

Geologic Report

Aaron L. Young

Drilling Time and Sample Log

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: States #1-33
 Well Id:
 Location: Section 33 - T6S - R20W
 License Number: API: 15-163-24235
 Spud Date: 7 / 8 / 2014
 Surface Coordinates: 330' FNL and 2310' FWL
 Approx. NE - NE - NW
 Bottom Hole Coordinates:
 Ground Elevation (ft): 2225' K.B. Elevation (ft): 2230'
 Logged Interval (ft): 3300' To: 3770' Total Depth (ft): 3770'
 Formation: Arbuckle
 Type of Drilling Fluid: Chemical - Mud-Co
 Region: Rooks Co., KS
 Drilling Completed: 7 / 15 / 2014
 Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Trek AEC, LLC
 Address: 155 N Market, Suite 710
 Wichita, KS 67202

GEOLOGIST

Name: Aaron L. Young
 Company: Young Consulting LLC
 Address: 155 N. Market, Suite 710
 Wichita, Kansas 67202

General Info

CONTRACTOR: WW Drilling, Rig #6

BIT RECORD:

| No. | Size | Make | Jets | Out | Feet | Hours |
|-----|--------|-----------|----------|------|------|-------|
| 1 | 12-1/4 | Smith | 14-14-15 | 259 | 254 | 2.5 |
| 2 | 7-7/8 | Smith F27 | 14-14-15 | 4770 | 4516 | 66.25 |

SURVEYS: 259' - 3459' - 1 3/4

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 35,000 lbs. on bit and approx 85 RPM.
 Running 7 stands of collars; 422.35'
 Pumping approx 800-900 psi at standpipe.

Daily Status

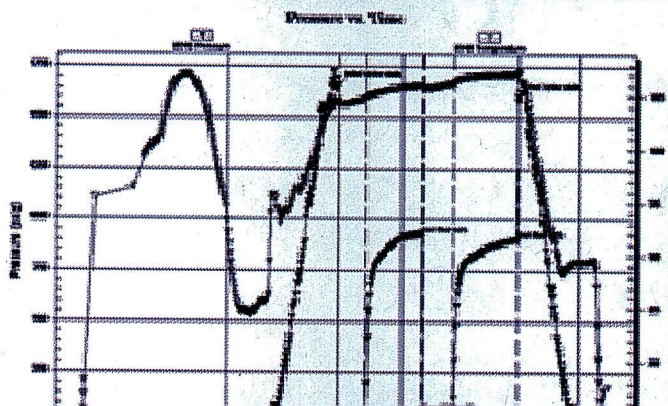
7/08/14 - Spud
 7/09/14 - Drilling @ 535'
 7/10/14 - Drilling @ 2265'
 7/11/14 - DST #1 3405'-3459'
 7/12/14 - DST #2 3472'-3498'
 7/13/14 - DST #3 3510'-3551', DST #2 3605'-3642'
 7/14/14 - DST #5 3676'-3710'
 7/15/14 - DST #4 3592'-3618'
 7/16/14 - DST #5 3524'-3654', Log and Set Casing

DST #1 Toronto & LCK 'A' 3,405'-3,459'
 30"-60"-30"-60"

IF: 1/2" blow
 ISI: No return
 FF: Surface blow
 FSI: No return

Rec': 75' Mud w/ oil spots

SIP: 929-906; FP: 35-55, 60-77; HP: 1663-1606

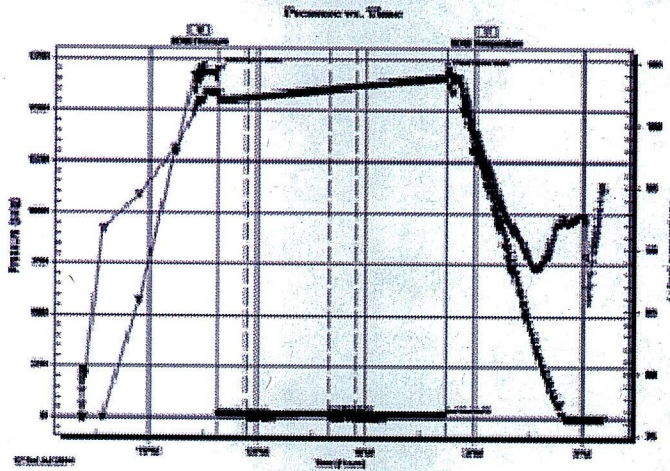


DST #2 LKC 'C' 3,472'-3,498'
15"-45"-15"-45"

IF: Surface blow, died in 9 min
ISI: No return
FF: No blow
FSI: No return

Rec': 1' Mud

SIP: 23-21; FP: 16-17, 16-17; HP: 1692-1697

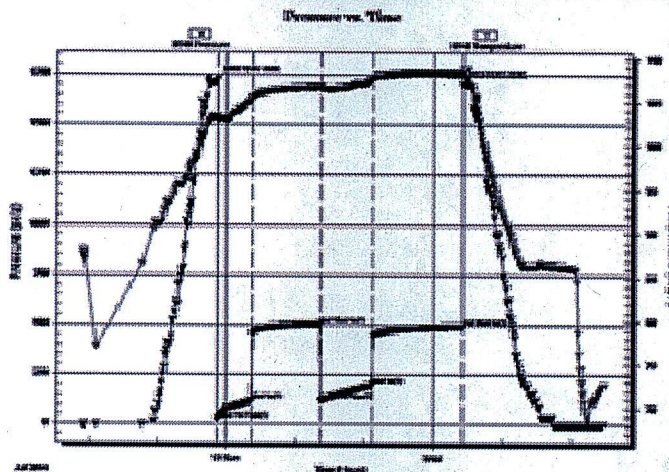


DST #3 LKC 'E', 'F', & 'G' 3,510'-3,551'
30"-60"-45"-75"

IF: BOB in 18 min
ISI: No return
FF: 8.5" blow
FSI: No return

Rec': 62' SOCWM (5% W, 10% O, 85% M), 310'
VSOCMW (5% O, 40% M, 55% W), 62' WM (30% W,
70% M), 1' Free Oil

SIP: 505-494; FP: 23-119, 122-198; HP: 1725-1701

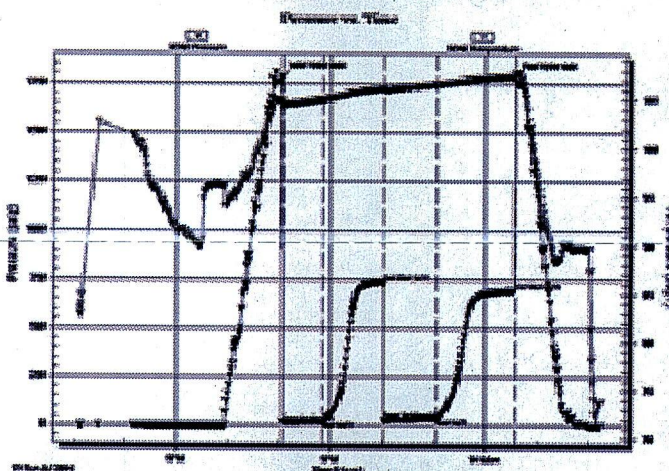


DST #4 LKC 'J' & 'K' 3,605'-3,642'
45"-75"-60"-90"

IF: 1 1/2" blow
ISI: No return
FF: 3/4" blow
FSI: No return

Rec': 45' HOCM (50% O, 50% M), 15' GO (5% G, 95%
O)

SIP: 741-696; FP: 18-26, 28-40; HP 1788-1788

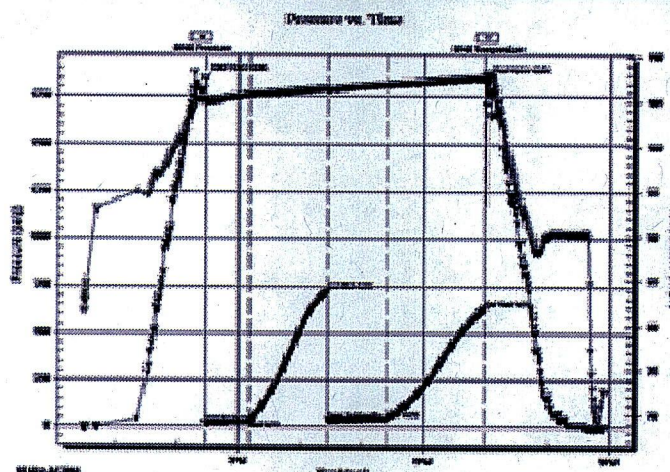


DST #5 Arbuckle 3,676'-3,710'
45"-75"-60"-90"

