



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
058
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 10W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DE0000481	DE0000290	DE0000221
Sample Date		Client Info		15 May 2024	04 Aug 2023	06 Apr 2023
Machine Age	mls	Client Info		261243	242866	229113
Oil Age	mls	Client Info		261243	13700	9000
Filter Age	mls	Client Info		261243	13700	9000
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	>100	37	23	14
Chromium	ppm	ASTM D5185m	>6	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	2	<1	1
Lead	ppm	ASTM D5185m	>10	4	3	0
Copper	ppm	ASTM D5185m	>150	6	4	4
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	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.

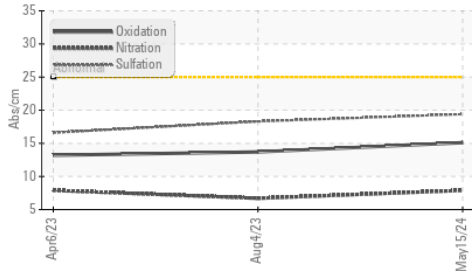
Silicon	ppm	ASTM D5185m	>20	5	3	2
Potassium	ppm	ASTM D5185m	>20	3	3	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.7	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	18.3	16.6
Silt	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

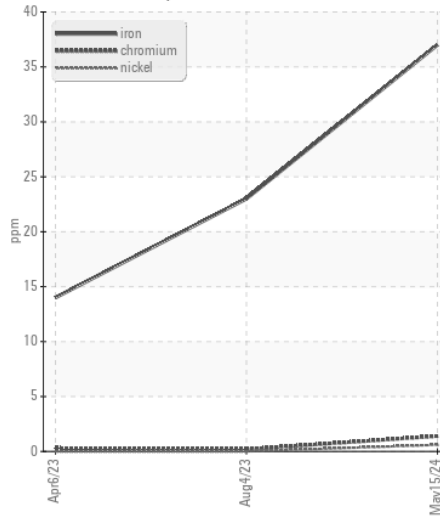
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	0
Boron	ppm	ASTM D5185m	2	7	9	51
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	64	62	81
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1011	986	253
Calcium	ppm	ASTM D5185m	1070	1130	1235	1938
Phosphorus	ppm	ASTM D5185m	1150	1169	1057	1021
Zinc	ppm	ASTM D5185m	1270	1327	1358	1229
Sulfur	ppm	ASTM D5185m	2060	3125	3957	4335
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	13.7	13.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	8.0	6.3
Visc @ 100°C	cSt	ASTM D445	15.52	13.2	13.2	13.3

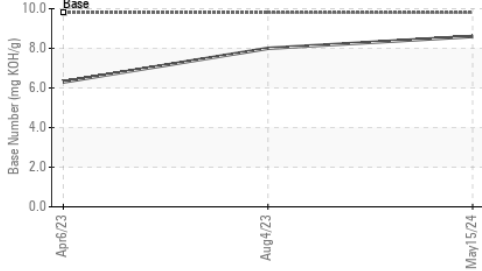
FT-IR (Direct Trend)



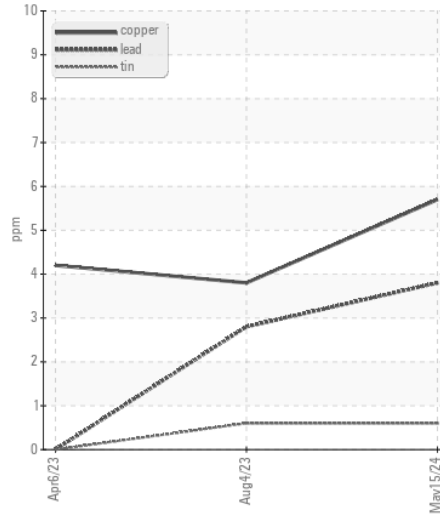
Ferrous Alloys



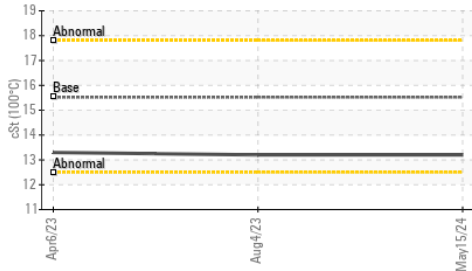
Base Number



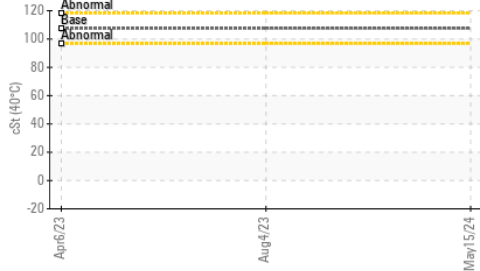
Non-ferrous Metals



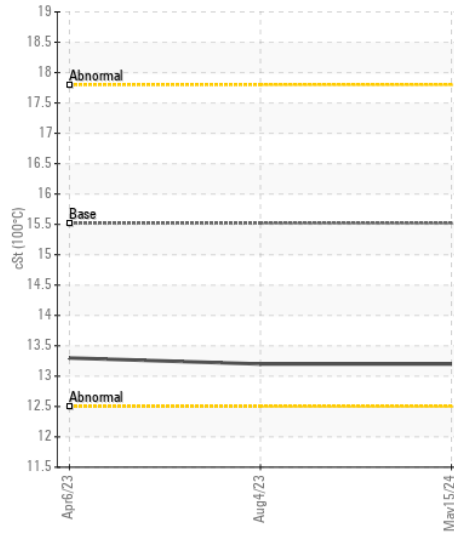
Viscosity @ 100°C



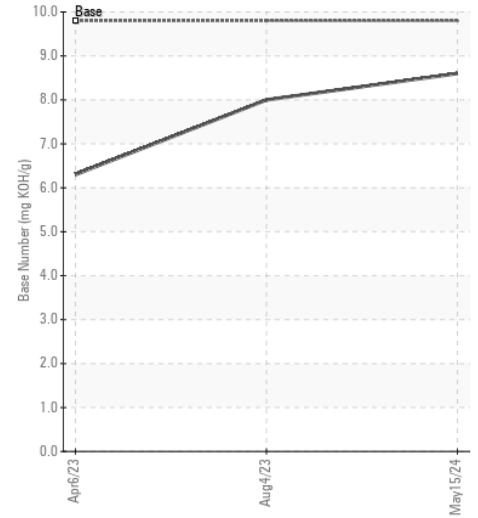
Viscosity @ 40°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DE0000481 **Received** : 28 Jun 2024
Lab Number : 06224193 **Tested** : 01 Jul 2024
Unique Number : 11102390 **Diagnosed** : 01 Jul 2024 - Angela Borella
Test Package : FLEET (Additional Tests: KV40)

Iroquois Bar Corp.
 155 Commerce Drive
 Lacakwana, NY
 US 14218
 Contact: Denver Persinger
 dpersinger@iroquoisbar.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: