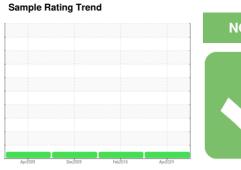


# **OIL ANALYSIS REPORT**

5-40 [80412]

# **GARDNER DENVER S033327-TYWOOD CORP**

Component





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

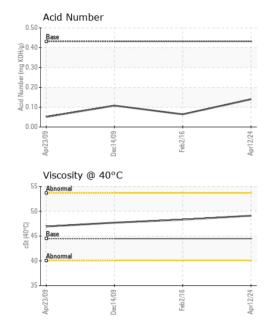
### **Fluid Condition**

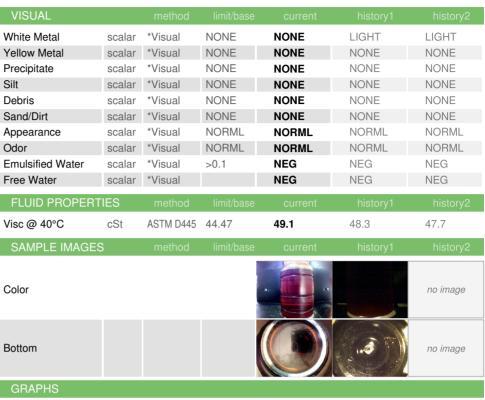
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

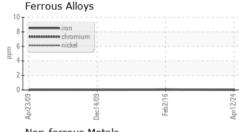
Sample Number   Client Info   UCH06180274   UCH03922025   UCH02542   Sample Date   Client Info   12 Apr 2024   02 Feb 2016   14 Dec 200   Machine Age   hrs   Client Info   0   0   866   Oil Age   Oil Age   hrs   Client Info   0   0   866   Oil Changed   Client Info   Not Changd   NORMAL   NORMAL							
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         29329         25335         16744           Oil Age         hrs         Client Info         0         0         866           Oil Changed         Client Info         Not Changd         N/A         N/A           Sample Status         NORMAL         NORMAL         NORMAL         NORMAL           CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1	Sample Number		Client Info		UCH06180274	UCH03922025	UCH02542402
Oil Age         hrs         Client Info         Not Changd         N/A         N/A           Sample Status         Normal         Normal         NORMAL         NORMAL         NORMAL           CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1         0           Ochronium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         >25         0         0         <1           Lead         ppm         ASTM D5185m         >25         0         0         <1           Lead         ppm         ASTM D5185m         >50         <1         <1         <1         <1	Sample Date		Client Info		12 Apr 2024	02 Feb 2016	14 Dec 2009
Colient Info	Machine Age	hrs	Client Info		29329	25335	16744
NORMAL   NORMAL   NORMAL   NORMAL   CONTAMINATION   method   limit/base   current   history1   history	Oil Age	hrs	Client Info		0	0	866
CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1	Oil Changed		Client Info		Not Changd	N/A	N/A
Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1         0           Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         >25         0         0         <1           Aluminum         ppm         ASTM D5185m         >25         0         0         <1           Lead         ppm         ASTM D5185m         >50         <1         <1         <1           Copper         ppm         ASTM D5185m         >50         <1         <1         <1           Tin         ppm         ASTM D5185m         >50         <1         <1         <1         <1           Capper         ppm         ASTM D5185m         >0         0         <1	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.1	NEG	NEG	NEG
Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         0         0         0           Titanium         ppm         ASTM D5185m         0         0         0           Silver         ppm         ASTM D5185m         >25         0         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>50	0	<1	0
Titanium	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver         ppm         ASTM D5185m         0         0         0           Aluminum         ppm         ASTM D5185m         >25         0         0         <1           Lead         ppm         ASTM D5185m         >25         0         0         <1           Copper         ppm         ASTM D5185m         >50         <1         <1         <1           Tin         ppm         ASTM D5185m         >50         <1         <1         <1           Tin         ppm         ASTM D5185m          0         0         0           Antimony         ppm         ASTM D5185m          0         2           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1         <1         0           Molybdenum	Nickel	ppm	ASTM D5185m		0	0	0
Aluminum         ppm         ASTM D5185m         >25         0         0         <1           Lead         ppm         ASTM D5185m         >25         0         0         <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >25         0         0         <1           Copper         ppm         ASTM D5185m         >50         <1         <1         <1           Tin         ppm         ASTM D5185m         >15         0         0         0           Antimony         ppm         ASTM D5185m          0         2           Vanadium         ppm         ASTM D5185m         0         0         0         <1           Cadmium         ppm         ASTM D5185m         0         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0.1         0         0         0         0           Barium         ppm         ASTM D5185m         0.1         0         0         0         0           Mall ppm         ASTM D5185m         0.1         0         0         0         0           Mall ppm         ASTM D5185m         0.2         1         0	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >50         <1         <1         <1           Tin         ppm         ASTM D5185m         >15         0         0         0           Antimony         ppm         ASTM D5185m          0         2           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1	Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Tin ppm ASTM D5185m >15	Lead	ppm	ASTM D5185m	>25	0	0	<1
Antimony         ppm         ASTM D5185m          0         2           Vanadium         ppm         ASTM D5185m         0         0         <1	Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Vanadium         ppm         ASTM D5185m         0         0         <1           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1         <1         0           Molybdenum         ppm         ASTM D5185m         0.1         0         0         0           Magnese         ppm         ASTM D5185m         0.1         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1         0           Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644	Tin	ppm	ASTM D5185m	>15	0	0	0
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1	Antimony	ppm	ASTM D5185m			0	2
ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         1.2         <1         <1         0           Molybdenum         ppm         ASTM D5185m         0.1         0         0         0           Manganese         ppm         ASTM D5185m         1.3         <1         <1         0           Magnesium         ppm         ASTM D5185m         0         0         <1         0           Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         >20         0	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         1.2         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0.1         0         0         0           Manganese         ppm         ASTM D5185m         1.3         <1         <1         0           Magnesium         ppm         ASTM D5185m         0         0         <1         0           Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         >20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history1	Boron	ppm	ASTM D5185m	0	0	0	0
Manganese         ppm         ASTM D5185m         1.3         <1         <1         0           Magnesium         ppm         ASTM D5185m         0         0         <1         0           Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         >20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history1	Barium	ppm	ASTM D5185m	1.2	<1	<1	0
Magnesium         ppm         ASTM D5185m         0         0         <1         0           Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history	Molybdenum	ppm	ASTM D5185m	0.1	0	0	0
Calcium         ppm         ASTM D5185m         8.2         1         0         0           Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1	Manganese	ppm	ASTM D5185m	1.3	<1	<1	0
Phosphorus         ppm         ASTM D5185m         447         781         1107         317           Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history	Magnesium	ppm	ASTM D5185m	0	0	<1	0
Zinc         ppm         ASTM D5185m         0         24         11         0           Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         2         2         2         0           Potassium         ppm         ASTM D5185m         >20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history	Calcium	ppm	ASTM D5185m	8.2	1	0	0
Sulfur         ppm         ASTM D5185m         436         1733         561         1644           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         2         <1	Phosphorus	ppm	ASTM D5185m	447	781	1107	317
CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >25         2         2         <1	Zinc	ppm	ASTM D5185m	0	24	11	0
Silicon         ppm         ASTM D5185m         >25         2         2         <1           Sodium         ppm         ASTM D5185m         2         2         2         0           Potassium         ppm         ASTM D5185m         >20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history	Sulfur	ppm	ASTM D5185m	436	1733	561	1644
Sodium         ppm         ASTM D5185m         2         2         0           Potassium         ppm         ASTM D5185m         >20         0         <1         0           FLUID DEGRADATION         method         limit/base         current         history1         history	CONTAMINANTS	5	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <b>0</b> <1 0  FLUID DEGRADATION method limit/base current history1 history	Silicon	ppm	ASTM D5185m	>25	2	2	<1
FLUID DEGRADATION method limit/base current history1 history	Sodium	ppm	ASTM D5185m		2	2	0
	Potassium	ppm	ASTM D5185m	>20	0	<1	0
Acid Number (AN) mg KOH/g ASTM D8045 0.431 0.14 0.064 0.108	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.431	0.14	0.064	0.108

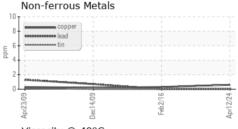


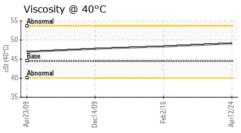
## **OIL ANALYSIS REPORT**

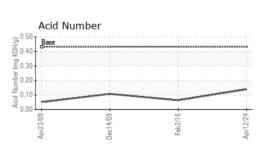
















Certificate 12367

Sample No.

Lab Number : 06180274 Unique Number : 11031600

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : UCH06180274

Received : 15 May 2024 **Tested** : 16 May 2024

Diagnosed

: 17 May 2024 - Wes Davis

Contact: SUE PARRILLO sparrillo@calsupplycompany.com T: (401)946-1300

**CAL SUPPLY COMPANY** 

259 MACKLIN ST

CRANSTON, RI

US 02920

To discuss this sample report, contact Customer Service at 1-800-237-1369.  $^st$  - 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) F: (401)946-0055

Report Id: UCCALCRA [WUSCAR] 06180274 (Generated: 05/17/2024 14:08:37) Rev: 1

Contact/Location: SUE PARRILLO - UCCALCRA