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**WICHITA, KANSAS**

**OPERATOR:** MULL DRILLING CO. INC.

**WELL NO.:** 3 - 17

**LEASE:** ALBERS

**LOCATION:** 990' FNL & 2310' FEL.

**SEC:** 17

**TWP:** 17 S

**RGE:** 23 W

**COUNTY:** NESS

**STATE:** KANSAS

**CONTRACTOR:** DUKE DRILLING RIG # 2

**COMM:** 07 - 14 - 2010

**COMP:** 07 - 23 - 2010

**RTD:** 4550

**LTD:** 4550

**SAMPLES SAVED FROM:** 3700

**TO:** RTD

**DRILL TIME KEPT FROM:** 3700

**TO:** RTD

**GEOLOGICAL SUPERVISION FROM:** 3600

**TO:** RTD

**MUD UP @:** 3600

**TYPE OF MUD:** CHEMICAL

**ELEVATION:**

**KB:** 2465

**GL:** 2456

**MEASUREMENTS FROM KB**

**CASING RECORD:**

**SURFACE:** 8.625 @ 218'

**PRODUCTION:** 5.5" @ 4550'

**ELECTRICAL SURVEYS:**

DIL

CNL/CDL

MICRO

SONIC

**FORMATION:**

**SAMPLE TOP:**

**DATUM:**

**LOG TOP:**

**DATUM:**

**STRUCT. COMP:**

**HEEBNER**

3825

- 1360

3825

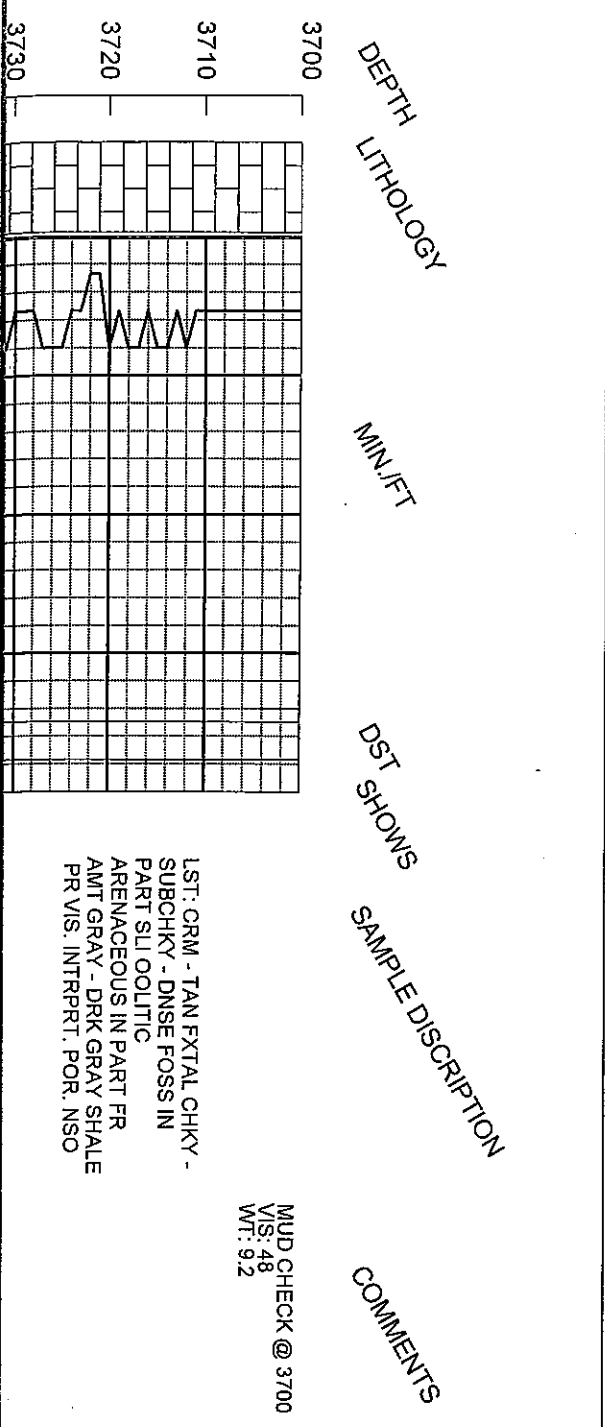
- 1360

+ 02

LANSING	3860	- 1395	3860	- 1395	+ 03
PAWNEE	4248	- 1783	4248	- 1783	FLAT
FT. SCOTT	4340	- 1875	4340	- 1875	+ 03
CHEROKEE	4364	- 1899	4364	- 1899	+ 01
MISSISSIPPI	4438	- 1973	4438	- 1973	- 01

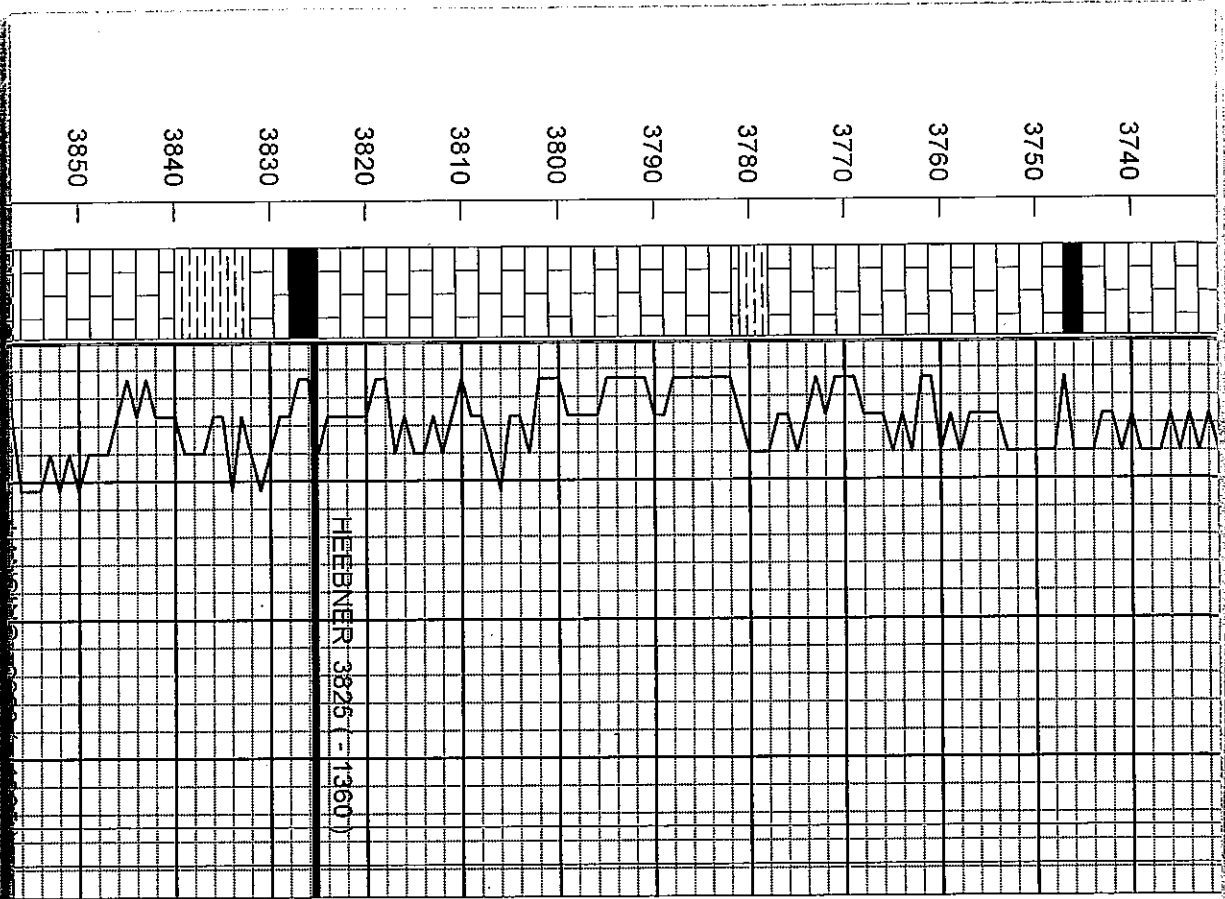
**REFERENCE WELL FOR STRUCTURAL COMPARISON:**

MULL DRILLING CO INC. 2-17 - 2010      SEC. 17 - 17S - 23W      NESS COUNTY KANSAS



MUD CHECK @ 3700  
VIS: 48  
WT: 92

LST: CRM - TAN FXTAL CHKY -  
SUBCHKY - DNSE FOSS IN  
PART SLI OOLITIC  
ARENACEOUS IN PART FR  
AMT GRAY - DRK GRAY SHALE  
PR VIS. INTRPRT. POR. NSO



