

# BRAD HUTCHINSON

116 EVES DRIVE  
RUSSELL, KANSAS 67665

785-483-0492

## GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY <u>PROSPECT OIL &amp; GAS, INC.</u> LEASE <u>ALVIN SOURKUP JR. #1</u> FIELD <u>HALL-GURNEY</u> LOCATION <u>SW NE SW</u> SEC <u>3</u> TWSP <u>15S</u> RGE <u>12W</u> COUNTY <u>Russell</u> STATE <u>KANSAS</u>	ELEVATIONS KB <u>1842'</u> DF _____ GL <u>1836'</u> Measurements Are All From <u>Kelly Bushing</u>
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CONTRACTOR <u>ROYAL DRILLING, INC.</u> SPUD <u>11/28/2017</u> COMP _____ RTD <u>12/05/2017</u> LTD <u>3360 (-1518)</u> MUD UP <u>2400'</u> TYPE MUD <u>CHEMICAL</u>	CASING SURFACE <u>8 5/8" @ 390'</u> PRODUCTION <u>5 1/2" @ 3359'</u> ELECTRICAL SURVEYS CNL/COL MEL/DIL
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SAMPLES SAVED FROM \_\_\_\_\_ 2600 TO RTD

DRILLING TIME KEPT FROM \_\_\_\_\_ 2600 TO RTD

SAMPLES EXAMINED FROM \_\_\_\_\_ 2600 TO RTD

GEOLOGICAL SUPERVISION FROM \_\_\_\_\_ 2600 TO RTD

GEOLOGIST ON WELL BRAD J. HUTCHINSON

FORMATION TOPS	LOG	SAMPLES	
ANHYDRITE	714 (+1128)	710 (+1126)	
TOPEKA	2650 (-808)	2651 (-809)	
HEEDNER	2884 (-1042)	2886 (-1044)	
TORONTO	2901 (-1059)	2902 (-1060)	
BROWN LIME	2976 (-1134)	2978 (-1136)	
LANDING	2987 (-1145)	2988 (-1146)	
BEE KANSAS CITY	3246 (-1404)	3251 (-1409)	
GORHAM SAND	3280 (-1438)	3280 (-1438)	
ROTARY TOTAL DEPTH		3360 (-1518)	
ELECTRIC LOG TOTAL DEPTH		3360 (-1518)	

3

O ALVIN SOURKUP #1

7505

REMARKS DAILY PROGRESS:

11/28 MOVE IN & RIG UP  
 11/29 390'  
 11/30 1420'  
 12/01 2120'  
 12/02 2770'  
 12/03 2980'  
 12/04 3072'  
 12/05 3260' RTD

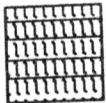
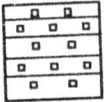
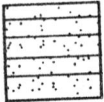

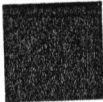
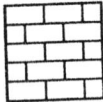
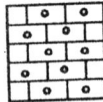
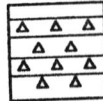
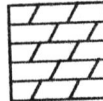
RECOMMENDATIONS: It was recommended based on two (2) positive drillstem tests, and log calculations, that 5/8" production be set and cemented, and the following zones to be tested and treated.

