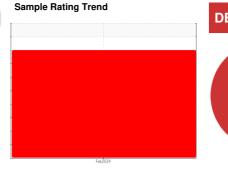


PROBLEM SUMMARY

SCRAPPER HPU PC11

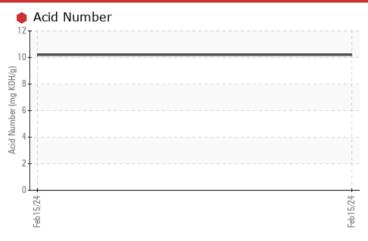
Component **Hydraulic System**

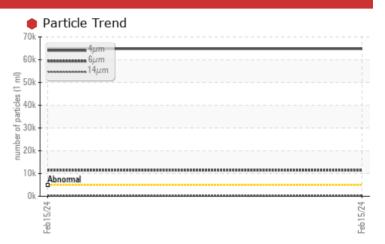
{not provided} (--- GAL)





COMPONENT CONDITION SUMMARY





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. We recommend that you drain the oil from the component if this has not already been done. 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. 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.

Customer Id: PCA_129713 Sample No.: PC Lab Number: 02616232 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

PROBLEMATIO	C TEST	RESULT	S		
Sample Status				SEVERE	
Particles >4µm		ASTM D7647	>5000	64788	
Particles >6µm		ASTM D7647	>1300	11416	
Particles >14μm		ASTM D7647	>160	478	
Particles >21μm		ASTM D7647	>40	<u> </u>	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/21/16	
Acid Number (AN)	mg KOH/g	ASTM D974*		10.2	

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.			
Resample			?	Resample in 30-45 days to monitor this situation.			
Alert			?	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.			
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.			
Check Breathers			?	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.			
Check Dirt Access			?	We advise that you check all areas where contaminants can enter the system.			

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend







SCRAPPER HPU PC11

Component

Hydraulic System

{not provided} (--- GAL)

DIAGNOSIS

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. We recommend that you drain the oil from the component if this has not already been done. 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. 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.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The high AN level of the oil indicates the presence of oxi-polymerized products. The AN level is much higher than the recommended limit. The oil is no longer serviceable.

				Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC		
Sample Date		Client Info		15 Feb 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	1		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)	>20	<1		
Copper	ppm	ASTM D5185(m)	>20	4		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current 0	history1	history2
	ppm ppm		limit/base			-
Boron		ASTM D5185(m)	limit/base	0		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 0 0 <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 0 0 <1 <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 0 0 <1 <1 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 0 0 <1 <1 0 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		0 0 0 0 <1 <1 0 2 60 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 0 0 <1 <1 0 2 60 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MEthod ASTM D5185(m)	limit/base	0 0 0 0 <1 <1 0 2 60 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm	ASTM D5185(m)	limit/base >15	0 0 0 0 <1 <1 0 2 60 <1 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185(m)	limit/base >15 >20	0 0 0 0 <1 <1 0 2 60 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI	ppm	ASTM D5185(m)	limit/base >15 >20 limit/base	0 0 0 0 <1 <1 0 2 60 <1 current 0 0 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm	ppm	ASTM D5185(m)	limit/base >15 >20 limit/base >5000	0 0 0 0 <1 <1 0 2 60 <1 current 0 0 41 current 0 64788		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm	ASTM D5185(m) METHOD ASTM D5185(m)	limit/base >15 >20 limit/base >5000 >1300	0 0 0 0 0 <1 <1 0 2 60 <1 current 0 0 <1 current 4 64788 11416	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >6µm Particles >14µm	ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	0 0 0 0 0 <1 <1 0 2 60 <1 current 0 0 <1 current 4 64788 11416 478		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 0 0 0 0 <1 <1 0 2 60 <1 current 0 0 <1 current 4 64788 11416 478 149	history1 history1	history2 history2



OIL ANALYSIS REPORT

