

Scale 1:240 Imperial

Well Name: TEEL #4
Surface Location: N2 SE SE NE 5-8S-24W
Bottom Location:
API: 15-165-23811-0000
License Number: 33813
Spud Date: 2/29/2012 Time: 3:34 PM
Region: GRAHAM
Drilling Completed: 3/6/2012 Time: 6:42 PM
Surface Coordinates: 2165 FNL & 330 FEL
Bottom Hole Coordinates:
Ground Elevation: 2369.00ft
K.B. Elevation: 2374.00ft
Logged Interval: 238.00ft To: 3868.00ft
Total Depth: 3870.00ft
Formation:
Drilling Fluid Type: FRESH WATER/CHEMICAL GEL

OPERATOR

Company: JASON OIL COMPANY, LLC
Address: P.O. BOX 701
RUSSELL, KS 67665

Contact Geologist: JIM SCHOENBERGER
Contact Phone Nbr: (785) 483-4204
Well Name: TEEL #4
Location: N2 SE SE NE 5-8S-24W API: 15-165-23811-0000
Pool: Field: NANA NORTHWEST
State: KANSAS Country: USA

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -100.0136759 Latitude: 39.3869642
N/S Co-ord: 2165 FNL
E/W Co-ord: 330 FEL

LOGGED BY



Company: SOLUTIONS CONSULTING
Address: 108 W 35TH
HAYS, KS 67601

Phone Nbr: (785) 259-3737
Logged By: Geologist Name: JEFF LAWLER

CONTRACTOR

Contractor: ROYAL DRILLING INC.
Rig #: 1
Rig Type: MUD ROTARY
Spud Date: 2/29/2012 Time: 3:34 PM
TD Date: 3/6/2012 Time: 6:42 PM
Rig Release: 3/7/2012 Time: 7:00 AM

ELEVATIONS

K.B. Elevation: 2374.00ft Ground Elevation: 2369.00ft
K.B. to Ground: 5.00ft

NOTES


NOTES
 DUE TO ECONOMICAL RECOVERY ON DST #2 & #3 AND STRUCTURAL POSITION DECISION WAS MADE TO RUN 5 1/2" PRODUCTION CASING AND FURTHER EVALUATE ZONES WITH OIL SHOWS, LOG ANALYSIS, AND FAVORABLE DRILLSTEM TEST RESULTS.

RESPECTFULLY SUBMITTED,
 JEFF LAWLER

WELL COMPARISON SHEET

FORMATION	P&A				EOR P&A				II				•											
	IMPERIAL OIL OF KS				IMPERIAL OIL OF KS				IMPERIAL OIL OF KS				JASON OIL											
	GOFF #5				NANA NW LKC 304-W				GOFF C#1				TEEL #2											
	TEEL #4				NE SE NE 5-8-24				NW SW NW 4-8-24				NW NW SW 4-8-34											
	KB	2374	GL	2369	KB	2391			KB	2363			KB	2373			KB	2358						
	LOG TOPS		SAMPLE TOPS		CARD/SAMPL TOPS		LOG	SMPL	CARD/SAMPL TOPS		LOG	SMPL	DATA SOURCE		LOG	SMPL	DATA SOURCE		LOG	SMPL				
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM			DEPTH	DATUM			DEPTH	DATUM			DEPTH	DATUM			DEPTH	DATUM			
ANHYDRITE TOP	2028	346	2027	347	2042	349	- 3	- 2	2010	353	- 7	- 6	2022	351	- 5	- 4	2022	336	+ 10	+ 11				
BASE	2059	315	2054	320													2054	304	+ 11	+ 16				
TARKIO																								
TOPEKA	3388	-1014	3388	-1014													3383	-1025	+ 11	+ 11				
OREAD																								
HEEBNER SHALE	3595	-1221	3594	-1220	3612	-1221	+ 0	+ 1	3582	-1219	- 2	- 1	3612	-1239	+ 18	+ 19	3587	-1229	+ 8	+ 9				
TORONTO	3617	-1243	3620	-1246	3634	-1243	+ 0	- 3	3605	-1242	- 1	- 4	3632	-1259	+ 16	+ 13	3609	-1251	+ 8	+ 5				
DOUGLAS																								
BROWN LIME																								
LKC	3632	-1258	3630	-1256	3643	-1252	- 6	- 4	3617	-1254	- 4	- 2	3648	-1275	+ 17	+ 19	3622	-1264	+ 6	+ 8				
BKC	3826	-1452	3834	-1460	3854	-1463	+ 11	+ 3									3827	-1469	+ 17	+ 9				
CONGLOMERATE/QTZ																								
MISSISSIPPIAN																								
ARBUCKLE																								
RTD			3870	-1496					3845	-1482		- 14	3845	-1472		- 24	3870	-1512						+ 16
LTD	3868	-1494															3871	-1513	+ 19					

DST #1 LKC "D,E"



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jason Oil CO. **5-8-24, Graham, Ks**

PO Box 701 **teel #4**
 Russell Ks 67665 Job Ticket: 46032 **DST#: 1**

ATTN: Jeff Lawler Test Start: 2012.03.04 @ 12:15:56

GENERAL INFORMATION:

Formation: **KC"D,E"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:08:26
 Time Test Ended: 18:29:56

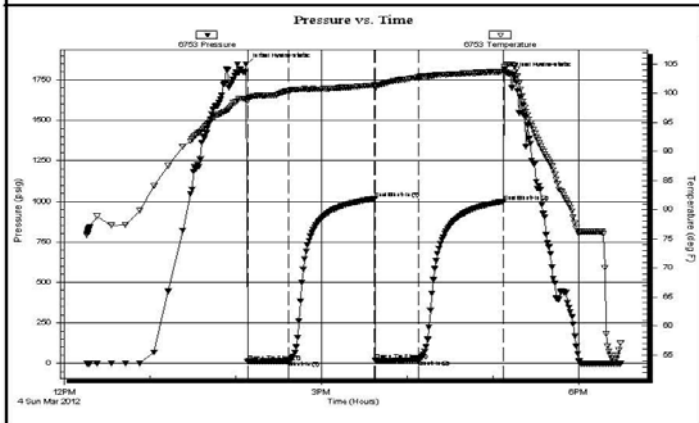
Interval: **3669.00 ft (KB) To 3698.00 ft (KB) (TVD)**
 Total Depth: 3698.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2374.00 ft (KB)
 2369.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6753 Outside

Press@RunDepth: 21.24 psig @ 3670.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.04 End Date: 2012.03.04 Last Calib.: 2012.03.04
 Start Time: 12:15:56 End Time: 18:29:56 Time On Btm: 2012.03.04 @ 14:07:26
 Time Off Btm: 2012.03.04 @ 17:10:26

TEST COMMENT: IF-2.5in blow
 ISI-No blow
 FF-1in blow
 FSI-No blow



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1844.07	99.13	Initial Hydro-static
1	12.59	98.66	Open To Flow (1)
30	14.13	100.42	Shut-In(1)
90	1015.37	101.41	End Shut-In(1)
91	20.00	100.83	Open To Flow (2)
121	21.24	102.74	Shut-In(2)
180	999.35	103.76	End Shut-In(2)
183	1789.62	104.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 20%O 80%M	0.07
10.00	VSGO 5%G 95%O	0.14

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 46032

Printed: 2012.03.04 @ 18:42:36

DST #2 LKC "F,G"



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jason Oil CO.

