



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 5010133**

Component  
**Diesel Engine**

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

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0035104</b>	IL0033255	IL05900959
Sample Date		Client Info		<b>09 Jan 2024</b>	04 Oct 2023	29 Jun 2023
Machine Age	mls	Client Info		<b>288084</b>	262800	234354
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>45</b>	55	23
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
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>9</b>	8	7
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

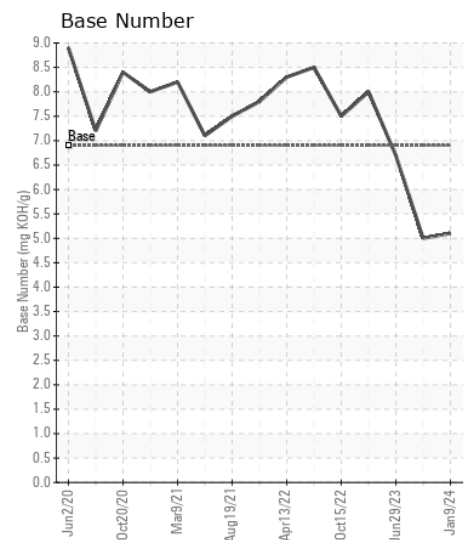
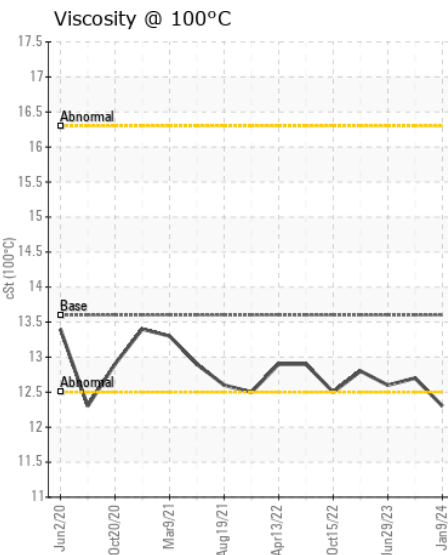
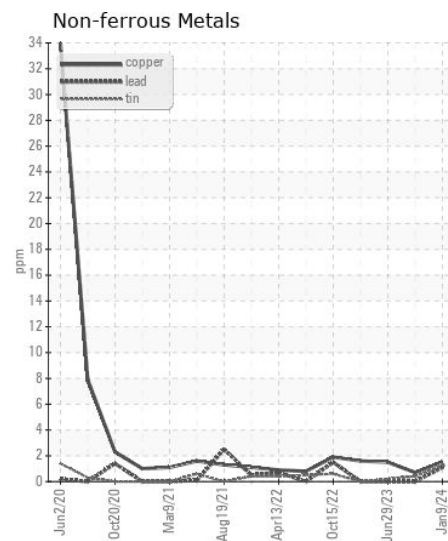
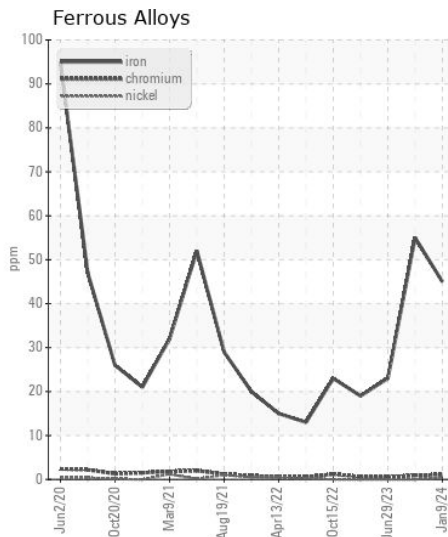
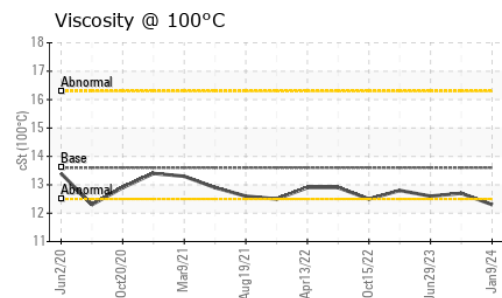
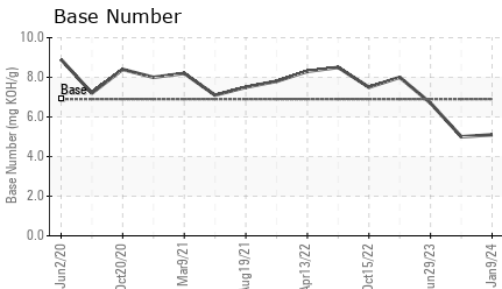
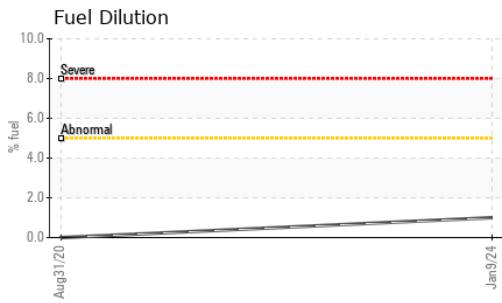
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	6	4
Fuel	%	ASTM D3524	>5	<b>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>0.8</b>	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.7</b>	12.9	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.2</b>	25.4	22.9
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	3
Boron	ppm	ASTM D5185m	39	<b>28</b>	22	66
Barium	ppm	ASTM D5185m	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	49	<b>80</b>	79	82
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	616	<b>779</b>	724	651
Calcium	ppm	ASTM D5185m	1554	<b>1497</b>	1423	1447
Phosphorus	ppm	ASTM D5185m	899	<b>875</b>	868	851
Zinc	ppm	ASTM D5185m	1069	<b>1177</b>	1117	1110
Sulfur	ppm	ASTM D5185m	2624	<b>3063</b>	2745	3343
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.7</b>	22.2	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>5.1</b>	5.0	6.7
Visc @ 100°C	cSt	ASTM D445	13.6	<b>12.3</b>	12.7	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0035104 **Received** : 12 Jan 2024  
**Lab Number** : 06058965 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10830347 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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)

**TAMPA IDEALEASE**  
 5951 ORIENT ROAD  
 TAMPA, FL  
 US 33610-9565  
 Contact: Russ Cook  
 russcook@idealease.com  
 T: (813)626-9285  
 F: (844)270-1356