

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 2026818

Component Diesel Engine Fluid

PETRO CANADA DURON SHP 10W30 (--- 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.

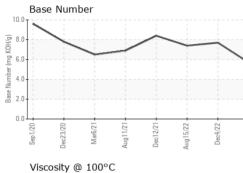
Fluid Condition

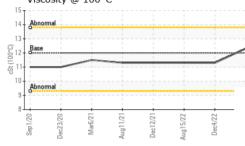
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

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SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PCA0108166	PCA0081825	PCA0079902		
Sample Date		Client Info		30 Oct 2023	04 Dec 2022	15 Aug 2022		
Machine Age	mls	Client Info		228462	228462	228462		
Oil Age	mls	Client Info		228462	228462	228462		
Oil Changed		Client Info		N/A	N/A	Changed		
Sample Status				NORMAL	NORMAL	NORMAL		
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2		
Fuel		WC Method	>5	<1.0	<1.0	<1.0		
Glycol		WC Method		NEG	NEG	NEG		
WEAR METAI	_S	method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>100	39	30	25		
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1		
Nickel	ppm	ASTM D5185m	>4	<1	3	<1		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m	>3	0	0	<1		
Aluminum	ppm	ASTM D5185m	>20	4	4	3		
Lead	ppm	ASTM D5185m	>40	<1	2	1		
Copper	ppm	ASTM D5185m	>330	7	9	9		
Tin	ppm	ASTM D5185m	>15	<1	2	1		
Antimony	ppm	ASTM D5185m						
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	3	9		
Barium	ppm	ASTM D5185m	0	0	0	0		
Molybdenum	ppm	ASTM D5185m	50	58	65	62		
Manganese	ppm	ASTM D5185m	0	<1	<1	<1		
Magnesium	ppm	ASTM D5185m	950	860	954	864		
Calcium	ppm	ASTM D5185m	1050	1001	1119	1072		
Phosphorus	ppm	ASTM D5185m	995	823	1010	955		
Zinc	ppm	ASTM D5185m	1180	1169	1272	1210		
Sulfur	ppm	ASTM D5185m	2600	2656	3231	2946		
CONTAMINA	NTS	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	5	5	4		
Sodium	ppm	ASTM D5185m		<1	1	1		
Potassium	ppm	ASTM D5185m	>20	1	4	4		
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.8	0.8	0.7		
Nitration	Abs/cm	*ASTM D7624	>20	10.0	11.2	10.6		
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.0	22.0		
FLUID DEGRA	DATION	method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	17.7	17.4		
Base Number (BN)	mg KOH/g	ASTM D2896		5.7	7.7	7.4		



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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	
Aug 15/22 Dec4/22 Oct30/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Aug Oc	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		method	limit/base		history1	history2	
	Visc @ 100°C	cSt	ASTM D445	12.00	12.3	11.3	11.3	
	GRAPHS							
	Ferrous Alloys							
5/22 -	35 - iron	\wedge	\	/				
Aug 15/22 Dec4/22	30 pickel	1	\backslash					
	25	/						
	<u>ال</u> 20	/						
	15							
	5-							
	0			and a street of the				
	Sep 1/20 Dec23/20 Mar6/21	Aug11/21 Dec12/21	Aug15/22 Dec4/22	0ct30/23				
	∞		Au	õ				
	250 T							
	200 - copper lead							
	200 summinum tin							
E	150							
	100							
	50							
			2					
	Sep 1/20 Dec23/20 Mar6/21	Aug11/2 Dec12/2	Aug15/22 Dec4/22	0ct30/23				
	Viscosity @ 100°	-	0	Base Number				
				10				
	14 - Abnormal			- E	3.0			
-	13 12 Base			KOH/6				
	112 Base			ar (mg	5.0 -			
č	3 11			Base Number (mg KOH/g)	ŧ.0			
	10 - Abnormal			Base	2.0-			
	9-							
	20+	21	22	53		21	22+	
	Sep 1/20 Dec23/20 Mar6/21	Aug11/21 Dec12/21	Aug15/22 - Dec4/22 -	0ct30/23	Sep1/20 Dec23/20 Mar6/21	Aug11/21 Dec12/21	Aug15/22 Dec4/22 Oct30/23	
Laboratory	: WearCheck USA -	son Ave Cr	13		RMS - DILLON			
Sample No.	: PCA0108166	Receive		Nov 2023			7 HWY 9 WEST	
Lab Number	: 06001436	ed : 09	DILLON, SC					
Unique Number	: 10729796 : ELEET	Diagnos	tician : We	es Davis		US 29536 Contact: KEVIN HOOKS		



Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Contact: KEVIN HOOKS

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