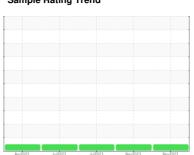


OIL ANALYSIS REPORT

Sample Rating Trend









PETRO CANADA DURON SHP 15W40 (--- 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

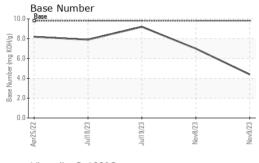
Fluid Condition

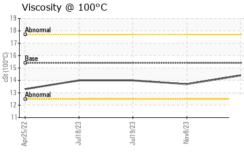
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Apr2022				
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0059164	GFL0059162	GFL0085032
Sample Date		Client Info		09 Nov 2023	08 Nov 2023	19 Jul 2023
Machine Age	mls	Client Info		105803	105715	99412
Oil Age	mls	Client Info		105803	105715	99412
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	60	31	4
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	2	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	3	2	0
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	6	0	4
Barium	ppm	ASTM D5185m	0	6	6	0
Molybdenum	ppm	ASTM D5185m	60	59	60	58
Manganese						
	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	1010	<1 838	<1 877	<1 987
-						
Magnesium	ppm	ASTM D5185m	1010	838	877	987
Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	1010 1070	838 1038	877 1057	987 1084
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150	838 1038 920	877 1057 980	987 1084 1057
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270	838 1038 920 1116	877 1057 980 1173	987 1084 1057 1271
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1010 1070 1150 1270 2060	838 1038 920 1116 2911	877 1057 980 1173 3257	987 1084 1057 1271 3683
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1010 1070 1150 1270 2060 limit/base	838 1038 920 1116 2911 current	877 1057 980 1173 3257 history1	987 1084 1057 1271 3683
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1010 1070 1150 1270 2060 limit/base	838 1038 920 1116 2911 current	877 1057 980 1173 3257 history1	987 1084 1057 1271 3683 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	838 1038 920 1116 2911 current 7	877 1057 980 1173 3257 history1 4	987 1084 1057 1271 3683 history2 2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	838 1038 920 1116 2911 current 7 4 3	877 1057 980 1173 3257 history1 4 0	987 1084 1057 1271 3683 history2 2 2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm	ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20	838 1038 920 1116 2911 current 7 4 3	877 1057 980 1173 3257 history1 4 0 9	987 1084 1057 1271 3683 history2 2 2 0
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >6	838 1038 920 1116 2911 current 7 4 3 current	877 1057 980 1173 3257 history1 4 0 9 history1 0.6	987 1084 1057 1271 3683 history2 2 2 0 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >6 >20	838 1038 920 1116 2911 current 7 4 3 current 1.2 14.9	877 1057 980 1173 3257 history1 4 0 9 history1 0.6 9.9	987 1084 1057 1271 3683 history2 2 2 0 history2 0.2 5.8
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >6 >20 >30	838 1038 920 1116 2911 current 7 4 3 current 1.2 14.9 28.9	877 1057 980 1173 3257 history1 4 0 9 history1 0.6 9.9 21.4	987 1084 1057 1271 3683 history2 2 2 0 history2 0.2 5.8 17.8
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >6 >20 >30 limit/base	838 1038 920 1116 2911 current 7 4 3 current 1.2 14.9 28.9	877 1057 980 1173 3257 history1 4 0 9 history1 0.6 9.9 21.4 history1	987 1084 1057 1271 3683 history2 2 2 2 0 history2 0.2 5.8 17.8



OIL ANALYSIS REPORT

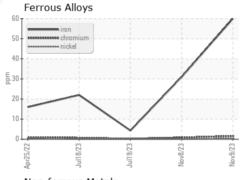


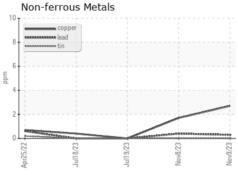


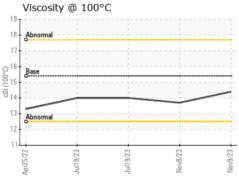
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

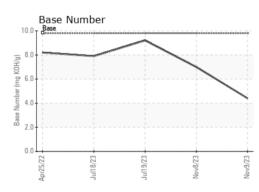
FLUID PROP	EKIIES	method	ilmit/base		nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	13.7	14.0

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10740450

: GFL0059164 : 06006688 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 Nov 2023 Diagnosed : 15 Nov 2023 Diagnostician : Don Baldridge

GFL Environmental - 410 - Michigan West 39000 Van Born Rd Wayne, MI

US 48184 Contact: Belal Dgheish bdgheish@gflenv.com T: (734)714-2340

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)

Report Id: GFL410 [WUSCAR] 06006688 (Generated: 11/15/2023 20:57:19) Rev: 1