



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL LH842689**  
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>IL0036653</b>	IL0028490	IL05802201
Sample Date		Client Info		<b>17 May 2024</b>	01 Dec 2023	21 Mar 2023
Machine Age	mls	Client Info		<b>198884</b>	181710	155144
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>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>38</b>	72	22
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	11	6
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

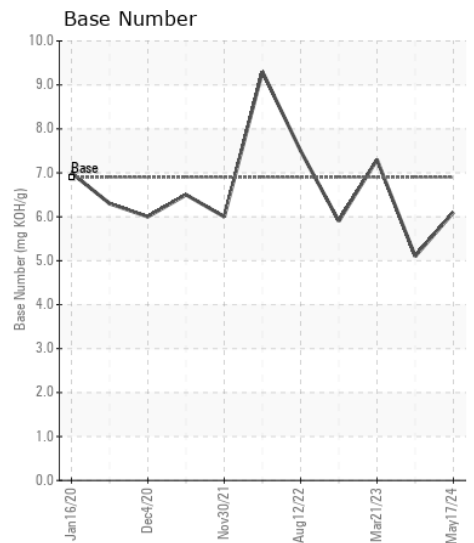
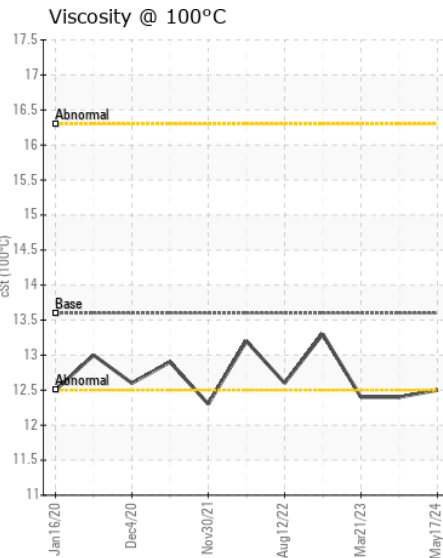
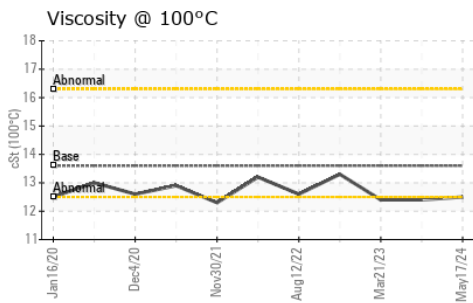
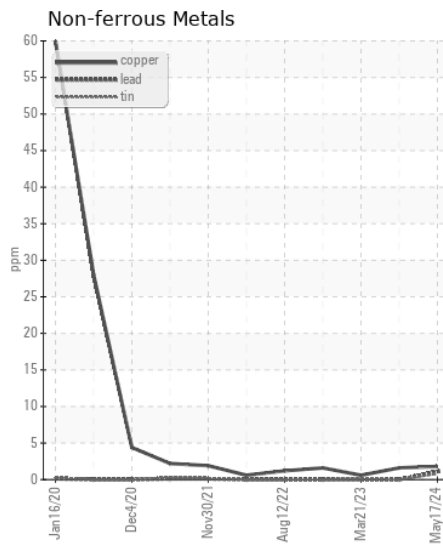
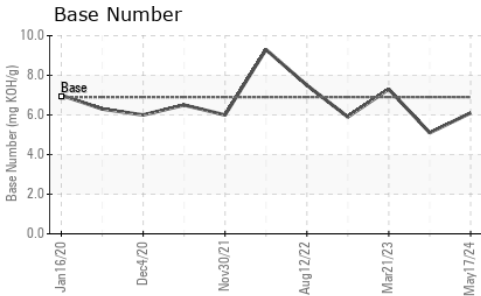
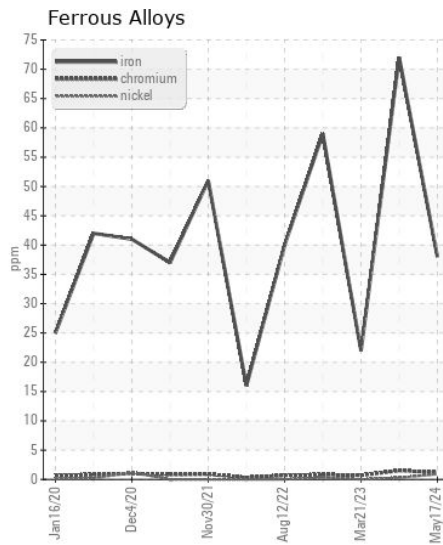
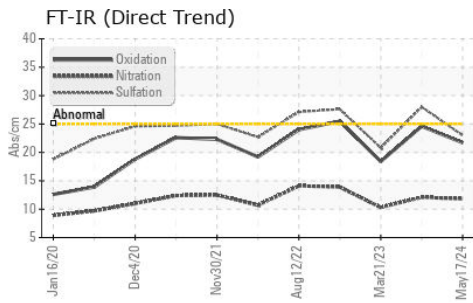
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	9	6
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	7	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	1.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	1.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	12.1	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	28.0	20.8
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>3</b>	2	4
Boron	ppm	ASTM D5185m	39	<b>27</b>	37	66
Barium	ppm	ASTM D5185m	1	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	49	<b>58</b>	78	66
Manganese	ppm	ASTM D5185m	1	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	616	<b>743</b>	504	694
Calcium	ppm	ASTM D5185m	1554	<b>1290</b>	1357	1224
Phosphorus	ppm	ASTM D5185m	899	<b>737</b>	863	765
Zinc	ppm	ASTM D5185m	1069	<b>913</b>	1139	934
Sulfur	ppm	ASTM D5185m	2624	<b>2820</b>	2250	2465
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.7</b>	24.6	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>6.1</b>	5.1	7.3
Visc @ 100°C	cSt	ASTM D445	13.6	<b>12.5</b>	12.4	12.4



Certificate L2367

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

**Sample No.** : IL0036653

**Lab Number** : 06193597

**Unique Number** : 11050349

**Test Package** : FLEET

**Received** : 29 May 2024

**Tested** : 30 May 2024

**Diagnosed** : 30 May 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)