

OIL ANALYSIS REPORT

Area CITY OF BRANDON Machine Id HAMILTON GEAR #3 SCRAPER Component Gearbox Fluid

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the component.

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LE0000308		
Sample Date		Client Info		26 Aug 2009		
Machine Age	mths	Client Info		360		
Oil Age	mths	Client Info		24		
Filter Age	mths	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron				4		
Iron Chromium	ppm	ASTM D5185(m)		1		
	ppm	ASTM D5185(m)		<1		
Nickel	ppm	ASTM D5185(m)		0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		0		
Lead	ppm	ASTM D5185(m)		<1		
Copper	ppm	ASTM D5185(m)		5		
Tin	ppm	ASTM D5185(m)		<1		
Vanadium	ppm	ASTM D5185(m)	NONE	0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)		19		
Potassium	ppm	ASTM D5185(m)		0		
Water		WC Method		NEG		
				NEG		
Silt	scalar	Visual*	NONE	NONE		
Silt Debris	scalar scalar	Visual* Visual*	NONE NONE			
			-	NONE		
Debris	scalar	Visual*	NONE	NONE VLITE		
Debris Sand/Dirt	scalar scalar	Visual* Visual*	NONE	NONE VLITE NONE		
Debris Sand/Dirt Appearance	scalar scalar scalar	Visual* Visual* Visual*	NONE NONE NORML	NONE VLITE NONE NORML		
Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual*	NONE NONE NORML	NONE VLITE NONE NORML NORML NEG		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	NONE NONE NORML	NONE VLITE NONE NORML NORML NEG 0		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NONE NORML NORML NEG 0 9		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NONE NORML NEG 0 9 0		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NORML NORML NEG 0 9 0 0		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NORML NORML NEG 0 9 0 0 0 0		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NONE NORML NEG 0 9 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NORML NORML NEG 0 9 0 0 0 0 0 0 0 2 1 3		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NORML NORML NEG 0 9 0 0 0 0 0 0 0 2 1 3 3 350		
Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML	NONE VLITE NORML NORML NEG 0 9 0 0 0 0 0 0 0 2 1 3		

Visc @ 40°C

cSt

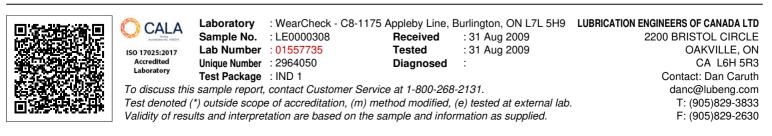
ASTM D7279(m)

Contact/Location: Dan Caruth - LUBOAK

524



Ferrous Alloys 10 mdd 0 Non-ferrous Metals 10 lead 0 Viscosity @ 40°C 52 524. 524 (524. 524 cSt (40°C) 524 523. 523. 523.4 523.2 523 Aug26/09



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