

OPERATOR

Company: TDI, INC.
Address: 1310 BISON ROAD
HAYS, KANSAS 67601

Contact Geologist: TOM DENNING
Contact Phone Nbr: 785-628-2593
Well Name: LESTER # 1
Location: SW NE SW SW, Sec.T17S-R19W
API: 15-165-22,073-00-00
Pool: WILDCAT
State: KANSAS
Field: UNNAMED
Country: USA



Scale 1:240 Imperial

Well Name: LESTER # 1
Surface Location: SW NE SW SW, Sec.T17S-R19W
Bottom Location:
API: 15-165-22,073-00-00
License Number: 4787
Spud Date: 7/15/2014 Time: 1:30 PM
Region: RUSH COUNTY
Drilling Completed: 7/21/2014 Time: 10:48 AM
Surface Coordinates: 705' FSL & 735' FWL
Bottom Hole Coordinates:
Ground Elevation: 2119.00ft
K.B. Elevation: 2129.00ft
Logged Interval: 3000.00ft To: 4056.00ft
Total Depth: 4056.00ft
Formation: CONGLOMERATE SAND
Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -99.399099
Latitude: 38.5991738
N/S Co-ord: 705' FSL
E/W Co-ord: 735' FWL

LOGGED BY

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

Phone Nbr: 785-625-3380
Logged By: GEOLOGIST Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
Rig #: 1
Rig Type: MUD ROTARY
Spud Date: 7/15/2014 Time: 1:30 PM
TD Date: 7/21/2014 Time: 10:48 AM

ELEVATIONS

K.B. Elevation: 2129.00ft
K.B. to Ground: 10.00ft

Ground Elevation: 2119.00ft

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL BASED ON NEGATIVE RESULTS OF DST # 1, LOG ANALYSIS AND LOW STRUCTURE.

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG.

DRILL STEM TESTING BY TRILOBITE TESTING INC: ONE (1) CONVENTIONAL TEST

FORMATION TOPS COMPARISON

	LESTER # 1	SCHWINDT #1	SCHWINN FMS # 1
	SW NE SW SW	150'NE of NE SW SE	SW NE SW
	SEC.2-17S-19W	SEC.2-17-19W	SEC.11-17-19W
	2119'GL 2129'KB	KB 2102'	KB 2136'
<u>FORMATION</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>
Anhydrite	1358 +771		+797
B-Anhydrite	1386 +743		+766
Topeka	3207-1078	- 998	-1041
Heebner Sh.	3493-1364	-1300	-1328
Toronto	3512-1383	-1321	-1348
LKC	3540-1411	-1347	-1376
BKC	3804-1675	-1589	-1640
Marmaton	3832-1703	-1628	-1670
Pawnee	3858-1729		-1686
Conglomerate	3900-1771	-1678	-1722
Arbuckle	Not Reached		
RTD	4056-1927	-1714	-1844

SUMMARY OF DAILY ACTIVITY

7-15-14 RU, Spud 1:30 PM, set 8 5/8" surface casing to 221' w/ 150 sxs
Common 2%Gel 3%CC, slope 3/4 degree, plug down 7:30 PM

7-16-14 460', drill plug 3:30 AM

7-17-14 1751', drilling

7-18-14 2655', drilling, displaced 2853' to 2880'

7-19-14 3315', CFS 3576', CFS 3749'

7-20-14 3860', drilling, CFS 3860', short trip 25 stands, CFS 3929', CFS 3970',
DST # 1 3880' to 3970' conglomerate sand, slope mirror, TOWP

DST # 1 3880 to 3970, conglomerate sand, slope-misrun, TOWB,
logs, decision to P&A, TIWB, LDDP
7-22-14 4056', finish LDDP and plugging well, plug down 2:15 AM, RD

DST # 1 TEST SUMMARY

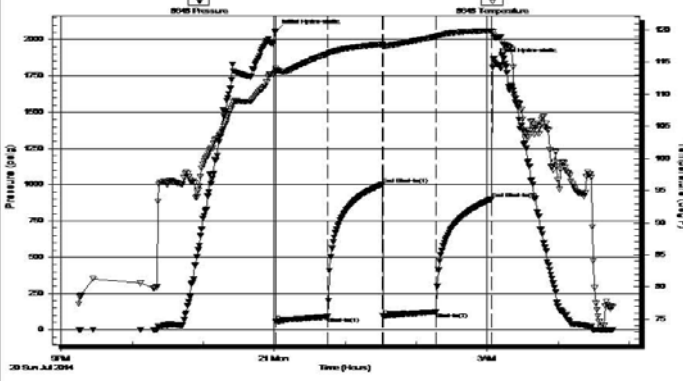
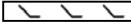
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT																																						
TDI, Inc 1310 Bison Rd Hays KS, 67601 ATTN: Herb		2-17s-19w Rush KS Lester Job Ticket: 59326 DST#: 1 Test Start: 2014.07.20 @ 21:15:00																																					
GENERAL INFORMATION:																																							
Formation: Cong. Sand Deviated: No Whipstock ft (KB) Time Tool Opened: 00:01:30 Time Test Ended: 04:46:30		Test Type: Conventional Bottom Hole (Initial) Tester: Cody Bloedorn Unit No: 73																																					
Interval: 3880.00 ft (KB) To 3970.00 ft (KB) (TVD) Total Depth: 3970.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair		Reference Elevations: 2129.00 ft (KB) 2121.00 ft (CF) KB to GR/CF: 8.00 ft																																					
Serial #: 8648 Inside Press@RunDepth: 122.27 psig @ 3949.00 ft (KB) Start Date: 2014.07.20 End Date: 2014.07.21 Start Time: 21:15:05 End Time: 04:46:29																																							
		Capacity: 8000.00 psig Last Calib.: 2014.07.21 Time On Btm: 2014.07.21 @ 00:01:15 Time Off Btm: 2014.07.21 @ 03:05:00																																					
TEST COMMENT: 45 - IF- 6.5" blow 45 - IS- No return 45 - FF- 3.75" blow 45 - FS- No return																																							
Pressure vs. Time		PRESSURE SUMMARY																																					
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Image Header 03

Image Header 04

Image Header 05

ROCK TYPES

	Clystgy		shale, grn		shale, red		Lscongl
	Lmst fw<7		shale, gry		Shcol		CglSandy
	Lmst fw>7		Carbon Sh		Ss		Dol Lime

ACCESSORIES

MINERAL

- ▲ Chert, dark
- P Pyrite
- Varicolored chert

FOSSIL

- Oolite
- ⬢ Oomoldic

OTHER SYMBOLS

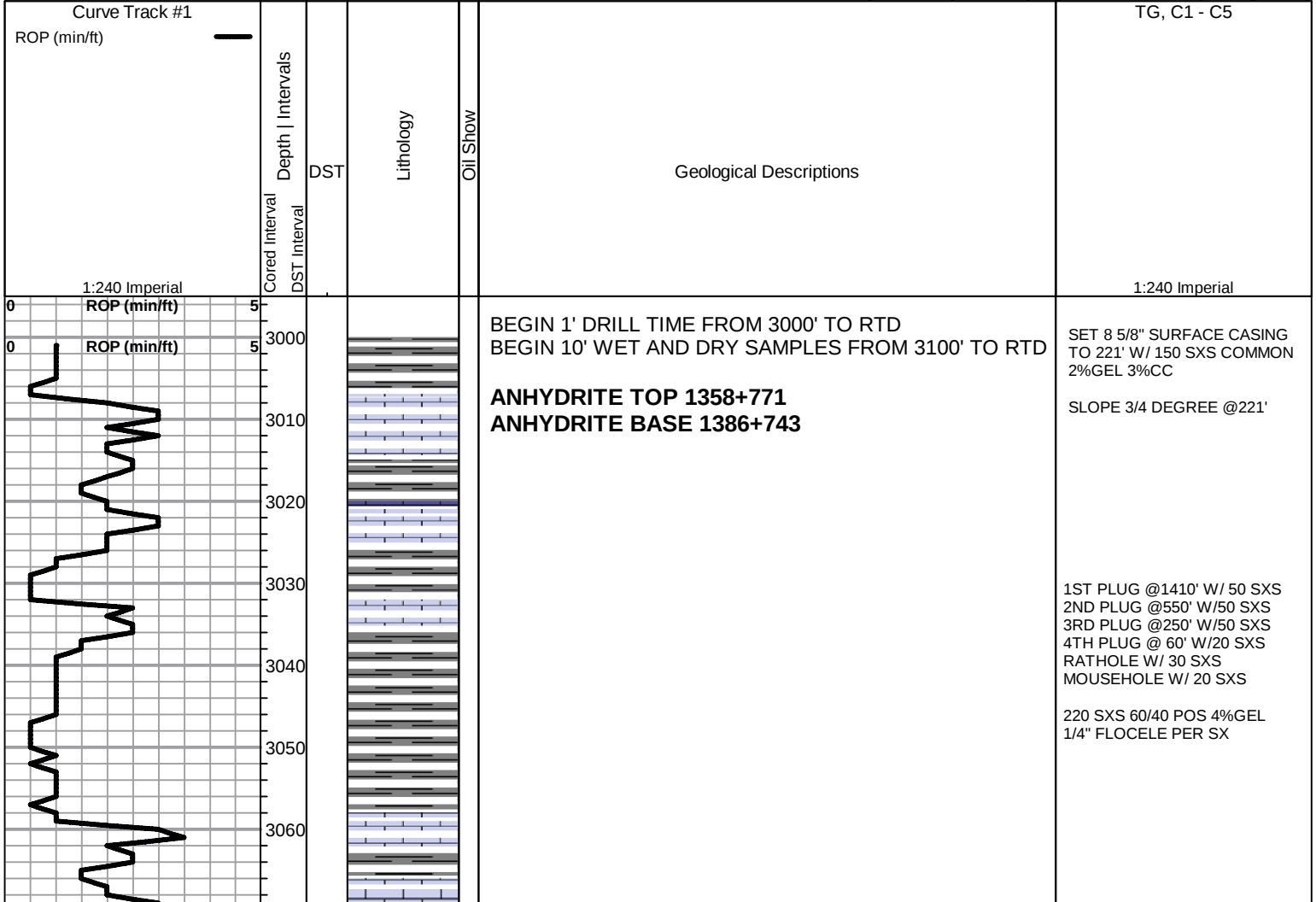
Oil Show

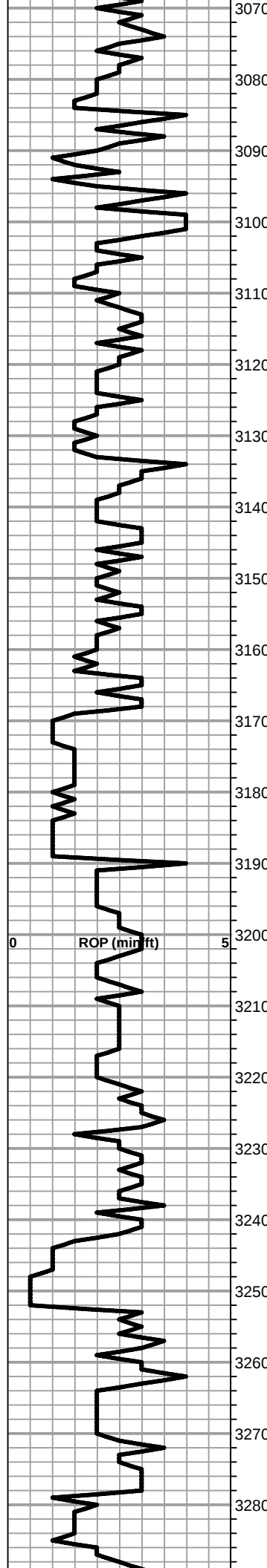
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

- DST Int
- DST alt
- Core
- tail pipe

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





Lime, lt-med brn-med gray, fnxln

Lime lt-med grayish brn-gray, fnxln, slightly fossiliferous

Lime, lt-med brn-lt-med gray, fnxln

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt brn, fnxln, scattered gray mottling

Lime, lt-med brn-lt gray, fnxln

Lime,lt gray, fnxln

Lime, lt brn, fnxln, slightly fossiliferous

Shale, lt-med gray, soft blocky to soft sticky clumps

Lime, dark brn, fn-vfxln

Lime, crm-lt brn, fnxln, slightly fossiliferous

TOPEKA ELog 3207-1078

Lime, crm-lt brn, fnxln to slightly granular in part w/ bedded chalk

Lime, lt-med brn-lt grayish brn, fn-vfxln

Lime, crm-lt-med brn, fnxln

Lime, crm-offwhite-lt gray, fnxln

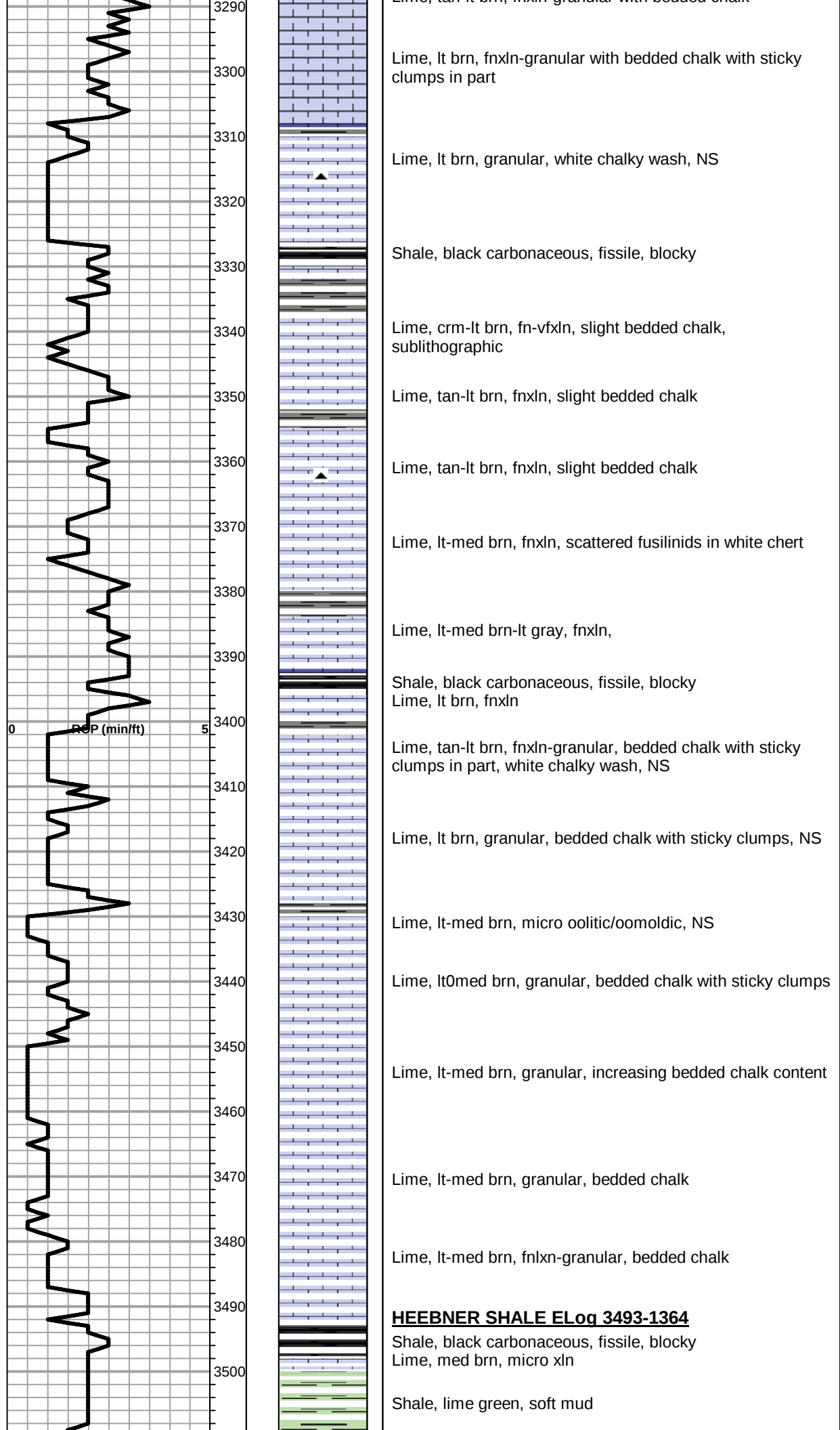
Lime, lt brn, granular, NS

Lime, lt-med brn-grayish brn, fn-vfxln

Lime, lt brn-lt grayish brn, fnxln

Lime,lt brn-lt grayish brn, fnxln, slightly fossiliferous

Lime, tan-lt brn, fnxln-granular with bedded chalk



TORONTO ELog 3512-1383

Lime, white-crm, fnxln-granular in part, slight bedded chalk, NS

Lime, tan-lt brn, fn-vfxln, slight bedded chalk

Shale, reddish brn, soft blocky with lt red wash

LKC ELog 3540-1411

Lime, lt brn, fn-vfxln

Lime, lt-med brn, fn-vfxln, slight bedded chalk

Lime, lt-med brn, fn-vfxln

Lime, lt brn, oolitic/oomoldic, NS, No Wet Cut

Lime, offwhite-lt brn, fnxln, bedded chalk

Lime, tan-lt brn, fn-vfxln, slight bedded chalk, few chips of oolitic chert

Lime, fnxln, slight bedded chalk, NS

Lime, tan, fn-vfxln, slight bedded chalk grading into lt gray tinted lime near shale boundary, fnxln

Shale, black carbonaceous, fissile, blocky

Lime, lt grayish brn, fn-vfxln

Lime, tan-lt brn, cemented oolitic beds, NS

Lime, lt-med brn, fnxln, slight bedded chalk, NS

Lime, crm-tan, fnxln, bedded chalk

Lime, lt brn, oolitic/oomoldic, NS, No Wet Cut

Lime, buff-lt brn, fn-micro xln

Lime, crm-lt brn, fn-micro xln

Lime, lt gray, micro xln, few chips of black chert

Lime, crm, fn-micro xln, tan chert

Lime, crm-tan, fn-micro xln, slight bedded chalk

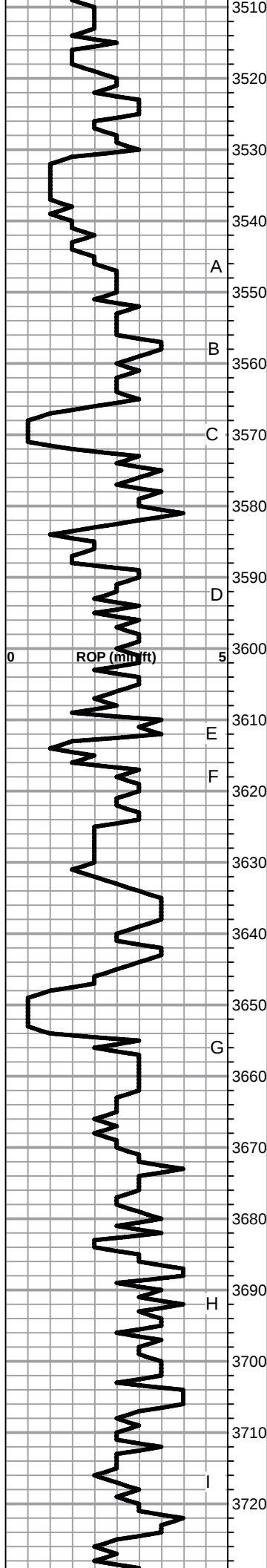
Shale, lt-med gray, firm blocky

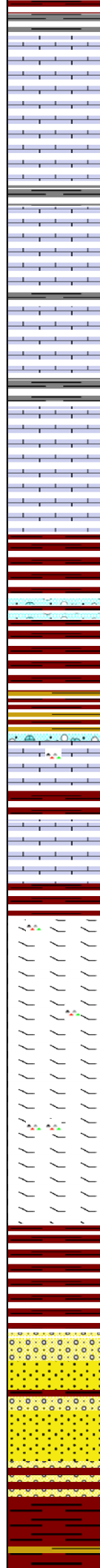
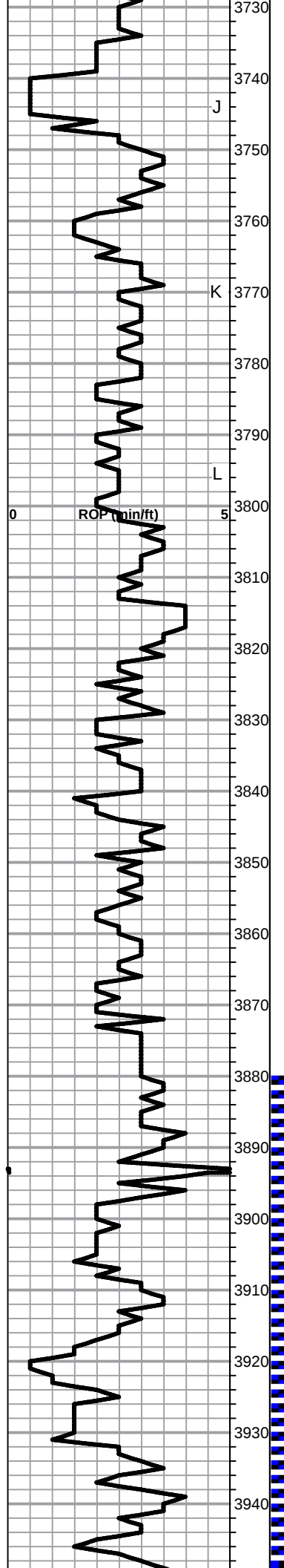
Lime, offwhite-tan, fn-micro xln, slight bedded chalk, NS

Lime, tan, fn-micro xln, slight bedded chalk

Shale, lt red wash, soft mud to soft blocky

CFS 3576'





Lime, lt brn, fnxln-oolitic/oomoldic, NS, No Wet Cut

Lime, tan, fnxln, slight bedded chalk

Lime, crm-tan, fnxln

Lime, grayish brn, fnxln

Lime, crm-lt brn, fnxln

Lime, crm-tan, fnxln, bedded chalk

Lime, crm-lt brn, fn-vfxln, bedded chalk

Lime, lt brn, fn-vfxln

BKC ELog 3804-1675

Shale, reddish brn, soft blocky

Shale, reddish brn, soft blocky, clastic lime mix

Shale, reddish brn-vari colored , soft blocky with few chert nodules

MARMATON ELog 3832-1703

Lime, tan, fnxln with bright orange chert fragments

Lime, lt brn, fn-vfxln

PAWNEE ELog 3858-1729

Lime, crm-lt brn, fn-vfxln

Lime, crm-tan, fnxln-slightly granular, slight bedded chalk
Chert, tan, white, orange, fresh, sharp

Lime, crm-lt brn, fnxln-granular, slightly dolomitic

Lime, crm-tan, fnxln, slightly dolomitic

CONGLOMERATE ELog 3900-1771

Shale, dark brn with deep red wash

Shale, red-reddish brn, red wash
Clay, white, sticky clumps

Sandstone, quartz, poorly sorted, cemented with dolomite,
NS, No Staining, No Wet Cut

Sandstone, quartz, scattered clusters, friable in part, poorly
sorted, lightly cemented, NS

Shale, red, med-dark brn, deep red wash

CFS 3750'

CFS @3860', short trip 25
stands

DST # 1 3880' TO 3970' SEE
HEADER FOR TEST SUMMARY

