MIKE ENGELBRECHT

Licensed Geologist No. 334

2513 Spring Meadow
Wichita, KS 67205

Phone: 316-721-9226
Cell: 316-641-8008

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

OPERATOR RITCHIE EXPLORATION INC.
LEASE #3 ELLIS 23D
FIELD BRIDGES NE
LOCATION 335'FSL & 2209'FEL = SW SW SE
SEC. 23 TWP. 14 RGE. 32W
COUNTY LOGAN STATE KS.

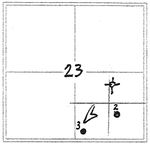
CONTRACTOR WW DRILLING RIG #2
COMM. 8-02-14 COMP. 8-13-14
RTD 4560' LOG TD 4559
SAMPLES SAVED FROM 3400 TO RTD
DRILLING TIME KEPT FROM 3300 TO RTD
SAMPLES EXAMINED FROM 3500 TO RTD
GEOLOGICAL SUPERVISION FROM 3750 TO RTD
MUD UP DISPL @ 3399' TYPE MUD CHEMICAL
API # 15-109-21,326-00-00

ELEVATION
KB 2774
DF
GL 2769
Measurements Are All From KB 2774

CASING RECORD
SURFACE 8 5/8" @ 218
W/165 SXS.
PRODUCTION 5½" @ 4555
W/200 SXS. P.C. @ 2177

WELL LOG SURVEYS
NABORS
COMP DENS NEUTRON
DUAL INDUCTION

FORMATION	LOG TOP	LOG DATUM	SAMPLE TOP	SAMPLE DATUM	STRUCT. COMP.
ANHYDRITE	2220	+554	2221	+553	+10
BASE	2241	+533	2243	+531	+9
STOTLER	3376	-602	3375	-601	+17
HEEBNER SH	3738	-964	3737	-963	+19
LANSING	3774	-1000	3773	-999	+17
MUNCIE	3935	-1161	3935	-1161	+23
STARK SH	4029	-1255	4030	-1256	+19
BKC	4114	-1340	4114	-1340	+19
ALTAMONT	4156	-1382	4156	-1382	+20
PAWNEE	4232	-1458	4233	-1459	+16
CHEROKEE SH	4311	-1537	4312	-1538	+17
JOHNSON ZN	4353	-1579	4353	-1579	+16
MRW SD	4388	-1614	4386	-1612	+12
MISS	4404	-1630	4405	-1631	+10



REFERENCE WELL FOR STRUCTURAL COMPARISON REI #2 ELLIS 23D

ACTIVITY @ 7:00 A.M.		BIT & SURVEY RECORD						
DATE	DEPTH	NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS
8-2-14	MIRT-SPUD							
8-3-	DRLG. @ 1500'							
8-4	DRLG. @ 2965'							
8-5	DRLG @ 3655'							
8-6	CTCH @ 3823'							
8-7	TIH @ 3885							
8-8	DST#5 @ 4000							
8-9	DRLG. @ 4075'							
8-10	DRLG @ 4225'							
8-11	DRLG @ 4365'							
8-12	DST#10 @ 4406							
8-13	LOGGING							

FORMATION	INTERVAL	DESCRIPTION OF SHOW	LOG ANALYSIS 0 3

DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHH-FHH	Recovery

REMARKS AND RECOMMENDATIONS

IT WAS RECOMMENDED TO RUN 5 1/2" PRODUCTION CASING TO PRODUCE MULTIPLE LKC ZONES AS INDICATED BY DST's.

MIKE ENGELBRECHT
GEOL LIC # 334

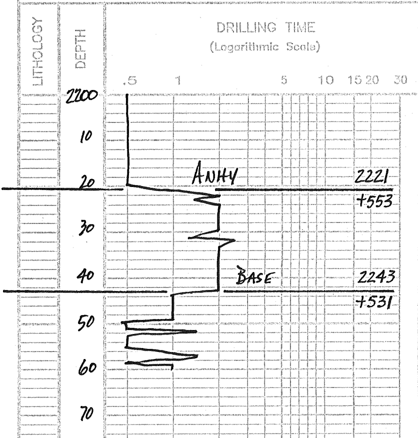
MUD BY MUD-CO
DST's BY TRILOBITE
LOG's BY NABORS

