

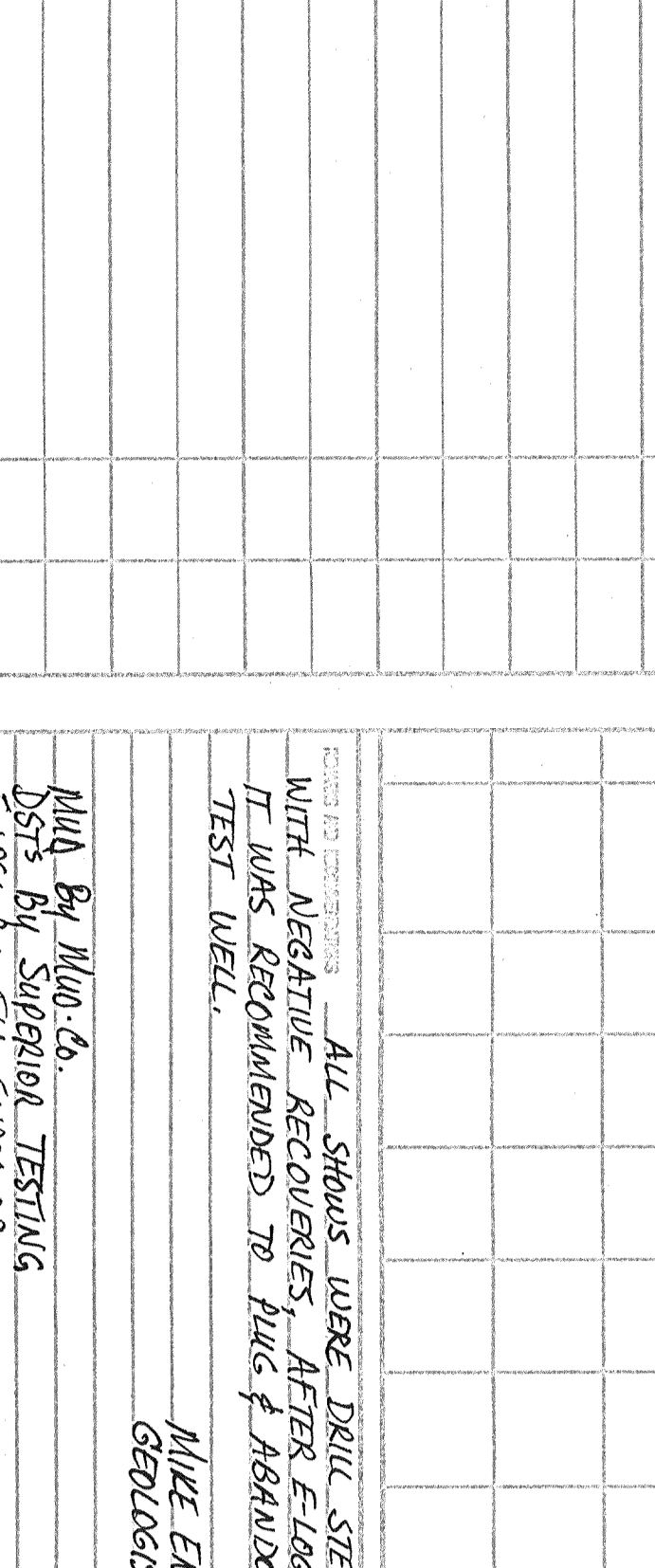
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GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

OPERATOR: **RITCHIE EXPLORATION, INC.**
LEASE: **BEUCHER-OTTLEY #1**
FIELD: **WILDCAT**
LOCATION: **E12 SE SE = 600' SEC 4 1/4 T1E1E**
SEG.: **12 T1P 13 RGE 31W**
COUNTY: **GOVE** STATE: **KS**
COUNTRY: **MURKIN** DEEG #14
DIP: **7-12** COMP: **8-5-12**
DOMIN.: **4100**
STARTS SHOWN FROM: **3600 TO 4700**
DRAINAGE TIME FROM: **3600 TO 4700**
SWITCHES EXTENDED FROM: **3600 TO 4700**
GEOTECH. STRONG. FROM: **3600 TO 4700**
WELL ID: **DISH @ 3426 THE 000 CHEMICAL**
WELL ID: **15-063-02-024-00 00**

FORMATION	THICKNESS	DEPTH	STRUCTURE
ANNUQUITE	2356-4534	411	
STARKER	3559-670	412	
HEEBNER	3915-1026	412	
LANSING	3916-1027	412	
MUNICIPAL	4108-1219	419	
STARKER	4103-1305	420	
STARKER	4193-1306	420	
STARKER	4384-1495	420	
CHEROKEE	4476-1587	421	
JOHNSON	4524-1635	421	
JOHNSON	4524-1635	421	
MISSOURI	4559-1670	448	



WELL LOG STRINGS
DUAL INDUCTION
RANGE

ALL SHOWS LOGS DRILL STEIN TESTED
WITH ALTERNATE RECORDS AFTER E-LOG EVALUATION
IT WAS RECOMMENDED TO PULL & ABANDON THIS
TEST WELL.
MIKE ENGELBRECHT
GEOLOGIST LIC # 334

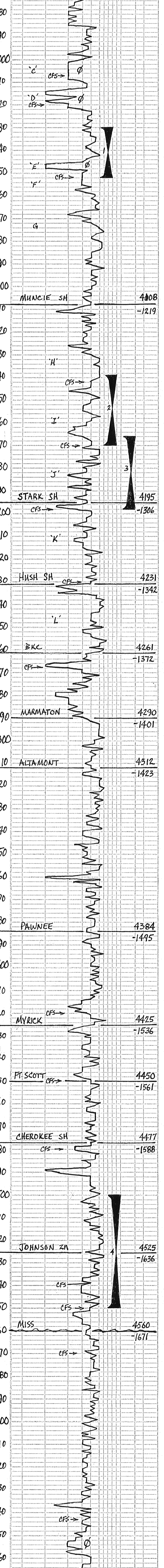
MUD BY MILCO-DA
TESTS BY SUPERIOR TESTING
ESTS BY ELL-SUNDER

DRILL STEIN TESTS

DATE	DEPTH	TIME	REMARKS
7-27-12	1161'		
7-28	600 @ 1268'		
7-30	DRUG @ 3513'		
8-01	CRS @ 4120'		
8-02	DST # 4190'		
8-03	DST # 4120'		
8-04	DST # 4150'		
8-05	@ 41700 TO 41		

DEPTH	DRILLING TIME (Logarithmic Scale)
2300	
10	
20	
30	
40	
50	
60	
70	
80	
90	
100	
110	
120	
130	
140	
150	
160	
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780	
790	
800	
810	
820	
830	
840	
850	
860	
870	
880	
890	
900	
910	
920	
930	
940	
950	
960	
970	
980	
990	
1000	

LEGEND
Anhydrite Salt Sandstone Shale Carb th Limestone Oil/Limro Chert Dolomite



RTD = 4700'
LTD = 4701'

DISPLACED @ 3426
BUT TRIP @ 3426'
PIPE STRAP 1.66 SHOUL
S.H.T. = 34'

MUD CO CK @ 3513'
VISC: 68 FHT: 6.4
WT: 8.8 CHL: 1500

GEOL. ON LOCATION
1:30 PM MON. 7:30-12
1100 # F.P.

VISC: 60
WT: 9.2
LEM: 5 #

TODAY RECORD HIGH IN
NO WICHITA, 95" HERE.
1150 # F.P.

VISC: 58
WT: 9.2
LEM: 5 #

MUD CO V
VISC: 63 FHT: 9.6
WT: 9.2 CHL: 3,000

SHORT TRIP 22 HRS.
COND HOLE 182 HRS.

DST #1 4030-4052
30-30-30-30
IF: WK BLOW DIED 9 MINS.
FF: DEAD, FLUSH, SURGE
REC: 5'00 SPMIND = 1% OIL
SIP: 904-836
SIP: 40-43 FFP: 44-48
TEMP: 120°

VISC: 54
WT: 9.0
LEM: 2 #

DST #2 4139-4170
30-30-30-30
IF: WK BLOW DIED 15 MINS.
FF: DEAD, FLUSH, SURGE
REC: 10' MIND + OS
SIP: 210-116
SIP: 40-43 FFP: 44-48
TEMP: 120°

DST #3 4166-4198
30-45-45-60
IF: WK BUILT TO 2 1/2 MINS.
FF: WK BLOW DIED 15 MINS.
REC: 30' SOCM = 71.0, 93.7 M
SIP: 519-303
SIP: 41-44 FFP: 60-68

MUD CO CK
VISC: 57 FHT: 6.8
WT: 9.1 CHL: 3,000

VISC: 63
WT: 9.3
LEM: 4 #

VISC: 57
WT: 9.3
LEM: 5 #

PULLED 10 STDS S. TRIP

DST #4 4700-4770
30-45-45-60
IF: BUILT TO 74" THEN DIED
FF: NO BLOW - FLUSH SURGE
REC: 10' SOCM = 57.0, 95.2 M
SIP: 519-303
SIP: 51-53 FFP: 53-57
TEMP: 129°

MUD CO CK
VISC: 60 FHT: 8.0
WT: 9.0 CHL: 1,000

VISC: 63
WT: 9.3
LEM: 4 #

VISC: 57
WT: 9.3
LEM: 5 #

STUCK ON CONNECTION

REACHED 2 SAT. NIGHT @ 1:55 AM
PULLED 10 STD SHORT TRIP,
COND. HOLE 1 1/2 HRS, CAME
OUT FOR LOGS. (ADSSX W/LOG)

STUCK ON CONNECTION