

### **OIL ANALYSIS REPORT**

#### Area [43977886] Machine Id 9462

# Component Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

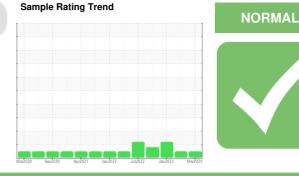
All component wear rates are normal.

#### Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

### Fluid Condition

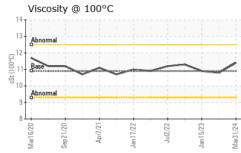
The condition of the oil is acceptable for the time in service.

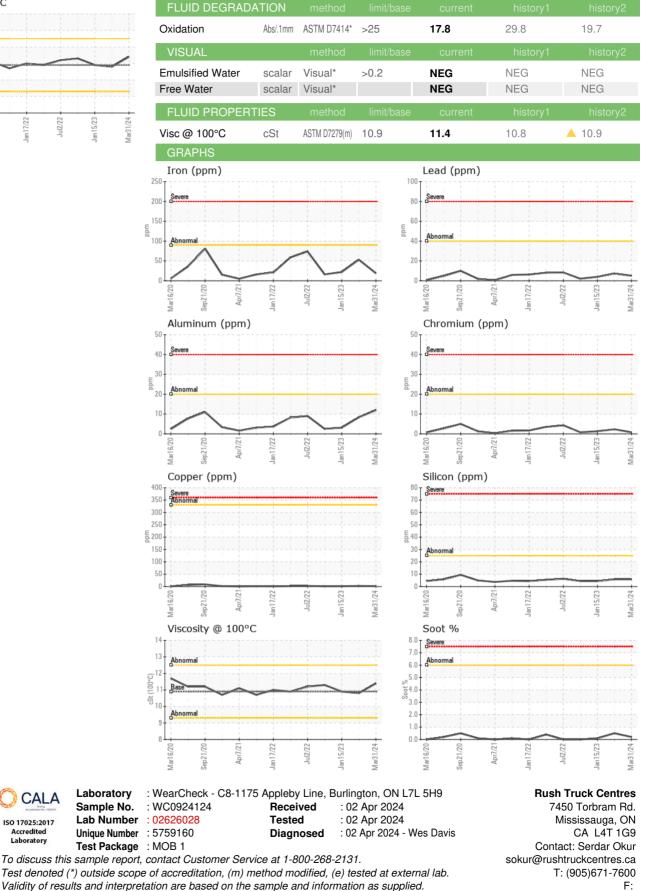


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0924124	WC0853358	WC0702999
Sample Date		Client Info		31 Mar 2024	24 Sep 2023	15 Jan 2023
Machine Age	kms	Client Info		318120	303408	281626
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<b>2</b> .7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	19	53	22
Chromium	ppm	ASTM D5185(m)	>20	<1	2	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	12	8	3
Lead	ppm	ASTM D5185(m)	>40	5	7	4
Copper	ppm	ASTM D5185(m)	>330	2	2	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	30	31	46
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	2	6	10
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	752	718	708
Calcium	ppm	ASTM D5185(m)	3000	1364	1298	1386
Phosphorus						
1 noophorad	ppm	ASTM D5185(m)	1150	691	677	738
Zinc	ppm ppm	,	1150 1350			738 765
· .		,		691	677	
Zinc	ppm	ASTM D5185(m)	1350	691 788	677 762	765
Zinc Sulfur	ppm ppm	ASTM D5185(m) ASTM D5185(m)	1350	691 788 2423	677 762 2364	765 2521
Zinc Sulfur Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1350 4250	691 788 2423 <1	677 762 2364 <1	765 2521 <1
Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	1350 4250 limit/base	691 788 2423 <1 current	677 762 2364 <1 history1	765 2521 <1 history2
Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	1350 4250 limit/base	691 788 2423 <1 current 6	677 762 2364 <1 history1 6	765 2521 <1 history2 4
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25	691 788 2423 <1 <u>current</u> 6 3	677 762 2364 <1 history1 6 4	765 2521 <1 history2 4 3
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25 >20	691 788 2423 <1 current 6 3 31	677 762 2364 <1 history1 6 4 16	765 2521 <1 <u>history2</u> 4 3 5
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1350 4250 limit/base >25 >20 limit/base	691 788 2423 <1 current 6 3 31 current	677 762 2364 <1 history1 6 4 16 history1	765 2521 <1 history2 4 3 5 5 history2



## **OIL ANALYSIS REPORT**





Report Id: RUSMIS [WCAMIS] 02626028 (Generated: 04/02/2024 14:33:20) Rev: 1

CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Serdar Okur - RUSMIS