



Area
CRAIG E PHILIP
Machine Id
[CRAIG E PHILIP] 001 565024-1
Component
Port Main Engine
Fluid
CHEVRON DELO 710 LE (142 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0068820	MW0068806	MW0064709
Sample Date		Client Info		01 Jul 2024	01 Jun 2024	01 Mar 2024
Machine Age	hrs	Client Info		24996	24287	23471
Oil Age	hrs	Client Info		196	4615	3799
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		N/A	None	N/A
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

An increase in the iron level is noted. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	62	22	21
Chromium	ppm	ASTM D5185m	>8	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	2	1	2
Lead	ppm	ASTM D5185m	>18	7	6	7
Copper	ppm	ASTM D5185m	>80	14	9	10
Tin	ppm	ASTM D5185m	>14	8	2	4
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

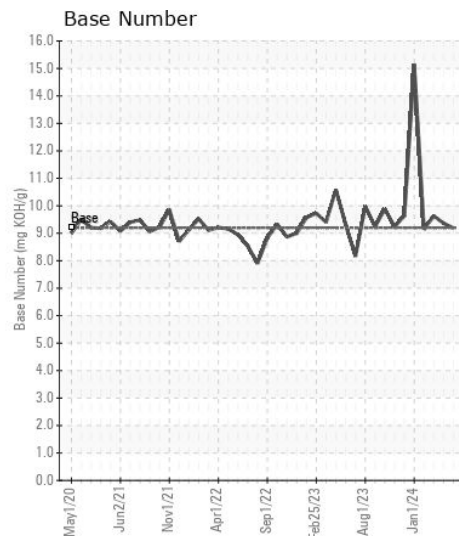
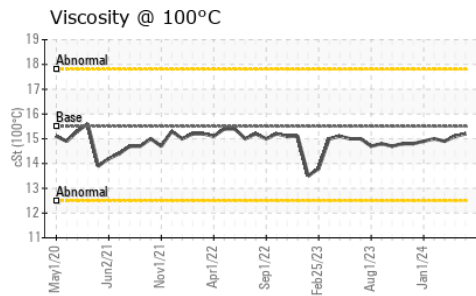
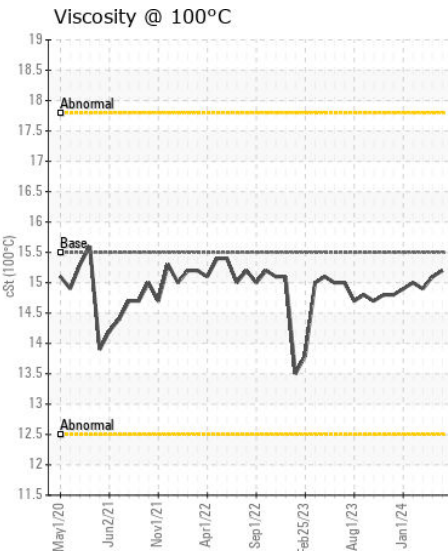
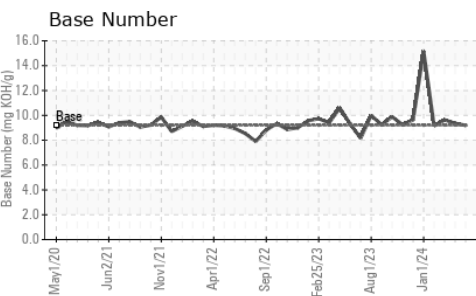
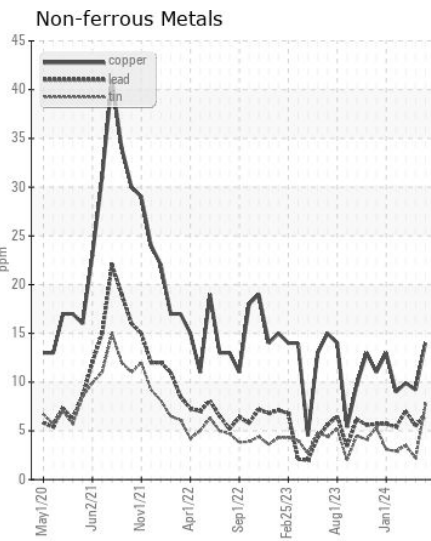
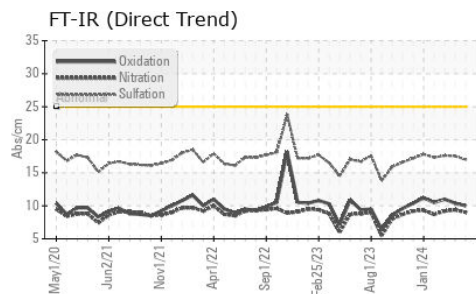
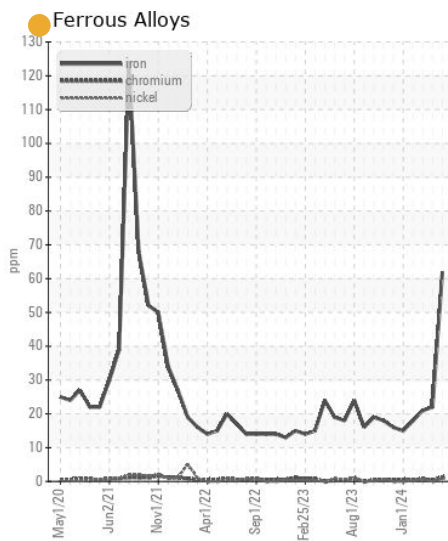
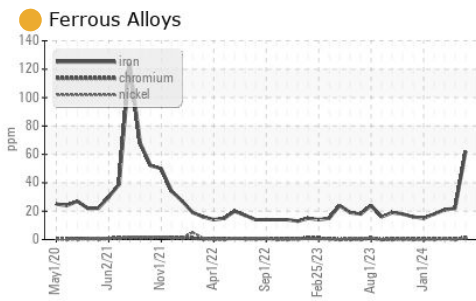
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	5	5
Potassium	ppm	ASTM D5185m	>20	3	0	0
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	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.4	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.0	17.5	17.6
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	1	3	1
Boron	ppm	ASTM D5185m		40	37	41
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		47	48	48
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m		10	13	5
Calcium	ppm	ASTM D5185m		3578	3857	3800
Phosphorus	ppm	ASTM D5185m		8	14	0
Zinc	ppm	ASTM D5185m	10	3	15	0
Sulfur	ppm	ASTM D5185m		2241	2846	2947
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0	10.4	11.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	9.19	9.36	9.63
Visc @ 100°C	cSt	ASTM D445	15.5	15.2	15.1	14.9



Certificate L2367

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

Sample No. : MW0068820

Lab Number : 06234038

Unique Number : 11122872

Test Package : MAR 2

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 14 Jul 2024 - Don Baldridge

INGRAM BARGE

900 S 3RD ST

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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)