

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Area ACAS 115 Machine Id CHICAGO PNEUMATIC ITJ108875 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

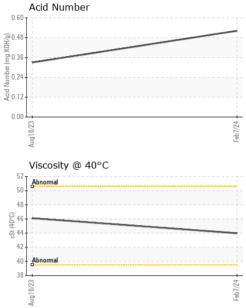
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Date         Client Info         07 Feb 2024         18 Aug 2023            Machine Age         hrs         Client Info         4840         15650            Oil Age         hrs         Client Info         4840         0            Oil Changed         Client Info         Changed         Changed            Sample Status         NORMAL         NORMAL         NORMAL            CONTAMINATION         method         limi/base         current         history1         history2           Water         WC Method         >0.1         NEG         NEG            WEAR METALS         method         imi/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50<<<1         <1             Nickel         ppm         ASTM D5185m         0         0             Silver         ppm         ASTM D5185m         >50         2         <1            Chronium         ppm         ASTM D5185m         >50         2         <1            Silver         ppm         AST				AUG2023	P802024		
Sample Date         Client Info         07 Feb 2024         18 Aug 2023            Machine Age         hrs         Client Info         4840         0            Oil Age         hrs         Client Info         4840         0            Oil Changed         Client Info         4840         0            Sample Status         NORMAL         NORMAL         NORMAL            CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.1         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50<<<1         <1             Vickel         ppm         ASTM D5185m         0         0             Silver         ppm         ASTM D5185m         >50         2         <1            Copper         ppm         ASTM D5185m         >50         2         <1            Cadmium         ppm         ASTM D5185	SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         4840         15650            Oil Age         hrs         Client Info         4840         0            Sample Status         Client Info         Changed         Changed            Sample Status         NORMAL         NORMAL          NORMAL            CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.1         NEG          Nerent         history1         history2           Wron         ppm         ASTM D5185m         50         <1         <1            Chromium         ppm         ASTM D5185m         0         0             Nickel         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         25         0         0            Copper         ppm         ASTM D5185m         21         <1            Cadmium         ppm         ASTM D5185m         0         0	Sample Number		Client Info		UCH06125019	UCH05944700	
Oil Age       hrs       Client Info       4840       0          Oil Changed       Client Info       Changed       Changed          Sample Status       Image: Client Info       NORMAL       NORMAL          CONTAMINATION       method       limit/base       current       history1       history2         Water       WC Method       >0.1       NEG       NEG          WEAR METALS       method       imit/base       current       history1       history2         Iron       ppm       ASTM D5185m       S0       <1       <1          Nickel       ppm       ASTM D5185m       0       0          Auminum       ppm       ASTM D5185m       0       0          Auminum       ppm       ASTM D5185m       >25       0       0          Qandium       ppm       ASTM D5185m       >1       0          Vanadium       ppm       ASTM D5185m       >1       0          Qandium       ppm       ASTM D5185m       0       0          Qandium       pm       ASTM D5185m       0	Sample Date		Client Info		07 Feb 2024	18 Aug 2023	
Oil Changed Sample Status     Client Info     Changed NORMAL     Changed NORMAL        CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method >0.1     NEG     NEG        WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     <1     <1        Ohromium     ppm     ASTM D5185m     >10     <1     0        Nickel     ppm     ASTM D5185m     0     0        Silver     ppm     ASTM D5185m     >25     3     0        Aluminum     ppm     ASTM D5185m     >25     0     0        Copper     ppm     ASTM D5185m     >50     2     <1        Yanadium     ppm     ASTM D5185m     >15     <1     0        Vanadium     ppm     ASTM D5185m     0     0        ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0        ADDitives     ppm     ASTM D5185m     0     0	Machine Age	hrs	Client Info		4840	15650	
Sample Status         NORMAL         NORMAL         NORMAL            CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.1         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1         <1            Chromium         ppm         ASTM D5185m         >10         <1         0            Nickel         ppm         ASTM D5185m         0         0             Silver         ppm         ASTM D5185m         25         3         0            Aluminum         ppm         ASTM D5185m         >25         0         0            Copper         ppm         ASTM D5185m         >50         2         1            Cadmium         ppm         ASTM D5185m         >15         <1         0            ASTM D5185m         0         0         0	Oil Age	hrs	Client Info		4840	0	
CONTAMINATIONmethodlimit/basecurrenthistory1history2WaterWC Method>0.1NEGNEGWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m>50<1<1ChromiumppmASTM D5185m00NickelppmASTM D5185m00SilverppmASTM D5185m00AduminumppmASTM D5185m2530LeadppmASTM D5185m>2500CopperppmASTM D5185m>502<1TinppmASTM D5185m>502<1CadmiumppmASTM D5185m>15<10QanadiumppmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m00MaganeseppmASTM D5185m00MaganeseppmASTM D5185m210CalciumppmASTM D5185m210MagnesiumppmASTM D5185m00MagneseppmASTM D5185m22725SulfurppmASTM D5185m215155Sulfur<	Oil Changed		Client Info		Changed	Changed	
Water         WC Method         >0.1         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1         <1            Ohromium         ppm         ASTM D5185m         >10         <1         0            Nickel         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         25         3         0            Aluminum         ppm         ASTM D5185m         >25         0         0            Aluminum         ppm         ASTM D5185m         >25         0         0            Aluminum         ppm         ASTM D5185m         >50         2         <1            Astm D5185m         >50         2         <1         0            Cadmium         ppm         ASTM D5185m         0         0            ADDTIVES         method         limit/base         current         history1         history2	Sample Status				NORMAL	NORMAL	
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         <1         <1            Chromium         ppm         ASTM D5185m         0         0             Nickel         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         25         3         0            Aluminum         ppm         ASTM D5185m         >25         0         0            Lead         ppm         ASTM D5185m         >50         2         <1            Cadmium         ppm         ASTM D5185m         >15         <1         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0            Barium         ppm         ASTM D5185m         2         2      <	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron         ppm         ASTM D5185m         >50         <1	Water		WC Method	>0.1	NEG	NEG	
Iron         ppm         ASTM D5185m         >50         <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium         ppm         ASTM D5185m         >10         <1	Iron	maa	ASTM D5185m	>50	<1	<1	
Nickel         ppm         ASTM D5185m         0         0            Titanium         ppm         ASTM D5185m         <1         0            Silver         ppm         ASTM D5185m         0         0            Aluminum         ppm         ASTM D5185m         >25         3         0            Lead         ppm         ASTM D5185m         >25         0         0            Copper         ppm         ASTM D5185m         >50         2         <1            Tin         ppm         ASTM D5185m         >50         2         <1         0            Cadmium         ppm         ASTM D5185m         >15         <1         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0            Molybdenum         ppm         ASTM D5185m         0         0            Maganese         ppm         ASTM D5185m         227         25            Calcium         ppm <th>-</th> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>	-						
Titanium         ppm         ASTM D5185m         <1	Nickel						
Silver         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m         >25         3         0            Lead         ppm         ASTM D5185m         >25         0         0            Copper         ppm         ASTM D5185m         >50         2         <1            Tin         ppm         ASTM D5185m         >50         2         <1            Vanadium         ppm         ASTM D5185m         >15         <1         0            Vanadium         ppm         ASTM D5185m         <1         0            Cadmium         ppm         ASTM D5185m         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         2         2             Marganese         ppm         ASTM D5185m         0         0             M					-		
Aluminum         ppm         ASTM D5185m         >25         3         0            Lead         ppm         ASTM D5185m         >25         0         0            Copper         ppm         ASTM D5185m         >50         2         <1            Tin         ppm         ASTM D5185m         >15         <1         0            Cadmium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         227         25             Magnesium         ppm         ASTM D5185m         227         25             Sulfur         ppm         ASTM D5185m         227							
Lead         ppm         ASTM D5185m         >25         0         0            Copper         ppm         ASTM D5185m         >50         2         <1				>25	-		
Copper         ppm         ASTM D5185m         >50         2         <1					-		
Tin         ppm         ASTM D5185m         >15         <1					-		
VanadiumppmASTM D5185m<1					_		
CadmiumppmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m00BariumppmASTM D5185m22MolybdenumppmASTM D5185m00ManganeseppmASTM D5185m00MagnesiumppmASTM D5185m<10CalciumppmASTM D5185m22725ZincppmASTM D5185m22725ZincppmASTM D5185m125155SulfurppmASTM D5185m80044CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>202<1PotassiumppmASTM D5185m>202<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2				210			
BoronppmASTM D5185m00BariumppmASTM D5185m22MolybdenumppmASTM D5185m00ManganeseppmASTM D5185m00MagnesiumppmASTM D5185m<10CalciumppmASTM D5185m<22725PhosphorusppmASTM D5185m227725ZincppmASTM D5185m125155SulfurppmASTM D5185m80044CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>202<1PotassiumppmASTM D5185m>202<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Cadmium						
