



# OIL ANALYSIS REPORT

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

Machine Id  
**46497**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0903088</b>	WC0827996	WC0773988
Sample Date		Client Info		<b>06 May 2024</b>	21 Aug 2023	17 Jan 2023
Machine Age	mls	Client Info		<b>0</b>	80413	57358
Oil Age	mls	Client Info		<b>60000</b>	0	25000
Filter Age	mls	Client Info		<b>60000</b>	0	25000
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>28</b>	51	25
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	7	4
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>5</b>	21	23
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	1
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

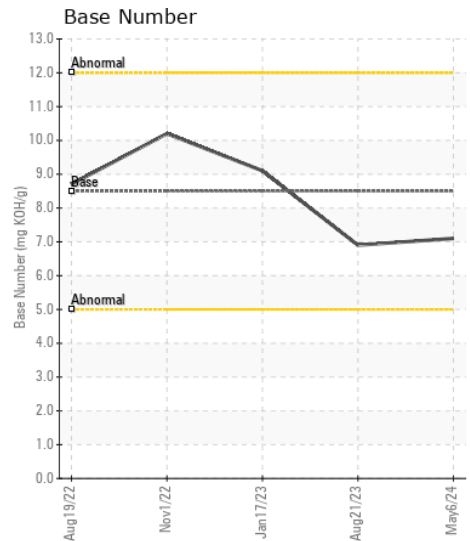
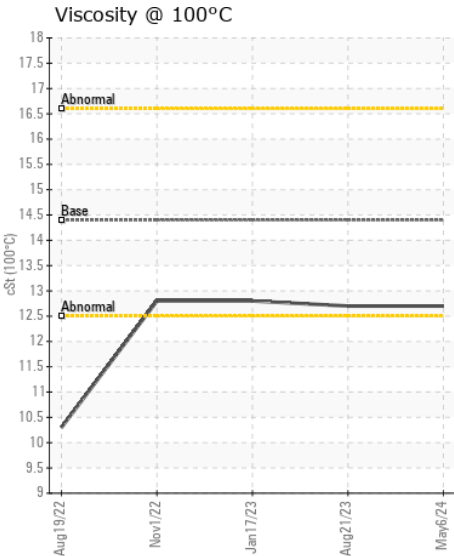
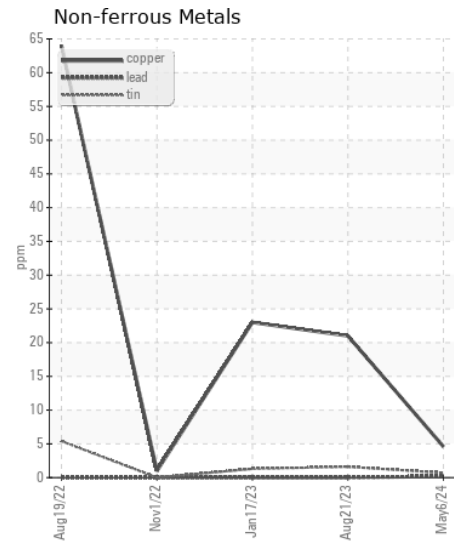
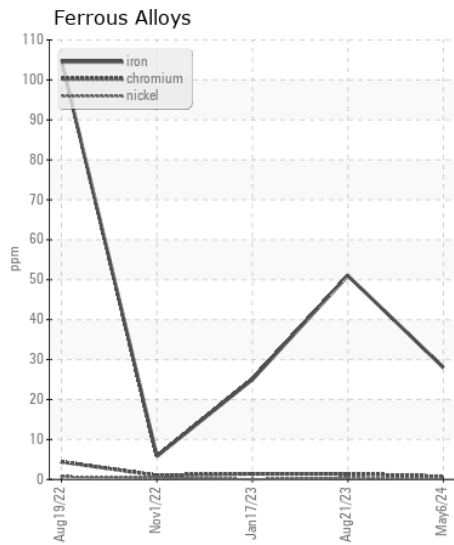
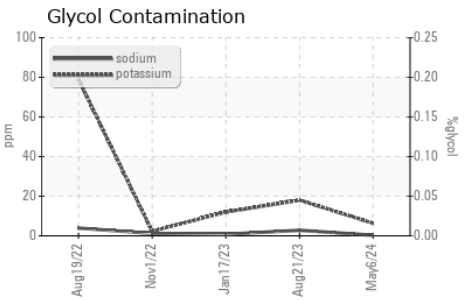
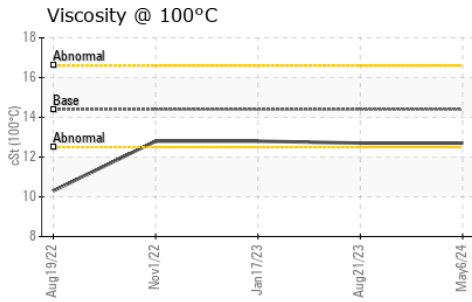
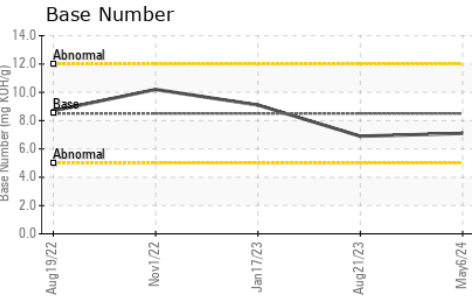
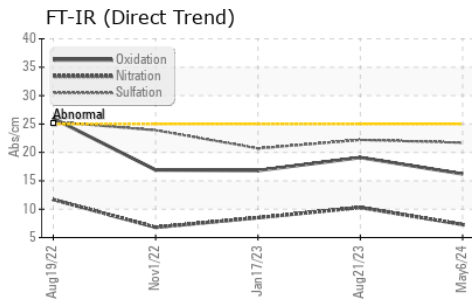
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	18	12
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>0.3</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	10.3	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.7</b>	22.2	20.7
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	>158	<b>&lt;1</b>	3	<1
Boron	ppm	ASTM D5185m	250	<b>302</b>	4	12
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	1
Molybdenum	ppm	ASTM D5185m	100	<b>81</b>	70	64
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	450	<b>401</b>	997	875
Calcium	ppm	ASTM D5185m	3000	<b>1413</b>	1185	1155
Phosphorus	ppm	ASTM D5185m	1150	<b>1056</b>	1076	1039
Zinc	ppm	ASTM D5185m	1350	<b>1203</b>	1348	1229
Sulfur	ppm	ASTM D5185m	4250	<b>3428</b>	3292	2803
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	19.1	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.1</b>	6.9	9.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.7</b>	12.7	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0903088 **Received** : 23 May 2024  
**Lab Number** : 06189995 **Tested** : 31 May 2024  
**Unique Number** : 11046747 **Diagnosed** : 31 May 2024 - Sean Felton  
**Test Package** : FLEET ( Additional Tests: Glycol )

**SALEM NATIONALEASE CORPORATION**  
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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)