



OIL ANALYSIS REPORT

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

Area  
**STONWAY CONCRETE RENTON**  
Machine Id  
**[STONWAY CONCRETE RENTON] 10-539**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T4 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0003289</b>	PE0002136	PE0002276
Sample Date		Client Info		<b>30 May 2024</b>	01 Mar 2024	26 Aug 2023
Machine Age	hrs	Client Info		<b>4105</b>	3471	2819
Oil Age	hrs	Client Info		<b>1286</b>	652	1213
Filter Age	hrs	Client Info		<b>1286</b>	652	1213
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>15</b>	9	29
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	3	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	7
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

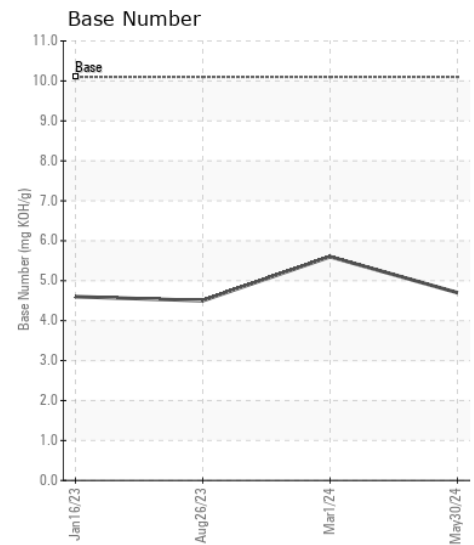
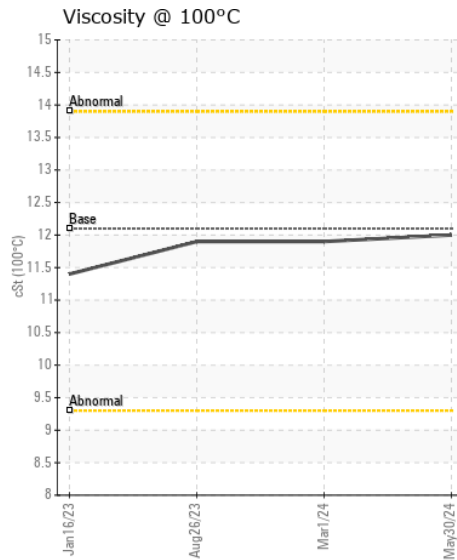
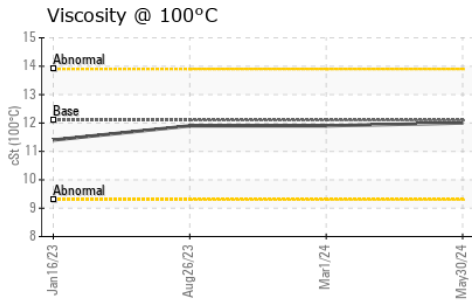
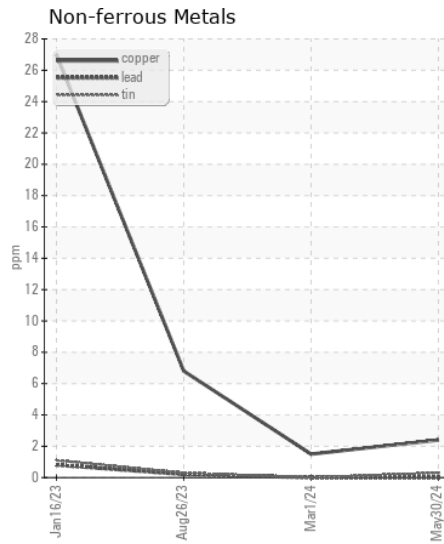
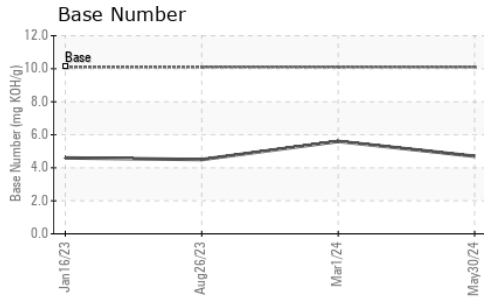
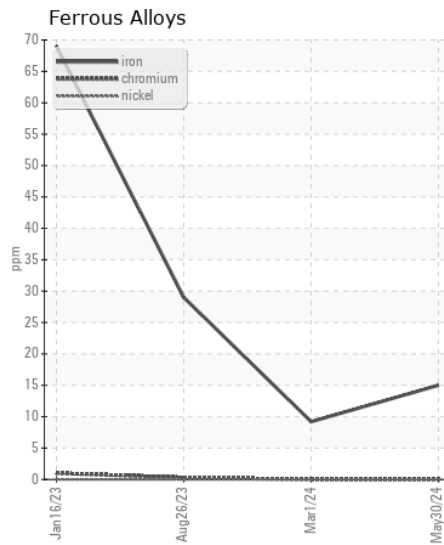
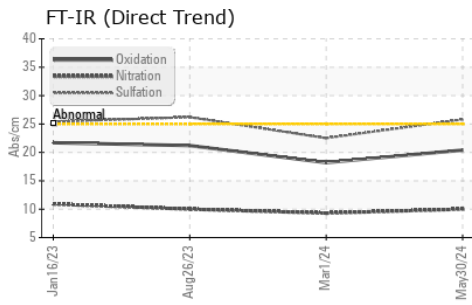
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	2	4
Potassium	ppm	ASTM D5185m	>20	<b>18</b>	11	20
Fuel		WC Method	>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>0.5</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.0</b>	9.3	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.8</b>	22.5	26.2
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		<b>30</b>	66	38
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	2	6
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>23</b>	21	95
Calcium	ppm	ASTM D5185m		<b>2290</b>	2096	2297
Phosphorus	ppm	ASTM D5185m		<b>972</b>	860	953
Zinc	ppm	ASTM D5185m		<b>1233</b>	1045	1265
Sulfur	ppm	ASTM D5185m		<b>3821</b>	3400	3828
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.4</b>	18.2	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>4.7</b>	5.6	4.5
Visc @ 100°C	cSt	ASTM D445	12.1	<b>12.0</b>	11.9	11.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0003289  
**Lab Number** : 06220495  
**Unique Number** : 11098692  
**Test Package** : CONST ( Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN )

**Gary Merlino Construction - Off Road Shop**  
 9125 10TH AVE SOUTH  
 SEATTLE, WA  
 US 98108  
 Contact: Jesse Patterson  
 oilsamples@gmccinc.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)

T: 1(866)292-1303

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