



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**PCS - PORTABLE CRUSHING SERVICES**

Machine Id  
**KOMATSU LD11 - PCS**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0014722</b>	KL0013795	KL0014090
Sample Date		Client Info		<b>09 Jul 2024</b>	10 Apr 2024	10 Jan 2024
Machine Age	hrs	Client Info		<b>10614</b>	10168	9640
Oil Age	hrs	Client Info		<b>1024</b>	578	50
Filter Age	hrs	Client Info		<b>1024</b>	578	50
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	21	5
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	6	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>6</b>	24	16
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

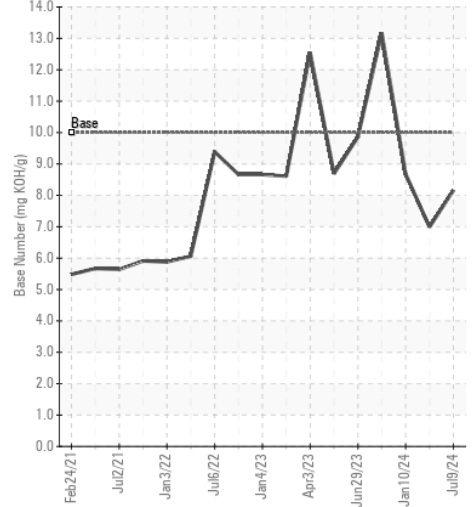
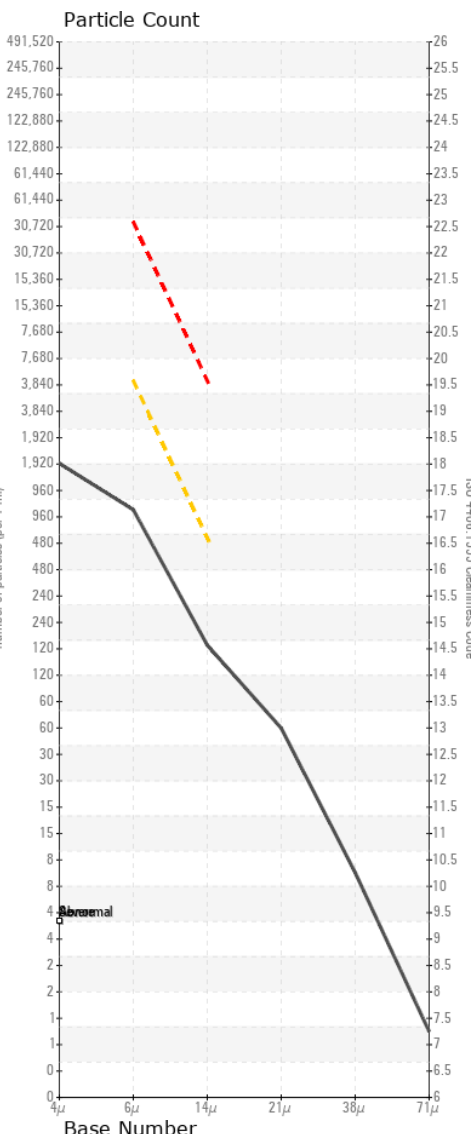
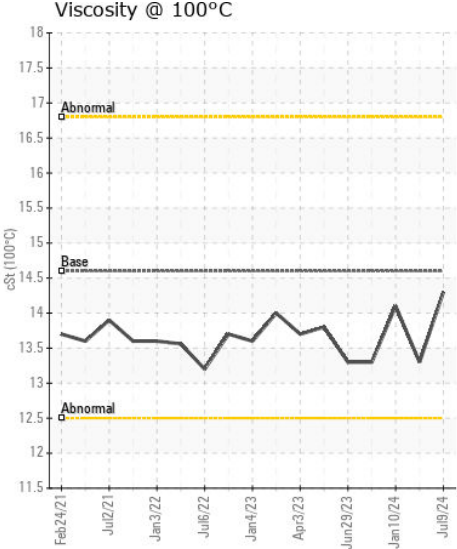
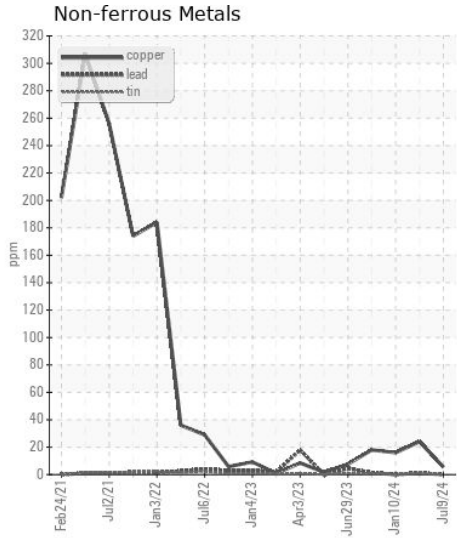
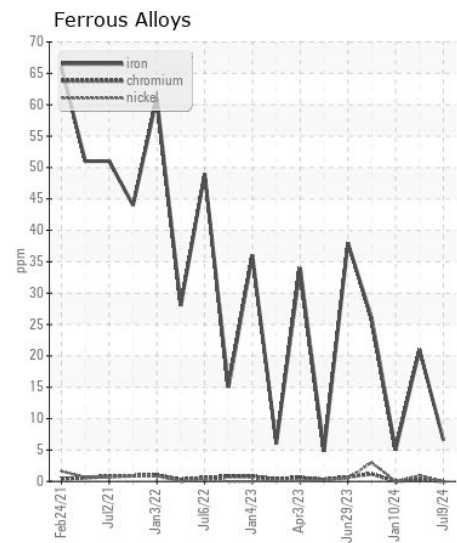
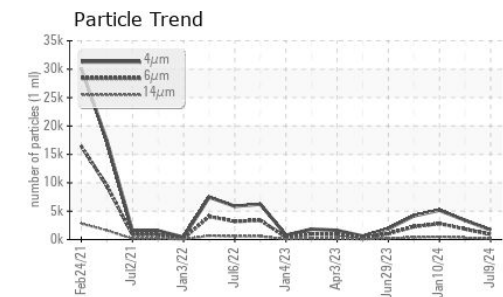
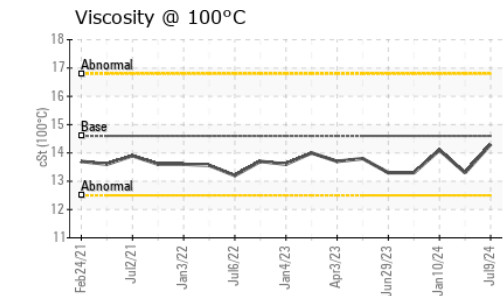
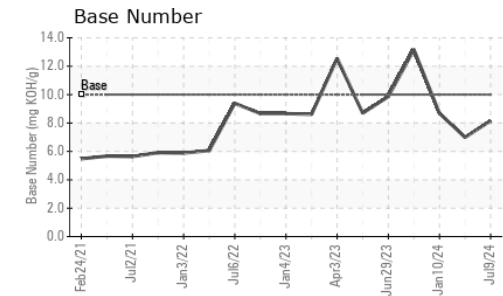
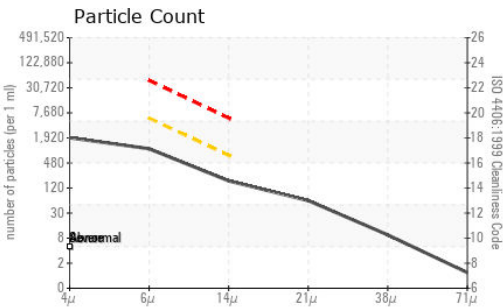
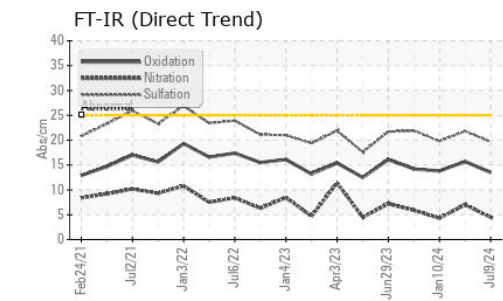
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>16</b>	▲ 70	▲ 73
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	36	8
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.5</b>	7.0	4.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.7</b>	21.8	19.8
