

Machine Id **R&M DD-5-29 C0143 - WEST BRIDGE (S/N 1695709505)** Component Gearbox

{not provided} (--- GAL)

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.

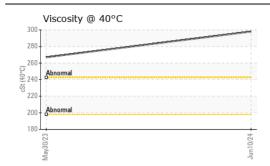
FLUID CONDITION

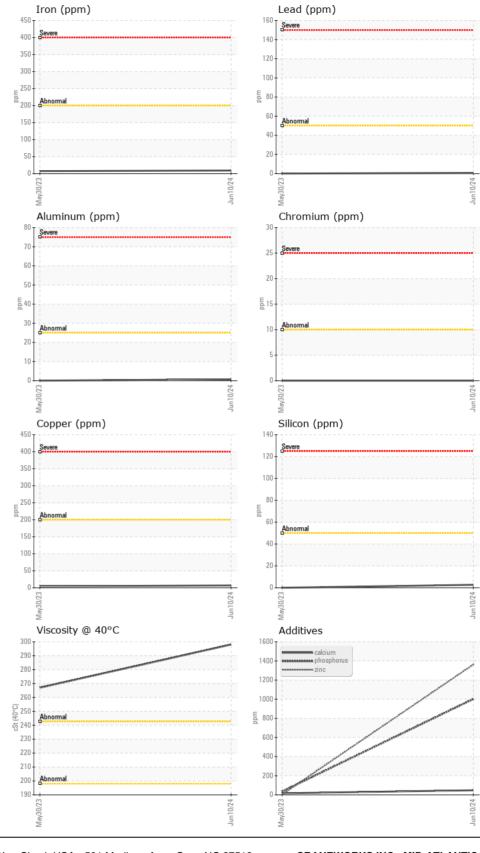
The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/AbnCurrentHistory1History2Sample NumberClient InfoDC0036834DC0029170Sample DateClient InfoI0 Jun 202430 May 2023Machine AgehrsClient Info00Oil AgehrsClient InfoO0Filter AgehrsClient InfoM/AN/AOil ChangedClient InfoM/AN/AFilter ChangedClient InfoM/AN/ASample StatusClient InfoM/AN/AIronppmASTM D5185m>20097NickelppmASTM D5185m>1000NickelppmASTM D5185m>10Cl0SilverppmASTM D5185m>50<10LeadppmASTM D5185m>50<10VanadiumppmASTM D5185m>100<VanadiumppmASTM D5185m>100<Yellow Metalscalar"VisualNONENONENONEYellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185m5030Yellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185m5030 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
Sample DateClient Info10 Jun 202430 May 2023Machine AgehrsClient Info00Oil AgehrsClient Info00Filter AgehrsClient InfoN/AN/AOil ChangedClient InfoN/AN/AFilter ChangedClient InfoN/AN/AFilter ChangedClient InfoN/AN/ASample StatusVNORMALNORMALIronppmASTM D5185m<>20097NickelppmASTM D5185m>1000NickelppmASTM D5185m>100SilverppmASTM D5185m>2074AluminumppmASTM D5185m>20074LeadppmASTM D5185m>20074VanadiumppmASTM D5185m>100VanadiumppmASTM D5185m>100<Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040SoliconppmASTM D5185m>20A0 <trr>Soli</trr>	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info00Oil AgehrsClient Info00Filter AgehrsClient InfoN/AN/AOil ChangedClient InfoN/AN/AFilter ChangedClient InfoN/AN/AFilter ChangedClient InfoN/AN/ASample StatusVisualNORMALNORMALIronppmASTM D5185m>20097NickelppmASTM D5185m>1000NickelppmASTM D5185m>10Cl0SilverppmASTM D5185m>20074AluminumppmASTM D5185m>207AluminumppmASTM D5185m>2074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>100<VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20030SiliconppmASTM D5185m>200A0 <td< th=""><th>Sample Number</th><th></th><th>Client Info</th><th></th><th>DC0036834</th><th>DC0029170</th><th></th></td<>	Sample Number		Client Info		DC0036834	DC0029170	
Oil AgehrsClient Info00Filter AgehrsClient InfoN/AN/AOil ChangedClient InfoN/AN/AN/AFilter ChangedClient InfoN/AN/AN/ASample StatusClient InfoN/AN/AN/AIronppmASTM D5185m>20097ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10SilverppmASTM D5185m>10<10AluminumppmASTM D5185m>25<10LeadppmASTM D5185m>20074CopperppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>2030ValdervisualNONENONENONESiliconppmASTM	Sample Date		Client Info		10 Jun 2024	30 May 2023	
Filter AgehrsClient Info00Oil ChangedClient InfoN/AN/AFilter ChangedClient InfoN/AN/ASample StatusNORMALNORMALNORMALIronppmASTM D5185m>20097ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10c10TitaniumppmASTM D5185m>10c10SilverppmASTM D5185m>20c10AluminumppmASTM D5185m>20074LeadppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>20074White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2030Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040PotassiumppmASTM D5185m>2040Si	Machine Age	hrs	Client Info		0	0	
Oil ChangedClient InfoN/AN/AN/AFilter ChangedClient InfoN/AN/ASample StatusClient InfoN/AN/AIronppmASTM D5185m>20097ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m>10<10SilverppmASTM D5185m>25<10AluminumppmASTM D5185m>20074LeadppmASTM D5185m>20074VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>2030Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040PotassiumppmASTM D5185m>2040Silitscala	Oil Age	hrs	Client Info		0	0	
Filter ChangedClient InfoN/AN/AN/ASample StatusClient InfoN/ANORMALIronppmASTM D5185m>20097ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m>10<10SilverppmASTM D5185m>20<10AluminumppmASTM D5185m>25<10LeadppmASTM D5185m>20074CopperppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5030SiliconppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONEGodrscalar*VisualNORHNORHLNORHL <tr< th=""><th>Filter Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th>0</th><th></th></tr<>	Filter Age	hrs	Client Info		0	0	
Sample StatusNORMALNORMALNORMALIronppmASTM D5185m>20097ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m0<10SilverppmASTM D5185m25<10AluminumppmASTM D5185m>20074LeadppmASTM D5185m>20074CopperppmASTM D5185m>20074TinppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040Yellow Metalscalar*VisualNONENONENONESilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORML </th <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th>N/A</th> <th></th>	Oil Changed		Client Info		N/A	N/A	
Iron ppm ASTM D5185m >200 9 7 Chromium ppm ASTM D5185m >10 0 0 Nickel ppm ASTM D5185m >10 <1 0 Titanium ppm ASTM D5185m >10 <1 0 Silver ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m >25 <1 0 Lead ppm ASTM D5185m >200 7 4 Copper ppm ASTM D5185m >200 7 4 Vanadium ppm ASTM D5185m >200 7 4 Vanadium ppm ASTM D5185m >10 0 <1 Vanadium ppm ASTM D5185m >10 0 <1 Yellow Metal scalar *Visual NONE	Filter Changed		Client Info		N/A	N/A	
ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m0<1SilverppmASTM D5185m00AluminumppmASTM D5185m>25<10LeadppmASTM D5185m>20074CopperppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040Silitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLQdorscalar*VisualNORMLNORMLNORML	Sample Status				NORMAL	NORMAL	
ChromiumppmASTM D5185m>1000NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m0<1SilverppmASTM D5185m00AluminumppmASTM D5185m>25<10LeadppmASTM D5185m>20074CopperppmASTM D5185m>20074VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040SiliconppmASTM D5185m>2040Silitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLQdorscalar*VisualNORMLNORMLNORML				000	•		
NickelppmASTM D5185m>10<1					-		
TitaniumppmASTM D5185mO<1					-		
SilverppmASTM D5185m00AluminumppmASTM D5185m>25<10LeadppmASTM D5185m>50<10CopperppmASTM D5185m>20074TinppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1Vellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5030PotassiumppmASTM D5185m>2040Silitscalar*VisualNONENEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORENONENONEAppearancescalar*VisualNORMLNORMLNORML				>10			
AluminumppmASTM D5185m>25<1							
LeadppmASTM D5185m>50<1				05	-		
CopperppmASTM D5185m>20074TinppmASTM D5185m>100<1VanadiumppmASTM D5185m>100<1White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5030PotassiumppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORML							
TinppmASTM D5185m>100<1							
VanadiumppmASTM D5185m0<1					-		
White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5030PotassiumppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML				>10	-		
Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5030PotassiumppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML							
SiliconppmASTM D5185m>5030PotassiumppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML							
PotassiumppmASTM D5185m>2040WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Silicon	ppm	ASTM D5185m	>50	3	0	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Potassium	ppm	ASTM D5185m	>20	4	0	
Debrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Water		WC Method	>0.2	NEG	NEG	
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Debris	scalar	*Visual	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water scalar *Visual >0.2 NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Sodium ppm ASTM D5185m 5 <1	Sodium	ppm	ASTM D5185m		5	<1	
Boron ppm ASTM D5185m 12 0			ASTM D5185m			0	
Barium ppm ASTM D5185m 0 0	Barium		ASTM D5185m		0	0	
Molybdenum ppm ASTM D5185m 0 <1	Molybdenum		ASTM D5185m		0	<1	
Manganese ppm ASTM D5185m 1 <1			ASTM D5185m		1	<1	
Magnesium ppm ASTM D5185m 99 3	Magnesium	ppm	ASTM D5185m		99	3	
Calcium ppm ASTM D5185m 48 17	Calcium	ppm	ASTM D5185m		48	17	
Phosphorus ppm ASTM D5185m 1001 35	Phosphorus		ASTM D5185m		1001	35	
Zinc ppm ASTM D5185m 1360 4			ASTM D5185m		1360		
Sulfur ppm ASTM D5185m 8998 2987	Sulfur	ppm	ASTM D5185m		8998	2987	
	Vier @ 1000		ASTM D445		298	267	

Report Id: CRAASHMA [WUSCAR] 06217179 (Generated: 06/24/2024 14:42:28) Rev: 1

Contact/Location: JASON WILDE - CRAASHMA





CRANEWORKS INC - MID-ATLANTIC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received 11089 LEADBETTER ROAD : DC0036834 : 21 Jun 2024 Lab Number : 06217179 Tested ASHLAND, VA : 24 Jun 2024 Diagnosed Unique Number : 11090043 : 24 Jun 2024 - Don Baldridge US 23005 Test Package : MOB 1 Contact: JASON WILDE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jcwilde@vacraneworks.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

ρĭ

Contact/Location: JASON WILDE - CRAASHMA Page 2 of 2