

# Mudgrove

**PETROLEUM CORPORATION**  
Clifton, Kansas

## NOTES

Company: Webco Oil Company, Inc.

Lease: Mathias #1

Field: Kraft-Prusa

Location: NE-NW-SW (1269' FSL & 345' FWL)

Sec: 12 Twsp: 16S Rge: 12W

County: Barton State: Kansas

KB: 1904' GL: 1895'

API #: 15-009-25946-00-00

Contractor: Southwind Drilling, Inc. ( Rig # 2)

Spud: 03/01/2014 Comp: 03/08/2014

RTD: 3355'

Mud Up: 2500' Type Mud: Chemical

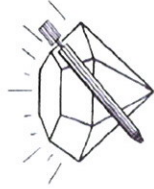
Samples Saved From: 2600' to RTD  
Drilling Time Kept From: 2600' to RTD  
Samples Examined From: 2600' to RTD  
Geological Supervision from: 2850' to RTD  
Geologist on Well: Wyatt Urban

Surface Casing: 8 5/8@ 388'

Electronic Surveys: None

## WEBCO OIL CO. WELL COMPARISON

DRILLING WELL				COMPARISON WELL				COMPARISON WELL			
Webco Oil-Mathias #1				Webco Oil- Weber A #8				Webco Oil-Weber A			
NE-NW-SW				C-NE-SE-SE				C-SE-NW-SW			
12-16S-12W				11-16S-12W				12-16S-12W			
1904 KB				1902 KB				1894 KB			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log
Topeka	2658	-754									
Hebner	2945	-1041		2948	-1046			2688	-794	40	
Toronto	2957	-1053	1904								
Douglas	2974	-1070	1904								
Brown Lime	3036	-1132	1904								
Lansing	3050	-1146	1904	3050	-1148	2	3052	3048	-1154	8	
BKC	3308	-1404	1904					3295	-1401	-3	
Arbuckle	3349	-1445	1904					3308	-1414	-31	
RTD	3328	-1424	1904					3313	-1419	-5	
LTD											



DIAMOND TESTING  
P.O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313  
DRILL-STEM TEST TICKET  
FILE: STCMathias1dst1

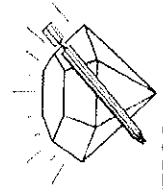
TIME ON: 07:40 3/7/2014  
TIME OFF: 13:30 3/7/2014

Company: WEBCO Lease & Well No. MATHIAS #1  
Contractor: SOUTHWIND DRLG RIG 2 Charge to WEBCO  
Elevation: 1904 K.B Formation: LANSING "G" Effective Pay:          Ft. Ticket No. j3194  
Date: 3/07/14 Sec: 12 Twp: 16 S Range: 12 W County: BARTON State: KANSAS  
Test Approved By: WYATT URBAN Diamond Representative: JOHN RIEDL

Formation Test No. 1 Interval Tested from: 3127 ft. to 3147 ft. Total Depth 3147 ft.  
Packer Depth 3122 ft. Size 6 3/4 in. Packer depth          ft. Size 6 3/4 in.  
Packer Depth 3127 ft. Size 6 3/4 in. Packer depth          ft. Size 6 3/4 in.  
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3130 ft. Recorder Number 30046 Cap. 6000 P.S.I.  
 Bottom Recorder Depth (Outside) 3144 ft. Recorder Number 13498 Cap. 6000 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
 Mud Type CHEMICAL Viscosity 50 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 8.9 Water Loss 8 Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 2,000 P.P.M. Drill Pipe Length 3107 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NOT REQUESTED Test Tool Length 20 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 20 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: WEAK (1" DECREASING TO SURFACE BLOW) NO BB  
 2nd Open: FAIR (BUILDING THROUGHOUT TO 4") NO BB  
 Recovered 130 ft. of GIP  
 Recovered 50 ft. of SLOGGM (3%OIL 10%GAS 87%MUD)  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Price Job \_\_\_\_\_  
 Other Charges \_\_\_\_\_  
 Insurance \_\_\_\_\_  
 Total \_\_\_\_\_  
 Remarks: TOTAL FLUID REC:50" IN DRILL PIPE  
 TOOLSAMPLE GRINDOUT: 4%OIL 96%MUD

Time Set Packer(s) 9:10 A.M. Time Started Off Bottom 11:55 A.M. Maximum Temperature 100  
 Initial Hydrostatic Pressure (A) 1492 P.S.I.  
 Initial Flow Period (B) 30 Minutes 15 P.S.I. to (C) 21 P.S.I.  
 Initial Closed In Period (D) 30 Minutes 443 P.S.I.  
 Final Flow Period (E) 60 Minutes 24 P.S.I. to (F) 35 P.S.I.  
 Final Closed In Period (G) 45 Minutes 436 P.S.I.  
 Final Hydrostatic Pressure (H) 1479 P.S.I.



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: STCMathias1ds12

TIME ON: 02:20 3/8/2014  
 TIME OFF: 07:40 3/8/2014

Company WEBCO Lease & Well No. MATHIAS #1  
 Contractor SOUTHWIND DRLG RIG 2 Charge to WEBCO  
 Elevation 1904 K B Formation LANSING "H.I.J." Effective Pay Ft. Ticket No. j3185  
 Date 3/08/14 Sec 12 Twp 16 S Range 12 W County BARTON State KANSAS  
 Test Approved By WYATT URBAN Diamond Representative JOHN RIEDL












Formation Test No. 2 Interval Tested from 3202 ft. to 3275 ft. Total Depth 3275 ft.  
 Packer Depth 3197 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.  
 Packer Depth 3202 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_  
 Top Recorder Depth (Inside) 3205 ft. Recorder Number 30046 Cap. 6000 P.S.I.  
 Bottom Recorder Depth (Outside) 3272 ft. Recorder Number 13498 Cap. 6000 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
 Mud Type CHEMICAL Viscosity 55 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 9.2 Water Loss 8 Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 3,000 P.P.M. Drill Pipe Length 3252 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number NOT REQUESTED Test Tool Length 20 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 73 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: WEAK (1/2" DECREASING TO SURFACE BLOW) NO BB  
 2nd Open: VERY WEAK (1/4" DEAD IN 20 MINUTES) " "

Recovered 20 ft. of OILSPECKED DRILLING MUD  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Price Job \_\_\_\_\_  
 Other Charges \_\_\_\_\_  
 Insurance \_\_\_\_\_  
 Total \_\_\_\_\_  
 Remarks: TOTAL FLUID REC:20" IN DRILL PIPE  
 TOOLSAMPLE GRINDOUT: 100% MUD

Time Set Packer(s) 3:30 A.M. Time Started Off Bottom 6:00 A.M. Maximum Temperature 96  
 Initial Hydrostatic Pressure (A) 1535 P.S.I.  
 Initial Flow Period (B) 30 Minutes 13 P.S.I. to (C) 16 P.S.I.  
 Initial Closed In Period (D) 30 Minutes 470 P.S.I.

Initial Closed In Period: \_\_\_\_\_ P.S.I.  
 Final Flow Period: 45 (E) 17 P.S.I. to (F) 21 P.S.I.  
 Final Closed In Period: 45 (G) 451 P.S.I.  
 Final Hydrostatic Pressure: \_\_\_\_\_ (H) 1522 P.S.I.

**ROCK TYPES**

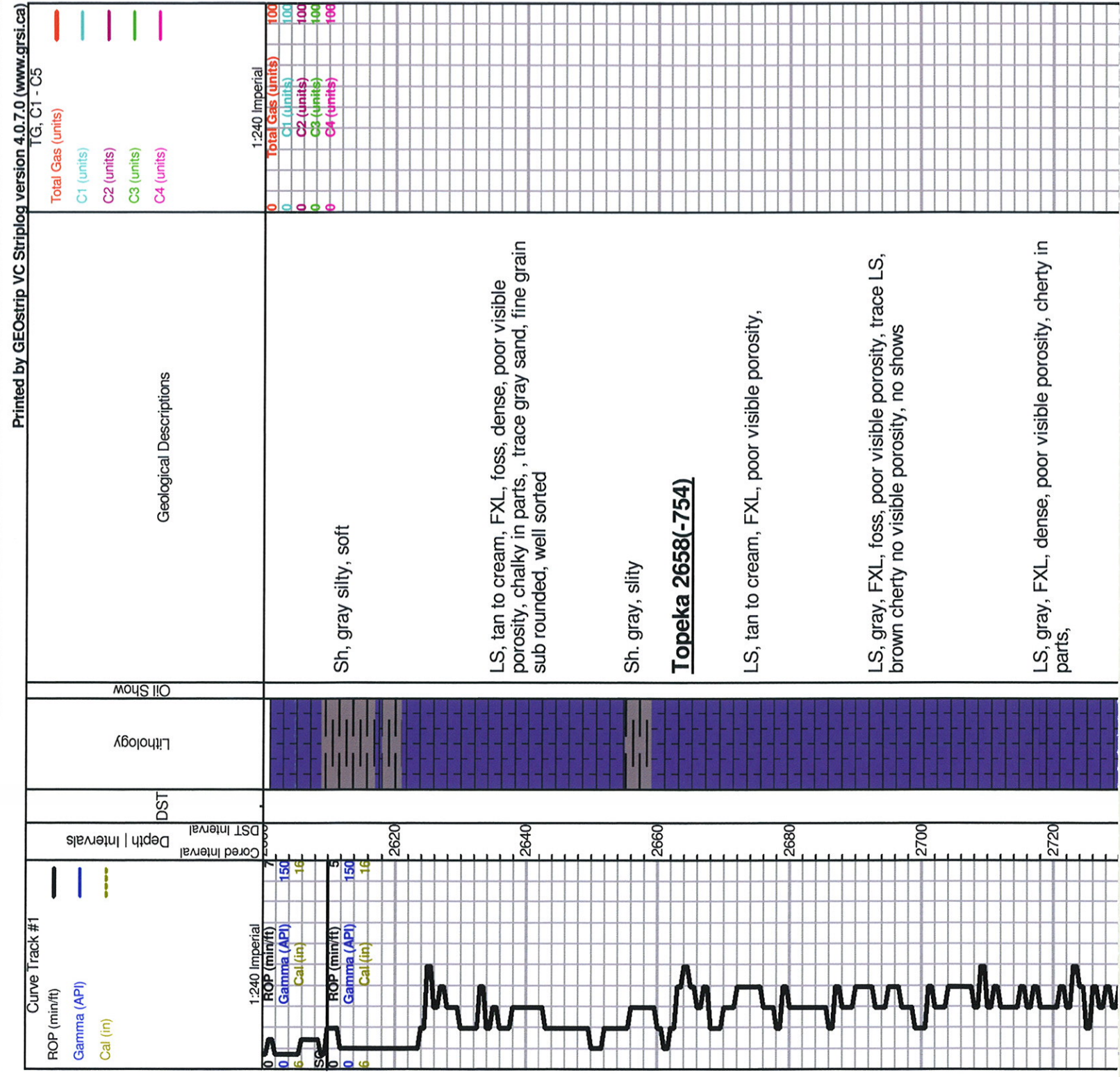
 Chitcong l	 Dolomite	 Dolsec	 shale, grn	 Carbon Sh	 Shoal
 Dolomite	 Limestone	 Limestone	 shale, gray	 shale, red	

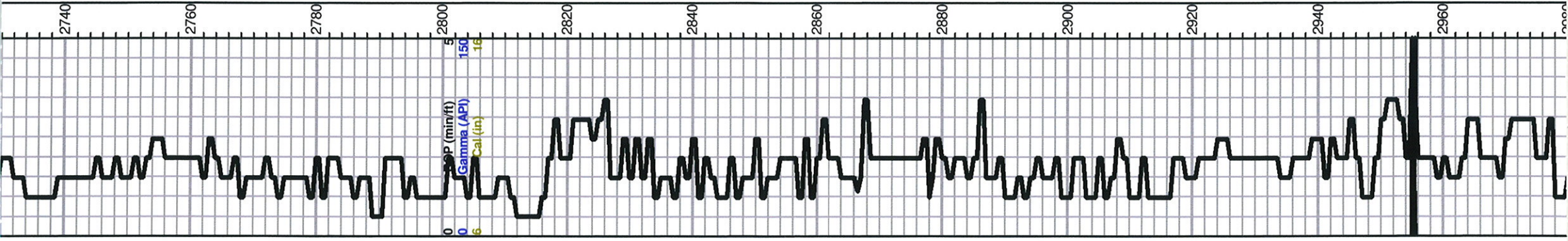
**ACCESSORIES**

<b>FOSSIL</b>	<b>STRINGER</b>	<b>TEXTURE</b>
φ Oolite	~~~~~ Chert	C Chalky
		FX FinexIn

**OTHER SYMBOLS**

 Good Show	 DST Int
 Fair Show	 DST alt
 Poor Show	 Core
 Spotted or Trace	 tail pipe
 Questionable Stn	
 Dead Oil Stn	
 Fluorescence	
 Gas	





LS, gray, tan, FXL, poor scattered porosity, chalky, few  
foss, trace gray silty sh.

LS, gray, cream, FXL dense, poor vis porosity

Sh. gray greenish, maroon, silty,

LS, gray, foss, FXL, poor visible porosity, trace  
maroon, sh. silty, soft,

Black carb Sh .

LS, gray to tan, FXL, dense, poor visible porosity, no  
shows, trace tan chert

LS, gray, FXL, poor -fair visible porosity, chalky, in  
parts, trc. tan ool, chert

LS, gray, tan, FXL, chalky, poor visible porosity, chalky  
in parts, trc. brown stain, Lt. trc SFO, faint odor

LS, tan, FXL, chalky, few foss, poor visible porosity,

**HEEBNER 2945 (-1041)**

Black carb Sh.

**Toronto 2957 (-1053)**

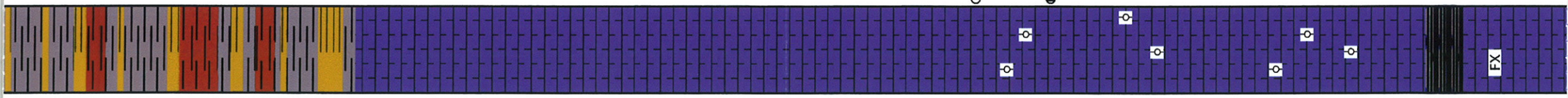
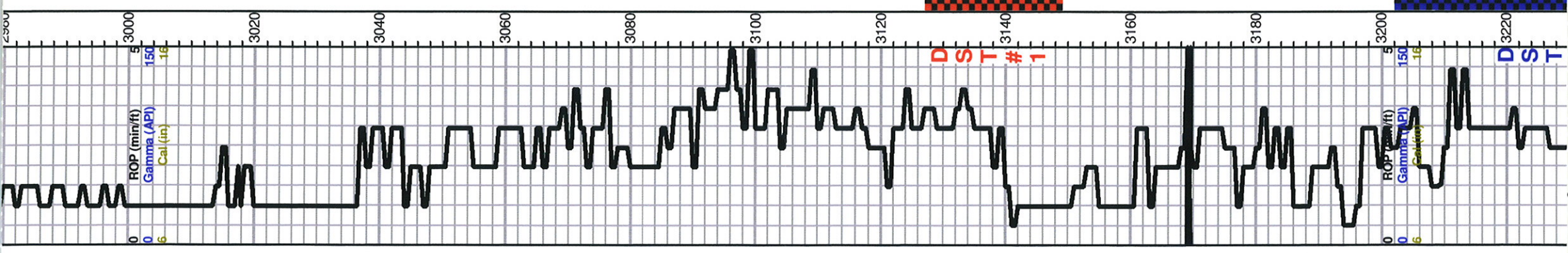
LS, tan, P.P. porosity, Lt. SFO, trace brown stain, faint  
odor

LS, tan, FXL, dense poor visible porosity, chalky in  
parts, no shows

**Dundas 2974 (-1070)**



CFS 20-40-60



Sh. maroon, gray, silty, soft

Sh. gray, greenish, maroon, trace sand, gray, F-grained, well sorted, NSFO

Sh. gray, green, silty, soft maroon, trc. sand, V.fine grained, well sorted, Lt. trc. black stain, Lt. flor. cut, odor???

Sh. gray, maroon, soft, silty

**Brown Lime 3036 (-1132)**

LS, tan to brown, FXL, dense, cherty, no visible porosity,

LS, cream to tan, FXL, cherty, poor visible porosity, no shows

**Lansing 3050 (-1146)**

LS, cream to tan, FXL, few foss, poor scattered porosity, trace black stain, NSFO

LS, cream, chalky in parts, poor visible porosity, trace black stain,

LS, cream chalky, P.P. porosity, trace SFO, Lt. brown stain, faint odor

LS, gray, FXL, ool, cherty, poor visible porosity, poor scattered porosity, no shows

LS, tan, chalky, poor visible porosity, trace brown stain, no shows, trace gray silty shale

LS, cream to tan, chalky, poor scattered porosity, poor INXLN porosity, trace black stain, no shows

LS, cream, tan, ool, poor scattered porosity, trace Lt. SFO, Lt. brown stain, Lt. flor. cut, odor???

LS, white, cream, ool, good vuggy porosity, SFO, golden brown stain, Ft. odor,

LS, white to cream, ool, good vuggy porosity, trace. black stain, NSFO, no odor

Sh. black carb, gray silty

LS, cream, tan, FL, dense poor visible porosity, no shows, trace ool, poorly developed, no visible porosity

LS, cream, ool, poorly developed, poor scattered porosity, dense, no shows

LS, tan to cream, P.P. scattered porosity, Lt. SFO, Lt. brown stain, chalky, odor  
Sh. black carb

LS, tan to brown, FXL, cherty dense, poor visible porosity, no shows,



CFS 20-40-60



