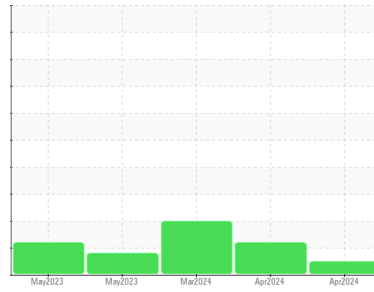




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
BLUE ORGIN GEEX G2 HPU
 Component
Hydraulic System
 Fluid
RADCOLUBE FR282 (--- 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. The amount and size of particulates present in the system are acceptable. Chlorine measured at 1.1 ppm.

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		PH0003851	PH0003051	PH0003053
Sample Date	Client Info		16 Apr 2024	09 Apr 2024	22 Mar 2024
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	1	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	0	<1	<1
Calcium	ppm	ASTM D5185m	0	7	7
Phosphorus	ppm	ASTM D5185m	11	24	26
Zinc	ppm	ASTM D5185m	0	7	11
Sulfur	ppm	ASTM D5185m	71	0	102

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	0	<1
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	0	<1	1
Chlorine Content	ppm	ASTM D5185m	1.10	0.000	11.6
Water	%	ASTM D6304 >0.05	0.007	0.019	0.011
ppm Water	ppm	ASTM D6304 >500	79	195	112

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>320	160	▲ 2872	▲ 8930
Particles >6µm	ASTM D7647	>80	56	▲ 139	▲ 2726
Particles >14µm	ASTM D7647	>20	9	15	▲ 264
Particles >21µm	ASTM D7647	>4	2	5	▲ 77
Particles >38µm	ASTM D7647	>3	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>15/13/11	14/13/10	▲ 19/14/11	▲ 20/19/15

FLUID DEGRADATION

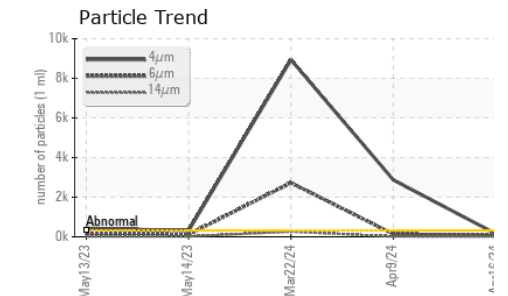
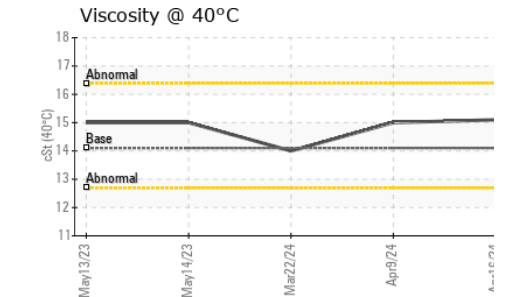
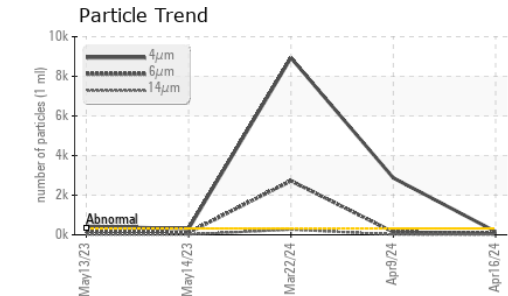
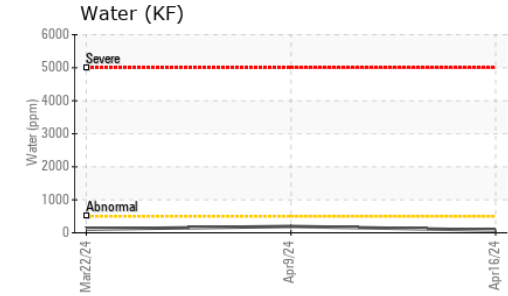
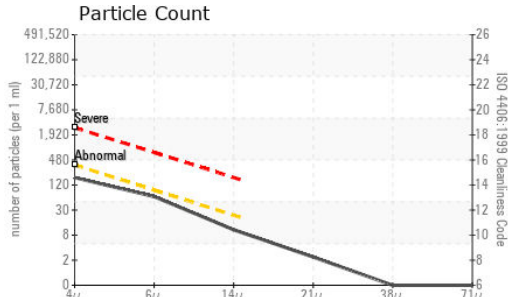
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.09	0.205	0.185	0.18

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT



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

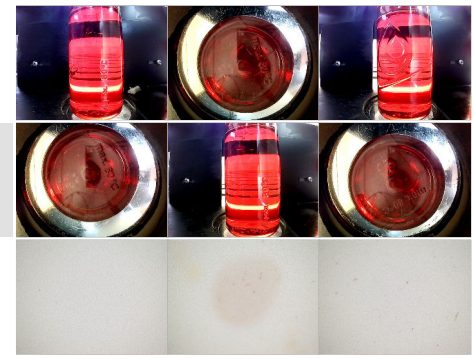
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	14.1	15.1	15.00

SAMPLE IMAGES	method	limit/base	current	history1	history2
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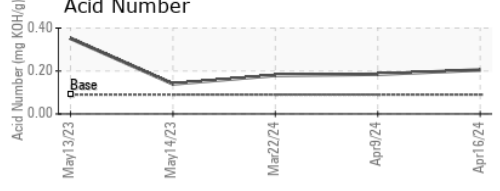
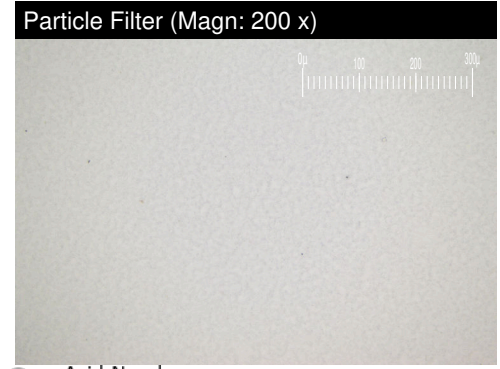
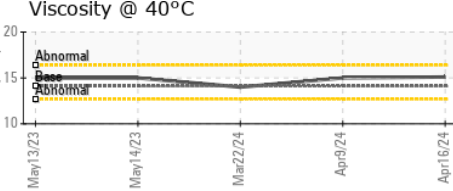
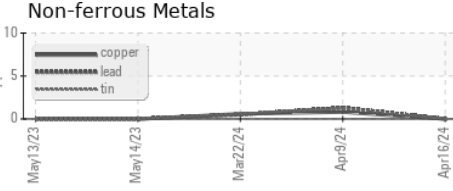
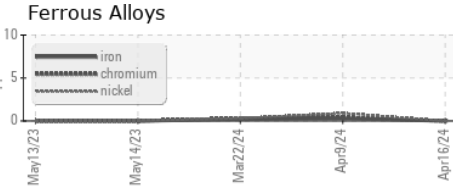
Color

Bottom

PrtFilter



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0003851
Lab Number : 06152444
Unique Number : 10982522
Test Package : PLANT (Additional Tests: CHLORINEXRF, KF, PrtFilter)

BLUE ORIGIN
 35961 HWY 54
 VAN HORN, TX
 US 79855
 Contact: MANUEL HERRERA
 mherrera@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)