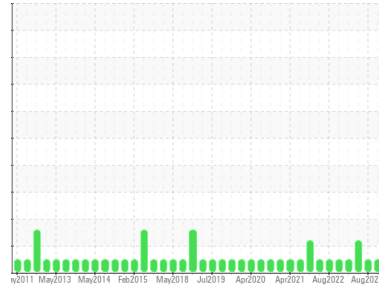


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Area
KEMP QUARRIES / MUSKOGEE SAND [66638]
 Machine Id
WL056

Component
Transmission (Manual)
 Fluid
PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

DIAGNOSIS
Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 changed filters)

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	PCA0084740	PCA0087099	PCA0087160
Sample Date	Client Info	03 Oct 2023	10 Aug 2023	06 Jun 2023
Machine Age	hrs	34177	33775	33310
Oil Age	hrs	34177	1190	725
Oil Changed	Client Info	N/A	Changed	Not Chngd
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	17	32	21
Chromium	ppm	ASTM D5185m >5	3	3	2
Nickel	ppm	ASTM D5185m >5	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >7	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	1	4
Lead	ppm	ASTM D5185m >45	0	<1	0
Copper	ppm	ASTM D5185m >225	39	21	21
Tin	ppm	ASTM D5185m >10	<1	<1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	<1	0	<1
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	3	2	2
Manganese	ppm	ASTM D5185m 9	0	<1	1
Magnesium	ppm	ASTM D5185m 1	21	21	25
Calcium	ppm	ASTM D5185m 3131	1767	727	1242
Phosphorus	ppm	ASTM D5185m 1194	616	535	651
Zinc	ppm	ASTM D5185m 1281	880	640	805
Sulfur	ppm	ASTM D5185m 3811	2905	1733	2791

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >125	8	11	12
Sodium	ppm	ASTM D5185m	0	<1	1
Potassium	ppm	ASTM D5185m >20	2	0	2

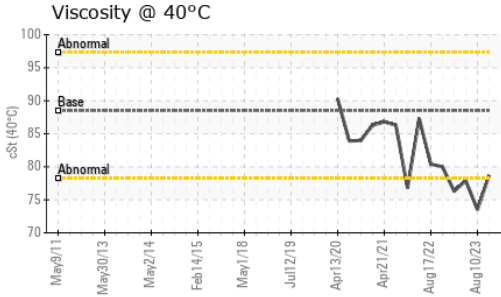
VISUAL

method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	NONE	NONE	▲ MODER
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES

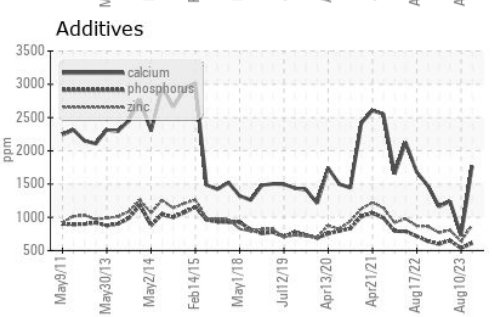
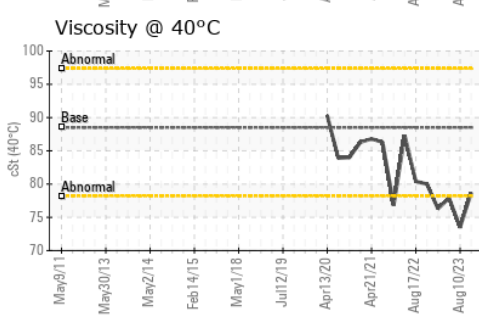
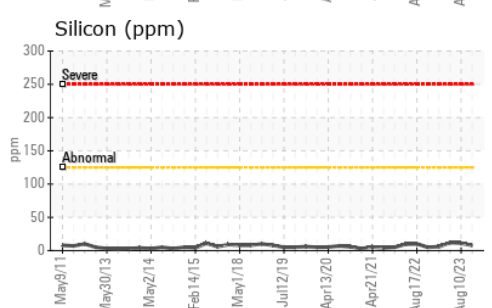
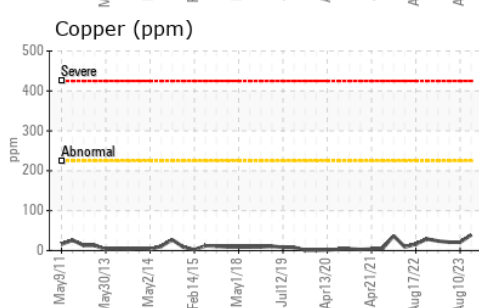
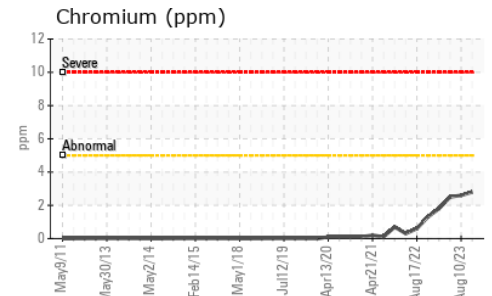
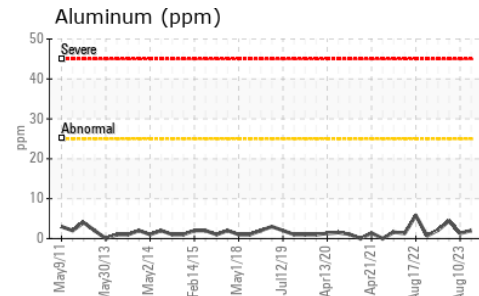
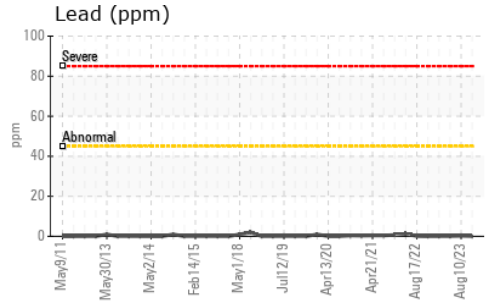
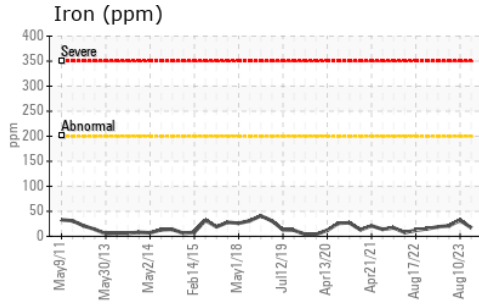
method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 88.5	78.7	73.5	77.9

OIL ANALYSIS REPORT



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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084740 **Received** : 16 Oct 2023
Lab Number : 05980780 **Diagnosed** : 18 Oct 2023
Unique Number : 10698075 **Diagnostician** : Angela Borella
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)