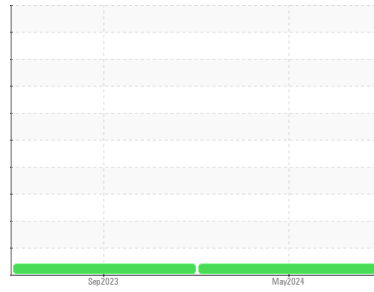




OIL ANALYSIS REPORT

Area
KANSAS/15/EG - EXCAVATOR
 Machine Id
20.145L [KANSAS^15^EG - EXCAVATOR]
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (4 GAL)

Sample Rating Trend



VISCOSITY



DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0918357	WC0746054	---
Sample Date	Client Info		01 May 2024	11 Sep 2023	---
Machine Age	hrs	Client Info	0	6	---
Oil Age	hrs	Client Info	0	6	---
Oil Changed	Client Info		Not Chngd	Not Chngd	---
Sample Status			ATTENTION	ATTENTION	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	27	6	---
Chromium	ppm	ASTM D5185m >20	2	<1	---
Nickel	ppm	ASTM D5185m >2	<1	0	---
Titanium	ppm	ASTM D5185m >2	<1	0	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >25	5	3	---
Lead	ppm	ASTM D5185m >40	<1	<1	---
Copper	ppm	ASTM D5185m >330	227	19	---
Tin	ppm	ASTM D5185m >15	1	0	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	<1	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	36	69	---
Barium	ppm	ASTM D5185m 0	9	5	---
Molybdenum	ppm	ASTM D5185m 0	45	43	---
Manganese	ppm	ASTM D5185m	3	2	---
Magnesium	ppm	ASTM D5185m 0	486	498	---
Calcium	ppm	ASTM D5185m	1509	1539	---
Phosphorus	ppm	ASTM D5185m	900	932	---
Zinc	ppm	ASTM D5185m	1046	1101	---
Sulfur	ppm	ASTM D5185m	2915	3549	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	13	12	---
Sodium	ppm	ASTM D5185m	1	4	---
Potassium	ppm	ASTM D5185m >20	3	1	---
Fuel	%	ASTM D3524 >5	0.4	0.4	---

INFRA-RED

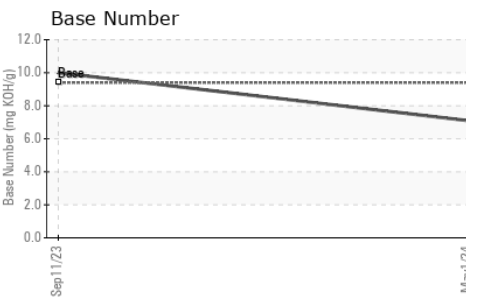
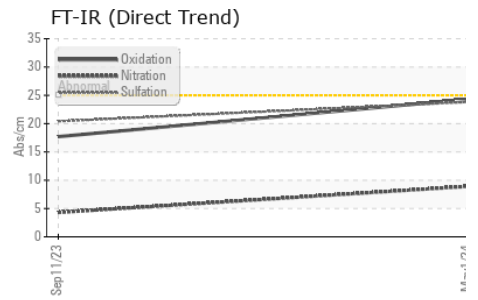
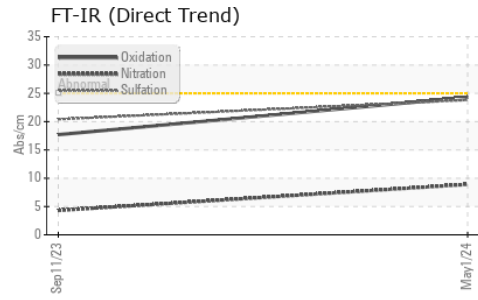
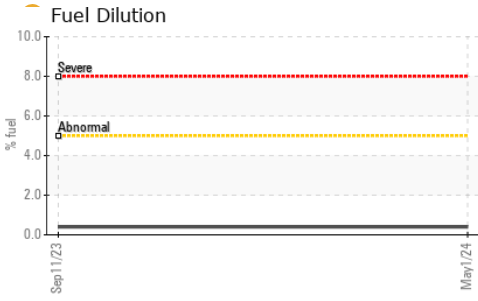
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	8.9	4.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.8	20.4	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	24.3	17.7	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	7.1	10.0	---



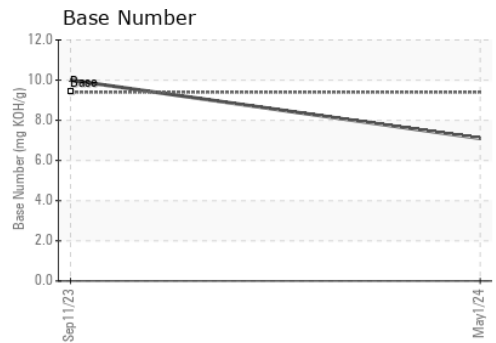
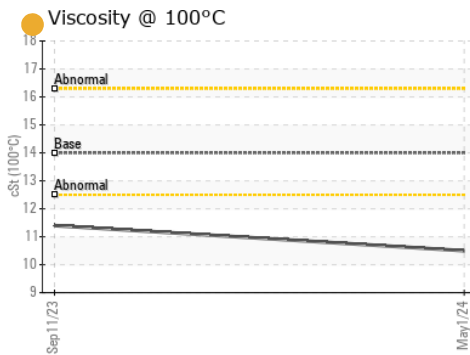
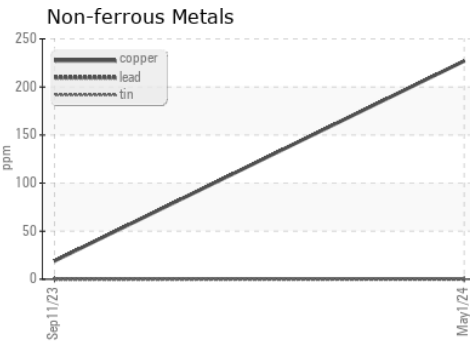
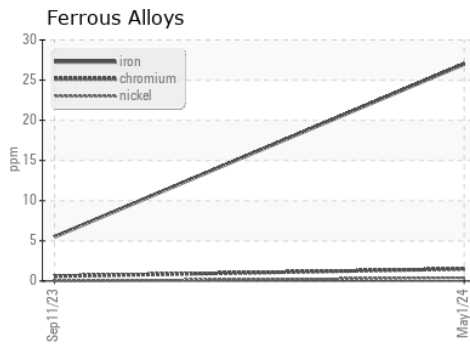
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	10.5	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918357 **Received** : 10 May 2024
Lab Number : 06176451 **Tested** : 15 May 2024
Unique Number : 11022504 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, 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)