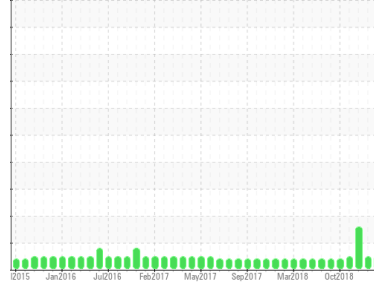


Area
Turret [450296480]
 Machine Id
Reservoir Tank Heat Transfer Fluid (WH-167839) (S/N Sample Tag: TB-16602 WH-167839)
 Component
Heat Transfer Fluid
 Fluid
PETRO CANADA TURBOFLO EP 46 (800 LTR)



DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. Lubritest recommends using HTTFL sample kits for heat transfer fluids. Please contact us at 1-800-268-2131 and provide a purchase order for \$245 + HST in order to conduct additional testing (boiling points @ 10%, 50%, and 90%, percent boiling < 335°C, and solids) to determine the suitability for continued use. Please contact your representative for information regarding the proper sampling kits for your service.

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	PC0080348	PC	PC0076372
Sample Date	Client Info	09 Apr 2024	07 Jan 2024	09 Oct 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ATTENTION

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>0.0601	NEG	NEG	NEG
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WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>200	0	0	0
Chromium	ppm	ASTM D5185(m)	>21	0	0	0
Nickel	ppm	ASTM D5185(m)	>21	0	<1	0
Titanium	ppm	ASTM D5185(m)	>21	0	0	0
Silver	ppm	ASTM D5185(m)	>21	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>21	0	<1	0
Lead	ppm	ASTM D5185(m)	>21	0	0	0
Copper	ppm	ASTM D5185(m)	>21	0	0	<1
Tin	ppm	ASTM D5185(m)	>21	0	0	0
Antimony	ppm	ASTM D5185(m)	>21	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)		<1	0	<1
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	0	0
Calcium	ppm	ASTM D5185(m)		0	0	<1
Phosphorus	ppm	ASTM D5185(m)	280	269	274	275
Zinc	ppm	ASTM D5185(m)	0.0	1	<1	1
Sulfur	ppm	ASTM D5185(m)		693	740	694
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

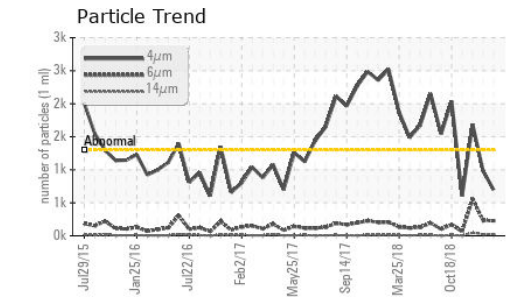
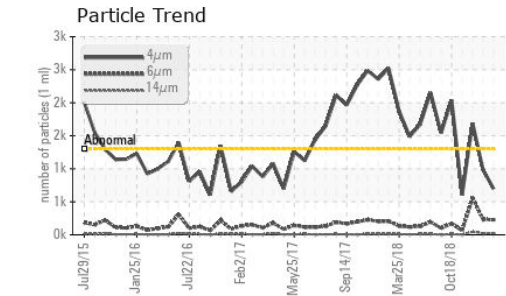
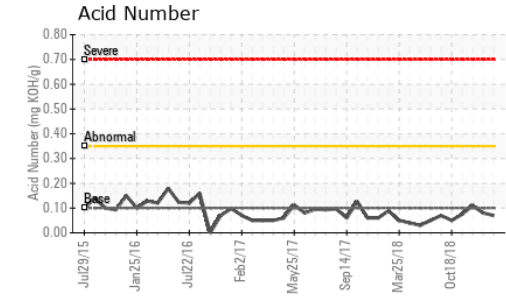
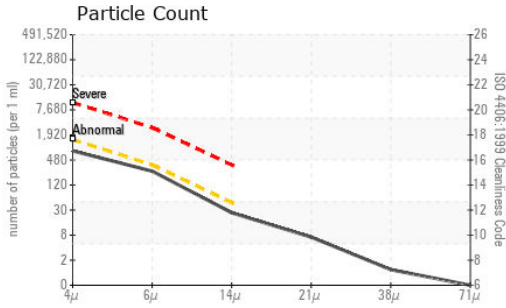
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>25	0	0	0
Sodium	ppm	ASTM D5185(m)	>21	1	1	1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0

FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm	ASTM D7647	>1300	697	981	● 1690
Particles >6µm	ASTM D7647	>320	228	232	● 562
Particles >14µm	ASTM D7647	>40	23	21	● 44
Particles >21µm	ASTM D7647	>10	6	5	14
Particles >38µm	ASTM D7647	>3	1	1	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	17/15/12	17/15/12	● 18/16/13

OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g ASTM D974*	.10	0.07	0.08	0.11

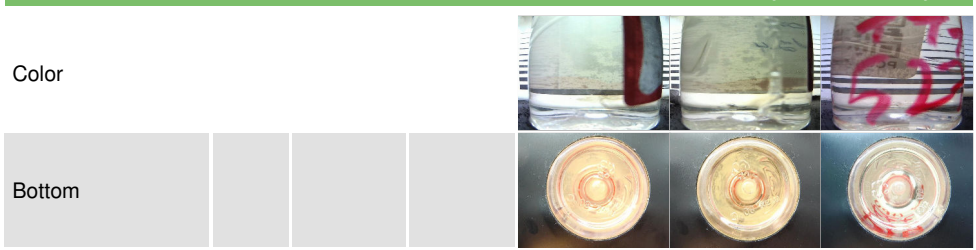
VISUAL

method	limit/base	current	history1	history2	
White Metal	scalar Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar Visual*	NONE	NONE	NONE	NONE
Silt	scalar Visual*	NONE	NONE	NONE	NONE
Debris	scalar Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar Visual*	NONE	NONE	NONE	NONE
Appearance	scalar Visual*	NORML	NORML	NORML	NORML
Odor	scalar Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar Visual*	>0.0601	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

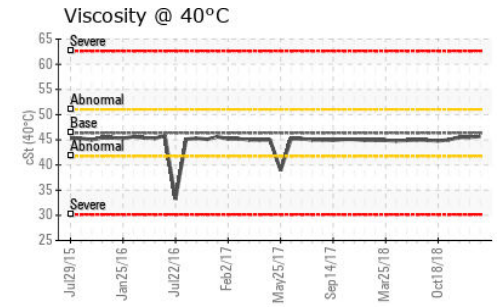
FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt ASTM D7279(m)	46.37	45.7	45.5	45.5

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080348 **Received** : 26 Apr 2024
Lab Number : **02631633** **Tested** : 29 Apr 2024
Unique Number : 5772786 **Diagnosed** : 29 Apr 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: PrtCount)

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.