

# **OIL ANALYSIS REPORT**



# Machine Id **[] 62601 Diesel Engine** Fluid **PETRO CANADA DURON SHP 10W30 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

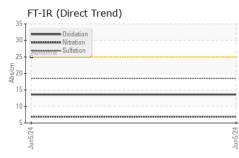
## Fluid Condition

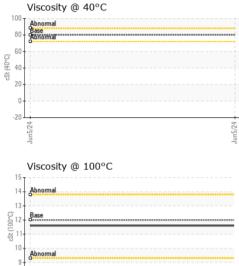
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

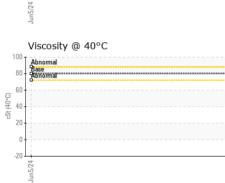
Sample Number	ON method	limit/base	current	history1	history2
	Client Info		PCA0119332		
Sample Date	Client Info		05 Jun 2024		
Machine Age mls	Client Info		250784		
Oil Age mls	Client Info		0		
Oil Changed	Client Info		Not Changd		
Sample Status			NORMAL		
CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0		
Water	WC Method	>0.2	NEG		
Glycol	WC Method		NEG		
WEAR METALS	method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m	>100	13		
Chromium ppm	ASTM D5185m	>20	0		
Nickel ppm	ASTM D5185m	>4	0		
Titanium ppm	ASTM D5185m		<1		
Silver ppm	ASTM D5185m	>3	0		
Aluminum ppm	ASTM D5185m	>20	5		
Lead ppm	ASTM D5185m	>40	0		
Copper ppm	ASTM D5185m	>330	1		
Tin ppm	ASTM D5185m	>15	0		
Vanadium ppm	ASTM D5185m		0		
Cadmium ppm	ASTM D5185m		0		
ADDITIVES	method				
	mounou	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	limit/base	current 6	history1	history2
_					
Boron ppm	ASTM D5185m	2	6		
Boron ppm Barium ppm	ASTM D5185m ASTM D5185m	2 0 50	6 0		
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	6 0 53 <1 913		
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	6 0 53 <1 913 1058		
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	6 0 53 <1 913 1058 998		
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	6 0 53 <1 913 1058 998 1201	    	
BoronppmBariumppmMolybdenumppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	6 0 53 <1 913 1058 998	  	   
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmCONTAMINANTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180	6 0 53 <1 913 1058 998 1201	    	
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmCONTAMINANTSSiliconppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600	6 0 53 <1 913 1058 998 1201 3334		
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmCONTAMINANTSSiliconppmSodiumppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	6 0 53 <1 913 1058 998 1201 3334 <u>current</u> 6 1	     history1	      history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSodiumppmPotassiumppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600	6 0 53 <1 913 1058 998 1201 3334 current 6	     history1	     history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmCONTAMINANTSSiliconppmSodiumppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	6 0 53 <1 913 1058 998 1201 3334 <u>current</u> 6 1	      history1	      history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSoliconppmSodiumppmPotassiumppmINFRA-RED%	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	6 0 53 <1 913 1058 998 1201 3334 <u>current</u> 6 1 4 <u>current</u> 0.4	      history1  	      history2  
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSoliconppmPotassiumppmINFRA-REDsoot %NitrationAbs/or	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	6 0 53 <1 913 1058 998 1201 3334 <i>current</i> 6 1 4 <i>current</i> 0.4 6.9	     history1   history1	      history2   history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSoliconppmSodiumppmPotassiumppmINFRA-RED%	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	6 0 53 <1 913 1058 998 1201 3334 <u>current</u> 6 1 4 <u>current</u> 0.4	     history1   history1	      history2  history2  history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSoliconppmPotassiumppmINFRA-REDsoot %NitrationAbs/or	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>Iimit/base</b> >25 >20 <b>Iimit/base</b> >3 >20	6 0 53 <1 913 1058 998 1201 3334 <i>current</i> 6 1 4 <i>current</i> 0.4 6.9	      history1   history1  	      history2   history2  history2
BoronppmBariumppmMolybdenumppmManganeseppmMagnesiumppmCalciumppmPhosphorusppmZincppmSulfurppmSulfurppmSodiumppmPotassiumppmINFRA-REDSoot %NitrationAbs/cSulfationAbs/c	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 50 950 1050 995 1180 2600 <b>imit/base</b> >25 <b>imit/base</b> >20 <b>imit/base</b> >3 >20	6 0 53 <1 913 1058 998 1201 3334 <u>current</u> 6 1 4 <u>current</u> 0.4 6.9 18.5	       history1  history1  history1	      history2  history2  history2



# **OIL ANALYSIS REPORT**







	VISUAL		method	limit/base	current	history1	history2
	White Metal	o o e le v	*Visual				
		scalar		NONE	NONE		
	Yellow Metal	scalar scalar	*Visual *Visual	NONE	NONE		
	Precipitate Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
- 24	Appearance	scalar	*Visual	NORML	NORML		
Jun5/24	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual	20.2	NEG		
				line it /le e e e			
	FLUID PROPE		method	limit/base		history1	history2
	Visc @ 100°C	cSt	ASTM D445	12.00	11.6		
	GRAPHS						
	Ferrous Alloys						
	iron						
Jun5/24	12 - chromium						
2	10						
	8						
	6-						
	4						
	2 -						
	0		*******				
	Jun5/24			Jun5/24			
				7			
L D A	Non-ferrous Meta	ls					
	copper						
	8 - Lead						
	6 -						
	шdd						
	4						
	2						
	0 5		******	54			
	Jun5/24			Jun5/24			
5	Viscosity @ 100%	_		,			
10 J	Viscosity @ 100°C	• 			Base Numb	ber	
	14 - Abnormal				.0		
	13						
				(B/H0) 6	.0		
	0 12 - Base 0 12 - G			E_5	.0		
				y Buse and the second s	0		
	10 - Abnormal			ase 2	.0		
	9 -				.0-		
	84				.0		
	Jun5/24			Jun5/24	Jun5/24		Jun5/24
	~			~	~		~
Laboratory	: WearCheck USA - 50	1 Madiso	on Ave Carv	. NC 27513	Trans	ervice - Shop 1377 -	Berkelev-Davville
Sample No.	: PCA0119332	Rece		Jul 2024			hepherd Hill Rd
Lab Number	: 06225479	Teste	ed : 03	3 Jul 2024			Danielson, CT
Unique Number				Jul 2024 - Dor	n Baldridge		US 06239
lest Package	: FLEET (Additional To			<b>`</b>		Contact: Shop 13	

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.

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

Certificate L2367

Contact/Location: Shop 1377 Oil Analysis - TSV1377

T:

F:

shop1377@transervice.com