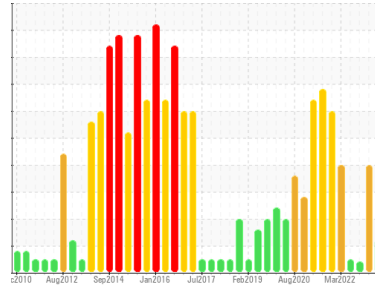




OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Area
(ZONE3) BRUCE B/0B/34340
Machine Id
0B-34340-MV314-ActuatorHydFluid
Component
Hydraulic System
Fluid
SUPRESTA FYRQUEL EHC-S (8 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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		WC0845415	WC0744558	WC
Sample Date	Client Info		04 Jan 2024	20 Jul 2023	15 Dec 2022
Machine Age	kms	Client Info	0	0	0
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>5	0	<1	0
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	0
Lead	ppm	ASTM D5185(m)	>5	0	0	0
Copper	ppm	ASTM D5185(m)	>5	0	<1	0
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)	>5	0	0	0
Beryllium	ppm	ASTM D5185(m)	>5	0	0	0
Cadmium	ppm	ASTM D5185(m)	>5	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		0	<1	1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
Calcium	ppm	ASTM D5185(m)		1	2	0
Phosphorus	ppm	ASTM D5185(m)		36741	28225	26935
Zinc	ppm	ASTM D5185(m)		▲ 7	▲ 9	▲ 6
Sulfur	ppm	ASTM D5185(m)		0	34	1
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

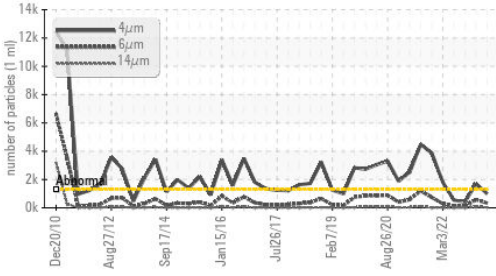
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>5	<1	<1	<1
Sodium	ppm	ASTM D5185(m)	>5	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	2	<1	0
Water	%	ASTM D6304*	>0.08	0.098	▲ 0.115	0.063
ppm Water	ppm	ASTM D6304*	>800	984	▲ 1157.1	636.7

FLUID CLEANLINESS

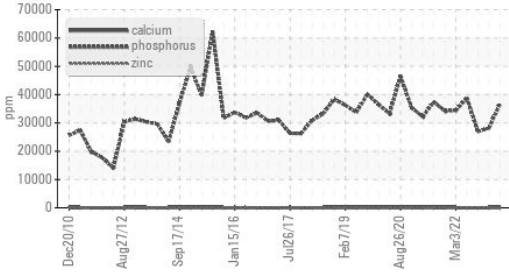
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	1003	▲ 1691	420
Particles >6µm	ASTM D7647	>320	▲ 333	▲ 575	111
Particles >14µm	ASTM D7647	>40	35	▲ 57	16
Particles >21µm	ASTM D7647	>10	14	▲ 15	9
Particles >38µm	ASTM D7647	>3	3	1	4
Particles >71µm	ASTM D7647	>3	2	0	3
Oil Cleanliness	ISO 4406 (c)	>17/15/12	▲ 17/16/12	▲ 18/16/13	16/14/11

OIL ANALYSIS REPORT

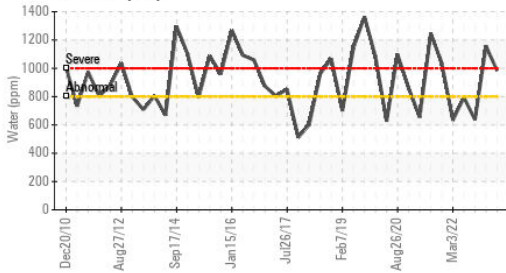
▲ Particle Trend



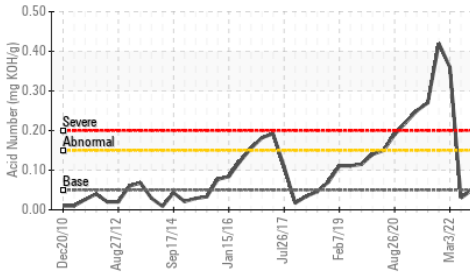
▲ Additives



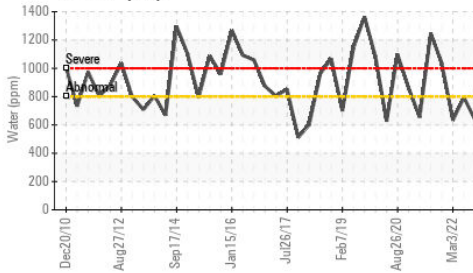
Water (KF)



Acid Number



Water (KF)



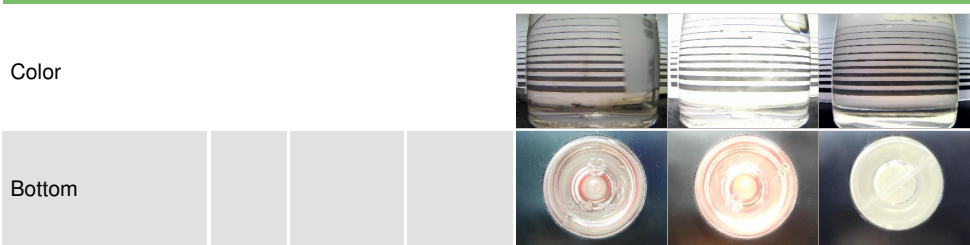
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN) mg KOH/g	ASTM D974*	0.05	0.11	0.11	0.05	
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.08	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

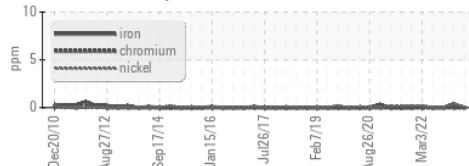
method	limit/base	current	history1	history2		
Visc @ 40°C	cSt	ASTM D7279(m)	47	45.6	39.2	44.2

SAMPLE IMAGES

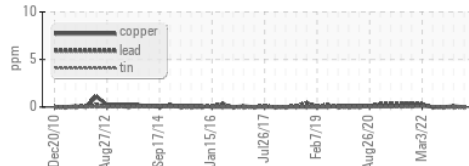


GRAPHS

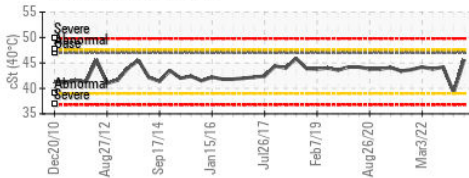
Ferrous Alloys



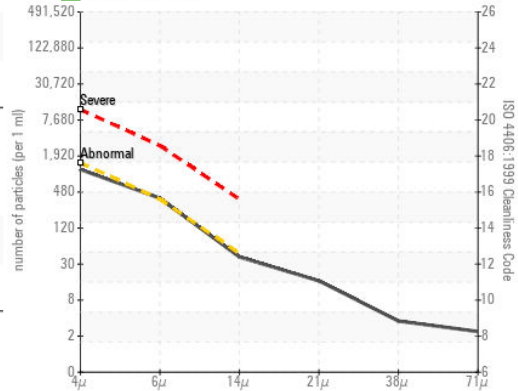
Non-ferrous Metals



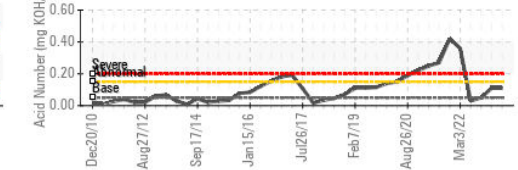
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0845415 **Received** : 17 Jan 2024
Lab Number : 02609579 **Diagnosed** : 19 Jan 2024
Unique Number : 5710665 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Bruce Power - Bruce A PdM
 P.O.Box 1540, 177 Tie Road., RM-222 U2 Column 2N11 615'
 Tiverton, ON
 CA N0G 2T0
 Contact: Pierre Adouki
 pierre.adouki@brucepower.com
 T: (519)361-2673
 F:

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.