

Scale 1:240 Imperial

Well Name: ORGAN #17-1
Surface Location: SE NE SE NW SECTION 17 - 6S - 25W
Bottom Location:
API: 15-065-24122
License Number: 33335
Spud Date: 10/31/2016 Time: 12:00 AM
Region: GRAHAM COUNTY KANSAS
Drilling Completed: 11/6/2016 Time: 5:12 AM
Surface Coordinates: 1932' FNL & 2562' FWL
Bottom Hole Coordinates:
Ground Elevation: 2562.00ft
K.B. Elevation: 2570.00ft
Logged Interval: 3350.00ft To: 3918.00ft
Total Depth: 3919.00ft
Formation: LANSING - KANSAS CITY
Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

OPERATOR

Company: IA OPERATING, INC.
Address: 9915 W 21ST STREET
SUITE B
WICHITA, KS 67205
Contact Geologist: JONATHAN ALLEN
Contact Phone Nbr: (316) 721-0036
Well Name: ORGAN #17-1
Location: SE NE SE NW SECTION 17 - 6S - 25W
API: 15-065-24122
Pool: State: KANSAS Field: WILDCAT
Country: USA

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -100.1344235
Latitude: 39-5325632
N/S Co-ord: 1932' FNL
E/W Co-ord: 2562' FWL

LOGGED BY



Company: BIG CREEK CONSULTING, INC.
Address: 1909 MAPLE
ELLIS, KS 67637
Phone Nbr: (785) 259-3737
Logged By: GEOLOGIST Name: JEFF LAWLER / STEVE REED

CONTRACTOR

Contractor: DISCOVERY DRILLING
Rig #: 2
Rig Type: MUD ROTARY
Spud Date: 10/31/2016 Time: 12:00 AM
TD Date: 11/6/2016 Time: 5:12 AM
Rig Release: 11/7/2016 Time: 12:00 PM

ELEVATIONS

K.B. Elevation: 2570.00ft
K.B. to Ground: 8.00ft

Ground Elevation: 2562.00ft

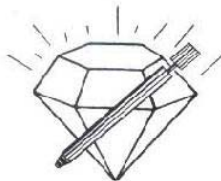
NOTES

BASED ON POSITIVE RESULTS OF DST #1 AND WELL LOG ANALYSIS THE DECISION WAS MADE TO SET 5.5" #15 CASING TO FURTHER TEST WELL POTENTIAL.

DRILL STEM TESTING PERFORMED BY DIAMOND TESTERS:
TWO (2) TESTS WERE COMPLETED

GEOPHYSICAL WELL LOGGING PERFORMED BY ELI WIRELINE:
COMPENSATED DENSITY/NEUTRON, DUAL INDUCTION, MICRO, AND SONIC LOGS WERE COMPLETED

| FORMATION | ORGAN 17-1 | | | | N2 S2 SE NE 18-6-25 | | | | NE NE NE 17-6-25 | | | | SE NW NW NW 22-6-25 | | | | NE NW SE 17-6-25 | | | | | | | | | | | | | |
|---------------|------------|-------|-------------|-------|---------------------|-------|-------|-------|------------------|-------|-------|-------|---------------------|-------|-------|-------|------------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-------|-------|
| | KB | | 2570 | | GL | | 2562 | | KB | | 2583 | | KB | | 2582 | | KB | | 2591 | | KB | | 2582 | | | | | | | |
| | LOG TOPS | | SAMPLE TOPS | | LOG | | LOG | | SMPL. | | LOGS | | LOG | | SMPL. | | LOGS | | LOG | | SMPL. | | COMP. CARD | | LOG | | SMPL. | | | |
| | DEPTH | DATUM | DEPTH | DATUM | DEPTH | DATUM | DEPTH | DATUM | CORR. | CORR. | DEPTH | DATUM | CORR. | CORR. | DEPTH | DATUM | CORR. | CORR. | DEPTH | DATUM | CORR. | CORR. | DEPTH | DATUM | CORR. | CORR. | DEPTH | DATUM | CORR. | CORR. |
| ANHYDRITE TOP | 2152 | 418 | 2154 | 416 | 2167 | 416 | | | + 0 | 2166 | 416 | | | + 0 | 2177 | 414 | | | + 2 | 2167 | 415 | | | + 1 | | | | | | |
| BASE | 2184 | 386 | 2186 | 384 | 2199 | 384 | | | + 0 | | | | | | 2209 | 382 | | | + 4 | + 2 | 2198 | 384 | | | + 2 | + 0 | | | | |
| TOPEKA | 3463 | -893 | 3467 | -897 | 3472 | -889 | | | - 8 | | | | | | 3462 | -871 | | | - 22 | - 26 | 3440 | -858 | | | - 35 | - 39 | | | | |
| HEEBNER SHALE | 3620 | -1050 | 3620 | -1050 | 3628 | -1045 | | | - 5 | - 5 | 3642 | -1060 | | | + 10 | + 10 | 3667 | -1076 | | | + 26 | + 26 | 3646 | -1064 | | | + 14 | + 14 | | |
| TORONTO | 3640 | -1070 | 3640 | -1070 | 3650 | -1067 | | | - 3 | - 3 | | | | | | | 3691 | -1100 | | | + 30 | + 30 | 3668 | -1086 | | | + 16 | + 16 | | |
| LKC | 3658 | -1088 | 3660 | -1090 | 3667 | -1084 | | | - 4 | - 6 | 3680 | -1098 | | | + 10 | + 8 | 3706 | -1115 | | | + 27 | + 25 | 3684 | -1102 | | | + 14 | + 12 | | |
| BKC | 3846 | -1276 | 3848 | -1278 | 3852 | -1269 | | | - 7 | - 9 | 3867 | -1285 | | | + 9 | + 7 | 3893 | -1302 | | | + 26 | + 24 | 3867 | -1285 | | | + 9 | + 7 | | |
| TOTAL DEPTH | 3918 | -1348 | 3919 | -1349 | 3903 | -1320 | | | - 28 | - 29 | 3883 | -1301 | | | - 47 | - 48 | 3975 | -1384 | | | + 36 | + 35 | 3867 | -1285 | | | - 63 | - 64 | | |



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: ORGAN#17-1DST#1

TIME ON: 2055 11-4
TIME OFF: 0355 11-5

Company IA OPERATING Lease & Well No. ORGAN #17-1

Contractor DISCOVERY DRLG RIG 2 Charge to IA OPERATING

Elevation 2570KB Formation LANS B-G Effective Pay _____ Ft. Ticket No. P0141

Date 11-4-16 Sec. 17 Twp. 6 S Range 25 W County GRAHAM State KANSAS

Test Approved By STEVE REED Diamond Representative Michael Carroll

Formation Test No. 1 Interval Tested from 3666 ft. to 3738 ft. Total Depth 3738 ft.

Packer Depth 3661 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 3666 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3651 ft. Recorder Number 5950 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 3703 ft. Recorder Number 0230 Cap. 5000 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 55 Drill Collar Length 0 ft. I.D. 2 1/4 in.

Weight 9.0 Water Loss 7.2 cc. Weight Pipe Length 249 ft. I.D. 2 7/8 in.

Chlorides 900 P.P.M. Drill Pipe Length 3384 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number 11 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 72(40.5A) ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: (TOOL SLID 3' TO BOTTOM) 1" BLOW-BUILT TO 5" IN 30 MINUTES **NOBB**

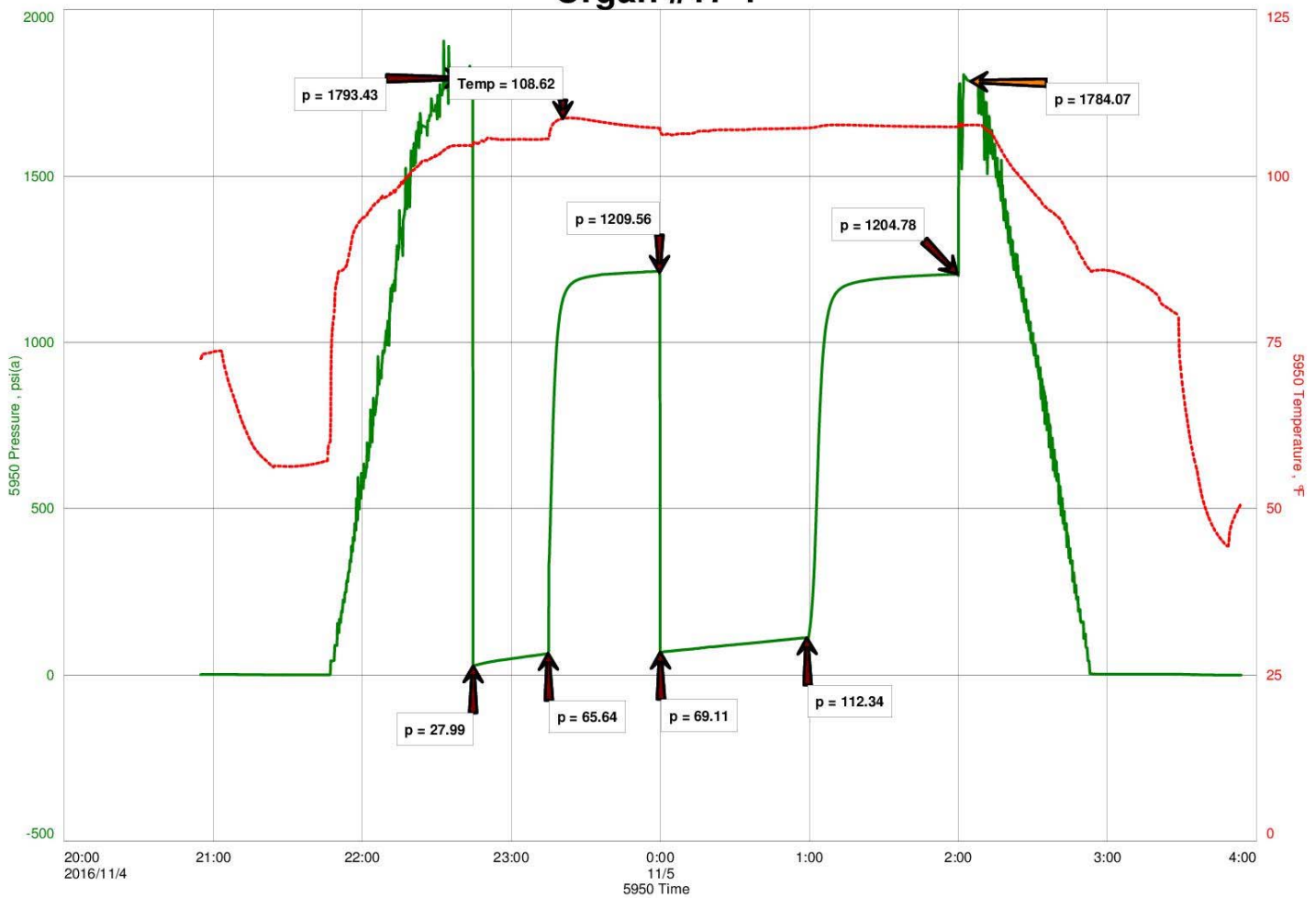
2nd Open: NO BLOW-BUILT TO 11" IN 60 MINUTES **NOBB**

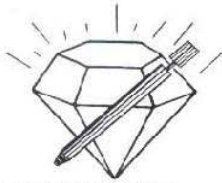
| | | | |
|-----------|-----------------------------|---------------------|---------------------|
| Recovered | 30 ft. of | GAS IN PIPE | CHLORIDES 20000 PPM |
| Recovered | 30 ft. of | HOCM 40%O 60%M | RW .4 @ 60 DEGREES |
| Recovered | 63 ft. of | OCM 35%O 65%M | PH 7 |
| Recovered | 127 ft. of | GCOCM 4%G 28%O 68%M | |
| Recovered | 220 ft. of | TOTAL FLUID | Price Job |
| Recovered | ft. of | | Other Charges |
| Remarks: | TOOL SAMPLE: 30%O 25%W 45%M | | Insurance |
| | | | Total |

| | | | | | | | |
|------------------------------|------------|--------------|-------------------------|-----------|---------------|---------------------|------------|
| Time Set Packer(s) | 10:45 P.M. | A.M. P.M. | Time Started Off Bottom | 2:00 A.M. | A.M. P.M. | Maximum Temperature | 109 |
| Initial Hydrostatic Pressure | | | (A) | 1793 | P.S.I. | | |
| Initial Flow Period | Minutes | 30 | (B) | 28 | P.S.I. to (C) | | 66 P.S.I. |
| Initial Closed In Period | Minutes | 45 | (D) | 1210 | P.S.I. | | |
| Final Flow Period | Minutes | 60 | (E) | 69 | P.S.I. to (F) | | 112 P.S.I. |
| Final Closed In Period | Minutes | 60 | (G) | 1205 | P.S.I. | | |
| Final Hydrostatic Pressure | | | (H) | 1784 | P.S.I. | | |

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Organ #17-1





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: ORGAN#17-1DST#2

TIME ON: 1610
TIME OFF: 2120

Company IA OPERATING Lease & Well No. ORGAN #17-1
Contractor DISCOVERY DRLG RIG 2 Charge to IA OPERATING
Elevation 2570KB Formation LANS/KC H-K Effective Pay _____ Ft. Ticket No. P0142
Date 11-5-16 Sec. 17 Twp. _____ 6 S Range _____ 25 W County GRAHAM State KANSAS
Test Approved By STEVE REED Diamond Representative Michael Carroll

Formation Test No. 2 Interval Tested from 3758 ft. to 3820 ft. Total Depth 3820 ft.
Packer Depth 3753 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3758 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3743 ft. Recorder Number 5950 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3795 ft. Recorder Number 0230 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 49 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 7.4 cc. Weight Pipe Length 249 ft. I.D. 2 7/8 in.
Chlorides 1100 P.P.M. Drill Pipe Length 3481 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number NA Test Tool Length 28 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 62(30.5A) ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/4" BLOW-BUILT TO 1" IN 30 MINUTES NOBB
2nd Open: NO BLOW-BUILT TO 1/4" IN 30 MINUTES NOBB

Recovered 30 ft. of OCM 35%O 65%M
Recovered 30 ft. of TOTAL FLUID
Recovered _____ ft. of _____
Recovered _____ ft. of _____

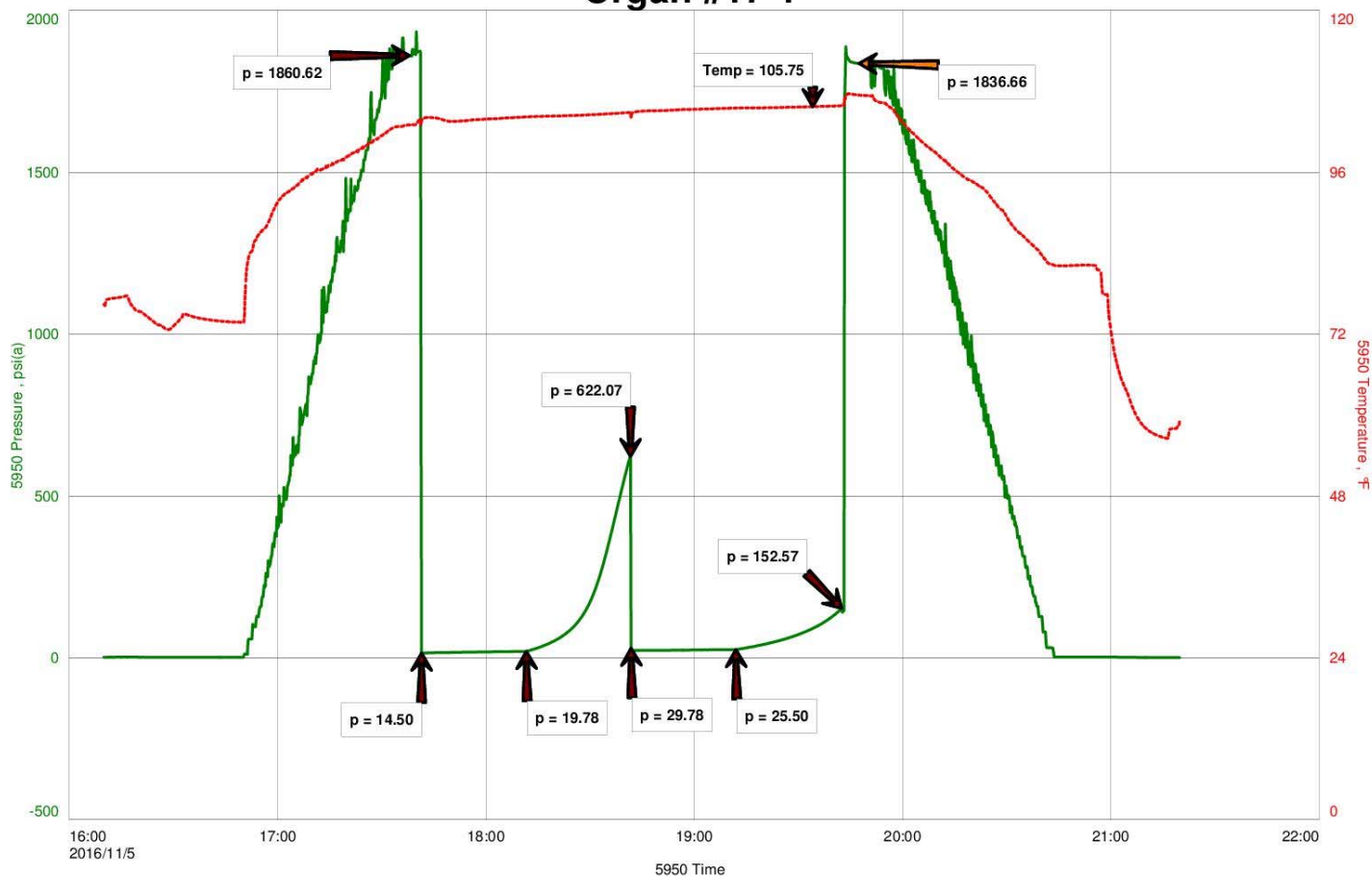
| | |
|--|---------------|
| Recovered _____ ft. of _____ | Price Job |
| Recovered _____ ft. of _____ | Other Charges |
| Remarks: <u>TOOL SAMPLE: 48%O 52%M</u> | Insurance |
| _____ | Total |

Time Set Packer(s) 5:40 P.M. ^{A.M.}/_{P.M.} Time Started Off Bottom 7:40 P.M. ^{A.M.}/_{P.M.} Maximum Temperature 106

Initial Hydrostatic Pressure..... (A) 1861 P.S.I.
Initial Flow Period..... Minutes 30 (B) 15 P.S.I. to (C) 20 P.S.I.
Initial Closed In Period..... Minutes 30 (D) 622 P.S.I.
Final Flow Period..... Minutes 30 (E) 30 P.S.I. to (F) 26 P.S.I.
Final Closed In Period..... Minutes 30 (G) 153 P.S.I.
Final Hydrostatic Pressure..... (H) 1837 P.S.I.

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Organ #17-1



C:\Users\Owner\Desktop\DRILLSTEM TEST\2014\ORGAN#17-1\DST#2.FKT 05-Nov-16 Ver



ROCK TYPES

- Cht
- Lmst fw7>
- shale, gry
- shale, red
- Lmst fw<7
- shale, grn
- Carbon Sh

ACCESSORIES

- | | | | |
|----------------------------|--|--|----------------------------|
| MINERAL P Pyrite | FOSSIL F Fossils < 20% O Oolite O Oomoldic | STRINGER ~ Chert Sandstone red shale | TEXTURE C Chalky |
|----------------------------|--|--|----------------------------|

OTHER SYMBOLS

- DST**
- DST Int
 - DST alt

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

| Curve Track #1 | Depth Intervals | DST | Lithology | Oil Show | Geological Descriptions | Curve Track #3 |
|---|--------------------------------|-----|-----------|----------|-------------------------|----------------|
| ROP (min/ft) — Gamma (API) — Cal (in) - - - | Cored Interval DST Interval | | | | | |
| 1:240 Imperial | | | | | | 1:240 Imperial |

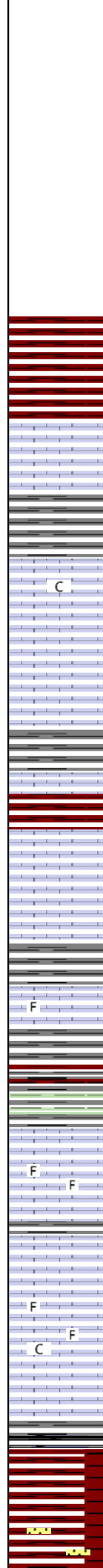
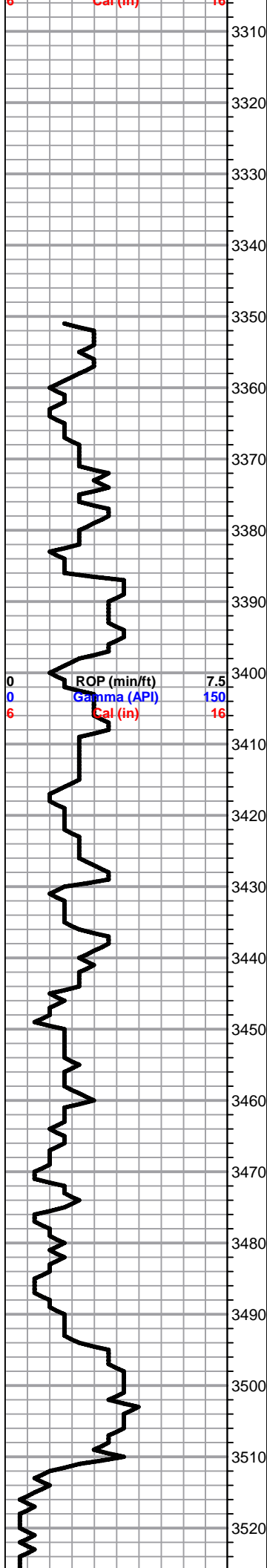
1' DRILL TIME THROUGH ANHYDRITE FROM 2130' - 2210'

1' DRILL TIME FROM 3350' - RTD
10' WET/DRY SAMPLES FROM 3400' -RTD

GEOLOGICAL SUPERVISION BY JEFF LAWLER/STEVE REED
FROM 3400' - RTD

8 5/8" SURFACE PIPE SET @ 295' SURVEY

ANHYDRITE TOP 2154' (+4116) E-LOG 2152' (+418)
ANHYDRITE BASE 2186' (+384) E-LOG 2184' (+386)



Lm - light gray, vfxln, dense, slightly chalky

Lm - cream-light brown, mostly fnxln with scattered interxn porosity, brittle, crumbles on crush

Lm - cream, fine interparticle porosity, bedded chalk in part

Sh - maroon, soft, blocky

Lm - cream-light brown, vfxln, dense, hard

Lm - off white, slightly granular, well cemented, dense, slightly chalky

Lm - cream, fnxln, clastic fossils, interclastic porosity, dense, hard, chalky in part

Sh - dark gray, green, maroon, soft, gritty, waxy, pyrite clusters

TOPEKA 3467' (-897) E-LOG 3463' (-893)

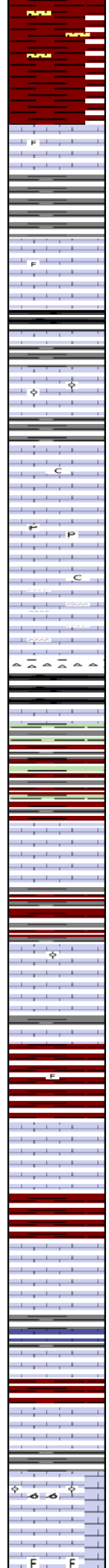
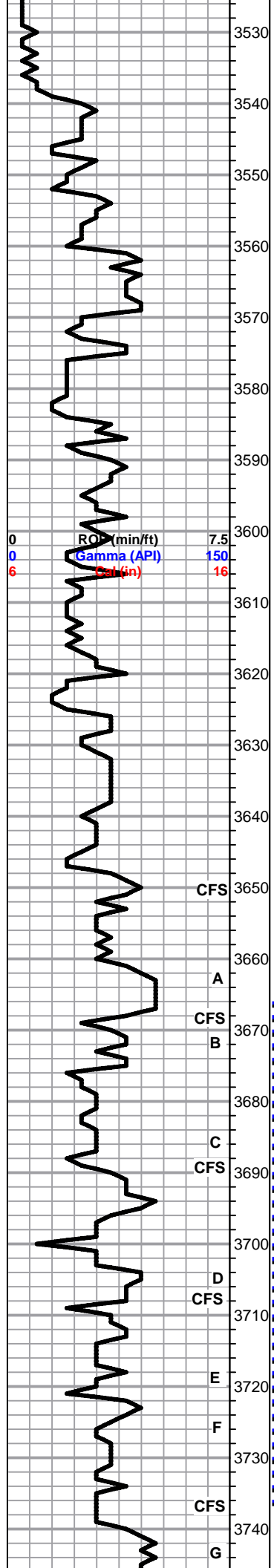
Lm - cream-light brown, fnxln, dense, brittle, slightly fossiliferous

Lm - cream-offwhite, vfxln, dense, slightly fossiliferous, clean and barren, light brown chert, slightly chalky in some

Sh - black carbonaceous with gray, maroon, soft, gritty

Sh - maroon, soft, blocky, silty

Ss - light brown, very fine grained, moderately cemented, well sorted, angular to rounded pebbles



rounded, no shows

Sh - maroon, soft, blocky, silty, sticky forming red wash, some maroon sand clusters

Lm - cream, well cemented, clastic fossils, dense, well cemented, hard

Lm - cream-off white, vfxln, slightly fossiliferous, scattered secondary recrystallization, dense, very hard

Sh - black carbonaceous, waxy, silty, with bronze specks

Lm - cream-buff, fnxln, slightly oolitic, dense, hard

Lm - cream-off white, vfxln, dense, hard, light gray chert, white sticky chalk

Lm - A/A, with pyrite clusters

Lm - cream, vfxln, sharp, brittle, bedded chalk in part, cherty

HEEBNER 3620' (-1050) E-LOG 3620' (-1050)

Sh - black carbonaceous, firm, waxy

Sh - greenish gray / maroon, soft, blocky

TORONTO 3640' (-1070) E-LOG 3640' (-1070)

Lm - cream-buff, fnxln, slightly oolitic in some, limited development, white sticky chalk, no shows

Sh - dark gray, maroon, firm, waxy

LKC 3660' (-1090) E-LOG 3658' (-1088)

Lm - cream-off white, fnxln, slightly oolitic, poor development, no shows

Lm - cream, vfxln, dense, clean, bright, no shows

Lm - cream-buff, fossiliferous, limited development, no shows

Sh - maroon, soft, sticky clumps

Lm - cream-tan, fnxln, scattered ppt porosity, scattered oil stain, slightly vuggy with specks of free oil, no odor

Sh - maroon, firm, some soft forming sticky clumps

Lm - cream, fnxln, fine ppt porosity, scattered light golden brown stain, no odor, moderate streaming wet cut under UV

Lm - cream-tan, vfxln, dense, hard, clean and barren

Sh - maroon-medium brown, firm, blocky

Lm - cream-light brown, medxln, slightly oolitic, scattered to saturated light brown staining, strong odor, FO in some

Lm - cream, oolitic/oomoldic, fine interoolitic porosity with scattered light brown stain, fair odor, scattered vugs, good streaming wet cut under UV

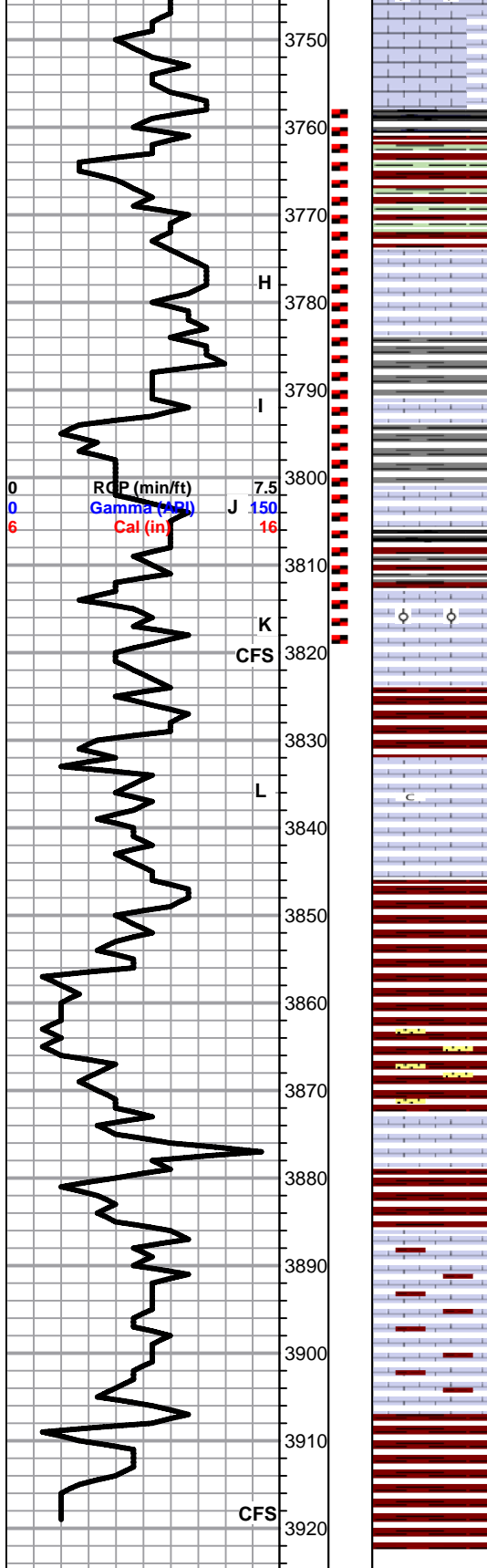
Lm - cream-off white, vfxln, slightly fossiliferous, dense, hard, pyrite clusters

SHORT TRIP
SURVEY 3/4 dgr
strap 3.13 short

DST#1 LKC B-G
3666'-3738'
30-45-60-60

220' total fluid
30' GIP
30' HOCM
(40%O, 60%M)
63' OCM
(35%O, 65%M)
127' GCOCM
(4%G, 28%O,
68%M)

IFP: 28-66#
FFP: 69-112#
SIP: 1210-1204#



Lm - buff, vfxln, some secondary recrystallization, clean and barren, white chert, pyrite

Lm - cream-tan, vfxln, dense, hard, cherty

Sh - black, maroon, green, firm, waxy

Lm - medium brown, vfxln, dense, some with clastic inclusions, no shows

Lm - cream-bone white, vfxln, dense, cherty

Sh - medium gray, soft, silty

Lm - cream, vfxln, dense, hard, no shows

Lm - cream-tan, vfxln, dense, poorly developed, no shows

Sh - medium gray/maroon, soft, blocky

Lm - cream-light brown, oolitic, scattered vuggy porosity, limited total porosity, scattered light brown staining, SFO upon crush, no odor, good streaming wet cut

Lm - buff, vfxln, dense, hard, no shows

Sh - maroon, firm, blocky

Lm - cream-tan, vfxln, limited total porosity, clean and barren, chalky in part

Lm - cream, vfxln, clean and sharp, dense, hard

BKC 3848' (-1278) E-LOG 3846' (-1276)

Sh - reddish brown-medium gray, firm, waxy

Sh - maroon, firm, some soft forming sticky clumps
 Ss - maroon clusters, very fine grained, loosely cemented, friable, well sorted

Lm - cream-buff, vfxln, dense, very hard, clean and barren

Sh - reddish brown, firm, blocky, waxy

Lm - buff, granular, well cemented, no shows

Lm - A/A, with abundant sticky red shale

Sh - orangish red, soft, sticky clumps

Sh - A/A, consuming red wash

RTD 3919' (-1349) LTD 3918'

DST#2 LKC G-K
 3758-3820'
 30-30-30-30

30' total fluid
 30' OCM
 (35%O,65%M)

IFP: 15-20#
 FFP: 30-26#
 SIP: 622-152#

TD SURVEY
 1/4 dgr