

### **OIL ANALYSIS REPORT**

# SQUIRE COGSWELL VACPUMP-006

Pump Fluid

#### SHELL TURBO S4 GX 32 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

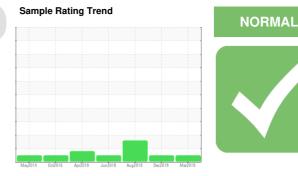
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

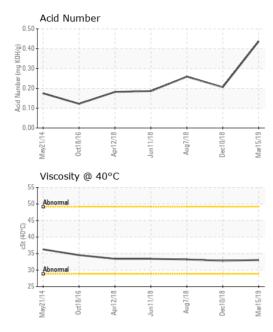
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



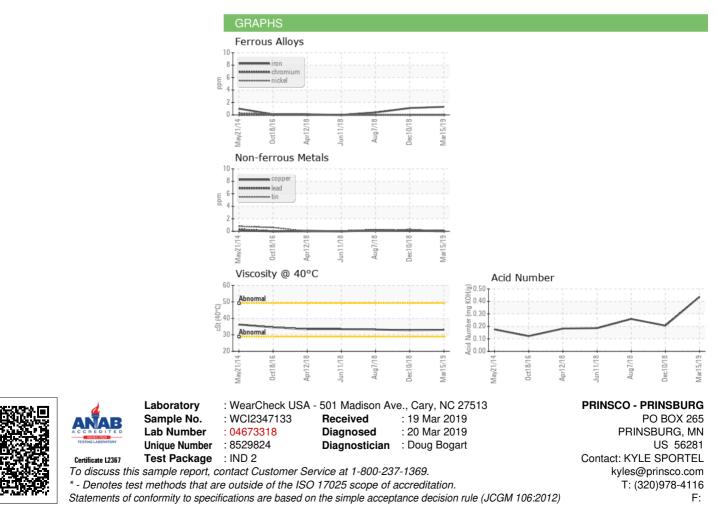
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WCI2347133	WCI2256373	WCI2342481
Sample Date		Client Info		15 Mar 2019	10 Dec 2018	07 Aug 2018
Machine Age	hrs	Client Info		66336	65075	62817
Oil Age	hrs	Client Info		3120	1859	1738
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	1	1	<1
Chromium	ppm	ASTM D5185m		0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>7	<1	0	0
Lead	ppm	ASTM D5185m	>12	0	<1	<1
Copper	ppm	ASTM D5185m	>30	<1	<1	<1
Tin	ppm	ASTM D5185m	>9	0	<1	0
Antimony	ppm	ASTM D5185m		0	0	<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		<1	<1	0
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	0
Calcium	ppm	ASTM D5185m		0	<1	0
Phosphorus	ppm	ASTM D5185m		116	120	326
Zinc	ppm	ASTM D5185m		7	6	2
Sulfur	ppm	ASTM D5185m		50	57	94
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	1	3
Sodium	ppm	ASTM D5185m		9	8	2
Potassium	ppm	ASTM D5185m	>20	6	5	3
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.437	0.206	0.259



## **OIL ANALYSIS REPORT**



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	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		NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
	<u>.</u>	ASTM D445		33.03	32.8	33.21
Visc @ 40°C	cSt	A311VI D443			52.0	00.21
Visc @ 40°C SAMPLE IMAGES		method	limit/base	current	history1	history2
-			limit/base			



Contact/Location: KYLE SPORTEL - PRIPRIMN