



# OIL ANALYSIS REPORT

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

Machine Id  
**ST JOHNS GEN 1**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0872218</b>	WC0872213	LF0001298
Sample Date		Client Info		<b>24 Jan 2024</b>	05 Jan 2024	28 Jan 2023
Machine Age	hrs	Client Info		<b>7</b>	7	12
Oil Age	hrs	Client Info		<b>7</b>	7	12
Filter Age	hrs	Client Info		<b>7</b>	7	12
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	<b>2</b>	2	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	1	0
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>330	<b>4</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
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

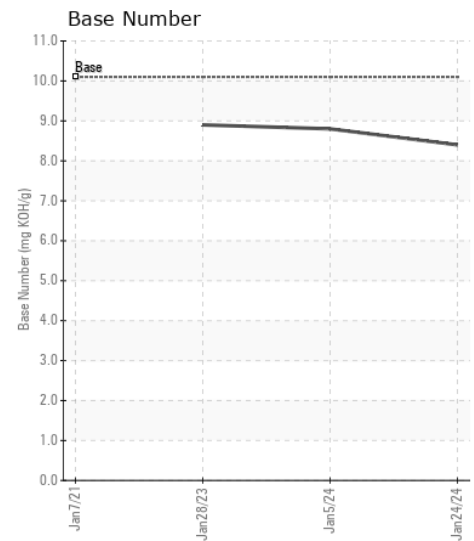
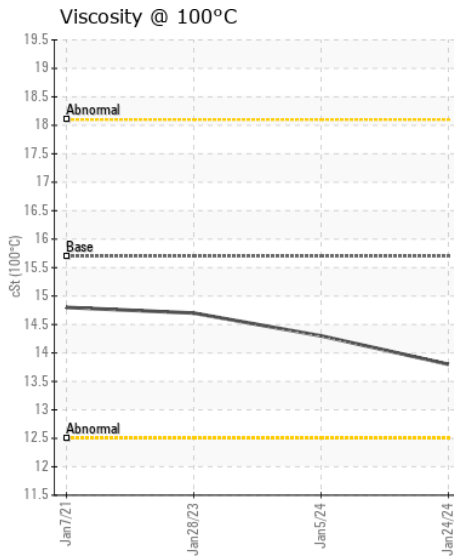
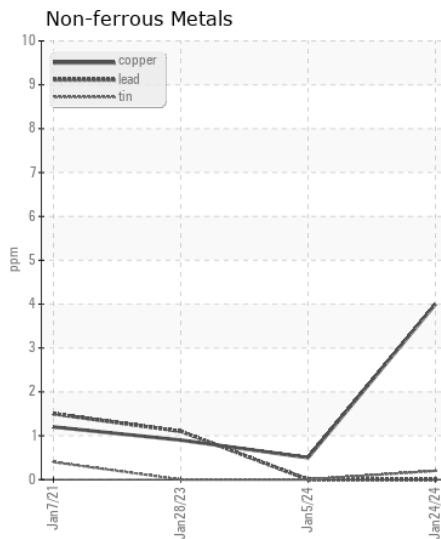
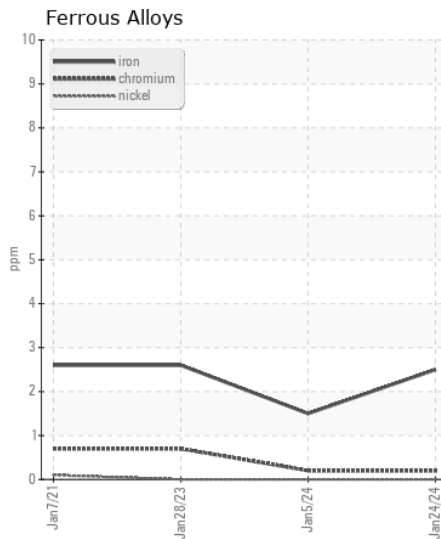
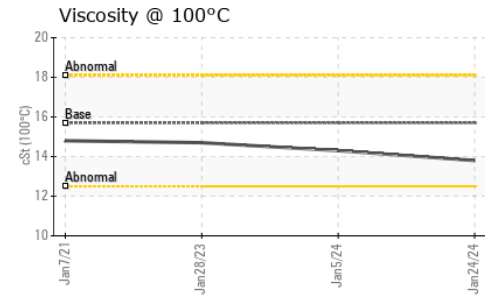
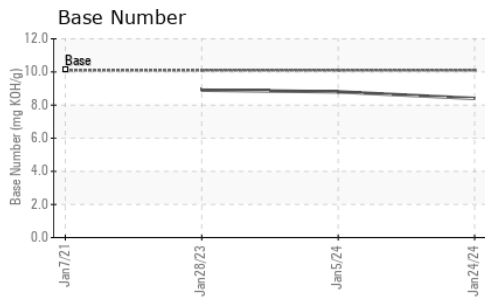
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	9	8
Fuel		WC Method	>3.0	<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	>6	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	5.4	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	20.3	21.0
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>0</b>	0	2
Boron	ppm	ASTM D5185m	316	<b>184</b>	203	214
Barium	ppm	ASTM D5185m	0.0	<b>8</b>	8	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>6</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	24	<b>72</b>	11	10
Calcium	ppm	ASTM D5185m	2292	<b>1880</b>	1928	2085
Phosphorus	ppm	ASTM D5185m	1064	<b>852</b>	849	961
Zinc	ppm	ASTM D5185m	1160	<b>1069</b>	1062	1110
Sulfur	ppm	ASTM D5185m	4996	<b>3391</b>	3370	3414
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.1</b>	16.6	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>8.4</b>	8.8	8.9
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.8</b>	14.3	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0872218  
**Lab Number** : 06088517  
**Unique Number** : 10875962  
**Test Package** : FLEET

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Wes Davis

**STANDBY POWER SUPPORT SYSTEMS**  
 6100 COLORADO AVE  
 ODESSA, TX  
 US 79760

Contact: SANTANA SARABIA  
 standbypower7114@yahoo.com

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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