

# **OIL ANALYSIS REPORT**

[2021351] C-19 (S/N 13895)

**Screw Compressor** 

**NOT GIVEN (--- GAL)** 

# Sample Rating Trend



# Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

# Contamination

The water content is negligible. 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 Number         Client Info         WC0844678             Sample Date         Client Info         18 Nov 2023             Machine Age         hrs         Client Info         20689             Oil Changed         Client Info         N/A             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         history           Iron         ppm         ASTM D5185m         >60         <1             Chromium         ppm         ASTM D5185m         >4         <1             Nickel         ppm         ASTM D5185m         <1              Nickel         ppm         ASTM D5185m         <1              Silver         ppm         ASTM D5185m         >5         2             Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >15 <th></th> <th></th> <th></th> <th></th> <th>N0VZUZ3</th> <th></th> <th></th>					N0VZUZ3		
Sample Date         Client Info         18 Nov 2023	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         20689             Oil Age         hrs         Client Info         0             Oil Changed         Client Info         N/A             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >60         <1	Sample Number		Client Info		WC0844678		
Oil Age         hrs         Client Info         0             Oil Changed         Client Info         N/A             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         histor           Iron         ppm         ASTM D5185m         >60         <1             Chromium         ppm         ASTM D5185m         >4         <1             Nickel         ppm         ASTM D5185m         <1              Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         >5         2             Aluminum         ppm         ASTM D5185m         >10         0             Aluminum         ppm         ASTM D5185m         >15         0             Lead         ppm         ASTM D5185m         >15         0             Copper         ppm	Sample Date		Client Info		18 Nov 2023		
Oil Changed Sample Status         Client Info         N/A             WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >60         <1	Machine Age	hrs	Client Info		20689		
NORMAL	Oil Age	hrs	Client Info		0		
WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >60         <1	Oil Changed		Client Info		N/A		
Iron	Sample Status				NORMAL		
Chromium         ppm         ASTM D5185m         >4         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>60	<1		
Titanium	Chromium	ppm	ASTM D5185m	>4	<1		
Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >5         2             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >30         <1	Nickel	ppm	ASTM D5185m		<1		
Aluminum         ppm         ASTM D5185m         >5         2             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >30         <1	Titanium	ppm	ASTM D5185m		<1		
Lead	Silver	ppm	ASTM D5185m		0		
Copper         ppm         ASTM D5185m         >30         <1             Tin         ppm         ASTM D5185m         >15         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         <1	Aluminum	ppm	ASTM D5185m	>5	2		
Tin         ppm         ASTM D5185m         >15         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         <1             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Magnaese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         >50         <1 <td>Lead</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;10</td> <td>0</td> <td></td> <td></td>	Lead	ppm	ASTM D5185m	>10	0		
Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         <1             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         50         <1             CONTAMINANTS         method         limit/base         current         history1 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;30</td> <td>&lt;1</td> <td></td> <td></td>	Copper	ppm	ASTM D5185m	>30	<1		
Cadmium         ppm         ASTM D5185m         <1             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history1           Sodium         ppm         ASTM D5185m         0          -	Tin	ppm	ASTM D5185m	>15	0		
ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >50         <1	Vanadium	ppm	ASTM D5185m		0		
Boron   ppm   ASTM D5185m   0	Cadmium	ppm	ASTM D5185m		<1		
Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         <1             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1             Sodium         ppm         ASTM D5185m         >20         <1             Potassium         ppm         ASTM D5185m         >20         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         <1             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1             Sodium         ppm         ASTM D5185m         0              Potassium         ppm         ASTM D5185m         >20         <1	Boron	ppm	ASTM D5185m		0		
Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         0             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1	Barium	ppm	ASTM D5185m		0		
Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         <1             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1             Sodium         ppm         ASTM D5185m         0              Potassium         ppm         ASTM D5185m         >20         <1	Molybdenum	ppm	ASTM D5185m		<1		
Calcium         ppm         ASTM D5185m         <1             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1             Sodium         ppm         ASTM D5185m         0              Potassium         ppm         ASTM D5185m         >20         <1	Magnesium	ppm	ASTM D5185m		0		
Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1	Calcium	ppm	ASTM D5185m		<1		
Sulfur         ppm         ASTM D5185m         176             CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >50         <1	Phosphorus	ppm	ASTM D5185m		0		
CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >50         <1	Zinc	ppm	ASTM D5185m		0		
Silicon         ppm         ASTM D5185m         >50         <1             Sodium         ppm         ASTM D5185m         0             Potassium         ppm         ASTM D5185m         >20         <1	Sulfur	ppm	ASTM D5185m		176		
Sodium         ppm         ASTM D5185m         0             Potassium         ppm         ASTM D5185m         >20         <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1	Silicon	ppm	ASTM D5185m	>50	<1		
	Sodium	ppm	ASTM D5185m		0		
	Potassium	ppm	ASTM D5185m	>20	<1		
Water % ASTM D6304 >0.1 <b>0.002</b>	Water	%	ASTM D6304	>0.1	0.002		
ppm Water ppm ASTM D6304 >1000 <b>19</b>	ppm Water	ppm	ASTM D6304	>1000	19		
FLUID DEGRADATION method limit/base current history1 histor	1-1-						
Acid Number (AN) mg KOH/g ASTM D8045 0.013	• •	TION	method	limit/base	current	history1	history2



# **OIL ANALYSIS REPORT**







Laboratory Sample No. Lab Number **Unique Number** 

: WC0844678 : 06016480 : 10755624

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

Diagnosed Test Package : IND 2 (Additional Tests: KF)

: 28 Nov 2023 Diagnostician : Jonathan Hester

: 24 Nov 2023

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) LAMB WESTON/RDO

PO BOX 552 PARK RAPIDS, MN US 56470

Contact: MICHAEL GRUIS michael.gruis@lambweston.com

T: (218)732-2188 F: (218)732-2175