

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

EQUIPMENT G. GAGNON Machine Id KIOTI KIOTI CS2220

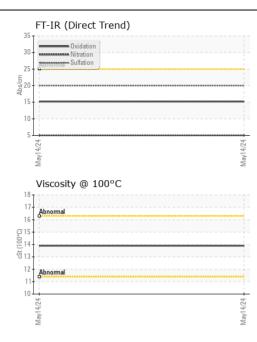
Component Diesel Engine

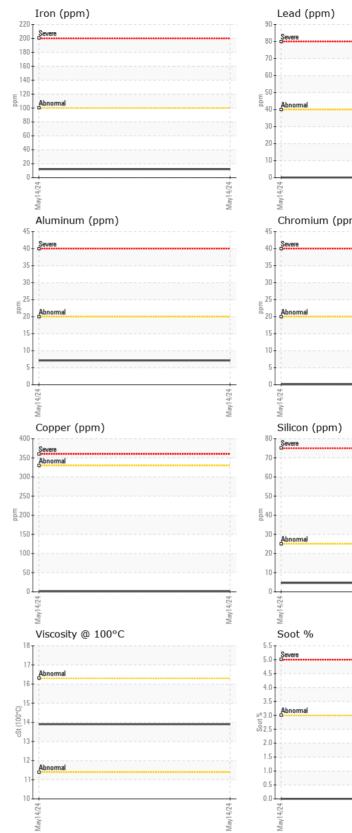
SHELL 15W40 (--- GAL)

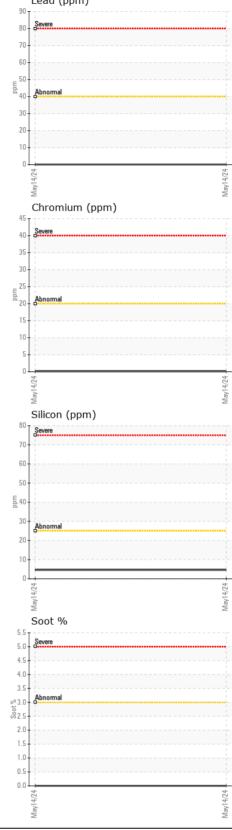
SILLE IJW40 (GAL)					.,		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		KT0001013		
	Sample Date		Client Info		14 May 2024		
	Machine Age	hrs	Client Info		148		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	12		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	7		
	Lead	ppm	ASTM D5185(m)	>40	0		
	Copper	ppm	ASTM D5185(m)		1		
	Tin	ppm	ASTM D5185(m)		3		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	VLITE		
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CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	5		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		5		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol Soot %	%	WC Method	. 0	NEG 0		
	Nitration	70 Abs/cm	ASTM D7844* ASTM D7624*	>3 >20	5.0		
	Sulfation	Abs/.1mm	ASTM D7624 ASTM D7415*	>20	20.0		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water		Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>150	1		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		160		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		5		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		46		
	Calcium	ppm	ASTM D5185(m)		2045		
	Phosphorus	ppm	ASTM D5185(m)		919		
	Zinc	ppm	ASTM D5185(m)		1044		
	Sulfur	ppm	ASTM D5185(m)	05	2752		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	15.2		

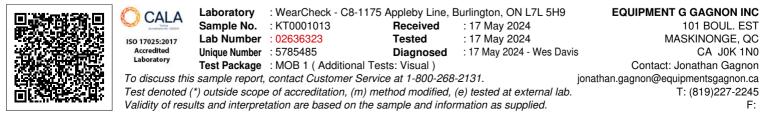
Visc @ 100°C cSt ASTM D7279(m)

13.9









Contact/Location: Jonathan Gagnon - EQUMAS Page 2 of 2