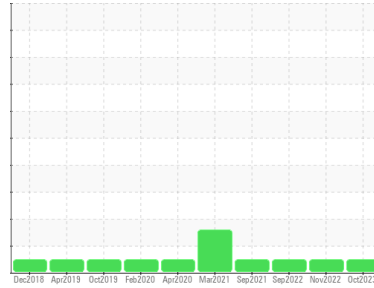




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PETERBILT 1228

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC06027470	WC0694217	WC0603398
Sample Date	Client Info	10 Oct 2023	19 Nov 2022	02 Sep 2022
Machine Age	mls	Client Info	0	0
Oil Age	mls	Client Info	0	450
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >110	4	19	23
Chromium	ppm	ASTM D5185m >4	0	<1	1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	1	<1	<1
Lead	ppm	ASTM D5185m >45	0	6	8
Copper	ppm	ASTM D5185m >85	<1	16	27
Tin	ppm	ASTM D5185m >4	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 250	1	14	9
Barium	ppm	ASTM D5185m 10	0	0	<1
Molybdenum	ppm	ASTM D5185m 100	56	66	64
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 450	944	1012	941
Calcium	ppm	ASTM D5185m 3000	1092	1226	1260
Phosphorus	ppm	ASTM D5185m 1150	1037	1100	1019
Zinc	ppm	ASTM D5185m 1350	1244	1303	1276
Sulfur	ppm	ASTM D5185m 4250	3071	3658	3087

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >30	4	19	5
Sodium	ppm	ASTM D5185m >158	3	2	0
Potassium	ppm	ASTM D5185m >20	0	0	3

INFRA-RED

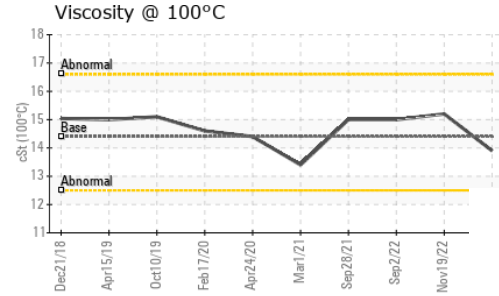
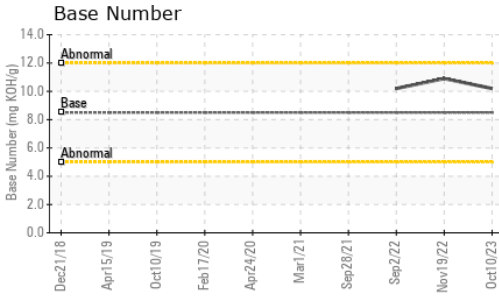
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.3	0.4	1.3
Nitration	Abs/cm	*ASTM D7624 >20	5.9	6.6	12.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.0	20.1	26.6

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.4	14.7	22.3
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	10.2	10.9	10.2



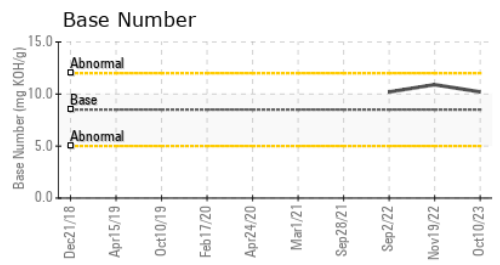
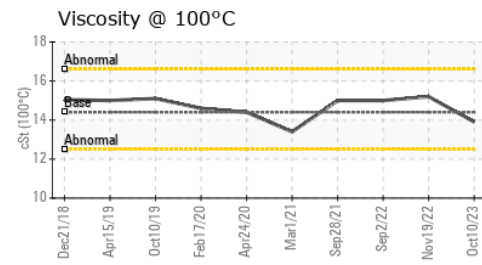
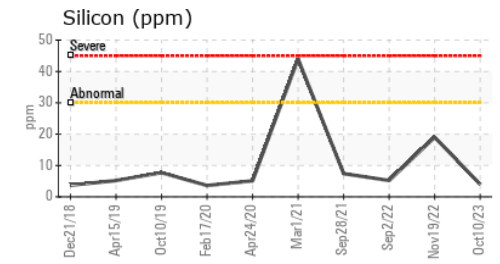
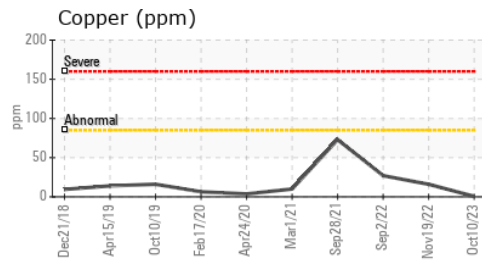
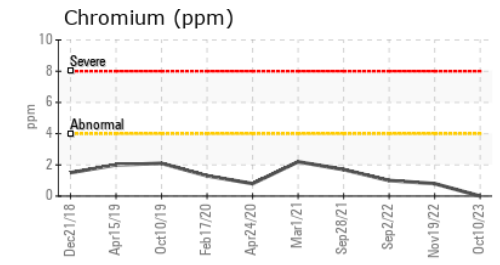
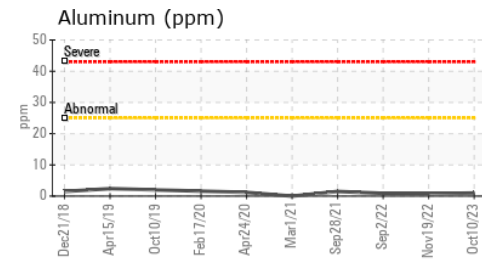
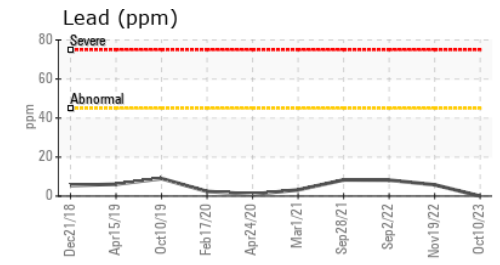
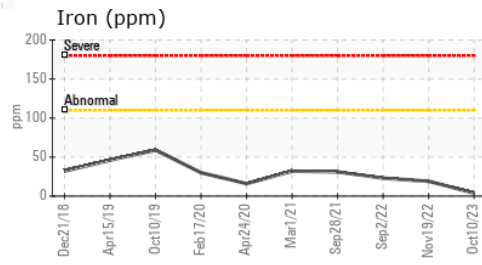
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	15.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06027470 **Received** : 07 Dec 2023
Lab Number : 06027470 **Diagnosed** : 08 Dec 2023
Unique Number : 10777261 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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 89 BLACK MEADOW RD
 CHESTER, NY
 US 10918
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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)