



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 105**  
 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		TR06216365	TR06151315	TR06045116
Sample Date		Client Info		13 Jun 2024	12 Apr 2024	21 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		1154	758	434
Filter Age	hrs	Client Info		1154	758	434
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	66	48	32
Chromium	ppm	ASTM D5185m	>4	2	2	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	8	7	5
Lead	ppm	ASTM D5185m	>45	4	1	0
Copper	ppm	ASTM D5185m	>85	2	2	0
Tin	ppm	ASTM D5185m	>4	2	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

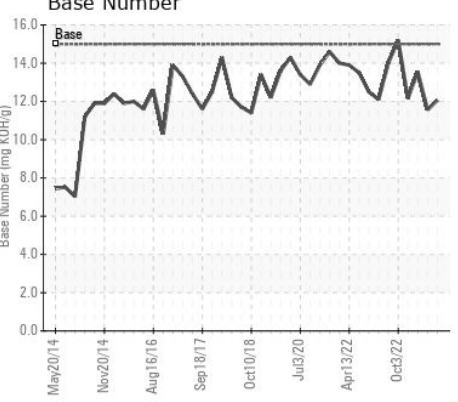
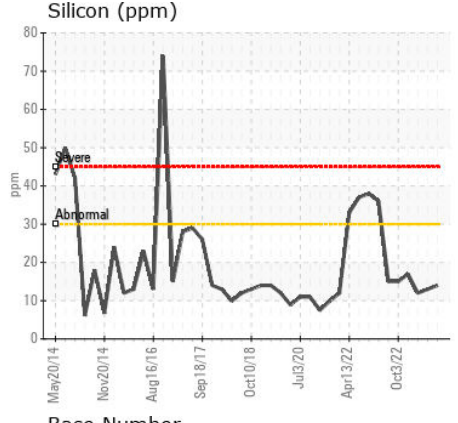
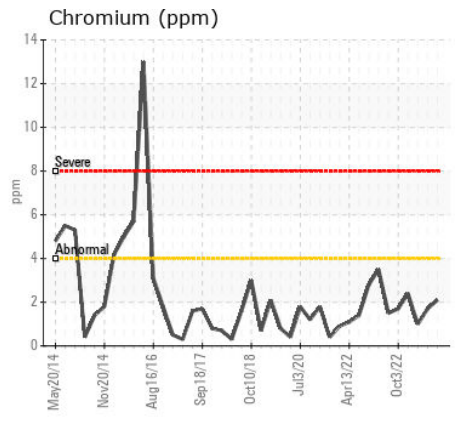
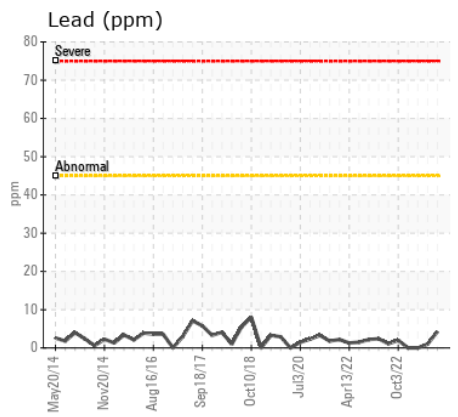
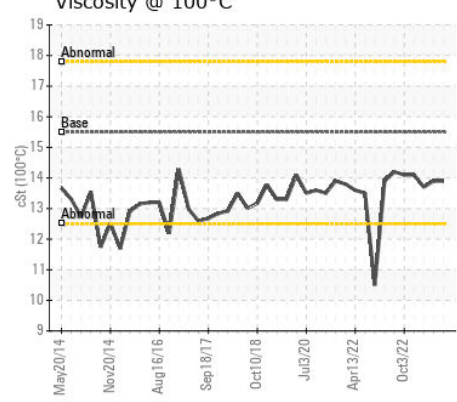
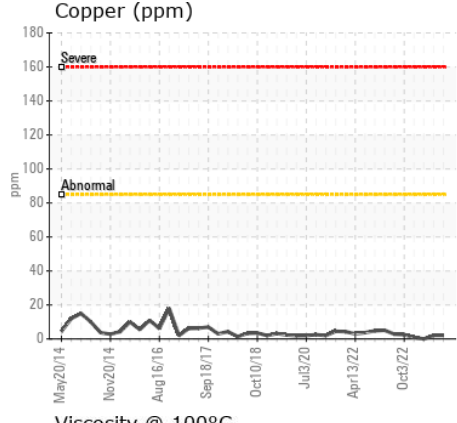
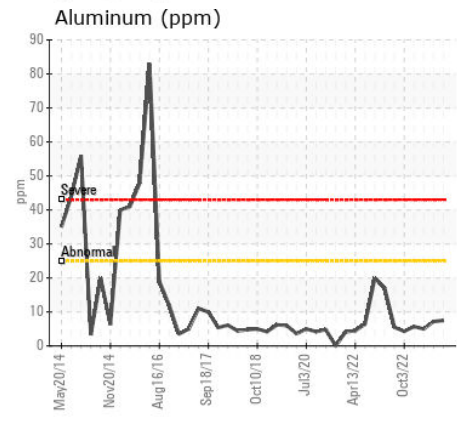
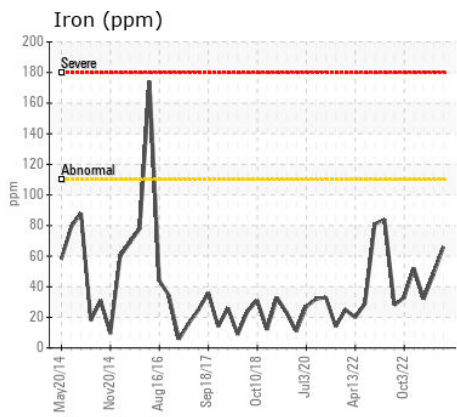
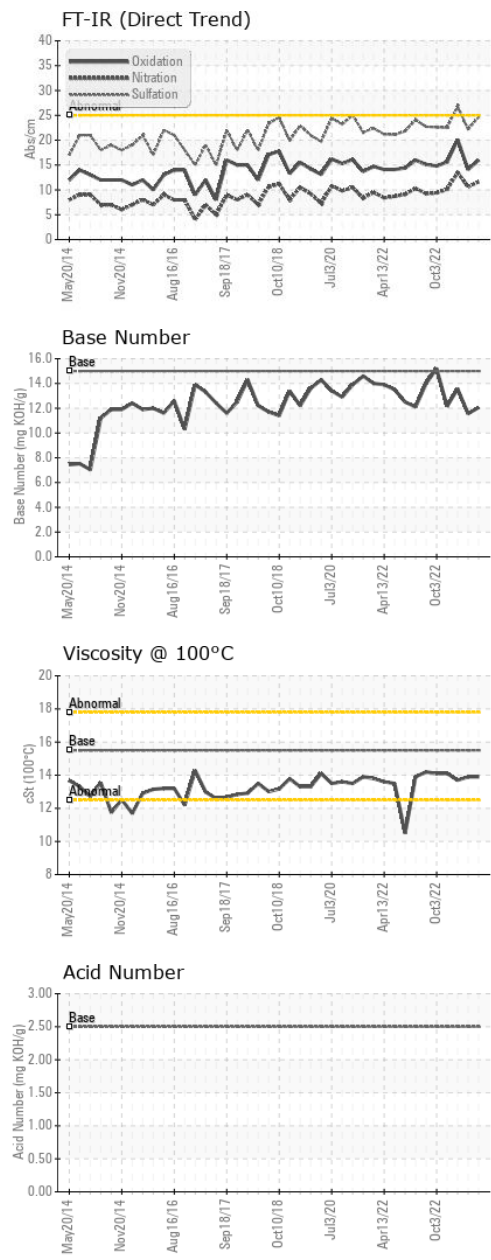
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	14	13	12
Potassium	ppm	ASTM D5185m	>20	4	4	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	11.6	10.6	13.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	22.2	26.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		9	6	4
Boron	ppm	ASTM D5185m		55	89	149
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		151	162	154
Manganese	ppm	ASTM D5185m		1	0	<1
Magnesium	ppm	ASTM D5185m		226	255	361
Calcium	ppm	ASTM D5185m	4500	4339	4280	3673
Phosphorus	ppm	ASTM D5185m		1052	1043	929
Zinc	ppm	ASTM D5185m	1400	1170	1152	1069
Sulfur	ppm	ASTM D5185m		4991	4385	3988
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	14.1	20.1
Base Number (BN)	mg KOH/g	ASTM D2896	15	12.06	11.56	13.56
Visc @ 100°C	cSt	ASTM D445	15.5	13.9	13.9	13.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06216365  
**Lab Number** : 06216365  
**Unique Number** : 11089229  
**Test Package** : MOB 2 ( Additional Tests: TAN Man )

**Received** : 20 Jun 2024  
**Tested** : 23 Jun 2024  
**Diagnosed** : 23 Jun 2024 - Don Baldrige

**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)