

OPERATOR

Company: CARRIE EXPLORATION DEVELOPMENT A GENERAL PARTNERSHIP
 Address: 210 W 22nd
 HAYS, KANSAS 67601

Contact Geologist: RON HEROLD
 Contact Phone Nbr: 913-961-2760
 Well Name: SLEEPER C # 1
 Location: W2 NE NW NE Sec.10-22s-11w API: 15-185-23,759-00-00
 Pool: WILDCAT Field: UNNAMED
 State: KANSAS Country: USA

Scale 1:240 Imperial

Well Name: SLEEPER C # 1
 Surface Location: W2 NE NW NE Sec.10-22s-11w
 Bottom Location:
 API: 15-185-23,759-00-00
 License Number: 6768
 Spud Date: 7/27/2012 Time: 7:00 PM
 Region: STAFFORD COUNTY
 Drilling Completed: 8/2/2012 Time: 8:10 PM
 Surface Coordinates: 4950' FSL & 1879' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 1754.00ft
 K.B. Elevation: 1761.00ft
 Logged Interval: 1900.00ft To: 3650.00ft
 Total Depth: 3650.00ft
 Formation: ARBUCKLE
 Drilling Fluid Type: FRESH WATER GEL/CHEMICAL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 4950' FSL
 E/W Co-ord: 1879' FEL

LOGGED BY

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

Phone Nbr: (785) 639-1337
 Logged By: Geologist Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 4
 Rig Type: MUD ROTARY
 Spud Date: 7/27/2012 Time: 7:00 PM
 TD Date: 8/2/2012 Time: 8:10 PM
 Rig Release: 8/3/2012 Time: 3:00 AM

ELEVATIONS

K.B. Elevation: 1761.00ft Ground Elevation: 1754.00ft
 K.B. to Ground: 7.00ft


NOTES

DECISION MADE TO RUN PRODUCTION CASING BASED ON POSITVE RESULTS OF DST # 2. SIMPSON SAND

FORMATION TOPS SUMMARY**SLEEPER #C-1****4950' FSL & 1879' FWL, NE/4****Sec.10-22s-11w****1754' GL 1761' KB**

<u>FORMATION</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>
Neva		2002- 241
Red Eagle		2093- 332
Stotler Lime		2380- 619
Elmont		2446- 685
Howard		2602- 841
Topeka	2701- 940	2703- 942
Heebner Shale	2995-1234	2996-1235
Toronto	3016-1255	3016-1255
Douglas Shale	3029-1268	3030-1269
Brown Lime	3136-1375	3137-1376
LKC	3163-1402	3163-1402
BKC	3402-1641	3408-1647
Simpson Shale		3492-1731
Simpson Sand		3494-1733
Arbuckle	3542-1781	3543-1782
RTD	3650-1889	
LTD		3650-1889

DST # 1 SUMMARY

	DRILL STEM TEST REPORT	
	Carrie Exploration & Development 210 West 22nd Hays, Kansas 67601 ATTN: Herb Deines	10-22s-11w Stafford Sleeper #C-1 Job Ticket: 17316 DST#: 1 Test Start: 2012.08.01 @ 00:00:00

GENERAL INFORMATION:

Formation: **Kansas City "B,C,D,&**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended: 00:00:00

Interval: 3174.00 ft (KB) To 3245.00 ft (KB) (TVD)
 Total Depth: 3245.00 ft (KB) (TVD)
 Hole Diameter: 8.88 inches Hole Condition: Fair

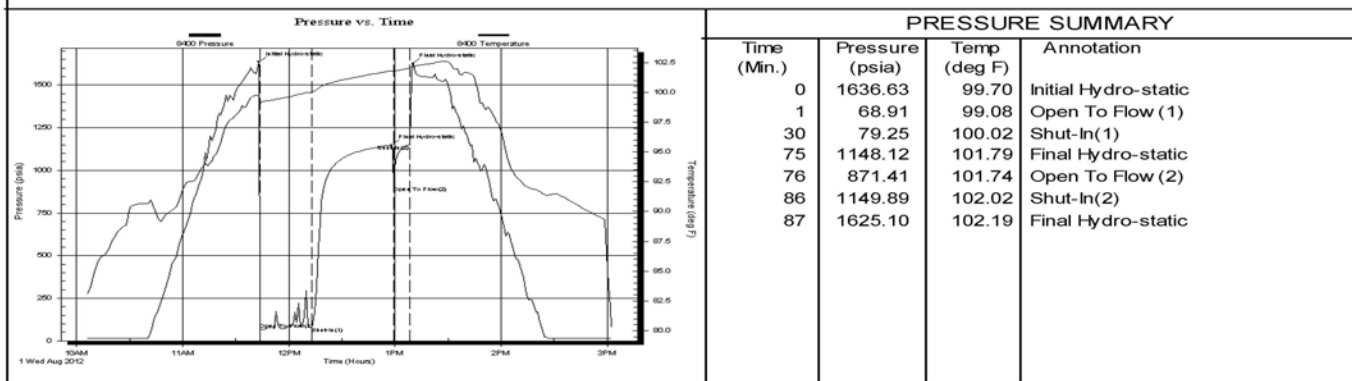
Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig 59
 Unit No: 3315

Reference Elevations: 1761.00 ft (KB)
 1754.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8400 Inside

Press@RunDepth: psia @ 3240.98 ft (KB)
 Start Date: 2012.08.01 End Date: 2012.08.01 Capacity: 5000.00 psia
 Start Time: 10:05:00 End Time: 15:03:00 Last Calib.: 2012.08.01
 Time On Btm: 2012.08.01 @ 11:43:00
 Time Off Btm: 2012.08.01 @ 12:58:00

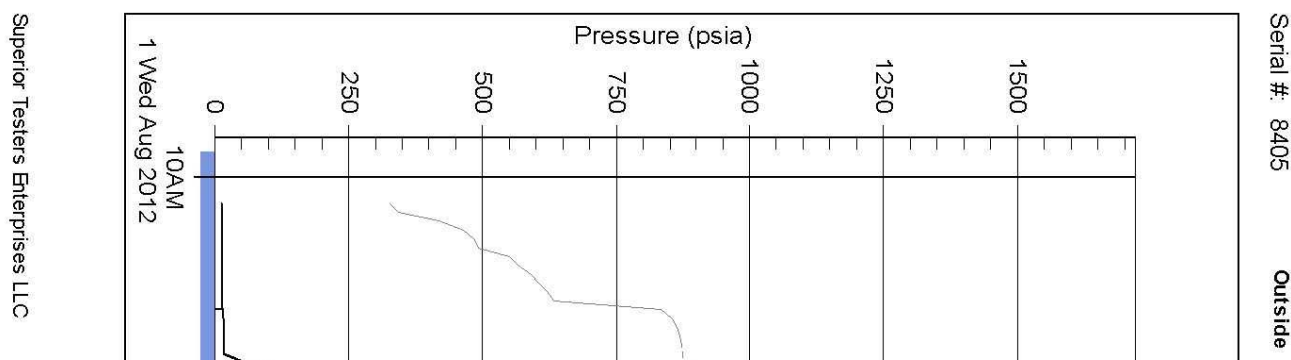
TEST COMMENT: 1st Oprng 30 Minutes Weak building blow built to 3 1/8 inches into the water
 1st Shut-In 45 Minutes-no blow back
 2nd Opening 25 Minutes-No blow - flushed tool-no help-pulled tool after 15 minutes
 2nd Sut-In none taken



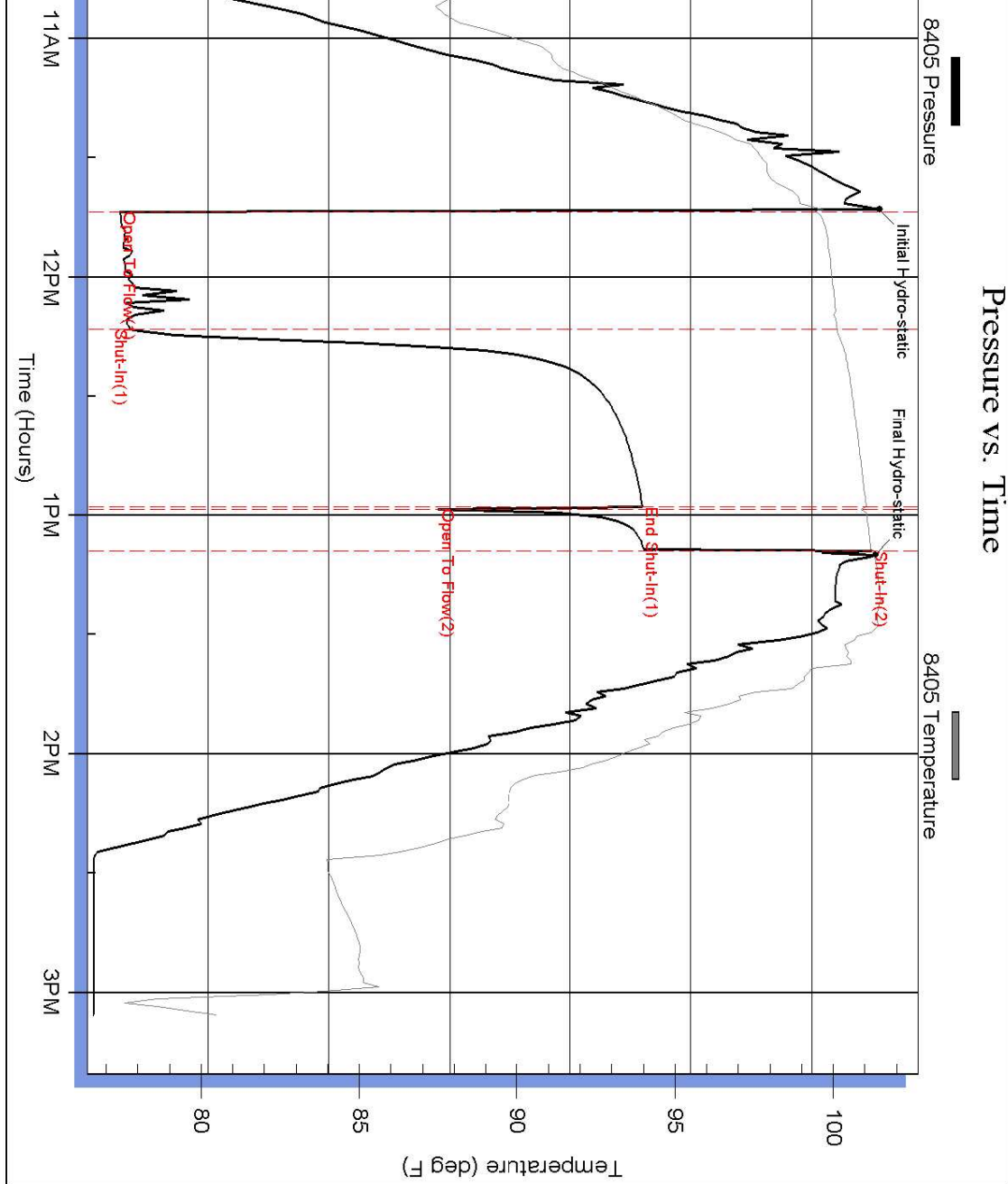
Recovery	Gas Rates																																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Length (ft)</th> <th>Description</th> <th>Volume (bbl)</th> </tr> </thead> <tbody> <tr> <td>40.00</td> <td>Drilling mud</td> <td>0.56</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Length (ft)	Description	Volume (bbl)	40.00	Drilling mud	0.56													<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th> </th> <th>Choke (inches)</th> <th>Pressure (psia)</th> <th>Gas Rate (Mcf/d)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)												
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Superior Testers Enterprises LLC
Ref. No: 17316
Printed: 2012.08.01 @ 13:18:48

DST # 1 EXPANDED CHART



Pressure vs. Time



Ref. No: 17316

Printed: 2012.08.01 @ 13:18:48

DST # 2 TEST SUMMARY



DRILL STEM TEST REPORT

Carrie Exploration & Development
 210 West 22nd
 Hays, Kansas 67601
 ATTN: Herb Deines

10-22s-11w Stafford
 Sleeper #C-1
 Job Ticket: 17317
 Test Start: 2012.08.03 @ 07:45:00
DST#: 2

GENERAL INFORMATION:

Formation: **Simpso**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:58:30
 Time Test Ended: 15:57:30

Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig 59
 Unit No: 3315

Interval: **3489.00 ft (KB) To 3546.00 ft (KB) (TVD)**
 Total Depth: 3650.00 ft (KB) (TVD)
 Hole Diameter: 8.88 inches Hole Condition: Fair

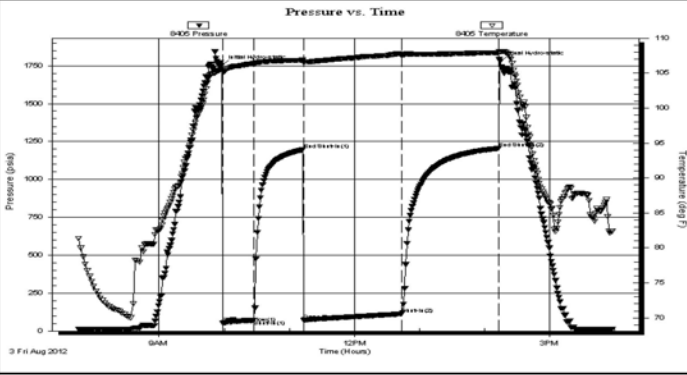
Reference Elevations: 1761.00 ft (KB)
 1754.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: **8405** Inside
 Press@RunDepth: 113.52 psia @ 3540.02 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.08.03 End Date: 2012.08.03 Last Calib.: 1899.12.30
 Start Time: 07:46:00 End Time: 15:57:30 Time On Btm: 2012.08.03 @ 09:57:30
 Time Off Btm: 2012.08.03 @ 14:14:30

TEST COMMENT: 1st Opening 30 Minutes-Weak building blow built to 5 inches into the water
 1st Shut-In 45 Minutes- No blow back
 2nd Opening 90 Minutes-Weak building blow built to 14 inches into the water
 2nd Shut-In 90 Minutes-No blow back



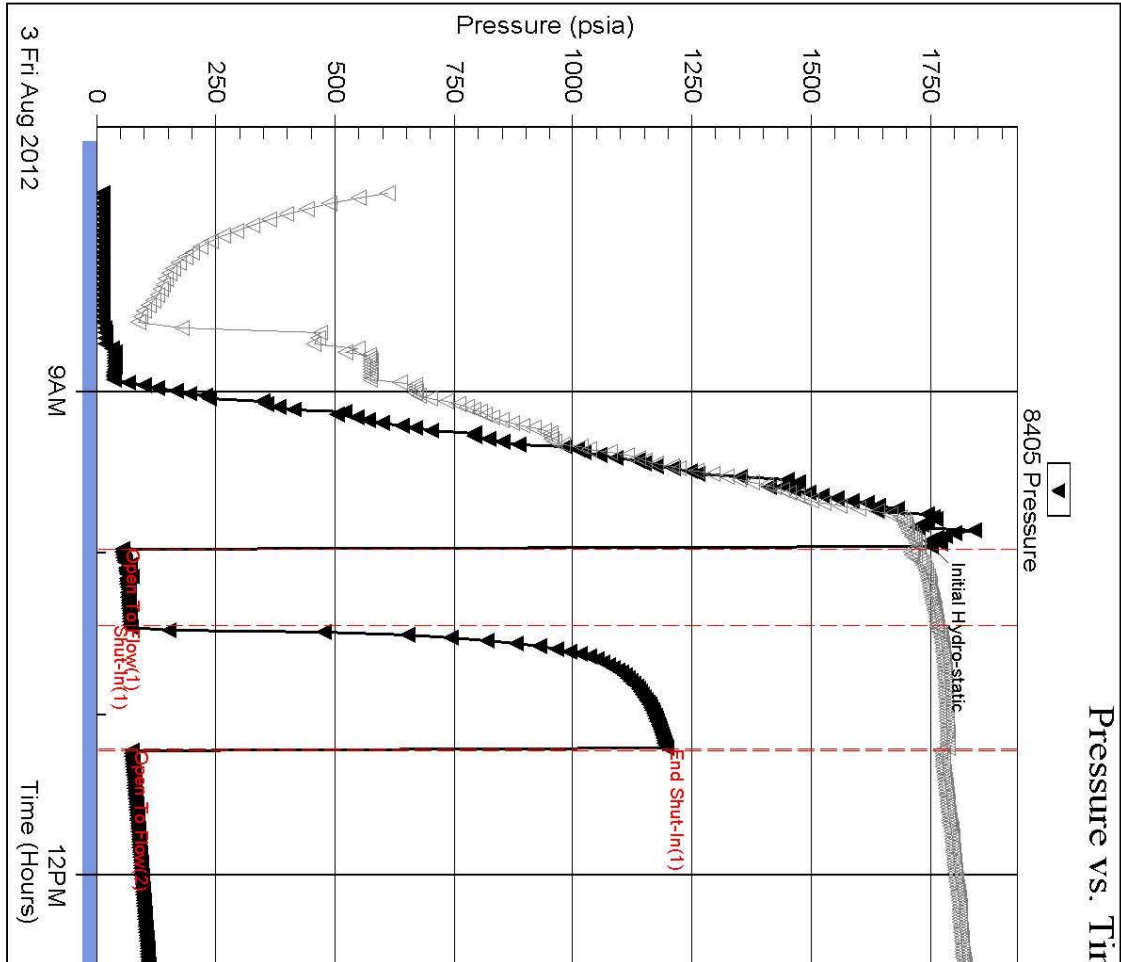
PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1752.11	105.53	Initial Hydro-static
1	54.73	105.25	Open To Flow (1)
30	71.08	106.35	Shut-In(1)
76	1196.67	106.84	End Shut-In(1)
76	73.31	106.49	Open To Flow (2)
167	113.52	107.61	Shut-In(2)
256	1205.41	107.92	End Shut-In(2)
257	1781.40	108.05	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
145.00	Gas in the pipe	2.03
45.00	Oil and gas cut mud	0.63
0.00	10%Gas 10%Oil 10%Water 70%Mud	0.00
60.00	Oil and gas cut muddy w water	0.84
0.00	5%Gas 10% Oil 25% Water 60%Mud	0.00
60.00	Mud 5% Oil 95Mud Chlorides 8500	0.84

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

Superior Testers Enterprises LLC Ref. No: 17317 Printed: 2012.08.04 @ 00:13:09

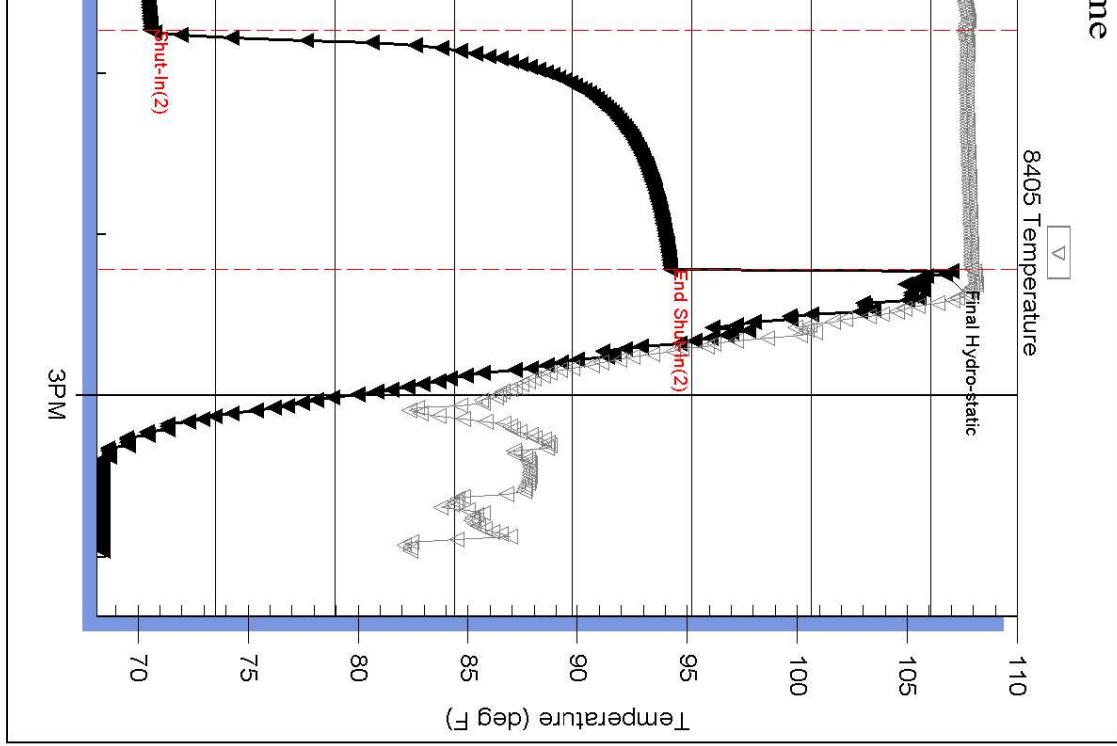
DST # 2 EXPANDED CHART



Superior Testers Enterprises LLC Ref. No: 17317

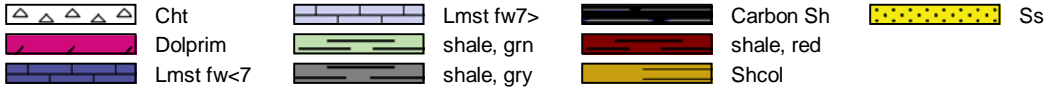
Serial #: 8405 Inside Carrie Exploration & Development Sleeper #C-1

Printed: 2012.08.04 @ 00:13:12



DST Test Number: 2

ROCK TYPES



ACCESSORIES

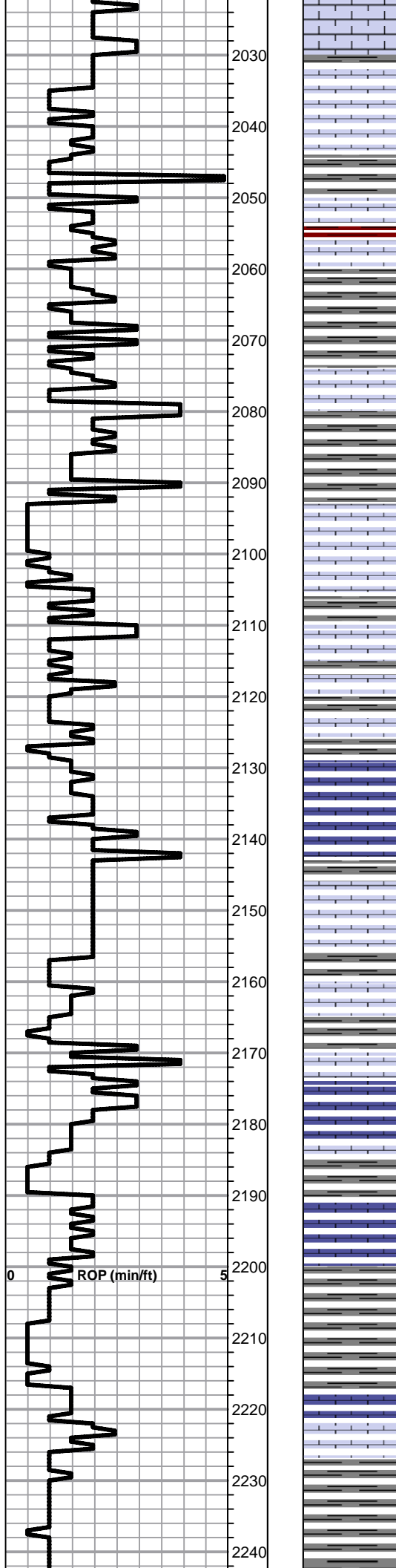


OTHER SYMBOLS



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

<p>Curve Track #1 ROP (min/ft)</p>	<p>Depth Intervals Cored Interval DST Interval</p>	<p>DST Lithology</p>	<p>Oil Show</p> <p>Geological Descriptions</p>	<p>TG, C1 - C5</p> <p>1:240 Imperial</p>
<p>1:240 Imperial ROP (min/ft)</p>	<p>2000 2010 2020</p>		<p>NEVA 2002-241</p> <p>Begin 1' drill time from 2000' to RTD Begin 10' wet and dry samples from 2050' to RTD</p>	<p>8 5/8" set to 258' w/175 sxs. Common, 2%Gel, 3%CC. Allied ticket 53685</p> <p>Slope @ 258'=3/4 degree</p>



2030

2040

2050

2060

2070

2080

2090

2100

2110

2120

2130

2140

2150

2160

2170

2180

2190

2200

2210

2220

2230

2240

Lime, crm-lt brn, fnxln, slightly fossiliferous

Shale, gray-black carbonaceous grading into dove gray shale

Lime, wht, fnxln, micro oolitic, NS

Lime, crm-tan, fnxln

RED EAGLE ELog 2093-332

Lime, crm, fnxln-granular, slightly fossiliferous, No Wet Cut, NS

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, med brn-gray, fnxln

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

Lime, offwhite-lt-med brn, fnxln, slight chalk in part

Shale, med gray, soft blocky, trashy mix with lime in part

Lime, brn-gray, fnxln, trashy mix.

Lime, lt-med brn, fnxln

Shale, med gray, soft-firm blocky

Lime, lt-med brn, fnxln

Shale, med gray, soft-firm blocky

Shale, lt gray, soft mud balls

Shale, lt-med gray, forming soft mud balls

0 ROP (min/ft) 5

2250
2260
2270
2280
2290
2300
2310
2320
2330
2340
2350
2360
2370
2380
2390
2400
2410
2420
2430
2440
2450
2460

0 P (min/ft) 5



Lime, lt-med brn, granular, fossiliferous, specks of glauconite

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

Lime, lt-med brn-gray, fnxln

Shale, med soft, red wash

Shale, dove gray-lt green, soft mud balls

Lime, brn-gray, fnxln, trashy mix with gray shale
Shale, dove gray, soft mud balls

Lime, lt-med brn, fnxln

Shale, lt gray, soft mud balls

Shale, lt gray, soft mud balls

Shale, lt gray, soft mud balls

Shale, lt gray, soft mud balls

STOTLER LIME ELog 2380-619

Lime, lt-med brn, fnxln, fossiliferous in part, sticky white chalk

Shale, red, soft mud balls

Lime, lt-med brn, fnxln-granular, slight chalk in part, NS

Shale, lt gray-red, soft mud balls

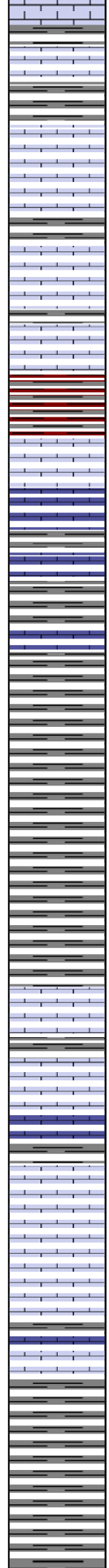
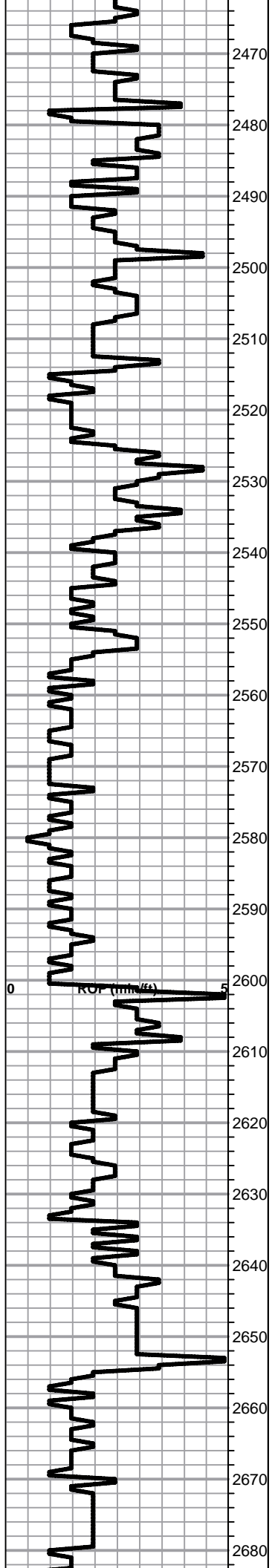
Shale, lt gray, soft mud balls

Shale, lt gray, soft mud balls

ELMONT ELog 2446-685

Lime, lt-med brn, fnxln

Lime, crm-lt brn, fnxln, chalk in part



Shale, gray, soft mud balls

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt-med gray, fnxln

Lime, lt brn, fnxln with soft sticky chalk

Lime, lt-med brn, fnxln

Shale, red soft blocky

Shale, brn-gray, blocky

Lime, gray, fnxln

Lime, crm-med brn, fnxln-granular in part, slightly chalky

Shale, gray, blocky

Shale, lt-med gray, soft mud balls

Shale, lt-med gray, soft

Shale, lt-med gray, soft

Shale, lt-med gray, soft

HOWARD LIME ELog 2602-841

Lime, med brn, fn-vfxln, slightly fossiliferous

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

Lime, med brn-gray-grayish brn, fnxln

Lime, med brn, fnxln, slightly fossiliferous

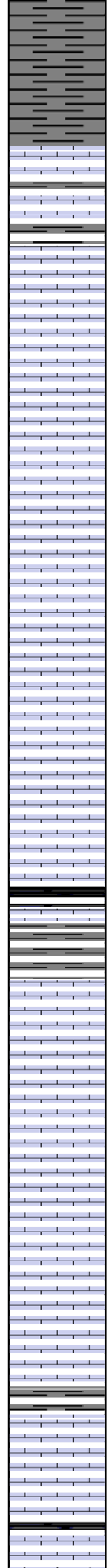
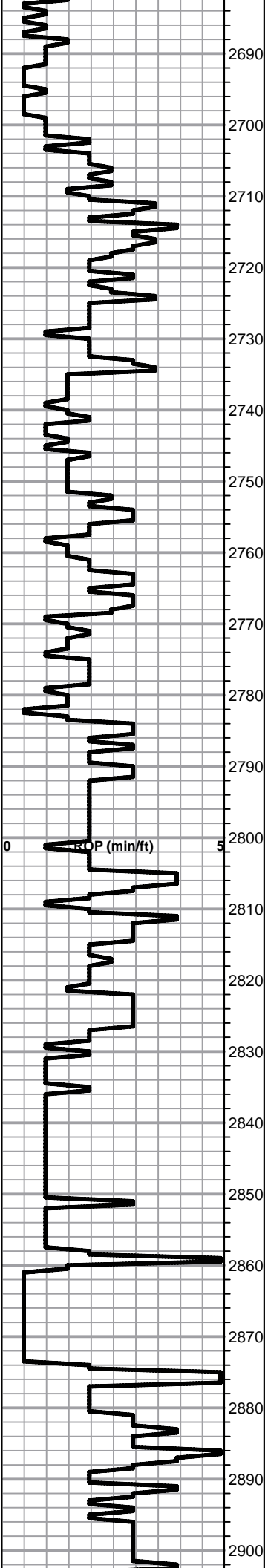
Lime, med brn-grayish brn, fnxln

Shale, lt-med gray, soft

Shale, lt gray, soft mud balls

2690
2700
2710
2720
2730
2740
2750
2760
2770
2780
2790
2800
2810
2820
2830
2840
2850
2860
2870
2880
2890
2900

ROP (min/ft)



Shale, lt gray soft

TOPEKA SPL 2701-940 ELog 2703-942

Lime, med brn, fnxln, fossiliferous

Lime, lt-med brn, fnxln, slightly fossiliferous, slight chalk in part

Lime, lt-med brn, fnxln

Lime, med brn, fnxln-granular, slight chalk in part

Lime, med brn-grayish brn, fnxln-granular, fusulinids

Lime, lt-dark brn, mostly fnxln, slight chalk

Lime, lt-med brn, fnxln-granular, slight chalk

Lime, lt-med brn, fnxln-granular, chalk in part, slightly fossiliferous

Lime, lt-med brn, fnxln-granular, slight chalk, slightly fossiliferous

Lime, lt-med brn, fnxln, chalk in part, slightly fossiliferous

Lime, grayish brn-brn-gray, fnxln
Chert, gray, sharp, fresh

Shale, black carbonaceous

Lime, lt-med brn, fnxln, slightly chalky

Lime, lt-med brn, fnxln-granular, soft, sticky chalk in part

Lime, lt brn, with soft, sticky chalk in part

Lime, lt brn, granular, chalky

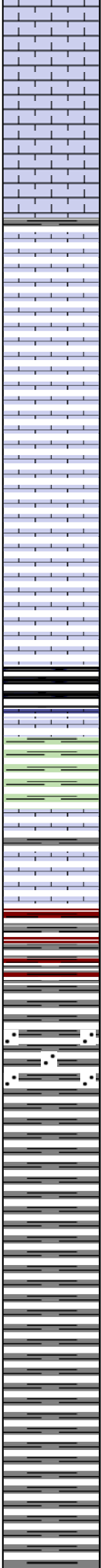
Lime, white-med brn, fnxln-granular, chalky in part

Lime, lt-med brn-brnish gray, fnxln

Lime, lt-med brn, fnxln-granular, chalky

2910
2920
2930
2940
2950
2960
2970
2980
2990
3000
3010
3020
3030
3040
3050
3060
3070
3080
3090
3100
3110
3120

0
KSP (min/ft)
5



Lime, lt-med brn, granular, chalky

Lime, lt-med brn, fnxln-granular, bedded chalk in part

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn, fnxln, bedded chalk in part

Lime, lt-med brn, fn-vfxln, bedded chalk in part

Lime, lt-med brn, fn-vfxln, chalk in part

Lime, lt-med brn, fnxln, chalk in part

Lime,lt-med brn, fnxln, chalk in part

Lime, lt-med brn, fnxln

HEEBNER SHALE SPL 2995-1234 ELog 2996-1235

Shale, black carbonaceous, fissile

Lime, brn, vfxln

Shale, dove gray-lime green, soft

TORONTO SPL 3016-1255 ELog 3016-1255

Lime, med brn, fnxln, fossiliferous, NS

Lime, crm, fnxln, chalky NS

DOUGLAS SHALE SPL 3029-1268 ELog 3030-1269

Shale, reddish brn-gray, soft with slight red wash

Shale, lt gray, soft, sticky

Sandstone, lt gray, very fine grained, gritty, micaceous, NS, thinly bedded

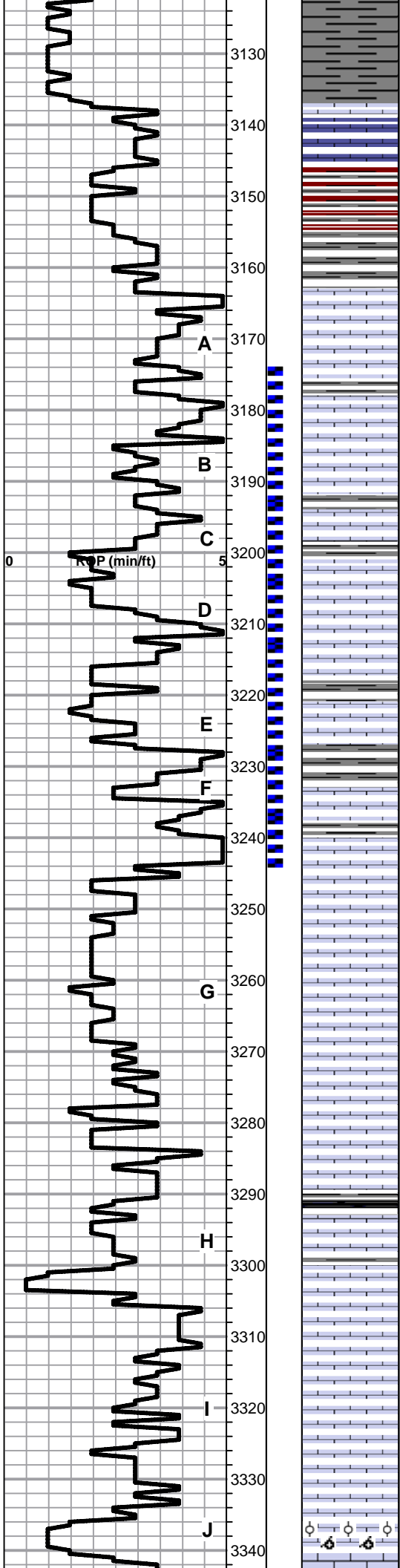
Shale, lt gray, soft-forming soft mud balls

Shale, lt-med gray, soft, blocky, platey

Shale, lt gray, soft-forming soft mud balls

Shale, lt gray, soft-forming soft mud balls

Shale, lt-med gray, soft mud balls



Shale, lt gray, soft-forming soft mud balls

BROWN LIME SPL 3136-1375 ELog 3137-1376

Lime, med brn, fn-vfxln, slightly fossiliferous

Shale, reddish brn-med gray, soft to sticky in part

LKC SPL 3163-1402 ELog 3163-1402

Lime, lt-med brn-gray, fnxln, hard on crush

Lime, lt-med brn-gray, fnxln

Lime, crm-lt brn, fnxln, scattered granular, NS

Lime, crm-lt brn, fnxln

Lime, crm-med brn-gray, fnxln

Lime, lt-med brn, fnxln with granular in part, NS, No Odor

Lime, lt-med brn, fnxln

Lime, lt-med brn, fnxln-granular in part, NS

Lime, lt-med brn, fnxln

Lime, lt-med brn, fnxln.

Lime, med brn, fnxln

Lime, med brn-grayish brn, fnxln-granular, chalky, NS

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

Lime, le-med brn with gray fossil remnants in part

Shale, gray-black carbonaceous

Lime, crm-tan-lt brn, fnxln with bedded chalk, no wet cut

Lime, lt-med brn, fnxln with scattered oolmoldic material, barren, NS

Lime, lt-med brn, fnxln, slightly chalky

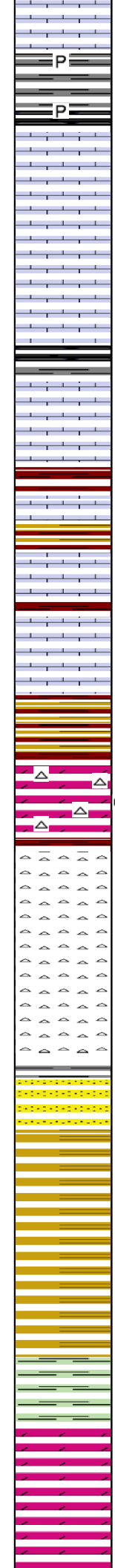
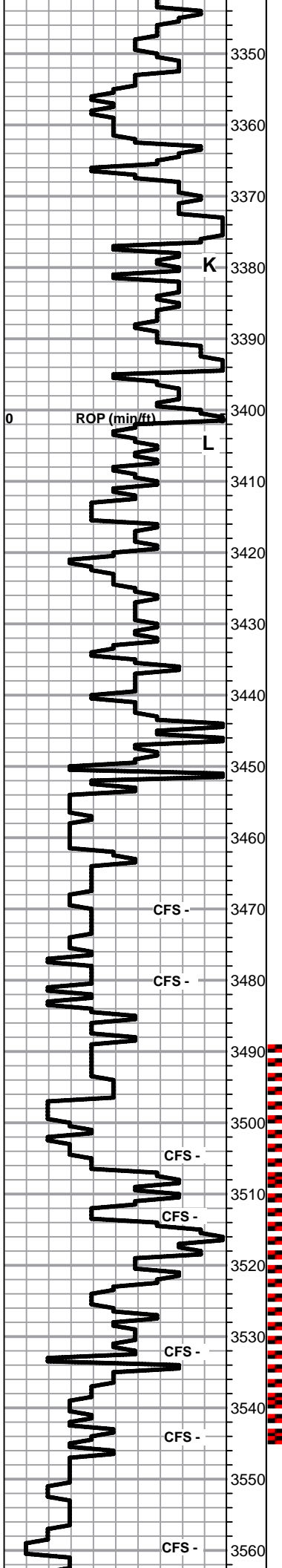
Lime, lt-med brn, fnxln, chalky

Lime, lt-med brn, fnxln-vfxln, chalk in part

Lime, lt-med brn, fnxln-oolmoldic, NS

**DST # 1 3174' - 3245' SEE
HEADER FOR TEST
DETAILS**

SLOPE 1 1/4 DEGREE



Shale, gray, blocky, pyrite clusters

Lime, lt brn, fn-vfxln, slight chalk in part

Lime, crm-lt brn, fnxln-crypto xln

Lime, lt-med brn, crypto xln

Shale, gray-black carbonaceous

Lime, lt brn, fnxln-cryptoxln

BKC SPL 3402-1641 ELog 3408-1647

Shale, reddish brn, soft blocky

Shales, vari colored

Lime, lt brn, fnxln, well cemented, NS

Lime, lt brn, fnxln, NS

Shale, vari colored with light red wash

VIOLA ELog 3450-1689

Dolomite, lt brn, granular, NFO, No Odor, Lt wet cut on break

Cherts, vari colored, sharp, fresh

Cherts, vari colored, sharp, fresh

Chert, vari colored with gilsonite in white weathered chert

SIMPSON SAND ELog 3494-1733

Mix of vari colored cherts, with quartz grain inclusions, No Odor, appears as clastic mix with gilsonite in weathered material

Shales vari color with vari color cherts

Shales vari color with vari color cherts

Shale, blue green, waxy, soft, blocky

ARBUCKLE SPL 3542-1781 ELog 3543-1782

Dolomite, crm, fnxln-granular, No Shows, No Wet Cut, No Odor

Dolomite, crm-lt brn, fnxln with fine grained sucroic in part, NS

**DST # 2 STRADDLE TEST
3489'-3546'
SEE HEADER FOR TEST
SUMMARY**

