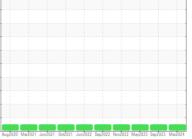


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 582 Component Diesel Engine Fluid

PETRO CANADA DURON HP 15W40 (--- GAL)

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.

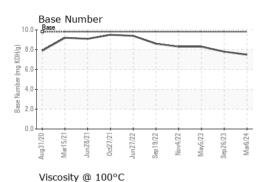
Fluid Condition

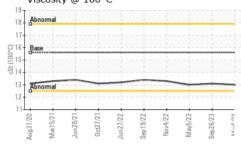
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

4L)		Aug2020 Mar2	021 Jun2021 Oct2021 Jun2	022 Sep2022 Nov2022 May2023 Sep2	023 Mar2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0082729	PCA0082811	PCA0069522
Sample Date		Client Info		06 Mar 2024	26 Sep 2023	05 May 2023
Machine Age	hrs	Client Info		0	0	5780
Oil Age	hrs	Client Info		0	0	54
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
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
Iron	ppm	ASTM D5185m	>100	14	12	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m		2	2	3
Lead	ppm	ASTM D5185m		1	1	1
Copper	ppm	ASTM D5185m		1	2	2
Tin	ppm		>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	3	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		62	66	63
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		944	941	1014
Calcium	ppm	ASTM D5185m		1125	1130	1178
Phosphorus	ppm	ASTM D5185m		1010	1096	1067
Zinc	ppm	ASTM D5185m		1245	1258	1297
Sulfur	ppm	ASTM D5185m		3048	3685	3494
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	6	6
Sodium	ppm	ASTM D5185m	00	<1	0	2
Potassium	ppm	ASTM D5185m	>20	4	7	6
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.0	7.9	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	19.4	19.8
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	15.7	15.8
Base Number (BN)	ma KOU/a	ASTM D2896	9.8	75		
Dase Number (DN)	mg KOH/g	A31W D2030	9.0	7.5	7.8	8.3

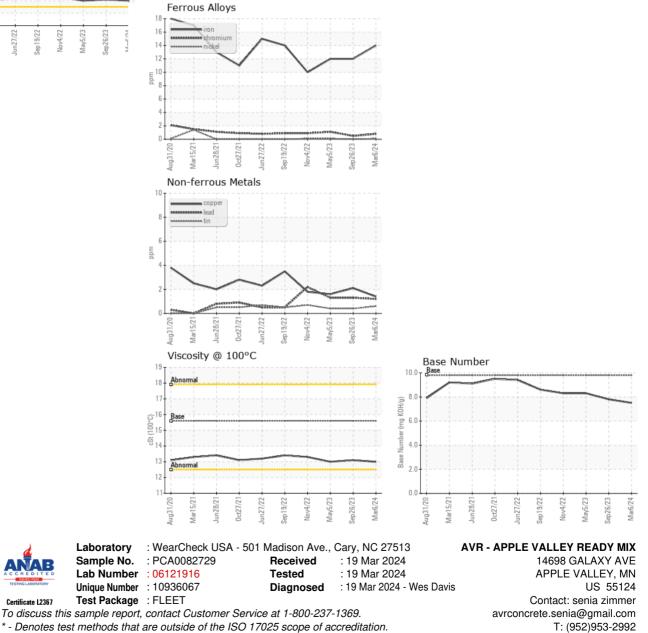


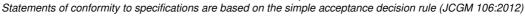
OIL ANALYSIS REPORT





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	15.6	13.0	13.1	13.0
GRAPHS						





Certificate L2367

F: (952)953-2994