

OIL ANALYSIS REPORT





PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

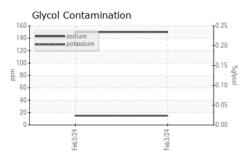
Fluid Condition

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

AL)				Feb2024		
SAMPLE INFO	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105589		
Sample Date		Client Info		03 Feb 2024		
Machine Age	mls	Client Info		36856		
Dil Age	mls	Client Info		0		
Dil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method		NEG		
WEAR META	ALS	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	271		
Chromium	ppm	ASTM D5185m		6		
Nickel	ppm	ASTM D5185m	>4	3		
Titanium	ppm	ASTM D5185m	~7	3 <1		
Silver		ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m		68		
	ppm		>20	00 <1		
_ead	ppm	ASTM D5185m		51		
Copper	ppm	ASTM D5185m				
Гin	ppm	ASTM D5185m	>15	5		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	32		
Barium	ppm	ASTM D5185m	0	<1		
Molybdenum	ppm	ASTM D5185m	50	85		
Manganese	ppm	ASTM D5185m	0	25		
Magnesium	ppm	ASTM D5185m	950	1002		
Calcium	ppm	ASTM D5185m	1050	2607		
Phosphorus	ppm	ASTM D5185m	995	1288		
Zinc	ppm	ASTM D5185m	1180	1692		
Sulfur	ppm	ASTM D5185m	2600	4210		
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	22		
Sodium	ppm	ASTM D5185m		15		
Potassium	ppm	ASTM D5185m	>20	150		
Glycol	%	*ASTM D2982		NEG		
						history2
INFRA-RED		method	limit/base	current	history1	nistoryz
	%	method *ASTM D7844	limit/base	0.8	history1	
Soot %	% Abs/cm					
Soot % Nitration		*ASTM D7844	>3	0.8		
Soot % Nitration	Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415	>3 >20	0.8 13.3		
Soot % Nitration Sulfation	Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415	>3 >20 >30	0.8 13.3 24.9		



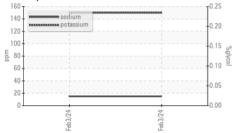
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Viscosity @ 100°C



Glycol Contamination



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	10.5		
GRAPHS						
Iron (ppm)			10	Lead (ppm)		
250 - Severe			8	0 - Severe		
200 - Severe E 150 -			E G			
Abnormal			¹² 4	0 - Abnormal		
50				0		
045			24 +	0 54 54		24
Feb3/24			Feb 3/24 .	Feb3/24		Feb3/24
Aluminum (ppm)				Chromium (p	(mm)	
			5		·pm)	
60-			4	0 - Severe		
E 40			в ³	0		
Abnormal			<u>م</u> ط	0 - Abnormal		-
20 -				0		
0 1,			24	24-10		24
Feb3/24			Feb3/24	Feb3/24		Feb3/24
Copper (ppm)				Silicon (ppm)		
400 Severe			8	0 Severe		1
300			6	0		
틆 200 -			튭.4	0		
100-			2	Abnormal		
0				0		
- Feb3/24			Feb3/24	Feb3/24		Feb3/24 -
Feb			Feb	Feb		Feb
Viscosity @ 100°C	2			Base Number	r	
¹⁶			(B/H0	UT		
14 Abnormal			OX 6.	0		
G 12 Base			u la q	0		
⁴³ 10 - Abnormal			9) 09 4. Base Number (mg 8 8 8	0 -		
8			0.	0 ++		
- Feb3/24			Feb3/24 .	Feb3/24 -		Feb3/24 -
Fel				-19 -19		Fet

