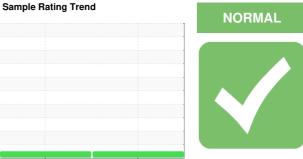


OIL ANALYSIS REPORT





DT816 Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (36 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

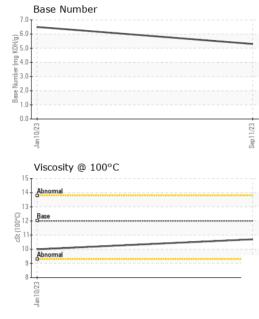
Fluid Condition

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

N SHP 10W30 (3	6 Q1S)		Jan 2023	Sep 2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103254	PCA0080902	
Sample Date		Client Info		11 Sep 2023	10 Jan 2023	
Machine Age	mls	Client Info		50170	25084	
Oil Age	mls	Client Info		50170	25084	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	.S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>120	34	58	
Chromium	ppm	ASTM D5185m	>20	2	3	
Vickel	ppm	ASTM D5185m	>5	7	6	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>2	<1	0	
Aluminum	ppm	ASTM D5185m	>20	14	36	
Lead		ASTM D5185m	>40	<1	<1	
	ppm	ASTM D5185m		39	162	
Copper	ppm					
Tin	ppm	ASTM D5185m	>15	2	6	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	79	
Barium	ppm	ASTM D5185m	0	0	2	
Molybdenum	ppm	ASTM D5185m	50	75	119	
Manganese	ppm	ASTM D5185m	0	2	5	
Magnesium	ppm	ASTM D5185m	950	889	711	
Calcium	ppm	ASTM D5185m	1050	1151	1417	
Phosphorus	ppm	ASTM D5185m	995	895	667	
Zinc	ppm	ASTM D5185m	1180	1186	832	
Sulfur	ppm	ASTM D5185m	2600	2723	2217	
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	16	73	
Sodium	ppm	ASTM D5185m		5	4	
Potassium	ppm	ASTM D5185m	>20	37	103	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.7	0.8	
Nitration	Abs/cm	*ASTM D7624	>20	9.3	11.4	
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	24.1	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	23.7	
Base Number (BN)	mg KOH/g	ASTM D2896		5.3	6.5	



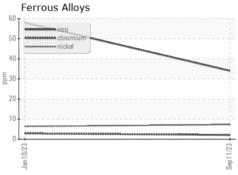
OIL ANALYSIS REPORT



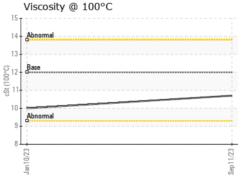
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	

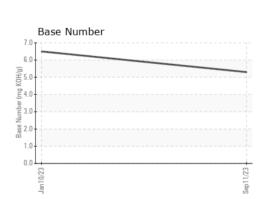
FLUID PROPI		method			riistory i	History2
Visc @ 100°C	cSt	ASTM D445	12.00	10.7	10.0	

GRAPHS



Non-ferrous Metals	
180 T :	
160 - copper lead	
140 - management tin	
120	
E 100	
80	
60	
40	
20	
0	_
0/23	
Jan10/23	
Viscosity @ 100°C	







Certificate L2367

Report Id: NWWPIE [WUSCAR] 05955125 (Generated: 09/20/2023 18:00:56) Rev: 1

Laboratory Sample No. Lab Number Unique Number : 10656338 Test Package : FLEET

: PCA0103254 : 05955125

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 19 Sep 2023 : 20 Sep 2023 Diagnostician : Wes Davis

NW WHITE & CO - ANDERSON DIVISION 2605 RIVER RD

PIEDMONT, SC US 29673 Contact: James Threatt jthreatt@nwwhite.com T: (864)918-4646

* - 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)