



# OIL ANALYSIS REPORT

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

Area  
**Contracting**  
Machine Id  
**4401 4401**  
Component  
**Gasoline Engine**  
Fluid  
**SAE 30W (1 QTS)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0956060</b>	WC0784498	WCMCF06772
Sample Date		Client Info		<b>09 Jul 2024</b>	13 Feb 2023	06 May 2015
Machine Age	hrs	Client Info		<b>0</b>	0	67
Oil Age	hrs	Client Info		<b>0</b>	0	67
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	N/A
Sample Status				<b>ATTENTION</b>	SEVERE	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>3</b>	▲ 299	17
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	4
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>40	<b>2</b>	24	6
Lead	ppm	ASTM D5185m	>50	<b>0</b>	3	<1
Copper	ppm	ASTM D5185m	>155	<b>2</b>	6	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	8	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

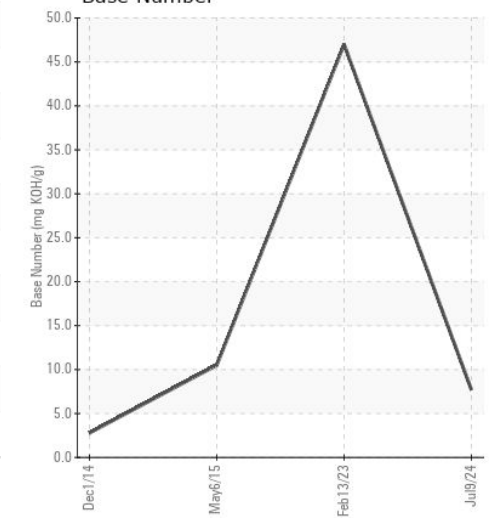
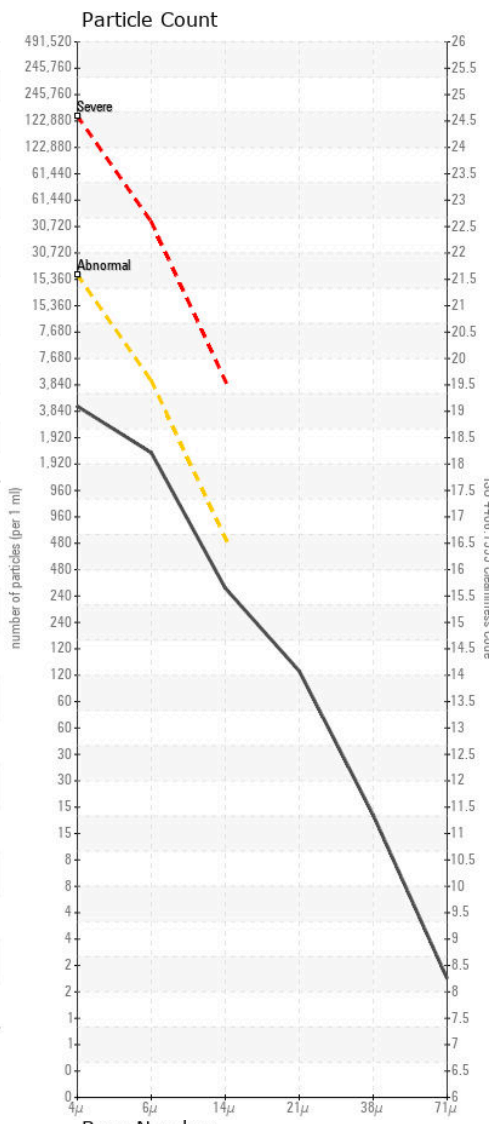
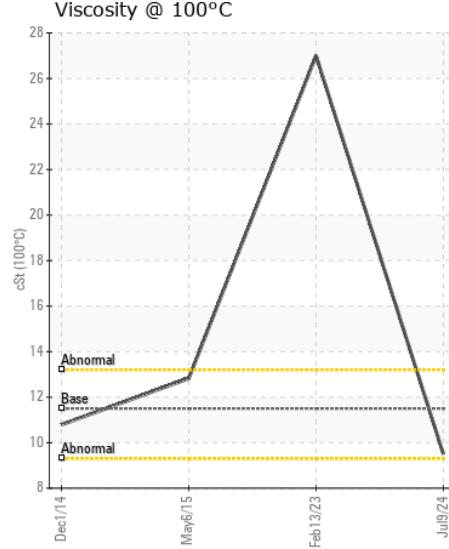
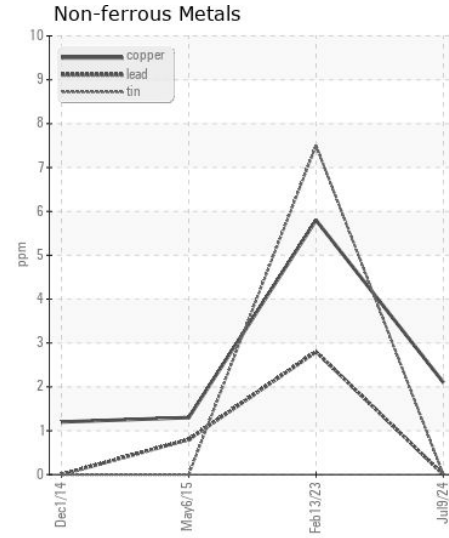
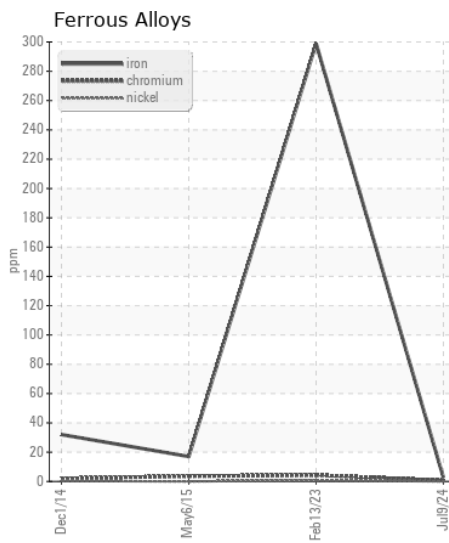
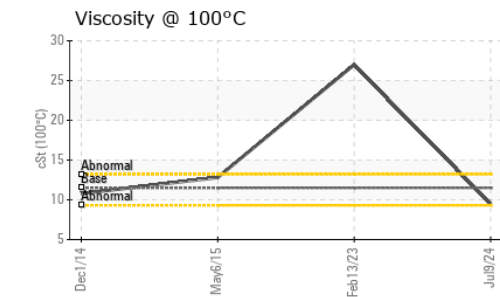
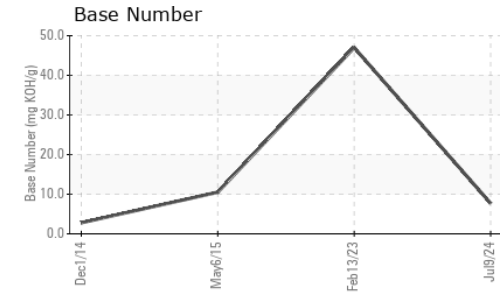
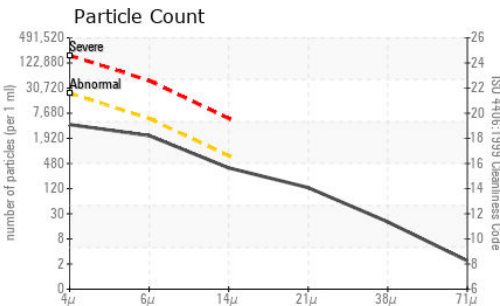
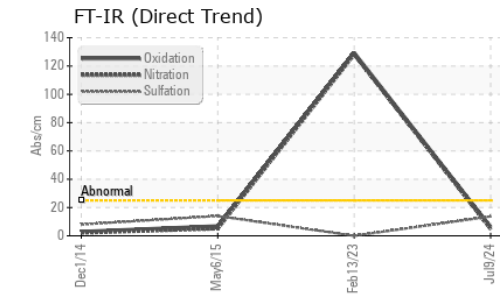
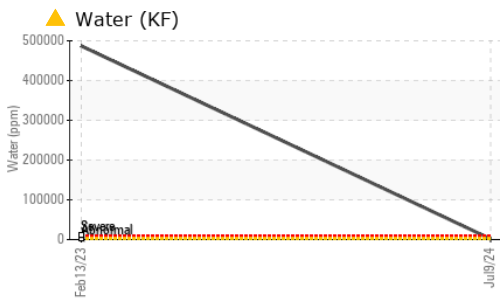
Appearance is milky. There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>30	<b>5</b>	23	10
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	0
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	%	ASTM D6304	>0.2	<b>▲ 0.152</b>	▲ 48.7	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 1520</b>	▲ 487000	---
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	2.3	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.7</b>	128.0	5.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>13.7</b>	0.0	14.
Particles >4µm		ASTM D7647	>20000	<b>3576</b>	19940	---
Particles >6µm		ASTM D7647	>5000	<b>1948</b>	▲ 10862	---
Particles >14µm		ASTM D7647	>640	<b>331</b>	▲ 1849	---
Particles >21µm		ASTM D7647	>160	<b>112</b>	▲ 623	---
Particles >38µm		ASTM D7647	>40	<b>17</b>	▲ 96	---
Particles >71µm		ASTM D7647	>10	<b>2</b>	10	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>19/18/16</b>	▲ 21/21/18	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>● MILKY</b>	● MILKY	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>▲ 0.2%</b>	▲ 0.2%	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>400	<b>2</b>	0	6
Boron	ppm	ASTM D5185m		<b>23</b>	37	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>13</b>	4	37
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	4	0
Magnesium	ppm	ASTM D5185m		<b>76</b>	199	608
Calcium	ppm	ASTM D5185m		<b>2745</b>	779	855
Phosphorus	ppm	ASTM D5185m		<b>801</b>	394	831
Zinc	ppm	ASTM D5185m		<b>934</b>	674	981
Sulfur	ppm	ASTM D5185m		<b>7665</b>	1812	1605
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>6.4</b>	129.5	7.
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.7</b>	47.0	10.50
Visc @ 100°C	cSt	ASTM D445	11.5	<b>9.5</b>	● 27.0	12.82



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0956060 **Received** : 12 Jul 2024  
**Lab Number** : 06234754 **Tested** : 15 Jul 2024  
**Unique Number** : 11123588 **Diagnosed** : 15 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: KF, PrtCount, TBN )

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Certificate L2367  
 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)