



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
KEMP QUARRIES / RIVER VALLEY OZARK
Machine Id
OHT113
Component
Rear Right Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0084437	PCA0084652	PCA0048229
Sample Date		Client Info		20 Feb 2024	01 May 2023	18 Mar 2022
Machine Age	hrs	Client Info		26095	25813	24551
Oil Age	hrs	Client Info		0	24551	24204
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	47	66	70
Chromium	ppm	ASTM D5185m	>10	1	1	<1
Nickel	ppm	ASTM D5185m	>5	6	3	3
Titanium	ppm	ASTM D5185m	>15	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	4	6	5
Lead	ppm	ASTM D5185m	>10	2	0	0
Copper	ppm	ASTM D5185m	>75	6	<1	3
Tin	ppm	ASTM D5185m	>8	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

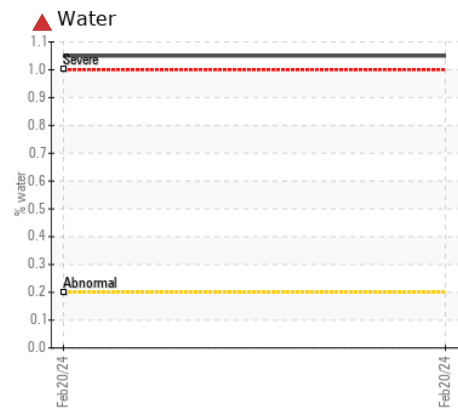
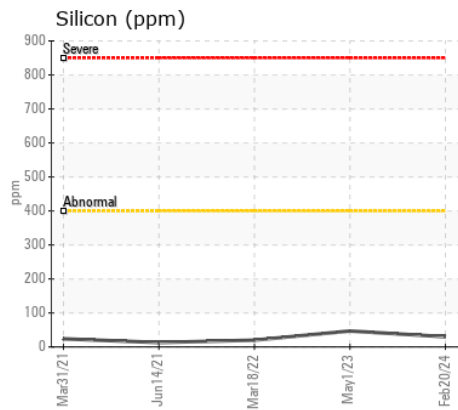
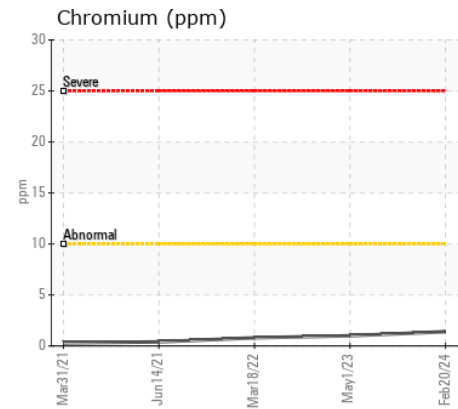
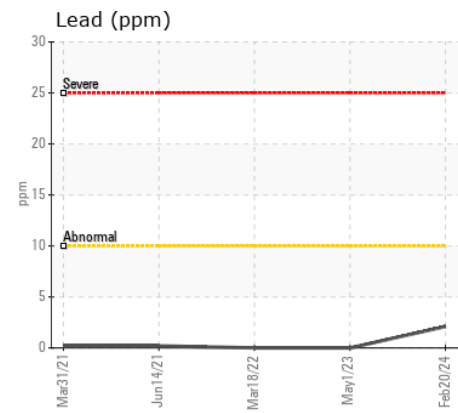
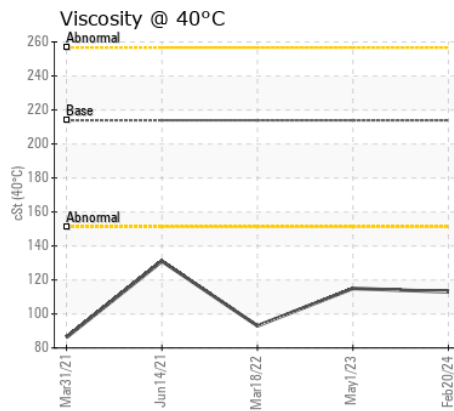
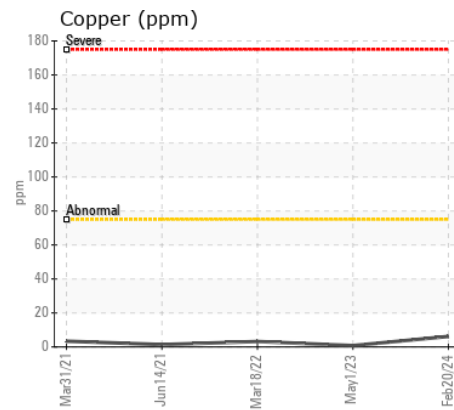
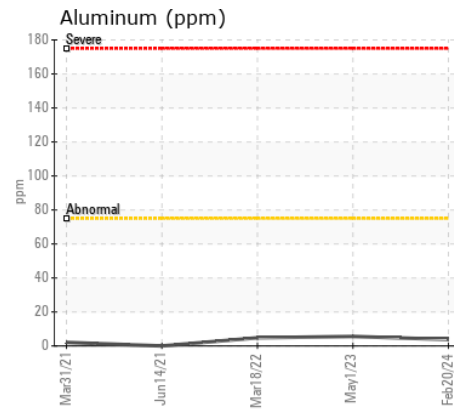
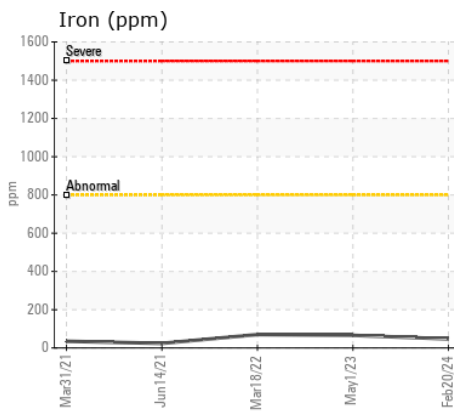
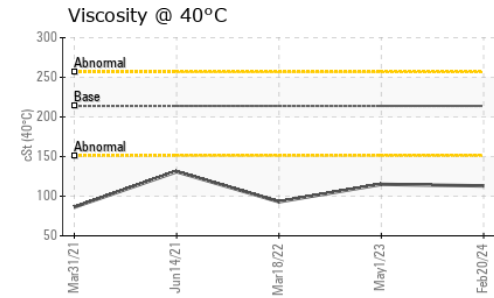
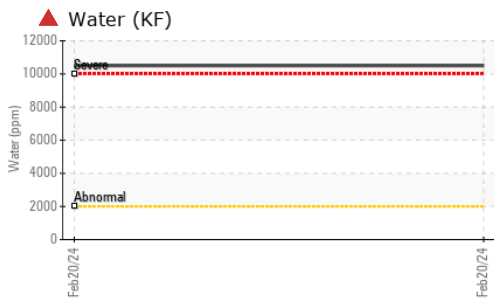
There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>400	30	47	20
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water	%	ASTM D6304	>0.2	▲ 1.05	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 10500	---	---
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	>0.2	▲ 0.2%	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		5	<1	<1
Boron	ppm	ASTM D5185m	2	9	0	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	2	2	2
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	9	23	45	23
Calcium	ppm	ASTM D5185m	3114	1474	1554	1368
Phosphorus	ppm	ASTM D5185m	1099	681	526	663
Zinc	ppm	ASTM D5185m	1245	763	674	750
Sulfur	ppm	ASTM D5185m	7086	3411	4499	3122
Visc @ 40°C	cSt	ASTM D445	213.9	113	115	93.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084437
Lab Number : 06100447
Unique Number : 10898677
Test Package : MOB 1 (Additional Tests: KF)

Kemp Quarries - River Valley - Ozark
 9446 N Hwy 309
 Ozark, AR
 US 72949
 Contact:
 ozark@rivervalleyquarries.com

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)

T:
F: