

OIL ANALYSIS REPORT

Sample Rating Trend





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.

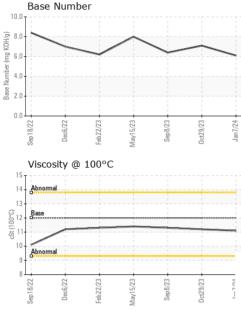
Fluid Condition

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

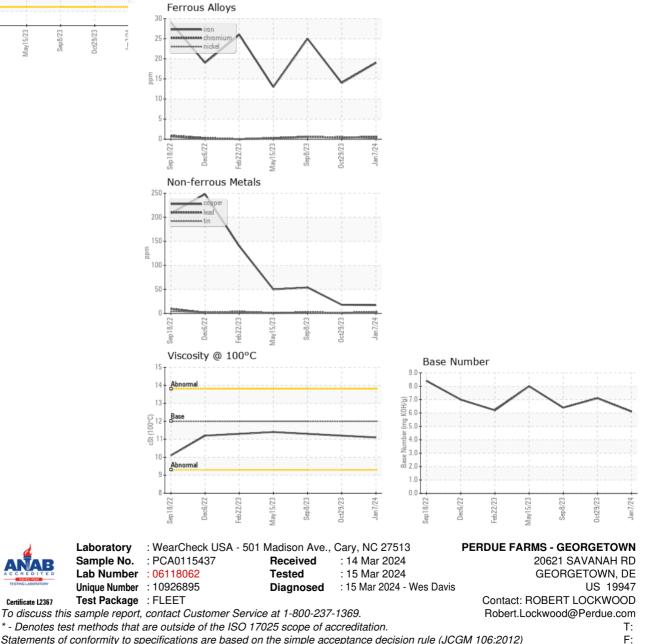
TS)		Sep2022	Dec2022 Feb2023	May2023 Sep2023 Oct2023	Jan2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0115437	PCA0108180	PCA0103362
Sample Date		Client Info		07 Jan 2024	29 Oct 2023	08 Sep 2023
Machine Age	mls	Client Info		0	123707	103426
Dil Age	mls	Client Info		40000	20281	40625
Dil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	19	14	25
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Fitanium	ppm	ASTM D5185m		4	<1	2
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	4
ead	ppm	ASTM D5185m	>40	3	1	2
Copper	ppm	ASTM D5185m	>330	17	18	54
Fin	ppm	ASTM D5185m	>15	2	1	2
/anadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	0	<1
Barium	ppm	ASTM D5185m	0	0	12	0
Volybdenum	ppm	ASTM D5185m	50	51	61	60
Vanganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	950	831	934	895
Calcium	ppm	ASTM D5185m	1050	1073	1067	1124
Phosphorus	ppm	ASTM D5185m	995	883	1028	863
Zinc	ppm	ASTM D5185m	1180	1108	1233	1215
Sulfur	ppm	ASTM D5185m	2600	3098	3097	2934
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	8	6
Sodium	ppm	ASTM D5185m		3	0	3
Potassium	ppm	ASTM D5185m	>20	7	7	10
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.2	8.5	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	19.6	21.9
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	15.6	18.1
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	7.1	6.4



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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	11.2	11.3
GRAPHS						



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

Certificate L2367