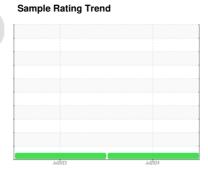


# **OIL ANALYSIS REPORT**



832009 Natural Gas Engine DIESEL ENGINE OIL SAE 15W40 (--- GAL)





## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

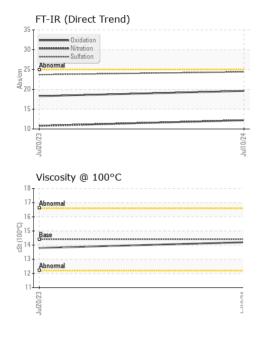
### **Fluid Condition**

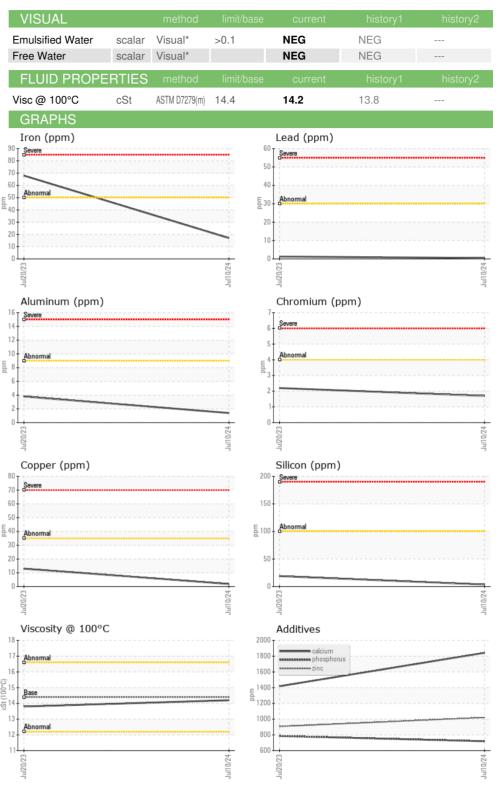
The condition of the oil is acceptable for the time in service.

AE 15W40 ( 0	GAL)		Jul2023	Jul2024		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0119243	GFL0087019	
Sample Date		Client Info		10 Jul 2024	20 Jul 2023	
Machine Age	hrs	Client Info		2823	15349	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	TION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	17	68	
Chromium	ppm	ASTM D5185(m)	>4	2	2	
Nickel	ppm	ASTM D5185(m)	>2	<1	1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	ASTM D5185(m)	>9	1	4	
Lead	ppm	ASTM D5185(m)	>30	<1	1	
Copper	ppm	ASTM D5185(m)	>35	2	13	
Tin	ppm	ASTM D5185(m)	>4	<1	2	
Antimony	ppm	ASTM D5185(m)		<1	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	15	10	
Barium	ppm	ASTM D5185(m)	10	<1	2	
Molybdenum	ppm	ASTM D5185(m)	100	60	78	
Manganese	ppm	ASTM D5185(m)		<1	6	
Magnesium	ppm	ASTM D5185(m)	450	603	652	
Calcium	ppm	ASTM D5185(m)	3000	1842	1418	
Phosphorus	ppm	ASTM D5185(m)	1150	719	786	
Zinc	ppm	ASTM D5185(m)	1350	1021	907	
Sulfur	ppm	ASTM D5185(m)	4250	2155	2135	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	4	19	
Sodium	ppm	ASTM D5185(m)	>158	8	4	
Potassium	ppm	ASTM D5185(m)	>20	<1	2	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	
Nitration	Abs/cm	ASTM D7624*	>20	12.2	10.8	
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.4	23.7	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.6	18.3	



# **OIL ANALYSIS REPORT**







CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02648081 Unique Number : 5813633 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 253 - TOR APT : GFL0119243

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested** Diagnosed

: 16 Jul 2024 : 16 Jul 2024

: 16 Jul 2024 - Wes Davis

15 Bermondsey Road - Building B Toronto, ON CA M4B 1Y9

Contact: Natalia Stalynska nstalynska@gflenv.com

T: F:

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied. Report Id: GFL253 [WCAMIS] 02648081 (Generated: 07/16/2024 13:17:45) Rev: 1

Submitted By: ?