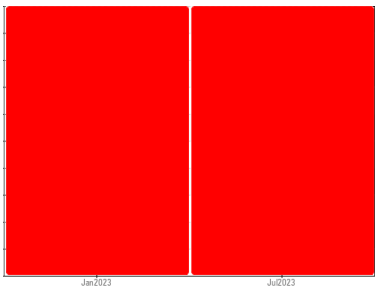
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
KEMP QUARRIES / BCS-STILWELL
Machine Id
TTH036
Component
Right 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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: PM-1 sampled fluid)

Wear
The iron level is severe. Gear wear is indicated.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**PCA0086294**	PCA0086722	---
Sample Date		Client Info		**06 Jul 2023**	30 Jan 2023	---
Machine Age	hrs	Client Info		**6958**	6499	---
Oil Age	hrs	Client Info		**6958**	0	---
Oil Changed		Client Info		**N/A**	Changed	---
Sample Status				**SEVERE**	SEVERE	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>500	**10000**	17746	---
Chromium	ppm	ASTM D5185m	>10	**84**	152	---
Nickel	ppm	ASTM D5185m	>10	**8**	22	---
Titanium	ppm	ASTM D5185m		**61**	112	---
Silver	ppm	ASTM D5185m		**1**	0	---
Aluminum	ppm	ASTM D5185m	>25	**561**	917	---
Lead	ppm	ASTM D5185m	>25	**2**	2	---
Copper	ppm	ASTM D5185m	>50	**23**	46	---
Tin	ppm	ASTM D5185m	>10	**1**	0	---
Vanadium	ppm	ASTM D5185m		**2**	4	---
Cadmium	ppm	ASTM D5185m		**2**	1	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	**<1**	15	---
Barium	ppm	ASTM D5185m	0	**3**	3	---
Molybdenum	ppm	ASTM D5185m	0	**12**	19	---
Manganese	ppm	ASTM D5185m	0	**79**	136	---
Magnesium	ppm	ASTM D5185m	9	**92**	127	---
Calcium	ppm	ASTM D5185m	3114	**2247**	961	---
Phosphorus	ppm	ASTM D5185m	1099	**796**	313	---
Zinc	ppm	ASTM D5185m	1245	**736**	45	---
Sulfur	ppm	ASTM D5185m	7086	**32218**	52796	---

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>75	**3628**	6737	---
Sodium	ppm	ASTM D5185m		**18**	32	---
Potassium	ppm	ASTM D5185m	>20	**154**	282	---

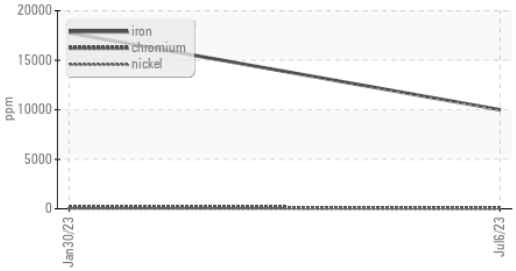
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	0.2%	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	213.9	**216**	23.9	---

OIL ANALYSIS REPORT

OIL DIAGNOSTICS

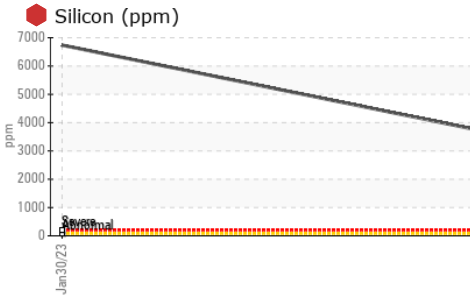
Ferrous Alloys



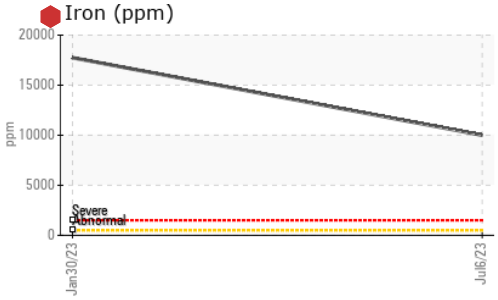
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

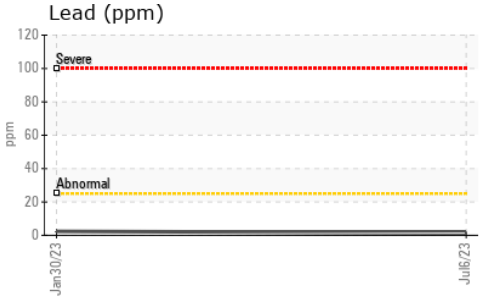
Silicon (ppm)



