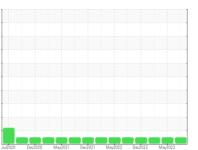


## **OIL ANALYSIS REPORT**

#### Sample Rating Trend





NORMAL

	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
	Sample Number		Client Info		PCA0103355	PCA0099317	PCA0092859
al to monitor.	Sample Date		Client Info		30 Jul 2023	14 May 2023	25 Feb 2023
		mls	Client Info		372289	351552	330597
nal.	0	mls	Client Info		22289	42000	21287
	Oil Changed		Client Info		Not Changd	Changed	Not Changd
ination in the	Sample Status				NORMAL	NORMAL	NORMAL
	CONTAMINATIO	ואכ	method	limit/base	current	history1	history2
			WC Method	>6.0		<1.0	<1.0
suitable	Fuel Water				<1.0		
ndition of the			WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	WEAR METALS		method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>100	17	30	18
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	0	<1	0
	Titanium	ppm	ASTM D5185m		1	7	8
	Silver	ppm	ASTM D5185m	>2	0	0	0
		ppm	ASTM D5185m	>25	2	3	2
		ppm	ASTM D5185m	>40	2	1	0
		ppm		>330	4	7	6
		ppm		>15	0	<1	<1
		ppm	ASTM D5185m	210	0	<1	0
		ppm	ASTM D5185m		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	2	1	4	6
		ppm	ASTM D5185m	0	0	0	0
		ppm	ASTM D5185m	50	58	57	47
		ppm	ASTM D5185m		<1	<1	<1
		ppm	ASTM D5185m	950	945	900	746
	-	ppm			0.10	000	1 10
			ASTM D5185m	1050	1110	1224	1117
				1050	1110 886	1224	1117
	Phosphorus	ppm	ASTM D5185m	995	886	1031	889
	Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	995 1180	886 1285	1031 1286	889 1055
	Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600	886 1285 3702	1031 1286 3812	889 1055 3359
	Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	886 1285 3702 current	1031 1286 3812 history1	889 1055
	Phosphorus Zinc Sulfur CONTAMINANT Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	995 1180 2600 limit/base	886 1285 3702 current 4	1031 1286 3812 history1 5	889 1055 3359 history2 4
	Phosphorus Zinc Sulfur CONTAMINANT Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	886 1285 3702 current	1031 1286 3812 history1 5 2	889 1055 3359 history2
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm S	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	995 1180 2600 limit/base >25	886 1285 3702 current 4	1031 1286 3812 history1 5	889 1055 3359 history2 4
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	886 1285 3702 current 4 0	1031 1286 3812 history1 5 2	889 1055 3359 history2 4 2
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 <b>limit/base</b> >25 >20	886 1285 3702 current 4 0 2	1031 1286 3812 history1 5 2 2 2	889 1055 3359 history2 4 2 1
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm S ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	995 1180 2600 imit/base >25 >20	886 1285 3702 current 4 0 2 2 current 0.4	1031 1286 3812 history1 5 2 2 2 2 history1	889 1055 3359 history2 4 2 1 1 history2
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm S ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	995 1180 2600 <b>imit/base</b> >25 >20 <b>imit/base</b> >3 >20	886 1285 3702 current 4 0 2 2 current	1031 1286 3812 history1 5 2 2 2 history1 0.6	889 1055 3359 history2 4 2 1 1 history2 0.4
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm S ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	995 1180 2600 <b>imit/base</b> >25 >20 <b>imit/base</b> >3 >20	886 1285 3702 current 4 0 2 current 0.4 8.3	1031 1286 3812 history1 5 2 2 2 history1 0.6 9.7	889 1055 3359 history2 4 2 1 1 history2 0.4 8.9
	Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm S ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844	995 1180 2600 <b>imit/base</b> >25 >20 <b>imit/base</b> >3 >20 >30	886 1285 3702 current 4 0 2 current 0.4 8.3 18.9	1031 1286 3812 history1 5 2 2 2 history1 0.6 9.7 21.1	889 1055 3359 history2 4 2 1 history2 0.4 8.9 18.8

# Machine Id 2026868

#### Component Diesel Engine Fluid

### PETRO CANADA DURON SHP 10W30 (35)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

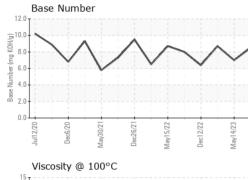
#### Fluid Condition

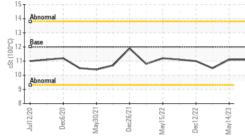
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



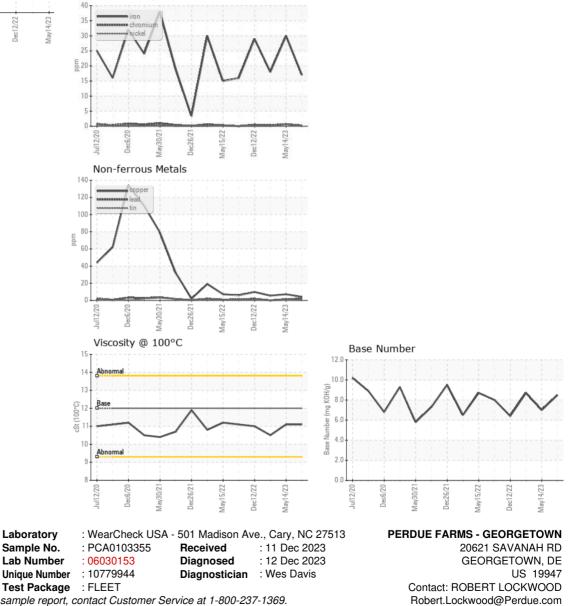
# **OIL ANALYSIS REPORT**

Ferrous Alloys





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.1	10.5
GRAPHS						





Т:

F: