

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 826025-1066

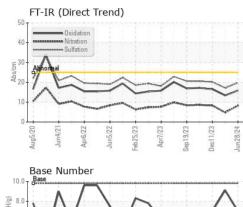
Diesel Engine

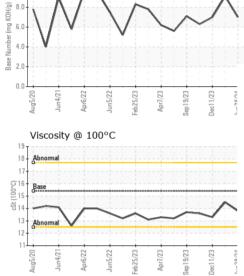
PETRO CANADA DURON SHP 15W40 (--- LTR)

GNOSIS	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
mmendation	Sample Number		Client Info		GFL0017149	GFL0113594	GFL0103823
nple at the next service interval to monitor.	Sample Date		Client Info		28 Jun 2024	07 Mar 2024	11 Dec 2023
	Machine Age	hrs	Client Info		15334	14974	14420
nponent wear rates are normal.	Oil Age	hrs	Client Info		360	454	465
mination	Oil Changed		Client Info		Changed	N/A	Changed
Contamination There is no indication of any contamination in the bil.	Sample Status				NORMAL	NORMAL	NORMAL
	CONTAMINA	TION	method	limit/base	current	history1	history2
Fluid Condition	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
N result indicates that there is suitable hity remaining in the oil. The condition of the	Water		WC Method	>0.2	NEG	NEG	NEG
suitable for further service.	Glycol		WC Method		NEG	NEG	NEG
	WEAR META	LS	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>120	13	2	11
	Chromium	ppm	ASTM D5185m		<1	0	<1
	Nickel	ppm	ASTM D5185m		4	<1	10
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum		ASTM D5185m		3	<1	3
	Lead	ppm	ASTM D5185m		0	0	0
		ppm	ASTM D5185m		<1	1	2
	Copper Tin	ppm	ASTM D5185m			0	<1
		ppm		>10	0		
	Vanadium Cadmium	ppm	ASTM D5185m ASTM D5185m		0	0	<1 <1
		ppm		l:		-	
	ADDITIVES		method	limit/base		history1	history2
	Boron	ppm	ASTM D5185m		3	3	5
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	58	53	59
	Manganese	ppm	ASTM D5185m	0	<1	0	<1
	Magnesium	ppm	ASTM D5185m	1010	1000	910	957
	Calcium	ppm	ASTM D5185m	1070	1160	1025	1061
	Phosphorus	ppm	ASTM D5185m	1150	1031	920	948
	Zinc	ppm	ASTM D5185m	1270	1302	1133	1211
	Sulfur	ppm	ASTM D5185m	2060	3387	3419	3151
	CONTAMINA	NTS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	5	4	7
	Sodium	ppm	ASTM D5185m		4	<1	4
	Potassium	ppm	ASTM D5185m	>20	<1	0	3
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>4	0.3	0.1	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	4.8	8.3
	Sulfation	Abs/.1mm	*ASTM D7415		19.8	17.2	20.2
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation		*ASTM D7414	>25	15.9	13.4	16.5



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C C C C C C C C C C C C C C	end)	VISUAL		method	limit/base	current	history1	history2
Precipitate calar Visual NONE NONE NONE NONE NONE NONE Sand/Unit scalar Visual NONE NONE NONE NONE NONE NONE Sand/Unit scalar Visual NONE NONE NONE NONE NONE NONE NONE NONE		White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Site books coalar Visual NONE NONE NONE NONE NONE Sand/Dirit scalar Visual NONE NONE NONE NONE NONE NONE NONE NONE		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar Visual NONE NONE NONE NONE NONE NONE NONE SandDird Appearance scalar Visual NORML		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt scalar Visual NONE NONE NORML NO		Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance scalar Visual NORML		Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Laboratory WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Sample No. Sampl	And	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Laboratory WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Sample No. Sampl	Jun5/22 eb25/23 Apr7/23 ep19/23 bc11/23 bc11/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar Visual NEG NEG NEG HEUD PROPERTIES method limitbase current history1 history2 Visc@ 100°C cst ASTM D445 15.4 13.8 14.5 13.3 GRAPHS Ton (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Co	Jun Feb2 Sep1 Jun2 Jun2	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
ELUID PROPERTIES method initibase current biology biology Visc @ 100°C cSi ASTM D445 15.4 13.8 14.5 13.3 Interpretation of the second data of the se		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Visc @ 100°C ost ASTM D445 15.4 13.8 14.5 13.3 CRAPHS Tron (pm)		Free Water	scalar	*Visual		NEG	NEG	NEG
GRAPHS Tron (ppm) Graphing C C C C C C C C C C C C C	\land	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Laboratory :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: Seriority :: WearCheck USA - 501 Madison Ave.,	$\vee \vee $	Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.5	13.3
C C C C C C C C C C C C C C		GRAPHS						
C C C C C C C C C C C C C C		Iron (ppm)				Lead (ppm)		
C C C C C C C C C C		³⁰⁰ I Same			100	T :- : : : : : : : : T (
C C C C C C C C C C C C C C	Jun5/22 eb25/23 Apr7/23 kep19/23 bec11/23	200 4						
C C C C C C C C C C C C C C	Ap Ap	Earo						
Laboratory: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. :: GFL::0017149 Sample No. :: GFL::0017149 Tested ::::::::::::::::::::::::::::::::::::	°C							
Auminum (ppm) Auminum (ppm) Auminu						\sim		
Aluminum (ppm) Aluminum (ppm)		5/20 6/22 5/22	5/23	9/23			5/22 - 5/23 -	9/23
Liboratory :: WearCheck USA - 501 Madison Ave., Cary, NC 2751 Sample No.: : : : : : : : : : : : : : : : : : :		Aug' Jun Jun	Feb2	Sep1	Jun2	Aug' Jun Apri	Jun' Feb2! Apri	Sep1
Laboratory :: WearCheck USA - 501 Madison Ave., Cary, NC 2751 Sample No. :: GFL0017149 Sample No.	~						pm)	
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Educatory: WearCheck USA - 501 Madison Ave., Cary, NC 27513. Sample No.: GFL0017149 Laboratory: WearCheck USA - 501 Madison Ave., Cary, NC 27513. Sample No.: GFL0017149 Tested :: 08 Jul 2024 Diagnosed :: 08 Jul 2024 - Wes Davis Diagnosed :: 08 Jul 2024 - Wes Davis Di		5/20 6/22	5/23	9/23	8/24	5/20 14/21. 6/22.	5/22 - 5/23 -	9/23 - 1/23 - 8/24
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Laboratory :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Midlothian, VA Laboratory :: GFL0017149 Sample No.: : GFL0017149 Lab Number :: 11113104 Diagnosed :: 08 Jul 2024 Diagnosed :: 08 Jul 2024 - Wes Davis Contact: Corbin Umphlet * Denotes test methods that are outside of the ISO 17025 scope of accreditation. * Denotes test methods that are outside of the ISO 17025 scope of accreditation.								
Laboratory :: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.: :GFL0017149 Sample No.: :GFL0017149 Laboratory :: 06229611 Test Packag: :MOB1+ 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. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.		툡 200 -			<u> </u> 40) Abnormal		
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Viscosity @ 100°C Uiscosity @ 1		ug5/2C Jun4/21 Jun5/22	b25/23	p19/23 c11/23	n28/24	ug5/2(un4/2: pr6/22	un5/22 b25/23 pr7/23	p19/23 c11/23 n28/24
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 654S - Midlothian Sample No. : GFL0017149 Received : 05 Jul 2024 Lab Number : 06229611 Tested : 08 Jul 2024 - Wes Davis Unique Number : 11113104 Diagnosed : 08 Jul 2024 - Wes Davis Test Package : MOB1+ 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.				Sec. A	ηr			Ju De
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 654S - Midlothian Sample No. : GFL0017149 Received : 05 Jul 2024 12230 Deergrove Road Lab Number : 06229611 Tested : 08 Jul 2024 Midlothian, VA Unique Number : 11113104 Diagnosed : 08 Jul 2024 US 23112 Test Package : MOB1+ 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. T:						Base	<u></u>	
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Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 654S - Midlothian Sample No. : GFL0017149 Received : 05 Jul 2024 12230 Deergrove Road Lab Number : 06229611 Tested : 08 Jul 2024 Midlothian, VA Unique Number : 11113104 Diagnosed : 08 Jul 2024 - Wes Davis US 23112 Certificate L2367 Test Package : MOB1+ Contact: Corbin Umphlet To discuss this sample report, contact Customer Service at 1-800-237-1369. cumphlet@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T:		10 + 12 - 22 - 22	723	23	0.0	/21 /21	22+	23 + 24 +
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 654S - Midlothian Sample No. : GFL0017149 Received : 05 Jul 2024 12230 Deergrove Road Lab Number : 06229611 Tested : 08 Jul 2024 Midlothian, VA Unique Number : 11113104 Diagnosed : 08 Jul 2024 - Wes Davis US 23112 Certificate L2367 Test Package : MOB1+ Contact: Corbin Umphlet To discuss this sample report, contact Customer Service at 1-800-237-1369. cumphlet@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T:		Aug5. Jun4 Apr6/	Feb 25,	Apr/ Sep19, Jec11/	Jun 28	Aug5 Jun4 Apr6,	Jun5 Feb25, Apr7/	Sep19 Dec11, Jun28,
To discuss this sample report, contact Customer Service at 1-800-237-1369.cumphlet@gflenv.com* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.T:	Sample No. Lab Numbe Unique Numbe	:GFL0017149 r :06229611 r :11113104	Recei Teste	ived : 05 ed : 08	5 Jul 2024 3 Jul 2024		12230 [Deergrove Road Midlothian, VA US 23112
* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.	•		ice at 1-8	300-237-136	9.			
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:	* - Denotes test methods that	at are outside of the ISO 1	7025 scc	pe of accred	litation.		-	T:
	Statements of conformity to	specifications are based of	on the sin	nple accepta	nce decision	rule (JCGM 106	3:2012)	F:

Report Id: GFL654S [WUSCAR] 06229611 (Generated: 07/09/2024 10:02:52) Rev: 1

Submitted By: GFL654,GFL654S,GFL659 - Chuck Warr