



WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL

ABNORMAL

ATTENTION

Area

[KALEB WILLIS]

Machine Id

VOLVO PENTA 3950010511

Component

Starboard IPS

Fluid

VOLVO PENTA SAE 15W40 (8 GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

The iron level is marginal. Moderate concentration of visible metal present. Gear wear is indicated.

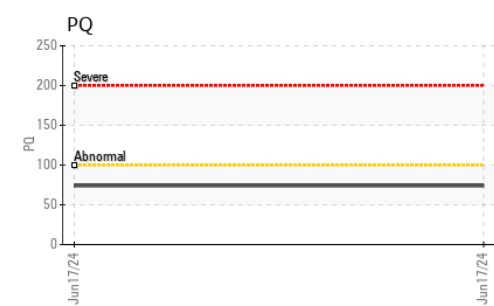
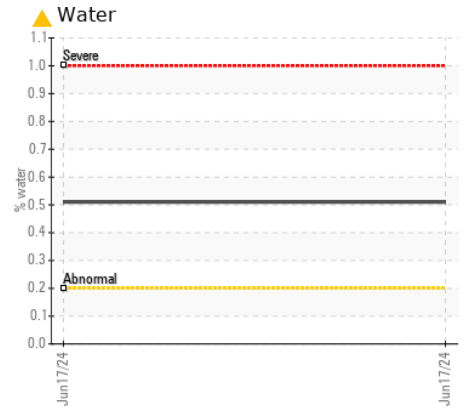
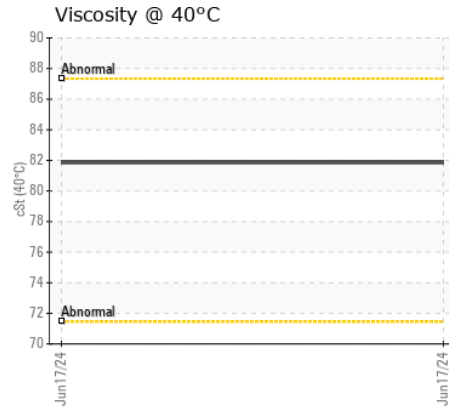
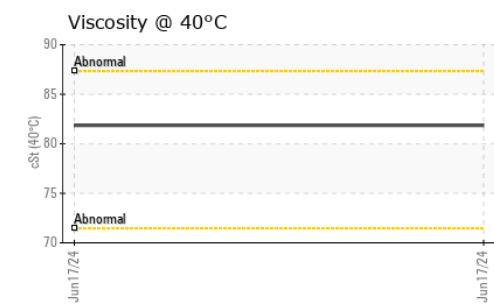
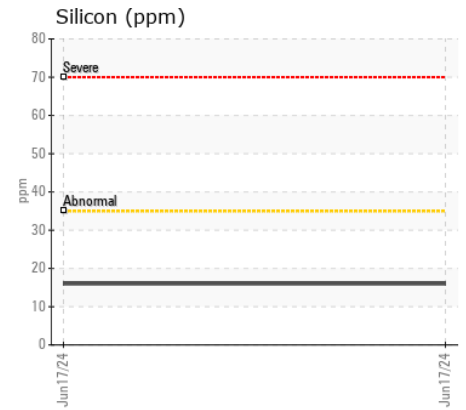
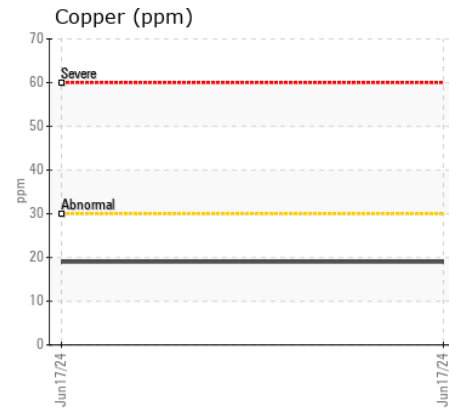
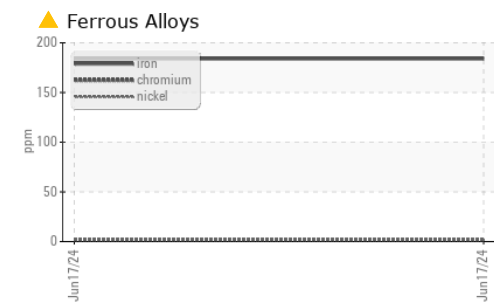
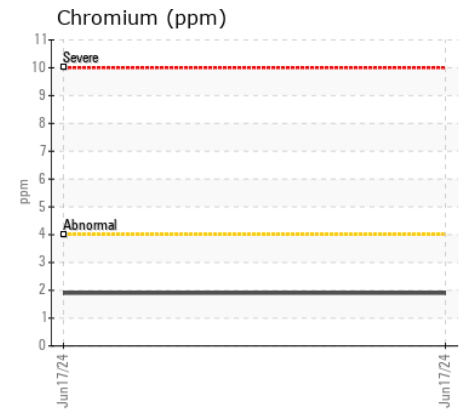
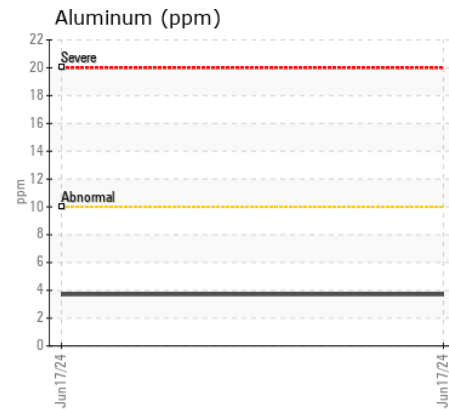
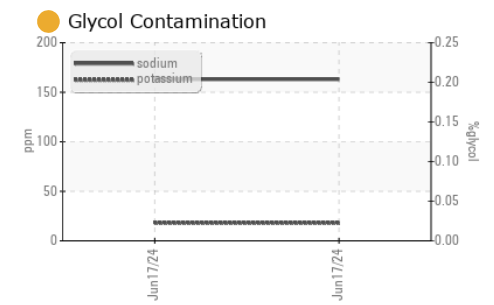
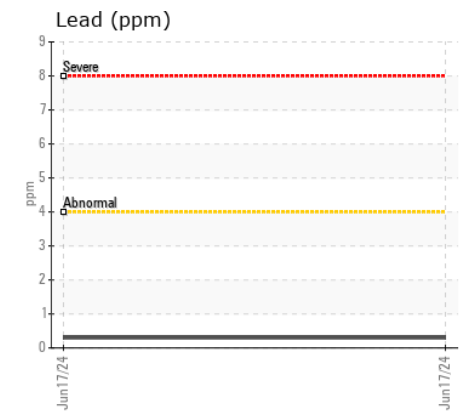
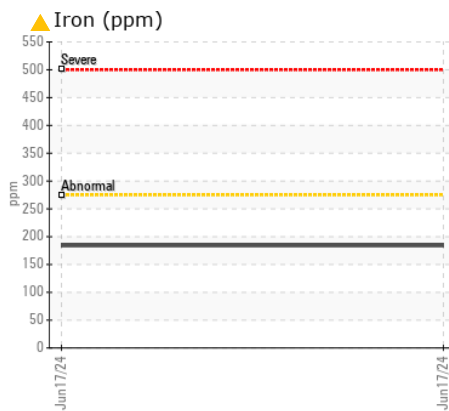
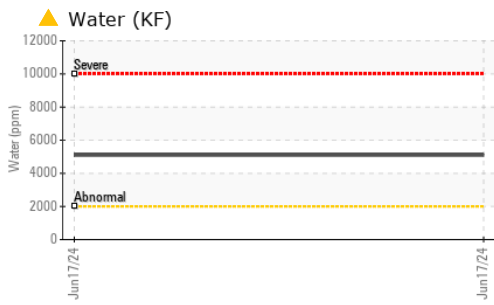
CONTAMINATION

There is a moderate concentration of water present in the oil. The high sodium (Na) level indicates the possible presence of salt water.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA011404	---	---
Sample Date		Client Info		17 Jun 2024	---	---
Machine Age	hrs	Client Info		167	---	---
Oil Age	hrs	Client Info		167	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---
PQ		ASTM D8184		74	---	---
Iron	ppm	ASTM D5185m	>275	▲ 184	---	---
Chromium	ppm	ASTM D5185m	>4	2	---	---
Nickel	ppm	ASTM D5185m	>4	2	---	---
Titanium	ppm	ASTM D5185m	>3	<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	4	---	---
Lead	ppm	ASTM D5185m	>4	<1	---	---
Copper	ppm	ASTM D5185m	>30	19	---	---
Tin	ppm	ASTM D5185m	>3	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	▲ MODER	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>35	16	---	---
Potassium	ppm	ASTM D5185m	>20	18	---	---
Water	%	ASTM D6304	>0.2	▲ 0.510	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 5100	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	---	---
Sodium	ppm	ASTM D5185m		● 163	---	---
Boron	ppm	ASTM D5185m		325	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		11	---	---
Magnesium	ppm	ASTM D5185m		803	---	---
Calcium	ppm	ASTM D5185m		67	---	---
Phosphorus	ppm	ASTM D5185m		1439	---	---
Zinc	ppm	ASTM D5185m		68	---	---
Sulfur	ppm	ASTM D5185m		22231	---	---
Visc @ 40°C	cSt	ASTM D445		81.85	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA011404 **Received** : 18 Jun 2024
Lab Number : 06213834 **Tested** : 18 Jun 2024
Unique Number : 11086698 **Diagnosed** : 18 Jun 2024 - Doug Bogart
Test Package : MOB 1 (Additional Tests: KF, PQ)

WESTERN BRANCH DIESEL
 400 SENSATION WEIGH
 BEAUFORT, NC
 US 28516
 Contact: DAVID SHOOK
 dshook@indelpower.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
 F: (252)504-3062