



PROBLEM SUMMARY

Sample Rating Trend

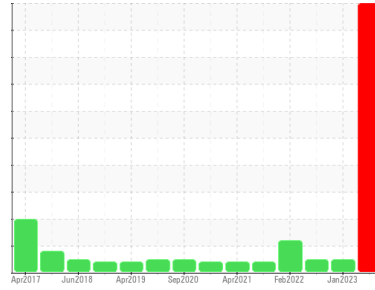
WEAR



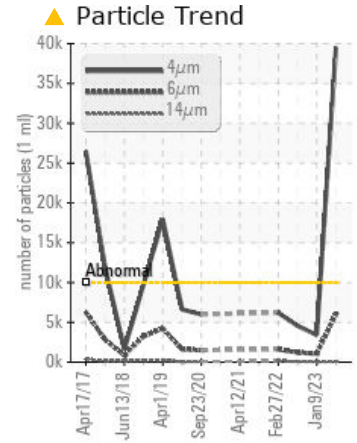
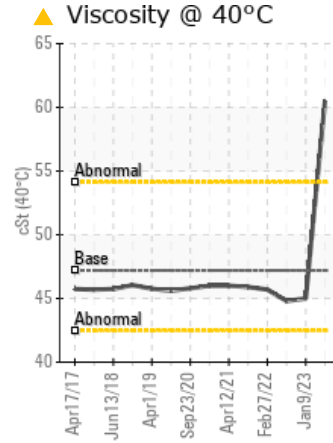
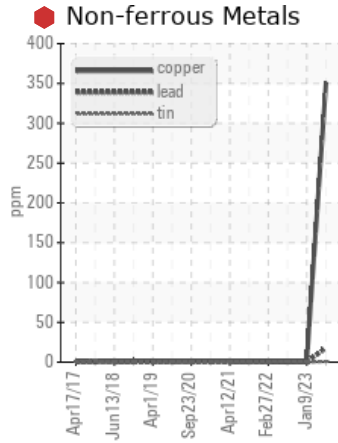
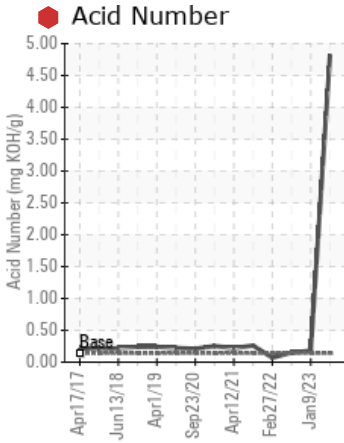
Machine Id
WWTP GD (S/N WASTE WATER)

Component
Air Compressor

Fluid
PETRO CANADA FS-600 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Lead	ppm	ASTM D5185m	>20	▲ 18	0	0
Copper	ppm	ASTM D5185m	>40	● 351	<1	<1
Particles >4µm		ASTM D7647	>10000	▲ 39484	3416	4567
Particles >6µm		ASTM D7647	>2500	▲ 6038	1062	1202
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 22/20/13	19/17/13	19/17/14
Acid Number (AN)	mg KOH/g	ASTM D8045	0.14	● 4.824	0.18	0.15
Visc @ 40°C	cSt	ASTM D445	47.2	▲ 60.5	45.0	44.8

Customer Id: SMIGRAKY
Sample No.: USPM17744
Lab Number: 05935425
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Flush System	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

09 Jan 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



15 Sep 2022 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



27 Feb 2022 Diag: Doug Bogart

ADDITIVES



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Additive levels indicate the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

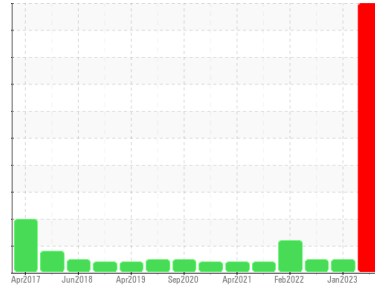
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
WWTP GD (S/N WASTE WATER)

Component
Air Compressor

Fluid
PETRO CANADA FS-600 (--- GAL)

DIAGNOSIS

Recommendation

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

Wear

Bearing and/or bushing wear is indicated.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil viscosity is higher than normal. Confirmed.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USPM17744	USPM25416	USPR000809
Sample Date	Client Info		24 Aug 2023	09 Jan 2023	15 Sep 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	19	0	0
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >10	1	0	0
Lead	ppm	ASTM D5185m >20	18	0	0
Copper	ppm	ASTM D5185m >40	351	<1	<1
Tin	ppm	ASTM D5185m >5	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
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	17	0	0
Barium	ppm	ASTM D5185m 20	34	1	1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	1	0	0
Magnesium	ppm	ASTM D5185m	5	0	0
Calcium	ppm	ASTM D5185m 20	34	0	0
Phosphorus	ppm	ASTM D5185m 320	46	83	71
Zinc	ppm	ASTM D5185m 20	810	65	53
Sulfur	ppm	ASTM D5185m 3000	196	620	420

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	<1	<1
Sodium	ppm	ASTM D5185m	6	<1	0
Potassium	ppm	ASTM D5185m >20	7	0	0
Water	%	ASTM D6304 >0.6	0.010	0.053	0.055
ppm Water	ppm	ASTM D6304 >6000	103.8	535.3	550.7

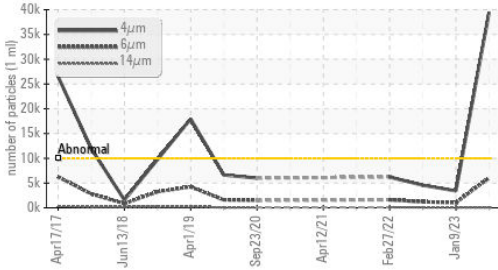
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	39484	3416	4567
Particles >6µm	ASTM D7647	>2500	6038	1062	1202
Particles >14µm	ASTM D7647	>320	67	68	83
Particles >21µm	ASTM D7647	>80	13	10	16
Particles >38µm	ASTM D7647	>20	0	0	1
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	22/20/13	19/17/13	19/17/14

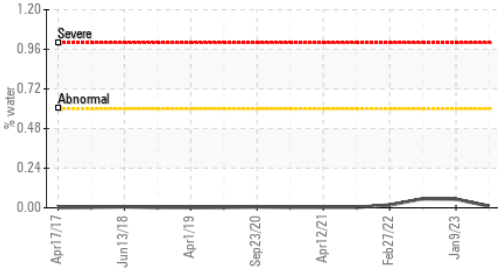
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.14	4.824	0.18	0.15

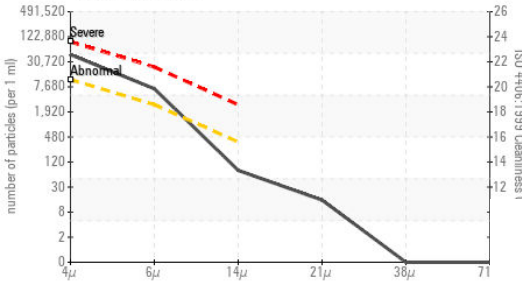
Particle Trend



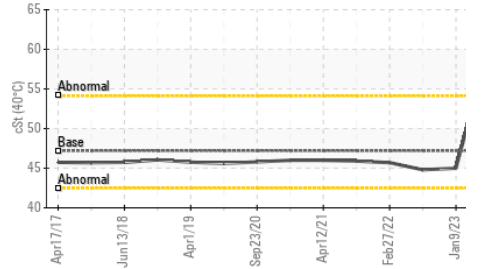
Water



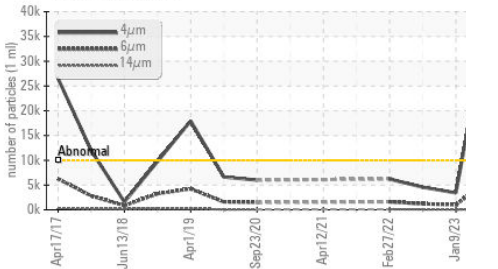
Particle Count



Viscosity @ 40°C



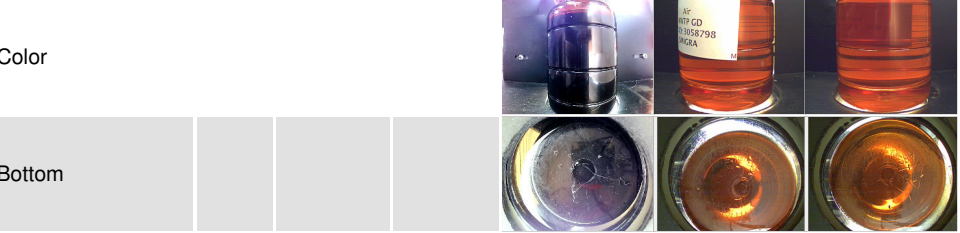
Particle Trend



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

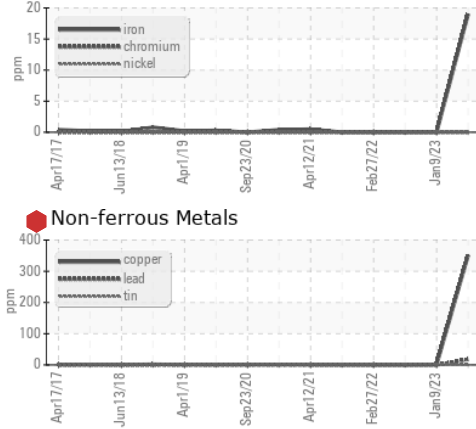
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	47.2 ▲ 60.5	45.0	44.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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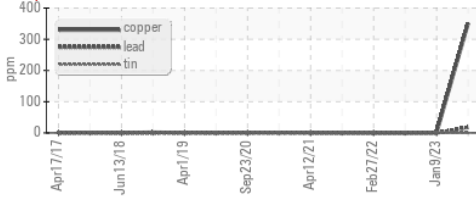


GRAPHS

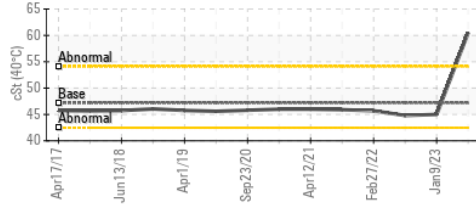
Ferrous Alloys



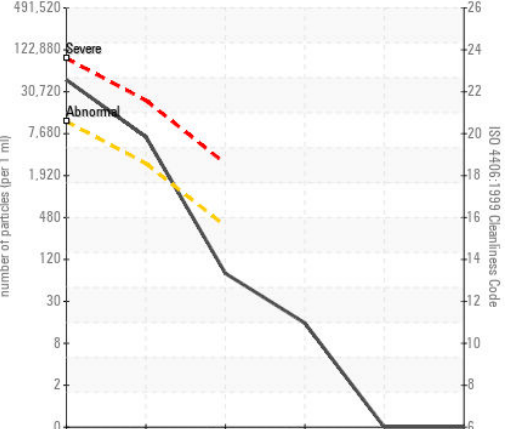
Non-ferrous Metals



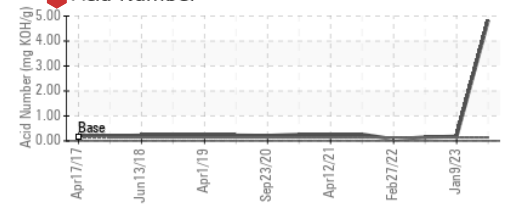
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM17744 **Received** : 25 Aug 2023
Lab Number : 05935425 **Diagnosed** : 28 Aug 2023
Unique Number : 10620696 **Diagnostician** : Doug Bogart
Test Package : IND 2

SMITHFIELD FOODS - GRAYSON
 800 C W STEVENS BLVD
 GRAYSON, KY
 US 41143
 Contact:

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)