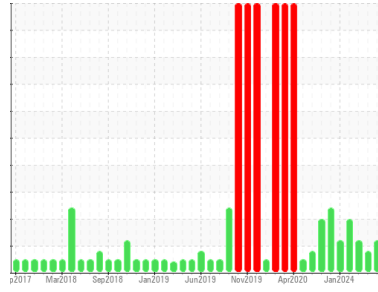


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**Fwd Machinery Space [450339560]**  
Machine Id  
**Thruster Fwd Aft - Seal Oil System (S/N Sample Tag CL-06004-S3)**  
Component  
**Sealing System**  
Fluid  
**PETRO CANADA ENERGOL GR-XP ISO 150 (65 LTR)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the fluid.

### 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>PC0076440</b>	PC	PC
Sample Date	Client Info	<b>21 May 2024</b>	21 Apr 2024	26 Feb 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>ATTENTION</b>	ATTENTION	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >100	<b>&lt;1</b>	<1
Chromium	ppm	ASTM D5185(m) >3	<b>0</b>	0
Nickel	ppm	ASTM D5185(m) >8	<b>0</b>	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0
Aluminum	ppm	ASTM D5185(m) >3	<b>0</b>	<1
Lead	ppm	ASTM D5185(m)	<b>0</b>	0
Copper	ppm	ASTM D5185(m) >3	<b>0</b>	<1
Tin	ppm	ASTM D5185(m)	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0

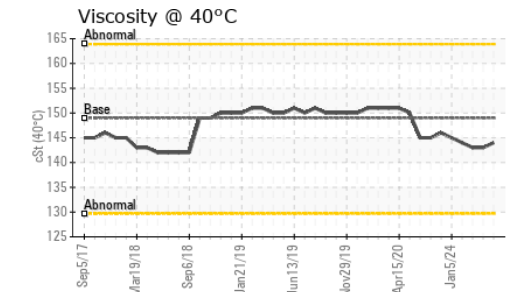
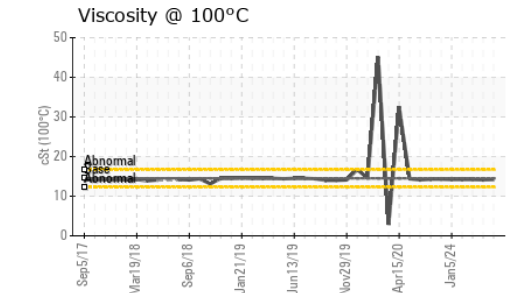
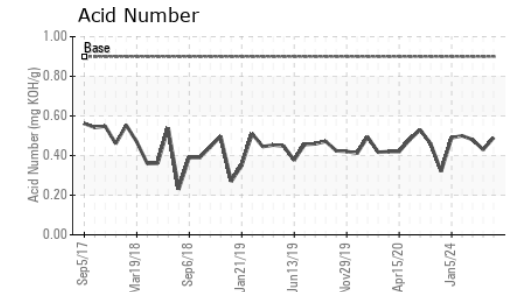
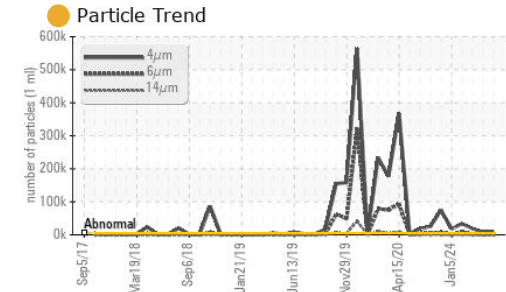
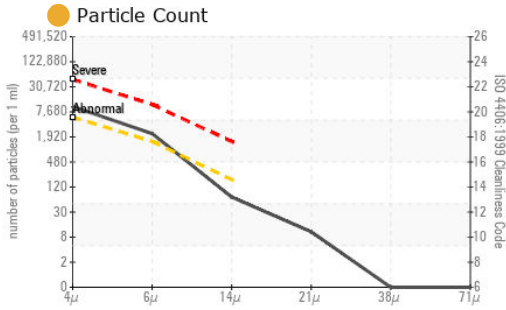
## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>16</b>	14
Barium	ppm	ASTM D5185(m)	<b>0</b>	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1
Calcium	ppm	ASTM D5185(m)	<b>4</b>	6
Phosphorus	ppm	ASTM D5185(m)	<b>169</b>	159
Zinc	ppm	ASTM D5185(m)	<b>4</b>	4
Sulfur	ppm	ASTM D5185(m)	<b>8021</b>	7909
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>2</b>	2
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1

# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0076440  
**Lab Number** : 02640339  
**Unique Number** : 5789501  
**Test Package** : MAR 2 ( Additional Tests: KV100, PQ, PrtCount, TAN Man, VI )

**Received** : 06 Jun 2024  
**Tested** : 07 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Kevin Marson

**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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	8947	8655	18254
Particles >6µm	ASTM D7647	>1300	2017	1183	2806
Particles >14µm	ASTM D7647	>160	61	45	140
Particles >21µm	ASTM D7647	>40	9	10	35
Particles >38µm	ASTM D7647	>10	0	1	6
Particles >71µm	ASTM D7647	>3	0	0	4
Oil Cleanliness	ISO 4406 (c)	>19/17/14	20/18/13	20/17/13	21/19/14

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.9	0.49	0.43	0.48

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	149	144	143
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.2	14.1
Viscosity Index (VI)	Scale	ASTM D2270*		95	95

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

