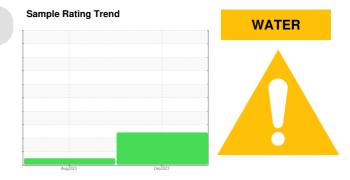
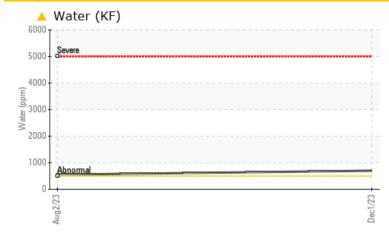


# **PROBLEM SUMMARY**

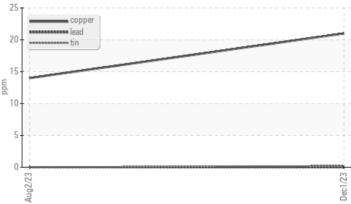


#### Machine Id **PRESS 16** Component **Hydraulic System** Fluid **ROYAL PURPLE SYNDRAULIC 46 (--- QTS)**

### COMPONENT CONDITION SUMMARY



### 🔺 Non-ferrous Metals



#### RECOMMENDATION

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

PROBLEMATIC 1	FEST RE	ESULTS				
Sample Status				ABNORMAL	NORMAL	
Copper	ppm	ASTM D5185m	>20	<u> </u>	14	
Water	%	ASTM D6304	>0.05	<b>6</b> 0.070	0.055	
ppm Water	ppm	ASTM D6304	>500	<u> </u>	550	

Customer Id: KONGOL Sample No.: RP0037801 Lab Number: 06029376 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u> There are no recommended actions for this sample.

#### HISTORICAL DIAGNOSIS

### 02 Aug 2023 Diag: Doug Bogart

NORMAL

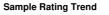


No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





## **OIL ANALYSIS REPORT**





PRESS 16

Component Hydraulic System Fluid ROYAL PURPLE SYNDRAULIC 46 (--- QTS)

#### DIAGNOSIS

#### A Recommendation

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

#### 🔺 Wear

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

#### Contamination

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

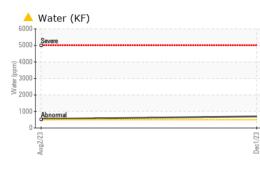
#### Fluid Condition

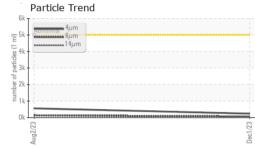
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

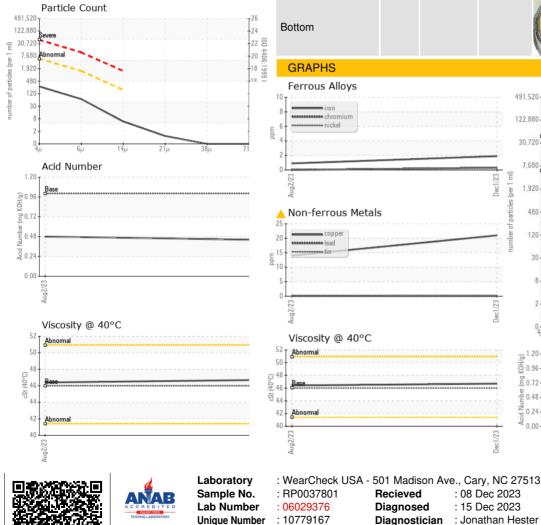
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0037801	RP0033148	
Sample Date		Client Info		01 Dec 2023	02 Aug 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		4228	2922	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	<1	
Chromium	ppm	ASTM D5185m	>20	<1	0	
Nickel	ppm	ASTM D5185m	>20	<1	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	2	0	
Lead	ppm	ASTM D5185m	>20	0	0	
Copper	ppm	ASTM D5185m	>20	<u> </u>	14	
Tin	ppm	ASTM D5185m	>20	<1	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		2	3	
Calcium	ppm	ASTM D5185m	150	57	54	
Phosphorus	ppm	ASTM D5185m	670	338	315	
Zinc	ppm	ASTM D5185m	800	414	386	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	10	8	
Sodium	ppm	ASTM D5185m		<1	<1	
Potassium	ppm	ASTM D5185m	>20	<1	0	
Water	%	ASTM D6304	>0.05	<b>6</b> 0.070	0.055	
ppm Water	ppm	ASTM D6304	>500	<b>A</b> 700	550	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	236	559	
Particles >6µm		ASTM D7647	>1300	59	142	
Particles >14µm		ASTM D7647	>160	5	9	
Particles >21µm		ASTM D7647	>40	1	2	
Particles >38µm		ASTM D7647	>10	0	0	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	15/13/10	16/14/10	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.44	0.48	



# **OIL ANALYSIS REPORT**







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	
ellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Ddor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	0.2%	0.2%	
ree Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	<b>FIES</b>	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D445	46.0	46.7	46.4	
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color				•		no image
Bottom						no image
GRAPHS						
Ferrous Alloys			101 500	Particle Count	:	20
			491,520			T <sup>26</sup>
iron						
iron chromium			122,880	-		-24
chromium				Severe		
chromium			30,720	Severe		-24 -22
••••••••••••••••••••••••••••••••••••••			30,720	Severe Abnormal		-22
iron chromium nickel			30,720	Abnormal		-22 -20
iron mickel			30,720		<b>.</b>	-22 -20
••••••••••••••••••••••••••••••••••••••	ls		30,720		•	-22 -20
ECCCOPPE Non-ferrous Meta	ls		30,720		•	-22 -20 -18 -16 -14
Non-ferrous Meta	ls		30,720 7,680 20/1920 1,920 990 90 9 90 9			-22 -20 -18 -16 -14
ECCCOPPE Non-ferrous Meta	ls		30,720			-22 -20 -18 -16
Non-ferrous Meta	ls		30,720 7,680 20/1920 1,920 990 90 9 90 9			-22 -20 -18 -16 -14
Non-ferrous Meta	ls		30,720 7,680 FUI add septement add septement add septement		•	-22 -20 -18 -16 -14 -12 -10
Ron-ferrous Metal	ls		30,720 7,680 FUI add septement add septement add septement		•	-22 -20 -18 -16 -14 -12
Non-ferrous Meta	ls		30,720 7,680 Fe 1 as 1,920 asoptime 480 120 asoptime 480 120 30 8		14μ 21μ	-22 -20 -18 -16 -14 -12 -10

Ê 0.72

-e 0.48

N 0.24

Dec1/23 -

: 08 Dec 2023

: 15 Dec 2023

Diagnostician : Jonathan Hester

#### Test Package : IND 2 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)

Recieved

Diagnosed

Dec1/23

KONG

GOLDEN, CO

US 80403

Contact/Location: Service Manager - KONGOL

16191 TABLE MOUNTAIN PKWY

Contact: Service Manager