

Petroleum Geology
212 Main Street, Claflin KS

Geologist's Report

Company: L.D. Drilling Inc.
Lease: Ernsting #1-1
Field: Chase-Silica
Surface Location: S2-S2-SE(330' FSL & 1320' FEL)
Sec: 1 Twp: 20S Rge: 12W
County: Barton State: Kansas
GL: 1787' KB: 1792'

Contractor: Petromark Drilling Rig #2
Spud: 2/20/15 Comp: 2/27/15
RTD: 3460' LTD: 3463'
Mud Up: +/- 2700' Mud Type: Chemical Displaced

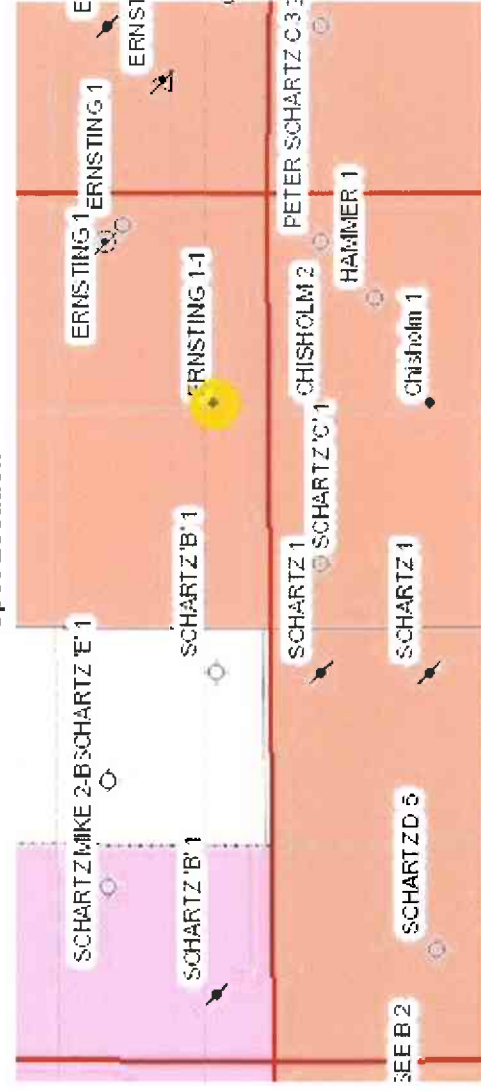
Drilling Time Kept From: 2700' to RTD
Samples Saved From: 2800' to RTD
Samples Examined: 2800' to RTD
Geoloigcal Supervision: 3010' to RTD
Geologist on Well: Kurt Talbott

Surface Casing: 8 5/8" @ 375'
Production Casing: 5 1/2" @

Wireline Logs: By Nabors: CNL/CDL, DIL, MEL, Sonic

Well Comparison			LD DRILLING		ISERN PETROLEUM		LD DRILLING	
			ERSTING 1-1		#1 ERNSTING		CHISHOLM #2	
			1792 KB		1789 KB		1791 KB	
FORMATION	Log	Log SS	SAMPLE	SS	SS	MD	SS	
ANHYDRITE	558	1234	566	1223				
BASE ANHYDRITE	577	1215	580	1209				
HEEBNER	2957	-1165	2949	-1160		2963	-1117	
TORONTO	2972	-1180						
DOUGLAS	2986	-1194						
BROWN LIME	3080	-1288	3071	-1282		3088	-1416	
LANSING	3100	-1308	3088	-1299		3106	-1315	
ARBUCKLE	3339	-1547	3341	-1552		3348	-1557	
TOTAL DEPTH	3463	-1671	3359	-1570		3461	-1670	

