



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
PCS - PORTABLE CRUSHING SERVICES
Machine Id
CASE SKIDSTEER LD18 - PCS
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014749	KL0013803	KL0013963
Sample Date		Client Info		09 Jul 2024	10 Apr 2024	09 Jan 2024
Machine Age	hrs	Client Info		2257	2179	2080
Oil Age	hrs	Client Info		227	149	50
Filter Age	hrs	Client Info		227	149	50
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	25	14
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	10	7
Lead	ppm	ASTM D5185m	>40	<1	3	<1
Copper	ppm	ASTM D5185m	>330	1	2	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

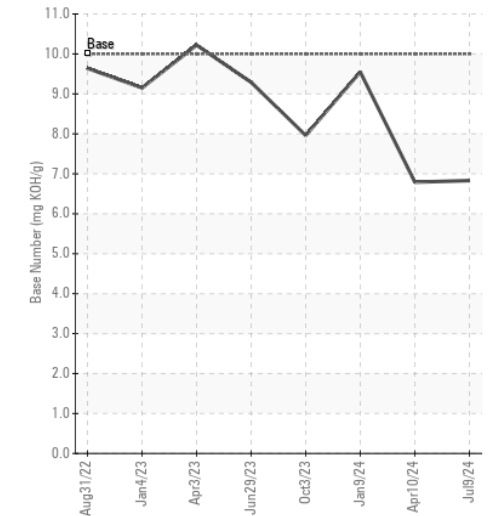
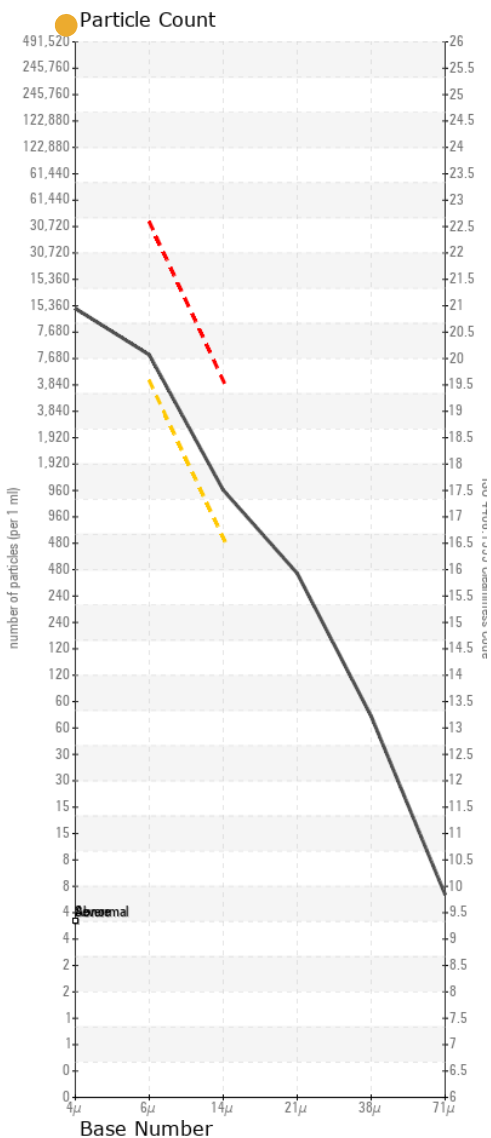
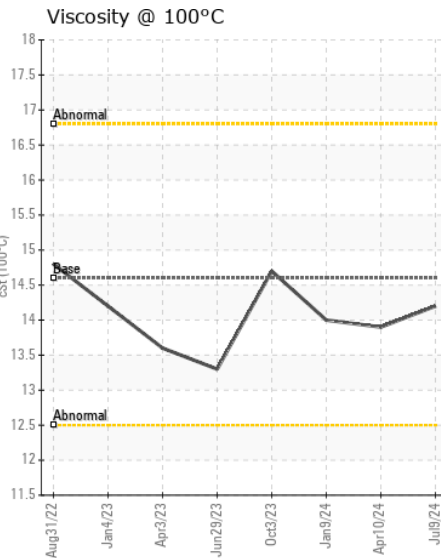
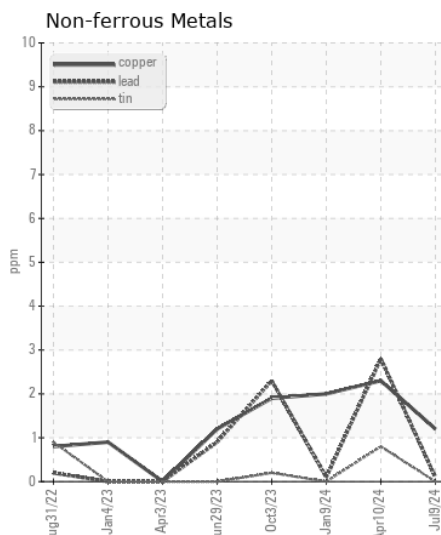
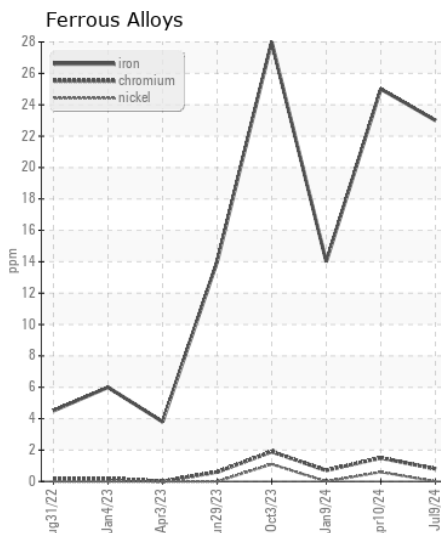
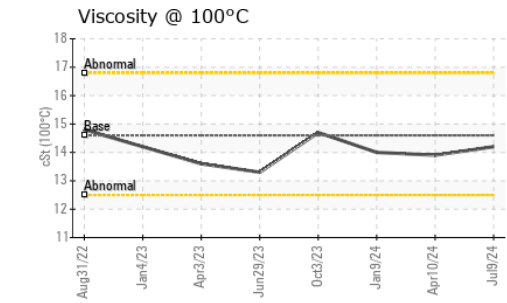
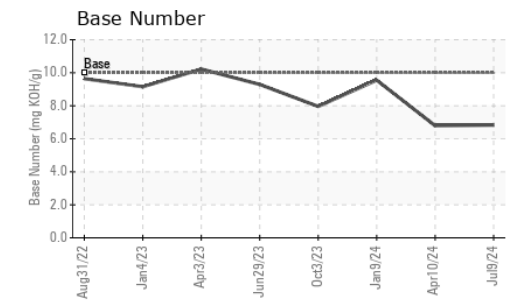
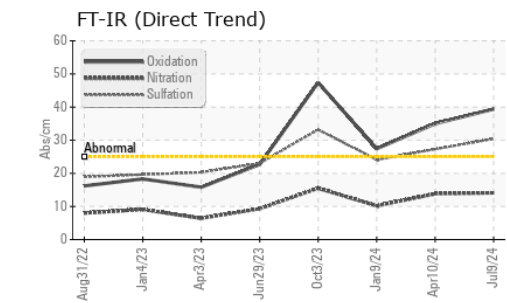
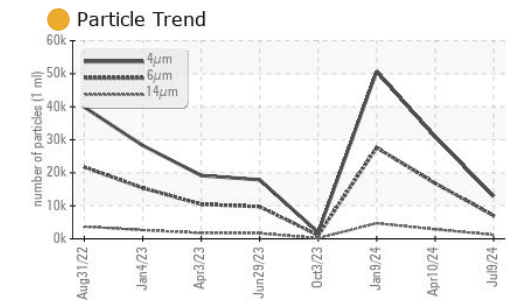
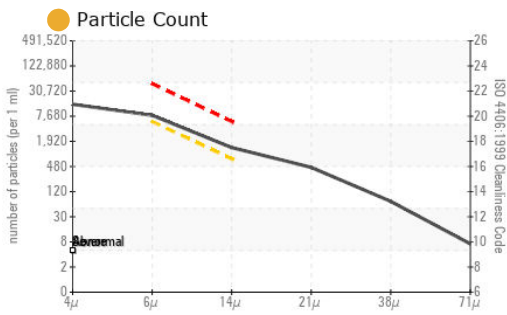
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	12	15	7
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	14.1	13.8	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.4	27.3	24.1
Particles >4µm		ASTM D7647		12875	30910	50684
Particles >6µm		ASTM D7647	>5000	7014	▲ 16838	▲ 27611
Particles >14µm		ASTM D7647	>640	1194	▲ 2866	▲ 4699
Particles >21µm		ASTM D7647	>160	402	▲ 965	▲ 1583
Particles >38µm		ASTM D7647	>40	62	▲ 149	▲ 244
Particles >71µm		ASTM D7647	>10	6	▲ 15	▲ 25
Oil Cleanliness		ISO 4406 (c)	>19/16	20/17	▲ 21/19	▲ 22/19
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

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		4	3	0
Boron	ppm	ASTM D5185m		247	321	277
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		71	77	68
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		396	423	392
Calcium	ppm	ASTM D5185m		1778	1598	1468
Phosphorus	ppm	ASTM D5185m	760	954	980	907
Zinc	ppm	ASTM D5185m	800	1135	1155	1116
Sulfur	ppm	ASTM D5185m	3000	5048	3687	3384
Oxidation	Abs/.1mm	*ASTM D7414	>25	39.4	35.0	27.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.83	6.79	9.55
Visc @ 100°C	cSt	ASTM D445	14.6	14.2	13.9	14.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014749 **Received** : 16 Jul 2024
Lab Number : 06238001 **Tested** : 17 Jul 2024
Unique Number : 11126835 **Diagnosed** : 18 Jul 2024 - Don Baldridge
Test Package : MOB 2 (Additional Tests: PrtCount)

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

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)