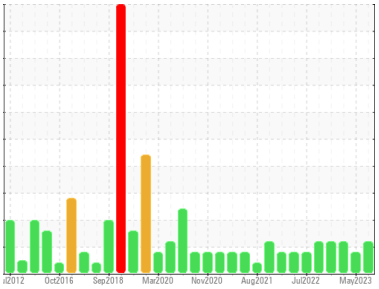
PROBLEM SUMMARY

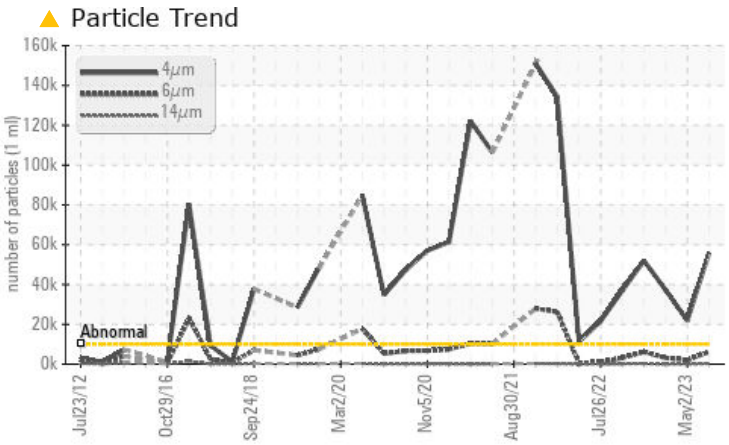
Sample Rating Trend



ISO

Area
FP-106 [10023334576]
Machine Id
A17741 - GEARMOTOR AC HELICAL PARALLEL SHAFT 31.28 GEAR RATIO NORTH HARSLEV PUMP
Component
Gear Motor
Fluid
PETRO CANADA ENDURATEX SYNTHETIC EP 220 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>10000	▲ **55888**	▲ 21892	▲ 37224
Particles >6µm		ASTM D7647	>2500	▲ **6243**	2102	▲ 3122
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/20/15**	▲ 22/18/13	▲ 22/19/13

Customer Id: HORAUS
Sample No.: WC0820529
Lab Number: 05904327
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 Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

02 May 2023 Diag: Angela Borella

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

26 Feb 2023 Diag: Angela Borella

ISO

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

15 Dec 2022 Diag: Don Baldridge

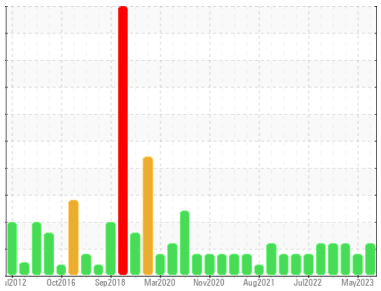
ISO

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
FP-106 [10023334576]
Machine Id
A17741 - GEARMOTOR AC HELICAL PARALLEL SHAFT 31.28 GEAR RATIO NORTH HARSLEV PUMP
Component
Gear Motor
Fluid
PETRO CANADA ENDURATEX SYNTHETIC EP 220 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0820529**	WC0791990	WC0775054
Sample Date		Client Info		**16 Jul 2023**	02 May 2023	26 Feb 2023
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				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>30	**7**	2	2
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>5	**0**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>5	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>25	**<1**	0	0
Tin	ppm	ASTM D5185m	>5	**0**	0	0
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	33	**0**	2	0
Barium	ppm	ASTM D5185m	5	**0**	0	<1
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	5	**2**	<1	<1
Calcium	ppm	ASTM D5185m	5	**29**	10	11
Phosphorus	ppm	ASTM D5185m	437	**462**	395	393
Zinc	ppm	ASTM D5185m	5	**1**	0	1
Sulfur	ppm	ASTM D5185m	5000	**1400**	1161	1125

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**6**	4	4
Sodium	ppm	ASTM D5185m		**3**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **55888**	▲ 21892	▲ 37224
Particles >6µm		ASTM D7647	>2500	▲ **6243**	2102	▲ 3122
Particles >14µm		ASTM D7647	>320	**287**	49	44
Particles >21µm		ASTM D7647	>80	**75**	6	5
Particles >38µm		ASTM D7647	>20	**4**	1	2
Particles >71µm		ASTM D7647	>4	**1**	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/20/15**	▲ 22/18/13	▲ 22/19/13

OIL ANALYSIS REPORT

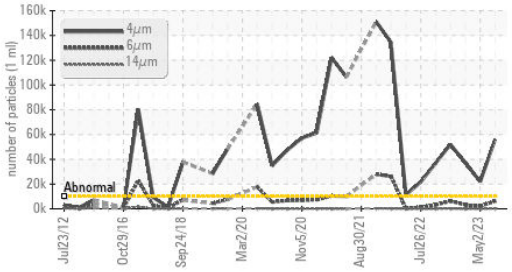
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	**0.52**	0.49	0.51

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	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
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

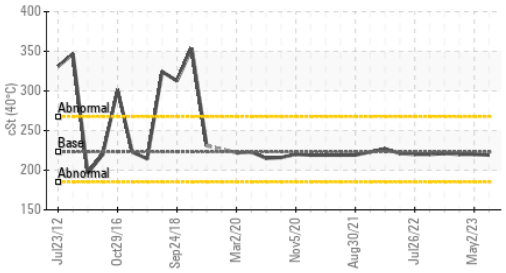
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	223	**219**	220	220

GRAPHS

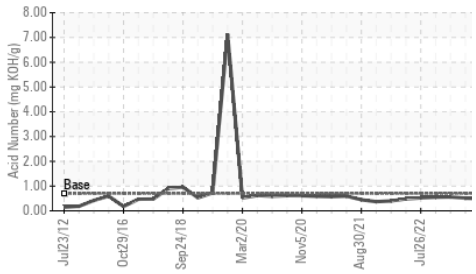
Particle Trend



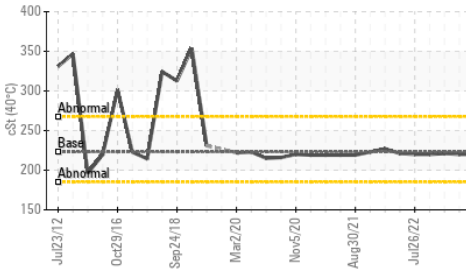
Viscosity @ 40°C



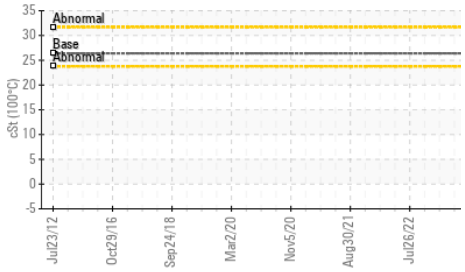
Acid Number



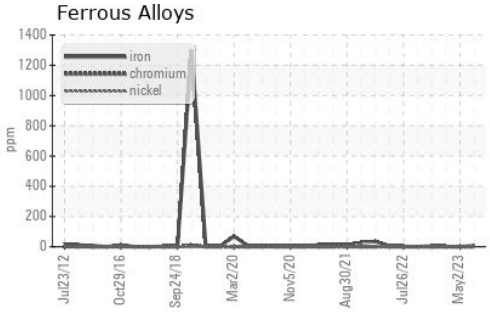
Viscosity @ 40°C



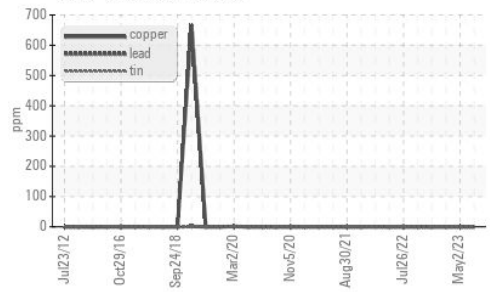
Viscosity @ 100°C



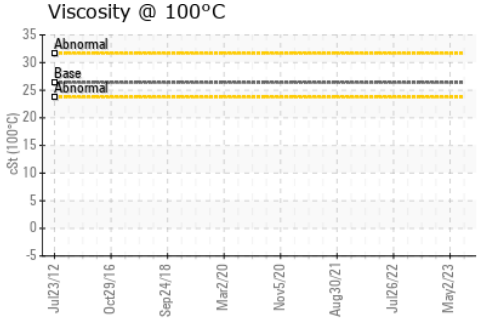
Ferrous Alloys



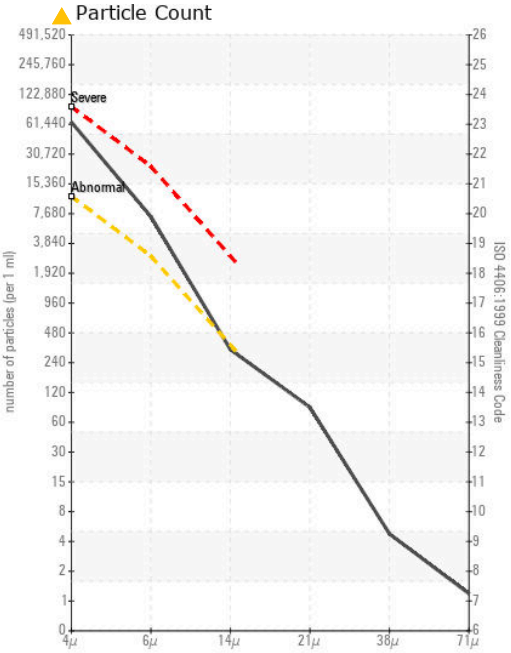
Non-ferrous Metals



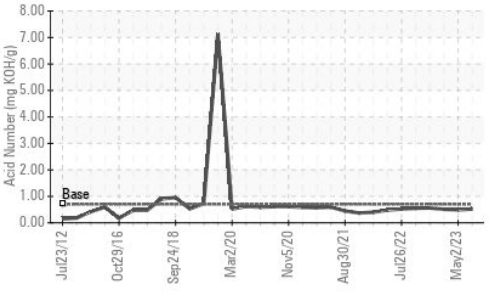
Viscosity @ 100°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0820529 **Received** : 21 Jul 2023
Lab Number : 05904327 **Diagnosed** : 24 Jul 2023
Unique Number : 10565683 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KV40, PrtCount)

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)

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