GEARHART

COMPENSATED DENSITY COMPENSATED NEUTRON LOG

FILING NO

COMPANY Sunshine Valley Petroleum
WELL Ehrlich #6-18
FIELD Wildcat
COUNTY Weld STATE Colorado
LOCATION SENW 2053' FNL 1900' FWL ⑥
Other Services Dil/GR
SEC 18 TWP 4N RGE 66W

Permanent Datum GL Elev 4710
Log Measured from KB 11 Ft Above Perm. Datum
Drilling Measured from KB
Elev. KB 4721 DF 4720 GL 4710

Date	8-3-85
Run No.	ONE
Depth - Driller	7330
Depth - Logger	7330
Bottom logged interval	7328
Top logged interval	3600
Type fluid in hole	Chem-gel
Density / Visc.	9.5 / 65
pH / Fluid Loss	9.0 / 6.4
Max rec. temp., deg F.	181
Source of Samples	FlowLine
Rm @ Meas. Temp.	2.4 @ 76 °F
Rmf @ Meas. Temp.	1.7 @ 76 °F
Rmc @ Meas. Temp.	3.0 @ 79 °F
Source Rmf / Source Rmc	Press / Press
Time: End Circulation	1:30
Time: Logger on Bottom	10:00
Recorded By	Ethechon
Witnessed By	Mr Ron Lowery

Bore-Hole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt	From	To
ONE	7.87	TD	295	8 5/8	24#	295	Surf.

RECEIVED
AUG 8 1985
COLO. OIL & GAS CONS. COMM.

FIELD PRINT

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EQUIPMENT DATA

Run No.	Logging Unit	Location	Gamma Ray Tool No.	Compensated Density Tool No.	Compensated Density Source No.	Compensated Density Source Type	Compensated Density Source Stg.	Compensated Neutron Tool No.	Compensated Neutron Source No.	Compensated Neutron Source Type	Compensated Neutron Source Stg.
ONE	7637	F.M.	4485	2516	CJV534	Ces137	2ci	9124	N-LA-3000	Am Be241	20ci

CALIBRATION DATA

Run No.	Gamma Ray Bkg. cps	Gamma Ray Std. cps	Magnesium LS	Magnesium SS	Aluminum LS	Aluminum SS	Test Block LS	Test Block SS	Caliper L. Ring	Caliper S. Ring	Neutron Calibrator LS	Neutron Calibrator SS	Neutron Caliper L. Ring	Neutron Caliper S. Ring
ONE	211.1	400	912.7	599.3	205.2	409.6	308.8	443.3	7320	3755	423	346	6768	3371

LOGGING DATA

Run No.	Depth From	Depth To	Speed FPM	Gamma Ray T C	Gamma Ray API PER LOG DIV.	Compensated Density T C	Matrix Density	Fluid Density	Compensated Neutron T C	Matrix Type	Const. "K"	Temp. Grad	Salinity PPM NaCL	Surf. Temp.
ONE	7330	7201	30	Auto	20	Auto	2.68	1.0	Auto	SS	1.036	1.1/100	2100	70
"	7201	6950	"	"	"	"	2.71	"	"	LS	"	"	"	"
"	4810	3590	"	"	"	"	2.68	"	"	SS	"	"	"	"

REMARKS:

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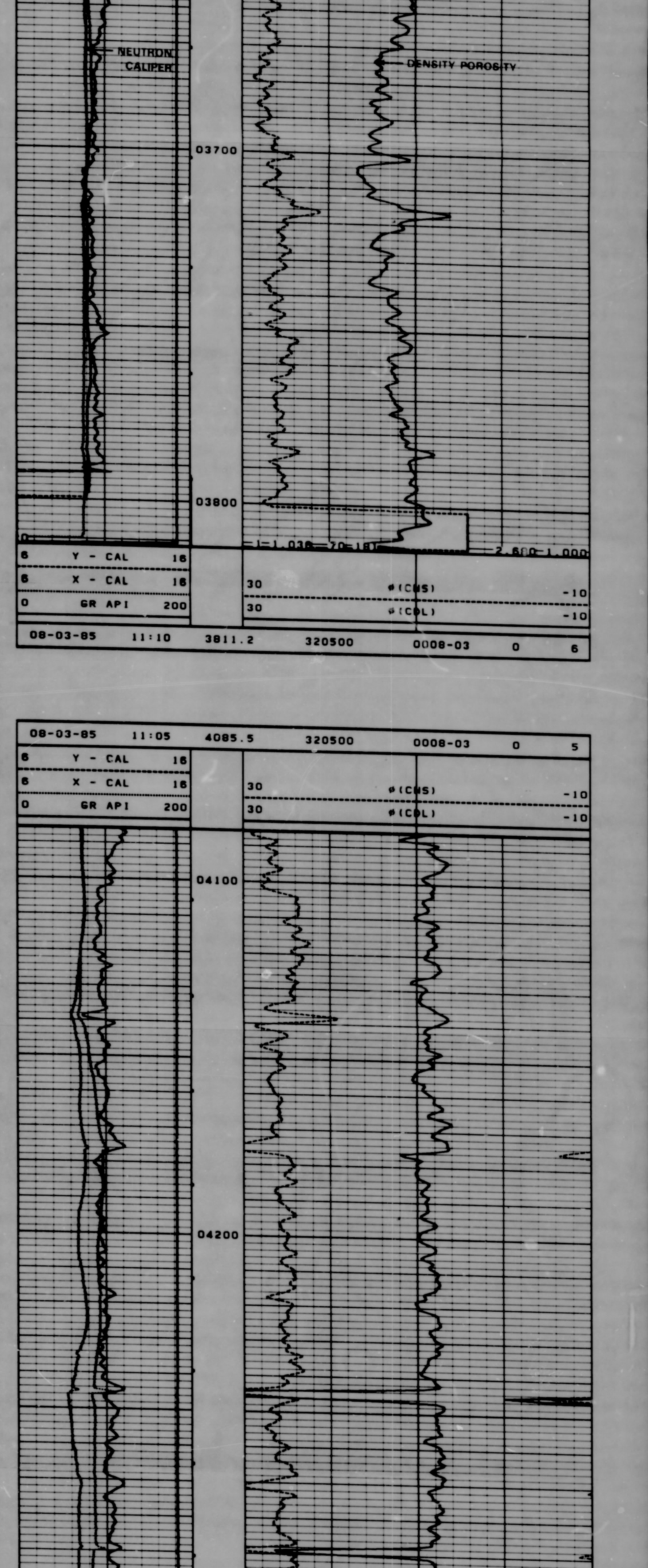
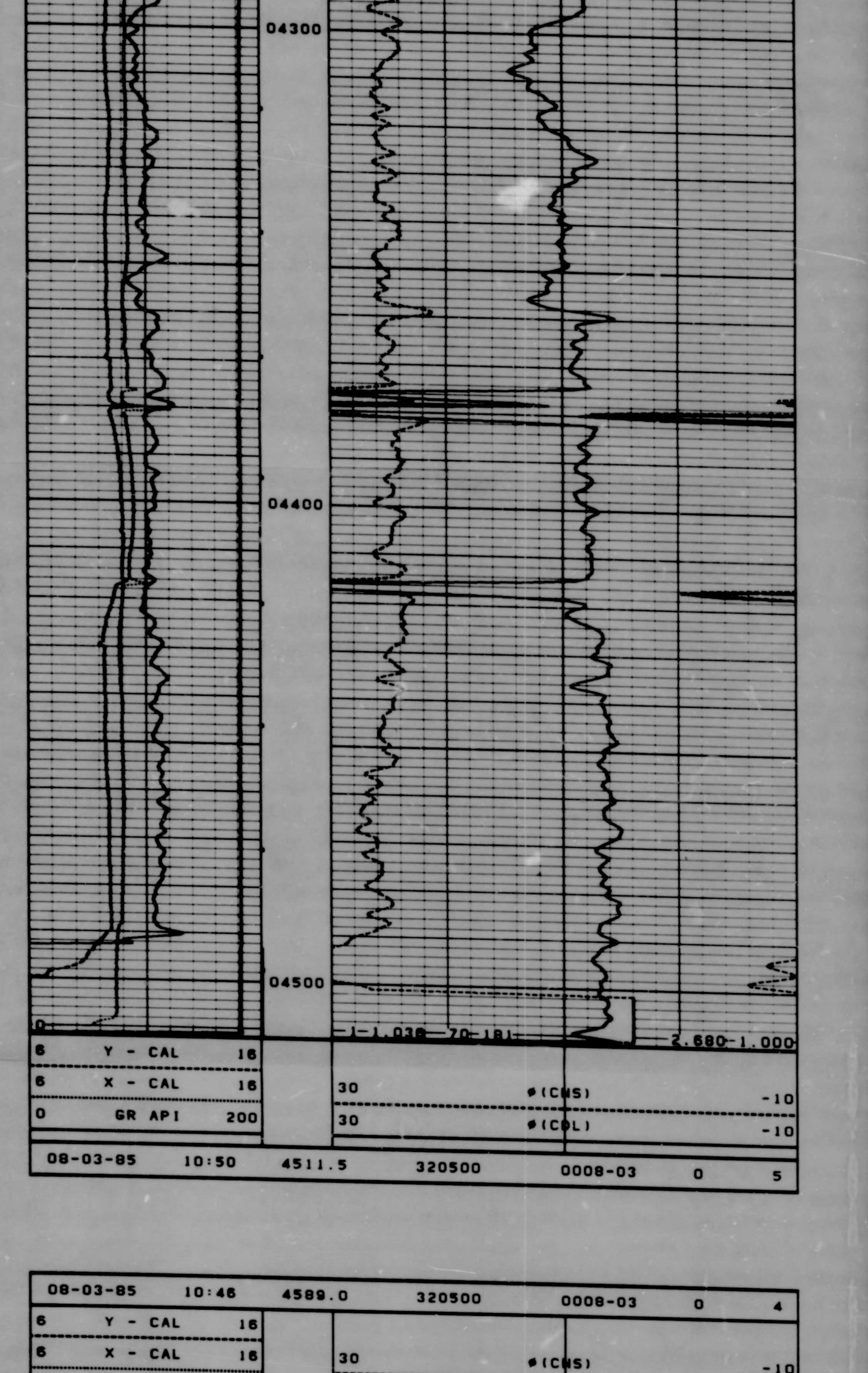
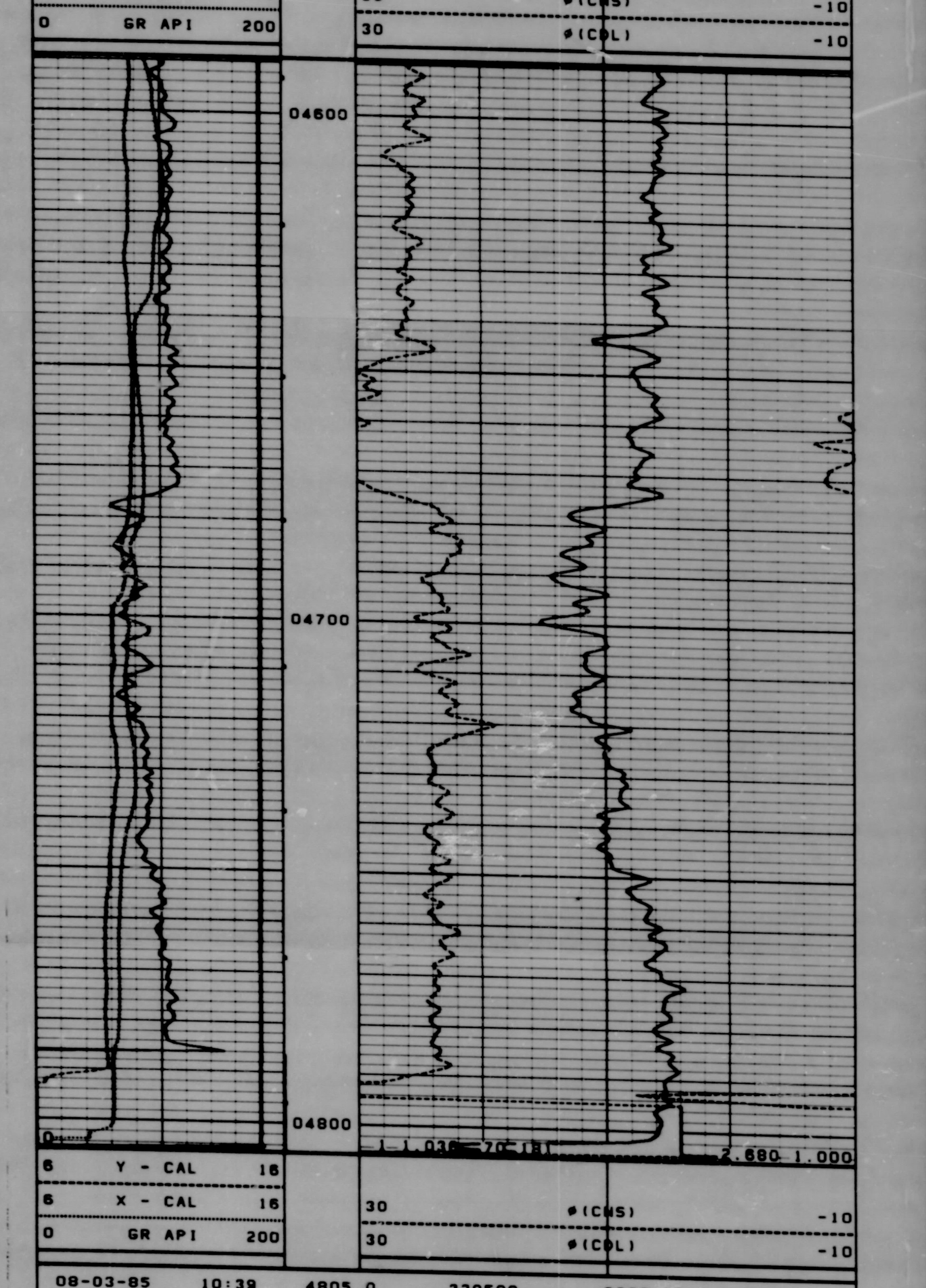
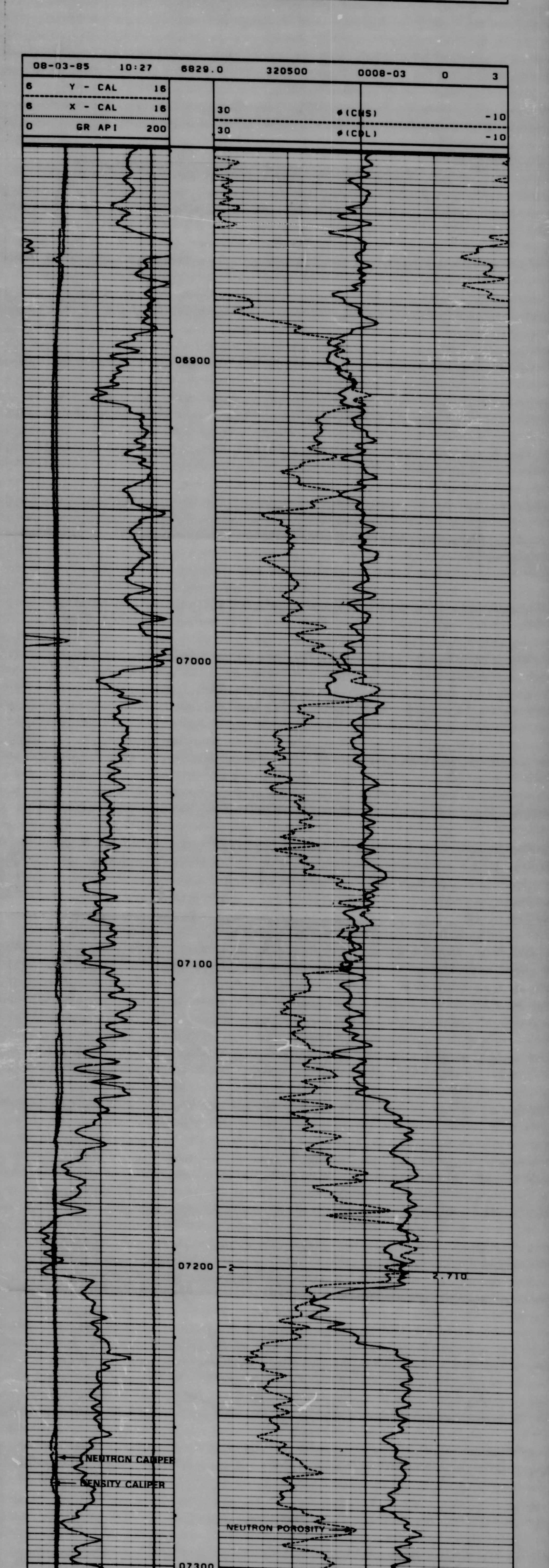
