



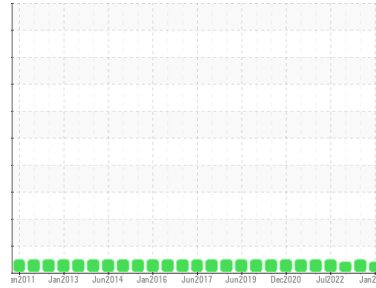
OIL ANALYSIS REPORT

Sample Rating Trend

ADDITIVES



Area
BRUCE B/7/71210
 Machine Id
7-71210-P2-PM Lo Brg Level
 Component
Lower Bearing
 Fluid
ESSO TERESSO ISO 68 (--- GAL)



DIAGNOSIS

Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

Phosphorus ppm levels are abnormally high. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0845387	WC0791673	WC0603570
Sample Date	Client Info		09 Jan 2024	06 Jun 2023	27 Oct 2022
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			ATTENTION	NORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >10	0	0	0
Chromium	ppm	ASTM D5185(m) >5	0	0	0
Nickel	ppm	ASTM D5185(m) >5	0	<1	0
Titanium	ppm	ASTM D5185(m) >5	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >5	1	<1	<1
Lead	ppm	ASTM D5185(m) >5	2	2	2
Copper	ppm	ASTM D5185(m) >5	0	0	0
Tin	ppm	ASTM D5185(m) >5	0	0	0
Antimony	ppm	ASTM D5185(m)	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 4.5	0	0	<1
Barium	ppm	ASTM D5185(m) 0.4	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	0	0	0
Calcium	ppm	ASTM D5185(m) 0	2	<1	2
Phosphorus	ppm	ASTM D5185(m) 0.7	▲ 6	4	▲ 6
Zinc	ppm	ASTM D5185(m) 0	1	1	<1
Sulfur	ppm	ASTM D5185(m) 1315	2465	2391	2349
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

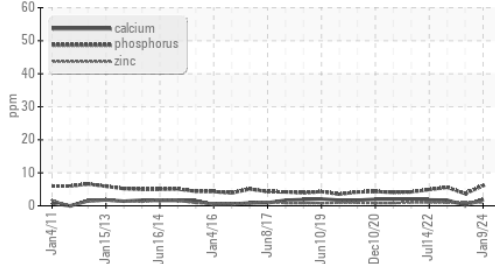
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >5	<1	<1	<1
Sodium	ppm	ASTM D5185(m) >5	0	0	0
Potassium	ppm	ASTM D5185(m) >20	0	0	0
Water	%	ASTM D6304* >0.005	0.002	0.001	0.001
ppm Water	ppm	ASTM D6304* >50	16	11.8	9.9

FLUID CLEANLINESS

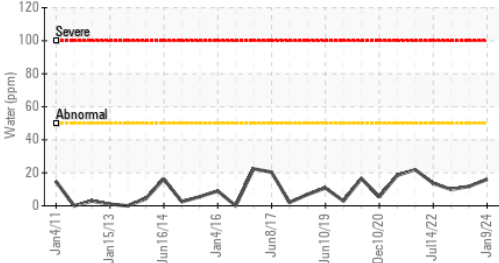
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	560	645	498
Particles >6µm	ASTM D7647	>1300	161	163	114
Particles >14µm	ASTM D7647	>320	22	16	8
Particles >21µm	ASTM D7647	>80	9	5	4
Particles >38µm	ASTM D7647	>20	1	0	1
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/15	16/15/12	17/15/11	16/14/10

OIL ANALYSIS REPORT

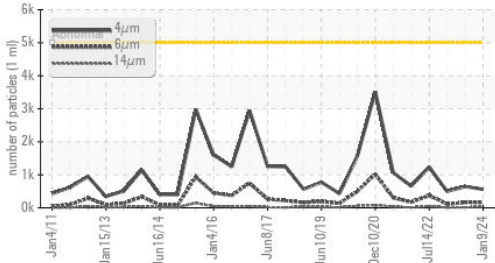
▲ Additives



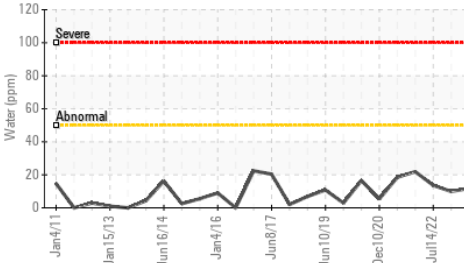
Water (KF)



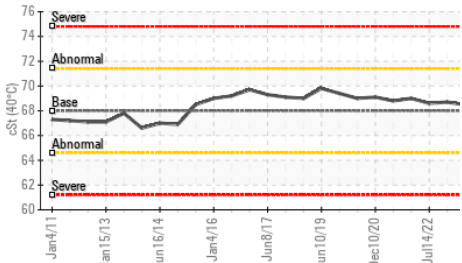
Particle Trend



Water (KF)



Viscosity @ 40°C

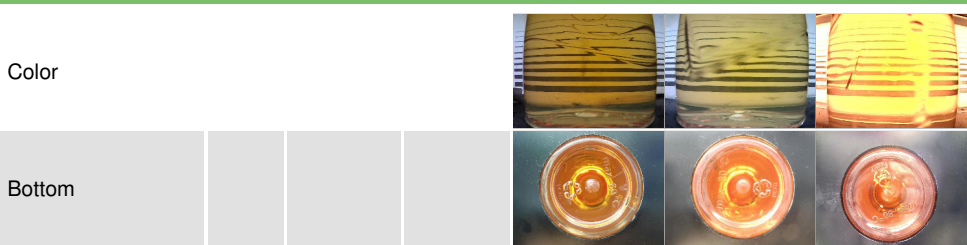


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.14	0.10	0.14

VISUAL		method	limit/base	current	history1	history2
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*	>0.005	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

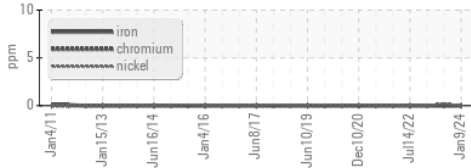
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	69.0	68.5	68.7

SAMPLE IMAGES

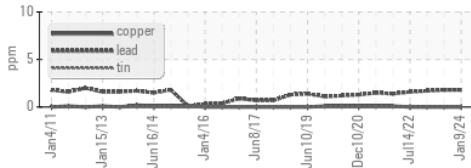


GRAPHS

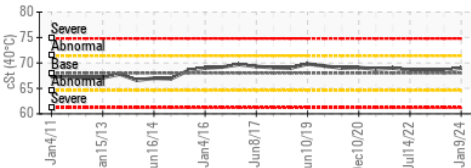
Ferrous Alloys



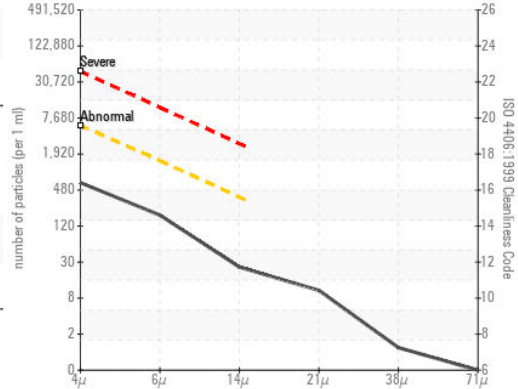
Non-ferrous Metals



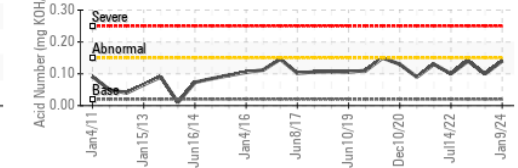
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0845387 **Received** : 17 Jan 2024
Lab Number : **02609385** **Diagnosed** : 18 Jan 2024
Unique Number : 5710471 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Bruce Power - Bruce A PdM
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 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.