



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
BH42
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0109698	PCA43455056	PCA13317029
Sample Date		Client Info		12 Jun 2024	16 May 2019	13 Apr 2018
Machine Age	hrs	Client Info		3887	2779	2167
Oil Age	hrs	Client Info		3887	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	8	7	6
Chromium	ppm	ASTM D5185m	>10	<1	1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>10	1	2	0
Lead	ppm	ASTM D5185m	>10	2	4	3
Copper	ppm	ASTM D5185m	>75	2	3	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

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

Silicon	ppm	ASTM D5185m	>20	8	4	2
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	6328	---	---
Particles >6µm		ASTM D7647	>1300	736	---	---
Particles >14µm		ASTM D7647	>160	32	---	---
Particles >21µm		ASTM D7647	>40	6	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/17/12	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	3	1
Boron	ppm	ASTM D5185m	110	81	14	6
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	4	1	0
Manganese	ppm	ASTM D5185m	1	0	---	---
Magnesium	ppm	ASTM D5185m	13	53	15	7
Calcium	ppm	ASTM D5185m	3610	2471	648	364
Phosphorus	ppm	ASTM D5185m	1192	952	751	684
Zinc	ppm	ASTM D5185m	1455	1276	841	878
Sulfur	ppm	ASTM D5185m	2641	4095	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.6	1.00	---	---
Visc @ 40°C	cSt	ASTM D445	55.14	46.0	---	---

