GL 04467_16

Schlumberger

COMPENSATED NEUTRON LOG

COUNTY CHURCHILL
FIELD or LOCATION 14-23N-35E
WELL DIXIE FEDERAL 45-14
COMPANY THERMAL POWER CO.

COMPANY THERMAL POWER COMPANY

WELL DIXIE FEDERAL 45-14

FIELD DIXIE VALLEY

COUNTY CHURCHILL **STATE** NEVADA

Location: NORTHEAST ¼ OF NORTHEAST ¼ OF SOUTHWEST ¼ OF
Sec. 14 Twp. 23N Rge. 35E

Other Services:
HRT HDT
CBL/VDL
IES

Permanent Datum: GL ; Elev.: 3410
Log Measured From KB , 22 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 3432
D.F. --
G.L. 3410

Date	7-3-79			
Run No.	ONE			
Depth—Driller	8914			
Depth—Logger	8920			
Btm. Log Interval	8920			
Top Log Interval	5400			
Casing—Driller	9⅝" @5398	@	@	@
Casing—Logger	5400			
Bit Size	8¾"			
Type Fluid in Hole	WATER			
Fluid Level	FULL			
Dens. Visc.	62.4 1.0			
pH Fluid Loss	8 -- ml	ml	ml	ml
Source of Sample	FLOWLINE			
R_m @ Meas. Temp.	-- @-- °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	-- @-- °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	-- @-- °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	-- --			
R_m @ BHT	-- @372 °F	@ °F	@ °F	@ °F
Time Since Circ.	6½ HOURS			
Max. Rec. Temp.	372 °F	°F	°F	°F
Equip. Location	8128 ISAC			
Recorded By	LINDGREN/BRASFIELD			
Witnessed By	DELEON/MCHURDIE			

Reproduced By
Petroleum Information.
CORPORATION
Midland, Texas 79701

REFERENCE K 5602S

15 COMPLETION RECORD

MADE FROM BEST COPY AVAILABLE

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

CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES

Date	Sample No.				
Depth - Driller					
Type Fluid					
Source of Sample					
R_m @ Meas. Temp.		@	°F	@	°F
R_{mf} @ Meas. Temp.		@	°F	@	°F
R_{mc} @ Meas. Temp.		@	°F	@	°F
R_m @ BHT		@	°F	@	°F
Dens.	Visc.				
ph	Fluid Loss		ml		ml
% Water by Vol.					
% Oil by Vol.					
% Solids by Vol.					
Solids Av. Sp. Gr.					

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

LOGGING DATA

Matrix	Auto Hole Size Corr.	Hole Size Setting (If not auto)	Porosity Scale	From	To
SS-OH	☐ Yes ☒ No	8½	60-0	8920	5400
	☐ Yes ☐ No				
	☐ Yes ☐ No				
	☐ Yes ☐ No				
	☐ Yes ☐ No				

EQUIPMENT DATA

Run No.	ONE			
Panel No.	NLH-BB-456			
Cart No.	A-1208			
Source No.	--			
Calibrator	1446			
GR Cart	JC-2087			
Caliper	--			
TTR	---			
Mem Panel No.	--			

REMARKS

Service Order No. - 64855

API Serial No. -

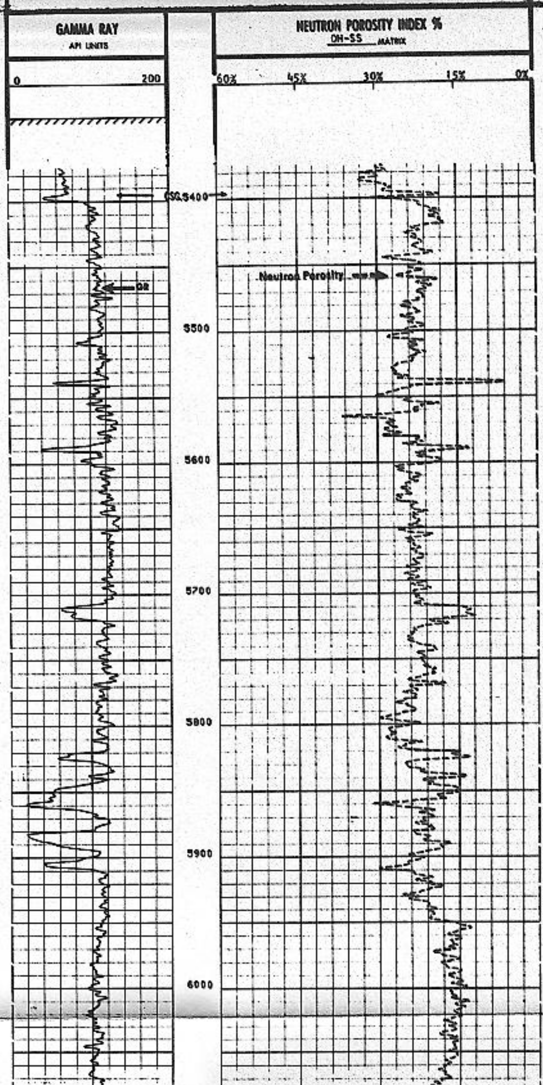
BIT SIZE/CASING DATA

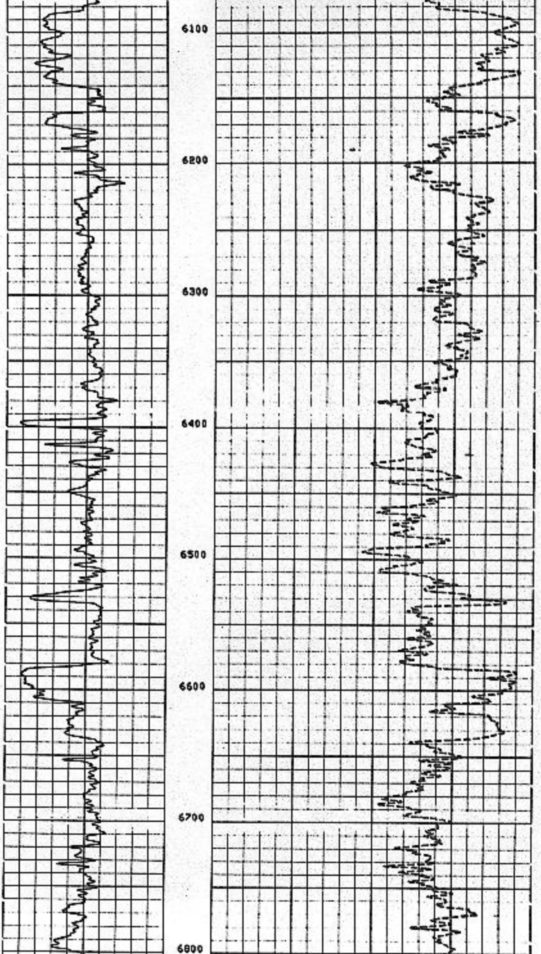
Bit	From	To	Csg. Size	Csg. Wt.	From	To
8½	8920	5400	9⅝	--	5398	SURFACE

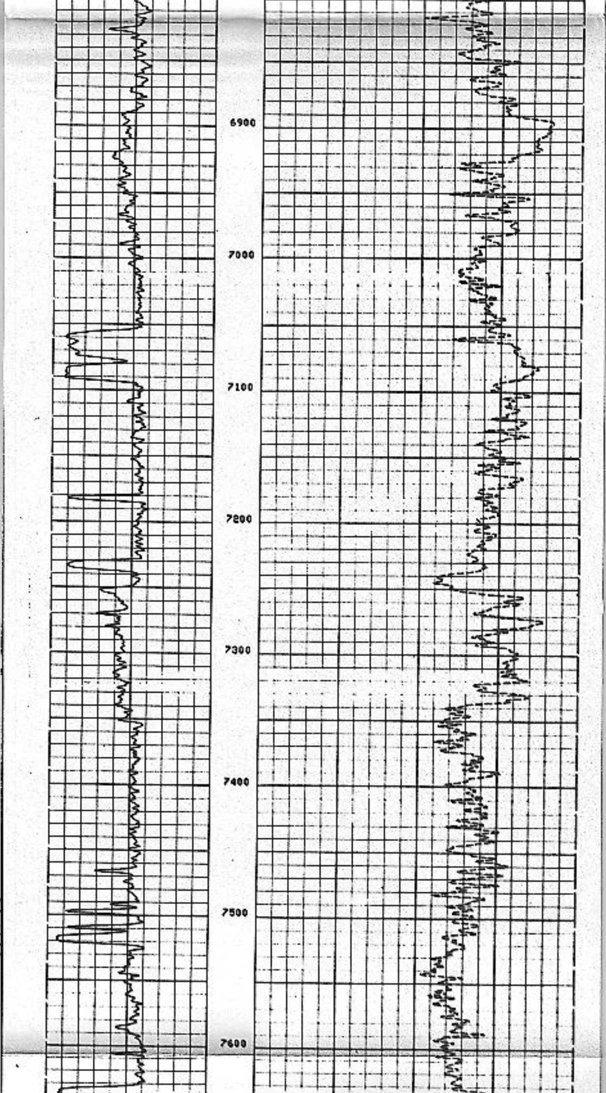
CALIBRATION DATA

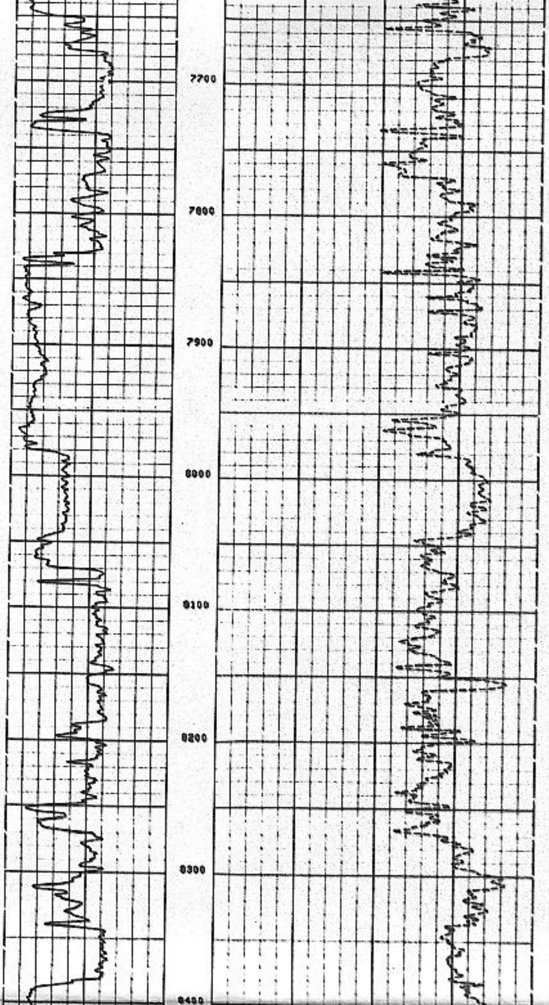
Run No.	Gamma Ray			CNL—Before Log—ACPS		CNL—After Log—ACPS	
	API Scale	Background CPS	Total CPS	Long Spacing	Short Spacing	Long Spacing	Short Spacing
1	0-200	28.62	2	1168	2574	1168	2574
2							
3							
4							

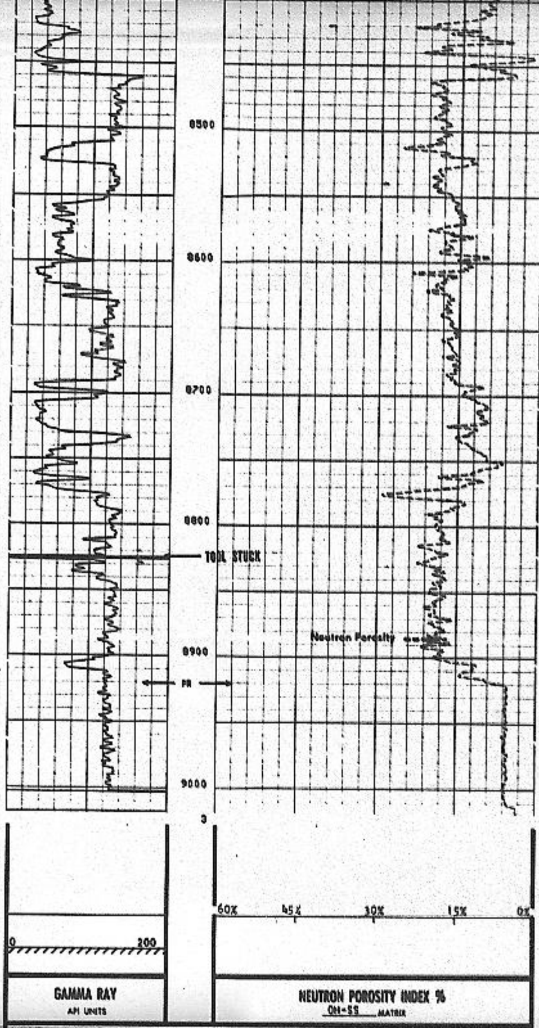
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.











COMPANY THERMAL POWER COMPANY
WELL DIXIE FEDERAL 45-14
FIELD DIXIE VALLEY
COUNTY CHURCHILL STATE NEVADA

SCHL. FR 8920
SCHL. TD 8920
DRLR TD 8414
Elev:
KB 3432
DF --
GL 3410

Schlumberger

COMPENSATED NEUTRON LOG

COUNTY CHURCHILL
FIELD or LOCATION 14-23N-35E
WELL DIXIE FEDERAL 45-14
COMPANY THERMAL POWER

COMPANY THERMAL POWER COMPANY
WELL DIXIE FEDERAL 45-14
FIELD DIXIE VALLEY
COUNTY CHURCHILL STATE NEVADA

Location: NORTHEAST ¼ OF NORTHEAST ¼ OF SOUTHWEST ¼ OF
Sec. 14 Twp. 23N Rge. 35E

Other Services:
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CBL/VDL
IES

Permanent Datum: GL ; Elev.: 3410
Log Measured From KB , 22 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 3432
D.F. --
G.L. 3410

Date	7-3-79			
Run No.	ONE			
Depth—Driller	8914			
Depth—Logger	8920			
Btm. Log Interval	8920			
Top Log Interval	5400			
Casing—Driller	9⅝" @ 5398	@	@	@
Casing—Logger	5400			
Bit Size	8½"			
Type Fluid in Hole	WATER			
Fluid Level	FULL			
Dens. | Visc.	62.4 | 1.0			
pH | Fluid Loss	8 | -- ml	ml	ml	ml
Source of Sample	FLOWLINE			
R_m @ Meas. Temp.	-- @ -- °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	-- @ -- °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	-- @ -- °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	-- | --			
R_m @ BHT	-- @ 372 °F	@ °F	@ °F	@ °F
Time Since Circ.	5½ HOURS			
Max. Rec. Temp.	372 °F	°F	°F	°F
Equip. | Location	8128 | SAC			
Recorded By	LINDGREN/BRASFIELD			
Witnessed By	DELEON/MCMURDIE			

FOLD HERE

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

CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES

Date | Sample No.		
Depth - Driller		
Type Fluid		
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
R_m @ BHT	@ °F	@ °F
Dens. | Visc.		
ph | Fluid Loss	ml	ml
% Water by Vol.		
% Oil by Vol.		
% Solids by Vol.		
Solids Av. Sp. Gr.		

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

LOGGING DATA

Matrix	Auto Hole Size Corr.	Hole Size Setting (If not auto)	Porosity Scale	From	To
SS-OH	☐ Yes ☒ No	8½	60-0	8920	5400
	☐ Yes ☐ No				
	☐ Yes ☐ No				
	☐ Yes ☐ No				
	☐ Yes ☐ No				

EQUIPMENT DATA

Run No.	ONE			
Panel No.	NLN-BB-456			
Cart No.	A-1208			
Source No.	--			
Calibrator	1446			
GR Cart	UC-2087			
Caliper	--			
TTR	--			
Mem Panel No.	--			

REMARKS

Service Order No. - 64855
API Serial No. -

BIT SIZE/CASING DATA

Bit	From	To	Csg. Size	Csg. Wt.	From	To
8½	8920	5400	9⅝	--	5398	SURFACE

CALIBRATION DATA

Run No.	Gamma Ray			CNL—Before Log—ACPS		CNL—After Log—ACPS	
	API Scale	Background CPS	Total CPS	Long Spacing	Short Spacing	Long Spacing	Short Spacing
1	0-200	28.62	2	1168	2574	1168	2574
2							
3				--			
4							

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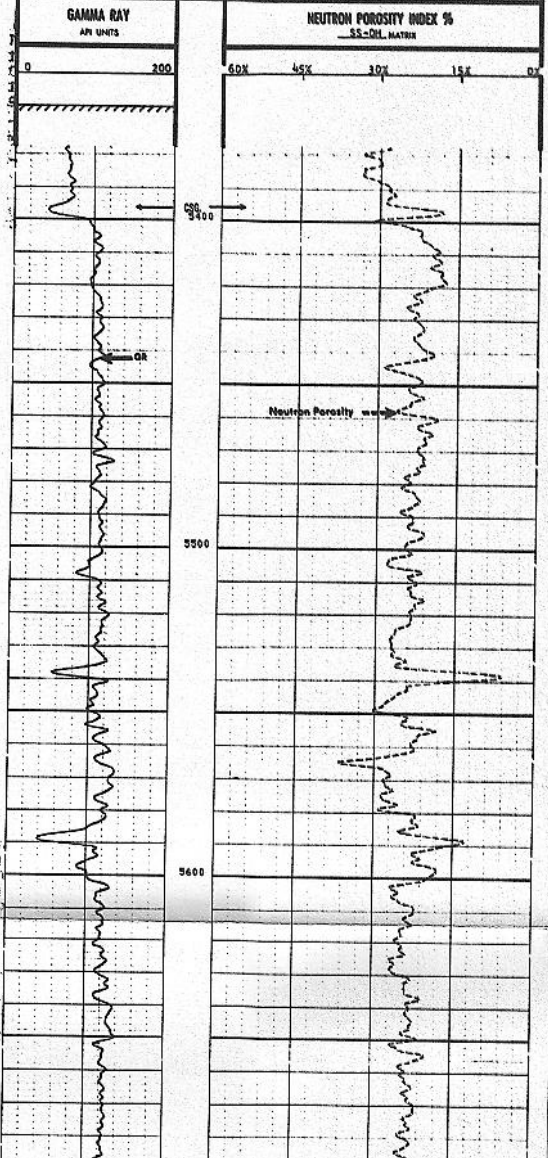
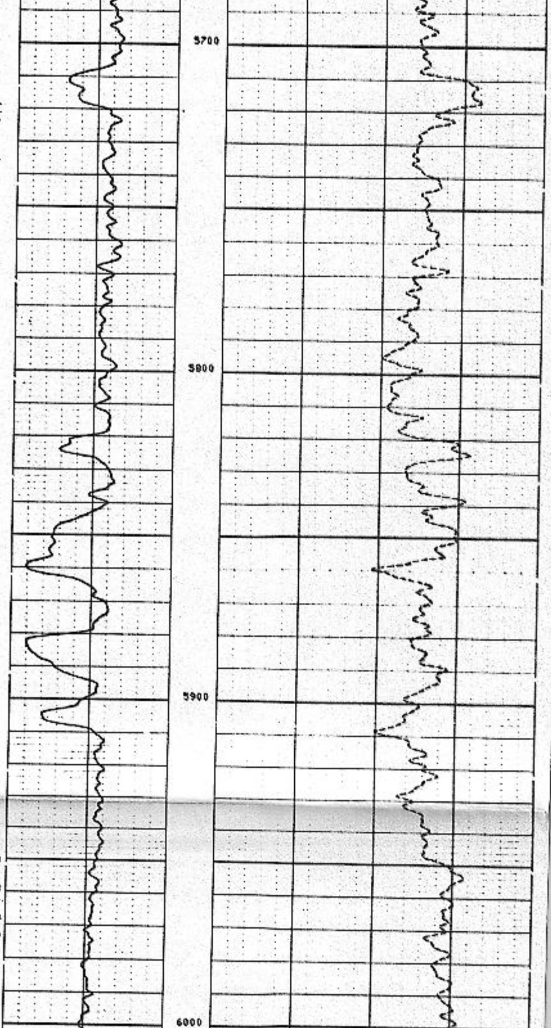
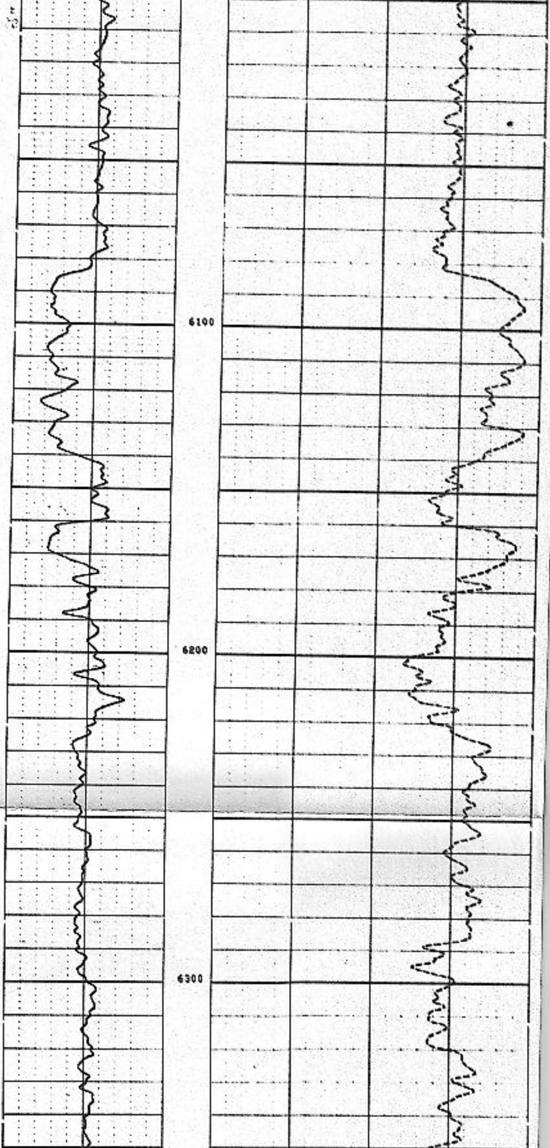
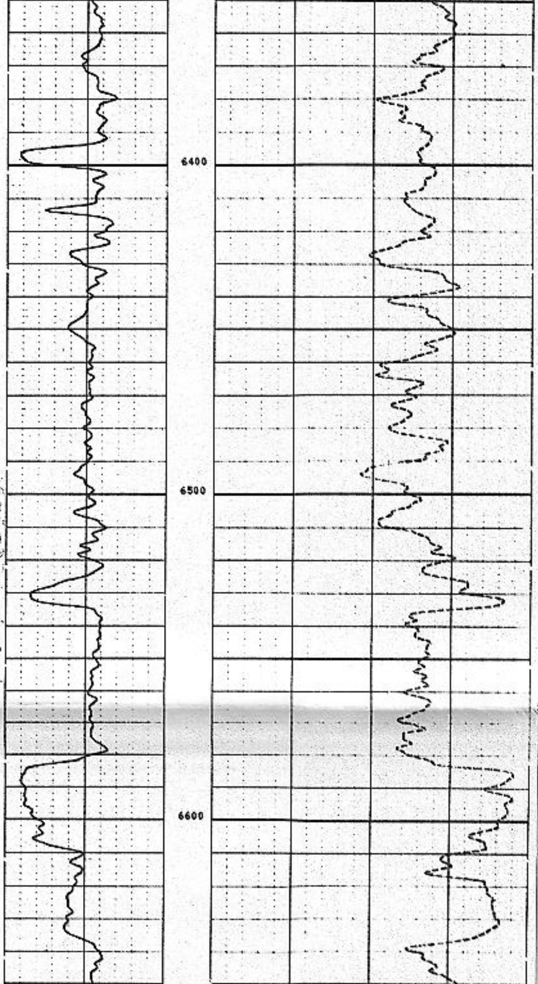
DETAIL LOG

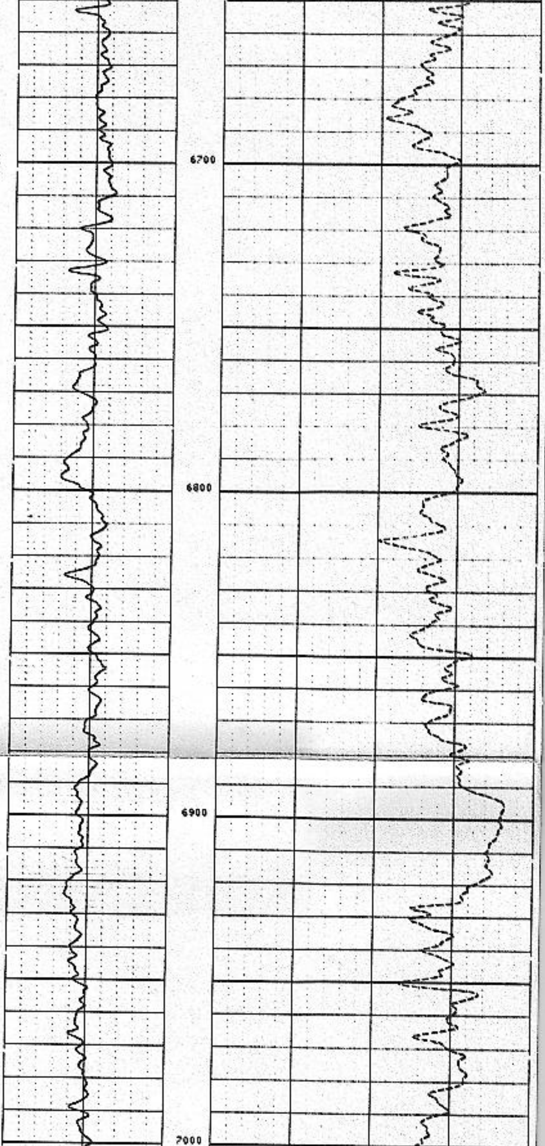
5" = 100'

