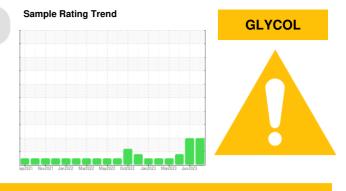


# PROBLEM SUMMARY

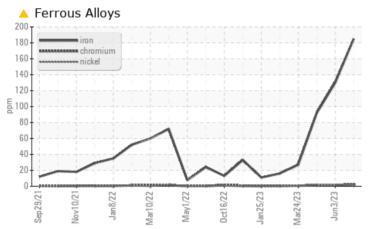
## GUAY SON/Yavaros [CONHER] Machine Id CATERPILLAR Pacifico Ind Azteca MP

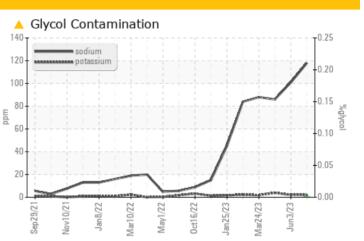
Diesel Engine

CHEVRON DELO 400 MULTIGRADE 15W40 (160 LTR)



### COMPONENT CONDITION SUMMARY





### RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC T	EST RE	SULTS				
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>100	🔺 185	<b>1</b> 30	<b>9</b> 2
Sodium	ppm	ASTM D5185m		<b>118</b>	<b>1</b> 01	86

Customer Id: CONHERKL Sample No.: KL0012268 Lab Number: 05904832 Test Package: FLEET



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Don Baldridge +1 <u>don.b505@comcast.net</u>

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED AC	TIONS			
Action	Status	Date	Done By	Description
Resample			?	We recommend an early resample to monitor this condition.

### **HISTORICAL DIAGNOSIS**

### 03 Jun 2023 Diag: Jonathan Hester



No corrective action is recommended at this time. We recommend an early resample to monitor this condition.Cylinder, crank, or cam shaft wear is indicated. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



view report

### 26 Apr 2023 Diag: Angela Borella



Resample at the next service interval to monitor. An increase in the iron level is noted. All other component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for



the time in service.

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.





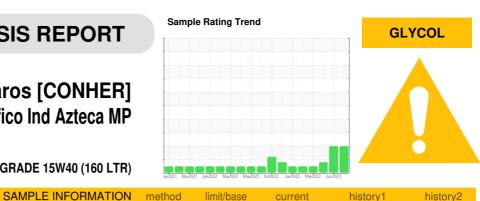


# **OIL ANALYSIS REPORT**

#### Area GUAY SON/Yavaros [CONHER] Machine Id CATERPILLAR Pacifico Ind Azteca MP Component

Diesel Engine

CHEVRON DELO 400 MULTIGRADE 15W40 (160 LTR)



DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### 📥 Wear

Cylinder, crank, or cam shaft wear is indicated.

### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

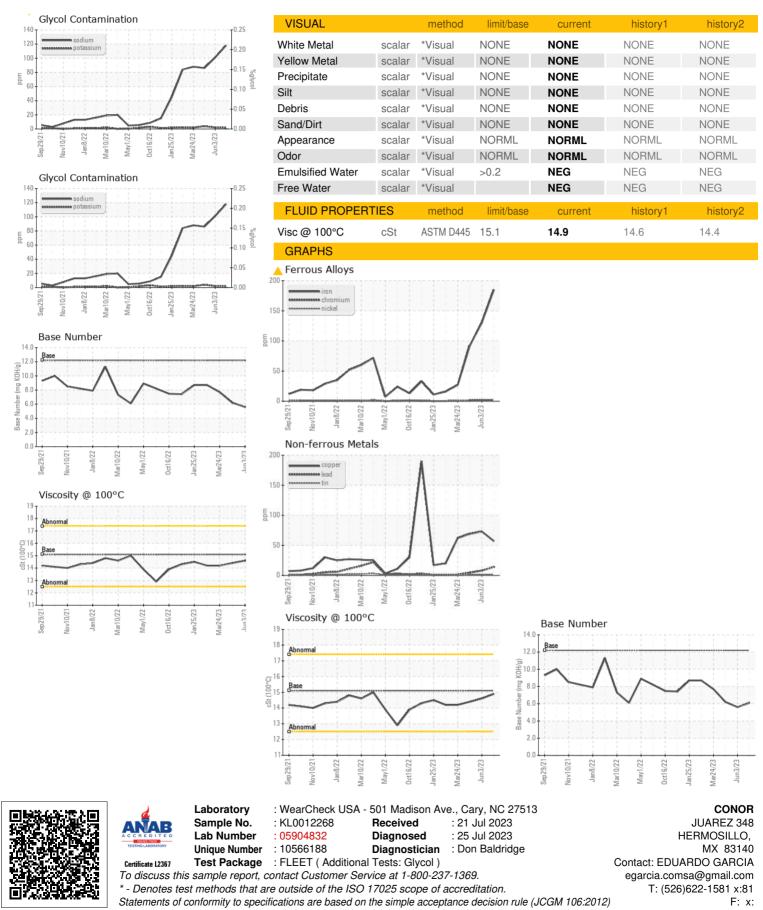
### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0012268	KL0012247	KL0012234
Sample Date		Client Info		14 Jul 2023	03 Jun 2023	26 Apr 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		378	345	358
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>185</b>	<b>1</b> 30	<b>9</b> 2
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>2	2	2	2
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	2	3
Lead	ppm	ASTM D5185m	>40	14	8	5
Copper	ppm	ASTM D5185m	>330	57	73	69
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		and the state	11 1. 1			
ADDITIVES		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	limit/base	current	history1 82	86
Boron	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	59 <1 148	82	86
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	59 <1	82 0	86 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	59 <1 148	82 0 141	86 0 122
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	59 <1 148 2	82 0 141 1	86 0 122 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	Irmit/base	59 <1 148 2 666	82 0 141 1 638	86 0 122 <1 545
Boron	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		59 <1 148 2 666 1676	82 0 141 1 638 1638	86 0 122 <1 545 1437
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360	59 <1 148 2 666 1676 846	82 0 141 1 638 1638 891	86 0 122 <1 545 1437 772
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360	59 <1 148 2 666 1676 846 1084	82 0 141 1 638 1638 891 1136	86 0 122 <1 545 1437 772 990
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360 1480	59 <1 148 2 666 1676 846 1084 3015	82 0 141 1 638 1638 891 1136 3212	86 0 122 <1 545 1437 772 990 2630
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360 1480 limit/base	59 <1 148 2 666 1676 846 1084 3015 current	82 0 141 638 1638 891 1136 3212 history1	86 0 122 <1 545 1437 772 990 2630 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1360 1480 limit/base >25	59 <1 148 2 666 1676 846 1084 3015 current 10	82 0 141 1 638 1638 891 1136 3212 history1 12	86 0 122 <1 545 1437 772 990 2630 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	1360 1480 limit/base >25	59 <1 148 2 666 1676 846 1084 3015 <u>current</u> 10 10 ▲ 118	82 0 141 638 1638 891 1136 3212 history1 12 ▲ 101	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1360 1480 limit/base >25	59 <1 148 2 666 1676 846 1084 3015 <u>current</u> 10 ▲ 118 2	82 0 141 638 1638 891 1136 3212 history1 12 ▲ 101 2	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1360 1480 limit/base >25 >20	59 <1 148 2 666 1676 846 1084 3015 current 10 ▲ 118 2 0.0	82 0 141 1 638 1638 891 1136 3212 history1 12 12 12 12 12 NEG	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86 4 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982	1360 1480 225 >20 limit/base >20 limit/base >3	59 <1 148 2 666 1676 846 1084 3015 current 10 ▲ 118 2 0.0 current	82 0 141 638 1638 891 1136 3212 history1 12 12 101 2 NEG history1	86 0 122 <1 545 1437 772 990 2630 bistory2 8 8 8 8 6 4 VEG history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982 method	1360 1480 225 >20 limit/base >20 limit/base >3	59 <1 148 2 666 1676 846 1084 3015 current 10 ▲ 118 2 0.0 current 1.1	82 0 141 638 1638 891 1136 3212 history1 12 ▲ 101 2 NEG history1 1	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86 4 86 4 NEG history2 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7844	1360 1480 >25 >20 limit/base >20 limit/base >3 >20	<ul> <li>59</li> <li>&lt;1</li> <li>148</li> <li>2</li> <li>666</li> <li>1676</li> <li>846</li> <li>1084</li> <li>3015</li> <li>current</li> <li>10</li> <li>▲ 118</li> <li>2</li> <li>0.0</li> <li>current</li> <li>1.1</li> <li>14.8</li> </ul>	82 0 141 638 1638 891 1136 3212 history1 12 ▲ 101 2 NEG history1 1 13.1	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86 4 NEG history2 1 12.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D2982 <b>nethod</b> *ASTM D7844 *ASTM D7844	1360 1480 225 >20 imit/base >20 imit/base >3 >20 >30	<ul> <li>59</li> <li>&lt;1</li> <li>148</li> <li>2</li> <li>666</li> <li>1676</li> <li>846</li> <li>1084</li> <li>3015</li> <li>current</li> <li>10</li> <li>▲ 118</li> <li>2</li> <li>0.0</li> <li>current</li> <li>1.1</li> <li>14.8</li> <li>30.1</li> </ul>	82 0 141 638 1638 891 1136 3212 history1 12 12 101 2 NEG history1 1 13.1 29.2	86 0 122 <1 545 1437 772 990 2630 history2 8 8 86 4 NEG history2 1 12.6 28.1



# **OIL ANALYSIS REPORT**



Submitted By: EDUARDO GARCIA

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