

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

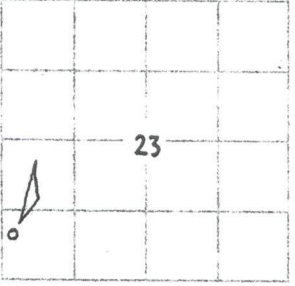
316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY <u>RAYMOND OIL COMPANY, INC.</u>	ELEVATIONS
LEASE <u># 1 MRLI UNIT</u>	KB <u>2639</u>
FIELD <u>WILDCAT</u>	DF _____
LOCATION <u>958' FSL & 138' FWL</u>	GL <u>2629</u>
SEC <u>23</u> TWSP <u>18s</u> RGE <u>27W</u>	Measurements Are All From <u>2639 KB</u>
COUNTY <u>LANE</u> STATE <u>KANSAS</u>	CASING
CONTRACTOR <u>L. D. DRILLING, INC.</u>	SURFACE <u>8 5/8" @ 260'</u>
SPUD <u>1-6-15</u> COMP <u>1-16-15</u>	PRODUCTION _____
RTD <u>4640</u> LTD <u>4693</u>	ELECTRICAL SURVEYS
MUD UP <u>3542</u> TYPE MUD <u>CHEMICAL</u>	<u>DUAL IND., DENS-N., MICRO</u>

SAMPLES SAVED FROM _____	<u>3400</u>	TO	<u>4640</u>
DRILLING TIME KEPT FROM _____	<u>3400</u>	TO	<u>4640</u>
SAMPLES EXAMINED FROM _____	<u>3400</u>	TO	<u>4640</u>
GEOLOGICAL SUPERVISION FROM _____	<u>3500</u>	TO	<u>4640</u>
GEOLOGIST ON WELL <u>KIM B. SHOEMAKER</u>			

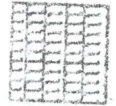

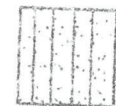



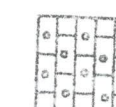


FORMATION TOPS	LOG	SAMPLES	
ANHYDRITE	1991+643	2002+632	
B/ANN.	2021+613	2026+608	
STOTLER	3462-828	3462-828	
HEEBNER	3894-1260	3895-1261	
LANSING	3933-1299	3931-1297	
HUSHPUCKNEY	4237-1603	4237-1603	
MARMATON	4302-1668	4307-1673	
FORT SCOTT	4450-1816	4450-1816	
CHEROKEE	4474-1840	4475-1841	
MISSISSIPPI	4560-1926	4550-1916	

REMARKS

1-6 @ 5010
 1-7 @ 263'
 1-8 @ Down
 1-9 @ "
 1-10 @ 1509'
 1-11 @ 2526'
 1-12 @ 3105'
 1-13 @ 3630'
 1-14 @ 4150'
 1-15 @ 4564'
 1-16 @ 4690'

API: 15-101-22514

LEGEND

	Anhydrite		Salt		Sandstone		Shale		Carb sh		Limestone		Cal. Lime		Chert		Dolomite
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DRILLING TIME IN MINUTES
 PER FOOT
 Rate of Penetration Increases

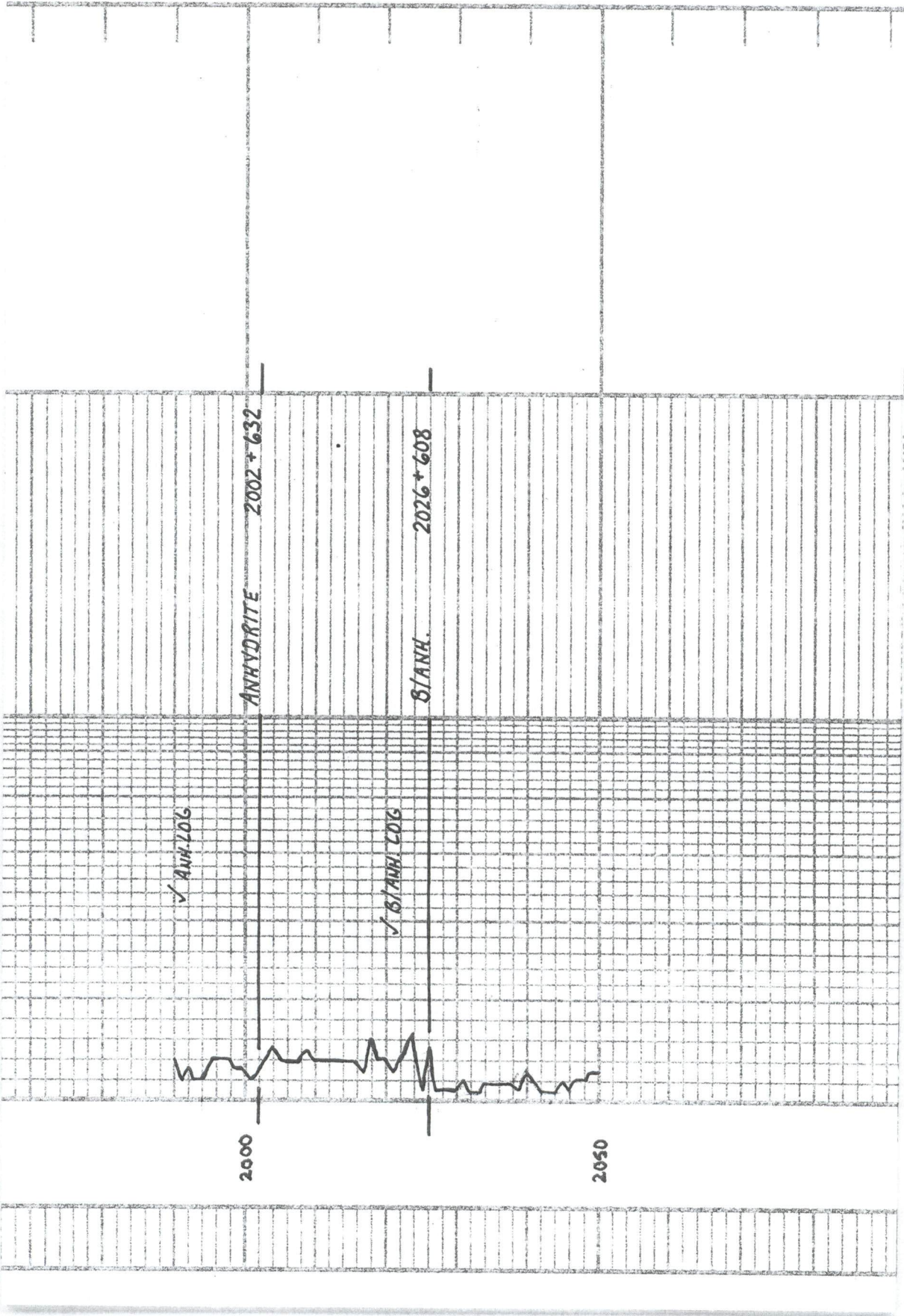
5" 10" 15" 20" 25"

DEPTH
 1950

LITHOLOGY

SAMPLE DESCRIPTIONS

REMARKS



✓ ANH LOG

✓ SI ANH LOG

ANHYDRITE 2002 + 632

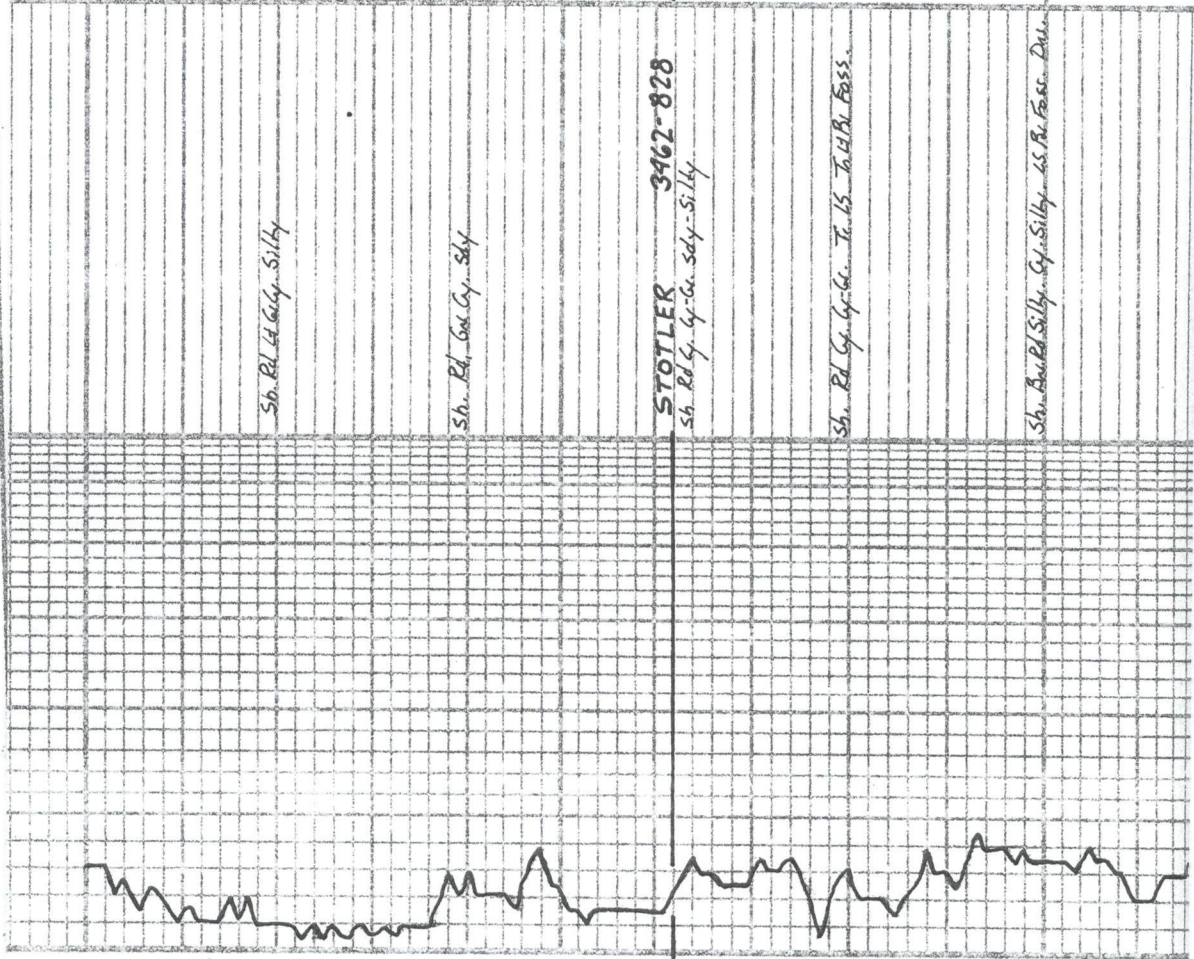
SI ANH. 2026 + 608

2000

2050

3400

3500



Sh. Bl. G. G. Silby

Sh. Bl. G. G. Silby

STOTLER 3462-828

Sh. Bl. G. G. Silby

Sh. Bl. G. G. Silby

Sh. Bl. G. G. Silby



sh. Blky. ls. wt. Sil. Foss. Sil. A

Samples are Logged

sh. Blky. Silky

ls. To G. Sil. Foss.

ls. Br. Sil. Foss.

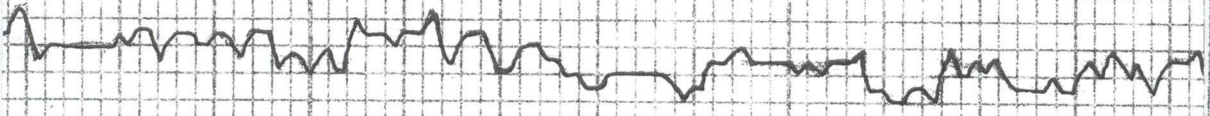
ls. wt. Blky. Foss.

ls. To Bl. Br. Sil. A

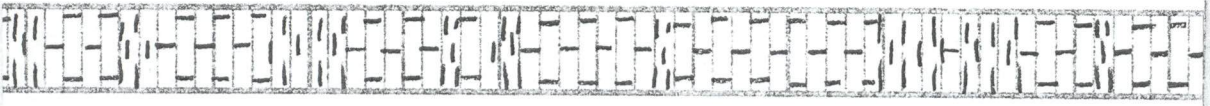
sh. G. Blky. Silky. Silky

ls. wt. Foss. Sil. Calcitic

Displaced Meter 3522



3600



ls. wt. Sil. Foss. Sil. Chalky.

ls. wt. Sil. Foss. Sil. Chalky.

ls. Ltg. Foss. Sil. Chalky.

Sh. Gray-BLK.

ls. Bl. V. Sil. Foss.

ls. wt. Ltg.ool. Foss.

ls. Ltg. Dns.

ls. T. wt. Foss. Sil. Foss. Sil. A

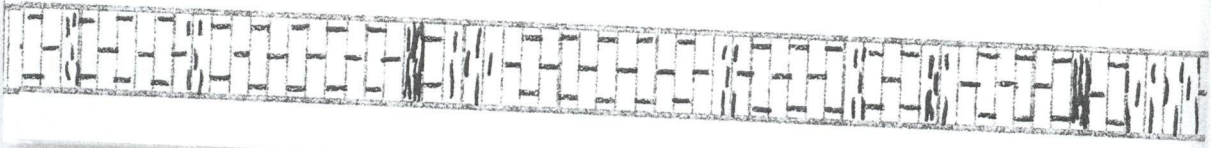
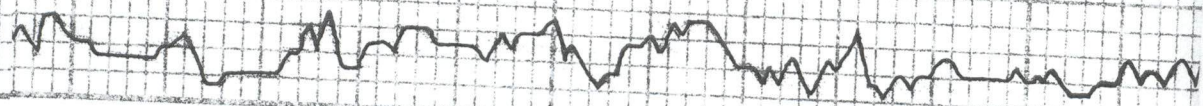
ls. Bl. V. Chalky

Sh. Bl. L. B. V. Sil. Foss.

Sh. DEQ. BLK

Sh. Gray.

3700



LS Gy. Dol.

LS w/ Foss. Chalky.

LS. To w/ Foss. Calcitic

LS w/ Vch. lay.

Sh. BLK.

LS To Foss. Calcitic.

LS. Ltg. Si. Foss. w/ DK G. Foss.

LS. To w/ Foss. Calcitic.

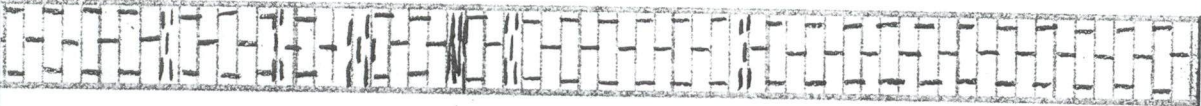
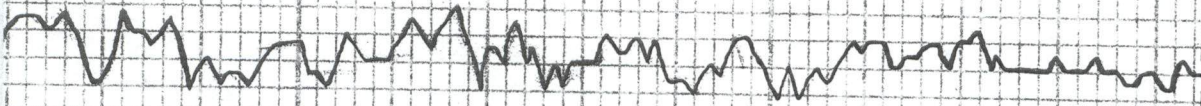
A Ch. Ltg.

LS To Ltg. VSi. Chalky

LS. To Ch. P. Si. Foss. Si. Chalky.

HECNER 3805-1961

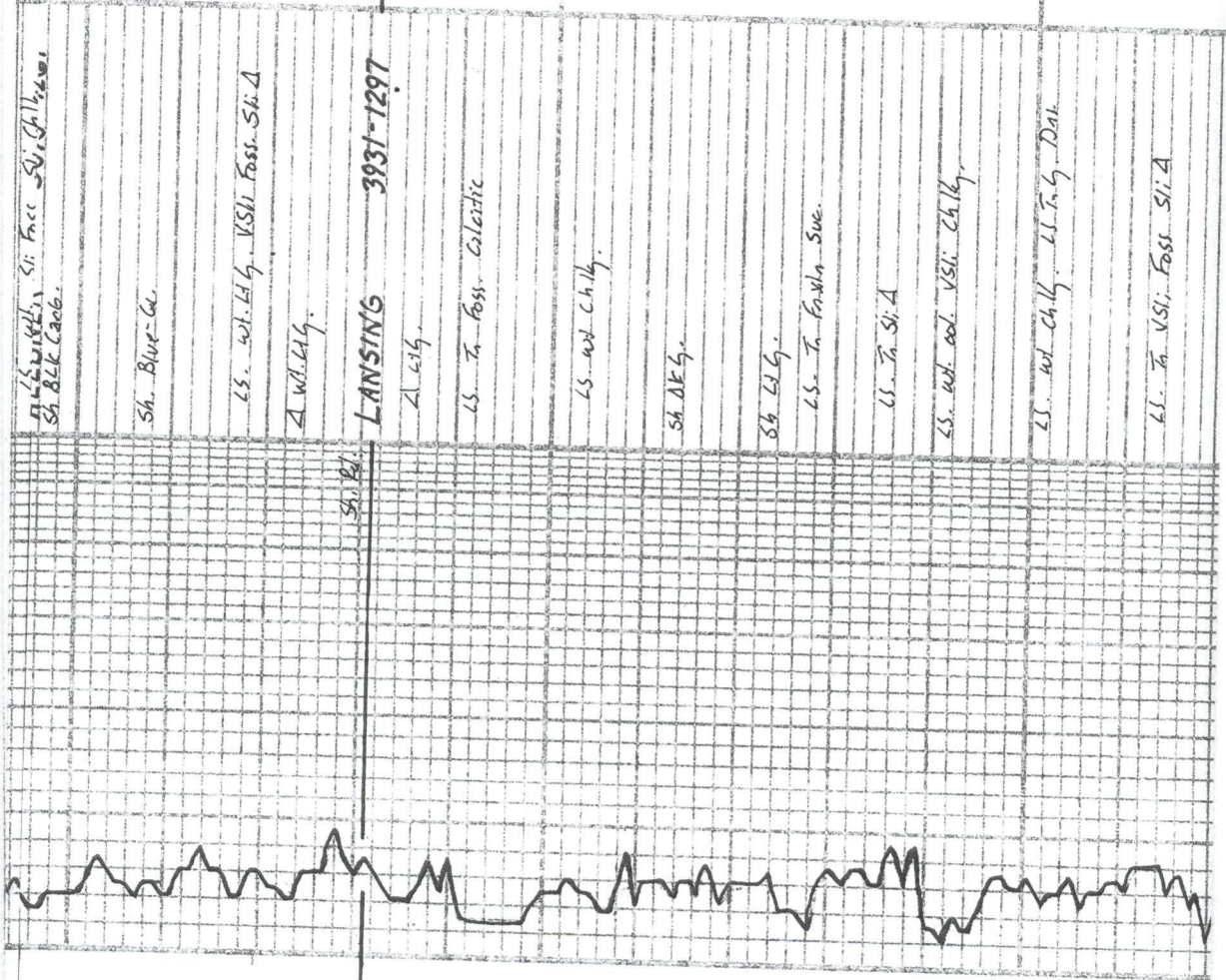
3800





3900

4000



LS. wt. Hlg. Sli. Foss. Sli. Chalk. Dan.
Sh. Blue-Cal.

LS. wt. Hlg. Sli. Foss. Sli. A

LS. wt. Hlg. Sli. Foss. Sli. A

LS. wt. Hlg.

LANSTING 3931-1297

LS. wt. Hlg.

LS. Foss. Colonic

LS. wt. Chalk.

SH. dk. G.

SH. Hlg.

LS. Foss. Sli. Sive.

LS. Foss. Sli. A

LS. wt. dk. Sli. Chalk.

LS. wt. Chalk. U.S. G. Dan.

LS. Foss. Sli. A

ls. Tan. sh.ood. ssi. Chalky

ls. wt. ssi. Foss. Chalky

ls. Tan. Foss. ool.

ls. wt. Chalky

ls. G. Dns. V.Si. Foss.

ls. G. Dns.

MUNCIE CREEK 4095-1461

Sh. blk.

ls. G. Bl. V.Si. Foss.

Sh. blk.

Al. Bl.

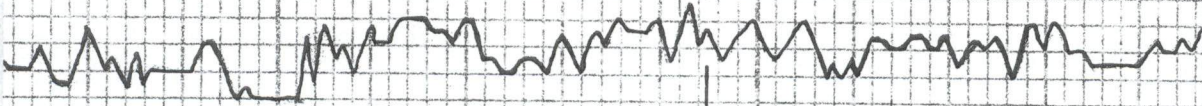
ls. Tan. sh. V.Si. Foss.

Sh. blk. ool. ls. Bl. ssi. Foss.

Al. Bl.

ls. Tan. sh. Foss. ssi. A

✓ MUNCIE CREEK LOG



4100

414-11-11-11

ES. wt. Chilly

ES. T. G. Drie

SB. G. G.

ES. wt. Chilly. 600. Si. Chilly.

ES. T. G. S. I. A

4193-1559

STARK
SH. ACK. Comb.

ES. wt. Chilly. 600. Foss. Si. Chilly.

ES. WT. V. Chilly.

ES. T. G. Drie

ES. G. Drie

4237-1603

HUSHPUCKNEY
SH. ACK. Comb.

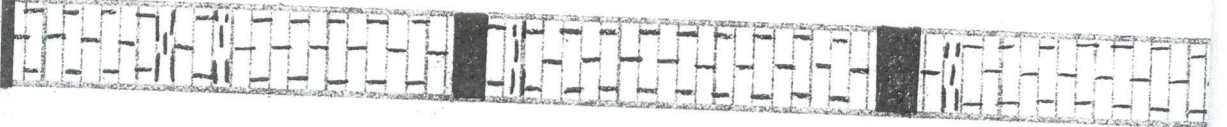
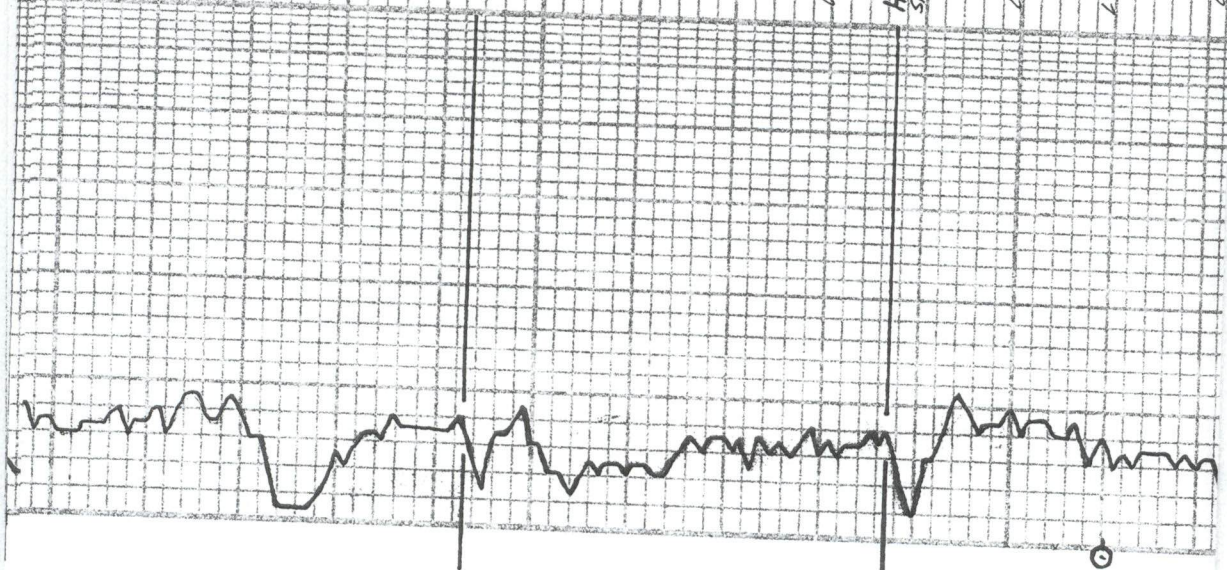
ES. R. Drie. V. Si. Calenti

ES. wt. Chilly. V. Si. Foss. V. Si. A. V. Si. Chilly

ES. wt. Chilly. V. Si. Foss. V. Si. Chilly

ES. wt. Chilly. Si. Foss. Si. Chilly

4200



4279-1645

B/KC

Ls. Tanish. Sil. Foss.

