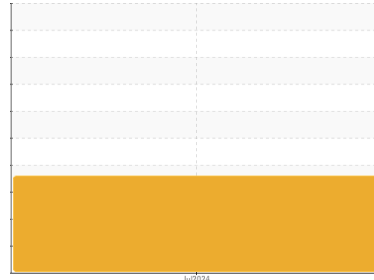


OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area
MACK DEFENSE [6100323733]
Machine Id
481407
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier la source de la fuite de fluide de refroidissement. Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation. Le fluide n'était pas spécifié, toutefois, une comparaison avec d'autres fluides indiqua que ce fluide est du (GENERIC) DIESEL ENGINE OIL SAE 40. Veuillez confirmer.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

Le test de glycol est positif. Concentration modérée de glycol dans l'huile.

Fluid Condition

Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. L'huile ne peut plus être utilisée en raison de la présence de contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WA0019445	---	---
Sample Date	Client Info			09 Jul 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			Changed	---	---
Sample Status				ABNORMAL	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	4	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	29	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

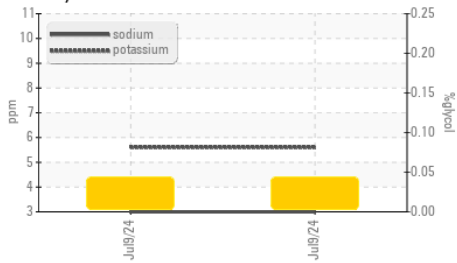
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	34	---	---
Barium	ppm	ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	100	0	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	8	---	---
Calcium	ppm	ASTM D5185(m)	3000	1818	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	951	---	---
Zinc	ppm	ASTM D5185(m)	1350	1060	---	---
Sulfur	ppm	ASTM D5185(m)	4250	3477	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	11	---	---
Sodium	ppm	ASTM D5185(m)	>216	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	▲ 6	---	---
Glycol	%	ASTM D7922*		▲ 0.043	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	5.6	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	17.2	---	---

OIL ANALYSIS REPORT

▲ Glycol Contamination



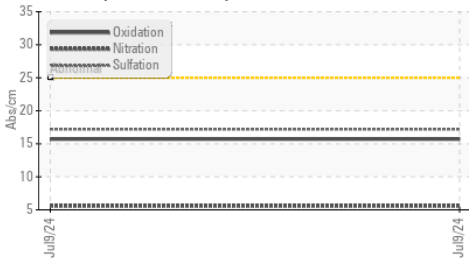
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	10.05	---

VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	14.4	13.2	---

GRAPHS

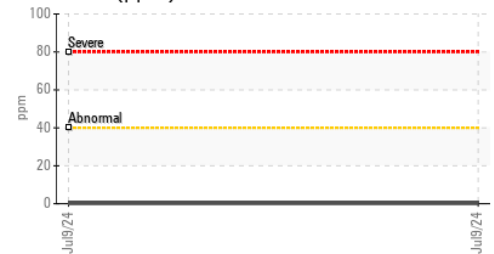
FT-IR (Direct Trend)



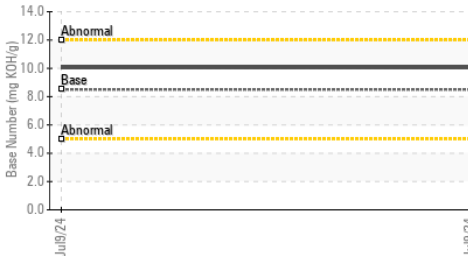
Iron (ppm)



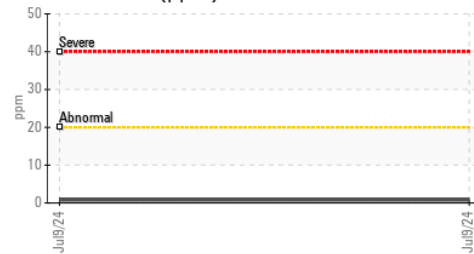
Lead (ppm)



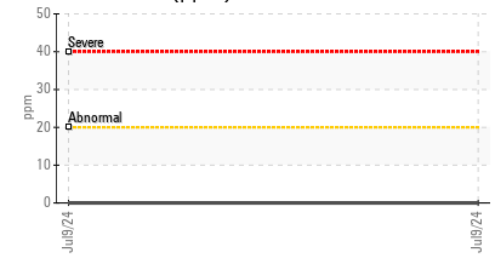
Base Number



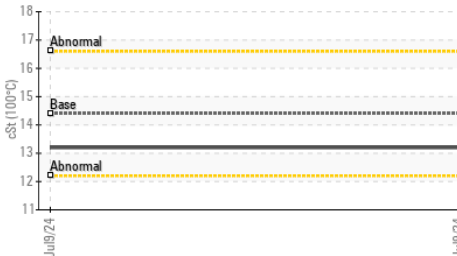
Aluminum (ppm)



Chromium (ppm)



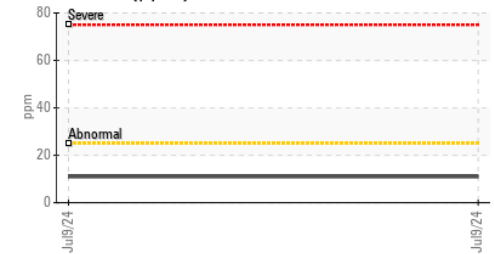
Viscosity @ 100°C



Copper (ppm)



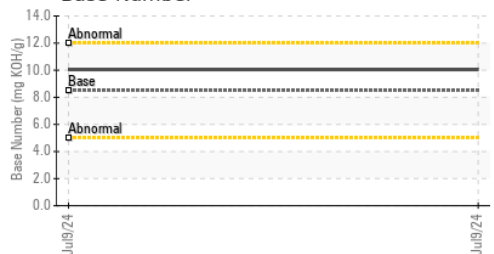
Silicon (ppm)



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0019445 **Received** : 12 Jul 2024
Lab Number : 02647611 **Tested** : 12 Jul 2024
Unique Number : 5813163 **Diagnosed** : 12 Jul 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: Glycol)

Wajax Limited
 2997 AV. WATT
 Quebec, QC
 CA G1X 3W1
 Contact: Steve Racine
 sracine@wajax.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

T:
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