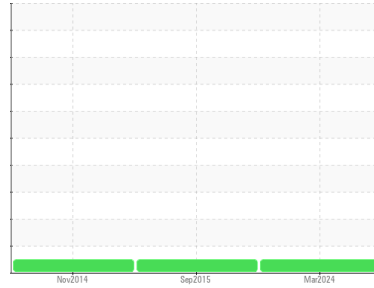


Area
QUANDRA COOLANT
Machine Id
SULLIVAN PALATEK 1308120007 - KERFORD LIMESTONE UNIT 4
Component
Compressor



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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			UCS06131458	UCS03851251	UCS03647997
Sample Date	Client Info			08 Mar 2024	18 Sep 2015	25 Nov 2014
Machine Age	hrs	Client Info		64681	12529	9615
Oil Age	hrs	Client Info		2100	998	687
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.8	NEG	NEG	NEG

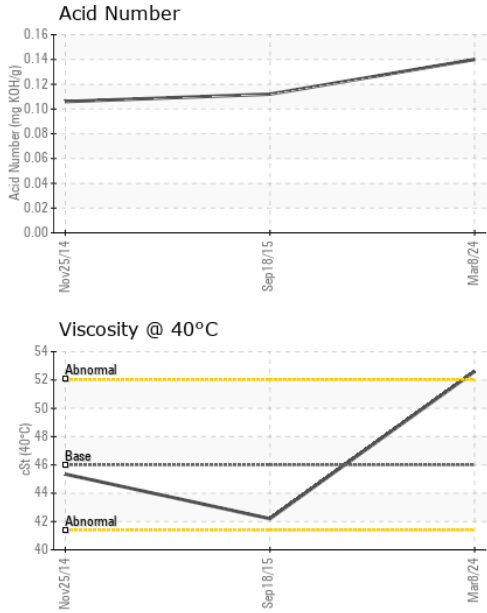
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	0	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	<1
Lead	ppm	ASTM D5185m	>25	<1	0	2
Copper	ppm	ASTM D5185m	>50	1	0	0
Tin	ppm	ASTM D5185m	>15	<1	2	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	0	0
Barium	ppm	ASTM D5185m	525	667	0	0
Molybdenum	ppm	ASTM D5185m	10	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	5	<1	0	0
Calcium	ppm	ASTM D5185m	10	7	0	0
Phosphorus	ppm	ASTM D5185m	250	93	716	316
Zinc	ppm	ASTM D5185m	100	0	0	0
Sulfur	ppm	ASTM D5185m	400	409	944	346

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	0	2
Sodium	ppm	ASTM D5185m		13	0	1
Potassium	ppm	ASTM D5185m	>20	2	2	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.14	0.112	0.106

OIL ANALYSIS REPORT



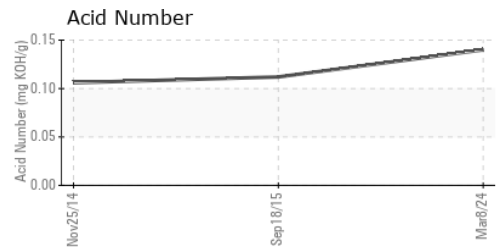
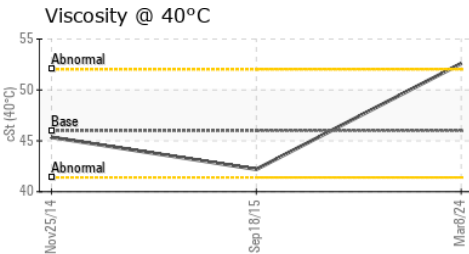
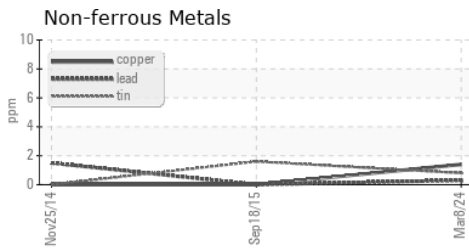
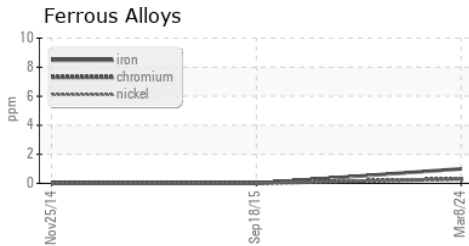
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	HEAVY
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.8	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	52.6	42.2	45.35

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCS06131458
Lab Number : 06131458
Unique Number : 10950923
Test Package : IND 2

RASMUSSEN AIR & GAS ENERGY
 655 240TH STREET
 WATERLOO, NE
 US 68069
 Contact: CHASE SVOBODA
 chase.svoboda@rage-energy.com
 T: (402)614-9926
 F:

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)