



Scale 1:240 Imperial

Well Name: Keough 3-34
 Surface Location: SW SW NE NW 34-28S-23W
 Bottom Location:
 API: 15-057-20959
 License Number: 5004
 Spud Date: 1/23/2015 Time: 11:15 PM
 Region:
 Drilling Completed: 2/4/2015 Time: 9:22 AM
 Surface Coordinates: 1240' FNL & 1335 FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2527.00ft
 K.B. Elevation: 2539.00ft
 Logged Interval: 4200.00ft To: 5360.00ft
 Total Depth: 5360.00ft
 Formation: MISS
 Drilling Fluid Type:

OPERATOR

Company: Vincent Oil Corporation
 Address: 155 N Market Ste 700
 Wichita KS 67202
 Contact Geologist: Dick Jordan
 Contact Phone Nbr: 3162623573
 Well Name: Keough 3-34
 Location: SW SW NE NW 34-28S-23W API: 15-057-20959
 Pool: DEVELOPMENT Field: Mulberry Creek
 State: KS Country: FORD

CONTRACTOR

Contractor: Duke Drilling Co., Inc.
 Rig #: 1
 Rig Type: Rotary
 Spud Date: 1/23/2015 Time: 11:15 PM
 TD Date: 2/4/2015 Time: 9:22 AM
 Rig Release: 2/5/2015 Time: 12:15 PM

LOGGED BY

Company: Vincent Oil Corporation
 Address: 155 N Market Ste 700
 Wichita KS 67202
 Phone Nbr: 3162623573
 Logged By: Geologist Name: Tom Dudgeon

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: 99.8272020
 Latitude: 37.5688004

Longitude: -99.8273059
 N/S Co-ord: 1240' FNL
 E/W Co-ord: 1335 FWL

Latitude: 37.5688094

OPEN HOLE LOGS

Logging Company: Nabors Competition and Production Services Co.
 Logging Engineer: Ian Mabb
 Truck #: 3802
 Logging Date: 2/4/2015
 # Logs Run: 4
 Time Spent: 6
 # Logs Run Successful: 4

LOGS RUN

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
Dual Induction	0.00ft	5362.00ft	2.00		1
Density Neutron	4250.00ft	5362.00ft	2.00		1
Micro	4250.00ft	5362.00ft	4.00		2
Sonic	0.00ft	5362.00ft	4.00		2

LOGGING OPERATION SUMMARY

Date	From	To	Description Of Operation
2/6/2015	0.00ft	5362.00ft	Logs Ran Successfully

CASING SUMMARY

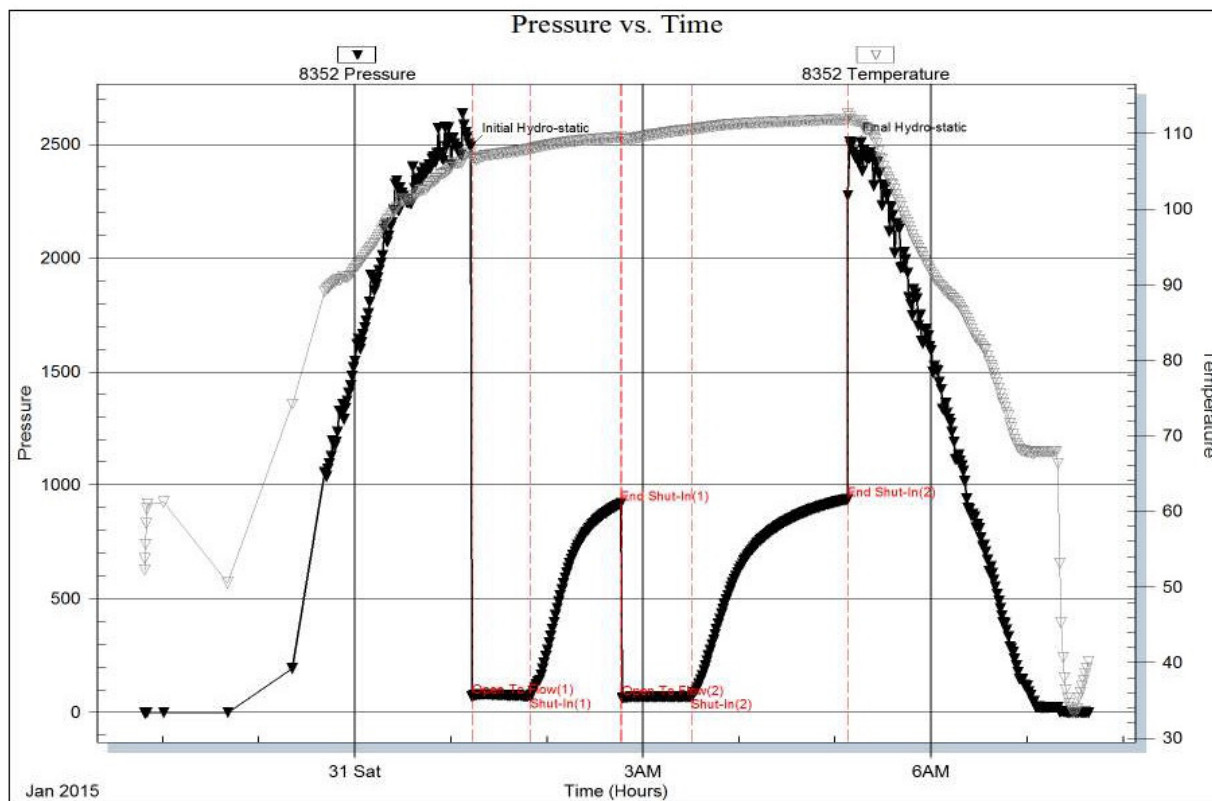
	Surface	Intermediate	Main		
Bit Size	12.25 in				
Hole Size			7.88 in		
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	655 ft	23#	15	1/25/2015 8:00 AM
Int Casing					
Prod Casing	4.5 in	5359 ft	11.6#	122	

CASING SEQUENCE

Type	Hole Size	Casing Size	At
	0.00 in	0.00	0.00 ft

DST #1

Serial #: 8352 Outside: Vincent Oil Corp. Keough #3-34 DST Test Number: 1



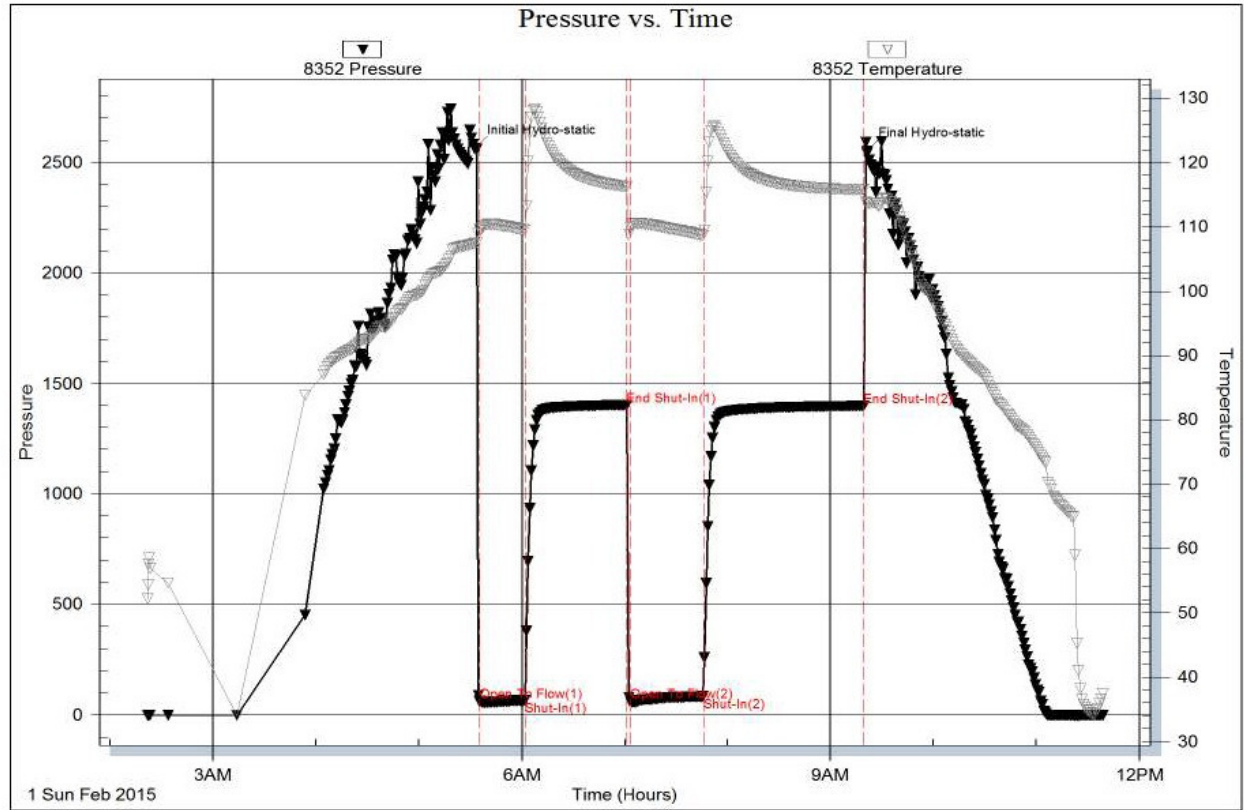
DST #2

Serial #: 8352

Outside Vincent Oil Corp.

Keough #3-34

DST Test Number: 2



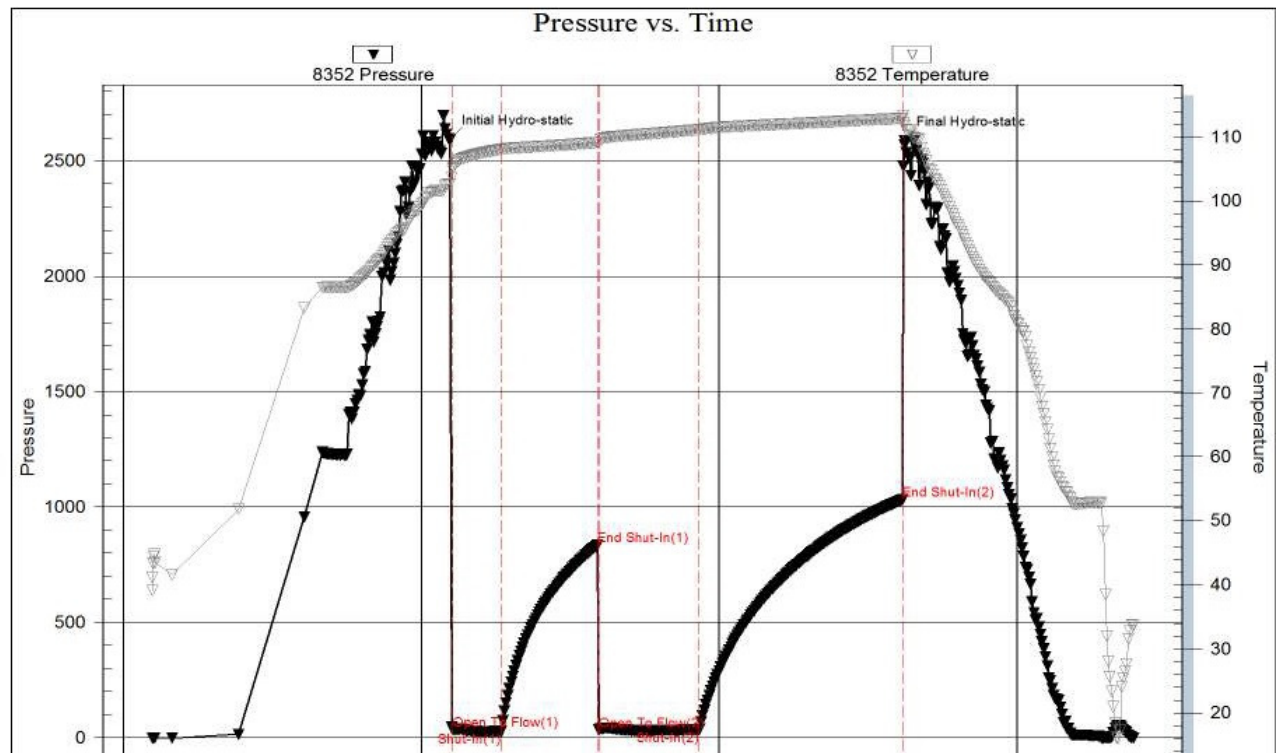
DST #3

Serial #: 8352

Outside Vincent Oil Corp.

Keough #3-34

DST Test Number: 3



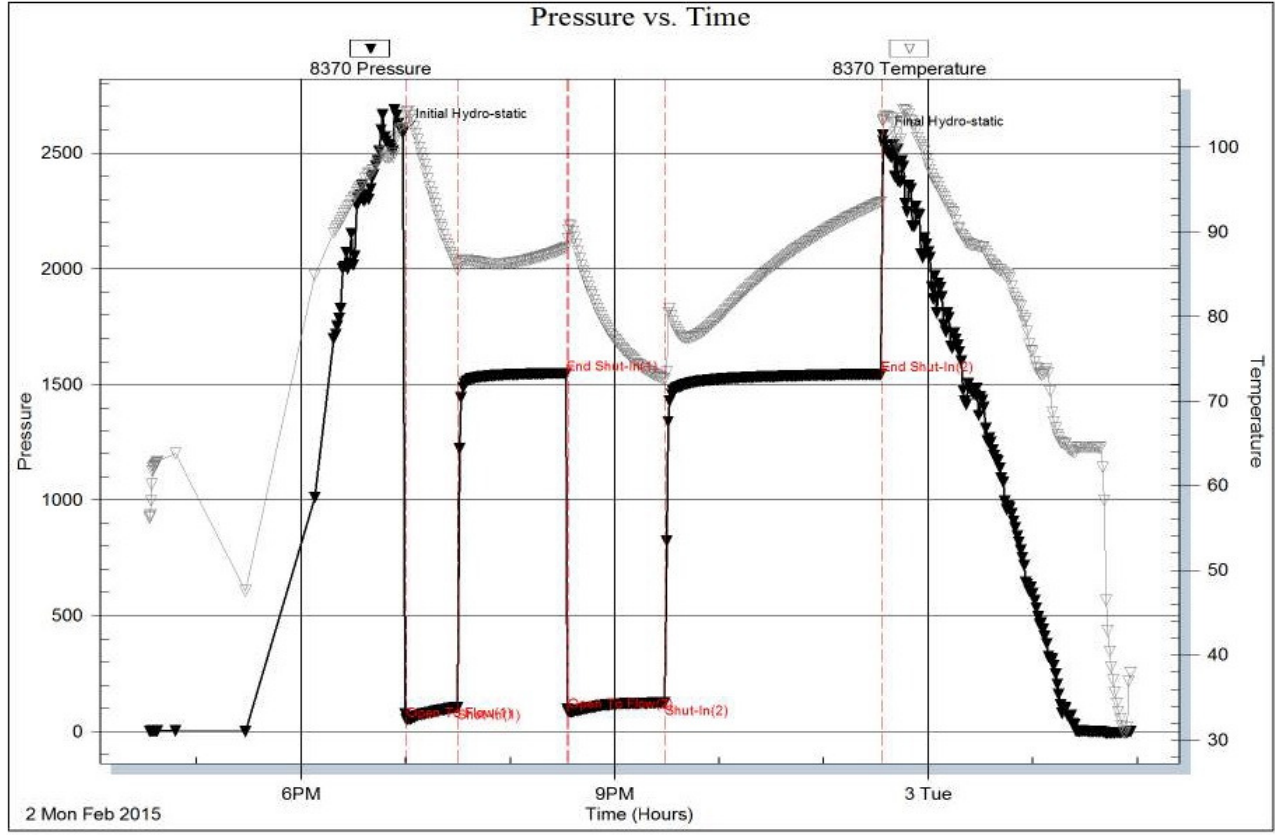
DST #4

Serial #: 8370

Inside Vincent Oil Corp.

Keough #3-34

DST Test Number: 4



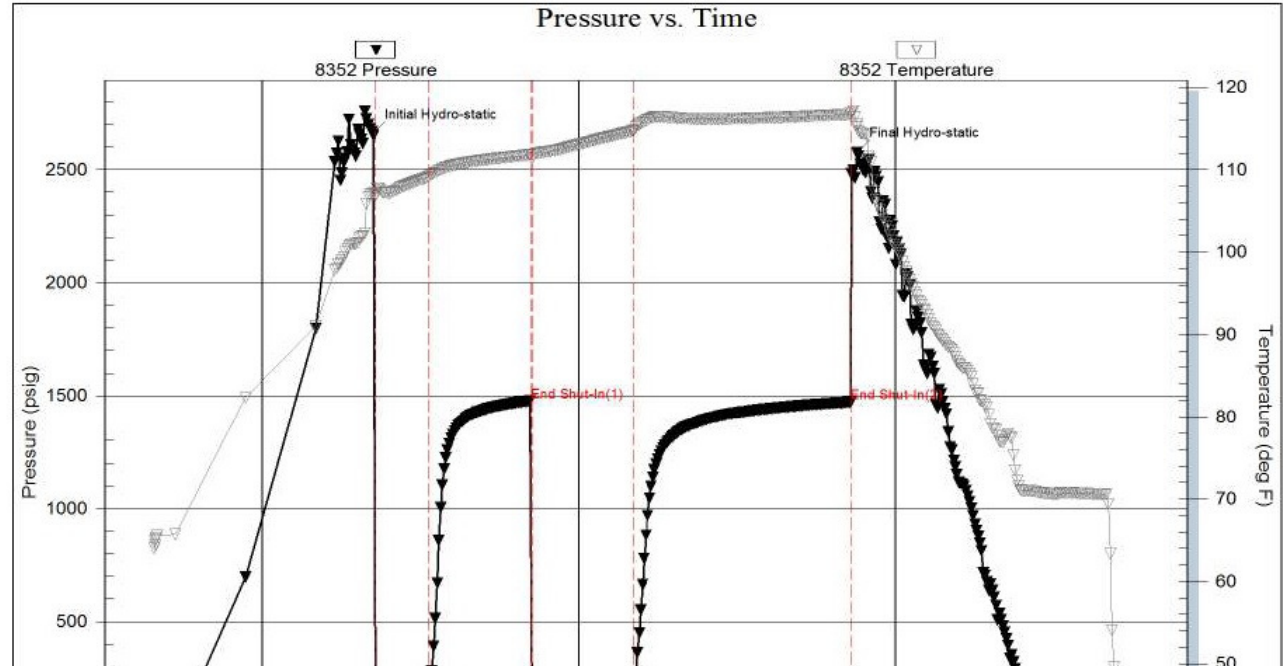
DST #5

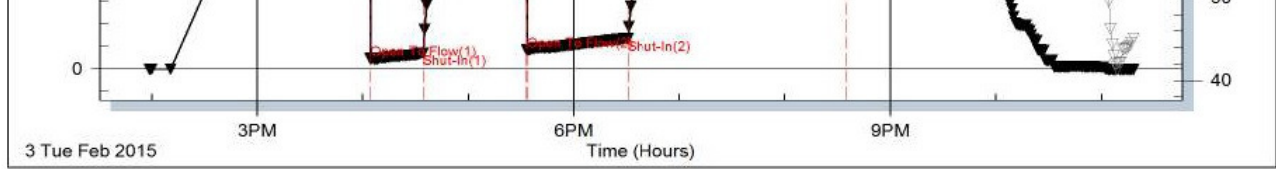
Serial #: 8352

Outside Vincent Oil Corp.

Keough #3-34

DST Test Number: 5



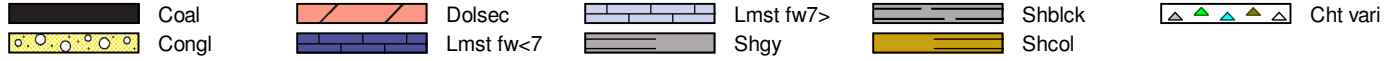


Trilobite Testing, Inc

Ref. No: 59741

Printed: 2015.02.06 @ 08:53:48

ROCK TYPES



ACCESSORIES

MINERAL

- Carbonaceous Flakes
- ▲ Chert, dark
- ∟ Dolomitic
- Ferruginous, grains or pe
- ∞ Glauconite
- P Pyrite
- Sandy
- Silty
- △ Chert White

FOSSIL

- ◇ Brachiopod
- ∩ Bryozoa
- ∩ Coral
- Crinoids
- ∩ Echinoid
- F Fossils < 20%
- ∩ Gastropod
- ∩ Oolite
- ∩ Plant Remains
- ∩ Corals
- ∩ Spicules

STRINGER

- ▨ Dolomite
- ▨ Sandstone
- ▨ Shale

TEXTURE

- C Chalky
- e Earthy

MISC

- ∩ Fractures
- ∩ Veins

OTHER SYMBOLS

POROSITY TYPE

- x Intercrystalline
- φ Interoolitic
- V Vuggy
- P Pinpoint
- ∩ Moldic
- O Organic
- F Fracture
- e Earthy
- Fenestral

OIL SHOWS

- Even Stn
- Spotted Stn 50 - 75 %
- Spotted Stn 25 - 50 %
- Spotted Stn 1 - 25 %
- Questionable Stn
- D Dead Oil Stn
- Fluorescence

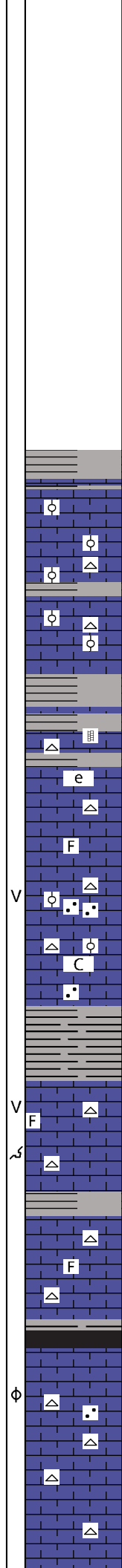
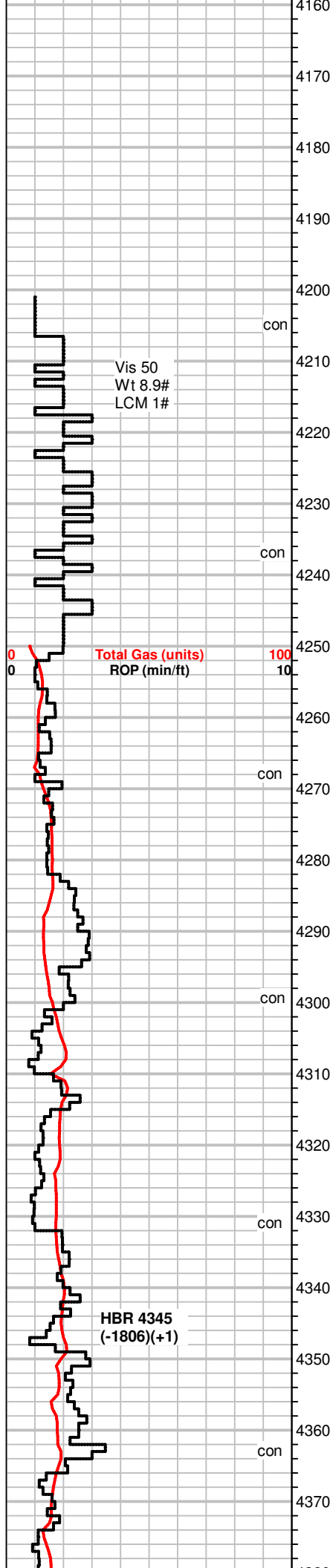
INTERVALS

- Core
- ∩ DST

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

Curve Track #01		Depth Intervals	Porosity Types	Interpreted Lithology	Oil Shows	Geological Descriptions	Comment
Total Gas (units)	ROP (min/ft)						
1:240 Imperial		4100					
0	0	4110					
100	10	4120					
		4130					
		4140					
		4150					

Geo on location @ 6:00 PM 1/28/2015
 Gas Detector provided by Bluestem Labs, on location and running
 @ 4250'



WS-PS, crm, vf-xln, gritty to sandy txt in part, oolitic pcs scatt, m-gr, ringed ooids, hard, NS
 SH, gray, green

MS-WS, off white to crm, oolitic pcs A.A., Chert, white
 SH, grays

SH, gray
 MS-WS, crm to tan, vf-xln, some pcs earthy txt, hard, calcite veins, NS
 Chert, white

MS-WS, tan to crm, some gray, mic-xln to f-xln, sandy txt in part, mottled pcs throughout,
 Chert, white, tan, gray, some micro oolitic

MS, crm, massive txt, friable, chalky matrix, scatt sandy pcs, fossilif, Chert, white
 Some SH, gray

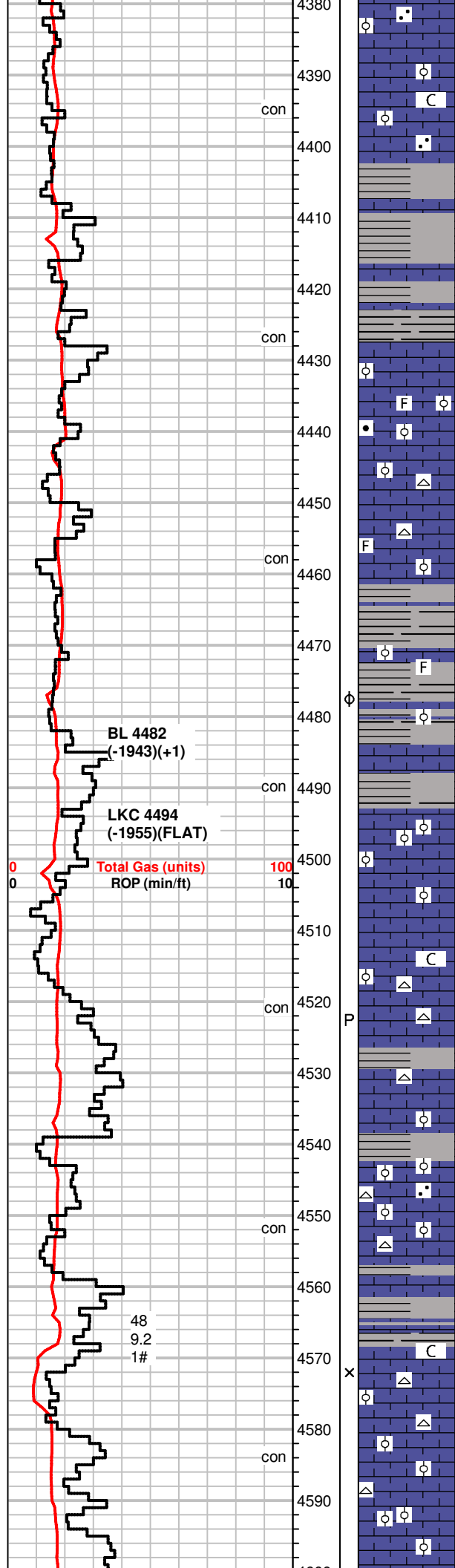
SH, gray, dk. gray, sli. carbonaceous
 MS, crm, A.A., Chert, white

MS, crm to lt. tan, mic-xln, hard, fossil frgmts throughout, silty in pcs, Chert, tan

SH, blk, sli. carbonaceous, rare gas bubbles

MS-WS, crm to gray, f-xln, gritty to sandy txt, dense, scatt fossils, dark mineral specs, Chert, white, fossilif.
 some SH, gray, green

MS-WS, A.A., large chert frgmts in MS matrix, hard,
 SH, dk. gray, gray



MS, crm to tan, f-xln, chalky matrix in part, scatt mottled pcs, micro oolitic to sandy txt, firm to hard, NS

Sh, gray

MS, tan to gray, vf-xln, some pcs mic-xln, dense, hard to firm, scatt fossils, crinoid sections common, large frgmts in MS matrix,

SH, blk, dk gray

MS-WS, gray to crm, f-xln, hard, rare dense pcs, m-gr oolitic pcs throughout, some w/ ringed ooids, mottled pcs common, magnetite specs, other dark minerals, NS

WS, crm to br, m-xln, m-gr oolitic, A.A., dark ooids present, firm, some pcs sandy, fossilif. lt. spotty edge stn dry
Chert, tan,

SH, dark gray to gray, red, green, rare pyrite

Scatt MS-WS, gray to crm, f-xln, dense, partly chalky, fossilif, oolitic.

MS, brn, mic-xln, dense, hard, NS

SH, blk, gray

MS-crm to lt. tan, mic-xln, hard, crm pcs chalky, fn-gr oolitic in part, friable, NS

MS, crm to lt. tan, mic to f-xln, hard, dense pcs, scatt fossils, rare chalky pcs, Chert, tan, white

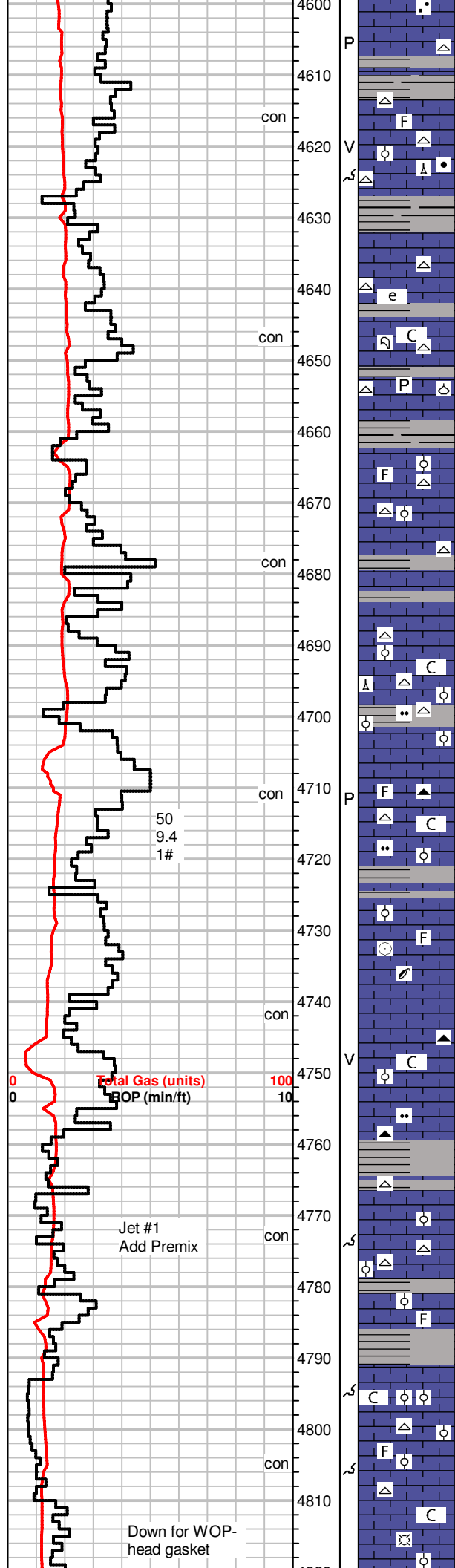
scatt SH, dk. gray, gray

MS, crm to gray, f-xln, sandy in part, rare f-gr dark ooids, crinoid frgmts, lt. edge stn dry,
Chert, tan white

SH, dk. gray, gray, red, scatt blk pcs

MS, crm to off white, f-xln, chalky matrix, silty pcs, hard to firm, NS

WS-PS, crm to lt. gray, tan, scatt brn pcs, m-xln, mottled pcs, m-gr oolitic to sub oolitic pcs, Chert, tan, white, some pcs weathered, calcite x-tals
SH, blk, gray



MS, crm to brn, some pcs gray, f-xln, gritty to sandy txt, hard, brn specs, dull fluor, spotty lt. edge str dry
SH, blk

MS-WS, gray to brn, f-xln, sub oolitic pcs, fossilif, scatt brn pcs, mic-xln, dense, magnetite specs
Chert, white, tan, blocky

SH, blk, gray, green

MS, tan to brn, f-xln to mic-xln, some earthy txt, scatt chalky pcs, gritty in part, firm to hard, fossil frgmts(brachs, crinoids)
Chert, tan, fossilif
Scatt SH, blk grays, pyrite

MS, crm to tan, f-xln, chalky, soft to firm, fossilif,
Chert, white, tan

SH, gray, silty

MS, off white to crm, mic-xln, dense, gray pcs, f-xln, gritty to silty txt, sli chalky matrix in pcs, fossilif, m-gr ringed ooids
Chert, white, gray, fossilif, spicules

SH, gray, green
MS, crm to lt. brn, gray, f-xln, firm to hard, sli. chalky fossilif, gritty txt in brn pcs.
Chert, white, gray, fusulinids, micro oolitic

MS, A.A., inc in crm pcs, f-xln, dense, fossils, dk. gray, mic-xln, hard, dense, NS
scatt SH, green, gray

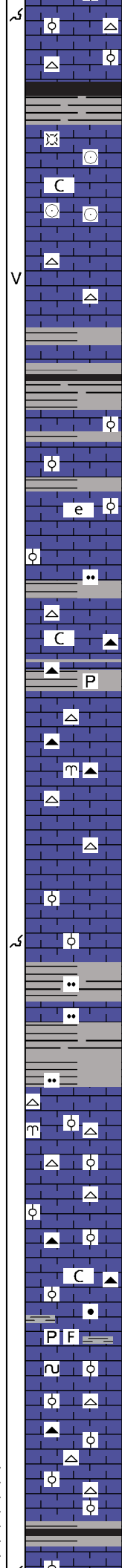
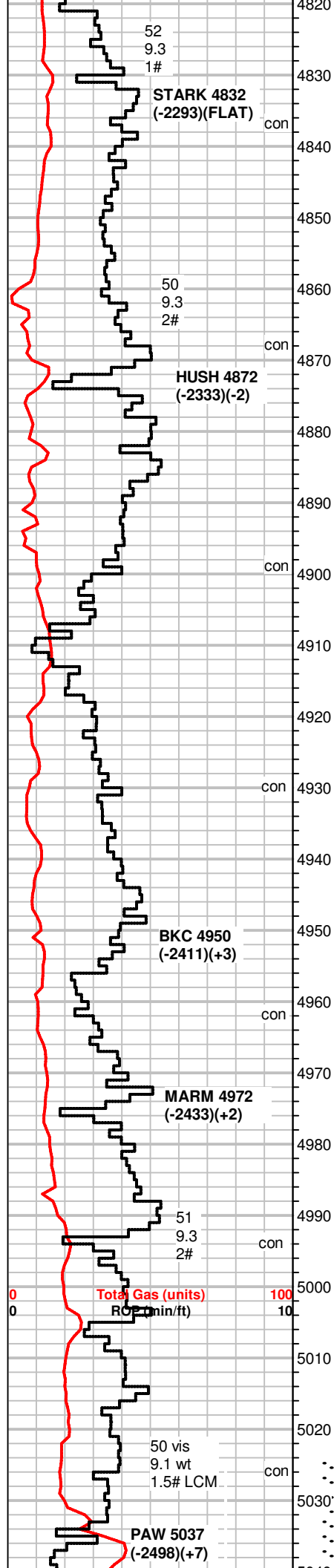
MS, crm to off white, chalky matrix, soft, some pcs hard, brittle, gritty txt, bright mineral fluor, NS, vuggy por.

MS, crm to tan, gray, f-xln, firm to hard, some pcs chalky, dense in part, scatt silty mottled pcs
Chert, white, gray
SH, gray

MS, crm to lt. tan, m-xln, gritty/sandy txt, firm brittle to friable, mottled pcs throughout, fossil frgmts, moldic por.
Chert, tan, white
SH, green, gray

MS, crm to gray, some brn, mic-xln to chalky matrix, most pcs dense, fossilif, oolitic to sub oolitic in part, rare mottled, dull fluor, NS, moldic por.
Chert, tan, fossilif.

MS-WS, crm, f to m-xln, some w/ chalky matrix, dense to soft pcs, fossilif, sandy, m-gr dark ooids in tite matrix, moldic por.
Chert, tan, fossilif.
rare SH, gray



SH, blk to dark gray, some gray

MS, tan to lt. brn, some gray, mic-xln, dense, sub oolitic to m-gr oomoldic, tite matrix, fossilif (crinoids), partly chalky mtr in pcs, NS

MS, A.A., vuggy por.
scatt Chert, white

MS, tan, f to m-xln, dense, hard, sub oolitic, mineral specs, NS

SH, blk, gray

MS-WS, crm to brn, earthy to massive txt, mic-xln pcs throughout, scatt moldic/oolitic m-gr pcs, dense, sli. sandy, dark mineral specs, NS, scatt SH, gray

MS, brn to crm, mic to f-xln, hard and dense, rare chalky pcs, soft, dull fluor, NS, barren dry
Chert, tan, white, opaque
rare SH, gray, pyrite

MS, crm to tan, mic to f-xln, dense, scatt fossils, blk specs, NS
Chert, blk, fossilif, gray, milky white,
scatt. SH, dk. gray, gray

MS, crm to gray, mic to f-xln, gritty to massive txt, dense to friable pcs, NS, moldic por.

SH, gray, dk. gray, silty to sandy in part

Scatt MS, crm to gray, gritty, m-xln, NS

SH, blk, gray, green

MS, crm to gray, f to mic-xln, firm to hard, some dense, scatt mineral specs, fossils, Chert, tan

MS, crm to tan, mic-xln, some pcs f to m-xln, suboolitic in tite matrix, some pcs friable/ fractured, scatt fritty pcs,
Chert, opaque, tan, white, fossilif, NS

MS, A.A., scatt chalky pcs,
Chert, gray

MS-WS, crm to brn, scatt gray, f-xln, firm to hard, suboolitic, dark mineral inclusions, scatt chalky pcs, fossilif
SH, gray, green, vf pyrite xtals

MS, crm to off white, mic to f-xln, dense, rare fossils, glauc specs, mineral fluor, NS

MS, crm to lt. brn, vf to mic-xln, dense, hard, suboolitic pcs, rare m-gr oolitic, tite matrix, min. fluor, NS, Chert, tan, gray, brn, fossilif.

MS-WS, crm to tan, mic-xln, hard, mostly dense, m-gr oolitic to micro oolitic, NS, Chert, opaque, rare fossils

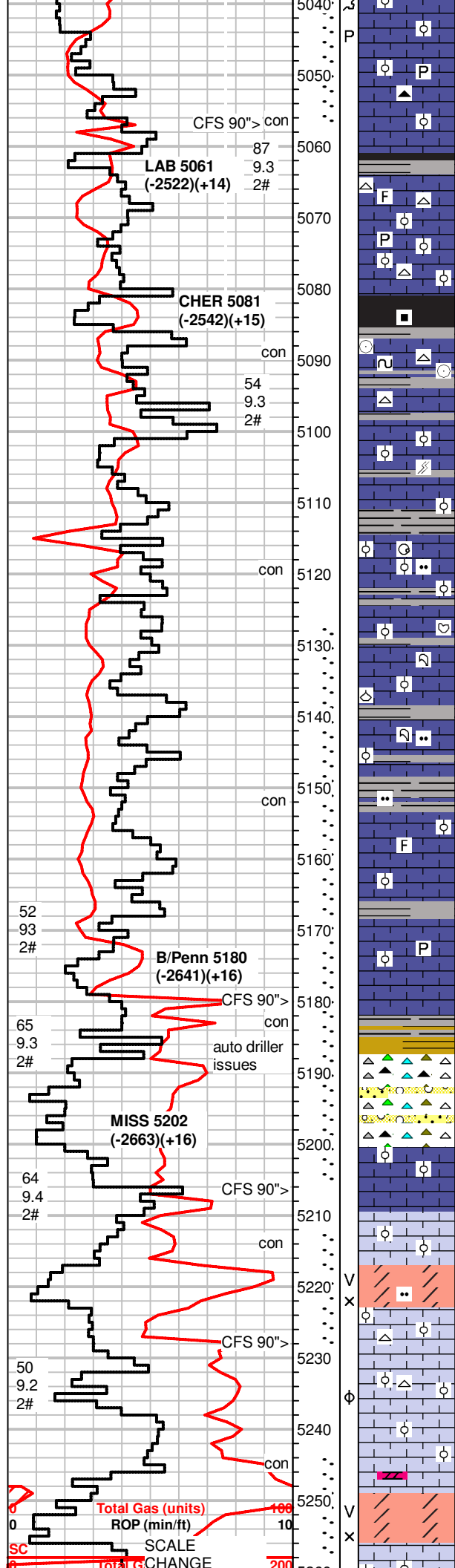
SH, rare blk, carb., gray, green
MS-WS, tan to crm, off white, f to m-xln, firm to hard, dense gritty

+4 UGK Shale Gas

+10 UGK Shale Gas

DST #1 5024-5057
Pawnee
30-60-45-90
SB BOB/7"
WBB/.5-1"
SB BOB/2.5"
WBB/1-2"
1070' GIP
Rec: 65' GOCM (16g, 16o, 68m)
IH 2489#
IF 69-73# ISIP 918#
FF 63-68# FSIP 937#
FH 2492#
BHT 112°F

+10 UGK Shale Gas



pcs, oolitic pcs, m-gr ooids, rare pcs w/ bright fluor, live oil droplets in pores, good stain, good odor, bubbling gas, inst. streaming cut, rare calcite/pyrite xtals. Chert, blk, fossilif.

Sh, gray to blk, some pyrite
 MS-WS, crm to brn, f-xln, firm to hard, sub oolitic pcs, micro oolitic, dense, fossilif, NS
 Chert, white, fossilif

MS, A.A., some mic-xln, sub oolitic, firm to hard, primarily dense pcs, pyrite, lt. edge stn dry, no cut, scatt SH, gray, blk, dec. amt.

SH, blk, grays, silty

MS, brn to crm, gritty to f-xln txt, hard, some pcs silty with chalky matrix, rare glauc specs, scatt. fossils (crinoid sections) NS, Chert, white, brn
 some SH, gray

MS, crm to gray, some brn, mic to f-xln, dense, rare fractured pcs, scatt sub oolitic pcs, NS

SH, blk, gray, silty
 MS-WS, crm to tan, f to m-xln, firm, some gritty pcs w/ chalky matrix, Chert, opaque, white, oolitic/fossilif.

SH's, blk, gray, gas bubbles
 MS, crm to brn, chalky pcs, f-xln, scatt hard, dense, fossilif pcs. NS

MS-WS, crm to brn, mic-xln to f-xln, dense, fossils(brachs, coral), girty txt in part, scatt mottled pcs, rare dead wormy stn.

MS, crm, A.A.
 some SH, gray, green, silty., some blk pcs

MS, crm to lt. tan, brn, mic-xln, hard, most pcs dense, sub oolitic, fossilif.

MS, crm to brn, mic-xln, dense, fossilif. A.A., 1 pc w/ bright fluor, no cut, no odor., some SH, gray

MS, crm to brn A.A., rare oolitic pcs scatt pyrite, some fossils, dull yellow fluor to **scatt bright fluor, slow milky cut, faint odor in bag**, no visible stn,

MS, crm to brn, f-xln, firm to hard, sub oolitic, fossilif. dense, moldic por. Chert, gray, white, SH, varicolored, blk, gray, red, yellow, some green

Chert, varicolored, blk, milky white, yellow, fossilif/oolitic, **very faint odor, scatt dull fluor, stain in vugs, spotty stain on white pcs, bkeeding gas, free oil droplets, inst. streaming cut**, vuggy por. Rare SS clusters, f-gr, friable to tite, mineral specs, **free oil when broken, rare bright fluor**

MS-WS, off white, crm to brn, oolitic, hard, dense, NS
 WS-PS, crm to off white, f-xln, sli. chalky pcs scatt, firm to hard, some pcs sli. dolomitic, sub oolitic to oolitic, m-gr ooids, dull fluor, NS

Dolo, gray to brn, vf-xln, vf-sucrosic txt, firm to soft, rare vuggy por., int-xln por. **faint to good odor, scatt bright fluor, slow milky cut, faint edge stn dry.**

WS-PS, off white, hard, m-gr oolitic, dull fluor, NS
 WS-PS, crm to of white, oolitic, m-gr, chalky matrix in pcs, scatt Chert, white

MS-PS, crm to off white, gritty to oolitic, hard to firm, some pcs friable, slightly dolomitic pcs, dull fluor, very faint odor

Dolo, brn, m-xln, sandy to sugary txt, soft, **bright to mineral fluor, free oil droplets in vugs, streaming cut on select pcs, spotty stn in wet, vuggy to int-xln por. good odor in bag/tray**

+22 UGK from Pawnee w/ 15 UGK recycle

Trip Gas

+24 UGK Shale Gas

+26 UGK Shale Gas

+17 UGK,

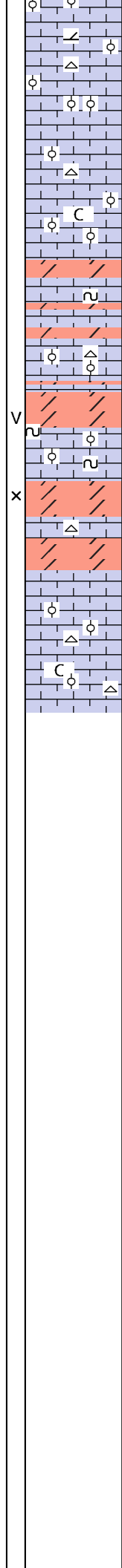
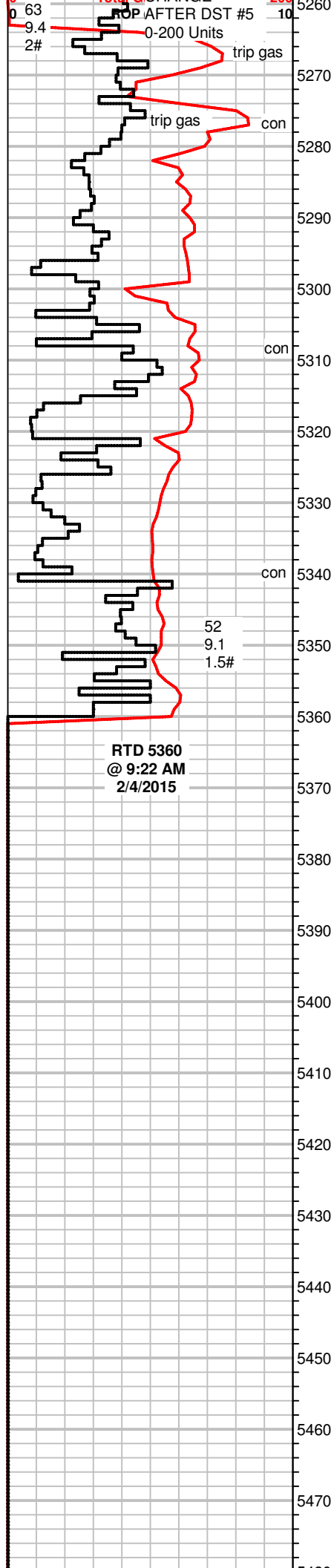
DST #2 5127-5180
Penn Lime
30-60-45-90
SB GTS/9" GA 3/8" Cke
122 MCF/10"
133 MCF/20"
137 MCF/30"
SB (loose fitting on manifold)
GA 1/4" Cke
115 MCF/1"
45 MCF/20"
45MCF/45"
Rec: 80' Mud
IH 2562#
IF 63-62# ISIP 1402#
FF 64-85# FSIP 1400#
FH 2550#
Temp 116 °F

+19 UGK,
+11 UGK recycle

+19 UGK,
+6 UGK recycle

+44 UGK, +26 UGK recyc.

+39 UGK, +16 UGK recyc.



WS-PS, crm to off white, f-xln, m-gr oolitic, fossilif. sli, dolomitic, firm to hard, NS, some Dolo, brn, limey, f-xln, faint odor

WS-PS, crm to off white, f-xln, m-gr oolitic, firm, dull fluor, NS Chert, white, fossilif

WS-PS, off white, firm, chalky pcs common, micro oolitic, NS Assoc. Chert, white

WS-PS, crm to off white, partly chalky, massive txt, oolitic, m-gr ringed ooids in chalky matrix, rare glauc, dense, NS Dolo, brn, f-xln, hard to brittle, fn-suc txt. barren, NS

Dolo, brn to tan, f-suc txt, A.A., NS

WS-PS, off white to crm, m-gr oolitic, ringed ooids, some pcs friable

Dolo, gray to brn, vf-suc to fn sugary txt, dark mineral specs, min. fluor, NS, vuggy por.

MS-WS, off white, oolitic in part, m-gr ooids, glauc

Dolo, gray to brn, vf-suc. txt, mineral inclusions, tite pcs, barren, NS, int-xln por.

MS-WS, off white, oolitic to micro oolitic pcs, hard, dense, NS assoc. Chert, white,

MS-WS, off white to tan, mic-xln, dense, scatt chalky pcs, some pcs oolitic, dull fluor, NS rare Chert, white

DST #3 5180-5206
Cong
 30-60-60-120
 SB BOB/15 sec
 FBB
 SB BOB/5 sec GTS/27"
 TSTM
 FBB TO SBB
 Rec: 50' Mud
 IH 2590#
 IF 36-29# ISIP 835#
 FF 34-33# FSIP 1031#
 FH 2586#
 Temp 113°F

DST #4 5212-5228 Miss
 30-60-60-120
 SB BOB/Immed GTS/7"
 GA .5" Cke
 279 MCF/10"
 339 MCF/20"
 434 MCF/30"
 WBB 4"
 SB GA GTS
 434 MCF/10"
 528 MCF/20"
 549 MCF/30"
 555 MCF/40"
 555 MCF/50"
 562 MCF/60"
 FBB 4-6"
 Rec: 30' Mud
 IH 2587#
 IF 52-105# ISIP 1549#
 FF 89-125# FSIP 1544#
 FH 2552#
 Temp 94°F

DST #5 5243-5258
 Miss
 30-60-60-120
 SB BOB/2"
 WBB
 SB BOB/1" GTS/12"
 TSTM
 W-FBB
 Rec: 100' CGO (20g, 80o)
 120' GMCO (36g, 38o, 26m)
 120' GOCM
 (38g, 22o, 40m)
 IH 2656#
 IF 44-70# ISIP 1477#
 FF 82-135# FSIP 1471#
 FH 2575#
 Temps 117°F
 Gravity: 35.8 API

	5480			
	5490			