



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**TIGERCAT 620H 6209618**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC IV 15W40 (4 GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06057474	---	---
Sample Date		Client Info		01 Jan 2024	---	---
Machine Age	hrs	Client Info		256	---	---
Oil Age	hrs	Client Info		256	---	---
Filter Age	hrs	Client Info		256	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>125	43	---	---
Chromium	ppm	ASTM D5185m	>8	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>15	2	---	---
Lead	ppm	ASTM D5185m	>30	<1	---	---
Copper	ppm	ASTM D5185m	>125	74	---	---
Tin	ppm	ASTM D5185m	>5	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

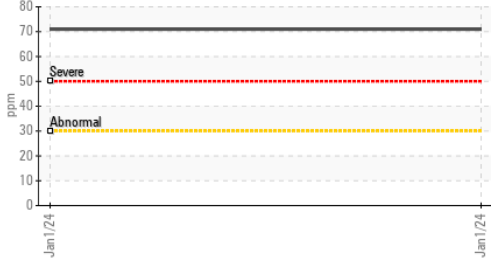
Silicon	ppm	ASTM D5185m	>30	▲ 71	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	---	---
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	>0.2	NEG	---	---

## FLUID CONDITION

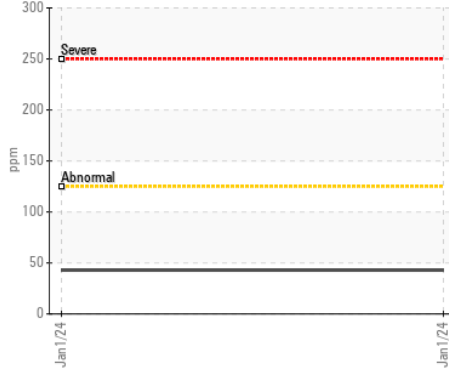
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m		18	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		9	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m		79	---	---
Calcium	ppm	ASTM D5185m	1300	2508	---	---
Phosphorus	ppm	ASTM D5185m		857	---	---
Zinc	ppm	ASTM D5185m	1300	1058	---	---
Sulfur	ppm	ASTM D5185m		3422	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	14	8.72	---	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.4	---	---

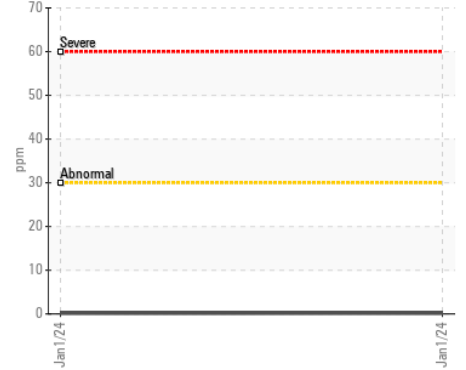
▲ Silicon (ppm)



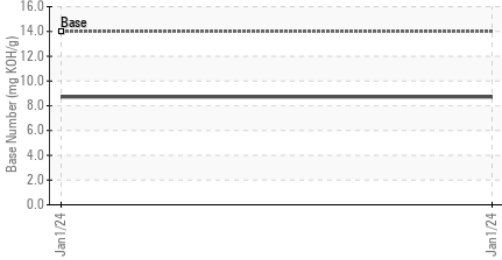
Iron (ppm)



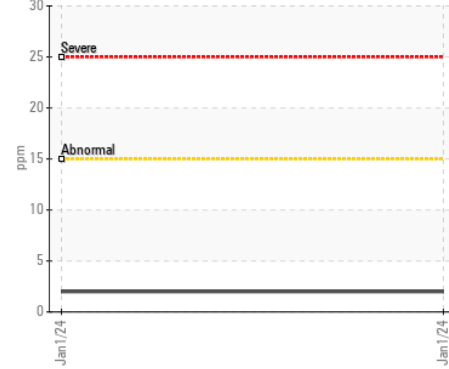
Lead (ppm)



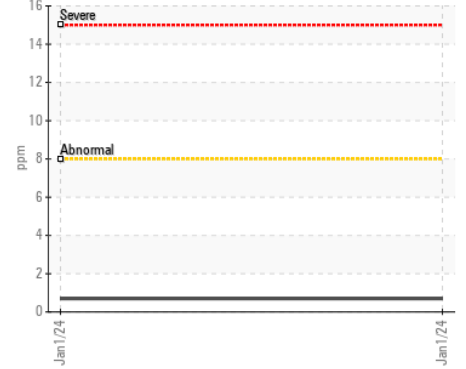
Base Number



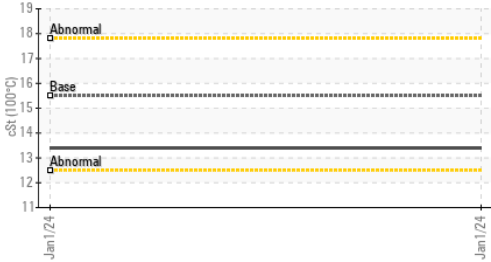
Aluminum (ppm)



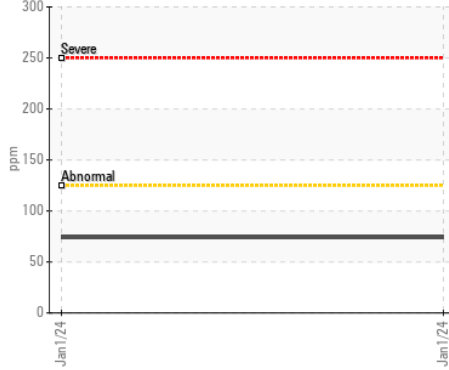
Chromium (ppm)



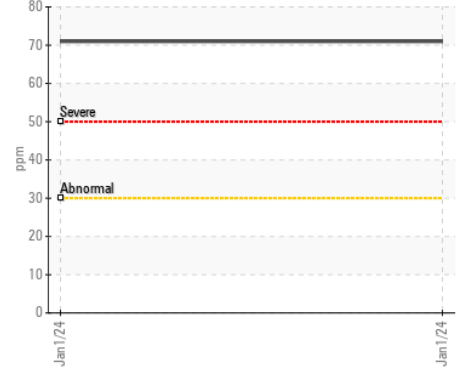
Viscosity @ 100°C



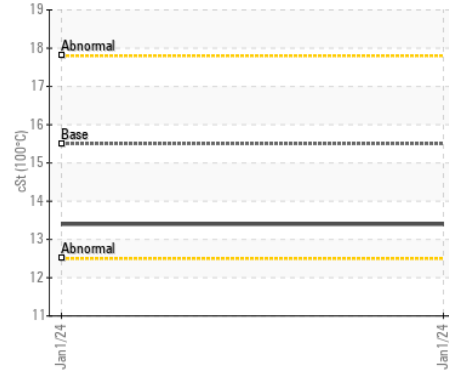
Copper (ppm)



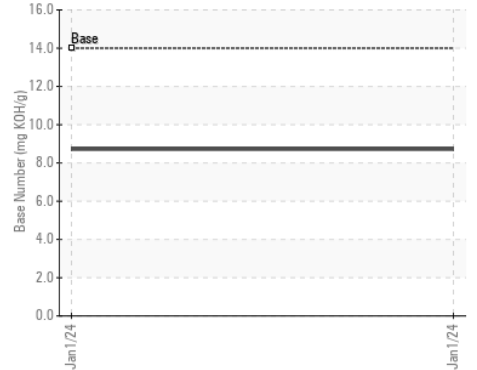
▲ Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06057474 **Received** : 10 Jan 2024  
**Lab Number** : 06057474 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10823423 **Diagnostician** : Sean Felton  
**Test Package** : MOB 2

**RICH KLEIN**  
 64 PUMPKIN CREEK RD  
 WAVERLY, TN  
 US 37185  
 Contact: RICH KLEIN  
 THREERIVERSFORESTRY@YAHOO.COM

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)

T:  
F: