

## **PROBLEM SUMMARY**

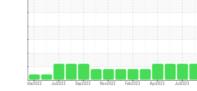
Sample Rating Trend

WEAR

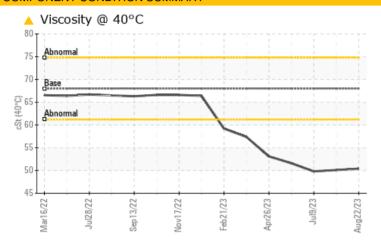
P-5220-D (S/N GP37001)

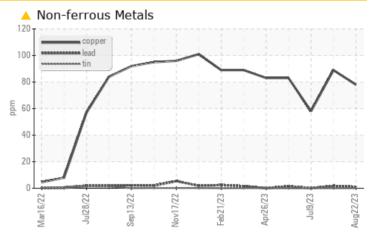
Component **Pump** Fluid

**ROYAL PURPLE SYNDRAULIC 68 (1 GAL)** 



### COMPONENT CONDITION SUMMARY





### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS													
Sample Status				ATTENTION	ATTENTION	ATTENTION							
Copper	ppm	ASTM D5185m	>30	<b>^</b> 78	<b>A</b> 89	<u></u> 58							
Visc @ 40°C	cSt	ASTM D445	68.0	<b>△</b> 50.4	<u> </u>	49.8							

Customer Id: TEABOG Sample No.: RP0038756 Lab Number: 05936775 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 03 Aug 2023 Diag: Don Baldridge

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.



#### 09 Jul 2023 Diag: Don Baldridge

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.



#### 17 May 2023 Diag: Angela Borella

WEAR



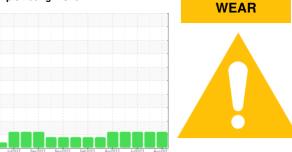
No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.





## **OIL ANALYSIS REPORT**

Sample Rating Trend



# P-5220-D (S/N GP37001)

Component

Pump

**ROYAL PURPLE SYNDRAULIC 68 (1 GAL)** 

### **DIAGNOSIS**

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

The copper level is abnormal. All other component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

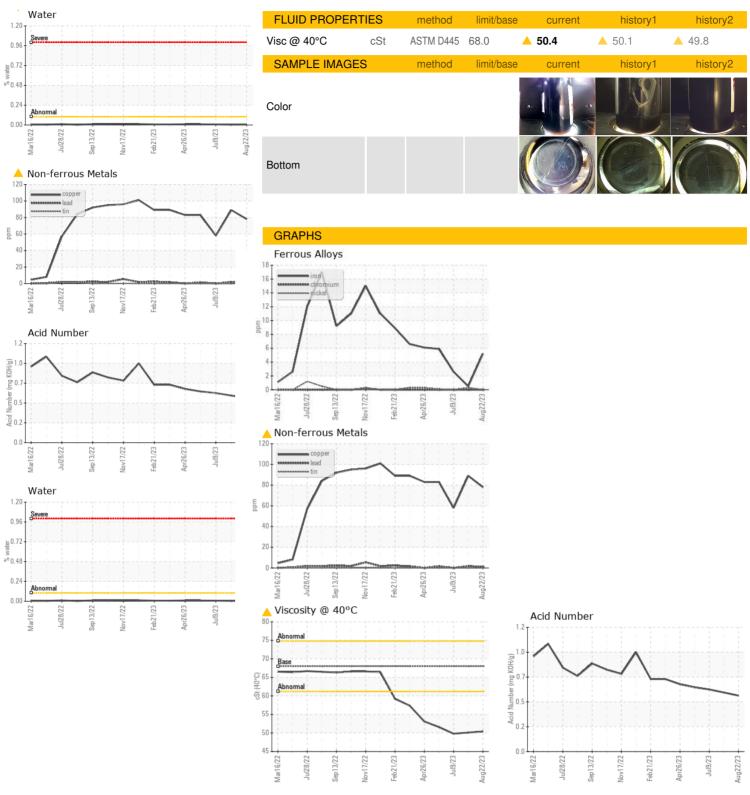
### Fluid Condition

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0038756	RP0038324	RP0035739
Sample Date		Client Info		22 Aug 2023	03 Aug 2023	09 Jul 2023
Machine Age	hrs	Client Info		27955	27880	27795
Oil Age	hrs	Client Info		1605	1530	1447
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	ATTENTION	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	5	<1	3
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>7	<1	0	<1
Lead	ppm	ASTM D5185m	>12	1	2	0
Copper	ppm	ASTM D5185m	>30	<u>^</u> 78	<b>A</b> 89	<u></u> 58
Tin	ppm	ASTM D5185m	>9	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		<1	0	4
Calcium	ppm	ASTM D5185m		25	21	24
Phosphorus	ppm	ASTM D5185m		805	874	720
Zinc	ppm	ASTM D5185m		542	581	520
CONTAMINANTS	3	method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base >60	current <1	history1 <1	history2 <1
Silicon						
Silicon Sodium	ppm	ASTM D5185m ASTM D5185m		<1	<1	<1
Silicon Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>60	<1 0	<1 0	<1 <1
Silicon Sodium Potassium Water	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>60 >20	<1 0 0	<1 0 0	<1 <1 0
Silicon Sodium Potassium Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>60 >20	<1 0 0 0 0.005	<1 0 0 0.004	<1 <1 0 0.007 76.9
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>60 >20 >.1	<1 0 0 0 0.005 54.8	<1 0 0 0.004 47.0	<1 <1 0 0.007 76.9
Silicon Sodium Potassium Water opm Water FLUID DEGRADA	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	>60 >20 >.1	<1 0 0 0.005 54.8 current	<1 0 0 0.004 47.0 history1	<1 <1 0 0.007 76.9 history2 0.60
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN)	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045	>60 >20 >.1 limit/base	<1 0 0 0.005 54.8 current 0.54	<1 0 0 0.004 47.0 history1 0.57	<1 <1 0 0.007 76.9 history2 0.60
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal	ppm ppm ppm % ppm ATION mg KOH/g	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method	>60 >20 >.1 limit/base	<1 0 0 0.005 54.8 current 0.54	<1 0 0 0.004 47.0 history1 0.57	<1 <1 0 0.007 76.9 history2 0.60
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal	ppm ppm ppm % ppm <b>ATION</b> mg KOH/g	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual	>60 >20 >.1 limit/base limit/base	<1 0 0 0.005 54.8 current 0.54 current NONE	<1 0 0 0.004 47.0 history1 0.57 history1 NONE	<1 0 0.007 76.9 history2 0.60 history2 NONE
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate	ppm ppm % ppm % ppm % ppm  ** **TION mg KOH/g  scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 limit/base limit/base NONE NONE	<1 0 0 0.005 54.8 current 0.54 current NONE	<1 0 0 0.004 47.0 history1 0.57 history1 NONE	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm % ppm % ppm % ation mg KOH/g scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual *Visual	>60 >20 >.1 limit/base NONE NONE NONE	<1 0 0 0.005 54.8 current 0.54 current NONE NONE	<1 0 0 0.004 47.0 history1 0.57 history1 NONE NONE	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE NONE
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm % ppm ATION mg KOH/g scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304  method ASTM D8045  method  *Visual  *Visual  *Visual  *Visual	>60 >20 >.1 limit/base NONE NONE NONE NONE	<1 0 0 0.005 54.8	<1 0 0 0.004 47.0 history1 0.57 history1 NONE NONE NONE	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE NONE LIGHT
Silicon Sodium Potassium Water opm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm % ppm % rion mg KOH/g scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304  method ASTM D8045  method  *Visual  *Visual  *Visual  *Visual  *Visual  *Visual	>60 >20 >.1 limit/base NONE NONE NONE NONE NONE NONE NONE	<1 0 0 0.005 54.8  current 0.54  current NONE NONE NONE NONE NONE NONE NONE	<1 0 0 0.004 47.0 history1 0.57 history1 NONE NONE NONE NONE	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE NONE LIGHT NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm % ppm % ppm % ATION mg KOH/g scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 limit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 0 0 0.005 54.8  current 0.54  current NONE NONE NONE NONE NONE NONE NONE NON	<1 0 0 0.004 47.0 history1 0.57 history1 NONE NONE NONE NONE	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE NONE NONE LIGHT NONE NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN)	ppm ppm ppm % ppm % ppm % scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 limit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 0 0 0.005 54.8  current 0.54  current NONE NONE NONE NONE NONE NONE NONE NON	<1 0 0 0.004 47.0 history1 0.57 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 0 0.007 76.9 history2 0.60 history2 NONE NONE NONE NONE LIGHT NONE NONE NONE NONE NONE NONE NONE NON



### **OIL ANALYSIS REPORT**







Laboratory Sample No. Lab Number **Unique Number** 

: RP0038756 : 05936775 : 10622046

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

: 28 Aug 2023 : 29 Aug 2023 Diagnostician : Don Baldridge

Test Package : IND 2 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) **TEAM SUR S.A.S.** 

BOGOTA. CO Contact: Team Sur jconde@teamsur.com T: (300)740-0654