

PROBLEM SUMMARY

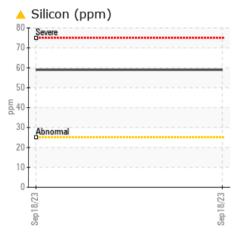


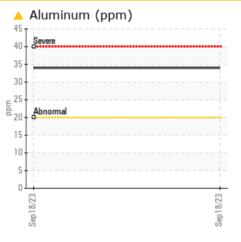
Machine Id 2227061

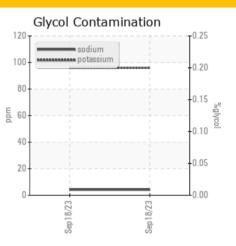
Component Diesel Engine Fluid

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

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

PROBLEMATI	C TES	Γ RESULT	S		
Sample Status				ABNORMAL	
Aluminum	ppm	ASTM D5185m	>20	<u> </u>	
Silicon	ppm	ASTM D5185m	>25	6 59	

Customer Id: PERGEODE Sample No.: PCA0106407 Lab Number: 06031142 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>

RECOMMENDE	D ACTIONS			
Action	Status	Date	Done By	Description
Check Dirt Access			?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



Machine Id 2227061

Component Diesel Engine

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

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

🔺 Wear

All component wear rates are normal.

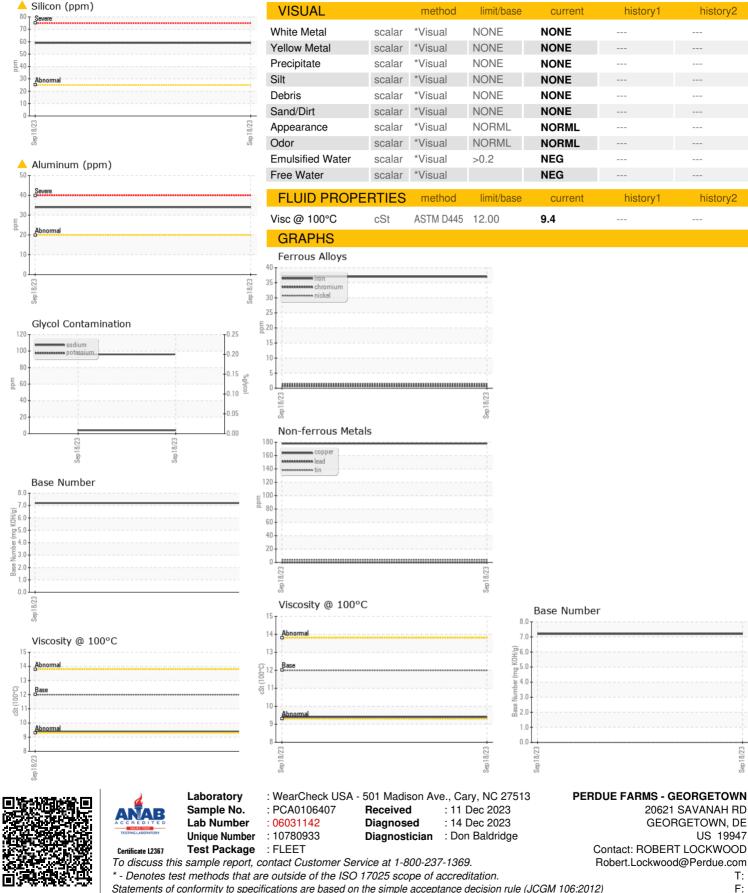
Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

Fluid Condition

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.

			8	Sep2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106407		
Sample Date		Client Info		18 Sep 2023		
Machine Age	mls	Client Info		0		
Dil Age	mls	Client Info		24966		
Dil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
-uel		WC Method	>5	<1.0		
Vater		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	.S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	37		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	1		
Fitanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	17		
Aluminum	ppm	ASTM D5185m	>20	<mark>/</mark> 34		
ead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	178		
Fin	ppm	ASTM D5185m	>15	4		
/anadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	156		
Barium	ppm	ASTM D5185m	0	4		
Molybdenum	ppm	ASTM D5185m	50	117		
Manganese	ppm	ASTM D5185m	0	-		
Magnesium	nom		0	3		
	ppm	ASTM D5185m	950	3 638		
0	ppm	ASTM D5185m ASTM D5185m				
Calcium			950	638		
Calcium Phosphorus	ppm	ASTM D5185m	950 1050	638 1546		
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	950 1050 995	638 1546 668		
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180	638 1546 668 826		
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	950 1050 995 1180 2600 limit/base	638 1546 668 826 2550 current ▲ 59	 history1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25	638 1546 668 826 2550 Current \$59 4	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25	638 1546 668 826 2550 current \$59 4 96	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm JTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25 >20 limit/base	638 1546 668 826 2550 current ▲ 59 4 96 current	 history1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm JTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	638 1546 668 826 2550 current 4 96 current 0.2	 history1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Vitration	ppm ppm ppm ppm JTS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824	950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	638 1546 668 826 2550 current ▲ 59 4 96 current 0.2 10.5	 history1 history1 	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Vitration Sulfation	ppm ppm ppm ppm yTTS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7824 *ASTM D7415	950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	638 1546 668 826 2550 current ▲ 59 4 96 current 0.2 10.5 23.6	 history1 history1 history1	 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Vitration Sulfation FLUID DEGRA	ppm ppm ppm ppm JTS 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 D7844 *ASTM D7844 *ASTM D7844	950 1050 995 1180 2600 Iimit/base >25 >20 Iimit/base >3 >20 >30 Iimit/base	638 1546 668 826 2550 current 59 4 96 current 0.2 10.5 23.6 current	 history1 history1 history1 history1	 history2 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm pm pm ppm ppm ppm ppm p	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7824 *ASTM D7415	950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	638 1546 668 826 2550 current ▲ 59 4 96 current 0.2 10.5 23.6	 history1 history1 history1	 history2 history2 history2



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

OIL ANALYSIS REPORT

