



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

## Area PCS - PORTABLE CRUSHING SERVICES

Machine Id  
**LD07 BOBCAT LD07 - PCS**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (12 QTS)**

### RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0013772</b>	KL0014089	KL0013053
Sample Date		Client Info		<b>10 Apr 2024</b>	10 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info		<b>6314</b>	6306	6238
Oil Age	hrs	Client Info		<b>58</b>	50	515
Filter Age	hrs	Client Info		<b>58</b>	50	515
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>16</b>	10	32
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	2	0
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

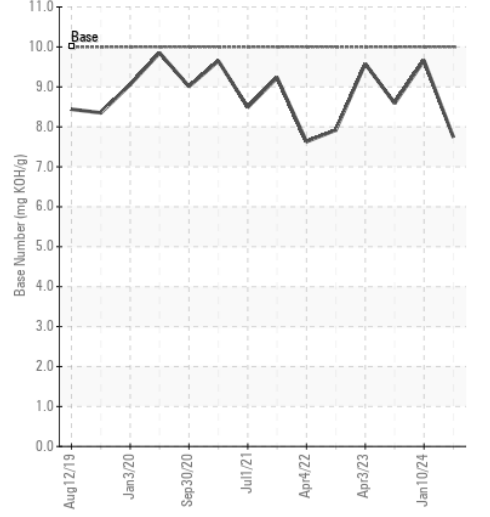
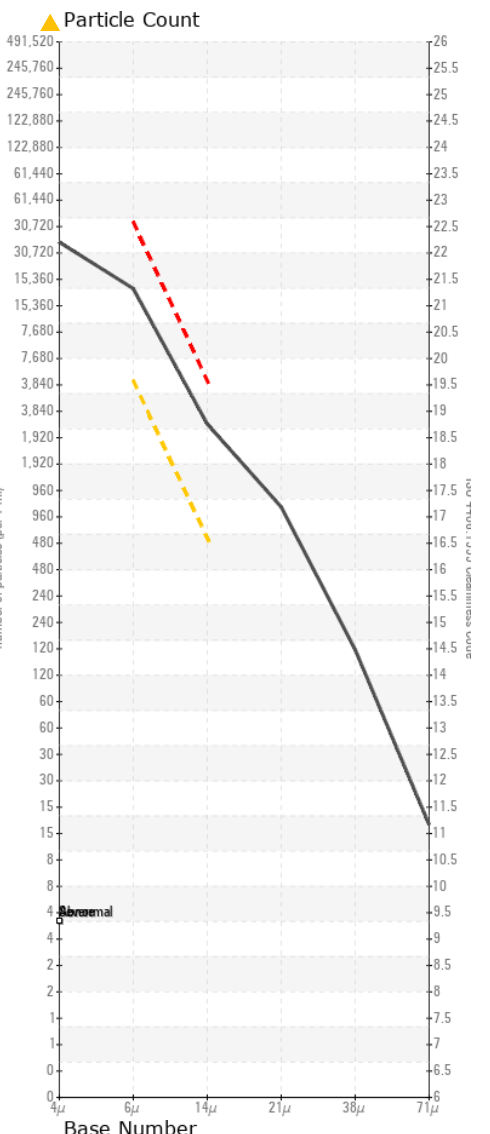
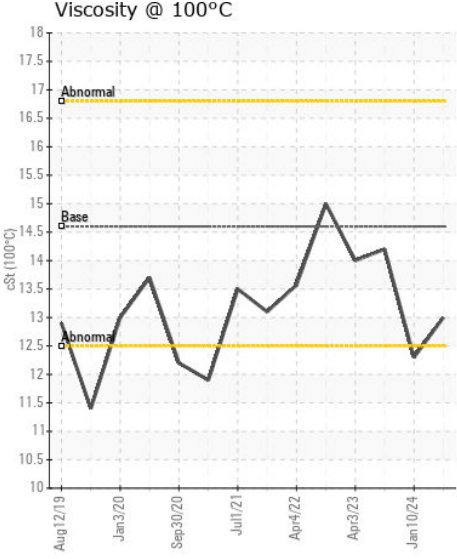
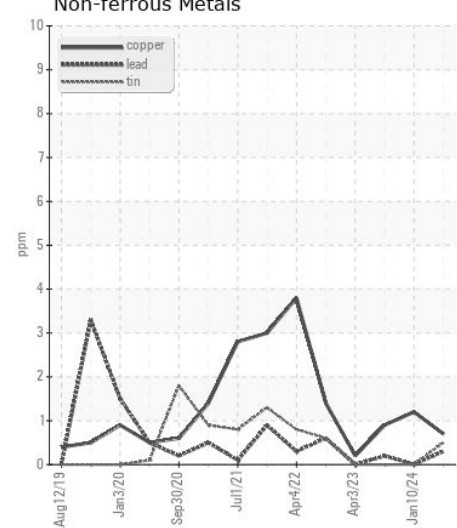
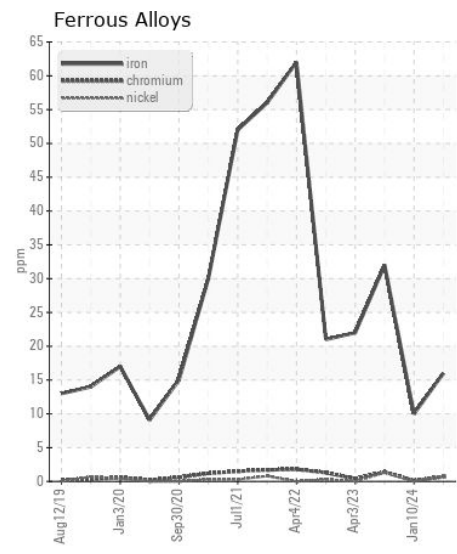
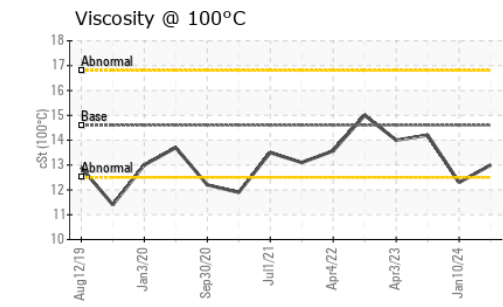
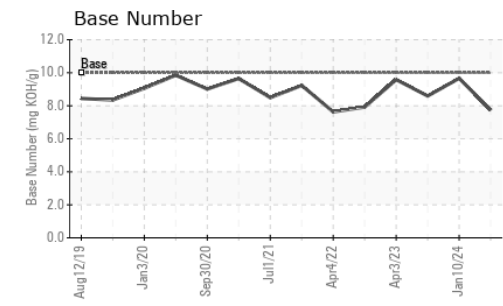
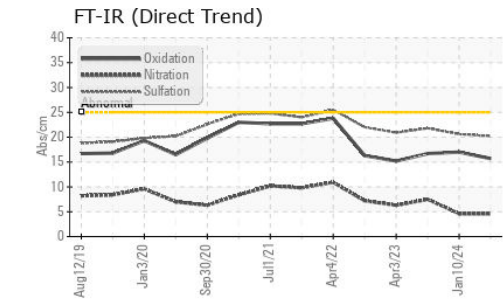
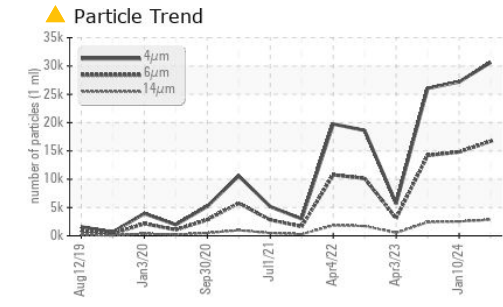
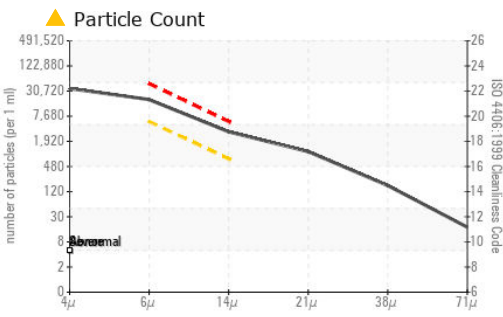
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	8	12
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.4	<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>0.1</b>	0.1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.6</b>	4.6	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	20.6	21.8
Particles >4µm		ASTM D7647		<b>30632</b>	27195	26055
Particles >6µm		ASTM D7647	>5000	<b>▲ 16687</b>	▲ 14815	▲ 14194
Particles >14µm		ASTM D7647	>640	<b>▲ 2840</b>	▲ 2521	▲ 2416
Particles >21µm		ASTM D7647	>160	<b>▲ 957</b>	▲ 849	▲ 814
Particles >38µm		ASTM D7647	>40	<b>▲ 148</b>	▲ 131	▲ 126
Particles >71µm		ASTM D7647	>10	<b>15</b>	13	13
Oil Cleanliness		ISO 4406 (c)	>19/16	<b>▲ 21/19</b>	▲ 21/19	▲ 21/18
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.

Sodium	ppm	ASTM D5185m		<b>3</b>	0	0
Boron	ppm	ASTM D5185m		<b>352</b>	196	345
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>71</b>	56	81
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>425</b>	438	326
Calcium	ppm	ASTM D5185m		<b>1522</b>	1462	1558
Phosphorus	ppm	ASTM D5185m	760	<b>1019</b>	838	982
Zinc	ppm	ASTM D5185m	800	<b>1150</b>	1015	1216
Sulfur	ppm	ASTM D5185m	3000	<b>3630</b>	2836	4144
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	17.0	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>7.74</b>	9.66	8.59
Visc @ 100°C	cSt	ASTM D445	14.6	<b>13.0</b>	12.3	14.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013772 **Received** : 16 Apr 2024  
**Lab Number** : 06150604 **Tested** : 17 Apr 2024  
**Unique Number** : 10980682 **Diagnosed** : 18 Apr 2024 - Sean Felton  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

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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)