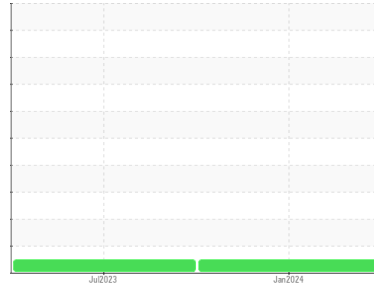


Area
HERTZ SMART OIL
Machine Id
VD029107-B - BRINE CONCENTRATOR
Component
Compressor
Fluid
SMARTOIL 6000 (--- GAL)



DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
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		UHK06054985	UHK05893881	---
Sample Date	Client Info		03 Jan 2024	09 Jul 2023	---
Machine Age	hrs	Client Info	5111	0	---
Oil Age	hrs	Client Info	2887	0	---
Oil Changed		Client Info	Changed	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>0.1	NEG	NEG	---
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WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>50	<1	0	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m		2	3	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	<1	---
Lead	ppm	ASTM D5185m	>25	<1	0	---
Copper	ppm	ASTM D5185m	>50	<1	0	---
Tin	ppm	ASTM D5185m	>15	1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		1	4	---
Calcium	ppm	ASTM D5185m	20	4	0	---
Phosphorus	ppm	ASTM D5185m		38	22	---
Zinc	ppm	ASTM D5185m		0	12	---
Sulfur	ppm	ASTM D5185m		0	107	---

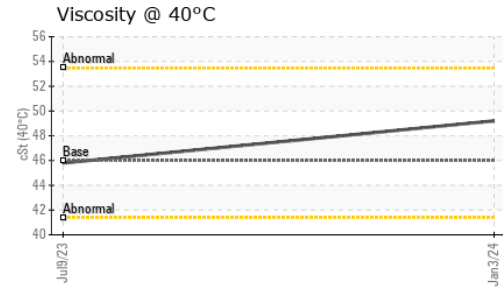
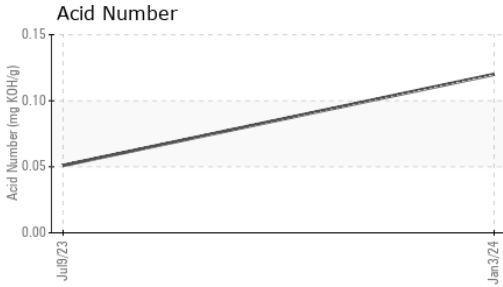
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	5	3	---
Sodium	ppm	ASTM D5185m		0	1	---
Potassium	ppm	ASTM D5185m	>20	1	0	---

FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045		0.12	0.051	---
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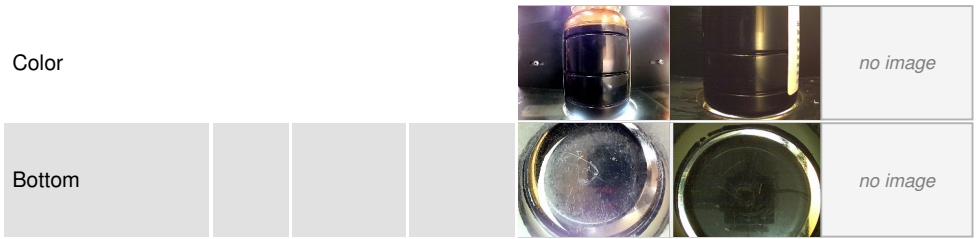
OIL ANALYSIS REPORT



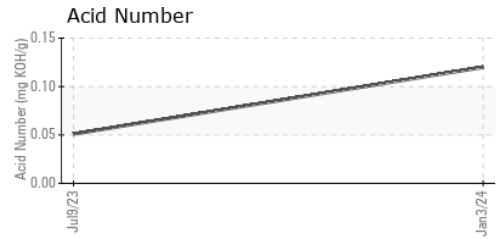
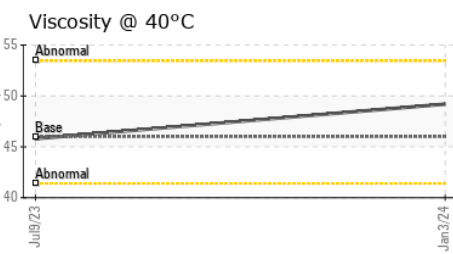
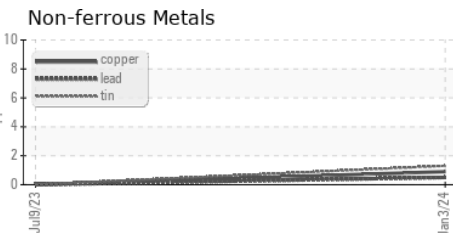
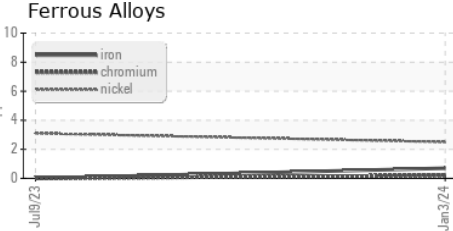
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	MODER	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	49.2	45.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UHK06054985 **Recieved** : 08 Jan 2024
Lab Number : **06054985** **Diagnosed** : 10 Jan 2024
Unique Number : 10820934 **Diagnostician** : Angela Borella
Test Package : IND 2

OTTER TAIL POWER COMPANY

BIG STONE CITY, SD
 US 57216
 Contact: BJ NELSON
 BJNELSON@OTPCO.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

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F: