



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CRAIG E PHILIP
Machine Id
[CRAIG E PHILIP] 002 565024-2
Component
Center Main Engine
Fluid
CHEVRON DELO 710 LE (235 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0068818	MW0068807	MW0064708
Sample Date		Client Info		01 Jul 2024	01 Jun 2024	01 Mar 2024
Machine Age	hrs	Client Info		24917	24210	23402
Oil Age	hrs	Client Info		0	1346	538
Filter Age	hrs	Client Info		136	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	None	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	29	32	21
Chromium	ppm	ASTM D5185m	>8	<1	0	<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	2	3
Lead	ppm	ASTM D5185m	>18	10	10	10
Copper	ppm	ASTM D5185m	>80	17	12	10
Tin	ppm	ASTM D5185m	>14	5	4	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

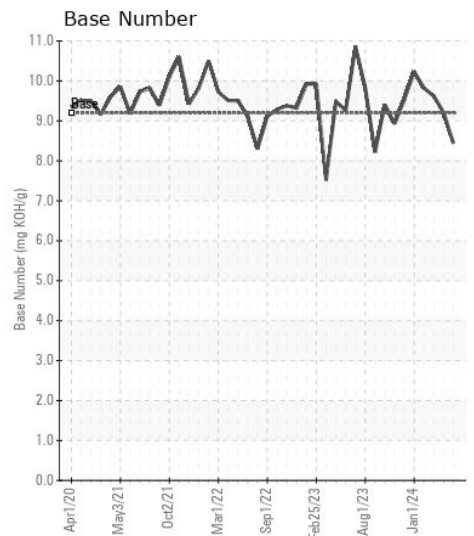
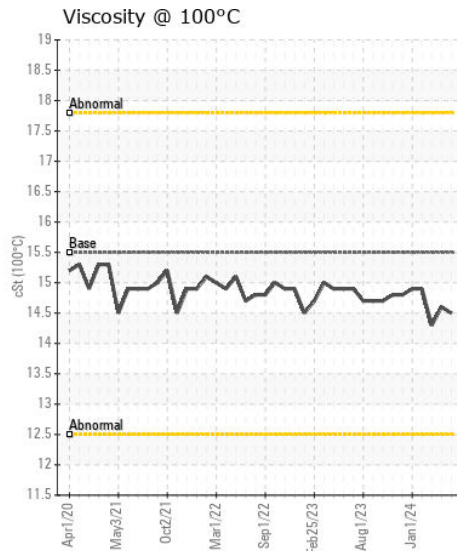
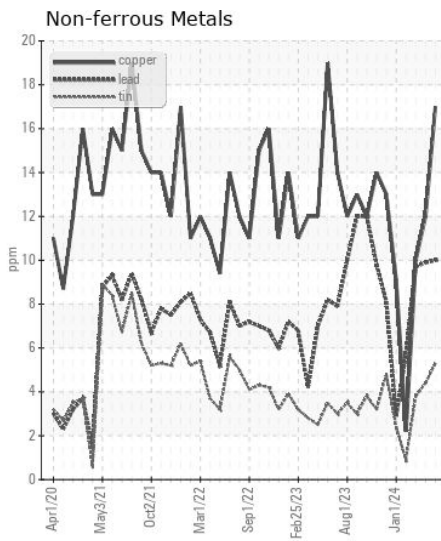
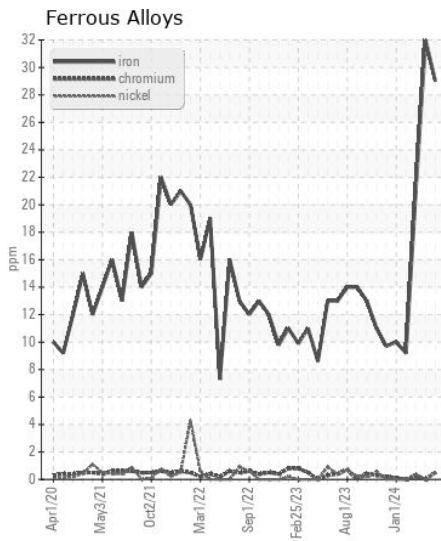
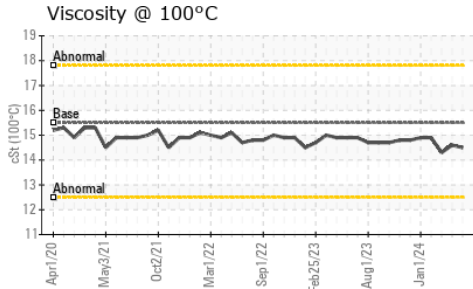
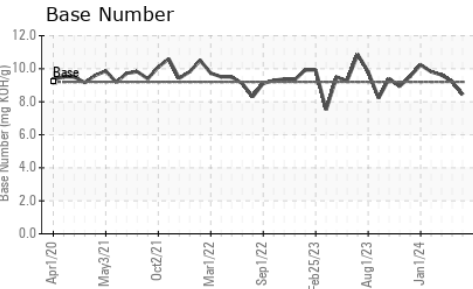
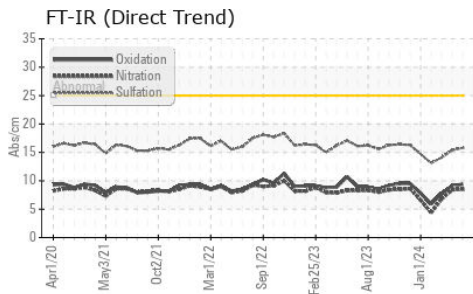
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	5	5
Potassium	ppm	ASTM D5185m	>20	4	<1	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	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.5	8.4	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.8	15.4	14.1
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	15	16	4
Boron	ppm	ASTM D5185m		38	36	40
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		45	45	44
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		9	10	30
Calcium	ppm	ASTM D5185m		3371	3479	3348
Phosphorus	ppm	ASTM D5185m		6	4	23
Zinc	ppm	ASTM D5185m	10	3	<1	32
Sulfur	ppm	ASTM D5185m		2075	2623	2641
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.4	9.1	7.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	8.44	9.21	9.62
Visc @ 100°C	cSt	ASTM D445	15.5	14.5	14.6	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0068818
Lab Number : 06234045
Unique Number : 11122879
Test Package : MAR 2
Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 12 Jul 2024 - Wes Davis

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003
 Contact: ANTHONY VAN CURA
 anthony.vancura@ingrambarga.com
 T: (270)415-4467
 F: (615)695-3697

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)