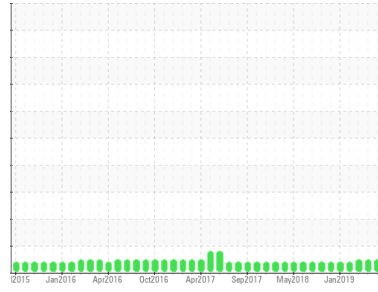


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Turret**

Machine Id

Reservoir Tank Heat Transfer Fluid (WH-167804) (S/N Sample Tag: TB-16601 WH-167804)

Component

Heat Transfer Fluid

Fluid

PETRO CANADA TURBOFLO EP 46 (800 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 fluid is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC0080671</b>	PC0080216	PC0080349
Sample Date	Client Info	<b>23 Jun 2024</b>	27 May 2024	09 Apr 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	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	history1	history2	
Water	WC Method	>0.0601	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>200	<b>0</b>	0	0
Chromium	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>21	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>21	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>21	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	>21	<b>0</b>	0	0
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)		<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Calcium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185(m)	280	<b>261</b>	271	266
Zinc	ppm	ASTM D5185(m)	0.0	<b>1</b>	1	1
Sulfur	ppm	ASTM D5185(m)		<b>682</b>	681	692
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

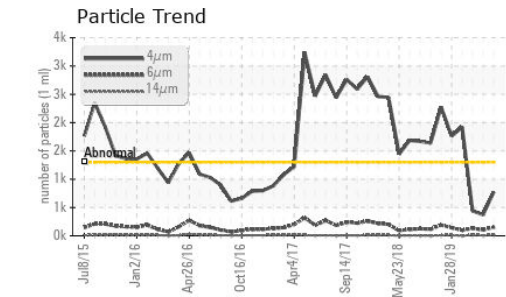
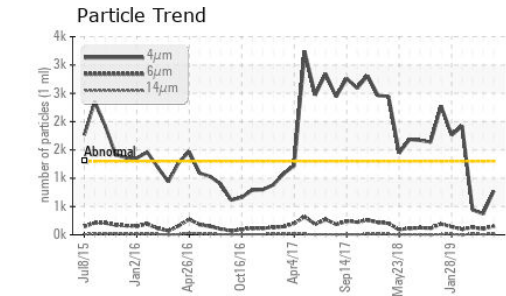
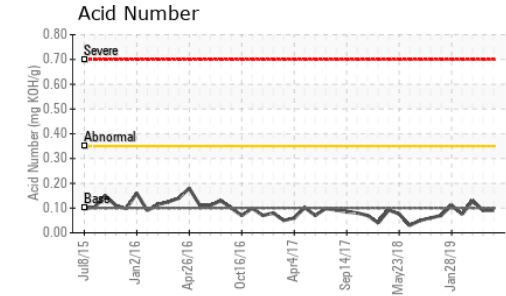
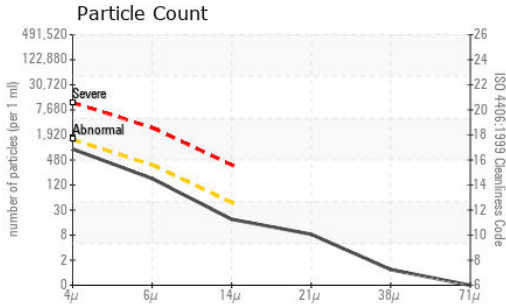
## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185(m)	>21	<b>1</b>	1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	0	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>1300	<b>771</b>	372	441
Particles >6µm	ASTM D7647	>320	<b>151</b>	104	132
Particles >14µm	ASTM D7647	>40	<b>16</b>	8	17
Particles >21µm	ASTM D7647	>10	<b>7</b>	2	8
Particles >38µm	ASTM D7647	>3	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	<b>17/14/11</b>	16/14/10	16/14/11

# OIL ANALYSIS REPORT

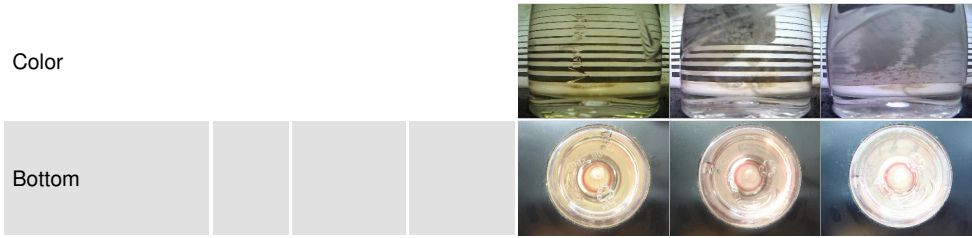


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.10	<b>0.09</b>	0.09	0.13

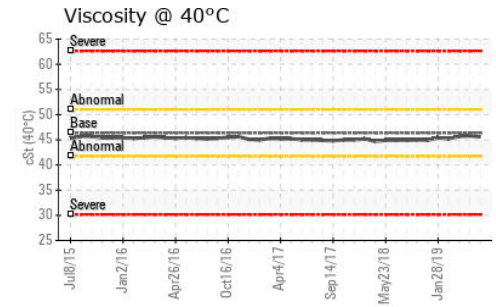
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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*	>0.0601	<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)	46.37	<b>45.6</b>	45.8	45.7

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0080671 **Received** : 24 Jun 2024  
**Lab Number** : **02643724** **Tested** : 25 Jun 2024  
**Unique Number** : 5801263 **Diagnosed** : 25 Jun 2024 - Kevin Marson  
**Test Package** : MAR 2 ( Additional Tests: PrtCount, TAN Man )

**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Street  
 St. John's, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshynes@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.