



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id
PALFINGER 100556 - FBM
Component
Hydraulic System
Fluid
CHEVRON RANDO HDZ 32 (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0780112	WC0516925	WC0356259
Sample Date		Client Info		13 Oct 2023	30 Mar 2022	31 Mar 2020
Machine Age	hrs	Client Info		4324	0	1824
Oil Age	hrs	Client Info		0	0	1824
Filter Age	hrs	Client Info		0	0	837
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	15	11	7
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

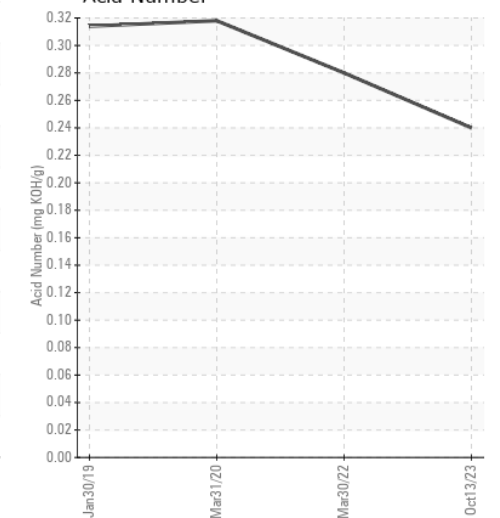
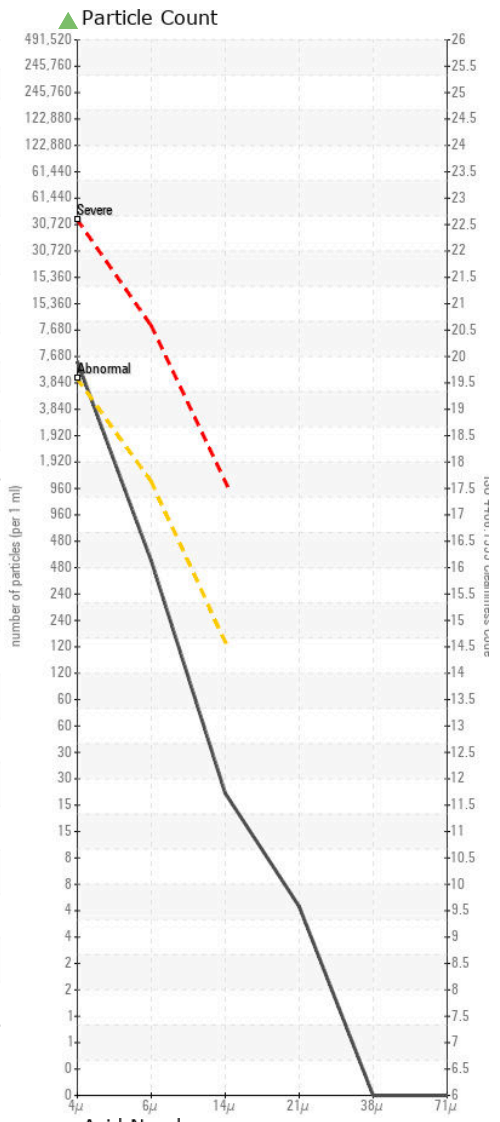
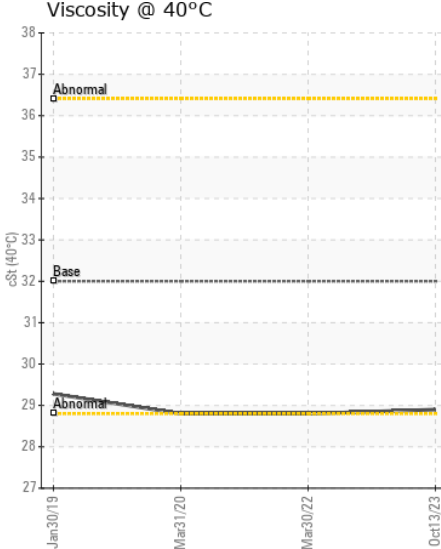
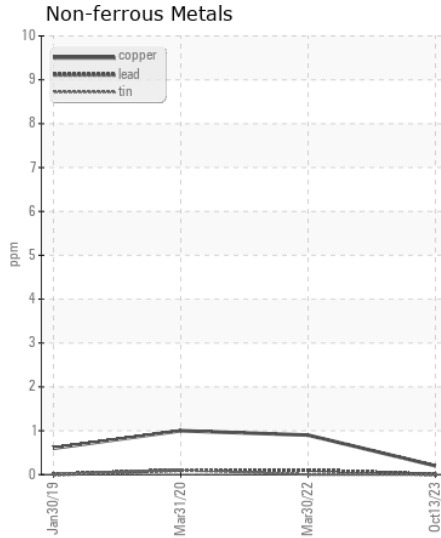
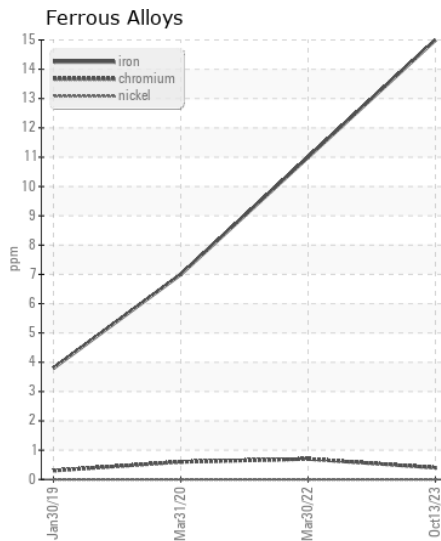
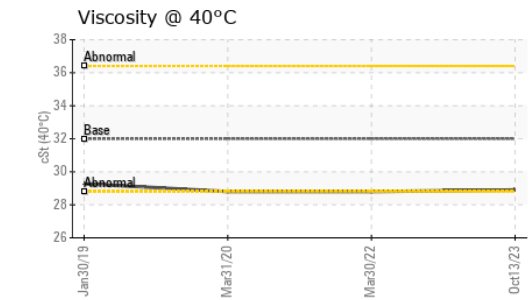
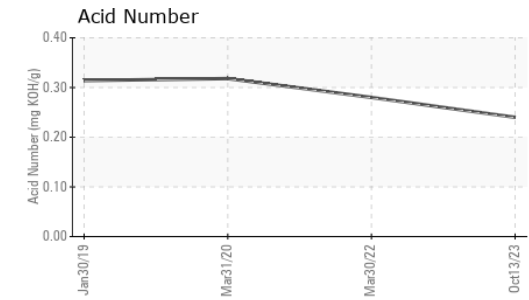
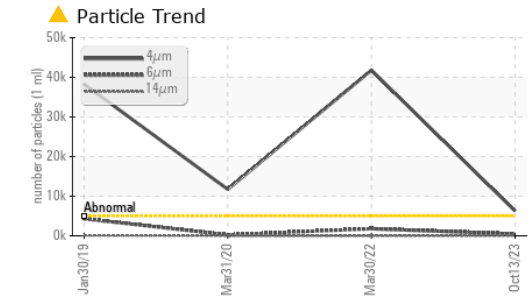
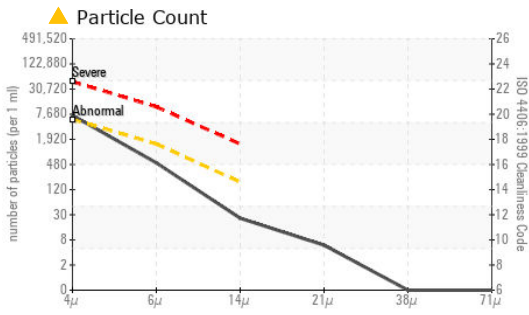
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	1	2	3
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 6265	▲ 41804	▲ 11734
Particles >6µm		ASTM D7647	>1300	461	▲ 1787	234
Particles >14µm		ASTM D7647	>160	22	9	14
Particles >21µm		ASTM D7647	>40	5	2	7
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/16/12	▲ 23/18/10	▲ 21/15/11
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		0	0	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		68	67	79
Phosphorus	ppm	ASTM D5185m		330	349	359
Zinc	ppm	ASTM D5185m		427	418	491
Sulfur	ppm	ASTM D5185m		2304	2093	2422
Acid Number (AN)	mg KOH/g	ASTM D8045		0.24	0.28	0.318
Visc @ 40°C	cSt	ASTM D445	32.0	28.9	28.8	28.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0780112 **Received** : 12 Jan 2024
Lab Number : 06059229 **Diagnosed** : 15 Jan 2024
Unique Number : 10830611 **Diagnostician** : Wes Davis
Test Package : CONST

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 FENTON, MO
 US 63026
 Contact: LARRY YOUNG
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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)