Spot Location



	Dolprim		shale, gm		Carbon Sh
	Lmst fw<7		shale, gry		

ROCK TYPES

EVENTS

-L Casing Shoe
▲ RTF
▲ Sidewall
▲ Left Casing Shoe
▼ Right Casing Shoe

INTERVALS

■ Core
* DST

DST

■ DST Int
■ DST alt

OTHER SYMBOLS

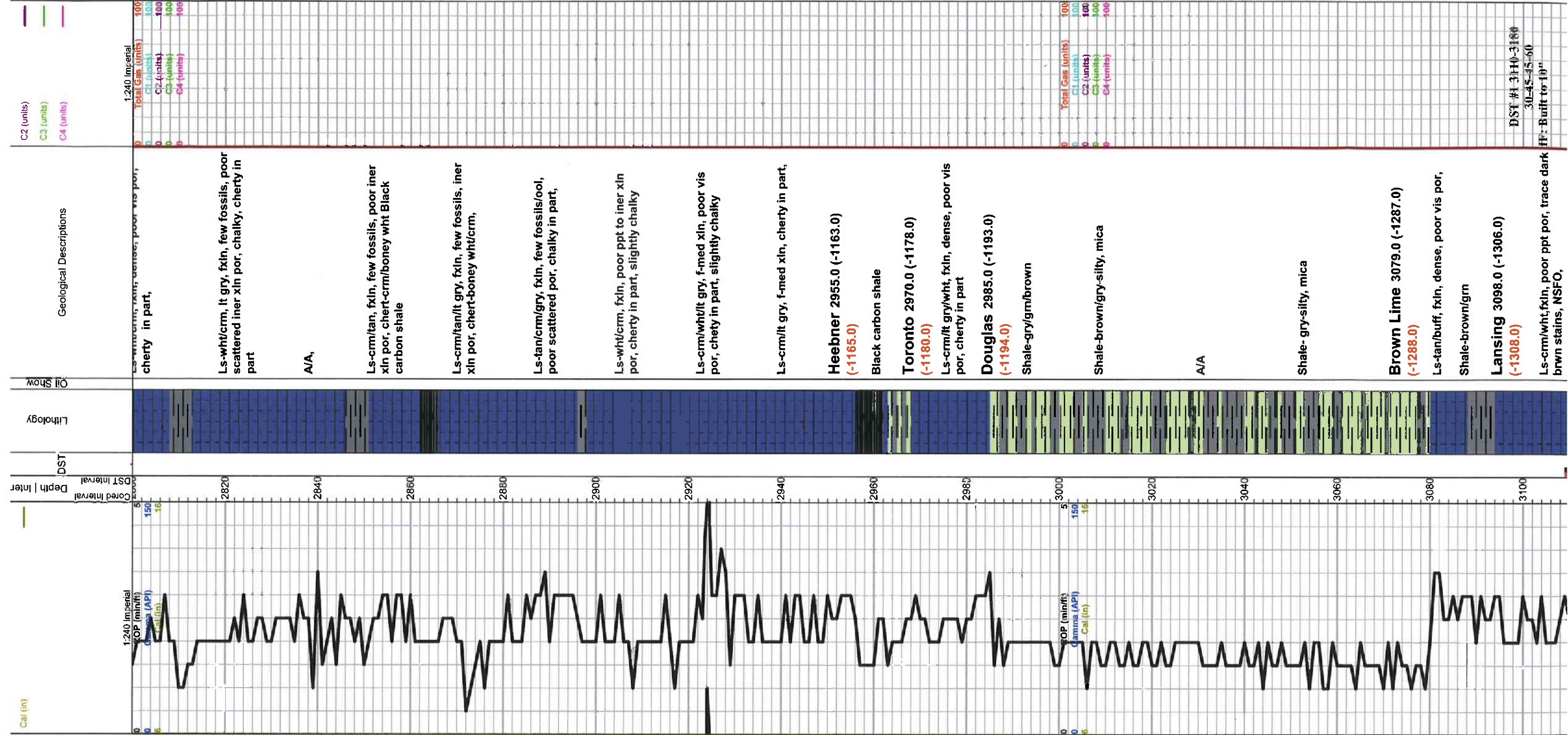
ROP (min/ft)
Gamma (API)

Curve Track #1

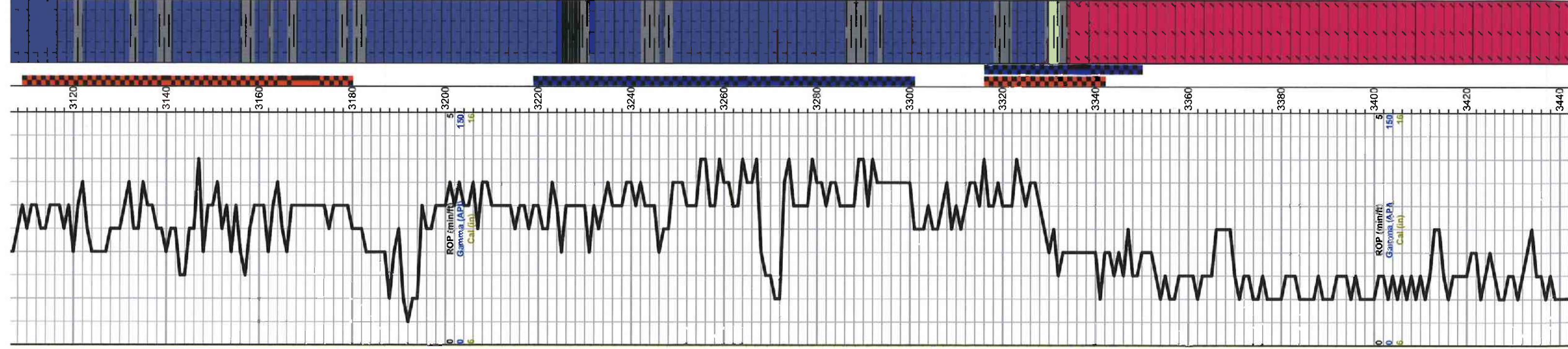
Intervals

Printed by GEOstrip VC Striplog version 4.0.8.9 (www.grsl.ca)
TG, C1 - C5

Total Gas (units)
C1 (units)



DST # 3110-3180
30-45-45-60
FF: Buirt to 10"



brwn stains, NSFO,	Recovery: 201' SIMCW (92 w 8m)
Ls-wht/crm/lt gry, ool/few fossils, poor ppt to iner xln por, trace stains, Spotty SFO, faint odor, chalky	Pressures: ISIP 614 psi FSIP 589 psi IFP 15-17 psi FFP 79-108 psi HSH 1484-1474 psi
Ls-crm/tan, fxln, ool, iner xln to sub oom por, dark brown stains, TrSFO, faint odor chalky,	
Ls-crm/lt gry, ool, poor vis por, cherty in part, slightly chalky	
Ls-crm/tan, fxln, ool, poor scattered iner ool to sub oom por, scattered dark brown stains, TrSFO, faint odor, chalky	
Ls-crm/tan, fxln, ool, poor vis por, chalky	
Ls-crm/lt gry, fxln, ool, oom por, Trace stains, NSFO, chalky	
Ls-crm/tan/lt gry, fxln, dense, poor vis por, cherty in part,	Total Gas (units) 100 C1 (units) 100 C2 (units) 100 C3 (units) 100 C4 (units) 100
A/A	DST #2 3219-3300 30-30-30-30 IF: Built to 1"
Trace black carbon shale	Recovery: 20' VSIOC (10-99m)
Ls-crm/tan, fxln, scattered oom por, no vis shows, chalky in part,	Pressures: ISIP 136 psi FSIP 64 psi IFP 13-17 psi FFP 20-23 psi HSH 1519-1513 psi
Ls-tan/gry, fxln, ool, dense, poor vis por, cherty in part,	
Ls-wht/crm, fxln, ool, poor to fair iner ool to oom por, dark brown stains, Fair SFO, good odor	DST #3 3316-3341 30-15-15-15 IF: Built to 1 3/4"
Ls-crm/wht, fxln, ool, poor vis por, chert boney wht Shale- gry/brwn/grn	Recovery: 3' Clean Oil 33' OCM (250 75m)
Ls-crm/tan/lt gry, fxln, dense, poor vis por, chert-boney wht/crm	Pressures: ISIP 923 psi FSIP 929 psi IFP 12-18 psi FFP 20-22 psi HSH 1587-1597 psi
A/A	
Shale-brwn/aqua green	
Arbuckle 3334.0 (-1542.0) (-1547.0)	
Dol-tan/gry, fxln, ppt to iner xln por, golden to dark brown stains, SFO, good odor	DST #4 3316-3350 30-45-45-60 IF: BOB 11 min FF: BOB 9 1/2 min
Dol-tan/gry, fine to med xln, fair iner xln por, golden brown stains, Good SFO, good odor	Recovery: 189' GIP 404' Clean Oil 94' OCM (220 78m)
Dol-crm/tan, fine to med xln, fair iner xln por with scattered fair vug por, golden to dark brown stains, SFO, good odor, slightly chalky	Pressures: ISIP 1086 psi FSIP 1065 psi FFP 17-197 psi FFP 116-194 psi HSH 1572-1572 psi
Dol-crm/tan, f-med xln, few rhomb xln, iner xln por, dark brown stains, TrSFO, fair odor, chert-boney wht	Total Gas (units) 100 C1 (units) 100 C2 (units) 100 C3 (units) 100 C4 (units) 100
Dol-crm/tan, f-med rhomb xln, fair iner xln to finely vug por, dark brown to black stains, NSFO, fair odor	
Dol-tan/lt gry, fxln, poor scattered ppt to iner xln por, dark brown to black stains, NSFO, chalky, chert-boney wht	
Dol-crm/tan/lt gry, fxln, poor scattered iner xln por, black stains, NSFO, sour odor chert-boney wht	
A/A	

