OIL ANALYSIS REPORT

Sample Rating Trend

Mar2024

ISO

Area
Beton Lagace - 888079
Machine Id
XB124
Component
Heat Transfer Fluid
Fluid
PETRO CANADA PETRO-THERM (--- GAL)

DIAGNOSIS

⚠ **Recommendation**

The sample submitted is 4 times dirtier than the ISO dirt count recommendation of 19/16/14.

⚠ **Contamination**

Particles >4µm and oil cleanliness are notably high.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Department	Client Info		**Sales**	---	---
Sample From	Client Info		**Machine**	---	---
Production Stage	Client Info		**Initial**	---	---
Sent to WC	Client Info		**03/27/2024**	---	---
Sample Number	Client Info		**E30001761**	---	---
Sample Date	Client Info		**20 Mar 2024**	---	---
Machine Age	hrs	Client Info	**0**	---	---
Oil Age	hrs	Client Info	**0**	---	---
Oil Changed		Client Info	**N/A**	---	---
Sample Status			**ABNORMAL**	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >200	**0**	---	---
Chromium	ppm	ASTM D5185(m) >21	**0**	---	---
Nickel	ppm	ASTM D5185(m) >21	**0**	---	---
Titanium	ppm	ASTM D5185(m) >21	**0**	---	---
Silver	ppm	ASTM D5185(m) >21	**0**	---	---
Aluminum	ppm	ASTM D5185(m) >21	**0**	---	---
Lead	ppm	ASTM D5185(m) >21	**0**	---	---
Copper	ppm	ASTM D5185(m) >21	**0**	---	---
Tin	ppm	ASTM D5185(m) >21	**0**	---	---
Antimony	ppm	ASTM D5185(m) >21	**0**	---	---
Vanadium	ppm	ASTM D5185(m)	**0**	---	---
Beryllium	ppm	ASTM D5185(m)	**0**	---	---
Cadmium	ppm	ASTM D5185(m)	**0**	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	**0**	---	---
Barium	ppm	ASTM D5185(m)	**0**	---	---
Molybdenum	ppm	ASTM D5185(m)	**0**	---	---
Manganese	ppm	ASTM D5185(m)	**0**	---	---
Magnesium	ppm	ASTM D5185(m)	**0**	---	---
Calcium	ppm	ASTM D5185(m)	**0**	---	---
Phosphorus	ppm	ASTM D5185(m) 0	**0**	---	---
Zinc	ppm	ASTM D5185(m) 0	**<1**	---	---
Sulfur	ppm	ASTM D5185(m) 326	**6**	---	---
Lithium	ppm	ASTM D5185(m)	**<1**	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	**0**	---	---
Sodium	ppm	ASTM D5185(m) >21	**0**	---	---
Potassium	ppm	ASTM D5185(m) >20	**0**	---	---
Water	%	ASTM D6304* >0.0601	**0.001**	---	---
ppm Water	ppm	ASTM D6304* >601	**9**	---	---

OIL ANALYSIS REPORT
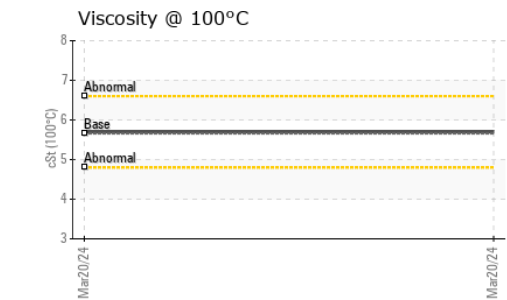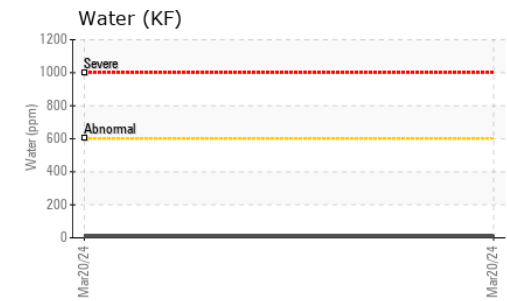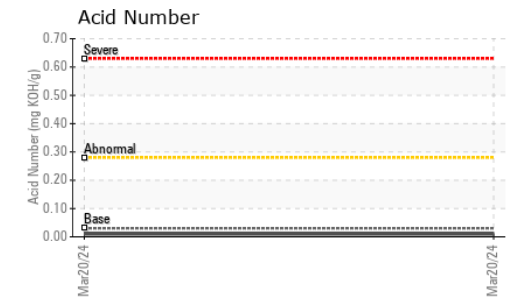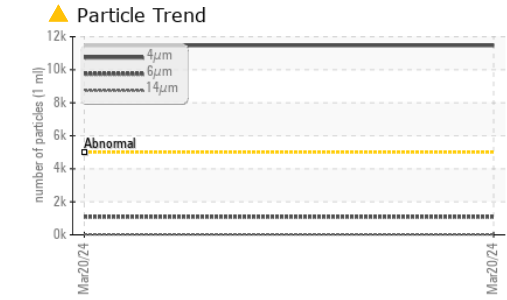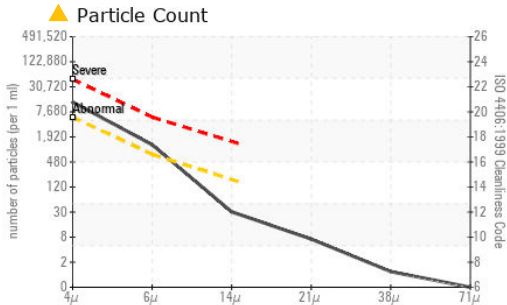
![E360S Environmental 360 Solutions logo]

Charts (left column)

- **Particle Count** ▲
- **Particle Trend** ▲
- **Acid Number**
- **Water (KF)**
- **Viscosity @ 100°C**

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 11469	---	---
Particles >6µm	ASTM D7647	>640	⬤ 1091	---	---
Particles >14µm	ASTM D7647	>160	27	---	---
Particles >21µm	ASTM D7647	>40	6	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	▲ 21/17/12	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D974*	0.03	0.01	---	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C cSt	ASTM D7279(m)	34.2	35.1	---	---
Visc @ 100°C cSt	ASTM D7279(m)	5.66	5.7	---	---
Viscosity Index (VI) Scale	ASTM D2270*	95	100	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			[image]	no image	no image
Bottom			[image]	no image	no image