

Mudgrove

Petroleum
Corporation

Geologist's Report

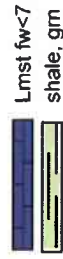
Company: L. D. Drilling, Inc.
Lease: DEM #1-19
Field: Christians
Location: E/2-SW-SW-NW (2310' FNL & 480' FWL)
Sec: 19 Twsp: 16S Rge: 12W
County: BartonState: Kansas
GL: 1936 KB: 1941

Contractor: Petromark Drilling
Spud: 1/27/14 Comp: 2/2/14
RTD: 3437' LTD:
Mud Up: 2675' Type Mud: Chemical/Displaced

Samples Saved From: 2800' to RTD
Drilling Time Kept From: 2600' to RTD
Samples Examined From: 2900' to RTD
Geological Supervision From: 2975' to RTD
Geologist on Well: Kurt Talbott

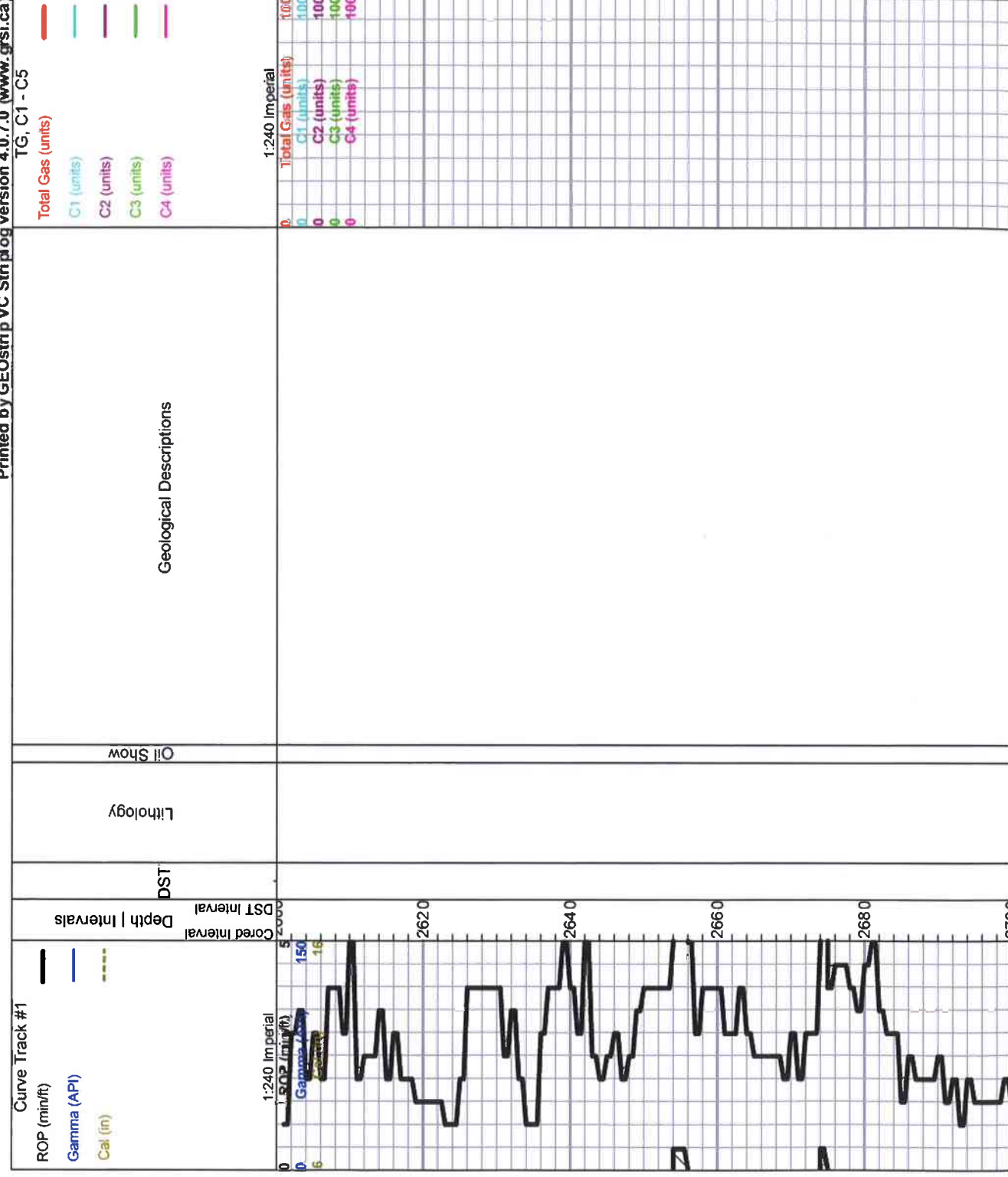
Surface Casing: 8 5/8" @ 434'
Production: None

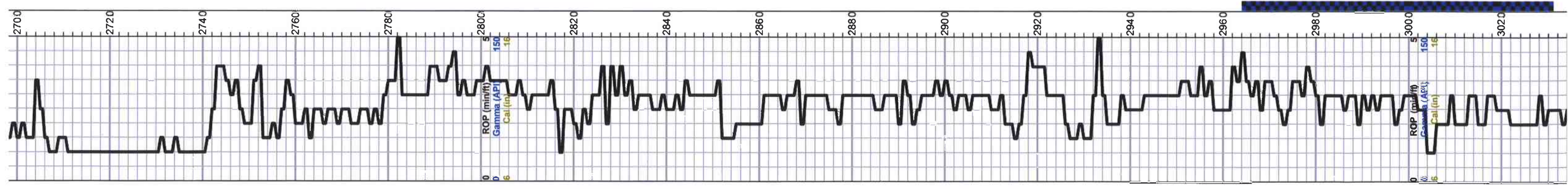
Logs: None



DST
DST Int
DST alt

OTHER SYMBOLS





Topeka 2780.0 (-839.0) 0.0

Ls-gry/tan, fxln, dense, fossils, poor vis por, slightly chalky

Ls-gry/tan, fxln, ool/fossil,s poor vis por, dense,

Cherty- A/A

Ls-crm/tan, fossils, slightly dolomitic, poor scattered por, fossils, Shale-gry/blk

Ls-gry/tan, fxln, fossils, dense, poor vis por,

A/A slightly chalky

Ls-gry/tan/crm, f-med xin, fossils, poor vis por, dense, Black carbon shale

Ls-gry/tan, fxn, fossils/ool, poor vis por, dense,

Ls-crm/tan, fxln, fossils, poor vis por, slightly chalky,

Ls-crm/tan, fxln, fossils, poor to fair inner xin por, golden brown to dark brown stains, SFO, faint odor,

Ls-crm/tan, fxln, sucrosic, fossils, poor scattered por, chert-gry/tan

DST #1 2964-3030
30-30-30-30
 IF: Weak Blow Died in 20 minutes

Recovery:
 60' Drilling Mud

Pressures:
 ISIP 844 psi
 FSIP 821 psi
 IFP 15-29 psi
 FFP 32-45 psi
 HSH 1375-1363 psi



Ls-tan/gry, fxln, few fossils, poor vis por, por vis por, chert-tan/gry

A/A

Heebner 3060.0 (-1119.0) 0.0

Black carbon shale

Shale-gry/grn

Toronto 3077.0 (-1136.0) 0.0

Ls-crm/wht, fxln, chalky, poor vi spor,

Douglas 3087.0 (-1146.0) 0.0

Shale-gry-silty-soft

Shale-gry/grn, sof, silty

A/A

Brown Lime 3146.0 (-1205.0) 0.0

Ls-buff/gry, fxln, dense, cherty, poor vis por

Lansing 3157.0 (-1216.0) 0.0

Ls-crm/tan, fxln, ool, poor vis por, chalky

A/A

Ls-crm/tan, fxln, poor scattered iner xin por, spotty brown stains, SFO, no odor, slightly chalky
Scattered fair oom por w/brown stains, SFO

Shale-gry/grn

Ls-crm/tan, fxln, ool, poor vis por, chert-tan/crm, slightly chaly

Ls-gry/tan, ool, poor scattered por, dense, chalky, Shale-gry

Ls- A/A

Ls-crm/wht, ffxln, ool, fair oom por, chalky, barren, chert- crm/wht ,

Ls-crm/wht, fxln, ool, oom por, barren, chalky chert-boney wht/crm

Ls-crm/wht, ool, poor vis por, mostly dense, slightly chalky, chert-crm/tan

Ls-tan/gry, fxln, slightly ool, dense, poor vis por

A/A Shale-gry

Ls-tan/lt gry, fxln, ool, poor ppt to iner ool por, trace spotty brown stains, TrSFO, no odor, slightly chalky

Ls- tan/lt gry, fxln, dense, slightly ool, chert-gry/tan

Ls-crm/wht, fxln, ool, poor scattered por, scattered brown stains, TrSFO, very faint odor, chalky, Shale-gry/brwn

Ls-gry/tan, fxln, ool, dense, cherty in part, shale- A/A

Ls- lt gry/crm, fxln, slightly ool, poor scattered iner xln por, stains, SFO, chalky, cherty

Ls-wht/crm, fxln, dense, cherty, poor por

Shale-black,gry/grn

DST #2 3149-3200
30-30-30-30

IF: Dead in 15 min

Recovery:
15' Mud

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

DST #3 3270-3340
30-30-30-30

IF: Dead in 5 min

Recovery: 5' Mud

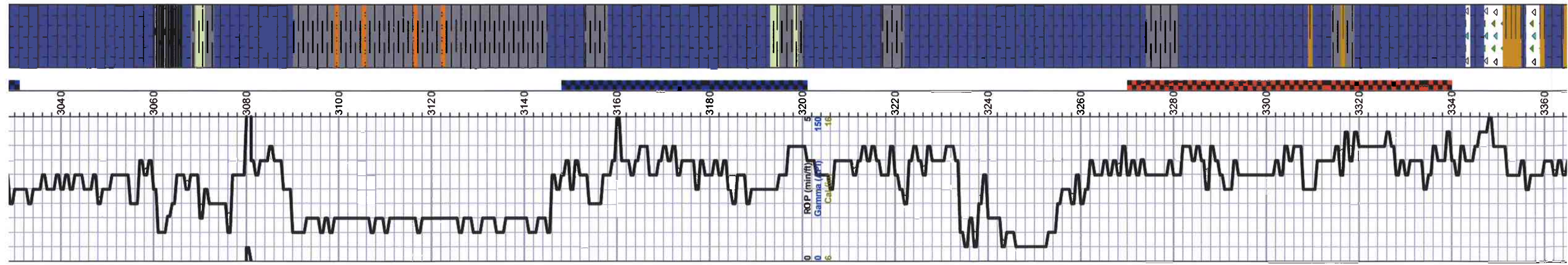
Pressures:
ISIP 368 psi
FSIP 309 psi
IFP 14-15 psi
FFP 15-17 psi
HSH 1563-1550 psi

DST #4 3378-3428
30-30-30-30

IF: Surface Blow

Recovery:
60' Oil Speckled Mud

Pressures:
ISIP 1094 psi
FSIP 1084 psi
IFP 15-31 psi
FFP 34-46 psi
HSH 1613-1604 psi



Ls-tan/gry, fxln, few fossils, poor vis por, por vis por, chert-tan/gry	A/A
Heebner 3060.0 (-1119.0) 0.0	Black carbon shale
Shale-gry/grn	
Toronto 3077.0 (-1136.0) 0.0	Ls-crm/wht, fxln, chalky, poor vi spor,
Douglas 3087.0 (-1146.0) 0.0	Shale-gry-silty-soft
Shale-gry/grn, sof, silty	
A/A	
Brown Lime 3146.0 (-1205.0) 0.0	Ls-buff/gry, fxln, dense, cherty, poor vis por
Lansing 3157.0 (-1216.0) 0.0	Ls-crm/tan, fxln, ool, poor vis por, chalky
A/A	
Ls-crm/tan, fxln, poor scattered iner xin por, spotty brown stains, SFO, no odor, slightly chalky Scattered fair oom por w/brown stains, SFO	
Shale-gry/grn	
Ls-crm/tan, fxln, ool, poor vis por, chert-tan/crm, slightly chaly	
Ls-gry/tan, ool, poor scattered por, dense, chalky, Shale-gry	
Ls- A/A	
Ls-crm/wht, ffxln, ool, fair oom por, chalky, barren, chert- crm/wht ,	
Ls-crm/wht, fxln, ool, oom por, barren, chalky chert-boney wht/crm	
Ls-crm/wht, ool, poor vis por, mostly dense, slightly chalky, chert-crm/tan	
Ls-tan/gry, fxln, slightly ool, dense, poor vis por	
A/A Shale-gry	
Ls-tan/lt gry, fxln, ool, poor ppt to iner ool por, trace spotty brown stains, TrSFO, no odor, slightly chalky	
Ls- tan/lt gry, fxln, dense, slightly ool, chert-gry/tan	
Ls-crm/wht, fxln, ool, poor scattered por, scattered brown stains, TrSFO, very faint odor, chalky, Shale-gry/brwn	
Ls-gry/tan, fxln, ool, dense, cherty in part, shale- A/A	
Ls- lt gry/crm, fxln, slightly ool, poor scattered iner xln por, stains, SFO, chalky, cherty	
Ls-wht/crm, fxln, dense, cherty, poor por	
Shale-black,gry/grn	

