



**T R A A P**  
Texas Refinery Advanced Analysis Program

**OIL ANALYSIS REPORT**

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**CASE-IH AFS 7240 7240-17 (S/N YHG234318)**  
Component  
**Diesel Engine**  
Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR05773048</b>	TR05441596	TR05132501
Sample Date		Client Info		<b>10 Nov 2022</b>	16 Nov 2021	06 Nov 2020
Machine Age	hrs	Client Info		<b>790</b>	646	481
Oil Age	hrs	Client Info		<b>144</b>	165	155
Filter Age	hrs	Client Info		<b>144</b>	165	155
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	22	17
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	6	7
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>300</b>	452	131
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

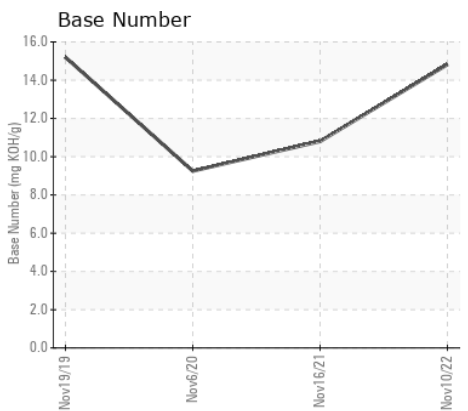
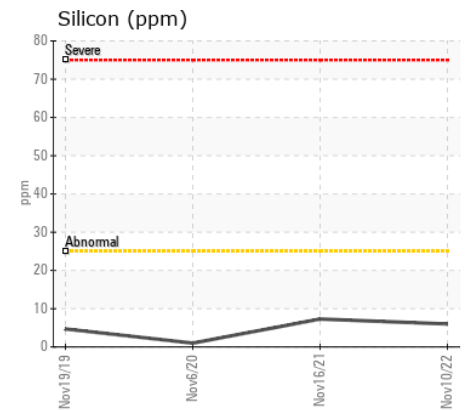
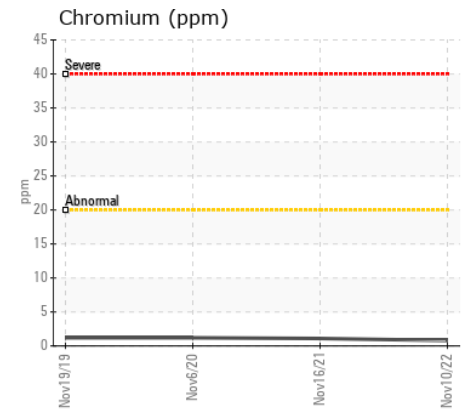
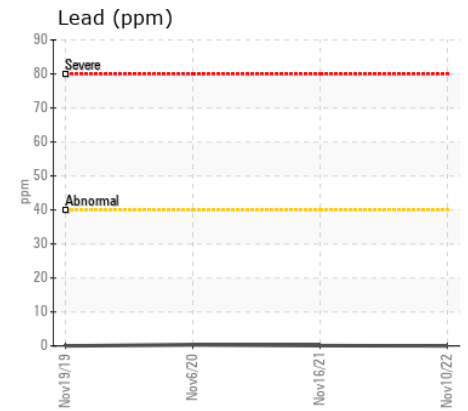
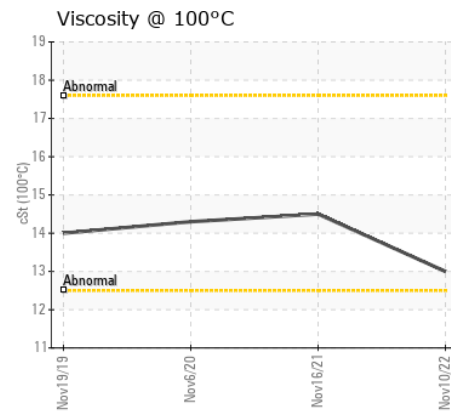
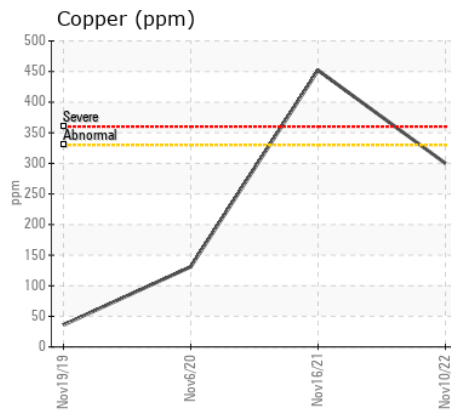
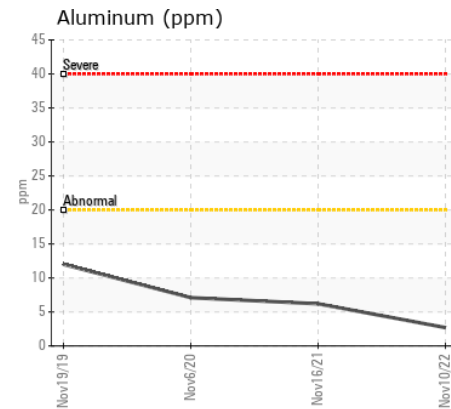
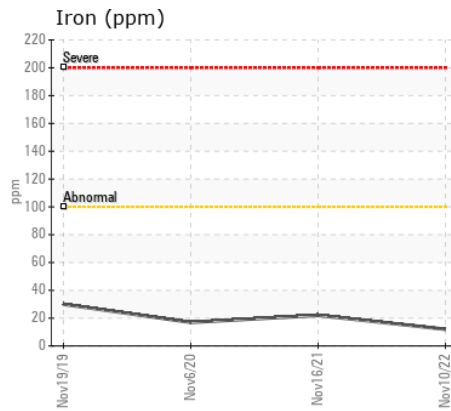
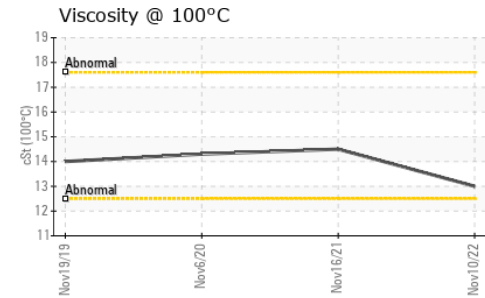
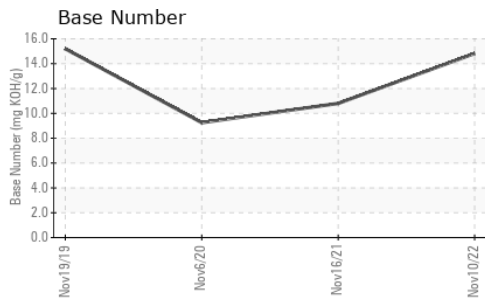
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	1
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	22	23
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	9.4	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	18.7	19.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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		<b>3</b>	9	5
Boron	ppm	ASTM D5185m		<b>0</b>	<1	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>131</b>	139	179
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>35</b>	150	876
Calcium	ppm	ASTM D5185m		<b>3973</b>	3715	1784
Phosphorus	ppm	ASTM D5185m		<b>828</b>	948	1197
Zinc	ppm	ASTM D5185m		<b>974</b>	1029	1386
Sulfur	ppm	ASTM D5185m		<b>3872</b>	3324	3676
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	11.7	14.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>14.82</b>	10.8	9.25
Visc @ 100°C	cSt	ASTM D445		<b>13.0</b>	14.5	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR05773048 **Received** : 21 Feb 2023  
**Lab Number** : 05773048 **Diagnosed** : 22 Feb 2023  
**Unique Number** : 10347665 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

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)

**PHIL HARDER**  
 57803 350TH STREET  
 MOUNTAIN LAKE, MN  
 US 56159  
 Contact: PHILIP HARDER  
 philbren@frontiernet.net  
 T: 5(07) 227-6074  
 F: