



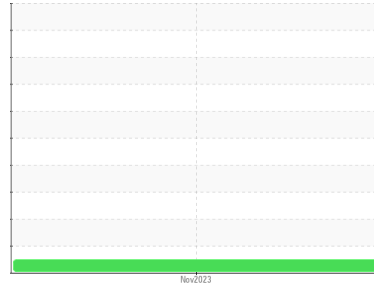
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Laurel Steel
 Machine Id
136-2A-M-COILOPENER
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- 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. 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

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	WC0876612	---	---
Sample Date	Client Info	01 Nov 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	2	---	---
Chromium	ppm ASTM D5185(m) >20	0	---	---
Nickel	ppm ASTM D5185(m) >20	<1	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m)	<1	---	---
Aluminum	ppm ASTM D5185(m) >20	0	---	---
Lead	ppm ASTM D5185(m) >20	<1	---	---
Copper	ppm ASTM D5185(m) >20	2	---	---
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) 5	<1	---	---
Barium	ppm ASTM D5185(m) 5	<1	---	---
Molybdenum	ppm ASTM D5185(m) 5	0	---	---
Manganese	ppm ASTM D5185(m)	0	---	---
Magnesium	ppm ASTM D5185(m) 25	1	---	---
Calcium	ppm ASTM D5185(m) 200	49	---	---
Phosphorus	ppm ASTM D5185(m) 300	327	---	---
Zinc	ppm ASTM D5185(m) 370	395	---	---
Sulfur	ppm ASTM D5185(m) 2500	843	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

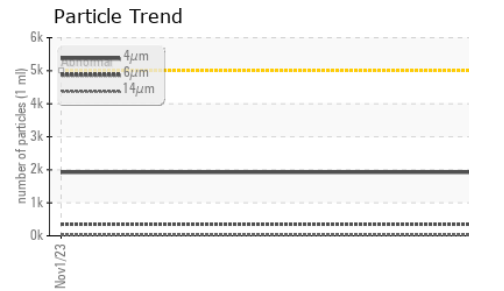
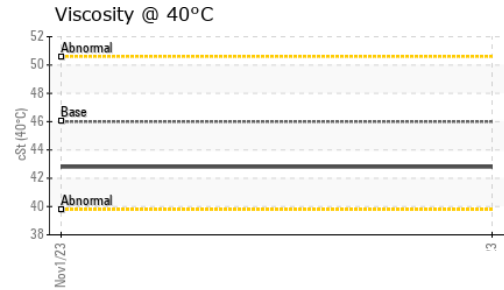
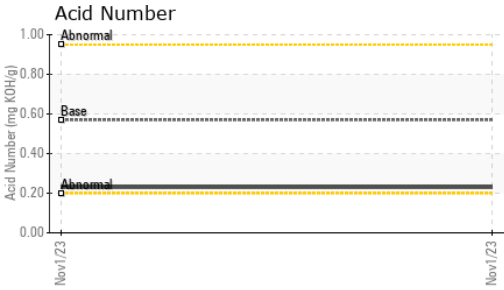
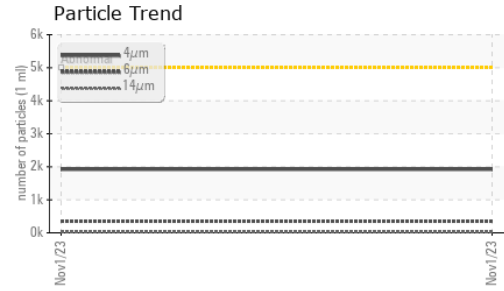
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	0	---	---
Sodium	ppm ASTM D5185(m)	<1	---	---
Potassium	ppm ASTM D5185(m) >20	0	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	1924	---	---
Particles >6µm	ASTM D7647 >1300	352	---	---
Particles >14µm	ASTM D7647 >160	20	---	---
Particles >21µm	ASTM D7647 >40	5	---	---
Particles >38µm	ASTM D7647 >10	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	18/16/11	---	---



OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.23	---	---

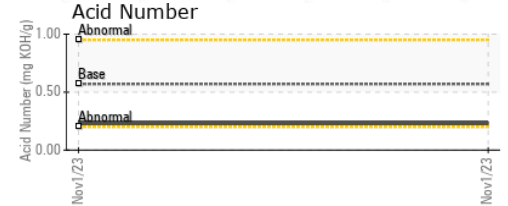
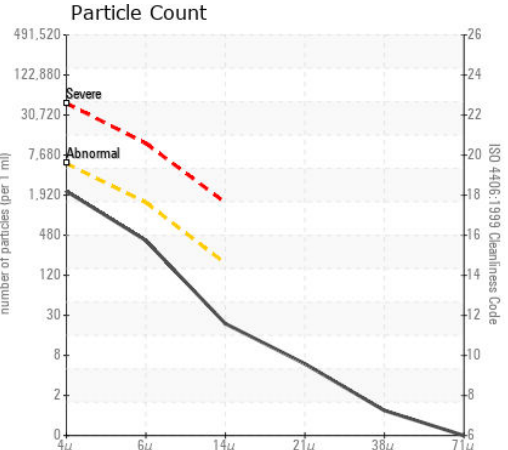
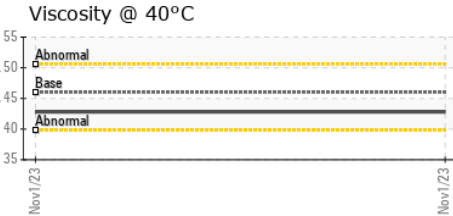
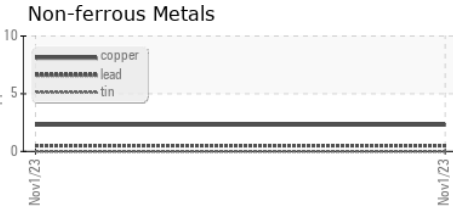
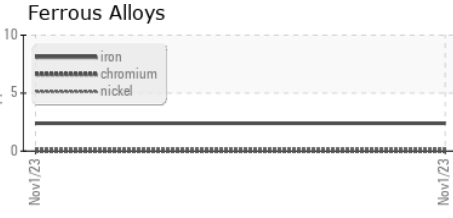
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	46	42.8	---	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0876612 **Received** : 15 Dec 2023
Lab Number : **02603474** **Diagnosed** : 18 Dec 2023
Unique Number : 5696559 **Diagnostician** : Wes Davis
Test Package : IND 2

FORSYTHE LUBRICATION
 120 CHATHAM ST.
 HAMILTON, ON
 CA L8P 2B5
 Contact: HEIDI LEINGARTNER

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.

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 F: (905)525-7024