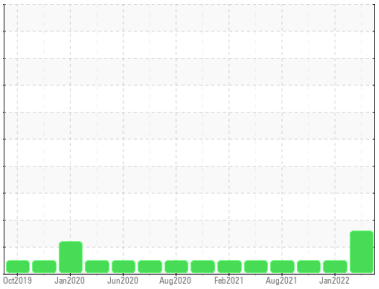
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
PETERBILT 20
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (48 QTS)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of particulates present 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		**KL0006365**	KL0006363	KL0006370
Sample Date		Client Info		**08 Mar 2022**	14 Jan 2022	11 Nov 2021
Machine Age	mls	Client Info		**184000**	171000	161366
Oil Age	mls	Client Info		**23000**	10000	30000
Oil Changed		Client Info		**Not Changd**	Not Changd	Changed
Sample Status				**ATTENTION**	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	>100	**38**	22	39
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**<1**	0	0
Titanium	ppm	ASTM D5185m		**0**	<1	<1
Silver	ppm	ASTM D5185m	>3	**<1**	<1	<1
Aluminum	ppm	ASTM D5185m	>20	**18**	19	20
Lead	ppm	ASTM D5185m	>40	**<1**	<1	1
Copper	ppm	ASTM D5185m	>330	**3**	2	6
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**8**	9	71
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**64**	63	114
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	0	**926**	847	602
Calcium	ppm	ASTM D5185m		**1278**	1175	1513
Phosphorus	ppm	ASTM D5185m		**920**	924	721
Zinc	ppm	ASTM D5185m		**992**	1144	808
Sulfur	ppm	ASTM D5185m		**2804**	3301	2590

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**7**	5	9
Sodium	ppm	ASTM D5185m		**2**	1	2
Potassium	ppm	ASTM D5185m	>20	**39**	31	47

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.5**	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	**8.8**	7.6	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.2**	21.3	24.1

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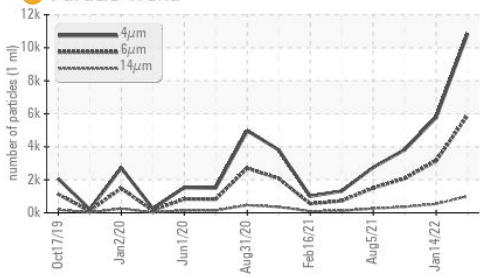
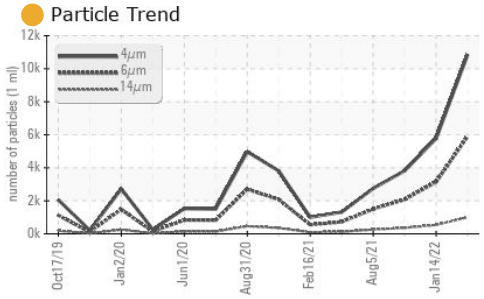
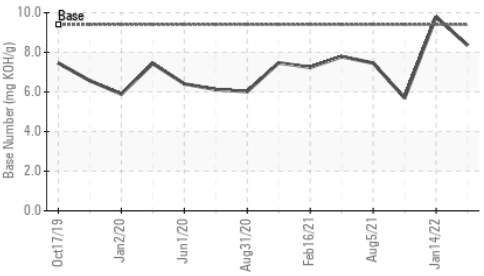
Particle Trend



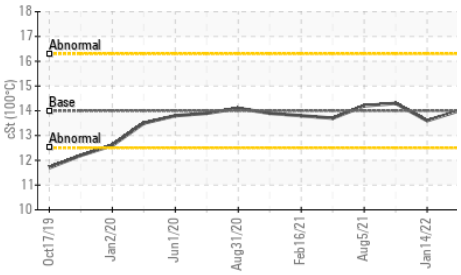
Particle Trend



Base Number



Viscosity @ 100°C



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**10848**	5772	3819
Particles >6µm		ASTM D7647	>5000	**5910**	3144	2081
Particles >14µm		ASTM D7647	>640	**1006**	535	354
Particles >21µm		ASTM D7647	>160	**339**	180	119
Particles >38µm		ASTM D7647	>40	**52**	28	18
Particles >71µm		ASTM D7647	>10	**5**	3	2
Oil Cleanliness		ISO 4406 (c)	>19/16	**20/17**	19/16	18/16

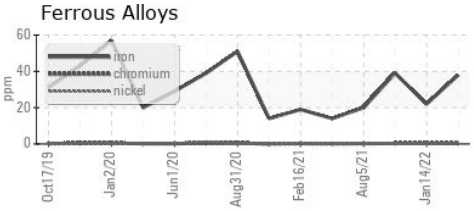
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.1**	17.2	23.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	**8.35**	9.79	5.69

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

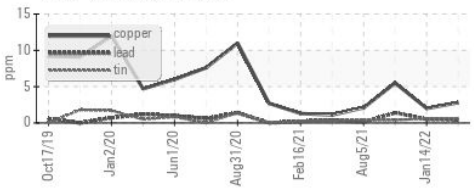
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	**14.0**	13.6	14.3

GRAPHS

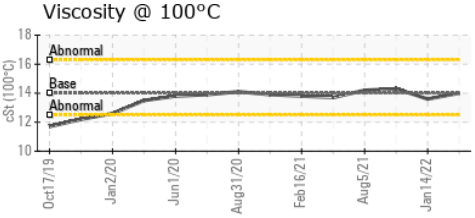
Ferrous Alloys



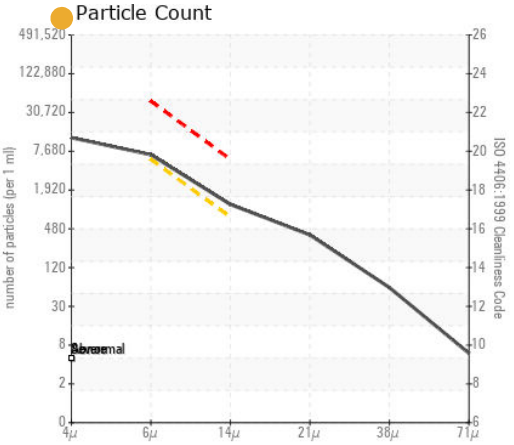
Non-ferrous Metals



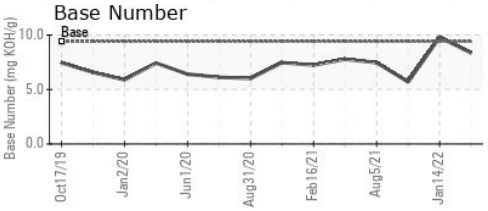
Viscosity @ 100°C



Particle Count



Base Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0006365
Lab Number : 05506650
Unique Number : 9915924
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 30 Mar 2022
Tested : 01 Apr 2022
Diagnosed : 01 Apr 2022 - Jonathan Hester

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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