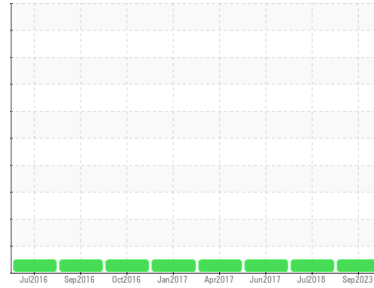




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
OKLAHOMA/3
 Machine Id
88.94GH [OKLAHOMA^3]
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0834105	WCCF0931	WCMCF32542
Sample Date	Client Info			27 Sep 2023	23 Jul 2018	09 Jun 2017
Machine Age	hrs	Client Info		6103	4166	2597
Oil Age	hrs	Client Info		403	250	242
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	66	6	13
Chromium	ppm	ASTM D5185m	>20	2	0	<1
Nickel	ppm	ASTM D5185m	>4	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	<1	2
Lead	ppm	ASTM D5185m	>40	2	1	0
Copper	ppm	ASTM D5185m	>330	13	<1	<1
Tin	ppm	ASTM D5185m	>15	1	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		44	59	36
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		47	42	43
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		545	520	632
Calcium	ppm	ASTM D5185m		1851	1713	1426
Phosphorus	ppm	ASTM D5185m		742	662	747
Zinc	ppm	ASTM D5185m		992	865	910
Sulfur	ppm	ASTM D5185m		2459	2250	2857

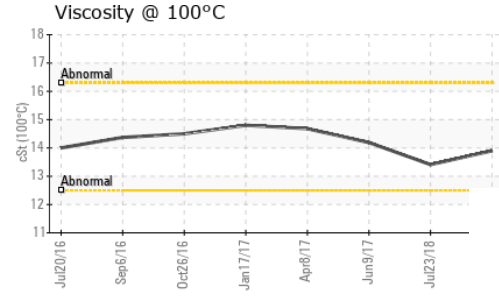
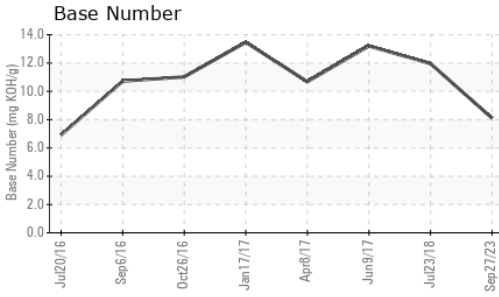
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	13	5	4
Sodium	ppm	ASTM D5185m	>118	10	4	5
Potassium	ppm	ASTM D5185m	>20	5	3	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	9.9	6.	5.
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	21.	14.

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	19.	11.
Base Number (BN)	mg KOH/g	ASTM D2896		8.1	11.96	13.20



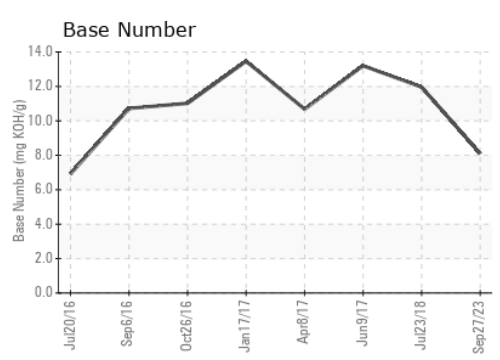
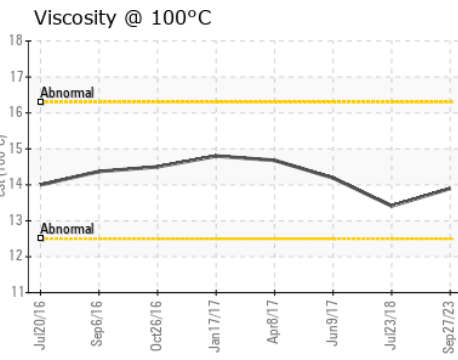
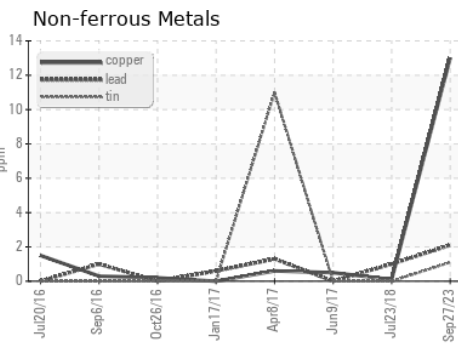
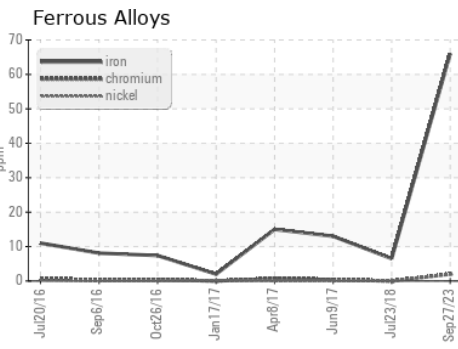
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.9	13.41	14.19

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0834105 **Received** : 02 Oct 2023
Lab Number : **05966091** **Diagnosed** : 03 Oct 2023
Unique Number : 10672642 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: DOUG KING
 doug.king@sherwood.net
 T: (316)617-3161
 F: x:

Certificate L2367
 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)