



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
829098 PETERBILT 320
 Component
Diesel Engine
 Fluid
TIER 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115228	GFL0115301	GFL0102224
Sample Date		Client Info		08 Jul 2024	20 May 2024	10 Apr 2024
Machine Age	hrs	Client Info		18597	18360	18121
Oil Age	hrs	Client Info		53	241	0
Filter Age	hrs	Client Info		53	241	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	23	29	16
Chromium	ppm	ASTM D5185m	>4	1	1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	3
Lead	ppm	ASTM D5185m	>45	3	3	<1
Copper	ppm	ASTM D5185m	>85	1	1	2
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

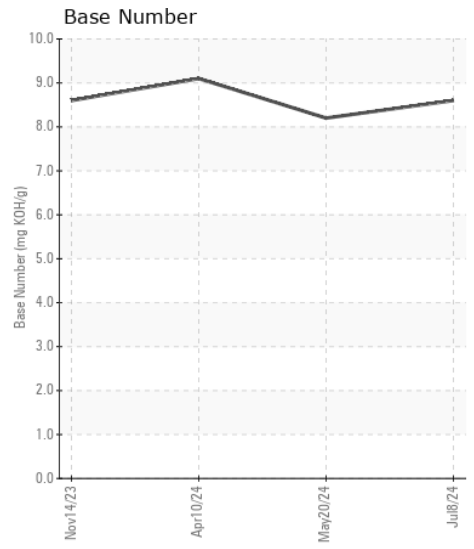
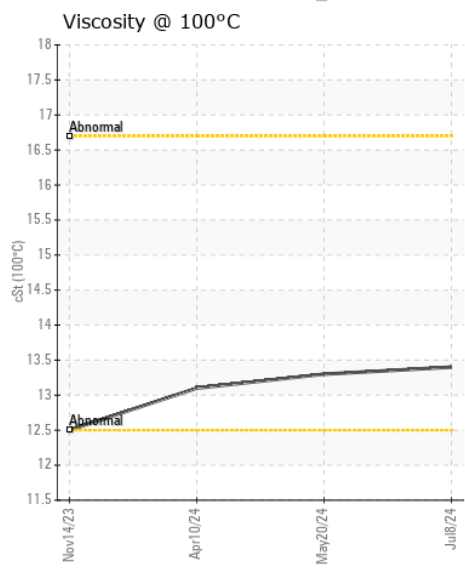
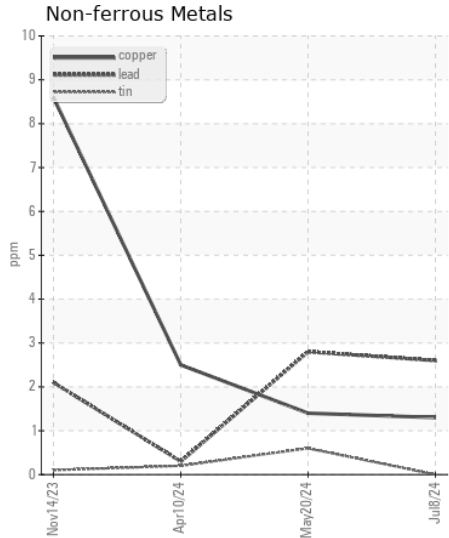
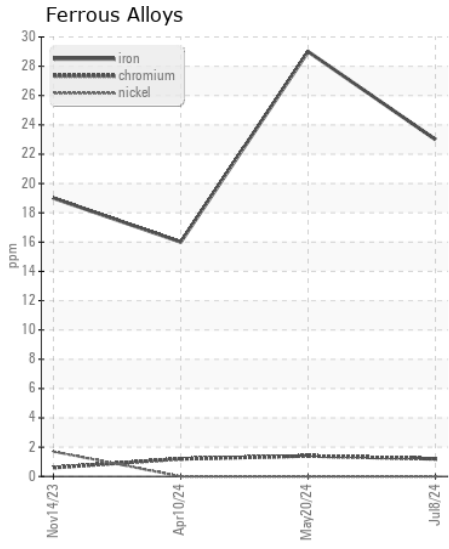
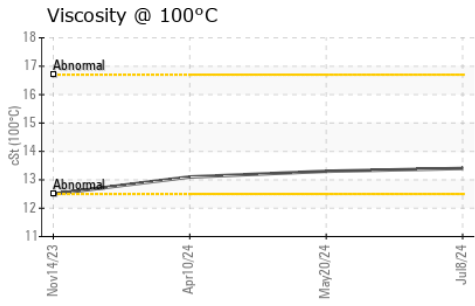
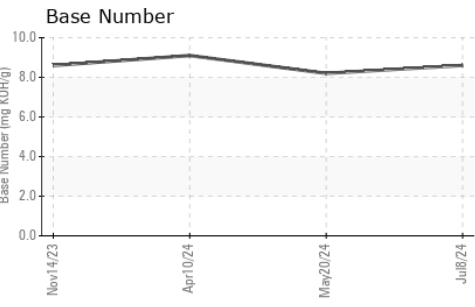
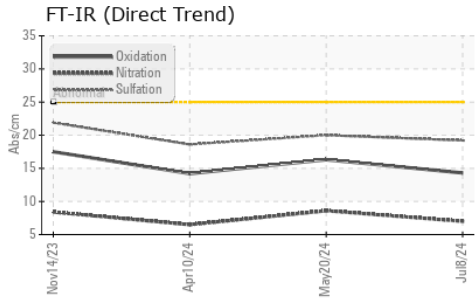
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	7	17	15
Potassium	ppm	ASTM D5185m	>20	3	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.0	8.6	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	20.0	18.6
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

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.

Sodium	ppm	ASTM D5185m		3	6	4
Boron	ppm	ASTM D5185m		18	14	16
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	57	56
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		940	889	868
Calcium	ppm	ASTM D5185m		1254	1133	1113
Phosphorus	ppm	ASTM D5185m		1080	1062	1065
Zinc	ppm	ASTM D5185m		1331	1248	1235
Sulfur	ppm	ASTM D5185m		3863	3513	3864
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	16.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	8.2	9.1
Visc @ 100°C	cSt	ASTM D445		13.4	13.3	13.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0115228
Lab Number : 06234329
Unique Number : 11123163
Test Package : FLEET

GFL Environmental - 642- Grand Rapids Hauling
 5826 Alden Nash Ave SE
 Lowell, MI
 US 49331
 Contact: Josh Arnett
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 T:
 F:

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)