OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
1714
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- QTS)

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.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

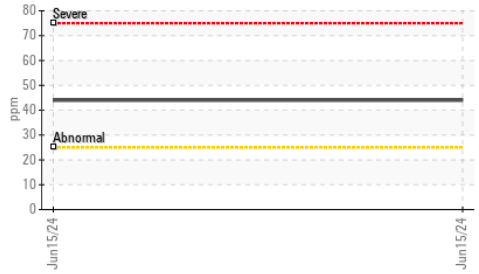
Elemental level of silicon (Si) above normal indicating ingress of seal material. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

FLUID CONDITION

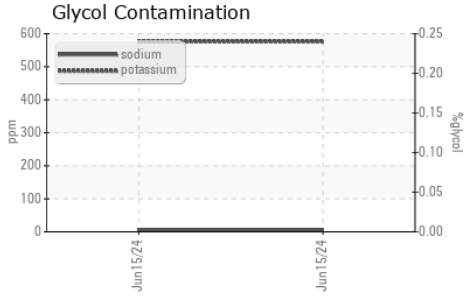
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0916466	---	---
Sample Date		Client Info		15 Jun 2024	---	---
Machine Age	mls	Client Info		21272	---	---
Oil Age	mls	Client Info		21272	---	---
Filter Age	mls	Client Info		21272	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>100	122	---	---
Chromium	ppm	ASTM D5185m	>20	4	---	---
Nickel	ppm	ASTM D5185m	>4	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	232	---	---
Lead	ppm	ASTM D5185m	>40	4	---	---
Copper	ppm	ASTM D5185m	>330	19	---	---
Tin	ppm	ASTM D5185m	>15	3	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 44	---	---
Potassium	ppm	ASTM D5185m	>20	576	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	---	---
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	---	---
Sodium	ppm	ASTM D5185m		7	---	---
Boron	ppm	ASTM D5185m	250	37	---	---
Barium	ppm	ASTM D5185m	10	5	---	---
Molybdenum	ppm	ASTM D5185m	100	48	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m	450	531	---	---
Calcium	ppm	ASTM D5185m	3000	1670	---	---
Phosphorus	ppm	ASTM D5185m	1150	709	---	---
Zinc	ppm	ASTM D5185m	1350	917	---	---
Sulfur	ppm	ASTM D5185m	4250	2130	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.1	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	9.9	---	---

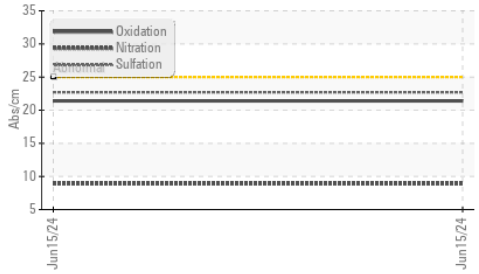
Silicon (ppm)



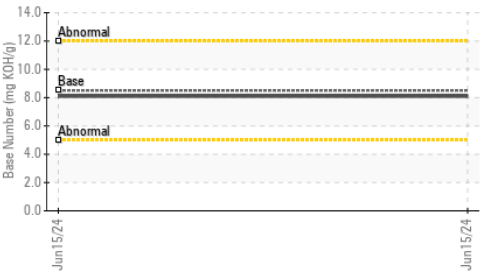
Glycol Contamination



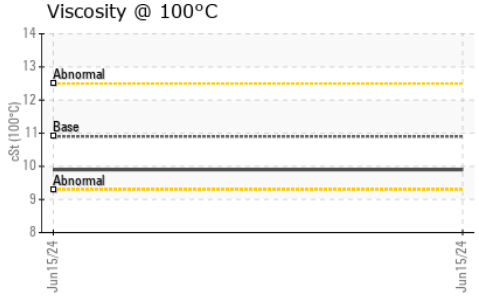
FT-IR (Direct Trend)



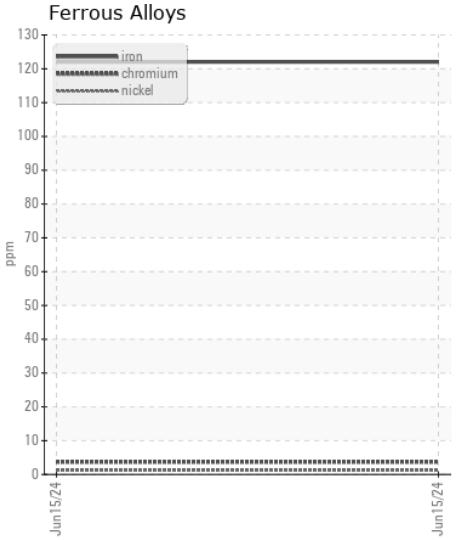
Base Number



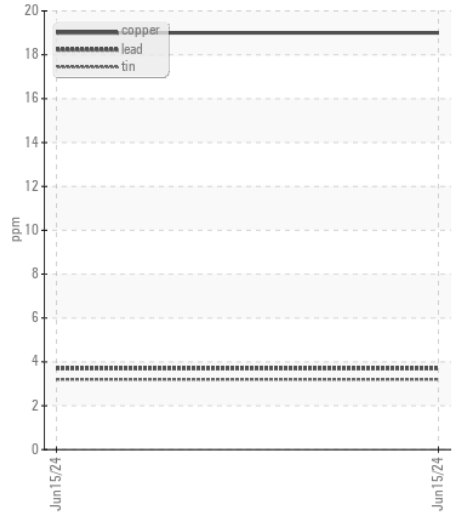
Viscosity @ 100°C



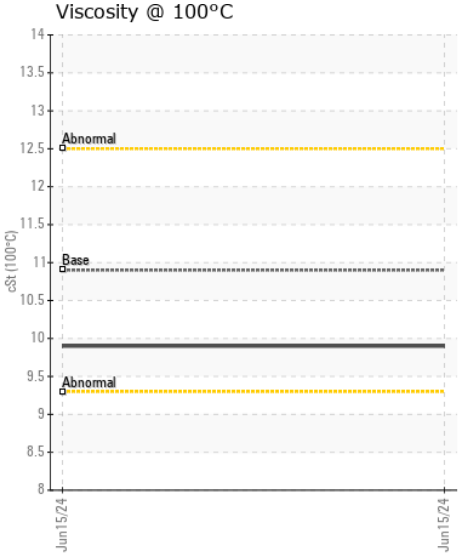
Ferrous Alloys



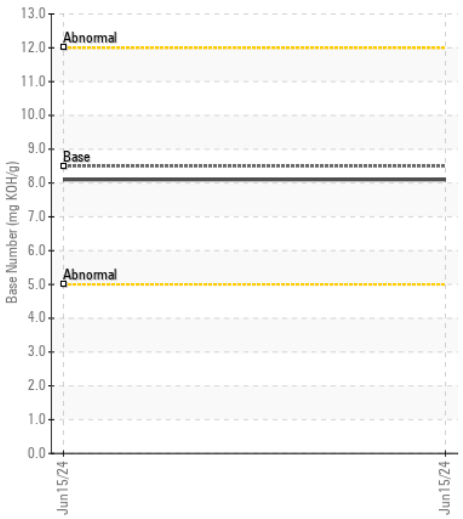
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0916466
Lab Number : 06225667
Unique Number : 11103864
Test Package : FLEET (Additional Tests: KV40)

Received : 01 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Don Baldridge

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)

CARCO TRANSPORTATION
3403 EAST ROOSEVELT ROAD
LITTLE ROCK, AR
US 72206
Contact: DENNIS CATES
denniscates@carcotrans.com
T: (800)967-0777
F: