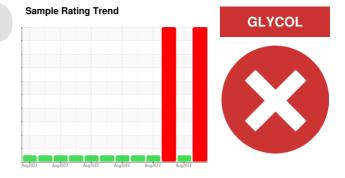


# **PROBLEM SUMMARY**

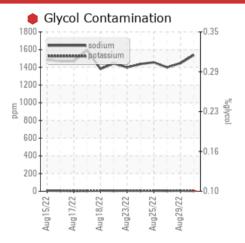
# WCLSNC QC DE NC 08012022

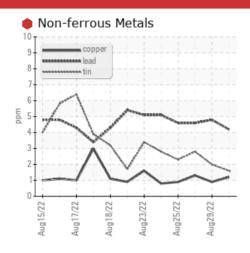
**Diesel Engine** 

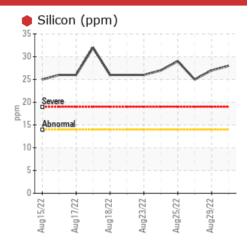
PETRO CANADA DURON SHP 15W40 (--- GAL)



### **COMPONENT CONDITION SUMMARY**







#### RECOMMENDATION

PROBLEMATIC TEST RESULTS									
Sample Status				SEVERE	NORMAL	SEVERE			
Silver	ppm	ASTM D5185m	>2	<u>^</u> 2	<1	<1			
Lead	ppm	ASTM D5185m	>2	<b>4</b>	5	5			
Tin	ppm	ASTM D5185m	>2	<u>^</u> 2	2	3			
Boron	ppm	ASTM D5185m	0	<b>4</b> 35	37	<u>4</u> 0			
Barium	ppm	ASTM D5185m	0	<u>^</u> 2	0	0			
Molybdenum	ppm	ASTM D5185m	60	92	95	88			
Silicon	ppm	ASTM D5185m	>14	<b>28</b>	27	<u>^</u> 25			
Sodium	ppm	ASTM D5185m	>13	<b>1538</b>	1447	<u> </u>			
Glycol	%	*ASTM D2982		• 0.10	NEG	0.10			
Nitration	Abs/cm	*ASTM D7624	>10.8	<b>12.5</b>	12.4	12.4			
Sulfation	Abs/.1mm	*ASTM D7415	>20.8	<b>24.5</b>	23.9	24.0			
Oxidation	Abs/.1mm	*ASTM D7414	>17.9	<b>18.5</b>	18.3	18.4			

Customer Id: WEACARQA **Sample No.:** WC0729319 Lab Number: 05630103 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: System Automation +1 905-569-8600 x230 Kevin.Marson@wearcheck.com

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

### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 29 Aug 2022 Diag: Jonathan Hester

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



26 Aug 2022 Diag: System

GLYCOL



25 Aug 2022 Diag: Jonathan Hester

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

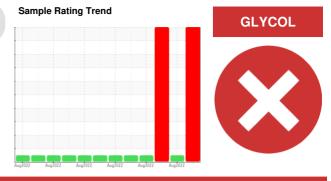


# **OIL ANALYSIS REPORT**

WCLSNC **QC DE NC 08012022** 

**Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- GAL)

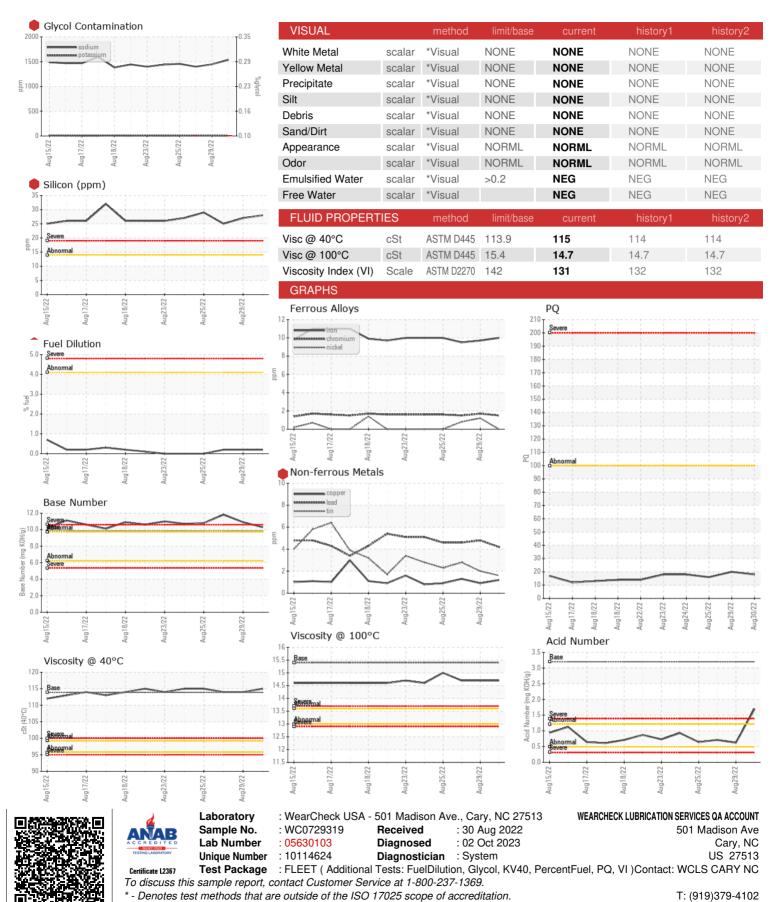


### DIAGNOSIS

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0729319	WC0729318	WC0729315
Sample Date		Client Info		30 Aug 2022	29 Aug 2022	26 Aug 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		18	20	
Iron	ppm	ASTM D5185m	>11	10	10	10
Chromium	ppm	ASTM D5185m	>3	2	2	2
Nickel	ppm	ASTM D5185m	>2	0	1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<u>^</u> 2	<1	<1
Aluminum	ppm	ASTM D5185m	>5	2	3	3
Lead	ppm	ASTM D5185m	>2	<b>4</b>	5	5
Copper	ppm	ASTM D5185m	>7	1	<1	1
Tin	ppm	ASTM D5185m	>2	<u>^</u> 2	2	3
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>▲</b> 35	37	<b>4</b> 0
Barium	ppm	ASTM D5185m	0	<u>^</u> 2	0	0
Molybdenum	ppm	ASTM D5185m	60	92	95	88
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	508	522	<b>494</b>
Calcium	ppm	ASTM D5185m	1070	1563	1571	<b>1489</b>
Phosphorus	ppm	ASTM D5185m	1150	686	723	<b>△</b> 629
Zinc	ppm	ASTM D5185m	1270	905	988	<u>▲</u> 877
Sulfur	ppm	ASTM D5185m	2060	2410	2495	2282
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>14	<b>28</b>	27	<u>^</u> 25
Sodium	ppm	ASTM D5185m	>13	<u> </u>	1447	<b>△</b> 1399
Potassium	ppm	ASTM D5185m	>20	3	8	<u>^</u> 6
Fuel	%	ASTM D3524	>4.1	0.2	0.2	0.2
Glycol	%	*ASTM D2982		0.10	NEG	• 0.10
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>0.3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>10.8	<b>12.5</b>	12.4	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>20.8	<b>24.5</b>	23.9	24.0
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>17.9	18.5	18.3	18.4
Acid Number (AN)	mg KOH/g	ASTM D8045	3.2	1.70	0.62	0.71
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.3	10.9	11.8



## **OIL ANALYSIS REPORT**



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (919)379-4050