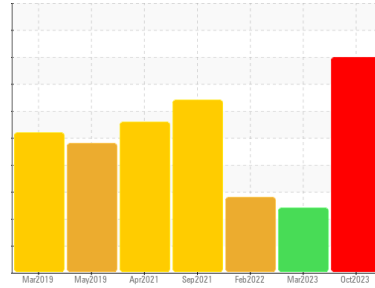


OIL ANALYSIS REPORT

Sample Rating Trend



Area
KEMP QUARRIES / BCS - GRAVETTE [64799]
Machine Id
TTH032
Component
Left Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. 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. (Customer Sample Comment: PM-1 sampled fluid)

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	PCA0084760	PCA0086763	PCA0034159	
Sample Date	Client Info	05 Oct 2023	01 Mar 2023	17 Feb 2022	
Machine Age	hrs	Client Info	12454	12454	12109
Oil Age	hrs	Client Info	12945	12454	493
Oil Changed	Client Info	N/A	Changed	Not Chngd	
Sample Status		SEVERE	ABNORMAL	ABNORMAL	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >500	▲ 578	298	288
Chromium	ppm	ASTM D5185m >10	6	2	2
Nickel	ppm	ASTM D5185m >10	2	0	<1
Titanium	ppm	ASTM D5185m	5	2	1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	▲ 68	▲ 36	▲ 20
Lead	ppm	ASTM D5185m >25	0	0	<1
Copper	ppm	ASTM D5185m >50	4	2	2
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m >5	---	---	0
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	46	160	208
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	2	1	2
Manganese	ppm	ASTM D5185m 0	6	3	2
Magnesium	ppm	ASTM D5185m 9	33	17	17
Calcium	ppm	ASTM D5185m 3114	3885	401	394
Phosphorus	ppm	ASTM D5185m 1099	874	863	1095
Zinc	ppm	ASTM D5185m 1245	1091	148	116
Sulfur	ppm	ASTM D5185m 7086	7207	26394	23783

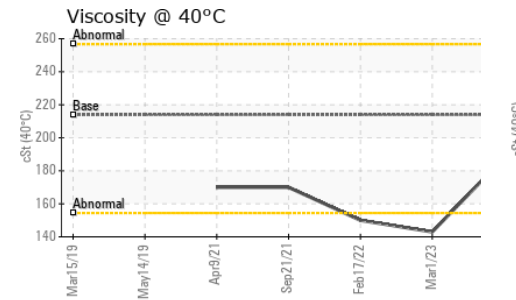
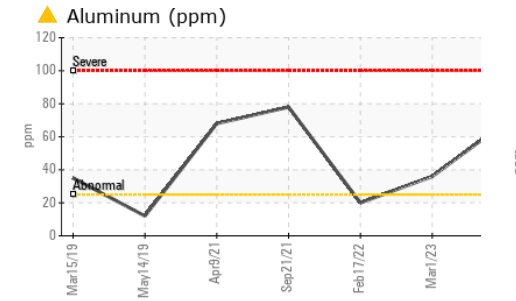
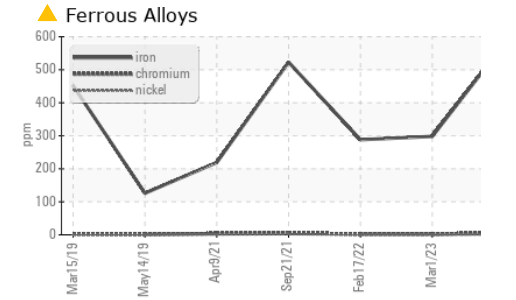
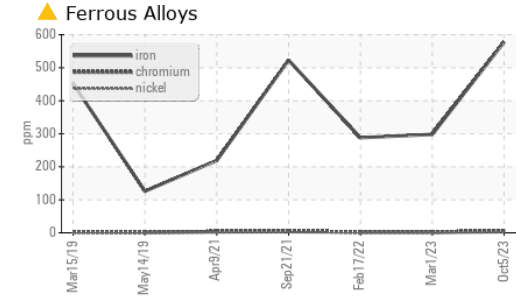
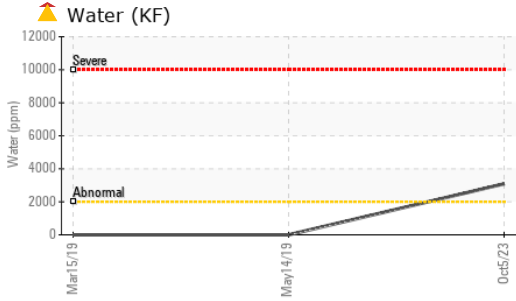
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >75	● 516	▲ 181	▲ 123
Sodium	ppm	ASTM D5185m	4	2	2
Potassium	ppm	ASTM D5185m >20	28	12	7
Water	%	ASTM D6304 >0.2	▲ 0.309	---	---
ppm Water	ppm	ASTM D6304 >2000	▲ 3090	---	---

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	▲ MODER
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
Free Water	scalar	*Visual	NEG	NEG	NEG

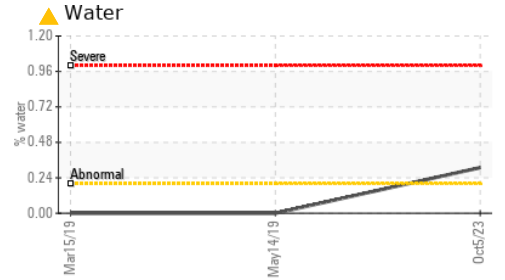
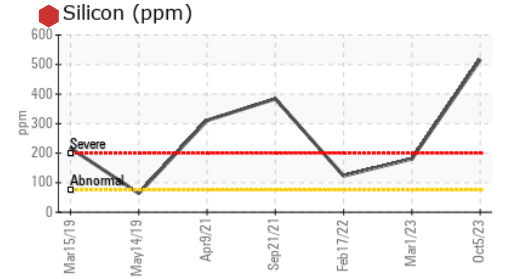
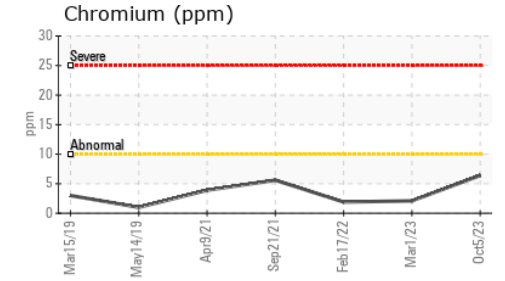
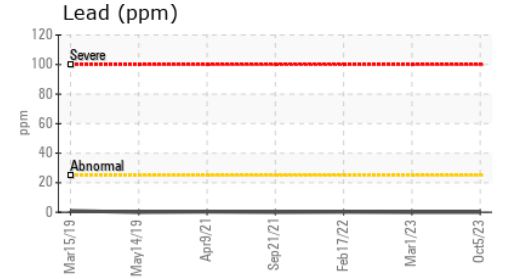
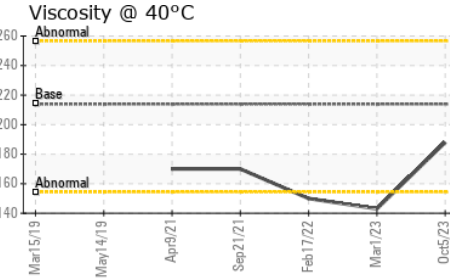
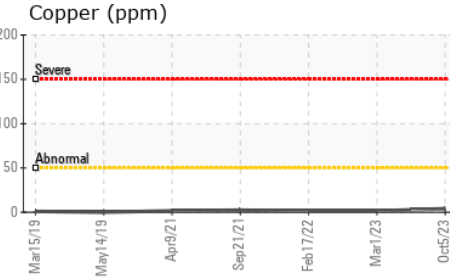
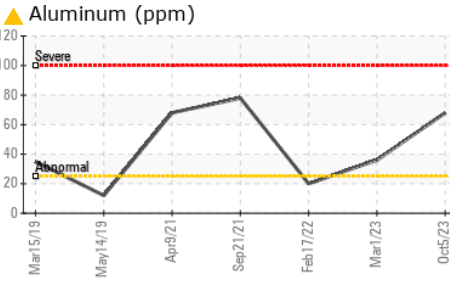
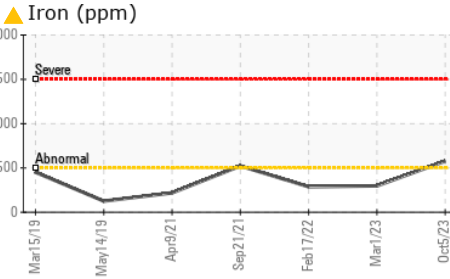
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	188	143	150

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. : PCA0084760
Lab Number : 05980738
Unique Number : 10698033
Test Package : MOB 1 (Additional Tests: KF)

Kemp Quarries - Benton County Stone - Gravette
 15100 N Hwy 59
 Sulphur Springs, AR
 US 72768
 Contact:
 gravette@bentoncountystone.com
 T:
 F:

Certificate L2367
 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)