

## **OIL ANALYSIS REPORT**





## 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

Metal levels are typical for a components first oil change.

#### Contamination

There is no indication of any contamination in the oil.

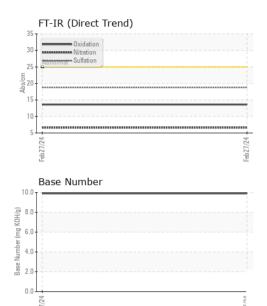
#### Fluid Condition

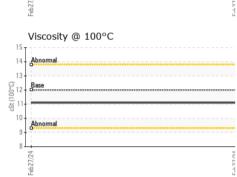
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

GAL)				Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111424		
Sample Date		Client Info		27 Feb 2024		
Machine Age	mls	Client Info		1324139		
Oil Age	mls	Client Info		1324139		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	10		
Lead	ppm	ASTM D5185m	>40	3		
Copper	ppm	ASTM D5185m	>330	3		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	6		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	70		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	950	968		
Calcium	ppm	ASTM D5185m	1050	1211		
Phosphorus	ppm	ASTM D5185m	995	1085		
Zinc	ppm	ASTM D5185m	1180	1268		
Sulfur	ppm	ASTM D5185m	2600	3598		
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	11		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	0		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7		
Nitration	Abs/cm	*ASTM D7624	>20	6.6		
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8		
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6		
Base Number (BN)	mg KOH/g	ASTM D2896		9.9		



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 VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1		
GRAPHS						
Iron (ppm)			100	Lead (ppm)		
200 Severe			80	Severe		
a 150 100 - Abnormal			E 40	Abnormal		
50 -			20			
0						
Feb27/24			Feb27/24	Feb27/24		
Feb 2			Feb2	Feb2		
Aluminum (ppm)				Chromium (p	pm)	
50 Severe			50	Severe		
			40			
20 Abnormal			<sup>30</sup>	Abnormal		
			<sup>11</sup> 20	) - Abnormal		
10-			10	)		
04			- 24			
Feb 27/24			Feb27/24	Feb27/24		
—			LL.	_		
Copper (ppm) 400 T Severe			80	Silicon (ppm)		
300			60			
툴 200 -			Ed 40	Abnormal		
100-			20	)		
0						
Feb 27/24			Feb27/24	Feb 27/2 4		
	_		Feb			
Viscosity @ 100°C	3			Base Number	-	
14 Abnormal			(b)HO3 8.0 (b)HO3 6.0 (b)HO3 6.0 (b)HO3 6.0 (b)HO3 6.0 (c)HO3 6.0	)		
C. Base			y E 6.0	)		
(j. 00) 12- 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			a 4.0	) <b>-</b>		
10 Abnormal				)-		
8			0.0			
Feb 27/24			Feb27/24	Feb27/24		
				-0		



Unique Number : 11045092 Diagnosed : 24 May 2024 - Wes Davis Test Package : MOB 1 (Additional Tests: TBN) Contact: PETER SHEPARD Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. pshepard@millertransgroup.com \* - 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)

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