

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **229037-603258** 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

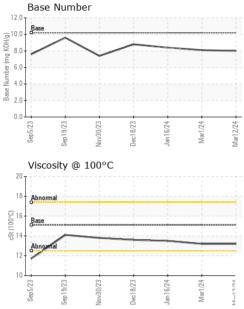
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0111963	GFL0111971	GFL0102584
Sample Date		Client Info		12 Mar 2024	01 Mar 2024	16 Jan 2024
Machine Age	hrs	Client Info		2186	2184	2134
Oil Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S .	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	27	25	19
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	3
Lead	ppm	ASTM D5185m	>30	6	7	7
Copper	ppm	ASTM D5185m	>35	2	2	3
Tin	ppm	ASTM D5185m	>4	<1	2	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	4	4	4
Barium	ppm	ASTM D5185m	5	0	0	3
Molybdenum	ppm	ASTM D5185m	50	59	55	58
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium						
•	ppm	ASTM D5185m	560	872	925	835
Calcium	ppm ppm	ASTM D5185m ASTM D5185m	1510	872 1116	925 1185	835 1108
Calcium Phosphorus		ASTM D5185m ASTM D5185m	1510 780	1116 1005	1185 1009	1108 978
Calcium Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1510	1116 1005 1188	1185	1108 978 1188
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1510 780	1116 1005	1185 1009	1108 978
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1510 780 870	1116 1005 1188 3592 current	1185 1009 1258 3014 history1	1108 978 1188 3472 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1510 780 870 2040	1116 1005 1188 3592 current 15	1185 1009 1258 3014 history1 15	1108 978 1188 3472 history2 15
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1510 780 870 2040 limit/base	1116 1005 1188 3592 current	1185 1009 1258 3014 history1	1108 978 1188 3472 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1510 780 870 2040 limit/base >+100	1116 1005 1188 3592 current 15	1185 1009 1258 3014 history1 15	1108 978 1188 3472 history2 15
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870 2040 limit/base >+100	1116 1005 1188 3592 current 15 7 2 2 current	1185 1009 1258 3014 history1 15 6 0 0 history1	1108 978 1188 3472 history2 15 4 4 4 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870 2040 limit/base >+100 >20 limit/base	1116 1005 1188 3592 current 15 7 2 2 current 0.1	1185 1009 1258 3014 history1 15 6 0 0 history1 0.2	1108 978 1188 3472 history2 15 4 4 4 history2 0.1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870 2040 limit/base >+100 >20 limit/base	1116 1005 1188 3592 current 15 7 2 2 current	1185 1009 1258 3014 history1 15 6 0 0 history1	1108 978 1188 3472 history2 15 4 4 4 history2 0.1 6.6
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870 2040 limit/base >+100 >20 limit/base	1116 1005 1188 3592 current 15 7 2 2 current 0.1	1185 1009 1258 3014 history1 15 6 0 0 history1 0.2	1108 978 1188 3472 history2 15 4 4 4 history2 0.1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1510 780 870 2040 <i>limit/base</i> >+100 >20 <i>limit/base</i>	1116 1005 1188 3592 current 15 7 2 2 current 0.1 7.5	1185 1009 1258 3014 history1 15 6 0 history1 0.2 7.5	1108 978 1188 3472 history2 15 4 4 4 history2 0.1 6.6
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1510 780 870 2040 limit/base >+100 >20 limit/base >20 20 20	1116 1005 1188 3592 current 15 7 2 current 0.1 7.5 19.1	1185 1009 1258 3014 history1 15 6 0 history1 0.2 7.5 18.9	1108 978 1188 3472 history2 15 4 4 4 history2 0.1 6.6 18.7
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7624	1510 780 870 2040 <i>limit/base</i> >20 <i>limit/base</i> >20 >30 <i>limit/base</i>	1116 1005 1188 3592 current 15 7 2 current 0.1 7.5 19.1 current	1185 1009 1258 3014 history1 15 6 0 history1 0.2 7.5 18.9 history1	1108 978 1188 3472 history2 15 4 4 4 history2 0.1 6.6 18.7 history2



OIL ANALYSIS REPORT

VISUAL



aboratory ample No. ab Number ique Number est Package	: WearCheck USA - 50 : GFL0111963 : 06122985 : 10937136 : FLEET contact Customer Serv	Recei Teste Diagn	ved : 1 d : 2 osed : 21	9 Mar 2024 0 Mar 2024 Mar 2024 - Do				Airport In Pau	dustrial F Is Valley US 73 Fony Gra	Road , Ok 3075 han
	0 EZUGE	Dec18/23	Jan 16/24 Jan 16/24	Base Number (ing KOH/g)	Base 0.0 8.0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Numbe	Nov30/23	Jan 16/24	Mar/24	Mar12/24
	Non-ferrous Meta	ls								
	20 15 10 5 0 5 0 5 0 5 5 0 5 5 5 5 5 5 5	Dec18/23	Jan 16/24	Mar12/24						
Marl/24	GRAPHS Ferrous Alloys									
	FLUID PROPE Visc @ 100°C	cSt	method ASTM D445	limit/base	13.2	urrent 2	histo 13.2	ory1	histor 13.5	y2
	Emulsified Water Free Water	scalar scalar	*Visual *Visual	>0.1	NE(NEG NEG		NEG NEG	
Mar1/24 Mar12/24	Appearance Odor	scalar scalar	*Visual *Visual	NORML	NO	RML RML	NORM		NORMI	
54	Sand/Dirt	scalar	*Visual	NONE	NO		NONE		NONE	
	Silt Debris	scalar scalar	*Visual *Visual	NONE	NO NO		NONE		NONE NONE	
	Precipitate	scalar	*Visual	NONE	NO		NONE		NONE	
	Yellow Metal	scalar	*Visual	NONE	NO	NE	NONE		NONE	

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Contact/Location: Tony Graham - GFL892

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