



SULLAIR PREVENTIVE MAINTENANCE PROGRAM

Compressor fluid is the lifeblood of your compressor. Regular oil testing can help you manage compressor maintenance and optimize performance by identifying abnormal wear or contamination.

A fluid analysis program can help predict potential problems before a major or unplanned repair occurs — helping avoid unnecessary downtime and plan service and maintenance actions during the most optimal times.

Unplanned downtime costs US manufacturers an average of \$50 billion annually*

A robust preventive maintenance plan can help:

- Increase ROI tenfold
- Reduce breakdowns by 70%
- Reduce downtime by 35 - 45%
- Reduce maintenance-related costs by 25 - 30%

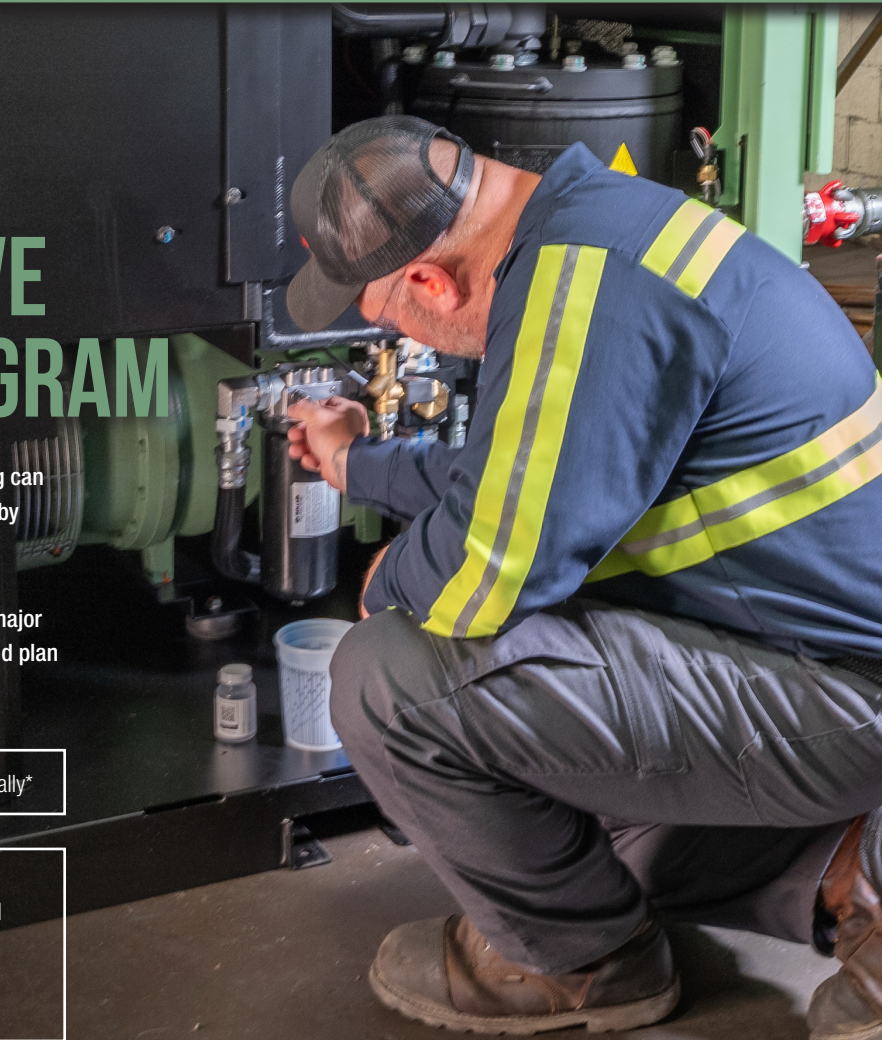
Source: Report from US Department of Energy

Fluid Analysis Benefits

- Fast and detailed analysis and reporting
- Analysis can be done on any type of compressor fluid
- Expert-backed support based on analysis of original formulation, consumption and expected life
- Helps avoid unscheduled downtime and set optimal change intervals
- Results can help you build a service and maintenance schedule tailored to your specific environment—helping optimize compressor performance

Predictive Maintenance via Fluid Analysis

- Help extend fluid and bearing life by identifying contaminants such as dirt, water and other process materials
- Help avoid unnecessary machine wear by acting when fluid results show increased contamination
- Acid number monitoring can show early warning signs of corrosive bearing wear and the fluid's remaining useful life—helping you plan proactively
- Viscosity results help detect indicators of higher operation temperatures
- Detect leaks by reviewing water levels in the fluid



Our team of true compressor experts offer training, maintenance, service and support

Whether you want to start your own predictive maintenance program or work with your local Authorized Sullair Distributor, we can help!

It's easy to get started, simply:

1. Order a fluid sampling kit
2. Register and setup the AssetLink app
3. Take fluid sample
4. Send sample to fluid testing and analysis lab
5. Review, take action and build your preventive maintenance program from the results

Fluid Sampling Kits

You or your local Authorized Sullair Distributor can obtain a fluid sample using a testing kit.


- Individual or multi-pack sampling kits
 - 4-count individual sampling kit (P/N 1004-3176)
 - 12-count multi-pack sampling kit (P/N 1004-0887)
- Easy access to fluid sampling data via the AssetLink app
- Mailing canisters with return shipping label
 - Recommended return instructions for samples:
 - Cushioned polybag or cardboard box (reuse kit box)
 - Use a service with easy shipment tracking

Visit TestOil.com/SullairFluidAnalysis for more program information and fluid sample best practices.

Questions?

Contact Aftermarket@sullair.com or visit Sullair.com/Distributors to find your local distributor.

Maintenance recommendations may fluctuate based on environment and operating conditions



Machine Condition: NORMAL
Lubricant Condition: MARGINAL

Sullair Corporation

Analysis Report

Lab Type: 2MT Serial No.: 903144908
Compressor MFG: SULLAIR Asset No.:
Compressor Model: LS3D-30-W/C Report: 9/15/2020

Customer Notes:

The particulate contamination exceeds our limits for a compressor (2128/25). High particulate contamination could be due to sampling or to consider changing sampling location. High particulate contamination will lead to abrasion wear and damage internal components.

For questions concerning this report, contact your local authorized Sullair distributor or Sullair service at 1-888-785-5247.

Date Sampled	9/2/20	9/2/20	9/2/20	9/2/20
Lab No.	Reference	2989311	2993958	2993937
Lab Hours	UPL/Down	UPL/Down	7946	8034
Compressor Hours	753	1183	10108	8184

Viscosity (Reported in centistokes) ASTM D 445 Mod


Viscosity @ 40C	29.1	21.0	21.1	20.7	21.0
FTIR 24 Kit (Reported in % Wt-110)					
Acid Number	96	90	87	90	87
Microsil Oil Cont.	0.0	0.0	0.0	0.0	0.0
PAO/ Ester Cont.	0.0	0.0	0.0	0.0	0.0
Chlorine Cont.	0.0	0.0	0.0	0.0	0.0

Water Content (Reported in ppm) ASTM D 6308 Mod

Water %	0.0	0.0	0.0	0.0	0.0
Iron	0	0	0	0	0
Copper	0	0	0	0	0
Lead	0	0	0	0	0
Aluminum	0	0	0	0	0
Nickel	0	0	0	0	0
Chromium	0	0	0	0	0
Titanium	0	0	0	0	0
Calcium	0	0	0	0	0
Magnesium	0	0	0	0	0
Zinc	0	0	0	0	0
Phosphorus	22	0	0	0	0
Silicon	> 5000	> 5000	> 5000	> 5000	> 5000
Boron	0	0	0	0	0
Sodium	0	0	0	0	0
Potassium	0	0	0	0	0

Particle Count (Reported in particles per ml) ISO 4406-99

ISO CODE	21/28/15	21/20/16	20/18/15
<4 Micron	20000	12124	1891
4-8 Micron	2000	4755	735
8-14 Micron	300	289	56
14-20 Micron	0	2	1
>20 Micron	0	0	0



Machine Condition: NORMAL
Lubricant Condition: CRITICAL

Sullair Corporation

Analysis Report

Lab Type: SULLAIR Serial No.: 20181020999
Compressor MFG: SULLAIR Asset No.:
Compressor Model: LS255 250AC Report: 8/31/2020

Customer Notes:

The viscosity (51.2 cSt) is higher than expected. The viscosity specification for this lubricant is 39 cSt. Low pH is caused by ingesting water or increased and number indicates antioxidant depletion and is a indicator of lubricant degradation. The machine should be drained, flushed very high and number result. The particle count for this compressor exceeds the limit (2128/25). Check for sources of particulate ingress and level of water contamination (0.815%) is excessive and considered abnormal. Sources of water contamination in compressors are running extended period, expansion from external sources, cooling system leaks.

For questions concerning this report, contact your local authorized Sullair distributor or Sullair service at 1-888-785-5247.

Date Sampled	8/21/20	11/8/20
Lab No.	Reference	2968508
Lab Hours	7782	1804
Compressor Hours	7782	1804

Viscosity (Reported in centistokes) ASTM D 445 Mod

Viscosity @ 40C	51.2	51.2
FTIR 24 Kit (Reported in % Wt-110)		
Acid Number	0.00	0.19
Microsil Oil Cont.	0.00	0.00
PAO/ Ester Cont.	0.00	0.00
Chlorine Cont.	0.00	0.00

Water Content (Reported in ppm) ASTM D 6308 Mod

Water %	0.81	0.81
Iron	0	0
Copper	0	0
Lead	0	0
Aluminum	0	0
Nickel	0	0
Chromium	0	0
Titanium	0	0
Calcium	0	0
Magnesium	0	0
Zinc	0	0
Phosphorus	0	0
Silicon	> 5000	> 5000
Boron	0	0
Sodium	0	0
Potassium	0	0

Particle Count (Reported in particles per ml) ISO 4406-99

ISO CODE	21/28/15	21/20/16	20/18/15
<4 Micron	20000	19897	8930
4-8 Micron	2000	6076	9478
8-14 Micron	320	505	264
14-20 Micron	0	21	11
>20 Micron	0	1	0



Machine Condition: NORMAL
Lubricant Condition: NORMAL

Sullair Corporation

Analysis Report

Lab Type: SULLAIR Serial No.: 20180220228
Compressor MFG: SULLAIR Asset No.:
Compressor Model: S509-1/8 Report: 9/29/2020

Customer Notes:

The results for this sample indicate normal conditions. Please continue scheduled sampling.

For questions concerning this report, contact your local authorized Sullair distributor or Sullair service at 1-888-785-5247.

Date Sampled	9/29/20	6/7/20	5/15/20	10/8/19
Lab No.	Reference	2993763	2993449	2766577
Lab Hours	7109	4879	2484	7882
Compressor Hours	14993	12961	63078	7882

Viscosity (Reported in centistokes) ASTM D 445 Mod

Viscosity @ 40C	88.1	88.0	95.0	97.7
FTIR 24 Kit (Reported in % Wt-110)				
Acid Number	0.00	0.09	0.07	0.03
Microsil Oil Cont.	0.00	0.00	0.00	0.00
PAO/ Ester Cont.	0.00	0.00	0.00	0.00
Chlorine Cont.	0.00	0.00	0.00	0.00

Water Content (Reported in ppm) ASTM D 6308 Mod

Water %	0.00	0.00	0.00	0.00
Iron	0	0	0	0
Copper	0	0	0	0
Lead	0	0	0	0
Aluminum	0	0	0	0
Nickel	0	0	0	0
Chromium	0	0	0	0
Titanium	0	0	0	0
Calcium	1	1	1	0
Magnesium	0	0	0	0
Zinc	0	0	0	0
Phosphorus	3	3	0	0
Boron	0	0	0	0
Sodium	2	0	0	0
Potassium	0	0	0	0

Particle Count (Reported in particles per ml) ISO 4406-99

ISO CODE	21/28/15	17/16/13	16/13/10	14/12/11
<4 Micron	20000	1219	2386	437
4-8 Micron	2000	689	959	182
8-14 Micron	320	37	69	12
14-20 Micron	0	1	3	0
>20 Micron	0	0	0	0

* Survey by Plant Engineering