

## {UNASSIGNED} Machine Id KIOTI Herzing-56308 Main Engine

KIOTI 15W40 (--- GAL)

## RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

#### WEAR

All component wear rates are normal.

# CONTAMINATION

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### **FLUID CONDITION**

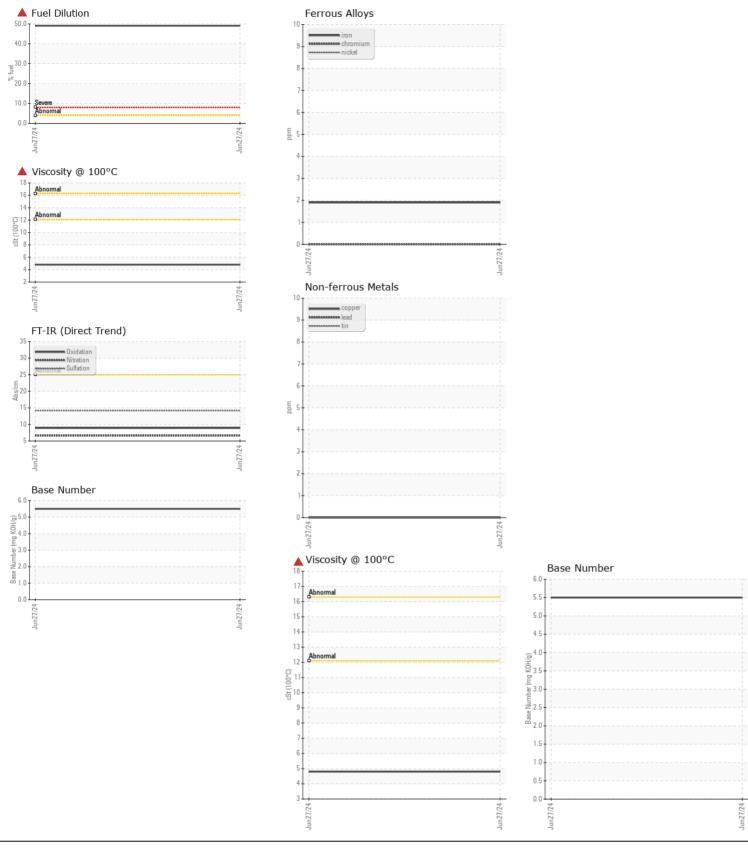
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

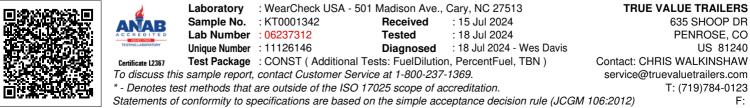
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KT0001342		
Sample Date		Client Info		27 Jun 2024		
Machine Age	hrs	Client Info		160		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>75	2		
Chromium	ppm	ASTM D5185m	>8	0		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>15	2		
Lead	ppm	ASTM D5185m	>18	0		
Copper	ppm	ASTM D5185m	>80	0		
Tin	ppm	ASTM D5185m	>14	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>20	14		
Potassium	ppm	ASTM D5185m	>20	0		
Fuel	%	ASTM D3524	>4.0	<b>4</b> 9.1		
Water		WC Method	>0.1	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844		0.1		
Nitration	Abs/cm	*ASTM D7624	>20	6.6		
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.2		
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	scalar	*Visual	>0.1	NEG		
Sodium			. 7E	0		
Sodium	ppm	ASTM D5185m	>75	2		
Boron	ppm	ASTM D5185m		28		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		48		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		15		
Calcium	ppm	ASTM D5185m		1213		
Phosphorus	ppm	ASTM D5185m		592		
Zinc	ppm	ASTM D5185m		660		
Sulfur	ppm	ASTM D5185m		2405		
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.9		
Base Number (BN)	mg KOH/g	ASTM D2896		5.5		

4.8

ASTM D445

Visc @ 100°C cSt





Contact/Location: CHRIS WALKINSHAW - TRUPEN Page 2 of 2