



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 5919028**  
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>IL0035060</b>	IL0033226	IL05934658
Sample Date		Client Info		<b>01 Feb 2024</b>	31 Oct 2023	03 Aug 2023
Machine Age	mls	Client Info		<b>315133</b>	0	294816
Oil Age	mls	Client Info		<b>0</b>	308371	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>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

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

### CONTAMINATION

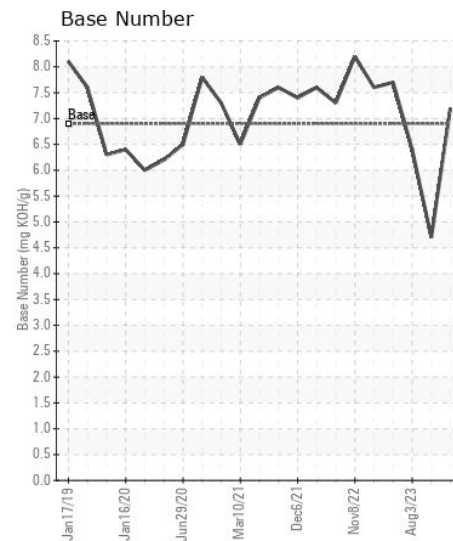
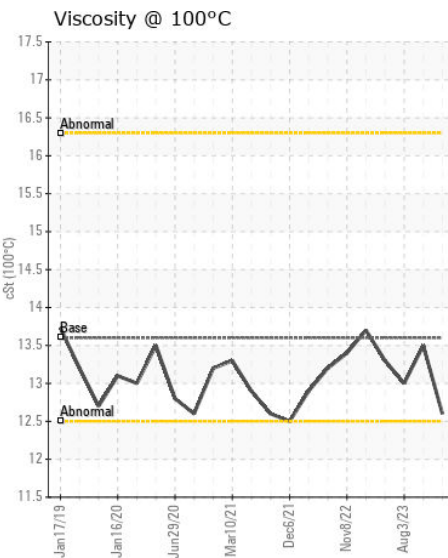
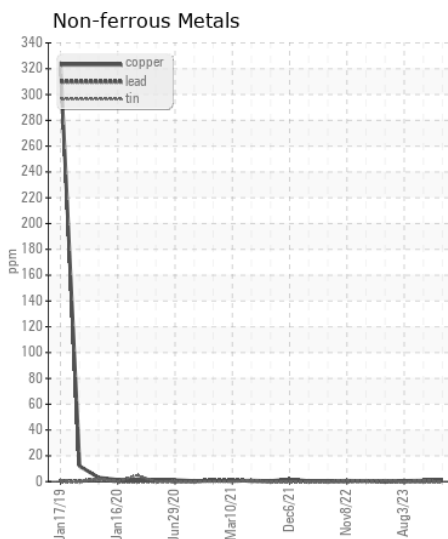
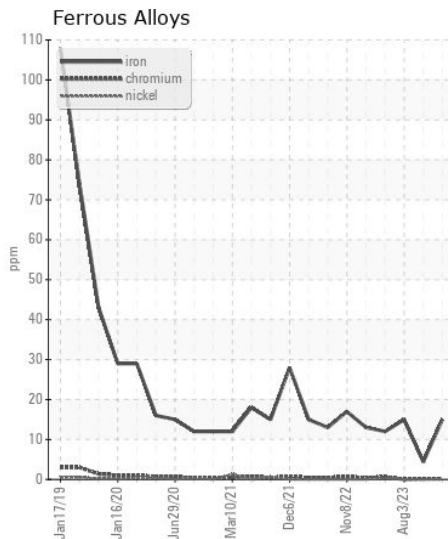
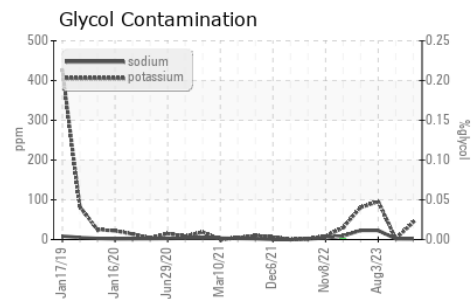
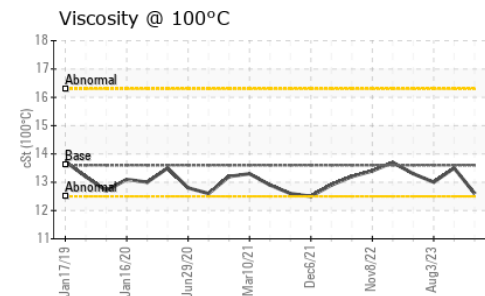
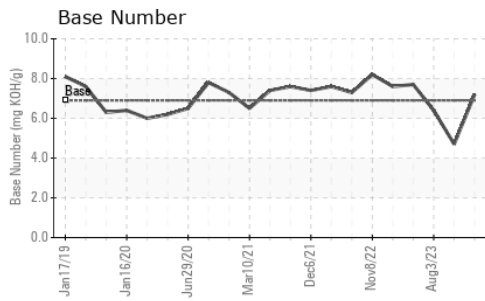
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	5
Potassium	ppm	ASTM D5185m	>20	<b>44</b>	2	▲ 96
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	12.5	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	26.1	22.0
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>2</b>	2	23
Boron	ppm	ASTM D5185m	39	<b>124</b>	6	175
Barium	ppm	ASTM D5185m	1	<b>25</b>	0	0
Molybdenum	ppm	ASTM D5185m	49	<b>75</b>	59	88
Manganese	ppm	ASTM D5185m	1	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	616	<b>596</b>	904	559
Calcium	ppm	ASTM D5185m	1554	<b>1274</b>	1049	1491
Phosphorus	ppm	ASTM D5185m	899	<b>868</b>	1017	990
Zinc	ppm	ASTM D5185m	1069	<b>1002</b>	1215	1241
Sulfur	ppm	ASTM D5185m	2624	<b>2765</b>	3040	3625
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	24.1	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>7.2</b>	4.7	6.4
Visc @ 100°C	cSt	ASTM D445	13.6	<b>12.6</b>	13.5	13.0



Certificate L2367

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

**Sample No.** : IL0035060

**Lab Number** : 06084584

**Unique Number** : 10872029

**Test Package** : FLEET ( Additional Tests: Glycol )

**Received** : 09 Feb 2024

**Tested** : 12 Feb 2024

**Diagnosed** : 12 Feb 2024 - Jonathan Hester

**TAMPA IDEALEASE**

5951 ORIENT ROAD

TAMPA, FL

US 33610-9565

Contact: Russ Cook

russcook@idealease.com

T: (813)626-9285

F: (844)270-1356

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)