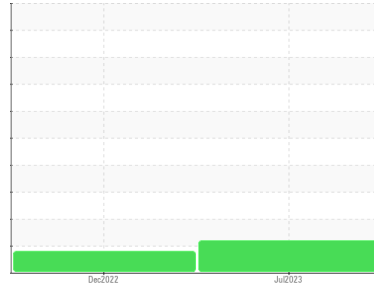


OIL ANALYSIS REPORT



Machine Id
014
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP E6 10W40 (--- GAL)

Sample Rating Trend



FUEL



DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of fuel present in the oil.

▲ Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0032532	DE0000240	---
Sample Date	Client Info			06 Jul 2023	14 Dec 2022	---
Machine Age	mls	Client Info		417514	408839	---
Oil Age	mls	Client Info		8626	9600	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ABNORMAL	MARGINAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	19	17	---
Chromium	ppm	ASTM D5185m	>4	<1	1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	2	1	---
Aluminum	ppm	ASTM D5185m	>54	37	19	---
Lead	ppm	ASTM D5185m	>20	2	1	---
Copper	ppm	ASTM D5185m	>240	1	<1	---
Tin	ppm	ASTM D5185m	>5	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

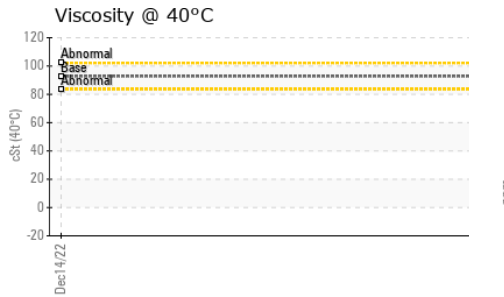
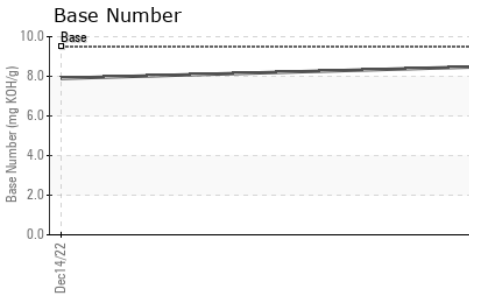
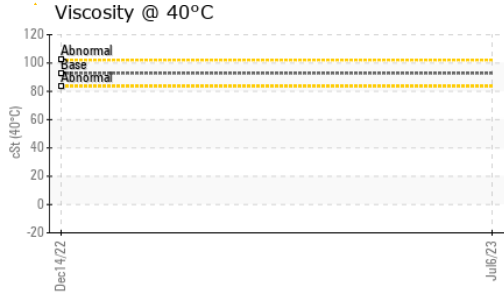
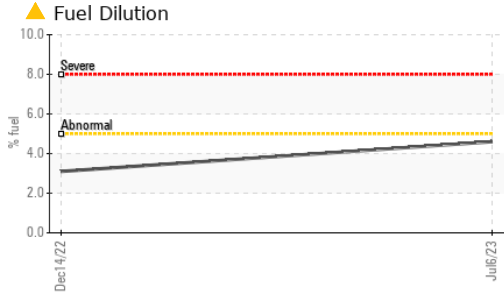
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	27	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	58	62	---
Manganese	ppm	ASTM D5185m	0	1	<1	---
Magnesium	ppm	ASTM D5185m	80	990	733	---
Calcium	ppm	ASTM D5185m	2400	1155	1343	---
Phosphorus	ppm	ASTM D5185m	750	1051	984	---
Zinc	ppm	ASTM D5185m	840	1327	1277	---
Sulfur	ppm	ASTM D5185m	2130	3984	3743	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	5	5	---
Sodium	ppm	ASTM D5185m		2	2	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel	%	ASTM D3524	>5	▲ 4.6	▲ 3.1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	8.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.3	17.9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	13.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	8.5	7.9	---

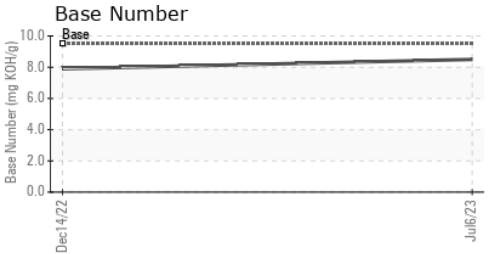
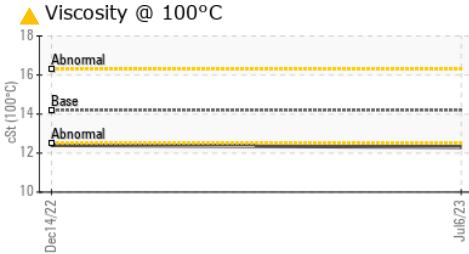
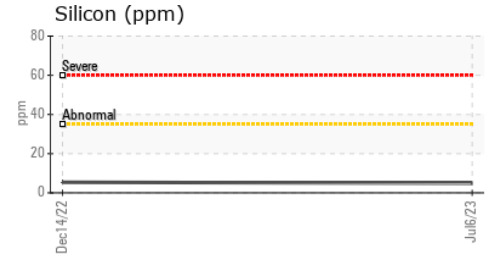
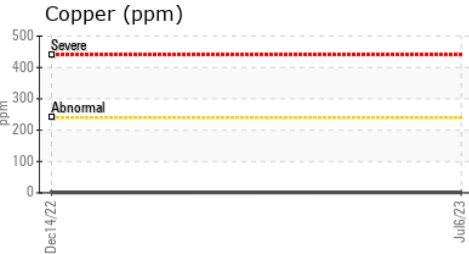
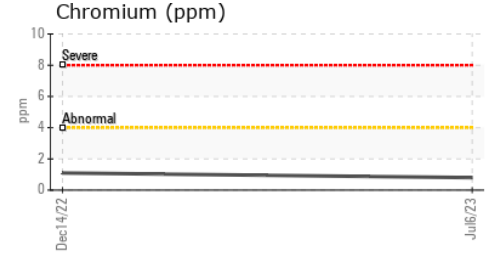
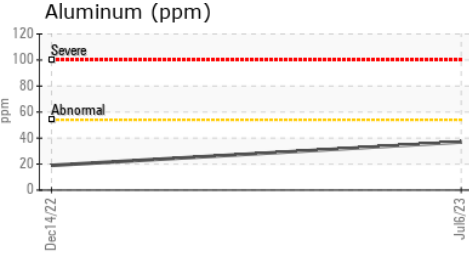
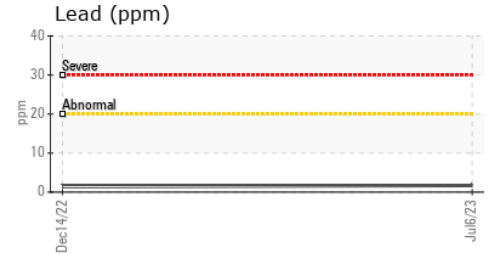
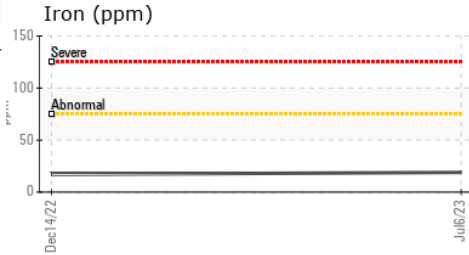
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.2	▲ 12.3	12.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PC0032532 **Received** : 14 Aug 2023
Lab Number : 05924032 **Diagnosed** : 16 Aug 2023
Unique Number : 10603979 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, TBN)

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)