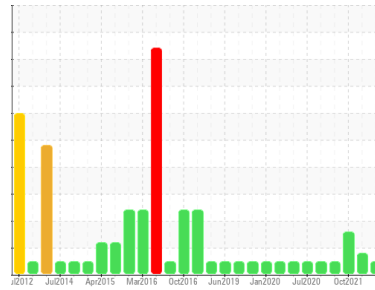




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
CATERPILLAR LOADER L-7
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (12 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		WC0721310	WC0721475	WC0542289
Sample Date	Client Info		01 Dec 2022	22 Jul 2022	16 Oct 2021
Machine Age	hrs	Client Info	47506	46833	45220
Oil Age	hrs	Client Info	500	500	500
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

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	62	93	66
Chromium	ppm	ASTM D5185m >20	<1	2	3
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m >2	0	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >25	1	2	2
Lead	ppm	ASTM D5185m >40	2	2	4
Copper	ppm	ASTM D5185m >330	101	▲ 516	24
Tin	ppm	ASTM D5185m >15	2	2	0
Antimony	ppm	ASTM D5185m	---	---	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	7	8	8
Barium	ppm	ASTM D5185m 10	0	0	<1
Molybdenum	ppm	ASTM D5185m 100	62	58	22
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 450	916	890	1076
Calcium	ppm	ASTM D5185m 3000	1127	1113	1272
Phosphorus	ppm	ASTM D5185m 1150	983	962	969
Zinc	ppm	ASTM D5185m 1350	1235	1212	1160
Sulfur	ppm	ASTM D5185m 4250	3280	2794	4097

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	7	▲ 32
Sodium	ppm	ASTM D5185m >158	2	2	11
Potassium	ppm	ASTM D5185m >20	0	1	5

INFRA-RED

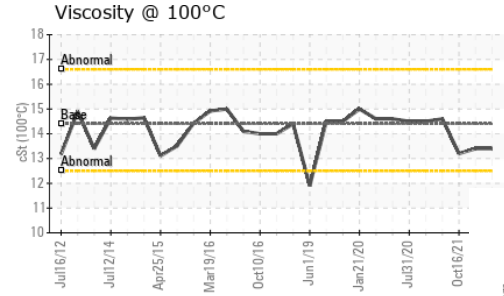
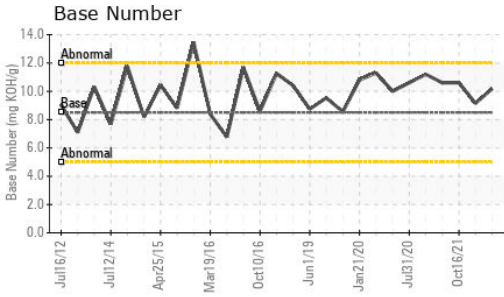
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.7	1	0.6
Nitration	Abs/cm	*ASTM D7624 >20	8.6	9.8	7.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.6	22.4	19.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.1	18.3	13.3
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	10.18	9.15	10.6



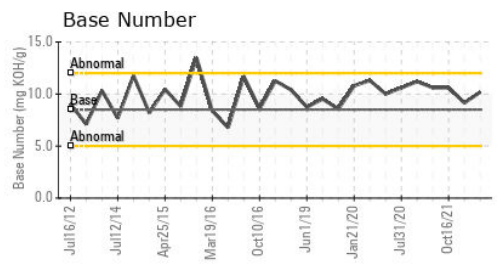
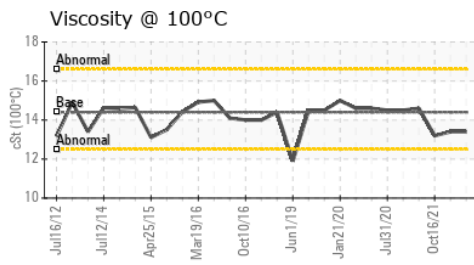
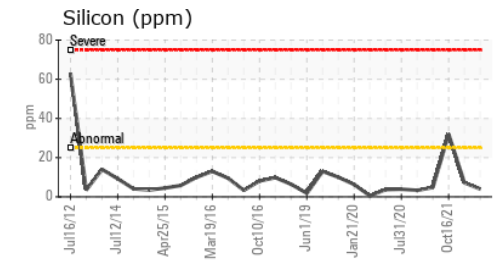
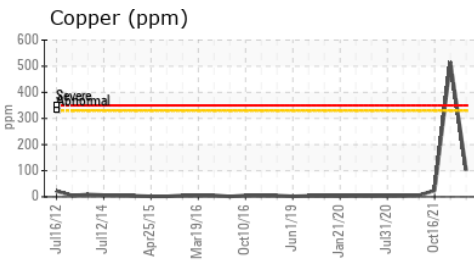
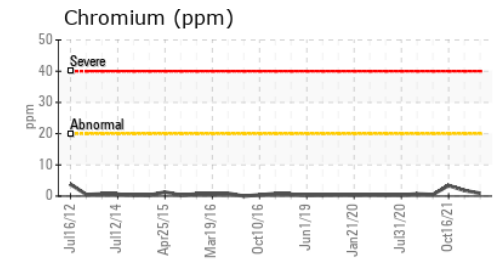
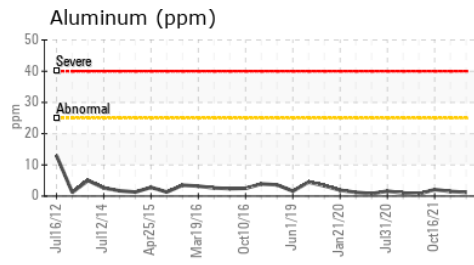
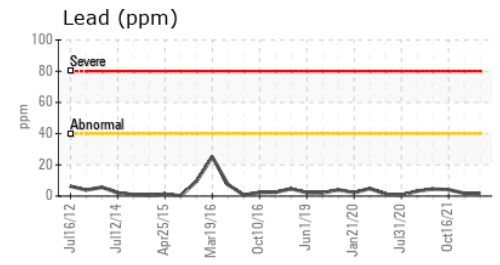
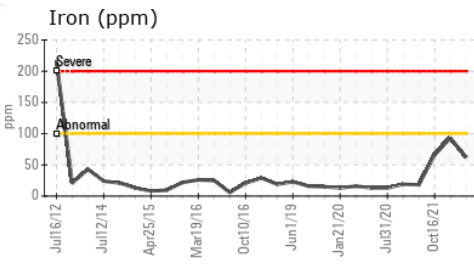
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	13.4	13.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0721310 **Received** : 09 Dec 2022
Lab Number : **05713736** **Diagnosed** : 12 Dec 2022
Unique Number : 10253312 **Diagnostician** : Wes Davis
Test Package : MOB 2

TRESCA BROS SAND & GRAVEL INC
 66 MAIN ST
 MILLIS, MA
 US 02054
 Contact: FRAN ROSSI
 frossi@trescaconcrete.com
 T: (508)376-2957
 F: (508)376-4333

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)