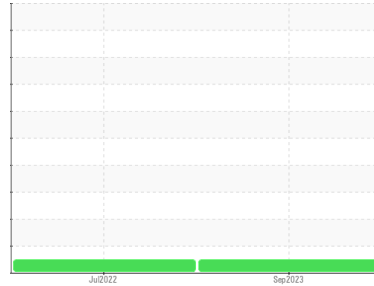




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Watkins Block Truck Shop Omaha
 Machine Id
76 Mule [Watkins Block Truck Shop Omaha]
 Component
Rear Rear Diesel Engine
 Fluid
PETRO CANADA 10W30 (9 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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	SBP0005012	SBP0000246	---
Sample Date	Client Info	22 Sep 2023	12 Jul 2022	---
Machine Age	hrs Client Info	985	777	---
Oil Age	hrs Client Info	208	196	---
Oil Changed	Client Info	Changed	Changed	---
Sample Status		NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	12	5	---
Chromium	ppm ASTM D5185m >20	<1	<1	---
Nickel	ppm ASTM D5185m >4	0	0	---
Titanium	ppm ASTM D5185m	61	<1	---
Silver	ppm ASTM D5185m >3	<1	0	---
Aluminum	ppm ASTM D5185m >20	8	3	---
Lead	ppm ASTM D5185m >40	1	<1	---
Copper	ppm ASTM D5185m >330	5	1	---
Tin	ppm ASTM D5185m >15	1	<1	---
Vanadium	ppm ASTM D5185m	<1	0	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	31	108	---
Barium	ppm ASTM D5185m	0	0	---
Molybdenum	ppm ASTM D5185m	20	6	---
Manganese	ppm ASTM D5185m	2	<1	---
Magnesium	ppm ASTM D5185m	812	641	---
Calcium	ppm ASTM D5185m	1261	1319	---
Phosphorus	ppm ASTM D5185m	994	694	---
Zinc	ppm ASTM D5185m	1211	837	---
Sulfur	ppm ASTM D5185m	3286	3231	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	12	4	---
Sodium	ppm ASTM D5185m	6	2	---
Potassium	ppm ASTM D5185m >20	17	3	---

INFRA-RED

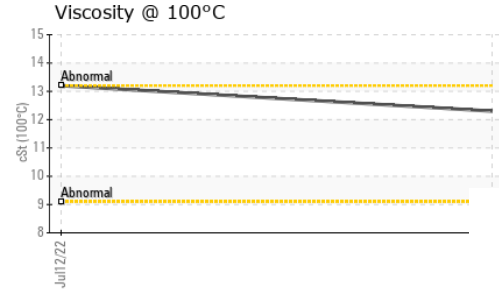
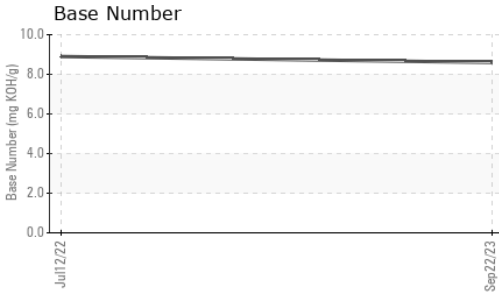
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	0.1	---
Nitration	Abs/cm *ASTM D7624 >20	6.8	8.9	---
Sulfation	Abs/.1mm *ASTM D7415 >30	17.5	20.4	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	13.8	14.1	---
Base Number (BN)	mg KOH/g ASTM D2896	8.6	8.9	---



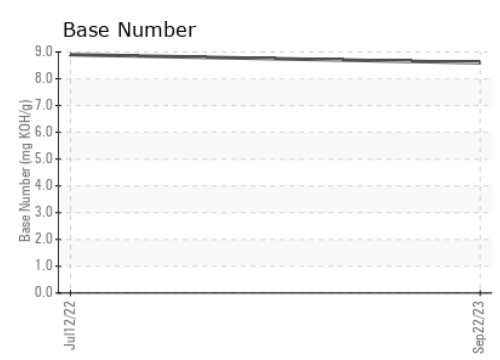
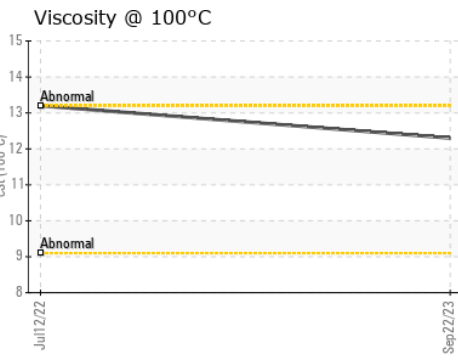
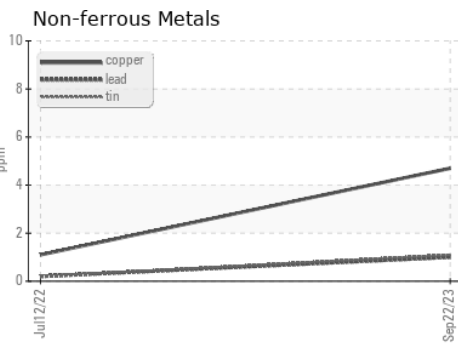
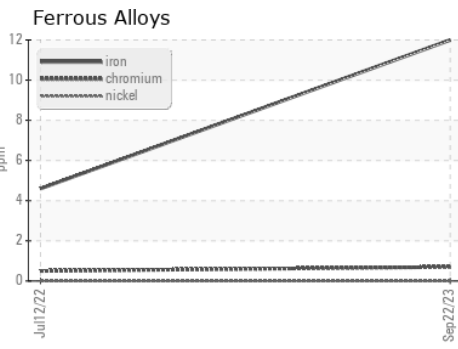
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.3	13.2	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005012 **Received** : 28 Sep 2023
Lab Number : **05964047** **Diagnosed** : 29 Sep 2023
Unique Number : 10670598 **Diagnostician** : Wes Davis
Test Package : FLEET

Watkins Block Truck Shop Omaha - 602227
 14306 Giles Rd
 Omaha, NE
 US 68138
 Contact: Dave Hozba
 daveh@watkinsconcreteblock.com
 T: (402)894-6518
 F:

Certificate L2367
 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)