

#### Machine Id SCRAPPER HPU PC10 Component Hydraulic System

{not provided} (--- GAL)

### 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**

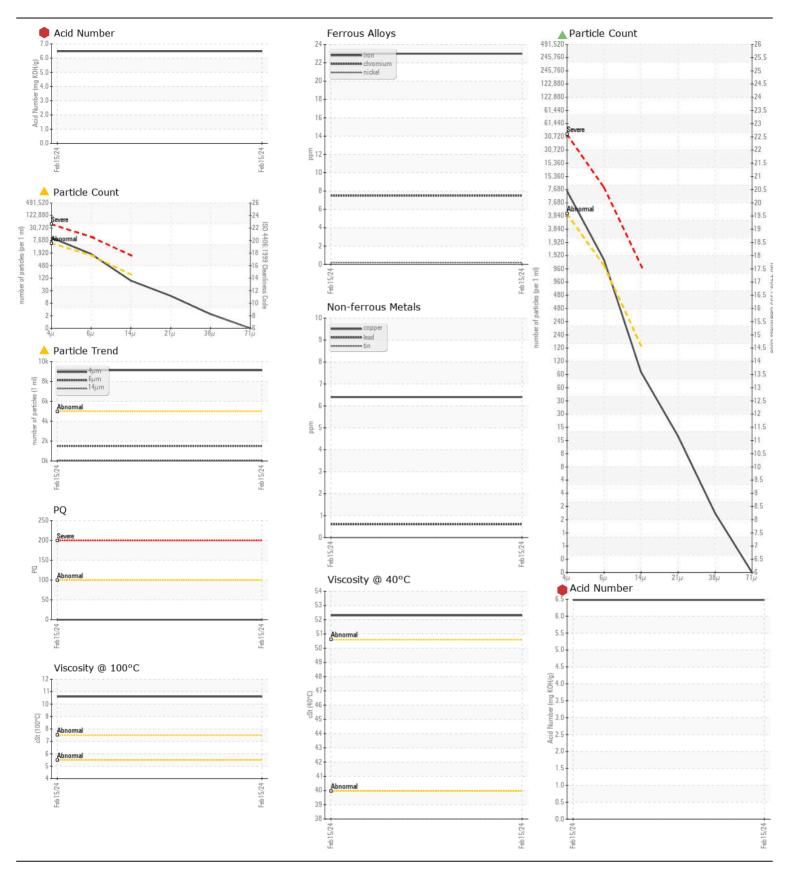
The high AN level of the oil indicates the presence of oxi-polymerized products. The AN level is much higher than the recommended limit. The oil is no longer serviceable.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number	00111	Client Info	Linity ton	PC		
Sample Date		Client Info		15 Feb 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				SEVERE		
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		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
0'''			45	•		
Silicon	ppm	ASTM D5185(m)	>15	3		
Potassium	ppm	ASTM D5185(m)	>20	1		
Water		WC Method	>0.05	NEG		
Particles >4µm		ASTM D7647	>5000 >1300	▲ 9121 ▲ 1500		
Particles >6µm Particles >14µm		ASTM D7647 ASTM D7647		1508 80		
Particles >21µm		ASTM D7647 ASTM D7647	>100	15		
Particles >38µm		ASTM D7647	>10	2		
Particles >71µm		ASTM D7647 ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)		<b>20/18/13</b>		
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		
Sodium	ppm	ASTM D5185(m)		1		
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		
Acid Number (AN)	mg KOH/g	ASTM D974*		6.48		
Visc @ 40°C	cSt	ASTM D7279(m)		52.3		
Visc @ 100°C	cSt	ASTM D7279(m)		10.6		

# WEAR NORMAL CONTAMINATION ATTENTION FLUID CONDITION SEVERE

198

Viscosity Index (VI) Scale ASTM D2270\*



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Behshad Sabah CALA 回流 - 🔳 Sample No. : PC Received : 16 Feb 2024 Lab Number : 02616231 Tested : 21 Feb 2024 Mississauga, ON ISO 17025:2017 Unique Number : 5733341 Accredited : 21 Feb 2024 - Kevin Marson CA L5J 1K2 Diagnosed Laboratory Test Package : IND 2 (Additional Tests: KV100, PQ, TAN Man, VI) Contact: Behshad Sabah To discuss this sample report, contact Customer Service at 1-800-268-2131. Behshad.Sabah@hfsinclair.com T: (905)716-2158 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (905)403-6740 Validity of results and interpretation are based on the sample and information as supplied.