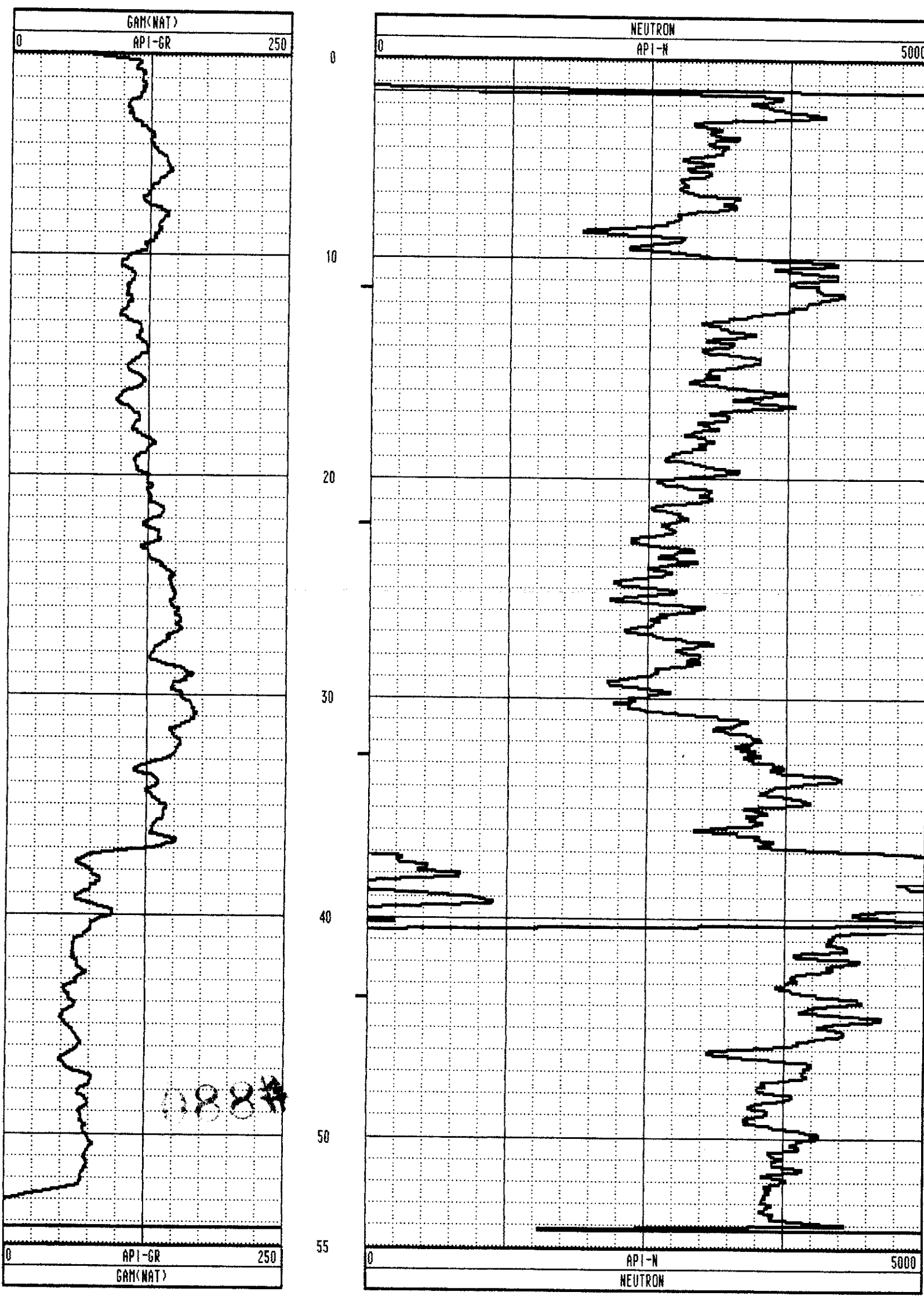
COMPANY	: QUINTETTE COAL LTD.
WELL	: QHR 88028 GAMMA-NEUTRON
LOCATION/FIELD	: BL:20120:SL:27600
COUNTY	: TRANSFER
STATE	: BRITISH COLUMBIA
SECTION	: TOWNSHIP : RANGE :

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

DATE	: 09/23/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 54.32	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.02	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 13.3	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

Century

QHR 88028 GAMMA-DENSITY

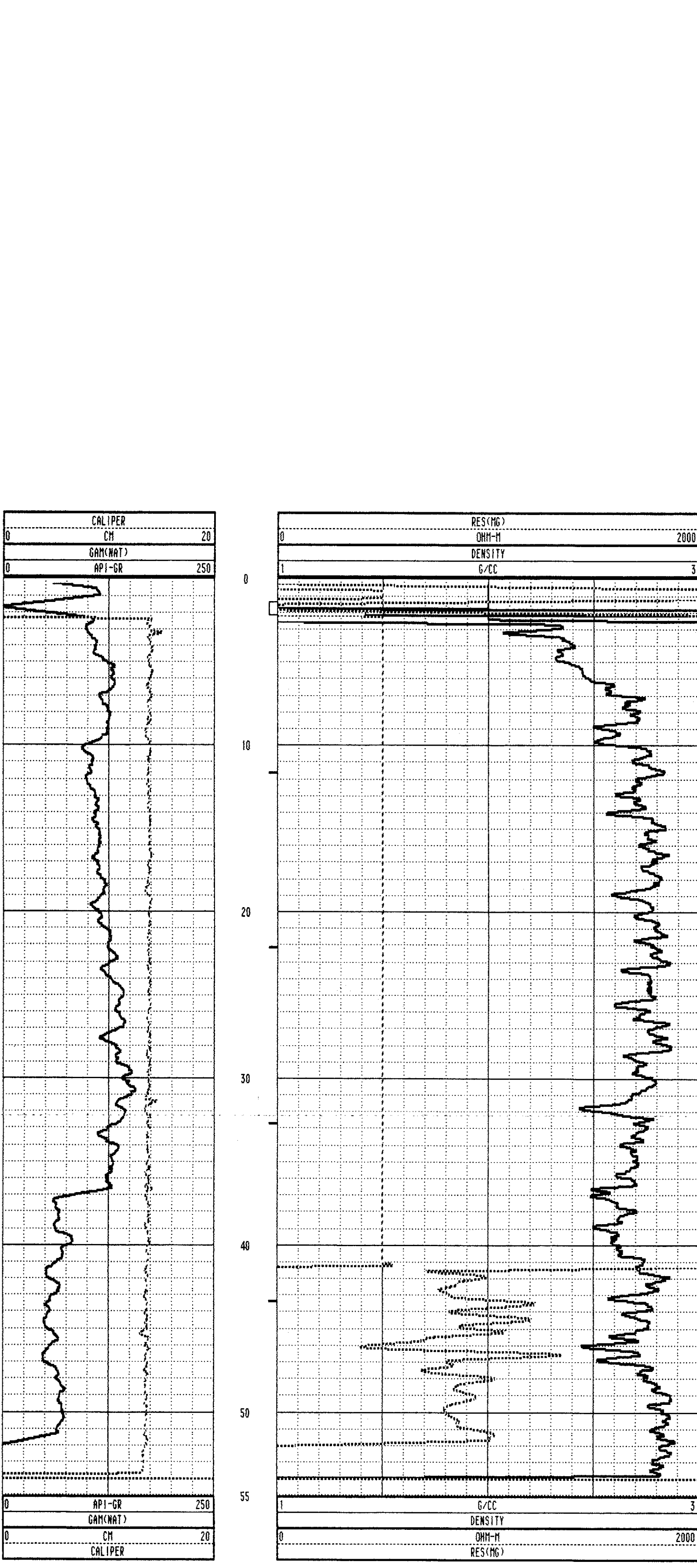
COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88028 GAMMA-DENSITY			DEN.NEUT	
LOCATION/FIELD	: BL:20120:SL:27600			GAM.RES.	
COUNTY	: TRANSFER			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/23/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 54.12	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.36	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 13.3	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :

VERTICAL HOLE

LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

Century

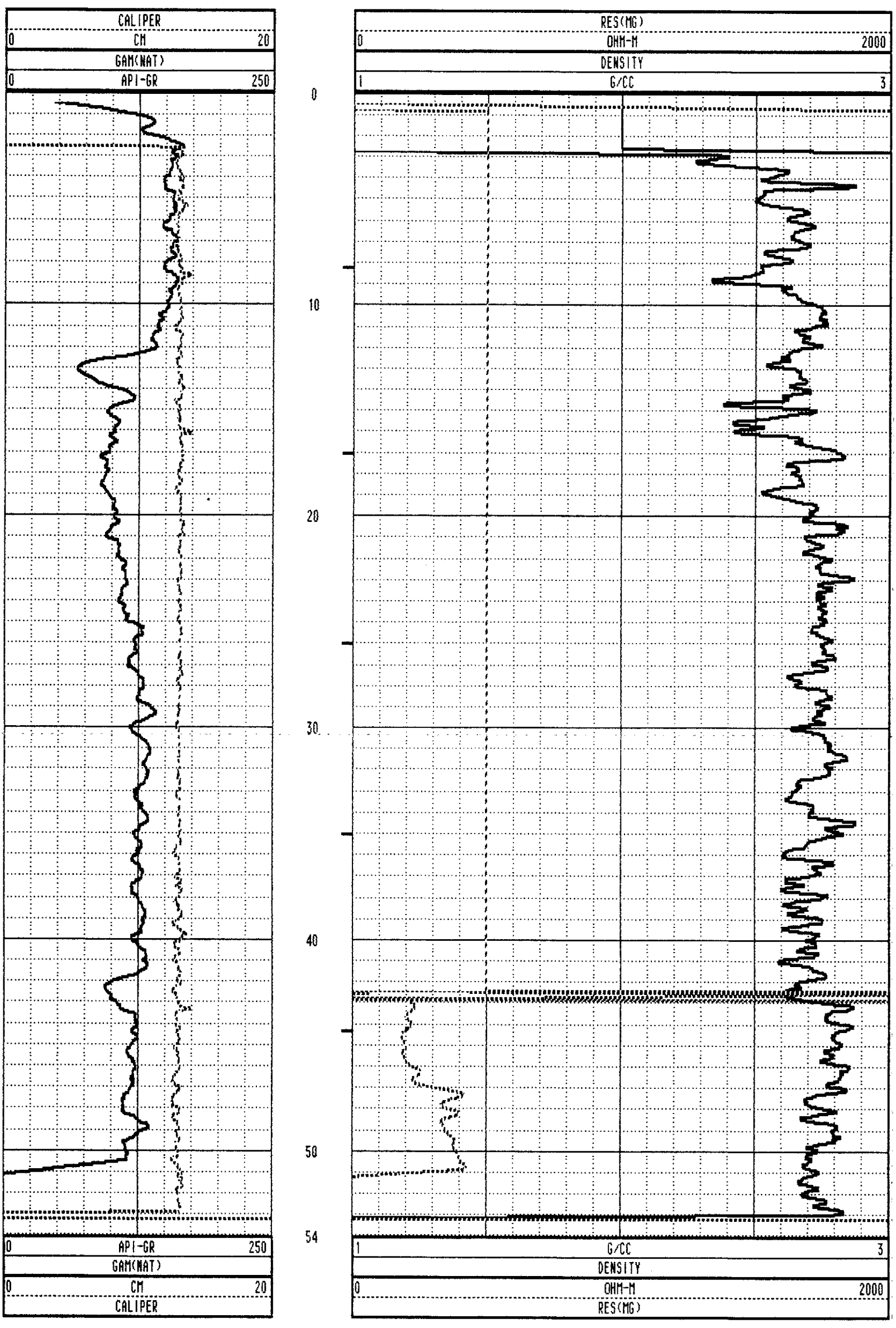
QHR 88029 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88029 GAMMA-DENSITY			DEN.NEUT	
LOCATION/FIELD	: BL:20340:SL:27300			GAM.RES.	
COUNTY	: TRANSFER			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/23/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 53.32	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.54	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 13.3	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 4
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

in 880

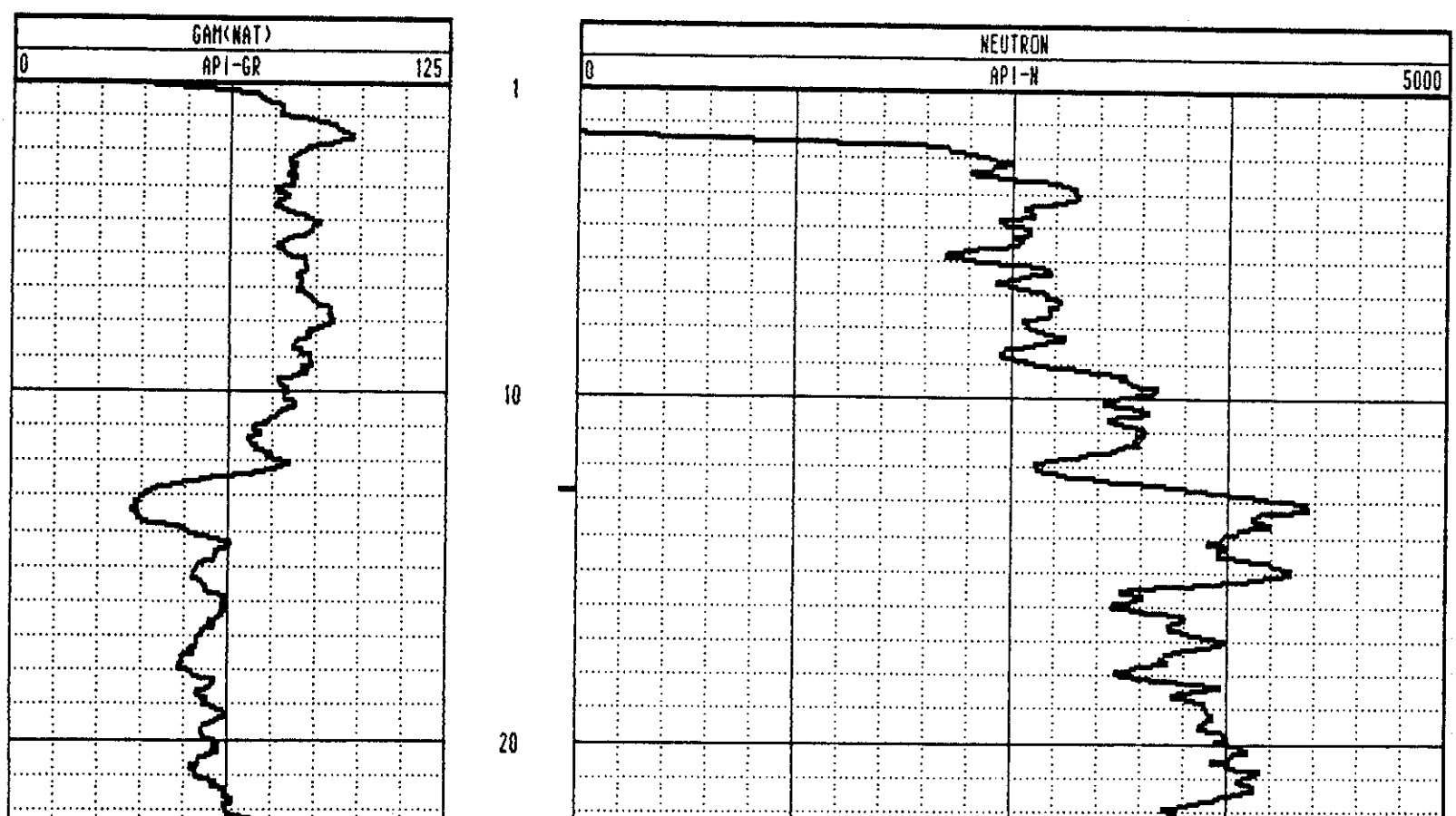
Century

QHR 88029 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88029 GAMMA-NEUTRON			DEN,NEUT	
LOCATION/FIELD	: BL:20340:SL:27300			GAM,RES,	
COUNTY	: TRANSFER			CAL,DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/23/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 54	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 52.28	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.12	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 13.3	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED THROUGH RODS

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

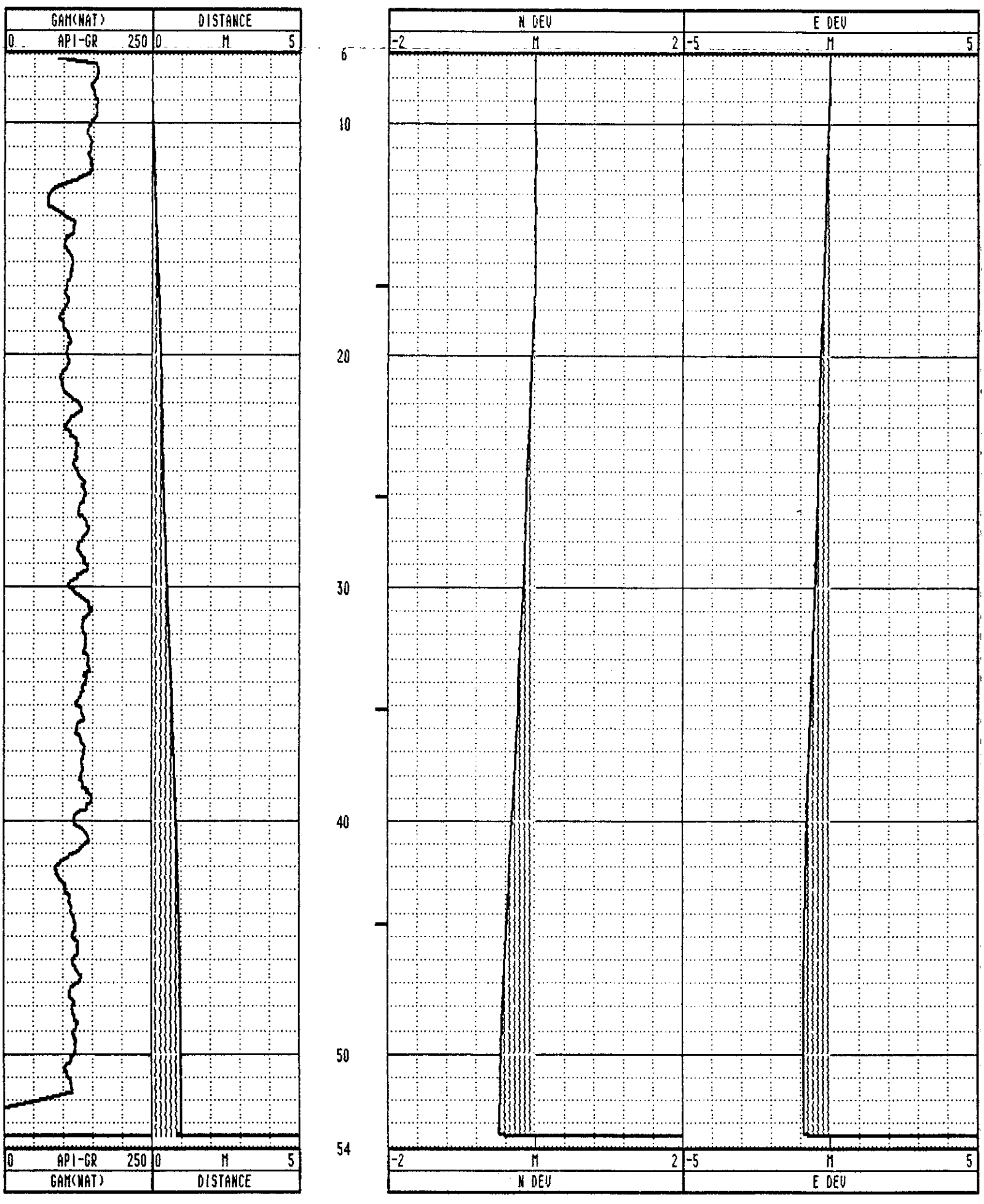
Certify

QHR 88029 DEVIATION

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88029 DEVIATION #880			DEN,NEUT	
LOCATION/FIELD	: BL:20340:SL:27300			GAM,RES,	
COUNTY	: TRANSFER			CAL,DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/24/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 53.62	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 7.24	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88029 DEV
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/24/88
DATA FROM	:	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: FEET LOG 0

able Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
7.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
12.0	12.00	0.01	-.09	0.1	274.4	1.7	267.5
17.0	17.00	-.00	-.22	0.2	269.7	1.3	258.4
22.0	21.99	-.06	-.35	0.4	260.1	1.0	191.8
27.0	26.99	-.12	-.43	0.4	254.1	1.8	252.0
32.0	31.99	-.19	-.56	0.6	251.2	2.1	234.4
37.0	36.99	-.26	-.70	0.7	250.0	1.9	253.7
42.0	41.99	-.34	-.81	0.9	247.0	1.8	234.3
47.0	46.98	-.42	-.88	1.0	244.4	0.7	243.0
52.0	51.98	-.47	-.88	1.0	241.8	0.3	154.0
53.6	53.60	-.49	-.88	1.0	241.0	0.0	0.0

Century

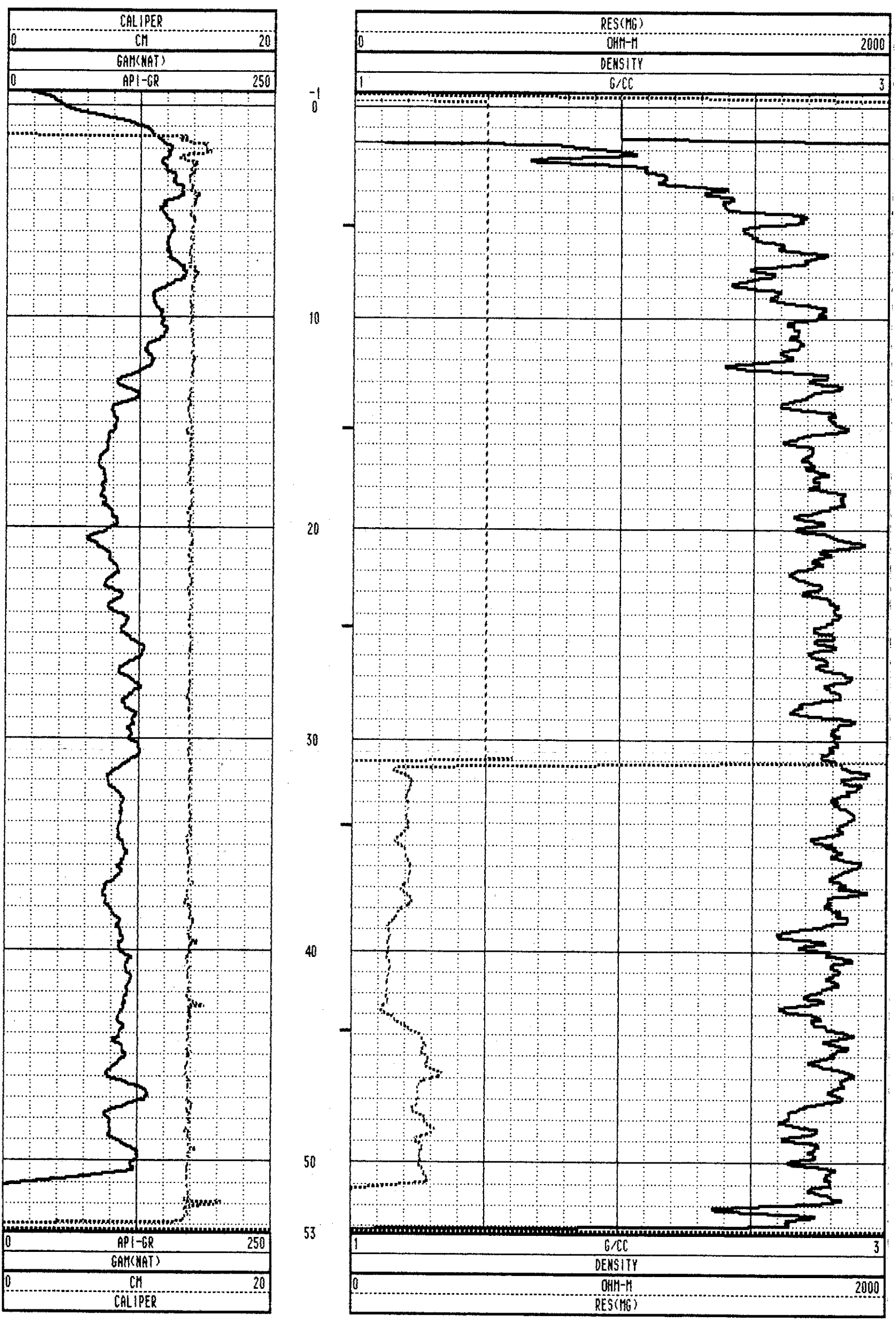
QHR 88030 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88030 GAMMA-DENSITY			DEN,NEUT	
LOCATION/FIELD	: BL:20290:SL:27300			GAM,RES,	
COUNTY	: TRANSFER			CAL,DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/24/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 53.32	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: -.58	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#080



