MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
PCS - PORTABLE CRUSHING SERVICES
Machine Id
KOMATSU PC290LC TH01 - PCS
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (24 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

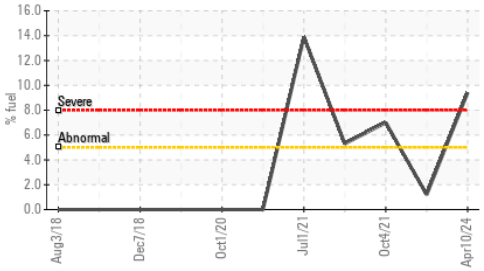
There is a high amount of fuel present in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

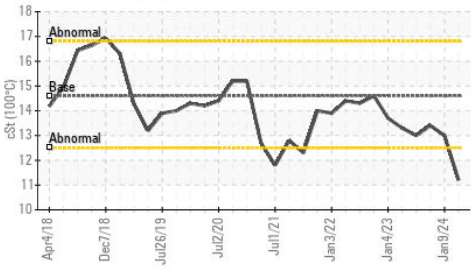
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013775	KL0014098	KL0013077
Sample Date		Client Info		10 Apr 2024	09 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info		12916	12462	12320
Oil Age	hrs	Client Info		504	50	645
Filter Age	hrs	Client Info		504	50	645
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	43	21	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	1	0	1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	3	0
Lead	ppm	ASTM D5185m	>40	2	<1	1
Copper	ppm	ASTM D5185m	>330	13	5	1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	6	6
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel	%	ASTM D3524	>5	▲ 9.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.2	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.2	6.7	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5	20.7	19.9
Particles >4µm		ASTM D7647		1557	3012	3402
Particles >6µm		ASTM D7647	>5000	848	1600	1853
Particles >14µm		ASTM D7647	>640	144	300	315
Particles >21µm		ASTM D7647	>160	49	93	106
Particles >38µm		ASTM D7647	>40	8	16	16
Particles >71µm		ASTM D7647	>10	1	1	2
Oil Cleanliness		ISO 4406 (c)	>19/16	17/14	18/15	18/15
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
Sodium	ppm	ASTM D5185m		4	0	0
Boron	ppm	ASTM D5185m		214	321	360
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		86	85	92
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		381	385	384
Calcium	ppm	ASTM D5185m		1425	1401	1398
Phosphorus	ppm	ASTM D5185m	760	1000	956	998
Zinc	ppm	ASTM D5185m	800	1164	1170	1232
Sulfur	ppm	ASTM D5185m	3000	4034	3819	4242
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	15.4	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	4.52	8.73	9.31
Visc @ 100°C	cSt	ASTM D445	14.6	▲ 11.2	13.0	13.4

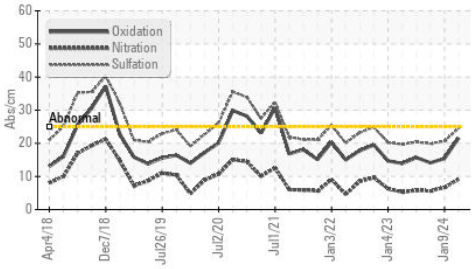
Fuel Dilution



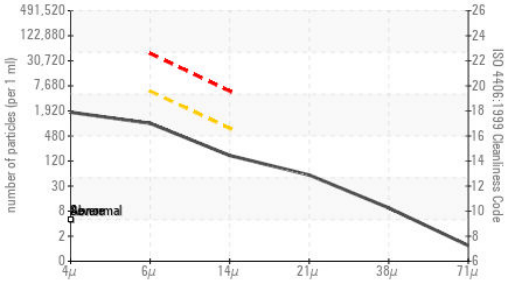
Viscosity @ 100°C



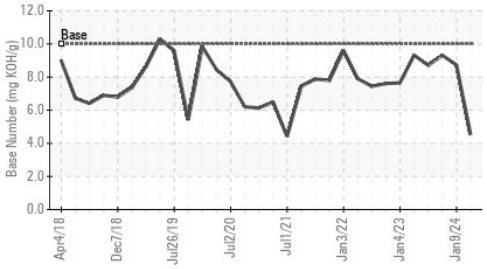
FT-IR (Direct Trend)



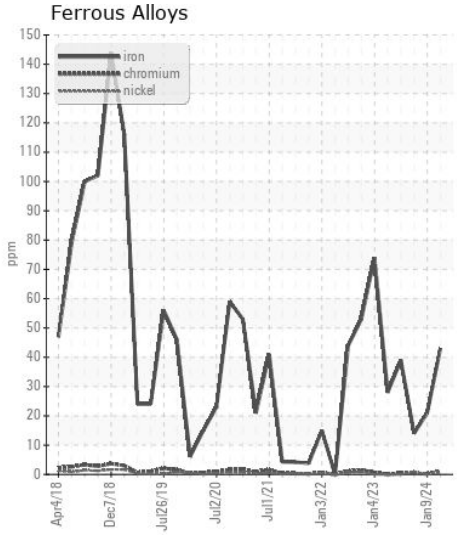
Particle Count



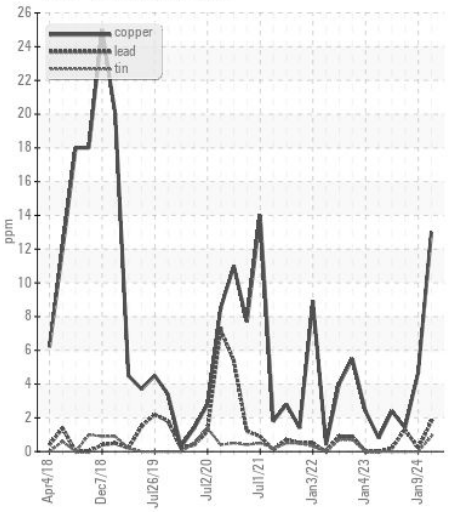
Base Number



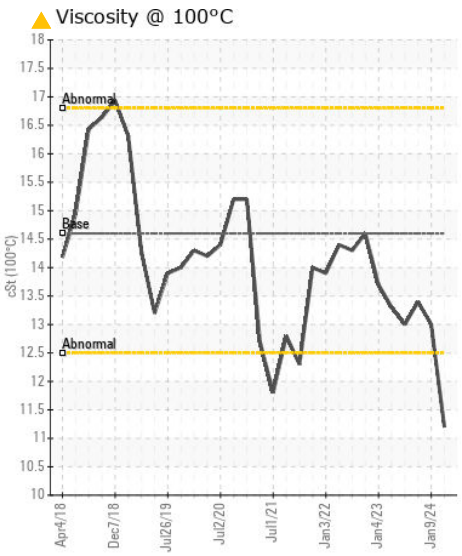
Ferrous Alloys



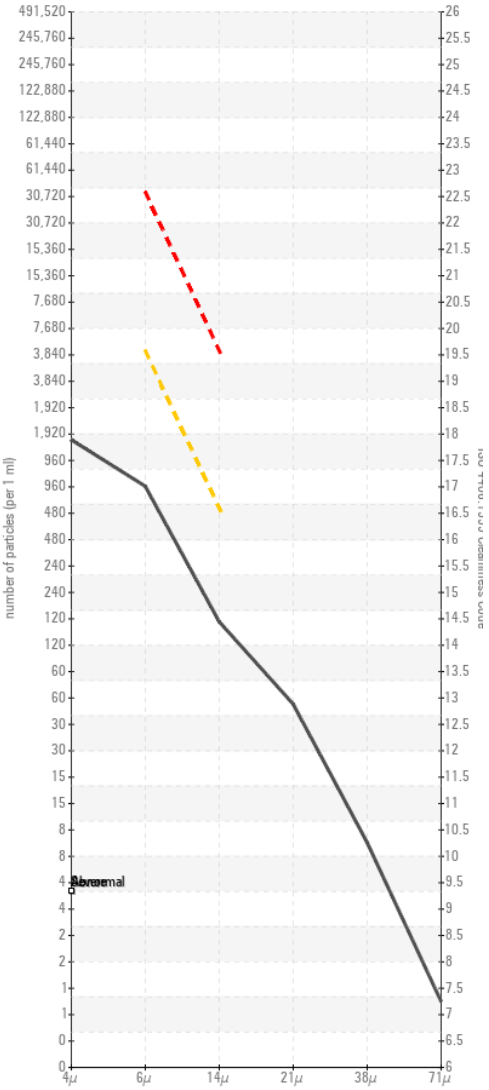
Non-ferrous Metals



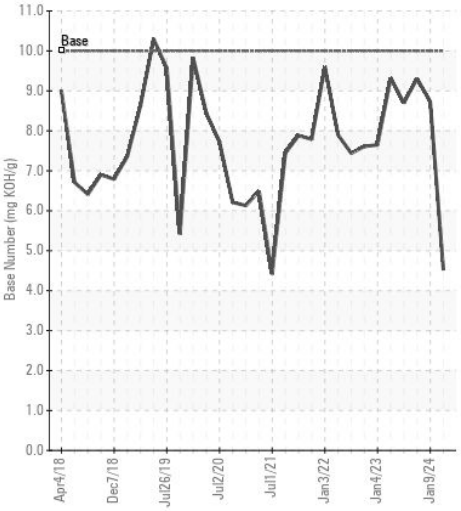
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013775
Lab Number : 06150605
Unique Number : 10980683
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel, PrtCount)

Received : 16 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 19 Apr 2024 - Doug Bogart

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)

PIKES PEAK PERFORMANCE PRODUCTS
7888 BULLET RD
PEYTON, CO
US 80831
Contact: SCOTT RIGGS
sriggs.pikespeakperformance@gmail.com
T: (303)434-0126
F: x: