

## **OIL ANALYSIS REPORT**

### Area IR ULTRA COOLANT Machine Id INGERSOLL RAND CBV899397 - AMEREN

Component Compressor

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

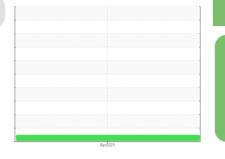
All component wear rates are normal.

#### 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 Rating Trend

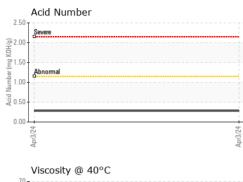


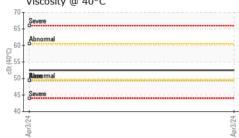
NORMAL

SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		UCH06154512		
Sample Date		Client Info		03 Apr 2024		
Machine Age	hrs	Client Info		2092		
Oil Age	hrs	Client Info		2092		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>25	1		
Lead	ppm	ASTM D5185m	>25	0		
Copper	ppm	ASTM D5185m	>50	<1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	500	787		
Molybdenum	ppm	ASTM D5185m	0	<1		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m	0	2		
Calcium	ppm	ASTM D5185m	0	6		
Phosphorus	ppm	ASTM D5185m	20	1		
Zinc	ppm	ASTM D5185m	0	<1		
Sulfur	ppm	ASTM D5185m	200	320		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2		
Sodium	ppm	ASTM D5185m		17		
Potassium	ppm	ASTM D5185m	>20	9		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.28		



# **OIL ANALYSIS REPORT**





White Metal   scalar   *Visual   NONE   NONE      Yellow Metal   scalar   *Visual   NONE   NONE    Image     Precipitate   scalar   *Visual   NONE   NONE   NONE    Image     Silt   scalar   *Visual   NONE   NONE   NONE    Image     Debris   scalar   *Visual   NONE   NONE   NONE    Image
Precipitate   scalar   *Visual   NONE   NONE      Silt   scalar   *Visual   NONE   NONE    I     Debris   scalar   *Visual   NONE   LIGHT    I     Sand/Dirt   scalar   *Visual   NONE   NONE    I     Appearance   scalar   *Visual   NORML   NORML    I     Odor   scalar   *Visual   NORML   NORML    I     Emulsified Water   scalar   *Visual   NORML   NORML    I     Free Water   scalar   *Visual   >0.1   NEG    I     Visc @ 40°C   cSt   ASTM D45   49.4   52.5      SAMPLE IMAGES   method   Imit/base   current   history1     Color   Color   I   Imit/base   current   history1     Bottom   I   I   Imit/base   no image   I   Imit/base   no image   I     GRAPHS   Image   Image
Siltscalar*VisualNONENONEDebrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLFree Waterscalar*Visual>0.1NEGFree Waterscalar*Visual>0.1NEGVisc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorColorscalar*imit/baseno imageBottomiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEIAppearancescalar*VisualNORMLNORMLIOdorscalar*VisualNORMLNORMLIEmulsified Waterscalar*Visual>0.1NEGIFree Waterscalar*Visual>0.1NEGIFree Waterscalar*Visual>0.1NEGIVisc @ 40°CcStASTM D44549.452.5ISAMPLE IMAGESmethodlimit/basecurrenthistory1Colorclorimit/basecurrentno imageBottomimitimitimit/baseno imageCaRPHSimitimitimit/baseimit/base
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEIAppearancescalar*VisualNORMLNORMLIOdorscalar*VisualNORMLNORMLIEmulsified Waterscalar*Visual>0.1NEGIFree Waterscalar*Visual>0.1NEGIFree Waterscalar*VisualImit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodimit/basecurrenthistory1ColorColorImit/basecurrenthistory1BottomImitImit/basecurrenthistory1ColorImit/basecurrenthistory1ColorImit/basecurrenthistory1RotherImit/basecurrenthistory1Imit/baseImit/basecurrenthistory1Imit/baseImit/basecurrenthistory1Imit/baseImit/basecurrenthistory1Imit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/baseImit/BaseImit/BaseImit/BaseImit/BaseImit/BaseImit/BaseImit/BaseImit
Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGFree Waterscalar*VisualNEGImit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorBottomGRAPHS
Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGFree Waterscalar*VisualNEGImit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorBottomGRAPHS
Odorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGFree Waterscalar*VisualNEGImit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorBottomGRAPHS
Emulsified Waterscalar*Visual>0.1NEGFree Waterscalar*VisualImit/basecurrenthistory1FLUID PROPERTIESmethodlimit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorBottomGRAPHS
Free Waterscalar*VisualNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1Visc @ 40°CcStASTM D44549.452.5SAMPLE IMAGESmethodlimit/basecurrenthistory1Colorlimit/basecurrentno imageBottomno imageGRAPHS </th
FLUID PROPERTIES method limit/base current history1   Visc @ 40°C cSt ASTM D445 49.4 52.5    SAMPLE IMAGES method limit/base current history1   Color Imit/base current no image   Bottom Imit/base no image   GRAPHS GRAPHS Imit/base Imit/base
Visc @ 40°C   cSt   ASTM D445   49.4   52.5      SAMPLE IMAGES   method   imit/base   current   history1     Color   method   imit/base   current   no image     Bottom   method   imit/base   current   no image     GRAPHS   method   state   state   state
SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorImageImageImageBottomImageImageImageGRAPHSImageImage
Color   Image     Bottom   Image     GRAPHS   Image
Bottom no image no image GRAPHS
GRAPHS
Non-ferrous Metals
Viscosity @ 40°C Acid Number
Severe     Severe       65     Abnormal       Abnormal     60       45     Severe       45     Severe       45     Severe       45     Severe       45     Severe       45     Severe       40     FZEPGY

To discuss this sample report, con

\* - 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)

Report Id: UCJOHSAI [WUSCAR] 06154512 (Generated: 04/23/2024 17:27:08) Rev: 1

Certificate L2367

Contact/Location: RACHEL VON HATTEN - UCJOHSAI

Page 2 of 2

F: (314)874-0965