PROBLEM SUMMARY

Sample Rating Trend

GLYCOL

Area
(90350X) Walgreens - Out of Service
Machine Id
[Walgreens - Out of Service] 136A66188
Component
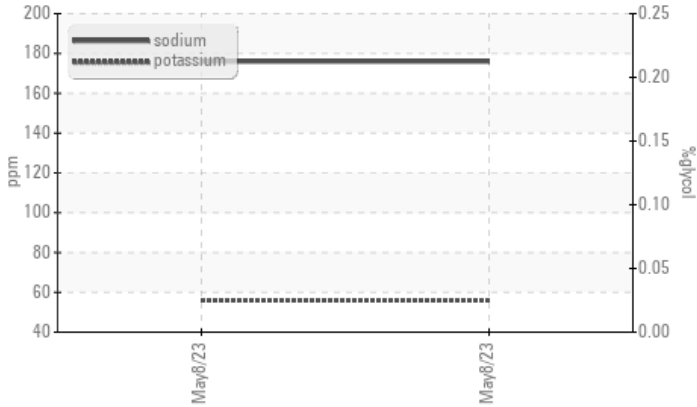## Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)

COMPONENT CONDITION SUMMARY

⚠️ Glycol Contamination

| sodium |
| potassium |

RECOMMENDATION

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			**ABNORMAL**	---	---
Sodium	ppm	ASTM D5185m		⚠️ **176**	---	---
Potassium	ppm	ASTM D5185m	>20	⚠️ **56**	---	---

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

GLYCOL

Area
(90350X) Walgreens - Out of Service
Machine Id
[Walgreens - Out of Service] 136A66188
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)

May 2023

DIAGNOSIS

⚠ **Recommendation**

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

⚠ **Contamination**

Sodium and/or potassium levels are high.

⚠ **Fluid Condition**

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		PCA0093876	---	---
Sample Date	Client Info		08 May 2023	---	---
Machine Age	mls	Client Info	727831	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed		Client Info	Not Changd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	6	---	---
Chromium	ppm	ASTM D5185m	>4	0	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>45	0	---	---
Copper	ppm	ASTM D5185m	>85	2	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	50	70	---	---
Manganese	ppm	ASTM D5185m	0	0	---	---
Magnesium	ppm	ASTM D5185m	950	949	---	---
Calcium	ppm	ASTM D5185m	1050	1070	---	---
Phosphorus	ppm	ASTM D5185m	995	997	---	---
Zinc	ppm	ASTM D5185m	1180	1219	---	---
Sulfur	ppm	ASTM D5185m	2600	3485	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	4	---	---
Sodium	ppm	ASTM D5185m		⚠ 176	---	---
Potassium	ppm	ASTM D5185m	>20	⚠ 56	---	---
Glycol	%	*ASTM D2982		NEG	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.2	---	---

OIL ANALYSIS REPORT

OIL DIAGNOSTICS
360 TECHNICAL EXPERTISE

Glycol Contamination

Viscosity @ 100°C

Glycol Contamination
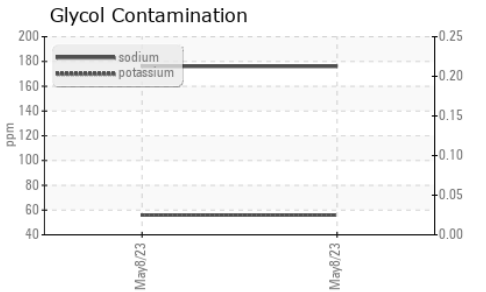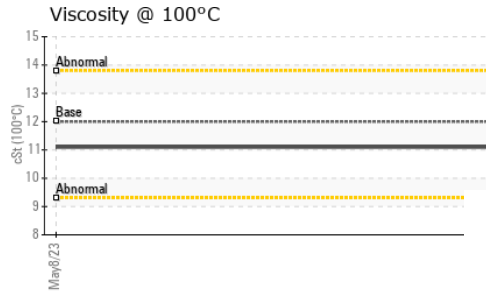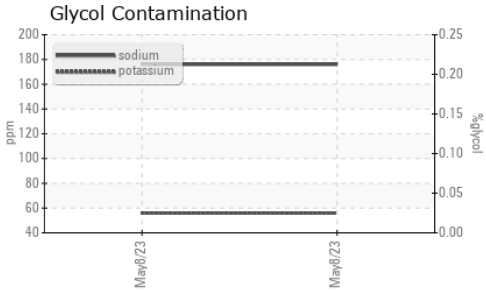
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*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	12.00	**11.1**	---	---

GRAPHS
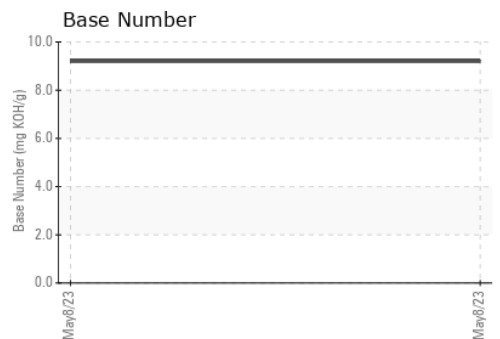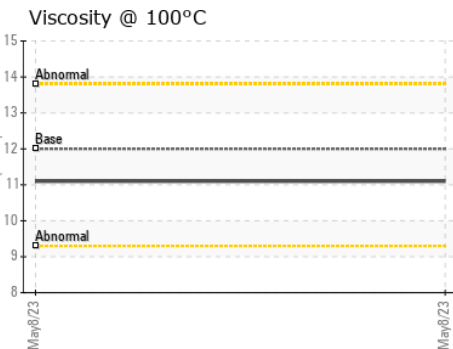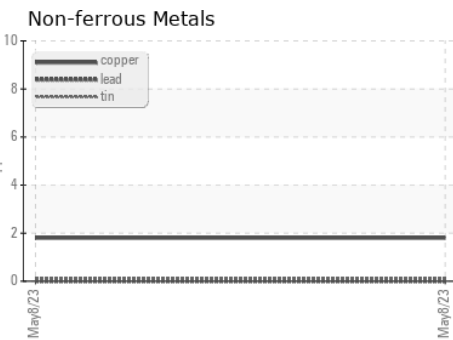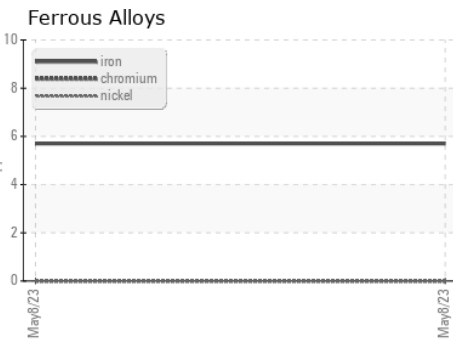
Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number

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)