

OIL ANALYSIS REPORT

Sample Rating Trend







PETRO CANADA DURON SHP 10W30 (--- QTS

ON SHP 10W30 (·	QTS)	Mar2021	Aug2021 Dec2021 May20	122 Sep2022 Mar2023 Aug2023	Feb2024	
SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110894	PCA0104154	PCA009256
Sample Date		Client Info		20 Feb 2024	31 Aug 2023	30 Mar 2023
Machine Age	mls	Client Info		226451	202039	176687
Oil Age	mls	Client Info		226451	0	151910
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAI	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	12	13	16
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	0	3	7
Tin	ppm	ASTM D5185m	>15	<1	<1	0
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		2	3	<1
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	50	57	66	69
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	950	857	908	1031
Calcium	ppm	ASTM D5185m	1050	1082	1160	1209
Phosphorus	ppm	ASTM D5185m	995	957	958	965
Zinc	ppm	ASTM D5185m	1180	1207	1242	1330
Sulfur	ppm	ASTM D5185m	2600	2271	3038	3085
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	6
Sodium	ppm	ASTM D5185m		0	2	1
Potassium	ppm	ASTM D5185m	>20	0	<1	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.6	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.0	9.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	21.1	19.3
FLUID DEGRA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.0	15.5
	1/0111	LOTH DOCCO				1.0

Base Number (BN) mg KOH/g ASTM D2896

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.

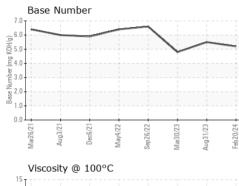
4.8

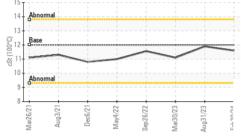
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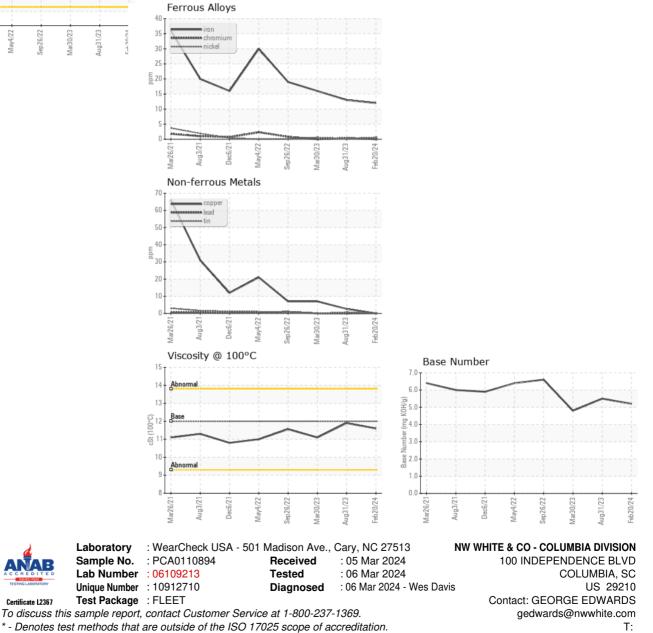


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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	11.6	11.9	11.1
GRAPHS						



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

Certificate L2367

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