



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
TIGERCAT 630H 6306097
 Component
Hydraulic System
 Fluid
SHELL TELLUS S2 VX 46 (113 LTR)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02634355	---	---
Sample Date		Client Info		03 May 2024	---	---
Machine Age	hrs	Client Info		4600	---	---
Oil Age	hrs	Client Info		2888	---	---
Filter Age	hrs	Client Info		500	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	17	---	---
Chromium	ppm	ASTM D5185(m)	>10	2	---	---
Nickel	ppm	ASTM D5185(m)	>10	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	---	---
Lead	ppm	ASTM D5185(m)	>10	0	---	---
Copper	ppm	ASTM D5185(m)	>75	2	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

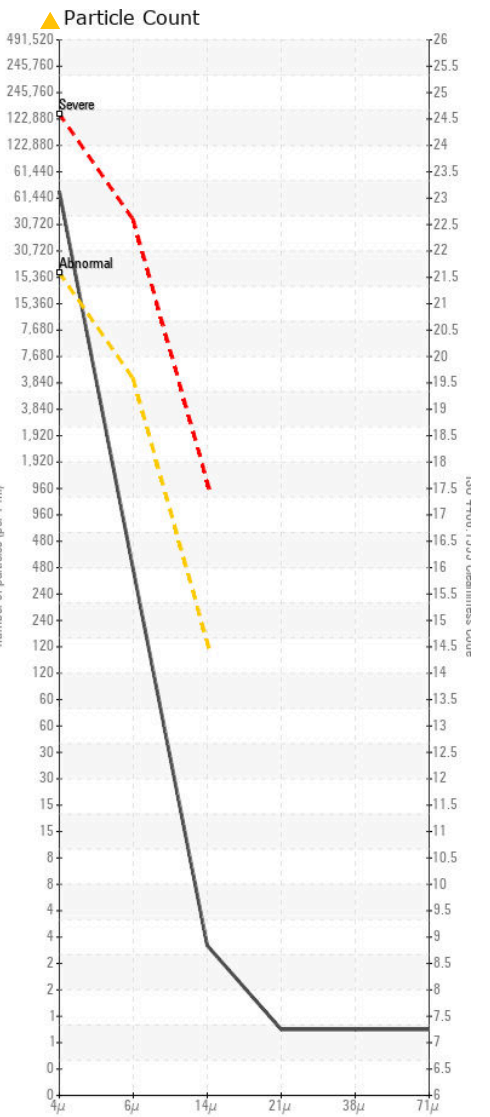
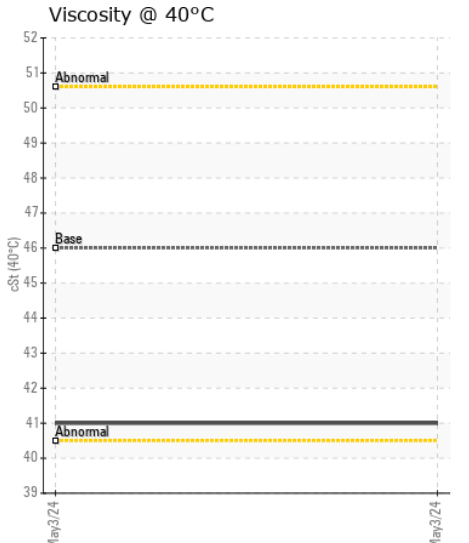
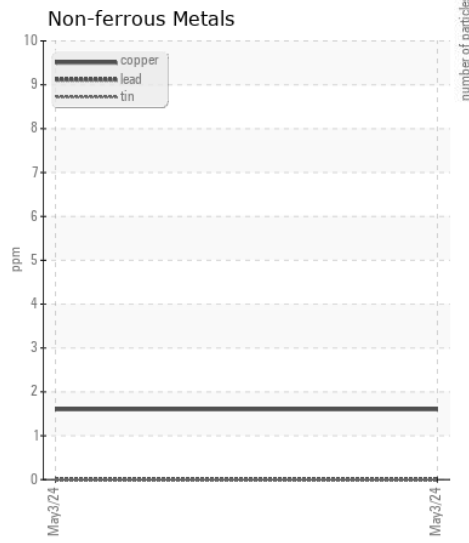
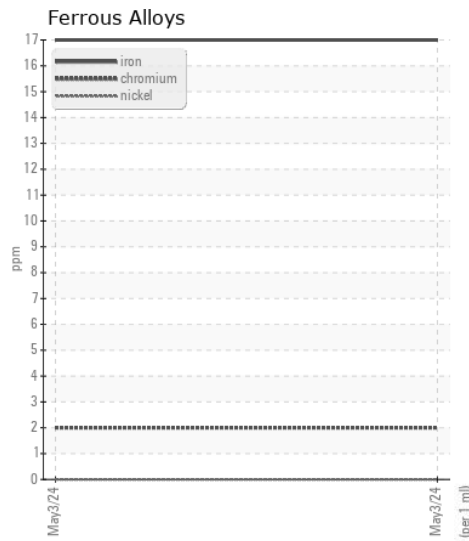
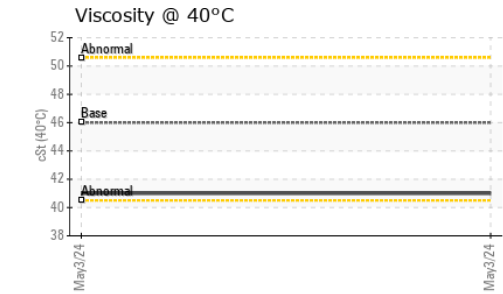
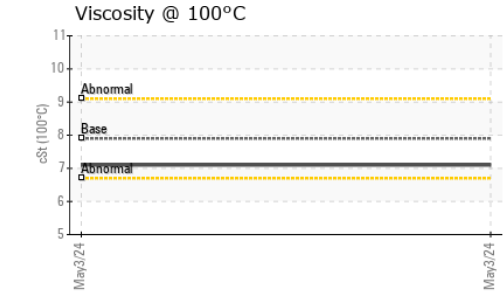
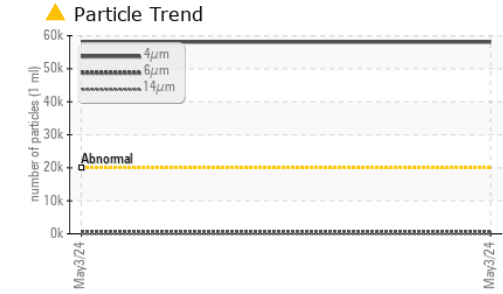
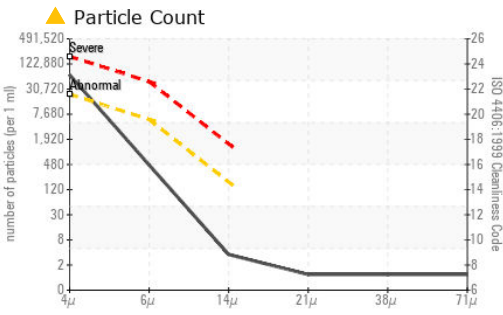
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>20000	▲ 58088	---	---
Particles >6µm		ASTM D7647	>5000	411	---	---
Particles >14µm		ASTM D7647	>160	3	---	---
Particles >21µm		ASTM D7647	>40	1	---	---
Particles >38µm		ASTM D7647	>10	1	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/14	▲ 23/16/9	---	---
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*	>0.1	NEG	---	---

FLUID CONDITION

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)		<1	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		20	---	---
Calcium	ppm	ASTM D5185(m)		33	---	---
Phosphorus	ppm	ASTM D5185(m)		296	---	---
Zinc	ppm	ASTM D5185(m)		351	---	---
Sulfur	ppm	ASTM D5185(m)		848	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46	41.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	7.9	7.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	143	135	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02634355 **Received** : 09 May 2024
Lab Number : 02634355 **Tested** : 10 May 2024
Unique Number : 5775508 **Diagnosed** : 10 May 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, VI)

PETROLES TEMIS
 10 RUBE DUBE
 VILLE-MARIE, QC
 CA J9V 1N9
 Contact: Michael Gauthier
 vente@petrolestemis.com
 T: (819)629-6883
 F: (819)629-2215

To discuss this sample report, contact Customer Service at 1-800-827-0711.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)