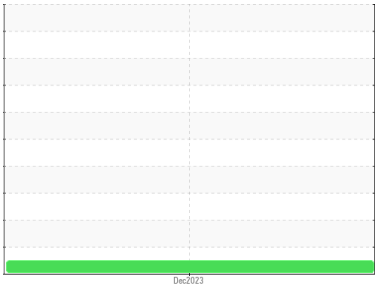
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
DSHP13BLKTOP
Component
5 New (Unused) Oil
Fluid
PETRO CANADA DURON SHP 15W30 (--- LTR)

DIAGNOSIS

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

Wear
{not applicable}

Contamination
{not applicable}

Fluid Condition
{not applicable}

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC**	---	---
Sample Date		Client Info		**13 Dec 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**NORMAL**	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		**<1**	---	---
Chromium	ppm	ASTM D5185(m)		**0**	---	---
Nickel	ppm	ASTM D5185(m)		**0**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)		**1**	---	---
Lead	ppm	ASTM D5185(m)		**0**	---	---
Copper	ppm	ASTM D5185(m)		**0**	---	---
Tin	ppm	ASTM D5185(m)		**0**	---	---
Antimony	ppm	ASTM D5185(m)		**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**1**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**59**	---	---
Manganese	ppm	ASTM D5185(m)		**0**	---	---
Magnesium	ppm	ASTM D5185(m)		**1030**	---	---
Calcium	ppm	ASTM D5185(m)		**1070**	---	---
Phosphorus	ppm	ASTM D5185(m)		**1100**	---	---
Zinc	ppm	ASTM D5185(m)		**1210**	---	---
Sulfur	ppm	ASTM D5185(m)		**2910**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**4**	---	---
Sodium	ppm	ASTM D5185(m)		**<1**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	---	---
Nitration	Abs/cm	ASTM D7624*		**4.1**	---	---
Sulfation	Abs/.1mm	ASTM D7415*		**17.6**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		**12.7**	---	---

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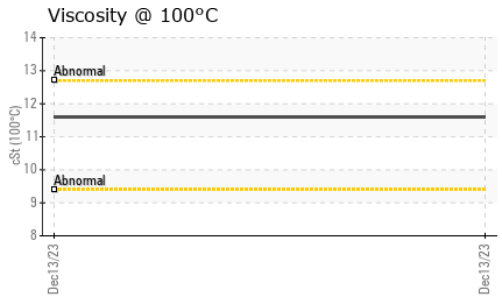

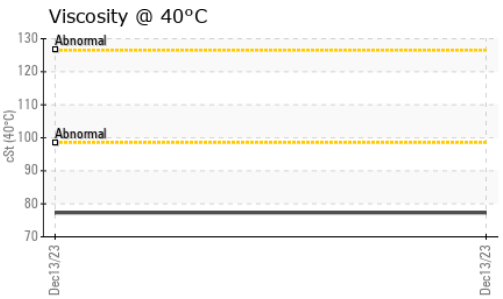

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	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 D7279(m)		**77.3**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**11.6**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		**142**	---	---

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

GRAPHS

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Petro-Canada Technical/Nick Finelli**
Sample No. : PC **Recieved** : 22 Dec 2023
Lab Number : 02604934 **Diagnosed** : 28 Dec 2023
Unique Number : 5698019 **Diagnostician** : Kevin Marson
Test Package : TEST (Additional Tests: FT-IR, ICP, ICP-NEWOIL, KV100, KV40, Spat, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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