

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **3736** Component **Diesel Engine**

MOBIL DELVAC 1300 SUPER15W40 (10 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

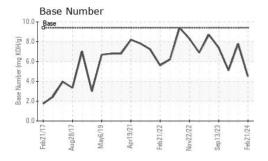
Fluid Condition

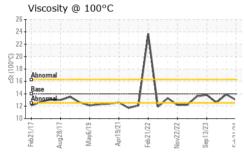
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		302017 Aug.	2017 May2019 Api20	21 Feb2022 Nov2022 Sep2		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0110811	GFL0073223	GFL0073220
Sample Date		Client Info		21 Feb 2024	16 Nov 2023	23 Oct 2023
Machine Age	hrs	Client Info		17418	16868	16763
Oil Age	hrs	Client Info		600	650	650
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	10	2	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	2	6
Lead	ppm	ASTM D5185m	>40	2	0	1
Copper	ppm	ASTM D5185m	>330	3	<1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	163	447	205
DOIOII	PPIII					
Barium		ASTM D5185m	0	0	0	0
Barium	ppm		0		0	0 74
Barium Molybdenum	ppm ppm	ASTM D5185m		0 59		
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		0	80	74
Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	0 59 <1	80 <1	74 0
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 59 <1 228 1586	80 <1 379 1408	74 0 346
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 59 <1 228 1586 909	80 <1 379 1408 1064	74 0 346 1334
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 59 <1 228 1586	80 <1 379 1408	74 0 346 1334 869
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 59 <1 228 1586 909 1113	80 <1 379 1408 1064 1293	74 0 346 1334 869 1173
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	0	0 59 <1 228 1586 909 1113 2704	80 <1 379 1408 1064 1293 3305	74 0 346 1334 869 1173 2509
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	0 0 limit/base	0 59 <1 228 1586 909 1113 2704	80 <1 379 1408 1064 1293 3305 history1	74 0 346 1334 869 1173 2509 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 limit/base	0 59 <1 228 1586 909 1113 2704 current	80 <1 379 1408 1064 1293 3305 history1	74 0 346 1334 869 1173 2509 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 limit/base >25	0 59 <1 228 1586 909 1113 2704 current 13	80 <1 379 1408 1064 1293 3305 history1 5	74 0 346 1334 869 1173 2509 history2 10 8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 limit/base >25 >20 limit/base	0 59 <1 228 1586 909 1113 2704 current 13 9 2	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1	74 0 346 1334 869 1173 2509 history2 10 8 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base >25 >20 limit/base >4	0 59 <1 228 1586 909 1113 2704 current 13 9 2 current 0.3	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1 0.1	74 0 346 1334 869 1173 2509 history2 10 8 2 history2 0.4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 limit/base >25 >20 limit/base	0 59 <1 228 1586 909 1113 2704 current 13 9 2	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1	74 0 346 1334 869 1173 2509 history2 10 8 2
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 Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 limit/base >25 >20 limit/base >4 >20	0 59 <1 228 1586 909 1113 2704 current 13 9 2 current 0.3 8.4	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1 0.1 5.5	74 0 346 1334 869 1173 2509 history2 10 8 2 history2 0.4 8.0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method	0 0 limit/base >25 >20 limit/base >4 >20 >30 limit/base	0 59 <1 228 1586 909 1113 2704 current 13 9 2 current 0.3 8.4 24.1 current	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1 0.1 5.5 20.9 history1	74 0 346 1334 869 1173 2509 history2 10 8 2 history2 0.4 8.0 23.5 history2
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 Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 limit/base >25 >20 limit/base >4 >20 >30	0 59 <1 228 1586 909 1113 2704 current 13 9 2 current 0.3 8.4 24.1	80 <1 379 1408 1064 1293 3305 history1 5 2 <1 history1 0.1 5.5 20.9	74 0 346 1334 869 1173 2509 history2 10 8 2 history2 0.4 8.0 23.5



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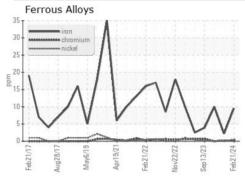


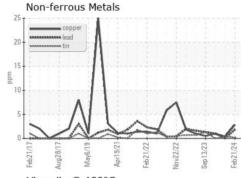


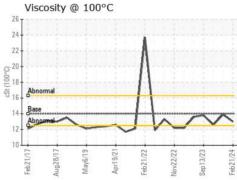
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

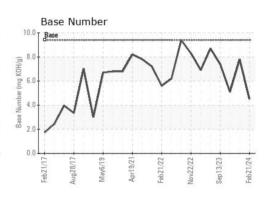
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.0	13.9	12.6

GRAPHS













Certificate L2367

Laboratory Sample No.

Lab Number : 06099842 Unique Number : 10898072 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0110811 Received **Tested**

Diagnosed

: 27 Feb 2024 : 27 Feb 2024 - Don Baldridge

: 26 Feb 2024

GFL Environmental - 146 - Augusta

1064 Franke Industrial Augusta, GA

US 30909

Contact: JEFFERY WASHINGTON jeff.washington@gflenv.com

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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