



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
JOHN M RIVERS
Machine Id
[JOHN M RIVERS] 001 633894-1
Component
Port Main Engine
Fluid
CHEVRON DELO 710 LS (325 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0058712	MW0058706	MW0065759
Sample Date		Client Info		01 Jul 2024	01 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		5289	3907	3259
Oil Age	hrs	Client Info		5289	3907	3259
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	28	27	25
Chromium	ppm	ASTM D5185m	>8	2	2	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>3	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>15	2	3	3
Lead	ppm	ASTM D5185m	>18	11	10	9
Copper	ppm	ASTM D5185m	>80	21	21	19
Tin	ppm	ASTM D5185m	>14	9	9	9
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

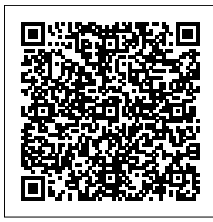
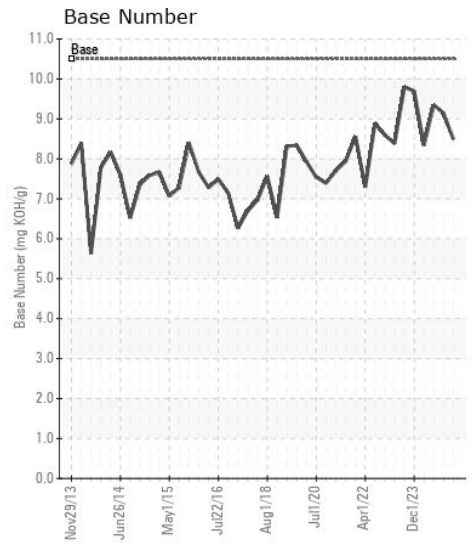
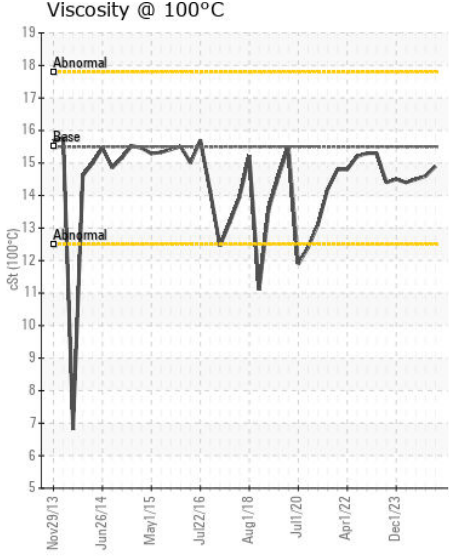
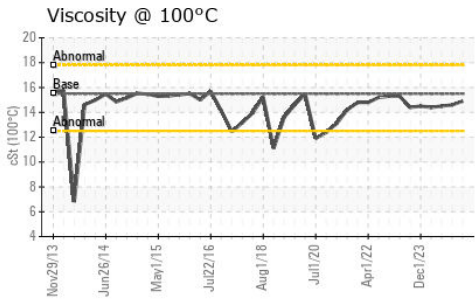
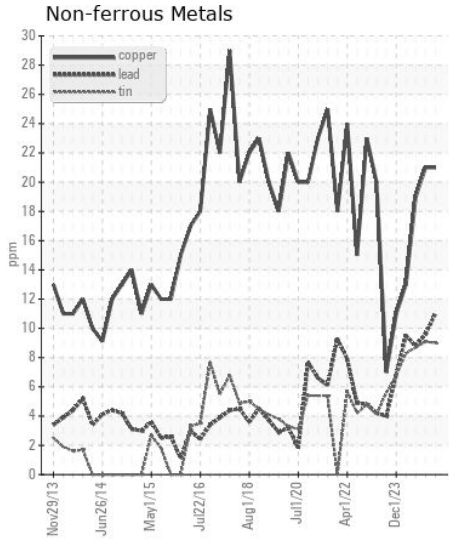
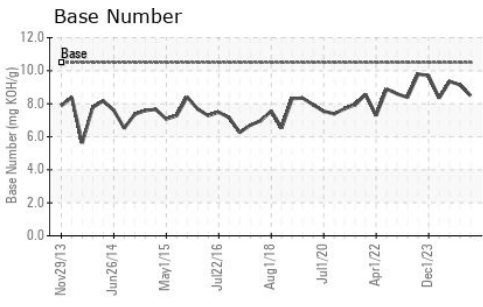
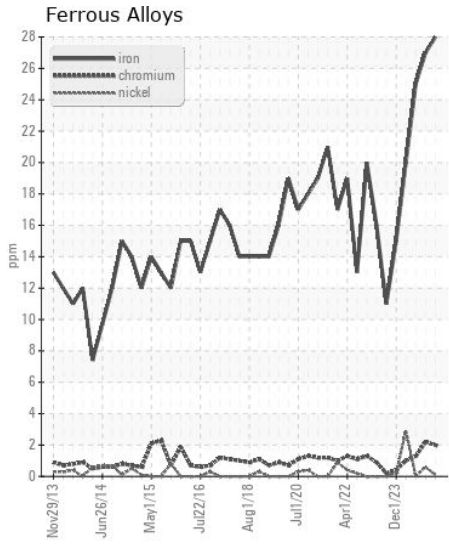
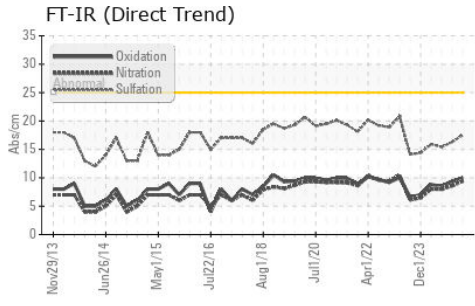
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	13	8
Potassium	ppm	ASTM D5185m	>20	4	4	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		0.6	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.6	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	16.3	15.4
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	13	4	9
Boron	ppm	ASTM D5185m		43	49	50
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		47	47	48
Manganese	ppm	ASTM D5185m		3	2	1
Magnesium	ppm	ASTM D5185m		13	13	14
Calcium	ppm	ASTM D5185m		3353	3401	3360
Phosphorus	ppm	ASTM D5185m		21	29	25
Zinc	ppm	ASTM D5185m		14	21	16
Sulfur	ppm	ASTM D5185m		2224	2951	2537
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0	9.4	8.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	8.49	9.14	9.35
Visc @ 100°C	cSt	ASTM D445	15.5	14.9	14.6	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0058712
Lab Number : 06238574
Unique Number : 11127408
Test Package : MAR 2
Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

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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)