Schlumberger

SIMULTANEOUS COMPENSATED NEUTRON-FORMATION DENSITY

COMPANY	L & B LEASING, INC. (CITATION)
WELL	YARICK NO. 5
FIELD	WILDCAT
COUNTY	BATES
STATE	MISSOURI
LOCATION	1459.27' FNL & 1459.45' FWL
SEC	6
TWP	38N
RANGE	32W
Other Services	DI-SFL
Permanent Datum	GROUND LEVEL
Elev.	867.1
Log Measured From	G.L., 0 Ft. Above Perm. Datum
Drilling Measured From	G.L.
Elev.: K.B. / D.F. / G.L.	G.L. 867.1
Date	4-1-81
Run No.	ONE
Depth-Driller	423
Depth-Logger	427
Btm. Log Interval	426
Top Log Interval	127
Casing-Driller	7 @ 126
Casing-Logger	127
Bit Size	6 1/4
Type Fluid in Hole	KCL & WATER
Logger on Bottom	1800 4-1-81
Equip. / Location	7749 / WICHITA
Recorded By	BEECHER
Witnessed By	RUGG

FOLD HERE — The well name, location and borehole reference data were furnished by the customer

RUN NO.	ONE
Service Order No.	219668
Fluid Level	SURF
Salinity, PPM CL.	
Speed - F.P.M.	1800-FPH
EQUIPMENT DATA	
Dens. Panel	EJ-1315
Dens. Cart.	EB-603
Dens. Skid	D-1192
Dens. Sonde	EC-165
Dens. Source	B-3274
Dens. Calibrator	106-1060
Neut. Panel	A-1104
Neut. Cart.	A-1486
Neut. Source	F-1492
Neut. Calibrator	AB-1505
GR Cart.	JAA-508
Memorizer Panel	CA-609
Tape Recorder (TTR)	
Depth Encoder (DRE)	
Pressure Wheel (CPW)	
Centralizers: Enter Spring, Standoffs, In-line, or None — Type	NONE
No.	
S. O. — Inches	
CALIBRATION DATA	
GR BKG. CPS	184
GR Source CPS	660
GR Sens. - Cal	165
GR T. C. - Cal	6
CNL Short Spacing - Before Log	2886
CNL Long Spacing - Before Log	1242
CNL Short Spacing - After Log	2886
CNL Long Spacing - After Log	1242
FDC P1 — Before Log	471
FDC P2 — Before Log	812
FDC P1 — After Log	471
FDC P2 — After Log	812

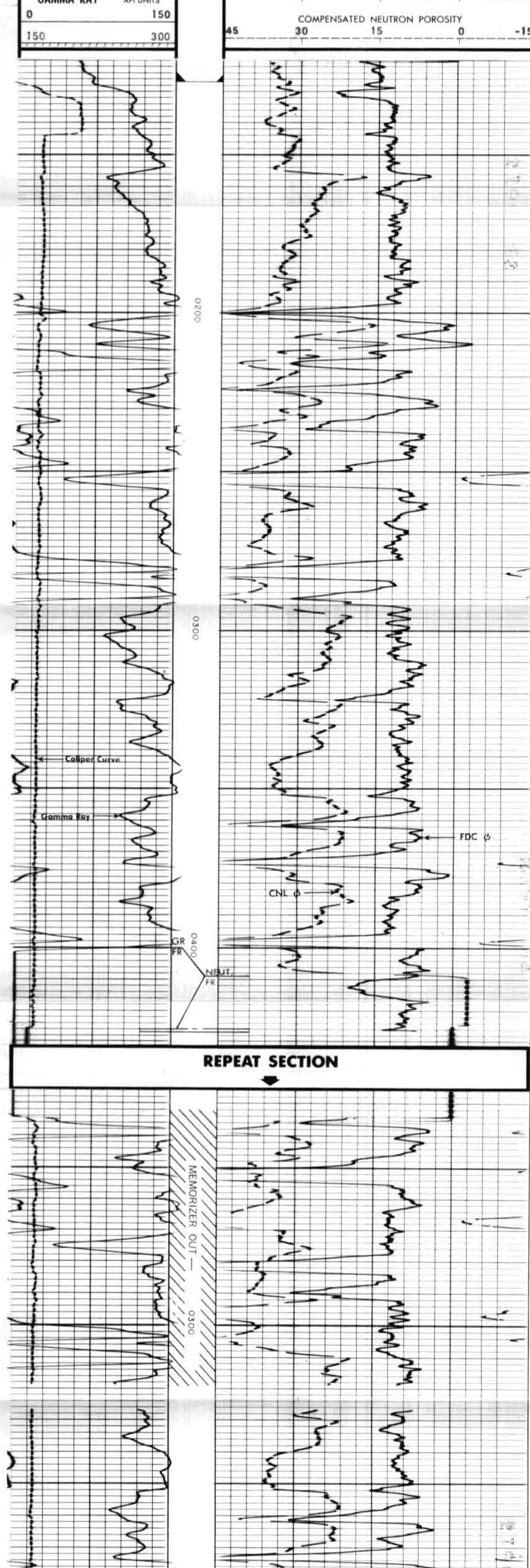
Type Log	Depth		

REMARKS:

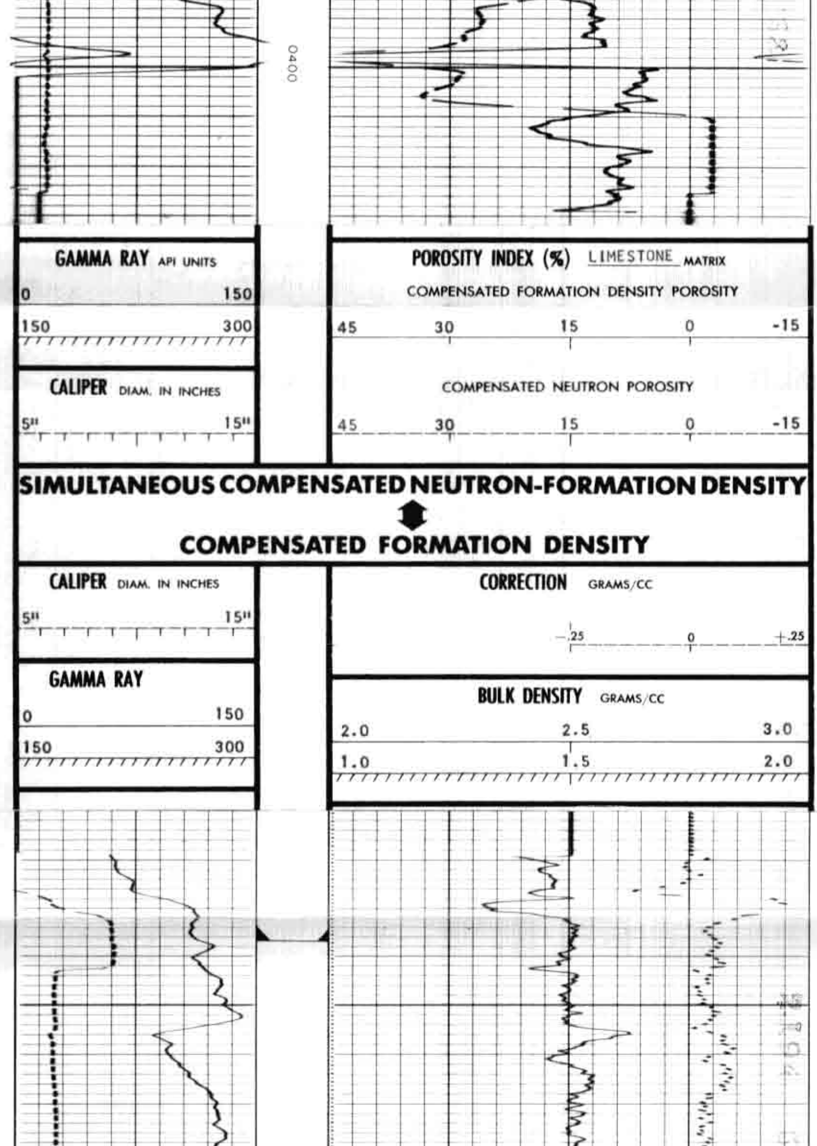
LOGGING DATA

DEPTH Top	DEPTH Bottom	CNP Porosity Scale	CNP Matrix	CNP Auto Corr. or Hole Size Setting	FDC Porosity Scale	FDC Grain Density	FDC Liquid Density	FDC Hole Fluid	GR Sens. Logged	GR T.C.	GR Zero Div. Left	GR Scale Per 100 Div.
127	426	-15/45	LSOH	AUTO	-15/45	2.71	1.0	LIQ.	150	2	0	150

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.



REPEAT SECTION



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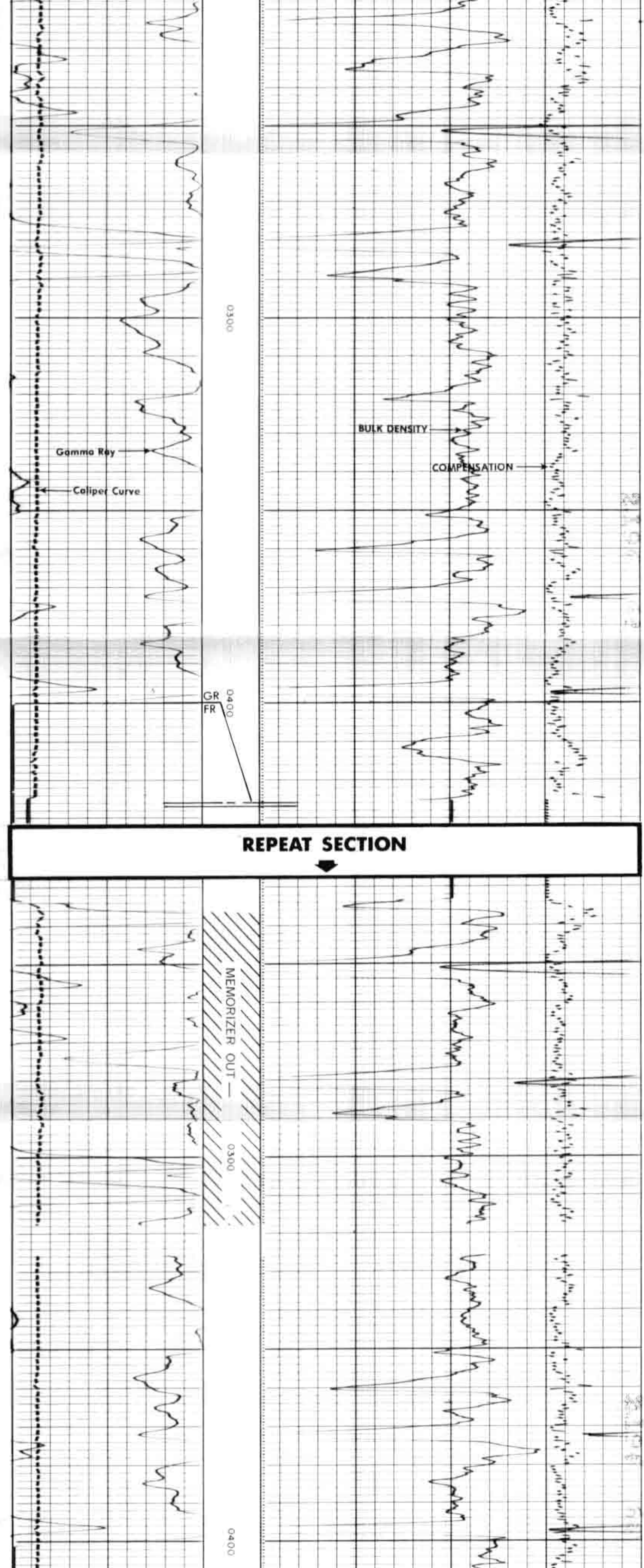
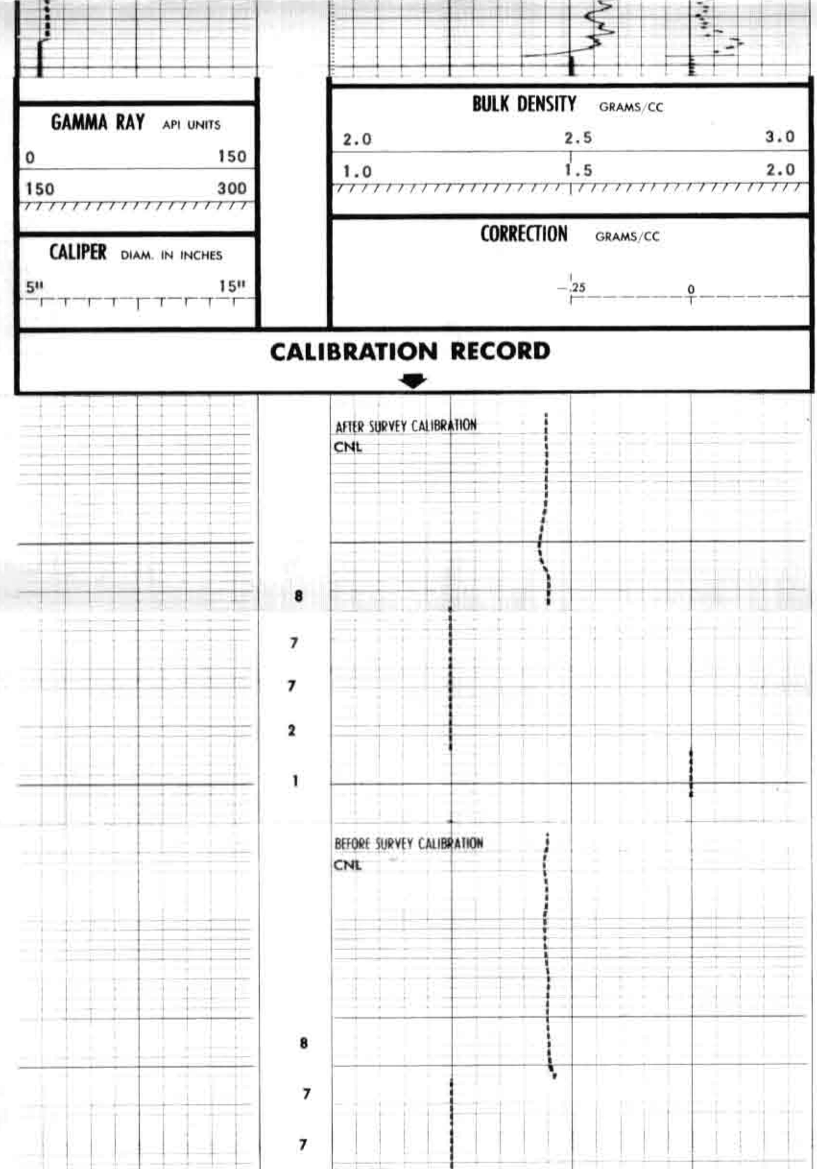
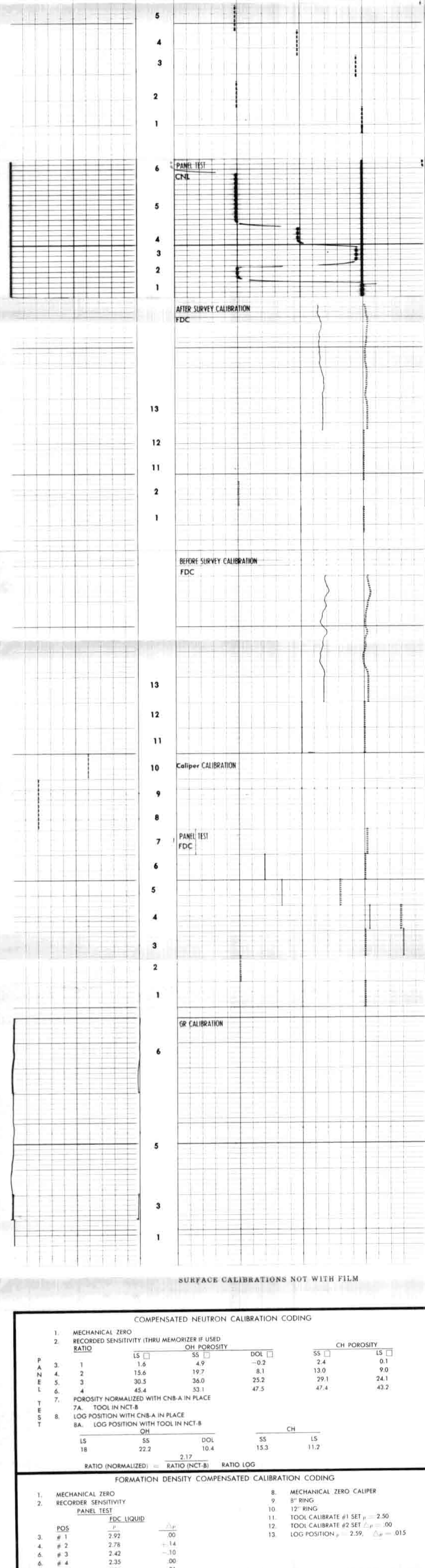
COMPENSATED FORMATION DENSITY



