

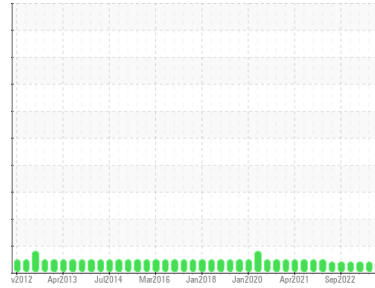


OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

Area
(ZONE3) BRUCE A/2/33120
 Machine Id
2-33120-P3-PM Up Guide Brg
 Component
Upper Guide Bearing
 Fluid
MOBIL DTE 746 (17 GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

The Direct-Reading Ferrographic data (DL, DS, %large) is normal. 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

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. 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	WC0871700	WC0815722	WC0801537
Sample Date	Client Info	04 Jan 2024	02 Oct 2023	10 Jul 2023
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		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>1	0	0	0
Chromium ppm ASTM D5185(m)	>1	0	0	0
Nickel ppm ASTM D5185(m)	>1	<1	0	<1
Titanium ppm ASTM D5185(m)	>5	0	0	0
Silver ppm ASTM D5185(m)		0	<1	0
Aluminum ppm ASTM D5185(m)	>1	<1	0	<1
Lead ppm ASTM D5185(m)	>3	0	<1	0
Copper ppm ASTM D5185(m)	>1	0	<1	0
Tin ppm ASTM D5185(m)	>1	0	0	0
Antimony ppm ASTM D5185(m)		0	0	0
Vanadium ppm ASTM D5185(m)		0	0	0
Beryllium ppm ASTM D5185(m)		0	0	0
Cadmium ppm ASTM D5185(m)		0	0	0

DR-FERROGRAPHY

method	limit/base	current	history1	history2
Large Particles DR-Ferr*		1.3	0.4	0.3
Small Particles DR-Ferr*		0.7	0.3	0.2
Total Particles DR-Ferr*	>---	2	0.7	0.5
Large Particles Percentage % DR-Ferr*		30	14.3	20
Severity Index DR-Ferr*		1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)		0	<1	<1
Barium ppm ASTM D5185(m)		0	<1	0
Molybdenum ppm ASTM D5185(m)		0	0	0
Manganese ppm ASTM D5185(m)		0	0	0
Magnesium ppm ASTM D5185(m)		0	0	0
Calcium ppm ASTM D5185(m)		0	0	<1
Phosphorus ppm ASTM D5185(m)		0	<1	<1
Zinc ppm ASTM D5185(m)		<1	<1	1
Sulfur ppm ASTM D5185(m)		30	54	49
Lithium ppm ASTM D5185(m)		<1	<1	<1

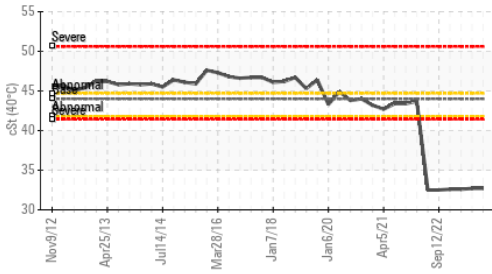
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>5	0	0	<1
Sodium ppm ASTM D5185(m)	>5	<1	<1	<1
Potassium ppm ASTM D5185(m)	>20	4	0	<1
Water % ASTM D6304*	>0.005	0.002	0.001	0.002
ppm Water ppm ASTM D6304*	>50	21	4.5	17.3

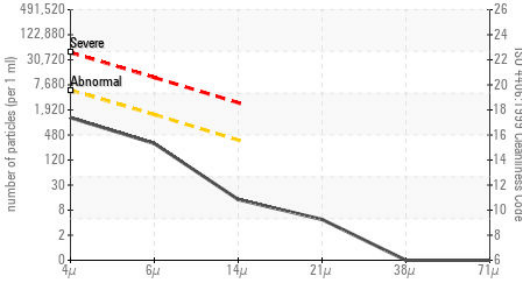


OIL ANALYSIS REPORT

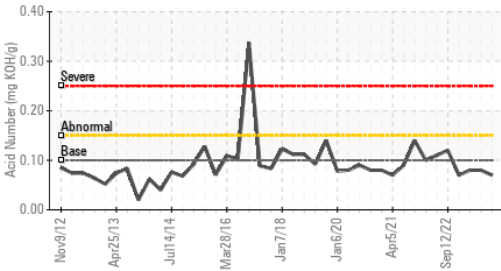
▲ Viscosity @ 40°C



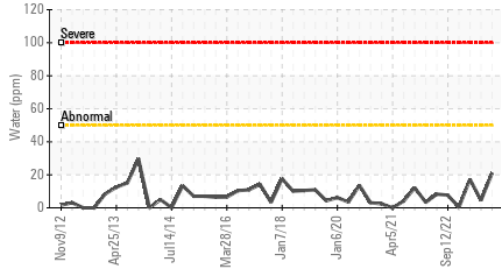
Particle Count



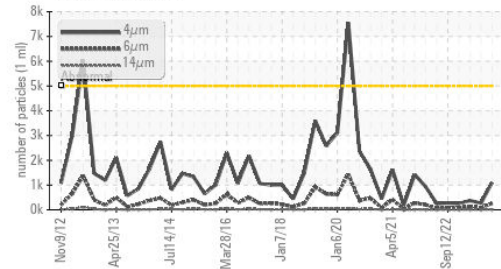
Acid Number



Water (KF)



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	1098	268	372
Particles >6µm	ASTM D7647	>1300	264	86	127
Particles >14µm	ASTM D7647	>320	12	10	13
Particles >21µm	ASTM D7647	>80	4	2	4
Particles >38µm	ASTM D7647	>20	0	0	0
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/15	17/15/11	15/14/10	16/14/11

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.10	0.07	0.08	0.08

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	VLITE
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)	44.0	▲ 32.7	▲ 32.7	▲ 32.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0871700
Lab Number : 02608221
Unique Number : 5709307
Test Package : IND 2 (Additional Tests: Bottom, DR-Ferr, TAN Man)

Bruce Power - Bruce A PdM
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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.