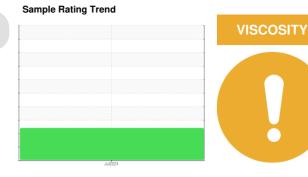


# **OIL ANALYSIS REPORT**

# STK PILES FRONT ST-01 **ST-01**

Gear Reducer

SHELL MORLINA S4 B 220 (--- GAL)



### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

## Fluid Condition

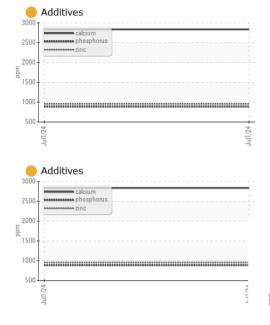
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

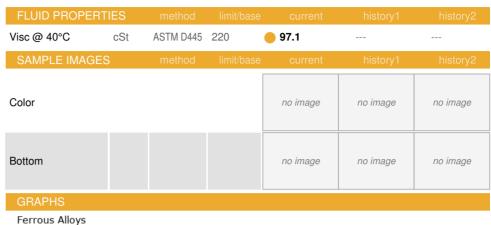
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0944149		
Sample Date		Client Info		01 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed	1110	Client Info		N/A		
Sample Status		Oliciti IIIIo		ATTENTION		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>250	85		
Chromium	ppm	ASTM D5185m	>5	<1		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>50	<1		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
	le le		11 1.0			
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		17		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		2		
Manganese	ppm	ASTM D5185m		1		
Magnesium	ppm	ASTM D5185m		15		
Calcium	ppm	ASTM D5185m		<b>2835</b>		
Phosphorus	ppm	ASTM D5185m		<b>887</b>		
Zinc	ppm	ASTM D5185m		955		
Sulfur	ppm	ASTM D5185m		3239		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	25		
Sodium	ppm	ASTM D5185m	- 00	0		
Potassium	ppm	ASTM D5185m	>20	2		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
		*Visual		NONE		
Precipitate	scalar	*Visual	NONE	_		
Silt	scalar			NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		

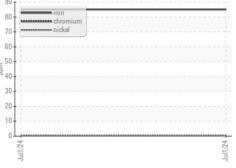
Contact/Location: Brian Bunnell - COVORE



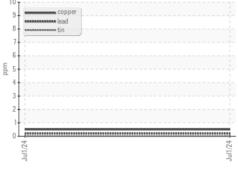
## **OIL ANALYSIS REPORT**

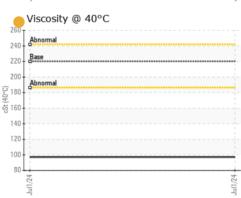






## Non-ferrous Metals









Certificate 12367

Laboratory Sample No.

: WC0944149 Lab Number : 06236504 Unique Number : 11125338

Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Jul 2024 Tested

: 16 Jul 2024 Diagnosed : 17 Jul 2024 - Sean Felton

**COVIA - OREGON - 004** 1446 DEVILS BACKBONE ROAD OREGON, IL

US 61061-0156 Contact: Brian Bunnell brian.bunnell@coviacorp.com

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)

Contact/Location: Brian Bunnell - COVORE

T: (815)677-8700