



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**8114764**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0034898</b>	IL06009324	IL05911759
Sample Date		Client Info		<b>09 Jan 2024</b>	09 Oct 2023	05 Jul 2023
Machine Age	mls	Client Info		<b>97586</b>	90897	82986
Oil Age	mls	Client Info		<b>0</b>	40000	40000
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</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>23</b>	12	99
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	4
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	4	27
Lead	ppm	ASTM D5185m	>40	<b>4</b>	<1	5
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	6
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

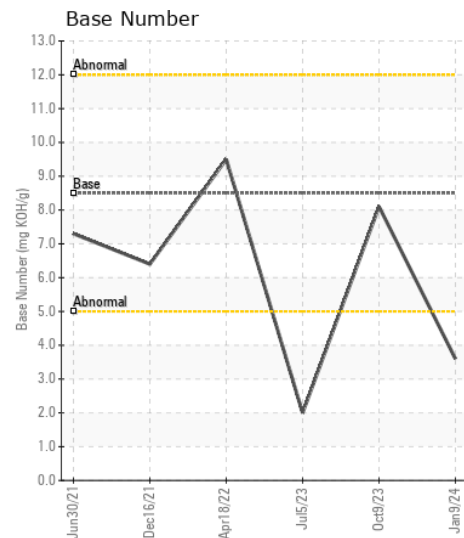
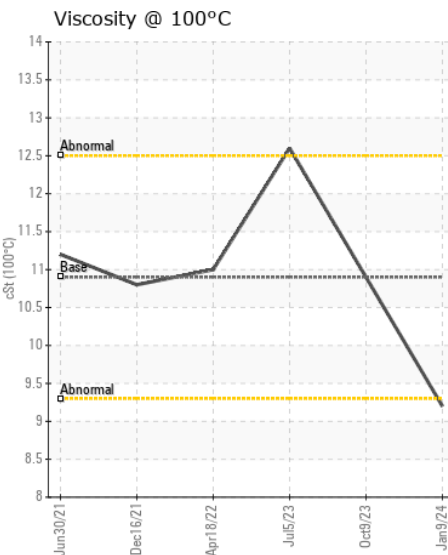
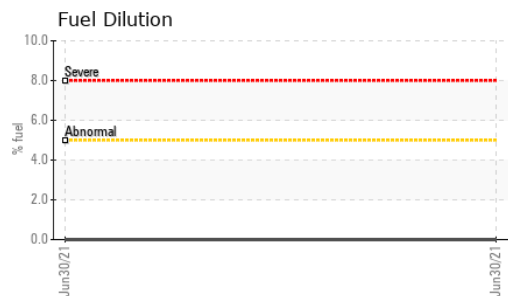
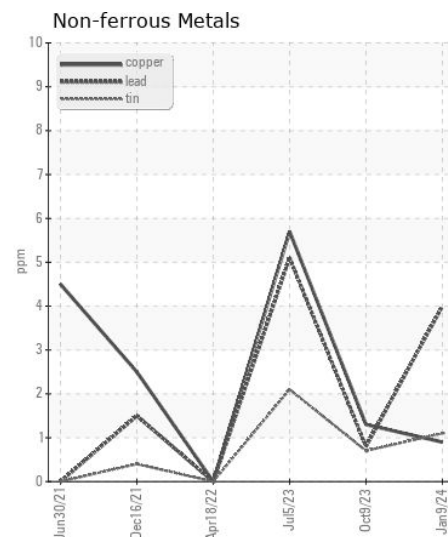
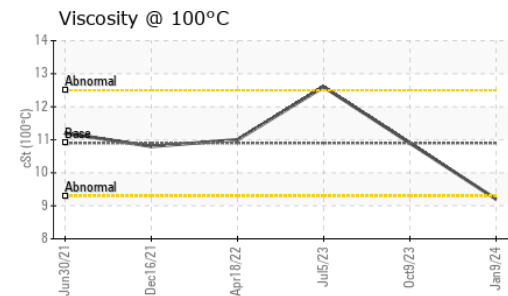
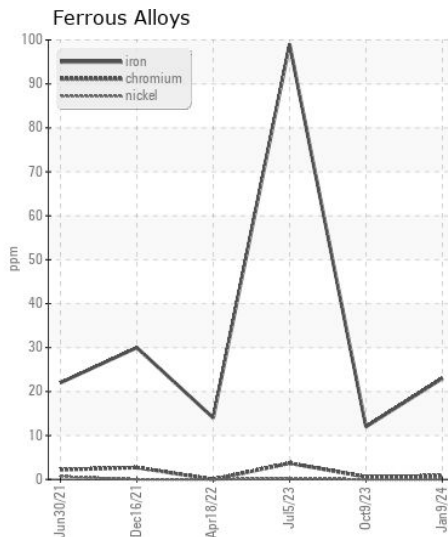
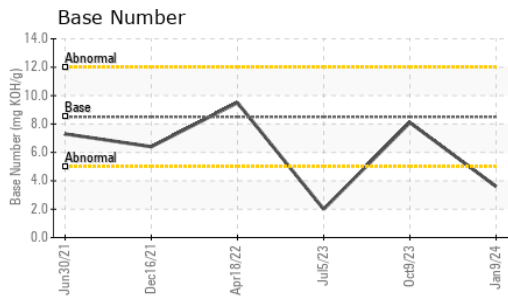
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>15</b>	9	17
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	8	60
Fuel	%	ASTM D3524	>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>0.7</b>	0.4	1.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.7</b>	10.2	18.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.5</b>	24.7	36.9
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>	3	3
Boron	ppm	ASTM D5185m	250	<b>21</b>	30	15
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>37</b>	39	45
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	450	<b>454</b>	462	490
Calcium	ppm	ASTM D5185m	3000	<b>1432</b>	1537	1604
Phosphorus	ppm	ASTM D5185m	1150	<b>700</b>	702	694
Zinc	ppm	ASTM D5185m	1350	<b>822</b>	851	901
Sulfur	ppm	ASTM D5185m	4250	<b>2164</b>	2283	2085
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>40.1</b>	26.5	50.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>3.6</b>	8.1	▲ 2.0
Visc @ 100°C	cSt	ASTM D445	10.9	<b>9.2</b>	10.9	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0034898 **Received** : 17 Jan 2024  
**Lab Number** : 06063330 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834712 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution )

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)

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