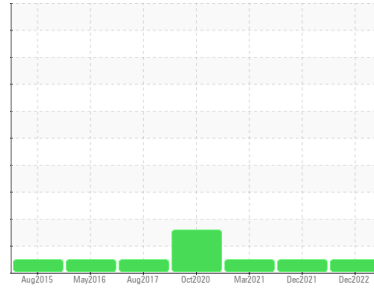




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
JOHN DEERE 317 317
 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	WC0661452	WC0542346	WC0542253
Sample Date	Client Info	12 Dec 2022	04 Dec 2021	18 Mar 2021
Machine Age	hrs	2872	4812	4812
Oil Age	hrs	1	500	500
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 >51	35	37	20
Chromium	ppm	ASTM D5185m >11	<1	<1	<1
Nickel	ppm	ASTM D5185m >5	<1	1	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	<1	<1
Aluminum	ppm	ASTM D5185m >31	1	5	0
Lead	ppm	ASTM D5185m >26	<1	1	<1
Copper	ppm	ASTM D5185m >26	1	5	2
Tin	ppm	ASTM D5185m >4	<1	<1	<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	12	8	14
Barium	ppm	ASTM D5185m 10	12	0	0
Molybdenum	ppm	ASTM D5185m 100	58	66	61
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 450	798	1068	927
Calcium	ppm	ASTM D5185m 3000	1026	1206	1073
Phosphorus	ppm	ASTM D5185m 1150	905	1053	1002
Zinc	ppm	ASTM D5185m 1350	1107	1300	1138
Sulfur	ppm	ASTM D5185m 4250	2985	2697	2596

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >22	6	20	18
Sodium	ppm	ASTM D5185m >158	2	6	2
Potassium	ppm	ASTM D5185m >20	0	4	<1

INFRA-RED

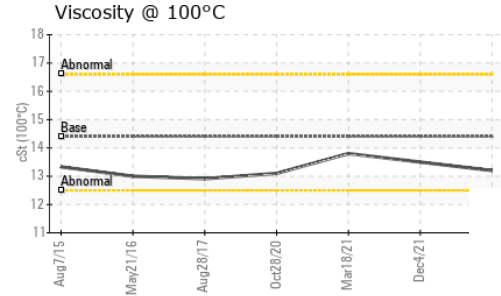
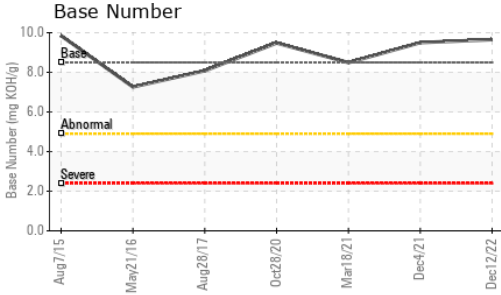
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.7	7.9	6.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.9	20	19.9

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.0	15.6	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	9.65	9.50	8.49



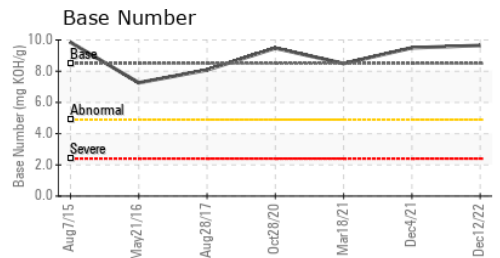
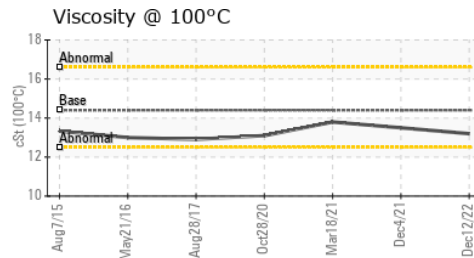
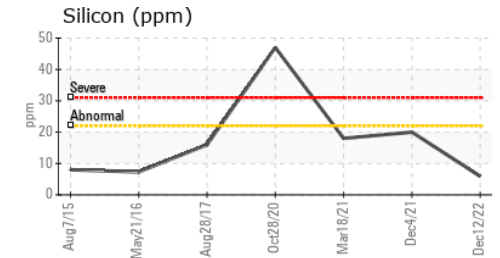
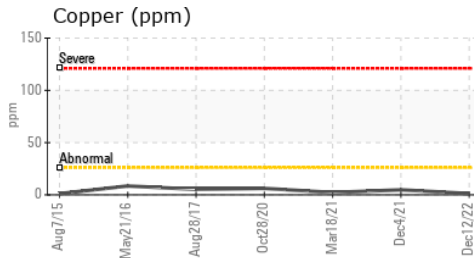
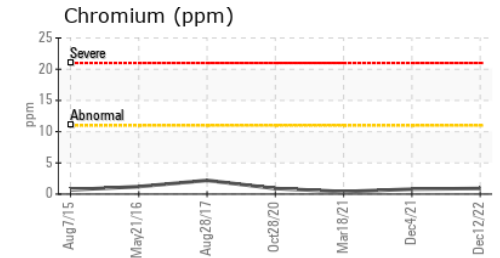
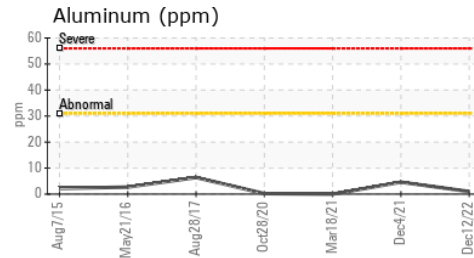
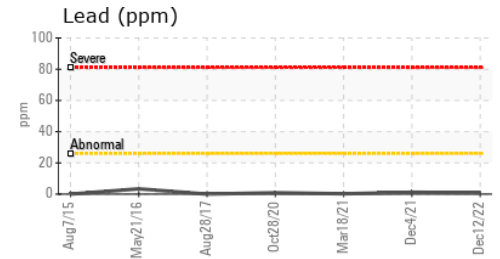
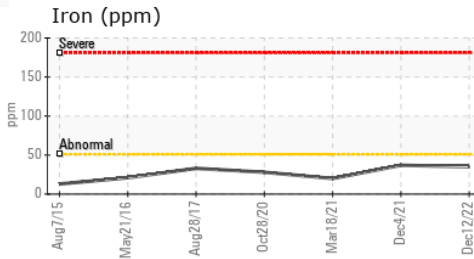
OIL ANALYSIS REPORT



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	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0661452 **Received** : 23 Jan 2023
Lab Number : 05747286 **Diagnosed** : 25 Jan 2023
Unique Number : 10306890 **Diagnostician** : Sean Felton
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

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)