

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id **733024** Component **Natural Gas Engine** Fluid **RDL-3647 (--- GAL)**

DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

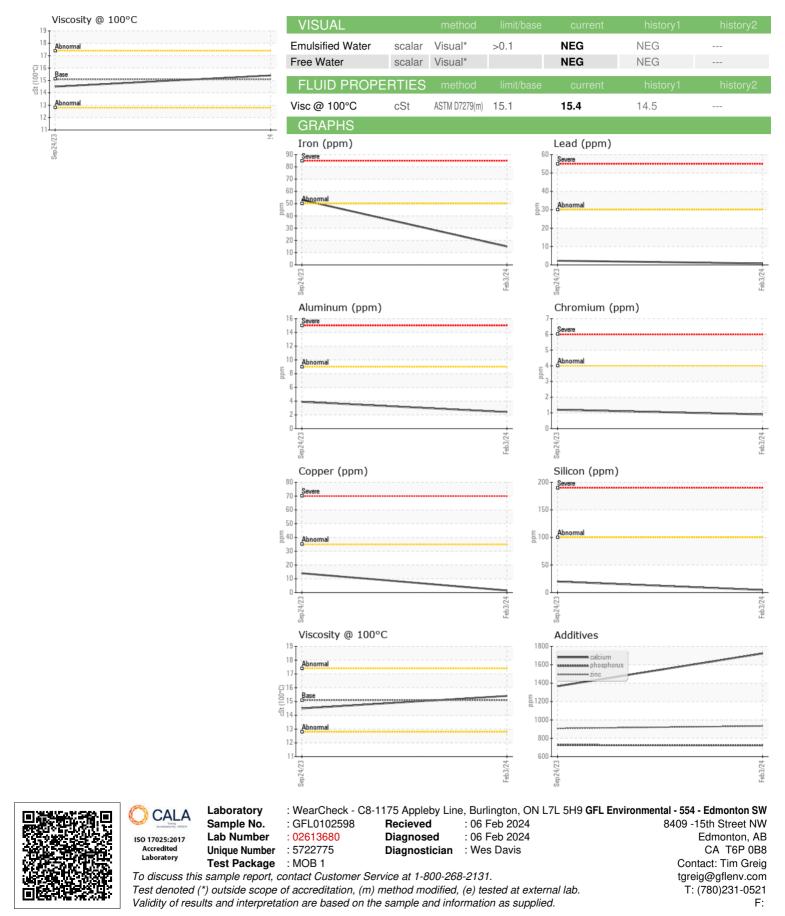
Fluid Condition

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

			Sep2023	Feb2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0102598	GFL0093909	
Sample Date		Client Info		03 Feb 2024	24 Sep 2023	
Machine Age	hrs	Client Info		2014	1132	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	ABNORMAL	
CONTAMINAT	ION	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	15	5 3	
Chromium	ppm	ASTM D5185(m)	>4	<1	1	
Nickel	ppm	ASTM D5185(m)	>2	<1	1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	ASTM D5185(m)	>9	2	4	
Lead	ppm	ASTM D5185(m)	>30	<1	2	
Copper	ppm	ASTM D5185(m)	>35	2	14	
Tin	ppm	ASTM D5185(m)	>4	<1	1	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
oddiniani	ppm	()		•		
ADDITIVES	ppm	method	limit/base	current	history1	history2
			limit/base 50		history1 12	history2
ADDITIVES	ppm	method	50	current		
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185(m) ASTM D5185(m)	50	current 13	12	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	50 5 50	current 13 0	12 2	
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	50 5 50	current 13 0 56	12 2 78	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	50 5 50 0	current 13 0 56 <1	12 2 78 8	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	methodASTM D5185(m)ASTM D5185(m)ASTM D5185(m)ASTM D5185(m)ASTM D5185(m)ASTM D5185(m)	50 5 50 0 560	current 13 0 56 <1 575	12 2 78 8 650	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	50 5 50 0 560 1510	Current 13 0 56 <1 575 1723	12 2 78 8 650 1366	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 5 50 0 560 1510 780	Current 13 0 56 <1 575 1723 724	12 2 78 8 650 1366 726	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 5 50 0 560 1510 780 870	Current 13 0 56 <1 575 1723 724 933	12 2 78 8 650 1366 726 907	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 5 50 0 560 1510 780 870	Current 13 0 56 <1 575 1723 724 933 2145 <1	12 2 78 8 650 1366 726 907 2050	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 5 50 0 560 1510 780 870 2040	Current 13 0 56 <1 575 1723 724 933 2145 <1	12 2 78 8 650 1366 726 907 2050 <1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 50 50 560 1510 780 870 2040	Current 13 0 56 <1 575 1723 724 933 2145 <1 Current	12 2 78 8 650 1366 726 907 2050 <1 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 50 50 560 1510 780 870 2040	Current 13 0 56 <1 575 1723 724 933 2145 <1 current 5	12 2 78 8 650 1366 726 907 2050 <1 history1 20	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 5 50 0 560 1510 780 870 2040 2040 limit/base >+100	Current 13 0 56 <1 575 1723 724 933 2145 <1 Current 5 7	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 50 50 560 1510 780 870 2040 2040 >+100 >+100	Current 13 0 56 <1 575 1723 724 933 2145 <1 Current 5 7 2 Current	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4 20 4	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 50 0 560 1510 780 870 2040 Imit/base >+100 >20 Imit/base	Current 13 0 56 <1 575 1723 724 933 2145 <1 current 5 7 2 current 0	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4 20 4 20 4 2 20 4 2 2 0	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	50 50 50 560 1510 780 870 2040 2040 >+100 >+100	Current 13 0 56 <1 575 1723 724 933 2145 <1 Current 5 7 2 Current	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4 20 4 2 2	 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	50 50 00 560 1510 780 870 2040 2040 2040 2040 2040 2040 20 20 20 20 20 20 20 20 20 20 20 20 20	Current 13 0 56 <1 575 1723 724 933 2145 <1 <i>current</i> 5 7 2 <i>current</i> 0 11.2 23.2	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4 20 4 2 2 history1 0 10.8	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	50 50 560 1510 780 870 2040 imit/base >+100 20 imit/base >20 imit/base	Current 13 0 56 <1 575 1723 724 933 2145 <1 <i>current</i> 5 7 2 <i>current</i> 0 11.2 23.2	12 2 78 8 650 1366 726 907 2050 <1 history1 20 4 20 4 2 2 history1 0 10.8 22.8	 history2 history2 history2



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