Particles >4µm		ASTM D7647		<b>1696</b>	3384	5168
Particles >6µm		ASTM D7647	>5000	<b>924</b>	1844	2815
Particles >14µm		ASTM D7647	>640	<b>157</b>	314	479
Particles >21µm		ASTM D7647	>160	<b>53</b>	106	161
Particles >38µm		ASTM D7647	>40	<b>8</b>	16	25
Particles >71µm		ASTM D7647	>10	<b>1</b>	2	3
Oil Cleanliness		ISO 4406 (c)	>19/16	<b>17/14</b>	18/15	19/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>5</b>	34	5
Boron	ppm	ASTM D5185m		<b>409</b>	364	368
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>88</b>	90	81
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m		<b>386</b>	391	363
Calcium	ppm	ASTM D5185m		<b>1568</b>	1653	1440
Phosphorus	ppm	ASTM D5185m	760	<b>1104</b>	1114	996
Zinc	ppm	ASTM D5185m	800	<b>1326</b>	1338	1198
Sulfur	ppm	ASTM D5185m	3000	<b>4279</b>	4593	3685
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	15.7	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>8.16</b>	6.99	8.68
Visc @ 100°C	cSt	ASTM D445	14.6	<b>14.3</b>	13.3	14.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0014722 **Received** : 16 Jul 2024  
**Lab Number** : 06237993 **Tested** : 17 Jul 2024  
**Unique Number** : 11126827 **Diagnosed** : 18 Jul 2024 - Don Baldridge  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )  
 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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