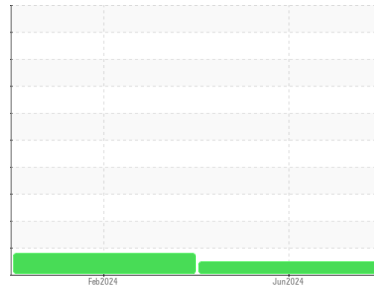




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
122303 - VOLVO L220 LOADER
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON ADVANCED 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			SBP0006618	SBP0005783	---
Sample Date	Client Info			19 Jun 2024	22 Feb 2024	---
Machine Age	hrs	Client Info		1006	492	---
Oil Age	hrs	Client Info		514	492	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	---
Water	WC Method	>0.2		NEG	NEG	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	23	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	2	4	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	3	---
Lead	ppm	ASTM D5185m	>40	3	8	---
Copper	ppm	ASTM D5185m	>330	61	365	---
Tin	ppm	ASTM D5185m	>15	2	4	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	12	55	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	59	93	---
Manganese	ppm	ASTM D5185m	0	1	4	---
Magnesium	ppm	ASTM D5185m	1010	821	40	---
Calcium	ppm	ASTM D5185m	1070	1408	2503	---
Phosphorus	ppm	ASTM D5185m	1150	1086	1159	---
Zinc	ppm	ASTM D5185m	1270	1319	1504	---
Sulfur	ppm	ASTM D5185m	2060	3784	4638	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	28	---
Sodium	ppm	ASTM D5185m		3	2	---
Potassium	ppm	ASTM D5185m	>20	4	3	---

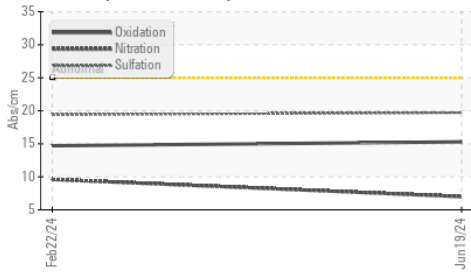
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.0	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	19.4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	14.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	7.8	5.7	---

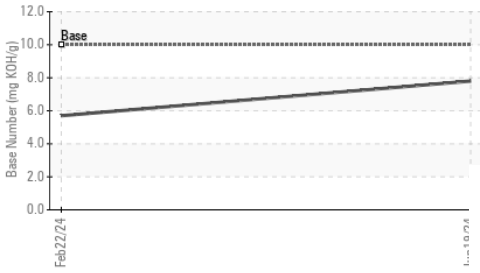


OIL ANALYSIS REPORT

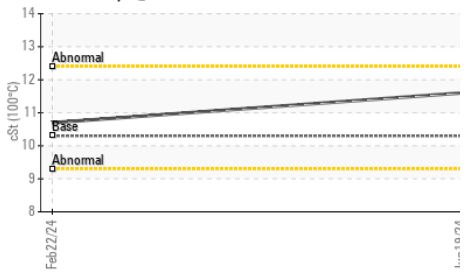
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

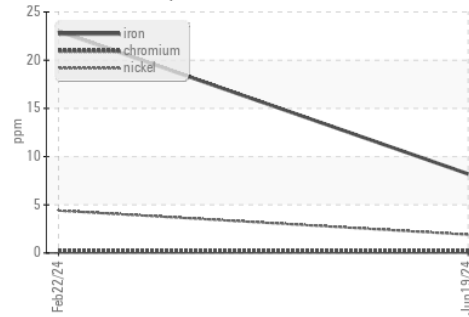


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

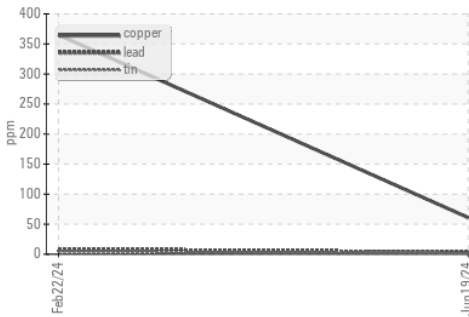
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.3	11.6	10.7

GRAPHS

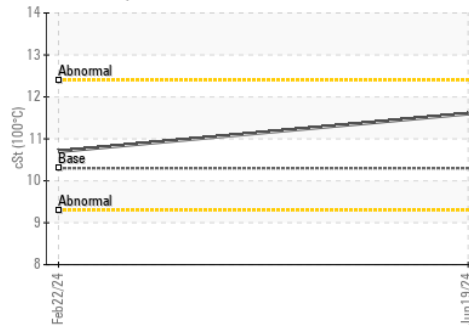
Ferrous Alloys



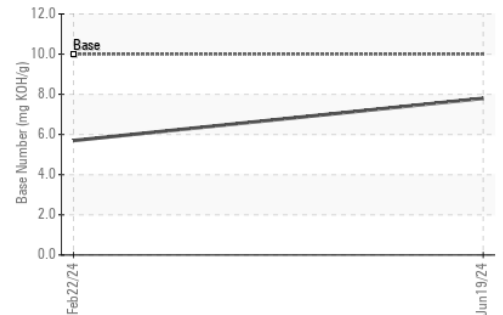
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006618 **Received** : 24 Jun 2024
Lab Number : 06219009 **Tested** : 26 Jun 2024
Unique Number : 11097206 **Diagnosed** : 26 Jun 2024 - Wes Davis
Test Package : FLEET

Constructors Inc. - 603659
 1815 Y Street
 Lincoln, NE
 US 68508
 Contact: Loren Michael
 LorenM@constructorslincoln.com
 T: (402)434-2157
 F:

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)