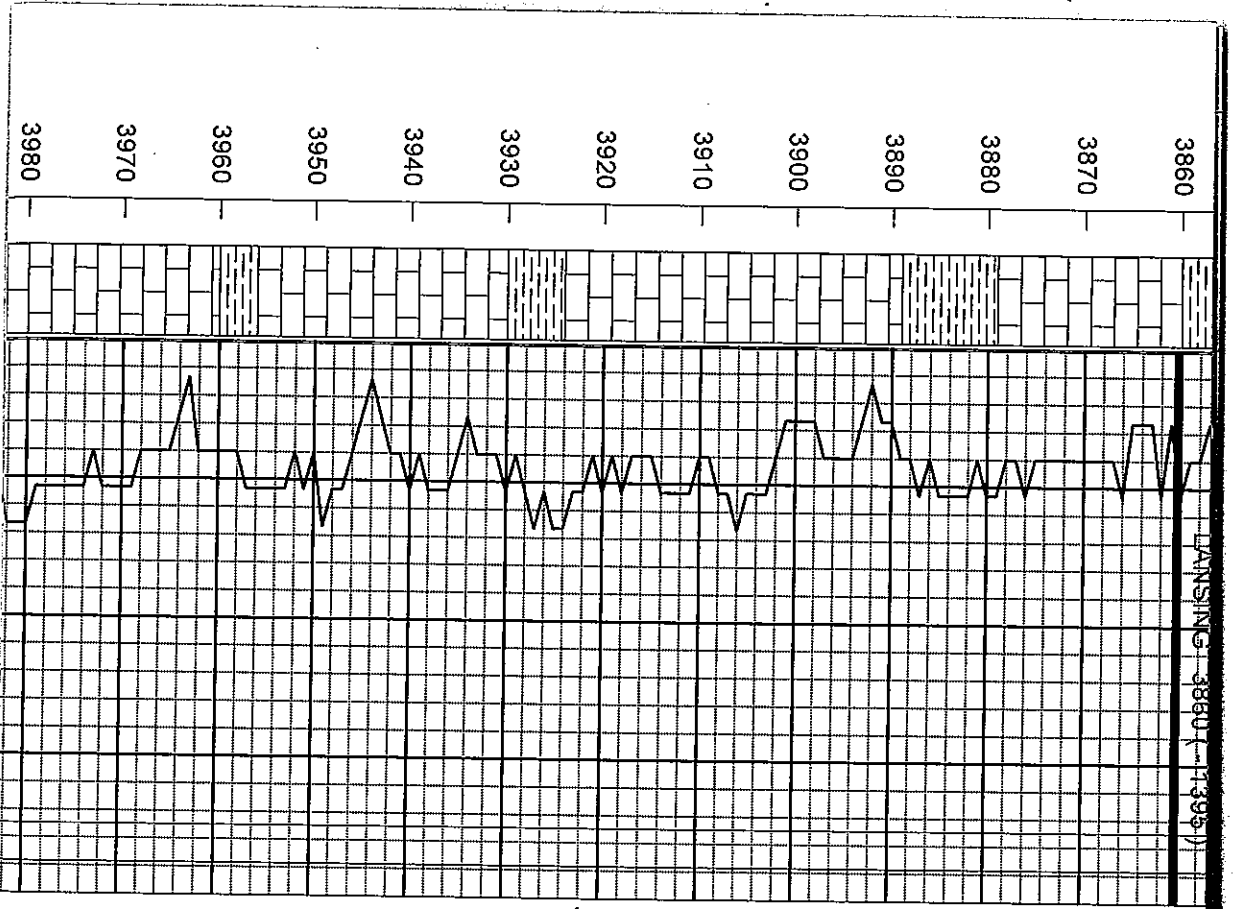
LST: A. A. AREN. IN PART  
 MINOR OOLITES PR VIS POR.  
 NSO

LST: CRM - TAN - BRN  
 SUBCHKY - DNSE  
 ARENAGEOUS FOSS. IN PART  
 RARE OOLITE PR INTRPRT.  
 POR. NSO

LST: CRM - TAN - BRN FXTAL  
 SOFT CHKY ARENAGEOUS IN  
 PART OOLITIC & SIL FOSS. FR  
 AMT GRAY SHALE FR  
 INTRPRT. POR. NSO

SHALE: BLACK CARB. W/FR  
 AMT DNSE MOTTLED MICRITIC  
 LST. NSO  
 SHALE: GRAY - GRN SILTY

LST: WHT - CRM FXTAL DNSE  
 BLOCKY MINOR AMT TRANSL.  
 CHERT RARE FOS. NO VIS.  
 POR. NSO



SHALE: GRAY

LST: WHT - CRM FXTAL MOST  
 CHKY SOFT VERY FOSS W/ FR  
 - GD FOSS INTRPRT. POR.  
 NSO  
 LST: A. A. BECOM. DNSE  
 BLOCKY NSO

SHALE: GRAY CALC.

LST: CRM - GRAY FXTAL MOST  
 DNSE SLI FOSS NO VIS. POR.  
 NSO

LST: A. A. NSO

SHALE: GRAY

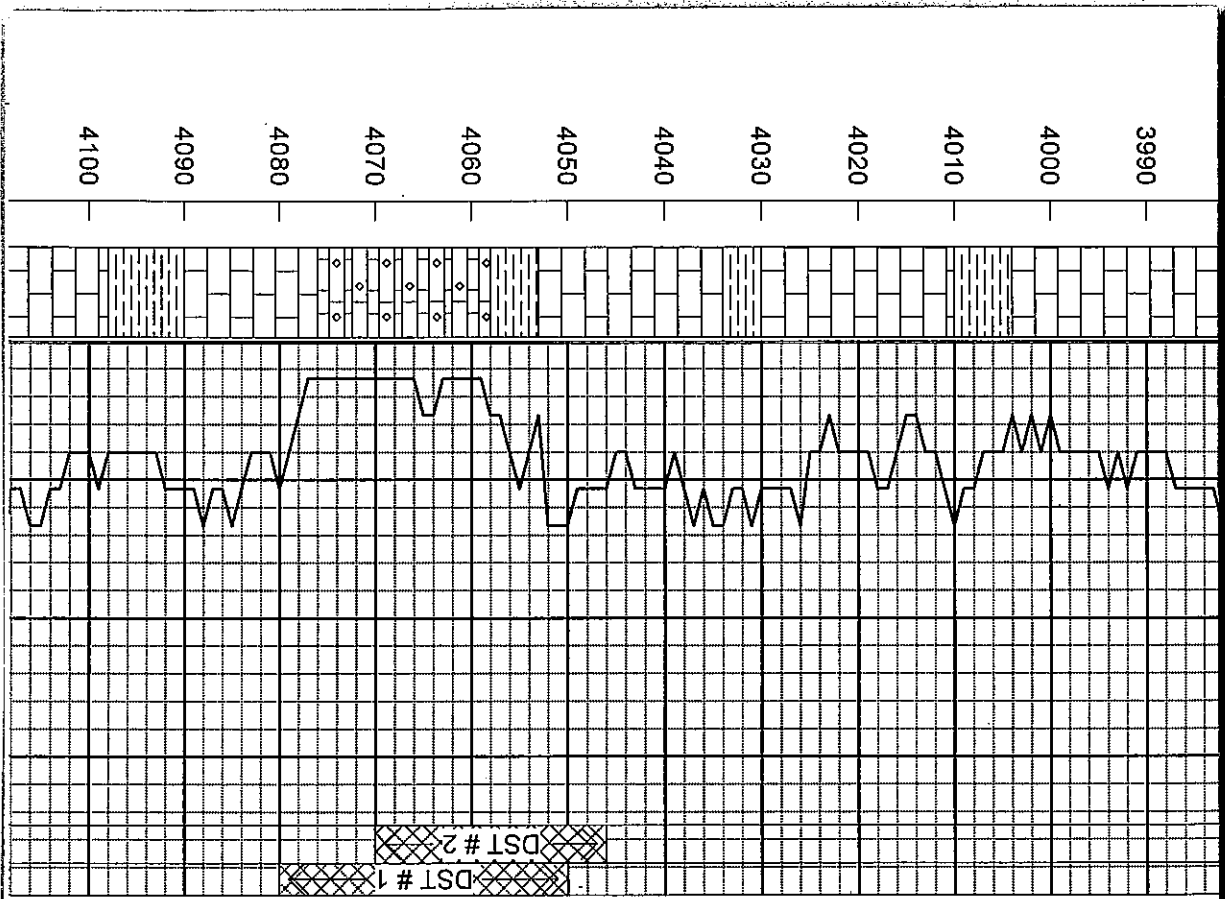
LST: WHT - CRM FXTAL  
 SUBCHKY - DNSE FOSS IN  
 PART PR - FR INTRPRT. POR.  
 NSO

LST: CRM - WHT FXTAL  
 SUBCHKY - DNSE MINOR  
 FOSS. SLI OOLITIC. SHALY IN  
 PART NO VIS. POR. NSO

SHALE: GRAY CALC.

LST: WHT - CRM - GRAY FXTAL  
 SUBCHKY - DNSE FOSS. IN  
 PART W/ MINOR OOLICASTIC  
 PR INTRPRT. & OOCASST. POR.  
 NSO

MUD CHECK @ 3980



LST: WHT - GRM FXTAL MOST  
DNSE BRITTLE - BLOCKY SLI  
FOSS FW PCS OOLCASTIC PR  
- FR INTRPRT & MINOR  
OOCAST POR. NSO

VIS: 46  
WT: 9.1

LST: CRM - TAN FXTAL  
SUBCHKY - DNSE FOSS IN  
PART NO VIS. POR. NSO  
SHALE: GRAY

LST: WHT - GRM FXTAL MOST  
DNSE SLI FOSS. MASSIVE  
BLOCKY NO VIS. POR. NSO

SHALE: GRAY - GRN, RED -  
BRN SILTY ARGILLACEOUS IN  
PART CRM - TAN FXTAL DNSE  
HARD FOSS. IN PART NO VIS.  
POR. NSO

MUD CHECK @ 4050  
VIS: 47  
WT: 9.2

SHALE: DRK GRAY

LST: CRM - WHT FXTAL  
SUBCHKY - DNSE BRITTLE  
FOSS - OOLCASTIC GSFO  
STRONG ODOR ABUND SAT  
STN EXCEL. OOCAST POR.

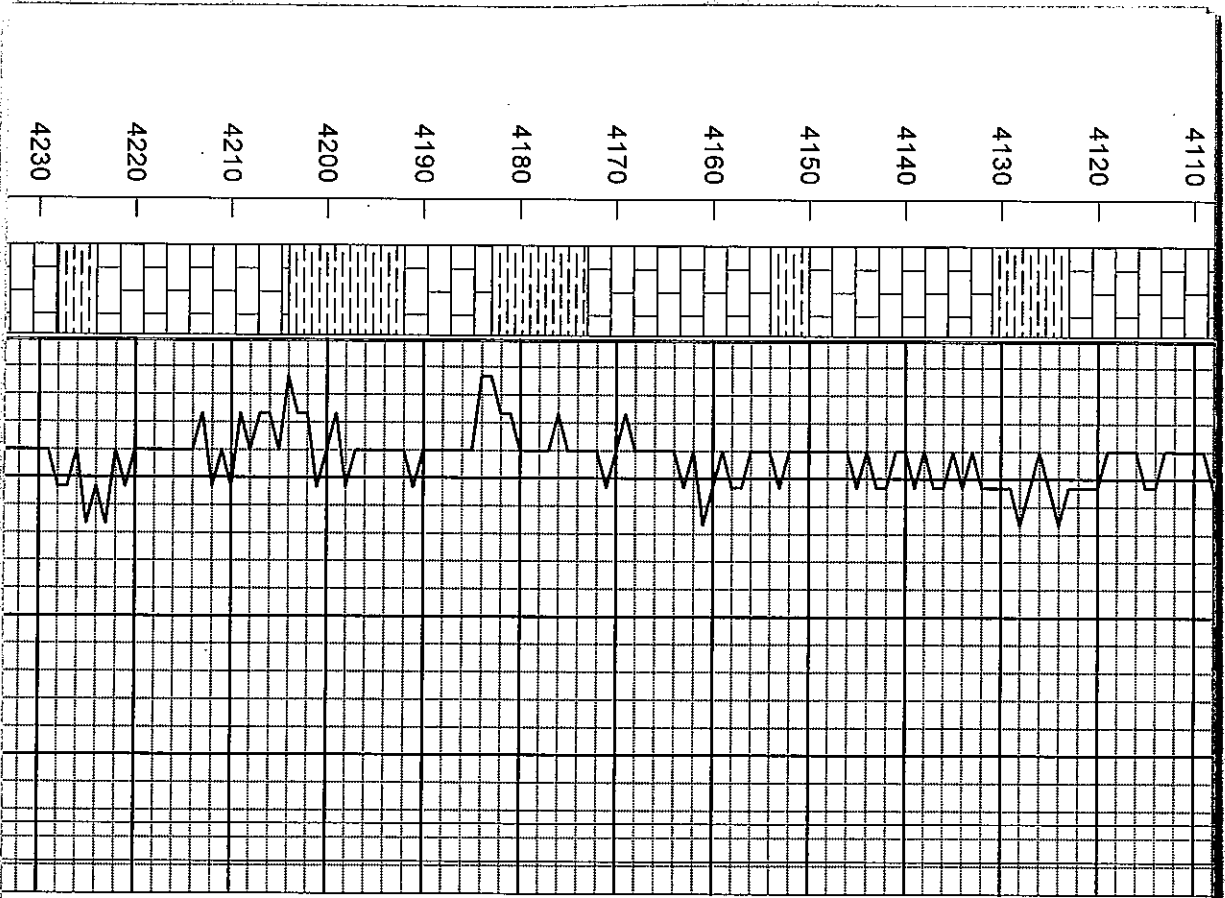
DST #1 (4050 - 4080)  
REC: 1960 GOCMWR?  
ISP: 287 - 288#  
ISP: 1196#  
FFP: 384 - 946#  
FSP: 1185#  
TRIED TO REVERSE  
DID NOT SUCCEED  
RECOVERY COMPROMISED

LST: A. A. BECOM. DNSE  
BLOCKY NO VIS. POR. NSO

DST #2 (4046 - 4070) SP  
REC: 558 CGO  
744 OCMW 2%O  
IEP: 243 - 179#  
ISP: 1185#  
FFP: 273 - 557#  
FSP: 1175#

SHALE: DRK GRAY FISSILE IN  
PART

LST: WHT - GRM FXTAL DNSE  
BLOCKY CHERTY IN PART  
RARE FOSS. MINOR PART



FARE FOSS. NO VIS. FOR. NSO

LST: A. A. NSO

SHALE: GRAY - DRK GRAY

LST: GRM - GRAY FXTAL DNSE  
BLOCKY SIL FOSS. NO VIS.  
POR. NSO

SHALE: GRAY SANDY

LST: GRM - GRAY FXTAL SNDY  
NO VIS. POR. NSO

MUD CHECK @ 4150  
VIS: 49  
WT: 9.2

SHALE: RED - BRN, GRAY

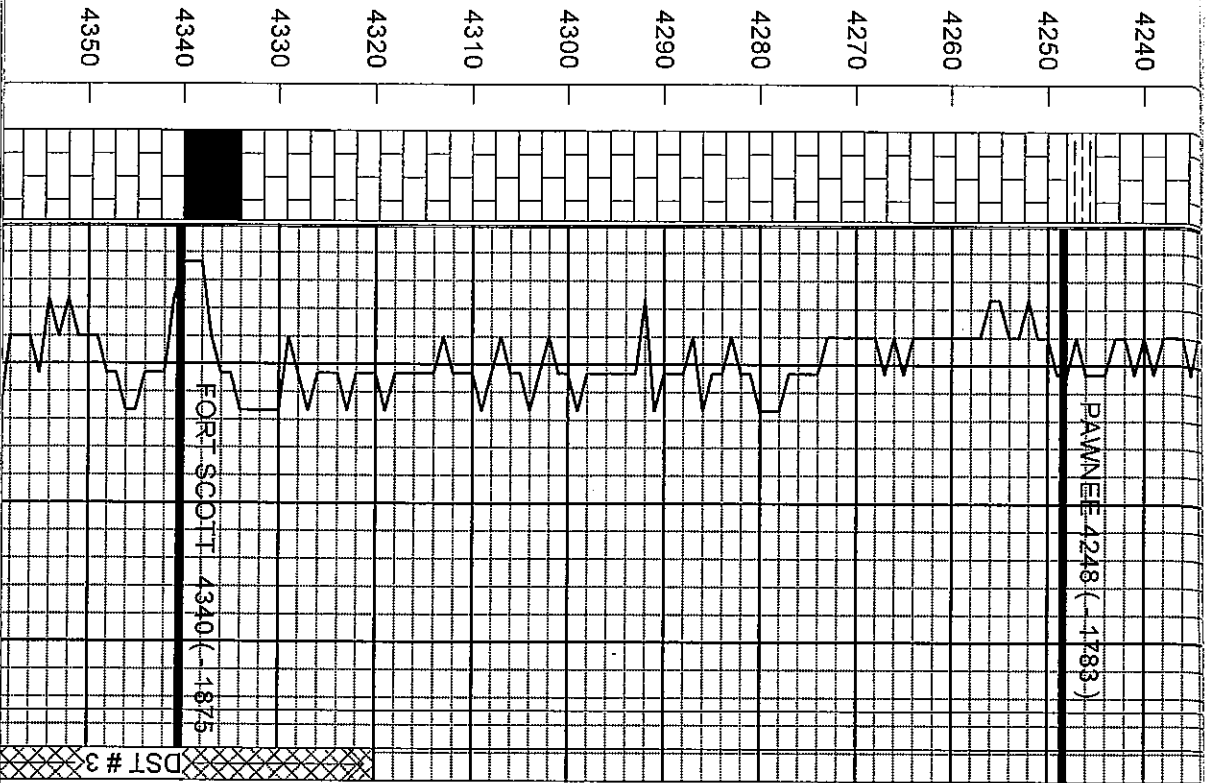
SHALE: A. A. W/ FR AMT  
FLAGGY DNSE LST  
INTRBEDDED W/ SH. NSO

A. A. NSO

LST: TAN - BRN FXTAL DNE  
BLOCKY VOID OF FOSS NO VIS  
POR. NSO

SHALE: GRAY - DRK GRAY  
SILTY

LST: GRM - GRAY FXTAL DNSE



ROCK MASSIVE VOID OF  
FOSS MICRITIC IN PART RARE  
VUGGY POR. MOST W/ NO VIS.  
POR. NSO

SHALE: GRAY - DRK GRAY

LST: CRM - TAN FXTAL  
MICRITIC IN PART DNSE  
BLOCKY FOSS IN PART NO  
VIS. POR. NSO

LST: CRM - TAN - GRAY DNSE  
MASSIVE NO VIS. POR. NSO

LST: CRM - GRAY FXTAL DNSE  
BLOCKY FOSS IN PART  
MICRITIC NO VIS. POR. NSO

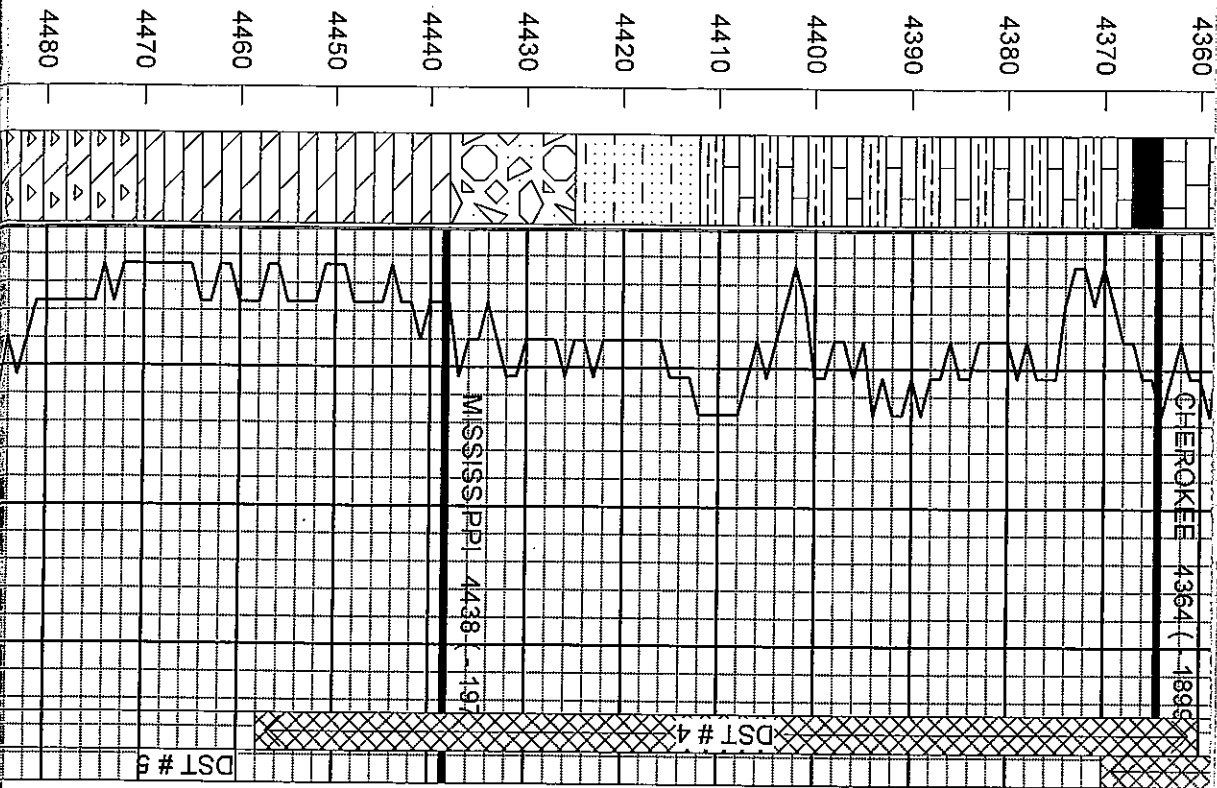
LST: CRM - GRAY FXTAL  
MASSIVE BLOCKY MICRITIC IN  
PART BECOMMING SHALEY  
TOWARD BOTTOM CONTACT  
NSO

SHALE: BLACK CARB.

LST: CRM - TAN FXTAL DNSE  
BLOCKY OOLITIC IN PART  
FSFO GSSY STRONG ODOR  
SCATT LT BRN STN PR  
INTRPRT. POR.

MUD CHECK @ 4292  
VIS: 52  
WT: 9.3

DST # 3 (4320 - 4370)  
REC: 2 MUD  
IFP: 18 - 19#  
ISP: 320#  
FFP: 19 - 20#  
FSIP: 81#



LST: A. A. SHLY IN PART

SHALE: BLACK

LST: CRM - GRAY FXTAL DNSE  
 SLL FOSS. NO VIS. POR. NSO  
 INTERBEDDED W/ DARK GRAY  
 SHALE

A. A. SNDY IN PART NSO

LST: A. A. W/ INTERBEDDED  
 GRAY SHALE NSO

SND: FN - MED GRND TIGHT  
 CLUST W/ FR AMT WEATH,  
 CHERT SSFO FR ODOR SCATT  
 HVY BLK STN PR INTRGAN,  
 POR.

CGI: SND A. A. W/ FR AMT  
 ROTTEN WEATH VARI COL.  
 SHALE & CHERT A. A.

DOLO: CRM - TAN FXTAL DNSE  
 BRITTLE SUCROSSIC FSFO  
 GD ODOR FW PCS W/ LT - MED  
 BRN SAT. STN PR - FR  
 INTRXTAL POR.

DOLO: CRM - GRAY FXTAL  
 SUCROSSIC HARD BRITTLE  
 SHOW A. A. GD ODOR. GD  
 INTRXTAL & VUGGY POR.

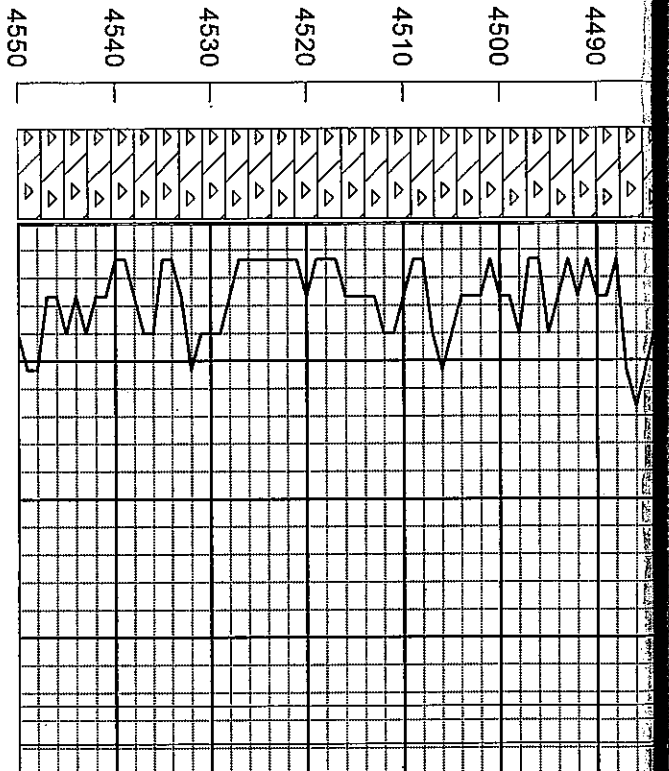
DOLO: A. A. W/ ABUND. WHT  
 CHERT NSO

DST # 4 ( 4360 - 4458 )  
 REC: 243' OCM 40% O  
 IFP: 55 - 65#  
 ISIP: 1304#  
 FFP: 65 - 131#  
 FSIP: 1301#

MUD CHECK @ 4450  
 VIS: 50  
 WT: 9.2

DST # 5 ( 4460 - 4470 )  
 REC: 1085' CGO  
 62' GOWCM 10% O  
 IFP: 40 - 68#  
 ISIP: 1334#  
 FFP: 80 - 438#  
 FSIP: 1333#





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DOLO: VERY CHERTY  
 SUCROSSIC TIGHT H2S ODOR  
 NSO

DOLO: CRM - WHT FXTAL  
 SUCROSSIC TIGHT VERY  
 CHERTY NO VIS. POR. NSO

DOLO: A. A. CHERTY NSO

MUD CHECK @ 4525  
 VIS: 52  
 WT: 9.2

RTD = 4550 LTD = 4550

**COMMENTS:** PRODUCTION CASING WAS SET TO FURTHER  
 TEST THE PRODUCTIVITY OF THIS WELL.  
 Respectfully,  
 Kevin L. Kessler