

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

708547 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.

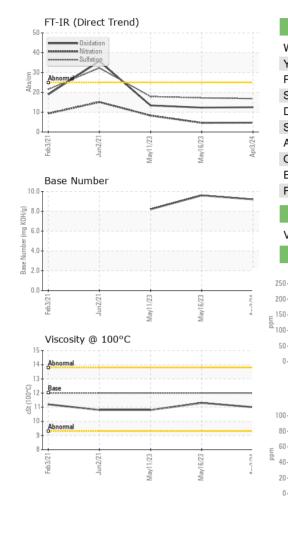
Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PCA0121414	PCA0095798	PCA0095727		
Sample Date		Client Info		03 Apr 2024	16 May 2023	11 May 2023		
Machine Age	mls	Client Info		428845	428796	9257		
Oil Age	mls	Client Info		428845	428796	9257		
Oil Changed		Client Info		Changed	Changed	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		
Iron	ppm	ASTM D5185m	>100	10	2	17		
Chromium	ppm	ASTM D5185m	>20	0	0	<1		
Nickel	ppm	ASTM D5185m	>4	0	0	<1		
Titanium	ppm	ASTM D5185m		1	1	<1		
Silver	ppm	ASTM D5185m	>3	0	0	0		
Aluminum	ppm	ASTM D5185m	>20	2	0	3		
Lead	ppm	ASTM D5185m	>40	0	0	1		
Copper	ppm	ASTM D5185m	>330	0	0	<1		
Tin	ppm	ASTM D5185m	>15	<1	0	<1		
Antimony	ppm	ASTM D5185m						
Vanadium	ppm	ASTM D5185m		0	0	<1		
Cadmium	ppm	ASTM D5185m		0	0	<1		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	2	20	19	25		
Barium	ppm	ASTM D5185m	0	0	0	0		
Molybdenum	ppm	ASTM D5185m	50	52	58	73		
Manganese	ppm	ASTM D5185m	0	<1	0	<1		
Magnesium	ppm	ASTM D5185m	950	850	814	893		
Calcium	ppm	ASTM D5185m	1050	1071	1112	1200		
Phosphorus	ppm	ASTM D5185m	995	958	990	976		
Zinc	ppm	ASTM D5185m	1180	1129	1141	1276		
Sulfur	ppm	ASTM D5185m	2600	3352	3136	3652		
CONTAMINAN	TS	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	5	4	4		
Sodium	ppm	ASTM D5185m		<1	0	5		
Potassium	ppm	ASTM D5185m	>20	<1	2	6		
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.2		
Nitration	Abs/cm	*ASTM D7624		4.7	4.6	8.3		
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.8	17.2	17.9		
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	12.3	13.4		
Base Number (BN)	mg KOH/g	ASTM D2896		9.2	9.6	8.2		
4:31:24) Rev: 1				Contact/Location: ROSTY VITER - MILPHINE				



OIL ANALYSIS REPORT



May16/23 Apr3/24	White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	scalar scalar scalar scalar scalar	*Visual *Visual *Visual	NONE	NON NON		NONE NONE	NONE	
May16/23 May16/23	Precipitate Silt Debris	scalar scalar			NON	IE	NONE	NONE	
May11/23	Silt Debris	scalar	*Visual						
May16/23	Debris			NONE	NON	IE	NONE	NONE	
May15/23 +		scalar	*Visual	NONE	NON	IE	NONE	NONE	
May11/23	Sand/Dirt	Sualai	*Visual	NONE	NON	IE	NONE	NONE	
May11/23 May16/23 Apr3/24		scalar	*Visual	NONE	NON	IE	NONE	NONE	
May May	Appearance	scalar	*Visual	NORML	NOF	ML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NOF	ML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	ì	NEG	NEG	
	Free Water	scalar	*Visual		NEG	i	NEG	NEG	
	FLUID PROPE		method	limit/base	cu	rrent	history1	history2	
	Visc @ 100°C	cSt	ASTM D445	12.00	11.0		11.3	10.8	
	GRAPHS								
	Iron (ppm)				Lead	(ppm)			
23	200 - Severe	1	1		80 Severe		1	1	
May11/23 May16/23 AcreA					60 -				
2 2	Abnormal			L L	40 Abnorma				
	50				20-				
			~	4				en	
	Feb3/21 Jun2/21	May11/23	May16/23	Apr3/24	Feb3/21	Jun2/21	May11/23	May16/23	
		Ma	Ma	er.				Ma	
	Aluminum (ppm)				Chron	nium (pp	om)		
1	80				40 - Severe				
	E 60			ε	30				
May1 1/23 May16/23 Arr.cA	40 Severe			ud d	20 - Abnorma	4			
May A.	20 - Abpormal				10				
			53	24	0	21	33	23	
	Feb3/21 Jun2/21	May11/23	May16/23	Apr3/24	Feb 3/21	Jun2/21	May11/23	May16/23	
	Copper (ppm)	M	M		Silicor	n (ppm)	N.	W.	
	400 Severe					. (PP)			
	300-				60 -				
	틀 200			u d	40			 	
	100 -				Abnorma 20				
	6 Feb3/21	May11/23 -	May16/23	Apr3/24	Feb3/21	Jun2/21-	May11/23 -	May16/23 -	
	ع ب Viscosity @ 100°C		May	AF		ج Number	May	May	
	¹⁶		1			umbel			
	Abnormal			1 KOH	3.0				
	(5,001) 12 - Base		******	er (m	.0				
				2	1.0				
	Abnormal			Base	2.0				
	Feb3/21+	- 1/23	3/23 -	Apr3/24 +	Feb3/21+0.0	2/21-	/23 -	5/23 -	
	Juní	May11/23	May16/23	Apr3	E.	Jun2/21	May11/23	May16/23	
Lab Number Unique Number	: PCA0121414 : 06143836 : 10968644	Recei Teste Diagr	Madison Ave., Cary, NC 27513 Received : 10 Apr 2024 Tested : 11 Apr 2024 Diagnosed : 11 Apr 2024 - Wes I sts: TBN)			MILLER TRUCK LEASING #11 2196 BENNETT ROA PHILADELPHIA, P Davis US 1911 Contact: ROSTY VITE			

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

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Contact/Location: ROSTY VITER - MILPHINE

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