

(PKD6978) Walgreens - Yard Horse [Walgreens - Yard Horse] 136A89102

Diesel Engine

PETRO CANADA DURON SHP 10W30 (3 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

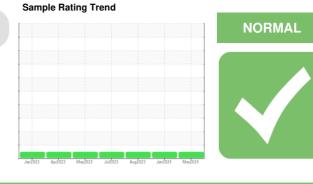
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

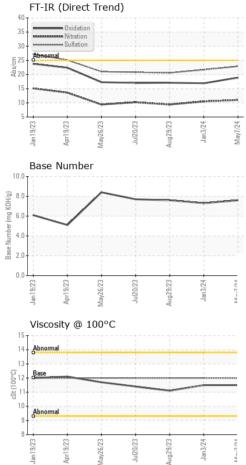
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0115841	PCA0111088	PCA0101908
Sample Date		Client Info		07 May 2024	03 Jan 2024	29 Aug 2023
Machine Age	hrs	Client Info		338164	15966	14836
Oil Age	hrs	Client Info		650	400	400
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	21	21	18
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	0	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	2	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	57	57	59
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m				
Calcium		ASTIVI DOTODITI	950	867	966	896
Galolum	ppm	ASTM D5185m	950 1050	867 970		896 1065
Phosphorus	ppm ppm				966	
		ASTM D5185m	1050	970	966 1086	1065
Phosphorus	ppm	ASTM D5185m ASTM D5185m	1050 995	970 983	966 1086 1043	1065 1031
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	970 983 1169	966 1086 1043 1294	1065 1031 1228
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600	970 983 1169 2866	966 1086 1043 1294 3037	1065 1031 1228 3592
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	970 983 1169 2866 current	966 1086 1043 1294 3037 history1	1065 1031 1228 3592 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1050 995 1180 2600 limit/base >25	970 983 1169 2866 current 3	966 1086 1043 1294 3037 history1 2	1065 1031 1228 3592 history2 4
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25	970 983 1169 2866 current 3 <1	966 1086 1043 1294 3037 history1 2 2 2	1065 1031 1228 3592 history2 4 4
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 <i>limit/base</i> >25 >20	970 983 1169 2866 current 3 <1 0	966 1086 1043 1294 3037 history1 2 2 2 0	1065 1031 1228 3592 history2 4 4 4 1
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 limit/base	970 983 1169 2866 current 3 <1 0 current 1.6	966 1086 1043 1294 3037 history1 2 2 2 0 history1 1.5	1065 1031 1228 3592 history2 4 4 1 1 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	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	1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	970 983 1169 2866 current 3 <1 0 current	966 1086 1043 1294 3037 history1 2 2 2 0 history1	1065 1031 1228 3592 history2 4 4 4 1 history2 1.2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7824 *ASTM D7415	1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20	970 983 1169 2866 current 3 <1 0 current 1.6 11.0	966 1086 1043 1294 3037 history1 2 2 2 0 history1 1.5 10.5	1065 1031 1228 3592 history2 4 4 4 1 history2 1.2 9.4
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAM	ppm ppm ppm TTS ppm ppm ppm ppm ppm % Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415	1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20 >30	970 983 1169 2866 current 3 <1 0 current 1.6 11.0 22.9 current	966 1086 1043 1294 3037 history1 2 2 2 0 history1 1.5 10.5 21.7 history1	1065 1031 1228 3592 history2 4 4 4 1 1 history2 1.2 9.4 20.6 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7824 *ASTM D7415	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	970 983 1169 2866 current 3 <1 0 current 1.6 11.0 22.9	966 1086 1043 1294 3037 history1 2 2 2 0 <u>history1</u> 1.5 10.5 21.7	1065 1031 1228 3592 history2 4 4 4 1 history2 1.2 9.4 20.6



OIL ANALYSIS REPORT



)			VISUAL			method						story2	
		White Metal		scalar	*Visual	NONE	NONE	1	NONE	NO	NE		
			Yellow Metal		scalar	*Visual	NONE	NONE		NONE	NO		
and the second	Precipitate		scalar	*Visual	NONE	NONE	1	NONE	NO	NE			
			Silt		scalar	*Visual	NONE	NONE	ľ	NONE	NO	NE	
and the second	Debris		scalar	*Visual	NONE	NONE	ľ	NONE	NON	NE			
			Sand/Dirt		scalar	*Visual	NONE	NONE	1	NONE	NON	NE	
Jul20/23	Aug29/23 Jan3/24	May7/24	Appearance		scalar	*Visual	NORML	NORML		NORML	NOF	RML	
Ju	Aug	W	Odor		scalar	*Visual	NORML	NORML		NORML	NOF		
			Emulsified W		scalar	*Visual	>0.2	NEG		NEG	NEC		
			Free Water		scalar	*Visual		NEG	1	NEG	NEC	à	
			FLUID PF			method	limit/base	current		history1		story2	
			Visc @ 100°0		cSt	ASTM D445	12.00	11.5	1	11.5	11.1		
			GRAPHS										
			Ferrous Allo	oys									
23	23-24	10	70- iron										
Jul20/23	Aug29/23 Jan3/24		60 - nickel										
	4		50										
			틆 40										
:	1		30										
			20-										
1			10-										
			33 33 34 33	/23	/23	/23 -	/24						
			Jan 19/23 Apr1 9/23	May26/23	Jul20/23	Aug29/23 Jan3/24	May7/24						
			Non-ferrou										
Jul20/23	Aug29/23	V C C	¹⁰ T										
Jul	Aug2		8 - copper										
			6										
			Ed 4										
			2										
			0										
			Jan 19/23 Apr1 9/23	ay26/23	Jul20/23	Aug29/23 Jan3/24	lay7/24						
				M	٦u	Aug	Ŵ						
			Viscosity @	100°C			9.	Base Numb	er				
			14 - Abnormal				8.	.0-	1				
			13				(B/H	0					
			012 - Base										
			() 12 - Base () 12 - Base () 11 - Base				(0)7. HOX 00 W Jack Constraints MUX 00 MUX 0	.0					
			10				Nar 3	.0					
			Abnormal										
			8										
			9/23	6/23 .	Jul20/23 -	ug29/23 - Jan3/24 -	May7/24		6/23 -	Jul20/23 -	ug29/23 - Jan3/24 -		
			Jan 19,23 Apr 19,23	May26/23	Jul2	Aug29/23 Jan3/24	May	Jan 19/23 Apr 19/23	May26/23	Jul2	Aug29/23 Jan3/24		
4		Laboratory					ervice - Shop 1370 - Berkeley-Perrysbur						
			: PCA0115841 : 06198545			Received : 03 Jun 2024 Tested : 04 Jun 2024				28727 Oregon Roa Perrysburg, Ol			
150.4CC (7025						Diagnosed : 04 Jun 2024 - Wes Davis				US 4355			
Certificate L2367 Test Package		: FLEET	_	-					Contact: Curtis Ha				
	Alaia a a mar	ale report	contact Customer Service at 1-800-237-1369.chart@transervice.comare outside of the ISO 17025 scope of accreditation.T: (419)666-327										

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Submitted By: Curtis Hart