



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
BRUCE B/0B/54300 [START UP]
Machine Id
0B-54300-EPG1-E2
Component
Diesel Engine
Fluid
SHELL ROTELLA T4 15W40 (30 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

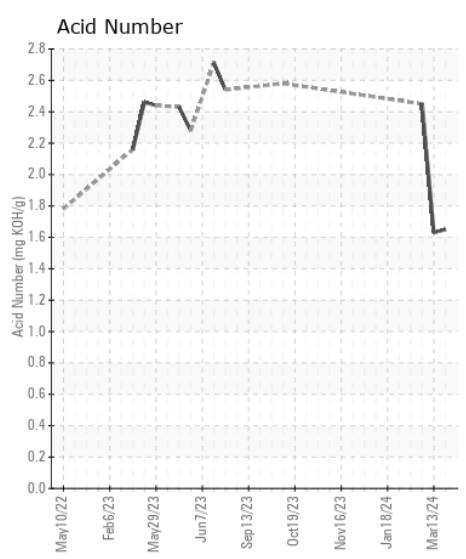
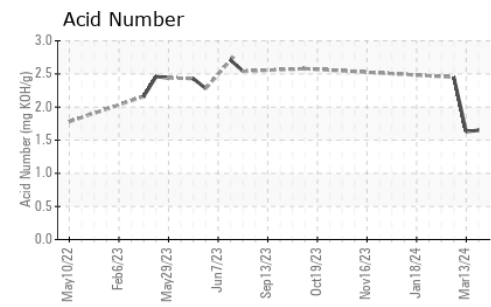
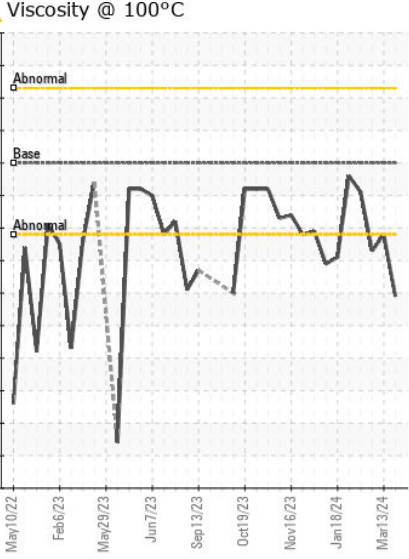
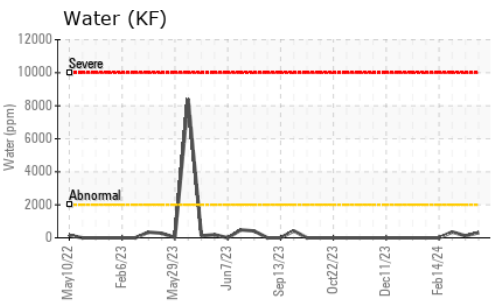
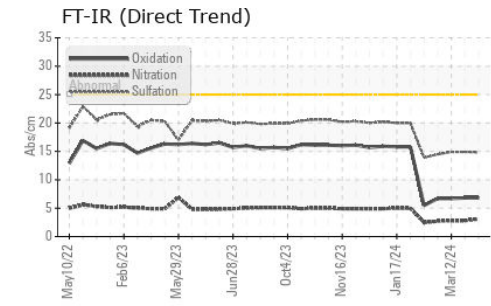
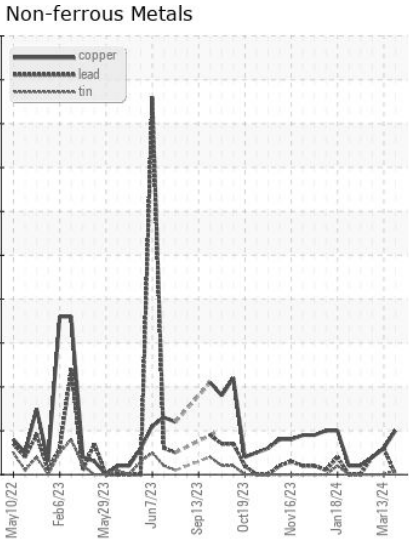
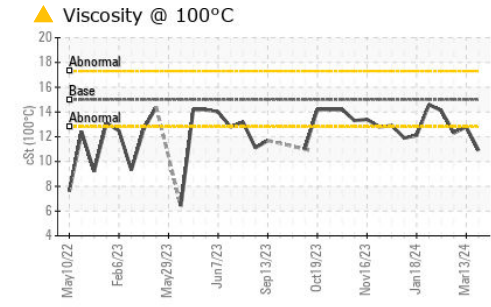
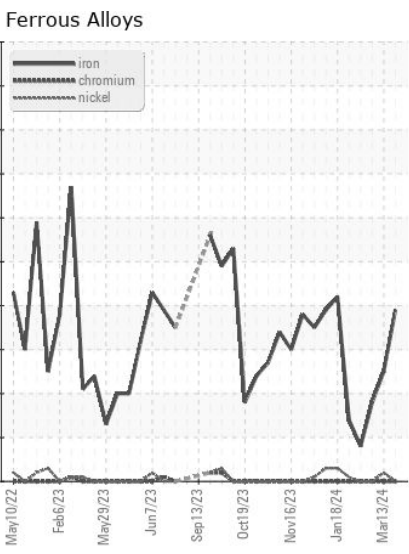
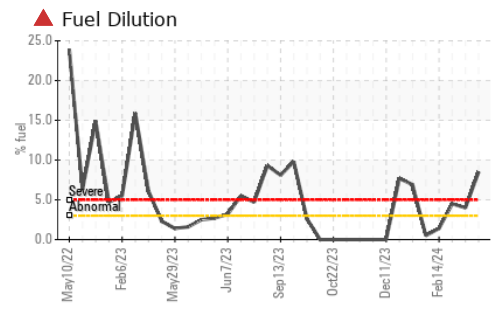
CONTAMINATION

There is a high amount of fuel present in the oil. The water content is negligible. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0896801	WC0896856	WC0896855
Sample Date		Client Info		06 Jun 2024	13 Mar 2024	12 Mar 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL
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Iron	ppm	ASTM D5185(m)	>200	4	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<1	1	1
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>30	1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
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Silicon	ppm	ASTM D5185(m)	>30	18	21	13
Potassium	ppm	ASTM D5185(m)	>20	3	3	3
Fuel	%	ASTM D7593*	>3.0	▲ 8.5	▲ 4	▲ 4.5
Water	%	ASTM D6304*	>0.2	0.031	0.012	0.035
ppm Water	ppm	ASTM D6304*	>2000	311	123	353
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	3.1	2.8	2.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	14.8	14.9	14.9
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*	>0.2	NEG	NEG	NEG
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Sodium	ppm	ASTM D5185(m)		6	6	5
Boron	ppm	ASTM D5185(m)		240	241	240
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		24	26	27
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		7	8	7
Calcium	ppm	ASTM D5185(m)		2093	2217	2216
Phosphorus	ppm	ASTM D5185(m)		610	653	646
Zinc	ppm	ASTM D5185(m)		695	719	715
Sulfur	ppm	ASTM D5185(m)		2210	2455	2447
Oxidation	Abs/.1mm	ASTM D7414*	>25	6.8	6.8	6.7
Acid Number (AN)	mg KOH/g	ASTM D974*		1.65	1.63	2.45
Base Number (BN)	mg KOH/g	ASTM D2896*	10.1	6.19	6.94	6.43
Visc @ 40°C	cSt	ASTM D7279(m)	118	80.6	103	99.8
Visc @ 100°C	cSt	ASTM D7279(m)	15	▲ 10.9	12.8	▲ 12.3
Viscosity Index (VI)	Scale	ASTM D2270*	133	122	119	115



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0896801
Lab Number : 02640981
Unique Number : 5798520
Test Package : MOB 2 (Additional Tests: KF, KV40, PercentFuel, PrtCount, Tan Auto, TAN Man, OilVisat

Bruce Power - Bruce A PdM
 P.O.Box 1540, 177 Tie Road., RM-222 U2 Column 2N11 615
 Tiverton, ON
 CA N0G 2T0
 Contact: Bradley Mangotich
 bradley.mangotich@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.