



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**Columbus Transfer tote Transfer tote**

Component  
**Bulk Fluid Tank**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

This is a baseline read-out on the submitted sample.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0004251</b>	---	---
Sample Date	Client Info		<b>26 Sep 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	<b>0</b>	---	---
Tin	ppm	ASTM D5185m	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>2</b>	---
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	---
Molybdenum	ppm	ASTM D5185m	60	<b>56</b>	---
Manganese	ppm	ASTM D5185m	0	<b>0</b>	---
Magnesium	ppm	ASTM D5185m	1010	<b>952</b>	---
Calcium	ppm	ASTM D5185m	1070	<b>1195</b>	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1082</b>	---
Zinc	ppm	ASTM D5185m	1270	<b>1288</b>	---
Sulfur	ppm	ASTM D5185m	2060	<b>3386</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		<b>6</b>	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---

## INFRA-RED

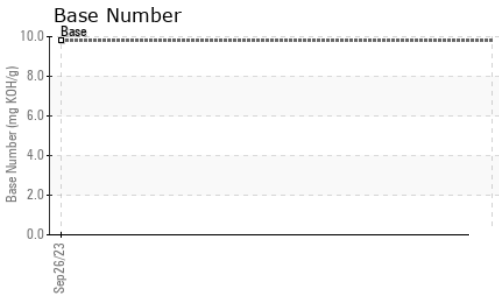
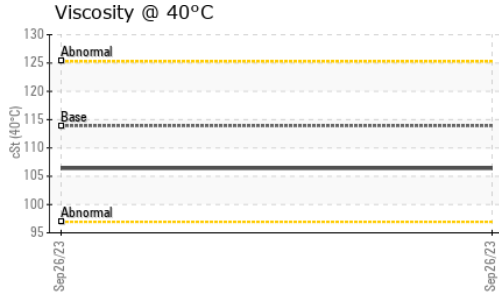
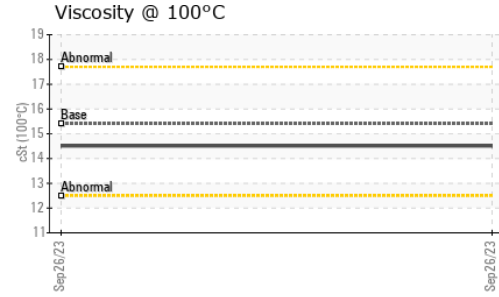
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	---
Nitration	Abs/cm	*ASTM D7624		<b>4.2</b>	---
Sulfation	Abs/.1mm	*ASTM D7415		<b>16.9</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		<b>12.4</b>	---





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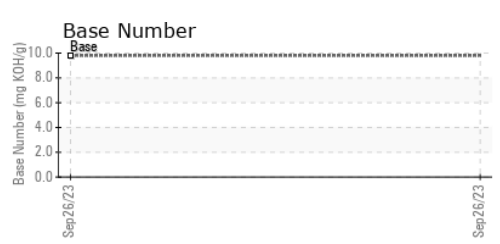
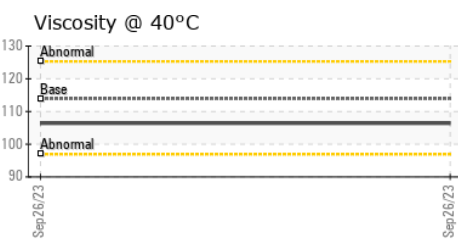
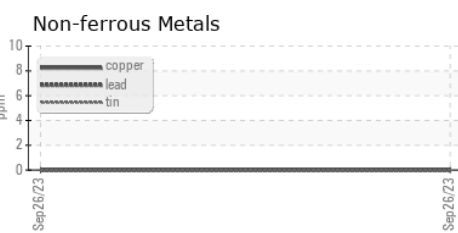
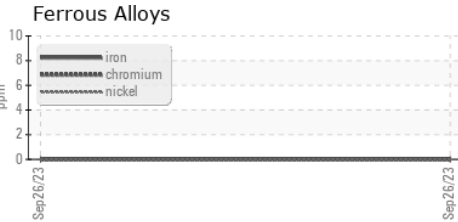


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	113.9	106.4	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.51	---	---
Viscosity Index (VI)	Scale	ASTM D2270	142	140	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0004251 **Received** : 29 Sep 2023  
**Lab Number** : 05965842 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10672393 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FT-IR, KV100, TBN, VI )

**Sapp Bros. Petroleum - Corporate - OMA**  
 9915 South 148th  
 OMAHA, NE  
 US 68138  
 Contact: Josh Broz  
 JBroz@sappbros.net  
 T: (402)895-2202  
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Certificate L2367  
 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)