



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

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

Machine Id  
**INTERNATIONAL 8**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (9 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06102560</b>	TR05617222	TR05170611
Sample Date		Client Info		<b>16 Feb 2024</b>	26 Jul 2022	07 Dec 2020
Machine Age	mls	Client Info		<b>1770660</b>	1680003	0
Oil Age	mls	Client Info		<b>30000</b>	30000	30000
Filter Age	mls	Client Info		<b>15000</b>	15000	15000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>72</b>	72	46
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	2
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	0
Copper	ppm	ASTM D5185m	>330	<b>9</b>	▲ 692	7
Tin	ppm	ASTM D5185m	>15	<b>2</b>	3	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

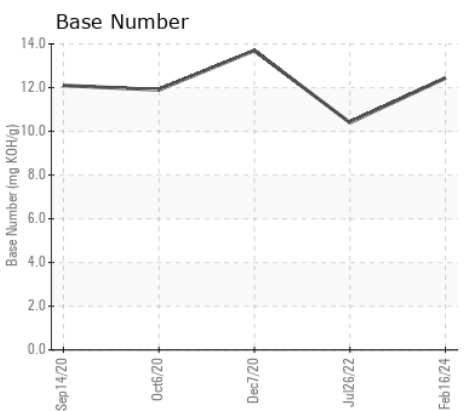
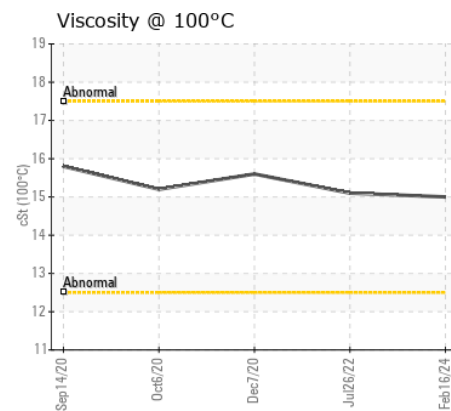
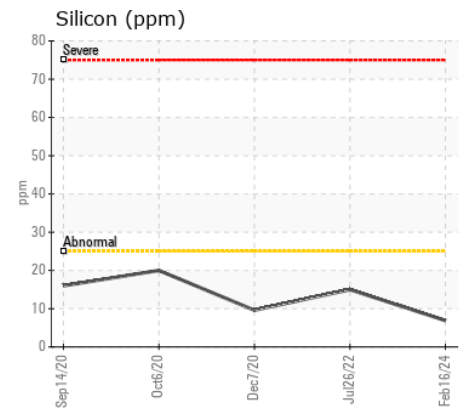
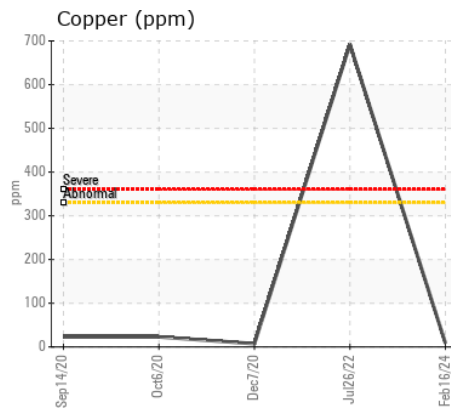
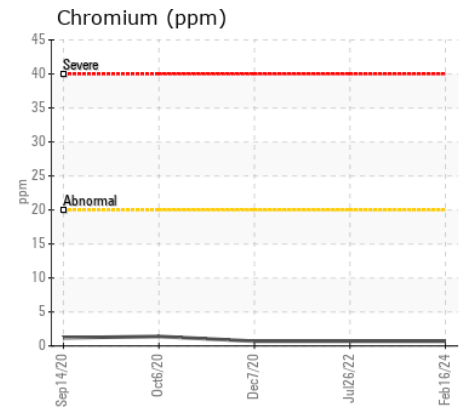
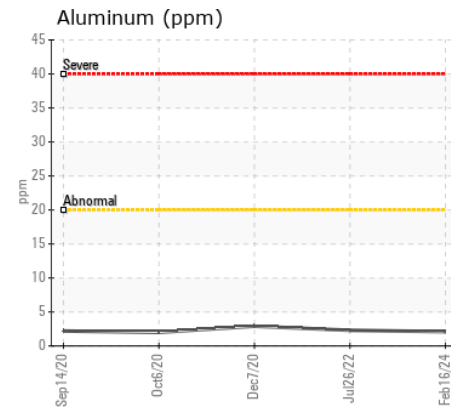
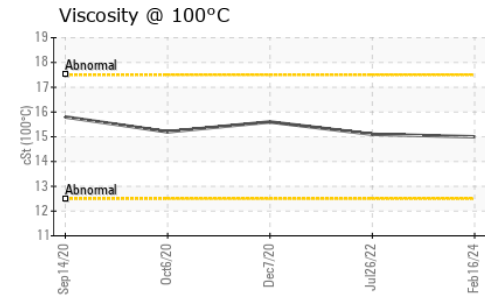
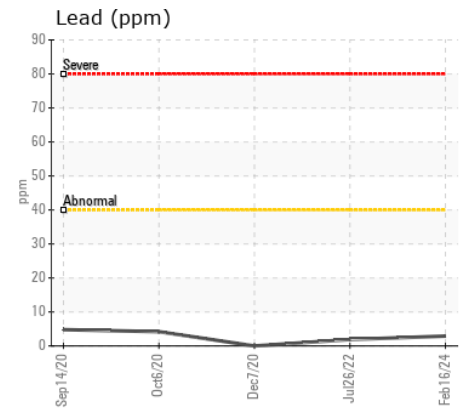
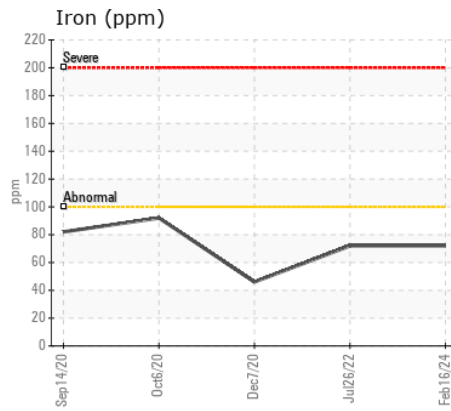
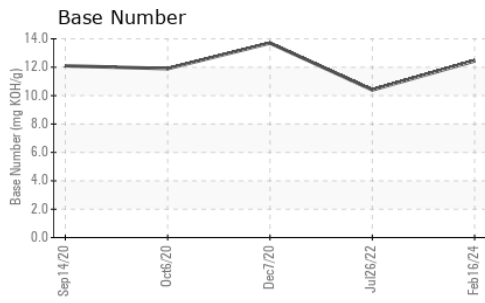
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	15	10
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	3
Fuel		WC Method	>2.0	<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>0.5</b>	0.7	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.0</b>	10.7	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.7</b>	23.3	21.2
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>1</b>	5	5
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	12	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>130</b>	108	120
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>20</b>	19	20
Calcium	ppm	ASTM D5185m		<b>4690</b>	4016	4438
Phosphorus	ppm	ASTM D5185m		<b>927</b>	848	934
Zinc	ppm	ASTM D5185m		<b>1177</b>	1006	1048
Sulfur	ppm	ASTM D5185m		<b>4662</b>	3835	3283
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	13.9	10.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>12.44</b>	10.4	13.7
Visc @ 100°C	cSt	ASTM D445		<b>15.0</b>	15.1	15.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06102560  
**Lab Number** : 06102560  
**Unique Number** : 10900790  
**Test Package** : MOB 2

**Received** : 27 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**JERRY TRENTHAM TRUCKING**  
 6266 STATE HWY 34, SUITE C  
 GLEN ALLEN, MO  
 US 63751  
 Contact: JONNY KENT

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)

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F: