



WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**NORMAL**  
**NORMAL**

Machine Id  
**INTERNATIONAL 5012899**

Component  
**Diesel Engine**

Fluid  
**VALVOLINE 15W40 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. 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		<b>IL0035071</b>	IL0033204	IL05934632
Sample Date		Client Info		<b>25 Jan 2024</b>	01 Nov 2023	27 Jul 2023
Machine Age	mls	Client Info		<b>261079</b>	239896	228150
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ATTENTION</b>	ATTENTION	NORMAL

### WEAR

An increase in the aluminum level is noted. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>36</b>	19	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 15</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

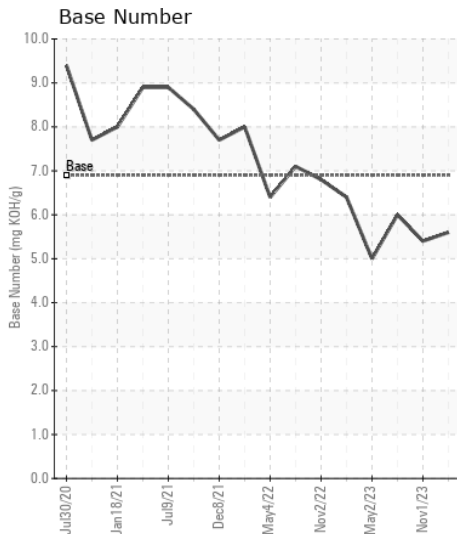
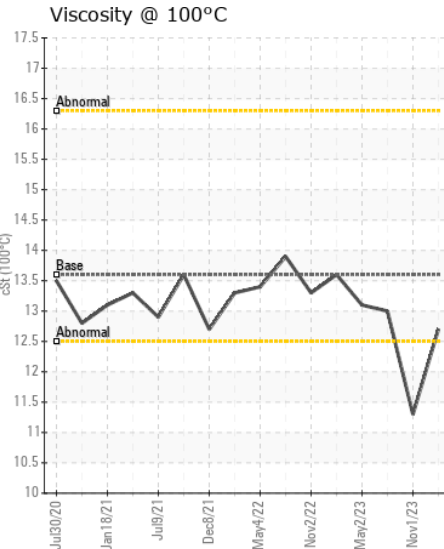
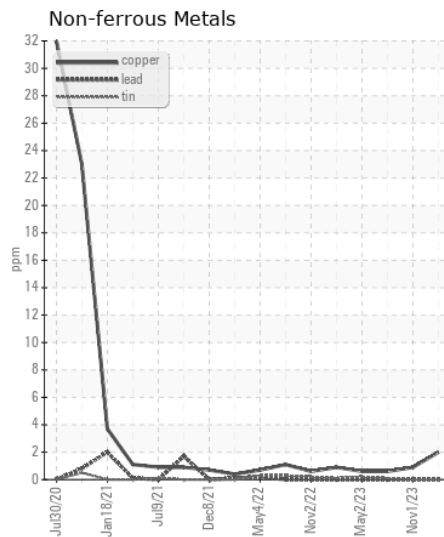
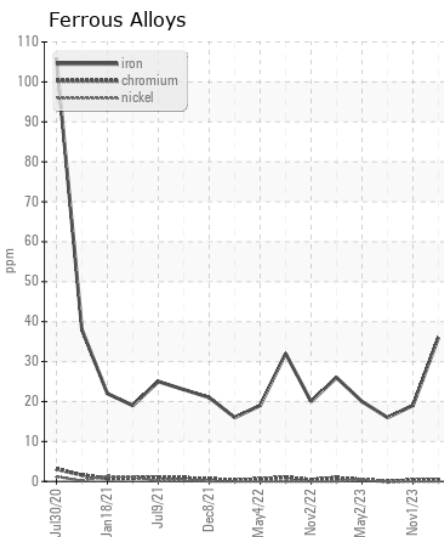
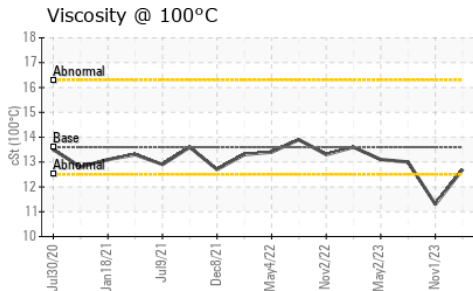
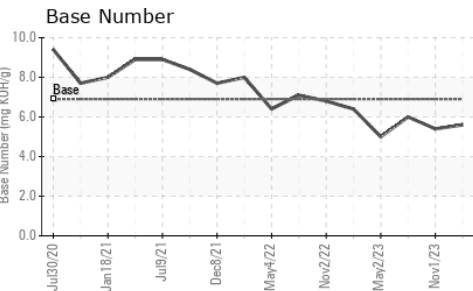
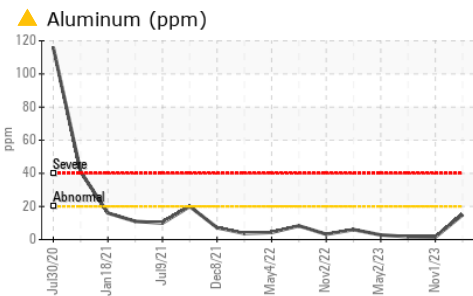
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	3	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.5	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.0</b>	10.2	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.2</b>	21.6	22.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>0</b>	0	3
Boron	ppm	ASTM D5185m	39	<b>55</b>	62	56
Barium	ppm	ASTM D5185m	1	<b>25</b>	<1	0
Molybdenum	ppm	ASTM D5185m	49	<b>91</b>	95	79
Manganese	ppm	ASTM D5185m	1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	616	<b>601</b>	560	695
Calcium	ppm	ASTM D5185m	1554	<b>1446</b>	1321	1438
Phosphorus	ppm	ASTM D5185m	899	<b>955</b>	752	834
Zinc	ppm	ASTM D5185m	1069	<b>1130</b>	941	1076
Sulfur	ppm	ASTM D5185m	2624	<b>2905</b>	2824	3146
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.2</b>	17.7	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>5.6</b>	5.4	6.0
Visc @ 100°C	cSt	ASTM D445	13.6	<b>12.7</b>	▲ 11.3	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0035071  
**Lab Number** : 06084601  
**Unique Number** : 10872046  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Sean Felton

**TAMPA IDEALEASE**  
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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)