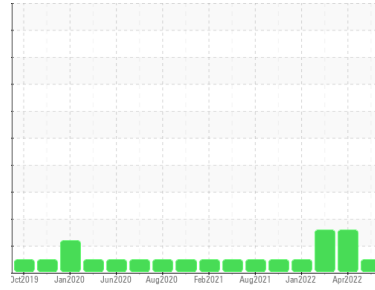




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PETERBILT 20

Component
Diesel Engine

Fluid
MOBIL DELVAC HDEO 15W40 (48 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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			KL0006367	KL0006366	KL0006365
Sample Date	Client Info			09 Jun 2022	06 Apr 2022	08 Mar 2022
Machine Age	mls	Client Info		202659	192122	184000
Oil Age	mls	Client Info		30000	30000	23000
Oil Changed	Client Info			Changed	Not Changd	Not Changd
Sample Status				NORMAL	ABNORMAL	ATTENTION

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	54	46	38
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	24	24	18
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	5	4	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

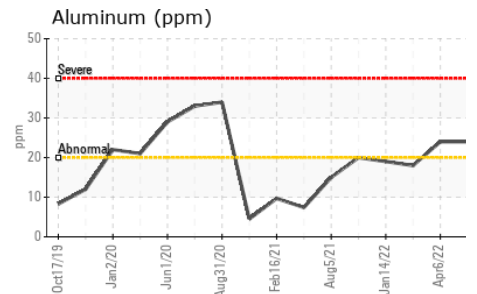
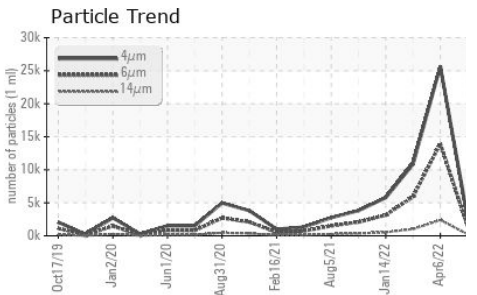
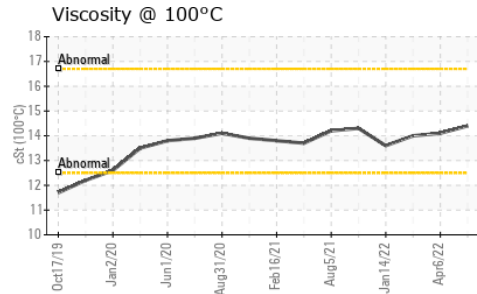
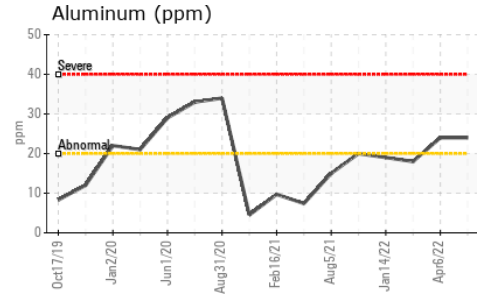
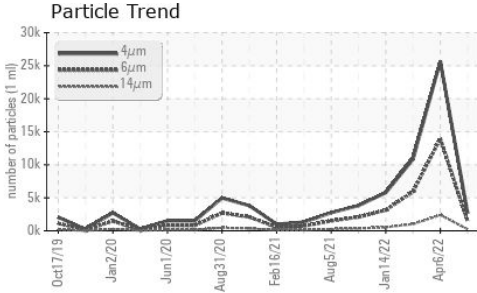
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		6	10	8
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		64	60	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		912	957	926
Calcium	ppm	ASTM D5185m		1301	1313	1278
Phosphorus	ppm	ASTM D5185m		987	1036	920
Zinc	ppm	ASTM D5185m		1197	1224	992
Sulfur	ppm	ASTM D5185m		3368	2951	2804

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	6	7
Sodium	ppm	ASTM D5185m		3	2	2
Potassium	ppm	ASTM D5185m	>20	53	49	39

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.9	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	23.1	20.2



OIL ANALYSIS REPORT



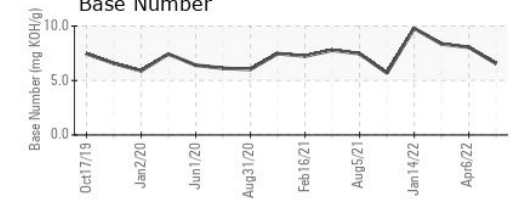
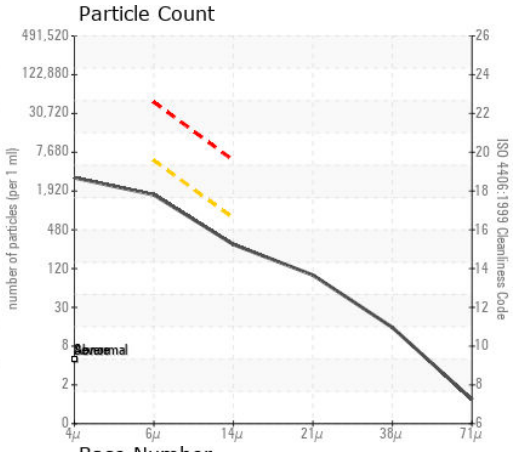
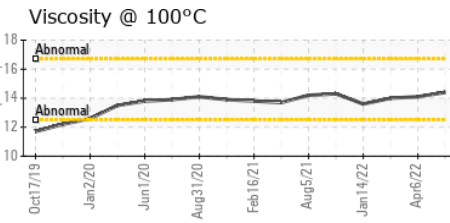
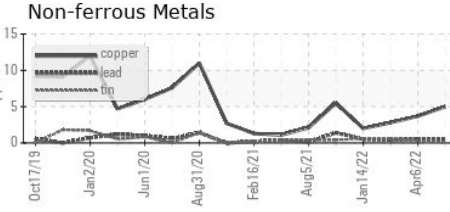
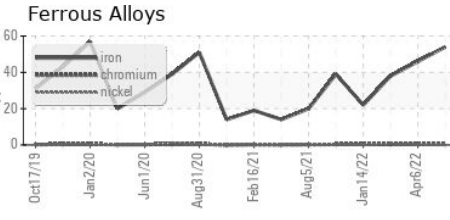
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		2695	25647	10848
Particles >6µm	ASTM D7647	>5000	1468	▲ 13971	● 5910
Particles >14µm	ASTM D7647	>640	250	▲ 2378	● 1006
Particles >21µm	ASTM D7647	>160	84	▲ 801	● 339
Particles >38µm	ASTM D7647	>40	13	▲ 124	● 52
Particles >71µm	ASTM D7647	>10	1	13	5
Oil Cleanliness	ISO 4406 (c)	>19/16	18/15	▲ 21/18	● 20/17

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm *ASTM D7414	>25	19.6	20.0	17.1
Base Number (BN)	mg KOH/g ASTM D2896		6.55	8.05	8.35

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		14.4	14.1	14.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0006367 **Received** : 29 Jun 2022
Lab Number : 05579908 **Tested** : 01 Jul 2022
Unique Number : 10034334 **Diagnosed** : 01 Jul 2022 - Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

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 berringtoncustomhay@gmail.com
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 F:

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)