

Machine Id  
**352**  
Component  
**Hydraulic System**  
Fluid  
**PANOLIN HLP SYNTH 46 (--- LTR)**

## DIAGNOSIS

### Recommendation

Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration. Veuillez préciser la marque et le modèle du composant lors du prochain échantillon.

### Wear

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

### Contamination

Il y a une quantité modérée de matières particulaires (2 à 100 µm de taille) présente dans l'huile. La propreté du système est supérieure à la limite acceptable pour votre objectif de propreté ISO 4406.

### Fluid Condition

Le AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0087457</b>	---	---
Sample Date	Client Info			<b>19 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>915</b>	---	---
Oil Age	hrs	Client Info		<b>915</b>	---	---
Oil Changed	Client Info			<b>Not Chngd</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>75	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

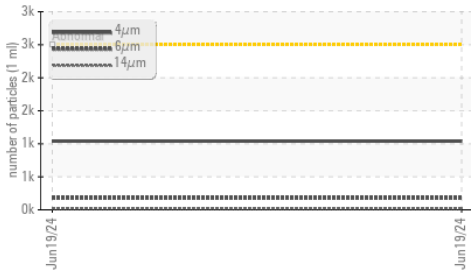
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Calcium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1700	<b>1450</b>	---	---
Zinc	ppm	ASTM D5185(m)	0	<b>9</b>	---	---
Sulfur	ppm	ASTM D5185(m)	1350	<b>1250</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---

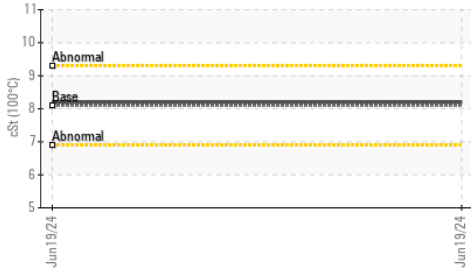
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<b>1041</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>179</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>20</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>9</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>6</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>▲ 6</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>17/15/11</b>	---	---

# OIL ANALYSIS REPORT

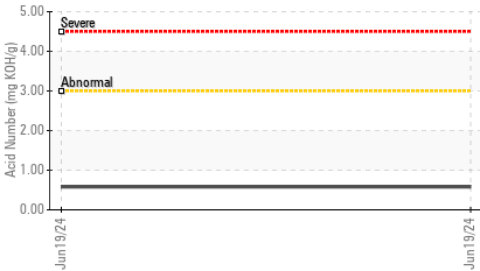
**▲ Particle Trend**



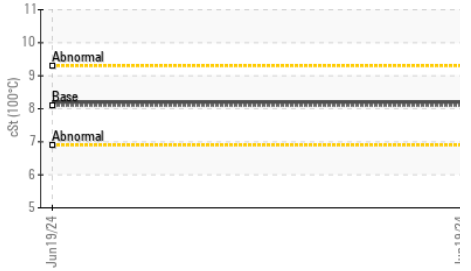
**Viscosity @ 100°C**



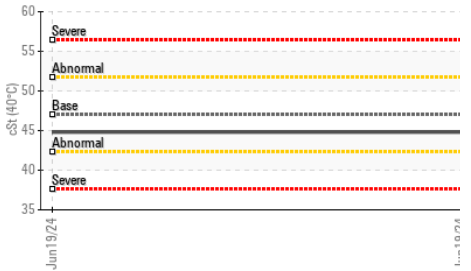
**Acid Number**



**Viscosity @ 100°C**



**Viscosity @ 40°C**



**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN) mg KOH/g ASTM D974\* **0.58** --- ---

**VISUAL** method limit/base current history1 history2

White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

**FLUID PROPERTIES** method limit/base current history1 history2

Visc @ 40°C	cSt	ASTM D7279(m)	47.0	<b>44.8</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.1	<b>8.2</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	146	<b>159</b>	---	---

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

Color		no image	no image
Bottom		no image	no image

**GRAPHS**

**Ferrous Alloys**



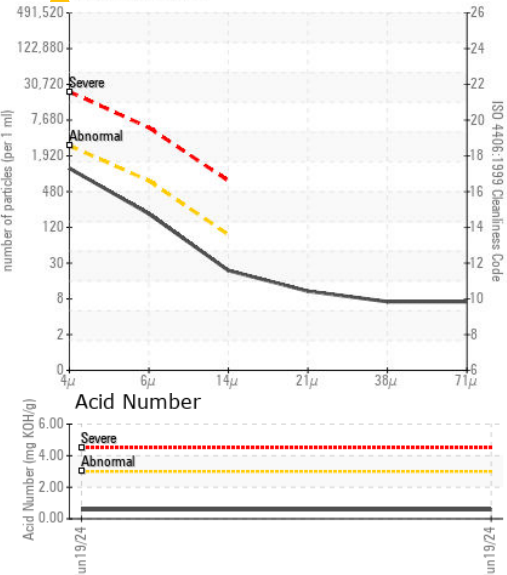
**Non-ferrous Metals**



**Viscosity @ 40°C**



**▲ Particle Count**



**Acid Number**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0087457 **Received** : 25 Jun 2024  
**Lab Number** : **02644051** **Tested** : 26 Jun 2024  
**Unique Number** : 5801590 **Diagnosed** : 26 Jun 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, TAN Man, VI )

**DISTRIBUTION SERGIBEC INC**  
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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.