1. GOCHAM SAND: 3302-3304
2. LANSING: 3203-3305  
 3075-3092  
 3014-3024

RESPECTFULLY SUBMITTED,  
 Brad J. Hutchison  
 BRAD J. HUTCHISON

LOG 7702

LEGEND

								
Anhydrite	Salt	Sandstone	Shale	Carb sh	Limestone	Ool. Lime	Chert	Dolomite

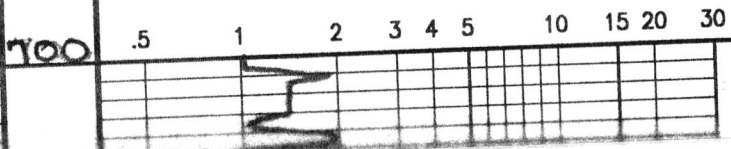
LITHOLOGY

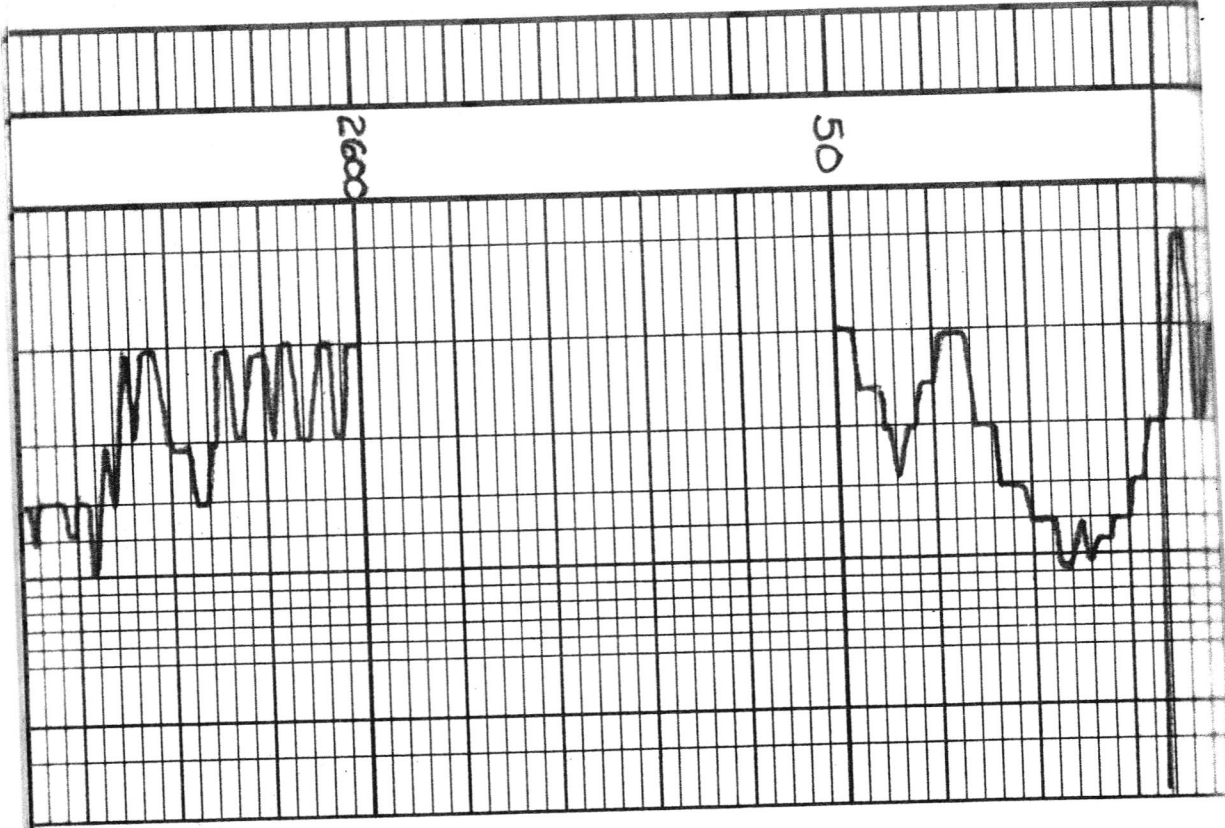
DEPTH

DRILLING TIME  
 (Logarithmic Scale)

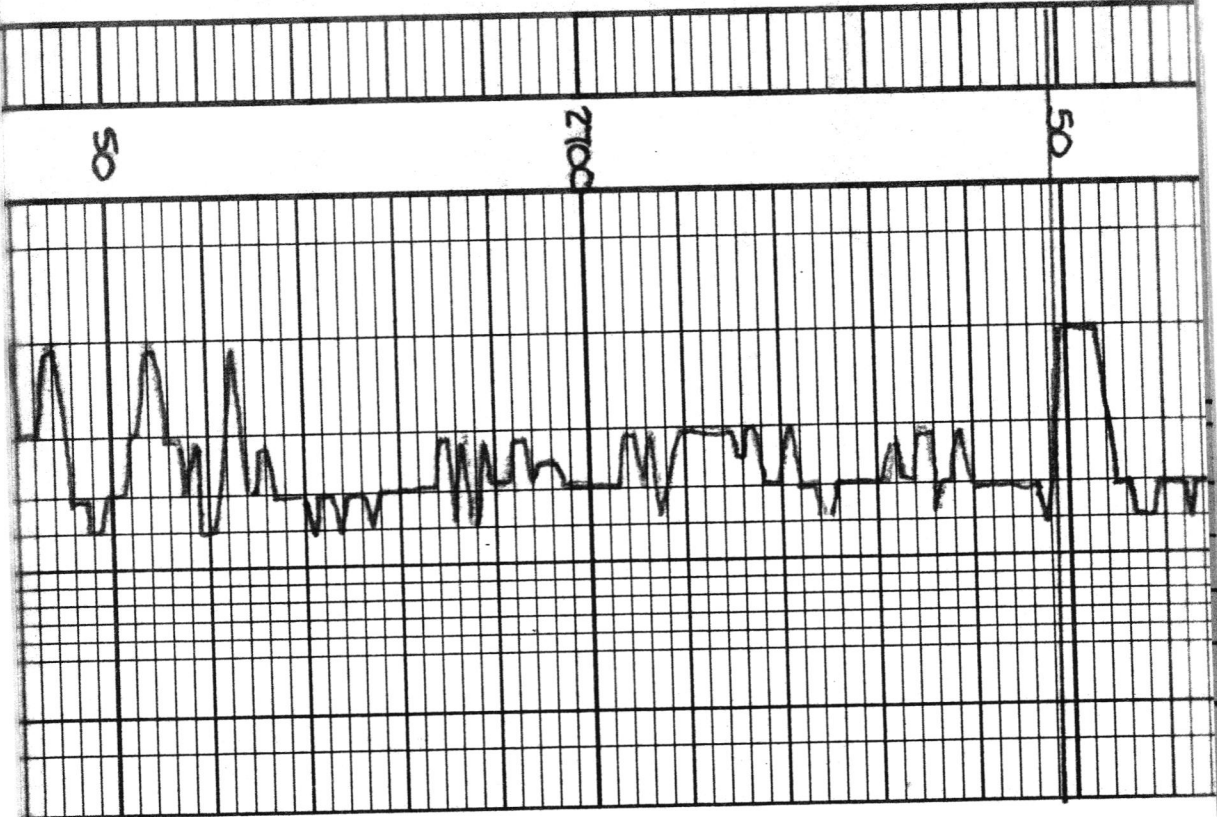
SAMPLE DESCRIPTIONS

REMARKS





ANHY THO (4/12/20)



50

2700

50

TOPKIN 2651 (009)

1.5 gty v. Dse. Wguy 1055

NS

name A.A.