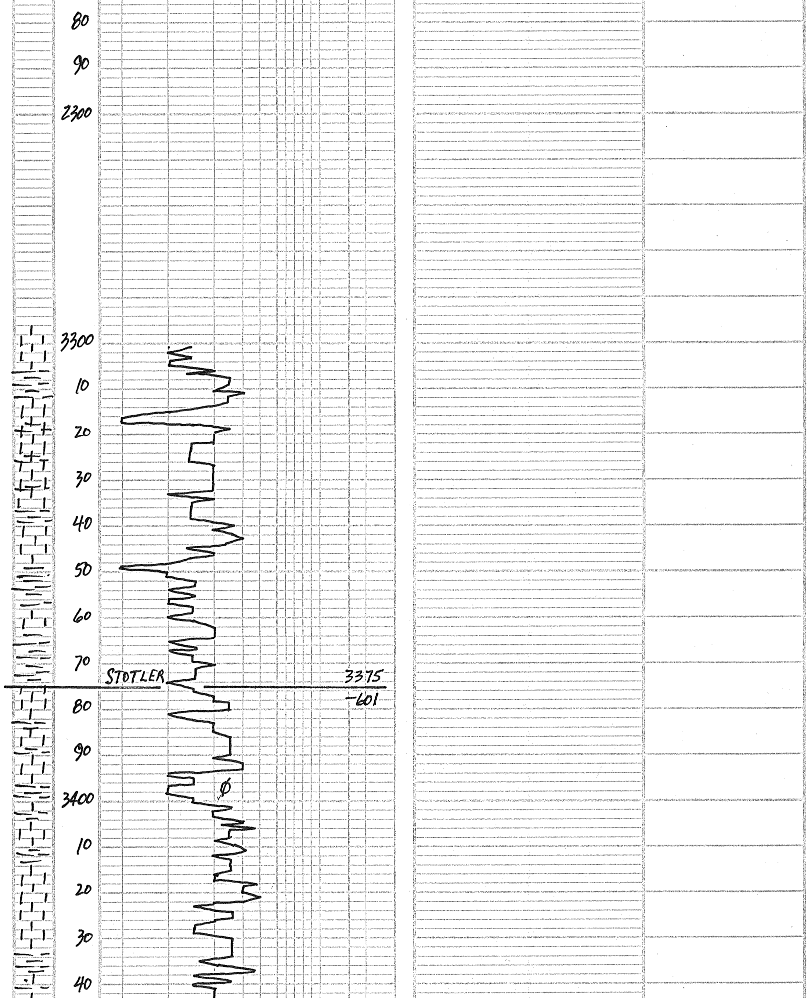
ENGEL-11

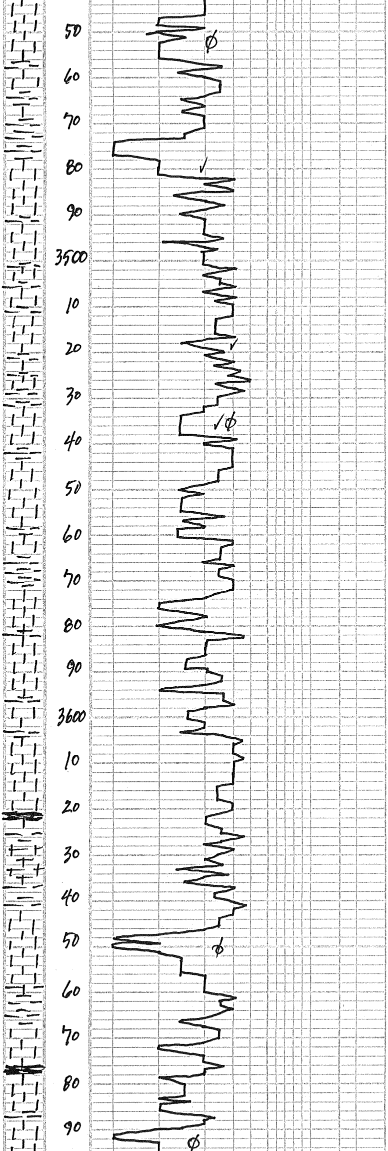
LEGEND

Anhydrite	Salt	Sandstone	Shale	Carb sh	Limestone	Ool.Lime	Chert	Dolomite
▥	▦	▤	▤	░	▦	▦	▦	▨

LITHOLOGY	DEPTH	DRILLING TIME (Logarithmic Scale)	SAMPLE DESCRIPTIONS	REMARKS







Displ @ 3399'

CRM-GRY LS POOR ϕ-NS
LOTS GRY-RED SHS — JUNK!

