

OIL ANALYSIS REPORT

Sample Rating Trend





FREIGHTLINER 125064-SW8504

SAMPLE INFORMATION method

MOBIL DELVAC ELITE 15W40 (--- 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.

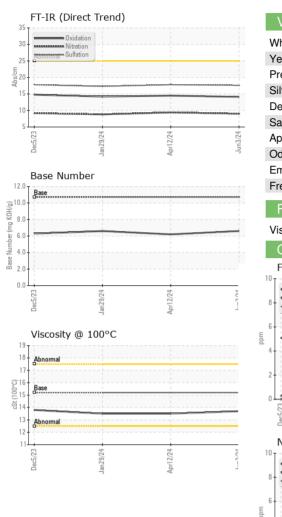
Fluid Condition

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

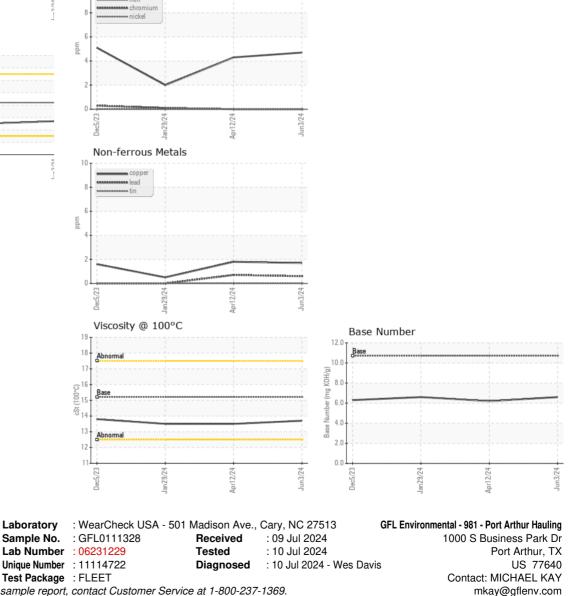
SAMPLE INFOR		mounda	iimii/base	current	nistory i	riistory2
Sample Number		Client Info		GFL0111328	GFL0111299	GFL0111348
Sample Date		Client Info		03 Jun 2024	12 Apr 2024	29 Jan 2024
Machine Age	hrs	Client Info		20886	20532	20001
Oil Age	hrs	Client Info		20886	0	500
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
-					-	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron		ASTM D5185m	>80		4	2
-	ppm			5 0	4	<1
Chromium	ppm	ASTM D5185m	>5			
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm		>30	4	4	4
Lead	ppm	ASTM D5185m	>30	<1	<1	0
Copper	ppm	ASTM D5185m		2	2	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 92	history1 90	history2 114
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	92	90	114
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	92 0	90 0	114 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126	90 0 127	114 2 118
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1	90 0 127 <1	114 2 118 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1 690	90 0 127 <1 685	114 2 118 0 627
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1 690 1250	90 0 127 <1 685 1239	114 2 118 0 627 1154
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1 690 1250 801	90 0 127 <1 685 1239 775	114 2 118 0 627 1154 686
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		92 0 126 <1 690 1250 801 875 3957	90 0 127 <1 685 1239 775 872 3893	114 2 118 0 627 1154 686 767 2970
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1 690 1250 801 875 3957 current	90 0 127 <1 685 1239 775 872 3893 history1	114 2 118 0 627 1154 686 767 2970 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	92 0 126 <1 690 1250 801 875 3957 current 5	90 0 127 <1 685 1239 775 872 3893 history1 4	114 2 118 0 627 1154 686 767 2970 history2 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >20	92 0 126 <1 690 1250 801 875 3957 current 5 2	90 0 127 <1 685 1239 775 872 3893 history1 4 2	114 2 118 0 627 1154 686 767 2970 history2 5 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >20 >20	92 0 126 <1 690 1250 801 875 3957 current 5 2 3	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	limit/base >20 >20 limit/base	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 3 current	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 2 history1	114 2 118 0 627 1154 686 767 2970 history2 5 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	limit/base >20 >20 limit/base >3	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 current 0.2	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 2 history1 0.2	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0 history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >20 >20 limit/base >3 >20	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 current 0.2 9.0	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 history1 0.2 9.4	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0 history2 0.2 8.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	limit/base >20 >20 limit/base >3	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 current 0.2	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 2 history1 0.2	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0 history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >20 >20 limit/base >3 >20	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 3 current 0.2 9.0 17.6	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 history1 0.2 9.4	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0 history2 0.2 8.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	Imit/base >20 >20 Imit/base >20 >3 >20 >3 >20	92 0 126 <1 690 1250 801 875 3957 current 5 2 3 3 current 0.2 9.0 17.6	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 2 history1 0.2 9.4 17.8	114 2 118 0 627 1154 686 767 2970 history2 5 2 0 history2 0.2 8.8 17.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >20 >20 limit/base >3 >20 >30 >30	92 0 126 <1 690 1250 801 875 3957 <i>current</i> 5 2 3 3 <i>current</i> 0.2 9.0 17.6	90 0 127 <1 685 1239 775 872 3893 history1 4 2 2 history1 0.2 9.4 17.8 history1	114 2 118 0 627 1154 686 767 2970 history2 5 2 2 0 history2 0.2 8.8 17.3 history2



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.2	13.7	13.5	13.5
GRAPHS						
Ferrous Alloys						
iron iron						



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)

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