WEAR CONTAMINATION FLUID CONDITION

NORMAL ABNORMAL NORMAL

N. Carolina

INGERSOLL RAND Ingersoll Rand (S/N C1017527)

Component
Case Drain Reciprocating Compressor

ANDEROL ROYCO 889 (5 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		AN0000118	AN0000117	
	Sample Date		Client Info		08 Aug 2023	18 Jan 2022	
	Machine Age	hrs	Client Info		17441	2012	
	Oil Age	hrs	Client Info		841	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	SEVERE	
WEAR	Iron	nnm	ASTM D5185m	<u>~50</u>	33	2 71	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		აა <1	2	
	Nickel	ppm	ASTM D5185m	>10	0	1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>25	12	14	
	Lead	ppm	ASTM D5185m	>25	2	9	
	Copper	ppm	ASTM D5185m		32	<u>▲</u> 179	
	Tin	ppm	ASTM D5185m		3	<u> </u>	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	▲ MODER	
CONTAMINATION	0.00		AOTM DEADE	05		00	
CONTAMINATION There is a light concentration of water present in the oil.	Silicon	ppm	ASTM D5185m		7	23	
	Potassium Water	ppm %	ASTM D5185m ASTM D6304	>0.1	4 <u> </u>	2 0.079	
	ppm Water		ASTM D6304		▲ 1216.6	791.3	
	Silt	ppm scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.1	NEG	NEG	
ELUD CONDITION							
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0	1	
The AN level is acceptable for this fluid. The condition of the oil is	Boron	ppm	ASTM D5185m		0	0	
	Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m		0	0	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	0 0	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1	0 0 0 2	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 2	0 0 0 0 2	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 2	0 0 0 0 2 1 8	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0 0 <1 2 0 4	0 0 0 2 1 8 11	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0 0 <1 2 0 4	0 0 0 2 1 8 11	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0	0 0 0 <1 2 0 4 0 64	0 0 0 2 1 8 11 0	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0.1	0 0 0 <1 2 0 4	0 0 0 2 1 8 11	





Certificate L2367

Report Id: PCMPIT [WUSCAR] 05919822 (Generated: 04/02/2024 09:32:24) Rev: 1

Laboratory Sample No. Unique Number: 10591736

Lab Number : 05919822

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : AN0000118

Received **Tested**

: 10 Aug 2023 Diagnosed Test Package: IND 2 (Additional Tests: PrtCount)

: 09 Aug 2023

: 10 Aug 2023 - Jonathan Hester

PC MCKENZIE CO PO BOX 112638 PITTSBURGH, PA US 15241 Contact: MATT GOOD

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.

matt.good@mckenziecorp.com T: (412)257-8866 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (412)257-8890

Contact/Location: MATT GOOD - PCMPIT