



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
SEVERE
NORMAL



Area
Mobile Fleet
Machine Id
339 339
Component
Left Outer Final Drive
Fluid
SHELL SPIRAX S6 AXME 75W90 (4 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0939224	WC0630597	WC0434086
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	2286	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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>750	493	695	278
Chromium	ppm	ASTM D5185m	>9	5	9	6
Nickel	ppm	ASTM D5185m	>10	1	1	<1
Titanium	ppm	ASTM D5185m		4	6	2
Silver	ppm	ASTM D5185m		<1	2	<1
Aluminum	ppm	ASTM D5185m	>40	81	138	67
Lead	ppm	ASTM D5185m	>15	<1	7	<1
Copper	ppm	ASTM D5185m	>40	2	3	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

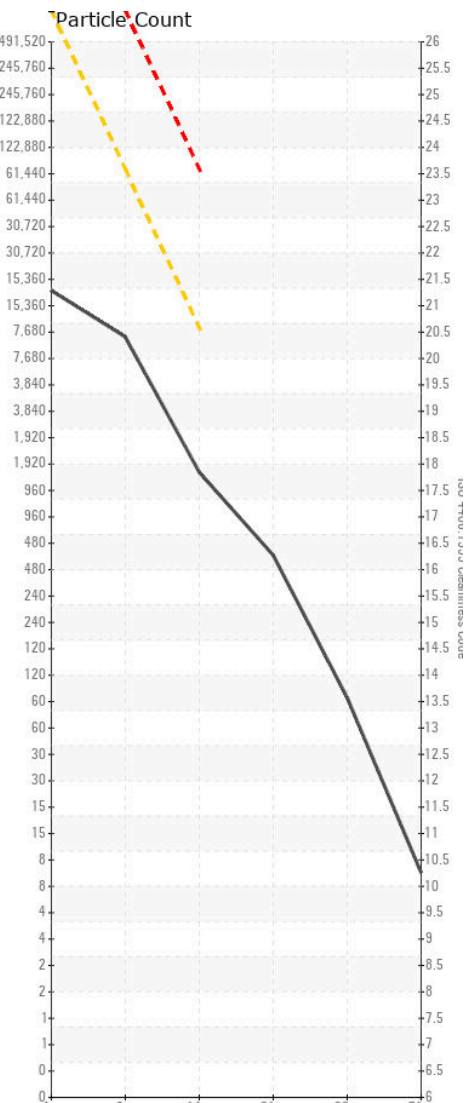
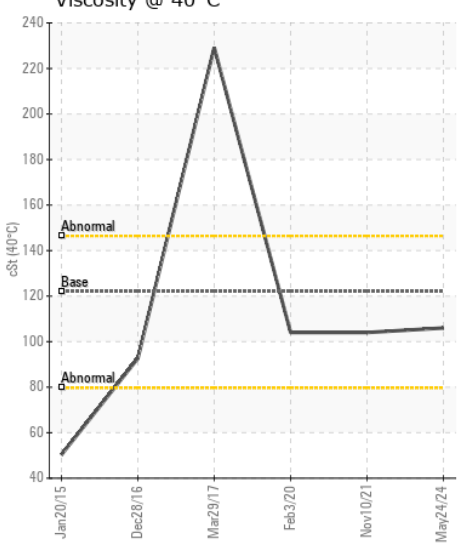
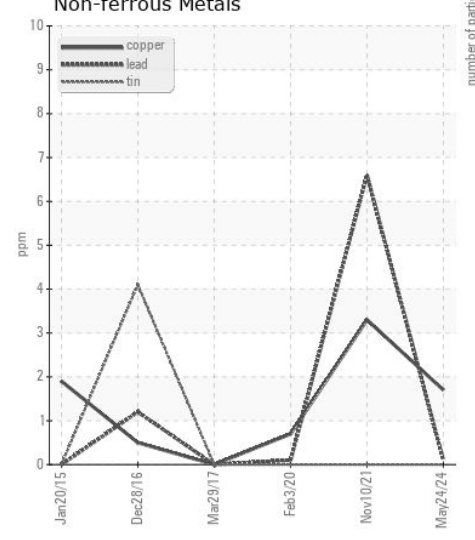
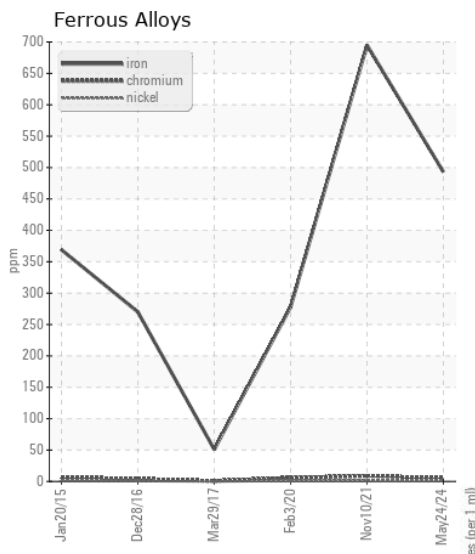
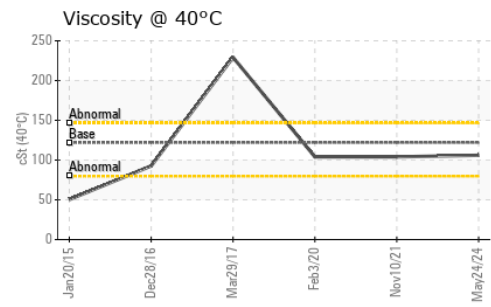
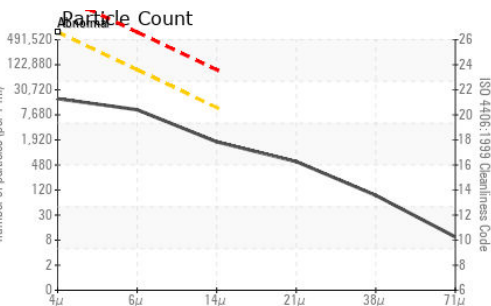
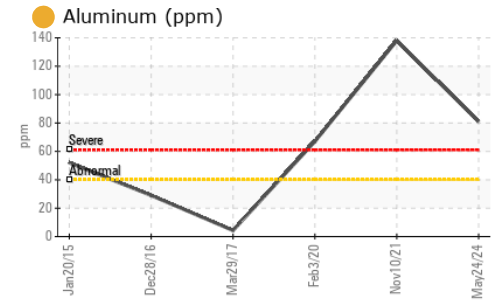
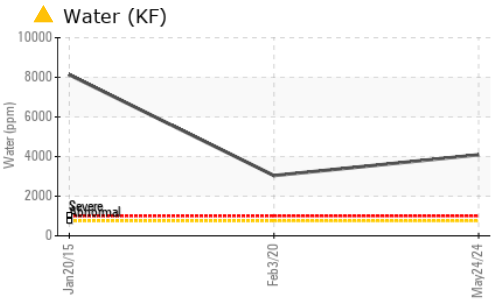
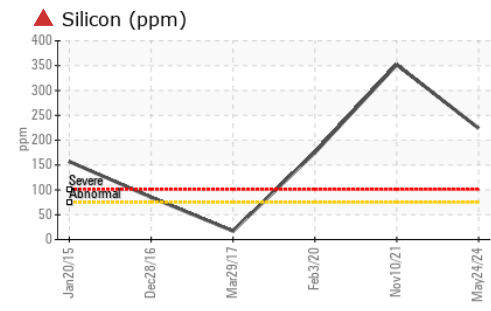
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	224	352	175
Potassium	ppm	ASTM D5185m	>20	7	12	8
Water	%	ASTM D6304	>0.075	0.409	---	0.304
ppm Water	ppm	ASTM D6304	>750	4090	---	3040
Particles >4µm		ASTM D7647	>640000	16286	10624	3628
Particles >6µm		ASTM D7647	>80000	8872	5788	1976
Particles >14µm		ASTM D7647	>10000	1510	985	336
Particles >21µm		ASTM D7647	>2500	509	332	113
Particles >38µm		ASTM D7647	>640	79	51	17
Particles >71µm		ASTM D7647	>160	8	5	1
Oil Cleanliness		ISO 4406 (c)	>26/23/20	21/20/18	21/20/17	19/18/16
Silt	scalar	*Visual	NONE	MODER	NONE	LIGHT
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	0.2%	NEG	0.2%

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>51	15	24	12
Boron	ppm	ASTM D5185m		315	287	299
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		5	7	5
Manganese	ppm	ASTM D5185m		6	8	3
Magnesium	ppm	ASTM D5185m		61	68	29
Calcium	ppm	ASTM D5185m		148	186	183
Phosphorus	ppm	ASTM D5185m		1519	1362	1399
Zinc	ppm	ASTM D5185m		97	120	56
Sulfur	ppm	ASTM D5185m		30048	21154	21099
Visc @ 40°C	cSt	ASTM D445	122	106	104	104



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939224 **Received** : 29 May 2024
Lab Number : 06193847 **Tested** : 01 Jun 2024
Unique Number : 11055970 **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)