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

Century

QHR 88030 GAMMA-NEUTRON

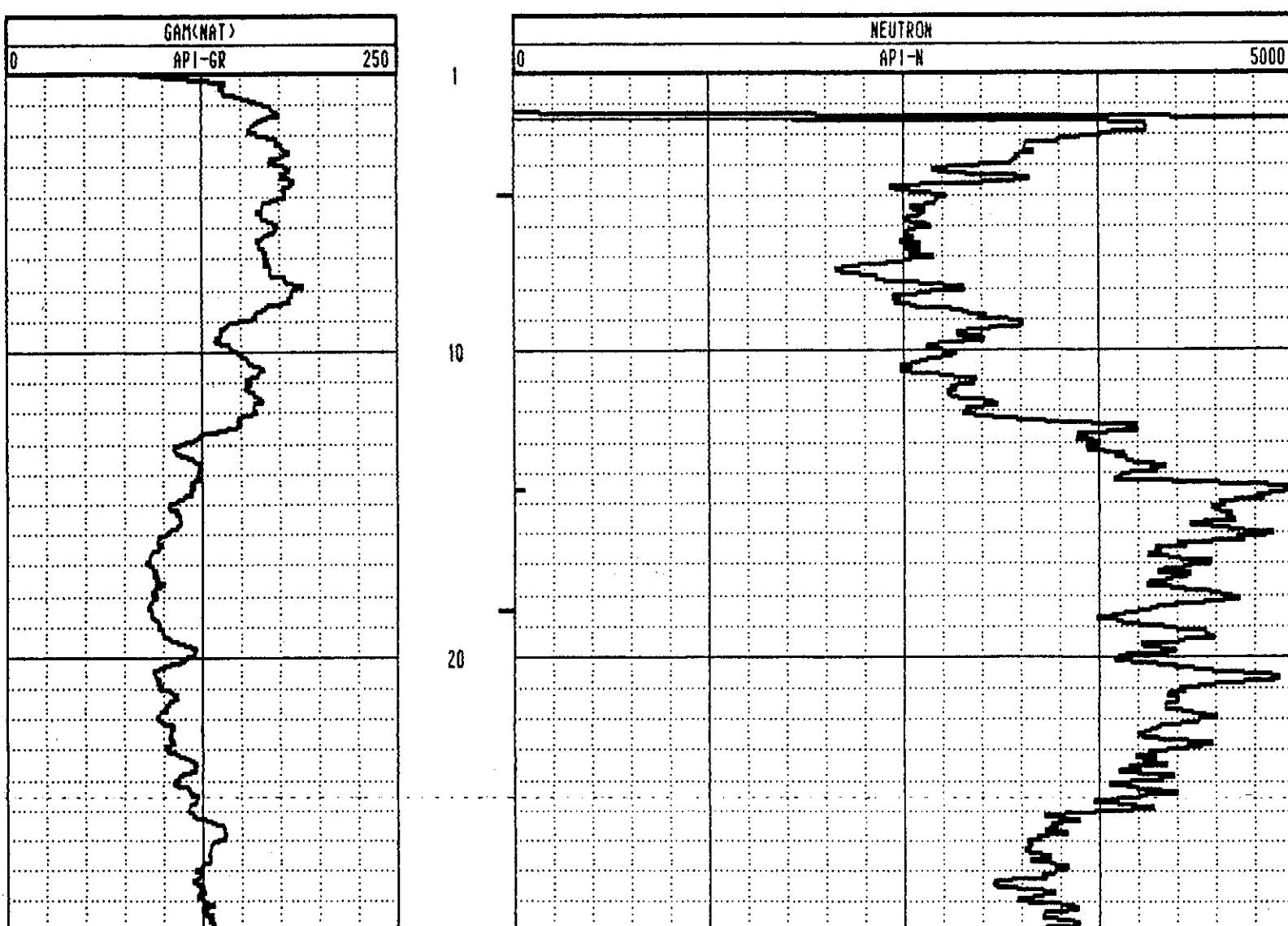
COMPANY	: QUINTETTE COAL LTD.				
WELL	: QHR 88030 GAMMA-NEUTRON				
LOCATION/FIELD	: BL:20290:SL:27300				
COUNTY	: TRANSFER				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/24/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 53.46	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.10	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

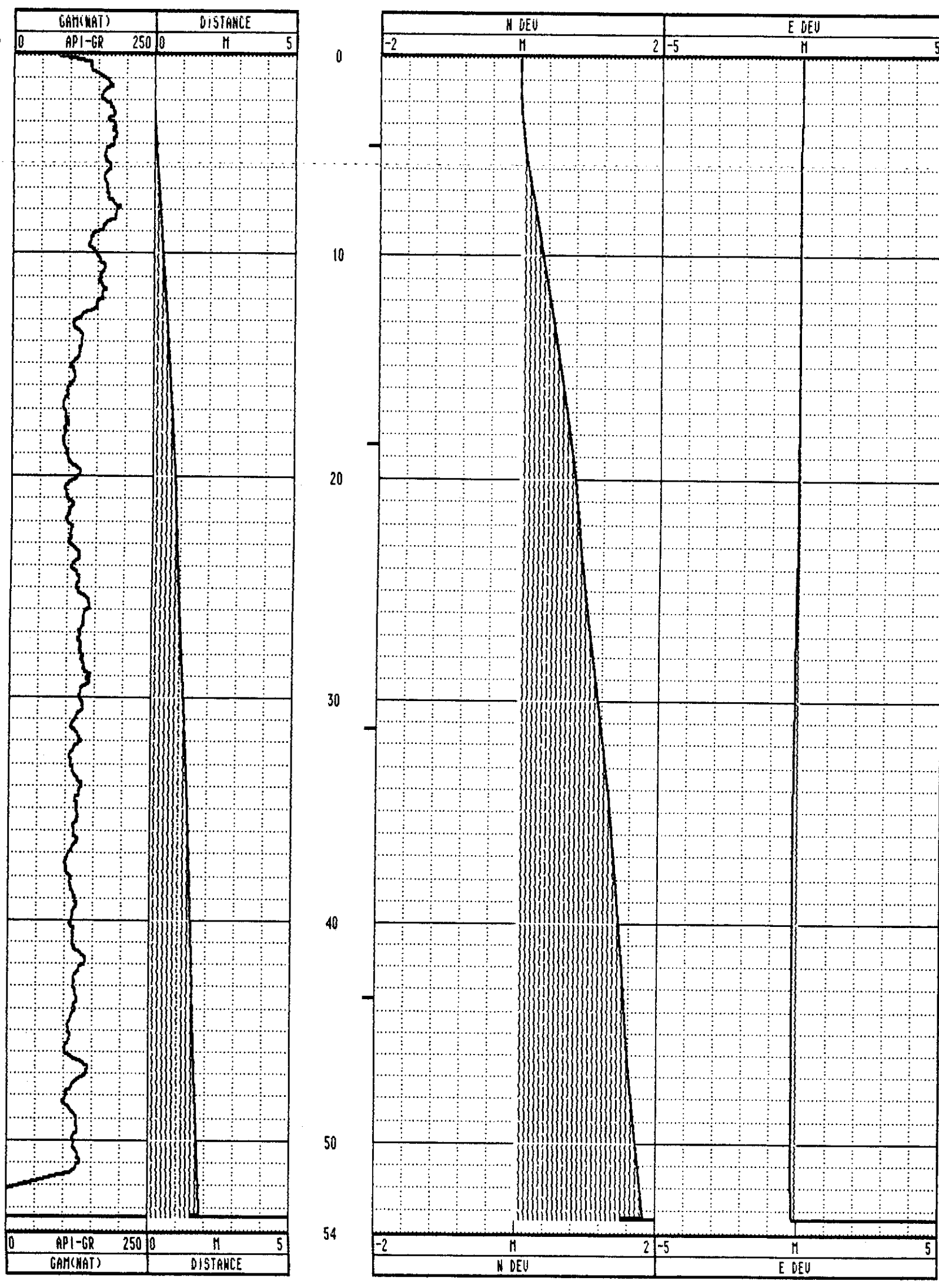
Century

QHR 88030 DEVIATION

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88030 DEVIATION			DEN.NEUT	
LOCATION/FIELD	: BL:20290:SL:27300			GAM.RES.	
COUNTY	: TRANSFER			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 09/24/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 55	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 53.46	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.10	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 2500

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88030 DEV
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/24/88
DATA FROM	:	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: FEET LOG 5

Cable Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
1.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
6.0	6.00	0.10	-.06	0.1	330.6	2.9	352.4
11.0	10.99	0.37	-.05	0.4	351.6	3.5	355.1
16.0	15.98	0.62	-.06	0.6	354.5	2.9	349.1
21.0	20.98	0.82	-.09	0.8	353.7	1.7	348.3
26.0	25.98	0.99	-.11	1.0	353.4	2.1	347.6
31.0	30.97	1.18	-.16	1.2	352.3	2.2	345.6
36.0	35.97	1.35	-.19	1.4	351.8	1.4	333.4
41.0	40.97	1.48	-.20	1.5	352.3	1.6	9.9
46.0	45.97	1.59	-.21	1.6	352.4	1.2	347.1
51.0	50.96	1.75	-.19	1.8	353.7	2.1	4.0
53.5	53.42	1.83	-.18	1.8	354.3	0.0	0.0

1230
1730 est time

#880 Hands

CGC

Century

QHR 88031 GAMMA-DENSITY

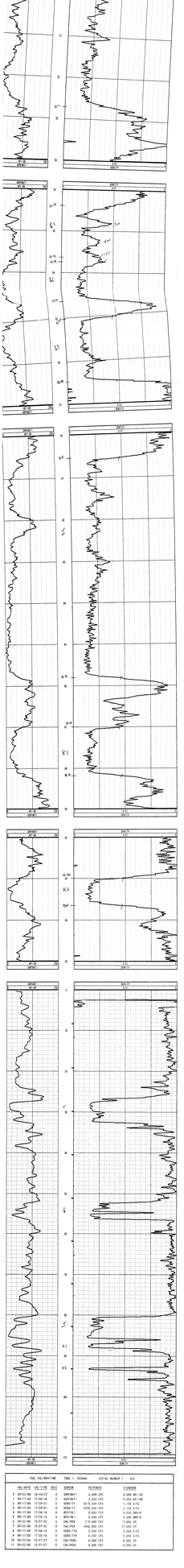
COMPANY	: QUINTETTE COAL LTD.		OTHER SERVICES
WELL	: QHR 88031 GAMMA-DENSITY		DEN-NEUT
LOCATION-FIELD	: 84.12230/115.13750		GAMMA
COUNTY	: GRIZZLY		CALIPER
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP	: RANGE :	

DATE	: 88-JUN-08	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 1749	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 1746.96	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.26	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 0	LOGGING UNIT	: 0401		
CASING SIZE	: 0.0 STEEL	LOGGING ENGINEER	: R.CHART		
CASING THICKNESS	: 0	RECORDED BY	: C.CAMPS		

BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	PH	: 0	TYPE	: 10300A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: GAIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 490	THRESH: 1000	
HOLE SIZE	:				
VERTICAL HOLE					
LOGGED OPEN HOLE					

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION	TOOL = 10300A	SERIAL NUMBER = 403		
CAL-DATE CAL-TIME DECK	SENSOR	REFERENCE	TOLERANCE	
1 89-JUN-08 10:44:29 0	GAMMAAT	0.000 CPS	0.000 API-US	
2 89-JUN-08 17:56:16 0	GAMMAAT	0.000 CPS	0.000 API-US	
3 89-JUN-08 17:59:01 0	DENSITY	54.15.000 CPS	1.176 G/CC	
4 89-JUN-08 17:59:16 0	DENSITY	54.15.000 CPS	1.176 G/CC	
5 89-JUN-08 17:56:16 0	BDENS1	0.000 CPS	0.000 OHM-M	
6 89-JUN-08 17:56:16 0	BDENS2	0.000 CPS	0.000 OHM-M	
7 89-JUN-08 17:57:02 0	CALIPER	215.400 CPS	7.600 CM	
8 89-JUN-08 17:57:02 0	CALIPER	1642.500 CPS	17.000 CM	
9 89-JUN-08 17:56:16 0	GRAVITY	0.000 CPS	0.000 G/CC	
10 89-JUN-08 17:56:16 0	GRAVITY	0.000 CPS	0.000 G/CC	
11 89-JUN-08 17:57:57 0	CALIPER1	0.000 CPS	0.000 CM	
12 89-JUN-08 17:57:57 0	CALIPER1	0.000 CPS	0.000 CM	

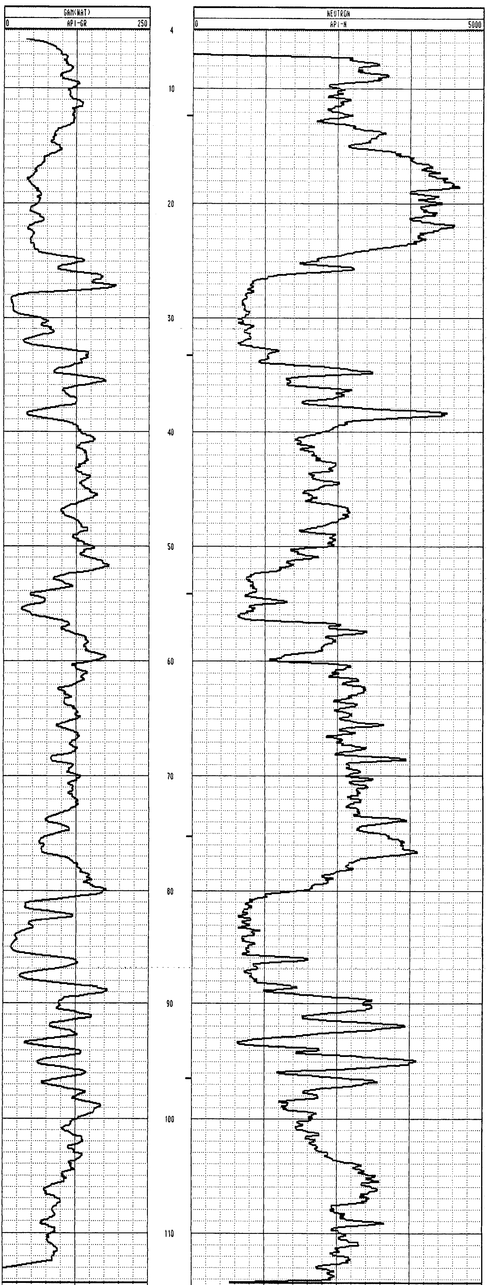
#880

Century

QHR 88031 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QHR 88031 GAMMA-NEUTRON	DEN.NEUT	
LOCATION/FIELD	: BL:22350:SL:25790	GAM.RES.	
COUNTY	: GRIZZLY	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 09/25/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 114	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 114.36	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 5.78	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 6	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : D.ZANKL	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 2
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 5000
REMARKS	:		
VERTICAL HOLE			
LOGGED OPEN HOLE			

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

CGC

Centu

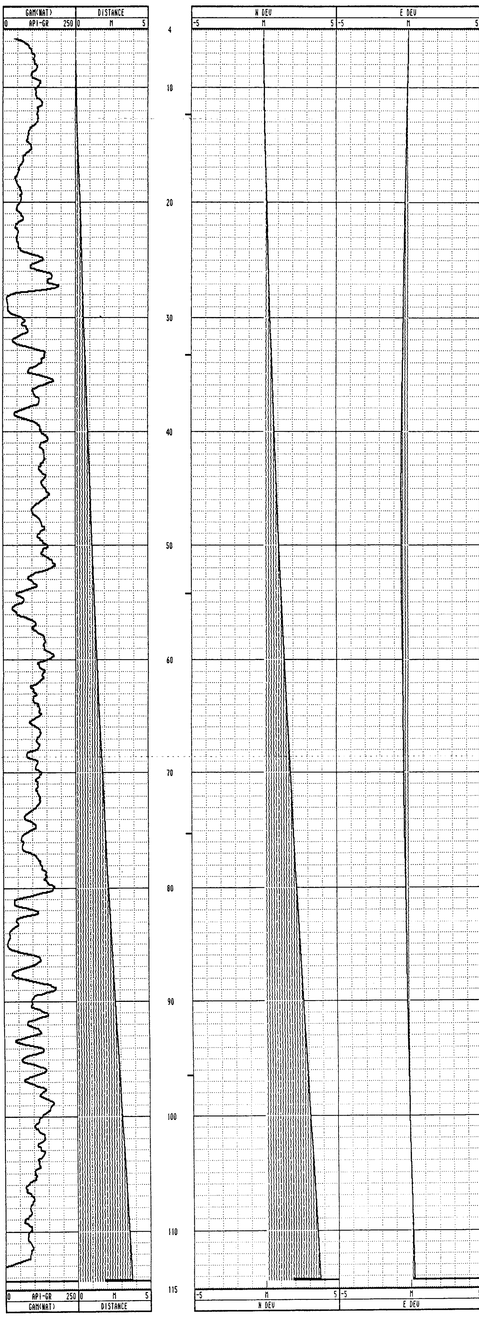
OHR ... DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER	
WELL	: OHR 88031 DEVIATION	DEN.NEUT	
LOCATION FIELD	: SL:22350:SL:25790	GAM.RES.	
COUNTY	: GRIZZLY	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 09/26/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 114	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 114.36	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 5.78	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 6	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 5000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: OHR 88031 GAM
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/26/88
DATA FROM	:	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: FEET LOG 0

Cable Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
5.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	0.04	-.05	0.1	313.2	1.1	307.4
15.0	15.00	0.11	-.12	0.2	313.5	1.4	313.0
20.0	20.00	0.21	-.23	0.3	312.8	1.5	314.3
25.0	24.99	0.31	-.31	0.4	315.0	1.3	321.7
30.0	29.99	0.43	-.35	0.6	320.4	1.8	342.2
35.0	34.99	0.60	-.40	0.7	326.0	1.9	314.9
40.0	39.99	0.73	-.47	0.9	327.4	1.8	337.0
45.0	44.98	0.88	-.50	1.0	330.3	1.7	356.0
50.0	49.98	1.04	-.48	1.1	335.2	1.9	356.8
55.0	54.98	1.22	-.48	1.3	338.6	2.0	9.2
60.0	59.97	1.40	-.43	1.5	342.8	2.2	16.9
65.0	64.97	1.62	-.36	1.7	347.3	2.4	359.2
70.0	69.96	1.83	-.35	1.9	349.2	2.4	356.1
75.0	74.96	2.01	-.31	2.0	351.2	2.0	12.9
80.0	79.95	2.22	-.23	2.2	354.1	3.2	14.3
85.0	84.95	2.45	-.18	2.5	355.8	2.4	355.3
90.0	89.94	2.67	-.14	2.7	357.1	2.4	8.6
95.0	94.94	2.88	-.09	2.9	358.1	2.4	18.4
100.0	99.93	3.10	-.02	3.1	359.6	3.1	15.9
105.0	104.93	3.34	0.06	3.3	1.0	2.6	37.1
110.0	109.92	3.55	0.15	3.5	2.5	2.8	18.4
114.4	114.28	3.74	0.24	3.7	3.7	0.0	0.0
115.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0

#880

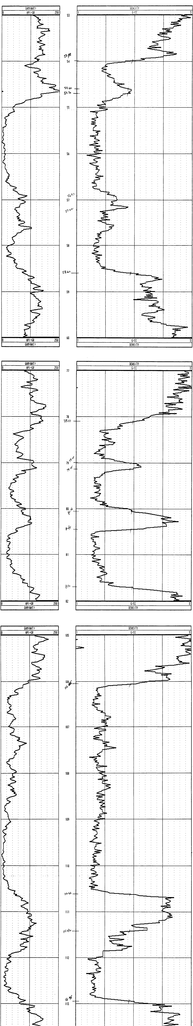
1120
11240 (or 11270)

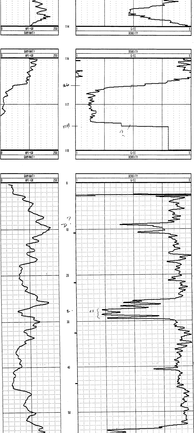
Century

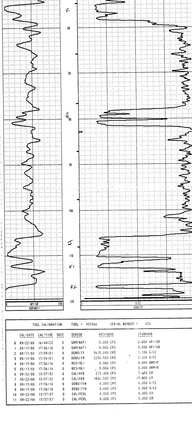
QHR 88033 GAMMA-DENSITY

COMPANY	: GEOMETTE CAN, LTD.	STACK SERVICES?	
WELL	: QHR #8033 GAMMA-DENSITY	CASING	
LOCATION-FIELD	:	SAMPLES	
COUNTY	: GRIZZLY	CALIPER	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP	RANGE	
DATE	: 09-27-88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 11240	ELEV. PERM. DATUM: 0	KB : 0
LOG BOTTOM	: 11242	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1134	DRILLING MEASURED FROM: 0	GL : 0
CASING DRILLER	: 0	LOGGING UNIT : 6401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0	RECORDED BY : D.DANIEL	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : QH11NAL
FLUID LEVEL	: FULL HOLE	PH : 0	RUN NUMBER : ONE
MATRIX DENSITY	: 2.65	MF TEMPERATURE : 0	LOG : M1
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : DEN 5
FORMATION MATRIX	: SANDSTONE	FLUID DELTA T : 656	TIMELINE 5000
REMARKS			
VERTICAL HOLE			
LOGGED 2HRS			

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS







TOOL CALIBRATION TOOL = 9310xx SERIAL NUMBER = 426

CALIBR	CALIBR	UNIT	SENSOR	SETTINGS	CURVENAME
0	09:52:46	16:46:22		GAMMAAPI	0.000 API
1	09:53:56	17:04:16		GAMMAAPI	0.000 API
2	09:54:56	17:04:16		GAMMAAPI	0.000 API
3	09:55:56	17:04:16		DENSITY	2.000 GM/CC
4	09:55:56	17:04:16		MSTRIC	0.000 GM/CC
5	09:56:56	17:04:16		MSTRIC	0.000 GM/CC
6	09:56:56	17:07:52		CALIPER	270.000 CPS
7	09:56:56	17:07:52		CALIPER	1842.000 CPS
8	09:57:56	17:07:52		CALIPER	0.000 CPS
9	09:57:56	17:07:52		CALIPER	0.000 CPS
10	09:58:56	17:07:52		CALIPER	0.000 CPS
11	09:58:56	17:07:52		CALIPER	0.000 CPS

CURVENAME
0.000 API-GR
0.000 API-GR
0.000 API-GR
0.000 G/CC
0.000 GM/CC
0.000 GM/CC
0.000 CPS
0.000 CPS
0.000 CPS
0.000 CPS

Century

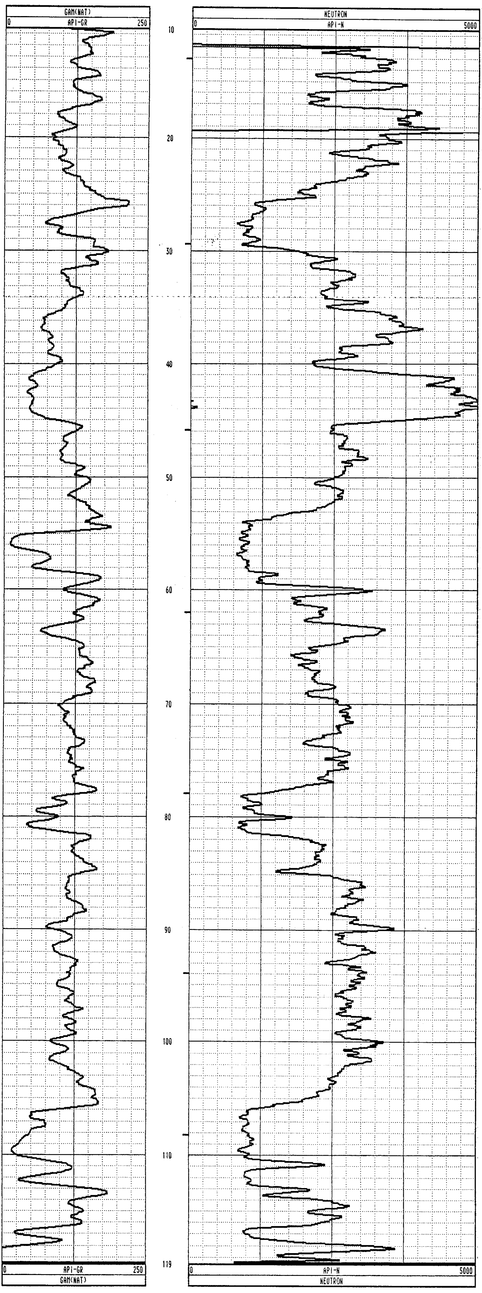
QHR 88033 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88033 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	:			GAM.RES.	
COUNTY	: GRIZZLY			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE :	
DATE	: 09/27/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 121	ELEV. PERM. DATUM	: 0	KB : 0	
LOG BOTTOM	: 119.54	LOG MEASURED FROM	: 0	DF : 0	
LOG TOP	: 10.64	DRL MEASURED FROM	: 0	GL : 0	
CASING DRILLER	: 6	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE : ORIGINAL	
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE : 9055A	
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG : 3	
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT : QUIN 2	
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH: 5000	

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 OHM	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 OHM	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 MV	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 MV	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

QHR 88033 DEVIATION

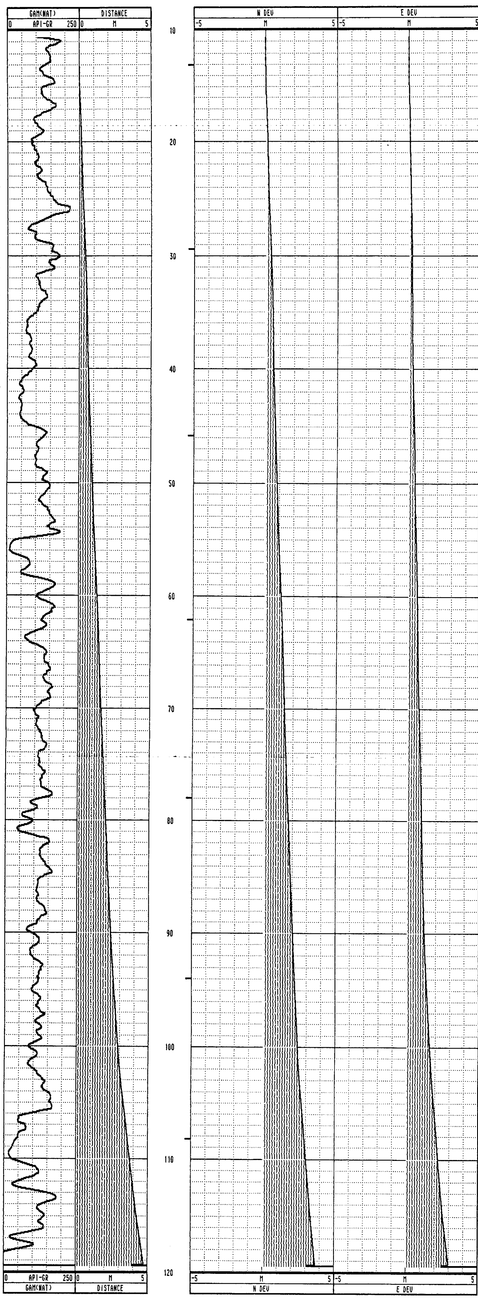
COMPANY	: QUINTETTE COAL LTD.		
WELL	: QHR 88033 DEVIATION		
LOCATION/FIELD	:		
COUNTY	: GRIZZLY		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

DATE	: 09/27/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 121	ELEV. PERM. DATUM:	0	KB	: 0
LOG BOTTOM	: 119.54	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 10.64	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 6	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 6
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	5000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QHR 88033 DEV
FIELD OFFICE	: CALGARY	DATE OF LOG	: 09/27/88
DATA FROM	:	PROBE	: 9055A 46
MAG. DECL.	: 24.500	DEPTH UNITS	: FEET LOG 5

Cable Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
10.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
15.0	15.00	0.03	0.01	0.0	25.8	1.0	53.7
20.0	20.00	0.14	0.06	0.2	23.6	1.4	36.5
25.0	25.00	0.22	0.13	0.3	30.6	1.7	29.2
30.0	29.99	0.38	0.19	0.4	27.2	1.6	2.7
35.0	34.99	0.50	0.22	0.5	23.5	0.9	11.2
40.0	39.99	0.58	0.28	0.6	25.4	1.6	37.9
45.0	44.99	0.68	0.37	0.8	28.5	1.7	31.5
50.0	49.99	0.84	0.45	1.0	28.4	2.5	22.6
55.0	54.98	0.97	0.55	1.1	29.5	2.1	37.8
60.0	59.98	1.14	0.63	1.3	29.2	2.6	30.7
65.0	64.98	1.29	0.69	1.5	28.3	1.8	22.4
70.0	69.97	1.40	0.78	1.6	29.2	1.9	49.7
75.0	74.97	1.55	0.92	1.8	30.7	2.5	34.5
80.0	79.97	1.72	1.01	2.0	30.4	2.1	29.3
85.0	84.96	1.88	1.09	2.2	30.2	2.5	41.6
90.0	89.96	2.04	1.21	2.4	30.7	2.5	31.5
95.0	94.95	2.20	1.39	2.6	32.2	2.5	38.3
100.0	99.94	2.40	1.59	2.9	33.6	3.6	53.2
105.0	104.93	2.69	1.89	3.3	35.2	5.8	45.2
110.0	109.90	3.01	2.21	3.7	36.3	5.5	48.4
115.0	114.88	3.34	2.56	4.2	37.5	6.7	49.1
119.5	119.39	3.69	2.99	4.7	39.0	0.0	0.0
120.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0

Century

QHR 88035 GAMMA-DENSITY

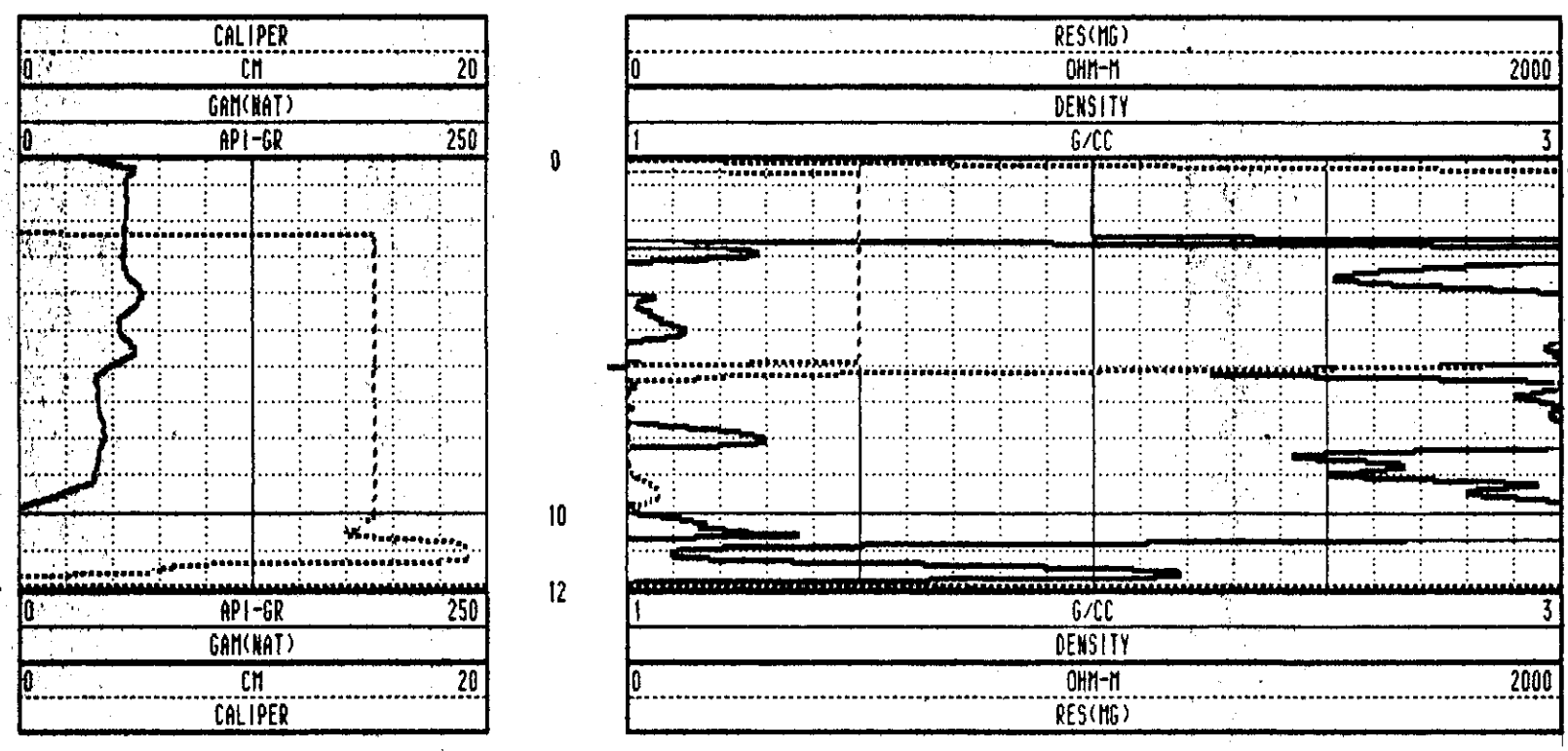
COMPANY	: QUINTETTE COAL LTD.				
WELL	: QHR 88035 GAMMA-DENSITY				
LOCATION/FIELD	:				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/03/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 30	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 12.04	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.38	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 6	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 5000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

#880

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE - ABANDONED HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

Century

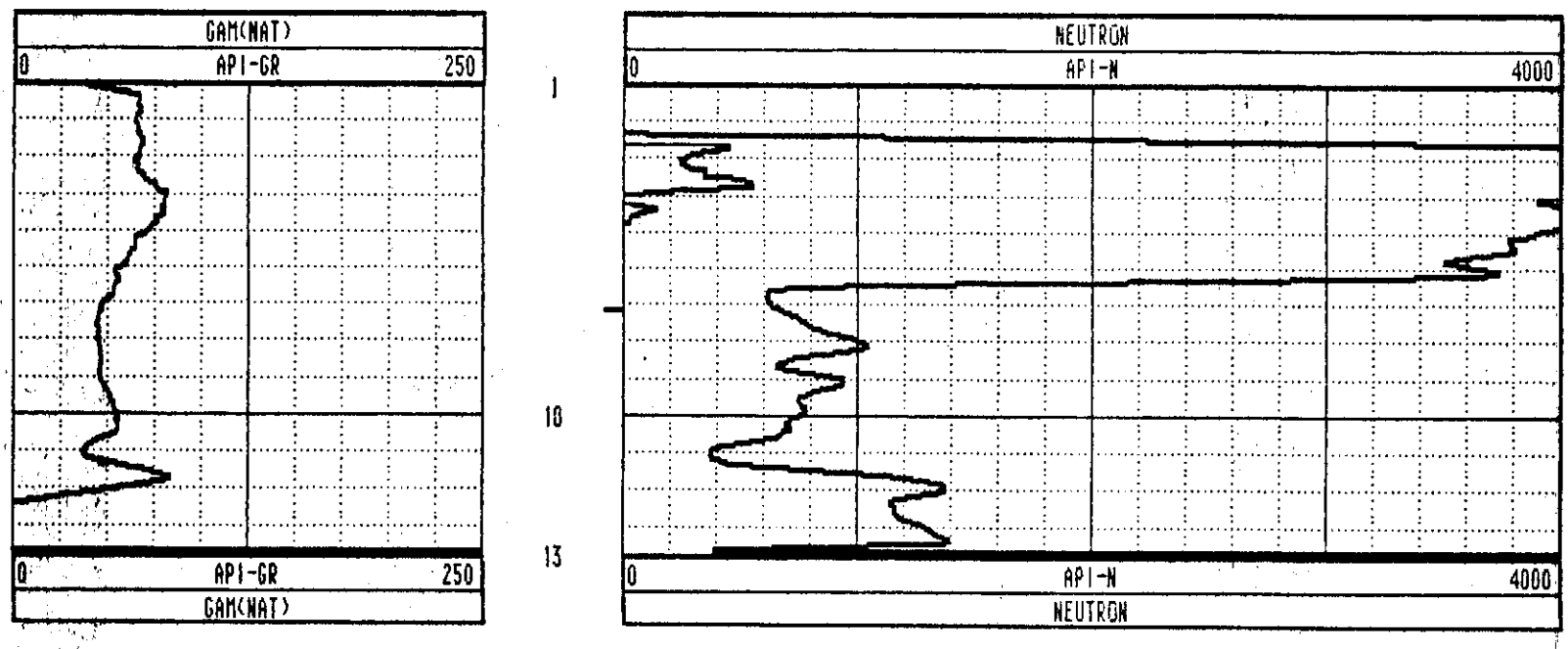
QHR 88035 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88035 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	:			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/03/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 30	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 13.72	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.12	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 6	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 5000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE - ABANDONED HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

Century

QHR 88036 GAMMA-DENSITY

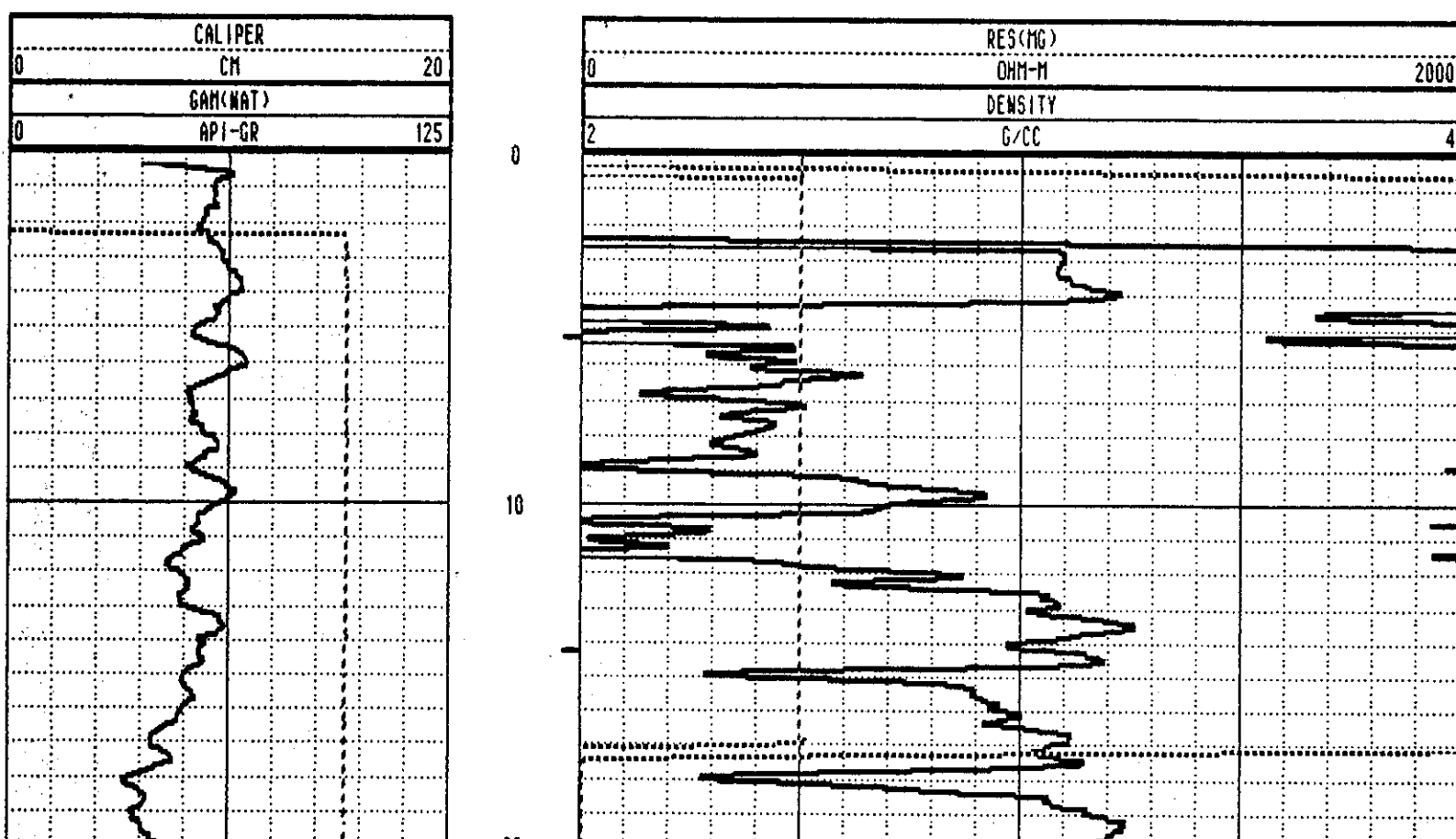
COMPANY	: QUINTETTE COAL LTD.				
WELL	: QHR 88036 GAMMA-DENSITY				
LOCATION/FIELD	:				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/04/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 51	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 49.70	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.34	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 51	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 5000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED THROUGH CASING

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

#880



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

Century

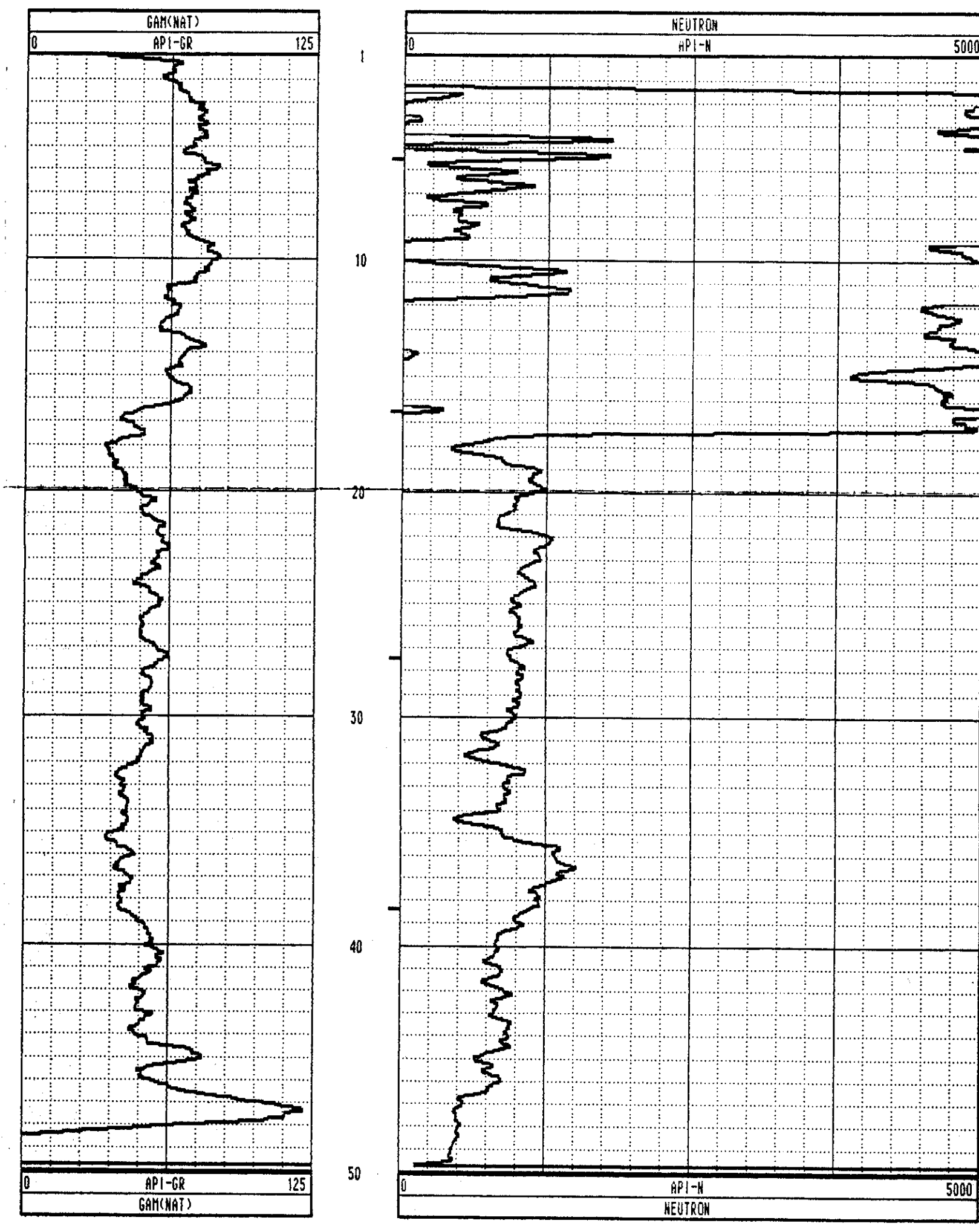
QHR 88036 GAMMA-NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QHR 88036 GAMMA-NEUTRON			DEN.NEUT	
LOCATION/FIELD	:			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/04/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 51	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 49.78	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.06	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 51	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: D.ZANKL		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 5000

REMARKS :
VERTICAL HOLE
LOGGED THROUGH CASING

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

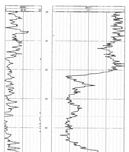
3680

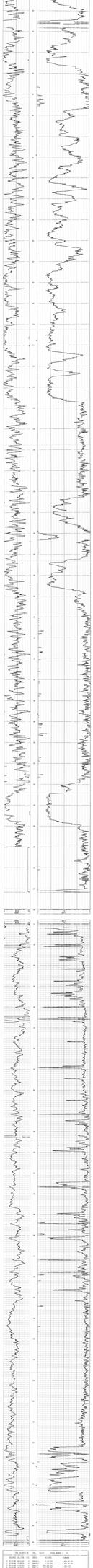


TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	07/28/88	15:20:10	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

Century
GEOPHYSICAL CORPORATION
GOB ARISS GAMMA-DENSITY





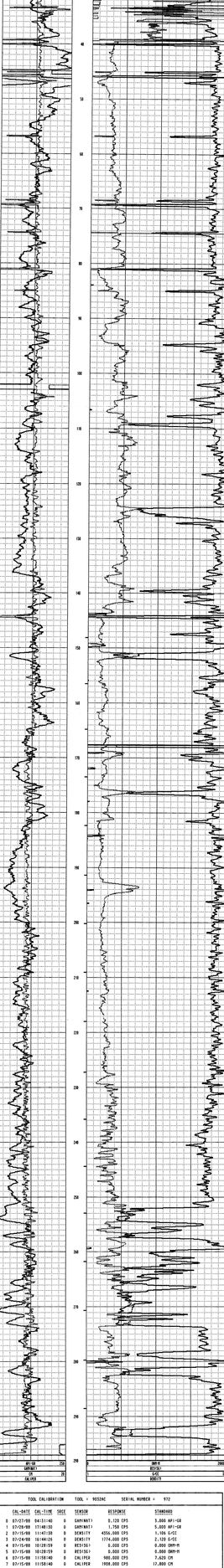
Century

#880

QMR 88155 GAMMA-DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR 88155 GAMMA-DENSITY		
LOCATION/FIELD	:		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 07-31/88	PERMANENT DATUM : GL	ELEVATIONS
DEPTH DRILLER	: 297	ELEV., PERM. DATUM:	KB :
LOG BOTTOM	: 293.16	LOG MEASURED FROM: GL	DF :
LOG TOP	: -.08	DRL MEASURED FROM: GL	GL :
CASING DRILLER	: 0	LOGGING UNIT : 8602	
CASING TYPE	:	FIELD OFFICE : CALGARY	
CASING THICKNESS: 0		RECORDED BY : R. WHITTAKER	
BIT SIZE	: 15.34	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.5	RM : 0	TYPE : 9032AC
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 1
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 632 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 2500
REMARKS	:		
OPEN HOLE			

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9032AC SERIAL NUMBER = 972

	CAL-DATE	CAL-TIME	SECS	SENSOR	RESPONSE	STANDARD
0	07/27/88	04:31:40	0	GAMMAR1	0.120 CPS	0.000 API-GR
1	07/29/88	17:48:30	0	GAMMAR1	1.750 CPS	5.000 API-GR
2	07/15/88	11:47:38	0	DENSITY	4356.000 CPS	1.106 G/CC
3	07/24/88	10:44:26	0	DENSITY	1774.000 CPS	2.120 G/CC
4	07/15/88	10:28:59	0	RESISC1	0.000 CPS	0.000 OHM-M
5	07/15/88	10:28:59	0	RESISC1	0.000 CPS	0.000 OHM-M
6	07/15/88	11:58:40	0	CALIPER	980.000 CPS	7.625 CM
7	07/15/88	11:58:40	0	CALIPER	1980.000 CPS	17.800 CM
8	07/15/88	10:28:59	0	DENSITYR	0.000 CPS	0.000 G/CC
9	07/15/88	10:28:59	0	DENSITYR	0.000 CPS	0.000 G/CC
10	07/15/88	10:28:59	0	CALIPERL	0.000 CPS	0.000 CM
11	07/15/88	10:28:59	0	CALIPERL	0.000 CPS	0.000 CM

#880

Century

QMR 88155 GAMMA-NEUTRON

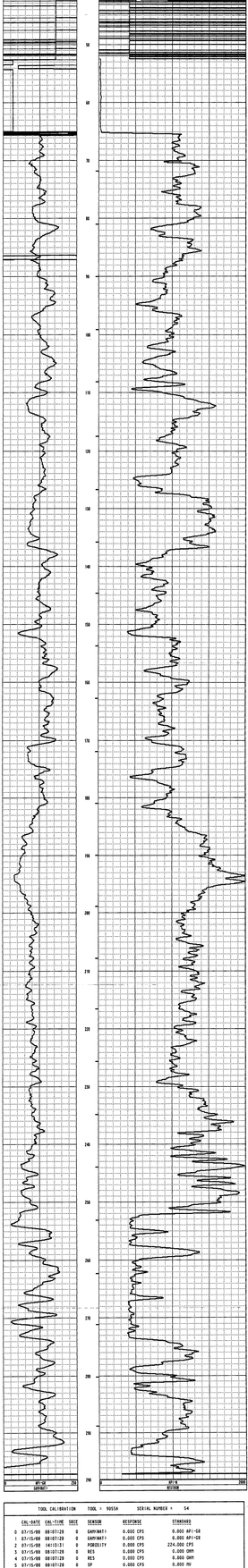
COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR 88155 GAMMA-NEUTRON	DEN.NEUT	
LOCATION/FIELD	: BL 20.530:SL 37.800/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 07/28/88	PERMANENT DATUM	: 1350	ELEVATIONS	
DEPTH DRILLER	: 297	ELEV. PERM. DATUM	: 1350	KB	:
LOG BOTTOM	: 297.14	LOG MEASURED FROM	: GL	DF	:
LOG TOP	: 0.86	DRL MEASURED FROM	: 1350	GL	: 1350
CASING DRILLER	: 5	LOGGING UNIT	: 8602		
CASING TYPE	: PVC	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0	RECORDED BY	: R. WHITTAKER		

BIT SIZE	: 15.54	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.5	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 175	PLOT	: GSS 10
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	2500
REMARKS	:				

ANGLE HOLE AZIMUTH 217 : INCLINATION 60

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 54

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/15/88	08:07:28	0	GAMMA(T)	0.000 CPS	0.000 API-GR
1	07/15/88	08:07:28	0	GAMMA(T)	0.000 CPS	0.000 API-GR
2	07/15/88	14:13:31	0	POROSITY	0.000 CPS	224.000 CPS
3	07/15/88	08:07:28	0	RES	0.000 CPS	0.000 OHM
4	07/15/88	08:07:28	0	RES	0.000 CPS	0.000 OHM
5	07/15/88	08:07:28	0	SP	0.000 CPS	0.000 MV
6	07/15/88	08:07:28	0	SP	0.000 CPS	0.000 MV
7	07/15/88	01:26:27	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/15/88	08:15:19	0	NEUTRON	224.000 CPS	271.000 API-N

#20

Century

GMR 88155 DEVIATION

COMPANY : SASKATCHE CONS LTD.
WELL : GMR 88155 (WEST)
LOCATION/FIELD : 31, 2055S/3E, 5TH/MACKENZIE RIVER
COUNTY :
PROVINCE : BRITISH COLUMBIA
SECTION : TOWNSHIP : RANGE :

STACK SERVICES
CALGARY
CAL.ALB.

DATE : 06-06-88
DEPTH DRILLER : 2055
LOG BOTTOM : 2051.14
LOG TOP : 0.00
CASING DRILLER : 5
CASING LOGGER : 2048
CASING THICKNESS : 0

PERMANENT DATUM : 1350
ELEV. PERM. DATUM : 1350
LOG MEASURED FROM: 1350
DRL MEASURED FROM: 1350

LOGGING UNIT : 8682
ENGINEER : CALGARY
RECORDED BY : R. WHITTAKER

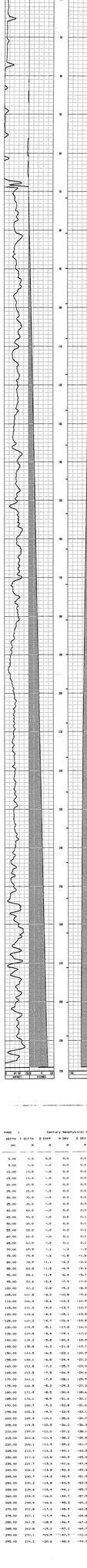
ELEVATIONS
KB : 1350
DF : 1350
GL : 1350

BIT SIZE : 17.34
MAGNETIC DECL. : -4.500
MATRIX DENSITY : 2.68
FLUID DENSITY : 1.00

BOREHOLE FLUID : WATER
PH : 8
RM @ TEMPERATURE : @
MATRIX DELTA T : 172
FLUID DELTA T : 698

FILE : PROCESSED
TYPE : 10554
RUN : 1
PLOT : 9050-0 1
THRESH: 2500

ALL SERVICES PROVIDED SUBJECT TO CSC STANDARD TERMS AND CONDITIONS



PAGE 1 Century Geophysical Corp. 90306 (PROCESSED)

DEPTH	D DIFF	N GRAV	C DEV DISTANCE	AZIMUTH	GAMMA	GAMMA
(M)	M	M	M	(DEG)	DEG	DEG
0.00	0.0	0.0	0.0	0.0	0.0	0.0
5.00	5.0	0.0	0.0	0.0	55.1	0.1
10.00	5.0	0.0	0.0	0.0	60.3	0.1
15.00	5.0	0.0	0.0	0.0	57.1	0.1
20.00	5.0	0.0	0.0	0.0	57.1	0.1
25.00	5.0	0.0	0.0	0.0	54.6	0.1
30.00	5.0	0.0	0.0	0.0	52.0	0.1
35.00	5.0	0.0	0.0	0.0	52.4	0.1
40.00	5.0	0.0	0.0	0.0	51.7	0.1
45.00	5.0	0.0	0.0	0.1	53.3	0.1
50.00	5.0	0.0	0.0	0.1	52.7	0.1
55.00	5.0	0.0	0.0	0.1	53.9	0.1
60.00	5.0	0.0	0.0	0.1	52.1	0.1
65.00	5.0	0.0	0.0	0.1	52.1	0.1
70.00	5.0	-1.1	-1.1	0.5	147.0	0.4
75.00	5.0	-1.7	-1.8	1.1	205.5	0.6
80.00	5.0	-3.3	-3.3	4.3	221.9	0.9
85.00	5.0	-4.9	-4.9	6.5	221.9	0.9
90.00	5.0	-6.4	-6.5	8.5	221.0	0.9
95.00	5.0	-7.9	-7.9	10.5	221.0	0.9
100.00	5.0	-9.3	-9.3	12.5	221.7	0.9
105.00	5.0	-10.8	-9.6	14.5	221.7	0.9
110.00	5.0	-12.3	-10.9	16.4	221.7	0.9
115.00	5.0	-13.7	-12.2	18.3	221.8	0.9
120.00	5.0	-15.2	-13.5	20.2	221.8	0.9
125.00	5.0	-16.6	-14.8	22.1	221.8	0.9
130.00	5.0	-17.9	-16.0	23.9	222.0	0.9
135.00	5.0	-19.3	-17.2	25.7	222.1	0.9
140.00	5.0	-20.6	-18.3	27.5	222.1	0.9
145.00	5.0	-21.8	-19.3	29.4	222.1	0.9
150.00	5.0	-23.1	-20.4	31.2	222.1	0.9
155.00	5.0	-24.3	-21.3	33.0	222.2	0.9
160.00	5.0	-25.4	-22.2	34.7	222.4	0.9
165.00	5.0	-26.5	-23.1	36.5	222.4	0.9
170.00	5.0	-27.6	-23.9	38.2	222.7	0.9
175.00	5.0	-28.7	-24.8	40.0	223.0	0.9
180.00	5.0	-29.8	-25.6	41.8	223.2	0.9
185.00	5.0	-30.9	-26.4	43.6	223.5	0.9
190.00	5.0	-32.0	-27.2	45.5	224.0	0.9
195.00	5.0	-33.2	-28.1	47.4	224.3	0.9
200.00	5.0	-34.4	-29.0	49.3	224.8	0.9
205.00	5.0	-35.5	-29.8	51.3	225.1	0.9
210.00	5.0	-36.7	-30.7	53.2	225.6	0.9
215.00	5.0	-37.9	-31.6	55.2	226.2	0.9
220.00	5.0	-39.2	-32.5	57.2	226.8	0.9
225.00	5.0	-40.5	-33.5	59.2	227.5	0.9
230.00	5.0	-41.8	-34.5	61.1	228.0	0.9
235.00	5.0	-43.2	-35.5	63.1	228.7	0.9
240.00	5.0	-44.6	-36.6	65.0	229.4	0.9
245.00	5.0	-46.0	-37.7	66.9	230.2	0.9
250.00	5.0	-47.4	-38.8	68.7	230.9	0.9
255.00	5.0	-48.8	-39.9	70.4	231.6	0.9
260.00	5.0	-50.2	-41.0	72.1	232.3	0.9
265.00	5.0	-51.6	-42.1	73.8	233.0	0.9
270.00	5.0	-53.0	-43.2	75.4	233.7	0.9
275.00	5.0	-54.4	-44.3	76.9	234.4	0.9
280.00	5.0	-55.8	-45.4	78.4	235.1	0.9
285.00	5.0	-57.2	-46.5	79.8	235.8	0.9
290.00	5.0	-58.6	-47.6	81.2	236.5	0.9
295.00	5.0	-60.0	-48.7	82.5	237.2	0.9
300.00	5.0	-61.4	-49.8	83.7	237.9	0.9
305.00	5.0	-62.8	-50.9	84.9	238.6	0.9
310.00	5.0	-64.2	-52.0	86.0	239.3	0.9
315.00	5.0	-65.6	-53.1	87.1	240.0	0.9
320.00	5.0	-67.0	-54.2	88.1	240.7	0.9
325.00	5.0	-68.4	-55.3	89.1	241.4	0.9
330.00	5.0	-69.8	-56.4	90.0	242.1	0.9
335.00	5.0	-71.2	-57.5	90.9	242.8	0.9
340.00	5.0	-72.6	-58.6	91.7	243.5	0.9
345.00	5.0	-74.0	-59.7	92.5	244.2	0.9
350.00	5.0	-75.4	-60.8	93.2	244.9	0.9
355.00	5.0	-76.8	-61.9	93.9	245.6	0.9
360.00	5.0	-78.2	-63.0	94.5	246.3	0.9
365.00	5.0	-79.6	-64.1	95.1	247.0	0.9
370.00	5.0	-81.0	-65.2	95.6	247.7	0.9
375.00	5.0	-82.4	-66.3	96.1	248.4	0.9
380.00	5.0	-83.8	-67.4	96.5	249.1	0.9
385.00	5.0	-85.2	-68.5	96.9	249.8	0.9
390.00	5.0	-86.6	-69.6	97.2	250.5	0.9
395.00	5.0	-88.0	-70.7	97.5	251.2	0.9
400.00	5.0	-89.4	-71.8	97.7	251.9	0.9
405.00	5.0	-90.8	-72.9	97.8	252.6	0.9
410.00	5.0	-92.2	-74.0	97.9	253.3	0.9
415.00	5.0	-93.6	-75.1	97.9	254.0	0.9
420.00	5.0	-95.0	-76.2	97.8	254.7	0.9
425.00	5.0	-96.4	-77.3	97.7	255.4	0.9
430.00	5.0	-97.8	-78.4	97.5	256.1	0.9
435.00	5.0	-99.2	-79.5	97.2	256.8	0.9
440.00	5.0	-100.6	-80.6	96.9	257.5	0.9
445.00	5.0	-102.0	-81.7	96.5	258.2	0.9
450.00	5.0	-103.4	-82.8	96.1	258.9	0.9
455.00	5.0	-104.8	-83.9	95.6	259.6	0.9
460.00	5.0	-106.2	-85.0	95.1	260.3	0.9
465.00	5.0	-107.6	-86.1	94.5	261.0	0.9
470.00	5.0	-109.0	-87.2	93.9	261.7	0.9
475.00	5.0	-110.4	-88.3	93.2	262.4	0.9
480.00	5.0	-111.8	-89.4	92.5	263.1	0.9
485.00	5.0	-113.2	-90.5	91.7	263.8	0.9
490.00	5.0	-114.6	-91.6	90.9	264.5	0.9
495.00	5.0	-116.0	-92.7	90.0	265.2	0.9
500.00	5.0	-117.4	-93.8	89.1	265.9	0.9
505.00	5.0	-118.8	-94.9	88.1	266.6	0.9
510.00	5.0	-120.2	-96.0	87.1	267.3	0.9
515.00	5.0	-121.6	-97.1	86.0	268.0	0.9
520.00	5.0	-123.0	-98.2	84.9	268.7	0.9
525.00	5.0	-124.4	-99.3	83.7	269.4	0.9
530.00	5.0	-125.8	-100.4	82.5	270.1	0.9
535.00	5.0	-127.2	-101.5	81.2	270.8	0.9
540.00	5.0	-128.6	-102.6	79.8	271.5	0.9
545.00	5.0	-130.0	-103.7	78.4	272.2	0.9
550.00	5.0	-131.4	-104.8	76.9	272.9	0.9
555.00	5.0	-132.8	-105.9	75.4	273.6	0.9
560.00	5.0	-134.2	-107.0	73.8	274.3	0.9
565.00	5.0	-135.6	-108.1	72.1	275.0	0.9
570.00	5.0	-137.0	-109.2	70.4	275.7	0.9
575.00	5.0	-138.4	-110.3	68.7	276.4	0.9
580.00	5.0	-139.8	-111.4	66.9	277.1	0.9
585.00	5.0	-141.2	-112.5	65.0	277.8	0.9
590.00	5.0	-142.6	-113.6	63.1	278.5	0.9
595.00	5.0	-144.0	-114.7	61.1	279.2	0.9
600.00	5.0	-145.4	-115.8	59.2	279.9	0.9
605.00	5.0	-146.8	-116.9	57.2	280.6	0.9
610.00	5.0	-148.2	-118.0	55.2	281.3	0.9
615.00	5.0	-149.6	-119.1	53.2	282.0	0.9
620.00	5.0	-151.0	-120.2	51.3	282.7	0.9
625.00	5.0	-152.4	-121.3	49.3	283.4	0.9
630.00	5.0	-153.8	-122.4	47.4	284.1	0.9
635.00	5.0	-155.2	-123.5	45.5	284.8	0.9
640.00	5.0	-156.6	-124.6	43.6	285.5	0.9
645.00	5.0	-158.0	-125.7	41.8	286.2	0.9
650.00	5.0	-159.4	-126.8	40.0	286.9	0.9
655.00	5.0	-160.8	-127.9	38.2	287.6	0.9
660.00	5.0	-162.2	-129.0	36.5	288.3	0.9
665.00	5.0	-163.6	-130.1	34.7	289.0	0.9
670.00	5.0	-165.0	-131.2	33.0	289.7	0.9
675.00	5.0	-166.4	-132.3	31.2	290.4	0.9
680.00	5.0	-167.8	-133.4	29.4	291.1	0.9
685.00	5.0	-169.2	-134.5	27.5	291.8	0.9
690.00	5.0	-170.6	-135.6	25.7	292.5	0.9
695.00	5.0	-172.0	-136.7	23.9	293.2	0.9
700.00	5.0	-173.4	-137.8	22.1	293.9	0.9
705.00	5.0	-174.8	-138.9	20.2	294.6	0.9
710.00	5.0	-176.2	-140.0	18.3	295.3	0.9
715.00	5.0	-177.6	-141.1	16.4	296.0	0.9
720.00	5.0	-179.0	-142.2	14.5	296.7	0.9
725.00	5.0	-180.4	-143.3	12.5	297.4	0.9
730.00	5.0	-181.8	-144.4	10.5	298.1	0.9
735.00	5.0	-183.2	-145.5	8.5	298.8	0.9
740.00	5.0	-184.6	-146.6	6.5	299.5	0.9
745.00	5.0	-186.0	-147.7	4.3	300.2	0.9
750.00	5.0	-187.4	-148.8	1.1	300.9	0.9
755.00	5.0	-188.8	-149.9	0.5	301.6	0.9
760.00	5.0	-190.2	-151.0	0.1	302.3	0.9
765.00	5.0	-191.6	-152.1	0.1	303.0	0.9
770.00	5.0	-193.0	-153.2	0.1

Century

#880

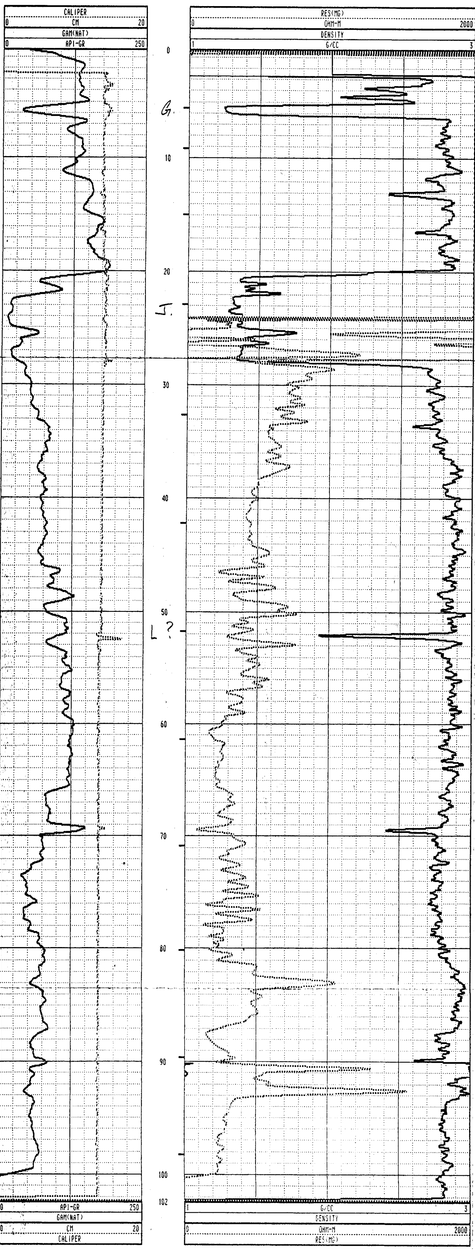
QMR88501 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88501 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: HOVERINE VALLY/MESA EXT.	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

DATE	: 10/06/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 102	ELEV. PERM. DATUM:	860	KB	: 0
LOG BOTTOM	: 102.36	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 0.46	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 4
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	8000

REMARKS :
VERTICAL HOLE
LOG OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAMMA(AT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAMMA(AT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RESIS(M)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RESIS(M)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:57:32	0	CALIPER	213.400 CPS	7.000 CM
7	09/22/88	13:57:32	0	CALIPER	1842.500 CPS	17.600 CM
8	09/17/88	17:36:16	0	DENSITYM	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYM	0.000 CPS	0.000 G/CC
10	09/22/88	13:57:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:57:57	0	CALIPERL	0.000 CPS	0.000 CM

12 20 (MARKED)

CGC

Century #880

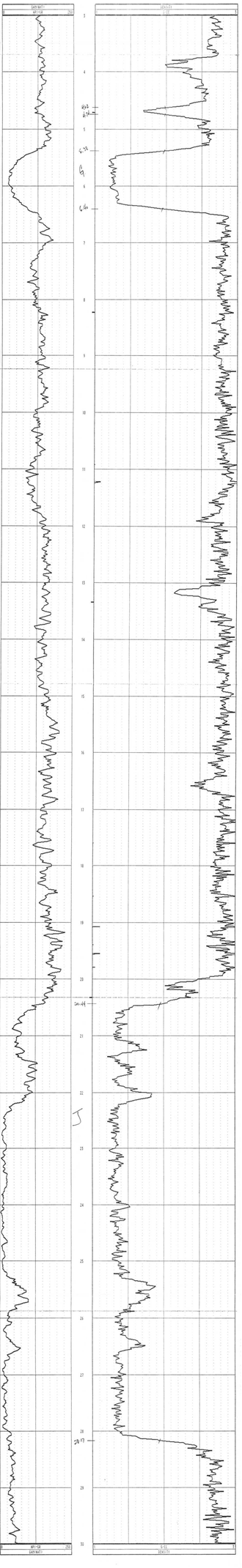
QMR88501 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88501 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLY/MESA EXT.	GAM.RES.	
COUNTY	:	CAL.DEN	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	PAGE :

DATE	: 10/06/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 102	ELEV. PERM. DATUM: 860	KB : 0
LOG BOTTOM	: 102.36	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 0.46	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 2	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS:	0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	PH : 0	TYPE : 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 4
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 8000
REMARKS	:		

VERTICAL HOLE
LOG OPEN HOLE

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



Century #880

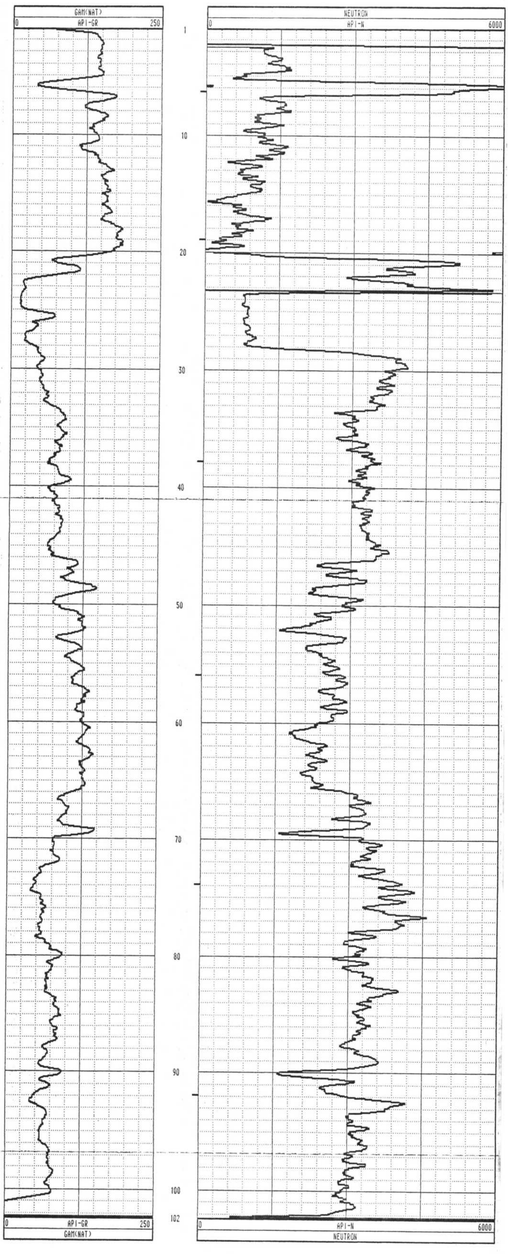
QMR88501 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88501 GAMMA NEUTRON	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLY/MESA EXT.	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

DATE	: 10/06/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 102	ELEV. PERM. DATUM	: 860	KB	: 0
LOG BOTTOM	: 102.34	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.24	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE 39450/20900

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

QMR88501 DEVIATION

COMPANY	: QUINTETTE COAL LTD.				
WELL	: QMR88501 DEVIATION				
LOCATION/FIELD	: WOVERINE VALLY/MESH EXT.				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 11/28/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 102	ELEV. PERM. DATUM: 860		KB	: 0
LOG BOTTOM	: 102.34	LOG MEASURED FROM: 0		DF	: 0
LOG TOP	: 1.24	DRL MEASURED FROM: 0		GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 39450/20900

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

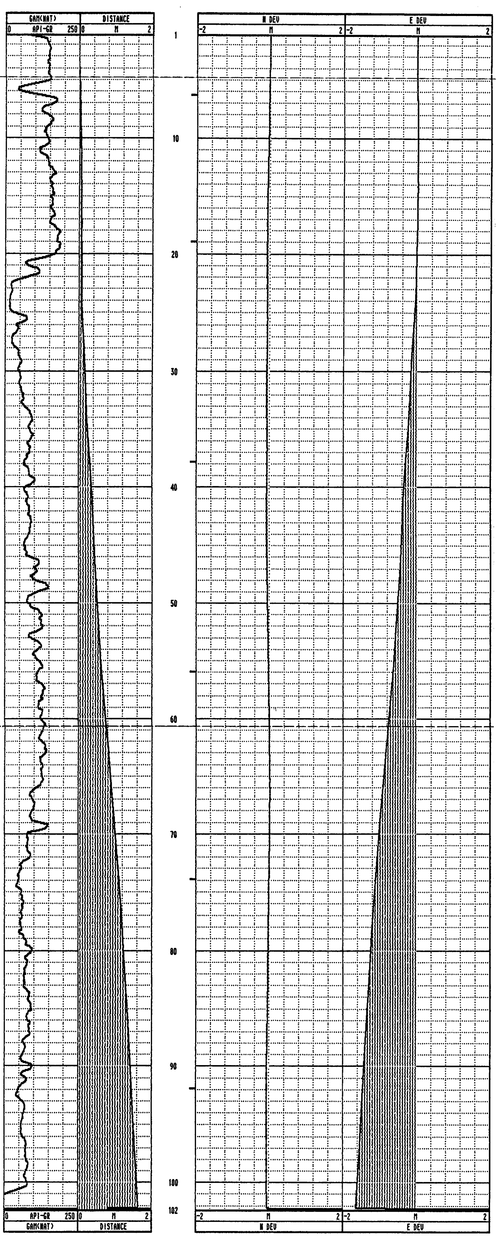


Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	-.04	0.02	0.0	157.7	0.4	167.4
20.0	20.00	-.08	-.01	0.1	187.8	0.4	237.1
30.0	30.00	-.08	-.13	0.2	243.8	0.7	284.7
40.0	40.00	-.07	-.34	0.4	258.1	1.0	261.1
50.0	49.99	-.03	-.81	0.8	263.8	1.3	287.6
60.0	59.99	-.00	-.74	0.7	269.7	1.4	274.2
70.0	69.99	0.01	-1.01	1.0	270.6	1.5	288.0
80.0	79.98	-.03	-1.23	1.2	268.8	1.0	242.6
90.0	89.98	-.07	-1.42	1.4	267.3	1.0	245.3
100.0	99.98	-.09	-1.59	1.6	267.7	1.0	251.1
102.3	102.32	-.06	-1.64	1.6	267.9	0.0	0.0

COMPU-LOG II - VERTICAL DEVIATION

CLIENT : QUINTETTE COAL LTD. HOLE ID. : QMR88501 GAMM
FIELD OFFICE : CALGARY DATE OF LOG : 10/06/88
DATA FROM : PROBE : 9055A
MAG. DECL. : 24.300 DEPTH UNITS : METER LOG 6

#880 1 : 200 MARKED

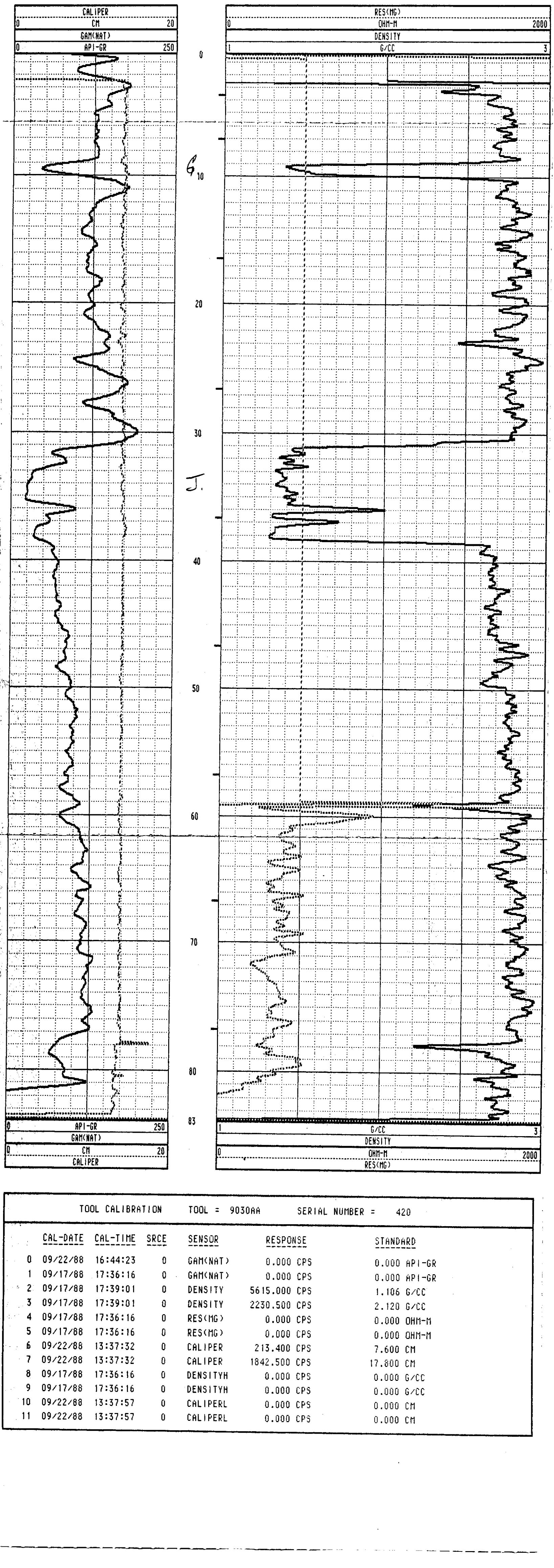
Century

QMR88502 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88502 GAMMA DENSITY			DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/07/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 84	ELEV. PERM. DATUM	: 1010	KB	: 0
LOG BOTTOM	: 83.82	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.42	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 35950/20100

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

CGC #880 Century

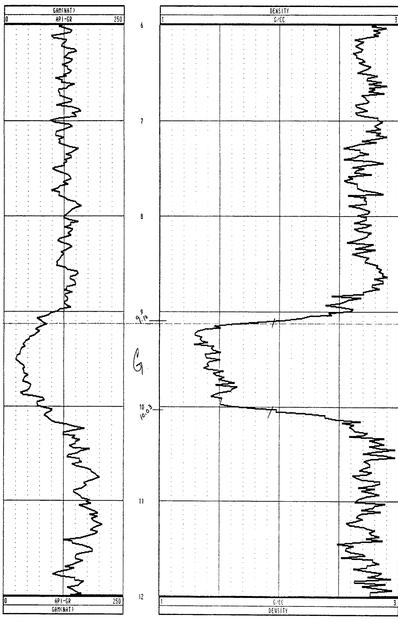
QMR88502 GAMMA DENSITY

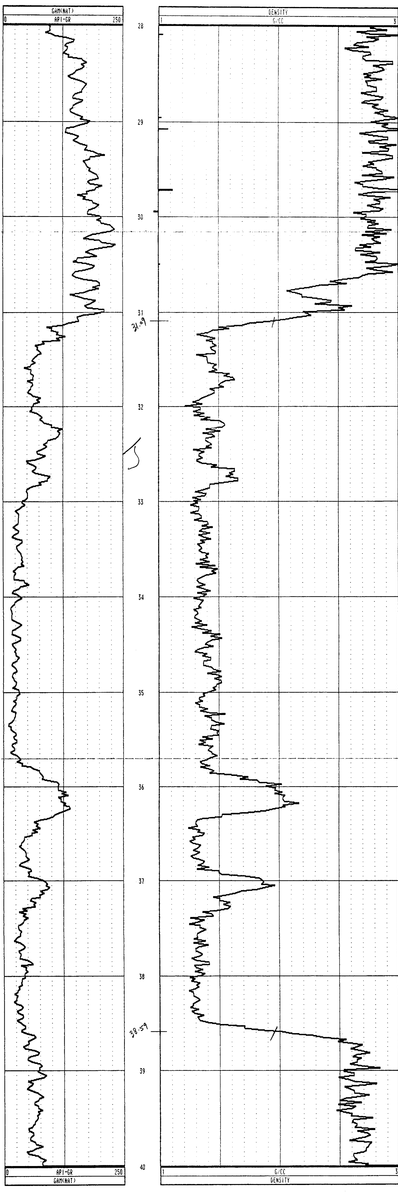
COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88502 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

DATE	: 10/07/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 84	ELEV. PERM. DATUM	: 1010	KB	: 0
LOG BOTTOM	: 83.82	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.42	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE 35950/20100

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS





#830

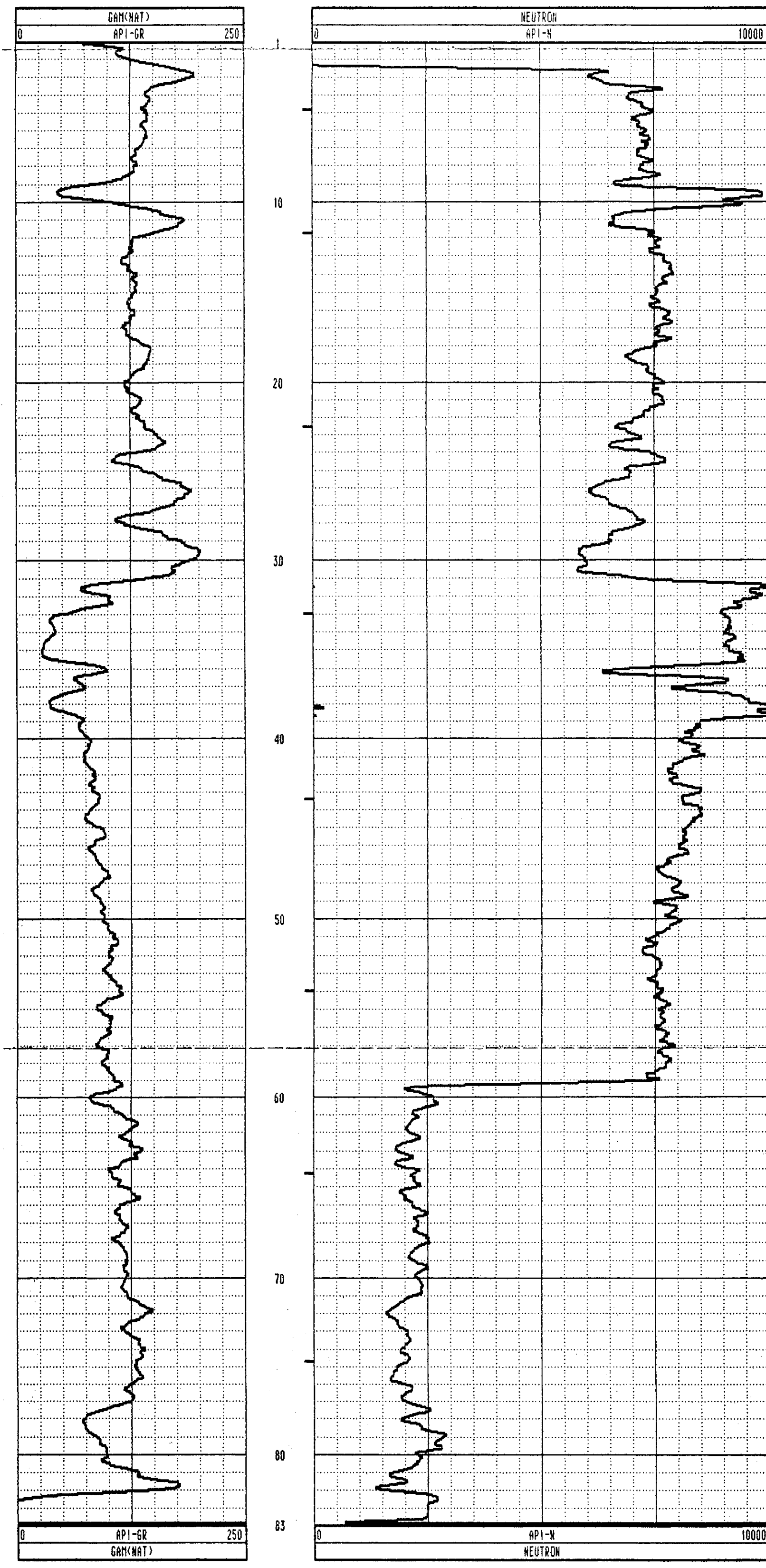
Century

QMR88502 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88502 GAMMA NEUTRON			DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/07/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 84	ELEV. PERM. DATUM	: 1010	KB	: 0
LOG BOTTOM	: 83.86	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.12	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 35950/20100

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

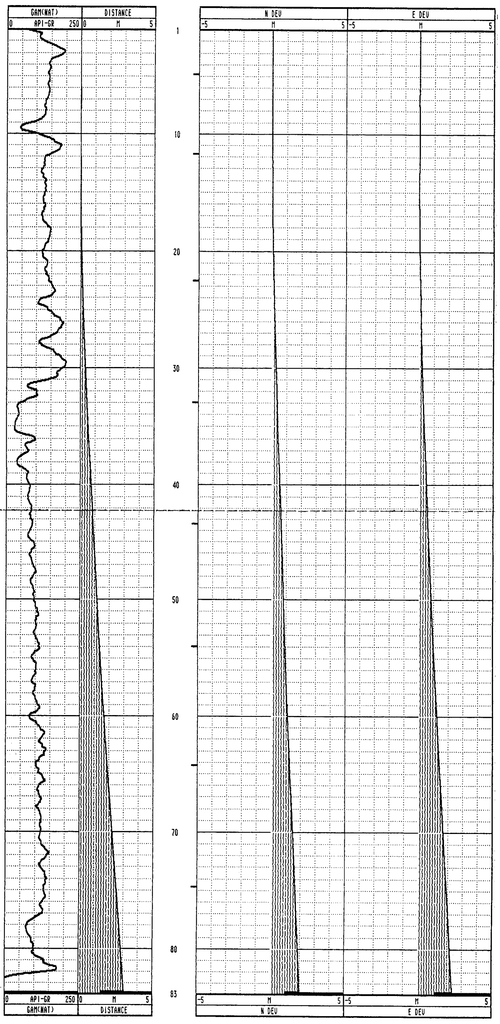
Century

QMR88502 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88502 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :
DATE	: 11/28/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 84	ELEV. PERM. DATUM: 1010	KB : 0
LOG BOTTOM	: 83.86	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.12	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 1	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 6
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 8000
REMARKS	:		

VERTICAL HOLE
LOGGED OPEN HOLE 35950/20100

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QMR88502 GAMM
FIELD OFFICE	: CALGARY	DATE OF LOG	: 10/07/88
DATA FROM	:	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 4

Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	0.00	-.01	0.0	281.4	0.4	333.4
20.0	20.00	0.07	0.01	0.1	10.2	0.5	22.0
30.0	29.99	0.29	0.19	0.3	34.1	2.0	44.4
40.0	39.99	0.55	0.50	0.7	42.2	2.1	42.4
50.0	49.98	0.82	0.83	1.2	45.3	2.4	53.8
60.0	59.96	1.11	1.24	1.7	48.2	3.4	48.2
70.0	69.95	1.47	1.67	2.2	48.6	3.7	35.1
80.0	79.93	1.86	2.15	2.8	49.2	3.2	30.0
83.9	83.78	1.99	2.34	3.1	49.6	0.0	0.0

1:200 MARKED

#880

Century

CGC

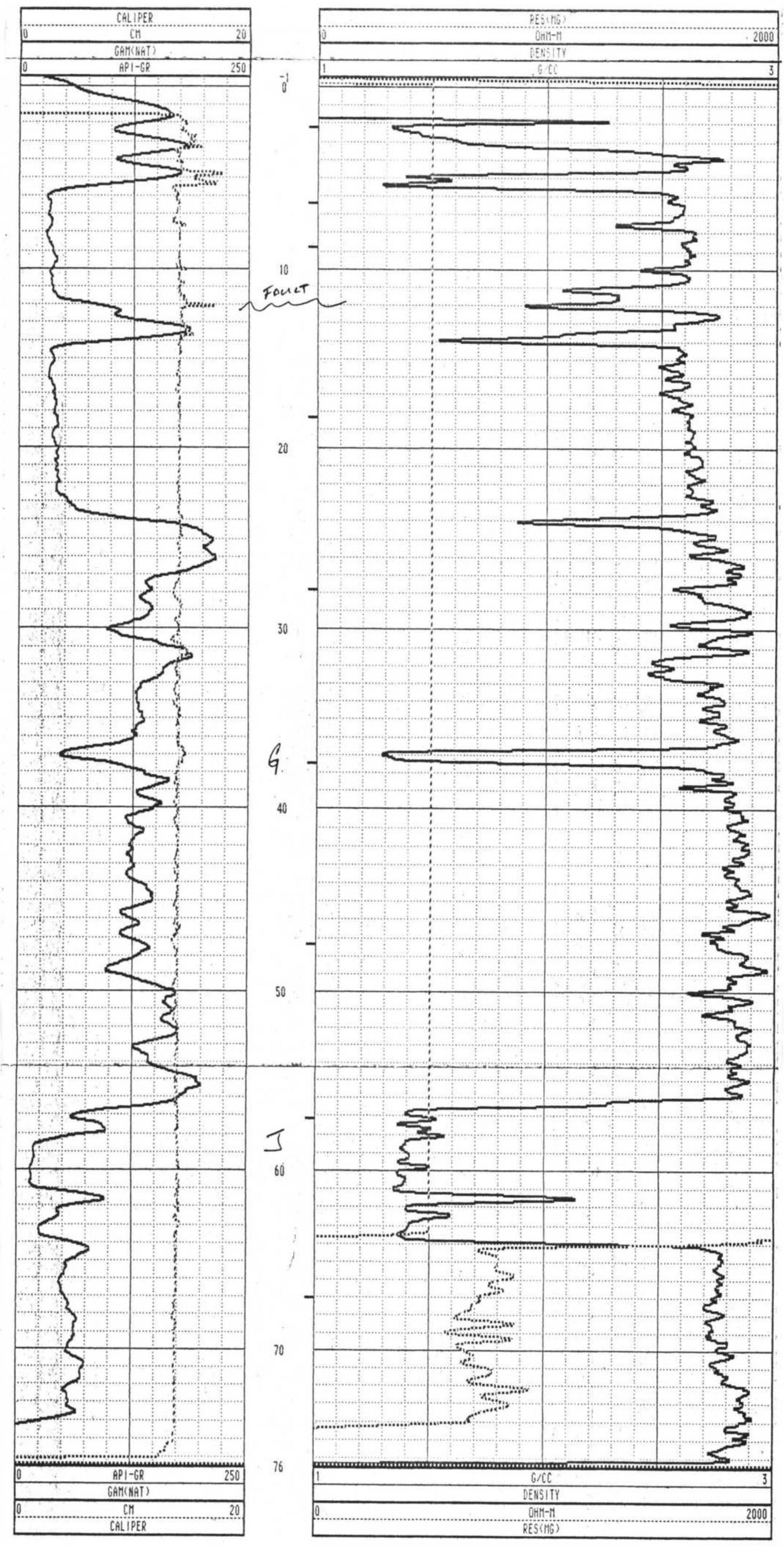
QMR88503 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.				
WELL	: QMR88503 GAMMA DENSITY				
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/07/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 76.5	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 76.46	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: -.48	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20400BL/39000SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

COMPANY : ARCHETTE OIL LTD.
WELL : CENTURY GAMMA DENSITY
FIELD/PROVINCE : LAKESHORE VALLEY/ONTARIO
COUNTY :
STATE :
SECTION : 25 SECTION 25 BLOCK 14 SURVEY : 0

DATE : 30/07/88
RUN NUMBER : ONE
LOG INTERVAL : 1,140.00
LOG TOP : 0.00

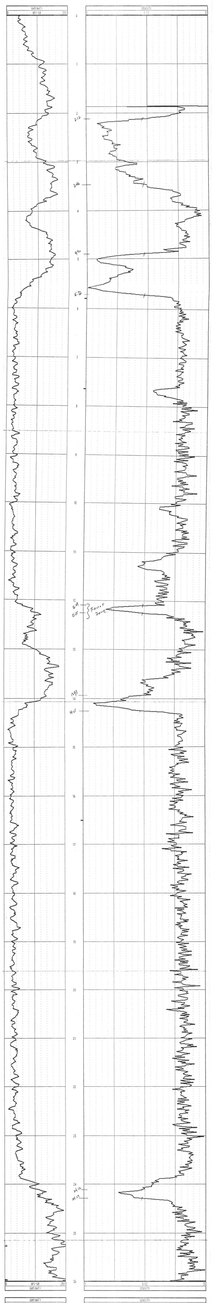
CASING DRILLER : 0.0
CASING LOGGER : 1,138.5
CASING DIAMETER : 6.25

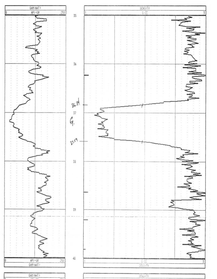
BIT SIZE : 7.75.0
TYPE FLUID IN HOLE : SALT WATER
MATRIX DENSITY : 2.648
FLUID DENSITY : 1.10
MATRIX NAME : LIMESTONE
REMARKS :
VERTICAL SCALE :
LOGGED DATA MADE TOWARDS TOPOGRAPHY

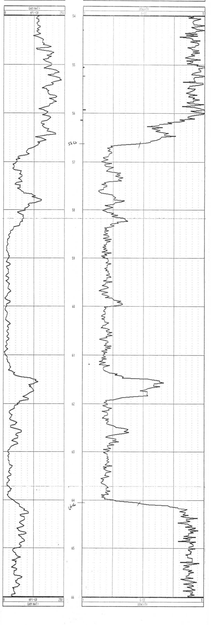
OPERATING RIG TIME : 0.0
DRILLING TIME : 0.0
LOGGING DAY : 1 DAY
FIELD OFFICE : 0 DAYS/UNIT
RECORDED BY : R.MACINTYRE

MEASURED FROM : 1 DATE: FILE : 0 DEVELOPMENT
ELEVATION : 0.00 TIME : 0.00 TYPE : 0.00 FLUID
PERMANENT DATUM : 0.0 LOG : 0.0
MATRIX UNIT : 0.000 FLUID : 0.0 DATUM : 0.0
FLUID UNIT : 0.000 FLUID : 0.0 DATUM : 0.0
RECORDED BY : 0.0 FLUID : 0.0 DATUM : 0.0

RECORDED WITH : 0.0 FLUID : 0.0 DATUM : 0.0
WITNESSED BY : 0.0 FLUID : 0.0 DATUM : 0.0







#880

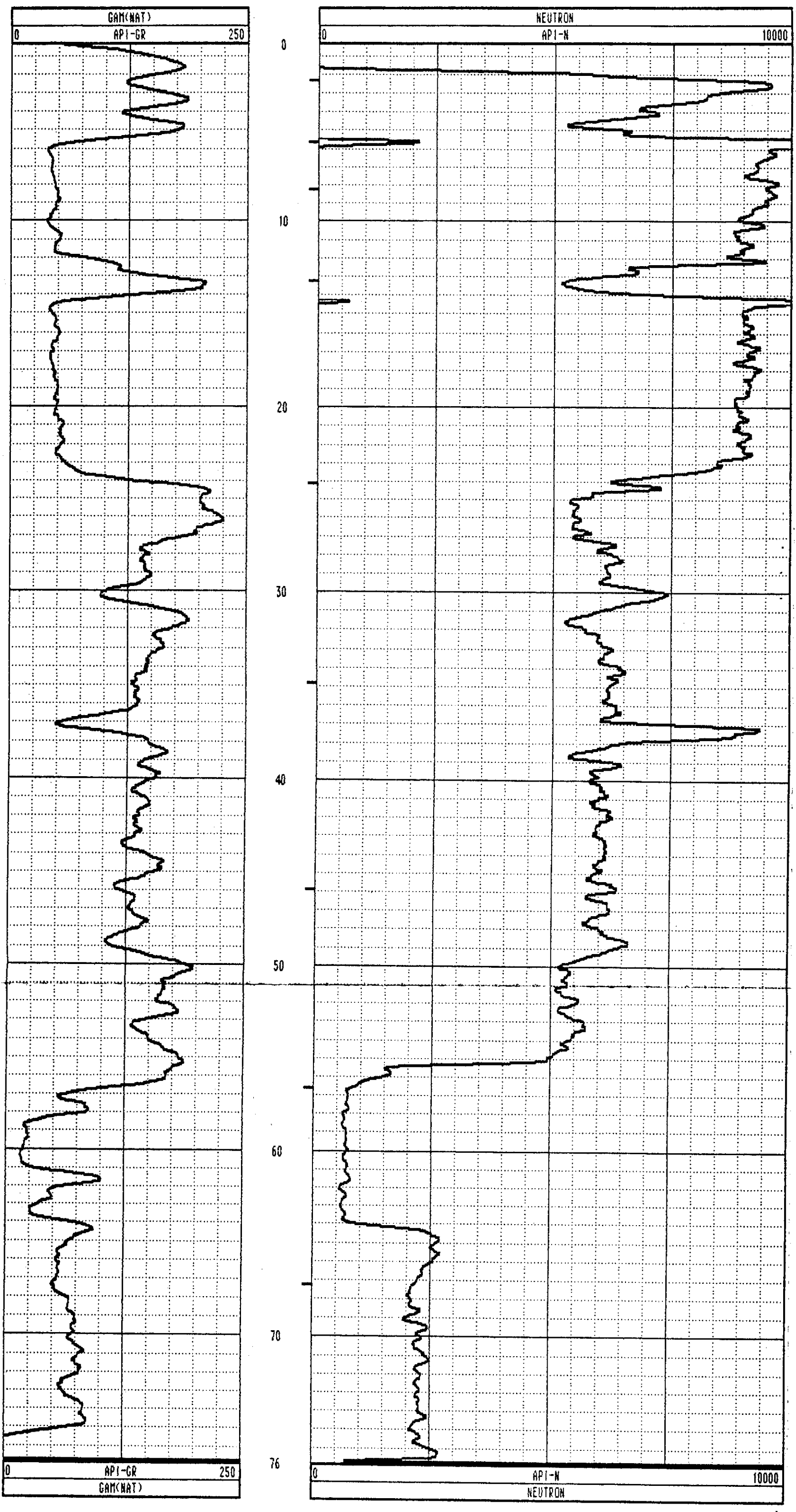
Century

CGC

QMR88503 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88503 GAMMA NEUTRON			DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	: TOWNSHIP	:	RANGE :		
DATE	: 10/07/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 76.5	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 76.84	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 0.44	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20400BL/39000SL
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

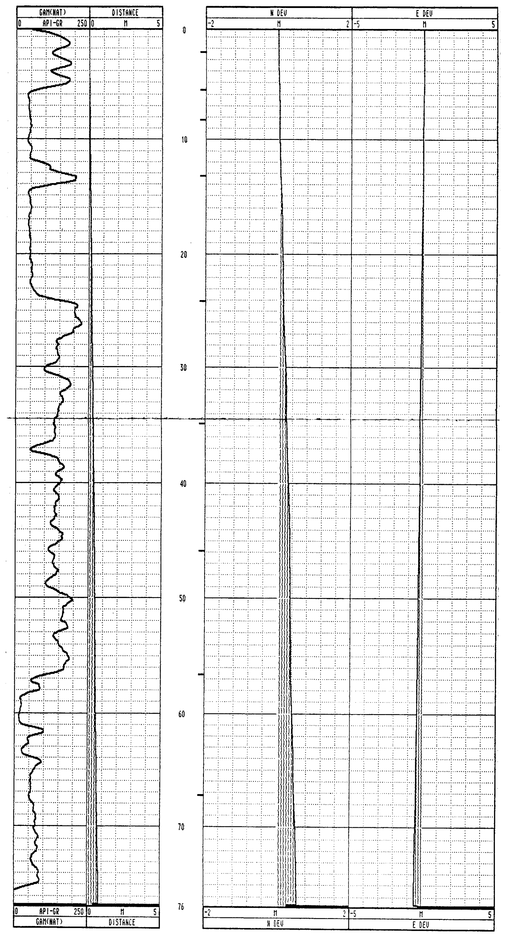
QMR88503 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88503 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 11/28/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 76.5	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 76.84	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 0.44	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 7
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20400BL/39000SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * * * *

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QMR88503 GAMM
FIELD OFFICE	: CALGARY	DATE OF LOG	: 10/08/88
DATA FROM	:	PROVE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 4

Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	SANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	0.04	-.05	0.1	306.6	0.3	281.0
20.0	20.00	0.13	-.11	0.2	318.2	0.7	283.2
30.0	30.00	0.21	-.17	0.3	320.9	1.0	315.4
40.0	40.00	0.29	-.23	0.4	320.9	0.6	354.9
50.0	50.00	0.35	-.31	0.5	318.8	0.4	133.2
60.0	60.00	0.41	-.37	0.6	319.1	0.8	333.5
70.0	69.92	0.52	-.46	0.7	318.1	1.1	321.0
76.8	76.83	0.54	-.55	0.8	315.7	0.0	0.0

