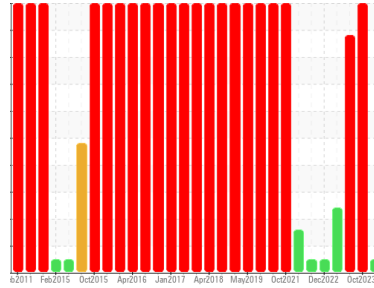


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / MUSKOGEE SAND [68122]
Machine Id
WLO42
Component
Front Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Pm2 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		PCA0086508	PCA0087042	PCA0084619
Sample Date	Client Info		11 Jan 2024	24 Oct 2023	11 Jul 2023
Machine Age	hrs	Client Info	33041	33553	32072
Oil Age	hrs	Client Info	33041	33553	32072
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	SEVERE	SEVERE

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	274	879	505
Chromium	ppm	ASTM D5185m >3	<1	2	2
Nickel	ppm	ASTM D5185m >3	0	1	2
Titanium	ppm	ASTM D5185m >2	<1	1	2
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >30	3	8	36
Lead	ppm	ASTM D5185m >13	<1	0	11
Copper	ppm	ASTM D5185m >103	6	14	114
Tin	ppm	ASTM D5185m >5	<1	<1	6
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	2	4	4
Barium	ppm	ASTM D5185m 0	0	19	0
Molybdenum	ppm	ASTM D5185m 0	4	2	2
Manganese	ppm	ASTM D5185m 0	2	8	6
Magnesium	ppm	ASTM D5185m 9	52	25	25
Calcium	ppm	ASTM D5185m 3114	2891	3274	2534
Phosphorus	ppm	ASTM D5185m 1099	893	991	961
Zinc	ppm	ASTM D5185m 1245	1020	1175	1162
Sulfur	ppm	ASTM D5185m 7086	4004	7779	4784

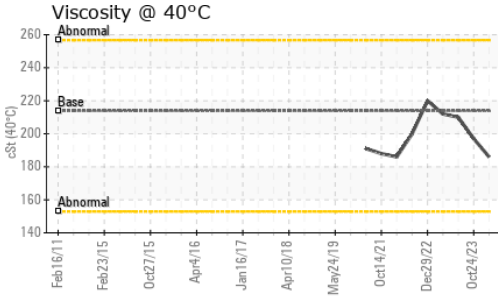
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	42	85	219
Sodium	ppm	ASTM D5185m	1	4	2
Potassium	ppm	ASTM D5185m >20	0	3	13

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	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.2	NEG	0.2%	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

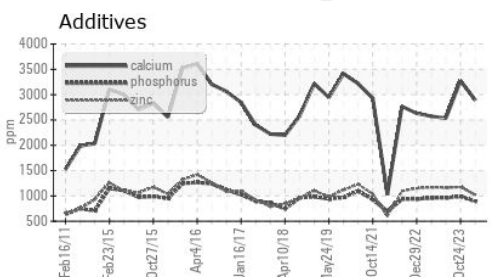
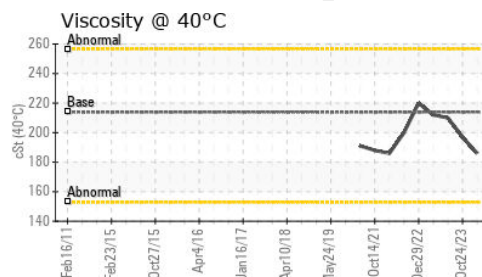
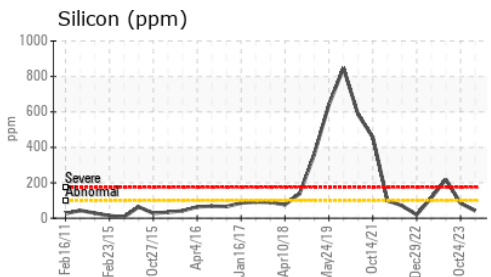
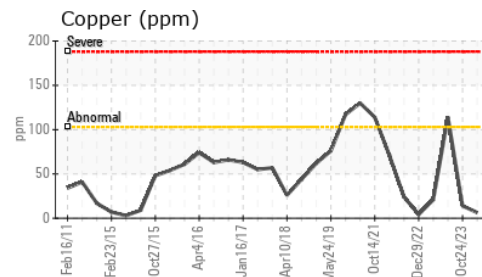
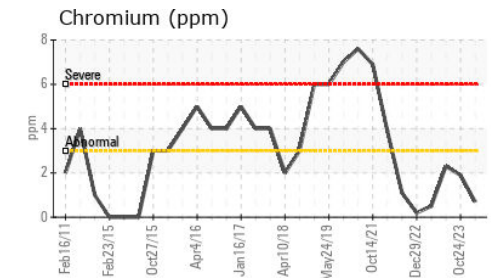
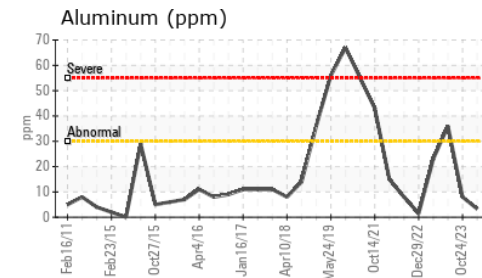
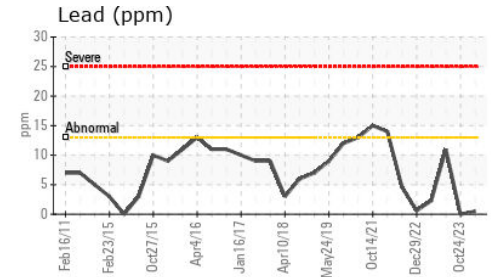
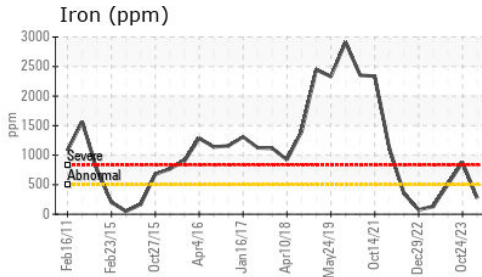
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	186	197	210

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086508 **Received** : 22 Jan 2024
Lab Number : 06067938 **Diagnosed** : 24 Jan 2024
Unique Number : 10844615 **Diagnostician** : Don Baldridge
Test Package : MOB 1

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: