

OIL ANALYSIS REPORT



Machine Id 5100

Component Diesel Engine

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

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.

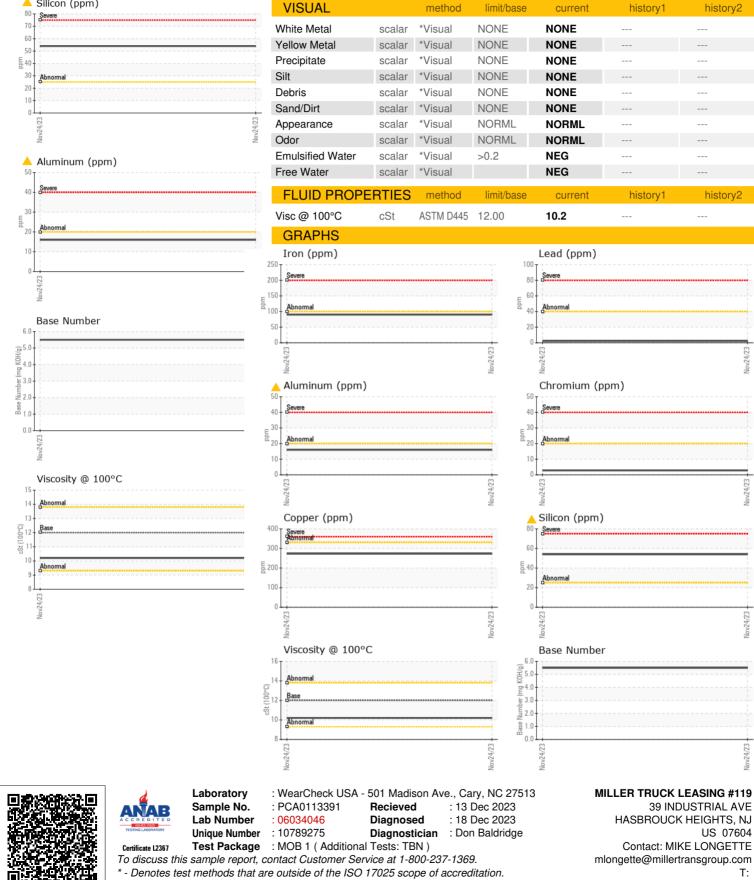
Contamination

Elemental levels of silicon (Si) and aluminum (AI) indicate alumina-silicate (coarse dirt) ingress.

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.

AL)						
,				Nov2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0113391		
Sample Date		Client Info		24 Nov 2023		
Machine Age	mls	Client Info		0		
Dil Age	mls	Client Info		0		
Dil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		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	90		
Chromium	ppm	ASTM D5185m	>20	3		
Nickel	ppm	ASTM D5185m	>4	<1		
Fitanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	<u> </u>		
ead	ppm	ASTM D5185m	>40	2		
Copper	ppm	ASTM D5185m	>330	273		
īn	ppm	ASTM D5185m	>15	6		
/anadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	92		
Barium	ppm	ASTM D5185m	0	1		
Nolybdenum	ppm	ASTM D5185m	50	25		
Manganese	ppm	ASTM D5185m	0	3		
/agnesium	ppm	ASTM D5185m	950	142		
Calcium	ppm					
		ASTM D5185m	1050			
nosonorus		ASTM D5185m ASTM D5185m	1050 995	1068		
	ppm	ASTM D5185m	995	1068 855		
Zinc				1068		
linc	ppm ppm ppm	ASTM D5185m ASTM D5185m	995 1180	1068 855 1113		
Zinc Sulfur CONTAMINAN	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600	1068 855 1113 2734		
Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	1068 855 1113 2734 current	 history1	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	995 1180 2600 limit/base	1068 855 1113 2734 current ▲ 54	 history1	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	1068 855 1113 2734 current ▲ 54 4	 history1 	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	1068 855 1113 2734	 history1 	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20 limit/base	1068 855 1113 2734 current ▲ 54 4 6 current	 history1 history1	 history2 history2
Silicon Sodium Potassium	ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	995 1180 2600 limit/base >25 >20 limit/base >3	1068 855 1113 2734 current ▲ 54 4 6 current 0.8	 history1 history1	 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Vitration	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7845	995 1180 2600 limit/base >25 >20 limit/base >3 >20	1068 855 1113 2734	 history1 history1 history1	 history2 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Vitration Sulfation	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7845	995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	1068 855 1113 2734 current ▲ 54 4 6 current 0.8 9.6 22.0	 history1 history1 history1	 history2 history2 history2



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* - 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)

OIL

Silicon (ppm)

DIAGNOSTICS

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