5-8-24, Graham, Ks

PO Box 701
Russell Ks 67665

teel #4

Job Ticket: 46033

DST#: 2

ATTN: Jeff Lawler

Test Start: 2012.03.04 @ 23:35:50

GENERAL INFORMATION:

Formation: **KC "F,G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:10:20

Time Test Ended: 05:55:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: **3698.00 ft (KB) To 3708.00 ft (KB) (TVD)**

Reference Elevations: 2374.00 ft (KB)

Total Depth: 3708.00 ft (KB) (TVD)

2369.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6753

Outside

Press@RunDepth: 142.57 psig @ 3699.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.04

2012.03.05

Last Calib.: 2012.03.05

Start Time: 23:35:55

End Date:

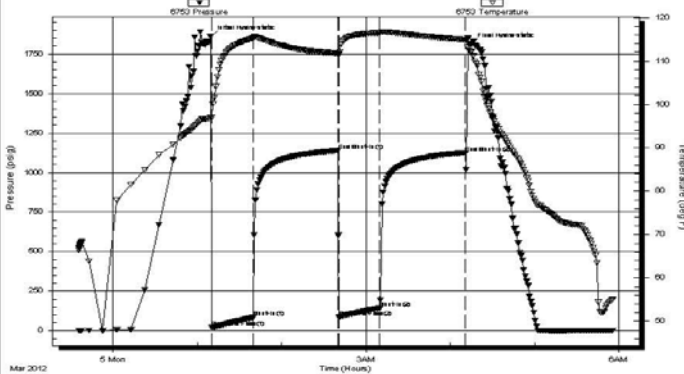
05:55:19

Time On Btm: 2012.03.05 @ 01:09:20

Time Off Btm: 2012.03.05 @ 04:14:20

TEST COMMENT: IF-BOB in 16min
ISI-No blow
FF-BOB in 24min
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Anotation
0	1859.05	97.01	Initial Hydro-static
1	19.71	96.95	Open To Flow (1)
31	83.66	115.26	Shut-In(1)
91	1139.15	111.73	End Shut-In(1)
92	87.18	111.38	Open To Flow (2)
121	142.57	116.47	Shut-In(2)
182	1126.32	114.91	End Shut-In(2)
185	1812.80	112.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
274.00	Water	3.84
1.00	Free Oil	0.01

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 46033

Printed: 2012.03.05 @ 06:21:30

DST #3 LKC "J,K,L"



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jason Oil CO.

5-8-24, Graham, Ks

PO Box 701
Russell Ks 67665

teel #4

Job Ticket: 46034

DST#: 3

ATTN: Jeff Lawler

Test Start: 2012.03.05 @ 19:20:38

GENERAL INFORMATION:

Formation: **KC "I-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:36:08

Time Test Ended: 02:58:08

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3785.00 ft (KB) To 3834.00 ft (KB) (TVD)

Reference Elevations: 2374.00 ft (KB)

Total Depth: 3834.00 ft (KB) (TVD)

2369.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6753

Outside

Press@RunDepth: 311.02 psig @ 3786.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.05

End Date:

2012.03.06

Last Calib.: 2012.03.06

Start Time: 19:20:38

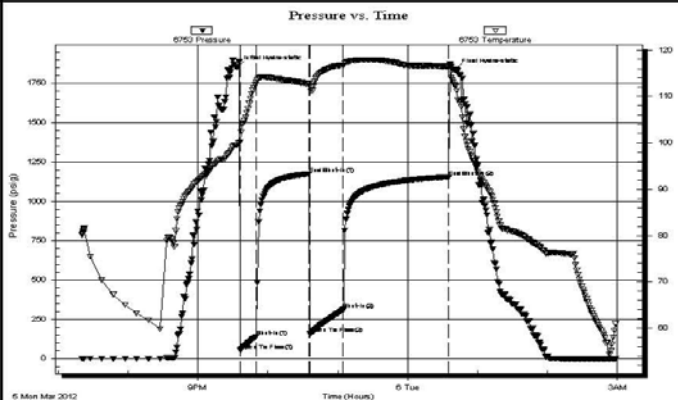
End Time:

02:58:08

Time On Btm: 2012.03.05 @ 21:33:38

Time Off Btm: 2012.03.06 @ 00:40:38

TEST COMMENT: IF-BOB in 2min
ISI-BOB in 27min
FF-BOB in 3min
FSI-BOB in 75min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1852.48	99.53	Initial Hydro-static
3	53.34	100.18	Open To Flow (1)
17	142.04	112.99	Shut-In(1)
62	1175.75	112.78	End Shut-In(1)
63	161.34	112.17	Open To Flow (2)
91	311.02	116.77	Shut-In(2)
182	1156.65	116.40	End Shut-In(2)
187	1837.77	112.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GSWOCM 20%G 15%O 10%VW 55%M	0.84
60.00	GMCO 20%G 65%O 15% M	0.84
590.00	GO 30%G 70%O	8.28
0.00	1540ft GIP	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 46034

Printed: 2012.03.06 @ 03:13:30

ROCK TYPES

Cht	shale, grn	shale, red	Arg/Shale
Lmst fw<7	shale, gry	Shcol	
Lmst fw>7	Carbon Sh	Ss	

ACCESSORIES

FOSSIL

◇ Oolite

STRINGER

~~~~~ Chert

█████ Dolomite

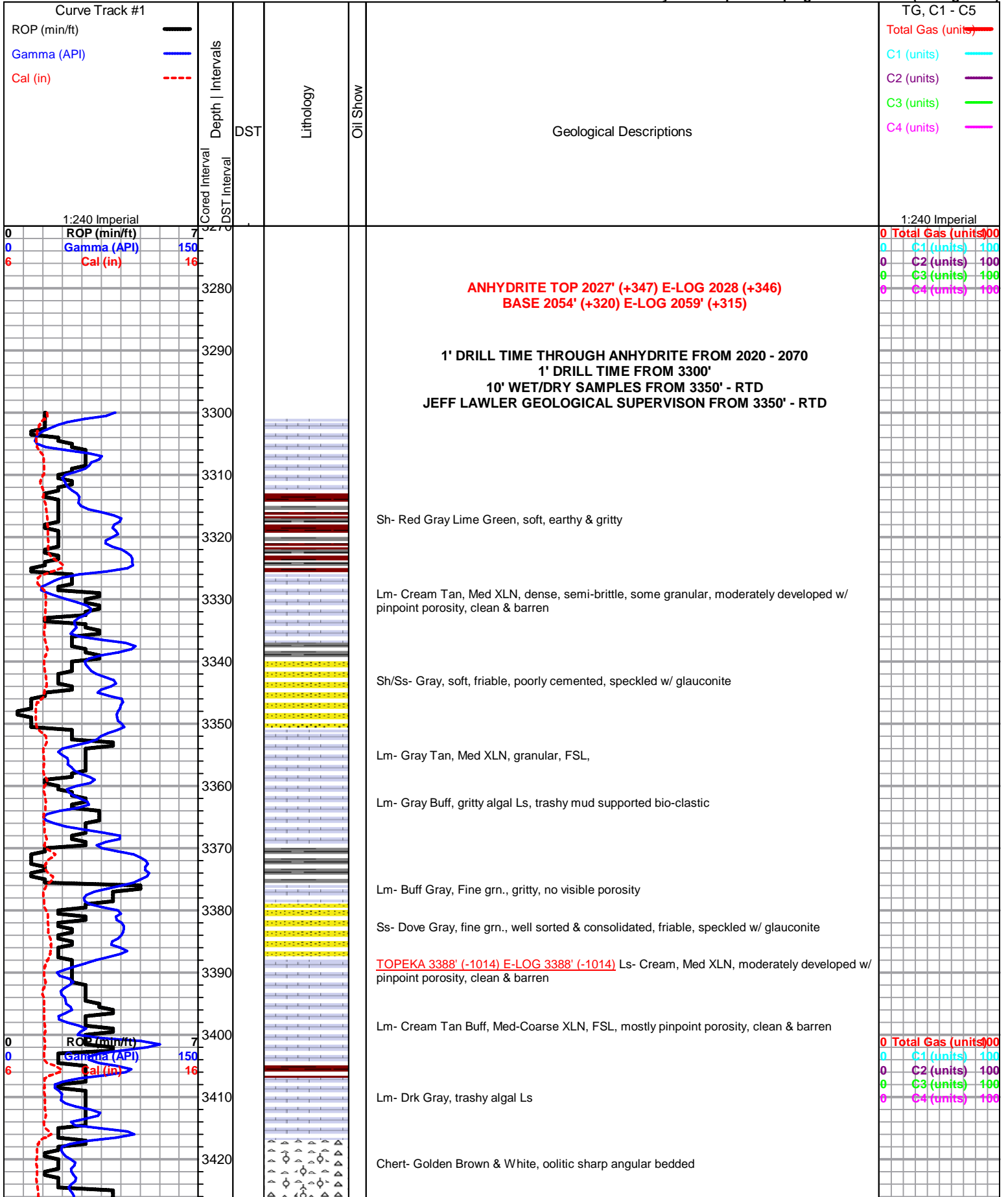
red shale

### OTHER SYMBOLS

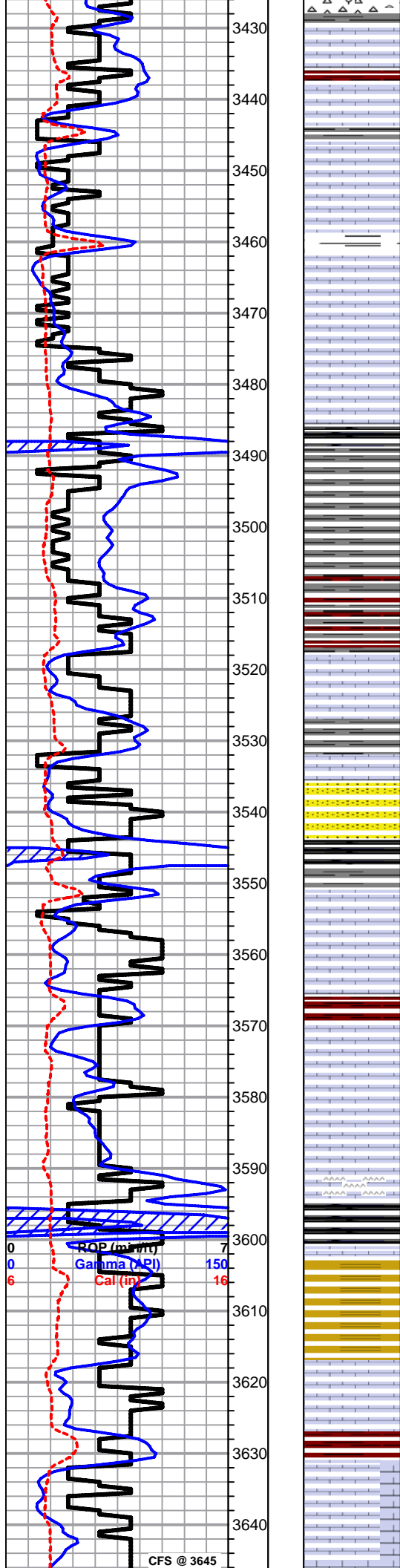
#### DST

- DST Int
- DST alt
- Core

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)







Sh- Gray Red Maroon, sticky chalky clumps, gritty, soft

Lm- Cream Tan, VF-Med XLN, mostly dense, siliceous, some granular w/ consistent pinpoint porosity, clean & barren

Lm- Gray, dense, trashy, some well cemented, dense cherty Ls

Lm- Cream Tan, Med grn., massive, dense, well cemented, granular, moderately developed w/ pinpoint porosity throughout

Lm- Off White, Fine grn., well cemented, gritty & grainy, slightly dolomitic, clean & barren

Sh- White, abundant white sticky chalky

Lm/Chert- Off White, VF XLN, Med grn., loosely cemented, developed w/ pinpoint porosity, FSL w/ fusulinids, few chips of angular white chert

Sh- Black Red Lime Green, dense, fissile, gritty, earthy, soft

Sh- Gray, slighty sandy shale & calcareous lime

Sh- A/A w/ maroon & red, gritty & earthy

Lm- Cream Gray, FXLN, dense, siliceous, semi-brittle, minimal visible porosity, few chips of various colored bedded chert

Lm- Gray, FXLN, A/A, trashy, dirty

Sh- Gray Red Maroon Lime Green, soft, sticky white chalk, few FSL chalky limes

Ss-Lt Gray Cream, VF grn., consolidated, very well sorted, slightly calcareous, loosely cemented, clean & barren

Sh- Black Gray, fissile, dense, well compacted

Lm- Cream Off White, VF XLN, dense, semi-brittle, siliceous, scattered pinpoint porosity, few chips of cream bedded chert

Lm- Cream Tan, VF XLN, dense, tight cherty Ls, mostly w/ no visible porosity, few chips of dense oolitic Ls w/ siliceous cementation

Lm- dense oolitic Ls A/A w/ cream FXLN, dense w/ abundant secondary intraparticle XLN porosity, clean & barren

Lm- Cream Tan, FXLN, mostly dense, few granular, moderately developed, scattered porosity, FSL, few w/ DRK BLK VERY SCATTERED STN, THICK, NO ODR,

Lm- Gray Lt Brown, FXLN, dense cherty Ls, scattered XLN porosity

**HEEBER 3594' (-1220) E-LOG 3595' (-1221)** Sh- Black Gray Brown Red Lime Green, dense, fissile, carbonaceous, soft & earthy, lime green wash

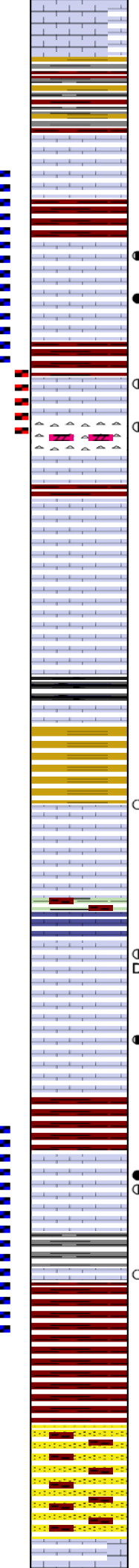
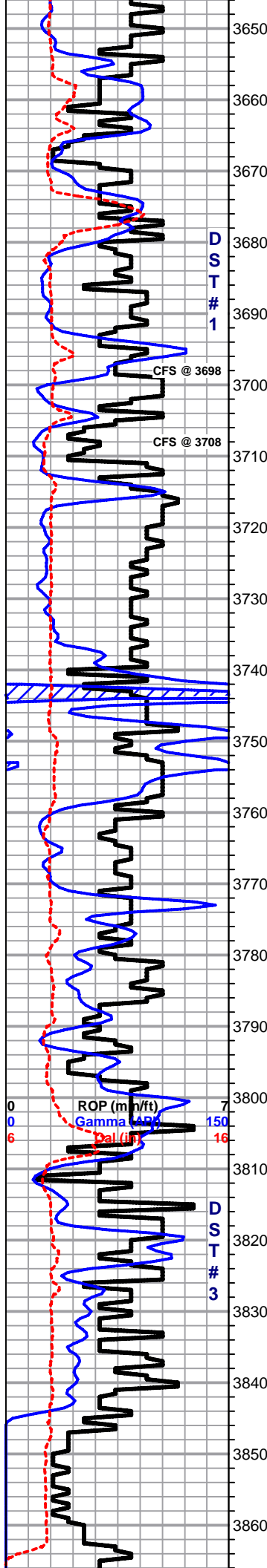
Sh- Lt Brown Lime Green wash

**TORONTO 3620' (-1246) E-LOG 3617' (-1243)** Lm- Cream Tan, F-Med XLN, mostly dense w/ secondary XLN porosity, some granular w/ moderate development, slightly dolomitic, pinpoint porosity, clean & barren

**LKC 3630' (-1256) E-LOG 3631' (-1257)** Lm- Cream Buff, VF-F XLN, dense, oolitic w/ siliceous cementation, slightly FSL w/ crinoids & fusulinids, chalky in part,

Lm- Off White Cream, VF-F XLN, dense, well cemented, slightly cherty LS, minimal

0 Total Gas (units) 100  
0 C1 (units) 100  
0 C2 (units) 100  
0 C3 (units) 100  
0 C4 (units) 100



development w/ limited visible porosity, clean

Sh- Gray Brown Red, soft, slightly unconsolidated & pebbly

Lm- Cream White, VF-F XLN, clean, dense, scattered XLN porosity, mostly dense w/ no visible porosity, tight

Lm- Cream Tan, F-Med XLN, abundant XLN porosity, well developed, consistant pinpoint primary porosity, LT GSY SATURATED STN, GD ODR, SL SFO, chips of semi-translucent sharp angular bedded chert

Lm- Off White, Med-Coarse XLN, very well developed, FSL, good consistant sub-vugular porosity, DRK SATURATED STN, FO, FR ODR

Lm- White, Med-Coarse, oolitic, FSL, well developed, DRK SCATTERED GSY STN, ODR, SL FO UPON CRUSH

Chert/Dolomite- Cream Tan, dense, well cemented, mostly w/ consistant pinpoint porosity, some slightly dolomitic chert, LT GSY STN, GOOD ODR

Lm- Cream Off White, FXLN, dense, scattered XLN porosity, tight, poorly developed, chalky in part

Lm- A/A, slightly cherty Ls, less development

Sh- Black Brown Maroon, fissile, well compacted, blocky, few soft, gritty chips

Lm- Lt Brown Tan Drk Gray, FXLN, trashy, semi-brittle, siliceous, some bio-clastics

Sh- Brown Lime Green Gray

Lm- Cream Off White, Med-Coarse XLN, slightly FSL, oolitic, partially well developed thin break, sub-vugular porosity, VERY SCATTERED LT STN, NSFO, SL ODR UPON CRUSH

Sh- Lime Green Maroon Gray, waxy, dense, well compacted, blocky

Lm- Buff, Fine grn., dense, slightly chalky algal Ls, no visible porosity

Lm- Cream Tan Lt Brown, Fine grn., well cemented, consistant pinpoint porosity, DRK STN, SL SFO, FNT ODR, \*\*CONSIDERABLE AMOUNT OF RESIDUAL HYDROCARBON NOTED\*\*

Lm- Cream Off White, Mid XLN, well developed, consistant pinpoint porosity, LGT GSY STN, SL SFO, FR ODR, LT GSY SHEEN

Lm- Cream Tan, Med-Coarse XLN, FSL, oolite clusters, well developed w/ consistant vuggy porosity, good intraconnectivity, FXLN, moderately well developed w/ consistant pinpoint porosity, GOOD DRK HVY STN, SCATTERED TO SATURATED, SFO UPON CRUSH, GOOD GSY SHEEN, FNT ODR

Lm- Lt Brown Cream, F-Med XLN, mostly dense, well cemented w/ limited porosity, few chips of well developed, sl FSL, good pinpoint porosity w/ DRK STN, FO UPON CRUSH, NO ODR

BKC 3834' (-1460) E-LOG 3825' (-1451) Sh- Red Maroon Brown Gray, soft, gritty & earthy, few slightly unconsolidated & pebbly, lt gray wash

Sh/Ss- A/A, w/ red sandy shales and shaley Ss, vf grn., well sorted, consolidated, loosely cemented

Lm- Cream Buff, Fine grn., FXLN, mostly semi-soft mud supported matrix, few dense, semi-

**SHORT TRIP  
SLOPE 1 dgr.  
DST #1  
3669-3698**

**0 Total Gas (units) 100**  
**0 C1 (units) 100**  
**0 C2 (units) 100**  
**0 C3 (units) 100**  
**0 C4 (units) 100**

**MINI TRIP  
SLOPE 1 dgr.  
DST #3  
3785-3834**

3870

LT: Clean Dun, fine gr., XLN, mostly semi-sol mud supported matrix, low dense, semi brittle XLN w/ limited visible porosity, clean & barren

RTD 3870' (-1496) LTD 3868' (-1494) @ 06:42 3/6/2012