GL04469.lg

Schlumberger

SIMULTANEOUS
COMPENSATED NEUTRON-FORMATION DENSITY

FORM
FIELD
LOCA
WELL 44-5 SODA LAKE
COMPANY CHEVRON U.S.A., INC

COMPANY CHEVRON U.S.A., INC.

WELL 44-5 SODA LAKE

FIELD FALLON

COUNTY CHURCHILL STATE NEVADA

LOCATION 2441.5'SOUTH & 2200'EAST FROM THE NORTHWEST CORNER OF
NE-NE-SE

API SERIAL NO.	SEC	TWP	RANGE
	5	19N	28E

Other Services:
DIL
LSS
HRT
HDT

Permanent Datum: GL, Elev.: 3988.5
Log Measured From KB N/A Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. N/A
D.F. - -
G.L. 3988.5

Date	1-11-78			
Run No.	ONE			
Depth - Driller	4975			
Depth - Logger	4981			
Btm. Log Interval	4980			
Top Log Interval	535			
Casing - Driller	7" @ 535	@	@	@
Casing - Logger	535			
Bit Size	6¼"			
Type Fluid in Hole	LIGNITE			
Dens. | Visc.	70 | 45	|	|	|
pH | Fluid Loss	9.0 | 10.6ml	| ml	| ml	| ml
Source of Sample	CIRCULATED			
Rm @ Meas. Temp.	1.32 @ 79°F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	2.10 @ 39°F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	1.98 @ 79°F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	M | C	|	|	|
Rm @ BHT	0.58 @ 175°F	@ °F	@ °F	@ °F
TIME Circulation Stopped	0900			
TIME Logger on Bottom	0330			
Max. Rec. Temp.	175°F	°F	°F	°F
Equip. | Location	7763 | SAC	|	|	|
Recorded By	BRASFIELD			
Witnessed By Mr.	LANE/HILL/SIKBA/LOVETT			

The well name, location and borehole reference data were furnished by the customer.

FOLD HERE

Reproduced By
Electrical Log Services
MIDLAND, TEXAS 79701

REFERENCE K 2634H

PI

14 COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

API NO.

CASING RECORD

PERFORATING RECORD

ACID. FRAC SHOT

I P

GOR GR

T P C P

REMARKS:

REPRODUCTION FOR RESALE PROHIBITED

RUN NO.	ONE			
Service Order No.	27463			
Fluid level	FULL			
Salinity, PPM Cl.	- -			
Speed - FPM	1900			
EQUIPMENT DATA				
Dens. Panel	DC-365			
Dens. Cart	G- 260			
Dens. Skid.	E- 277			
Dens. Sonde	FD-472			
Dens. Source	5199			
Dens. Calibrator	1241			
Neut. Panel	BA- 39			
Neut. Cart.	A- 409			
Neut. Source	495			
Neut. Calibrator	AB-594			
GR Cart.	199			
Memorizer Panel	CA-524			
Tape Recorder (TTR)	N-1940			
Depth Encoder (DBE)	C-1827			
Pressure Wheel (CPW)	H-2978			
Centralizers, Bowspring, Standoffs, In-line, or None — Type	- -			
Centralizers, Bowspring, Standoffs, In-line, or None — No.	0			
Centralizers, Bowspring, Standoffs, In-line, or None — S. O. — Inches	- -			
CALIBRATION DATA				
GR — BKG. CPS	68			
GR — Source CPS	288			
GR — Sens. - Cal	150			
GR — T. C. - Cal	2			
CNL — Short Spacing - Before Log	350			
CNL — Long Spacing - Before Log	155			
CNL — Short Spacing - After Log	351			
CNL — Long Spacing - After Log	156			
FDC — P° — Before Log	98.9			
FDC — P⁴ — Before Log	199			
FDC — P¹ — After Log	99			
FDC — P⁴ — After Log	199			

Type Log	Depth		

REMARKS:

GR RECORDED INTO CASING

LOGGING DATA

DEPTH		CNP			FDC				GR			
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens Logged	T. C.	Zero. Div. Left	Scale Per 100 Div.
40	4981	60-0	SS	AUTO	60-0	2.65	1.00	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 wilful 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 Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

CALIPER DIAM. IN INCHES

5" 15"

GAMMA RAY API UNITS

0 150

DEPTH

POROSITY INDEX % SANDSTONE MATRIX

COMPENSATED NEUTRON POROSITY

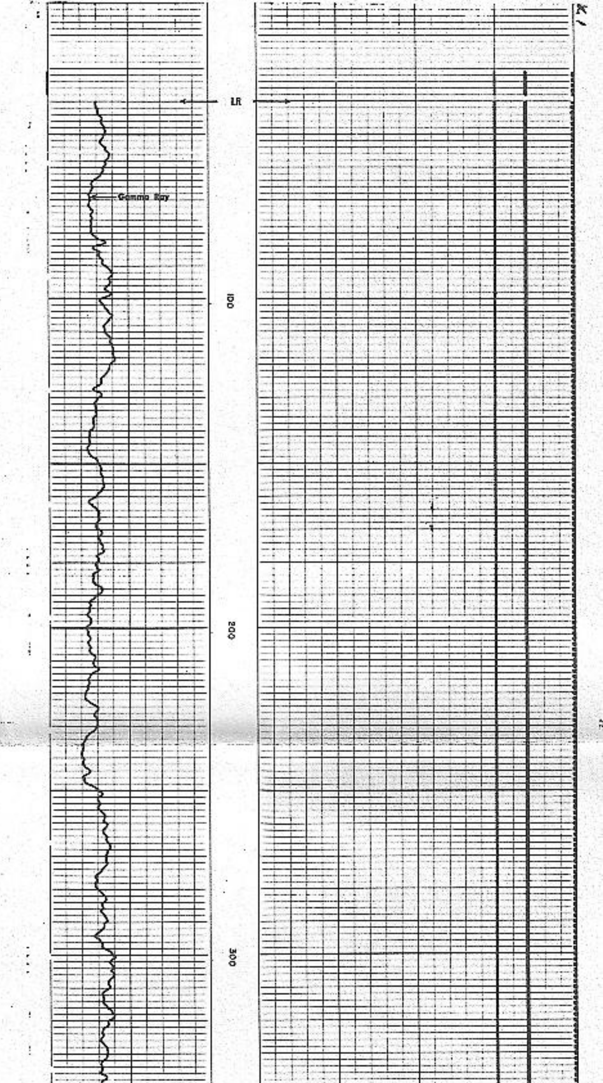
60 45 30 15 0

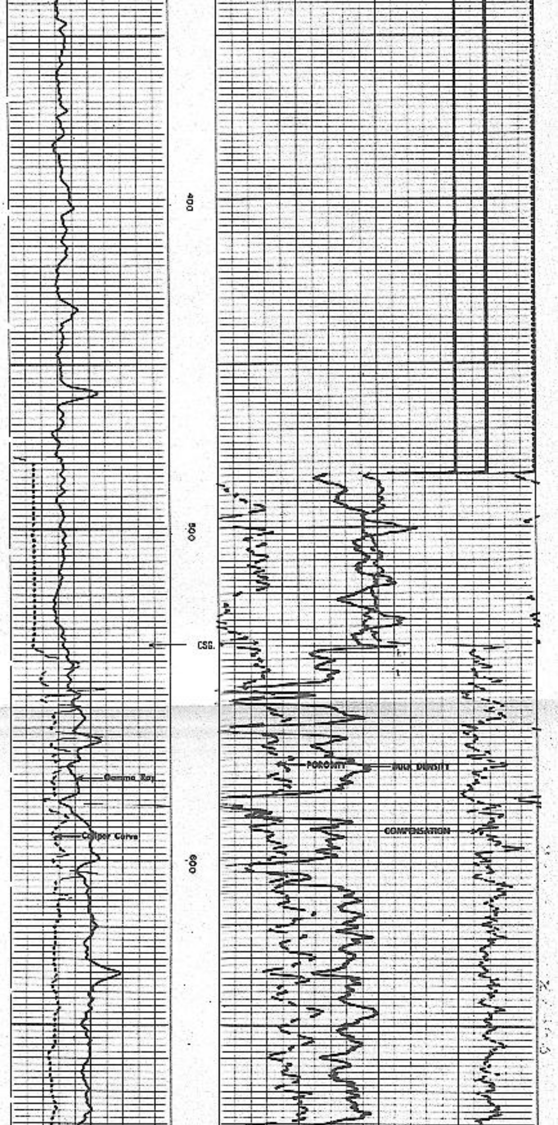
CORRECTION GRAMS CC

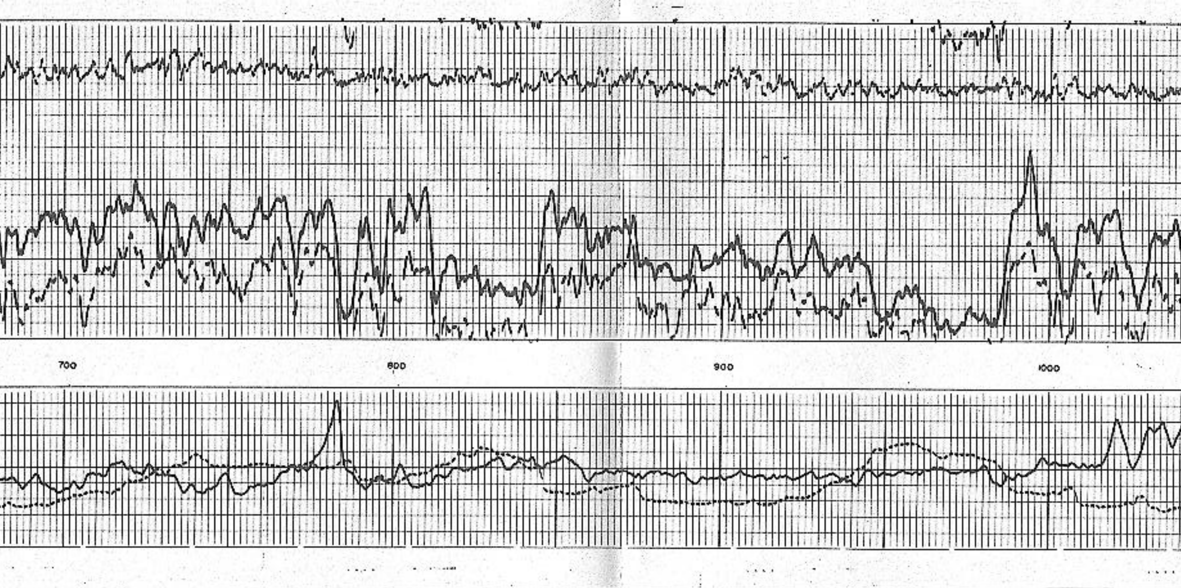
-.25 0 +.25

BULK DENSITY GRAMS CC

1.65 2.15 2.65







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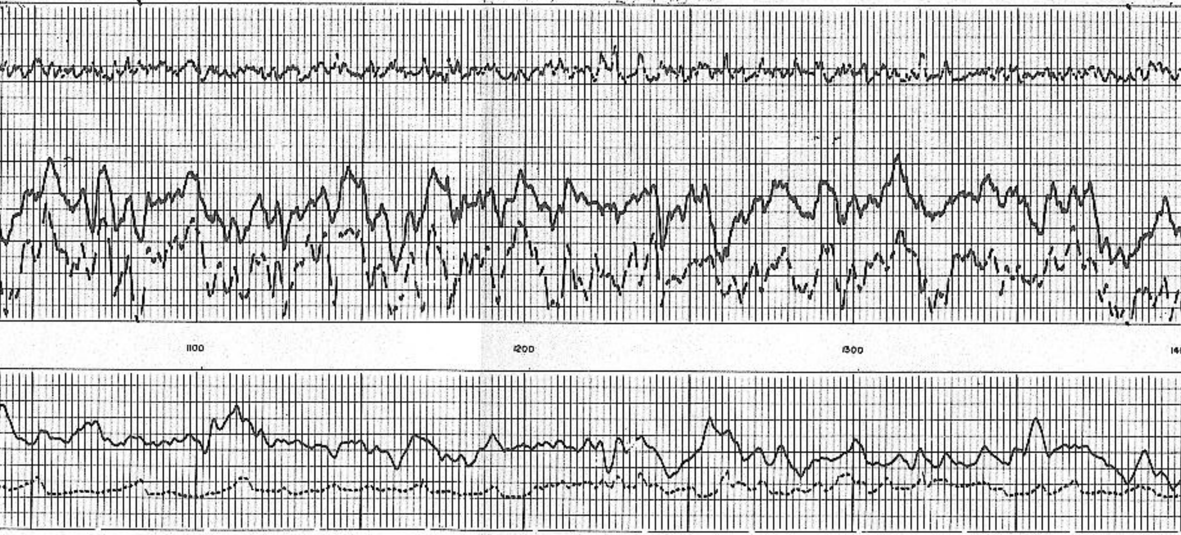
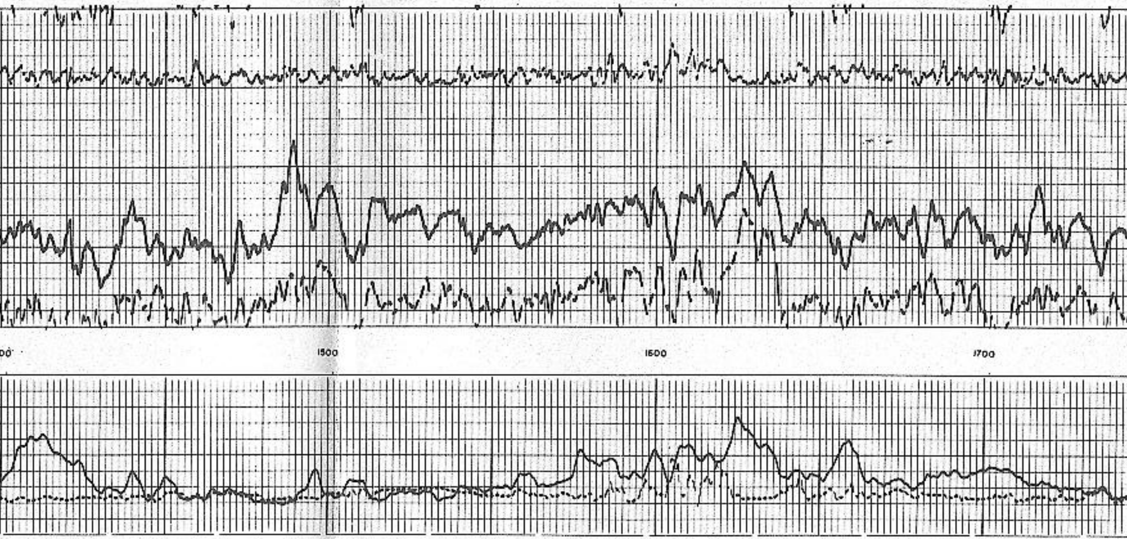
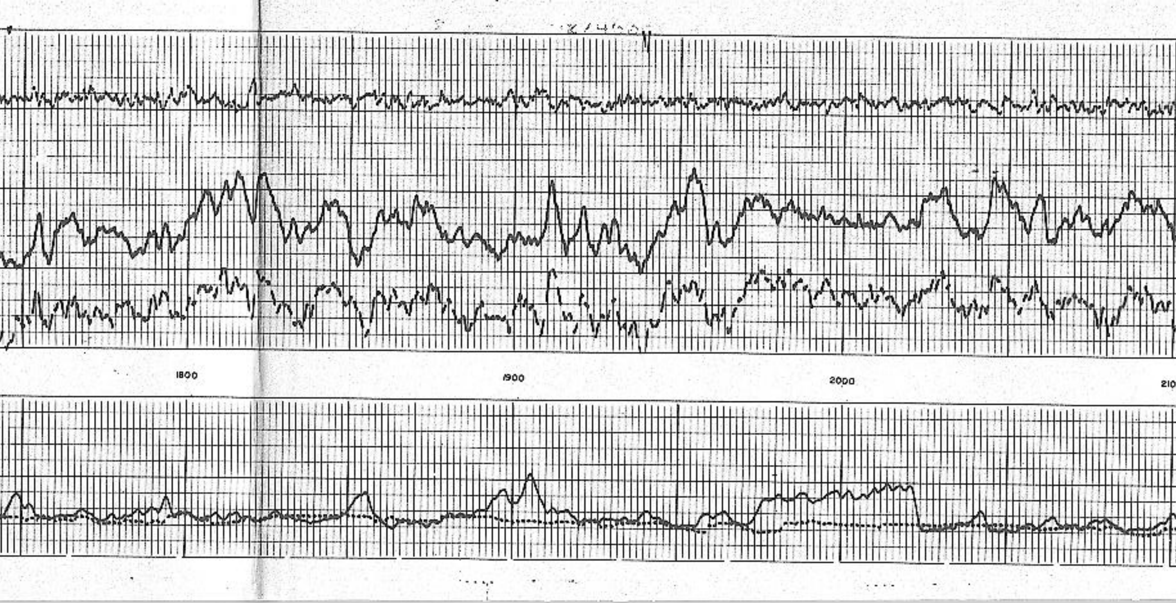
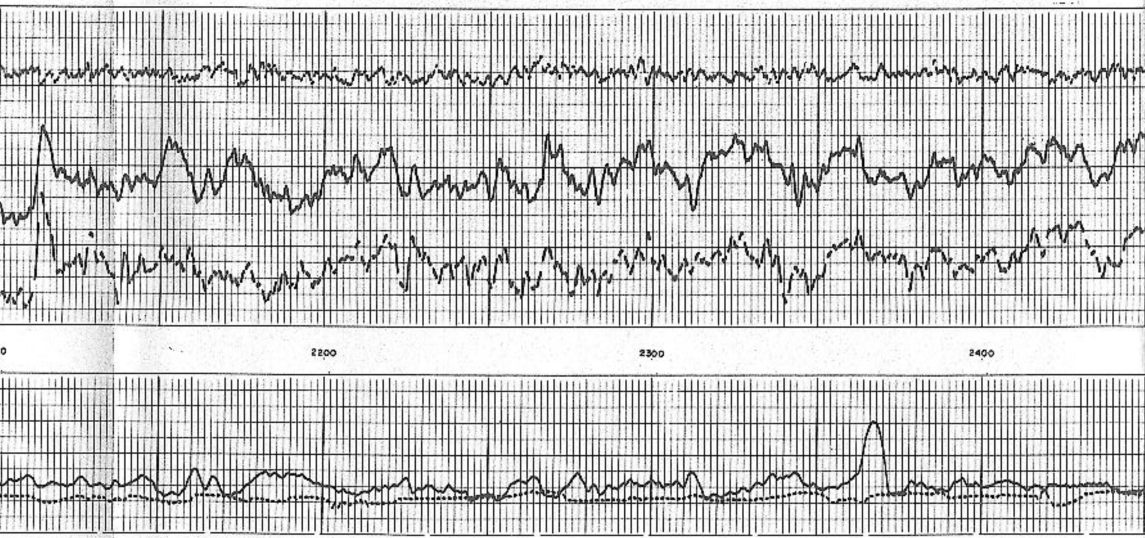
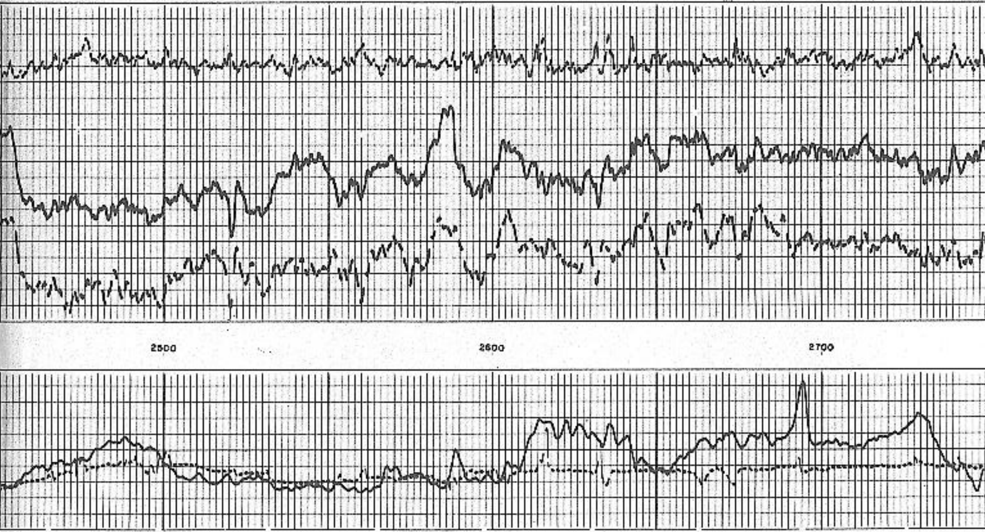
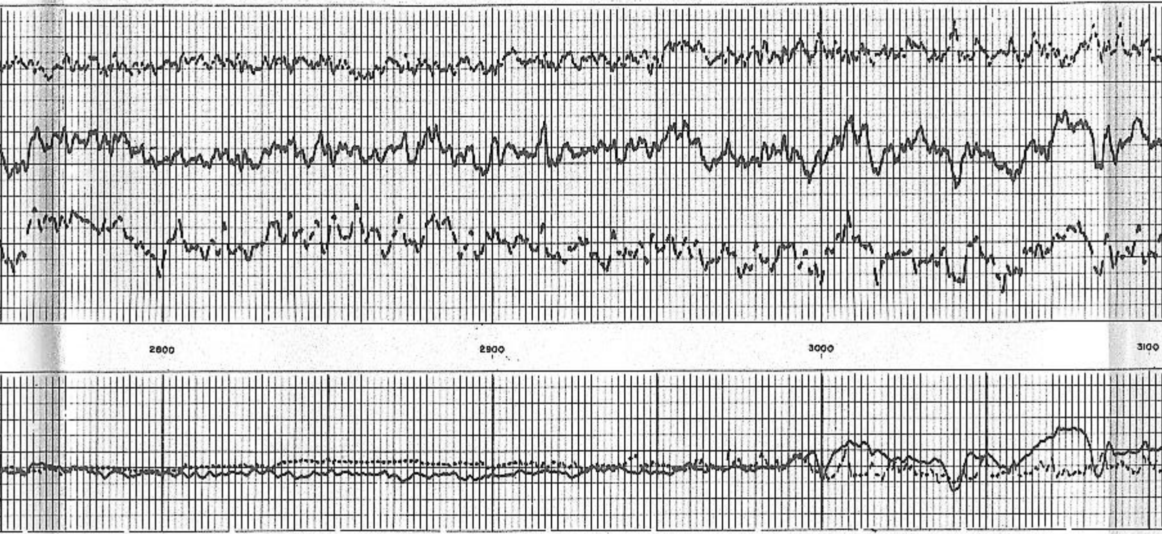


