



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
149977
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0019517	RPL0012501	RPL0003502
Sample Date		Client Info		24 Jun 2024	08 Aug 2023	09 Jul 2022
Machine Age	mls	Client Info		284587	234783	168663
Oil Age	mls	Client Info		40000	9110	25000
Filter Age	mls	Client Info		40000	9110	25000
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 131	18	31
Chromium	ppm	ASTM D5185m	>20	5	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	14	4	8
Lead	ppm	ASTM D5185m	>40	35	2	2
Copper	ppm	ASTM D5185m	>330	3	<1	2
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

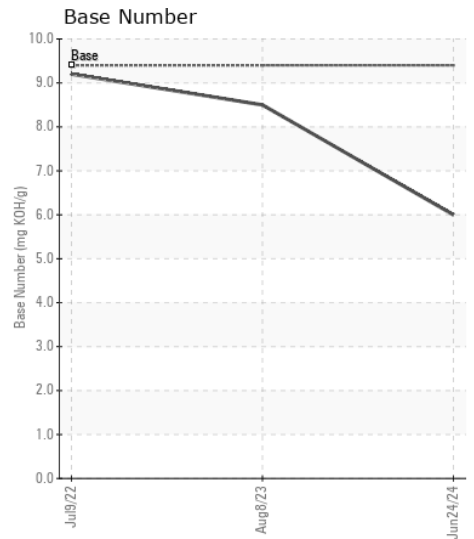
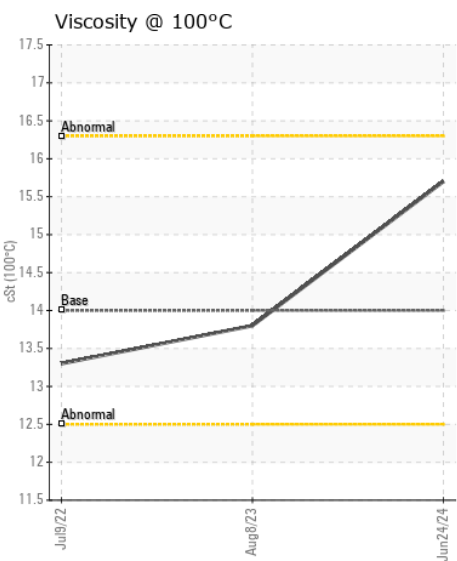
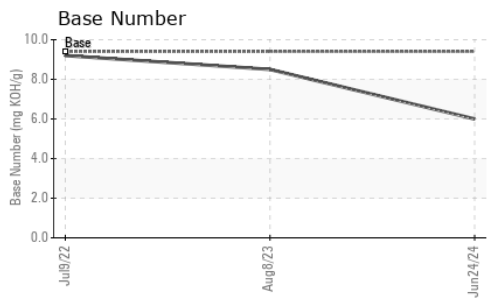
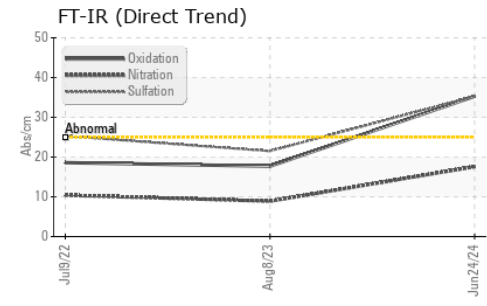
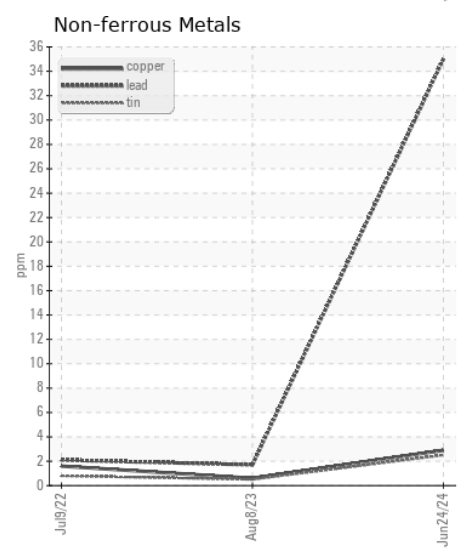
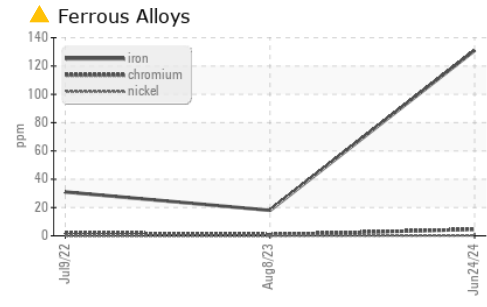
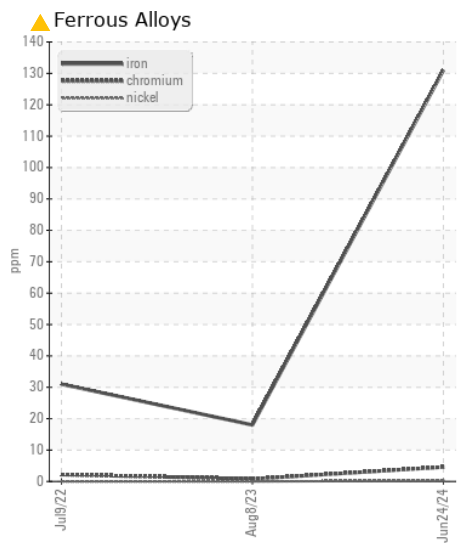
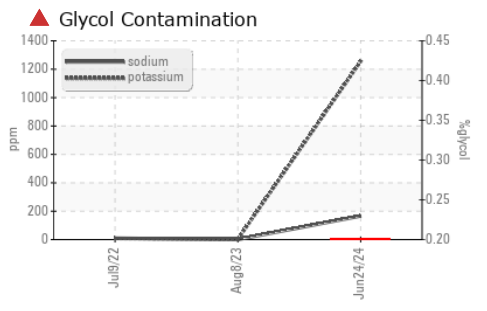
Sodium and/or potassium levels are high. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185m	>25	13	6	8
Potassium	ppm	ASTM D5185m	>20	▲ 1255	2	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.20	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.5	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	17.6	8.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	35.3	21.5	25.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 166	<1	10
Boron	ppm	ASTM D5185m	0	10	6	37
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	161	68	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	1084	973	588
Calcium	ppm	ASTM D5185m		1324	1159	1708
Phosphorus	ppm	ASTM D5185m		1144	1046	733
Zinc	ppm	ASTM D5185m		1425	1297	963
Sulfur	ppm	ASTM D5185m		2784	3249	2824
Oxidation	Abs/.1mm	*ASTM D7414	>25	35.3	17.7	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	6.0	8.5	9.2
Visc @ 100°C	cSt	ASTM D445	14	15.7	13.8	13.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0019517 **Received** : 03 Jul 2024
Lab Number : 06227011 **Tested** : 05 Jul 2024
Unique Number : 11110504 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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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)