



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**INTERNATIONAL 5012907**  
Component  
**Diesel Engine**  
Fluid  
**VALVOLINE 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0036657</b>	IL0034247	IL05966146
Sample Date		Client Info		<b>12 Jun 2024</b>	12 Mar 2024	25 Sep 2023
Machine Age	mls	Client Info		<b>292622</b>	276939	251588
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>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>16</b>	14	36
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	3	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	4
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
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.

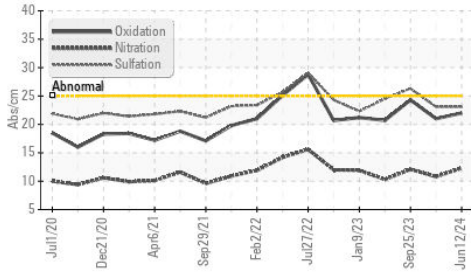
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	9
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	5	15
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.3</b>	10.8	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.1</b>	23.1	26.3
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

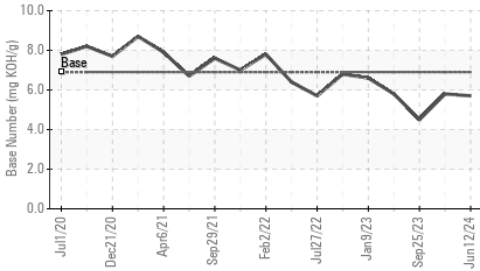
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	4	8
Boron	ppm	ASTM D5185m	39	<b>20</b>	86	46
Barium	ppm	ASTM D5185m	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	49	<b>59</b>	68	102
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	616	<b>823</b>	607	821
Calcium	ppm	ASTM D5185m	1554	<b>1306</b>	1406	1729
Phosphorus	ppm	ASTM D5185m	899	<b>767</b>	769	1114
Zinc	ppm	ASTM D5185m	1069	<b>976</b>	1114	1406
Sulfur	ppm	ASTM D5185m	2624	<b>2813</b>	3215	3405
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.0</b>	21.0	24.3
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>5.7</b>	5.8	4.5
Visc @ 100°C	cSt	ASTM D445	13.6	<b>12.8</b>	12.9	13.1

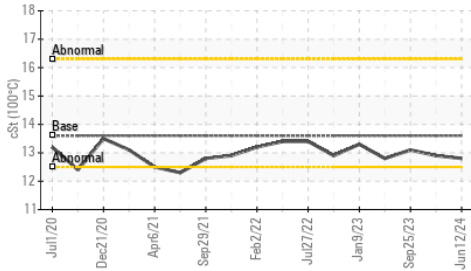
**FT-IR (Direct Trend)**



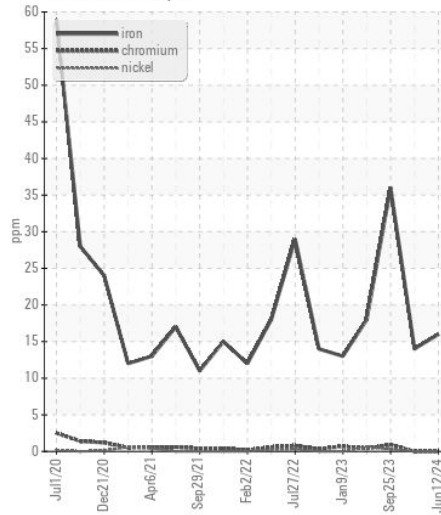
**Base Number**



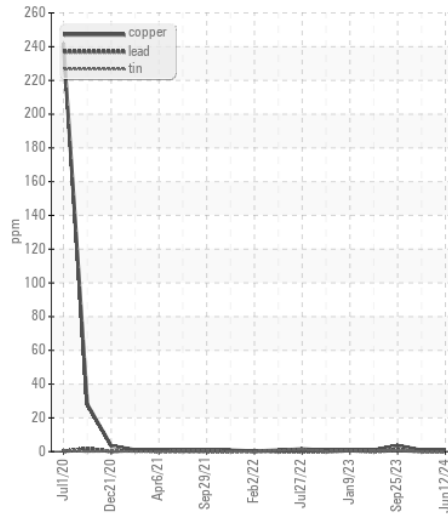
**Viscosity @ 100°C**



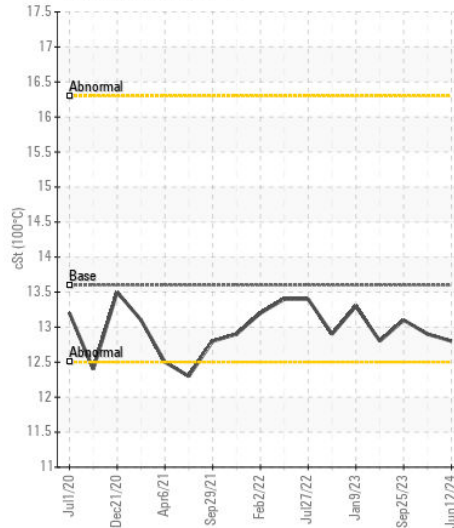
**Ferrous Alloys**



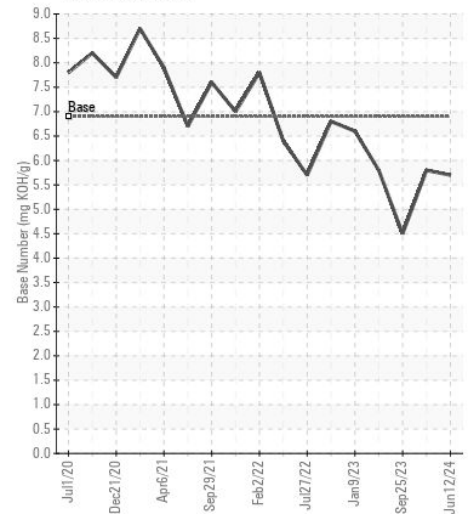
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : IL0036657

**Lab Number** : 06220672

**Unique Number** : 11098869

**Test Package** : FLEET

**Received** : 26 Jun 2024

**Tested** : 27 Jun 2024

**Diagnosed** : 27 Jun 2024 - Wes Davis

**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)