

OPERATOR

Company: OUTLAW WELL SERVICE, LLC
 Address: 1408 WEST 42ND
 HAYS, KANSAS
 67601
 Contact Geologist: PRESTON WOLF
 Contact Phone Nbr: 785-650-2399
 Well Name: SCHINDLER #1W
 Location: SW NW NE NW S17 T8S R17W
 API: 15-163-24269-00-00
 Pool: _____
 State: KANSAS
 Field: DOPITA
 Country: USA

Scale 1:240 Imperial

Well Name: SCHINDLER #1W
 Surface Location: SW NW NE NW S17 T8S R17W
 Bottom Location: _____
 API: 15-163-24269-00-00
 License Number: 34272
 Spud Date: 11/21/2014 Time: 5:02 PM
 Region: ROOKS COUNTY
 Drilling Completed: 11/27/2014 Time: 5:30 AM
 Surface Coordinates: 360 FNL & 1543 FWL
 Bottom Hole Coordinates: _____
 Ground Elevation: 1857.00ft
 K.B. Elevation: 1862.00ft
 Logged Interval: 2700.00ft To: 3370.00ft
 Total Depth: 3370.00ft
 Formation: ARBUCKLE
 Drilling Fluid Type: CHEMICAL / FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.2443983
 Latitude: 39.3638784
 N/S Co-ord: 360 FNL
 E/W Co-ord: 1543 FWL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 WEST 35TH
 HAYS, KANSAS 67601

Phone Nbr: 785-650-4540 / 785-639-1337
 Logged By: GEOLOGIST

Name: STEVE REED

CONTRACTOR

Contractor: WHITE KNIGHT DRILLING
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 11/21/2014 Time: 5:02 PM
 TD Date: 11/27/2014 Time: 5:30 AM
 Rig Release: 11/28/2014 Time: 2:00 AM

ELEVATIONS

K.B. Elevation: 1862.00ft Ground Elevation: 1857.00ft
 K.B. to Ground: 5.00ft

NOTES

BASED ON LACK OF SIGNIFICANT SHOWS, RESULTS OF DST #2, AND LOG ANALYSIS, THE DECISION WAS MADE TO PLUG AND ABANDON THE SCHINDLER #1W.

OPEN HOLE LOGGING PROVIDED BY: PIONEER ENGERGY SERVICES
 DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, AND MICRORESISTIVITY LOGS
 WERE COMPLETED

DRILL STEM TESTING PROVIDED BY: TRILOBITE TESTING
 TWO (2) STRADDLE TESTS WERE COMPLETED

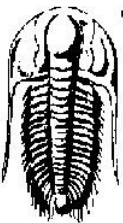
FORMATION TOPS COMPARISON AND DAILY ACTIVITY SUMMARY

	WELL NAME		COMPARISON WELL	COMPARISON WELL
	SCHINDLER #1W		SCHINDLER A#1	RAY SCHINDLER #6
	API: 15-163-24269		API: 15-163-19109	API: 15-163-23893
	1862 KB		1862 RB	1882 KB
FORMATION	SAMPLE TOPS	LOG TOPS	LOG TOPS (DATUM)	LOG TOPS (DATUM)
ANHYDRITE TOP	1245' (+617')	1250' (+612')	NA	NA
TOPEKA	2775' (-913')	2775' (-913')	-908'	-910'
HEEBNER	2988' (-1126')	2988' (-1126')	-1118'	-1120'
TORONTO	3009' (-1147')	3006' (-1144')	-1141'	-1142'
LKC	3029' (-1167')	3028' (-1166')	-1161'	-1162'
BKC	3254' (-1392')	3254' (-1392')	-1390'	-1388'
ARBUCKLE	3296' (-1434')	3300' (-1438')	-1438'	-1426'
RTD	3370' (-1508')	3371' (-1509')	-1483'	-1466'

SUMMARY OF DAILY ACTIVITY

- 11-19-14** M.I.R.U.
- 11-20-14** scrub rig, safety meeting
- 11-21-14** spud, drill to 477, work on rotary sprocket
- 11-22-14** 477, drilling
- 11-23-14** 1045, 8 5/8" surface casing set at 1258.03 w/425 sxs common, 2% gel, 3% cc, plug down @ 5:00pm, WOC, drilling
- 11-24-14** 1315, drilling
- 11-25-14** 2361, drilling, displace @ 2706, TOWB for hole in pipe, CFS @ 2960
- 11-26-14** 3014, drilling, CFS @ 3075, CFS @ 3138, CFS @ 3238, CFS @ 3306, CFS @ 3316, TD of 3370 reached @ 5:30am, CFS
- 11-27-14** 3370, short trip, CTCH, TOWB for logs, strap .02 long to board, survey 3/4°, logging, DST #1 3116-3162, misrun (bottom packer failure), DST #2 3116-3134, prepare for plugging
- 11-28-14** plugging, release rig

DST #1 SUMMARY

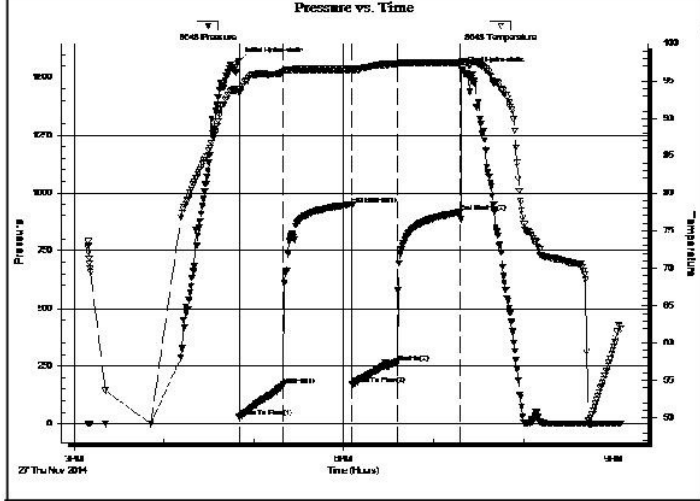
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	Outlaw Well Service LLC 1408 West 42nd Hays KS, 67601 ATTN: Steve Reed	17-8s-17w Rooks KS Schindler 1W Job Ticket: 60643 DST#:1 Test Start: 2014.11.27 @ 15:09:00

GENERAL INFORMATION:

Formation: G Zone	Test Type: Conventional Straddle (Initial)
Deviated: No Whipstock: ft (KB)	Tester: Cody Bloedorn
Time Tool Opened: 16:50:15	Unit No: 73
Time Test Ended: 21:05:00	
Interval: 3116.00 ft (KB) To 3162.00 ft (KB) (TVD)	Reference Elevations: 1853.00 ft (KB)
Total Depth: 3370.00 ft (KB) (TVD)	1848.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair	KB to GR/CF: 5.00 ft

Serial #: 8648 Inside	Capacity: 8000.00 psig
Press@RunDepth: 265.85 psig @ 3120.00 ft (KB)	Last Calib.: 2014.11.27
Start Date: 2014.11.27 End Date: 2014.11.27	Time On Btm: 2014.11.27 @ 16:50:00
Start Time: 15:09:05 End Time: 21:04:59	Time Off Btm: 2014.11.27 @ 19:18:15

TEST COMMENT: 30 - IF- B.O.B. in 7 minutes
 45 - IS- No return
 30 - FF- B.O.B. in 8 minutes
 45 - FS- No return

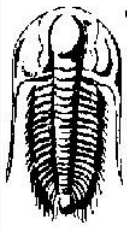


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.99	93.94	Initial Hydro-static
1	27.92	93.40	Open To Flow (1)
30	169.46	96.17	Shut-In(1)
75	950.98	96.57	End Shut-In(1)
76	170.93	96.31	Open To Flow (2)
106	265.85	97.23	Shut-In(2)
148	917.01	97.41	End Shut-In(2)
149	1530.76	97.63	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
496.00	Mud, 100%M	6.96

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

DST #2 SUMMARY

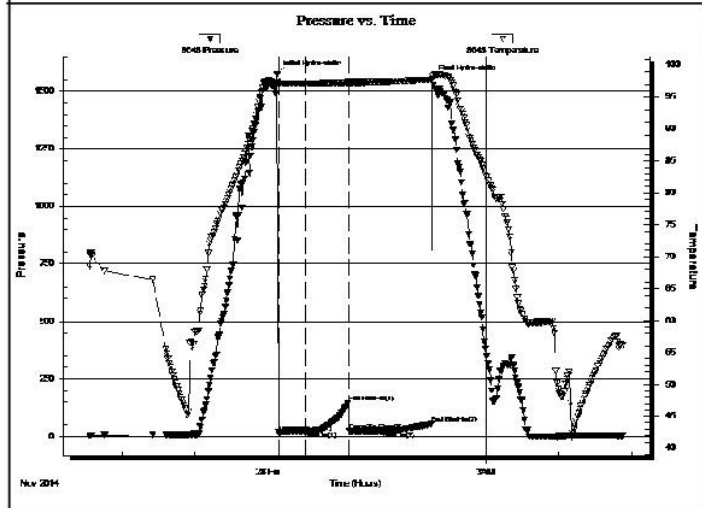
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	Outlaw Well Service LLC 1408 West 42nd Hays KS, 67601 ATTN: Steve Reed	17-8s-17w Rooks KS Schindler 1W Job Ticket: 60645 DST#:2 Test Start: 2014.11.27 @ 21:33:00

GENERAL INFORMATION:

Formation: Lansing "A-C"	Test Type: Conventional Straddle (Reset)
Deviated: No Whipstock: ft (KB)	Tester: Cody Bloedorn
Time Tool Opened: 00:08:45	Unit No: 73
Time Test Ended: 04:53:15	
Interval: 3116.00 ft (KB) To 3134.00 ft (KB) (TVD)	Reference Elevations: 1853.00 ft (KB)
Total Depth: 3371.00 ft (KB) (TVD)	1848.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair	KB to GR/CF: 5.00 ft

Serial #: 8648	Inside				
Press@RunDepth: 25.25 psig @ 3117.00 ft (KB)	Capacity: 8000.00 psig				
Start Date: 2014.11.27	End Date: 2014.11.28	Last Calib.: 2014.11.28			
Start Time: 21:33:05	End Time: 04:53:14	Time On Btm: 2014.11.28 @ 00:07:45			
		Time Off Btm: 2014.11.28 @ 02:15:45			

TEST COMMENT: 30 - IF- 1/2" blow
 30 - IS- No return
 30 - FF- Surface return
 30 - FS- No blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1575.37	97.46	Initial Hydro-static
1	16.81	97.12	Open To Flow (1)
24	25.06	97.11	Shut-In(1)
59	145.84	97.32	End Shut-In(1)
60	24.53	97.28	Open To Flow (2)
88	25.25	97.46	Shut-In(2)
128	55.08	97.73	End Shut-In(2)
128	1552.99	98.31	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
20.00	HOCM, 30%O, 70%G	0.28
0.00	186' of G.I.P.	0.00

* Recovery from multiple tests

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

DST #2 PRESSURE VS TIME CHART

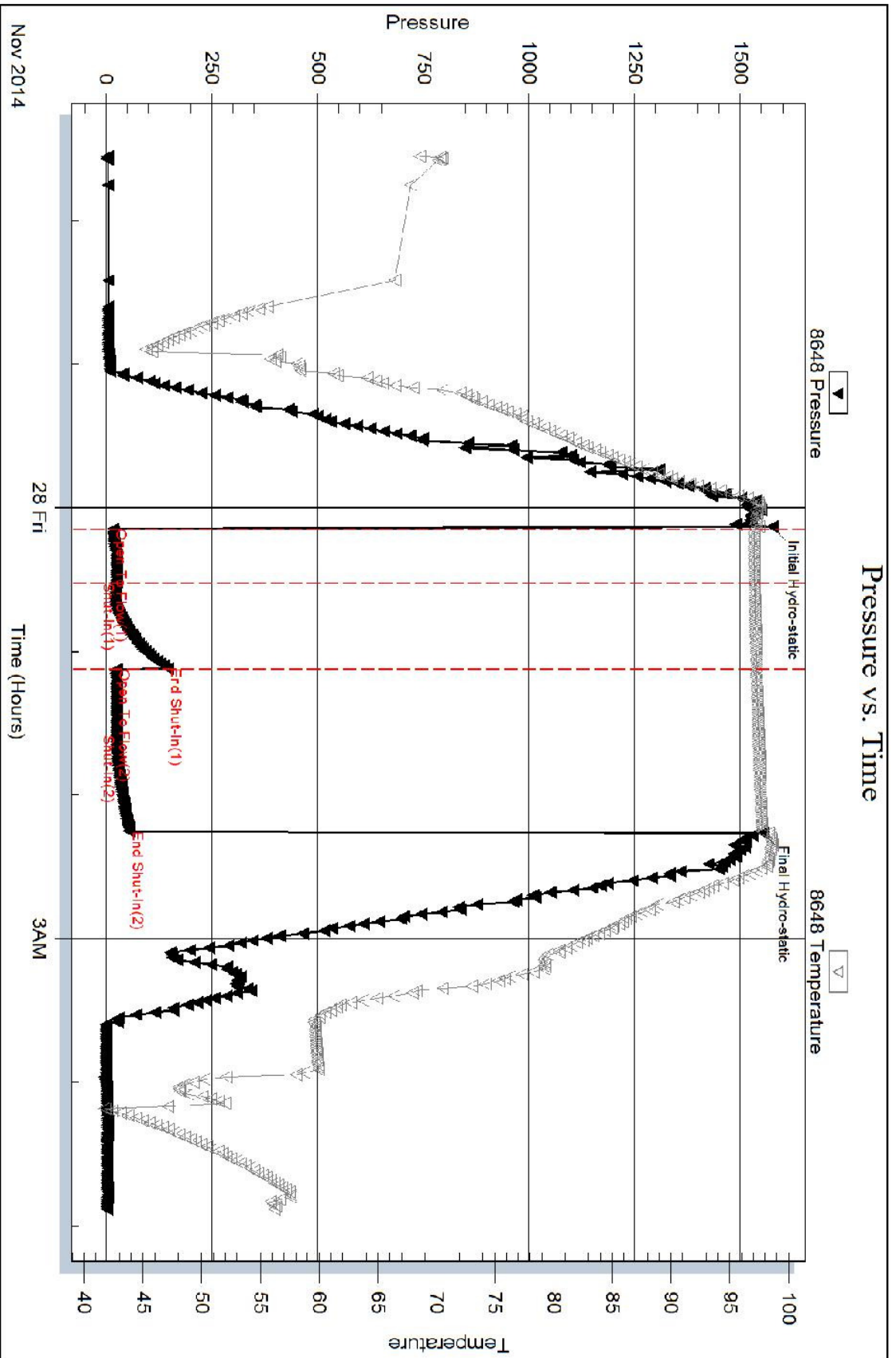
Serial #: 8648

Inside

Outlaw Well Service LLC

Schindler 1W

DST Test Number: 2


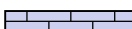









Trilobite Testing, Inc

Ref. No: 60645




Printed: 2014. 11.28 @ 06:17:33

ROCK TYPES




 Cht vari	 Lmst fw7> shale, grn	 Carbon Sh	 Ss
 Dolprim	 shale, gry	 shale, red	
 Lmst fw<7		 Shcol	

ACCESSORIES

MINERAL

-  Glauconite
-  Chert White
-  Euhed rhombs of dol or i

FOSSIL

- F Fossils < 20%
-  Oolite
-  Oomoldic
-  Fussilimid

STRINGER






-  Chert

TEXTURE

- C Chalky
- L Lithogr

OTHER SYMBOLS


EVENTS

-  Casing Shoe
-  RTF
-  Sidewall
-  Left Casing Shoe
-  Right Casing Shoe

INTERVALS

-  Core
-  DST

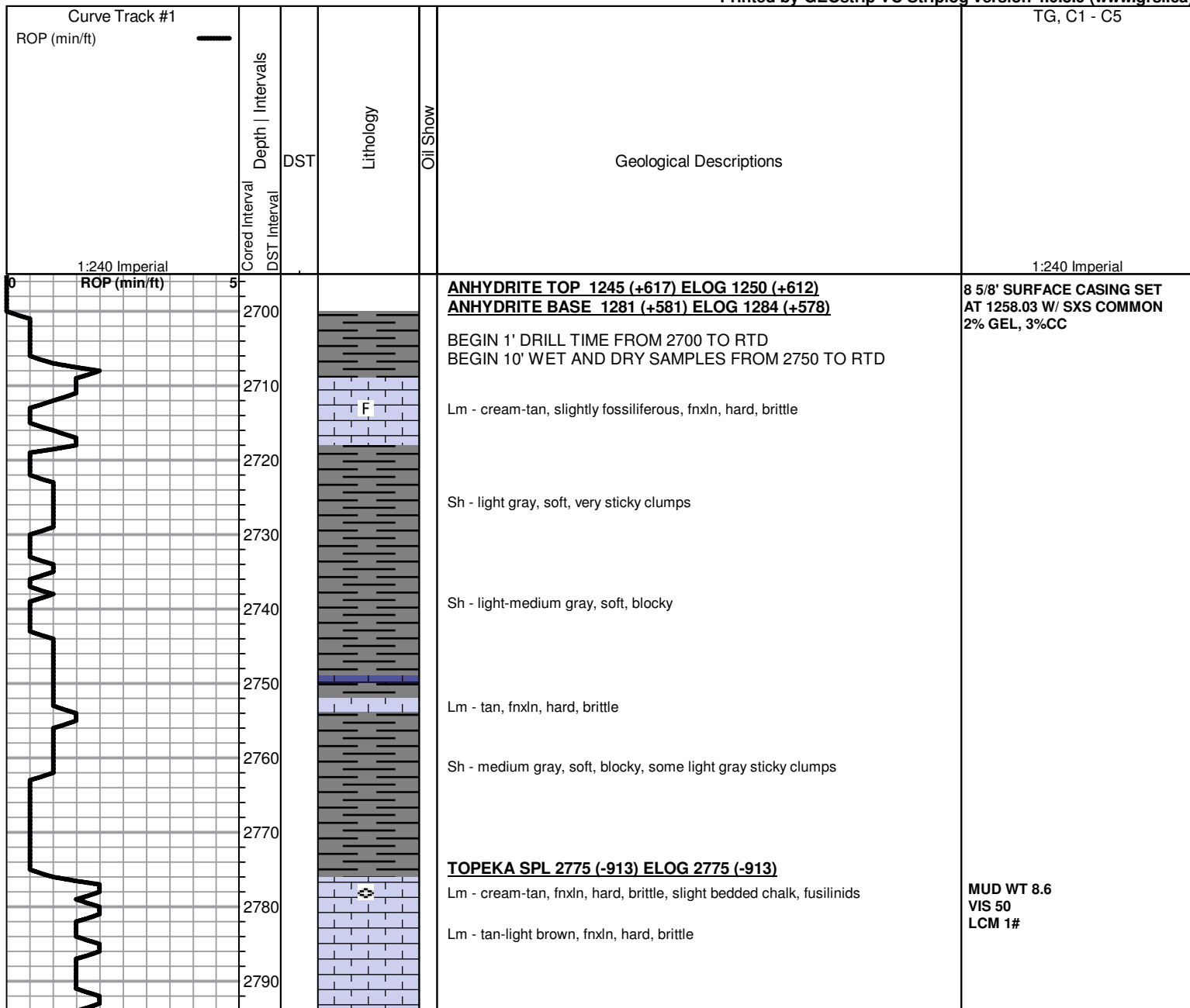
Oil Show

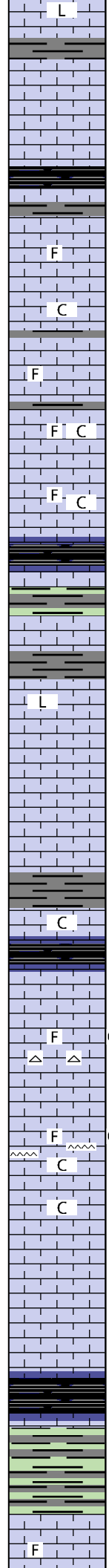
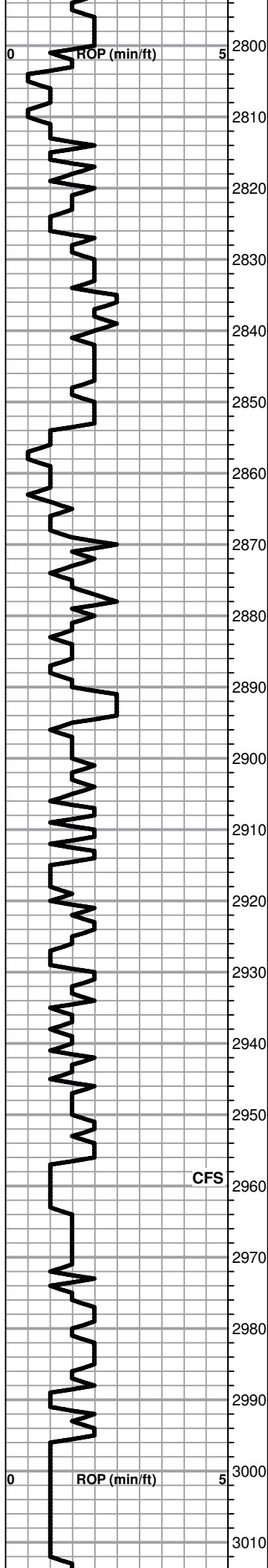
-  Good Show
-  Fair Show
-  Poor Show
-  Spotted or Trace
-  Questionable Stn
-  Dead Oil Stn
-  Fluorescence
-  Gas

DST

-  DST Int
-  DST alt
-  Core
-  tail pipe
-  DST
-  DST
-  DST

Printed by GEOstrip VC Striplog version 4.0.8.9 (www.grsi.ca)





Lm - tan, fnxln to lithographic in part, dense, hard, brittle

Lm - light gray-tan, fnxln, dense, hard

Sh - black, carbonaceous, waxy, soft

Lm - cream, fossiliferous, brittle, slight bedded chalk

Lm - cream, medxln to granular, dark fossil clasts, slightly chalky, no shows

Lm - cream-tan, mottled, slightly fossiliferous, medxln-granular, brittle, brown sticky shale clumps present

Lm - tan-slightly fossiliferous, mottled, granular, moderate hardness, slightly chalky

Lm - tan-light gray, fossiliferous, granular, easily crushed, slightly chalky, brown chert

Sh - black, carbonaceous, waxy, soft

Sh - light greenish gray, soft, blocky

Lm - cream, vfxln to lithographic in part, dense, hard

Lm - cream, fnxln, bedded chalk in part, clean and barren, brittle

Lm - cream-tan, fnxln, brittle, bedded chalk, no shows

Lm - cream-tan, fnxln, slightly chalky, no shows

Sh - black, carbonaceous, waxy, soft

Lm - cream-light gray, fossiliferous with fine interxln porosity, slightly vuggy, spotted light brown stain, few specks of free oil upon crush, no odor, good streaming wet cut under UV light, limited total porosity, white chert

Lm - cream, slightly fossiliferous, fine pinpoint porosity, spotted light brown stain, few specks of free oil, slightly chalky, cherty

Lm - cream-tan, fnxln, soft, brittle, slightly chalky, no shows

Lm - tan, fnxln, moderate hardness, brittle, no shows

HEEBNER SPL 2988 (-1126) ELOG 2988 (-1126)

Sh - black, carbonaceous, waxy, soft

Sh - light greenish gray, soft, blocky

TORONTO SPL 3009 (-1147) ELOG 3006 (-1144)

TRASHY SAMPLES

TRIP OUT FOR HOLE IN PIPE

**MUD WT 8.8
VIS 48
LCM 1#**

**MUD WT 8.8
VIS 47
LCM 1#**

Lm - offwhite, slightly fossiliferous, dense, hard, brittle, no shows

Sh - maroon / light gray, soft, blocky

LKC SPL 3029 (-1167) ELOG 3028 (-1166)

Lm - cream, slightly fossiliferous, fnxln, poor development, clean and barren, hard, brittle, slight bedded chalk

Lm - cream, fnxln, hard, brittle, bedded chalk in part, cherty, no shows

Lm - tan, fnxln, slightly oolitic, poorly developed, bedded chalk, no shows

Sh - light gray, soft, blocky

Lm - tan, fossiliferous, fine interxln porosity, spotted golden brown stain, gassy sheen, no odor, 1 chip with free oil specks upon crush, limited total porosity

Lm - cream-tan, fnxln, dense, very hard, some fossiliferous, clean and barren, no odor

Sh - maroon / medium gray, soft, fissile

Lm - cream-tan, fnxln to lithographic, brittle, slightly chalky, no shows

Sh - black, carbonaceous, waxy, soft

Lm - tan, fossiliferous, poor development, brittle, no shows

Lm - cream, fnxln, slightly chalky, no shows

Lm - tan, fine pinpoint porosity, friable, slightly fossiliferous, oomoldic in part, SFO upon crush, faint odor, scattered light brown stain, streaming wet cut under UV light

Lm - cream-tan, fnxln, some lithographic, hard, brittle, no shows

Lm - cream-light brown, granular, moderate hardness, cherty

Sh - black, carbonaceous, waxy, soft

Sh - light green / gray, soft, sticky

Lm - cream, medxln to granular in some, brittle, slightly chalky

Lm - tan-light gray, fnxln to lithographic in some, bedded chalk, hard, brittle

Lm - cream, slightly fossiliferous with fine pinpoint porosity, spotted light brown stain, good streaming wet cut, no odor, NSFO,

Lm - cream-tan, fnxln to lithographic in some, hard, brittle

Sh - medium gray, soft, fissile, light brown soft sticky clumps

Lm - cream, fnxln, brittle, slightly chalky

Sh - black, carbonaceous, waxy, soft

Sh - light green / maroon, soft, very sticky

Lm - tan, mostly fnxln, some chips with fine pinpoint porosity, spotted light brown stain, light gassy sheen, NSFO, faint odor, slight streaming wet cut under UV light

MUD WT 9.0
VIS 48
LCM 2#

DST #1 3116 TO 3162
STRADDLE (MISRUN)
SEE HEADER FOR SUMMARY

DST #2 3116 TO 3134
STRADDLE
SEE HEADER FOR SUMMARY

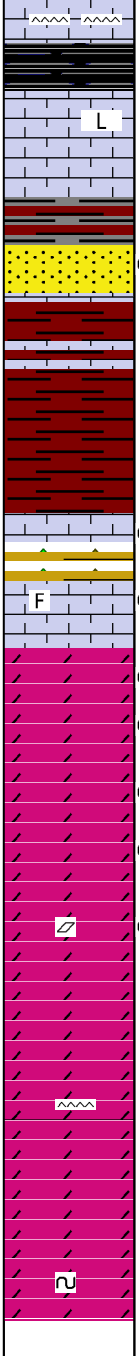
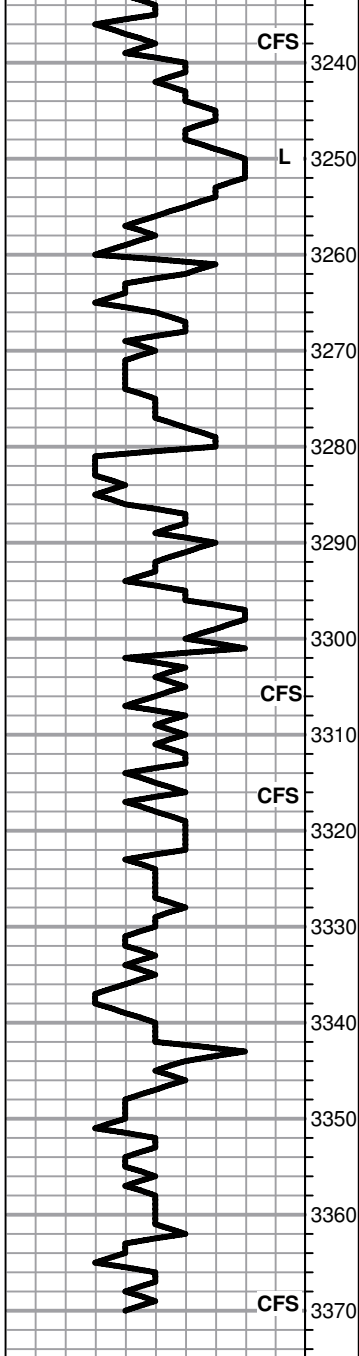
MUD WT 9.1
VIS 44
LCM 2#

3020
3030
3040
3050
3060
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
3170
3180
3190
3200
3210
3220
3230

A
B
C
CFS
D
E
F
G
CFS
H
I
J
K

ROP (min/ft)

0 5



Lm - cream-light brown, fnxn, brittle, bedded chalk, no shows, opaque chert

Sh - black, carbonaceous, waxy, fissile, soft

Lm - cream-tan, fnxn to lithographic in some, dense, hard, brittle

BKC SPL 3254 (-1392) ELOG 3254 (-1392)

Sh - light gray, soft sticky, maroon, soft, fissile

Ss - medium brown, fine grained, well sorted, angular, moderately cemented, saturated light brown stain, good streaming wet cut, NSFO, no odor

Sh - maroon, soft, very sticky, forming red wash

Sh - A/A

Lm - offwhite, granular, fine pinpoint porosity with light brown stain, NSFO, no odor, slight streaming wet cut, abundance of colored shales and cherts

Lm - cream, fossiliferous with fine pinpoint porosity, spotted light brown stain, few specks of FO in a couple chips, no odor

ARBUCKLE SPL 3296 (-1434) ELOG 3300 (-1438)

Dolo - tan-light brown, vfxn, few specks of dark stain, NSFO, questionable odor

Dolo - medium brown, vfxn with scattered pinpoint porosity, dark spotted stain, some specks of FO upon crush, limited porosity

Dolo - tan, fnxn, spotted pinpoint porosity, spotted dark stain, slight SFO upon crush, no odor

Dolo - light brown, fn-medxn, spotted stain, no odor

Dolo - tan, fnxn, hard, clean and barren

Dolo - tan-cream, well developed rhombic xtals, fn-medxn, spotted stain, slight oil specks upon crush

Dolo - tan, vfxn, very well cemented, very hard, no shows

Dolo - tan, vf-fnxn, clean and barren, cherty

Dolo - buff, vfxn, hard, no shows

Dolo - cream-buff, vfxn, hard, glauconite specks

RTD 3370 (-1508) LTD 3371 (-1509)

MUD WT 9.4
VIS 51
LCM 1#