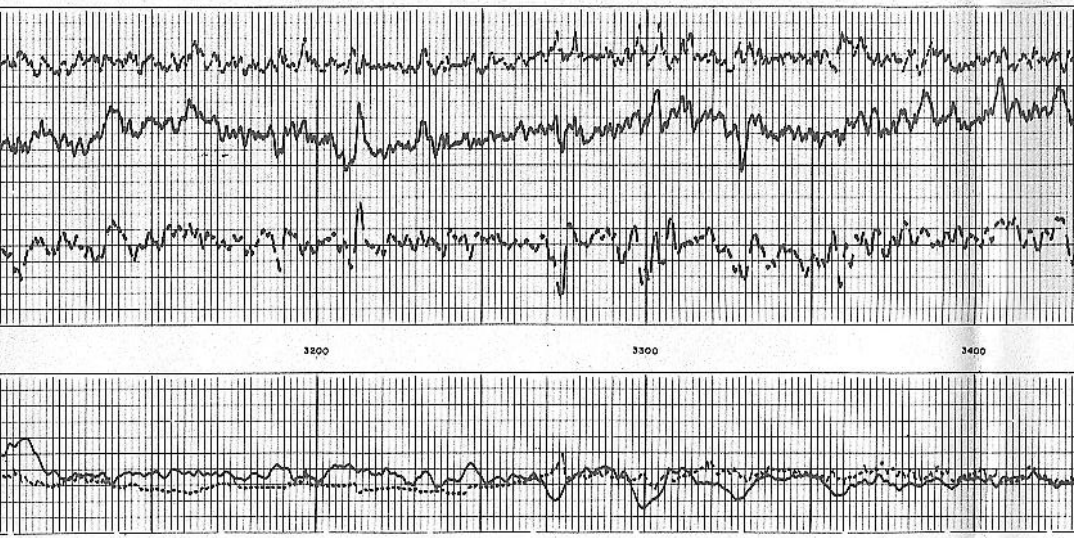


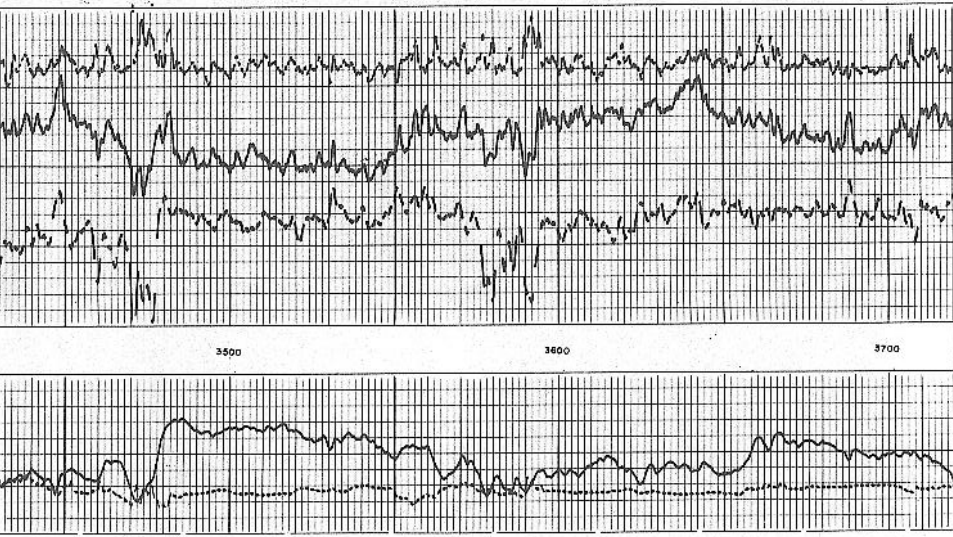


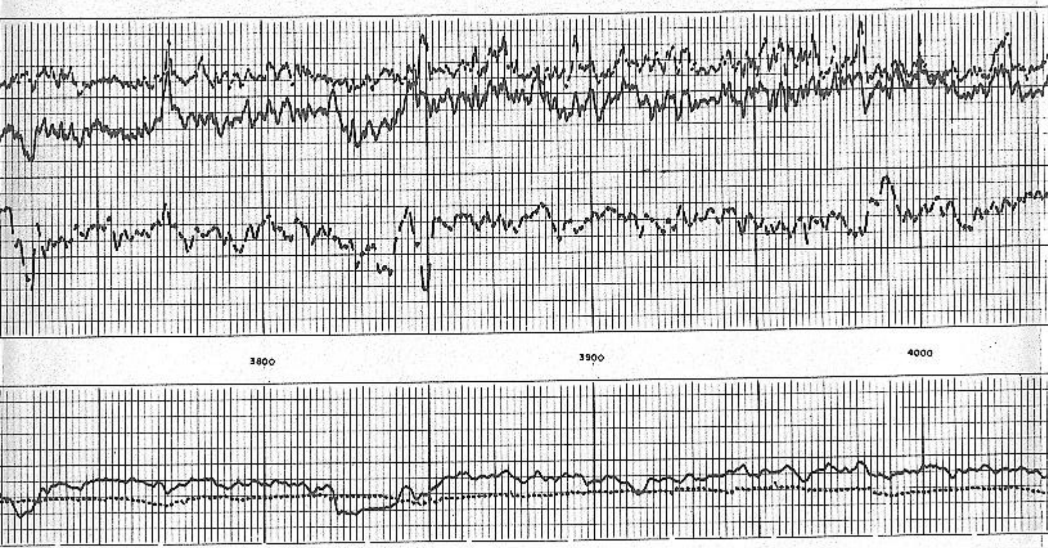


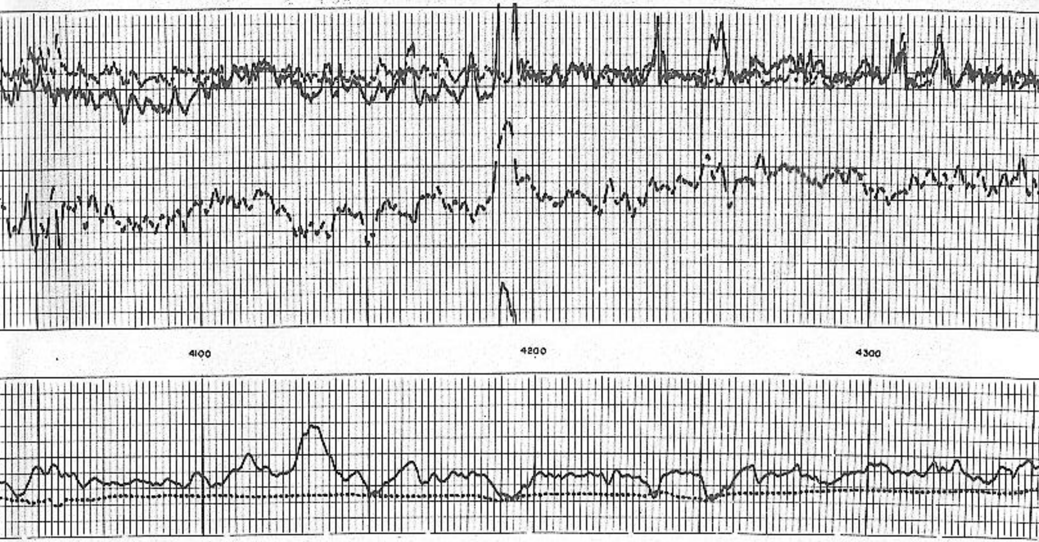


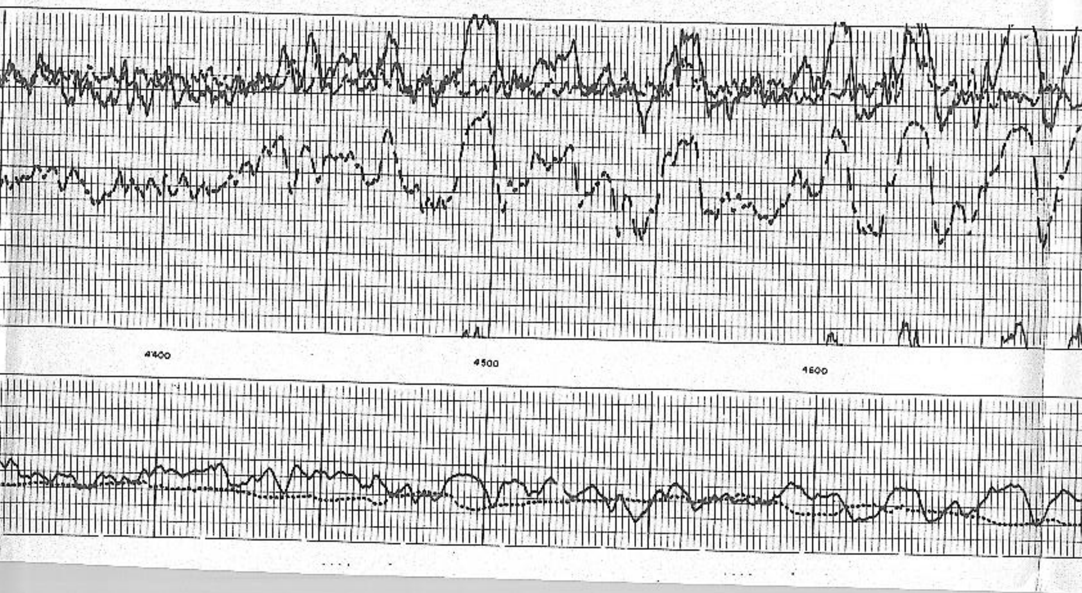


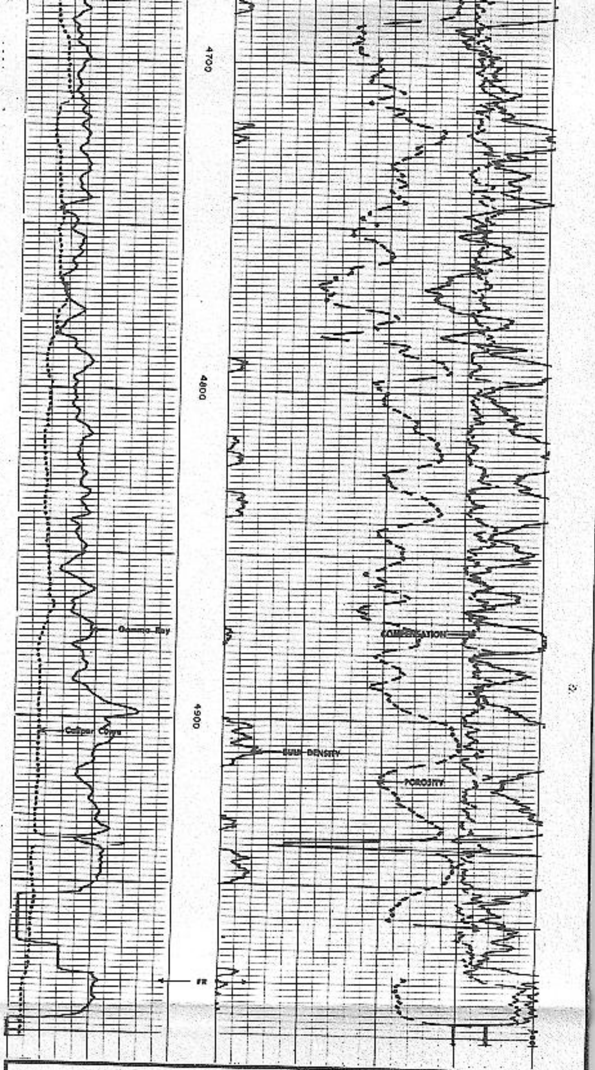




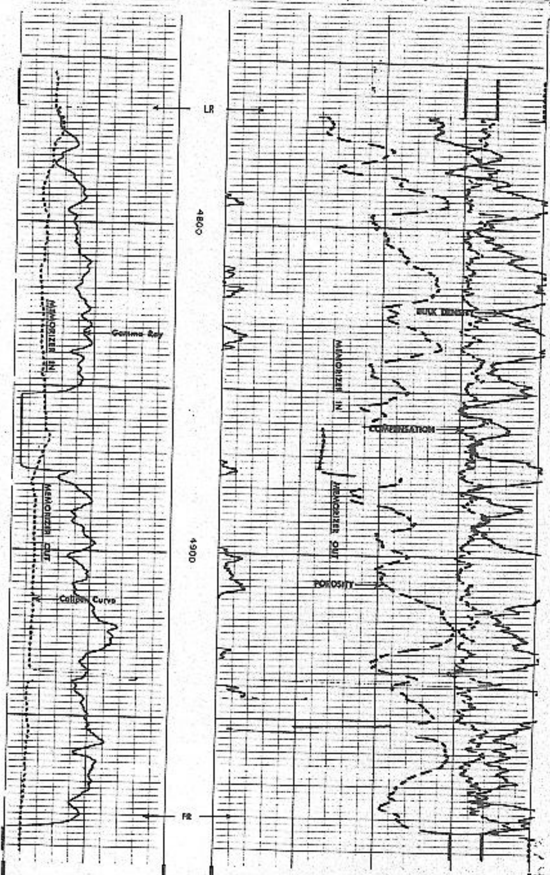








REPEAT SECTION



COMPENSATED NEUTRON POROSITY SANDSTONE MATRIX

60 45 30 15 0

GAMMA RAY API UNITS

0 150

BULK DENSITY GRAMS/CC

1.65 2.15 2.65

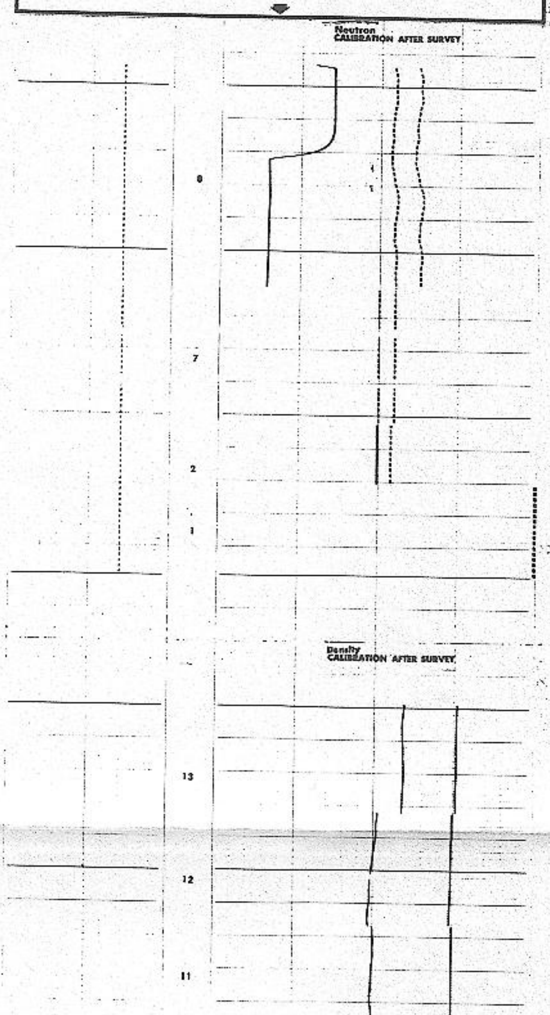
CALIPER DIAM. IN INCHES

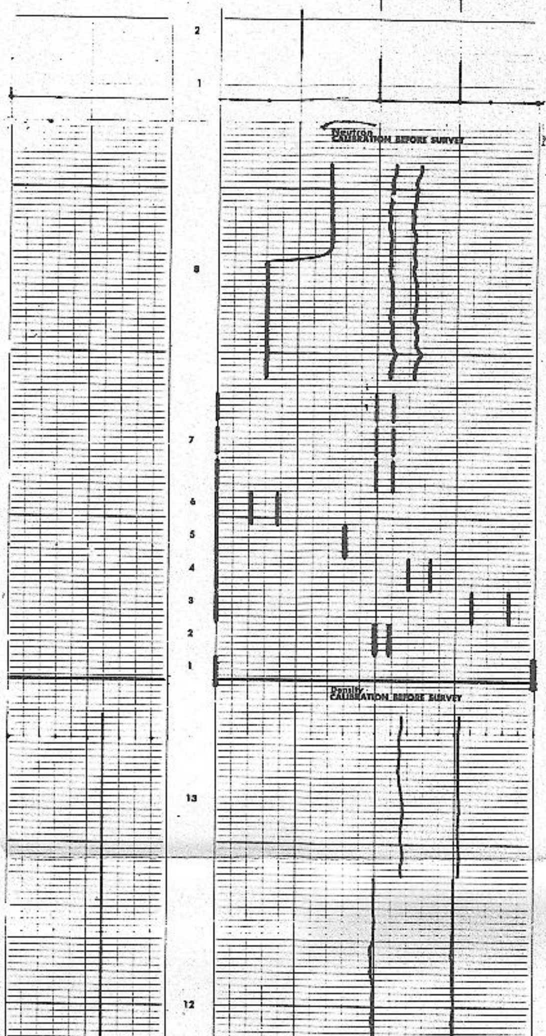
5" 15"

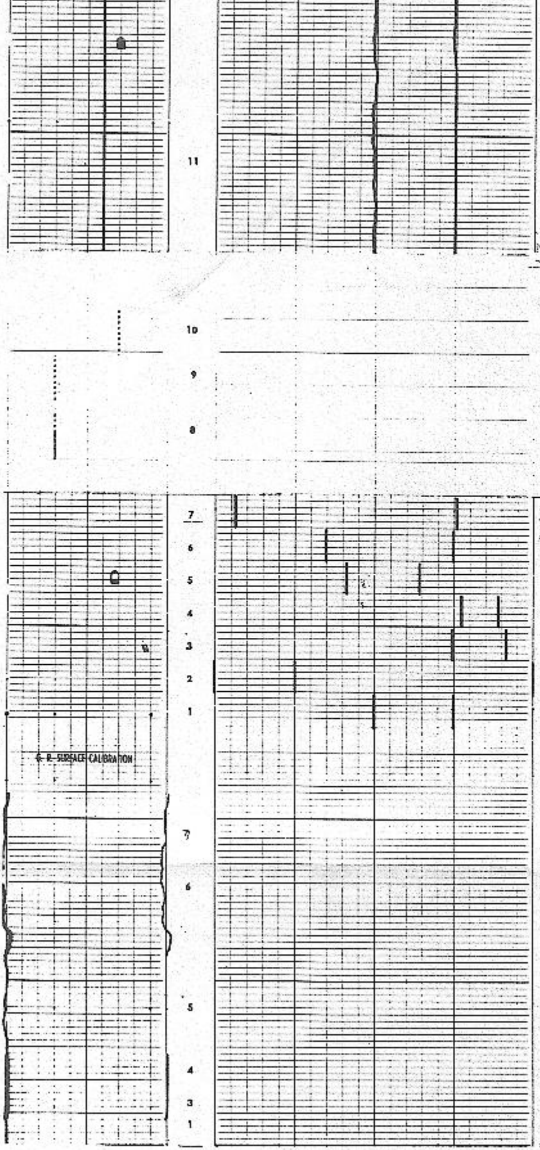
CORRECTION GRAMS/CC

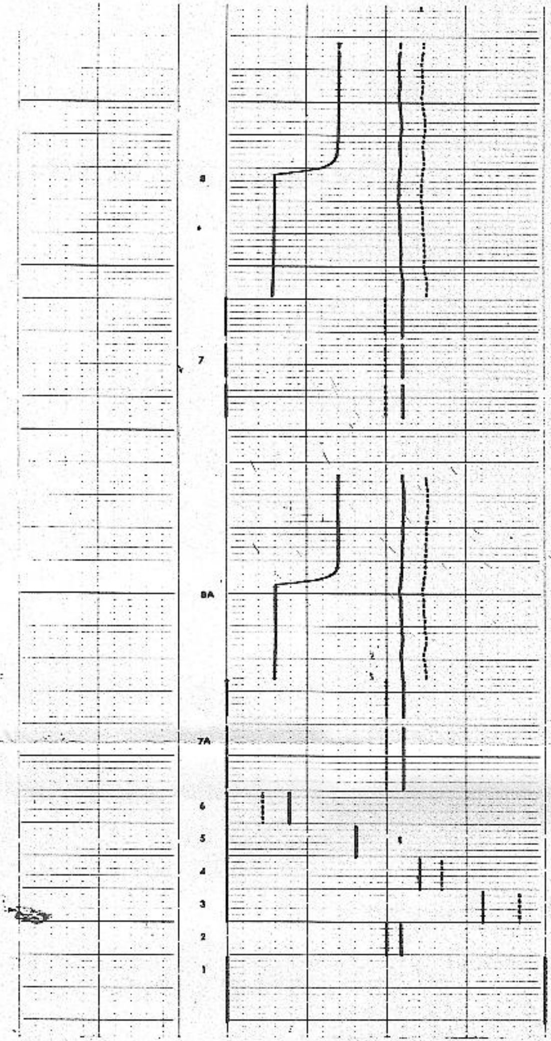
-.25 0 +.25

CALIBRATION RECORD









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) = $\frac{2.17}{\text{RATIO (NCT-B)}}$ RATIO LOG

BLUE SET
DEC. 29, 1977
CNC-A 409
CNB-AB 594
SOURCE 495
NEAR 709
FAR 314
RATIO 2.26

FORMATION DENSITY COMPENSATED CALIBRATION CODING

1. MECHANICAL ZERO
2. RECORDER SENSITIVITY

PANEL TEST

	#	FDC LIQUID ρ	$\Delta\rho$
3.	# 1	2.92	.00
[illegible]	[illegible]	2.78	+.14
5.	# 3	2.42	−.10
6.	# 4	2.35	.00
7.	# 5	2.08	.01

DECEMBER 15, 1977
PGS-EC 472
PGC-G 260
PDH-E 277
SFT-106 1241
SOURCE 5199
P_1 = 392.4 (98.1)

P_2 = 796.4 (199.1)

8. MECHANICAL ZERO CALIPER
9. 8" RING
10. 12" RING
11. TOOL CALIBRATE ρ_1 SET ρ = 2.50
12. TOOL CALIBRATE ρ_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 CHEVRON U.S.A.- INC.
WELL 44-5 SODA LAKE
FIELD FALLON
COUNTY CHURCHILL STATE CALIFORNIA

SCHL FR 4980
SCHL TD 4981
DRLR TD 4975
Elev: KB N/A
DF - -
GL 3988.5