

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **R&M DD-5-29 C0144 - TROLLEY (S/N 1695709506)** Gearbox

Gearbox Fluid

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

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 no indication of any contamination in the oil.

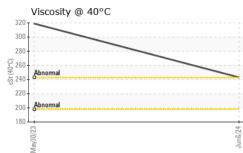
Fluid Condition

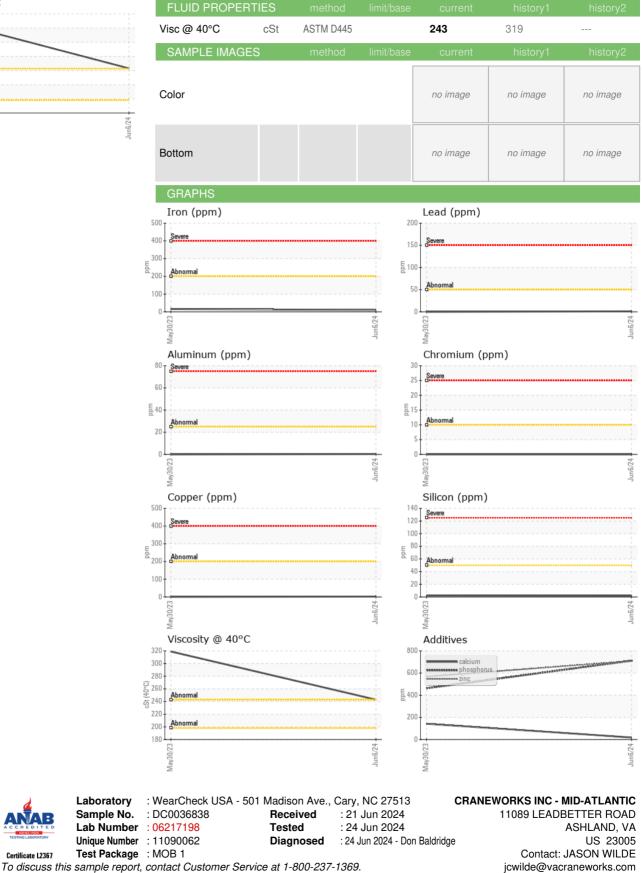
The condition of the oil is acceptable for the time in service.

Sample NumberSample DateIMachine AgehrsOil AgehrsOil ChangedISample StatusICONTAMINATIONVaterWaterWEAR METALSIronppmChromiumppmNickelppmSilverppmAluminumppmCopperppmTinppmCadmiumppmBoronppmBariumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	limit/base >0.2 limit/base >200 >10 >10 >10 >25 >50 >200 >10 >10	DC0036838 06 Jun 2024 0 N/A NORMAL 0 Current 9 0 Current 0 0 4 1 0 0 1 1 2 2 3 1 1 2 3 1 1 1 2 3 1 1 1 2 1 1 1 1	DC0029167 30 May 2023 0 Not Changd NORMAL NEG NEG 16 0 0 16 0 0 4 16 0 0 0 16 0 0 0 16 0 0 0 16 0 0 0 0 0	 history2 history2 -
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Oil ChangedSample StatusCONTAMINATIONWaterWEAR METALSIronppmChromiumppmChromiumppmSilverppmAluminumppmLeadppmCopperppmTinppmCadmiumppmBoronppmBariumppmMalganeseppmMagnesiumppmCalciumppmCalciumppmCalciumppmZincppm	method WC Method ASTM D5185m ASTM D5185m Method ASTM D5185m	>0.2 limit/base >200 >10 >10 >25 >50 >200 >10 >10	NORMAL current NEG 9 0 <1 0 <1 1 2 <1 1 2 <1 0 0 0 current 4 2 <1 0 0 0 0 0 0 0 0 0 0 0 0 0	NORMAL history1 NEG history1 16 0 0 0 0 0 0 <1	history2 history2 history2 history2
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AluminumppmLeadppmCopperppmTinppmVanadiumppmCadmiumppmADDITIVESBoronppmBariumppmMolybdenumppmMagnesiumppmCalciumppmPhosphorusppmZincppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>50 >200 >10	<1 1 2 <1 0 0 current <1	0 0 <1 0 <1 0 history1 0	 history2
Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>50 >200 >10	1 2 <1 0 0 current <1	0 <1 0 <1 0 history1	 history2
Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>200 >10	2 <1 0 0 current <1	<1 0 <1 0 history1 0	 history2
TinppmVanadiumppmCadmiumppmCadmiumppmADDITIVESppmBoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmPhosphorusppmZincppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>10	<1 0 0 current <1	0 <1 0 history1	 history2
TinppmVanadiumppmCadmiumppmCadmiumppmADDITIVESppmBoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmPhosphorusppmZincppm	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m		0 0 current <1	<1 0 history1 0	 history2
Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	0 current <1	0 history1 0	 history2
ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm	method ASTM D5185m ASTM D5185m	limit/base	current <1	history1 0	history2
Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm	ASTM D5185m ASTM D5185m	limit/base	<1	0	
BariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppm	ASTM D5185m				
Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm			0	0	
ManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppm	ASTM D5185m		-	0	
Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm	10111 2010011		0	0	
Calcium ppm Phosphorus ppm Zinc ppm	ASTM D5185m		1	<1	
Phosphorus ppm Zinc ppm	ASTM D5185m		11	0	
Zinc ppm	ASTM D5185m		18	142	
	ASTM D5185m		711	462	
	ASTM D5185m		709	567	
Sulfur ppm	ASTM D5185m		14209	15679	
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m	>50	2	2	
Sodium ppm	ASTM D5185m		3	3	
Potassium ppm	ASTM D5185m	>20	2	0	
VISUAL	method	limit/base	current	history1	history2
White Metal scala	ar *Visual	NONE	NONE	NONE	
Yellow Metal scala	ar *Visual	NONE	NONE	NONE	
Precipitate scala	ar *Visual	NONE	NONE	NONE	
Silt scala	ar *Visual	NONE	NONE	NONE	
Debris scala	ar *Visual	NONE	NONE	NONE	
Sand/Dirt scala	ar *Visual	NONE	NONE	NONE	
Appearance scala	ar *Visual	NORML	NORML	NORML	
Odor scala	ar *Visual	NORML	NORML	NORML	
Emulsified Water scala		>0.2		NEO	
Free Water scala	ar *Visual	~ · · · L	NEG	NEG	



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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Certificate 12367

Contact/Location: JASON WILDE - CRAASHMA

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