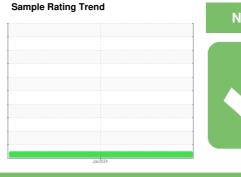


# **OIL ANALYSIS REPORT**

# Walgreens-Reefer [Walgreens-Reefer] 136C820958

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)





## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the

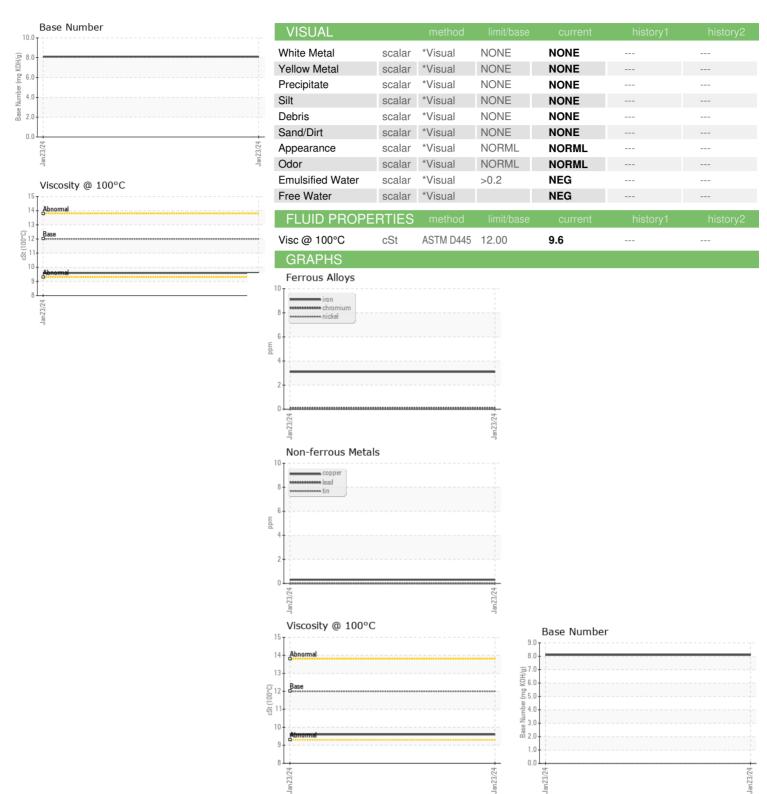
## **Fluid Condition**

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

Sample Number	AL)				Jan 2024		
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         1153             Oil Age         hrs         Client Info         148             Oil Changed         Client Info         Changed             Sample Status         Important Info         Important Info         Important Info         Important Info            CONTAMINATION         method         Ilmit/base         current         history1         his           Fuel         WC Method         >5         <1.0	Sample Number		Client Info		PCA0112869		
Oil Age         hrs         Client Info         148             Oil Changed         Client Info         Changed             Sample Status         NORMAL             CONTAMINATION         method         limit/base         current         history1         his           Fuel         WC Method         >5         <1.0	Sample Date		Client Info		23 Jan 2024		
Oil Changed Sample Status         Client Info         Changed NORMAL	Machine Age	hrs	Client Info		1153		
Sample Status	Oil Age	hrs	Client Info		148		
CONTAMINATION         method         limit/base         current         history1         his           Fuel         WC Method         >5         <1.0	Oil Changed		Client Info		Changed		
Fuel	ample Status				NORMAL		
Water Glycol         WC Method         NEG	CONTAMINATI	ON	method	limit/base	current	history1	history2
WEAR METALS   method   limit/base   current   history1   history	uel		WC Method	>5	<1.0		
WEAR METALS         method         limit/base         current         history1         his           Iron         ppm         ASTM D5185m         >100         3             Chromium         ppm         ASTM D5185m         >20         <1	Vater		WC Method	>0.2	NEG		
Iron	ilycol		WC Method		NEG		
Chromium         ppm         ASTM D5185m         >20         <1             Nickel         ppm         ASTM D5185m         >4         0             Titanium         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >20         <1	WEAR METALS	S .	method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >4         0             Titanium         ppm         ASTM D5185m         <1	on	ppm	ASTM D5185m	>100	3		
Titanium	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	lickel	ppm	ASTM D5185m	>4	0		
Aluminum         ppm         ASTM D5185m         >20         <1             Lead         ppm         ASTM D5185m         >40         0             Copper         ppm         ASTM D5185m         >330         <1	itanium	ppm	ASTM D5185m		<1		
Lead	Silver	ppm	ASTM D5185m	>3	0		
Copper         ppm         ASTM D5185m         >330         <1             Tin         ppm         ASTM D5185m         >15         0             Vanadium         ppm         ASTM D5185m         <1	luminum	ppm	ASTM D5185m	>20	<1		
Tin         ppm         ASTM D5185m         >15         0             Vanadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         2         6             Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         0         0             Manganesium         ppm         ASTM D5185m         950         850             Manganesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         950         869             Phosphorus         ppm         ASTM D5185m         2600         2844 </td <td>ead</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;40</td> <td>0</td> <td></td> <td></td>	ead	ppm	ASTM D5185m	>40	0		
Vanadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         2         6             Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         50         51             Magnesium         ppm         ASTM D5185m         950         850             Phosphorus         ppm         ASTM D5185m         995         869             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         2600         2844             Sulfur         ppm         ASTM D5185m         >25         2 <td>opper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;330</td> <td>&lt;1</td> <td></td> <td></td>	opper	ppm	ASTM D5185m	>330	<1		
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         2         6             Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         950         869             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         2600         2844             Sulfur         ppm         ASTM D5185m         2600         2844             Solium         ppm         ASTM D5185m         >25         2	în	ppm	ASTM D5185m	>15	0		
ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         2         6             Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25	'anadium	ppm	ASTM D5185m		<1		
Boron   ppm   ASTM D5185m   2   6       Barium   ppm   ASTM D5185m   0   0   0         Molybdenum   ppm   ASTM D5185m   50   51         Manganese   ppm   ASTM D5185m   0   0   0         Magnesium   ppm   ASTM D5185m   950   850         Magnesium   ppm   ASTM D5185m   1050   918         Phosphorus   ppm   ASTM D5185m   1050   918         Phosphorus   ppm   ASTM D5185m   1180   1085         Potashium   ppm   ASTM D5185m   2600   2844         Potassium   ppm   ASTM D5185m   <1         Potassium   ppm   ASTM D5185m   >20   0         INFRA-RED   method   limit/base   current   history1   history1   history1   history1   Soot %   % "ASTM D5185m   >20   0         INFRA-RED   method   limit/base   current   history1   history	admium	ppm	ASTM D5185m		0		
Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         995         869             Sulfur         ppm         ASTM D5185m         2600         2844             Sulfur         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >25         2             Potassium         ppm         ASTM D5185m         >20         0             Sodium         ppm         ASTM D5185m <td< td=""><td>ADDITIVES</td><td></td><td>method</td><td>limit/base</td><td>current</td><td>history1</td><td>history2</td></td<>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         50         51             Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         995         869             Sulfur         ppm         ASTM D5185m         2600         2844             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D7844	Boron	ppm	ASTM D5185m	2	6		
Manganese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         1050         918             Zinc         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base	Barium	ppm	ASTM D5185m	0	0		
Magnesium         ppm         ASTM D5185m         950         850             Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >	1olybdenum	ppm	ASTM D5185m	50	51		
Calcium         ppm         ASTM D5185m         1050         918             Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         *ASTM D7414         >25	1anganese	ppm	ASTM D5185m	0	0		
Phosphorus         ppm         ASTM D5185m         995         869             Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         **ASTM D7414         >25 <td>1agnesium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>950</td> <td>850</td> <td></td> <td></td>	1agnesium	ppm	ASTM D5185m	950	850		
Zinc         ppm         ASTM D5185m         1180         1085             Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414	alcium	ppm	ASTM D5185m	1050	918		
Sulfur         ppm         ASTM D5185m         2600         2844             CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         <1	hosphorus	ppm	ASTM D5185m	995	869		
CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         <1	inc	ppm	ASTM D5185m	1180	1085		
Silicon         ppm         ASTM D5185m         >25         2             Sodium         ppm         ASTM D5185m         <1             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	Bulfur	ppm	ASTM D5185m	2600	2844		
Sodium         ppm         ASTM D5185m         <1             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	ilicon	ppm	ASTM D5185m	>25	2		
INFRA-RED         method         limit/base         current         history1         his           Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	odium	ppm	ASTM D5185m		<1		
Soot %         %         *ASTM D7844         >3         0.1             Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	otassium	ppm	ASTM D5185m	>20	0		
Nitration         Abs/cm         *ASTM D7624         >20         4.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         18.7             FLUID DEGRADATION         method         limit/base         current         history1         his           Oxidation         Abs/.1mm         *ASTM D7414         >25         16.7	soot %	%	*ASTM D7844	>3	0.1		
FLUID DEGRADATION method limit/base current history1 his  Oxidation Abs/.1mm *ASTM D7414 >25 16.7	litration	Abs/cm	*ASTM D7624	>20	4.8		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7		
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Dogo Miyeshoy (DNI) was VOWA ACTM DOGOC	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7		
Base Number (BIN) mg KUH/g ASTM D2896 8.1	Base Number (BN)	mg KOH/g	ASTM D2896		8.1		



# **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. Lab Number Unique Number

: PCA0112869 : 06073505 : 10850182 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 30 Jan 2024 Recieved Diagnosed : 30 Jan 2024

: Wes Davis Diagnostician

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.

Transervice - Shop 1364 - Berkeley-Mt. Vernon

5100 Lake Terrace NE Mt. Vernon, IL US 62864 Contact: Erien White

ewhite@transervice.com T: (618)244-8726 F: (618)244-8791