Barium         ppm         ASTM D5185m         2         2            Molybdenum         ppm         ASTM D5185m         0         0            Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         0         0            Calcium         ppm         ASTM D5185m         <1         0            Calcium         ppm         ASTM D5185m         3         0            Calcium         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         20         444            Sodium         ppm         ASTM D5185m         >25         7         <1            Sodium         ppm         ASTM D5185m         >20         2         <1            Potassium         ppm         ASTM D5185m         >20         2         <1	ADDITIVES		method	limit/base	current	history1	history2
Barium         ppm         ASTM D5185m         2         2            Molybdenum         ppm         ASTM D5185m         0         0            Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         0         0            Calcium         ppm         ASTM D5185m         <1         0            Calcium         ppm         ASTM D5185m         3         0            Calcium         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         20         444            Sodium         ppm         ASTM D5185m         >25         7         <1            Sodium         ppm         ASTM D5185m         >20         2         <1            Potassium         ppm         ASTM D5185m         >20         2         <1	Boron	nnm	ASTM D5185m		0	0	
Molybdenum         ppm         ASTM D5185m         0         0            Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         <1         0            Calcium         ppm         ASTM D5185m         <1         0            Calcium         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         227         25            Sulfur         ppm         ASTM D5185m         20         44            Sodium         ppm         ASTM D5185m         >25         7         <1            Sodium         ppm         ASTM D5185m         >20         2         <1            Potassium         ppm         ASTM D5185m         >20         2         <1            FLUID DEGRADATION         method         limit/base         curre							
Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         <1         0            Calcium         ppm         ASTM D5185m         3         0            Calcium         ppm         ASTM D5185m         3         0            Phosphorus         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         125         155            Sulfur         ppm         ASTM D5185m         800         44            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7         <1            Sodium         ppm         ASTM D5185m         >0         10             Potassium         ppm         ASTM D5185m         >20         2         <1            FLUID DEGRADATION         method         limit/base         current         history1         history2					_	0	
Magnesium         ppm         ASTM D5185m         <1	•		ASTM D5185m				
Calcium         ppm         ASTM D5185m         3         0            Phosphorus         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         125         155            Sulfur         ppm         ASTM D5185m         800         44            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7         <1            Sodium         ppm         ASTM D5185m         >20         2         <1            Potassium         ppm         ASTM D5185m         >20         2         <1            FLUID DEGRADATION         method         limit/base         current         history1         history2	0				-		
Phosphorus         ppm         ASTM D5185m         227         25            Zinc         ppm         ASTM D5185m         125         155            Sulfur         ppm         ASTM D5185m         800         44            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7         <1	Calcium						
ZincppmASTM D5185m125155SulfurppmASTM D5185m80044CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>257<1SodiumppmASTM D5185m>257<1PotassiumppmASTM D5185m>202<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2					-		
SulfurppmASTM D5185m80044CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>257<1SodiumppmASTM D5185m010PotassiumppmASTM D5185m>202<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Zinc						
Silicon         ppm         ASTM D5185m         >25         7         <1	Sulfur						
Sodium     ppm     ASTM D5185m     0     10        Potassium     ppm     ASTM D5185m     >20     2     <1	CONTAMINANTS		method	limit/base	current	history1	history2
SodiumppmASTM D5185m010PotassiumppmASTM D5185m>202<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Silicon	ppm	ASTM D5185m	>25	7	<1	
Potassium         ppm         ASTM D5185m         >20         2         <1	Sodium		ASTM D5185m		0	10	
	Potassium		ASTM D5185m	>20	2	<1	
Acid Number (AN) mg KOH/g ASTM D8045 0.522 0.33	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.522	0.33	



# **OIL ANALYSIS REPORT**

VISUAL



	VISUAL		method	limit/base		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	LIGHT	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Feb7/24	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Free Water	scalar	*Visual	>0.1	NEG	NEG	
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		43.98	46.1	
	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Feb/7/24	Color						no image
	Bottom						no image
	Non-ferrous Met	als		124 <b>Feb</b> 1/24 <b>Feb</b> 1/24			
	Aug18/23			Feb7/24			
	A						
	Viscosity @ 40°C	2			Acid Number		
	Viscosity @ 40°C	2			Acid Number		
	Viscosity @ 40°C	2		( <sup>0.60</sup> ЮНОУ В	Acid Number		
	Viscosity @ 40°C			(第0.60 例子) 0.48 题 0.36	Acid Number		
	Viscosity @ 40°C			(b) 0.60 (b) 0.48 (b) 0.36 (c) 24 (c) 24	Acid Number		
	Viscosity @ 40°C			0.60 0.48 0.36 40.24 0.24 0.24	Acid Number		
	Viscosity @ 40°C			0.00			
	Viscosity @ 40°C			10.60 HON 0.48 HON 0.86 Hon 0.24 Hon 0.	Acid Number		

Contact/Location: JIM SUAREZ - UCADVTOM