



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

Machine Id  
**MIKE NADICKSBERND (S/N 74-C1-1142)**  
Component  
**Port Main Engine**  
Fluid  
**CHEVRON DELO 710 LS (275 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0069166</b>	MW0057665	MW0057656
Sample Date		Client Info		<b>22 Jun 2024</b>	31 May 2024	02 May 2024
Machine Age	hrs	Client Info		<b>42685</b>	41844	41148
Oil Age	hrs	Client Info		<b>19643</b>	19302	41148
Filter Age	hrs	Client Info		<b>1365</b>	1024	328
Oil Changed		Client Info		<b>N/A</b>	Not Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>25</b>	27	26
Chromium	ppm	ASTM D5185m	>8	<b>1</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>18	<b>10</b>	9	11
Copper	ppm	ASTM D5185m	>80	<b>35</b>	35	32
Tin	ppm	ASTM D5185m	>14	<b>9</b>	8	8
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

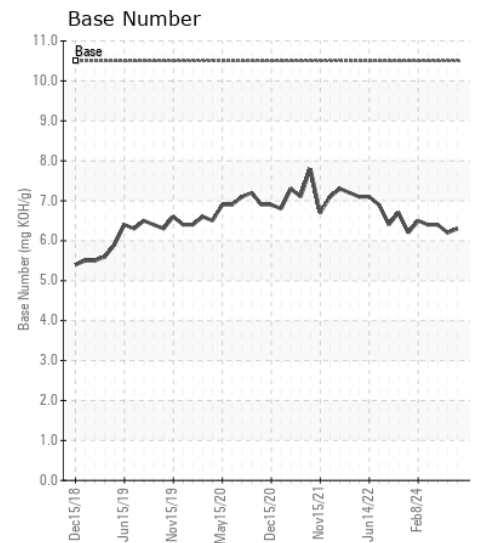
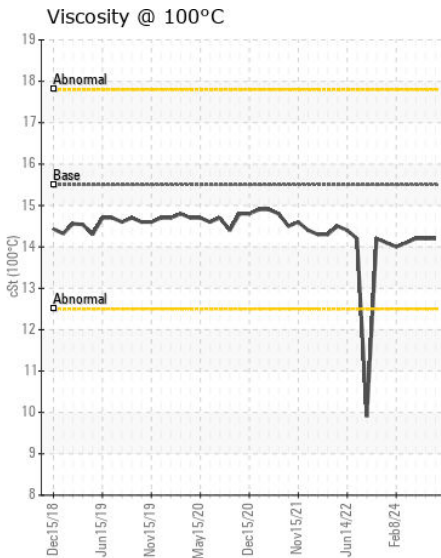
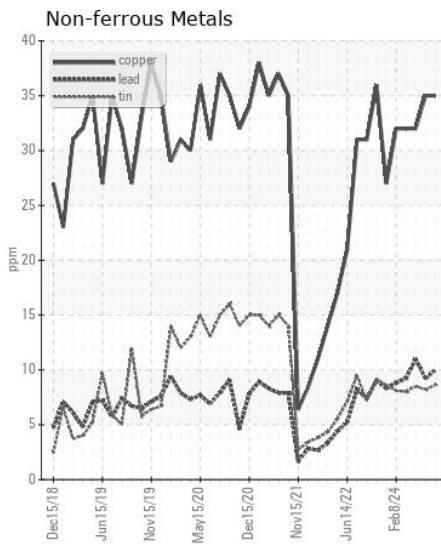
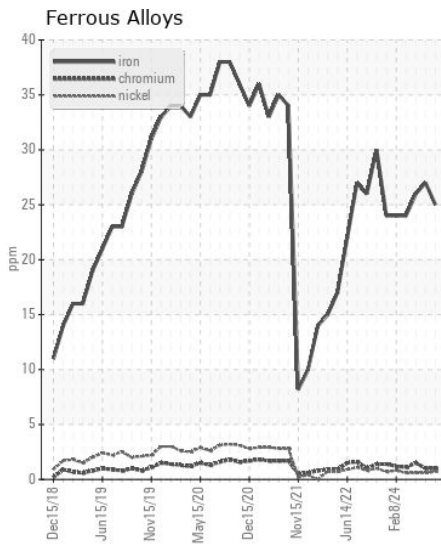
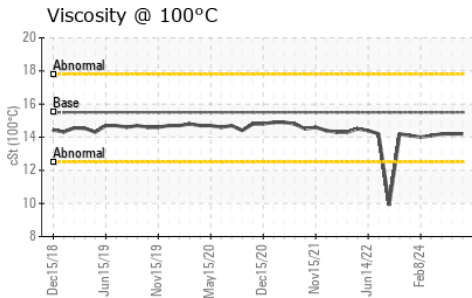
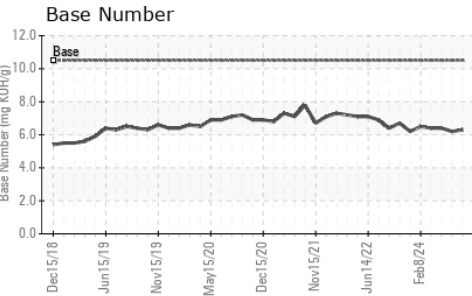
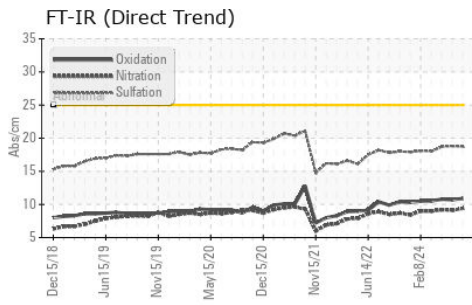
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	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	>3	<b>1.5</b>	1.4	1.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	9.1	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	18.8	18.7
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	>75	<b>3</b>	2	5
Boron	ppm	ASTM D5185m		<b>40</b>	38	36
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>45</b>	45	43
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>13</b>	14	8
Calcium	ppm	ASTM D5185m		<b>3491</b>	3231	3310
Phosphorus	ppm	ASTM D5185m		<b>17</b>	21	3
Zinc	ppm	ASTM D5185m		<b>14</b>	11	<1
Sulfur	ppm	ASTM D5185m		<b>2463</b>	2463	2325
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.9</b>	10.7	10.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>6.3</b>	6.2	6.4
Visc @ 100°C	cSt	ASTM D445	15.5	<b>14.2</b>	14.2	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0069166  
**Lab Number** : 06229818  
**Unique Number** : 11113311  
**Test Package** : MAR 2

**Received** : 08 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

**AMERICAN COMMERCIAL LINES**  
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 JEFFERSONVILLE, IN  
 US 47130  
 Contact: RONALD SCHNEIDER  
 ronald.schneider@bargaeacbl.com

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)

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