



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**(YA141205) Whiteville NC**  
Machine Id  
**10826**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110528</b>	GFL0110488	GFL0083378
Sample Date		Client Info		<b>17 Jul 2024</b>	13 Jun 2024	27 Mar 2024
Machine Age	hrs	Client Info		<b>28602</b>	28429	26899
Oil Age	hrs	Client Info		<b>173</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>2</b>	4	8
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>100	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

There is no indication of any contamination in the oil.

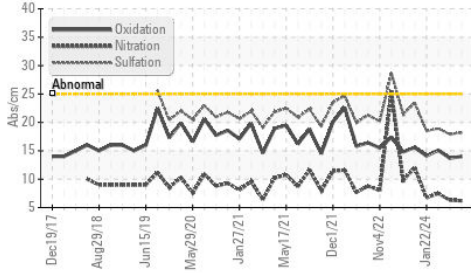
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	10	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	6	8
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	6.3	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	17.9	18.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

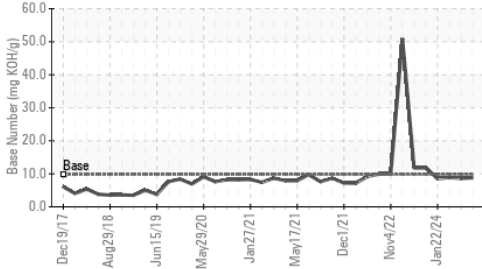
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>8</b>	7	13
Boron	ppm	ASTM D5185m	0	<b>10</b>	32	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>55</b>	52	54
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>877</b>	776	907
Calcium	ppm	ASTM D5185m	1070	<b>1083</b>	1537	962
Phosphorus	ppm	ASTM D5185m	1150	<b>987</b>	1127	1006
Zinc	ppm	ASTM D5185m	1270	<b>1150</b>	1394	1206
Sulfur	ppm	ASTM D5185m	2060	<b>3365</b>	4046	3371
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	13.7	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	8.6	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.3</b>	14.2	14.3

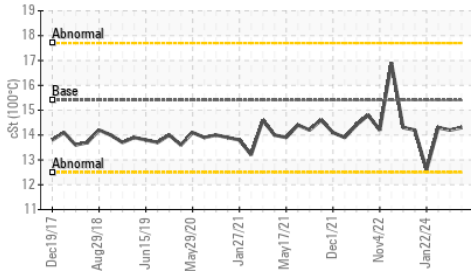
**FT-IR (Direct Trend)**



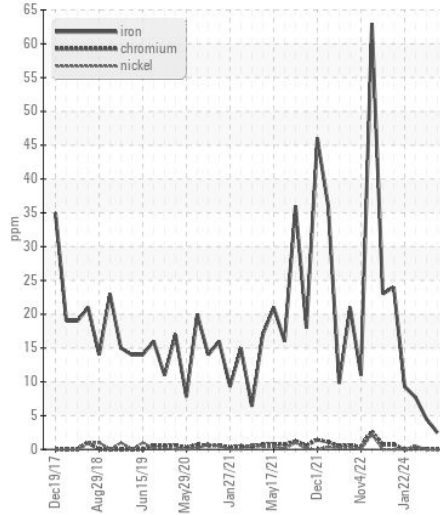
**Base Number**



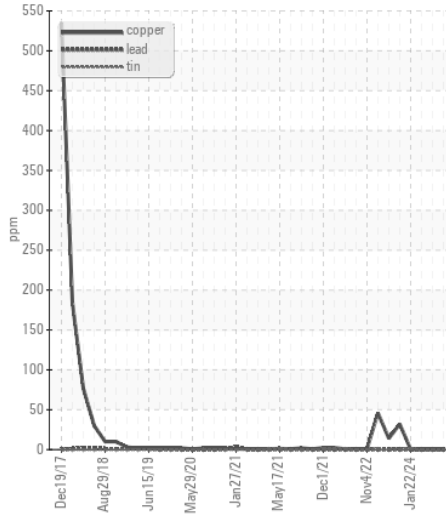
**Viscosity @ 100°C**



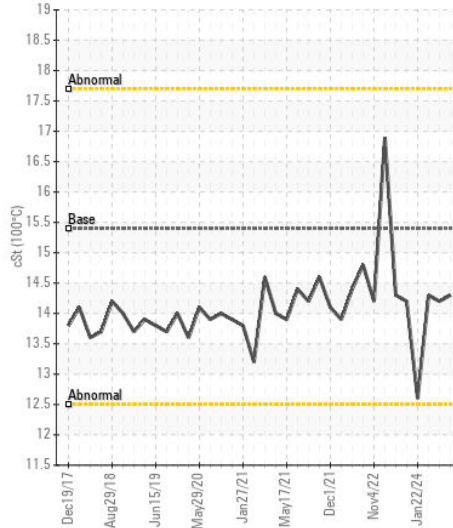
**Ferrous Alloys**



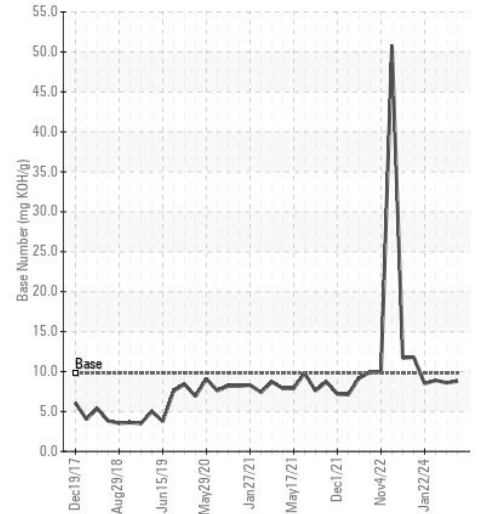
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110528  
**Lab Number** : 06241343  
**Unique Number** : 11130177  
**Test Package** : FLEET

**Received** : 19 Jul 2024  
**Tested** : 20 Jul 2024  
**Diagnosed** : 20 Jul 2024 - Wes Davis

**GFL Environmental - 108 - Whiteville**  
 5240 James B White Hwy South  
 Whiteville, NC  
 US 28472

Contact: Victor McGee  
 victor.mcgee@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: