



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 900 66
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0000517	WC0721344	WC0542561
Sample Date		Client Info		25 Aug 2023	18 Jan 2023	10 Mar 2022
Machine Age	hrs	Client Info		23217	23217	23217
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				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	12	40
Chromium	ppm	ASTM D5185m	>20	0	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	1
Lead	ppm	ASTM D5185m	>40	<1	<1	2
Copper	ppm	ASTM D5185m	>330	3	2	6
Tin	ppm	ASTM D5185m	>15	<1	<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

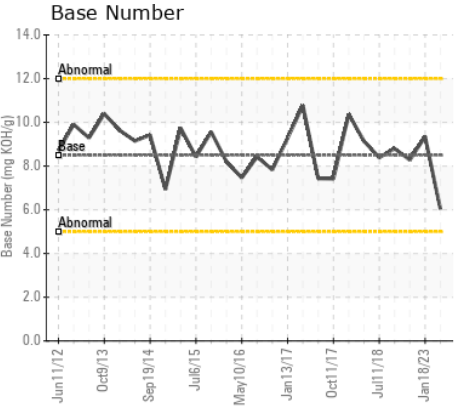
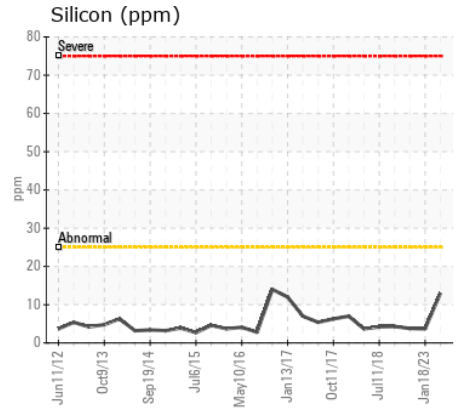
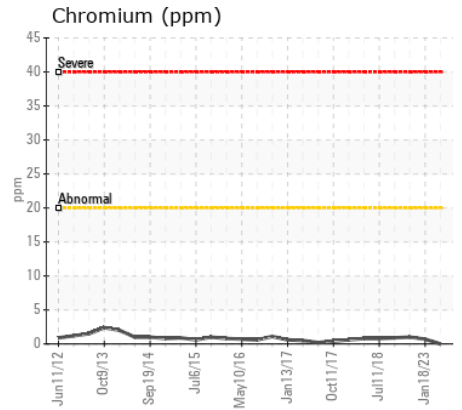
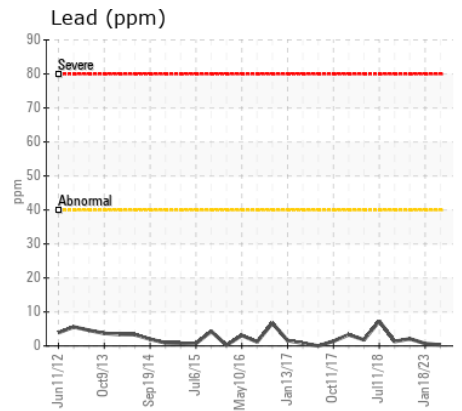
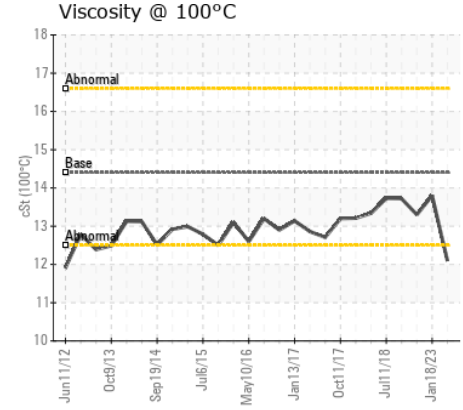
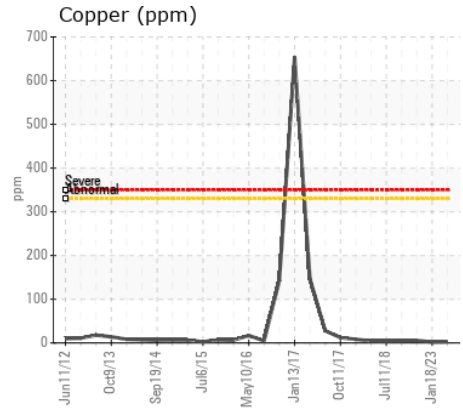
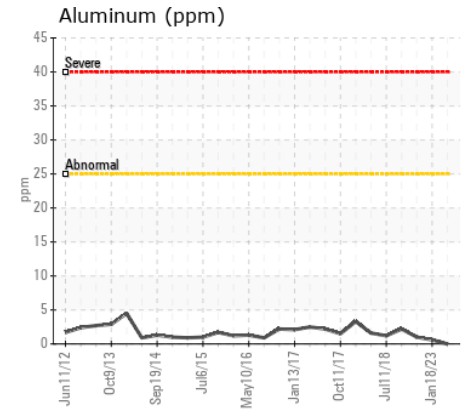
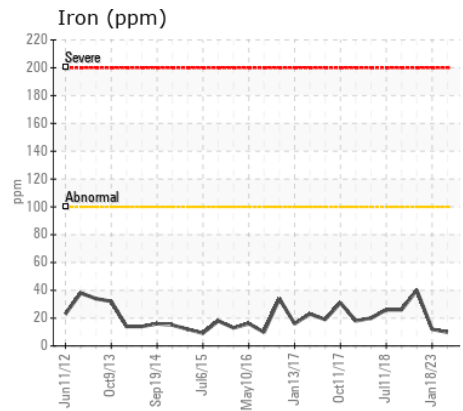
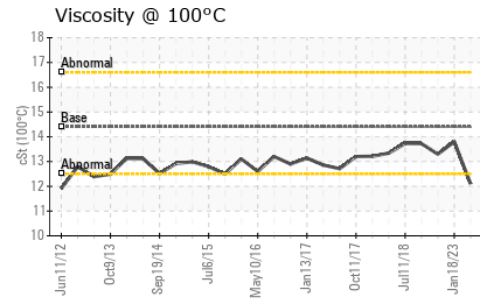
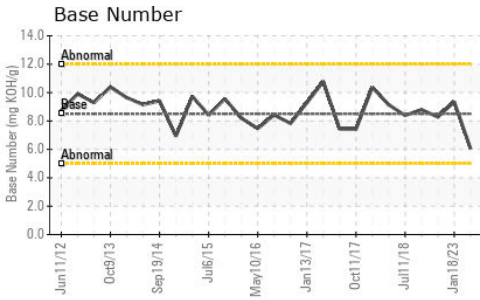
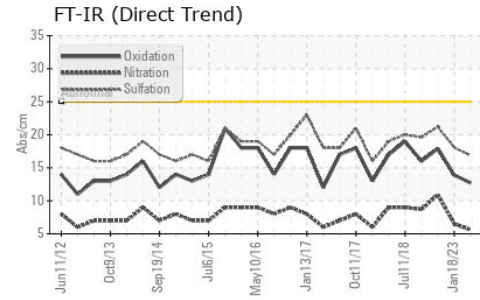
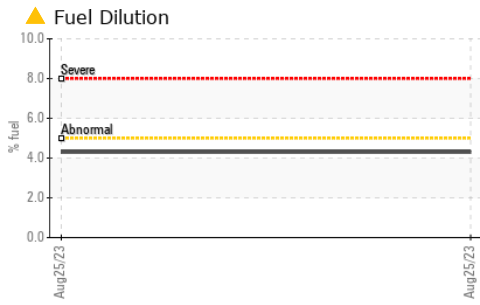
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	13	4	4
Potassium	ppm	ASTM D5185m	>20	7	0	0
Fuel	%	ASTM D3524	>5	▲ 4.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	5.6	6.5	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.8	18.1	21.2
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	4	<1	2
Boron	ppm	ASTM D5185m	250	8	8	6
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	57	57	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	980	867	1008
Calcium	ppm	ASTM D5185m	3000	1129	1052	1158
Phosphorus	ppm	ASTM D5185m	1150	1037	951	1065
Zinc	ppm	ASTM D5185m	1350	1271	1108	1245
Sulfur	ppm	ASTM D5185m	4250	3958	3519	2773
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.7	13.9	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.04	9.35	8.28
Visc @ 100°C	cSt	ASTM D445	14.4	12.1	13.8	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0000517
Lab Number : 05948249
Unique Number : 10644208
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 12 Sep 2023
Tested : 14 Sep 2023
Diagnosed : 14 Sep 2023 - Wes Davis

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

Contact: JACK GALIANO
 jgaliano@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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