



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



Machine Id  
**5039**  
Component  
**Right Final Drive**  
Fluid  
**SHELL SPIRAX S4 CX 50 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0221745</b>	JR0170113	JR0159338
Sample Date		Client Info		<b>12 Jul 2024</b>	25 Sep 2023	08 Feb 2023
Machine Age	hrs	Client Info		<b>7681</b>	6615	5132
Oil Age	hrs	Client Info		<b>1066</b>	2000	0
Filter Age	hrs	Client Info		<b>1066</b>	2000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>500	<b>30</b>	26	51
Iron	ppm	ASTM D5185m	>800	<b>54</b>	33	93
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>6</b>	2	3
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

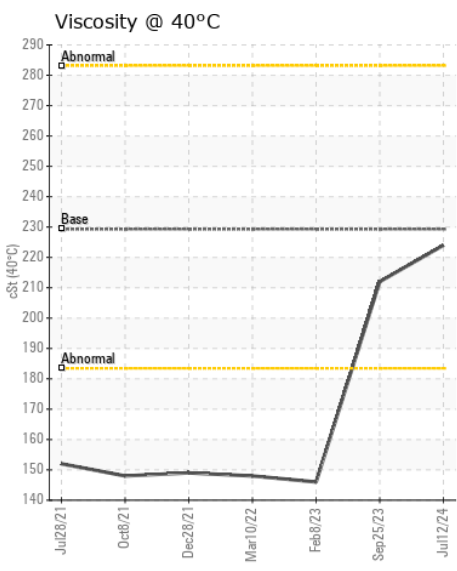
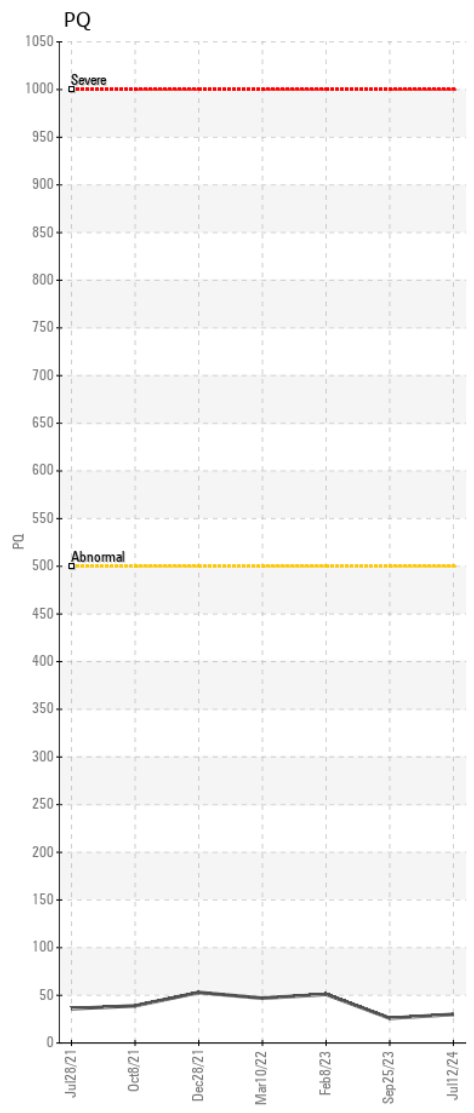
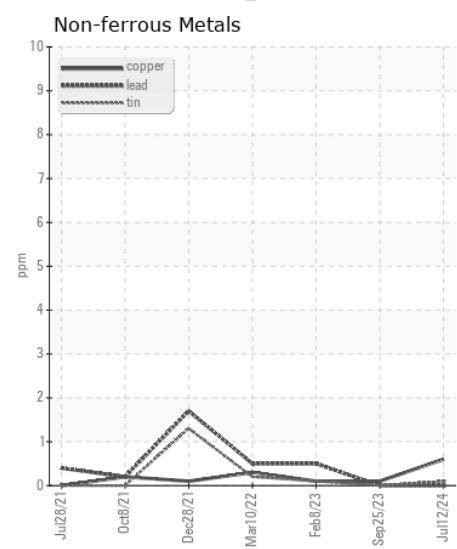
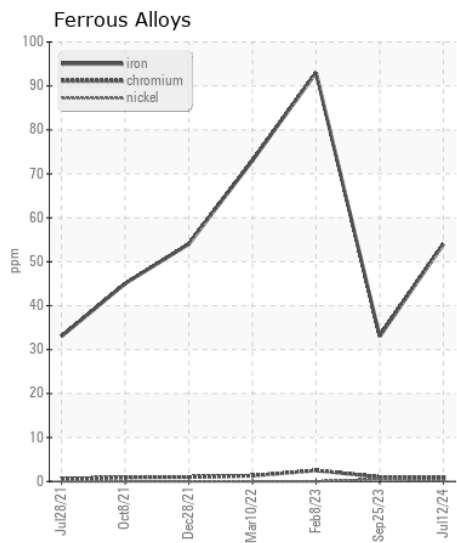
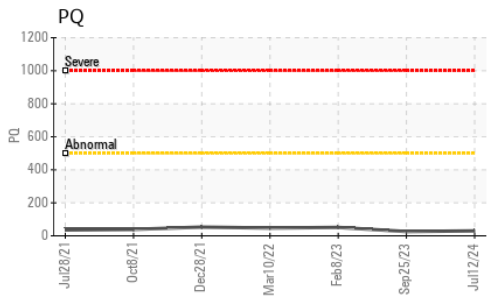
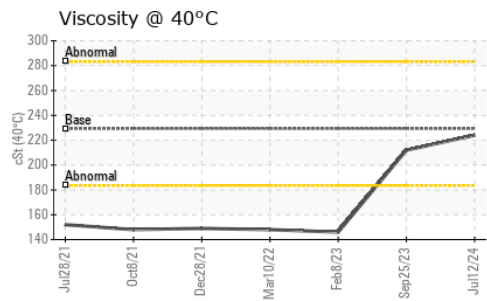
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>33</b>	12	17
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	2
Boron	ppm	ASTM D5185m		<b>1</b>	2	14
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>3</b>	3	10
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m		<b>23</b>	23	86
Calcium	ppm	ASTM D5185m	4200	<b>2445</b>	2133	2681
Phosphorus	ppm	ASTM D5185m		<b>850</b>	790	917
Zinc	ppm	ASTM D5185m	1080	<b>1015</b>	987	1122
Sulfur	ppm	ASTM D5185m		<b>13325</b>	14085	12365
Visc @ 40°C	cSt	ASTM D445	229.3	<b>224</b>	212	146



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0221745 **Received** : 18 Jul 2024  
**Lab Number** : 06240607 **Tested** : 19 Jul 2024  
**Unique Number** : 11129441 **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**PATRIOT DEVELOPMENT CORP**  
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 STERLING, VA  
 US 20166  
 Contact: ROBERT MOSS  
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 T:  
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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)