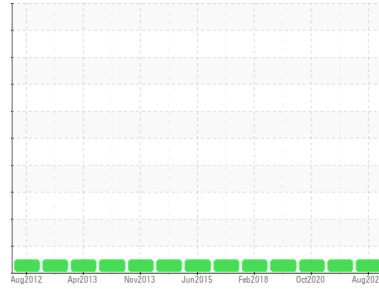




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
8374

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 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			WC0837176	WC0617838	WC0503531
Sample Date	Client Info			14 Aug 2023	18 Oct 2021	01 Oct 2020
Machine Age	hrs	Client Info		5740	5281	5479
Oil Age	hrs	Client Info		459	350	572
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	48	20	96
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	3	2	5
Copper	ppm	ASTM D5185m	>330	1	<1	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
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	250	26	16	26
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	95	54	101
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	450	1409	982	1417
Calcium	ppm	ASTM D5185m	3000	1634	1193	1991
Phosphorus	ppm	ASTM D5185m	1150	1492	990	1600
Zinc	ppm	ASTM D5185m	1350	1804	1138	1778
Sulfur	ppm	ASTM D5185m	4250	4579	4418	4282

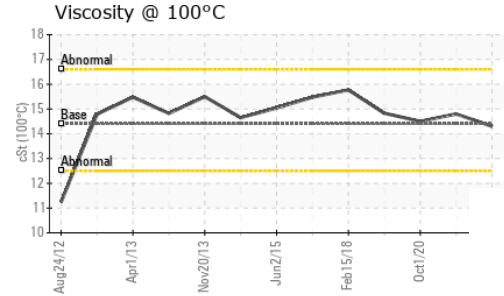
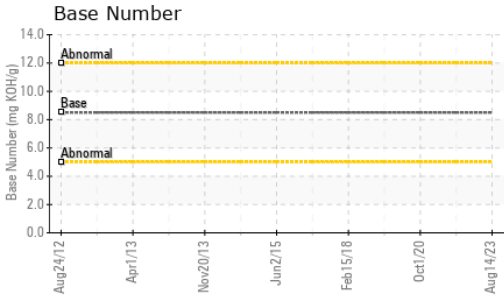
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	3	7
Sodium	ppm	ASTM D5185m	>158	2	2	5
Potassium	ppm	ASTM D5185m	>20	2	0	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	0.7	1.6
Nitration	Abs/cm	*ASTM D7624	>20	7.7	7.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	19.2	22.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	14.5	16
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	---	---



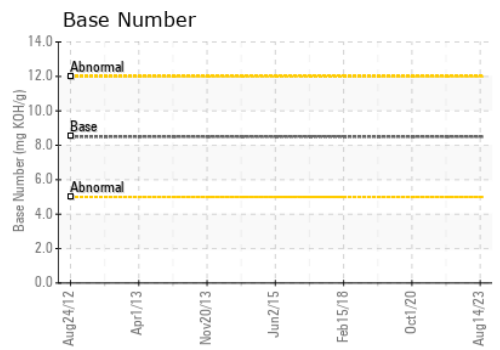
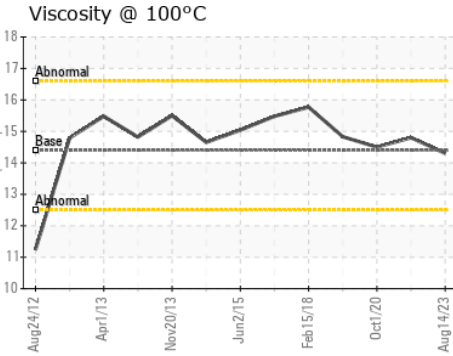
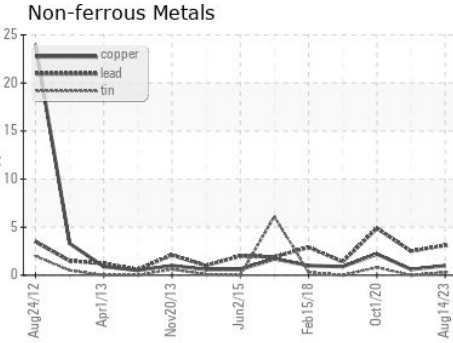
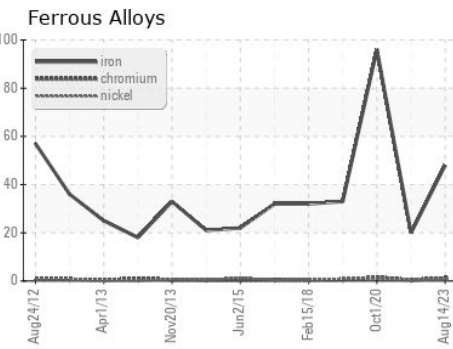
OIL ANALYSIS REPORT



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	14.4	14.3	14.8	14.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0837176 **Received** : 23 Aug 2023
Lab Number : 05931990 **Diagnosed** : 25 Aug 2023
Unique Number : 10617261 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

TRADER CONSTRUCTION CO.
 PO DRAWER 1578
 NEW BERN, NC
 US 28563
 Contact: MIKE WYATT
 mw Wyatt@traderconstruction.com
 T: (252)633-1399
 F: (252)638-4871

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)