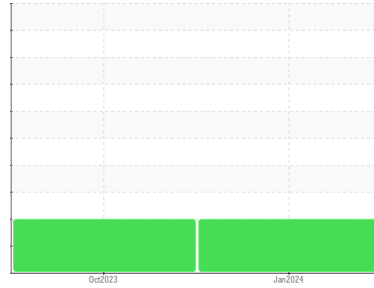




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[175466-N2STV4W]
 Machine Id
HPU 003
 Component
Hydraulic System
 Fluid
RADCOLUBE FR282 (33 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Chlorine is 10.3 ppm.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PH06060221	PH05977692	---
Sample Date	Client Info		09 Jan 2024	05 Oct 2023	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	20	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0	---
Chromium	ppm	ASTM D5185m >20	<1	0	---
Nickel	ppm	ASTM D5185m >20	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >20	2	0	---
Lead	ppm	ASTM D5185m >20	0	0	---
Copper	ppm	ASTM D5185m >20	0	0	---
Tin	ppm	ASTM D5185m >20	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	<1	0	---
Calcium	ppm	ASTM D5185m	1	2	---
Phosphorus	ppm	ASTM D5185m	120	146	---
Zinc	ppm	ASTM D5185m	0	2	---
Sulfur	ppm	ASTM D5185m	22	49	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	1	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	<1	<1	---
Chlorine Content	ppm	ASTM D5185m	10.3	2.10	---
Water	%	ASTM D6304 >0.05	0.011	0.016	---
ppm Water	ppm	ASTM D6304 >500	119	161.2	---

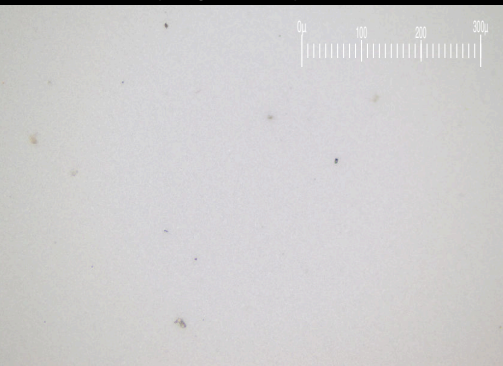
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80	▲ 365	▲ 793	---
Particles >6µm	ASTM D7647	>20	▲ 120	▲ 235	---
Particles >14µm	ASTM D7647	>3	▲ 12	▲ 18	---
Particles >21µm	ASTM D7647	>3	▲ 4	▲ 7	---
Particles >38µm	ASTM D7647	>3	0	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>13/11/8	▲ 16/14/11	▲ 17/15/11	---

FLUID DEGRADATION

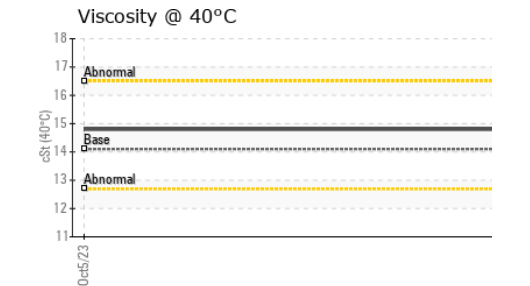
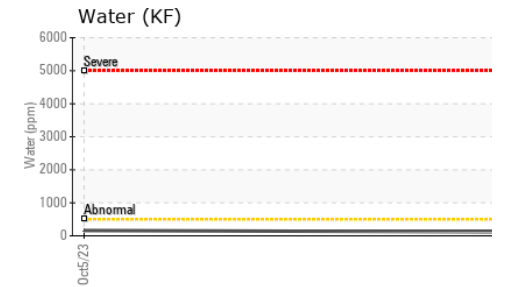
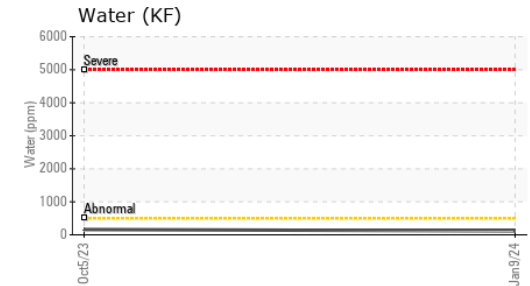
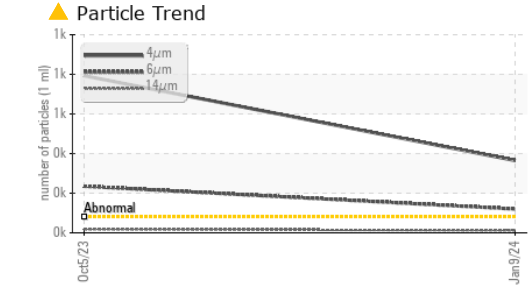
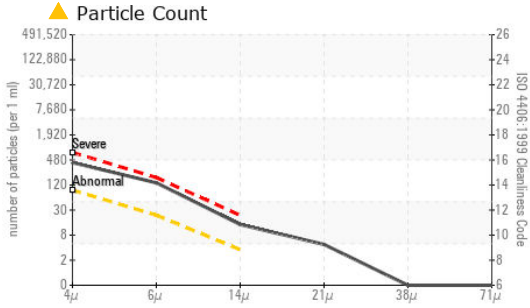
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.09	0.082	0.134	---

Particle Filter (Magn: 200 x)





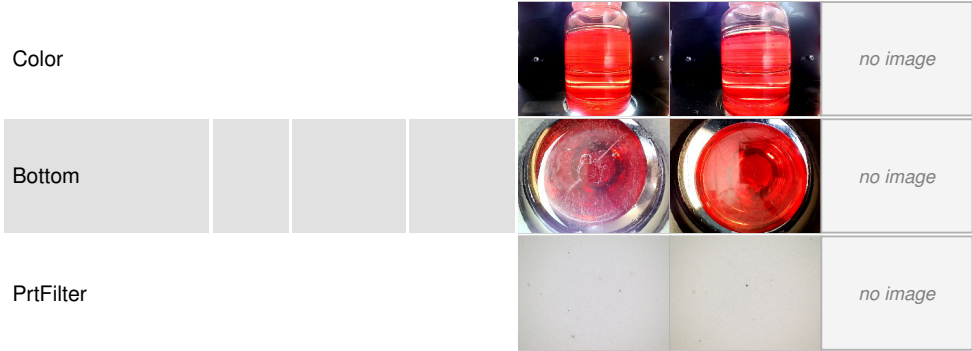
OIL ANALYSIS REPORT



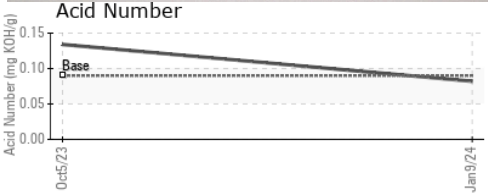
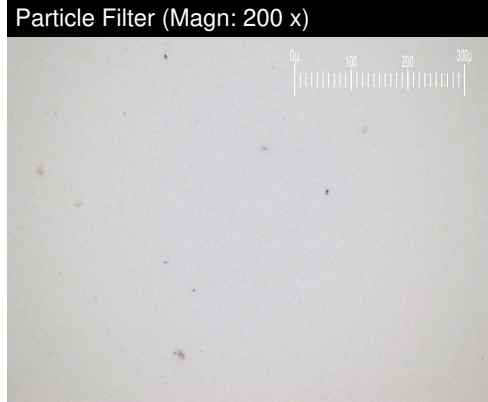
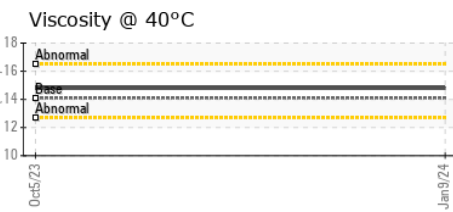
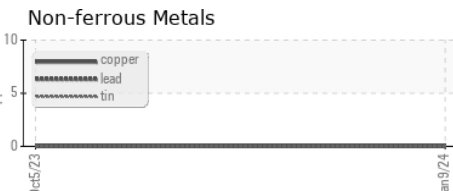
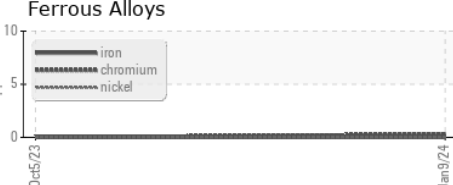
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 D445	14.1	14.8	14.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH06060221 **Recieved** : 12 Jan 2024
Lab Number : 06060221 **Diagnosed** : 23 Jan 2024
Unique Number : 10831603 **Diagnostician** : Doug Bogart
Test Package : PLANT (Additional Tests: CHLORINEXRF, KF, PrtFilter)

BLUE ORIGIN
 35961 HWY 54
 VAN HORN, TX
 US 79855
 Contact: IVAN ARZATE
 iarzate@blueorigin.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)