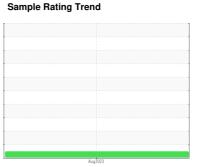


# **OIL ANALYSIS REPORT**

**F** Sa



NORMAL



Machine Id **2026841** 

Component **Diesel Engine** 

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

## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

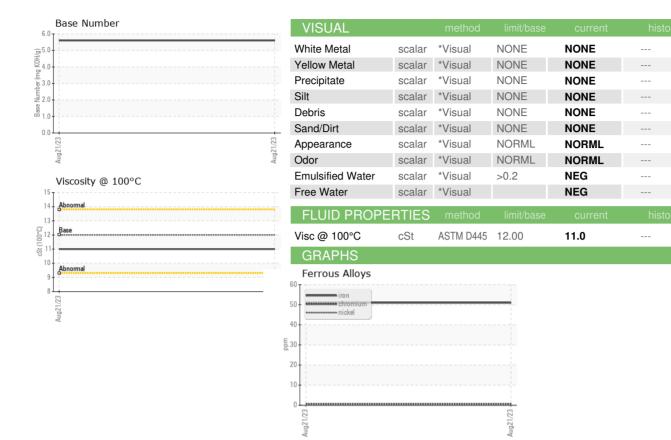
### **Fluid Condition**

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

Sample Date   Client Info   21 Aug 2023	TS)				Aug2023		
Company   Comp	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age   mls   Client Info   0	Sample Number		Client Info		PCA0102505		
Machine Age   mls   Client Info   0	Sample Date		Client Info		21 Aug 2023		
Dil Age	•	mls	Client Info		0		
CONTAMINATION   method   limit/base   current   history1   history2	Oil Age	mls	Client Info		0		
CONTAMINATION	Oil Changed		Client Info		N/A		
WC Method   S	Sample Status				NORMAL		
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >100         51             Chromium         ppm         ASTM D5185m         >20         <1	Fuel		WC Method	>5	<1.0		
Chromium	Glycol		WC Method		NEG		
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>100	51		
Nickel   ppm	Chromium		ASTM D5185m	>20	<1		
Description	Nickel		ASTM D5185m	>4	<1		
Silver	Titanium		ASTM D5185m		0		
Aluminum	Silver		ASTM D5185m	>3	<1		
Lead	Aluminum		ASTM D5185m	>20	0		
Copper	Lead				1		
Tin				>330	16		
Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         0         0             Wolybdenum         ppm         ASTM D5185m         50         61             Manganese         ppm         ASTM D5185m         0         1             Magnesium         ppm         ASTM D5185m         950         920             Calcium         ppm         ASTM D5185m         995         892             Phosphorus         ppm         ASTM D5185m         2600         3235             Zinc         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1 <td>• •</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>	• •				-		
ADDITIVES							
Soron   ppm   ASTM D5185m   2   <1             Sarium   ppm   ASTM D5185m   0   0   0           Molybdenum   ppm   ASTM D5185m   50   61           Manganese   ppm   ASTM D5185m   0   1           Magnesium   ppm   ASTM D5185m   950   920           Calcium   ppm   ASTM D5185m   1050   1147           Phosphorus   ppm   ASTM D5185m   1050   1147           Phosphorus   ppm   ASTM D5185m   995   892           Sulfur   ppm   ASTM D5185m   1180   1226           Sulfur   ppm   ASTM D5185m   2600   3235           CONTAMINANTS   method   limit/base   current   history1   history2       Sodium   ppm   ASTM D5185m   3           Potassium   ppm   ASTM D5185m   >20   4           INFRA-RED   method   limit/base   current   history1   history2       Soof %   "ASTM D7844   >3   0.7           Sulfation   Abs/.1mm "ASTM D7415   >30   21.9           FLUID DEGRADATION   method   limit/base   current   history1   history2       Dxidation   Abs/.1mm "ASTM D7414   >25   17.0					-		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         50         61             Manganese         ppm         ASTM D5185m         0         1             Magnesium         ppm         ASTM D5185m         950         920             Calcium         ppm         ASTM D5185m         1050         1147             Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         1180         1226             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         6             Sodium         ppm         ASTM D5185m         >20         4             Potassium         ppm         ASTM D5185m         >20         4             Soot %         "ASTM D7844         >3	Boron	ppm	ASTM D5185m	2	<1		
Manganese         ppm         ASTM D5185m         0         1             Magnesium         ppm         ASTM D5185m         950         920             Calcium         ppm         ASTM D5185m         1050         1147             Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         2600         3235             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         6             Solicon         ppm         ASTM D5185m         >20         4             Potassium         ppm         ASTM D5185m         >20         4             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844	Barium	ppm	ASTM D5185m	0	0		
Manganese         ppm         ASTM D5185m         0         1             Magnesium         ppm         ASTM D5185m         950         920             Calcium         ppm         ASTM D5185m         1050         1147             Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         2600         3235             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         6             Solicon         ppm         ASTM D5185m         >20         4             Potassium         ppm         ASTM D5185m         >20         4             INFRA-RED         method         limit/base         current         history1         history2           Soot %         *ASTM D7844         >3	Molybdenum	ppm	ASTM D5185m	50	61		
Magnesium         ppm         ASTM D5185m         950         920             Calcium         ppm         ASTM D5185m         1050         1147             Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         1180         1226             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         6             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         4            INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.7             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9	•		ASTM D5185m	0	1		
Calcium         ppm         ASTM D5185m         1 050         1147             Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         1180         1226             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         6             Sodium         ppm         ASTM D5185m         >20         4             Potassium         ppm         ASTM D5185m         >20         4             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.7             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9             FLUID DEGRADATION         *ASTM D7414 <td< td=""><td>ŭ</td><td></td><td>ASTM D5185m</td><td>950</td><td>920</td><td></td><td></td></td<>	ŭ		ASTM D5185m	950	920		
Phosphorus         ppm         ASTM D5185m         995         892             Zinc         ppm         ASTM D5185m         1180         1226             Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         6             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         4            Potassium         ppm         ASTM D5185m         >20         4            INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         10.1             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9             FLUID DEGRADATION         *ASTM D7414         >25         17.0 <td< td=""><td></td><td></td><td>ASTM D5185m</td><td>1050</td><td>1147</td><td></td><td></td></td<>			ASTM D5185m	1050	1147		
Zinc   ppm   ASTM D5185m   1180   1226       Sulfur   ppm   ASTM D5185m   2600   3235             CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >25   6           Sodium   ppm   ASTM D5185m   3           Potassium   ppm   ASTM D5185m   >20   4         INFRA-RED   method   limit/base   current   history1   history2     Soot %   *ASTM D7844   >3   0.7         Nitration   Abs/cm   *ASTM D7624   >20   10.1         Sulfation   Abs/.1mm   *ASTM D7415   >30   21.9         FLUID DEGRADATION   method   limit/base   current   history1   history2     Dxidation   Abs/.1mm   *ASTM D7414   >25   17.0							
Sulfur         ppm         ASTM D5185m         2600         3235             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         6             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         4             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.7             Nitration         Abs/cm         *ASTM D7624         >20         10.1             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.0	•						
Solition   ppm   ASTM D5185m   >25   6	-						
Sodium	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         4             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.7             Nitration         Abs/cm         *ASTM D7624         >20         10.1             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.0	Silicon	ppm	ASTM D5185m	>25	6		
INFRA-RED	Sodium	ppm	ASTM D5185m		3		
Soot %	Potassium	ppm	ASTM D5185m	>20	4		
Nitration         Abs/cm         *ASTM D7624         >20         10.1             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.0	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9              FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.0	Soot %	%	*ASTM D7844	>3	0.7		
Sulfation         Abs/.1mm         *ASTM D7415         >30         21.9              FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.0	Nitration	Abs/cm	*ASTM D7624	>20	10.1		
Oxidation	Sulfation		*ASTM D7415	>30			
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 5.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0		
	Base Number (BN)	mg KOH/g	ASTM D2896		5.6		



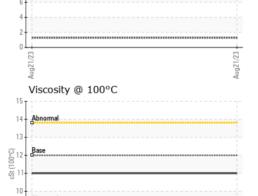
## **OIL ANALYSIS REPORT**

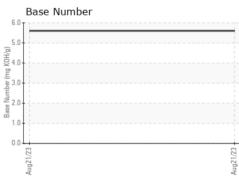


Non-ferrous Metals

12

mdd









Certificate L2367

Laboratory Sample No. Lab Number Unique Number Test Package : FLEET

: PCA0102505 : 05958546 : 10659759

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed Diagnostician

: 22 Sep 2023 : 23 Sep 2023 : Wes Davis

**PERDUE FARMS - PRINCE GEORGE** 

6012 HARDWARE DR PRINCE GEORGE, VA US 23875

Contact: MICHAEL DAVIS

MICHAELP.DAVIS@PERDUE.COM T:

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)

F: