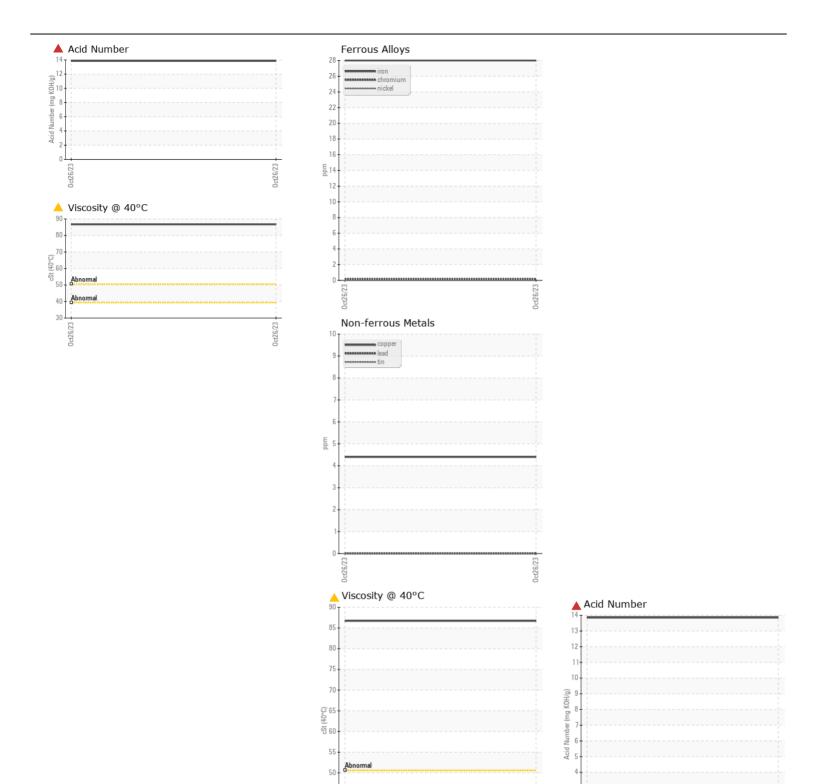
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL SEVERE**

SHELL 46 [1398556]

SULLAIR COAL HANDLING - CLINE CLIFFS (S/N NOT GIVEN) Compressor

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		UCH06030746		
	Sample Date		Client Info		26 Oct 2023		
	Machine Age	hrs	Client Info		65050		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185m	>50	28		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	<1		
	Lead	ppm	ASTM D5185m	>25	0		
	Copper	ppm	ASTM D5185m	>50	4		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	2		
There is a high amount of visible silt present in the sample.	Potassium	ppm	ASTM D5185m		1		
	Water		WC Method		NEG		
	Silt	scalar	*Visual	NONE	HEAVY		
	Debris	scalar	*Visual	NONE	NONE		
	Debris Sand/Dirt	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Sand/Dirt Appearance	scalar scalar	*Visual	NONE NORML	NONE NORML		
FLUID CONDITION	Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NORML	NONE NORML NORML NEG	 	
FLUID CONDITION The AN level is chose the recommended limit. The cil vice exity is	Sand/Dirt Appearance Odor	scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML	NONE NORML NORML NEG	 	
The AN level is above the recommended limit. The oil viscosity is	Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG	 	
	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0 0		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0 0		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0 0 0 <1 0		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0 0 <1 0 105		
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.	Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML	NONE NORML NORML NEG 21 0 0 0 <1 0 105 0		





Certificate L2367

Laboratory Sample No.

: UCH06030746 **Lab Number** : 06030746 Unique Number : 10780537 Test Package : IND 2

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

Diagnosed

: 11 Dec 2023 : 13 Dec 2023

: 14 Dec 2023 - Jonathan Hester

AIR TECHNOLOGIES INC (CLE) 6500 DAVIS INDUSTRIAL PARKWAY

CLEVELAND, OH US 44139

Contact: DERRICK PAES DPAES@AIRCOMPRESSORS.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.

T: (440)349-3900 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (440)349-0608