

## **OIL ANALYSIS REPORT**

### Area AIRLUBE PLUS 10 ATLAS COPCO API624787 - ORION LP BORGER TX

Component Compressor

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

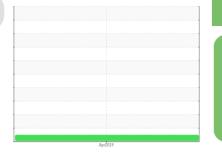
All component wear rates are normal.

#### 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

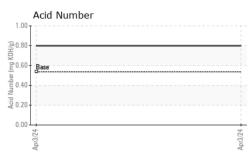


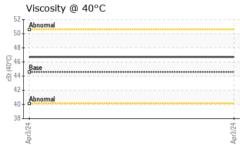
NORMAL

| SAMPLE INFORM    | <b>MATION</b> | method      | limit/base | current     | history1 | history2 |
|------------------|---------------|-------------|------------|-------------|----------|----------|
| Sample Number    |               | Client Info |            | UCH06161611 |          |          |
| Sample Date      |               | Client Info |            | 03 Apr 2024 |          |          |
| Machine Age      | hrs           | Client Info |            | 51395       |          |          |
| Oil Age          | hrs           | Client Info |            | 4131        |          |          |
| 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        | 0           |          |          |
| Chromium         | ppm           | ASTM D5185m | >5         | 0           |          |          |
| Nickel           | ppm           | ASTM D5185m |            | 0           |          |          |
| Titanium         | ppm           | ASTM D5185m |            | <1          |          |          |
| Silver           | ppm           | ASTM D5185m |            | 0           |          |          |
| Aluminum         | ppm           | ASTM D5185m | >15        | 0           |          |          |
| Lead             | ppm           | ASTM D5185m | >65        | 0           |          |          |
| Copper           | ppm           | ASTM D5185m | >65        | <1          |          |          |
| Tin              | ppm           | ASTM D5185m | >10        | 0           |          |          |
| Vanadium         | ppm           | ASTM D5185m |            | 0           |          |          |
| Cadmium          | ppm           | ASTM D5185m |            | 0           |          |          |
| ADDITIVES        |               | method      | limit/base | current     | history1 | history2 |
| Boron            | ppm           | ASTM D5185m | 0.1        | 0           |          |          |
| Barium           | ppm           | ASTM D5185m | 0.8        | <1          |          |          |
| Molybdenum       | ppm           | ASTM D5185m | 0          | 0           |          |          |
| Manganese        | ppm           | ASTM D5185m | 0.9        | <1          |          |          |
| Magnesium        | ppm           | ASTM D5185m | 0          | 0           |          |          |
| Calcium          | ppm           | ASTM D5185m | 0          | 0           |          |          |
| Phosphorus       | ppm           | ASTM D5185m | 409        | 650         |          |          |
| Zinc             | ppm           | ASTM D5185m | 0          | 0           |          |          |
| Sulfur           | ppm           | ASTM D5185m | 1290       | 367         |          |          |
| CONTAMINANTS     | ;             | method      | limit/base | current     | history1 | history2 |
| Silicon          | ppm           | ASTM D5185m | >35        | 0           |          |          |
| Sodium           | ppm           | ASTM D5185m |            | 1           |          |          |
| Potassium        | ppm           | ASTM D5185m | >20        | 0           |          |          |
| FLUID DEGRADA    | TION          | method      | limit/base | current     | history1 | history2 |
| Acid Number (AN) | mg KOH/g      | ASTM D8045  | 0.537      | 0.80        |          |          |



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| White Metal       scalar       *Visual       NONE       NONE           Precipitate       scalar       *Visual       NONE       NONE           Silt       scalar       *Visual       NONE       NONE           Silt       scalar       *Visual       NONE       NONE           Debris       scalar       *Visual       NONE       NONE           Sand/Dirt       scalar       *Visual       NONE       NONE           Appearance       scalar       *Visual       NORML       NORML           Odor       scalar       *Visual       NORML       NORML           Emulsified Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       >0.1       NEG            SAMPLE IMAGES       method       limit/base       current       history1       history1         Visc@ 40°C       cSt       ASTM D45       44.56       46.7  | ory1 history age no image  |
|---|--|
| Precipitate scalar *Visual NONE NONE<br>Silt scalar *Visual NONE NONE<br>Debris scalar *Visual NONE NONE<br>Sand/Dirt scalar *Visual NONE NONE<br>Appearance scalar *Visual NORML NORML<br>Odor scalar *Visual NORML NORML<br>Emulsified Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual NORML NORML<br>Free Water scalar *Visual NORML NORML<br>Free Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual NORML NORML NORML<br>Free Water scalar *Visual >0.1 NEG<br>SAMPLE IMAGES method imit/base current history1 history<br>Visc @ 40°C cSt ASTM D445 44.56 46.7<br>SAMPLE IMAGES method imit/base current history1 history<br>Color no image no image<br>no image no image<br>Bottom no image no image   | age no image   |
| Precipitate scalar *Visual NONE NONE<br>Silt scalar *Visual NONE NONE<br>Debris scalar *Visual NONE NONE<br>Sand/Dirt scalar *Visual NONE NONE<br>Appearance scalar *Visual NORML NORML<br>Odor scalar *Visual NORML NORML<br>Emulsified Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual NORML NORML<br>Free Water scalar *Visual NORML NORML<br>Free Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual NORML NORML NORML<br>Free Water scalar *Visual >0.1 NEG<br>SAMPLE IMAGES method imit/base current history1 history<br>Visc @ 40°C cSt ASTM D445 44.56 46.7<br>SAMPLE IMAGES method imit/base current history1 history<br>Color no image no image<br>no image no image<br>Bottom no image no image   | age no image   |
| Silt scalar Visual NONE NONE Sand/Dirt scalar Visual NONE NONE Appearance scalar Visual NONE NONE   | age no image   |
| Debris scalar *Visual NONE NONE<br>Sand/Dirt scalar *Visual NONE NONE<br>Appearance scalar *Visual NORML NORML<br>Emulsified Water scalar *Visual NORML NORML<br>Free Water scalar *Visual >0.1 NEG<br>Free Water scalar *Visual NORML NEG<br>FLUID PROPERTIES method limit/base current history1 history<br>Visc @ 40°C cSt ASTM D445 44.56 46.7<br>SAMPLE IMAGES method limit/base current history1 history<br>Color I imit/base current history1 history<br>Retro get 0°C cSt ASTM D445 44.56 46.7<br>SAMPLE IMAGES method limit/base current history1 history<br>Retro get 0°C cSt ASTM D445 44.56 46.7<br>Non-ferrous Alloys   | age no image   |
| Sand/Dirt       scalar       *Visual       NONE           Appearance       scalar       *Visual       NORML       NORML           Odor       scalar       *Visual       NORML       NORML           Odor       scalar       *Visual       NORML       NORML           Emulsified Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       >0.1       NEG           Ferewater       scalar       *Visual       NORML       NORML       NEG           Fullo PROPERTIES       method       limit/base       current       history1       history1         Visc @ 40°C       cSt       ASTM D445       44.56       46.7           SAMPLE IMAGES       method       limit/base       current       history1       history1         Bottom       g       no image       no image       no image       no image         figure   | age no image   |
| Appearance       scalar       *Visual       NORML           Odor       scalar       *Visual       NORML       NORML           Emulsified Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       >0.1       NEG           FLUID PROPERTIES       method       limit/base       current       history1       history         Visc @ 40°C       cSt       ASTM D445       44.56       46.7           SAMPLE IMAGES       method       limit/base       current       history1       history1         Color       Imit/base       current       no image       no image       no image         Bottom       Imit/base       revent       no image       no image       no image         function       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base         Glor       Imit/base       Imit/base       Imit/base       no image       no image         function       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base         GRAP  | ory1 history<br><br>ory1 history<br><br>ory1 history<br>age no image |
| Odor       scalar       *Visual       NORML           Emulsified Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       >0.1       NEG           Free Water       scalar       *Visual       NEG            FLUID PROPERTIES       method       limit/base       current       history1       history         Visc @ 40°C       cSt       ASTM D445       44.56       46.7           SAMPLE IMAGES       method       limit/base       current       history1       history1         Color       Imit Mages       no image       no image       no image       no image         Bottom       Imit Mages       Imit Mages       Imit Mages       Imit Mages       Imit Mages         GRAPHS       Ferrous Alloys       Imit Mages       Imit Mages       Imit Mages       Imit Mages       Imit Mages         Imit Mages       Imit Mages       Imit Mages       Imit Mages       Imit Mages       Imit Mages         Bottom       Imit Mages       Imit Mages       Imit Mages <thimit mages<="" th=""> <thimit mages<="" th=""> <thimi< td=""><td>ory1 history<br/><br/>ory1 history<br/>age no image</td></thimi<></thimit></thimit> | ory1 history<br><br>ory1 history<br>age no image                     |
| Emulsified Water scalar *Visual >0.1 NEG   Free Water scalar *Visual NEG   FLUID PROPERTIES method limit/base current history1 history   Visc @ 40°C cSt ASTM D445 44.56 46.7   SAMPLE IMAGES method limit/base current history1 history   Color Imit/base current history1 history   Bottom Imit/base current no image no image   Bottom Imit/base recurrent history no image  | ory1 history<br><br>ory1 history<br>age no image                     |
| Free Water scalar *Visual NEG   FLUID PROPERTIES method limit/base current history1 history   Visc @ 40°C cSt ASTM D445 44.56 46.7   SAMPLE IMAGES method limit/base current history1 history1   Color imit/base current history1 history1   Bottom imit/base current no image no image   Bottom imit/base no image no image no image   | ory1 history<br><br>ory1 history<br>age no image                     |
| FLUID PROPERTIES       method       limit/base       current       history1       history1         Visc @ 40°C       cSt       ASTM D445       44.56       46.7           SAMPLE IMAGES       method       limit/base       current       history1       history1         Color       imit/base       current       history1       history1         Bottom       imit/base       current       no image       no image         Bottom       imit/base       no image       no image       no image         GRAPHS   | age no image   |
| Visc @ 40°C       cSt       ASTM D445       44.56       46.7           SAMPLE IMAGES       method       limit/base       current       history1       history1       history1         Color       Image       no image       no image       no image       no image         Bottom       Image       no image       no image       no image       no image         GRAPHS       Ferrous Alloys       Image       Image       Image       Image         Mon-ferrous Metals       Image       Image       Image       Image       Image         Non-ferrous Metals       Image       Image       Image       Image       Image  | age no image   |
| SAMPLE IMAGES       method       limit/base       current       history1       history         Color       Image       no image       no image       no image         Bottom       Image       no image       no image       no image         Bottom       Image       no image       no image         GRAPHS       Image       Image       Image         Ferrous Alloys       Image       Image       Image         Image       Image       Image       Image       Image         Image       Image       Image       Image       Image         Image       Image       Image       Image       Image         Image       Image       Image       Image       Image         Image       Image       <  | age no image   |
| Color no image no image<br>Bottom no image no image<br>no image no image<br>GRAPHS<br>Ferrous Alloys  | age no image   |
| Bottom no image no image<br>GRAPHS<br>Ferrous Alloys  |  |
| GRAPHS<br>Ferrous Alloys  | age no image   |
| Ferrous Alloys  |  |
|   |  |
|   |  |
| Viscosity @ 40°C Acid Number  |  |
| Acid Nulliber   |  |
| Acid Nulliber   |  |
| Add Number  |  |
| Acid Nulliber   |  |
| S5         Action With Der           6         Base         Base           6         Base         Base           6         Base         Base           6         Base         Base  |  |
| S5         Abnomal         S0         Base           50         Abnomal         Base         Base   |  |
| und d 2 0 4 2 Cody  |  |

To discuss this sample report, contact Customer \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (502)253-6361 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (502)254-2523

Certificate L2367

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Contact/Location: BRYAN BENJAMIN - UCAIRLOU