



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
IAN
Machine Id
IAN (S/N LO TANK)
Component
Main Engine
Fluid
CHEVRON DELO 710 LS (350 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0009895	---	---
Sample Date		Client Info		07 Sep 2021	---	---
Machine Age	hrs	Client Info		62625	---	---
Oil Age	hrs	Client Info		1464	---	---
Filter Age	hrs	Client Info		1200	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	9	---	---
Chromium	ppm	ASTM D5185m	>8	<1	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m	>3	<1	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>15	1	---	---
Lead	ppm	ASTM D5185m	>18	2	---	---
Copper	ppm	ASTM D5185m	>80	7	---	---
Tin	ppm	ASTM D5185m	>14	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

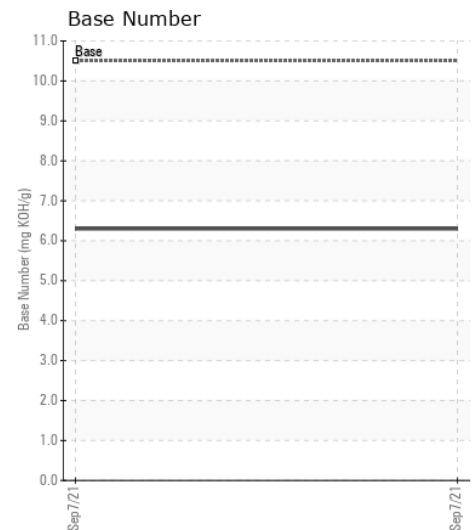
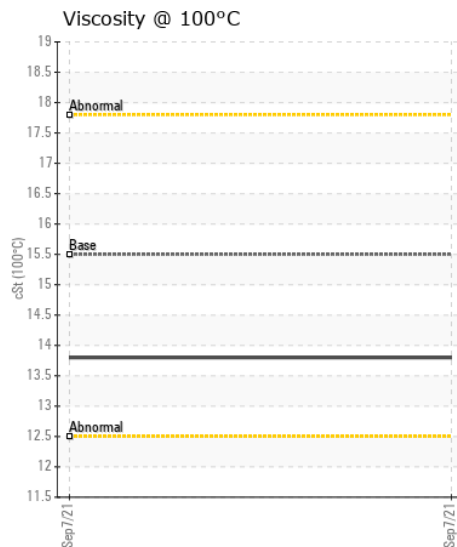
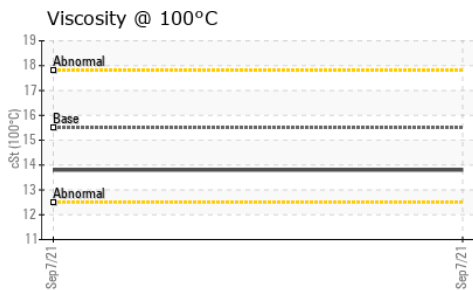
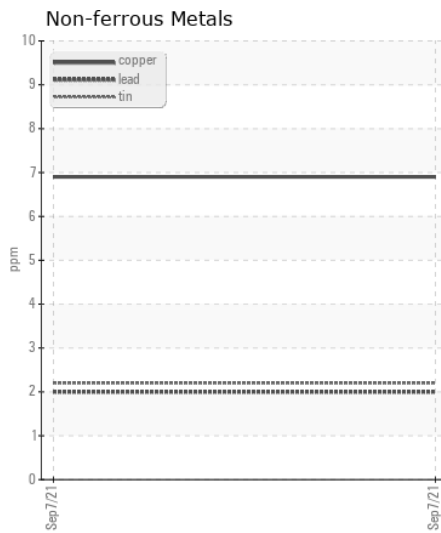
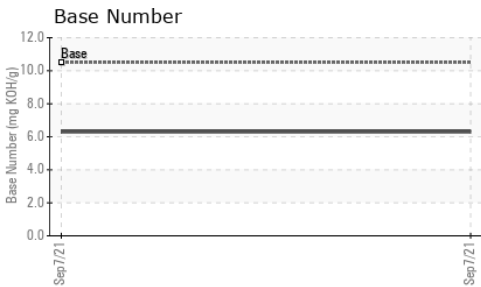
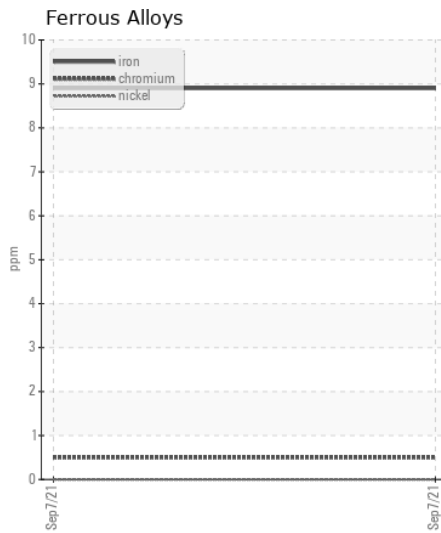
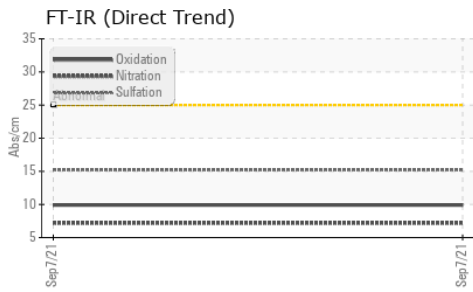
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	2	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.2	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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	>75	2	---	---
Boron	ppm	ASTM D5185m		37	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		44	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		21	---	---
Calcium	ppm	ASTM D5185m		3165	---	---
Phosphorus	ppm	ASTM D5185m		11	---	---
Zinc	ppm	ASTM D5185m		9	---	---
Sulfur	ppm	ASTM D5185m		1787	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	6.3	---	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0009895
Lab Number : 05361536
Unique Number : 9675629
Test Package : MAR 2

Received : 29 Sep 2021
Tested : 30 Sep 2021
Diagnosed : 30 Sep 2021 - Don Baldrige

AMERICAN RIVER TRANSPORTATION CO.
P.O. BOX 2889
ST. LOUIS, MO
US 63111

Contact: JASON PORTER
j_porter@admworld.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)

T:
F: (314)481-5278