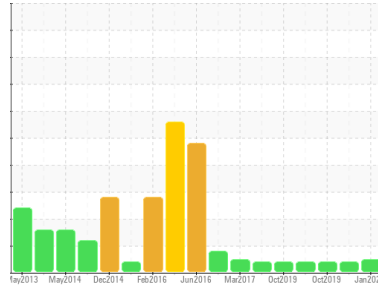


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Gas Compression [300231720]**  
Machine Id  
**Methanol Wellhead Injection Pump C - Gearbox (S/N Sample Tag PD-42010C-S1)**  
Component  
**Gearbox**  
Fluid  
**PETRO CANADA ENDURATEX SYNTHETIC EP 220 (120 LTR)**

**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**

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>08 Jan 2024</b>	24 Apr 2020	14 Oct 2019
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>	ATTENTION	ABNORMAL

**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>	6	5	
Iron	ppm	ASTM D5185(m) >150	<b>&lt;1</b>	1	17
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m) >65	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >80	<b>&lt;1</b>	1	4
Tin	ppm	ASTM D5185(m) >8	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

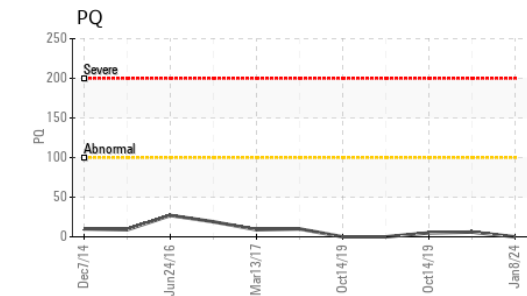
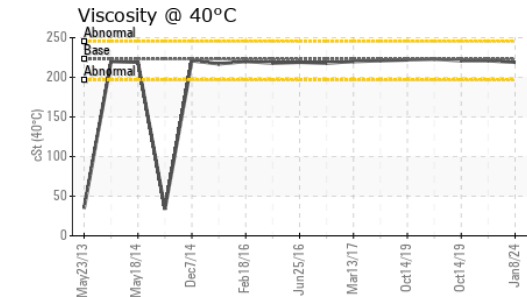
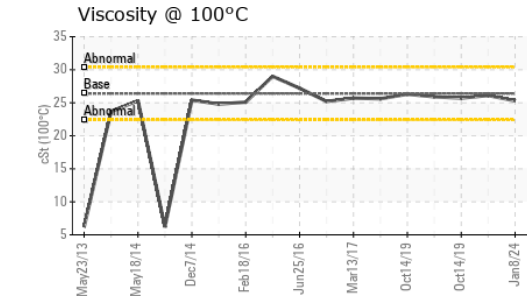
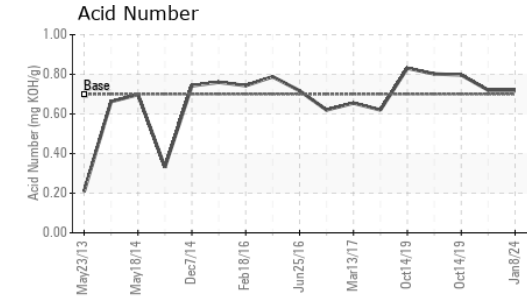
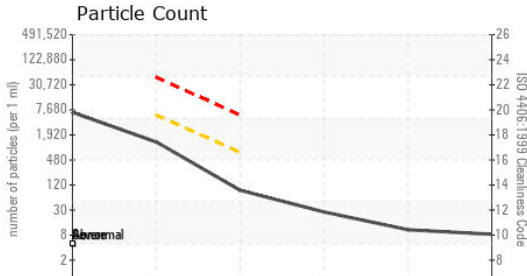
**ADDITIVES**

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 33	<b>33</b>	36	28
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m) 437	<b>393</b>	420	421
Zinc	ppm	ASTM D5185(m) 5	<b>2</b>	<1	1
Sulfur	ppm	ASTM D5185(m) 5000	<b>5706</b>	5047	5124
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

# OIL ANALYSIS REPORT



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647			<b>5802</b>	68111	148133
Particles >6µm	ASTM D7647	>5000		<b>1136</b> ▲	9988	24820 ▲
Particles >14µm	ASTM D7647	>640		<b>79</b>	223	342
Particles >21µm	ASTM D7647	>160		<b>24</b>	45	67
Particles >38µm	ASTM D7647	>40		<b>9</b>	0	0
Particles >71µm	ASTM D7647	>10		<b>7</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/19/16		<b>20/17/13</b> ▲	23/20/15	24/22/16 ▲

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.7	<b>0.72</b>	0.72	0.797

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	VLITE
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)	223	<b>219</b>	221	221
Visc @ 100°C	cSt	ASTM D7279(m)	26.39	<b>25.3</b>	26.1	25.7
Viscosity Index (VI)	Scale	ASTM D2270*	151	<b>146</b>	150	147

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : **02611247** **Received** : 25 Jan 2024  
**Unique Number** : 5720342 **Diagnosed** : 26 Jan 2024  
**Test Package** : MAR 2 ( Additional Tests: KV100, PQ, PrtCount, TAN Man, VI ) **Diagnostician** : 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.