



# OIL ANALYSIS REPORT

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



Machine Id  
**COLLIER BROTHERS**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (55 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0008900</b>	KL0008717	KL0008902
Sample Date		Client Info		<b>08 Jun 2024</b>	03 Jun 2024	13 Apr 2024
Machine Age	hrs	Client Info		<b>55614</b>	41283	55206
Oil Age	hrs	Client Info		<b>408</b>	370	768
Filter Age	hrs	Client Info		<b>408</b>	370	768
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>3</b>	9	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

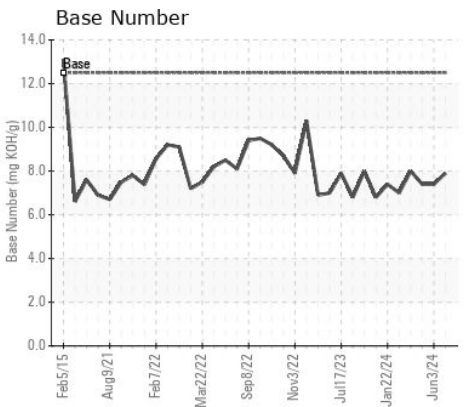
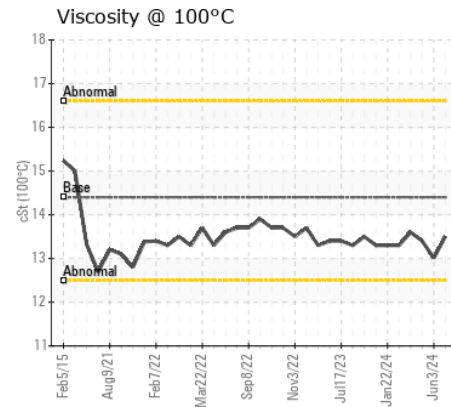
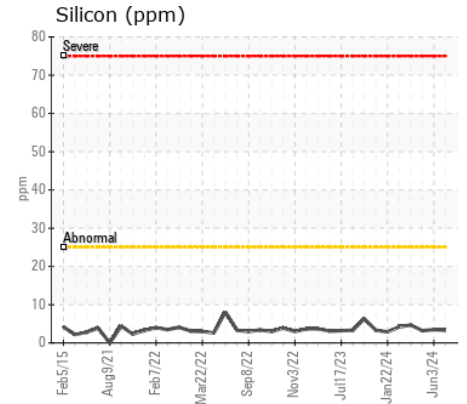
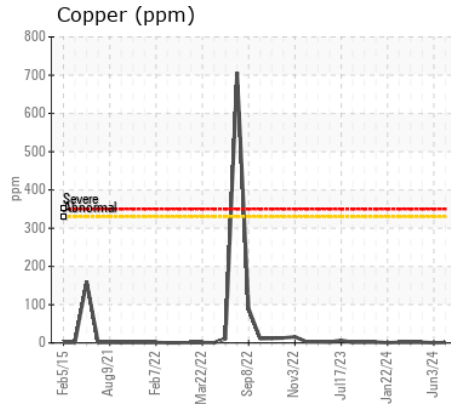
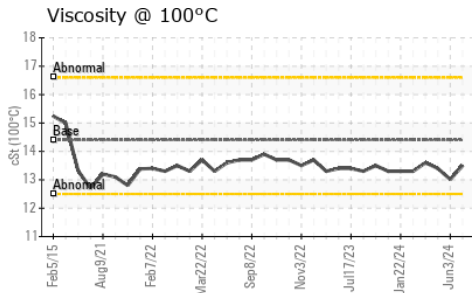
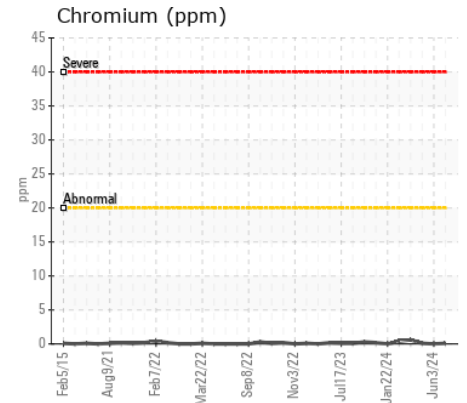
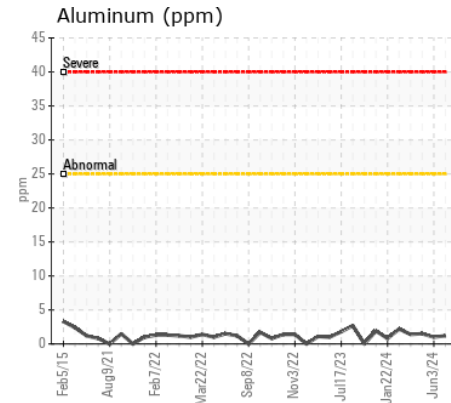
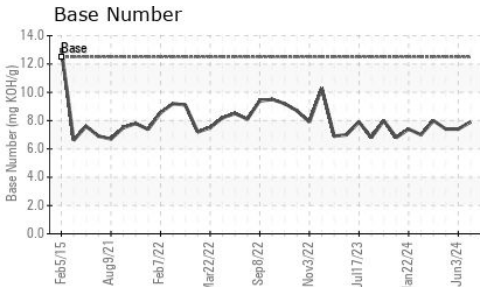
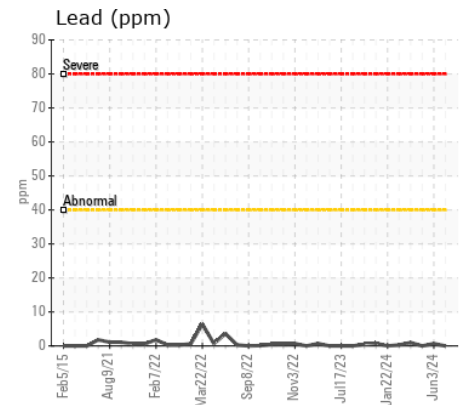
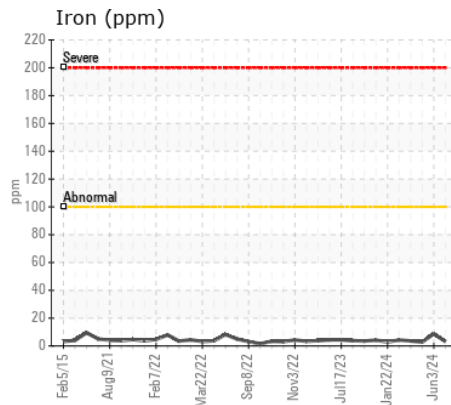
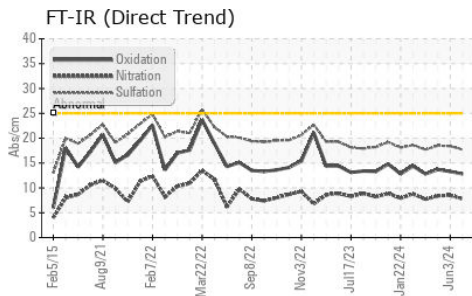
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.5	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.7</b>	18.4	18.5
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	>0.2	<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	0
Boron	ppm	ASTM D5185m	151	<b>74</b>	87	85
Barium	ppm	ASTM D5185m	0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	250	<b>2</b>	5	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>738</b>	766	788
Calcium	ppm	ASTM D5185m	2046	<b>1361</b>	1499	1323
Phosphorus	ppm	ASTM D5185m	1043	<b>724</b>	790	731
Zinc	ppm	ASTM D5185m	943	<b>839</b>	891	837
Sulfur	ppm	ASTM D5185m	5012	<b>3473</b>	3615	3467
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	13.3	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>7.9</b>	7.4	7.4
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	13.01	13.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0008900  
**Lab Number** : 06211092  
**Unique Number** : 11083956  
**Test Package** : MOB1+

**Received** : 14 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Angela Borella

**BLUE PACIFIC LEASING**  
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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)