



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LOUISIANA PARADISE

Component
Port Main Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (38 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0057343	MW0052248	MW0003427
Sample Date		Client Info		21 Feb 2024	27 Dec 2023	09 Oct 2023
Machine Age	hrs	Client Info		10432	9184	7432
Oil Age	hrs	Client Info		2249	1777	3627
Filter Age	hrs	Client Info		1251	1777	1750
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	9	6	16
Chromium	ppm	ASTM D5185m	>8	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>3	10	10	10
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	1	1
Lead	ppm	ASTM D5185m	>18	3	2	5
Copper	ppm	ASTM D5185m	>80	0	<1	<1
Tin	ppm	ASTM D5185m	>14	<1	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

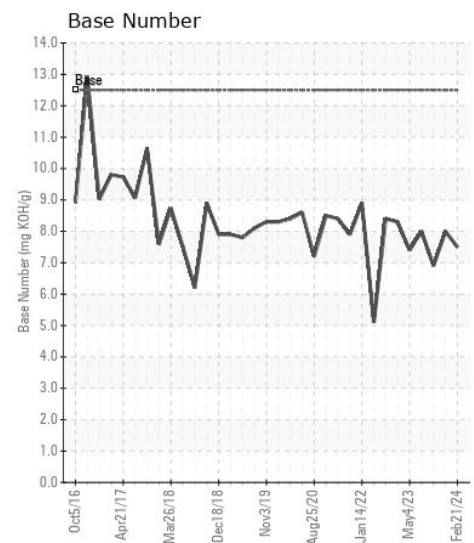
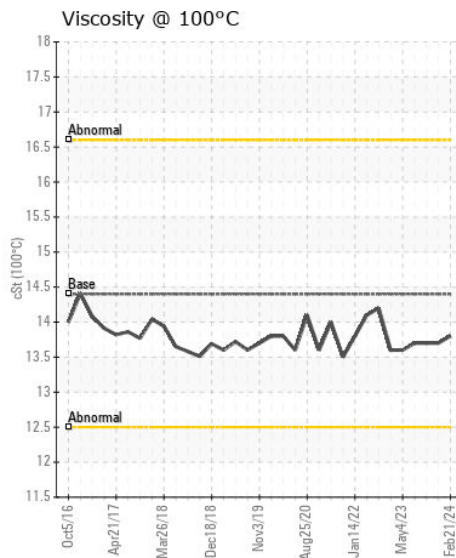
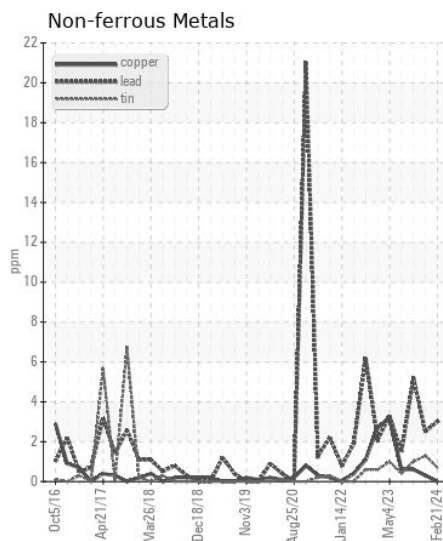
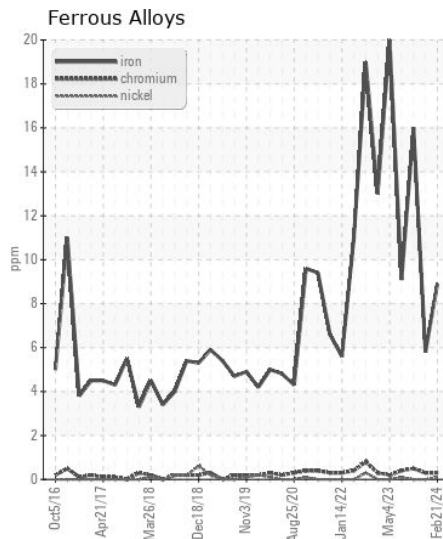
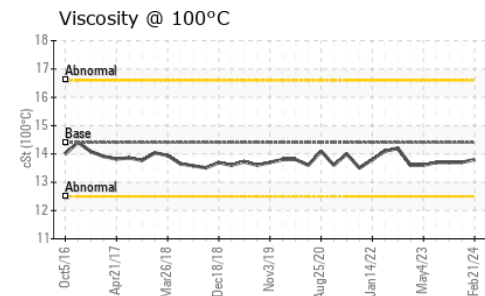
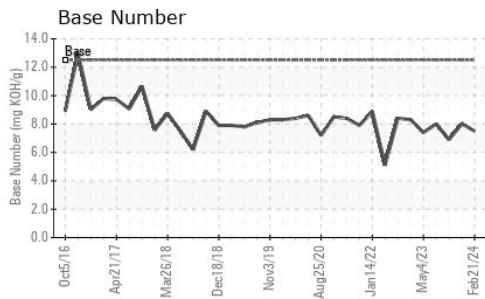
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	3	3	3
Potassium	ppm	ASTM D5185m	>20	4	3	4
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.3	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.5	7.8	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.0	19.5
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	>0.1	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	>75	10	10	10
Boron	ppm	ASTM D5185m	151	82	100	51
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	23	23	23
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	609	554	500
Calcium	ppm	ASTM D5185m	2046	2078	1928	1720
Phosphorus	ppm	ASTM D5185m	1043	884	864	760
Zinc	ppm	ASTM D5185m	943	1148	1080	926
Sulfur	ppm	ASTM D5185m	5012	3737	3765	3050
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	14.1	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	7.5	8.0	6.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	13.7	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0057343

Lab Number : 06104140

Unique Number : 10902370

Test Package : MAR 2

Received : 29 Feb 2024

Tested : 29 Feb 2024

Diagnosed : 02 Mar 2024 - Don Baldrige

AMERICAN RIVER TRANSPORTATION CO

8400 RIVER RD, PO BOX 656

WESTWEGO, LA

US 70094-2317

Contact: KEVIN CHIASSON

kevin.chiasson@adm.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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F: