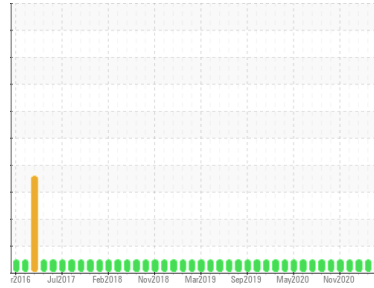


Area  
**Fwd Machinery Space [450182848]**  
Machine Id  
**Generator - SKSG Engine Crank Case (S/N Sample Tag CD-86201-S1)**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA BP ENERGOL DS3 154 (2670 LTR)**



**DIAGNOSIS**

**Recommendation**  
Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
There is no indication of any contamination in the oil.

**Fluid Condition**  
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

**SAMPLE INFORMATION** method limit/base current history 1 history 2

Sample Number	Client Info	<b>PC</b>	WC0052231	PC
Sample Date	Client Info	<b>06 Jun 2023</b>	09 Mar 2023	15 Jan 2021
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

**CONTAMINATION** method limit/base current history 1 history 2

Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

**WEAR METALS** method limit/base current history 1 history 2

Iron	ppm	ASTM D5185(m)	>25	<b>4</b>	4	6
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	<b>2</b>	2	1
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**ADDITIVES** method limit/base current history 1 history 2

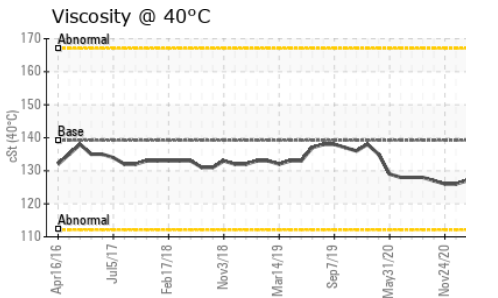
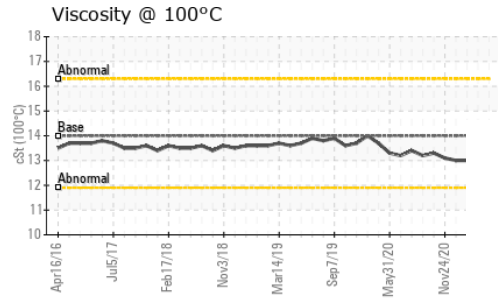
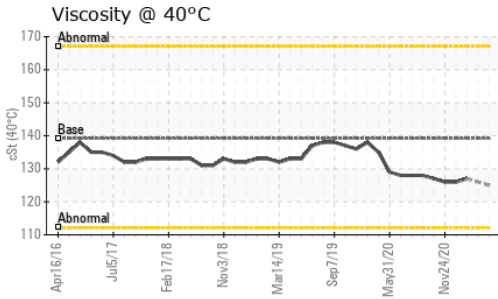
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	15	<b>20</b>	20	27
Calcium	ppm	ASTM D5185(m)	5500	<b>5343</b>	5737	5279
Phosphorus	ppm	ASTM D5185(m)	580	<b>922</b>	956	872
Zinc	ppm	ASTM D5185(m)	650	<b>961</b>	975	1030
Sulfur	ppm	ASTM D5185(m)	8500	<b>10172</b>	11173	10346
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

**CONTAMINANTS** method limit/base current history 1 history 2

Silicon	ppm	ASTM D5185(m)	>20	<b>5</b>	5	5
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1

**INFRA-RED** method limit/base current history 1 history 2

Soot %	%	ASTM D7844*	>2	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.9</b>	5.5	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>15.5</b>	15.4	14.9



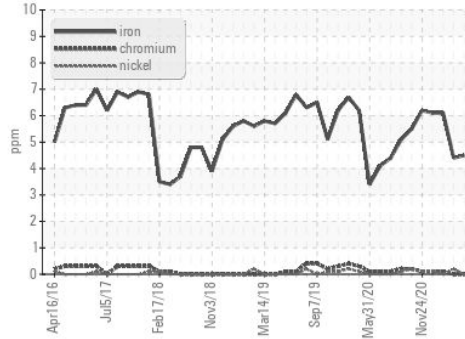
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.6</b>	5.4	8.2
Base Number (BN)	mg KOH/g	ASTM D2896*	15	<b>15.12</b>	15.90	15.70

VISUAL		method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

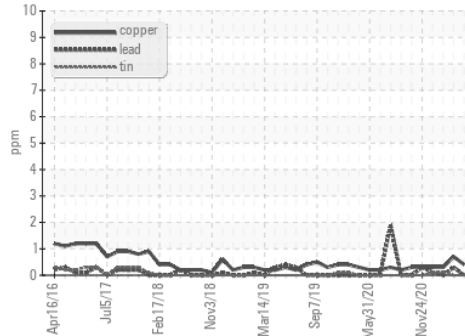
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	139.2	<b>125</b>	---	127
Visc @ 100°C	cSt	ASTM D7279(m)	14.0	<b>13.0</b>	13.1	13.0
Viscosity Index (VI)	Scale	ASTM D2270*	99	<b>96</b>	---	95

## GRAPHS

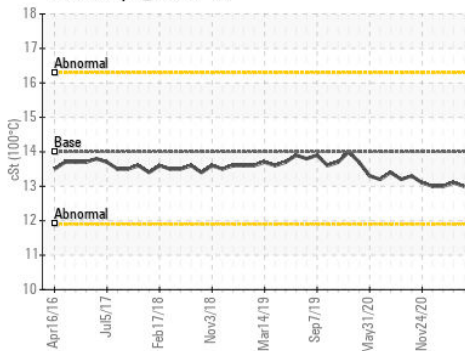
### Ferrous Alloys



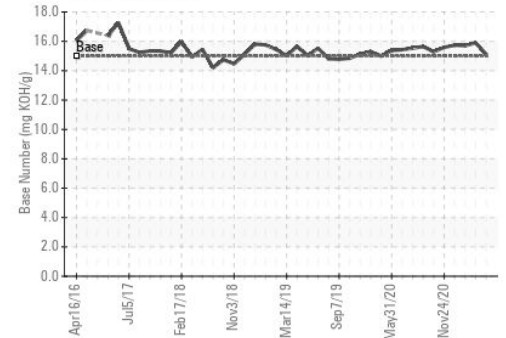
### Non-ferrous Metals



### Viscosity @ 100°C



### Base Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : 02568181  
**Unique Number** : 5605227  
**Test Package** : MAR 2 ( Additional Tests: KV40, VI)  
**Received** : 06 Jul 2023  
**Diagnosed** : 07 Jul 2023  
**Diagnostician** : Kevin Marson

**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Street  
 St. John's, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshhynes@suncor.com  
 T: (709)778-3575  
 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.