



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
250
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0719785	WCM1383938	---
Sample Date		Client Info		22 Jan 2024	03 Aug 2021	---
Machine Age	hrs	Client Info		86	1187	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	77	44	---
Chromium	ppm	ASTM D5185m	>20	5	5	---
Nickel	ppm	ASTM D5185m	>4	3	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	9	3	---
Lead	ppm	ASTM D5185m	>40	8	12	---
Copper	ppm	ASTM D5185m	>330	19	3	---
Tin	ppm	ASTM D5185m	>15	4	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

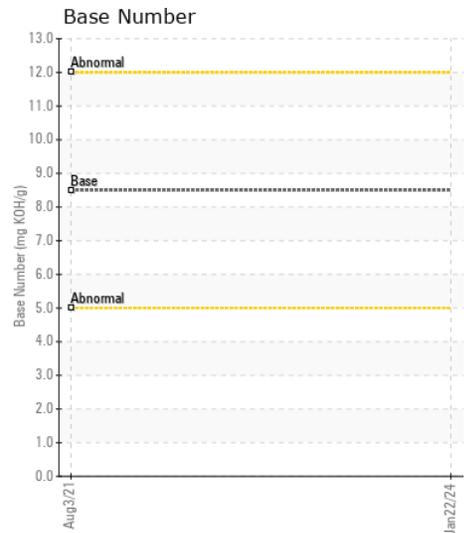
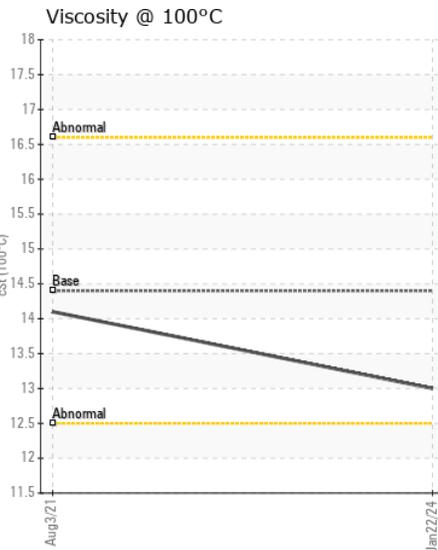
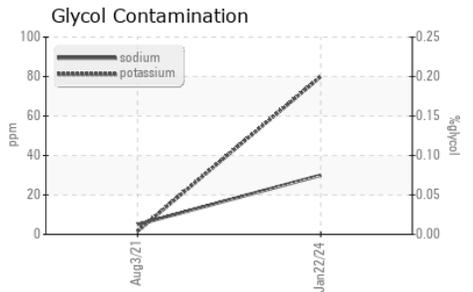
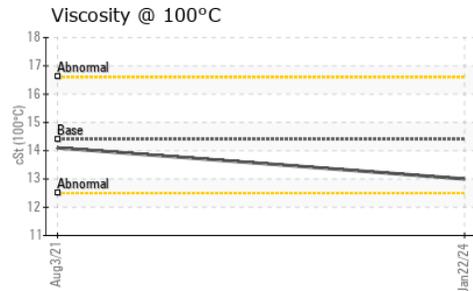
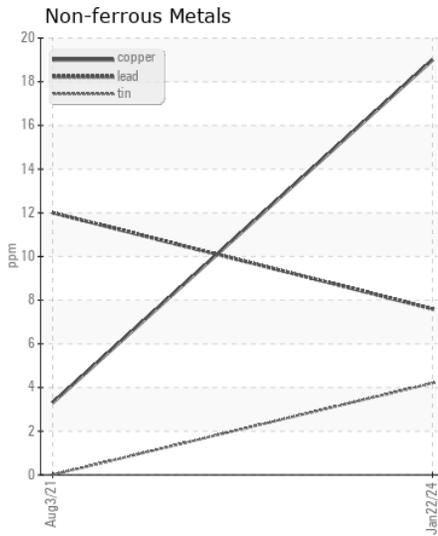
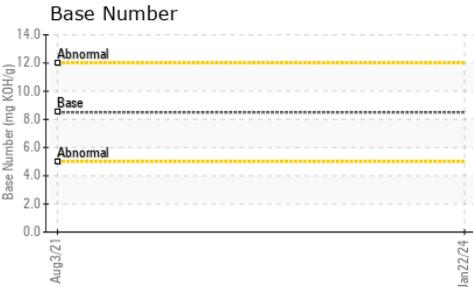
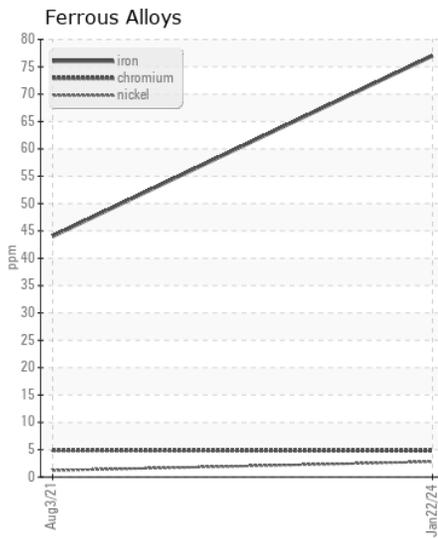
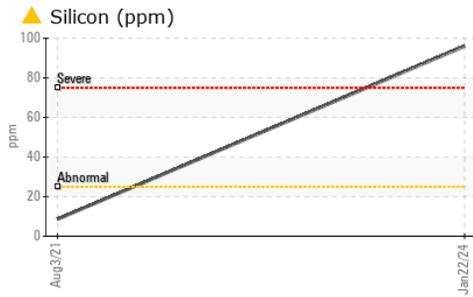
Sodium and/or potassium levels are high. Elemental level of silicon (Si) above normal indicating ingress of seal material. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	▲ 96	9	---
Potassium	ppm	ASTM D5185m	>20	▲ 80	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	21.9	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
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	---

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.

Sodium	ppm	ASTM D5185m	>216	30	5	---
Boron	ppm	ASTM D5185m	250	19	3	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	69	0	---
Manganese	ppm	ASTM D5185m		7	<1	---
Magnesium	ppm	ASTM D5185m	450	50	15	---
Calcium	ppm	ASTM D5185m	3000	2809	2872	---
Phosphorus	ppm	ASTM D5185m	1150	980	1075	---
Zinc	ppm	ASTM D5185m	1350	1218	1198	---
Sulfur	ppm	ASTM D5185m	4250	10651	3382	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	14.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	14.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0719785

Lab Number : 06087953

Unique Number : 10875398

Test Package : FLEET (Additional Tests: Glycol)

Received : 13 Feb 2024

Tested : 15 Feb 2024

Diagnosed : 15 Feb 2024 - Jonathan Hester

ALMSTEAD TREE & SHRUB CARE CO

58 BEECHWOOD AVE

NEW ROCHELLE, NY

US 10801

Contact:

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)

T:

F: