



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**SULLIVAN PALATEK 1709270003 - KNIFE RIVER**  
 Component  
**Compressor**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

**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			<b>DFP0000013</b>	---	---
Sample Date	Client Info			<b>28 May 2024</b>	---	---
Machine Age	hrs Client Info			<b>15178</b>	---	---
Oil Age	hrs Client Info			<b>0</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m		<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

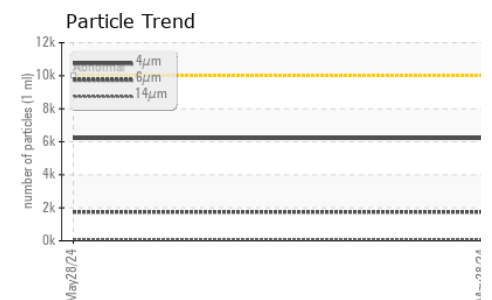
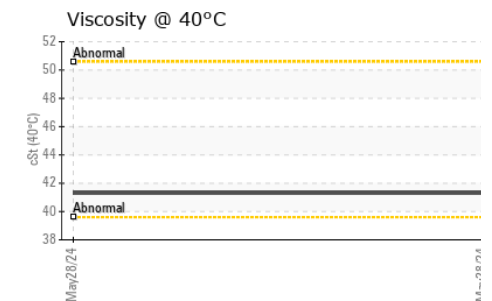
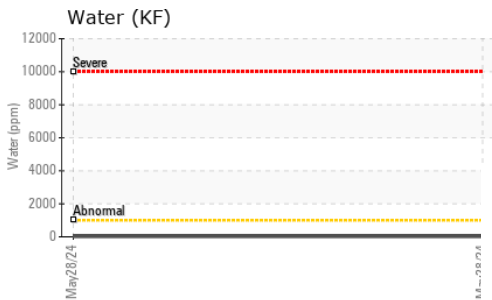
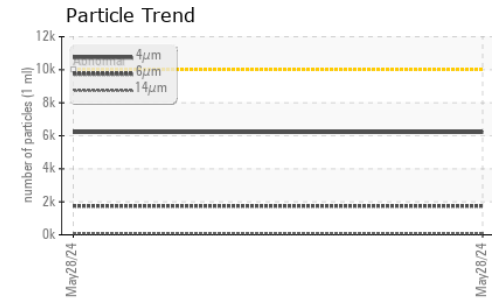
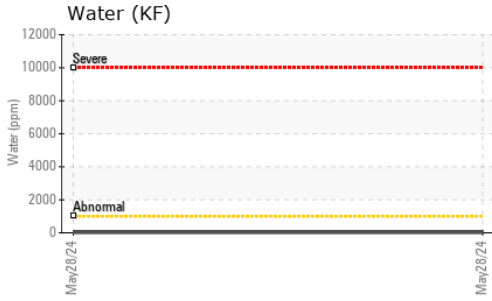
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>6</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>588</b>	---	---
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>942</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Water	%	ASTM D6304	>0.1	<b>0.002</b>	---	---
ppm Water	ppm	ASTM D6304	>1000	<b>25</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>6212</b>	---	---
Particles >6µm		ASTM D7647	>2500	<b>1746</b>	---	---
Particles >14µm		ASTM D7647	>320	<b>83</b>	---	---
Particles >21µm		ASTM D7647	>80	<b>16</b>	---	---
Particles >38µm		ASTM D7647	>20	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>20/18/14</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.093</b>	---	---



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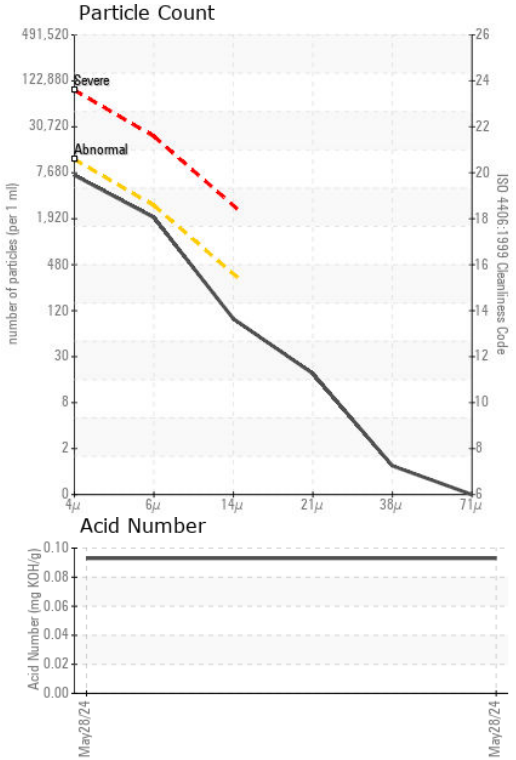
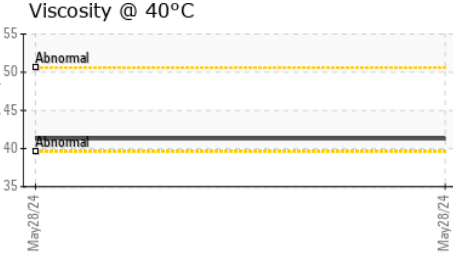
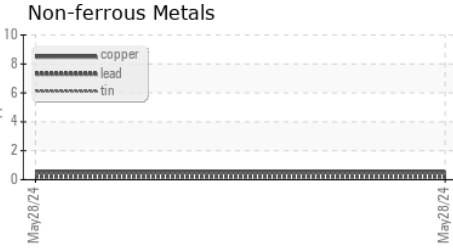
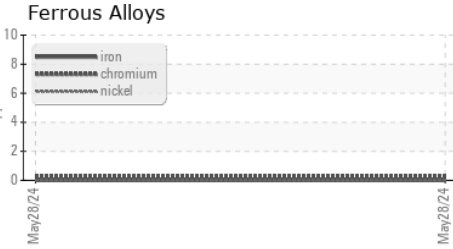
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	41.3	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DFP0000013      **Received** : 04 Jun 2024  
**Lab Number** : 06199122      **Tested** : 05 Jun 2024  
**Unique Number** : 11061245      **Diagnosed** : 06 Jun 2024 - Don Baldrige  
**Test Package** : PLANT ( Additional Tests: KF )

**Compressed Air Technology**  
 1801 E. 39th Street North  
 Sioux Falls,  
 US 57104  
 Contact: KEN HURST  
 khurst@dfpcompressedairtechnology.com

To discuss this sample report, contact Customer Service at 1-833-307-5970.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)      F: (605)332-0988