



# OIL ANALYSIS REPORT

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

Area  
**TRUCK - URBAN**

Machine Id  
**PETERBILT 70**

Component  
**Diesel Engine**

Fluid  
**Shell Spirax S6 (7 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample  
Comment: Revised hour meter reading )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0003199</b>	PE0001941	PE0001317
Sample Date		Client Info		<b>05 Feb 2024</b>	25 Oct 2023	03 Jul 2023
Machine Age	hrs	Client Info		<b>11700</b>	4923	4404
Oil Age	hrs	Client Info		<b>485</b>	519	493
Filter Age	hrs	Client Info		<b>485</b>	519	493
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

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	11	16
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>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

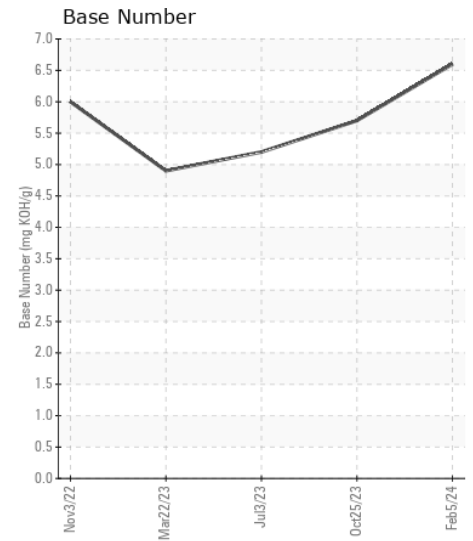
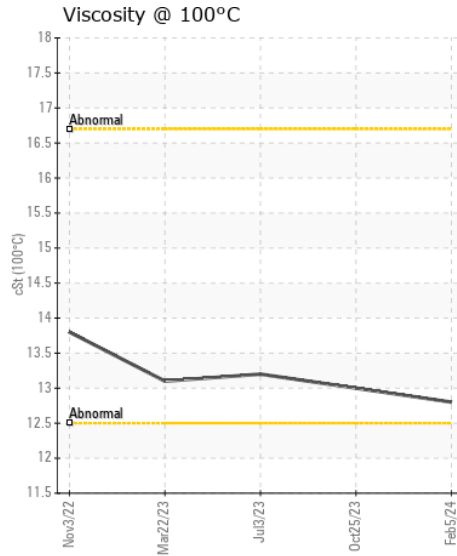
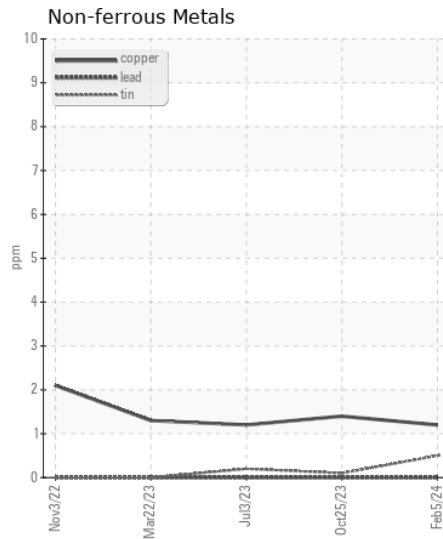
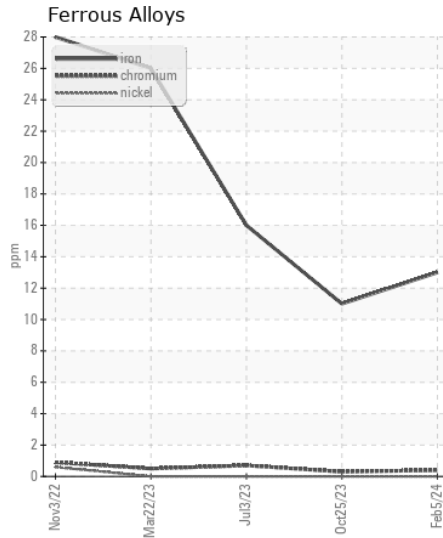
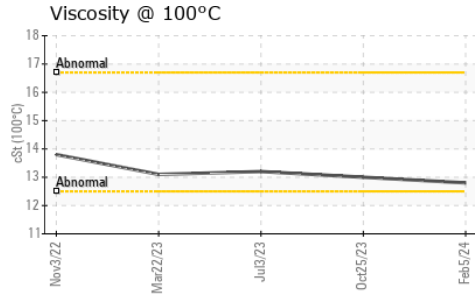
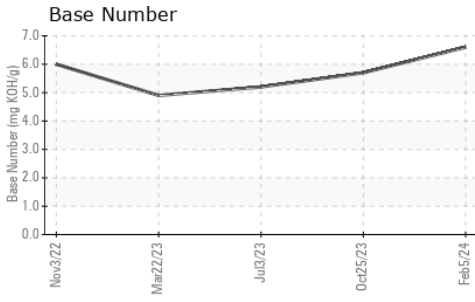
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	5
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>0.4</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	10.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	23.4	23.7
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>	3	3
Boron	ppm	ASTM D5185m		<b>22</b>	188	31
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>66</b>	74	80
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>782</b>	275	50
Calcium	ppm	ASTM D5185m		<b>1136</b>	1347	2133
Phosphorus	ppm	ASTM D5185m		<b>995</b>	944	983
Zinc	ppm	ASTM D5185m		<b>1230</b>	1103	1197
Sulfur	ppm	ASTM D5185m		<b>3090</b>	2935	4427
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	20.4	21.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.6</b>	5.7	5.2
Visc @ 100°C	cSt	ASTM D445		<b>12.8</b>	13.0	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0003199 **Received** : 14 Feb 2024  
**Lab Number** : 06089407 **Tested** : 15 Feb 2024  
**Unique Number** : 10876852 **Diagnosed** : 16 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - 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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