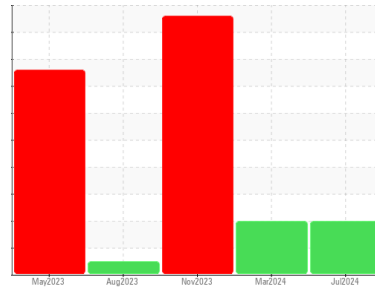




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

[8123982]

Machine Id

PH87218 (S/N 0015291)

Component

Hydraulic System

Fluid

CASTROL HYSPIIN DHV 46 (400 LTR)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0885249	WC0741315	WC0741312
Sample Date	Client Info		03 Jul 2024	19 Mar 2024	08 Nov 2023
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	SEVERE

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)	>20	3	3
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	<1
Copper	ppm	ASTM D5185(m)	>20	1	1
Tin	ppm	ASTM D5185(m)	>20	0	0
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	0
Barium	ppm	ASTM D5185(m)		0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		<1	1
Calcium	ppm	ASTM D5185(m)		12	12
Phosphorus	ppm	ASTM D5185(m)		487	515
Zinc	ppm	ASTM D5185(m)		588	602
Sulfur	ppm	ASTM D5185(m)		4053	4103
Lithium	ppm	ASTM D5185(m)		<1	<1

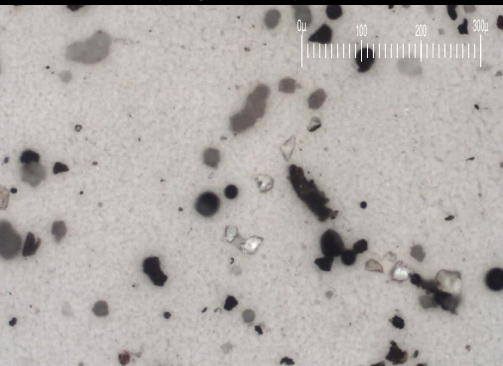
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	13	14
Sodium	ppm	ASTM D5185(m)		0	<1
Potassium	ppm	ASTM D5185(m)	>20	0	0

FLUID CLEANLINESS

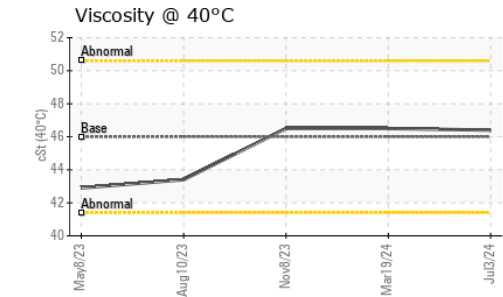
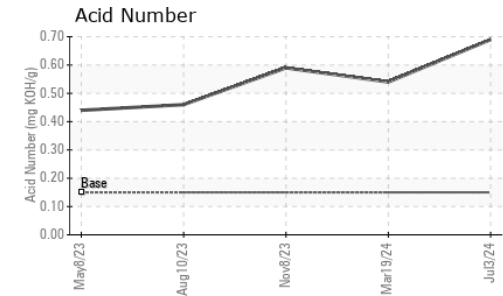
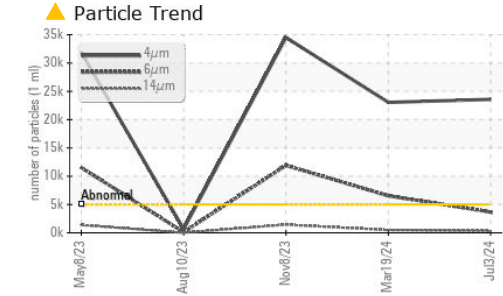
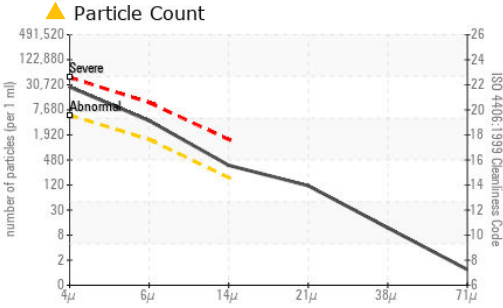
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 23578	▲ 23044	▲ 34505
Particles >6µm	ASTM D7647	>1300	▲ 3668	▲ 6543	▲ 11913
Particles >14µm	ASTM D7647	>160	● 314	▲ 486	▲ 1437
Particles >21µm	ASTM D7647	>40	▲ 102	▲ 103	▲ 516
Particles >38µm	ASTM D7647	>10	10	3	▲ 82
Particles >71µm	ASTM D7647	>3	1	0	▲ 7
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/15	▲ 22/20/16	▲ 22/21/18

Particle Filter (Magn: 100 x)





OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.15	0.69	0.54	0.59

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	VLITE	NONE	VLITE
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)	46.0	46.4	46.5	46.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color			
Bottom			
PrtFilter		no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0885249
Lab Number : **02645647**
Unique Number : 5803186
Test Package : IND 2 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtFilter, TAN Mar

Weir ESCO
 P.O.BOX 270, 185 HOPE STREET SOUTH
 PORT HOPE, ON
 CA L1A 3W4
 paul.dundas@mail.weir
 T: (647)725-8153
 F: (905)885-7600

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.