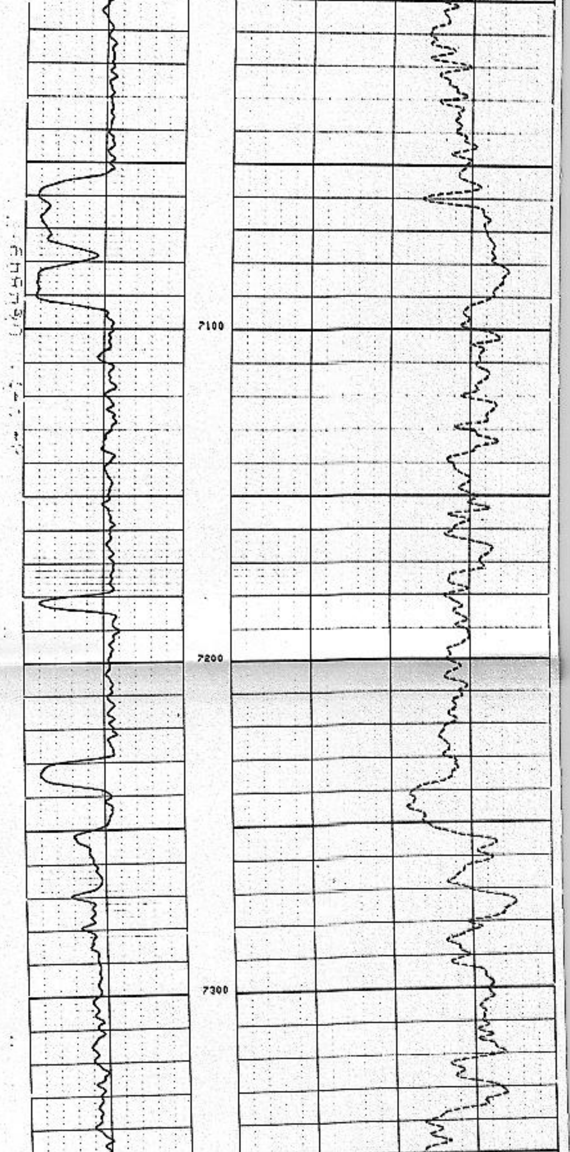


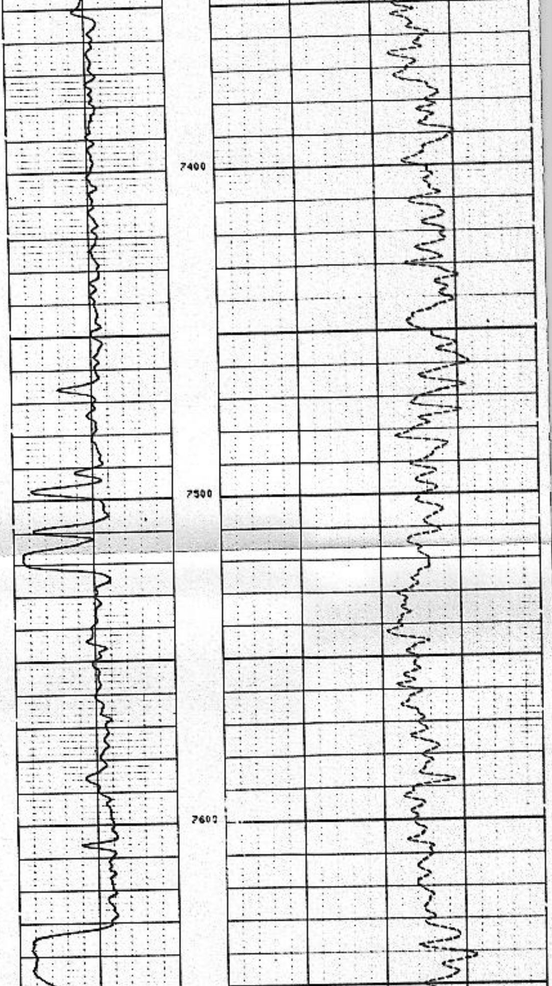


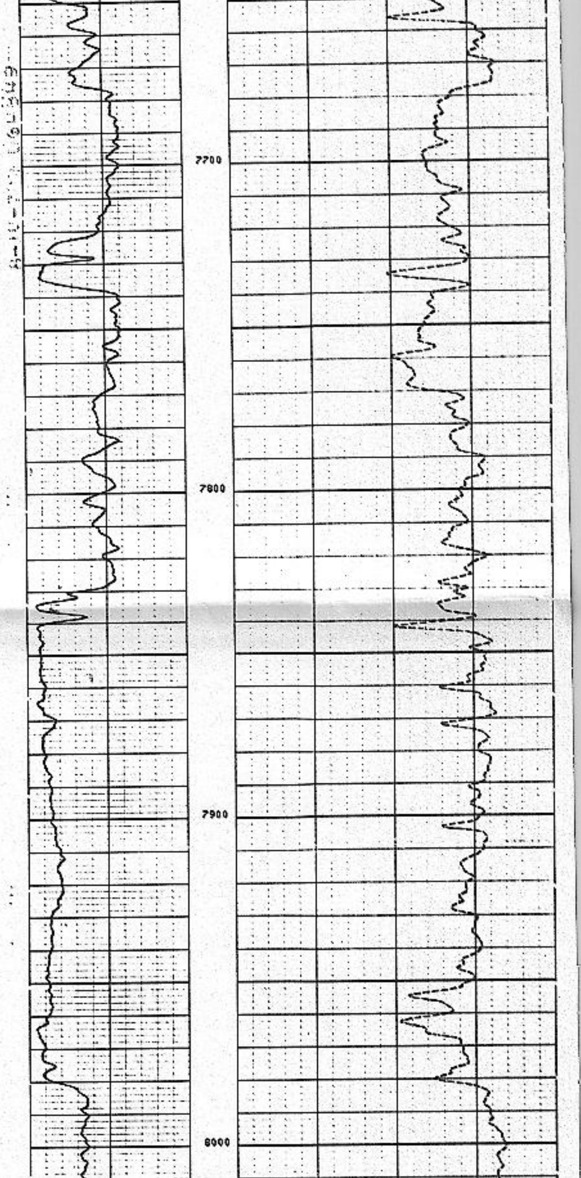


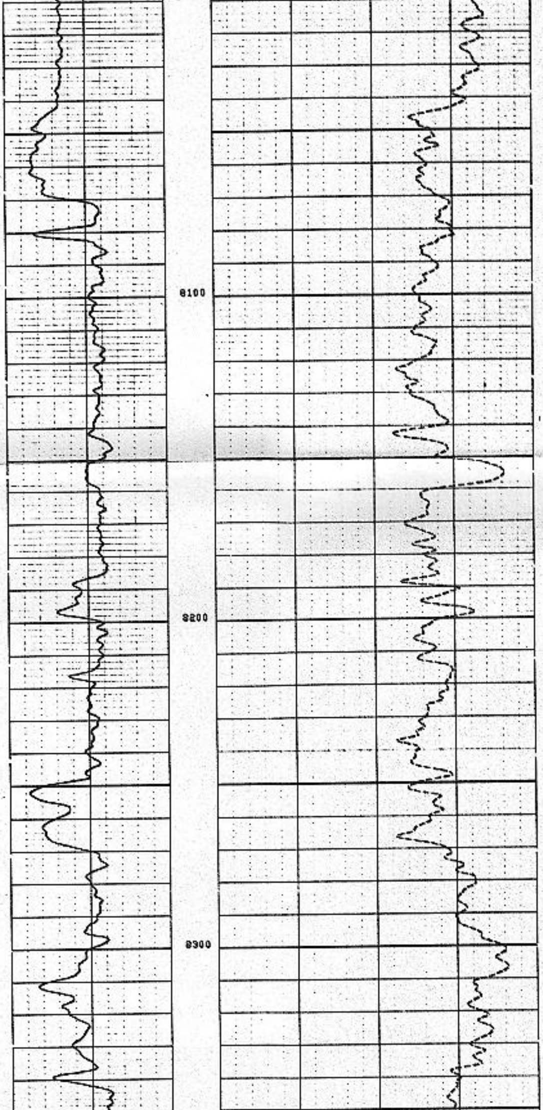


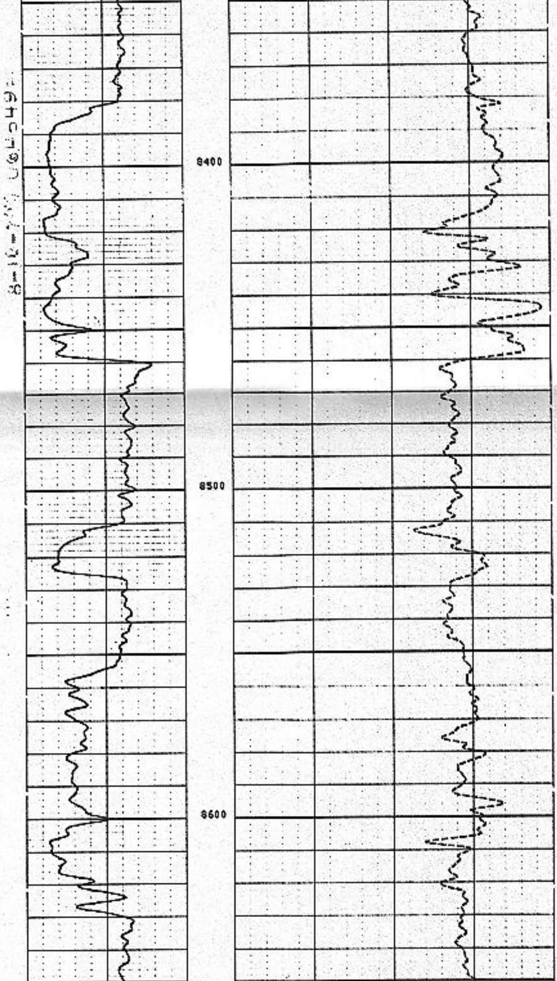


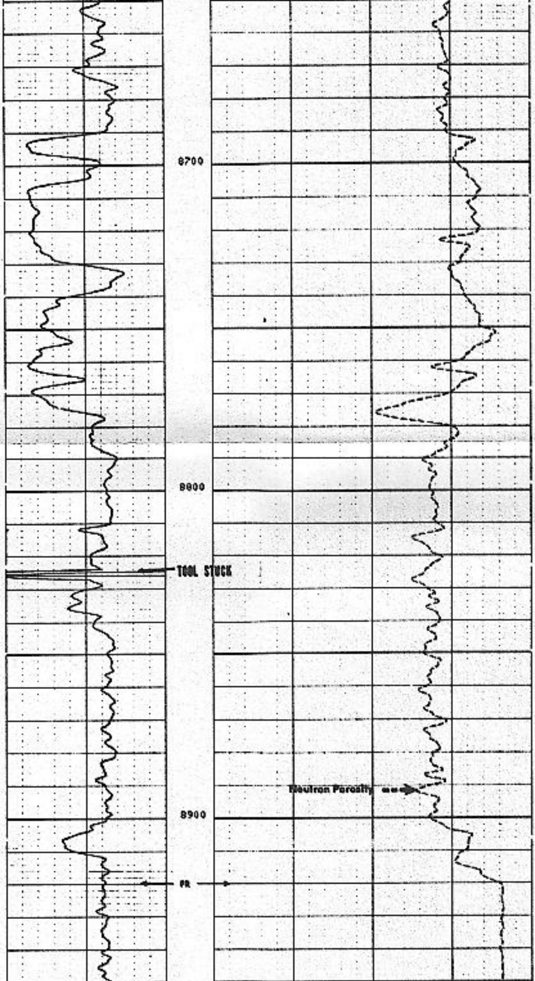


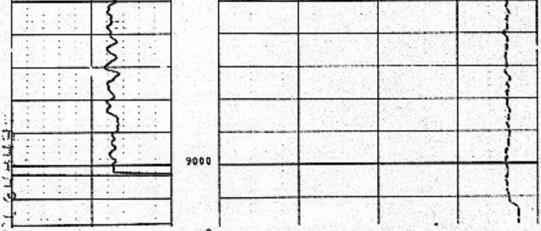












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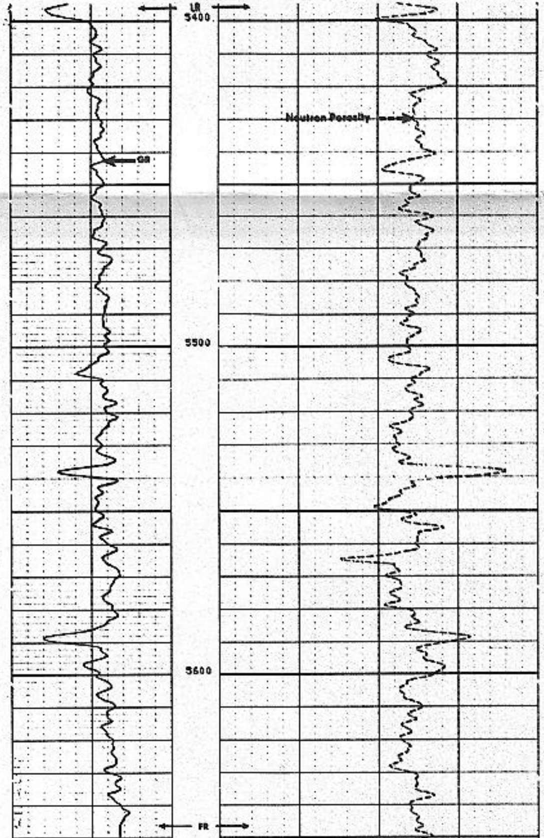
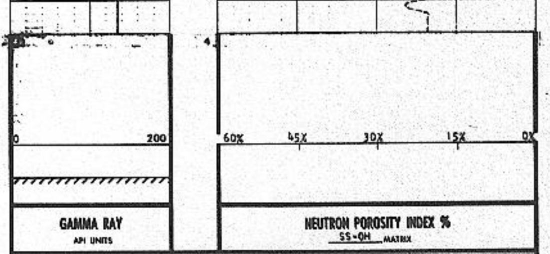
REPEAT SECTION

4





CALIBRATION RECORD

```
                 AFTER SURVEY TOOL CHECK SUMMARY

    PERFORMED:    79/07/03
    PROGRAM FILE:  NUC     (VERSION    12.4    78/12/ 8)

  CNTA                        TOOL  CHECK

                            JIG
                     BEFORE       AFTER
