



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>MW0058848</b>	MW0061429	MW0061426
Sample Date		Client Info		<b>25 Feb 2024</b>	27 Jan 2024	26 Dec 2023
Machine Age	hrs	Client Info		<b>19381</b>	19056	18676
Oil Age	hrs	Client Info		<b>325</b>	388	371
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</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>5</b>	1	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>0</b>	0	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>3</b>	3	3
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<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**

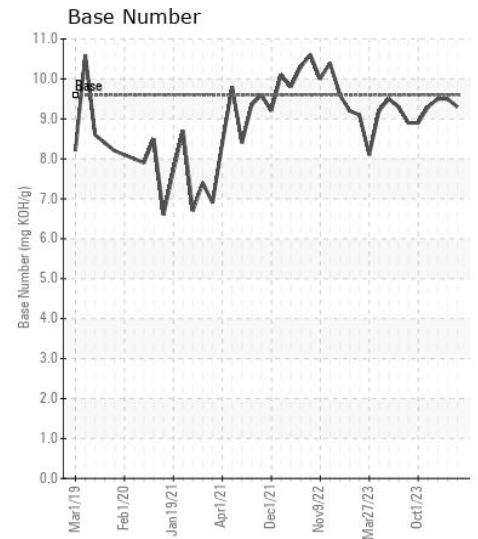
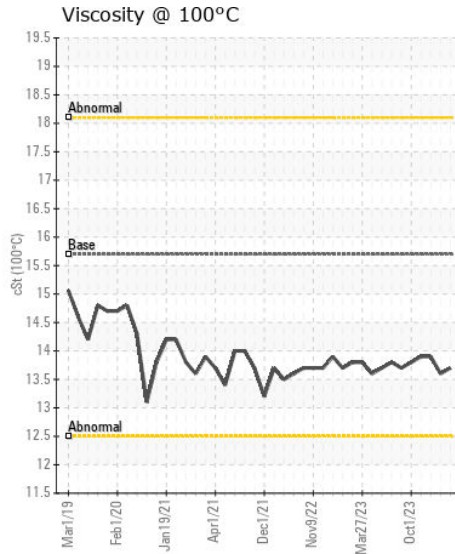
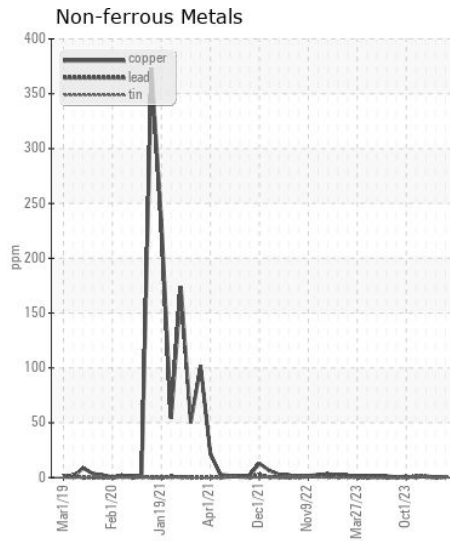
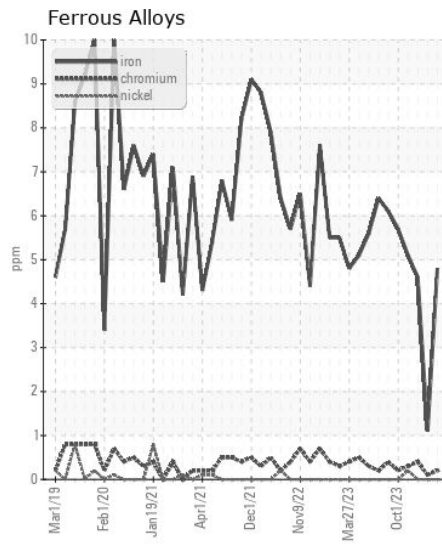
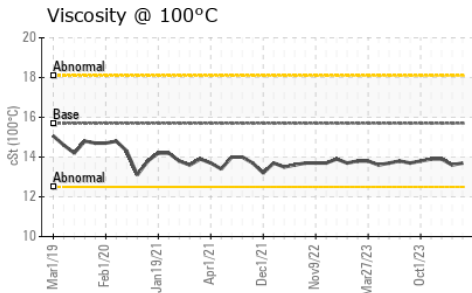
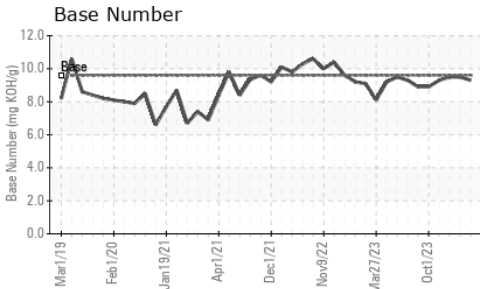
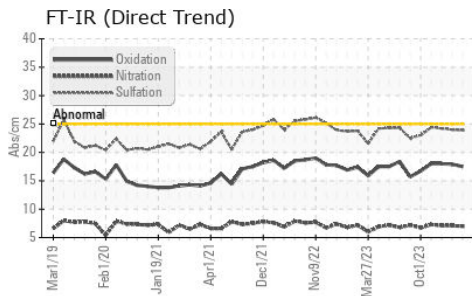
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>18</b>	0	1
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>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.0</b>	7.1	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.9</b>	24.0	24.2
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>6</b>	0	<1
Boron	ppm	ASTM D5185m		<b>395</b>	319	316
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>127</b>	124	111
Manganese	ppm	ASTM D5185m		<b>1</b>	2	1
Magnesium	ppm	ASTM D5185m		<b>636</b>	666	702
Calcium	ppm	ASTM D5185m		<b>1666</b>	1472	1533
Phosphorus	ppm	ASTM D5185m	1200	<b>717</b>	681	716
Zinc	ppm	ASTM D5185m	1300	<b>817</b>	832	814
Sulfur	ppm	ASTM D5185m	3200	<b>2846</b>	2347	2323
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	17.9	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>9.3</b>	9.5	9.5
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.7</b>	13.6	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0058848  
**Lab Number** : 06150959  
**Unique Number** : 10981037  
**Test Package** : MAR 2

**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Wes Davis

**INGRAM BARGE**  
 900 S 3RD ST  
 PADUCAH, KY  
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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)