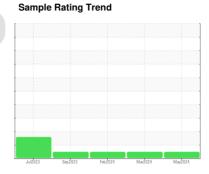


OIL ANALYSIS REPORT

Walgreens - Yard Horse [Walgreens - Yard Horse] 136A82254

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

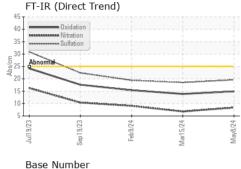
Fluid Condition

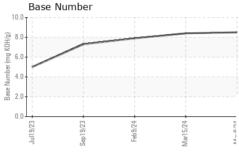
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

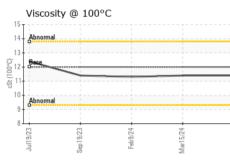
Sample Number Client Info PCA0123388 PCA0116430 PCA0116451 Sample Date Client Info O8 May 2024 15 Mar 2024 09 Feb 2024 Machine Age hrs Client Info 3901 3560 3368 3368 Oil Age hrs Client Info 341 192 377 Oil Changed Client Info Changed Changed Changed Changed Changed NORMAL NORMAL	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2		
Sample Date						•	•		
Machine Age hrs Client Info 3901 3560 3368 Oil Age hrs Client Info 341 192 377 Oil Changed Client Info Changed									
Oil Age hrs Client Info 341 192 377 Oil Changed Client Info Changed Changed Changed Changed Sample Status Client Info Changed Changed Changed NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history2 Euel WC Method >5 <1.0 <1.0 <1.0 Water WC Method NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 14 10 26 Chromium ppm ASTM D5185m >100 14 10 26 Chromium ppm ASTM D5185m >20 21 <1 2 Nickel ppm ASTM D5185m >30 0 0 <1 Lead ppm ASTM D5185m >30 0 0 <1		hrs			•				
Client Info Changed NORMAL NORMAL NORMAL NORMAL NORMAL									
CONTAMINATION	-	1110			-				
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	-		Olichi iilio			_			
Fuel		DNI	method	limit/base					
Water WC Method >0.2 NEG NEG NEG Glycol WC Method Imit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 14 10 26 Chromium ppm ASTM D5185m >20 <1		אוע							
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 14 10 26 Chromium ppm ASTM D5185m >20 <1									
WEAR METALS				>0.2					
Irron			WC Method		NEG	NEG	NEG		
Chromium	WEAR METALS		method	limit/base	current	history1	history2		
Nickel	-	ppm	ASTM D5185m	>100					
Description	Chromium	ppm	ASTM D5185m	>20	<1	<1	2		
Silver	Nickel	ppm		>4					
Aluminum ppm ASTM D5185m >20 2 2 1 Lead ppm ASTM D5185m >40 0 0 <1	Titanium	ppm	ASTM D5185m		0	0	<1		
Lead	Silver	ppm	ASTM D5185m	>3			<1		
Copper ppm ASTM D5185m >330 0 <1 <1 Tin ppm ASTM D5185m >15 <1	Aluminum	ppm	ASTM D5185m	>20	2	2	1		
Tin	Lead	ppm	ASTM D5185m	>40	0	0	<1		
Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 4 9 8 Barium ppm ASTM D5185m 0 1 0 0 Molybdenum ppm ASTM D5185m 0 59 60 62 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 906 882 892 Calcium ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 295 1094 990 1028 Zinc ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 histor	Copper	ppm	ASTM D5185m	>330	0	<1	<1		
Cadmium ppm ASTM D5185m 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 4 9 8 Barium ppm ASTM D5185m 0 1 0 0 Molybdenum ppm ASTM D5185m 50 59 60 62 Manganese ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m	>15	<1	<1	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	<1		
Boron	Cadmium	ppm	ASTM D5185m		0	0	<1		
Barium ppm ASTM D5185m 0 1 0 0 Molybdenum ppm ASTM D5185m 50 59 60 62 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2		
Molybdenum ppm ASTM D5185m 50 59 60 62 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 906 882 892 Calcium ppm ASTM D5185m 1050 1031 1029 1059 Phosphorus ppm ASTM D5185m 1050 1031 1029 1059 Phosphorus ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 1180 1216 1196 1153 Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1 2 9 INFRA-RED method	Boron	ppm	ASTM D5185m	2	4	9	8		
Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 906 882 892 Calcium ppm ASTM D5185m 1050 1031 1029 1059 Phosphorus ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1	Barium	ppm	ASTM D5185m	0	1	0	0		
Magnesium ppm ASTM D5185m 950 906 882 892 Calcium ppm ASTM D5185m 1050 1031 1029 1059 Phosphorus ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 1180 1216 1196 1153 Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m	50	59	60	62		
Calcium ppm ASTM D5185m 1050 1031 1029 1059 Phosphorus ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 1180 1216 1196 1153 Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m	0	<1	<1	<1		
Phosphorus ppm ASTM D5185m 995 1094 990 1028 Zinc ppm ASTM D5185m 1180 1216 1196 1153 Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m	950	906	882	892		
Zinc ppm ASTM D5185m 1180 1216 1196 1153 Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m	1050	1031	1029	1059		
Sulfur ppm ASTM D5185m 2600 3452 3422 3605 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m >20 <1	Phosphorus	ppm	ASTM D5185m	995	1094	990	1028		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m <1	Zinc	ppm	ASTM D5185m	1180	1216	1196	1153		
Silicon ppm ASTM D5185m >25 3 3 5 Sodium ppm ASTM D5185m <1 <1 0 Potassium ppm ASTM D5185m >20 <1 2 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.1 0.6 1.1 Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	Sulfur	ppm	ASTM D5185m	2600	3452	3422	3605		
Sodium ppm ASTM D5185m <1 <1 0 Potassium ppm ASTM D5185m >20 <1 2 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.1 0.6 1.1 Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	CONTAMINANTS method limit/base current history1 history2								
Potassium ppm ASTM D5185m >20 <1 2 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.1 0.6 1.1 Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	Silicon	ppm	ASTM D5185m	>25	3	3	5		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.1 0.6 1.1 Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	Sodium	ppm	ASTM D5185m		<1	<1	0		
Soot % % *ASTM D7844 >3 1.1 0.6 1.1 Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	Potassium	ppm	ASTM D5185m	>20	<1	2	9		
Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	INFRA-RED		method	limit/base	current	history1	history2		
Nitration Abs/cm *ASTM D7624 >20 8.4 6.8 9.1 Sulfation Abs/.1mm *ASTM D7615 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4	Soot %	%	*ASTM D7844	>3	1.1	0.6	1.1		
Sulfation Abs/.1mm *ASTM D7415 >30 19.6 18.5 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 13.9 15.4									
Oxidation									
	FLUID DEGRADA	ATION	method_	limit/base	current	history1	history2		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	13.9	15.4		
		mg KOH/g	ASTM D2896		8.5	8.4	7.9		

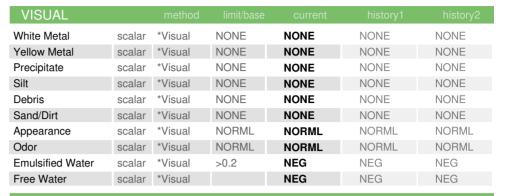


OIL ANALYSIS REPORT



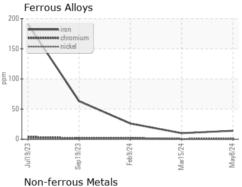


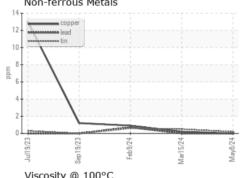


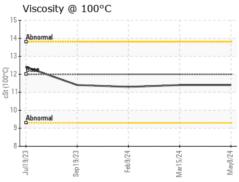


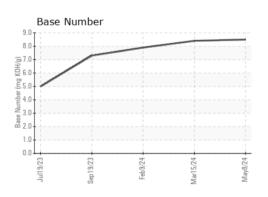
FLUID F	PROPERILES	method				history2
Visc @ 100	°C cSt	ASTM D445	12.00	11.4	11.4	11.3

GRAPHS













Laboratory Sample No.

Lab Number : 06178446 Unique Number : 11029772

: PCA0123388

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 May 2024 Tested

: 14 May 2024 Diagnosed : 14 May 2024 - Wes Davis

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass

101 Alliance Parkway Willamston, SC US 29697

Contact: Sonny Boucher

sboucher@transervice.com

Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (864)226-2304 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (864)226-2329

Report Id: TSV1373 [WUSCAR] 06178446 (Generated: 05/14/2024 18:43:30) Rev: 1

Submitted By: Sonny Boucher