

W. B. COLEMAN CO.
TESTING LABORATORIES

215-223-7731

ESTABLISHED 1922
 9TH ST. AND RISING SUN AVE.
 P.O. BOX 4461
 PHILADELPHIA, PA. 19140

RECEIVED FROM:
 Corco Chemical Corporation
 Tyburn Road and Cedar Lane
 Fairless Hills, Pa. 19030
 Attn: Mr. James T. Sheppard

DATE August 25, 1986

P.O. NO.

SPECIFICATION:

MATERIAL: Green Residue

CHEMICAL ANALYSIS

Laboratory Nos.:	992411				
Markings:	Carbon Steel Rim	Sidewall <i>Barrel</i>	Lid <i>Barrel</i>		
Graphitic Carbon					
Combined Carbon					
Total Carbon -	.057	.060	.060		
Manganese	.28	1.77	1.83		
Phosphorus	.005	.024	.028		
Sulfur	.011	.011	.030		
Silicon	.01	.51	.48		
Nickel		8.21	8.41		
Chromium		18.21	18.32		
Molybdenum		.32	.24		
Titanium					
Copper		.31	.32		
Cobalt					
Aluminum					
Vanadium					

Remarks:

W. B. COLEMAN CO.

BY

R. B. ...

Figure 1: Analysis of barrel composition.

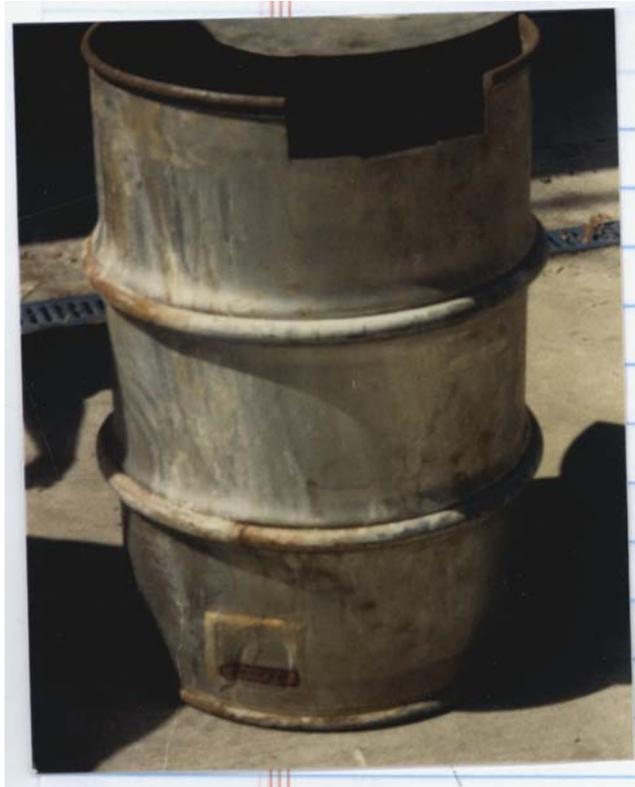


Figure 2: Barrel after failure.



Figure 3: Corroded lid of barrel.



Figure 4: Optical metallograph showing intergranular attack. (400X)

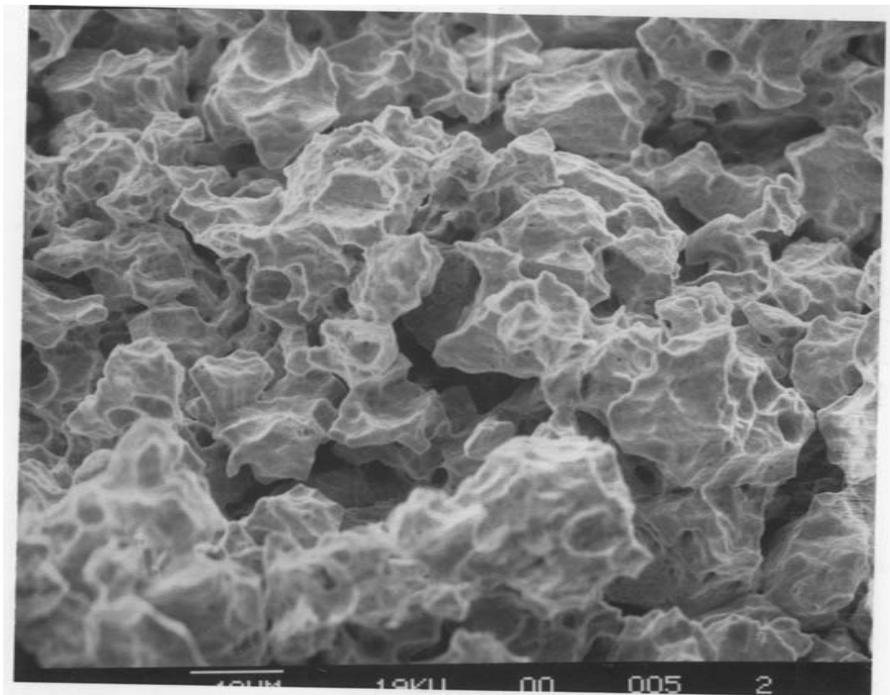


Figure 5: Scanning micrograph showing intergranular attack.

