



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
SEVERE
NORMAL



Area
Mobile Fleet
Machine Id
339 339
Component
Right Outer Final Drive
Fluid
SHELL SPIRAX S6 AXME 75W90 (2 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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		WC0939223	WC0630595	WC0434085
Sample Date		Client Info		24 May 2024	10 Nov 2021	03 Feb 2020
Machine Age	hrs	Client Info		10366	9451	8269
Oil Age	hrs	Client Info		928	1182	1104
Filter Age	hrs	Client Info		928	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	N/A	Not Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>750	722	▲ 877	560
Chromium	ppm	ASTM D5185m	>9	7	▲ 12	7
Nickel	ppm	ASTM D5185m	>10	2	1	2
Titanium	ppm	ASTM D5185m		4	6	5
Silver	ppm	ASTM D5185m		0	<1	4
Aluminum	ppm	ASTM D5185m	>40	● 126	● 174	● 133
Lead	ppm	ASTM D5185m	>15	0	<1	<1
Copper	ppm	ASTM D5185m	>40	2	1	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

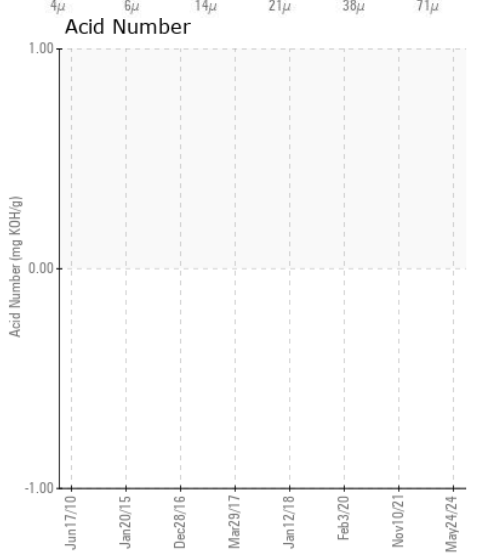
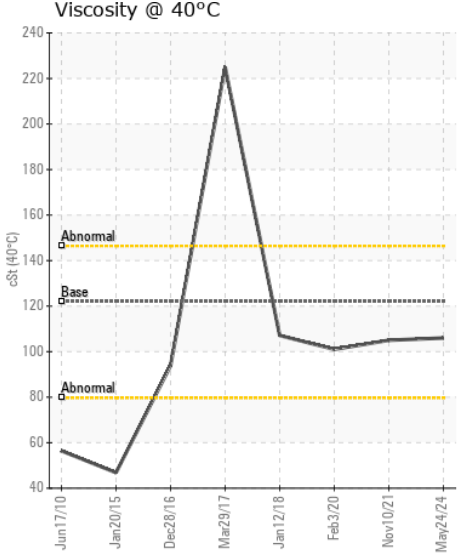
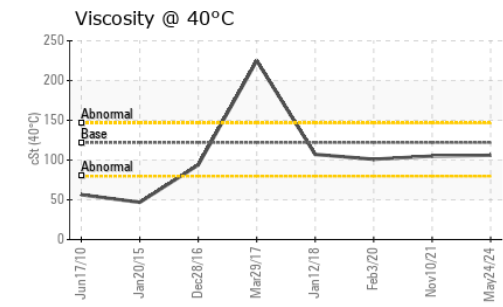
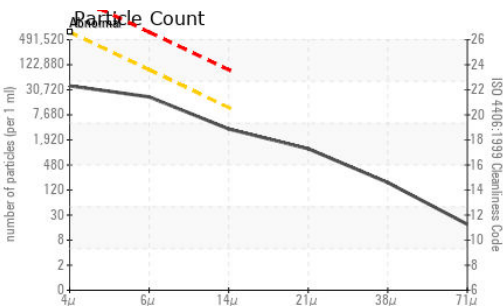
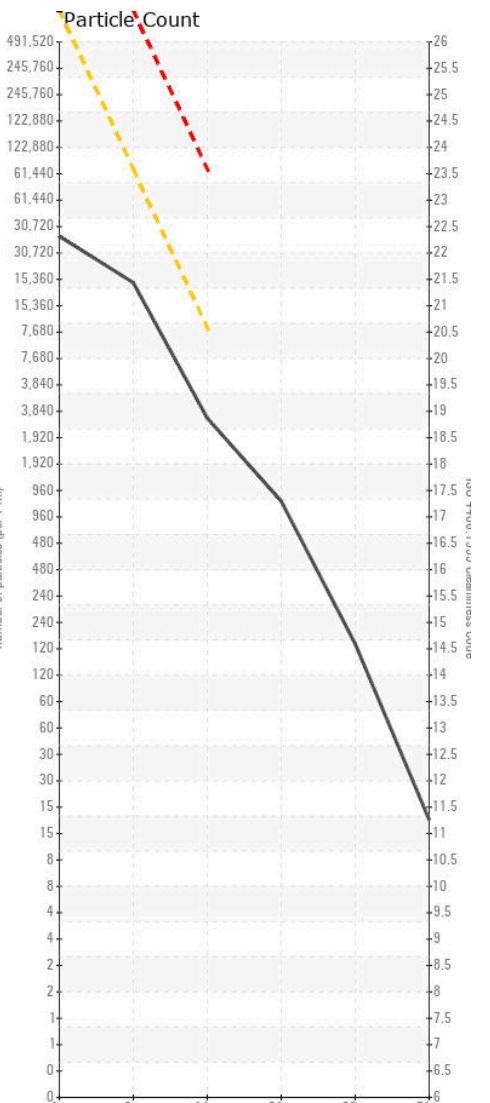
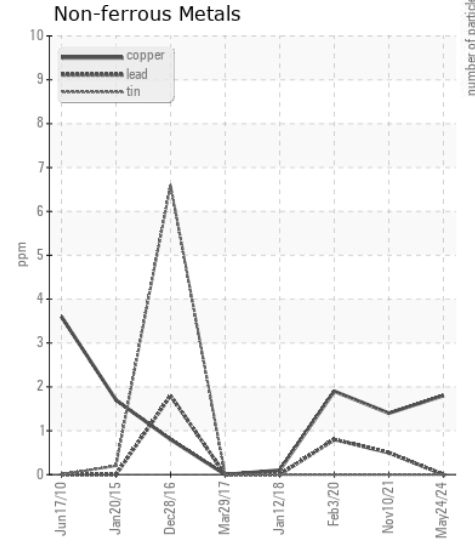
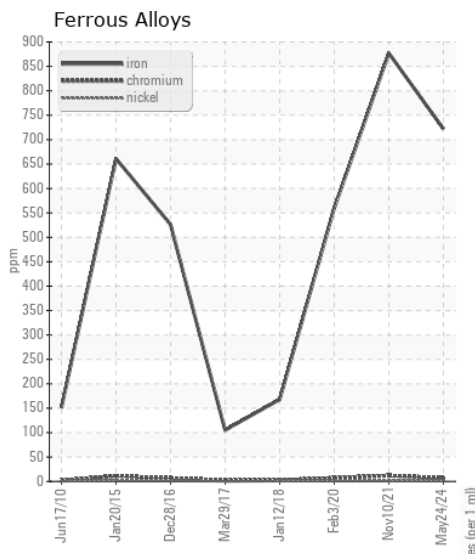
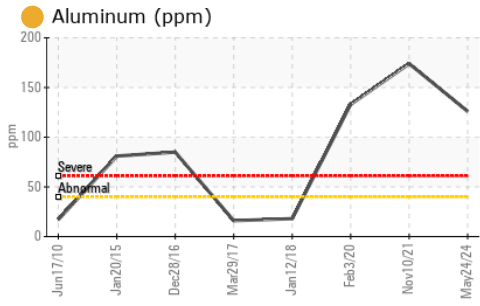
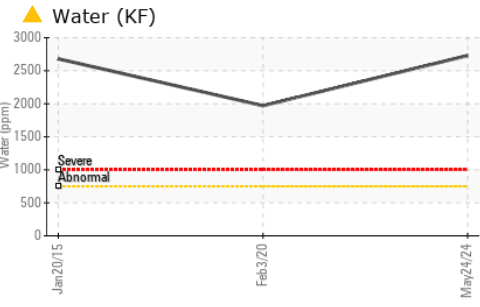
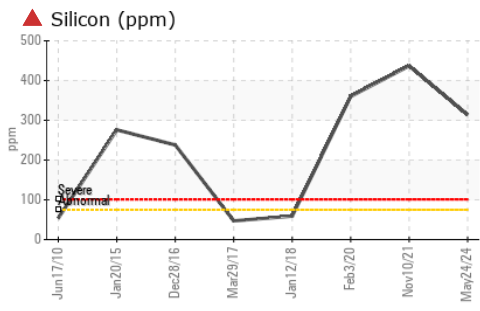
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	▲ 314	▲ 437	▲ 360
Potassium	ppm	ASTM D5185m	>20	9	28	22
Water	%	ASTM D6304	>0.075	▲ 0.273	---	▲ 0.197
ppm Water	ppm	ASTM D6304	>750	▲ 2730	---	▲ 1970
Particles >4µm		ASTM D7647	>640000	33094	8782	---
Particles >6µm		ASTM D7647	>80000	18028	4784	---
Particles >14µm		ASTM D7647	>10000	3068	814	---
Particles >21µm		ASTM D7647	>2500	1033	274	---
Particles >38µm		ASTM D7647	>640	160	42	---
Particles >71µm		ASTM D7647	>160	16	4	---
Oil Cleanliness		ISO 4406 (c)	>26/23/20	22/21/19	20/19/17	---
Silt	scalar	*Visual	NONE	NONE	NONE	▲ HEAVY
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	▲ 0.2%	NEG	▲ 0.2%

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>51	19	27	23
Boron	ppm	ASTM D5185m		304	312	326
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		5	9	6
Manganese	ppm	ASTM D5185m		7	9	5
Magnesium	ppm	ASTM D5185m		62	60	61
Calcium	ppm	ASTM D5185m		137	120	221
Phosphorus	ppm	ASTM D5185m		1504	1366	1377
Zinc	ppm	ASTM D5185m		77	82	65
Sulfur	ppm	ASTM D5185m		29744	21954	20563
Visc @ 40°C	cSt	ASTM D445	122	106	105	101



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939223 **Received** : 29 May 2024
Lab Number : 06193849 **Tested** : 01 Jun 2024
Unique Number : 11055972 **Diagnosed** : 01 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PrtCount)

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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)