



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

Area

**BARGE TRANSPORTATION**

Machine Id

**BARRY GRIFFITH - PGEN**

Component

**Port Genset**

Fluid

**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KFS0002651</b>	KFS0001264	KFS0002037
Sample Date		Client Info		<b>22 Jan 2024</b>	09 Feb 2023	02 Jan 2023
Machine Age	hrs	Client Info		<b>0</b>	14827	0
Oil Age	hrs	Client Info		<b>500</b>	500	500
Filter Age	hrs	Client Info		<b>500</b>	500	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>12</b>	7	6
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>12	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185m	>17	<b>3</b>	6	2
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

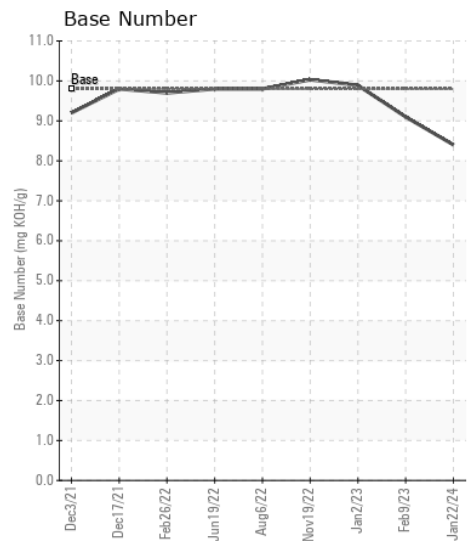
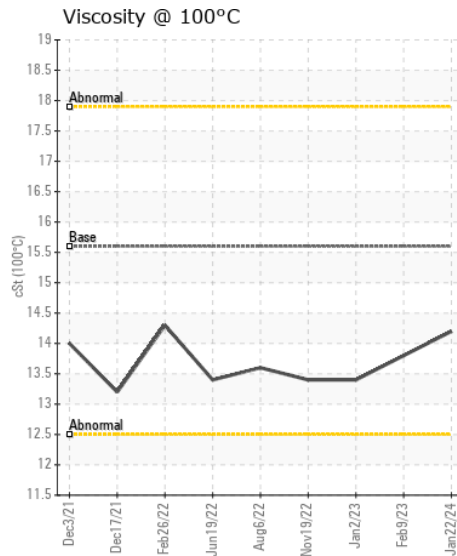
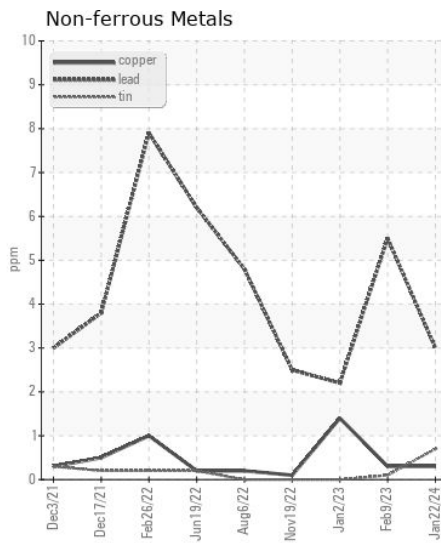
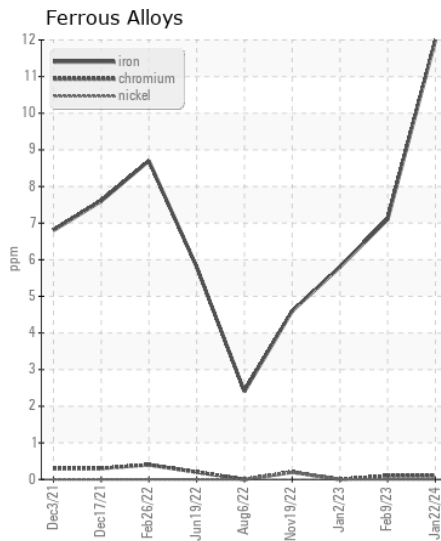
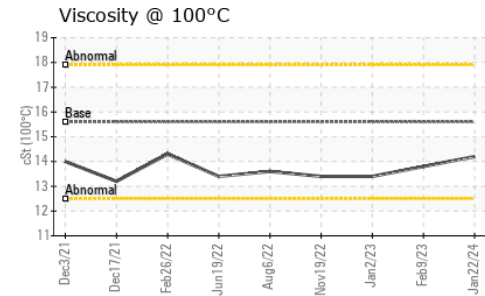
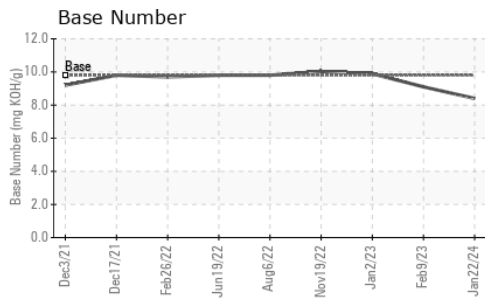
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.3</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	6.5	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	18.6	18.2
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	>0.1	<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>2</b>	3	0
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>60</b>	60	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>970</b>	917	826
Calcium	ppm	ASTM D5185m		<b>1049</b>	1151	1154
Phosphorus	ppm	ASTM D5185m		<b>982</b>	1002	973
Zinc	ppm	ASTM D5185m		<b>1210</b>	1237	1161
Sulfur	ppm	ASTM D5185m		<b>2767</b>	2988	2718
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	14.2	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	9.1	9.89
Visc @ 100°C	cSt	ASTM D445	15.6	<b>14.2</b>	13.8	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0002651  
**Lab Number** : 06083277  
**Unique Number** : 10870722  
**Test Package** : FLEET  
**Received** : 08 Feb 2024  
**Tested** : 08 Feb 2024  
**Diagnosed** : 08 Feb 2024 - Wes Davis

**M/V BARRY GRIFFITH**  
 3501 STARLITE DR  
 PADUCAH, KY  
 US 42003  
 Contact: BARRY GRIFFITH  
 bgriffith@hfline.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)