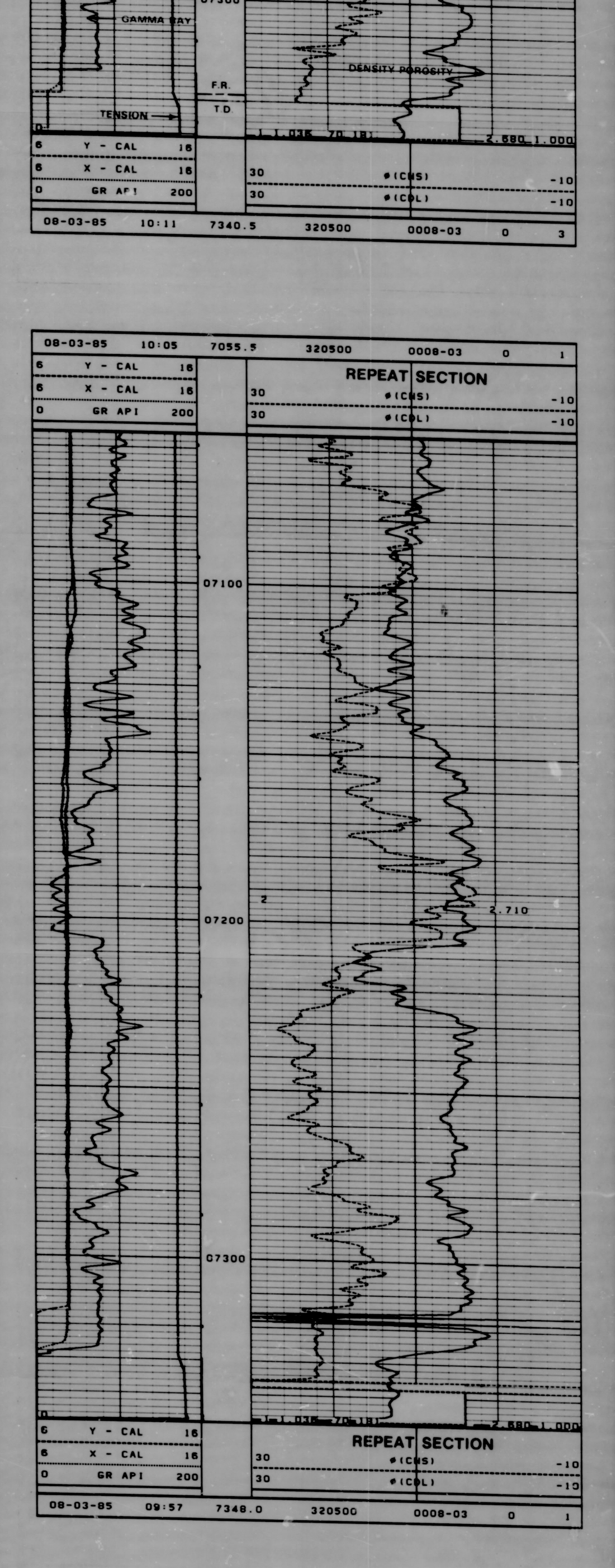
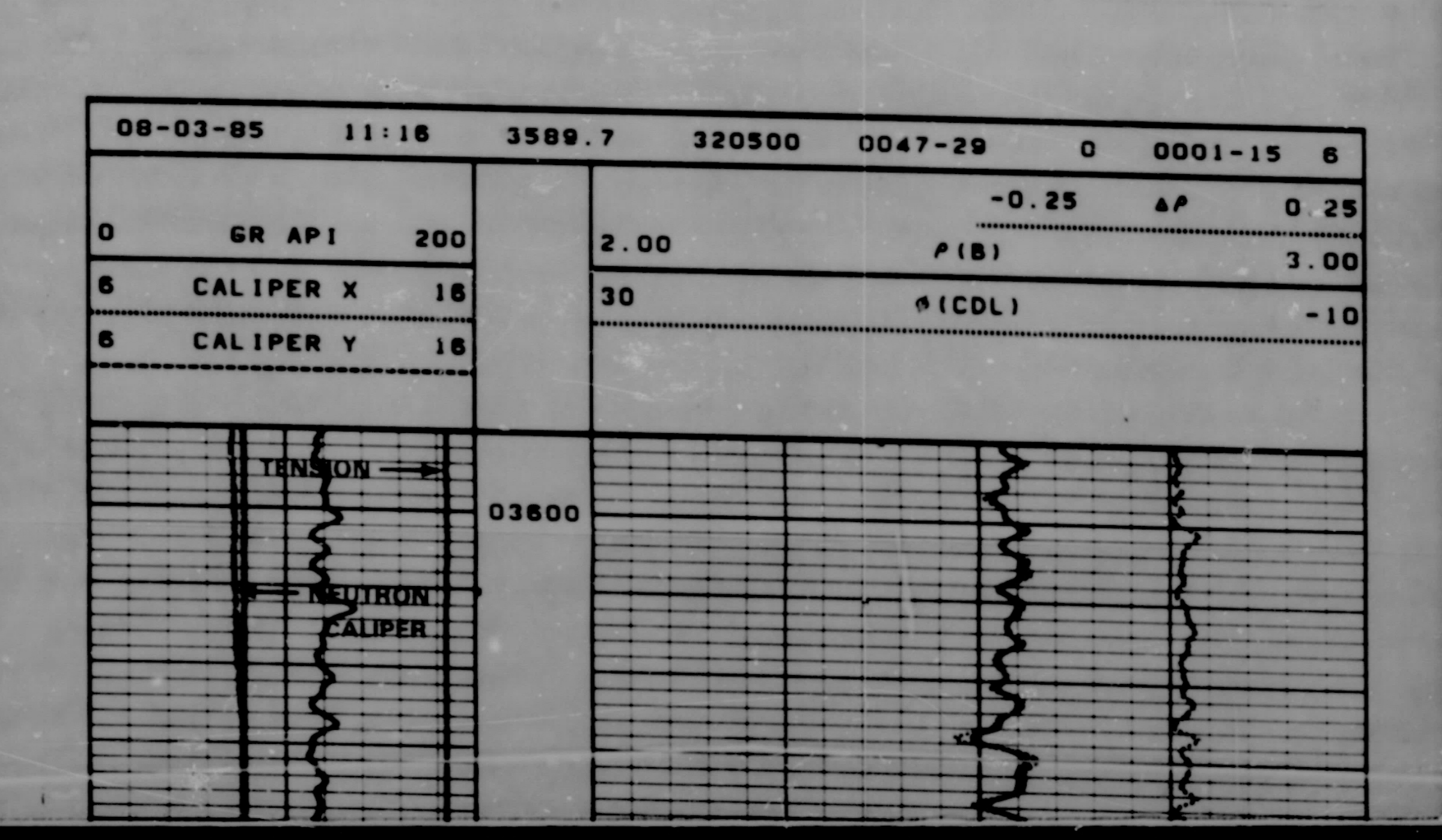


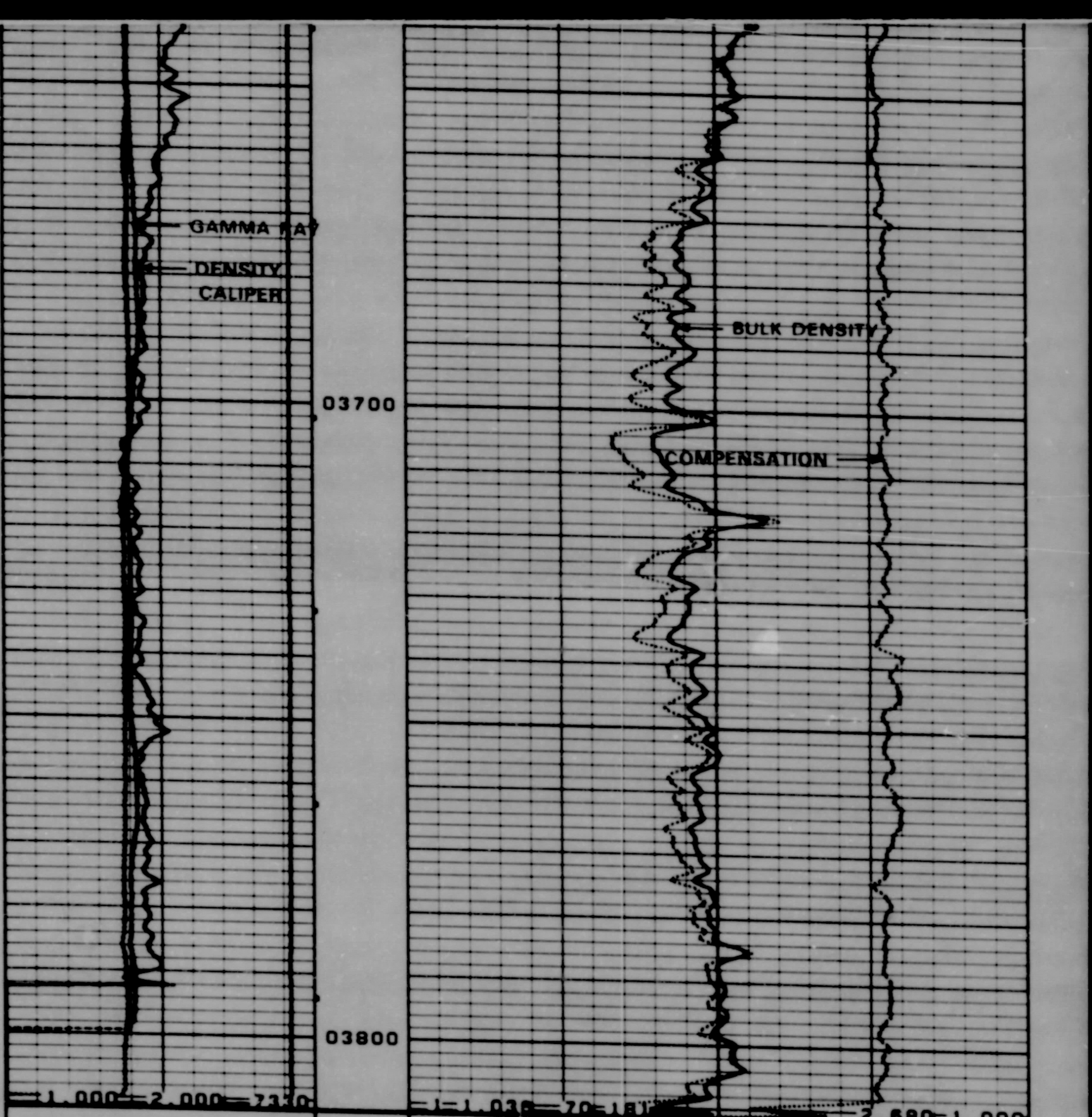












0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

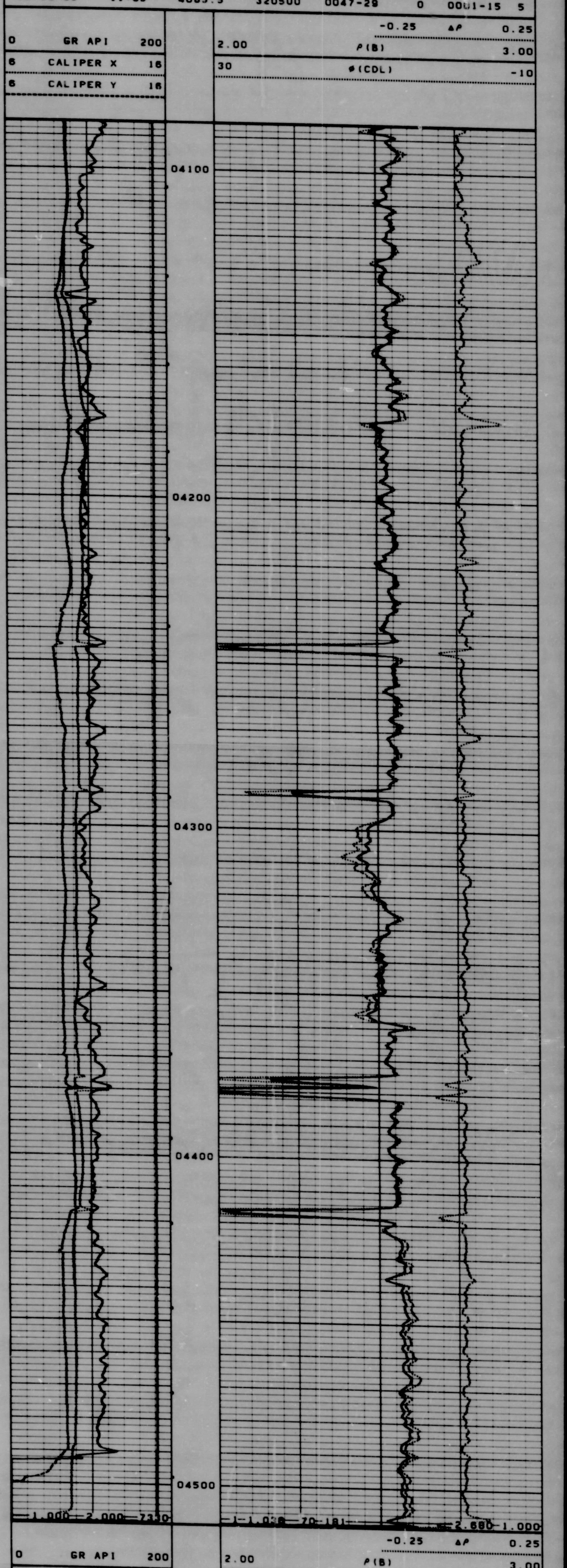
-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10

08-03-85 11:10 3811.2 320500 0047-29 0 0001-15 6

08-03-85 11:05 4085.5 320500 0047-29 0 0001-15 5

0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10



0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

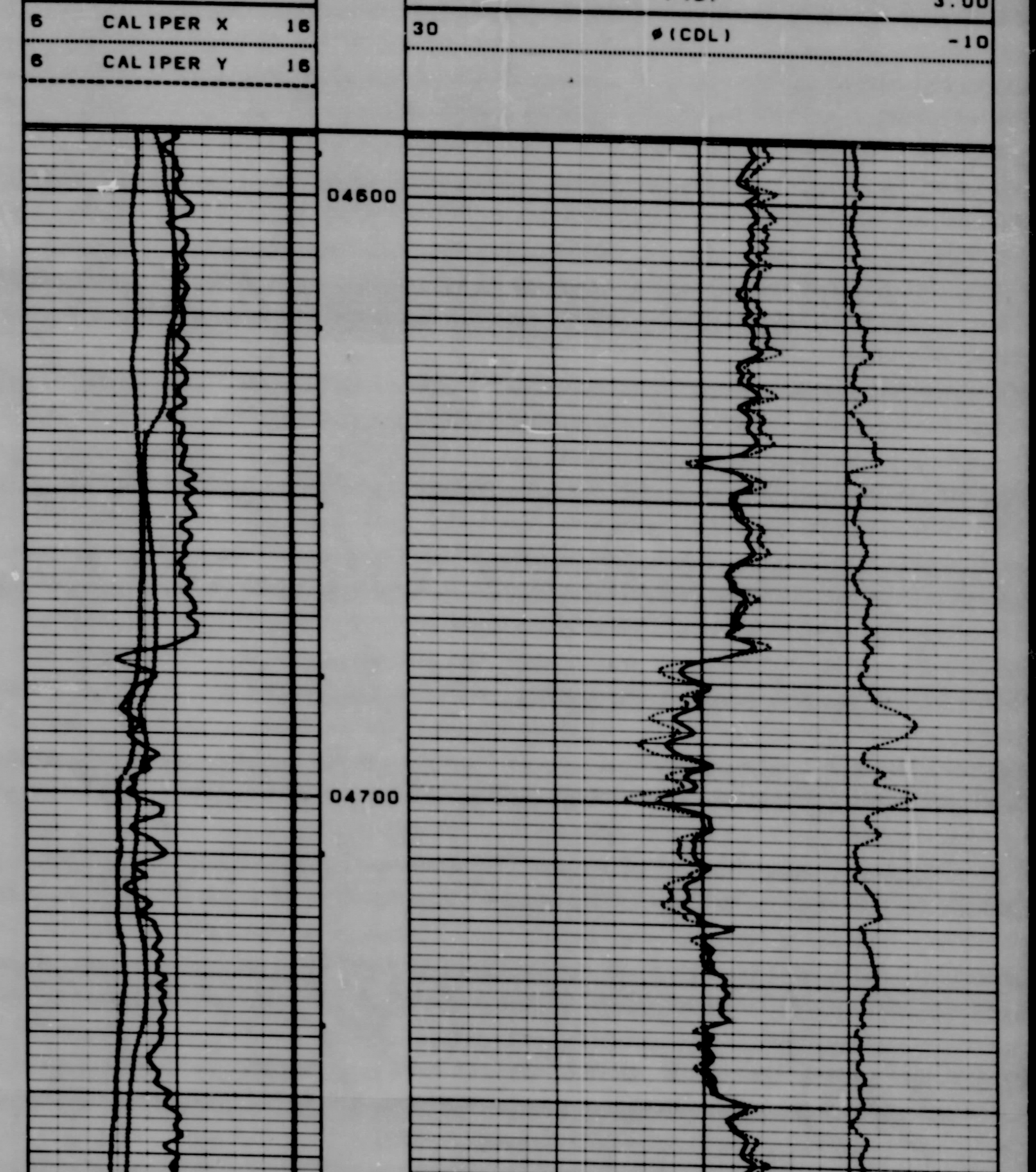
-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10

08-03-85 10:50 4511.5 320500 0047-29 0 0001-15 5

08-03-85 10:46 4589.0 320500 0047-29 0 0001-15 4

0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10



0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

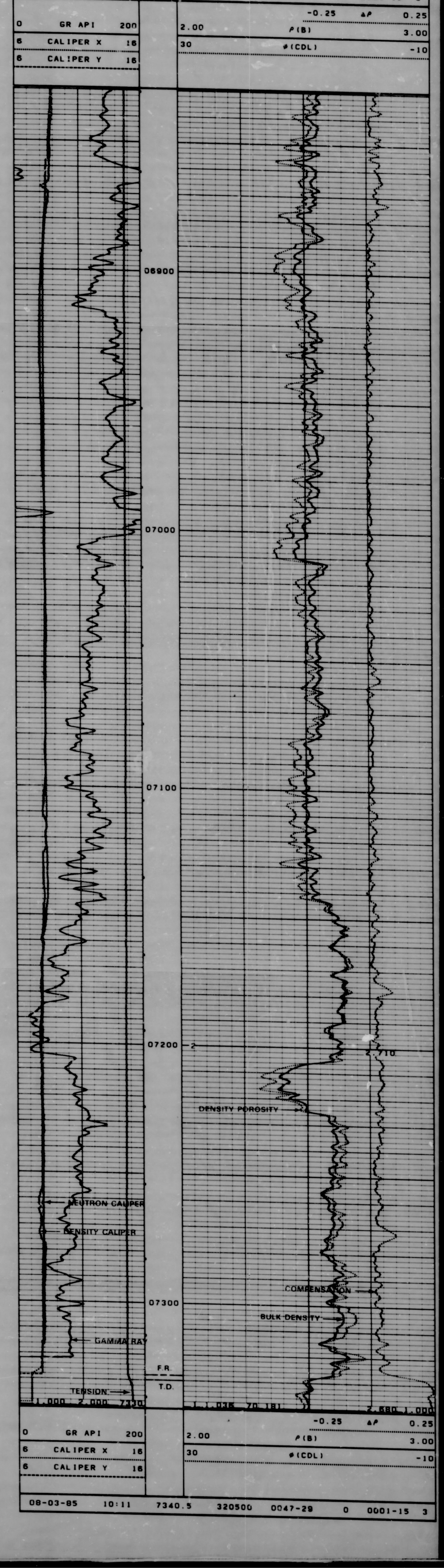
-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10

08-03-85 10:39 4805.0 320500 0047-29 0 0001-15 4

08-03-85 10:27 6829.0 320500 0047-29 0 0001-15 3

0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10



0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

-0.25	Δρ	0.25
2.00	ρ(B)	3.00
30	ϕ(CDL)	-10

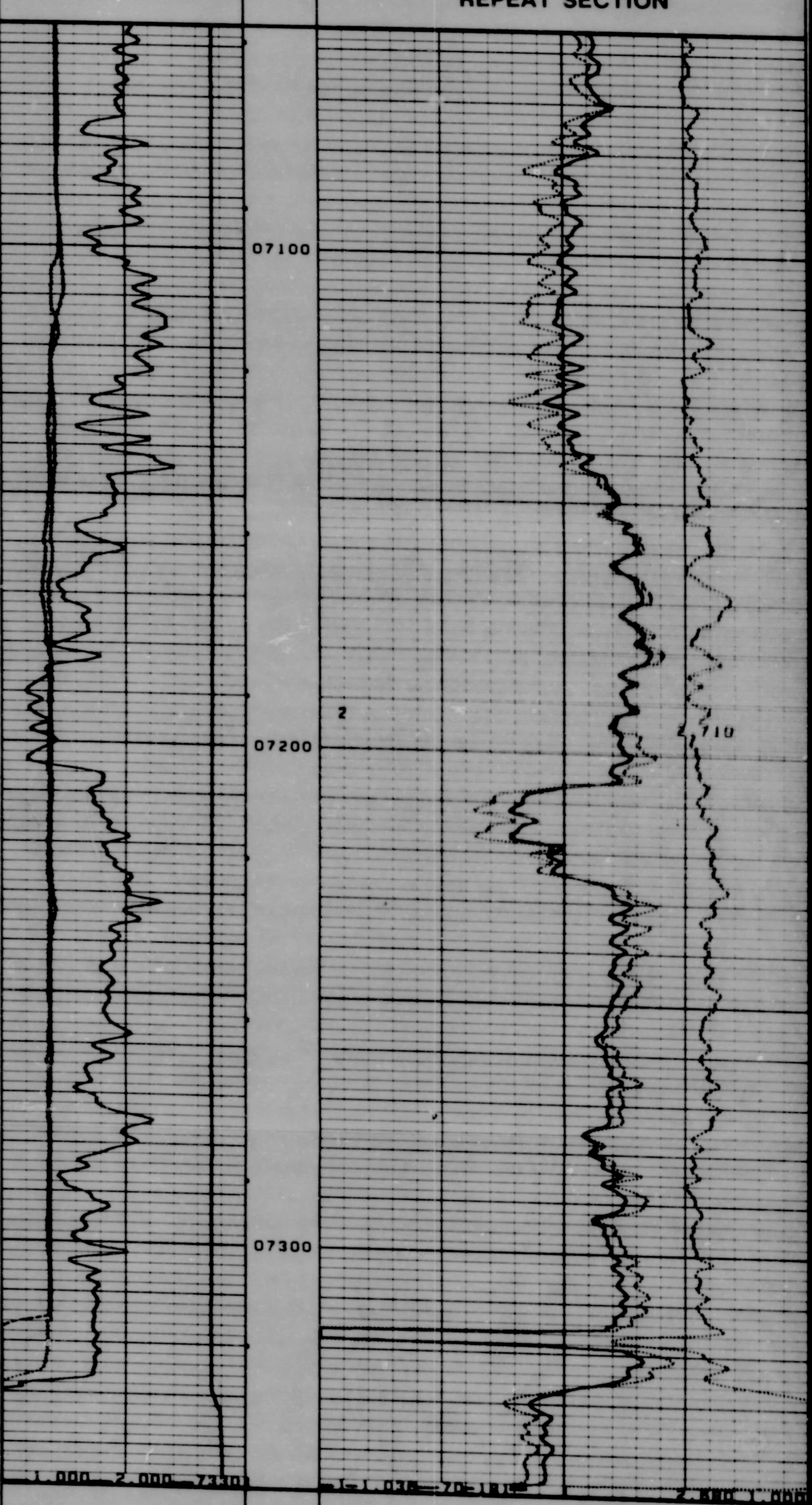
08-03-85 10:11 7340.5 320500 0047-29 0 0001-15 3

08-03-85 10:05 7055.5 320500 0047-29 0 0001-15 1

0	GR API	200		
6	CALIPER X	16		
6	CALIPER Y	16		

	-0.25 ΔP	0.25
2.00	P(B)	3.00
30	ø(CDL)	-10

REPEAT SECTION



0	GR API	200
6	CALIPER X	16
6	CALIPER Y	16

	-0.25 ΔP	0.25
2.00	P(B)	3.00
30	ø(CDL)	-10

REPEAT SECTION

08-03-85 09:57 7348.0 320500 0047-29 0 0001-15 1

08-03-85 11:57 99808.0 320500 0047-43 0 0

COMPENSATED NEUTRON AFTER SURVEY TOOL CHECK

NEUTRON DETECTOR

FIELD CHECK

	BEFORE	AFTER	UNITS
LS DETECTOR	423.8	423.7	CPS
SS DETECTOR	343.1	344.5	CPS
TOOL RATIO:	0.809	0.813	SS/LS
TOOL POROSITY:	14.11	14.27	LM-PU

TOOL CONSTANT: 1.036
SURFACE TEMPERATURE: 70° F
DEPTH: 0.0 FT
BIT SIZE: 7.87 IN

08-03-85 11:52 0.0 320500 0047-43 0 0

COMPENSATED DENSITY AFTER SURVEY TOOL CHECK

DENSITY DETECTOR

FIELD CHECK

	BEFORE	AFTER	UNITS
LS DETECTOR	308.8	308.4	CPS
SS DETECTOR	443.3	444.0	CPS
BULK DENSITY	2.330	2.334	G/CC
DENSITY CORR	-0.019	-0.016	G/CC

08-03-85 06:06 189.5 320500 0047-43 0 0

COMPENSATED NEUTRON BEFORE SURVEY TOOL CHECK

NEUTRON DETECTOR

	FIELD CHECK	UNITS
LS DETECTOR	423.8	CPS
SS DETECTOR	343.1	CPS
TOOL RATIO:	0.809	SS/LS
TOOL POROSITY:	14.11	LM-PU

TOOL CONSTANT: 1.036
SURFACE TEMPERATURE: 70° F
DEPTH: 0.0 FT
BIT SIZE: 7.87 IN

08-03-85 06:01 189.5 320500 0047-43 0 0

COMPENSATED DENSITY BEFORE SURVEY TOOL CHECK

DENSITY DETECTOR

	FIELD CHECK	UNITS
LS DETECTOR	308.8	CPS
SS DETECTOR	443.3	CPS
BULK DENSITY	2.330	G/CC
DENSITY CORR	-0.019	G/CC

07-25-85 14:31 189.5 0 0047-43 0 0

GAMMA RAY

BACKGROUND	CALIBRATOR	STANDARD	UNITS
211.1	624.7	120.0	GAPI

DELTA COUNTS PER SEC: 400.0 CPS/API = 3.446

07-25-85 14:31 189.5 0 0047-43 0 0

CALIPER

	MEASURED			CALIBRATED		
	SMALL	LARGE	UNITS	SMALL	LARGE	UNITS
CALX	3755	7320	MV	7.00	14.00	IN
CALY	3371	6768	MV	7.00	14.00	IN

07-25-85 14:31 189.5 0 0047-43 0 0

COMPENSATED NEUTRON SHOP CALIBRATION
PROGRAM NO: 03-0047-43
TOOL TYPE: CNT-BA
DATE PERFORMED: 07-25-85

NEUTRON DETECTOR

	LOW - ø	MED - ø	HIGH - ø	UNITS
TANK RATIO:	0.575	0.836	1.228	SS/LS
TANK POROSITY:	3.16	14.02	31.31	LM-PU
LS DETECTOR	1698.3	636.3	268.5	CPS
SS DETECTOR	935.2	514.0	318.0	CPS
TOOL RATIO:	0.550	0.807	1.193	SS/LS
TOOL POROSITY:	2.95	14.02	31.74	LM-PU

TOOL CONSTANT: 1.036
SURFACE TEMPERATURE: 70° F
DEPTH: 0.0 FT
BIT SIZE: 7.87 IN

FIELD STANDARD

SS DETECTOR	LS DETECTOR	RATIO	POROSITY
345.9 CPS	423.0 CPS	0.820	14.56

07-25-85 14:31 189.5 0 0047-43 0 0

COMPENSATED DENSITY SHOP CALIBRATION
DATE PERFORMED: 07-25-85

DENSITY DETECTOR

	MAG BLK(CPS)	ALUM BLK(CPS)	SPINE ANGLE	DEN/SPINE RATIO
LS DETECTOR	812.7	205.2		
SS DETECTOR	599.3	409.6	75	0.571

FIELD STANDARD

	FIELD CHECK	UNITS
LS DETECTOR	307.1	CPS
SS DETECTOR	443.9	CPS
BULK DENSITY	2.332	G/CC
DENSITY CORR	-0.018	G/CC