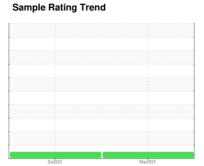


OIL ANALYSIS REPORT



Machine Id 510005 Transmission (Auto)

PETRO CANADA DuraDrive HD Synthetic 668 (--- 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.

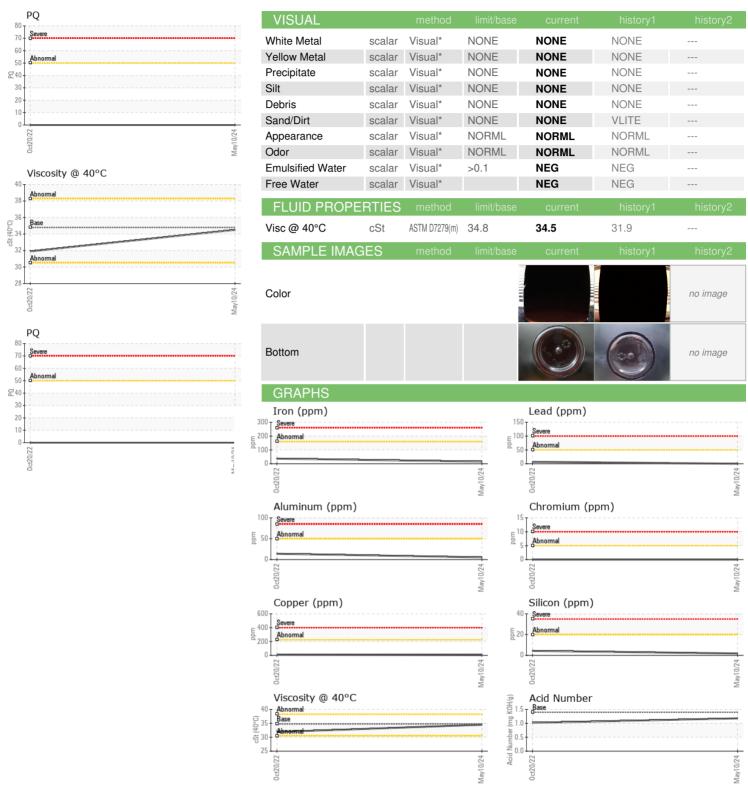
Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION method Imilibase current history1 history2	, oj	(•					
Sample Date Client Info 9893 6719	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 9893 6719	Sample Number		Client Info		GFL0117349	GFL0060272	
Oil Age hrs Client Info 1116 1040 Oil Changed Changed Changed Sample Status Client Info Changed Changed CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM DS185m >50 0 0 Iron ppm ASTM DS185m >50 0 0 Chromium ppm ASTM DS185m >5 0 0 Chromium ppm ASTM DS185m >5 0 0 Irin ppm ASTM DS185m >50 0 0 Lead ppm ASTM DS185m >50 0 7 Copper ppm ASTM DS185m >1	Sample Date		Client Info		10 May 2024	20 Oct 2022	
Client Info Changed Changed NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2	Machine Age	hrs	Client Info		9893	6719	
NORMAL N	Oil Age	hrs	Client Info		1116	1040	
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 PQ ASTM D5185/m >50 0 0 Iron ppm ASTM D5185/m >50 0 0 Chromium ppm ASTM D5185/m >5 0 0 Nickel ppm ASTM D5185/m >5 0 0 Alluminum ppm ASTM D5185/m >50 0 0 Alluminum ppm ASTM D5185/m >50 0 7 Lead ppm ASTM D5185/m >50 0 7 Lead ppm ASTM D5185/m >10 0 1	Oil Changed		Client Info		Changed	Changed	
Water WC Method >0.1 NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* >50 0 0 Iron ppm ASTM D8185(m) >50 0 0 Chromium ppm ASTM D5185(m) >5 0 0 Nickel ppm ASTM D5185(m) >5 0 0 Silver ppm ASTM D5185(m) >5 0 0 Aluminum ppm ASTM D5185(m) >5 0 0 Aluminum ppm ASTM D5185(m) >50 5 14 Lead ppm ASTM D5185(m) >50 0 7 Copper ppm ASTM D5185(m) >50 0 7 Bead ppm ASTM D5185(m) >10 0 1	Sample Status				NORMAL	NORMAL	
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* >50 0 0	CONTAMINAT	ION	method	limit/base	current	history1	history2
PQ	Water		WC Method	>0.1	NEG	NEG	
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Chromium ppm ASTM D5185(m) >5 0 0	PQ		ASTM D8184*	>50	0	0	
Nickel	Iron	ppm	ASTM D5185(m)	>160	15	37	
Titanium	Chromium	ppm	ASTM D5185(m)	>5	0	0	
Silver	Nickel	ppm	ASTM D5185(m)	>5	0	0	
Aluminum	Titanium	ppm	ASTM D5185(m)		0	0	
Lead	Silver	ppm	ASTM D5185(m)	>5	0	0	
Copper ppm ASTM D5185(m) >225 3 11 Tin ppm ASTM D5185(m) >10 0 1 Antimony ppm ASTM D5185(m) 0 <1	Aluminum	ppm	ASTM D5185(m)	>50	5	14	
Tin	Lead	ppm	ASTM D5185(m)	>50	0	7	
Antimony ppm ASTM D5185(m) 0 <1 Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 78 118 81 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 78 118 81 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 0 -1 Magnesium ppm ASTM D5185(m) 0 1 -1 Calcium ppm ASTM D5185(m) 13 65 122 Phosphorus ppm ASTM D5185(m) 3 3 3 <	Copper	ppm	ASTM D5185(m)	>225	3	11	
Vanadium ppm ASTM D5185(m) 0 0 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 78 118 81 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 0 0 Magnesium ppm ASTM D5185(m) 0 1 -1 Calcium ppm ASTM D5185(m) 222 270 240 Phosphorus ppm ASTM D5185(m) 1326 1029 1487 Zinc ppm ASTM D5185(m) >20 2 4 CONTAMINAN	Tin	ppm	ASTM D5185(m)	>10	0	1	
Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 78 118 81 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 0 Manganese ppm ASTM D5185(m) 0 1 Magnesium ppm ASTM D5185(m) 0 1 Calcium ppm ASTM D5185(m) 113 65 122 Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 3 Sulfur ppm ASTM D5185(m) 20 1 41 41 CONTAM	Antimony	ppm	ASTM D5185(m)		0	<1	
Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 78 118 81 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 <1	Vanadium	ppm	ASTM D5185(m)		0	0	
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 78 118 81 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 -1 Magnesium ppm ASTM D5185(m) 0 1 -1 Calcium ppm ASTM D5185(m) 13 65 122 Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1	Beryllium	ppm	ASTM D5185(m)		0	0	
Boron ppm ASTM D5185(m) 78 118 81	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 <1 Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 0 1 <1 Calcium ppm ASTM D5185(m) 113 65 122 Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) >20 <1 <1 FLUID DEGRADATION method limit/base current history1 history	Boron	ppm	ASTM D5185(m)	78	118	81	
Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 0 1 <1	Barium	ppm	ASTM D5185(m)		0	0	
Magnesium ppm ASTM D5185(m) 0 1 <1 Calcium ppm ASTM D5185(m) 113 65 122 Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)	0	0	<1	
Calcium ppm ASTM D5185(m) 113 65 122 Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0	<1	
Phosphorus ppm ASTM D5185(m) 222 270 240 Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) >20 <1	Magnesium	ppm	ASTM D5185(m)	0	1	<1	
Zinc ppm ASTM D5185(m) 3 3 Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1	Calcium	ppm	ASTM D5185(m)	113	65	122	
Sulfur ppm ASTM D5185(m) 1326 1029 1487 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) >20 <1	Phosphorus	ppm	ASTM D5185(m)	222	270	240	
Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) <1	Zinc	ppm	ASTM D5185(m)		3	3	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) <1	Sulfur	ppm	ASTM D5185(m)	1326	1029	1487	
Silicon ppm ASTM D5185(m) >20 2 4 Sodium ppm ASTM D5185(m) <1 3 Potassium ppm ASTM D5185(m) >20 <1 <1 FLUID DEGRADATION method limit/base current history1 history2	Lithium	ppm	ASTM D5185(m)		<1	<1	
Sodium ppm ASTM D5185(m) <1	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185(m) >20 <1 <1 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185(m)	>20	2	4	
Potassium ppm ASTM D5185(m) >20 <1 <1 FLUID DEGRADATION method limit/base current history1 history2	Sodium					3	
			, ,	>20		<1	
Acid Number (AN) mg KOH/g ASTM D974* 1.4 1.18 1.02	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	1.18	1.02	



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0117349 Lab Number : 02638153 Unique Number : 5787315

To discuss this sample report, contact Customer Service at 1-800-268-2131.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County Received **Tested**

: 28 May 2024 : 29 May 2024 Diagnosed Test Package : MOB 2 (Additional Tests: PQ, TAN Man)

: 29 May 2024 - Wes Davis

220 Carmek Blvd Rocky View County, AB **CA T1X 1X1** Contact: GFL Calgary

calgarymaintenance@gflenv.com T:

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: GFL Calgary - GFL550

F: (403)369-6163