



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

**75**

Component

**Rear Diesel Engine**

Fluid

**TRC MOLY XL PRO-SPEC IV XP 15W40 (10 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR0001524</b>	TR0001365	TR0001244
Sample Date		Client Info		<b>03 Jul 2024</b>	08 Apr 2024	14 Nov 2023
Machine Age	hrs	Client Info		<b>20861</b>	20519	19490
Oil Age	hrs	Client Info		<b>1371</b>	1029	665
Filter Age	hrs	Client Info		<b>342</b>	1029	665
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>42</b>	40	62
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	1	1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	4	6
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>330	<b>27</b>	46	425
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	2
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

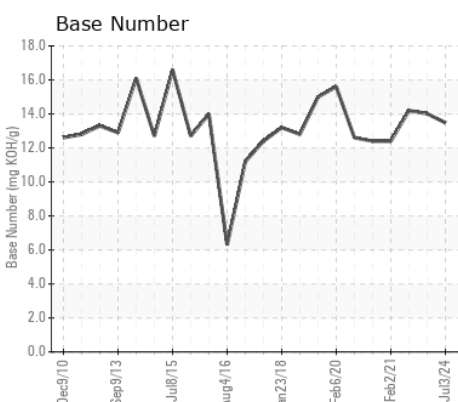
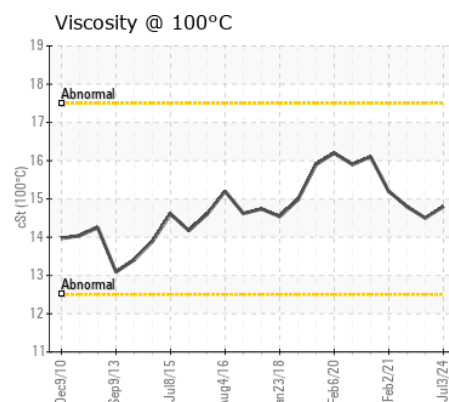
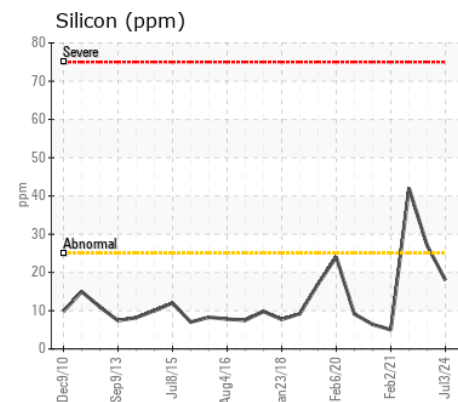
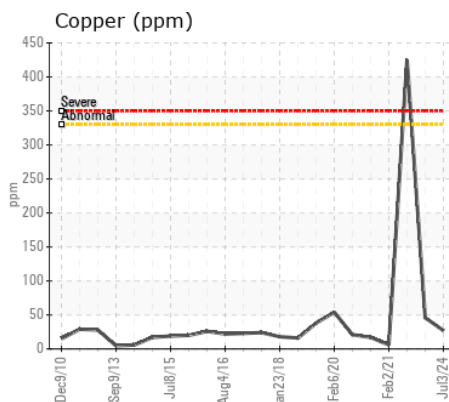
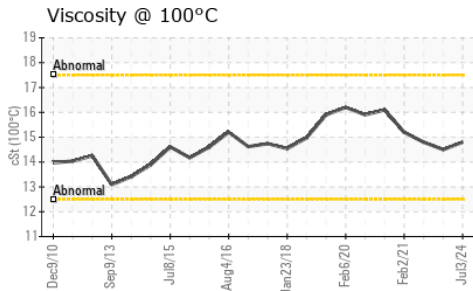
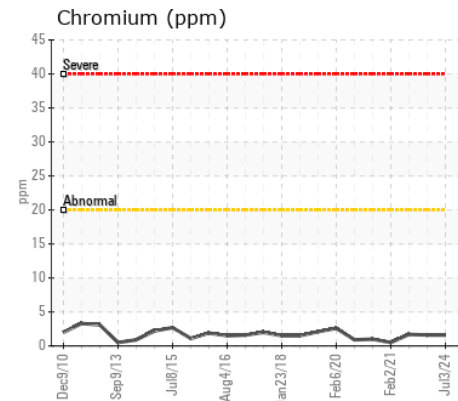
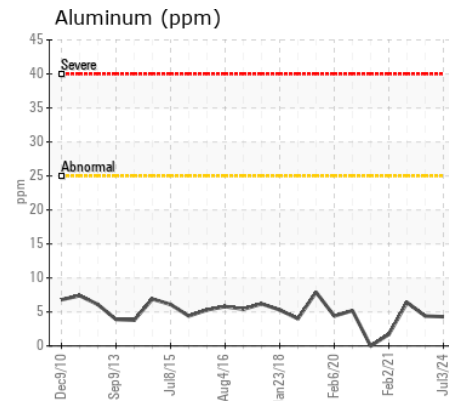
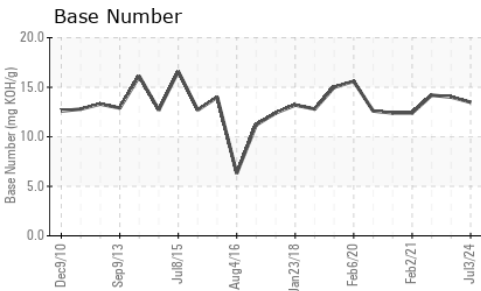
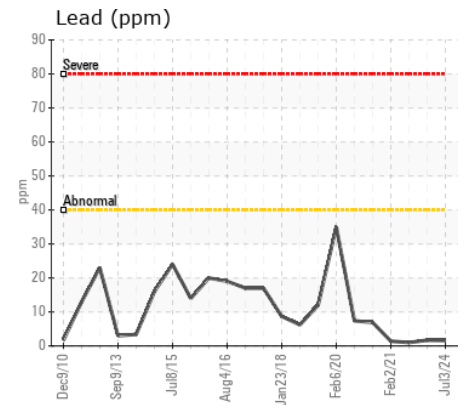
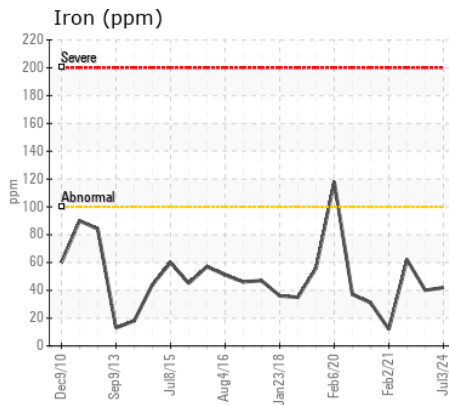
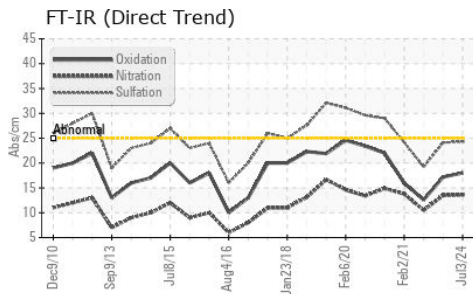
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>18</b>	27	42
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	1
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	0.0
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.6</b>	13.5	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.3</b>	24.1	19.2
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>8</b>	10	14
Boron	ppm	ASTM D5185m		<b>2</b>	0	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>160</b>	156	117
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>20</b>	19	19
Calcium	ppm	ASTM D5185m		<b>5101</b>	5031	3961
Phosphorus	ppm	ASTM D5185m		<b>1063</b>	1069	901
Zinc	ppm	ASTM D5185m		<b>1277</b>	1218	1028
Sulfur	ppm	ASTM D5185m		<b>5125</b>	5240	4107
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.0</b>	17.2	12.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>13.48</b>	14.01	14.20
Visc @ 100°C	cSt	ASTM D445		<b>14.8</b>	14.5	14.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR0001524  
**Lab Number** : 06230365  
**Unique Number** : 11113858  
**Test Package** : MOB 2  
**Received** : 08 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

**S S CONCRETE MATERIALS LLC**  
P.O. BOX 23283  
BULLHEAD CITY, AZ  
US 86439  
Contact: MARK OPHEIM

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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