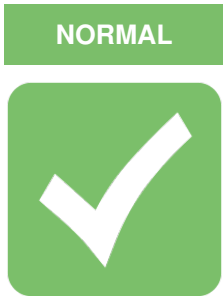
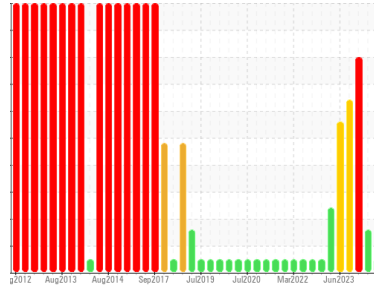


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / MUSKOGEE SAND [68980]
Machine Id
WL056
Component
Front Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-1 sampled fluid)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0086577	PCA0086552	PCA0084750
Sample Date	Client Info		01 Mar 2024	21 Dec 2023	03 Oct 2023
Machine Age	hrs	Client Info	35093	34606	34177
Oil Age	hrs	Client Info	35093	34606	34177
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	55	122	▲ 577
Chromium	ppm	ASTM D5185m >3	0	<1	2
Nickel	ppm	ASTM D5185m >3	0	<1	2
Titanium	ppm	ASTM D5185m >2	0	<1	▲ 3
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >30	3	11	● 37
Lead	ppm	ASTM D5185m >13	0	2	▲ 20
Copper	ppm	ASTM D5185m >103	8	20	▲ 170
Tin	ppm	ASTM D5185m >5	1	2	▲ 10
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	0	2	1
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m 0	0	2	9
Magnesium	ppm	ASTM D5185m 9	0	21	6
Calcium	ppm	ASTM D5185m 3114	2470	2991	3024
Phosphorus	ppm	ASTM D5185m 1099	889	905	1072
Zinc	ppm	ASTM D5185m 1245	949	1156	1227
Sulfur	ppm	ASTM D5185m 7086	4656	4083	5657

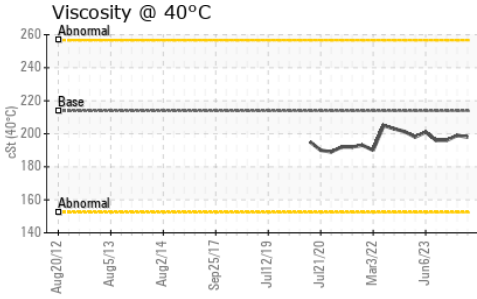
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	22	55	▲ 168
Sodium	ppm	ASTM D5185m	3	2	7
Potassium	ppm	ASTM D5185m >20	0	2	10

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	MODER
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	HAZY	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.2	NEG	0.2%	0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

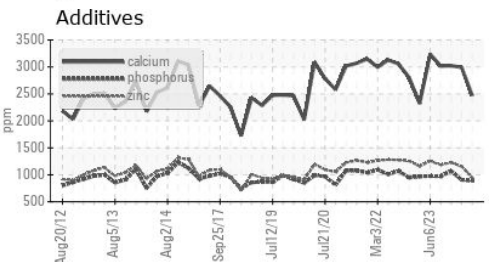
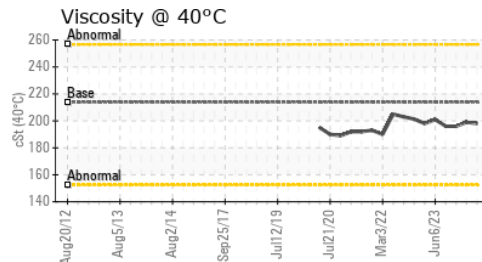
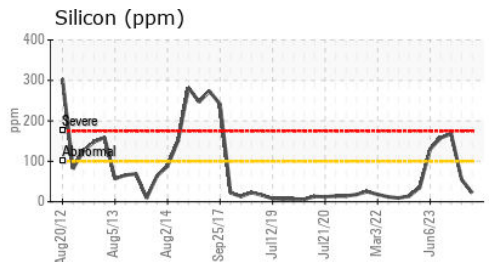
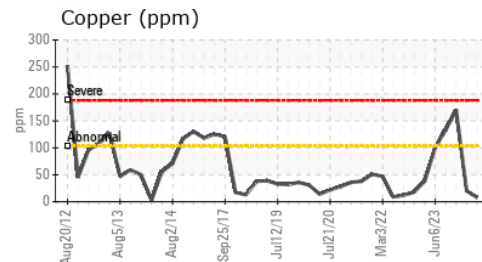
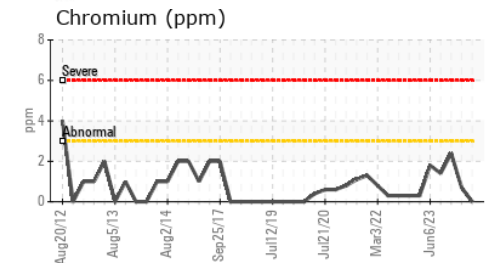
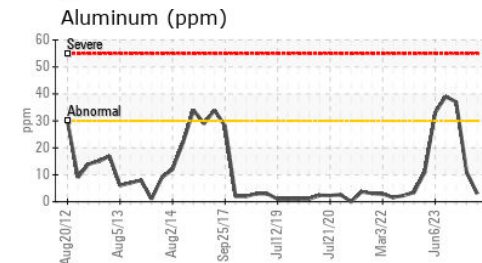
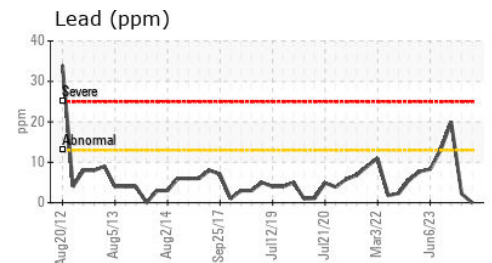
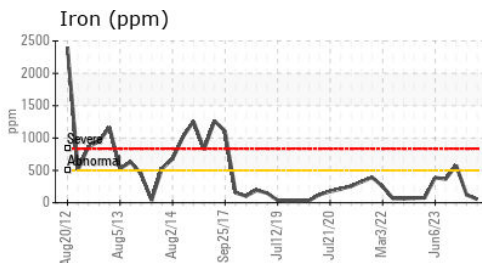
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	198	199	196

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	
Bottom				no image	no image	

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086577
Lab Number : **06115475**
Unique Number : 10924308
Test Package : MOB 1

Received : 11 Mar 2024
Tested : 12 Mar 2024
Diagnosed : 13 Mar 2024 - Don Baldrige

Kemp Quarries - Muskogee Sand
 3395 W 50th St N
 Porter, OK
 US 74454

Contact: MUSCOGEE NOTIFICATIONS
 muskogee@muskogeessand.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: