

# **OIL ANALYSIS REPORT**



Machine Id

OR343 Component Left Outer Final Drive Fluid PETRO CANADA DURATRAN (--- GAL)

## DIAGNOSIS

#### A Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

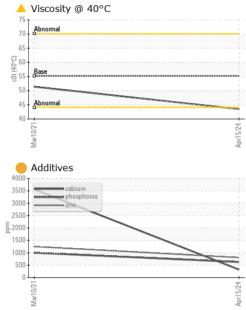
### Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0113339	GFL0010822	
Sample Date		Client Info		15 Apr 2024	10 Mar 2021	
Machine Age	hrs	Client Info		16058	12385	
Oil Age	hrs	Client Info		3673	500	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				ABNORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.075	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>750	124	15	
Chromium	ppm	ASTM D5185(m)	>9	<1	0	
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	
Titanium	ppm	ASTM D5185(m)		<1	<1	
Silver	ppm	ASTM D5185(m)		0	<1	
Aluminum	ppm	ASTM D5185(m)	>40	3	1	
Lead	ppm	ASTM D5185(m)	>15	0	<1	
Copper	ppm	ASTM D5185(m)	>40	1	<1	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Antimony	ppm	ASTM D5185(m)	>5	0	<1	
Vanadium	ppm	ASTM D5185(m)		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)	110	<b>7</b>	2	
Barium	ppm	ASTM D5185(m)	0.0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0.0	0	<1	
Manganese	ppm	ASTM D5185(m)	1	<1	<1	
Magnesium	ppm	ASTM D5185(m)	13	8	103	
Calcium	ppm	ASTM D5185(m)	3610	<mark> </mark> 324	3562	
Phosphorus	ppm	ASTM D5185(m)	1192	628	999	
Zinc	ppm	ASTM D5185(m)	1455	<mark> </mark> 807	1250	
Sulfur	ppm	ASTM D5185(m)	2641	<b>e</b> 1575	3304	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>75	12	11	
Sodium	ppm	ASTM D5185(m)	>51	2	2	
Potassium	ppm	ASTM D5185(m)	>20	1	10	



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	VISUAL		method	limit/base	current	history1	his
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	Precipitate	scalar	Visual*	NONE	NONE	NONE	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris		Visual*	NONE	NONE	VLITE	
		scalar			NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE			
	Appearance	scalar	Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.075	NEG	NEG	
	Free Water	scalar	Visual*		NEG	NEG	
	FLUID PROP	ERTIES	method	limit/base	current	history1	his
	Visc @ 40°C	cSt	ASTM D7279(m)	55.14	<b>4</b> 3.5	51.4	
	SAMPLE IMA	GES	method	limit/base	current	history1	his
	Color					Contraction of the	201
	Color				-		no i
	Bottom						no i
	GRAPHS						
	Iron (ppm)			;-	Lead (ppm)		
	0				0		
2	1000 Abnormal 500 -			udd	10 -		
		-		4			
	Mar10/2			Apr15/24	Mar10/2		
		<b>`</b>		A	_		
	Aluminum (ppm)	)			Chromium (p	, pm)	
	Severe 50 Abnormal			udd	20 - Severe		
				id	10 - Abnormal		
				24			
	Mar10/2			Apr15/24	Mar10/21		
	∠ Copper (ppm)			~	Silicon (ppm)	)	
	100 T				50 Severe		
	Severe 50 - Abnormal			E <sup>1</sup>	00 Abnormal		
					0		
	Mar1 0/2 1			Apr15/24	Mar10/21		
	≚ ▲ Viscosity @ 40°0	_		Ap	_		
	80			40	Additives		
				<u>គ</u> _20	calcium	110	
	Abnormal			a.20	un - hunshinn	No. of Concession, Name	
	Abnormal 0 + 60 - Base Abnormal Abnormal			La.	SANADARABARA ZIAC		
	60 - Base 40				0		
04 I/I DoP1	± 60 - Base			Apr15/24	SASASSASSASSASSASSASSASSASSASSASSASSASS		

: 23 Apr 2024 - Kevin Marson



Accredited Laboratory Test Package : MOB 1 To discuss this sample report, contact Customer Service at 1-800-268-2131. 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.

Diagnosed

Moose Creek, ON CA KOC 1W0 Contact: Charles Bergeron cbergeron@gflenv.com T: (613)538-4853 F:

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ISO 17025:2017

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Submitted By: Charles Bergeron Page 2 of 2