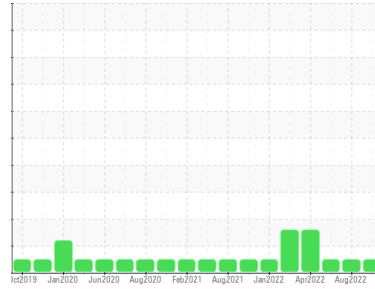




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PETERBILT 20

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER15W40 (48 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. The amount and size of particulates present in the system are 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		KL0006550	KL0006369	KL0006367
Sample Date	Client Info		22 Sep 2022	03 Aug 2022	09 Jun 2022
Machine Age	mls	Client Info	520208	212230	202659
Oil Age	mls	Client Info	20000	30000	30000
Oil Changed	Client Info		Not Changed	Not Changd	Changed
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 >100	18	13	54
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	<1	<1	<1
Aluminum	ppm	ASTM D5185m >20	19	12	24
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	2	2	5
Tin	ppm	ASTM D5185m >15	<1	<1	<1
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	2	4	6
Barium	ppm	ASTM D5185m 0	0	0	<1
Molybdenum	ppm	ASTM D5185m 0	61	58	64
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	949	901	912
Calcium	ppm	ASTM D5185m	1209	1156	1301
Phosphorus	ppm	ASTM D5185m	990	986	987
Zinc	ppm	ASTM D5185m	1199	1179	1197
Sulfur	ppm	ASTM D5185m	4483	3851	3368

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	5	6
Sodium	ppm	ASTM D5185m	0	3	3
Potassium	ppm	ASTM D5185m >20	37	24	53

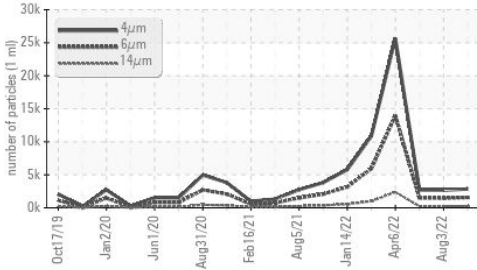
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.3	0.7
Nitration	Abs/cm	*ASTM D7624 >20	9.2	8.5	9.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.9	20.4	22.4

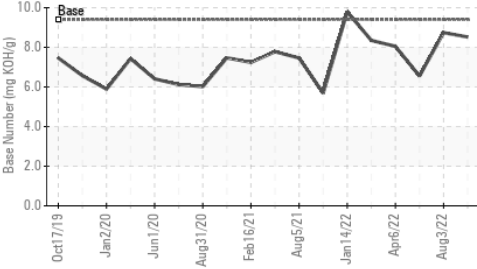


OIL ANALYSIS REPORT

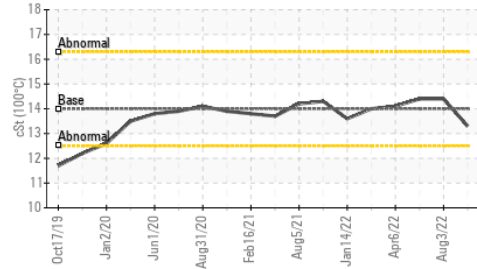
Particle Trend



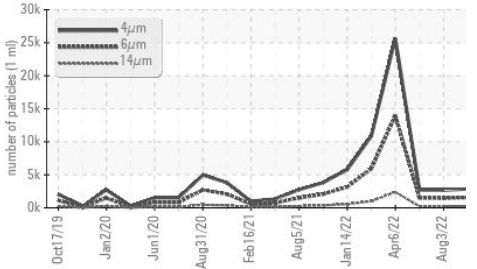
Base Number



Viscosity @ 100°C



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		2845	2666	2695
Particles >6µm	ASTM D7647	>5000	1550	1453	1468
Particles >14µm	ASTM D7647	>640	264	247	250
Particles >21µm	ASTM D7647	>160	89	83	84
Particles >38µm	ASTM D7647	>40	14	13	13
Particles >71µm	ASTM D7647	>10	1	1	1
Oil Cleanliness	ISO 4406 (c)	>19/16	18/15	18/15	18/15

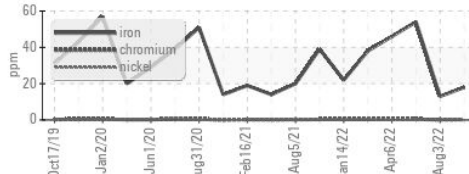
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	18.3	16.2	19.6
Base Number (BN)	mg KOH/g ASTM D2896	9.4	8.52	8.74	6.55

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

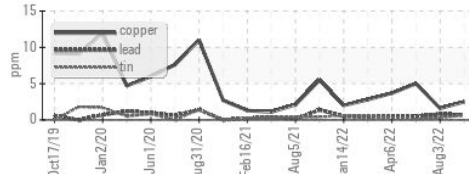
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445	14	13.3	14.4	14.4

GRAPHS

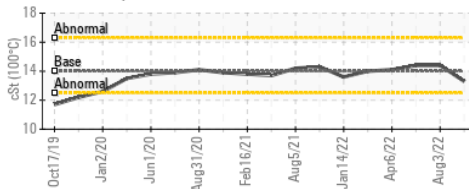
Ferrous Alloys



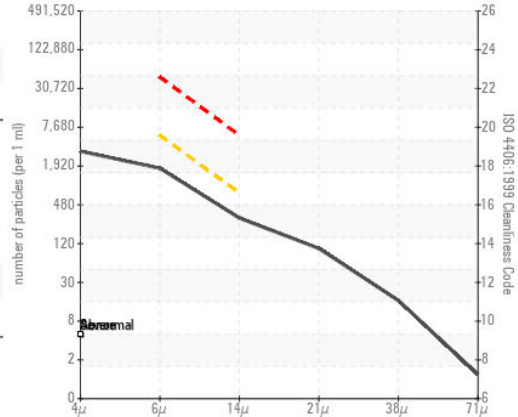
Non-ferrous Metals



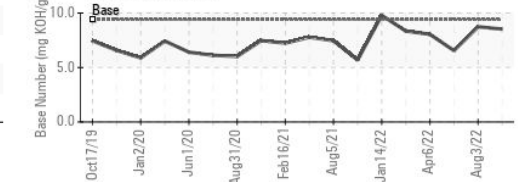
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KL0006550 Received : 05 Oct 2022
 Lab Number : 05658690 Tested : 06 Oct 2022
 Unique Number : 10163259 Diagnosed : 07 Oct 2022 - Don Baldrige
 Test Package : MOB 2 (Additional Tests: PrtCount)

BERRINGTON CUSTOM HAY

PO BOX 540
 WELLINGTON, NV
 US 89444
 Contact: REBECCA BERRINGTON
 berringtoncustomhay@gmail.com

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)

T: (775)465-2264

F: