

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area METRO METRO 25011 Component Front Differential

Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

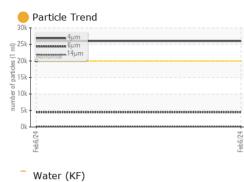
Fluid Condition

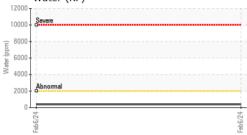
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

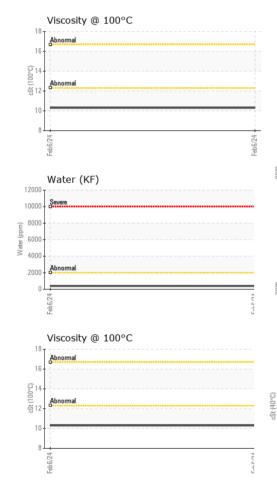
Sample Number Client Info 06 Feb 2024 Sample Date Client Info 06 Feb 2024 Oil Age mis Client Info 0 Oil Age mis Client Info N/A Oil Changed Client Info N/A WEAR METALS method Imithase current history WEAR METALS method Imithase Nickel ppm ASTM 05155 >10 -1 Nickel ppm ASTM 05155 >10 -1 Silver ppm ASTM 05155 >10 -1 Aluminum ppm ASTM 051555 >10 -1 Copper pm ASTM 051555 >10 -1 Aluminum ppm ASTM 051555 >10 -1 Copper pm A	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age mis Client Info 5 Oil Age mis Client Info 0 Sample Status Imite Info N/A WEAR METALS method imit/base current history! WEAR METALS method imit/base current history! Nickel ppm ASTM D5185m >10 <1	Sample Number		Client Info		WC0934541		
Oil Age mis Client Info N/A Sample Status Client Info N/A WEAR METALS method limit/base current history/ history/ Iron ppm ASTM D5185m >500 4 Chromium ppm ASTM D5185m >10 <1	Sample Date		Client Info		06 Feb 2024		
Oli Changed Client Info N/A Sample Status Image of the status I	Machine Age	mls	Client Info		5		
Sample Status Method Imit/base current history1 history2 Iron ppm ASTM D5185m >500 4 Otromium ppm ASTM D5185m >10 <1	Oil Age	mls	Client Info		0		
WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >500 4 Nickel ppm ASTM D5185m >10 <1	Oil Changed		Client Info		N/A		
Iron ppm ASTM D5185m >500 4 Nickel ppm ASTM D5185m >10 <1	Sample Status				ATTENTION		
Chromium ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >10 <1	Iron	ppm	ASTM D5185m	>500	4		
Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >25 2 Aluminum ppm ASTM D5185m >25 2 Lead ppm ASTM D5185m >210 -1 Copper ppm ASTM D5185m >100 <1	Chromium	ppm	ASTM D5185m	>10	<1		
Silver ppm ASTM D5185m <1 Aluminum ppm ASTM D5185m >25 2 Lead ppm ASTM D5185m >25 <1	Nickel	ppm	ASTM D5185m	>10	<1		
Aluminum ppm ASTM D5185m >25 2 Lead ppm ASTM D5185m >25 <1	Titanium	ppm	ASTM D5185m		<1		
Lead ppm ASTM D5185m >25 <1 Copper ppm ASTM D5185m >100 <1	Silver	ppm	ASTM D5185m		<1		
Copper ppm ASTM D5185m >100 <1 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>25	2		
Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m <1	Lead	ppm	ASTM D5185m	>25	<1		
Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m <1	Copper	ppm	ASTM D5185m	>100	<1		
Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1		ppm	ASTM D5185m	>10	<1		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 314 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1	Vanadium	ppm	ASTM D5185m		<1		
Boron ppm ASTM D5185m 314 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1	Cadmium		ASTM D5185m		<1		
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		314		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m		<1		
Calcium ppm ASTM D5185m 1 Phosphorus ppm ASTM D5185m 1689 Zinc ppm ASTM D5185m 0 Sulfur ppm ASTM D5185m 0 Sulfur ppm ASTM D5185m 29313 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 1689 Zinc ppm ASTM D5185m 0 Sulfur ppm ASTM D5185m 29313 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1 Sodium ppm ASTM D5185m >75 1 Potassium ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m		<1		
Zinc ppm ASTM D5185m 0 Sulfur ppm ASTM D5185m 29313 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1 Sodium ppm ASTM D5185m >75 1 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m		1		
SulfurppmASTM D5185m29313CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>751SodiumppmASTM D5185m>20<1	Phosphorus	ppm	ASTM D5185m		1689		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1 Sodium ppm ASTM D5185m >75 1 Potassium ppm ASTM D5185m >20 <1	Zinc	ppm	ASTM D5185m		0		
Silicon ppm ASTM D5185m >75 1 Sodium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 Water % ASTM D6304 >.2 0.037 Water ppm ASTM D6304 >.2 0.037 ppm Water ppm ASTM D6304 >2000 379 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 26015 Particles >4µm ASTM D7647 >20000 26015 Particles >4µm ASTM D7647 >640 258 Particles >21µm ASTM D7647 >40 2 Particles >38µm ASTM D7647 >40 2 Oil Cleanliness ISO 4406 (c) 21/19/16	Sulfur	ppm	ASTM D5185m		29313		
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 Water % ASTM D6304 >.2 0.037 ppm Water ppm ASTM D6304 >.2 0.037 ppm Water ppm ASTM D6304 >.2000 379 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 26015 Particles >6µm ASTM D7647 >5000 4447 Particles >14µm ASTM D7647 >640 258 Particles >21µm ASTM D7647 >160 66 Particles >38µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base <th< td=""><td>Silicon</td><td>ppm</td><td>ASTM D5185m</td><td>>75</td><th>1</th><td></td><td></td></th<>	Silicon	ppm	ASTM D5185m	>75	1		
Water % ASTM D6304 >.2 0.037 ppm Water ppm ASTM D6304 >.2000 379 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 26015 Particles >6µm ASTM D7647 >5000 4447 Particles >14µm ASTM D7647 >640 258 Particles >21µm ASTM D7647 >160 66 Particles >38µm ASTM D7647 >40 2 Particles >71µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		0		
ppm Water ppm ASTM D6304 >2000 379 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 26015 Particles >6µm ASTM D7647 >5000 4447 Particles >14µm ASTM D7647 >640 258 Particles >21µm ASTM D7647 >160 66 Particles >38µm ASTM D7647 >40 2 Particles >71µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >2/119/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	<1		
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 26015 Particles >6µm ASTM D7647 >5000 4447 Particles >6µm ASTM D7647 >640 258 Particles >14µm ASTM D7647 >160 66 Particles >21µm ASTM D7647 >160 66 Particles >38µm ASTM D7647 >40 2 Particles >71µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>.2	0.037		
Particles >4μm ASTM D7647 >20000 26015 Particles >6μm ASTM D7647 >5000 4447 Particles >14μm ASTM D7647 >640 258 Particles >21μm ASTM D7647 >160 66 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >40 2 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm	ASTM D6304	>2000	379		
Particles >6μm ASTM D7647 >5000 4447 Particles >14μm ASTM D7647 >640 258 Particles >21μm ASTM D7647 >160 66 Particles >21μm ASTM D7647 >100 2 Particles >38μm ASTM D7647 >40 2 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >640 258 Particles >21µm ASTM D7647 >160 66 Particles >38µm ASTM D7647 >40 2 Particles >38µm ASTM D7647 >40 2 Particles >71µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2					-		
Particles >21μm ASTM D7647 >160 66 Particles >38μm ASTM D7647 >40 2 Particles >37μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>5000	4447		
Particles >38μm ASTM D7647 >40 2 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>640			
Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>160	66		
Oil Cleanliness ISO 4406 (c) >21/19/16 22/19/15 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>40	2		
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>10	0		
	Oil Cleanliness		ISO 4406 (c)	>21/19/16	e 22/19/15		
Acid Number (AN) mg KOH/g ASTM D8045 2.62	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		2.62		



OIL ANALYSIS REPORT







	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
Feb6/24	Appearance	scalar	*Visual	NORML	NORML		
- B	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		58.4		
	Visc @ 100°C	cSt	ASTM D445		10.3		
	Viscosity Index (VI)	Scale	ASTM D2270		166		
	SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Fab 6,04	Color				Pier_ Unt2- Codiri- Unt2-	no image	no image
	Bottom					no image	no image
Feb6024	Non-ferrous Metal	S		491,520 122,880 30,720 122,880 122,880 122,880 1,1,920 1,2,940 1,2,	μ 6μ Acid Number	14μ 21μ	
Pro Pro	Feb6/24			Feb6/24	Feb6,24		Feb6/24

Report Id: bastarhd [WUSCAR] 06180628 (Generated: 05/18/2024 16:27:04) Rev: 1

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