

WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION NORMAL

Machine Id Or1984 Component Hydraulic System Fluid PETRO CANADA DURATRAN (115 LTR)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

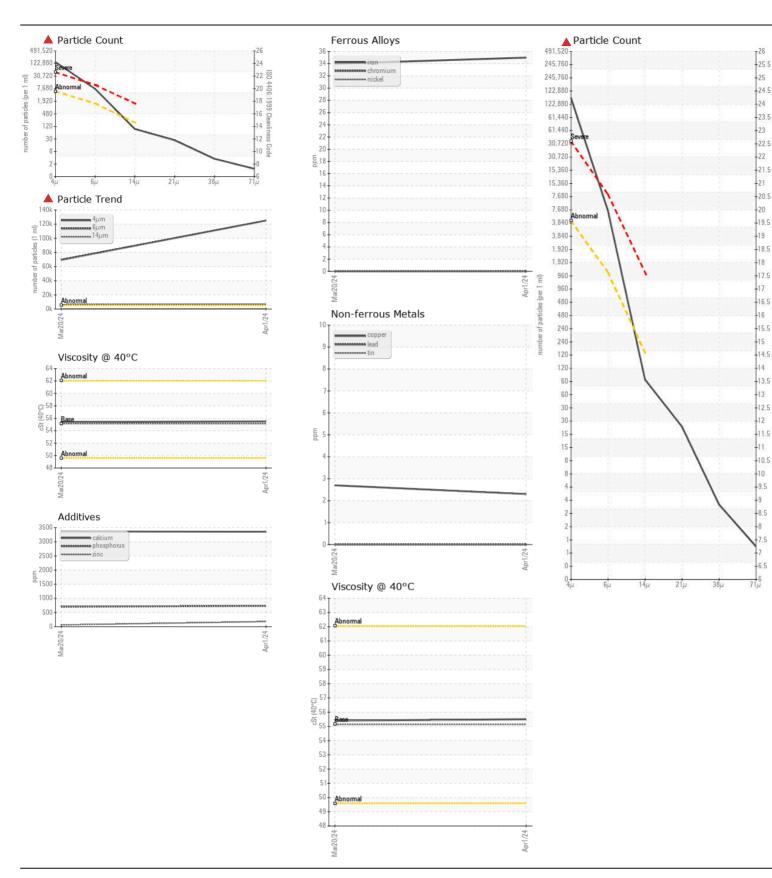
CONTAMINATION

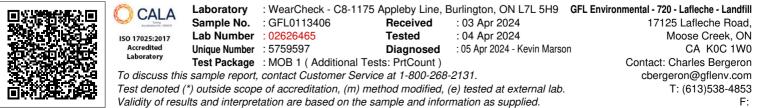
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113406	GFL0113298	
Sample Date		Client Info		01 Apr 2024	20 Mar 2024	
Machine Age	hrs	Client Info		11666	0	
Oil Age	hrs	Client Info		11666	0	
Filter Age	hrs	Client Info		500	0	
Oil Changed		Client Info		Changed	N/A	
Filter Changed		Client Info		Changed	N/A	
Sample Status				SEVERE	SEVERE	
Iron	ppm	ASTM D5185(m)	>65	35	34	
Chromium	ppm	ASTM D5185(m)	>6	0	0	
Nickel	ppm	ASTM D5185(m)	>10	0	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>5	<1	0	
Lead	ppm	ASTM D5185(m)	>45	0	0	
Copper	ppm	ASTM D5185(m)	>120	2	3	
Tin	ppm	ASTM D5185(m)	>4	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185(m)	>25	7	7	
Potassium	ppm	ASTM D5185(m)	>20	2	<1	
Water	ppm	WC Method	>0.1	2 NEG	NEG	
Particles >4µm		ASTM D7647	>5000	▲ 125014	▲ 69385	
Particles >6µm		ASTM D7647	>1300	▲ 6514	▲ 5743	
Particles >14µm		ASTM D7647	>160	79	13	
Particles >21µm		ASTM D7647	>40	23	2	
Particles >38µm		ASTM D7647	>10	3	1	
Particles >71µm		ASTM D7647	>3	1	1	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	A 24/20/13	▲ 23/20/11	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
Sodium	ppm	ASTM D5185(m)		2	2	
Boron	ppm	ASTM D5185(m)	110	98	0105	
Barium	ppm	ASTM D5185(m)	0.0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0.0	0	0	
Manganese	ppm	ASTM D5185(m)	1	0	0	
Magnesium	ppm	ASTM D5185(m)	13	15	12	
Calcium	ppm	ASTM D5185(m)	3610	3354	3364	
Phosphorus	ppm	ASTM D5185(m)	1192	732	705	
	ppm	ASTM D5185(m)	1455	180	61	
Zinc	ppiii	//011/100100(11)	1400	100		
Zinc Sulfur	ppm	ASTM D5185(m)	2641	2639	2692	





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