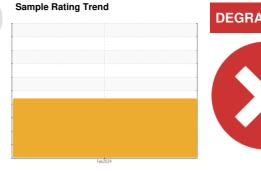


PROBLEM SUMMARY

SCRAPPER HPU PC10

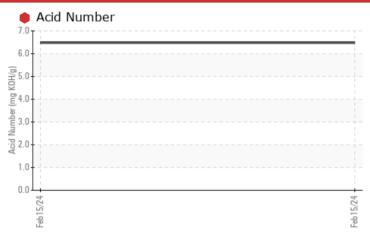
Component **Hydraulic System**

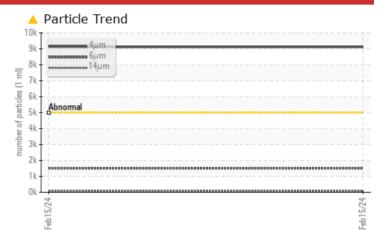
{not provided} (--- GAL)





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 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 at the next service interval to monitor. 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.

PROBLEMATIC TEST RESULTS

Sample Status		SEVERE	 	
Acid Number (AN)	mg KOH/g	ASTM D974*	6.48	

Customer Id: PCA_129713 Sample No.: PC Lab Number: 02616231 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

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.		
Change Filter			?	We recommend you service the filters on this component.		
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.		

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



SCRAPPER HPU PC10

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 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 at the next service interval to monitor. 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 light amount of silt (particulates < 14 microns in size) present in the oil.

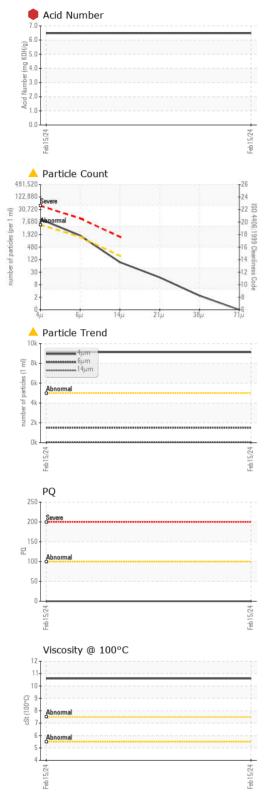
Fluid Condition

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.

				Feb 2024		
SAMPLE INFORI	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
PQ		ASTM D8184*		0		
Iron	ppm	ASTM D5185(m)	>20	23		
Chromium	ppm	ASTM D5185(m)	>20	8		
Nickel	ppm	ASTM D5185(m)	>20	<1		
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	6		
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
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		2		
Calcium	ppm	ASTM D5185(m)		33		
Phosphorus	ppm	ASTM D5185(m)		141		
Zinc	ppm	ASTM D5185(m)		26		
Sulfur	ppm	ASTM D5185(m)		1210		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS _	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3		
Sodium	ppm	ASTM D5185(m)		1		
Potassium	ppm	ASTM D5185(m)	>20	1		



OIL ANALYSIS REPORT



FLUID CLEANL	LINESS	method	limit/base		current	history1	history2
Particles >4µm		ASTM D7647	>5000		9121		
Particles >6µm		ASTM D7647	>1300		1508		
Particles >14µm		ASTM D7647	>160		80		
Particles >21µm		ASTM D7647	>40		15		
Particles >38µm		ASTM D7647	>10		2		
Particles >71µm		ASTM D7647	>3		0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14		20/18/13		
FLUID DEGRAD	ATION	method	limit/base		current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*			6.48		
. ,	ing Norry		11 11 11	_			
VISUAL		method	limit/base		current	history1	history2
White Metal	scalar	Visual*	NONE		NONE		
Yellow Metal	scalar	Visual*	NONE		NONE		
Precipitate	scalar	Visual*	NONE		NONE		
Silt	scalar	Visual*	NONE		NONE		
Debris	scalar	Visual*	NONE		NONE		
Sand/Dirt	scalar	Visual*	NONE		NONE		
Appearance	scalar	Visual*	NORML		NORML		
Odor	scalar	Visual*	NORML		NORML		
Emulsified Water	scalar	Visual*	>0.05		NEG		
Free Water	scalar	Visual*			NEG		
FLUID PROPE	RTIES	method	limit/base		current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)			52.3		
Visc @ 100°C	cSt	ASTM D7279(m)			10.6		
Viscosity Index (VI)	Scale	ASTM D2270*			198		
SAMPLE IMAG	ES	method	limit/base		current	history1	history2
Color						no imaga	no image
Color						no image	no image
					, and		
Bottom					(9")	no image	no image
				10			



CALA ISO 17025:2017 Accredited Laboratory

Sample No.

Laboratory

: PC Lab Number : 02616231 Unique Number : 5733341

Tested Diagnosed

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

Test Package : IND 2 (Additional Tests: KV100, PQ, TAN Man, VI) 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.

Received

: 16 Feb 2024

: 21 Feb 2024

: 21 Feb 2024 - Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Behshad Sabah

Mississauga, ON CA L5J 1K2

Contact: Behshad Sabah Behshad.Sabah@hfsinclair.com

T: (905)716-2158 F: (905)403-6740