



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1006
Component
Left Final Drive
Fluid
SHELL SPIRAX S4 CX 30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0195147	JR0169486	JR0111911
Sample Date		Client Info		05 Feb 2024	26 Jul 2023	24 Jan 2022
Machine Age	hrs	Client Info		7702	10005	7632
Oil Age	hrs	Client Info		500	10005	0
Filter Age	hrs	Client Info		500	1000	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		66	94	81
Iron	ppm	ASTM D5185m	>500	119	202	120
Chromium	ppm	ASTM D5185m	>10	3	5	2
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	14	4
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	6	7	5
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

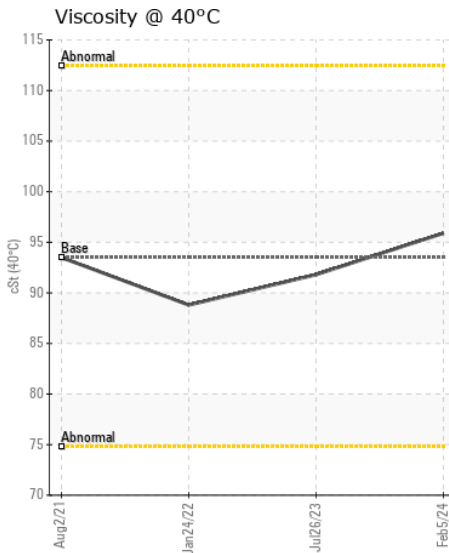
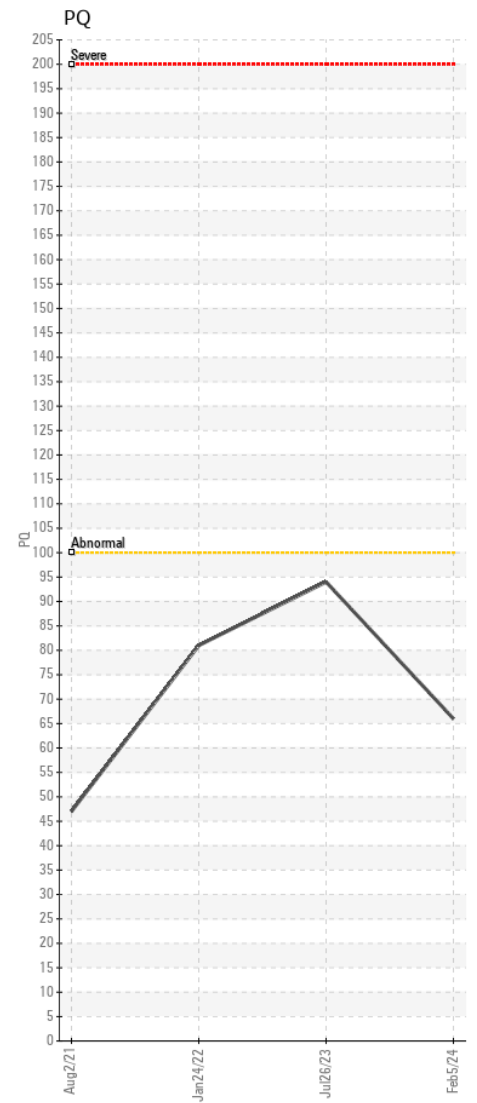
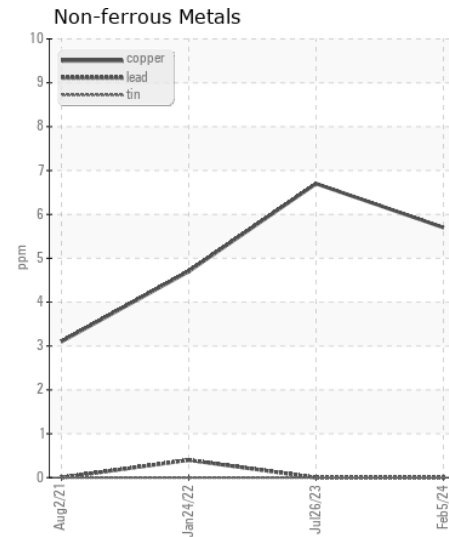
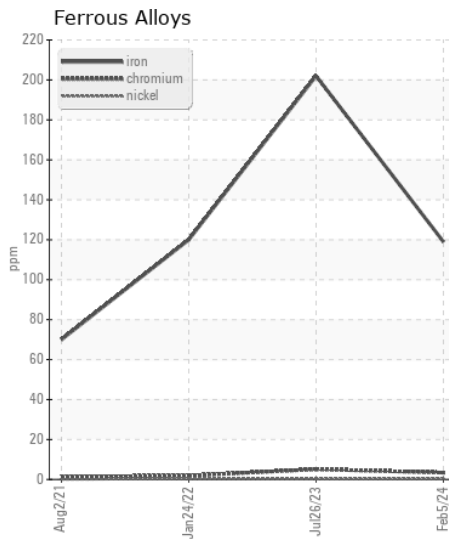
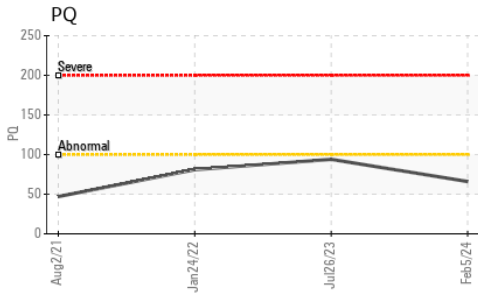
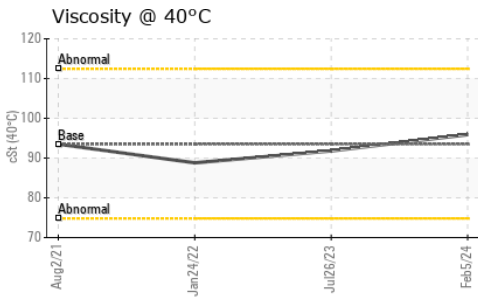
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	33	56	15
Potassium	ppm	ASTM D5185m	>20	3	4	3
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	5	0
Boron	ppm	ASTM D5185m		2	0	8
Barium	ppm	ASTM D5185m		11	0	0
Molybdenum	ppm	ASTM D5185m		3	4	6
Manganese	ppm	ASTM D5185m		<1	2	1
Magnesium	ppm	ASTM D5185m		14	20	25
Calcium	ppm	ASTM D5185m	4200	2934	3225	3313
Phosphorus	ppm	ASTM D5185m		826	997	918
Zinc	ppm	ASTM D5185m	1080	985	1233	1043
Sulfur	ppm	ASTM D5185m		4330	6712	3167
Visc @ 40°C	cSt	ASTM D445	93.5	95.9	91.8	88.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0195147

Lab Number : 06089674

Unique Number : 10877119

Test Package : CONST (Additional Tests: PQ)

Received : 14 Feb 2024

Tested : 16 Feb 2024

Diagnosed : 16 Feb 2024 - Wes Davis

PATRIOT DEVELOPMENT CORP

22721 LADBROOK DRIVE STE 120

STERLING, VA

US 20166

Contact: ROBERT MOSS

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T:

F:

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)