



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**NO UNIT WC0792087**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- LTR)**

## RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you check all areas where contaminants can enter the system. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique.

DISCLAIMER: Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0792087</b>	---	---
Sample Date		Client Info		<b>23 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changd</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

## WEAR

Copper and iron ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		<b>20</b>	---	---
Iron	ppm	ASTM D5185(m)	>20	<b>▲ 27</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m)	>20	<b>15</b>	---	---
Copper	ppm	ASTM D5185(m)	>20	<b>▲ 48</b>	---	---
Tin	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

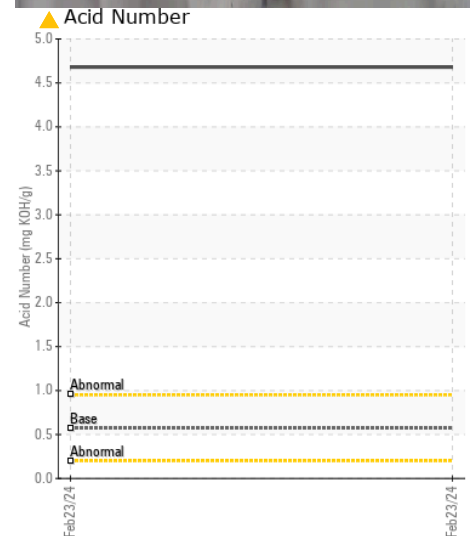
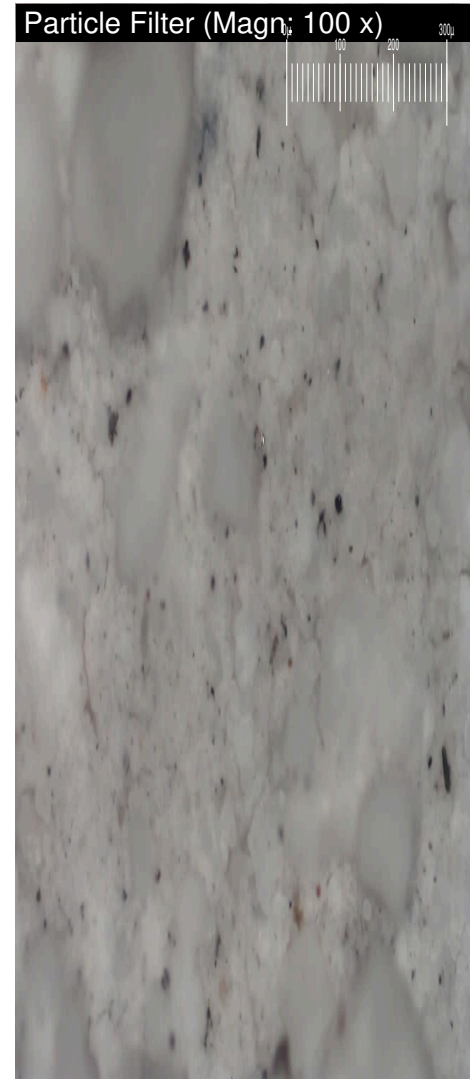
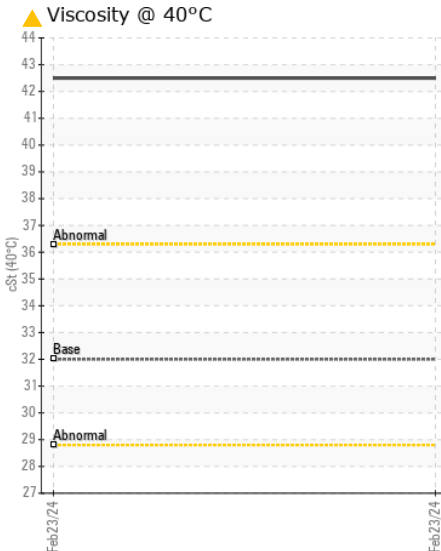
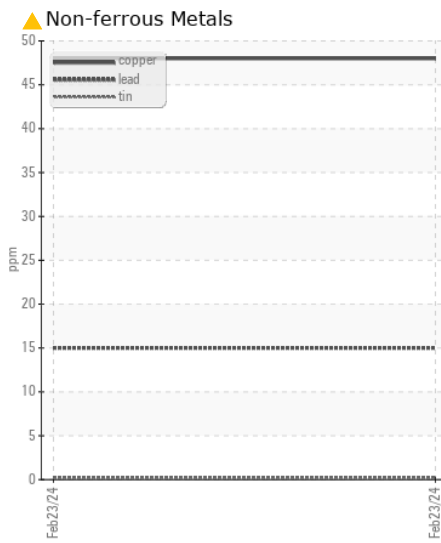
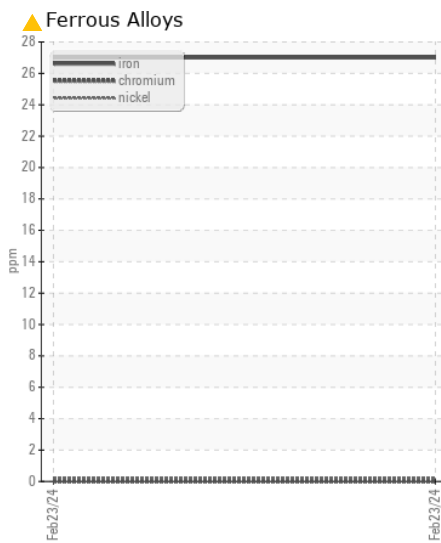
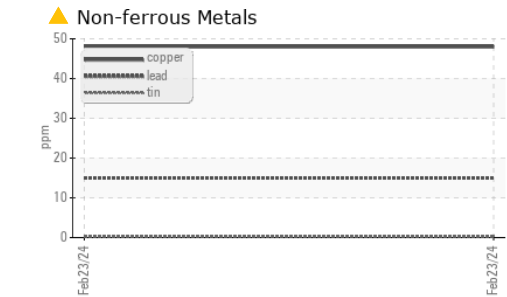
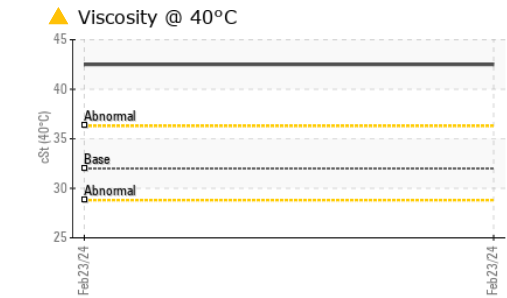
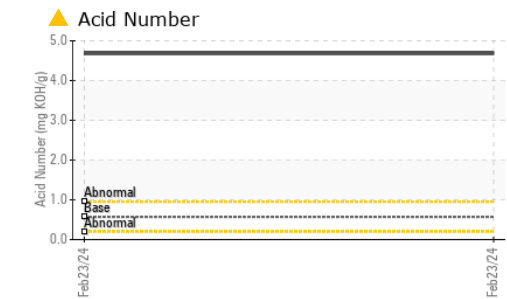
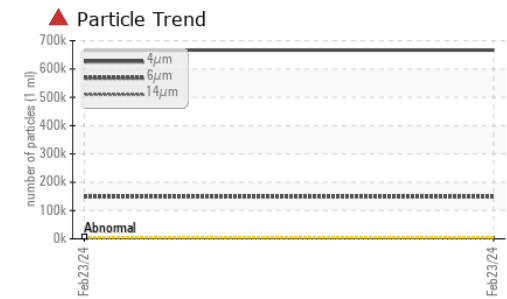
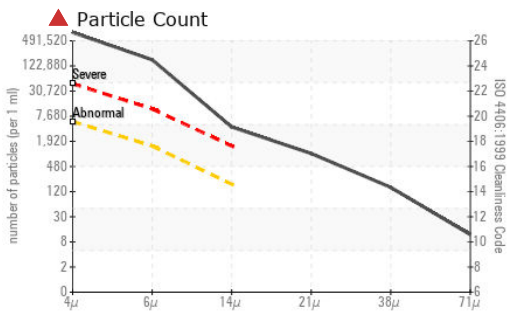
There is a high amount of particulates (2 to 100 microns in size) present in the oil. Moderate concentration of visible dirt/debris present in the oil. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>15	<b>6</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Water	%	ASTM D6304*	>0.05	<b>0.001</b>	---	---
ppm Water	ppm	ASTM D6304*	>500	<b>9</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 666816</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 148727</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 3703</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 861</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>▲ 134</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>▲ 10</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 27/24/19</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>▲ LTMOD</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>▲ HAZY</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	---	---

## FLUID CONDITION

The AN level is above the recommended limit. The oil viscosity is higher than normal. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Boron	ppm	ASTM D5185(m)	5	<b>0</b>	---	---
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	25	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m)	200	<b>60</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	300	<b>224</b>	---	---
Zinc	ppm	ASTM D5185(m)	370	<b>216</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2500	<b>549</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>▲ 4.68</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	32	<b>▲ 42.5</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

**Sample No.** : WC0792087

**Lab Number** : 02618042

**Unique Number** : 5735152

**Test Package** : IND 2 ( Additional Tests: BottomAnalysis, FILTERPATCH, KF, PQ, PrtFilter, TACO, Mac)

**Received** : 26 Feb 2024

**Tested** : 28 Feb 2024

**Diagnosed** : 28 Feb 2024 - Kevin Marson

**PKS Lifts**

1240 Osprey Drive

Ancaster, ON

CA L9G 4V5

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

T:

F: