

WEAR



Machine Id
PRESS #8 LOG OVEN

Component
Hydraulic System

Fluid
HOUGHTON COSMOLUBRIC HF122 ISO 46 (250 GAL)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

Aluminum ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0087723	PC0076100	PC0058470
Sample Date	Client Info			11 Jun 2024	02 Jun 2023	22 Jun 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>40	14	13	11
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>20	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>4	▲ 9	▲ 8	▲ 7
Lead	ppm	ASTM D5185(m)	>10	<1	1	1
Copper	ppm	ASTM D5185(m)	>60	4	4	3
Tin	ppm	ASTM D5185(m)	>4	9	10	11
Antimony	ppm	ASTM D5185(m)		0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

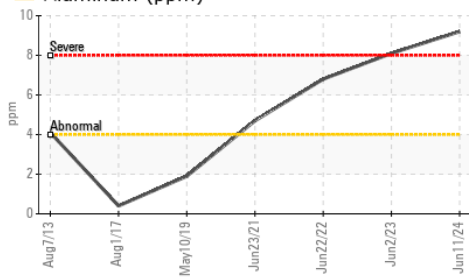
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		1	<1	<1
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		3	2	2
Calcium	ppm	ASTM D5185(m)		4	0	2
Phosphorus	ppm	ASTM D5185(m)		162	178	170
Zinc	ppm	ASTM D5185(m)		28	19	18
Sulfur	ppm	ASTM D5185(m)		660	677	722
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	0	1	1
Sodium	ppm	ASTM D5185(m)		5	3	3
Potassium	ppm	ASTM D5185(m)	>20	3	2	2

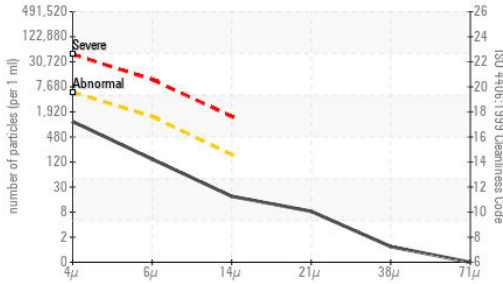
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	990	1946	738
Particles >6µm		ASTM D7647	>1300	124	553	113
Particles >14µm		ASTM D7647	>160	16	39	10
Particles >21µm		ASTM D7647	>40	7	10	2
Particles >38µm		ASTM D7647	>10	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/11	18/16/12	17/14/10

OIL ANALYSIS REPORT

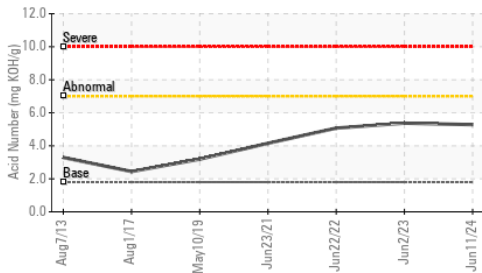
▲ Aluminum (ppm)



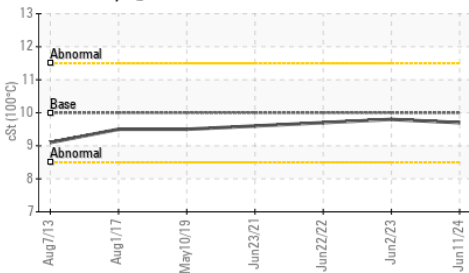
Particle Count



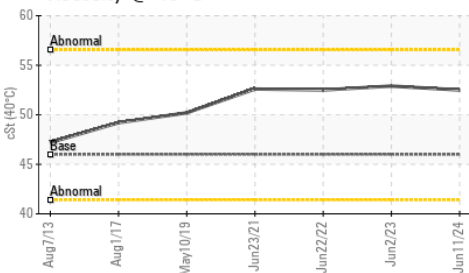
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C



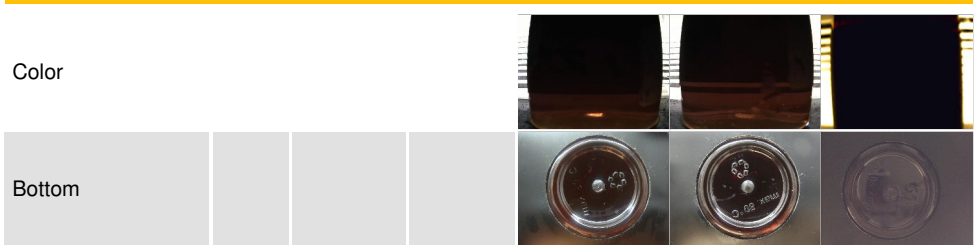
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN) mg KOH/g	ASTM D974*	1.8	5.28	5.37	5.07	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history1	history2		
Visc @ 40°C	cSt	ASTM D7279(m)	46	52.5	52.9	52.5
Visc @ 100°C	cSt	ASTM D7279(m)	10	9.7	9.8	9.7
Viscosity Index (VI)	Scale	ASTM D2270*	190	172	173	172

SAMPLE IMAGES



Color

Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0087723
Lab Number : **02641133**
Unique Number : 5798672
Test Package : IND 2 (Additional Tests: KV100, VI)
Received : 11 Jun 2024
Tested : 12 Jun 2024
Diagnosed : 12 Jun 2024 - Kevin Marson

EXTRUDEX ALUMINIUM
 411 CHRISLEA ROAD
 WOODBRIDGE, ON
 CA L4L 8N4
 Contact: Daljeet Munday
 dmunday@extrudex.com
 T: (416)745-4444
 F: (416)745-0925

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.