



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**DALE A HELLER**  
Machine Id  
[DALE A HELLER] 007 624201-7  
Component  
**Port Genset**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0049623</b>	MW0064831	MW0058848
Sample Date		Client Info		<b>20 May 2024</b>	22 Apr 2024	25 Feb 2024
Machine Age	hrs	Client Info		<b>20374</b>	20061	19381
Oil Age	hrs	Client Info		<b>299</b>	20061	325
Filter Age	hrs	Client Info		<b>299</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	5	5
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>17	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

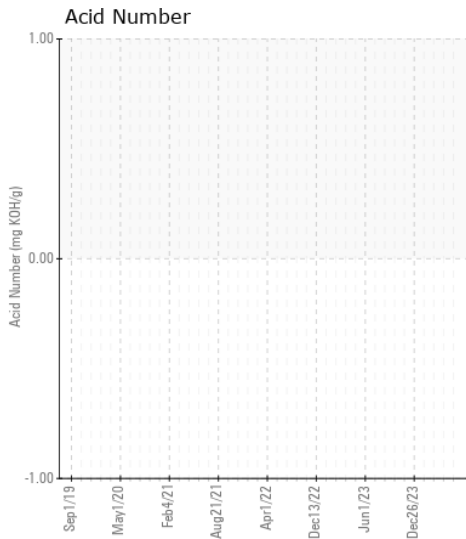
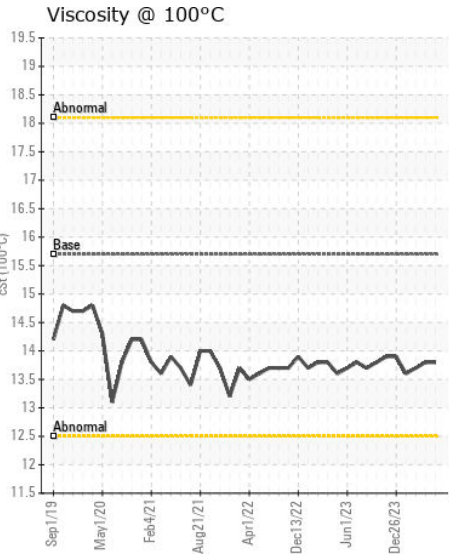
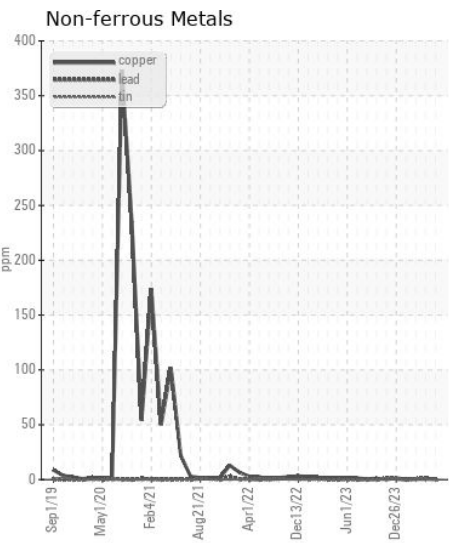
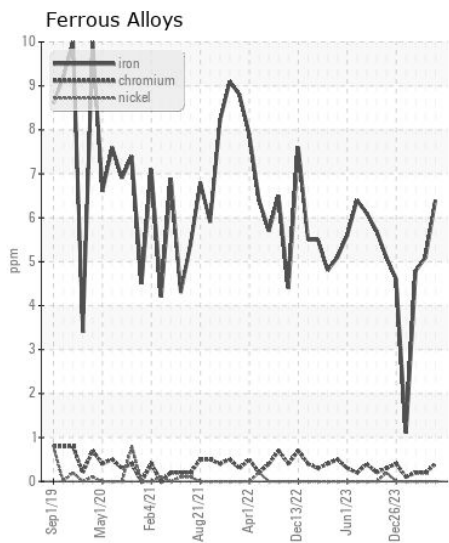
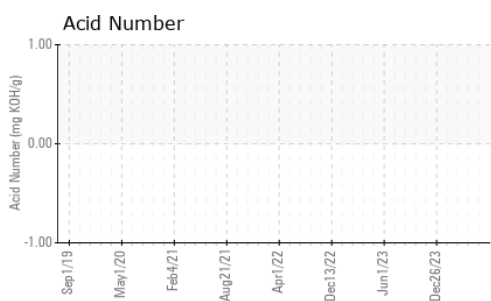
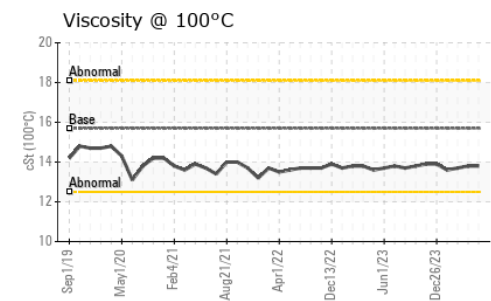
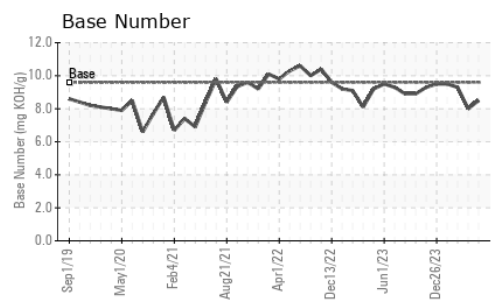
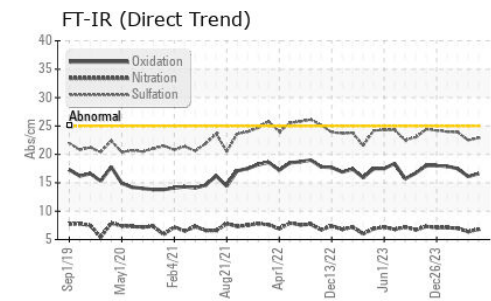
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	18
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	6.4	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	22.5	23.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>2</b>	2	6
Boron	ppm	ASTM D5185m		<b>381</b>	523	395
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>115</b>	102	127
Manganese	ppm	ASTM D5185m		<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m		<b>569</b>	502	636
Calcium	ppm	ASTM D5185m		<b>1702</b>	1607	1666
Phosphorus	ppm	ASTM D5185m	1200	<b>943</b>	994	717
Zinc	ppm	ASTM D5185m	1300	<b>1102</b>	1183	817
Sulfur	ppm	ASTM D5185m	3200	<b>3461</b>	3624	2846
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	16.1	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>8.5</b>	8.0	9.3
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.8</b>	13.8	13.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0049623  
**Lab Number** : 06211118  
**Unique Number** : 11083982  
**Test Package** : MAR 2 ( Additional Tests: TAN Man )

**Received** : 14 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Sean Felton

**INGRAM BARGE**  
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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)