



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
ADVANCE MIXER 185
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (10 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0000511	WC0802306	WC0721149
Sample Date		Client Info		19 Oct 2023	15 Apr 2023	15 Dec 2022
Machine Age	hrs	Client Info		40000	40000	40000
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	24	52	20
Chromium	ppm	ASTM D5185m	>20	<1	4	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	3	<1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	3	6	3
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

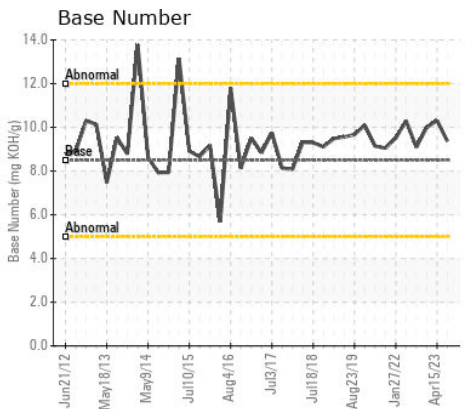
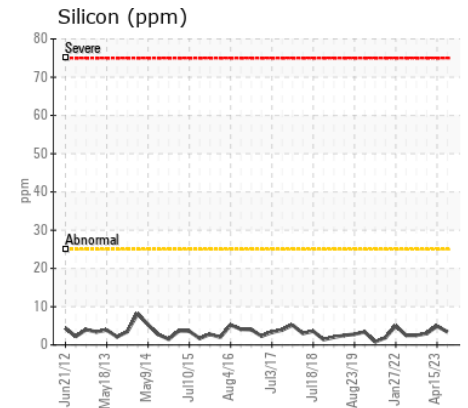
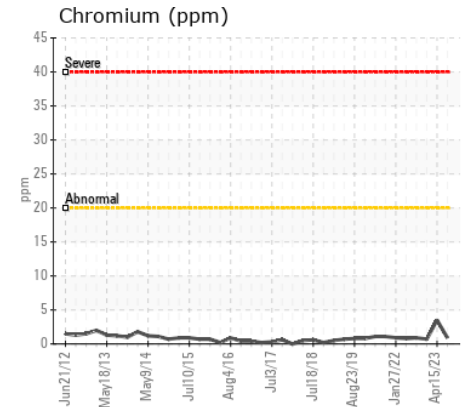
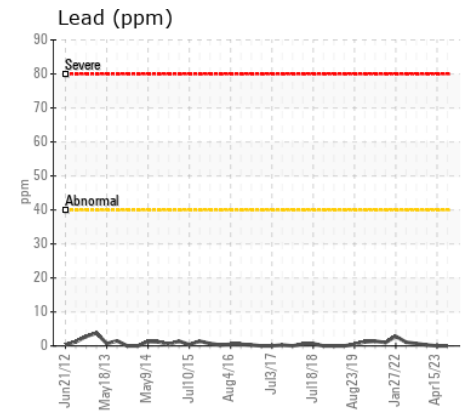
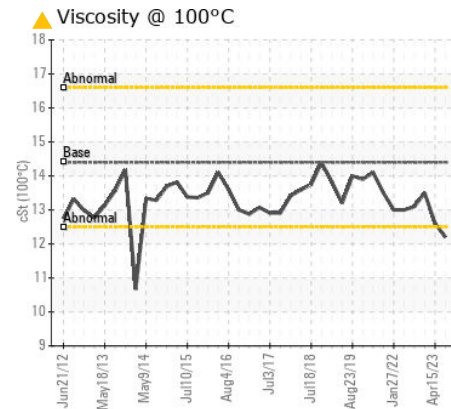
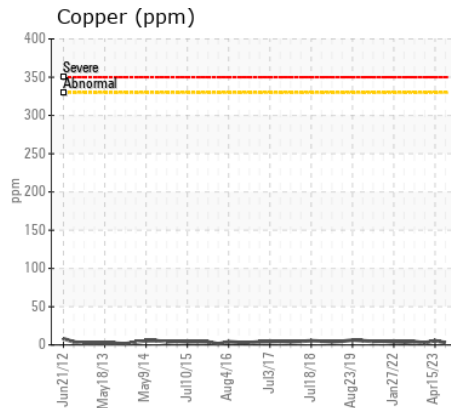
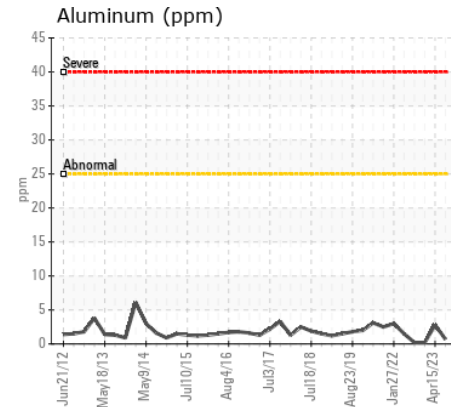
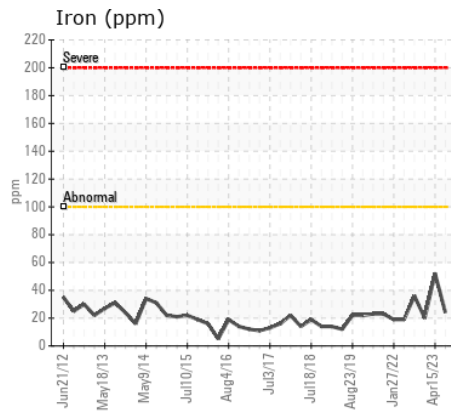
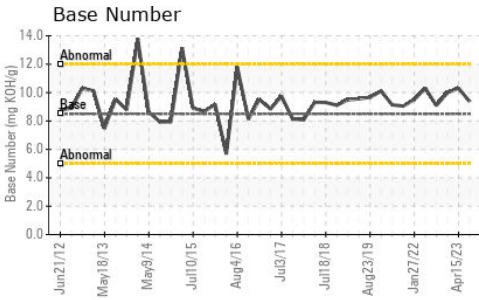
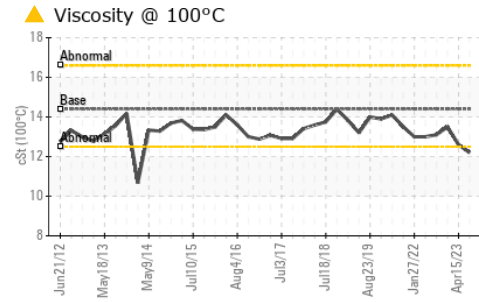
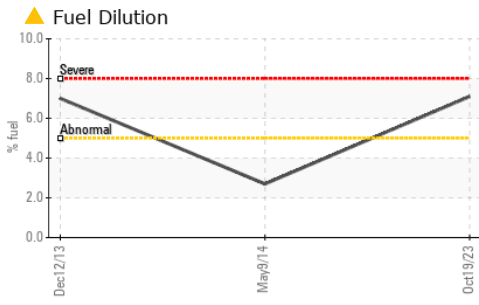
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	3	5	3
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel	%	ASTM D3524	>5	▲ 7.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.7	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.4	18.3
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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>158	2	3	2
Boron	ppm	ASTM D5185m	250	17	14	9
Barium	ppm	ASTM D5185m	10	0	0	12
Molybdenum	ppm	ASTM D5185m	100	60	67	57
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	631	885	840
Calcium	ppm	ASTM D5185m	3000	1341	1283	1032
Phosphorus	ppm	ASTM D5185m	1150	1036	1101	937
Zinc	ppm	ASTM D5185m	1350	1235	1406	1130
Sulfur	ppm	ASTM D5185m	4250	3384	4493	3063
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	15.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.37	10.31	10.00
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.2	12.6	13.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0000511
Lab Number : 06006516
Unique Number : 10740278
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 13 Nov 2023
Tested : 16 Nov 2023
Diagnosed : 16 Nov 2023 - Wes Davis

TRESCA BROS SAND & GRAVEL INC
 66 MAIN ST
 MILLIS, MA
 US 02054

Contact: FRAN ROSSI
 frossi@trescaconcrete.com

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)

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