LS & SHS AA

20 FLOOD GRY FN-XLN LS & GRY SHS
GRY MEALY LS POOR ϕ NS
NO ODOR

GRY SALT & PEPPER LS POOR ϕ-NS

STILL LOTS RED BEDS

40 GRY-BUFF SLI-FOSS LS POOR ϕ NS
NO ODOR

GRY Δty FOSSLD LS POOR ϕ-NS

60 TAN-BUFF SLI-FOSS LS P-F ϕ
NS NO ODOR

TAN-FLESHY FN-XLN DNSE LS
POOR ϕ -NS NO ODOR

80 BUFF-LT TAN FOSS LS P-F ϕ
NS NO ODOR

BUFF-LT TAN SEMI-FOSS LS FAIR ϕ
2 PCS LT STN, NO FO NO ODOR

00

LT CRM SEMI-FOSS LS FAIR ϕ-NS

LT CRM SEMI-FOSS LS FAIR ϕ-NS
PTLY CKY NO ODOR

20 LT CRM-BUFF LS—NS

WH-LT CRM Δty FOSS LS P-F ϕ
NS NO ODOR

40 LT CRM-BUFF FOSS LS-NS

LT CRM-BUFF MEALY CKY LS
SCAT LT STN- NO FO NO ODOR

60 FEW BLK SHS GRY-BUFF LS
POOR ϕ-NS NO ODOR

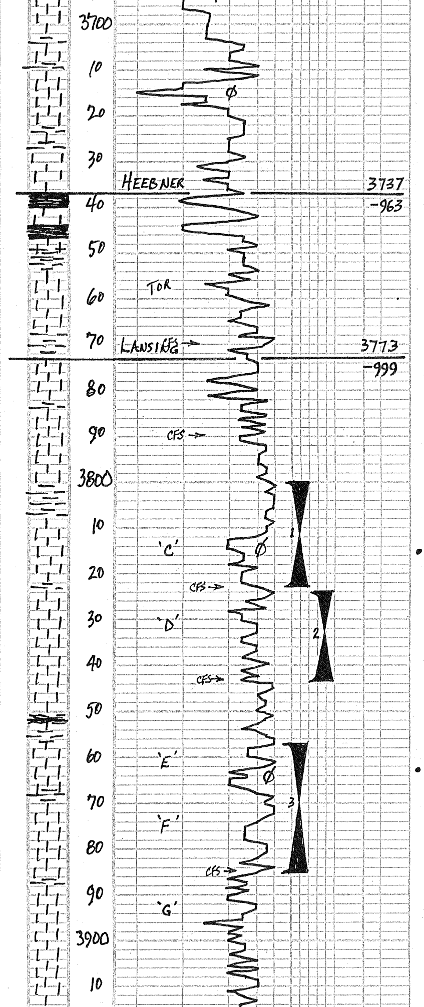
LT CRM FOSS LS FAIR FOSS ϕ
2 PCS LT STN, NO FO NO ODOR

80 WH-CRM FN-XLN CKY LS
POOR ϕ - NS NO ODOR

LT TAN-GRY SLI-FOSS LS
POOR ϕ-NS NO ODOR

00 LT TAN-BUFF SEMI-FOSS LS
P-F ϕ-NS NO ODOR

LT TAN-FLESHY FN-XLN LS
POOR ϕ -NS NO ODOR



20 WH- LT CRM CKY LS -NS NO ODOR LOTS CKY

VISC: 59
WT: 8.7
LCM: 2#

WH LT CRM- Aty CKY LS P-F φ NS NO ODOR

40 LT BUFF- FLESH- FOSS LS P-F φ - NS NO ODOR

LT CRM- BUFF SLI- FOSS CKY MEALY LS SCAT LT STN, NO FO, NO ODOR

VISC: 57
WT: 8.8
LCM: 2#
ADD PRE-MIX

60 FAIR AMT BLK SHS BUFF MEALY LS - POOR φ - NS NO ODOR

GEOL ON LOC 10:15 AM
TUES. 8-5-14

70) FEW LT CRM, FOSS LS W/SCAT LT STN POOR φ - NO FO, NO ODOR

30 MIN: FLOOD WH- LT CRM FN-XLN CKY LS POOR φ -NS NO ODOR

60 MIN: FLOOD WH- LT CRM SLI-FOSS CKY LS POOR φ - NS NO ODOR
WH- LT CRM SLI-FOSS LS POOR φ NS - NO ODOR

MUD: CO ✓
VISC: 59 CHL: 3,000
WT: 8.9 FILT: 9.2

90) WH- CRM- LT TAN SLI-FOSS-OOL LS POOR φ - PTLY CKY -NS NO ODOR

30 MIN: WH- LT CRM CKY LS POOR φ NS NO ODOR, OOL LS P-F φ - NS

60 MIN: FLOOD LT CRM- WH FN-XLN CKY LS POOR φ NS NO ODOR

00 PRED WH OOL CKY LS POOR φ - NS NO ODOR - CKY

PULLED 25 STDS- TITE
PIPE STRAP = .02 LONG
S.H.T. = 1½°

10 WH- LT CRM SLI-FOSS CKY LS POOR φ NS, NO ODOR

DST#1 3800'-3823'
30-45-45-60
IF: BOB IN 7½ mins. 1" BB.
FF: BOB IN 9 mins. 5" BB.
REC: 378' GIP
320' CGO = 10% G, 90% O
63' MCGO = 10% M, 20% G, 70% O
63' O&GCM = 10% G, 10% O, 80% M
120' SO&GCW = 1% O, 5% G, 10% M, 85% W
566' TF, GRAV = 30 CHL = 35K
SIP: 955-942
IFP: 34-145 FFP: 158-264
TEMP: 116°

20 WH- LT CRM SLI-FOSS LS POOR φ NS NO ODOR, LOTS RED PEACH SHS
23) LS AA & 1 2 PCS, CRM OOL LS W/SCAT LT STN, NO ODOR

30 MIN: LOTS PCS CRM OOL LS W/ FAIR INTER-OOL φ W/SS LT BRN GFO FAIR ODOR 25 PCS TRAY W/ STN FEW FOSS φ W/ SSGFO

60 MIN: LESS OOL LS MORE FOSS W/ FAIR VUG φ W/SS LT GFO, GD ODOR

40) LT CRM SLI-FOSS LS POOR φ -NS & GRY- GRN SHS

30 MIN: LT CRM SLI-FOSS LS W/POOR FOSS φ FEW PCS 5 W/VSSLTFO, LT ODOR, SLI- CKY

60 MIN: 2 PCS W/LT STN FT ODOR INCR IN CKY

50 PRED WH SLI- FOSS CKY LS -NS

60 WH- LT CRM SLI-FOSS CKY LS POOR φ FEW SCAT LT STN

DST #2 3824-3843
30-30-30-30
IF: WK BUILT TO ¼"
FF: WK BUILT TO ¼"
REC: 15' OCM = 20% O, 80% M
SIP: 525-391
IFP: 15-22 FFP: 23-29
TEMP: 108°

70 LT CRM- V. FOSS LS FAIR FOSS φ W/ SS LTGFO, FAIR ODOR, FEW BLK SHS CLEAN φ

80 LOTS PCS LT TAN V. FOSS LS W/FAIR FOSS φ W/S-FSLTGFO, GD ODOR

85) LOTS PCS LT TAN FOSS LS W/ FAIR FOSS φ W/S-FSLTGFO, GD ODOR CLEAN φ NOT CKY

30 MIN: CRM- LT TAN FOSS LS W/ TINY FOSS- PPT φ W/SSLTGFO FAIR ODOR INC SLI CKY

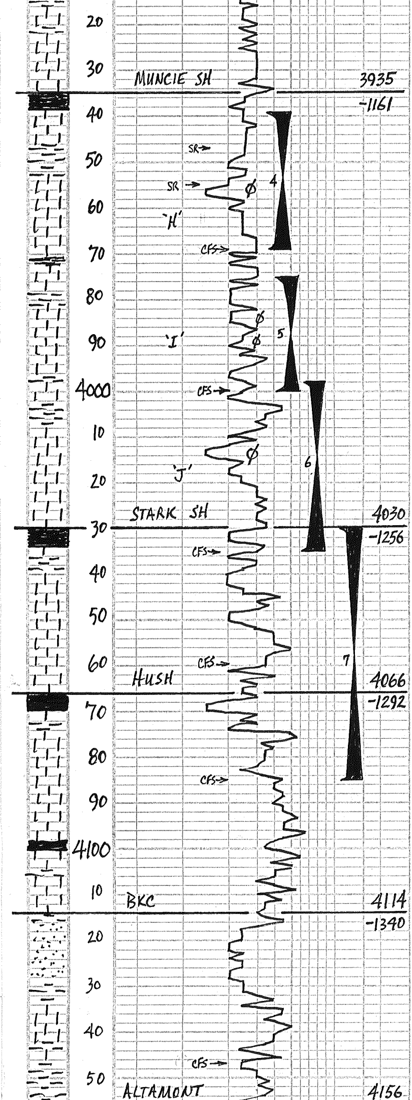
60 MIN: LOTS PCS LT TAN- CRM FOSS LS W/FAIR FOSS & PPT φ W/SSLTGFO FAIR ODOR ONLY SLI CKY

00 LOTS CRM LS W/ P-F SMALL FOSS φ W/SS LTGFO, FAIR ODOR, SLI CKY

10 LT CRM- WH FN-XLN LS DNSE-CKY FEW WH Δ - POOR φ - NS LT ODOR

DST#3 3857-3885
30-45-45-60
IF: BOB IN 6 mins. 6" B.B.
FF: BOB IN 5 mins. BOB 40 mins.
REC: 786' GIP
282' CGO = 5% G, 95% O
189' CGO = 10% G, 90% O
120' GO = 20% G, 80% O

20 LOTS PCS AA- SMALL FOSS W/SSLTFO FEW OOC LS W/ POOR φ - NS



30 FLOOD WH-LT CRM SLI-FOSS LS
POOR Ø DNSE-CKY-Δty-NS

40 WH-LT CRM-LT GRY FN-XLN LS
DNSE-CKY POOR Ø-NS NO ODOR

50 BLK SHS FEW LT GRY-GRN SH
LT GRY LS SLI-FOSS POOR Ø-NS

INC BLK SHS!
60 LT CRM-LT TAN SEMI-FOSS LS
W/P-F FOSS Ø FEW SAT STN,
SSLTGFO, LT-FAIR ODOR

69) LT CRM LT TAN FOSS LS W/P-F Ø
W/SSLTGFO, LT ODOR MEALY

30 MIN: LT CRM-LT TAN FOSS LS W/
FAIR FOSS Ø W/S-FSLTGFO, FAIR
ODOR, SLI Δty SOME BEST 'H' Ø
25+ PCS P.T. CLEAN!
60 MIN: LT CRM-V. LT GRY Δty FOSS
LS W/ FAIR Ø W/ SSLTGFO, LT ODOR
80 CRM-BUFF SLI-FOSS LS POOR Ø
NS LT ODOR
90 WH-LT CRM SLI-FOSS LS POOR Ø
NS LT ODOR

00) LT TAN SLI-FOSS LS POOR Ø
FEW W/ POOR VUG Ø W/VSSFO
LT ODOR LT GRY/GRN GUMBO SH
30 MIN: WH-LT CRM V. FOSS-TINY LS
W/ P-F TINY PPT-FOSS Ø W/SSLTGFO
STRO ODOR Δty-CKY
60 MIN: WH LT CRM FOSS LS W/P-F
FOSS Ø W/SSLTGFO STRO ODOR
10 LOTS Δty CKY PCS FOSS LS W/SSFO
STILL GD-STRO ODOR

20 LT TAN SMOOTH SKIN SLI-FOSS
LS W/ SCAT VUG Ø W/SSLTGFO
LT ODOR

30 LT CRM OOL-FOSS Δty LS FAIR FOSS
Ø FAIR AMT W/S-FSLTGFO, FAIR-GD
35) ODOR, SLI-CKY-CLEAN LOTS PCS 25+
OOL & FOSS LS W/FAIR FOSS Ø W/
FSLTGFO, FAIR ODOR O BARREN
30 MIN: NICE OOL-OOC-FOSS LS
W/ FAIR Ø W/S-FSLT BRNGFO FAIR ODOR
60 MIN: FEW PCS AA W/FSGFO
& LOTS BLK SHS

50 LT CRM-BUFF SEMI-FOSS LS W/P-F
FOSS Ø W/ SSLTGFO, LT ODOR
5 PCS W/SFO SLI CKY

60) LT CRM SLI-FOSS CKY LS FEW W/
SSLTGFO, LT-FAIR ODOR LOTS CKY
30 MIN: DECREASE IN LS AA-FEW
W/SSLTGFO LOTS CKY LT ODOR
60 MIN: LT TAN-BUFF, FLESH SLI-FOSS
CKY LS POOR Ø-NS NO ODOR, CKY

LT CRM-LT TAN SLI-FOSS LS POOR Ø
NS NO ODOR

80 PRED BLK SHS CRM-LT TAN SLI-FOSS
LS W/ POOR Ø-SCAT STN NO FO

85) LT CRM-LT TAN SLI-FOSS LS W/P-F
FOSS Ø W/SCAT STN & VS-SSLTFO
30 MIN: LS AA FEW 4 PCS W/VSSFO
LT-FAIR ODOR ON BRK
60 MIN: CRM-LT BUFF SLI-FOSS LS
DNSE-CKY POOR Ø-NS, SCAT STN
90 BUFF-V. LT GRY FN-XLN LS
POOR Ø-NS NO ODOR
00 BUFF-LT GRY FN-XLN LS
POOR Ø DNSE-NS NO ODOR

10 BUFF-LT GRY FN-XLN LS-NS
FEW DK GRY SHS

20 BUFF-FLESHY-LT TAN SEMI-FOSS LS
DNSE-MEALY POOR Ø-NS NO ODOR

30
LT TAN-BUFF SEMI-FOSS LS P-F Ø
NS NO ODOR DNSE-CKY

40 LT GRY-GRN SILTSTONE POOR Ø
SOFT NS NO ODOR

47) LT PEACH-V. LT BRN SILTSTONE-DIRTY
CKY-NS POOR Ø & LT CRM-LT PEACH
LS W/ POOR Ø-NS NO ODOR
30 MIN: LT CRM-WH SLI-FOSS LS
POOR Ø-NS, NO ODOR PTLY CKY
60 MIN: LT PEACH-CRM FN-XLN LS
POOR Ø-NS NO ODOR CKY
60 LT CRM-LT TAN FN-XLN LS POOR Ø
NS NO ODOR

591' TF GRAV. 37
SIP: 1170-1158
IFP: 22-116 FFP: 124-220
TEMP: 114°

DST #4 3939'-3969'
1008' GIP, 30-45-45-60
IF: BOB IN 6 MINS. 6" BB
FF: BOB IN 3 MINS. 9" BB
REC: 315' CGO = 5% G, 95% O
216' GCO = 20% G, 80% O
93' O & GCM = 15% G, 10% O, 75% M
624' TF GRAV. 36
SIP: 1173-1150
IFP: 42-132 FFP: 152-246
TEMP: 118°

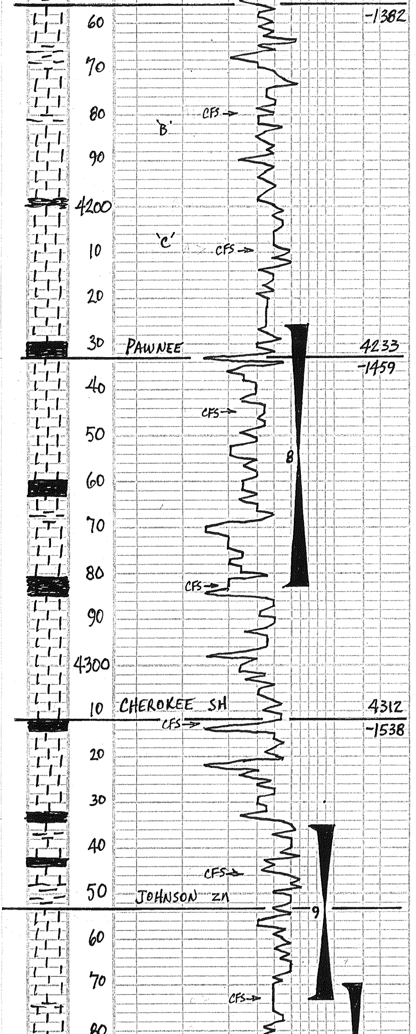
DST #5 3975-4000
30-30-30-30
IF: WK BUILT TO 1"
FF: NO BLOW-FLUSH
REC: 30' MUD + SO
SIP: 1117-1087
IFP: 15-28 FFP: 30-40
TEMP: 110°

DST #6 3998-4035'
30-45-45-60
IF: FAIR BUILT TO 10".
FF: FAIR BUILT TO 10½.
REC: 25' CO = 36° GRAV.
180' MW + SO = 40% M, 60% W
120' WTR = 100% W
325' TF CHL = 35,000
SIP: 618-605
IFP: 18-99 FFP: 102-160
TEMP: 117°

DST #7 4030-4085
30-30-30-30
IF: WK BUILT TO 1½"
FF: NO BLOW FLUSH ¼" BLOW
REC: 25' CGO = 5% G, 95% O
100' MUD + SO = 100% M
125' T.F.
SIP: 1155-1148
IFP: 17-43 FFP: 49-69
TEMP: 110°

ANOTHER TH-STORM .1" RAIN

VISC: 56
WT: 8.8
LCM: 3#



70 LT CRM - LT TAN FN-XLN LS POOR Ø
DNSE - CKY - NS NO ODOR
V. LT GRY GUMBO SHS

80) LS AA - NS & LOTS RED GUMBO
SHS
30 MIN: WH CKY LS POOR Ø - NS
NO ODOR
60 MIN: LT CRM - LT TAN FN-XLN
LS DNSE - CKY POOR Ø - NS NO ODOR
90 WH - LT GRY FN-XLN LS POOR Ø
NS NO ODOR FEW DK GRY SHS

SPLS JUNK LOTS
RED SHS

00 LT CRM - LT TAN SEMI-FOSS LS P-F Ø
NS NO ODOR

10) LT CRM - LT TAN SLI-FOSS LS POOR Ø
NS NO ODOR DNSE - CKY
30 MIN: WH - LT CRM FN-XLN LS
POOR Ø - NS, NO ODOR
60 MIN: LT TAN SLI-FOSS LS POOR Ø
NS NO ODOR DNSE - CKY
20 LT TAN SLI-FOSS LS POOR Ø - NS
NO ODOR DNSE

30 CRM SLI-FOSS LS, POOR Ø DNSE
NS NO ODOR

MUD CO. ✓
VISC: 58 FILT: 9.6 LCM: 2#
WT: 8.8 CHL: 7,000

40 LT CRM - LT TAN LS W/ SCAT FOSS-
VUG Ø FEW PCS 6 W/ SSLTFO LT ODOR
45) LOTS BLK SH LT TAN SLI-FOSS
LS W/ SCAT VUG Ø & SCAT STN
30 MIN: FAIR AMT LT CRM FOSS
LS W/ SCAT VUG Ø W/ SSLTFO
6 PCS W/ SFO + 10 W/ STN LT ODOR
60 MIN: LT CRM - LT TAN SLI-FOSS
LS W/ SCAT STN IN P-F VUG Ø
W/ SSFO LT ODOR CKY & ΔTY.
60 WH - LT CRM SLI-FOSS CKY LS
POOR Ø - NS NO ODOR, ΔTY

DST #8 4226-4283
30-45-45-60
IF: SLOW BUILT TO 8"
FF: BOB IN 30 MINS
REC: 5' CO
63' HOCM = 30% O, 70% M
63' O&GCM = 10% G, 20% O, 70% M
131' T.F.
SIP: 1137-1140
IFP: 19-47 FFP: 46-69
TEMP: 116°

FEW SLUFF PCS W/ S-FSGFO
70 LOTS GRY ΔTY LS & BLK SHS
CRM - LS W/ POOR Ø - NS NO ODOR

80) RED GRY-GRN - BLK SHS, LT TAN
SLI-FOSS LS W/ POOR Ø - NS

30 MIN: FEW LT TAN SEMI-FOSS LS
W/ SAT STN, VSSLTFO, LT ODOR

60 MIN: LT TAN FOSS LS W/ FAIR
FOSS Ø W/ FS BRNGFO FAIR ODOR
LOTS PCS SAT STN SLI-CKY
DK GRY BLK SHS

00 BLK SHS & TAN - BUFF OOL LS
POOR Ø - NS NO ODOR

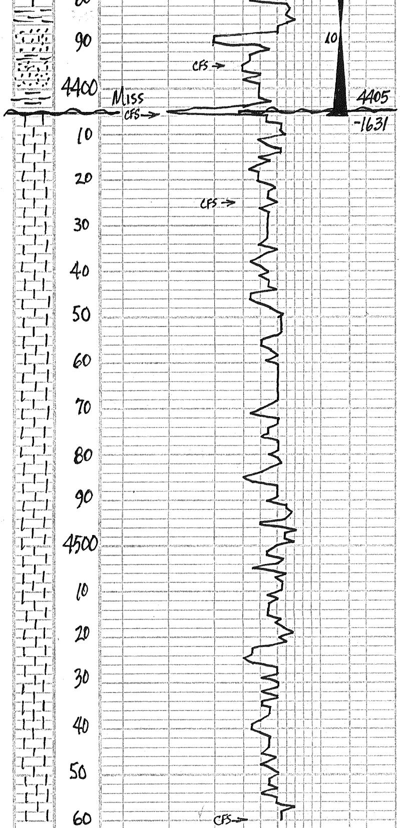
10 WH - LT BUFF SLI-FOSS LS POOR Ø
NS NO ODOR
13) LT BUFF WH SLI-FOSS LS POOR Ø
DNSE - CKY - NS, NO ODOR
30 MIN: LOTS WH - LT CRM SLI-FOSS
LS POOR Ø - NS NO ODOR
60 MIN: FLOOD BLK CRUMBLY SH
20 LT CRM - LT TAN SEMI-FOSS LS W/ P-
F FOSS Ø W/ SSLTGFO, LT ODOR
30 LT TAN FLESH FN-XLN DNSE LS
POOR Ø - NS NO ODOR

40 LT CRM - LT TAN SLI-FOSS LS
POOR Ø 3 PCS W/ SSLGFO LT ODOR
46) LT CRM - BUFF SLI-FOSS LS
W/ P-F Ø 3 PCS W/ SSLGFO, LT ODOR
30 MIN: CRM - TAN FOSS LS W/
P-F VUG Ø W/ SS DKFO LT ODOR
60 MIN: LT CRM LT TAN SLI-FOSS
LS POOR Ø - NS NO ODOR
LOTS DK GRY BLK SHS
60 LT TAN, OOL LS W/ P-F INTER-OOL
Ø W/ SSLTGFO, FT ODOR

DST #9 4335-4373
30-45-45-60
IF: BOB IN 9 MINS
FF: BOB IN 1 MIN. NO BB.
REC: 1512' GIP
63' G&OCM = 10% G, 10% O, 80% M
63' GMO = 30% G, 30% O, 40% M
126 T.F.
SIP: 183-184
IFP: 19-43 FFP: 27-56
TEMP: 117°

70 TAN FOSS LS W/ FAIR SMAL & LGE
VUG Ø W/ FS DK BR FO, STRO ODOR
73) HARD LS PTLY ΔTY CLEAN ROCKS
30 MIN: LS AA W/ FS DK BR GFO
FEW SAT STN, STRO ODOR, SCPOP.
60 MIN: LT TAN LS W/ SCAT FOSS
Ø W/ SS DK BRN FO, STRO ODOR
80 LT CRM - LT TAN SEMI-FOSS LS
W/ FAIR SMALL FOSS Ø W/ SS DKGFO

DST #10 4370'-4406'



90 FAIR AMT LT TAN SMALL FOSS LS, W/SSDKGFO, STRO ODOR, CLEAN Ø

95) 4 CLUST FN GR SST TIGHT-HARD W/SSDKFO, SPL-STRO ODOR

30 MIN: INC GRY SST W/POOR Ø W/S-FSDKGFO, HARD TIGHT, STRO ODOR

60 MIN: 10 CLUST FN-GR SST W/POOR Ø W/S-FSDKFO, FAIR ODOR ON BRK & FEW GRN SHS TRACE SHARP Δ-NS

00 LT GRY FN-GR SST 50% W/SSDKFO 50% CKY DIRTY MATRIX-NS

06) GRY SST AA 50% W/SSDKFO INC GRY SHARP Δ-NS

30 MIN: FEW SST-DIRTY CKY FEW GOLD SHS INC LTCRM LS-NS

60 MIN: SST AA & LT CRM-LT TAN SLI-FOSS LS-NS

20 LT YELL-DIRTY GOLD SDY LS MOST CKY-DIRTY-NS

25) LT CRM-YELL-FLESH SPY-MICRO-OOL CKY LS POOR Ø-NS NO ODOR

30 MIN: LT TAN BUFF SLI-FOSS LS PARTLY SDY-MICRO-OOL-NS

60 MIN: LT TAN-BUFF-FLESH SLI-FOSS LS POOR Ø-NS NO ODOR

40 LT TAN-BUFF SLI-FOSS LS POOR Ø NS NO ODOR DNSE-SLI-CKY

50 LT TAN SLI-FOSS LS POOR Ø DNSE-SLI-CKY-NS NO ODOR

60 MOSTLY GRY-GRN-BRN SILTY SHS

70 WH-LT CRM MICRO-OOL LS POOR Ø-NS NO ODOR

80 SPL 90% GRY-GRN SHS LS AA NS NO ODOR

90 SPL 90% GRY-GRN EARTHY SHS FEW CRM LS-NS

00 FEW WH-LT CRM SLI-FOSS LS POOR Ø-NS NO ODOR

10 LT CRM-LT TAN SLI-FOSS LS POOR Ø-NS NO ODOR

20 LT CRM-LT TAN FN-XLN LS POOR Ø-NS NO ODOR

30 LT CRM-LT TAN MICRO-OOL LS POOR Ø-NS NO ODOR

40 WH-LT CRM SLI-FOSS OOL LS POOR Ø-NS FEW SEMI-DOLO SUCR XLN FAIR Ø-NS

50 WH-LT CRM OOL LS PTLY CKY NS NO ODOR

60 FLOOD LT TAN SEMI-FOSS-OOL LS POOR Ø-NS

30 MIN: WH-LT TAN CKY LS-NS

S.H.T. @ ∡ = 1¼°

30-45-45-60
IF: SLOW BUILD TO 4½"
FF: BUILT TO 7". NO BB
REC: 219' GIP
30' CO' = 31° GRAV.
63' HO&GCM = 5% G, 25% O, 70% M
93' T.F.
SIP: 930-919
IFP: 18-26 FFP: 30-40
TEMP: 116°

← ADDING PRE-MIX

← VISC: 50
WT: 8.8
LCM: 2#

SPLS VERY POOR

LOADING PRE-MIX

ADDING PRE-MIX

SPLS IMPROVING

RTD 4560

LTD 4559