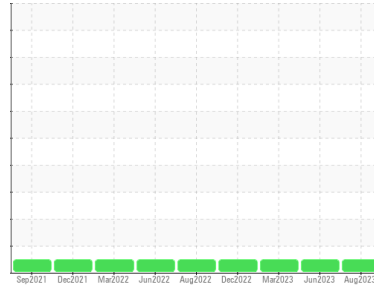




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
MACK A-4
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 LE 15W40 (--- QTS)

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		WC0819761	WC0756085	WC0756096
Sample Date	Client Info		11 Aug 2023	07 Jun 2023	02 Mar 2023
Machine Age	hrs	Client Info	11207	10914	10549
Oil Age	hrs	Client Info	300	150	300
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	30	20	27
Chromium	ppm	ASTM D5185m >20	<1	0	0
Nickel	ppm	ASTM D5185m >5	<1	<1	0
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	11	3	3
Lead	ppm	ASTM D5185m >40	5	2	3
Copper	ppm	ASTM D5185m >330	5	2	1
Tin	ppm	ASTM D5185m >15	2	1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	258	286	241
Barium	ppm	ASTM D5185m	0	2	0
Molybdenum	ppm	ASTM D5185m	149	148	155
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	810	693	770
Calcium	ppm	ASTM D5185m	1966	1763	1774
Phosphorus	ppm	ASTM D5185m 1200	859	789	793
Zinc	ppm	ASTM D5185m 1300	1056	988	1013
Sulfur	ppm	ASTM D5185m 3200	3399	3208	3158

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	11	8	9
Sodium	ppm	ASTM D5185m	5	<1	3
Potassium	ppm	ASTM D5185m >20	3	2	4

INFRA-RED

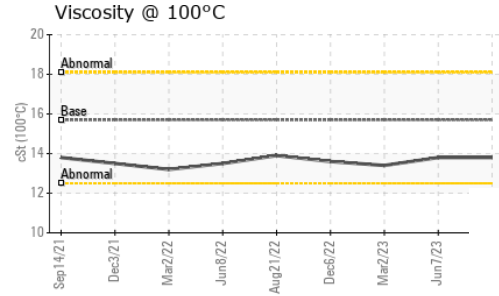
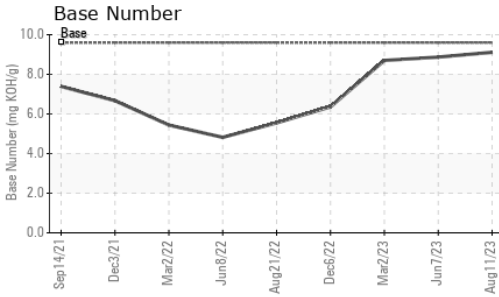
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.6	0.5	0.3
Nitration	Abs/cm	*ASTM D7624 >20	13.5	12.3	12.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	34.2	33.0	32.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	32.6	30.0	29.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	9.11	8.87	8.70



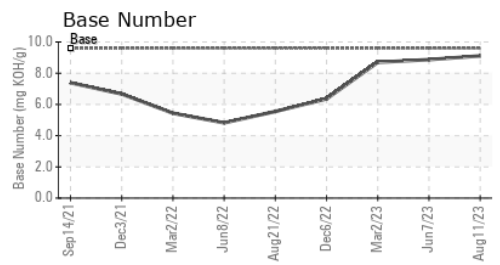
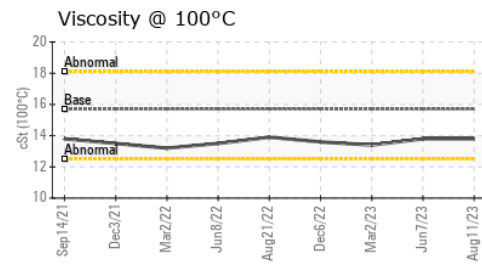
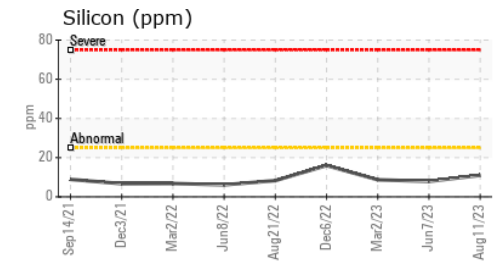
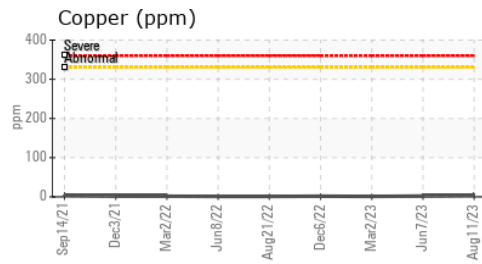
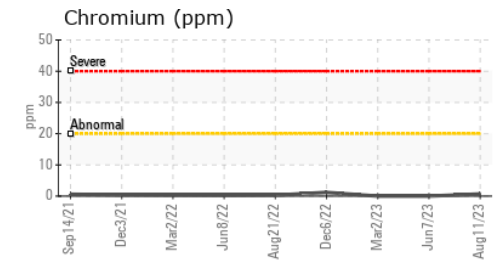
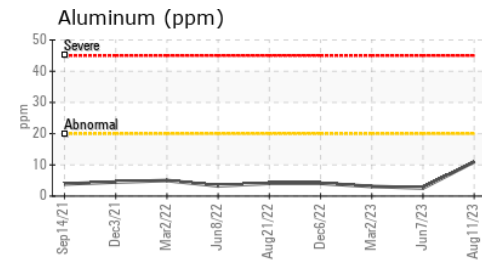
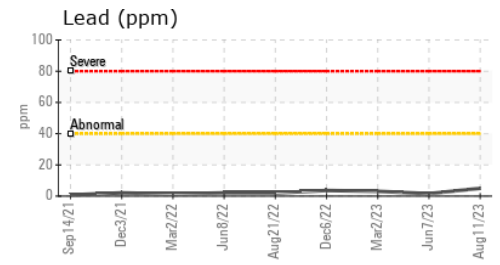
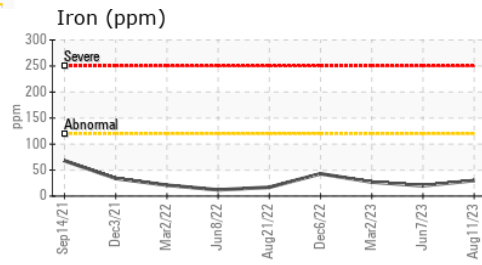
OIL ANALYSIS REPORT



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	15.7	13.8	13.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0819761 **Received** : 16 Aug 2023
Lab Number : 05926838 **Diagnosed** : 18 Aug 2023
Unique Number : 10606785 **Diagnostician** : Sean Felton
Test Package : MOB 2

ALLEGHENY DISPOSAL LLC
 PO BOX 4
 GREEN BANK, WV
 US 24944
 Contact: SERVICE MANAGER
 meckmechanic@frontier.com
 T: (304)456-4541
 F: (304)456-4540

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)