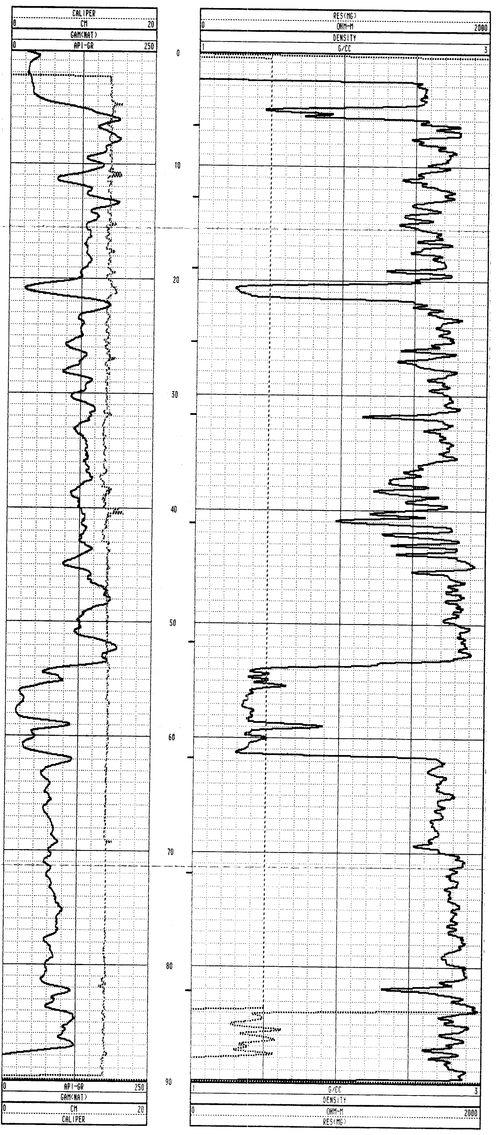
#880 Century

QMR88504 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88504 GAMMA DENS TY			DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/08/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 90.5	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 90.12	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 0.30	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 8
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20250BL/390005L

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	TRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

CGC

Century

#880

GAMMA DENSITY

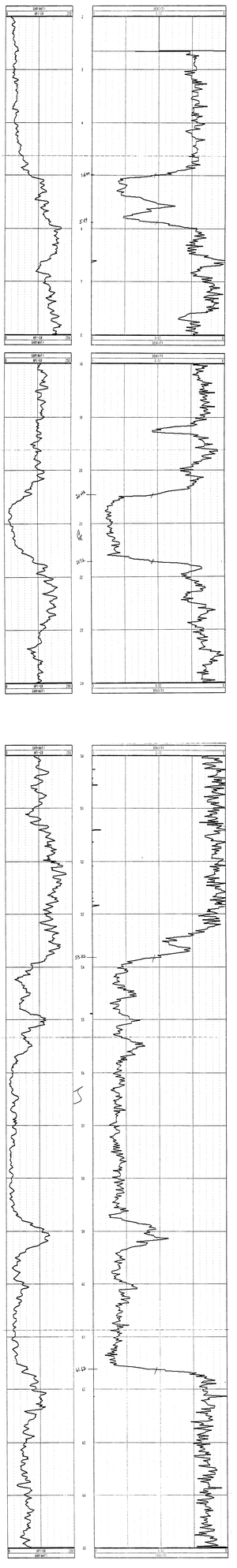
COMPANY	: QUINTETTE COAL LTD.		
WELL	: WMQ8504 GAMMA DENSITY		
LOCATION/FIELD	: WOOKEINE VALLEY/MESA EST		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP	: RANGE :

DATE	: 10/08/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 90.5	ELEV. PERM. DATUM		KB	: 0
LOG BOTTOM	: 90.12	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.50	DRL MEASURED FROM	: 0	GL	: 0

CASING DRILLER	: 0	LOGGING UNIT	: 0401
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS

BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AM
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DEL. A T	: 173	PLOT	: QUIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DEL. A T	: 690	THRESH	: 8000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE 202508L/390005L
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



#880

Century

QMR88504 GAMMA NEUTRON

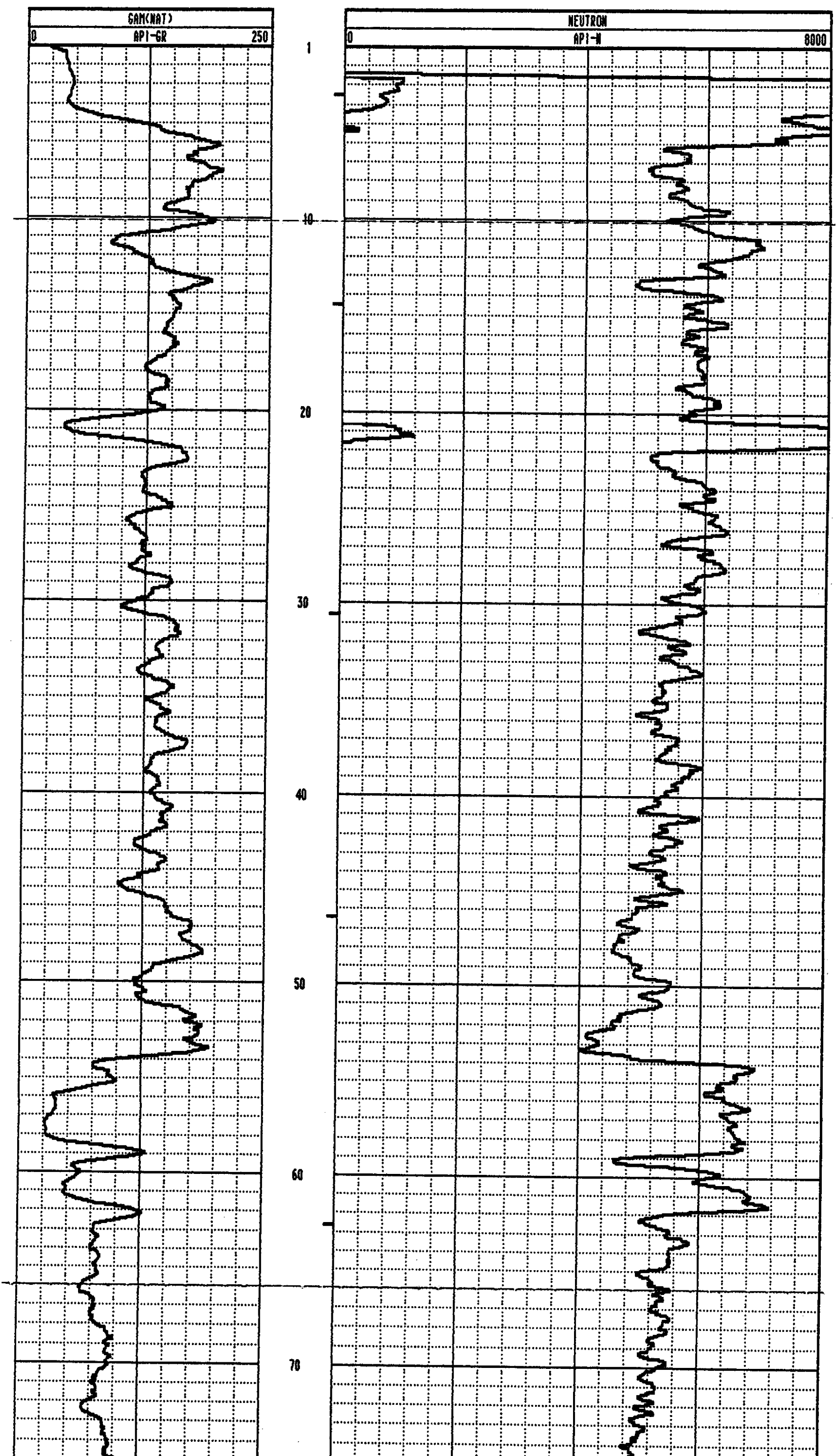
COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88504 GAMMA NEUTRON			DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/08/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 90.5	ELEV. PERM. DATUM	:	KB	: 0
LOG BOTTOM	: 90.14	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.14	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 7
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 8000

REMARKS :

VERTICAL HOLE

LOGGED OPEN HOLE 20250BL/39000SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

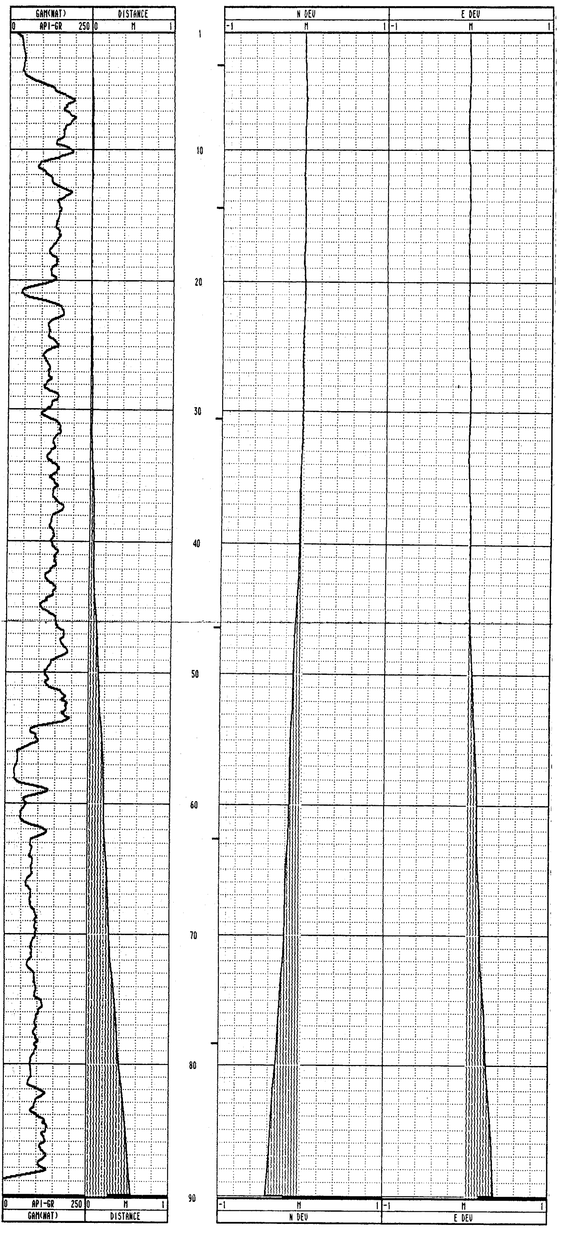
CGC #880 Century

QMR88504 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88504 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :
DATE	: 11/28/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 90.5	ELEV. PERM. DATUM:	KB : 0
LOG BOTTOM	: 90.14	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.14	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 1	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS:	0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 8
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 8000
REMARKS	:		

VERTICAL HOLE
LOGGED OPEN HOLE 20250BL/39000SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



* * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * * *

CLIENT : QUINTETTE COAL LTD. HOLE ID. : QMR88504 GAMM
FIELD OFFICE : CALGARY DATE OF LOG : 10/08/88
DATA FROM : PROBE : 9055A , 46
MAG. DECL. : 24.500 DEPTH UNITS : METER LOG 0

able Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SANG	GANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	-.00	-.01	0.0	268.6	0.2	41.2
20.0	20.00	0.00	0.00	0.0	6.0	1.0	335.1
30.0	30.00	-.01	0.02	0.0	128.1	0.6	347.8
40.0	40.00	-.04	0.03	0.1	145.9	0.1	31.0
50.0	50.00	-.11	0.06	0.1	150.7	0.7	93.8
60.0	60.00	-.15	0.13	0.2	139.6	0.1	155.0
70.0	70.00	-.21	0.17	0.3	140.2	0.2	209.2
80.0	79.99	-.30	0.25	0.4	140.7	1.0	151.0
90.0	89.99	-.42	0.35	0.5	140.5	1.0	161.6
90.1	90.13	-.42	0.35	0.5	140.6	0.0	0.0

#880 1:200 MARKED

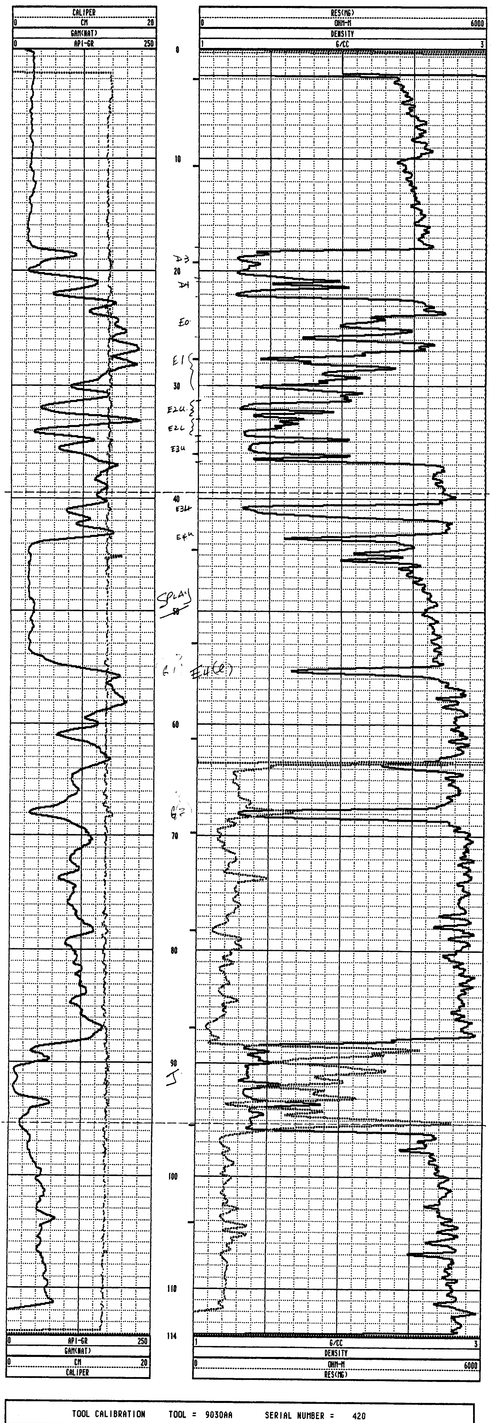
Century

QMR88505 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88505 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: HOUERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 10/09/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 113	ELEV. PERM. DATUM:	KB : 0
LOG BOTTOM	: 114.14	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 0.46	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 2	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS: 0.5		RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREMOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 3
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 12000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20600BL/39000SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYM	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYM	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

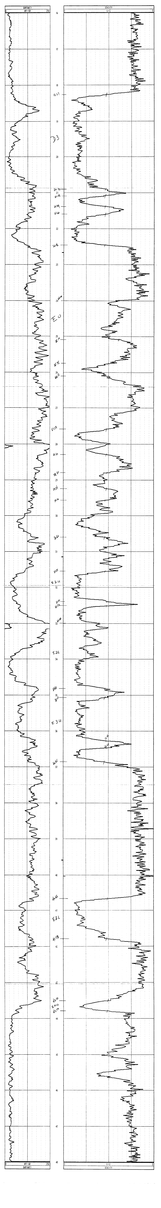
#880

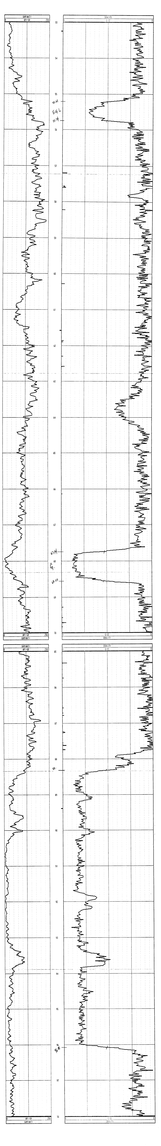
Century

GR&SSSS GAMMA DENSITY

COMPANY	: SUPERIOR OIL CO.	DENSITY CALIBRATION	
WELL	: CHEVRON STATE 1-16	DENSITY	
FIELD	: WILDCAT SWALLOW CREEK	GAMMA CALIBRATION	
COUNTY			
STATE	: UNITED STATES		
DATE	: 10-20-83	DENSITY SOURCE : 8	ELECTRONIC
RUN NUMBER	: 1	DENSITY TOOL : 8	DD
LOG NUMBER	: 10-16	GAMMA DETECTOR : 8	44
RUN TIME	: 1 HR	GAMMA SOURCE : 8	1
CASING DRILLER	: 5.500	LOGGING UNIT :	5
CASING LOGGER	: 5.500	LOGGING ENGINEER :	BARRY
CASING THICKNESS	: 0.275	WITNESSED BY :	R.PHILLIPS
BIT SIZE	: 7.8	DENSITY FILTER :	LIMESTONE
MUD TYPE	: LIGNOSULFONATE	GAMMA FILTER :	1
MUD WEIGHT	: 9.100	DT NORMALIZER :	100
FLUID SURFACE	: 0	MAXIMUM DEPTH :	9,100
FLUID LEVEL	: 0	MINIMUM DEPTH :	0
REMARKS			
CASING SHOE			
CHECK FOR WELL CONDITIONS			

THE INTERPRETATIONS CONTAINED HEREIN ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT, GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION, AND WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED IN CONNECTION WITH, OR RESULTING FROM, ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES.





#880

CGC

Century

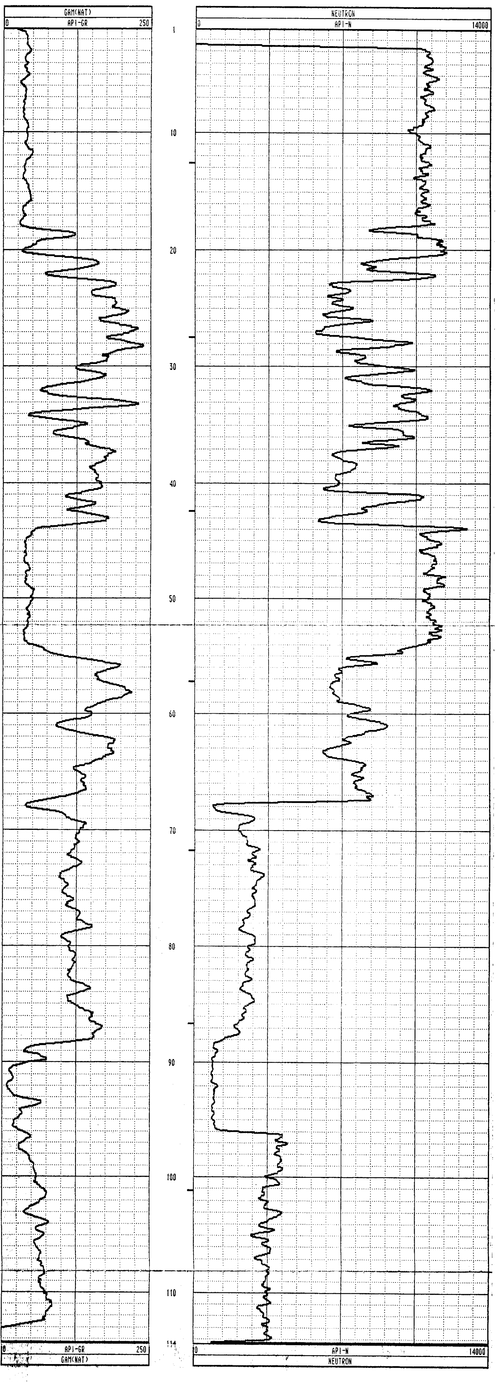
QMR88505 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QMR88505 GAMMA NEUTRON		
LOCATION/FIELD	: WOVERINE VALLEY/MESA EXT		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

DATE	: 10/09/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 113	ELEV. PERM. DATUM:	KB : 0
LOG BOTTOM	: 114.40	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.18	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 2	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 2
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 0 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 8000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20600BL/39000SL
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

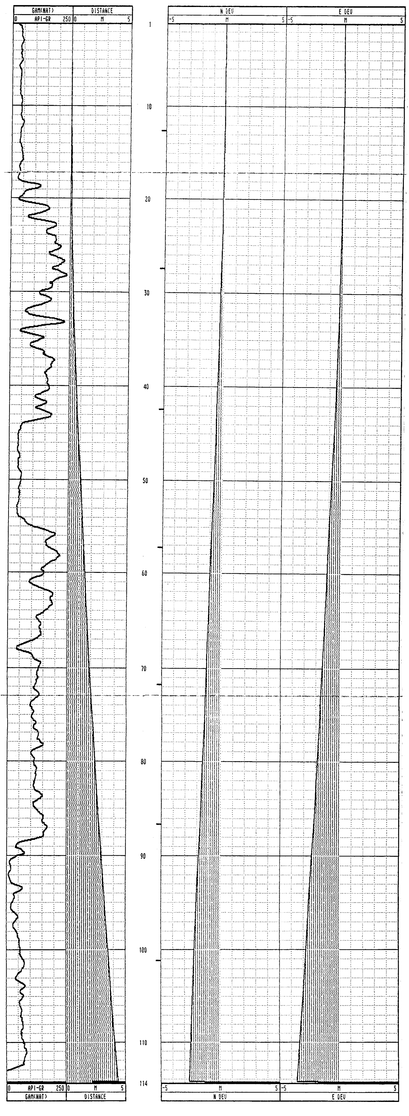
CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880 Century

QMR88505 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88505 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: HOUERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 11/28/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 113	ELEV. PERM. DATUM:	KB : 0
LOG BOTTOM	: 114.40	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.18	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 2	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : PROCESSED
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 9
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 8000
REMARKS	:		

VERTICAL HOLE
LOGGED OPEN HOLE 20600BL/39000SL
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



CLIENT : QUINTETTE COAL LTD. HOLE ID. : QMR88505 GAMM
FIELD OFFICE : CALGARY DATE OF LOG : 10/09/88
DATA FROM : 9055A PROBE : 46
MAG. DECL. : 24.500 DEPTH UNITS : FEET LOG 4

Cable Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	SAND	SANGB
0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0
10.0	10.00	-.02	0.02	0.0	141.4	0.9	215.3
20.0	20.00	-.10	-.06	0.1	209.4	0.2	291.3
30.0	29.99	-.25	-.20	0.3	217.7	1.2	232.9
40.0	39.99	-.46	-.43	0.6	223.5	2.0	223.8
50.0	49.98	-.69	-.78	1.0	228.4	2.8	205.4
60.0	59.97	-.98	-1.10	1.5	230.5	2.1	232.0
70.0	69.96	-1.21	-1.45	1.9	230.2	2.9	248.7
80.0	79.95	-1.52	-1.85	2.4	230.7	2.6	229.9
90.0	89.93	-1.84	-2.31	2.9	231.5	3.5	233.7
100.0	99.91	-2.19	-2.77	3.5	231.7	3.4	236.6
110.0	109.90	-2.47	-3.32	4.1	233.1	3.8	234.3
114.4	114.29	-2.61	-3.53	4.4	233.5	0.0	0.0

* * * * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * * *

1 : 200 MARKED

#880

Century

QMR88506 GAMMA DENSITY

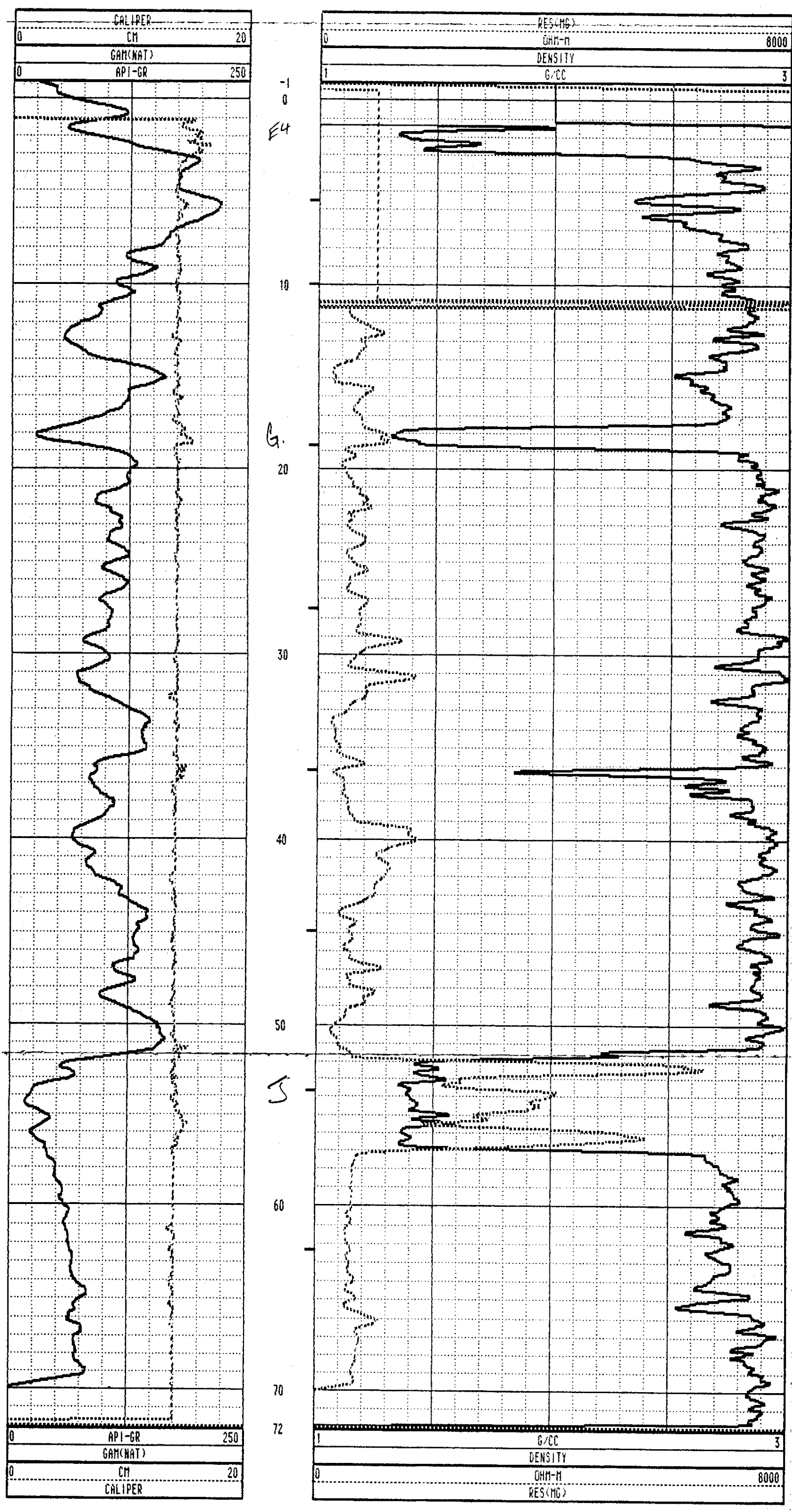
COMPANY	: QUINTETTE COAL LTD.
WELL	: QMR88506 GAMMA DENSITY
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH
COUNTY	:
STATE	: BRITISH COLUMBIA
SECTION	: TOWNSHIP : RANGE :

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

DATE	: 10/12/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 72	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 72.06	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: -.88	DRL MEASURED FROM:	0	GL	: 1075M
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20200BL/38700SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

#000 1:20 (MARKED)

Century

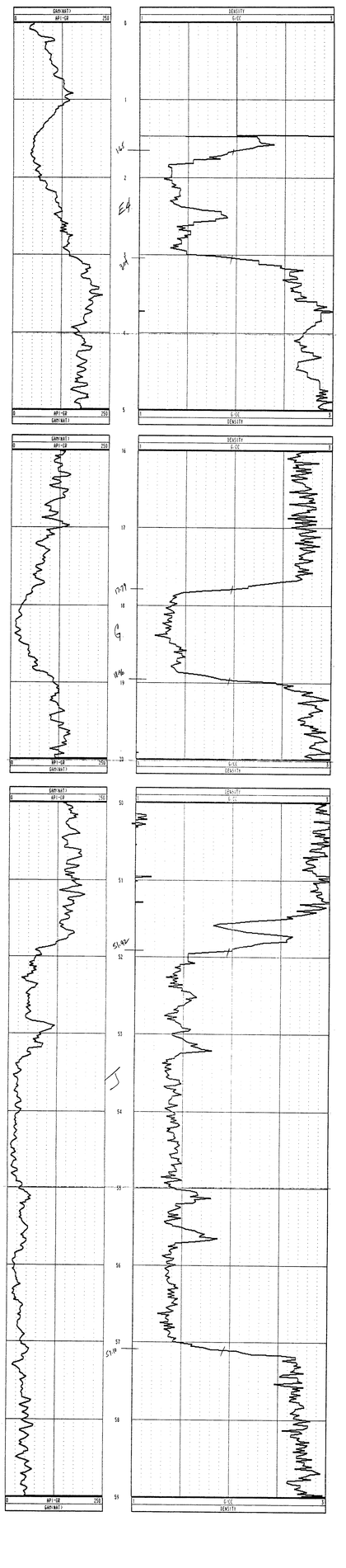
QMR88506 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88506 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH	GAM.RES.	
COUNTY	:	CAL.DEN	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 10/12/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 72	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 72.06	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: -.88	DRL MEASURED FROM:	0	GL	: 1075M
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN S
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	9000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE 20200BL/38700SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



#880

Century

QMR88506 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.				
WELL	: QMR88506 GAMMA NEUTRON				
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/12/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 72	ELEV. PERM. DATUM	:	KB	: 0
LOG BOTTOM	: 72.04	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.96	DRL MEASURED FROM	: 0	GL	: 1075M
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.66	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 20200BL/38700SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	150.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

#880

Century

QMR88506 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88506 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 10/12/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 72	ELEV. PERM. DATUM:		KB	: 0
LOG BOTTOM	: 72.04	LOG MEASURED FROM: 0		DF	: 0
LOG TOP	: 0.96	DRL MEASURED FROM: 0		GL	: 1075M
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	9000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE 20200BL/38700SL

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

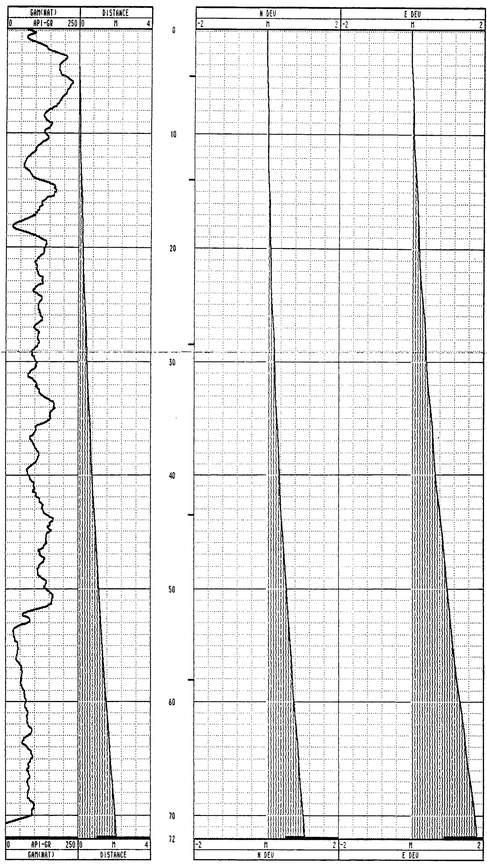


Table Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	DANB	SANB
1.0	0.96	0.00	0.00	0.0	0.0	0.0	0.0
11.0	10.96	0.05	0.08	0.1	59.8	0.9	86.5
21.0	20.96	0.12	0.23	0.3	62.8	0.9	63.7
31.0	30.95	0.24	0.44	0.5	61.5	1.2	69.4
41.0	40.95	0.37	0.70	0.8	61.9	1.6	80.2
51.0	50.94	0.58	1.03	1.2	60.7	2.4	54.7
61.0	60.93	0.79	1.40	1.6	60.5	3.4	71.0
71.0	70.92	1.05	1.80	2.1	59.8	2.3	33.2
72.0	72.00	1.07	1.83	2.1	59.7	0.0	0.0

COMPU-LOG II - VERTICAL DEVIATION

CLIENT	: QUINTETTE COAL LTD.	HOLE ID.	: QMR88506 GAMM
FIELD OFFICE	: CALGARY		
DATA FROM	: 24.500	PROBE	: 9055A , 46
MAG. DECL.	: 24.500	DEPTH UNITS	: METER LOG 4
		DATE OF LOG	: 10/12/88

#880 : 2M1 (1" RADIUS)

Century

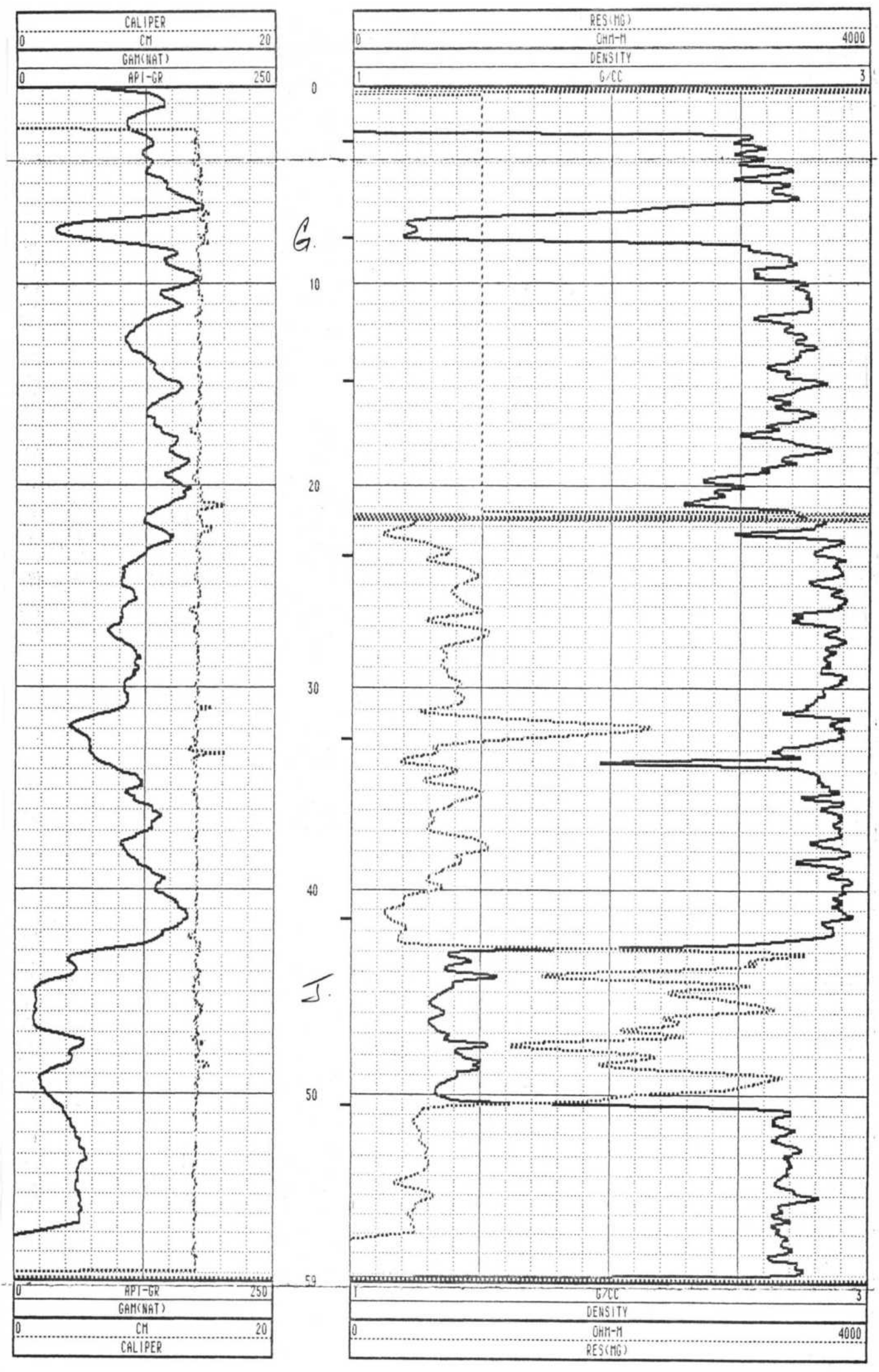
QMR88507 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QMR88507 GAMMA DENSITY		
LOCATION/FIELD	: WOLVERINE VALLEY/MESH EXT		
COUNTY	:		
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 10/14/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 60	ELEV. PERM. DATUM: 1125M	KB : 0
LOG BOTTOM	: 59.34	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 0.28	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 1	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 2
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 0 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 9000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 38400/20200

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

1 : 20 MARKED

#880

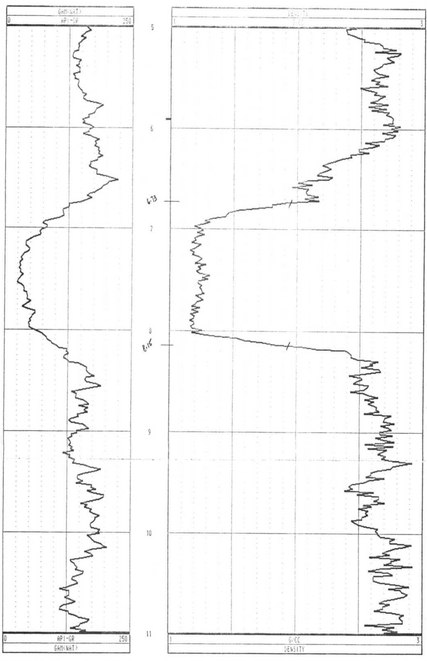
CGC

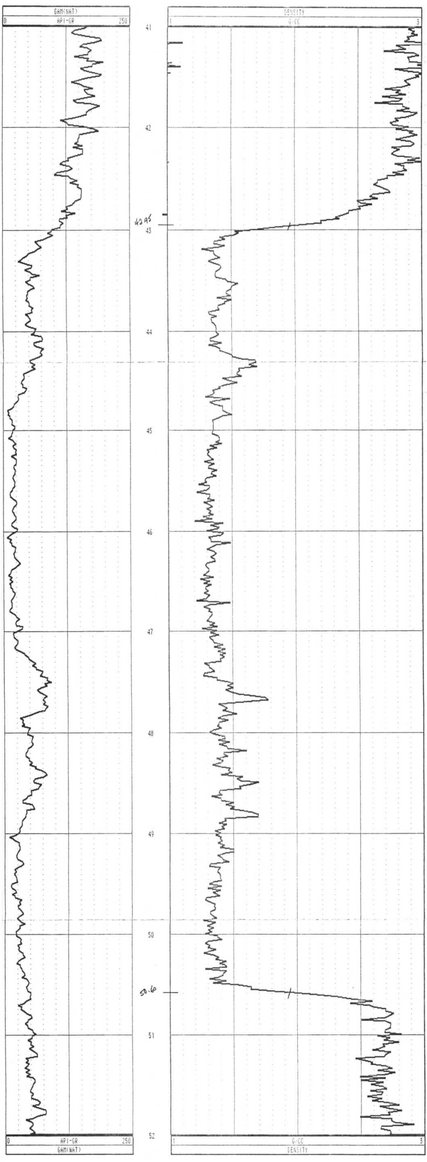
Century

OMR88507 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: OMR88507 GAMMA DENSITY	[illegible]	
LOCATION/FIELD	: WOLVERINE VALLEY/MESA EXT	[illegible]	
COUNTY	:	[illegible]	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 10-14-88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 60	ELEV. PERM. DATUM : 1250	KB : 0
LOG BOTTOM	: 59.34	LOG MEASURED FROM : A	DF : 0
LOG TOP	: 0.28	DRL MEASURED FROM : A	GL : 0
CASING DRILLER	: 1	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : FALCONS	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	PH : 6	TYPE : 9030AA
MATRIX DENSITY	: 2.66	RM TEMPERATURE : 6	LOG : 2
FLUID DENSITY	: 1.0	MATRIX DELTA : 1.75	PROJ : 00IN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA : 0.4	TRANSM: 2000
REMARKS	:		

VERTICAL HOLE
LOGGED OPEN HOLE 38400-20200
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS





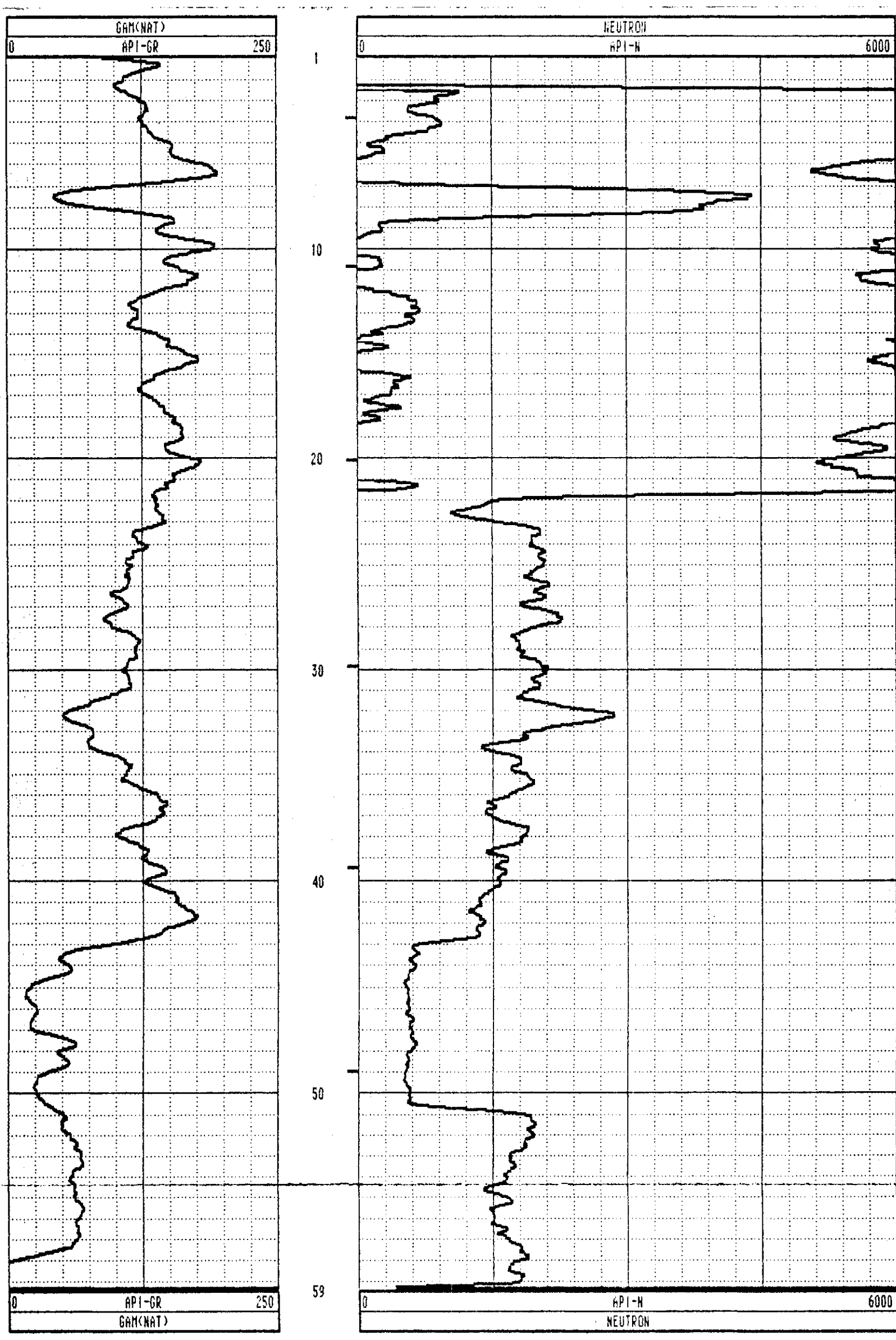
QMR88507 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.				
WELL	: QMR88507 GAMMA NEUTRON				
LOCATION/FIELD	: WOLVERINE VALLEY/MESA EXT				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/14/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 60	ELEV. PERM. DATUM	: 1125M	KB	: 0
LOG BOTTOM	: 59.38	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 1.04	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE 38400/20200

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055A SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	07/28/88	15:07:18	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4	07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6	07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7	07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

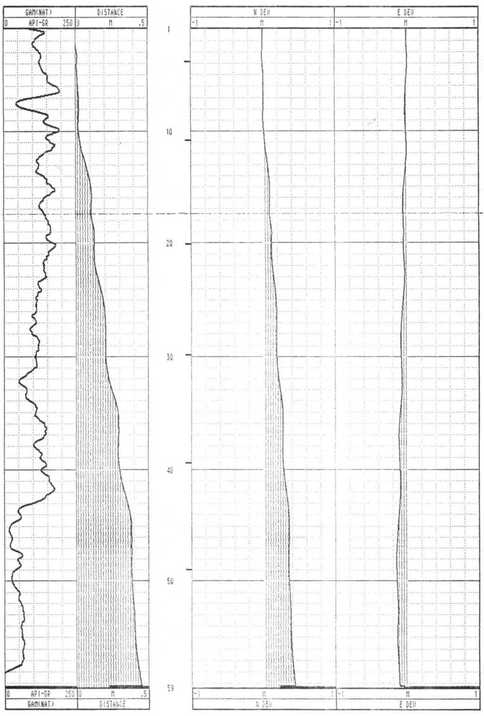
#880 Century

QMR88507 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88507 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY/MESA EXT	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	
DATE	: 10/14/88	PERMANENT DATUM : 0	ELEVATIONS
DEPTH DRILLER	: 60	ELEV. PERM. DATUM: 1125M	KB : 0
LOG BOTTOM	: 59.38	LOG MEASURED FROM: 0	DF : 0
LOG TOP	: 1.04	DRL MEASURED FROM: 0	GL : 0
CASING DRILLER	: 1	LOGGING UNIT : 8401	
CASING TYPE	: STEEL	FIELD OFFICE : CALGARY	
CASING THICKNESS	: 0.5	RECORDED BY : G.PHILLIPS	
BIT SIZE	: 15.6	BOREHOLE FLUID : WATER	FILE : ORIGINAL
MAGNETIC DECL.	: 24.500	RM : 0	TYPE : 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE : 0	LOG : 1
FLUID DENSITY	: 1.0	MATRIX DELTA T : 173	PLOT : 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T : 690	THRESH: 9000
REMARKS	:		

VERTICAL HOLE
LOGGED OPEN HOLE 38400/20200

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



Century #880

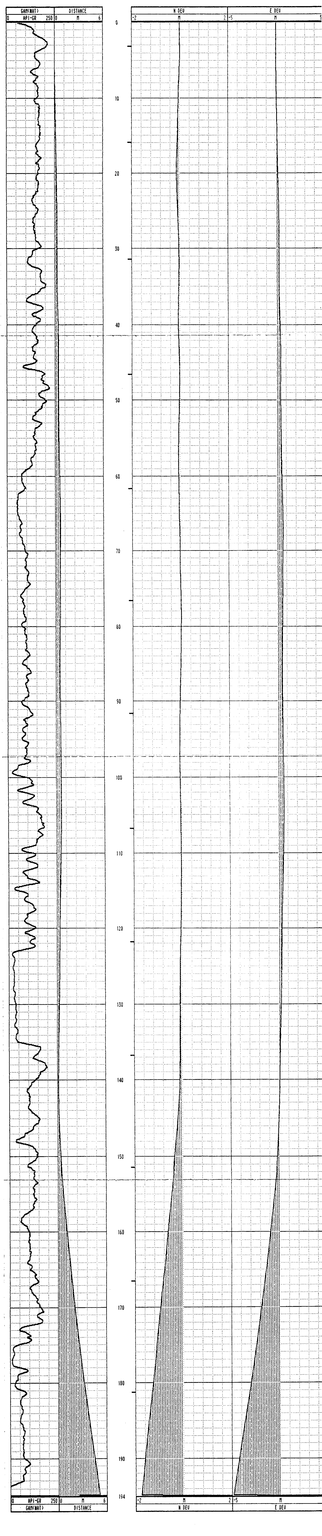
QMR88508 DEVIATION

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88508 DEVIATION	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY / MESA EXT.	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 193	ELEV. PERM. DATUM	: 1130M	KB	: 0
LOG BOTTOM	: 194.98	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.12	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 90554
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 2
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 9255 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	9000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE BL20500/SL38700

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



Bit Depth	True Depth	North Dev.	East Dev.	Distance	Azimuth	Dog Leg
0.0	0.00	0.00	0.00	0.00	0.0	0.0
10.0	10.00	-.04	0.00	.04	0.0	0.0
20.0	20.00	-.07	0.00	.07	0.0	0.0
30.0	29.99	-.09	0.01	.09	0.4	3.5
40.0	39.99	-.12	0.01	.12	0.4	87.7
50.0	49.99	-.14	0.01	.14	0.4	120.0
60.0	59.99	-.17	0.01	.17	0.4	85.8
70.0	69.99	-.19	0.01	.19	0.4	85.8
80.0	79.99	-.22	0.01	.22	0.4	85.8
90.0	89.99	-.24	0.01	.24	0.4	85.8
100.0	99.99	-.27	0.01	.27	0.4	85.8
110.0	109.99	-.29	0.01	.29	0.4	85.8
120.0	119.99	-.32	0.01	.32	0.4	85.8
130.0	129.99	-.34	0.01	.34	0.4	85.8
140.0	139.99	-.37	0.01	.37	0.4	85.8
150.0	149.99	-.39	0.01	.39	0.4	85.8
160.0	159.99	-.42	0.01	.42	0.4	85.8
170.0	169.99	-.44	0.01	.44	0.4	85.8
180.0	179.98	-.47	0.01	.47	0.4	85.8
190.0	189.98	-.49	0.01	.49	0.4	85.8
194.0	193.98	-.50	0.01	.50	0.4	85.8
194.98	194.98	-.50	0.01	.50	0.4	85.8

#880

Century

QMR88508 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88508 GAMMA NEUTRON	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY / MESA EXT.	GAM.RES.	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

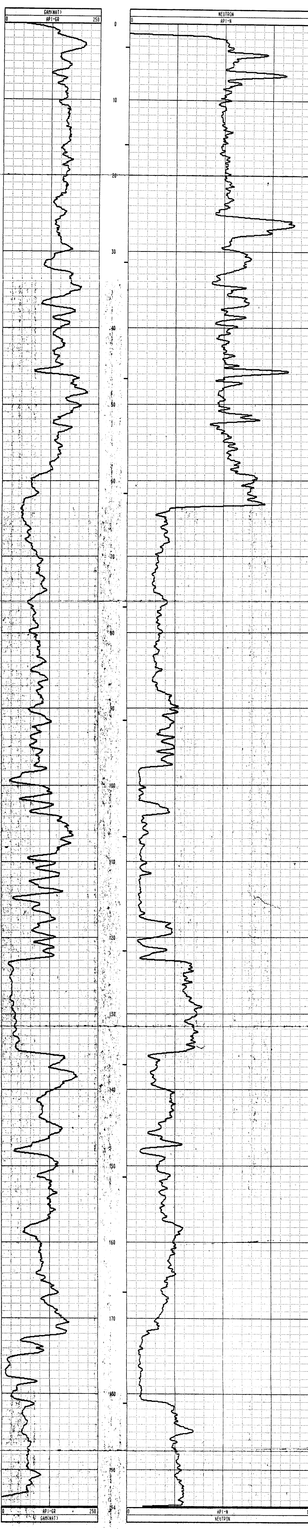
DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 193	ELEV. PERM. DATUM:	1130M	KB	: 0
LOG BOTTOM	: 194.98	LOG MEASURED FROM:	0	DF	: 0
LOG TOP	: 0.12	DRL MEASURED FROM:	0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS:	0.5	RECORDED BY	: G.PHILLIPS		

BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 5
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH:	9000
REMARKS	:				

VERTICAL HOLE

LOGGED OPEN HOLE BL20500/SL38700

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL : 9055A SERIAL NUMBER : 46

