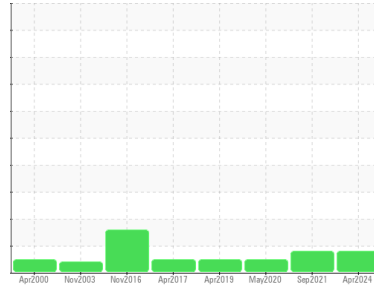


# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Area

**Fwd Machinery Space**

Machine Id

**Generator - SKSG Governor Oil (S/N Sample Tag CD-86201-S2)**

Component

**Governor System**

Fluid

**PETRO CANADA DURON UHP 5W40 (1 GAL)**

### DIAGNOSIS

**▲ Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

**▲ Fluid Condition**

Viscosity of sample indicates oil is within SAE 5W30 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC</b>	PC	PC
Sample Date	Client Info	<b>15 Apr 2024</b>	27 Sep 2021	18 May 2020
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

### CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	<b>0</b>	0	5
Iron	ppm	<b>6</b>	3	5
Chromium	ppm	<b>0</b>	0	<1
Nickel	ppm	<b>0</b>	<1	<1
Titanium	ppm	<b>0</b>	0	<1
Silver	ppm	<b>&lt;1</b>	2	2
Aluminum	ppm	<b>1</b>	<1	1
Lead	ppm	<b>0</b>	<1	<1
Copper	ppm	<b>7</b>	9	14
Tin	ppm	<b>0</b>	<1	0
Antimony	ppm	<b>0</b>	0	<1
Vanadium	ppm	<b>0</b>	0	0
Beryllium	ppm	<b>0</b>	0	0
Cadmium	ppm	<b>0</b>	0	0

### ADDITIVES

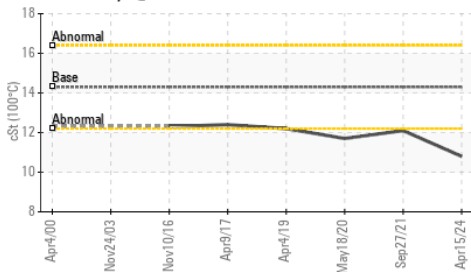
method	limit/base	current	history1	history2
Boron	ppm	<b>40</b>	6	2
Barium	ppm	<b>0</b>	0	<1
Molybdenum	ppm	<b>39</b>	4	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1
Magnesium	ppm	<b>797</b>	76	9
Calcium	ppm	<b>1177</b>	3258	3642
Phosphorus	ppm	<b>1026</b>	1397	1356
Zinc	ppm	<b>1095</b>	1485	1477
Sulfur	ppm	<b>2781</b>	4514	4924
Lithium	ppm	<b>&lt;1</b>	<1	<1

### CONTAMINANTS

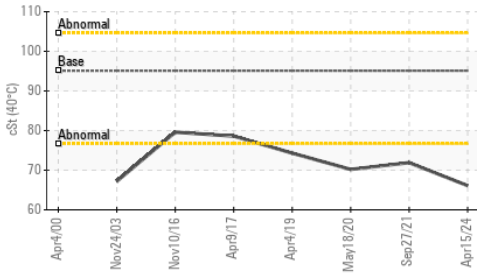
method	limit/base	current	history1	history2
Silicon	ppm	<b>2</b>	3	6
Sodium	ppm	<b>4</b>	6	7
Potassium	ppm	<b>&lt;1</b>	2	2

# OIL ANALYSIS REPORT

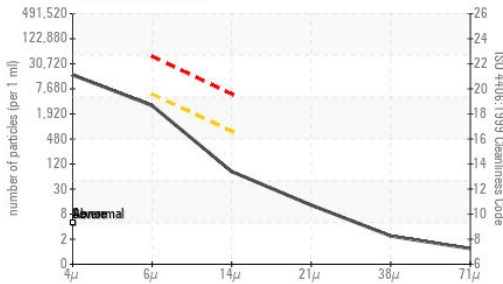
▲ Viscosity @ 100°C



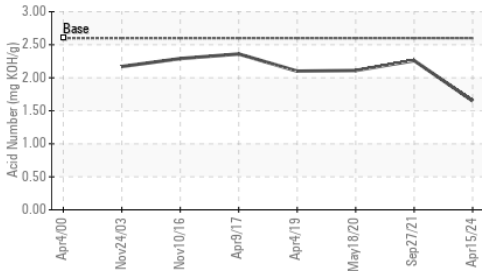
▲ Viscosity @ 40°C



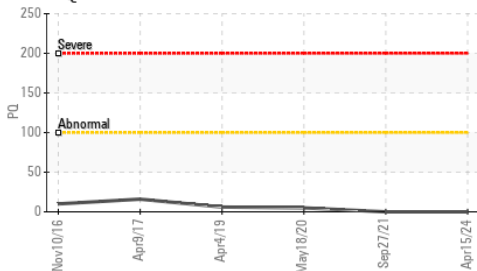
Particle Count



Acid Number



PQ



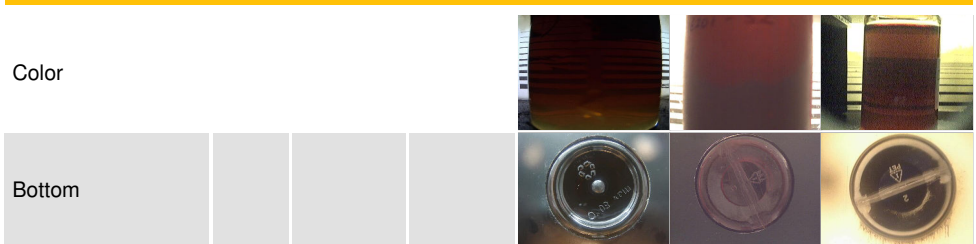
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>14442</b>	1393	3070
Particles >6µm		ASTM D7647	>5000	<b>2656</b>	192	330
Particles >14µm		ASTM D7647	>640	<b>70</b>	4	15
Particles >21µm		ASTM D7647	>160	<b>11</b>	1	5
Particles >38µm		ASTM D7647	>40	<b>2</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/19/16	<b>21/19/13</b>	18/15/9	19/16/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.6	<b>1.65</b>	2.26	2.11

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	▲ <b>66.1</b>	▲ 71.9	70.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	▲ <b>10.8</b>	▲ 12.1	11.7
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>154</b>	166	162

SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : 02634593  
**Unique Number** : 5775746  
**Test Package** : MAR 2 ( Additional Tests: KV100, PQ, PrtCount, TAN MAN, VI )

**Received** : 10 May 2024  
**Tested** : 13 May 2024  
**Diagnosed** : 13 May 2024 - Kevin Marson

**Suncor - Terra Nova Projects**  
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 F: (709)724-2835

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.