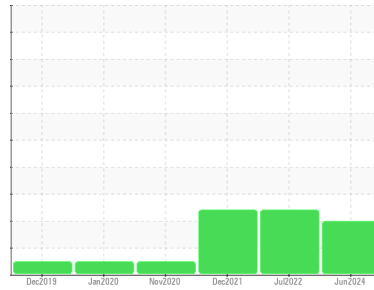


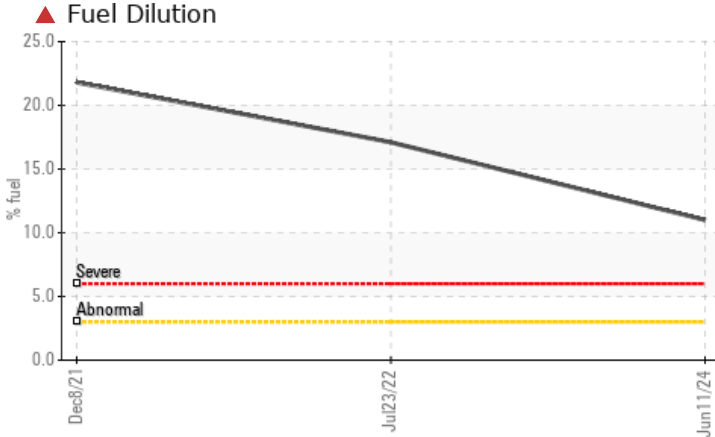
PROBLEM SUMMARY

Machine Id
Blue Bird 3929
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (18 QTS)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	SEVERE
Fuel	%	ASTM D3524	>3.0	▲ 11.0	▲ 17.1	▲ 21.8

Customer Id: ICSB370
 Sample No.: PCA0112481
 Lab Number: 06215302
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

HISTORICAL DIAGNOSIS

23 Jul 2022 Diag: Jonathan Hester

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

FUEL



view report



08 Dec 2021 Diag: Jonathan Hester

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

FUEL



view report



09 Nov 2020 Diag: Wes Davis

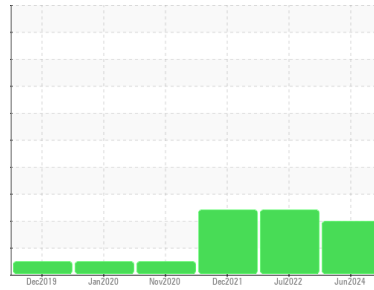
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

NORMAL



view report





Machine Id
Blue Bird 3929

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (18 QTS)

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

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

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0112481	PCA0045599	PCA0045489
Sample Date	Client Info		11 Jun 2024	23 Jul 2022	08 Dec 2021
Machine Age	mls	Client Info	202137	169996	156033
Oil Age	mls	Client Info	32141	13963	12234
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
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 >130	70	53	44
Chromium	ppm	ASTM D5185m >10	2	2	2
Nickel	ppm	ASTM D5185m >4	0	0	1
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	13	7	6
Lead	ppm	ASTM D5185m >20	<1	0	<1
Copper	ppm	ASTM D5185m >125	1	1	1
Tin	ppm	ASTM D5185m >4	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	0	1	<1
Barium	ppm	ASTM D5185m 0	0	2	0
Molybdenum	ppm	ASTM D5185m 50	54	50	49
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 950	866	751	805
Calcium	ppm	ASTM D5185m 1050	1015	902	893
Phosphorus	ppm	ASTM D5185m 995	931	818	803
Zinc	ppm	ASTM D5185m 1180	1147	1025	984
Sulfur	ppm	ASTM D5185m 2600	3098	2439	2118

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	4	4
Sodium	ppm	ASTM D5185m	4	2	2
Potassium	ppm	ASTM D5185m >20	4	2	2
Fuel	%	ASTM D3524 >3.0	▲ 11.0	▲ 17.1	▲ 21.8

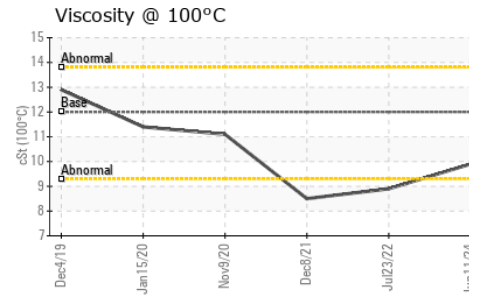
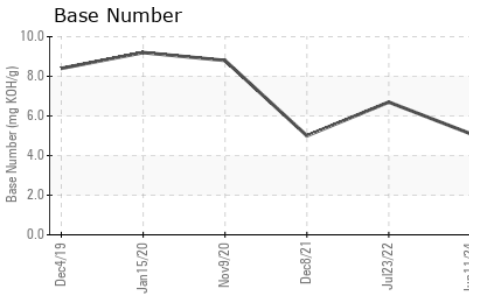
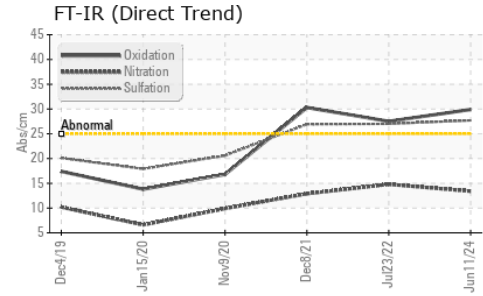
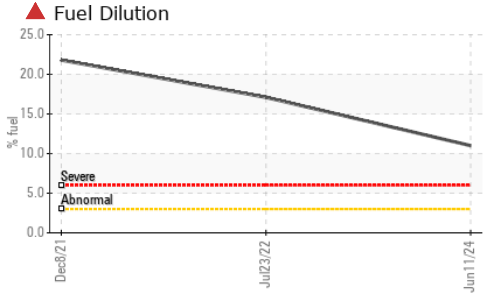
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	1.1	1.4	1.1
Nitration	Abs/cm	*ASTM D7624 >20	13.4	14.8	12.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	27.7	27.0	26.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	29.9	27.5	30.3
Base Number (BN)	mg KOH/g	ASTM D2896	5.1	6.7	5

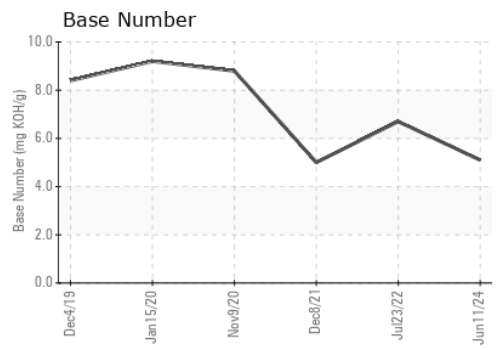
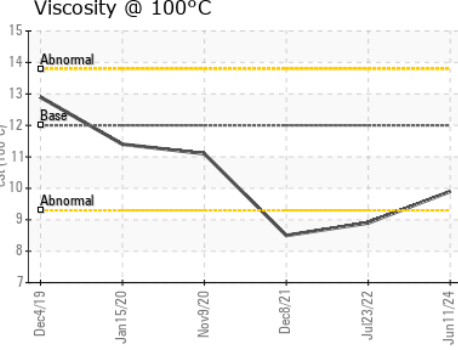
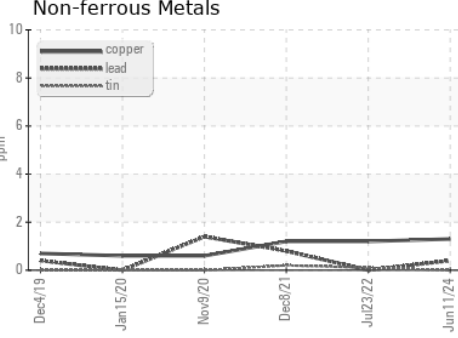
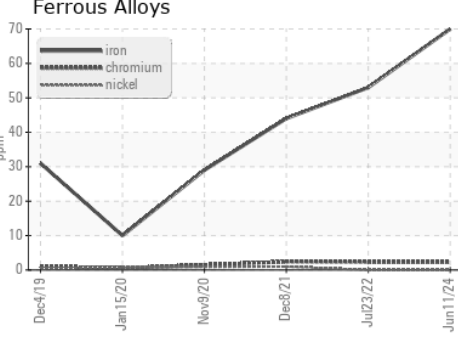
OIL ANALYSIS REPORT



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 12.00	9.9	▲ 8.9	▲ 8.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0112481 **Received** : 20 Jun 2024
Lab Number : **06215302** **Tested** : 24 Jun 2024
Unique Number : 11088166 **Diagnosed** : 24 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: PercentFuel)

ICSB370 - Alton
 4525 North Alby Road
 Godfrey, IL
 US 62035
 Contact: Chad Ingold
 c.ingold@illinois-central.com
 T: (618)466-5400
 F:

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)