



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
KANSAS/44/EG - EXCAVATOR
Machine Id
20.147L [KANSAS^44^EG - EXCAVATOR]
Component
Diesel Engine
Fluid
CAT DIESEL ENGINE OIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918349	WC0789835	---
Sample Date		Client Info		08 Jul 2024	16 Apr 2024	---
Machine Age	hrs	Client Info		194	10	---
Oil Age	hrs	Client Info		194	10	---
Filter Age	hrs	Client Info		0	10	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				ATTENTION	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	33	17	---
Chromium	ppm	ASTM D5185m	>20	2	1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	13	6	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	29	20	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

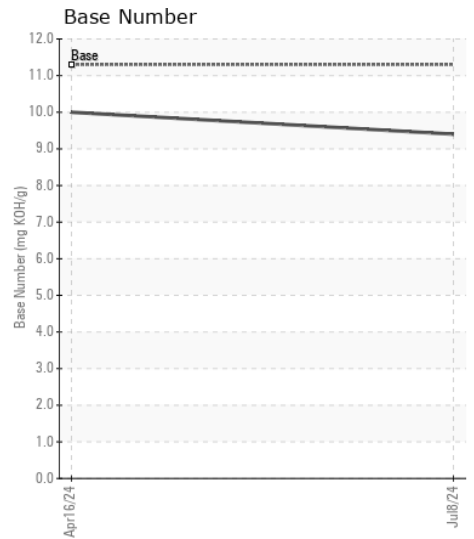
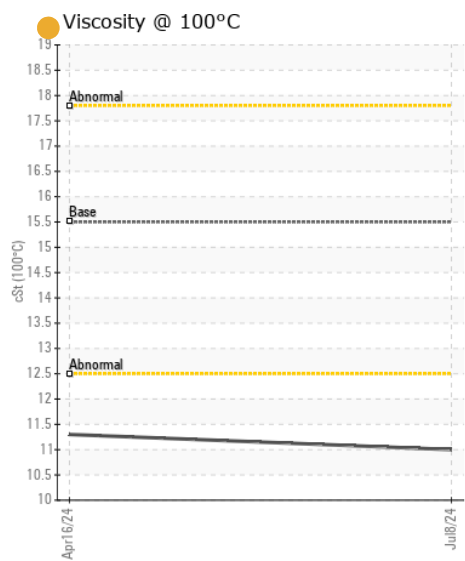
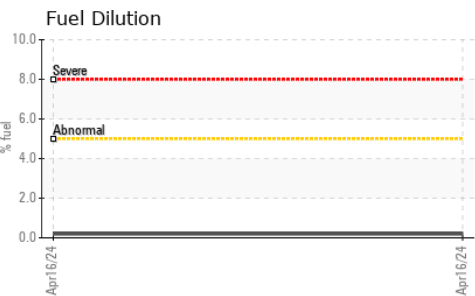
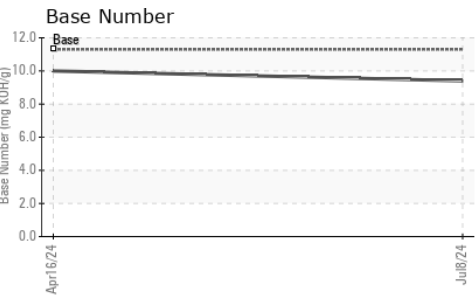
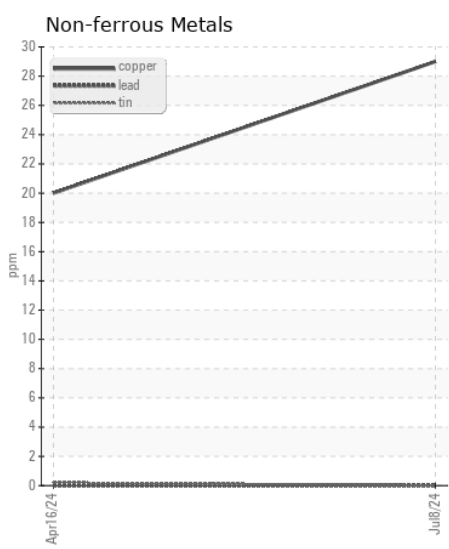
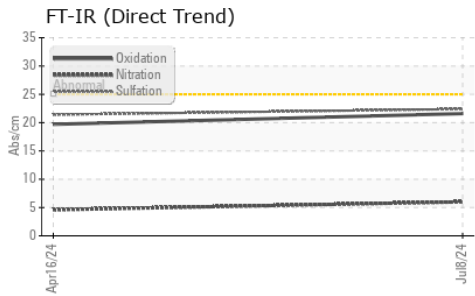
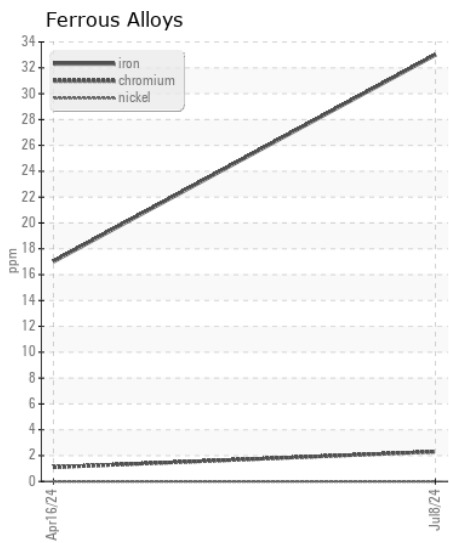
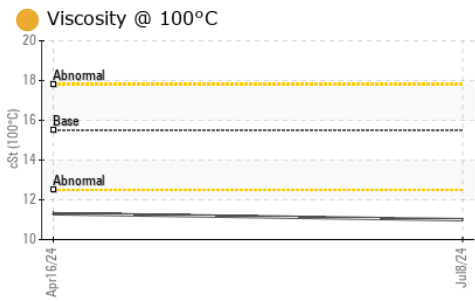
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	13	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---
Fuel	%	ASTM D3524	>5	<1.0	0.2	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	6.0	4.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		7	6	---
Boron	ppm	ASTM D5185m		49	73	---
Barium	ppm	ASTM D5185m		8	10	---
Molybdenum	ppm	ASTM D5185m		40	38	---
Manganese	ppm	ASTM D5185m		4	4	---
Magnesium	ppm	ASTM D5185m		508	515	---
Calcium	ppm	ASTM D5185m		1591	1535	---
Phosphorus	ppm	ASTM D5185m		937	944	---
Zinc	ppm	ASTM D5185m	1460	1053	1082	---
Sulfur	ppm	ASTM D5185m		3483	3539	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	19.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.3	9.4	10.0	---
Visc @ 100°C	cSt	ASTM D445	15.5	11.0	11.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918349 **Received** : 15 Jul 2024
Lab Number : 06235725 **Tested** : 16 Jul 2024
Unique Number : 11124559 **Diagnosed** : 16 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: FuelDilution, TBN)

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: RANDY ROBERTS
 randy.roberts@sherwood.net

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:
F: x: