

Petroleum Geology
212 Main Street, Claflin KS

Geologist's Report

Company: L. D. Drilling Inc
 Lease: J & J #1-6
 Field: NA
 Surface Location: NW-SE-SW-NE (2030' FNL & 1840' FEL)
 Sec: 6 Twp: 18S Rge: 13W
 County: Barton State: Kansas
 GL: 1831' KB: 1836'

Contractor: Petromark Drilling Rig #2
 Spud: 11/22/14 Comp: 11/29/14
 RTD: 3400' LTD: 3396'
 Mud Up: +/- 2600' Mud Type: Chemical Displaced

Drilling Time Kept From: 2900' to RTD
 Samples Saved From: 2900' to RTD
 Samples Examined: 2900' to RTD
 Geological Supervision: 3075' to RTD
 Geologist on Well: Kurt Talbott

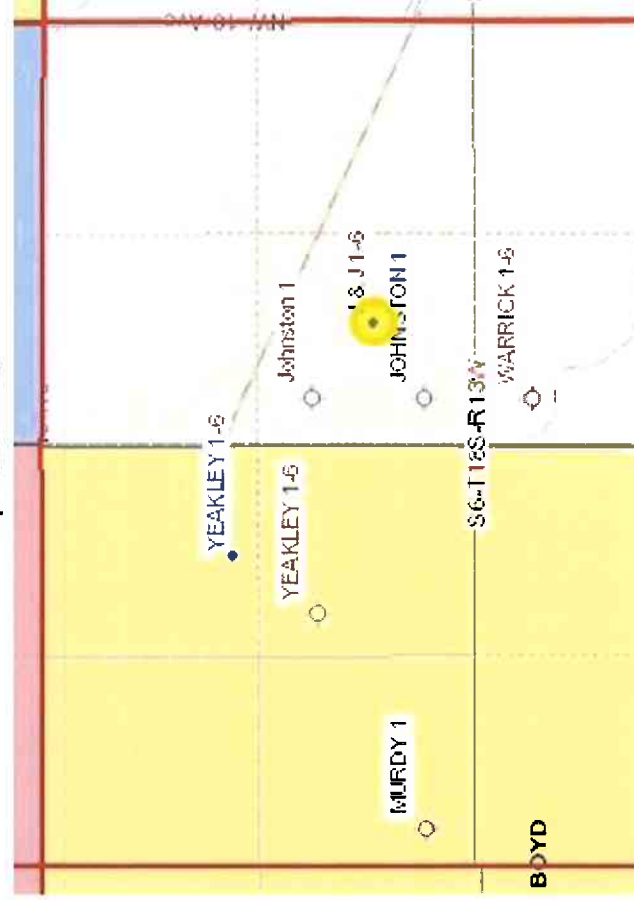
Surface Casing: 8 5/8" @ 804'
 Production Casing: 5 1/2" @

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

Well Comparison

FORMATION	WELL BEING DRILLED		OFFSET	
	LD	LD SS	SHELBY	SS
	J & J #1-6		#1-6 YEAKLEY	
	1836 KB		1838 KB	
ANHYDRITE	773	1063	780	1058
BASE ANHYDRITE	794	1042		
HEEBNER	3004	-1168	3008	-1170
TORONTO	3018	-1182	3022	-1184
DOUGLAS	3028	-1192	3032	-1194
BROWN LIME	3083	-1247	3089	-1251
LANSING	3099	-1263	3104	-1266
BASE KC	3291	-1455	3300	-1462
AMBUCKLE	3320	-1484	3308	-1470
TOTAL DEPTH	3396	-1560	3450	-1612

Spot Location



	Cht vari		Lmst fw<7		shale, gry		shale, red
	Dolprim		shale, gm		Carbon Sh		Shcol

ROCK TYPES

EVENTS

INTERVALS

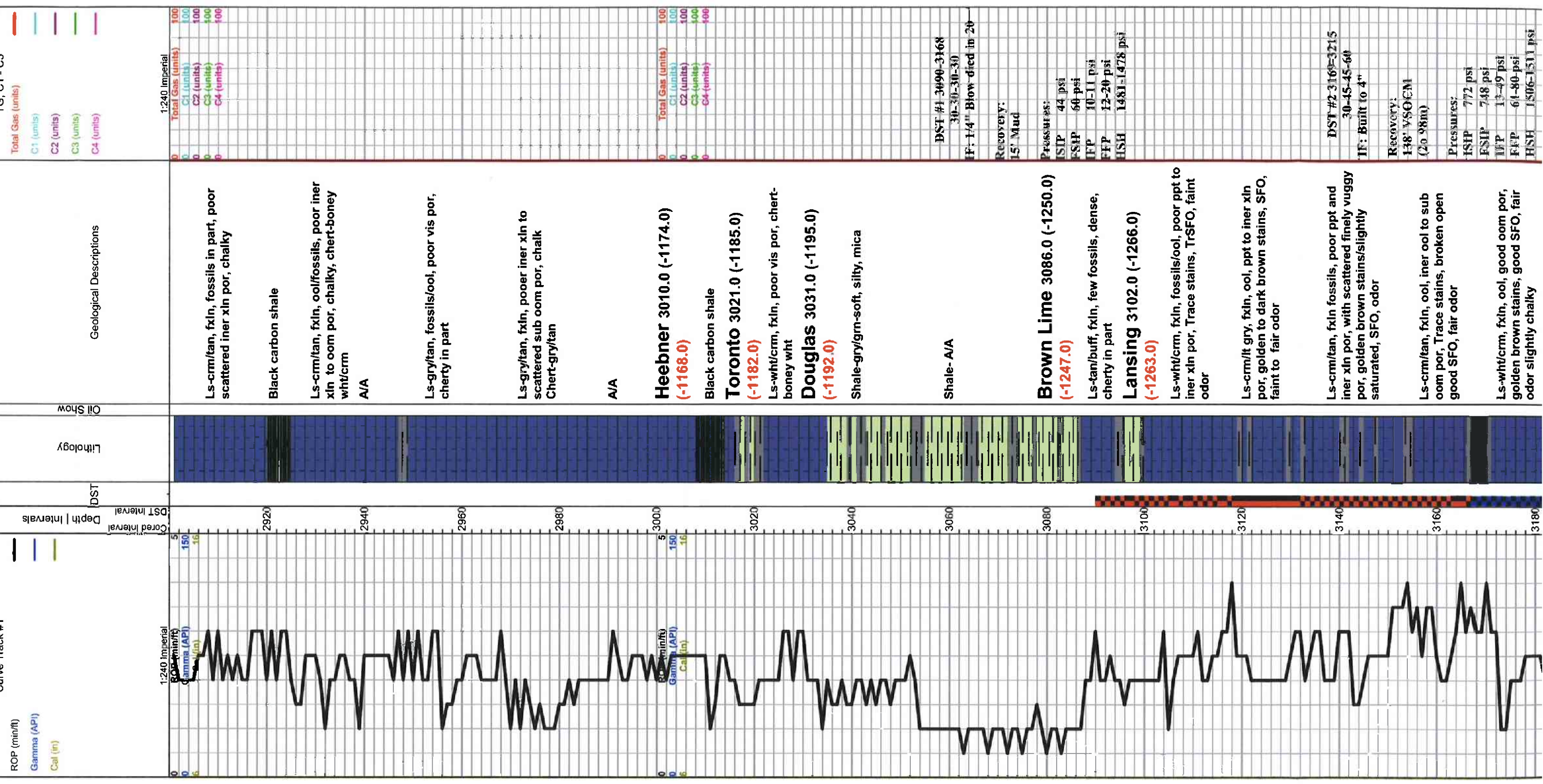
DST

OTHER SYMBOLS

J1 Casing Shoe
 RTF
 Sidewall
 Left Casing Shoe
 Right Casing Shoe

Core
 DST

DST Int
 DST alt



Ls-crm/tan, fxln, fossils in part, poor scattered iner xln por, chalky

Black carbon shale

Ls-crm/tan, fxln, ool/fossils, poor iner xln to oom por, chalky, chert-boney wht/crm

A/A

Ls-grytan, fossils/ool, poor vis por, cherty in part

Ls-grytan, fxln, poorer iner xln to scattered sub oom por, chalk Chert-gry/tan

A/A

Heebner 3010.0 (-1174.0)
(-1168.0)

Black carbon shale

Toronto 3021.0 (-1185.0)
(-1182.0)

Ls-wht/crm, fxln, poor vis por, chert-boney wht

Douglas 3031.0 (-1195.0)
(-1192.0)

Shale-gry/grn-soft, silty, mica

Shale- A/A

Brown Lime 3086.0 (-1250.0)
(-1247.0)

Ls-tan/buff, fxln, few fossils, dense, cherty in part

Lansing 3102.0 (-1266.0)
(-1263.0)

Ls-wht/crm, fxln, fossils/ool, poor ppt to iner xln por, Trace stains, TrSFO, faint odor

Ls-crm/lt gry, fxln, ool, ppt to iner xln por, golden to dark brown stains, SFO, faint to fair odor

Ls-crm/tan, fxln fossils, poor ppt and iner xln por, with scattered finely vuggy por, golden brown stains/slightly saturated, SFO, odor

Ls-crm/tan, fxln, ool, iner ool to sub oom por, Trace stains, broken open good SFO, fair odor

Ls-wht/crm, fxln, ool, good oom por, golden brown stains, good SFO, fair odor slightly chalky

DST #1 3090-3168
30-30-30-30

IF: 1 1/4" Blow-died in 20

Recovery:

15' Mud

Pressures:

ISIP 44 psi

FSHP 60 psi

FFP 10-11 psi

FFP 12-20 psi

HSH 1481-1478 psi

DST #2 3168-3215

30-45-45-60

IF: Built to 4"

Recovery:

148' VSOCM

(20 98m)

Pressures:

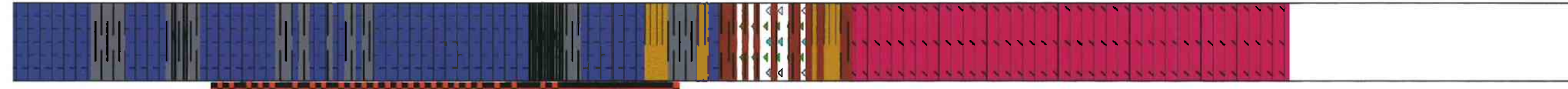
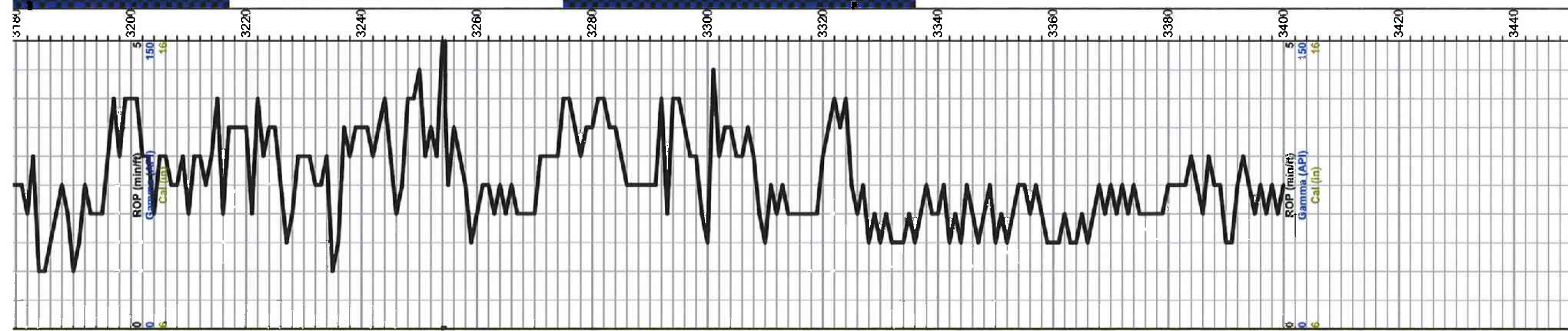
ISIP 772 psi

FSHP 748 psi

FFP 13-49 psi

FFP 61-80 psi

HSH 1506-1511 psi



Ls-crm/tan, fxln, ool, good inner ool to oom por, golden brown stains, SFO, good odor

Ls-crm, ool, poor scattered inner ool por, trace stains, TrSFO, chalky

Trace black carbon shale

Ls-crm/tan, fxln, ool, sub oom por, Trace stains, TrSFO, fair odor, chalky

Ls-crm/wht, ool, fair to good oom por, Trace golden brown stains, SFO, good odor slightly chalky

Ls-crm/wht, fxln, ool, sub oom por, Trace stains, Chalky, TrSFO, faint odor

Ls-crm/tan, fxln, few fossils, inner ool to good oom por, trace dark brown stains, weak SFO when broken open, faint odor

Ls-gry/tan, few fossils, poor vis por, cherty in part,

Base KC 3295.0 (-1459.0)
 (-1455.0)

Shale- gry/gm/mustard yellow,

Shale- A/A, red shales

Chert- wht/tan, ool,

Arbuckle 3324.0 (-1488.0)
 (-1484.0)

Dol- wht/lt gry, fine xln, poor to fair inner xln por, golden to dark brown stains, SFO when broken open, good odor

Dol-wht/crm/gry, fine to med xln, poor to fair inner xln por, dark brown stains, TrSFO, good odor , chert-boney wht

Dol-crm/tan, fxln, poor to fair inner xln por, dark brown to black stains, TrSFO, fair odor

Dol-crm/wht/tan, fine to med xln, few rhomb, good inner xln por, black stans, TrSFO, faint odor, cherty in part

Dol-lt gry/tan, fine to med xln, poor inner xln por, blk stains, NSFO, faint odor, slightly chalky in part

Dol-lt gry/wht, fine to med xln, fair inner xln por, blk asphaltic stains, NSFO, cherty in part,

Total Depth 3400.0 (-1564.0)
 (-1560.0)



BST #3 3215-3295
 30-45-45-60
 HF: Built to 5 1/4"

Recovery:
 209' GIP
 42' OCM
 (86-92m)
 61' GCWM
 (86-286-2w 62m)

Pressures:
 ISIP 959 psi
 FSIP 952 psi
 IEP 12-35 psi
 FFP 42-61 psi
 HSH 1562-1553 psi



BST #4 3275-3335
 30-30-30-30
 HF: Built to 3 3/4"

Recovery:
 425' GIP
 74' Clean Oil
 63' HOCM
 (456-55m)
 62' OCM
 (256-75m)

Pressures:
 ISIP 1068 psi
 FSIP 1060 psi
 IEP 10-40 psi
 FFP 42-63 psi
 HSH 1580-1583 psi