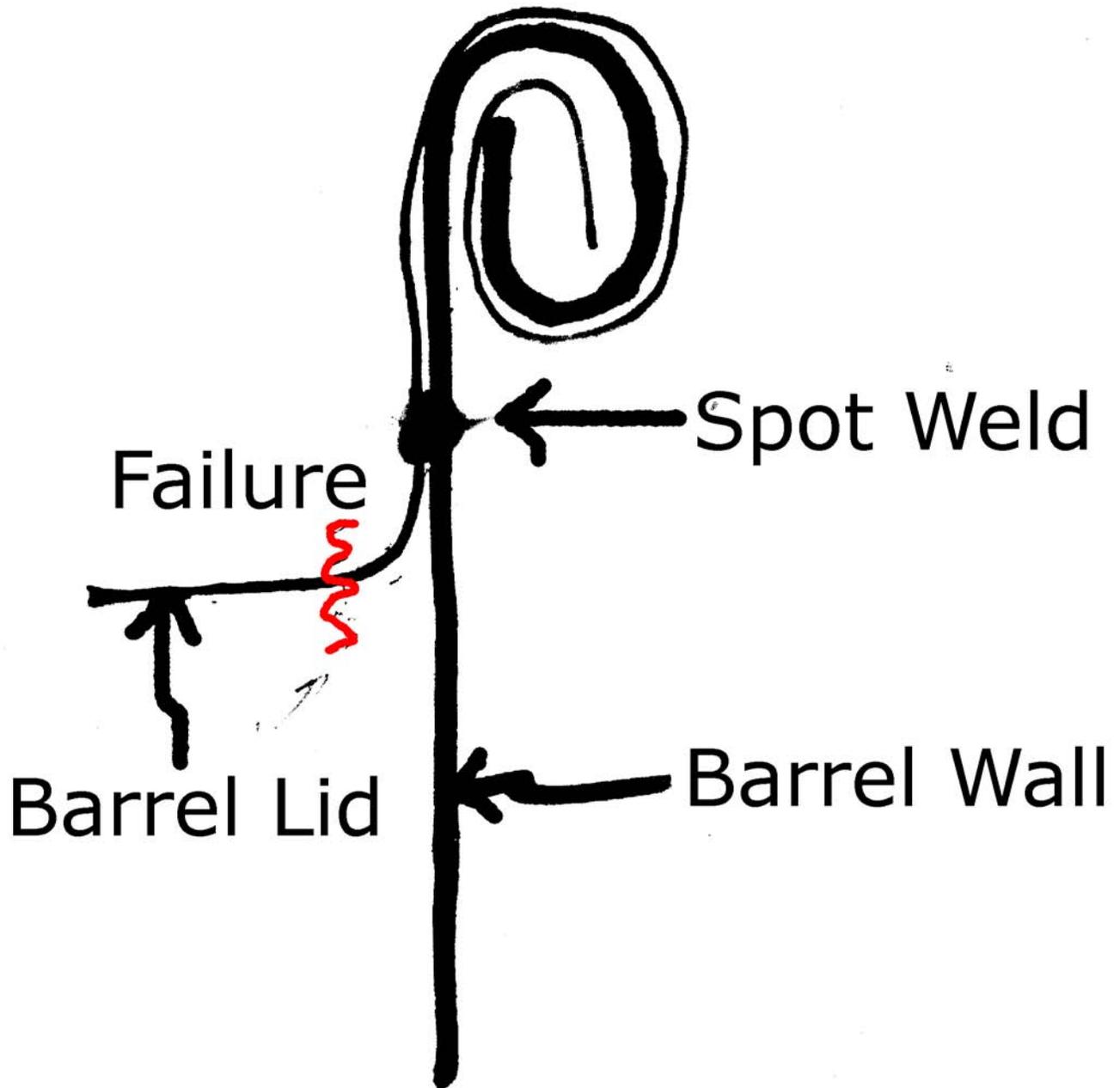


Figure 6: Rough sketch showing barrel seam, which is rolled and welded, and the nearby failure.