REPEAT SECTION



CALIBRATION RECORD



SURFACE CALIBRATIONS NOT WITH FILM

COMPENSATED NEUTRON CALIBRATION CODING

1. MECHANICAL ZERO
2. RECORDED SENSITIVITY (THRU MEMORIZER IF USED

PANEL TEST

	RATIO	OH POROSITY LS	OH POROSITY SS	OH POROSITY DOL	CH POROSITY SS	CH POROSITY LS
3.	1	1.6	4.9	-0.2	2.4	0.1
4.	2	15.6	19.7	8.1	13.0	9.0
5.	3	30.5	36.0	25.2	29.1	24.1
6.	4	45.4	53.1	47.5	47.4	43.2

7. POROSITY NORMALIZED WITH CNB-A IN PLACE
   7A. TOOL IN NCT-B
8. LOG POSITION WITH CNB-A IN PLACE
   8A. LOG POSITION WITH TOOL IN NCT-B

OH LS	OH SS	OH DOL	CH SS	CH LS
18	22.2	10.4	15.3	11.2

RATIO (NORMALIZED) = 2.17 / RATIO (NCT-B) RATIO LOG

FORMATION DENSITY COMPENSATED CALIBRATION CODING

1. MECHANICAL ZERO
2. RECORDER SENSITIVITY

PANEL TEST — FDC LIQUID

	POS	ρ	$\Delta\rho$
3.	# 1	2.92	.00
4.	# 2	2.78	+.14
6.	# 3	2.42	-.10
6.	# 4	2.35	.00
7.	# 5	2.08	.01

8. MECHANICAL ZERO CALIPER
9. 8" RING
10. 12" RING
11. TOOL CALIBRATE #1 SET ρ = 2.50
12. TOOL CALIBRATE #2 SET $\Delta\rho$ = .00
13. LOG POSITION ρ = 2.59, $\Delta\rho$ = .015

GAMMA RAY CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO
3. RECORDER SENSITIVITY
4. MEMORIZER ADJUSTMENT
5. BACKGROUND
6. CALIBRATE SOURCE IN PLACE

CALIBRATION RECORD

COMPANY	L & B LEASING, INC. (CITATION)
WELL	YARICK NO. 5
FIELD	WILDCAT
COUNTY	BATES
STATE	MISSOURI
SCHL. FR	426
SCHL. TD	427
DRLR. TD	423
Elev: KB	
DF	
GL	867.1