Sh. Ltg. & Silky.

4307-1673

MARMATON

Ls. w/ Tan. USH. Foss. w/ Sil. Chalky.

Sh. Red. Pink.

Ls. w/ Ltg. w/ Red Sh. Incl.

Sh. Ltg. Blue Silky

Ls. Ltg. Foss. Sil. Foss. P. Veryd

DE. Bl. Sil. SSF. No. Foss. No. Ddoc. (4362)

Ls. Tan. Orange. Ls. Tanish. Sil. Foss.

Sh. Gy. Ltg.

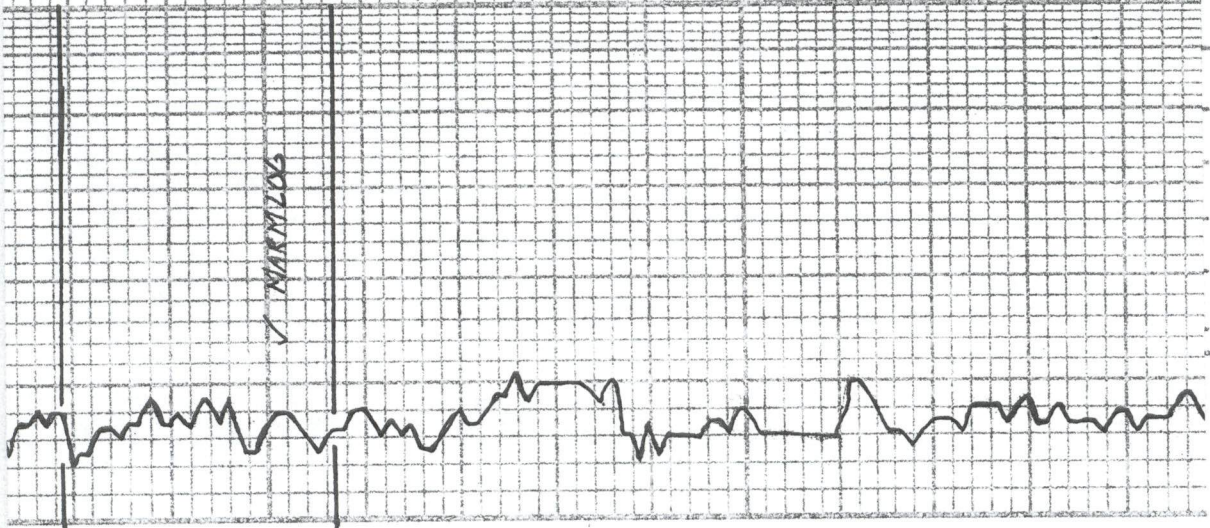
Ls. w/ Sil. Foss. Sil. A

Sh. Ltg.

Ls. Gy. Dol.

✓ MARMATON

4300



4400



sh. DEG. BLK.

sh. DEG. SILKY

LS. 7/4 y. SILKY. EXTRA

LS. 1/4 y. SILKY

sh. 6/4 DEG. SILKY

sh. BLK. CARD

FORT SCOTT 4450-1816

LS. 2/4 y. 001. Sh. Calcitiz

LS. wt. 1/4 y. SLI. Foss. VSI. Coll. P. V. 1/4 y. 1/4
 An. Sp. 1/4 y. SLI. Foss. VSI. Coll. P. V. 1/4 y. 1/4

V.F.I. DOR (4490)

CHEROKEE 4475-1841

sh. BLK. CARD

LS. 2/4 y. VSI. Foss.

LS. 1/4 y. VSI. Foss. SLI. Calcitiz

sh. DEG. CO.

sh. 1/4 Blue Pyrite

LS. 1/4 y. VSI. Foss.

LS. 1/4 y. SLI. Foss.

LS. wt. 1/4 y. SLI. Foss. SLI. Calcitiz

4500

Sh.

Sid. Chry. Fa. Gi. Sub. Rd. Do. P. Inty. of
B-4-SW-7 VSS Fo. No. Floor

No. Order (4535)

Sid. Chr. wt. Fa. Hd. Gi. Sub. Rd. Do.

Sid. Chr. wt. Fa. Hd. Gi. Sub. Rd. Do. P. Inty. of

Al. wt. G. Foss.

LS. To. R. Si. A

LS. wt. Ch. lky.

LS. To. R. wt. Si. A

LS. wt. lky. Sh. Foss. Celtic

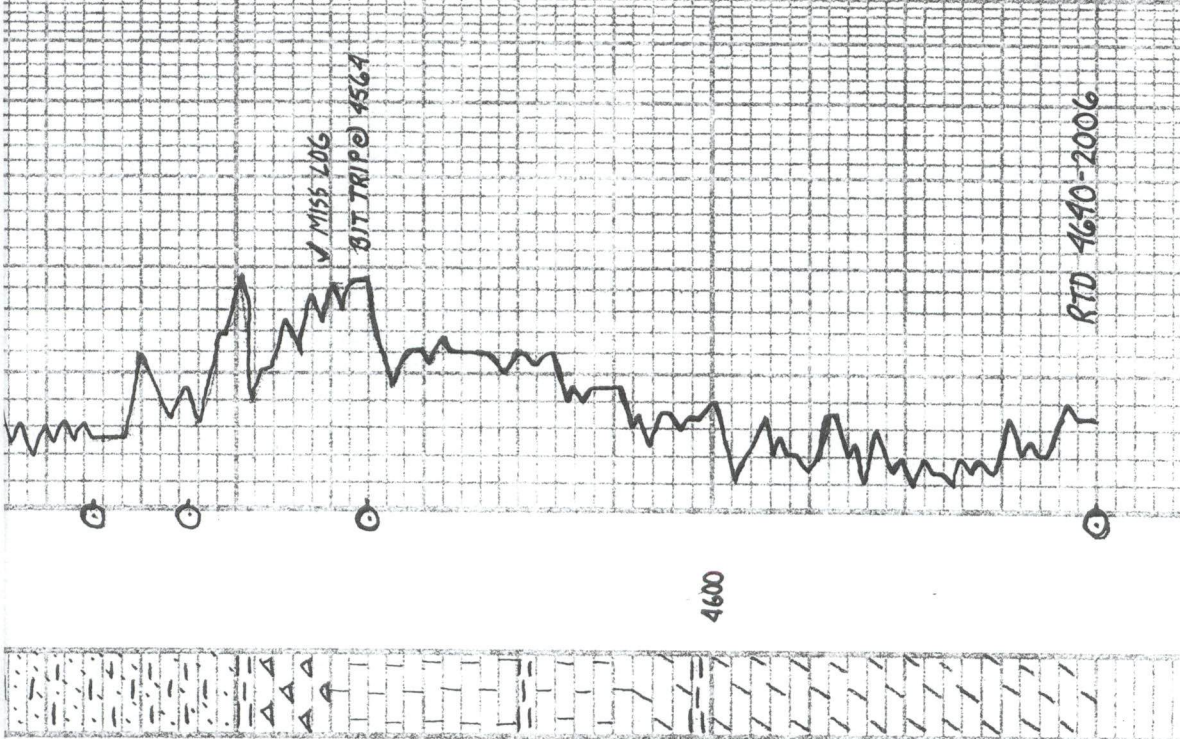
LS. To. R. wt. Si. A

Dol. lky. V. Exln. Suc.

Dol. To. R. V. Exln. Suc.

Dol. To. R. lky. V. Exln. Suc. Sh. Foss. Suc.
"Vaggy"

Dol. wt. lky. V. Exln. Suc. Sh. Foss.



MISS LOG

BITTRIP @ 4564

RTD 4640-2006

4600