CAL-DATE	CAL-TIME	SPEC	SENSOR	RESPONSE	STANDARD
0 07/28/88	15:07:16	0	GAMMA(T)	0.000 CPS	0.000 API-GR
1 07/28/88	15:07:16	0	GAMMA(T)	0.000 CPS	0.000 API-GR
2 10/05/88	12:07:01	0	POROSITY	0.000 CPS	190.000 CPS
3 07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
4 07/28/88	15:07:18	0	RES	0.000 CPS	0.000 OHM
5 07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
6 07/28/88	15:07:18	0	SP	0.000 CPS	0.000 MV
7 07/28/88	15:19:56	0	NEUTRON	0.000 CPS	0.000 API-N
8 07/28/88	15:19:56	0	NEUTRON	190.000 CPS	271.000 API-N

1 of 1 (Primary)

Century

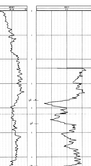
CDC

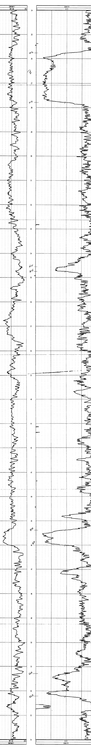
COMPENSATED GAMMA-GAMMA DENSITY

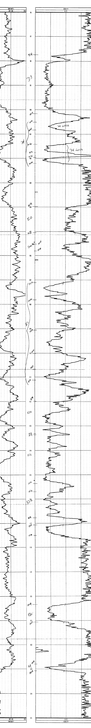
COMPANY	CENTURY GEOPHYSICAL CORPORATION		
WELL	[illegible]		
FIELD	[illegible]		
COUNTY	[illegible]	STATE	[illegible]
LOCATION	[illegible]		
OTHER SERVICES	[illegible]		
SEC.	[illegible]	TWP.	[illegible]
RGE.	[illegible]		
PERMANENT DATUM	[illegible]	ELEV.	[illegible]
LOG MEASURED FROM	[illegible]	ELEV.	[illegible]
DRILLING MEASURED FROM	[illegible]	ELEV.	[illegible]
DATE	[illegible]		
RUN NO.	[illegible]		
DEPTH-DRILLER	[illegible]		
DEPTH-LOGGER	[illegible]		
BTM. LOG INTERVAL	[illegible]		
TOP LOG INTERVAL	[illegible]		
CASING-DRILLER	[illegible]	@	[illegible]
CASING-LOGGER	[illegible]		
BIT SIZE	[illegible]		
TYPE FLUID IN HOLE	[illegible]		
DENSITY	[illegible]	VISCOSITY	[illegible]
PH	[illegible]	FLUID LOSS	[illegible]
SOURCE OF SAMPLE	[illegible]		
RM @ MEAS. TEMP.	[illegible]	@	[illegible]
RMF @ MEAS. TEMP.	[illegible]	@	[illegible]
RMC @ MEAS. TEMP.	[illegible]	@	[illegible]
SOURCE: RMF	[illegible]	RMC	[illegible]
RM @ BHT	[illegible]	@	[illegible]
TIME SINCE CIRCULATION	[illegible]		
MAX. REC. TEMP.	[illegible]		
EQUIP. NO.	[illegible]		
LOCATION	[illegible]		
RECORDED BY	[illegible]		
WITNESSED BY	[illegible]		

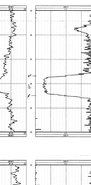
RUN NO. [illegible] | DATE [illegible] | TYPE LOG [illegible]

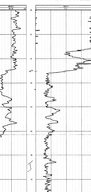
BOREHOLE RECORD			
BIT NO.	[illegible]	FROM	[illegible]
TYPE	[illegible]	TO	[illegible]
SIZE	[illegible]		
CASING RECORD			
SIZE	[illegible]	WEIGHT	[illegible]
TYPE	[illegible]	FROM	[illegible]
		TO	[illegible]











#88 1:200 Plotted

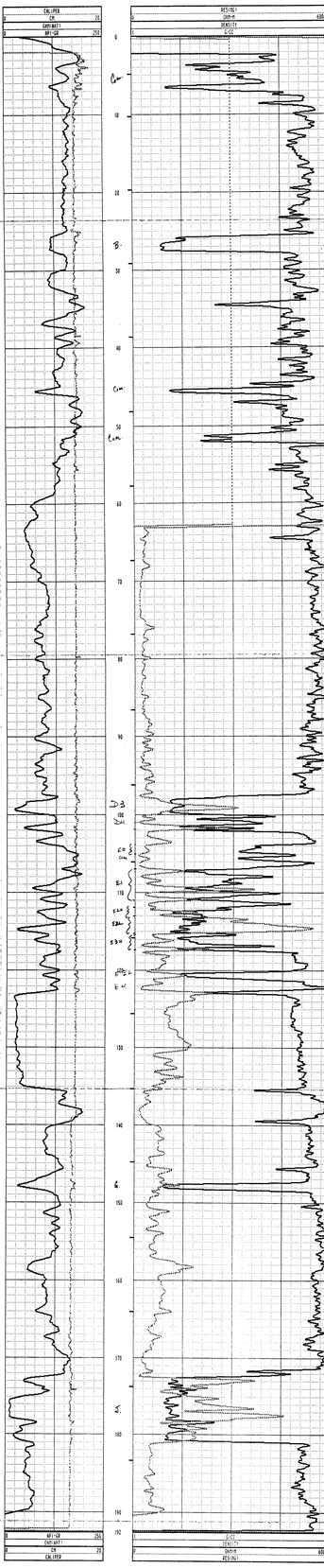
CGC **Century**

QMR88508 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88508 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY / MESH ENT.	GAMMA(S).	
COUNTY	:	CAL.DEV	
STATE	: BRITISH COLUMBIA		
SECTION	: TOWNSHIP :	RANGE :	

DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 195	ELEV. PERM. DATUM	: 1150ft	KB	: 0
LOG BOTTOM	: 192.48	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.02	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 2	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 6
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0 .2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE BL2050D/SL3870D
ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS


CALIPER
CS
GAMMA1
API-GR
RESIS1
OHM-M
DENSITY
G/CC
Cm
Cm.
B.
Cm.
Cm.
Cm

#880

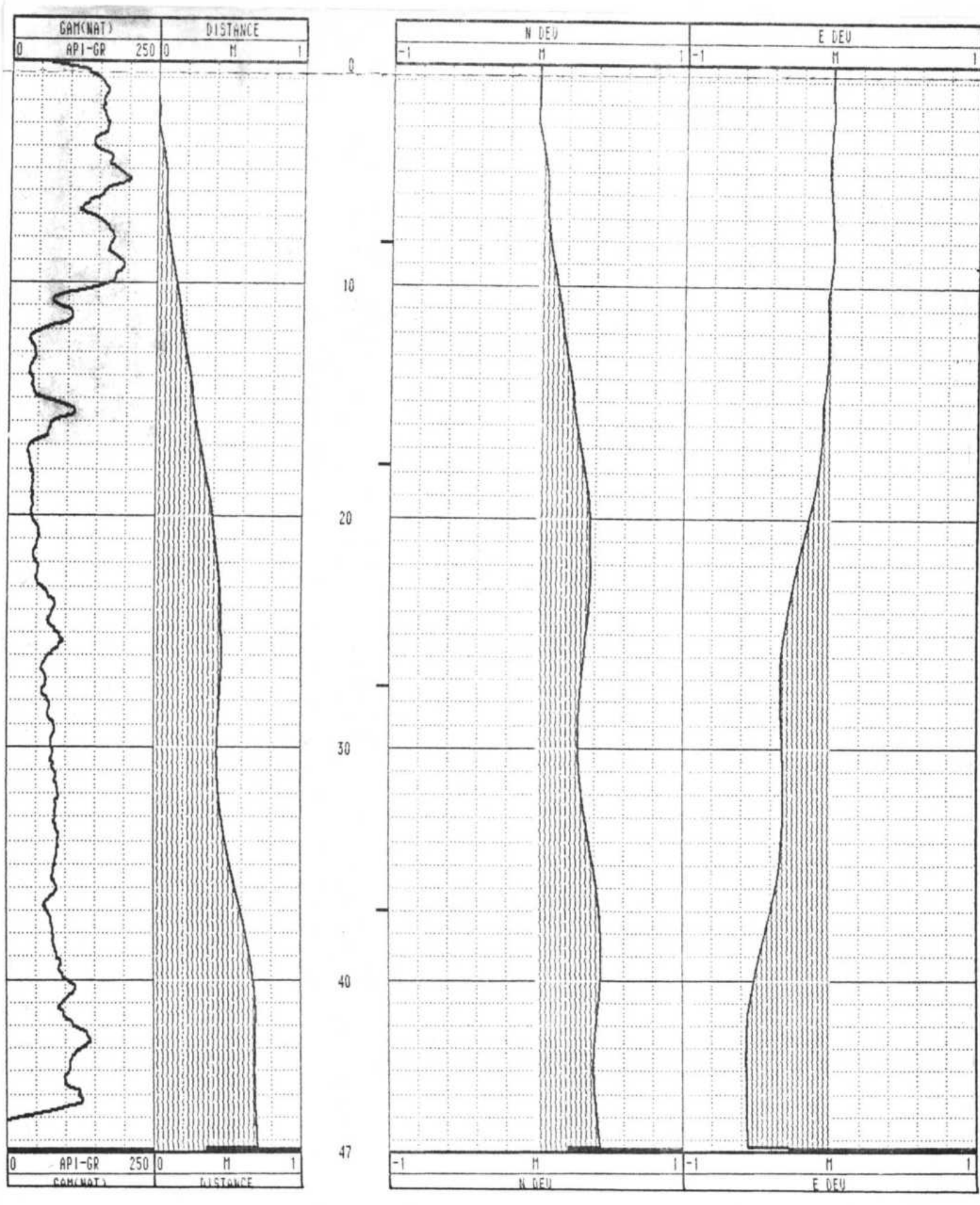
Century

QMR88509 DEVIATION

COMPANY	: QUINTETTE COAL LTD.			OTHER SERVICES:	
WELL	: QMR88509 DEVIATION			DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH			GAM.RES.	
COUNTY	:			CAL.DEV	
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 48	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 47.46	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.42	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055A
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 3
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 9055 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE BL20825/SL39375

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS

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* * * * * * * * * * * * COMPU-LOG II - VERTICAL DEVIATION * * * * * * * * * * * *

CLIENT       : QUINTETTE COAL LTD.    HOLE ID.     : QMR88509 GAMM
                                    * DATE OF LOG : 10/17/88
FIELD OFFICE : CALGARY                FROBE        : 9055A    ,     46
DATA FROM    :                        DEPTH UNITS : METER    LOG 2
MAG. DECL.   :   24.500

Table Depth  True Depth  North Dev.  East Dev.  Distance  Azimuth  SANG  SANGB
    0.0        0.00        0.00       0.00       0.0       0.0     0.0    0.0
   10.0       10.00        0.13       -.01       0.1     355.4     2.0  308.6
   20.0       19.99        0.36       -.14       0.4     338.6     1.7  283.4
   30.0       29.99        0.29       -.32       0.4     312.0     0.4   72.0
   40.0       39.98        0.44       -.51       0.7     311.0     1.5  245.8
   47.5       47.44        0.44       -.55       0.7     308.4     0.0    0.0
```

Century #880

QMR88509 GAMMA NEUTRON

COMPANY	: QUINTETTE COAL LTD.		
WELL	: QMR88509 GAMMA NEUTRON	OTHER SERVICES:	
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH	DEN.NEUT	
COUNTY	:	GAM.RES.	
STATE	: BRITISH COLUMBIA	CAL.DEV	
SECTION	: TOWNSHIP :	RANGE :	

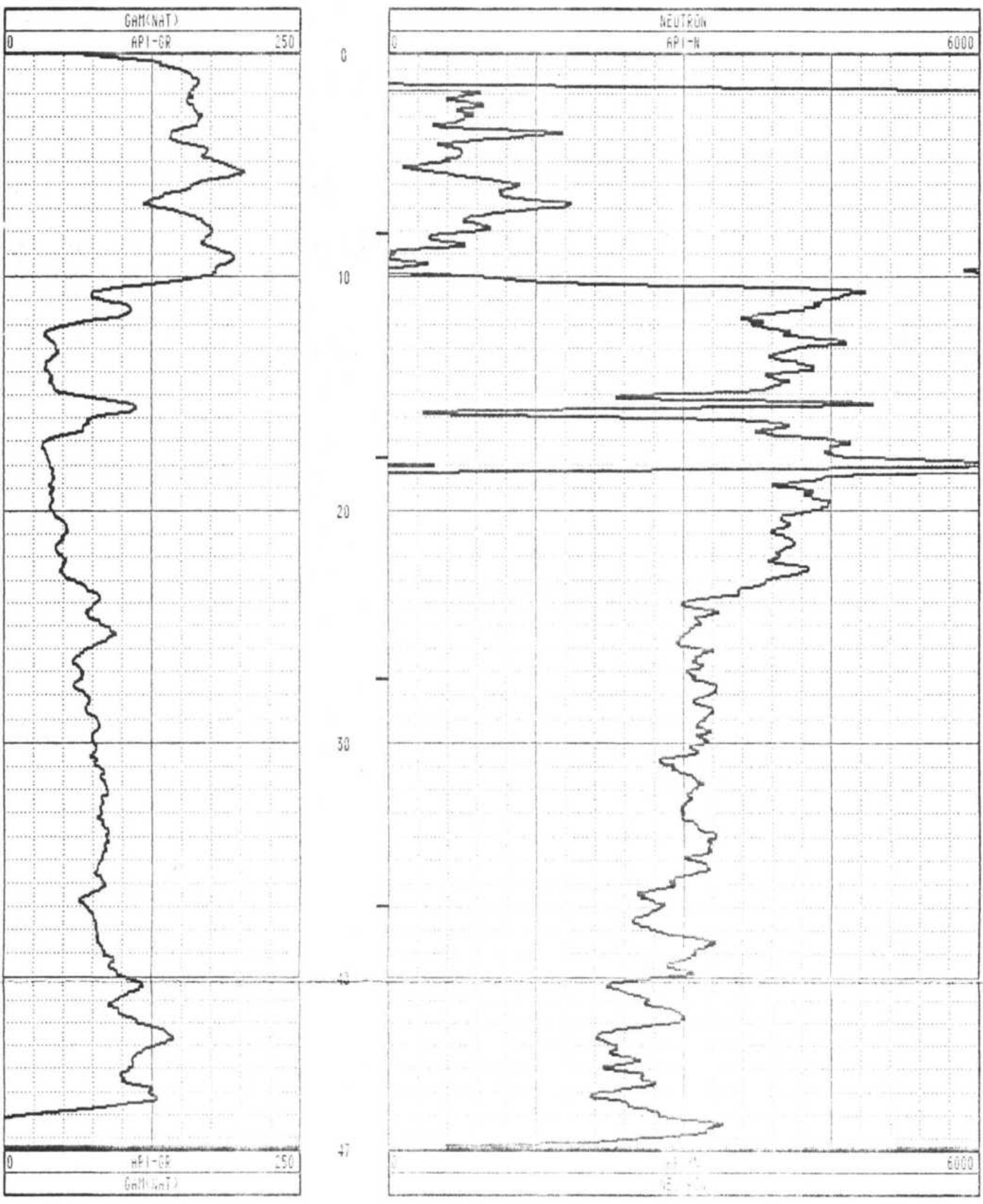
DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 48	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 47.46	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: 0.42	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9055M
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 0
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

REMARKS :

VERTICAL HOLE

LOGGED OPEN HOLE BL20825/SL39375

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9055M SERIAL NUMBER = 46

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	07/28/86	15:07:16	0	GAM(NAT)	0.000 CPS	1.000 API-GR
1	07/28/86	15:07:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	10/05/88	12:07:01	0	PORDS,T	0.000 CPS	100.000 CPS
3	07/28/86	15:07:16	0	RES	0.000 CPS	1.00 OHM
4	07/28/86	15:07:16	0	RES	0.000 CPS	0.000 OHM
5	07/28/86	15:07:16	0	SP	0.000 CPS	0.00 MV
6	07/28/86	15:07:16	0	SP	0.000 CPS	0.000 MV
7	07/28/86	15:19:50	0	NEUTRON	0.000 CPS	0.000 API-N
8	07/28/86	15:19:50	0	NEUTRON	10.000 CPS	2000.000 API-N

1 : 200 MARKED

#880

Century

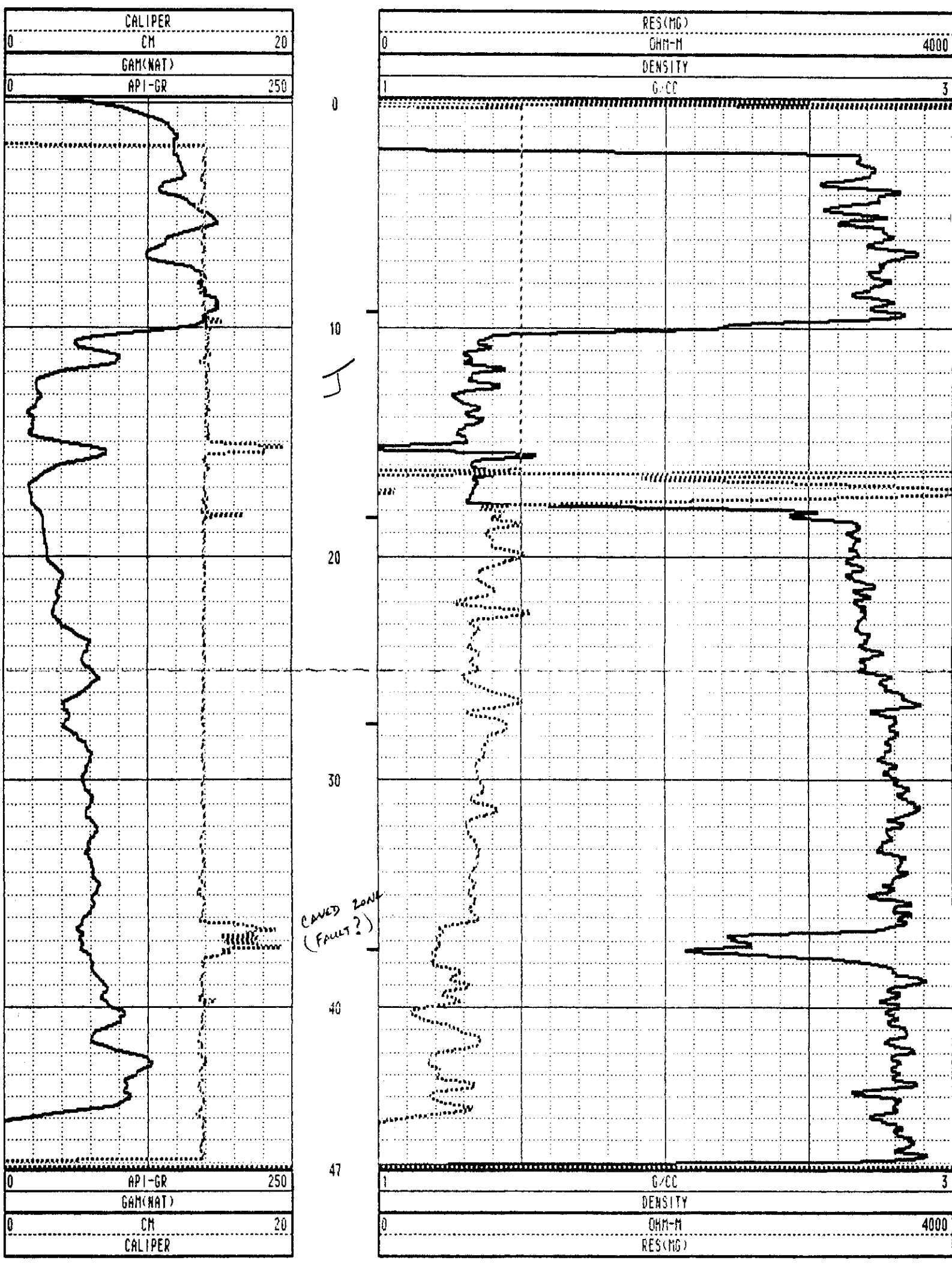
QMR88509 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.				
WELL	: QMR88509 GAMMA DENSITY				
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH				
COUNTY	:				
STATE	: BRITISH COLUMBIA				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 48	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 47.28	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: -.14	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: 0 2
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000

OTHER SERVICES:
DEN.NEUT
GAM.RES.
CAL.DEV

REMARKS :
VERTICAL HOLE
LOGGED OPEN HOLE BL20825/SL39375

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS



TOOL CALIBRATION TOOL = 9030AA SERIAL NUMBER = 420

	CAL-DATE	CAL-TIME	SRCE	SENSOR	RESPONSE	STANDARD
0	09/22/88	16:44:23	0	GAM(NAT)	0.000 CPS	0.000 API-GR
1	09/17/88	17:36:16	0	GAM(NAT)	0.000 CPS	0.000 API-GR
2	09/17/88	17:39:01	0	DENSITY	5615.000 CPS	1.106 G/CC
3	09/17/88	17:39:01	0	DENSITY	2230.500 CPS	2.120 G/CC
4	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
5	09/17/88	17:36:16	0	RES(MG)	0.000 CPS	0.000 OHM-M
6	09/22/88	13:37:32	0	CALIPER	213.400 CPS	7.600 CM
7	09/22/88	13:37:32	0	CALIPER	1842.500 CPS	17.800 CM
8	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
9	09/17/88	17:36:16	0	DENSITYH	0.000 CPS	0.000 G/CC
10	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM
11	09/22/88	13:37:57	0	CALIPERL	0.000 CPS	0.000 CM

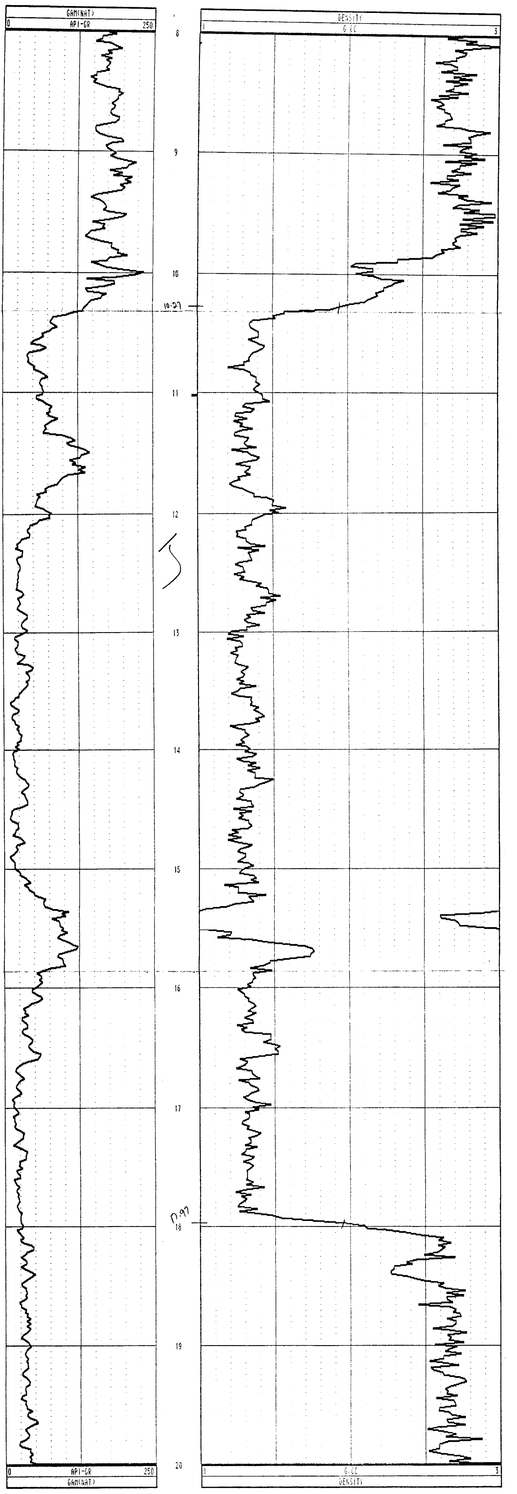
1:20 (MARKED)

Century

QMR88509 GAMMA DENSITY

COMPANY	: QUINTETTE COAL LTD.	OTHER SERVICES:	
WELL	: QMR88509 GAMMA DENSITY	DEN.NEUT	
LOCATION/FIELD	: WOLVERINE VALLEY SOUTH	GAM.RES.	
COUNTY	:	CAL.DEN	
STATE	: BRITISH COLUMBIA		
SECTION	:	TOWNSHIP :	RANGE :

DATE	: 10/17/88	PERMANENT DATUM	: 0	ELEVATIONS	
DEPTH DRILLER	: 48	ELEV. PERM. DATUM	: 0	KB	: 0
LOG BOTTOM	: 47.28	LOG MEASURED FROM	: 0	DF	: 0
LOG TOP	: -.14	DRL MEASURED FROM	: 0	GL	: 0
CASING DRILLER	: 1	LOGGING UNIT	: 8401		
CASING TYPE	: STEEL	FIELD OFFICE	: CALGARY		
CASING THICKNESS	: 0.5	RECORDED BY	: G.PHILLIPS		
BIT SIZE	: 15.6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 24.500	RM	: 0	TYPE	: 9030AA
MATRIX DENSITY	: 2.68	RM TEMPERATURE	: 0	LOG	: 1
FLUID DENSITY	: 1.0	MATRIX DELTA T	: 173	PLOT	: QUIN 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 690	THRESH	: 9000
REMARKS	:				

VERTICAL HOLE
LOGGED OPEN HOLE BL20825/SL39375

ALL SERVICES PROVIDED SUBJECT TO CGC STANDARD TERMS AND CONDITIONS