



WEAR

ABNORMAL

CONTAMINATION

NORMAL

FLUID CONDITION

NORMAL



Area
KEMP QUARRIES / KEMP STONE - FAIRLAND [62593]

Machine Id
OHT100

Component
Rear Right Final Drive

Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. (Customer Sample Comment: PM-1 sampled fluid. Overfilled and had material on magnets)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0086496	PCA0070254	PCA0061946
Sample Date		Client Info		07 Feb 2024	01 Nov 2022	25 May 2022
Machine Age	hrs	Client Info		6938	6511	6073
Oil Age	hrs	Client Info		6938	6073	6073
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	36	61	55
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>15	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	<1	1	1
Lead	ppm	ASTM D5185m	>10	2	4	4
Copper	ppm	ASTM D5185m	>75	8	15	16
Tin	ppm	ASTM D5185m	>8	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	▲ MODER	MODER	NONE

CONTAMINATION

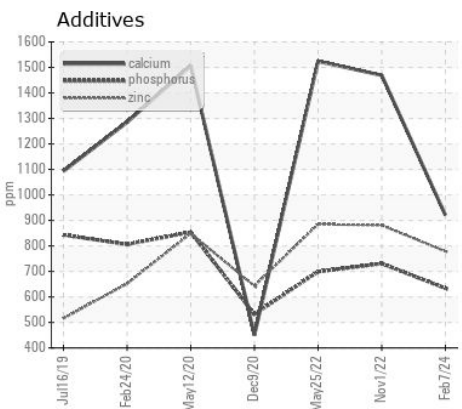
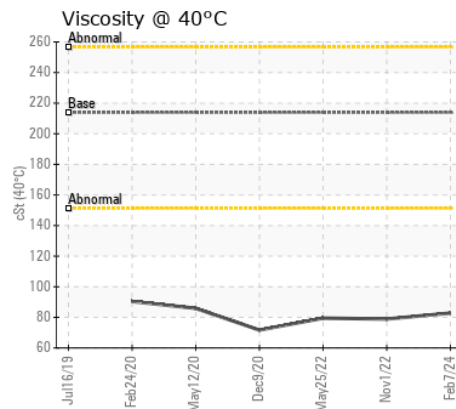
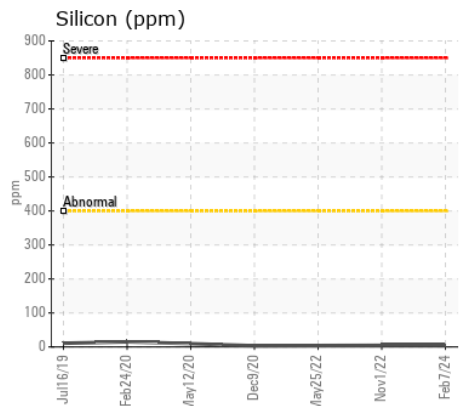
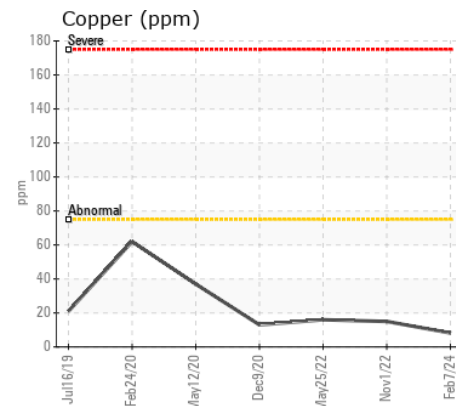
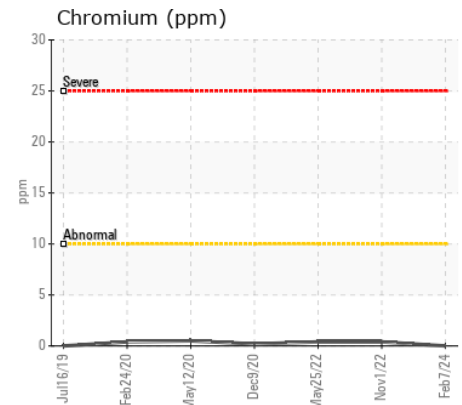
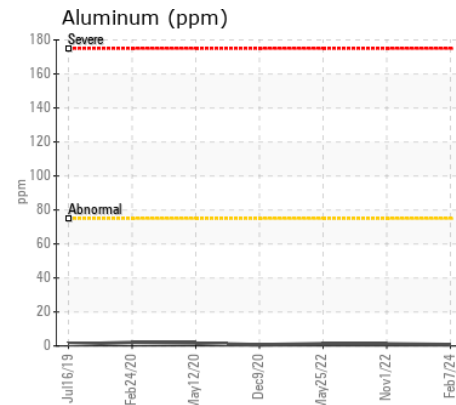
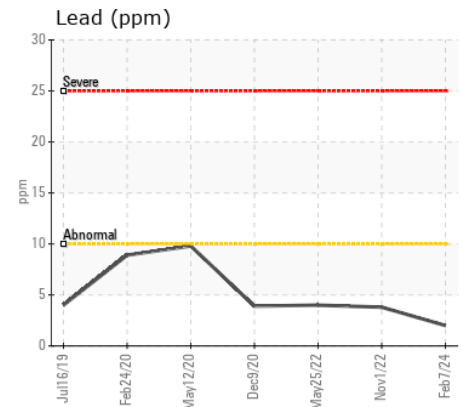
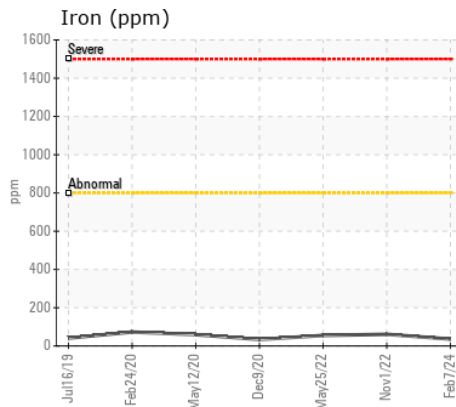
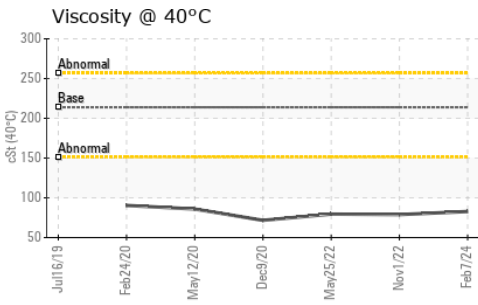
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	5	5	4
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
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	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		<1	1	2
Boron	ppm	ASTM D5185m	2	<1	1	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	8	13	12
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	9	142	184	170
Calcium	ppm	ASTM D5185m	3114	921	1469	1524
Phosphorus	ppm	ASTM D5185m	1099	634	731	699
Zinc	ppm	ASTM D5185m	1245	779	881	885
Sulfur	ppm	ASTM D5185m	7086	2198	3092	2678
Visc @ 40°C	cSt	ASTM D445	213.9	82.8	78.9	79.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086496
Lab Number : 06088417
Unique Number : 10875862
Test Package : MOB 1

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 15 Feb 2024 - Angela Borella

Kemp Quarries - Kemp Stone - Fairland
 18350 S 590 Rd
 Fairland, OK
 US 74343

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)

Contact: fairland@kempstone.com

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F: