

# (N/A) Preferred Service-Yard Horse [Preferred Service-Yard Horse] 192A32003A

**Diesel Engine** 

Fluid PETRO CANADA DURON SHP 10W30 (16 QTS)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

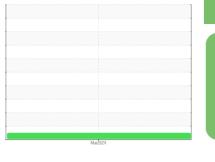
Metal levels are typical for a new component breaking in.

#### 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 Rating Trend

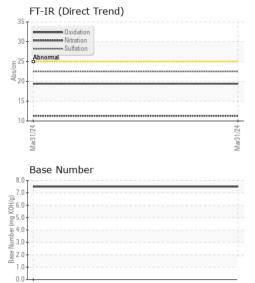


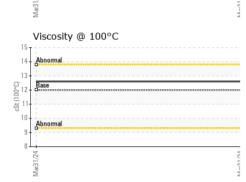
NORMAL

	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120228		
Sample Date		Client Info		31 Mar 2024		
Machine Age	hrs	Client Info		770		
Oil Age	hrs	Client Info		760		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ON	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	97		
Chromium	ppm	ASTM D5185m	>20	4		
Nickel	ppm	ASTM D5185m	>4	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	7		
Lead	ppm	ASTM D5185m	>40	1		
Copper	ppm	ASTM D5185m	>330	53		
Tin	ppm	ASTM D5185m	>15	2		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	6		
Barium	ppm	ASTM D5185m	0	6		
Molybdenum	ppm	ASTM D5185m	50	56		
-				50		
Manganese	ppm	ASTM D5185m	0	7		
Manganese Magnesium						
0	ppm	ASTM D5185m	0	7		
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	0 950	7 872		
Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050	7 872 1042		
Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995	7 872 1042 868		 
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180	7 872 1042 868 1122		  
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base	7 872 1042 868 1122 2748		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base	7 872 1042 868 1122 2748 current		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	0 950 1050 995 1180 2600 limit/base >25	7 872 1042 868 1122 2748 current 25	   history1	    history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base >25	7 872 1042 868 1122 2748 current 25 6	   history1 	   history2 
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b>	7 872 1042 868 1122 2748 current 25 6 4 4 current	   history1  	   history2 
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	7 872 1042 868 1122 2748 current 25 6 4 4 current 1.6	   history1   history1	   history2   history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b>	7 872 1042 868 1122 2748 current 25 6 4 4 current	   history1   history1 	   history2   history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 <b>limit/base</b> >25 	7 872 1042 868 1122 2748 current 25 6 4 current 1.6 11.3	   history1   history1 	   history2   history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	0 950 1050 995 1180 2600 <b>imit/base</b> >25 <b>imit/base</b> >3 >20 >30	7 872 1042 868 1122 2748 <u>current</u> 25 6 4 <u>current</u> 1.6 11.3 22.5	   history1   history1  	   history2   history2  history2



## **OIL ANALYSIS REPORT**





		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		
Ddor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPE		method	limit/base	current	history1	history2
/isc @ 100°C	cSt	ASTM D445	12.00	12.6		
GRAPHS						
Ferrous Alloys						
iron						
chromium nickel						
Mar3 1/24			Mar31/24			
Mar			Mar			
Non-ferrous Metal	ls					
copper 1			1			
tin						
• • • • • • • • • • • • • • • • • • •						
tin						
sector to the se			Ma3124			
Viscosity @ 100°C				Base Number		
Viscosity @ 100°C				Base Number		
Port Circuit and C			47/1822W 8.0 7.0	Base Number		
Provide the second seco			47/1822W 8.0 7.0	Base Number		
Port Circuit and C			47/1822W 8.0 7.0	Base Number		
Provide the second seco			47/1822W 8.0 7.0	Base Number		
Viscosity @ 100°C			8.0 7.0 (b)HOX 5.0 u) 4.0 3.0 3.0	Base Number		
Viscosity @ 100°C			8.0 7.0 (0)HOX Dul) aquiny seg 2.0	Base Number		
Viscosity @ 100°C			8.0 7.0 (0)HOX fbul) adumn adumny see 2.0 1.0	Base Number		
Viscosity @ 100°C			8.0 7.0 (b)HOX bul) aumpter 822 820 1.0 0.0			
Viscosity @ 100°C			8.0 7.0 (b)HOX bul) aumpter 822 820 1.0 0.0			
Viscosity @ 100°C			8.0 7.0 (0)HOX fbul) adumn adumny see 2.0 1.0	Base Number		
horizania horizania	2		8.0 7.0 (0)HOX fb0) 3.0 970 4.0 970 950 970 970 970 970 970 970 970 970 970 970 970 970 970 970 970 970	Mar31/24		
Horizon de la construcción de la	1 Madiso	n Ave., Cary	*70 (0)HOX bul John 4.0 +70 (0)HOX bul John 4.0 +70 (0)HOX bul John 3.0 +70 (0)HOX bul John 4.0 +70 (0)HOX bul John 4.0 (0)HOX	Mar31/24	vice - Shop 1920 -	Preferred Servio
horizania horizania	2	n Ave., Cary ved : 05	8.0 7.0 (0)HOX fb0) 3.0 970 4.0 970 950 970 970 970 970 970 970 970 970 970 970 970 970 970 970 970 970	Mar31/24	<i>vice - Shop 1920 -</i> 1955 W. North <i>J</i>	Preferred Servio



Unique Number : 10964324 Diagnosed : 05 Apr 2024 - Wes Davis Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tlindemann@transervice.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)

Report Id: TSV1920 [WUSCAR] 06139516 (Generated: 04/05/2024 17:37:48) Rev: 1

Laboratory Sample No. Lab Number

Submitted By: Tom Lindeman

Contact: Tom Lindeman

T: (630)376-8946

F: