



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Chem-Ecol
 Machine Id
A2308170
 Component
Hydraulic System
 Fluid
CHEM-ECOL BIO HYDRAULIC 32ZFD (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

{not applicable}

Contamination

{not applicable}

Fluid Condition

{not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		E30000166	---	---
Sample Date	Client Info		25 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	---
Chromium	ppm	ASTM D5185(m)	>20	0	---
Nickel	ppm	ASTM D5185(m)	>20	0	---
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	<1	---
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)		0	---
Barium	ppm	ASTM D5185(m)		0	---
Molybdenum	ppm	ASTM D5185(m)		0	---
Manganese	ppm	ASTM D5185(m)		<1	---
Magnesium	ppm	ASTM D5185(m)		1	---
Calcium	ppm	ASTM D5185(m)		280	---
Phosphorus	ppm	ASTM D5185(m)		167	---
Zinc	ppm	ASTM D5185(m)		3	---
Sulfur	ppm	ASTM D5185(m)		1026	---
Lithium	ppm	ASTM D5185(m)		<1	---

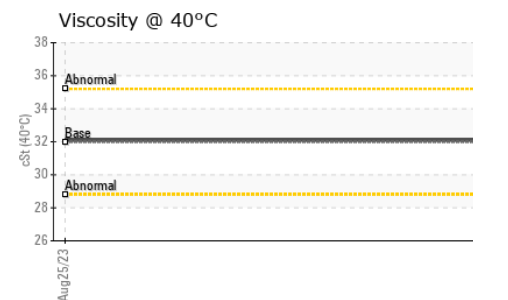
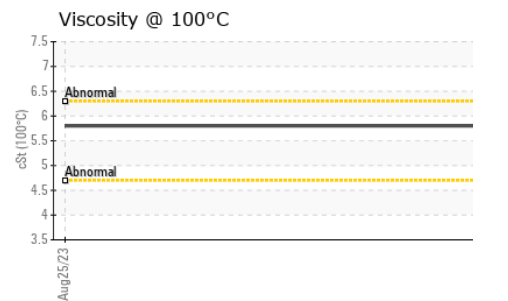
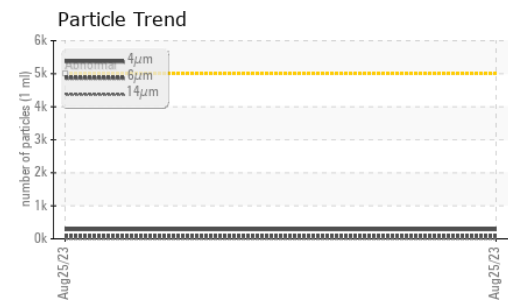
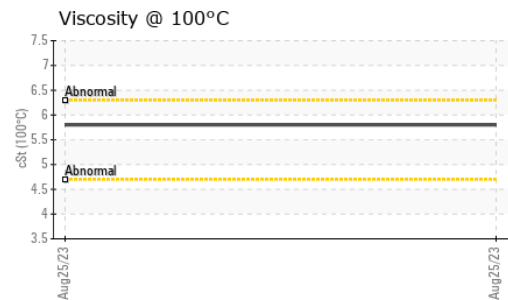
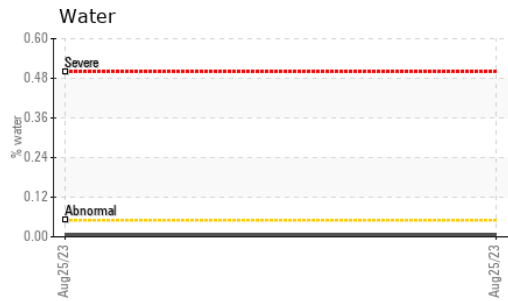
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<1	---
Sodium	ppm	ASTM D5185(m)		<1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---
Water	%	ASTM D6304*	>0.05	0.006	---
ppm Water	ppm	ASTM D6304*	>500	65.5	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	285	---	---
Particles >6µm	ASTM D7647	>1300	73	---	---
Particles >14µm	ASTM D7647	>160	7	---	---
Particles >21µm	ASTM D7647	>40	1	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	15/13/10	---	---

OIL ANALYSIS REPORT

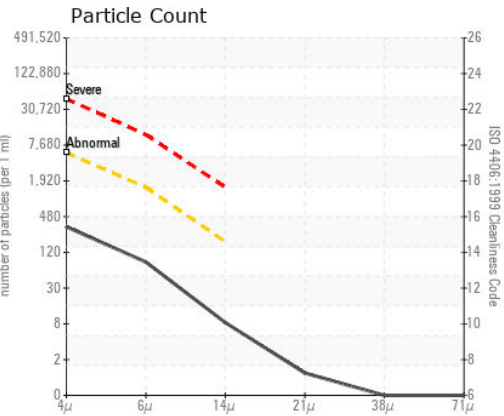
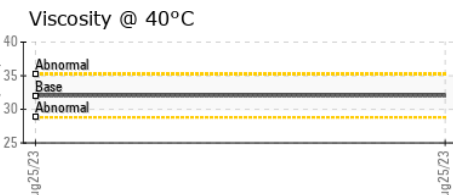
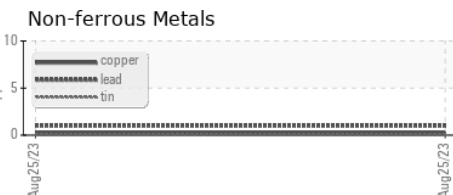
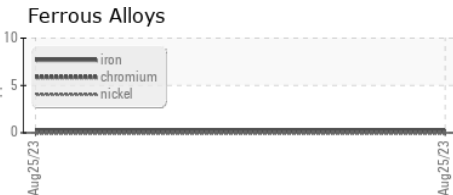


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.11	---	---
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32	32.1	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		5.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		124	---	---

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. : E30000166 **Received** : 31 Aug 2023
Lab Number : **02579686** **Diagnosed** : 05 Sep 2023
Unique Number : 5632746 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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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.