

OIL ANALYSIS REPORT





Machine Id 420131 Component **Diesel Engine**

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

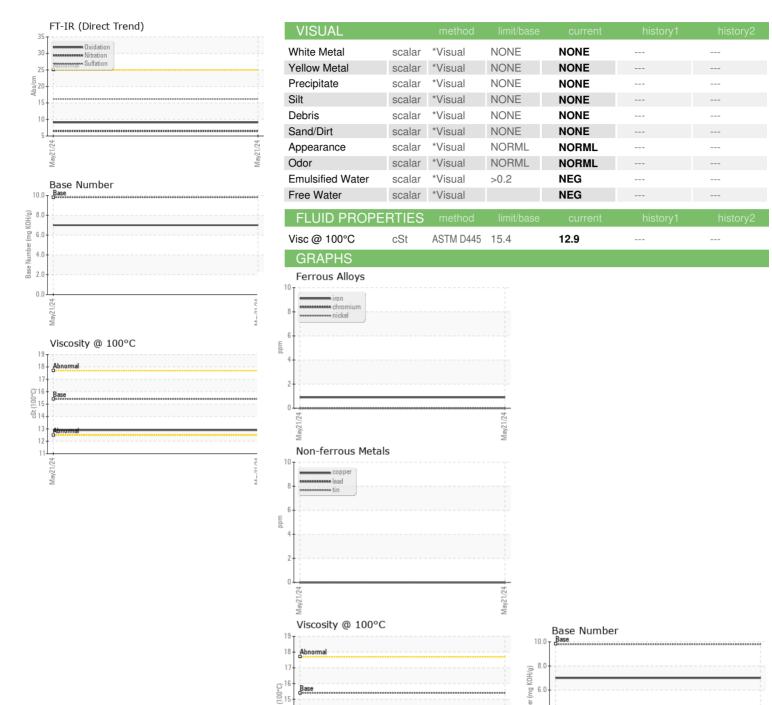
Recommendation

(Customer Sample Comment: Sample only, out of service)

SAMPLE INFORMATION method Imilibase current history2	N SHP 15W4U (-	GAL)			May2024		
Compage Comp	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		GFL0116293		
Dil Changed	Sample Date		Client Info		21 May 2024		
Contample Cont	Machine Age	hrs	Client Info		699818		
CONTAMINATION method militibase current history1 history2	Oil Age	hrs	Client Info		699818		
CONTAMINATION	Oil Changed		Client Info		Not Changd		
Water WC Method So.2 NEG So.3 S	Sample Status				NORMAL		
Wester Wc Method Wc Method Wc Method Wc Method NEG Wc Method Wc Method NEG Wc Method Wc Meth	CONTAMINAT	ΓΙΟΝ	method	limit/base	current	history1	history2
WEAR METALS	-uel		WC Method	>3.0	<1.0		
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >120 <1	<i>N</i> ater		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
ASTM D5185m Solution Abs/.1mm 'ASTM D5185m Solution Abs/.1mm 'ASTM D7414 Solution S	WEAR METAL	_S	method	limit/base	current	history1	history2
Silver	ron	ppm	ASTM D5185m	>120	<1		
ASTM D5185m Part	Chromium	ppm	ASTM D5185m	>20	0		
Silver	Nickel	ppm	ASTM D5185m	>5	0		
Ast Ast	Γitanium	ppm	ASTM D5185m	>2	0		
December December	Silver	ppm	ASTM D5185m	>2	0		
Copper	Aluminum	ppm	ASTM D5185m	>20	<1		
Tin	_ead	ppm	ASTM D5185m	>40	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 3 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 5 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 1010 29 Magnesium ppm ASTM D5185m 1070 2287 Phosphorus ppm ASTM D5185m 1150 936 Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m >25 4	Copper	ppm	ASTM D5185m	>330	0		
ADDITIVES	Γin	ppm	ASTM D5185m	>15	0		
ADDITIVES	√anadium	ppm	ASTM D5185m		0		
Soron ppm ASTM D5185m 0 0 0 0 0 0 0 0 0	Cadmium	ppm	ASTM D5185m		0		
Description	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 60 5 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	0	3		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 1010 29 Calcium ppm ASTM D5185m 1070 2287 Phosphorus ppm ASTM D5185m 1150 936 Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m 2060 4133 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 4 Solicon ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 Potassium ppm ASTM D5185m >20 4 Soot % *ASTM D7844 >4 0.1	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 1010 29 Calcium ppm ASTM D5185m 1070 2287 Phosphorus ppm ASTM D5185m 1150 936 Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m 2060 4133 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Potassium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7414 >25<	Molybdenum	ppm	ASTM D5185m	60	5		
Calcium ppm ASTM D5185m 1070 2287 Phosphorus ppm ASTM D5185m 1150 936 Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m 2060 4133 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Potassium ppm ASTM D5185m 20 4 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.1 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method li	Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus ppm ASTM D5185m 1 150 936 Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m 2060 4133 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.1 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base	Magnesium	ppm	ASTM D5185m	1010	29		
Zinc ppm ASTM D5185m 1270 1047 Sulfur ppm ASTM D5185m 2060 4133	Calcium	ppm	ASTM D5185m	1070	2287		
Sulfur ppm ASTM D5185m 2060 4133 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.1 Silfration Abs/cm *ASTM D7624 >20 6.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.1	Phosphorus	ppm	ASTM D5185m	1150	936		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.1 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.1	Zinc	ppm	ASTM D5185m	1270	1047		
Solition ppm ASTM D5185m >25 4	Sulfur	ppm	ASTM D5185m	2060	4133		
Sodium	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >4 0.1 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.1	Silicon	ppm	ASTM D5185m	>25	4		
INFRA-RED	Sodium	ppm	ASTM D5185m		2		
Soot %	Potassium	ppm	ASTM D5185m	>20	4		
Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.1	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 9.1	Soot %	%	*ASTM D7844	>4	0.1		
FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 9.1	Nitration	Abs/cm	*ASTM D7624	>20	6.5		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30			
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.0	Oxidation	Abs/.1mm	*ASTM D7414	>25	9.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0		



OIL ANALYSIS REPORT







Certificate 12367

Sample No.

₹ 14

Lab Number : 06191699 Unique Number : 11048451 Test Package : FLEET

: GFL0116293

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 May 2024

Tested : 29 May 2024 Diagnosed : 29 May 2024 - Angela Borella

0.0

GFL Environmental - 625 - Harrison Hauling 2480 S Clare Ave Clare, MI US 48617

> Contact: Glenda Standen gstanden@gflenv.com T:

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)

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