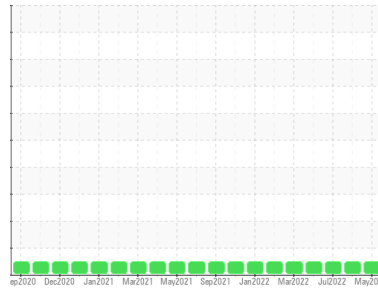




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(YA139860)
 Machine Id
PETERBILT 2681
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 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 INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0119675	GFL0111403	GFL0049631	
Sample Date	Client Info	30 May 2024	03 Feb 2024	28 Jul 2022	
Machine Age	hrs	Client Info	19293	0	14580
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	Changed	
Sample Status		NORMAL	NORMAL	NORMAL	

CONTAMINATION

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

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>165	25	14	10
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	3	6
Lead	ppm	ASTM D5185m	>150	2	2	1
Copper	ppm	ASTM D5185m	>90	1	4	2
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	6	9	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	64	93	60
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	968	1439	849
Calcium	ppm	ASTM D5185m	1070	1095	1467	1091
Phosphorus	ppm	ASTM D5185m	1150	1080	1446	1005
Zinc	ppm	ASTM D5185m	1270	1328	1831	1189
Sulfur	ppm	ASTM D5185m	2060	3186	4662	3092

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>35	8	8	4
Sodium	ppm	ASTM D5185m		75	54	3
Potassium	ppm	ASTM D5185m	>20	7	33	8

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>7.5	0.5	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.0	6.9	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	18.2	20.4

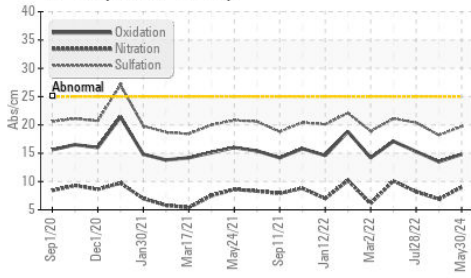
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	13.5	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.9	7.7	9.5

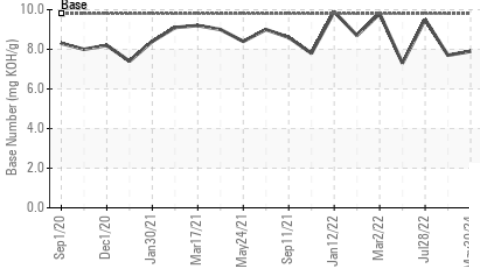


OIL ANALYSIS REPORT

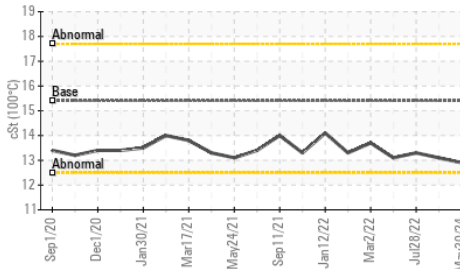
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

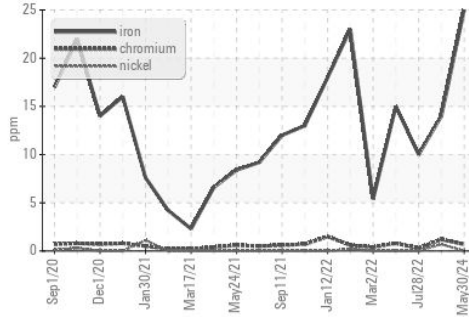


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

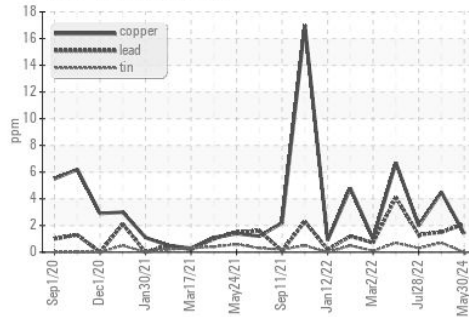
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.1

GRAPHS

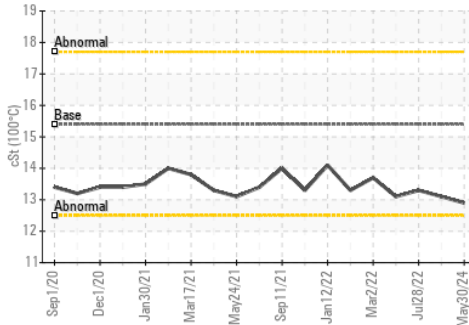
Ferrous Alloys



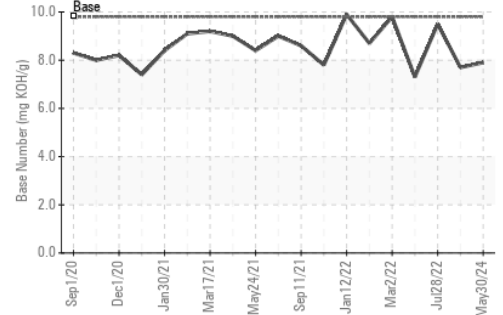
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0119675
 Lab Number : 06216481
 Unique Number : 11089345
 Test Package : FLEET

GFL Environmental - 004 - Newport - Central Coast
 427 Roberts Road
 Newport, NC
 US 28570

Contact: Marquis Williams
 marquis.williams@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)

T:
 F: (252)223-6010