



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
3879L
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0034318	---	---
Sample Date		Client Info		02 May 2024	---	---
Machine Age	mls	Client Info		15810	---	---
Oil Age	mls	Client Info		15000	---	---
Filter Age	mls	Client Info		15000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	184	---	---
Chromium	ppm	ASTM D5185m	>20	3	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	12	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	56	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Light fuel dilution occurring.

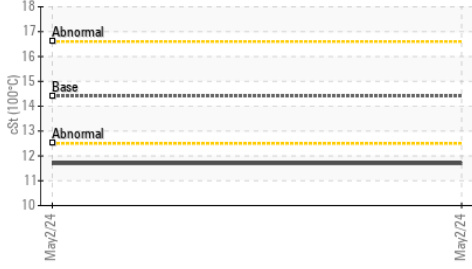
Silicon	ppm	ASTM D5185m	>25	30	---	---
Potassium	ppm	ASTM D5185m	>20	11	---	---
Fuel	%	ASTM D3524	>5	▲ 2.6	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	15.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.2	---	---
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	---	---

FLUID CONDITION

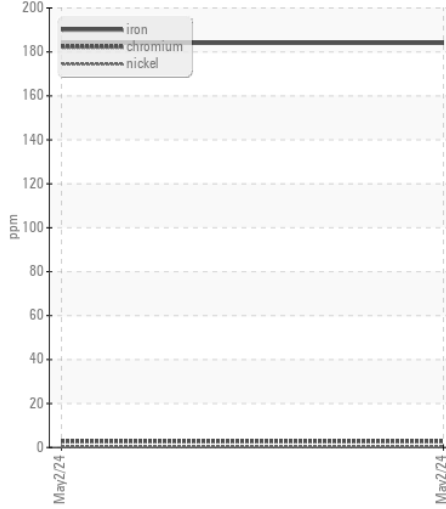
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>158	7	---	---
Boron	ppm	ASTM D5185m	250	24	---	---
Barium	ppm	ASTM D5185m	10	3	---	---
Molybdenum	ppm	ASTM D5185m	100	46	---	---
Manganese	ppm	ASTM D5185m		7	---	---
Magnesium	ppm	ASTM D5185m	450	814	---	---
Calcium	ppm	ASTM D5185m	3000	1172	---	---
Phosphorus	ppm	ASTM D5185m	1150	700	---	---
Zinc	ppm	ASTM D5185m	1350	850	---	---
Sulfur	ppm	ASTM D5185m	4250	2459	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.9	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.7	---	---

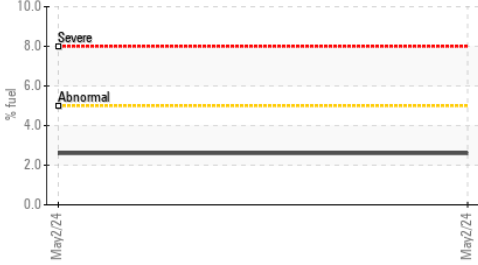
▲ Viscosity @ 100°C



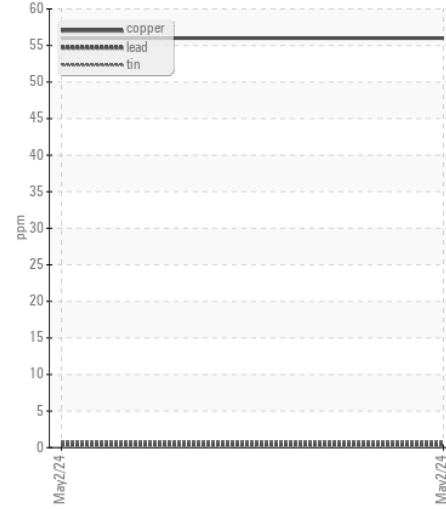
Ferrous Alloys



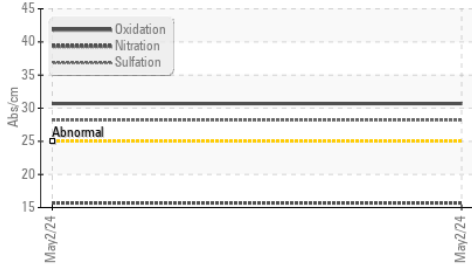
▲ Fuel Dilution



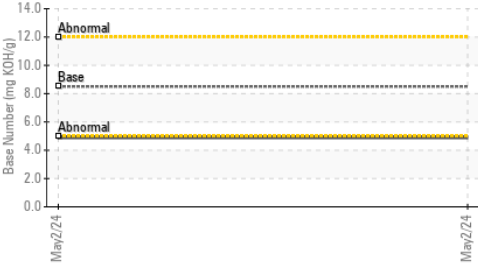
Non-ferrous Metals



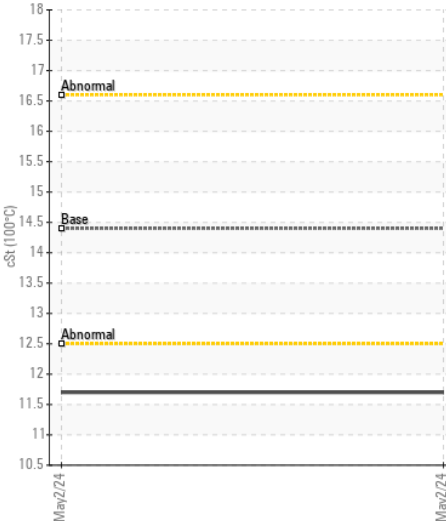
FT-IR (Direct Trend)



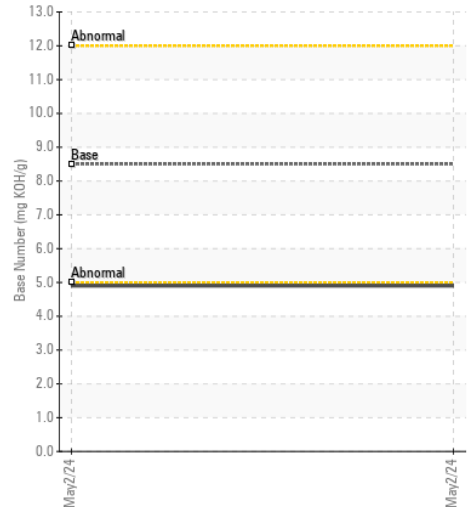
Base Number



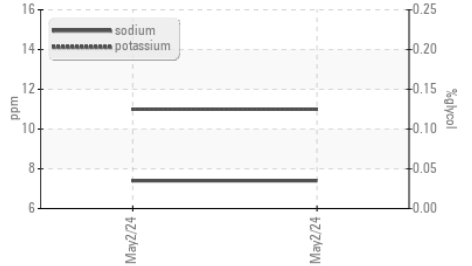
▲ Viscosity @ 100°C



Base Number



Glycol Contamination



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0034318
Lab Number : 06175160
Unique Number : 11021213
Test Package : FLEET (Additional Tests: FuelDilution, Glycol, PercentFuel)

RUSH TRUCK CENTER - CHICAGO IDEALEASE
 4655 SOUTH CENTRAL AVENUE
 CHICAGO, IL
 US 60638

Contact: MIKE LINLEY
 linleym@rushtruckcenters.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)

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