



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 115**  
 Component  
**Diesel Engine**  
 Fluid  
**TRC MOLY XL PROSPEC III 15W40 (44 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06151314</b>	TR06108208	TR05993818
Sample Date		Client Info		<b>12 Apr 2024</b>	28 Feb 2024	25 Oct 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>74</b>	883	528
Filter Age	hrs	Client Info		<b>74</b>	883	528
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>13</b>	88	62
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	4	3
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	5	6
Lead	ppm	ASTM D5185m	>45	<b>0</b>	4	<1
Copper	ppm	ASTM D5185m	>85	<b>2</b>	6	4
Tin	ppm	ASTM D5185m	>4	<b>0</b>	3	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

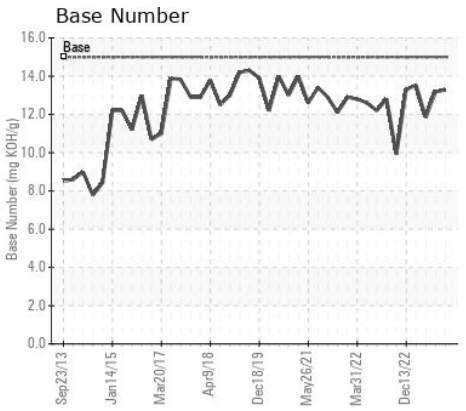
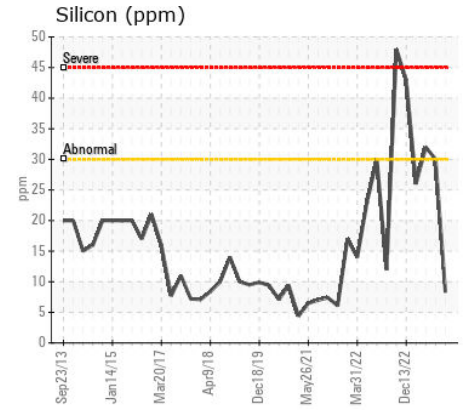
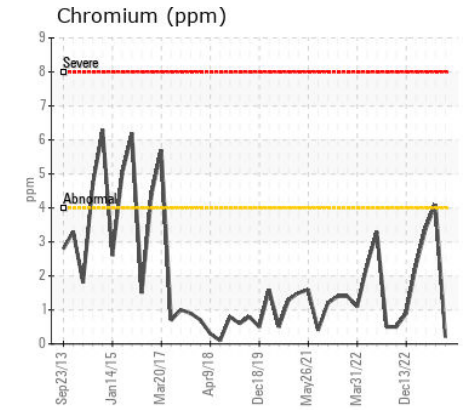
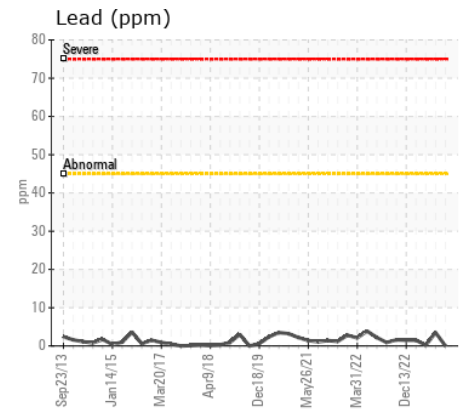
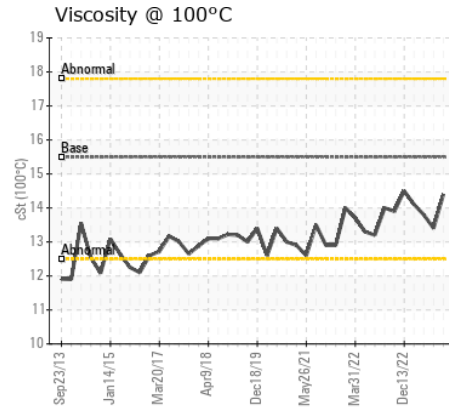
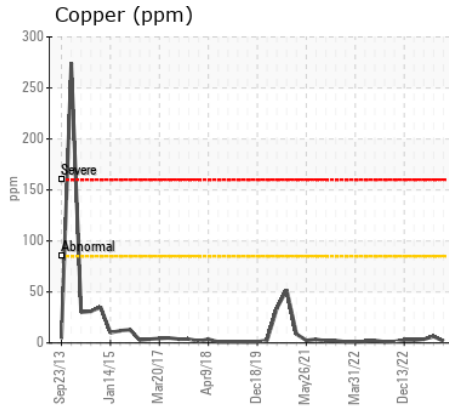
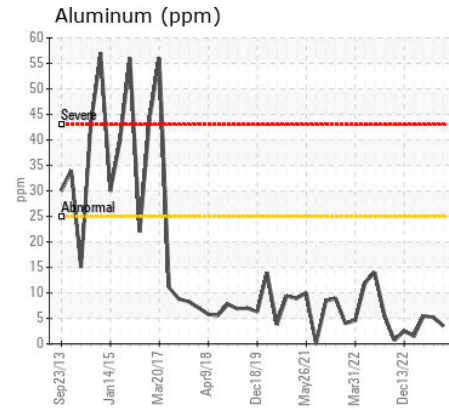
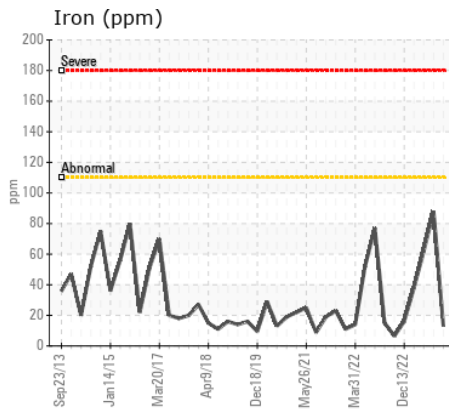
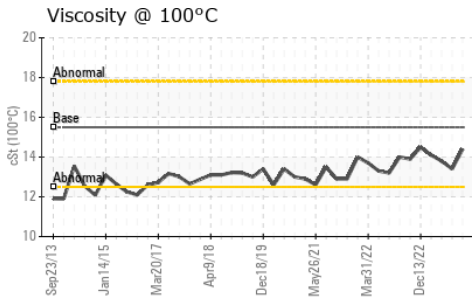
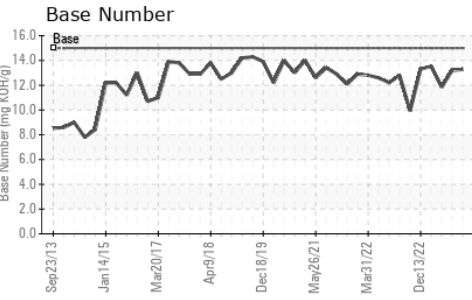
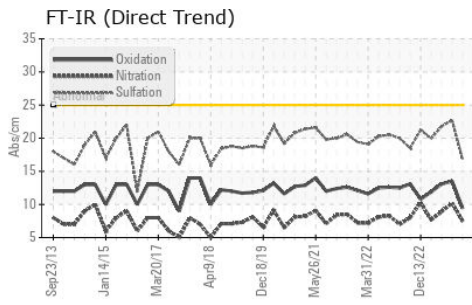
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>8</b>	▲ 30	▲ 32
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
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>0.2</b>	1.3	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	10.2	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.8</b>	22.7	21.8
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>5</b>	10	6
Boron	ppm	ASTM D5185m		<b>12</b>	125	197
Barium	ppm	ASTM D5185m		<b>0</b>	0	20
Molybdenum	ppm	ASTM D5185m		<b>132</b>	152	177
Manganese	ppm	ASTM D5185m		<b>0</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>40</b>	345	416
Calcium	ppm	ASTM D5185m	4500	<b>4130</b>	3736	3784
Phosphorus	ppm	ASTM D5185m		<b>977</b>	900	876
Zinc	ppm	ASTM D5185m	1400	<b>1069</b>	1014	991
Sulfur	ppm	ASTM D5185m		<b>4487</b>	4164	5114
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.4</b>	13.5	13.1
Base Number (BN)	mg KOH/g	ASTM D2896	15	<b>13.28</b>	13.19	11.85
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.4</b>	13.4	13.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06151314  
**Lab Number** : 06151314  
**Unique Number** : 10981392  
**Test Package** : MOB 2

**Received** : 16 Apr 2024  
**Tested** : 18 Apr 2024  
**Diagnosed** : 19 Apr 2024 - Sean Felton

**NUTTER ENTERPRISES INC**  
 28 STONE RD  
 BELMONT, NH  
 US 03220  
 Contact: DON PERCY

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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