    NRAT              2.15         2.18

    POROSITY CHANGE  (LINE):  0.004

                              8
                              8
                              8
                 BEFORE SURVEY CALIBRATION SUMMARY

    PERFORMED:     79/07/03
    PROGRAM FILE:  NUC     (VERSION     12.4    78/12/ 8)

  SGTE                  DETECTOR CALIBRATION SUMMARY

                  MEASURED
                 BKGD    JIG        CALIBRATED          UNITS
      GR          28     196           164              GAPI

  CNTA                  DETECTOR CALIBRATION SUMMARY

                   TANK                          JIG
                CALIBRATED        MEASURED           CALIBRATED
   NRAT            0.0              2.20                2.15

                              2
                              2
                              2
                              2
                         SHOP SUMMARY

    PERFORMED:     79/07/01
    PROGRAM FILE:  SHOP    (VERSION     12.4    78/12/ 8)

  CNTA                  DETECTOR CALIBRATION SUMMARY

                   TANK                       JIG
           MEASURED  CALIBRATED      MEASURED    CALIBRATED

   NRAT     2.19       2.15            2.20        2.17

                    (CNC:1420 , CNB:1446 )

                              0
```

CALIBRATION RECORD

COMPANY THERMAL POWER COMPANY
WELL DIXIE FEDERAL 45-14
FIELD DIXIE VALLEY
COUNTY CHURCHILL STATE NEVADA

SCHL FR 8920
SCHL TD 8920
DRLR TD 8414
Elev: KB 3432
DF --
GL 3410