



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 335 1026 (S/N 2NPLLD9X16M661455)
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TLY0002488	TLY0001908	TLY0002016
Sample Date		Client Info		11 Jun 2024	11 Dec 2023	02 Oct 2023
Machine Age	mls	Client Info		445775	435525	425346
Oil Age	mls	Client Info		435525	425346	10116
Filter Age	mls	Client Info		435525	425346	10116
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Bearing wear is indicated.

Iron	ppm	ASTM D5185m	>110	54	105	96
Chromium	ppm	ASTM D5185m	>4	3	4	3
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	3
Lead	ppm	ASTM D5185m	>45	11	12	11
Copper	ppm	ASTM D5185m	>85	▲ 190	12	29
Tin	ppm	ASTM D5185m	>4	▲ 7	6	6
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

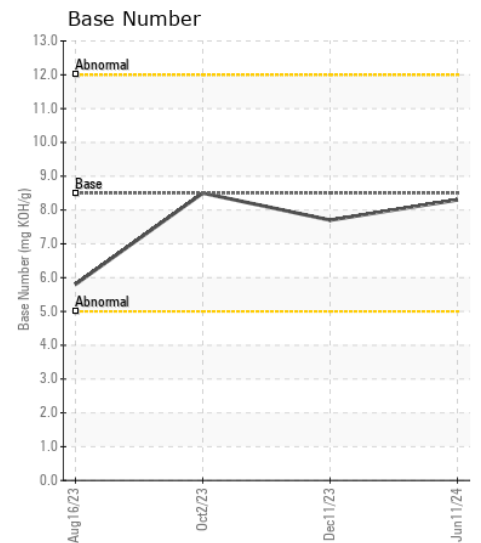
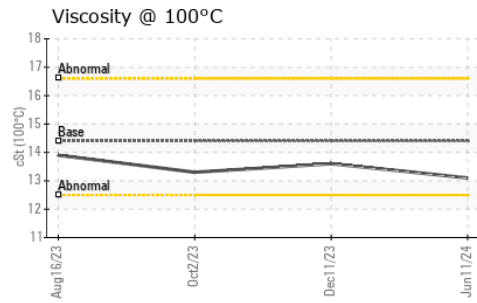
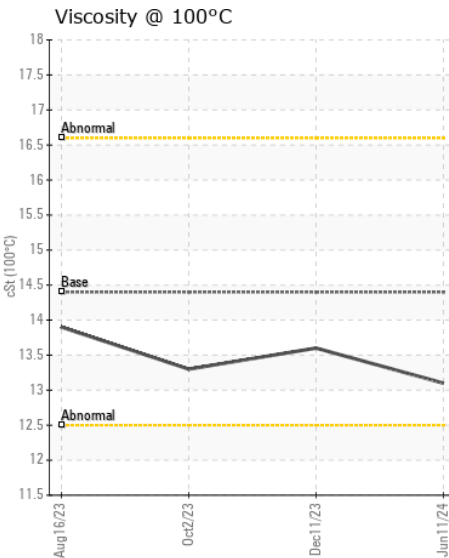
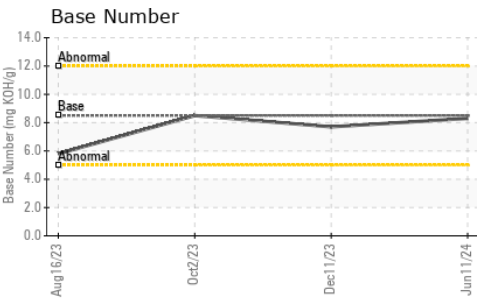
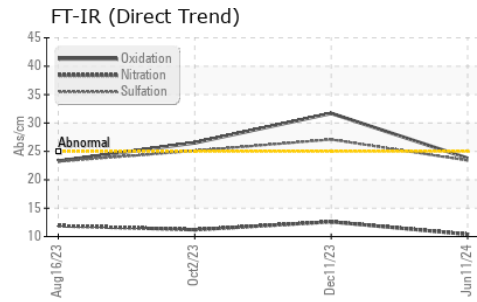
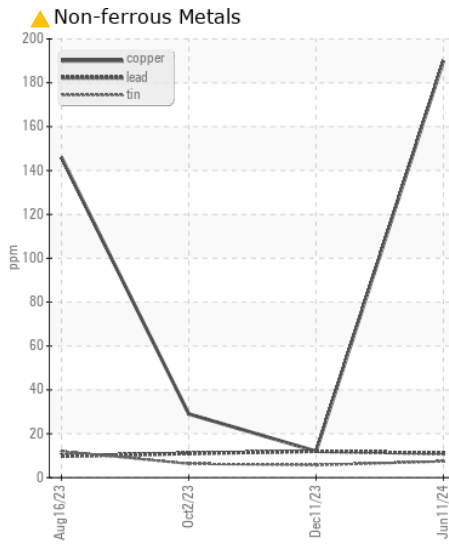
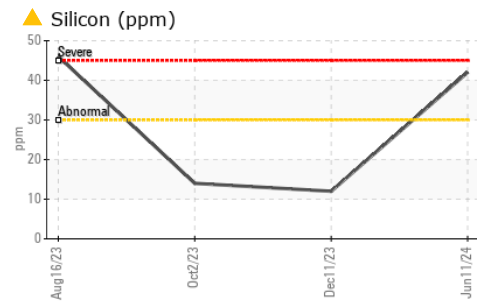
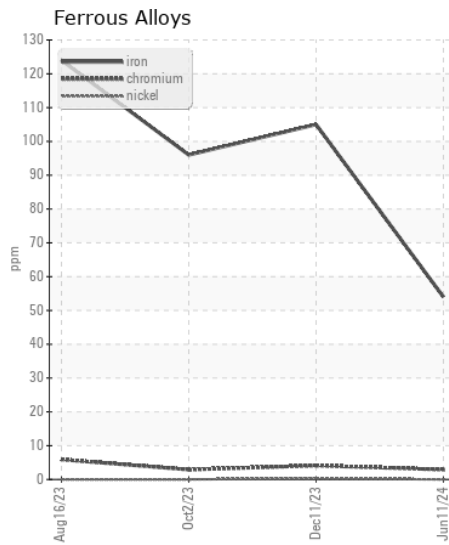
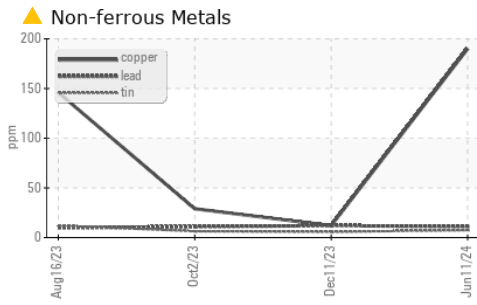
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>30	▲ 42	12	14
Potassium	ppm	ASTM D5185m	>20	4	<1	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.4	12.6	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	27.1	25.1
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>158	13	4	9
Boron	ppm	ASTM D5185m	250	44	52	46
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	53	51	50
Manganese	ppm	ASTM D5185m		1	2	1
Magnesium	ppm	ASTM D5185m	450	452	584	529
Calcium	ppm	ASTM D5185m	3000	1872	1780	1752
Phosphorus	ppm	ASTM D5185m	1150	916	851	786
Zinc	ppm	ASTM D5185m	1350	1055	1051	973
Sulfur	ppm	ASTM D5185m	4250	3161	2596	2365
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.8	31.7	26.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.3	7.7	8.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.6	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0002488 **Received** : 18 Jun 2024
Lab Number : 06214138 **Tested** : 20 Jun 2024
Unique Number : 11087002 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: Glycol, TBN)

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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)