IF: 1" blow
ISI: No return
FF: 1/4" blow
FSI: No return

Rec': 40' OCM (20% O, 80% M), 30' Free Oil

SIP726-634, FP: 21-34, 40-47; HP: 1846-1840



ROCK TYPES

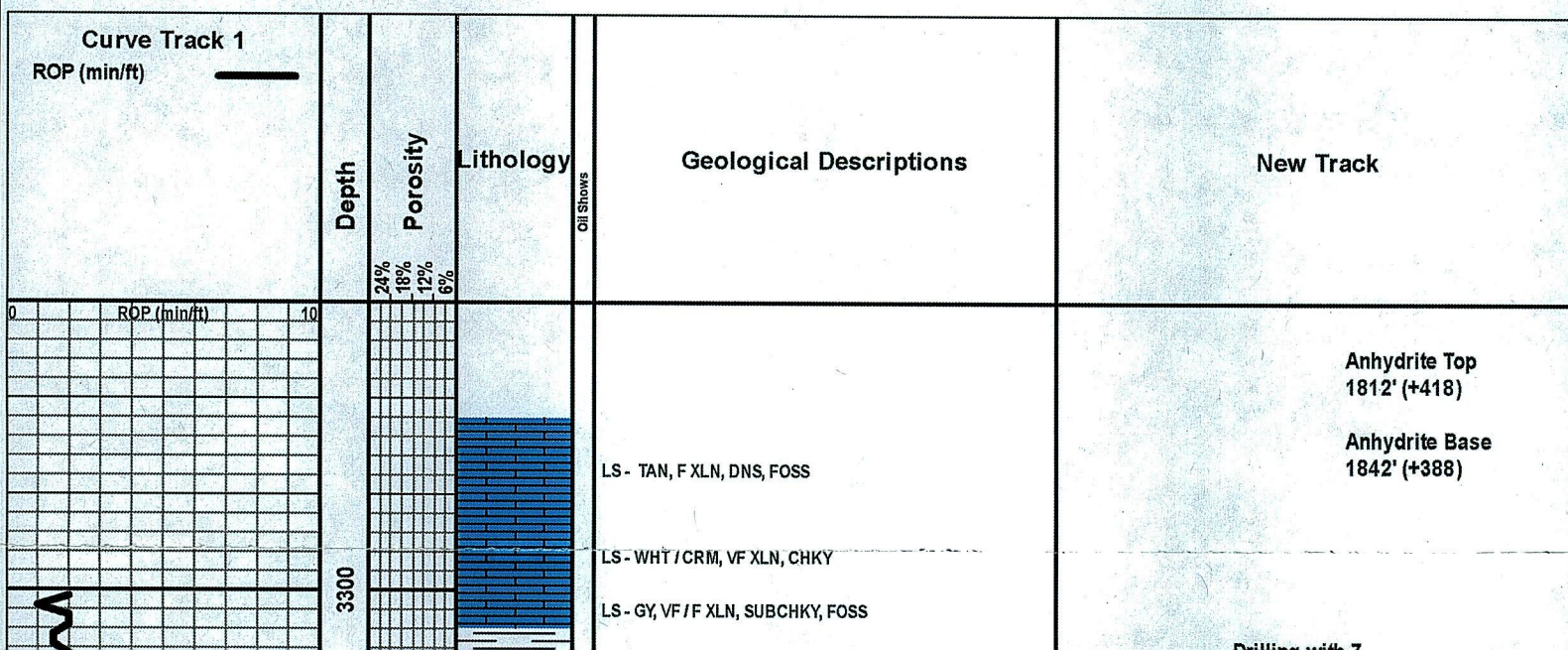
| | | | |
|-------|-------|---------|----------|
| Anhy | Gyp | Shgy | Sandylms |
| Bent | Igne | Sltst | Shale |
| Brec | Lmst | Ss | Sltstn |
| Cht | Meta | Till | Shlyslts |
| Clyst | Mrlst | Carb sh | Sltysch |
| Coal | Salt | Dol | Lms |
| Congl | Shale | Dtd | |
| Dol | Shcol | Gry sh | |

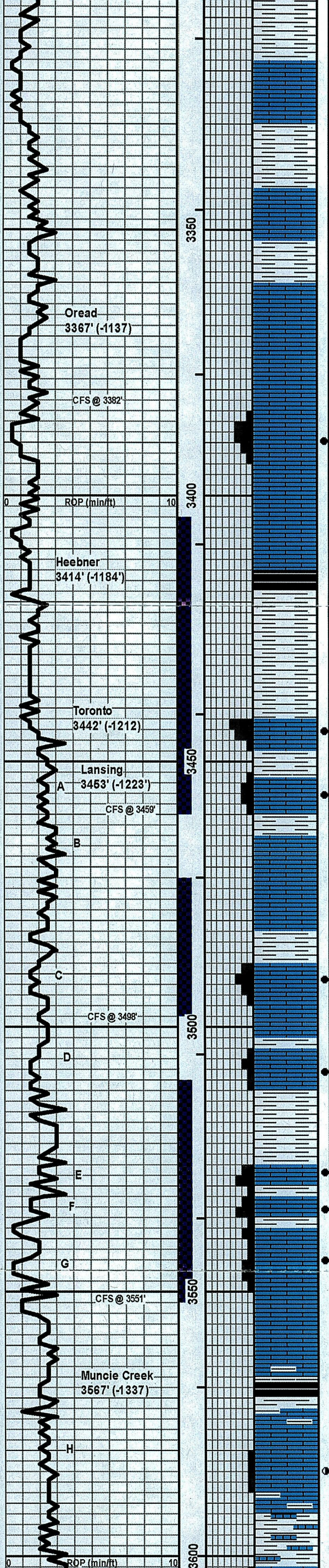
ACCESSORIES

| | | | |
|----------------|---------------|-----------------|----------------|
| MINERAL | Salt | Fossil | Clystn |
| Anhy | Sandy | Gastro | Dol |
| Arggrn | Silt | Oolite | Grysh |
| Arg | Sil | Ostra | Gryslt |
| Bent | Sulphur | Pelec | Lms |
| Bit | Tuff | Pellet | Sandylms |
| Brecfrag | Chlorite | Pisolite | Sh |
| Calc | Dol | Plant | Sltstn |
| Carb | Sand | Strom | |
| Chtdk | Sltly | Fuss | TEXTURE |
| Chtlt | | Oomold | Boundst |
| Dol | FOSSIL | STRINGER | Chalky |
| Feldspar | Algae | Anhy | Cryxln |
| Ferrpel | Amph | Arg | Earthy |
| Ferr | Belm | Bent | Finexln |
| Glau | Bioclst | Coal | Grainst |
| Gyp | Brach | Dol | Lithogr |
| Hvymin | Bryozoa | Gyp | Microxln |
| Kaol | Cephal | Ls | Mudst |
| Marl | Coral | Mrst | Packst |
| Minxl | Crin | Sltstrg | Wackest |
| Nodule | Echin | Ssstrg | |
| Phos | Fish | Carbsh | |
| Pyr | Foram | | |

OTHER SYMBOLS

| | | | |
|----------------------|-----------------|------------------|---------------|
| POROSITY TYPE | SORTING | OIL SHOWS | Dst |
| Earthy | Well | Even | EVENTS |
| Fenest | Moderate | Spotted | Rft |
| Fracture | Poor | Ques | Sidewall |
| Inter | ROUNDING | Dead | Conn |
| Moldic | Rounded | Gas show | |
| Organic | Subrnd | INTERVALS | |
| Pinpoint | Subang | Core | |
| Vuggy | Angular | Dst | |





SH - BLK, CARB, W/SH - RD / GRN / GY

LS - TAN, F XLN, DNS

SH - GRN / GY

LS - WHT / CRM, VF / F XLN, SUBCHKY

SH - RD / GRN / GY

LS - GY / SLI GRN, VF / F XLN, SUBCHKY / CHKY

LS - WHT / CRM, VF / F XLN, SUBCHKY / CHKY

LS - CRM, VF / F XLN, SUBCHKY / DNS

LS - TAN / GY, F XLN, DNS, ABUND FOSS

LS - CRM / TAN, F XLN, P / F INTXN POR, VGSFO, LT BRN OIL, G ODOR, NO FLUOR

LS - WHT / CRM, VF XLN, CHKY

LS - CRM / TAN, VF / F XLN, SUBCHKY

SH - BLK, CARB

SH - GRN / RD

LS - WHT / CRM, VF / F XLN, F INTXN POR, GSFO, LT BRN OIL, SLI ODOR, NO FLUOR

LS - WHT / CRM, VF / F XLN, F INTXN POR, GSFO, LT BRN OIL, SLI ODOR, NO FLUOR

SH - RD / MAR / GRN / GY

LS - WHT / CRM, VF / F XLN, SUBCHKY, CHKY

SH - BLK, SLI CARB, W/SH - RD / GRN / GY

LS - CRM, VF / F XLN, P / F INTXN POR, GSFO, LT BRN OIL, SLI ODOR, NO FLUOR

LS - CRM / TAN, F XLN, DNS, SUBCHKY IN PT

LS - CRM, F XLN, P INTXN + VUG POR, GSFO, LT BRN OIL, NO ODOR, NO FLUOR

SH - RD / GRN / GY

LS - CRM, F XLN, P INTXN + VUG POR, GSFO, LT BRN OIL, NO ODOR, NO FLUOR

LS - TAN / LT BRN, F XLN, G / XLCNT POR, VGSFO, LT BRN OIL, G ODOR, NO FLUOR, W/ CALCITE XTALS IN PT

LS - WHT / CRM, VF XLN, CHKY, NS

LS - CRM, F XLN, DNS

LS - CRM / GY, F XLN, DNS

SH - BLK, CARB, W/LS - GY / BRN, VF / F XLN, DNS, SHLY, PYRITE IN PT, FOSS

LS - WHT / CRM, F XLN, PRED DNS, P INTXN POR IN PT, SSFO, LT BRN OIL, NO ODOR, SLI YEL FLUOR

SH - GRN, W/LS - GY, VF / F XLN, SHLY, W/CHT, WHT / CLR

SH - GRN, LMY, FOSS

Drilling with
stands of collars
and 35,000# of
WOB @ 85 RPM
with approx.
800-900 psi at
standpipe

DST #1
Toronto - LKC 'A'
3405'-3459'
30"-60"-30"-60"

IF: 1/2" blow
ISI: No blow
FF: Surface blow
FSI: No return

Rec': 75' Mud w/ oil spots

IH: 1663#
IF: 35#-55#
ISI: 929#
FF: 60#-77#
FSI: 906#
FH: 1606#

WT 8.8
VIS 49
LCM 2#

WT 8.9
VIS 64
LCM 2#

DST #2
LKC 'C'
3472'-3498'
15"-45"-15"-45"

IF: surface blow, died in 9 min
ISI: No return
FF: No blow
FSI: No return

Rec': 1' ft M

IH: 1692#
IF: 16#-17#
ISI: 23#
FF: 16#-17#
FSI: 21#
FH: 1697#

WT 9.1
VIS 54
LCM 2#

DST #3
LKC 'E', 'F', & 'G'
3510'-3551'
30"-60"-45"-75"

IF: BOB in 18 min
ISI: No return
FF: 8.5" blow
FSI: No return

Rec': 62' SOCWM (5% W, 10% O, 85% M), 310' VSOCMW (5% O, 40% M, 55% W), 62' WM (30% W, 70% M), 1' Free Oil (100% O)

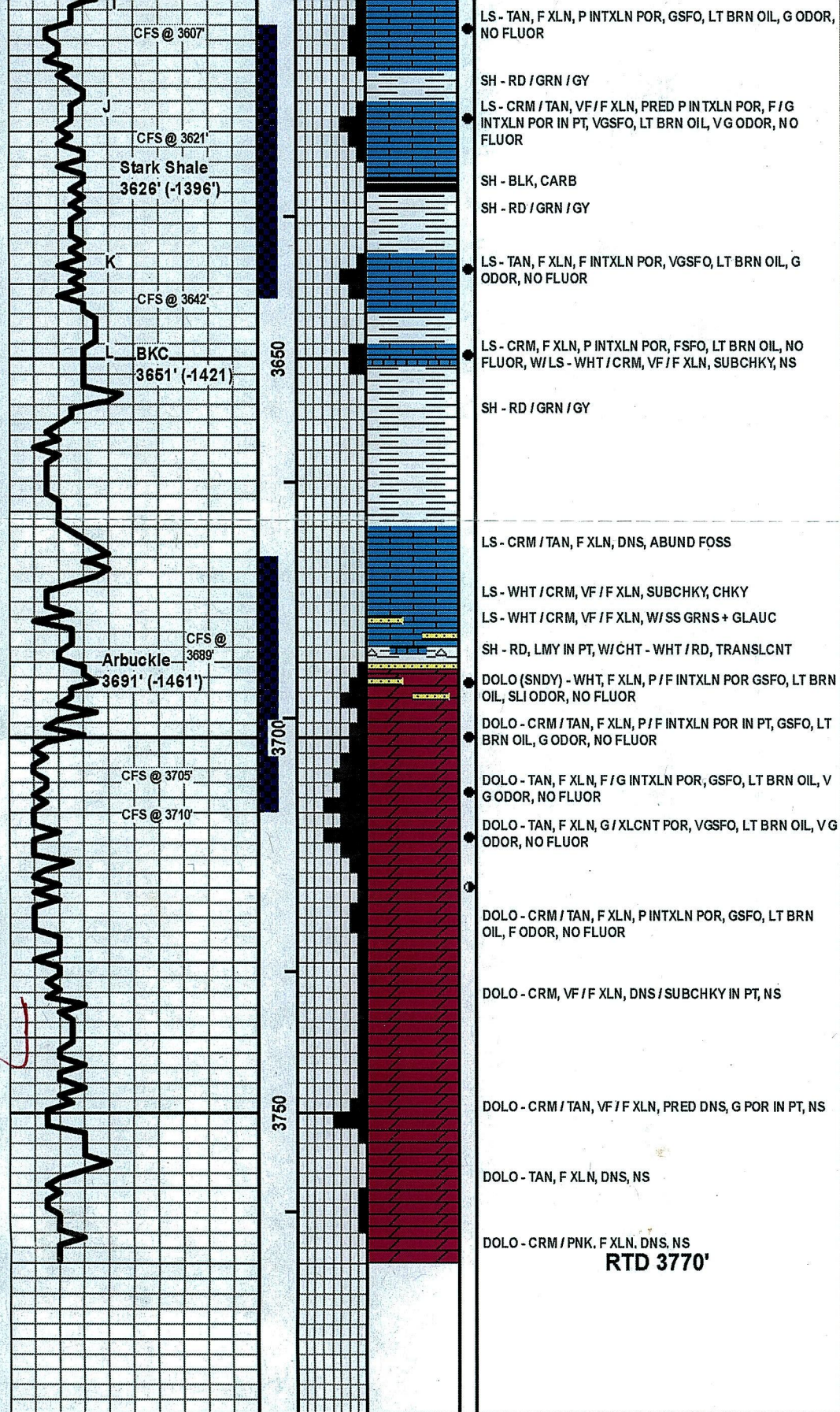
IH: 1725#
IF: 23#-119#
ISI: 505#
FF: 122#-198#
FSI: 494#
FH: 1701#

DST #4
LKC 'J' & 'K'
3605'-3642'
45"-75"-60"-90"

IF: 1 1/2" blow
ISI: No return
FF: 3/4" blow
FSI: No return

Rec': 45' HOCM (50% O, 50% M), 15' GO (5% G, 95% O)

IH: 1788#
IF: 18#-26#
ISI: 741#
FF: 28#-40#
FSI: 696#



FH: 1788#

WT 9.3
VIS 53
LCM 2#

WT 9.2
VIS 51
LCM 2#

DST #5
Arbuckle
3676'-3710'
45"-75"-60"-90"

WT 9.3
VIS 56
LCM 2#

IF: 1" blow
ISI: No return
FF: 1/4" blow
FSI: No return

Rec: 40' OCM (20% O, 80% M), 30' Free Oil

IH: 1846#
IF: 21#-34#
ISI: 726#
FF: 40#-47#
FSI: 634#
FH: 1840#