

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

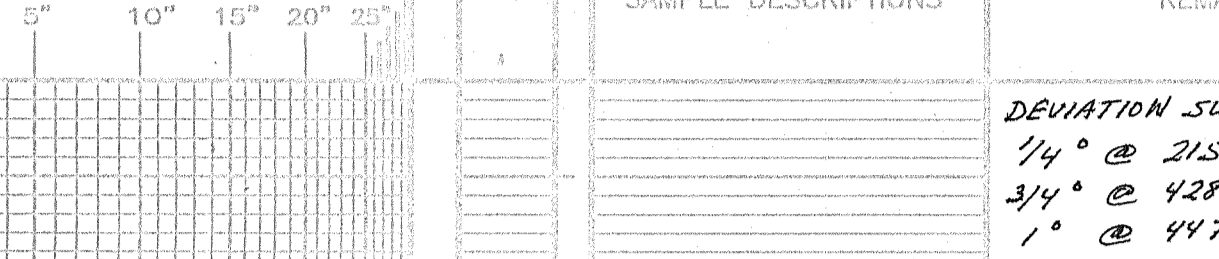
COMPANY **MULL DRUG. CO., INC.**
 LEASE **BERNBECK #1-20**
 LOCATION **S15.0, E1.0, S1.0, E1.0**
 COUNTY **TREGO** STATE **KS**
 SECTION **20** T15.5.0. R23.0. W.
 CONTRACTOR **W.W. DRUG RIG #6**
 SURFACE **8'6" @ 25'**
 PRODUCTION NAME _____
 RID **4473** LTD **4474**
 MUD UP **5400** TYPE MUD **CHEMICAL**
 SAMPLES SAVED FROM **3600** TO **770**
 DRILLING TIME KEPT FROM **3600** TO **770**
 SAMPLES EXAMINED FROM **3600** TO **770**
 GEOLOGICAL SUPERVISION FROM **3790** TO **770**
 GEOLOGIST ON WELL **LARRY P. FRIEND**

FORMATION TOPS	LOG	SAMPLES	ELEVATIONS
STONE CORRAL	1797 (+587)	1797 (+587)	
HEEBNER SH.	3743 (-1359)	3743 (-1359)	
LANSING	3779 (-1395)	3779 (-1395)	
BKC	4057 (-1673)	4057 (-1673)	
MARKATON	4067 (-1683)	4067 (-1683)	
"PALMNEE"	4166 (-1782)	4166 (-1782)	
"ET. SCOTT"	4260 (-1876)	4260 (-1876)	
MISSISSIPPIAN	4344 (-1960)	4344 (-1960)	
GILMORE CITY	4419 (-2035)	4419 (-2035)	

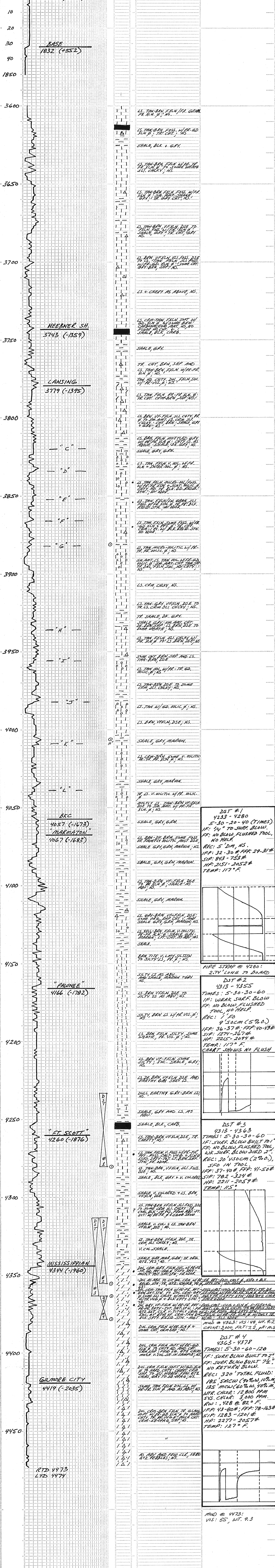
REMARKS **DUE TO NEGATIVE DSTS, IT WAS DECIDED TO PLUG AND ABANDON THIS WELL.**

Larry P. Friend

LEGEND



SCALE 1" = 100'



DEVIATION SURVEYS:
 1/4" @ 215'
 3/4" @ 4280'
 1" @ 4473'

DST #1
 4233 - 4280
 5-30-20-40 (TIMES)
 IF: NO BLOW, FLUSHED TOOL, NO HELP.
 REC: 5' DIA, NS.
 IFP: 32-30# FFP, 29-31#
 SIP: 843 - 753#
 HP: 2151 - 2052#
 TEMP: 117°F.

DST #2
 4313 - 4355
 TIMES: 5-30-30-60
 IF: WEAK SURF. BLOW
 FF: NO BLOW, FLUSHED TOOL, NO HELP.
 REC: 1' FO
 9'50CM (5% O.)
 IFP: 36-37# FFP, 40-43#
 SIP: 1274 - 267#
 HP: 2215 - 2094#
 TEMP: 117°F.
 CHART SHOWS NO FLUSH

DST #3
 4313 - 4363
 TIMES: 5-30-60-60
 IF: SURF. BLOW BUILT TO 1'
 FF: NO BLOW, FLUSHED TOOL, WKR. SURF. BLOW DIED 2"
 REC: 20' V50CM (2% O.), SFD IN TOOL
 IFP: 37-40# FFP, 41-50#
 SIP: 782 - 324#
 HP: 2211 - 2059#
 TEMP: 115°F.

DST #4
 4363 - 4378
 TIMES: 5-30-60-120
 IF: SURF. BLOW BUILT TO 2"
 FF: SURF. BLOW BUILT 7 1/2"
 NO RETURN BLOW.
 REC: 320' TOTAL FLUID:
 185' MCV (90% W, 10% M),
 135' MCV (60% W, 40% M),
 WTR. CNLR: 12,800 PPM
 SVS. CNLR: 3,000 PPM
 RW: .428 @ 82°F.
 IFP: 43-80#; FFP: 78-163#
 SIP: 1283 - 1201#
 HP: 2277 - 2057#
 TEMP: 127°F.

MUD @ 4473:
 VIS: 55, WT. 9.3

COMPANY **MULL DRUG. CO., INC.** LEASE **BERNBECK 1-20** ELEVATION: **2384 KB**
 LOCATION **S15.0-SE-N15.0-W15.0** SEC. **20** T15.5.0. R23.0. W.
 COUNTY **TREGO** STATE **KS**