



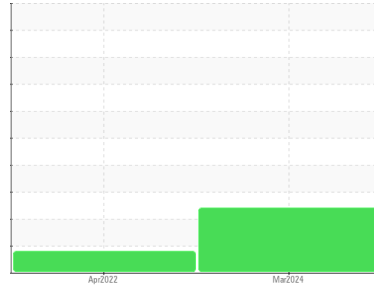
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
CONSTRUCTION INJECTION EDM INC [02623868]
 Machine Id
GROVE RT760 899 (S/N 79588)
 Component
Hydraulic System
 Fluid
PANOLIN HLP SYNTH 46 (583 LTR)



DIAGNOSIS

▲ Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

Les taux d'usure de tous les composants sont normaux.

▲ Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente dans l'huile. Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. La teneur en eau est négligeable. Le code de propreté du système est beaucoup plus haut que la limite acceptable pour votre objectif de propreté ISO 4406.

Fluid Condition

Le AN est acceptable pour ce fluide. l'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC	WC	---
Sample Date	Client Info	14 Mar 2024	13 Apr 2022	---
Machine Age	hrs Client Info	24645	24340	---
Oil Age	hrs Client Info	0	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		SEVERE	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185(m) >20	3	3	---
Chromium ppm	ASTM D5185(m) >10	0	<1	---
Nickel ppm	ASTM D5185(m) >10	0	<1	---
Titanium ppm	ASTM D5185(m)	0	0	---
Silver ppm	ASTM D5185(m)	0	0	---
Aluminum ppm	ASTM D5185(m) >10	<1	<1	---
Lead ppm	ASTM D5185(m) >10	0	0	---
Copper ppm	ASTM D5185(m) >75	<1	1	---
Tin ppm	ASTM D5185(m) >10	0	<1	---
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

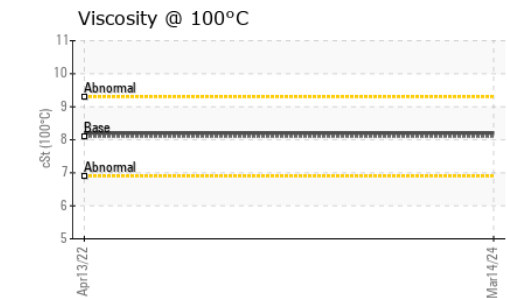
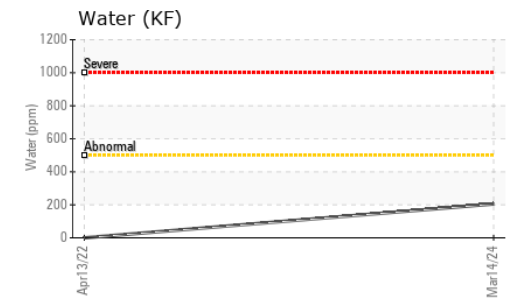
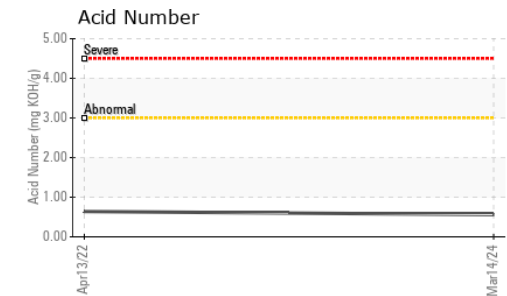
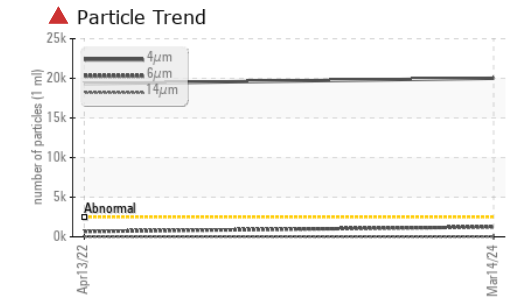
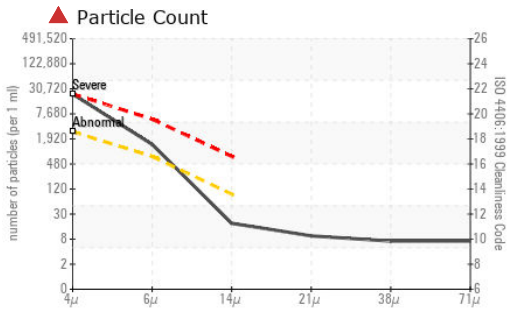
method	limit/base	current	history1	history2
Boron ppm	ASTM D5185(m) 0	0	1	---
Barium ppm	ASTM D5185(m) 0	0	0	---
Molybdenum ppm	ASTM D5185(m) 0	0	0	---
Manganese ppm	ASTM D5185(m) 0	0	0	---
Magnesium ppm	ASTM D5185(m) 0	<1	<1	---
Calcium ppm	ASTM D5185(m) 0	7	8	---
Phosphorus ppm	ASTM D5185(m) 1700	1471	1560	---
Zinc ppm	ASTM D5185(m) 0	26	28	---
Sulfur ppm	ASTM D5185(m) 1350	1348	1357	---
Lithium ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185(m) >20	0	1	---
Sodium ppm	ASTM D5185(m)	<1	1	---
Potassium ppm	ASTM D5185(m) >20	<1	<1	---
Water %	ASTM D6304* >0.05	0.020	---	---
ppm Water	ASTM D6304* >500	205	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	ASTM D7844*	0	0	---
Nitration Abs/cm	ASTM D7624*	3.8	3.9	---
Sulfation Abs/.1mm	ASTM D7415*	155.7	147.4	---
Mineral Oil Content %	ASTM D7418* <5.0%	<5.0	<5.0	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC **Received** : 22 Mar 2024
Lab Number : 02624051 **Tested** : 25 Mar 2024
Unique Number : 5749170 **Diagnosed** : 25 Mar 2024 - Bill Quesnel
Test Package : MOB 2 (Additional Tests: TAN Man)

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.

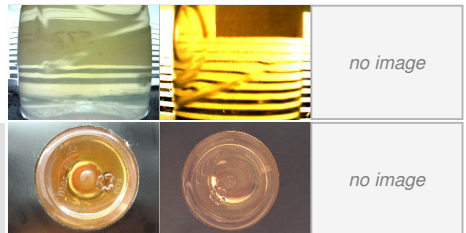
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 20010	▲ 19316	---
Particles >6µm	ASTM D7647	>640	● 1241	● 676	---
Particles >14µm	ASTM D7647	>80	16	11	---
Particles >21µm	ASTM D7647	>20	8	5	---
Particles >38µm	ASTM D7647	>4	6	3	---
Particles >71µm	ASTM D7647	>3	▲ 6	3	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 22/17/11	▲ 21/17/11	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*		150.6	138.8	---
Acid Number (AN)	mg KOH/g ASTM D974*		0.56	0.64	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	47.0	45.2	45.0	---
Visc @ 100°C	cSt ASTM D7279(m)	8.1	8.2	8.2	---
Viscosity Index (VI)	Scale ASTM D2270*	146	157	158	---

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





MINERAL OIL CONTENT REPORT

PASS

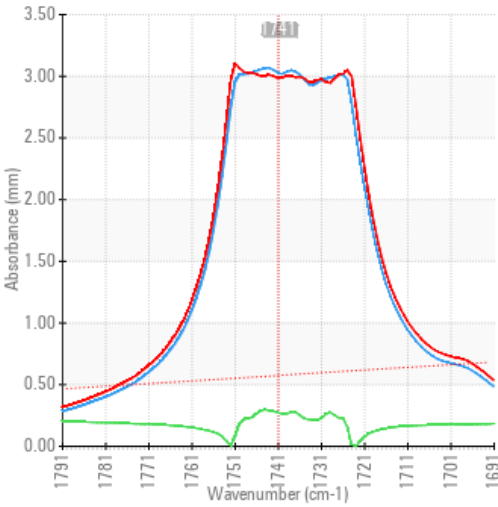


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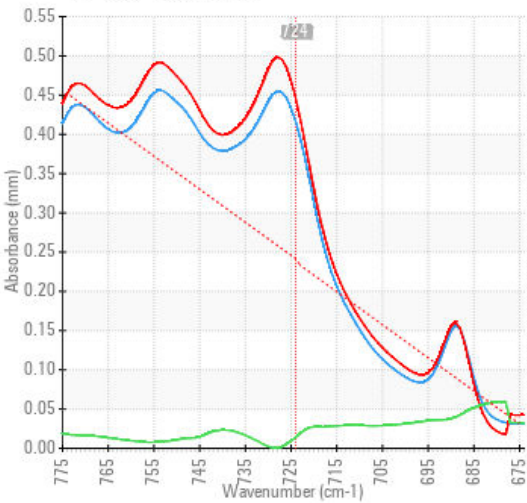
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	26	28	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	<5.0	---

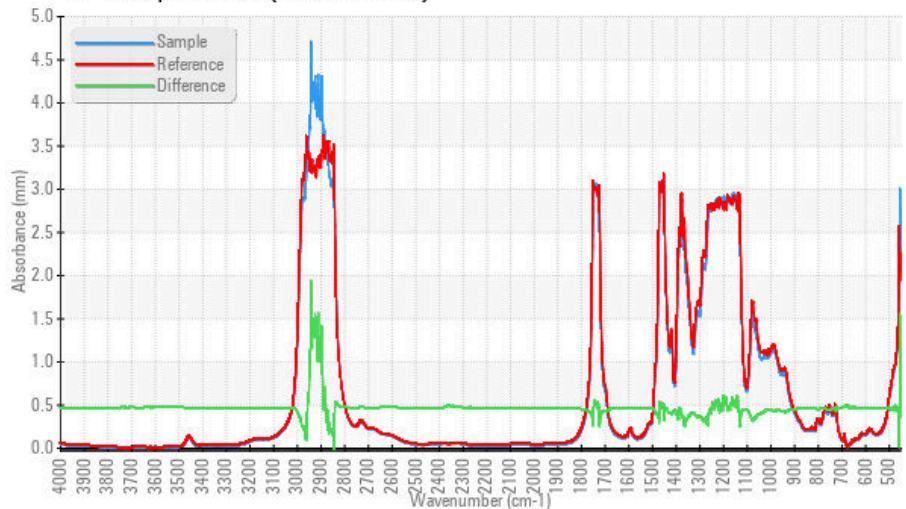
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



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