1.5 CRT-WHT CHALKY 1055

TR 5IN (1pc) MED DR 0600

1.5 WHT CHALKY 1055

1.5 BUET-CRT ENK  
HIGHLY 1055

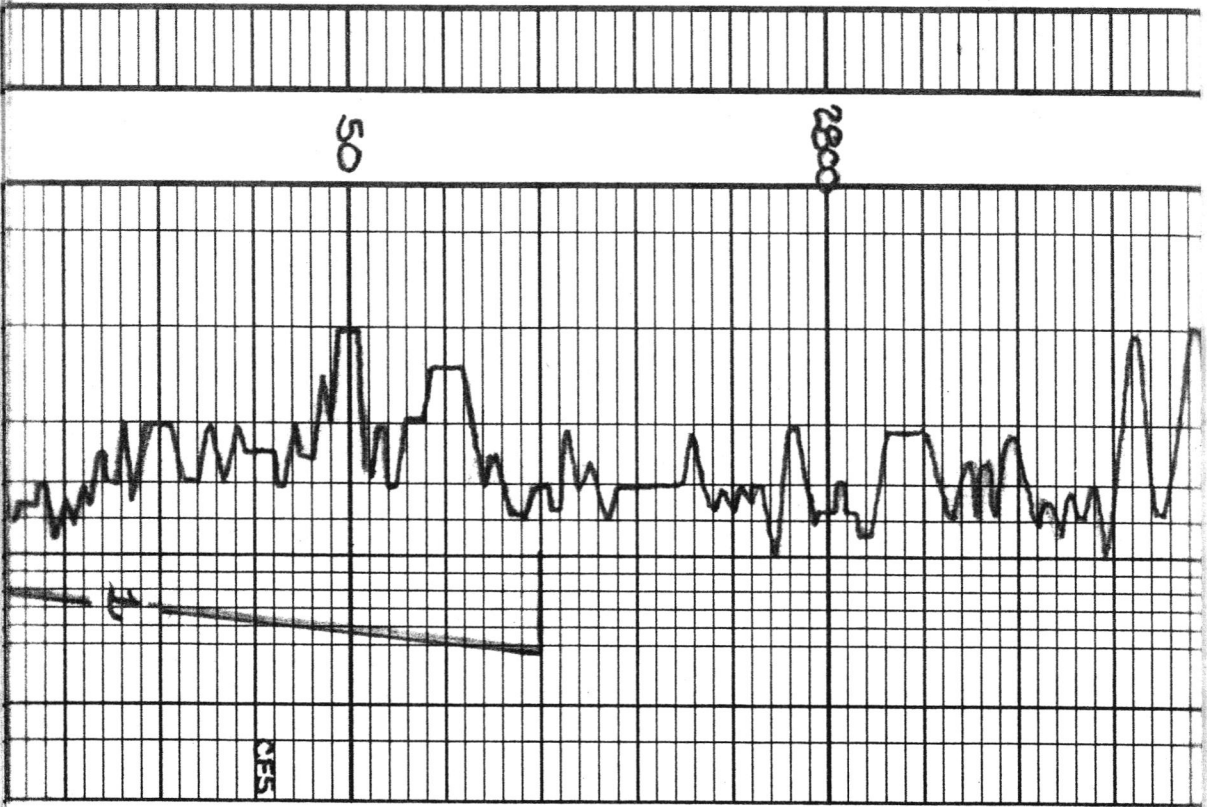
A.A.,

1.5 gty Dse. 1055

5h bar carb.,

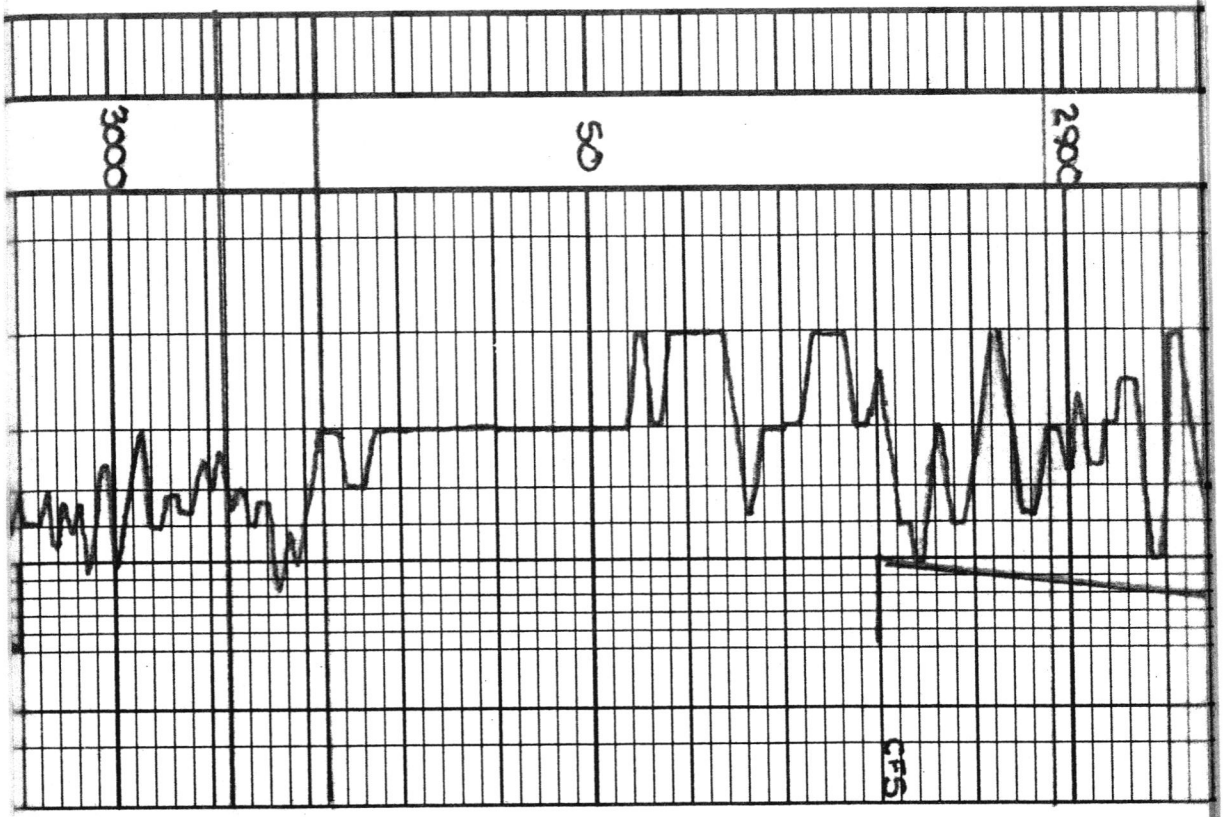
5h gty gumbo.,

1.5 ADD 5h A.A.



1-5 grey Dsc 5L 6095  
 A.A.  
 1-5 WH. CRH CHALKY L.S.,  
 6h blue carb.,  
 1-5 WH. CRH CHALKY  
 Same A.A.  
 1-5 base 6095 TR SHAL  
 1-5 CRH ENXL 5L 6095 TR  
 401 YNG CR EN 5L 6095 CRH  
 SHAL - 200' SED ET - WR  
 color  
 Same A.A.  
 1-5 CRH Dsc Chalky  
 A.A.  
 HEERNER 2886 (-1044)

D5E1 2830-2920  
 30. 30. 60. 60  
 IF 808-12 min  
 EF 808-13 min  
 REC: 110' mud  
 ISIP 799 psi  
 FSIIP 836 psi  
 IFP 38-53 psi  
 FFP 54-77 psi



Sh brk carb.

Well 1348-1530 PSI  
BHT 910

Sh grey - Pale green  
abund. black

**TORONTO 2902 (1000)**

LS buff - CRT, laminitic. highly  
succ. calcareous. Fr. EIR. JMT 5/11  
or EIR. It has even STN. 2 5/10  
gas bubbles. v. ET odor.

Sh g-y - reddish brn  
mica

SOME A.A.,

5.1. 16gfy v. EN GFN mica

FALL, ER 508T N5

same and

and up into reddish brown/gfy  
gfy.

same A.A.

**Brownline 2978 (1136)**

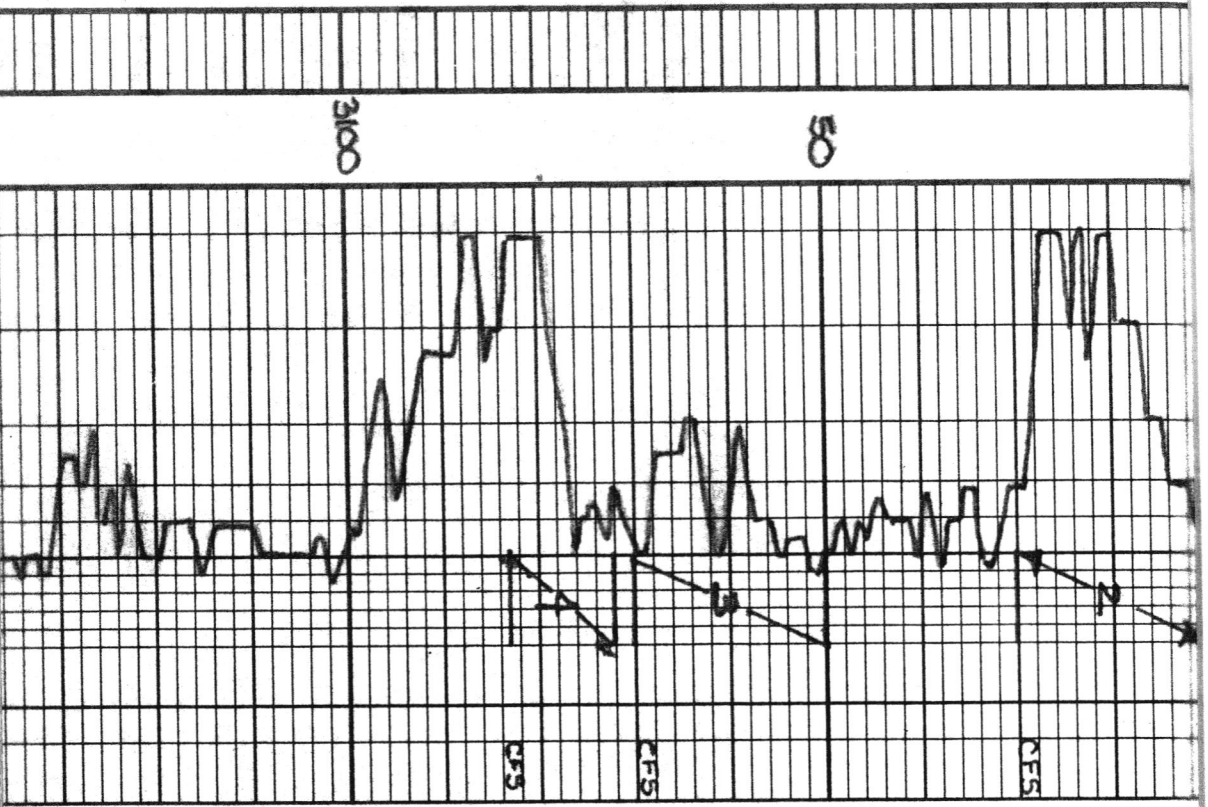
LS brn Dse blacky

**LANSING 2988 (1140)**

LS wht - grey F0Xk-D2. Highly  
dol. v. FORC STN  
SL 605 TR 200 5/5 AY

LS Hgfy Dse

DST-2 2010-2030



Ls H BUFE ENXL ool qd  
 ool of (hardly) qd  
 If blk chl, Fd 500 qd  
 odor

Sh pale grn-gry (quartz)

Ls H grn Dse sl 6055  
 abund grf blk N5

Ls H grn Dse chalky ool - 6055  
 IR FR INT ool o FR qd  
 Ls H grn Dse sl 500 odor  
 abund white chalky

Ls H grn Dse blocky

Ls H BUFE - 16 grn ENXL ool  
 ool of (hardly) qd  
 If blk chl, Fd 500  
 strong odor

A.A.

Ls H BUFE chalky ool  
 w/ grn shale

Ls H grn Dse AS

A.A.

Gd blk carb.

Ls BUFE - off grn Dse  
 at 6055 N5-

IF: 808-10 min  
 FE: 808.

REC: 250' LIP  
 45' HOCM  
 350' Oil 15310M

ISIP: 635 psi  
 FSIP: 603 psi  
 IFP: 18-25 psi

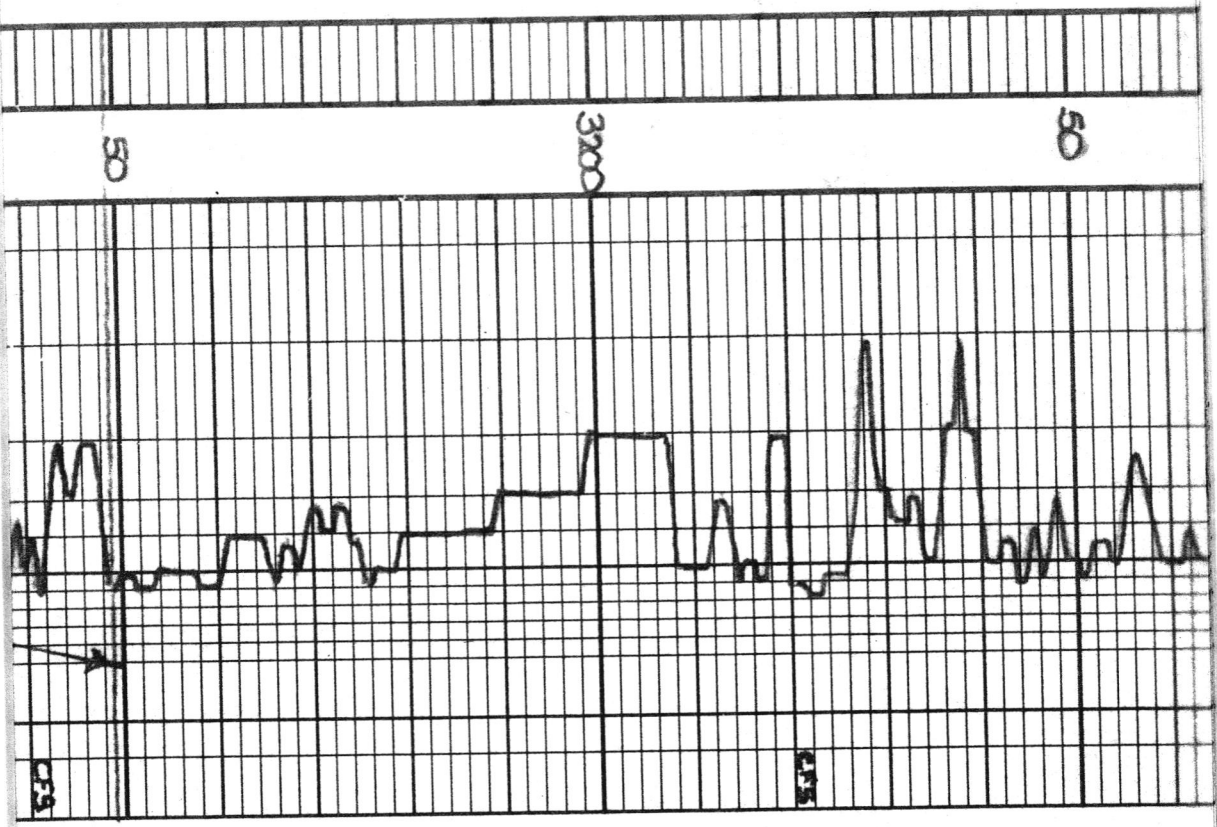
FFP: 24-33 psi  
 HSH: 1442-1459 psi  
 BHT: 920

DSI-3 3050-3070'  
 45.45.45.45  
 IF Wk build to 4 1/2"  
 FF Wk build to 1"

REC: 150' MUS  
 ISIP: 414 psi  
 FSIP: 410 psi

IFP: 24-59 psi  
 FFP: 62-92 psi  
 HSH: 1480-1461 psi  
 BHT: 950

DSI-4 3070-3083  
 30.30.45.45  
 IF: 808-19 min  
 FE: 808-20 min  
 REC: 205' LIP  
 45' HOCM

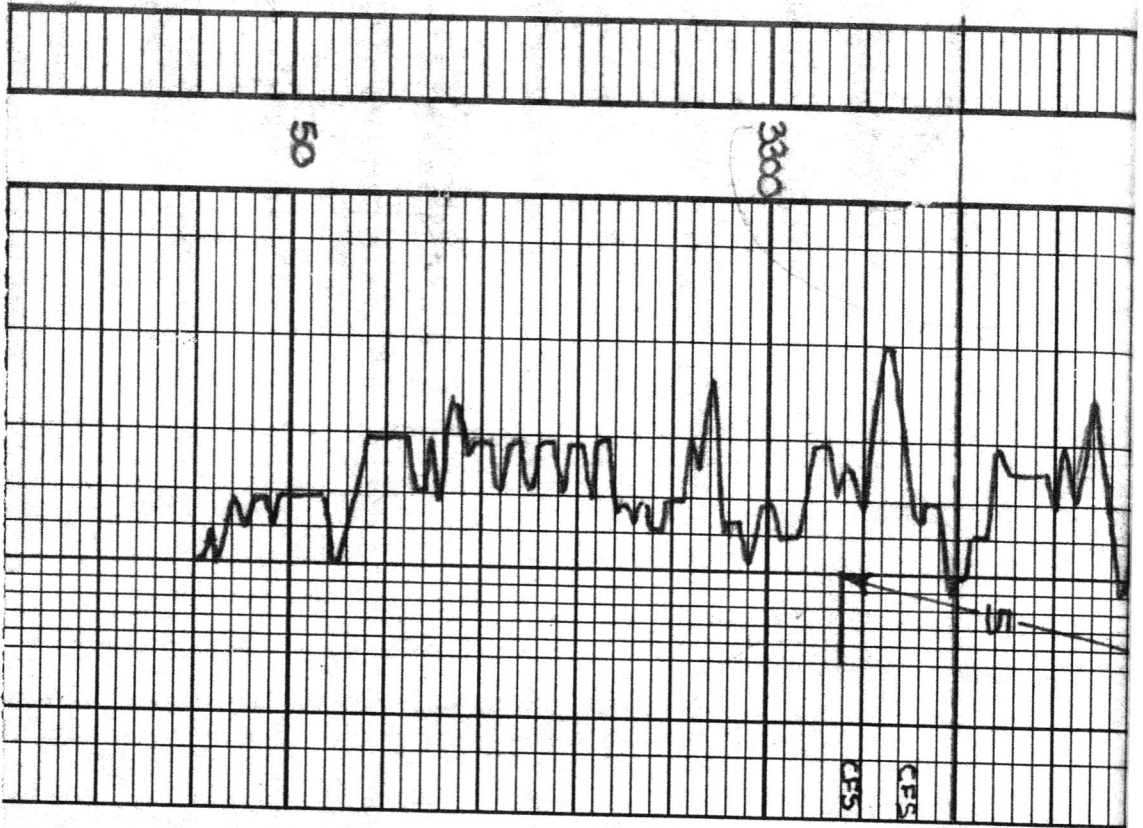


sh pale grn  
 1.5 carb-wht chunky  
 col-2025 -N5-  
 sh blk carb.  
 1.5 wght-carb chunky  
 DOC Fir 4pry coc p' (brown)  
 -N5-  
 1.5 H grt dse.  
 sh grt  
 sh blk carb.  
 abund grt sh.  
 1.5 dirty wht chunky  
 Yest. -N5-  
 1.5c grt dse. ls.  
 sh grt.

55% D 45% M  
 IEP 340 psi  
 FSP 648 psi  
 IEP 22-240 psi  
 FFP 26-38 psi  
 MSH 1495-1481 psi  
 BHT. 92°

BK 3251 (-1409)  
 sh grt - pale grn.  
 1.5 burr dse. dy  
 DT-5 3250-3292  
 15.15.15.15  
 IF 808-10 sec.  
 IF 808-20 sec.





CES  
CES

(Gorham 1/2 MID 3200 (1436))  
adund grn waxy sh.

55 CLR - 1000. 4th rd - 0.00  
Dried grn fr 1st sub rd - 0.00  
grn 5/80 fr 1st Odor 1/2 Honey  
A viny o' fr 1st 5/80

55 CLR - glossy Hd - 0.9 grn  
gd 500 ft fr sub rd - 0.00  
5/80 1/2 Odor 1/2 Honey

55 A.A.

INC WHT 55 w/ N5  
inc grn - blk waxy sh.

abund VC waxy sh.

REC. 210  
1520' MW

ESIP 1072 psi

FFIP 1074 psi

IFP 498-786 psi

FFP 811-968 psi

MSH 1035-1559 psi

BHT 1020