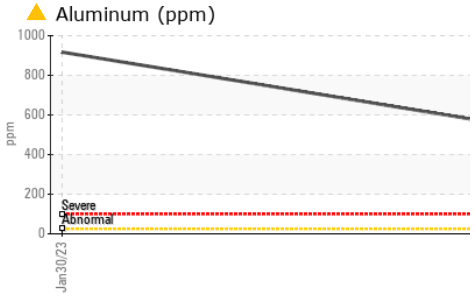
Iron (ppm)



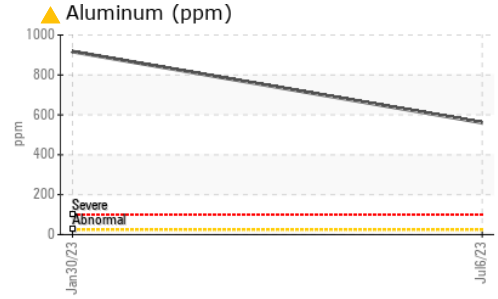
Lead (ppm)



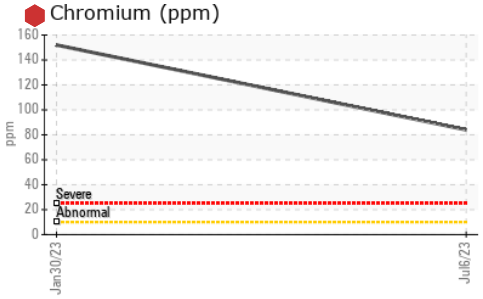
Aluminum (ppm)



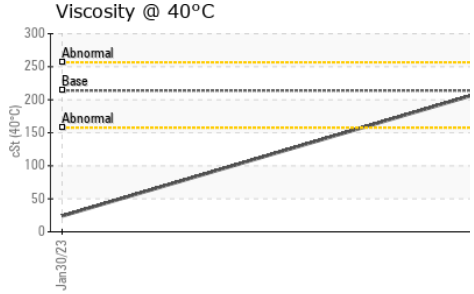
Aluminum (ppm)



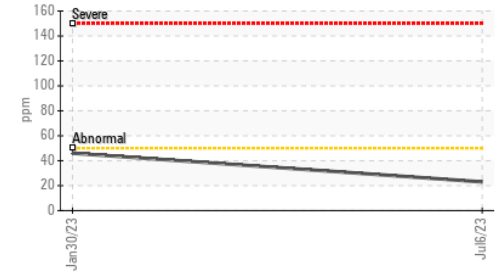
Chromium (ppm)



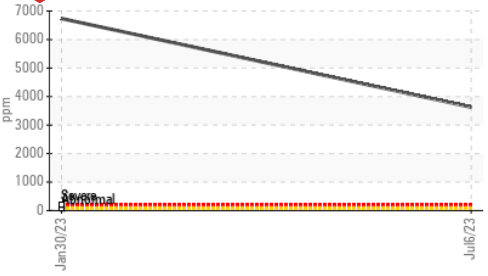
Viscosity @ 40°C



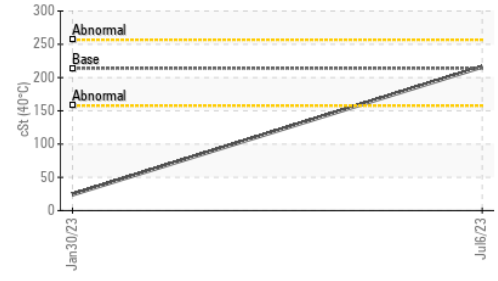
Copper (ppm)



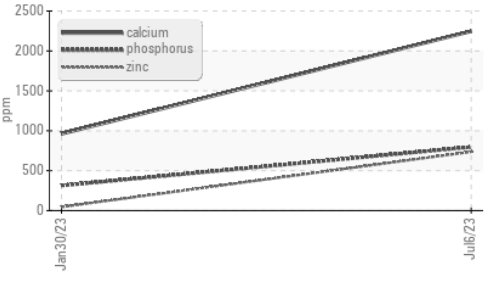
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086294
Lab Number : 05894695
Unique Number : 10550505
Test Package : MOB 1

Received : 10 Jul 2023
Diagnosed : 12 Jul 2023
Diagnostician : Sean Felton

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)

Kemp Quarries - Benton County Stone - Stillwell
463917 Highway 100
Bunch, OK
US 74931
Contact:
stilwell@bentoncountystone.com
T:
F: