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ANEXO A
Quantificação microbiana

As Tabelas A.1 e A.2 apresentam a média dos resultados obtidos na contagem das bactérias planctônicas e sésseis nos ensaios em triplicata.

Tabela A.1 - Quantificação de bactérias planctônicas dos grupos das BRS, BPA e BPF

Grupo Bacteriano	*BRS (NMP/ml)*	*BPA (NMP/ml)*	*BPF (UFC/ml)*
Inicial	1,67E+06	3,85E+06	1,00E+07
7 dias	1,40E+07	1,40E+07	1,01E+07
14 dias	8,48E+06	8,35E+06	4,93E+04
21 dias	8,80E+06	1,08E+07	1,00E+07
28 dias	8,25E+06	9,25E+06	7,53E+03
35 dias	1,16E+07	1,27E+07	2,20E+03
40 dias	1,40E+07	1,10E+07	3,00E+03

Tabela A.2 - Quantificação de bactérias sésseis para aços API 5L

Grupo Bacteriano	*Duração*	*Grau B*	*X65*	*X80*
BRS (NMP/ml)	7	6,03E+05	4,78E+05	5,62E+05
	14	7,92E+04	9,27E+04	6,20E+04
	21	2,78E+04	6,29E+04	2,71E+04
	28	2,74E+04	2,36E+04	7,17E+03
	35	2,27E+03	8,09E+03	2,01E+03
BPA (NMP/ml)	7	4,07E+05	6,64E+04	4,17E+05
	14	1,09E+05	1,16E+05	2,55E+05
	21	1,13E+05	2,21E+04	6,87E+04
	28	1,83E+04	6,24E+03	1,31E+04
	35	1,04E+05	1,03E+05	1,04E+05
BPF (CFU/ml)	7	7,02E+05	7,22E+03	2,06E+05
	14	6,87E+04	6,98E+04	2,77E+03
	21	6,91E+05	6,98E+05	6,70E+05
	28	1,57E+01	4,55E+00	2,31E+01
	35	4,85E+01	4,49E+01	1,52E+01

ANEXO B

Espectros de EDS

As Figuras B.1 e B.2 apresenta os espectros de EDS obtidos nas análises dos respectivos produtos de corrosão para ensaios com adição de microrganismo e sem, respectivamente.

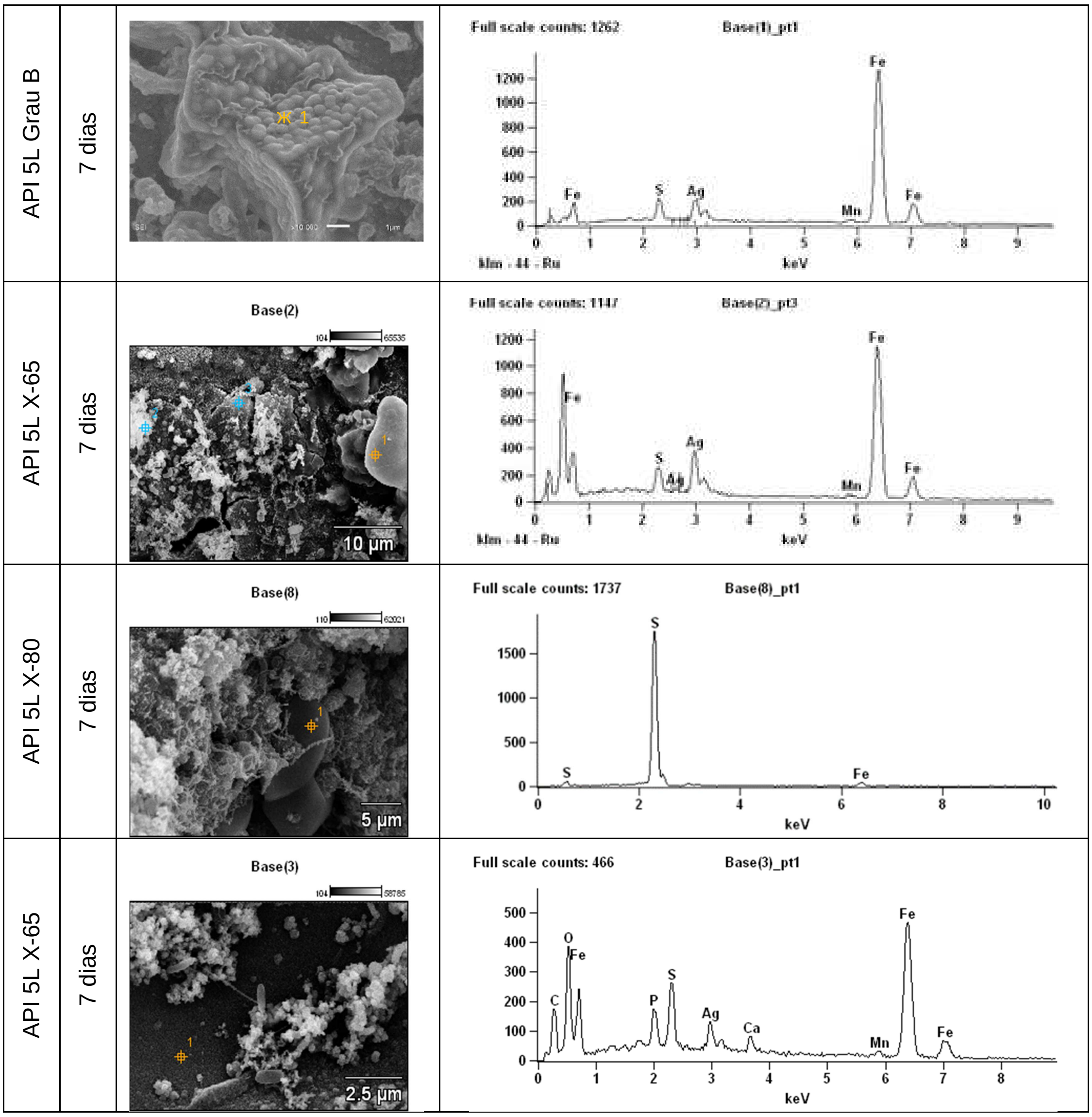


Figura B.1 – Imagens da superfície dos corpos de prova por microscopia eletrônica de varrerura apresentando a indicação do produto de corrosão caracterizado quimicamente e seu respectivo espectro de EDS para o ensaio com adição de microrganismos

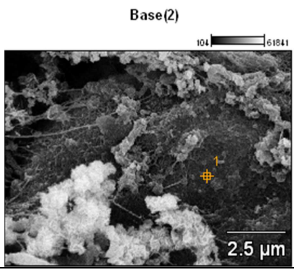
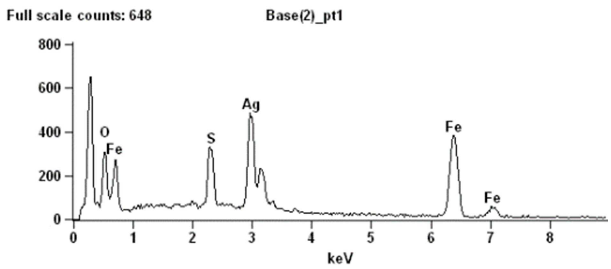
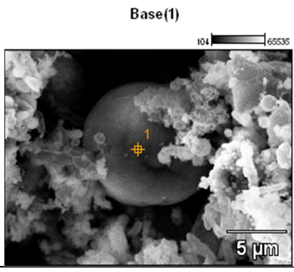
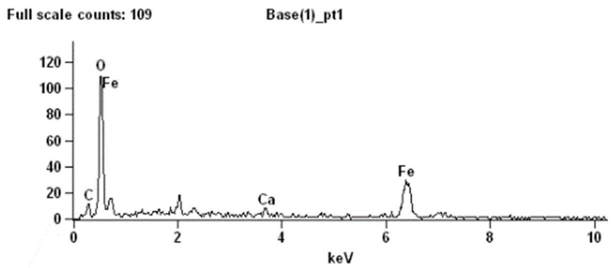
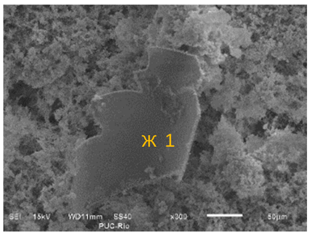
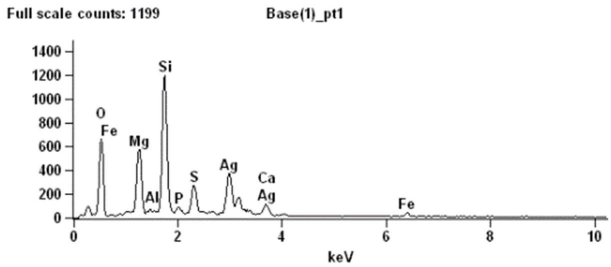
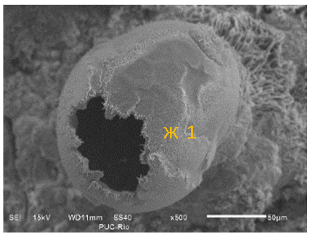
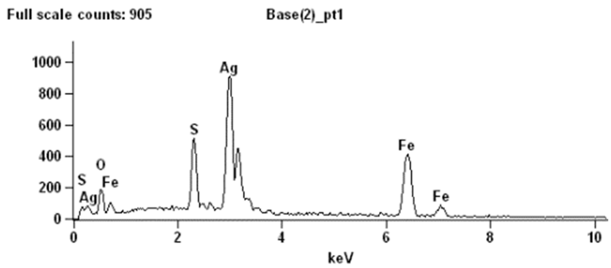
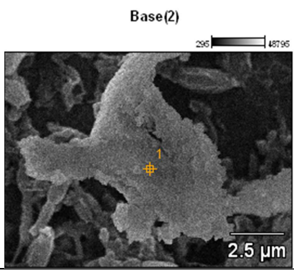
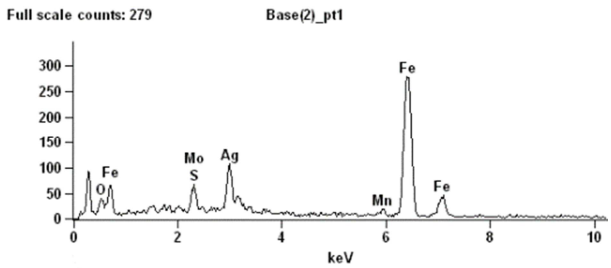
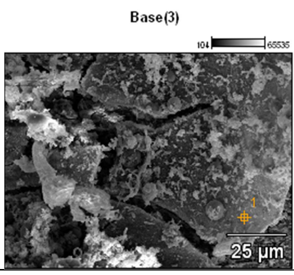
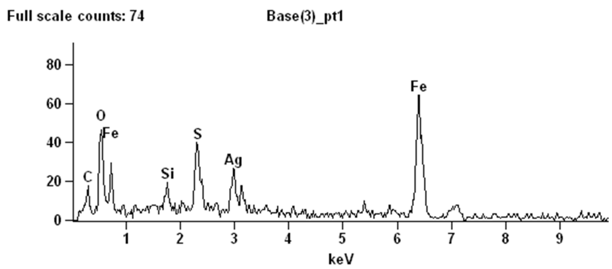
API 5L X-80	7 dias		
API 5L grau B	14 dias		
API 5L grau B	14 dias		
API 5L X-65	14 dias		
API 5L grau B	21 dias		
API 5L grau B	21 dias		

Figura B.1 – Imagens da superfície dos corpos de prova por microscopia eletrônica de varrerura apresentando a indicação do produto de corrosão caracterizado quimicamente e seu respectivo espectro de EDS para o ensaio com adição de microrganismos (cont.)

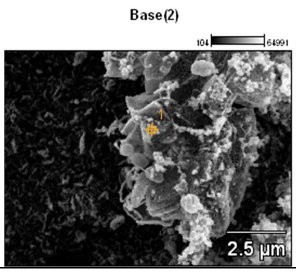
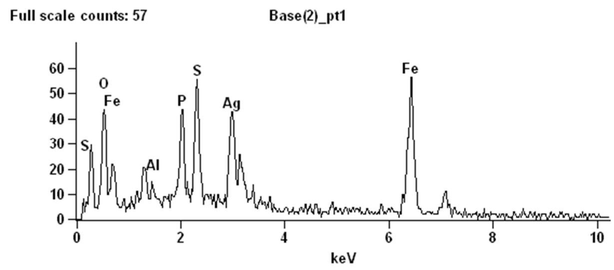
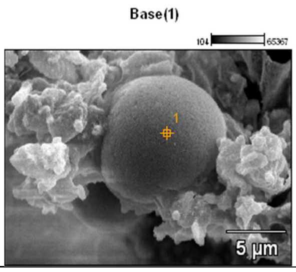
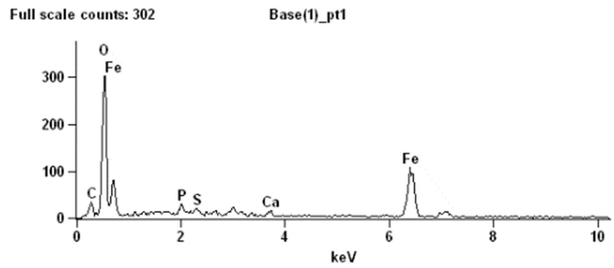
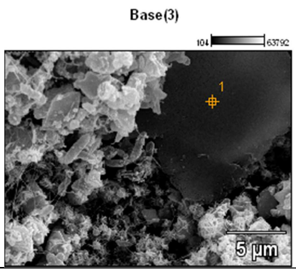
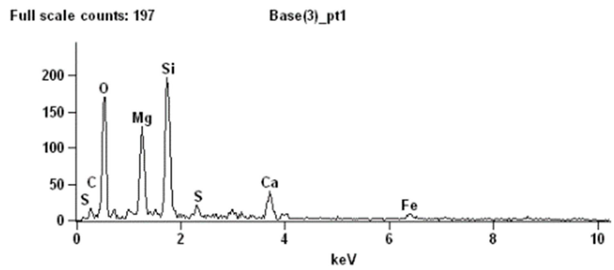
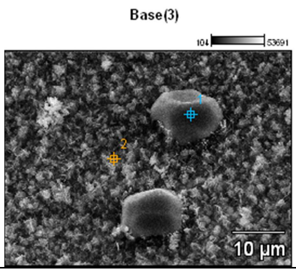
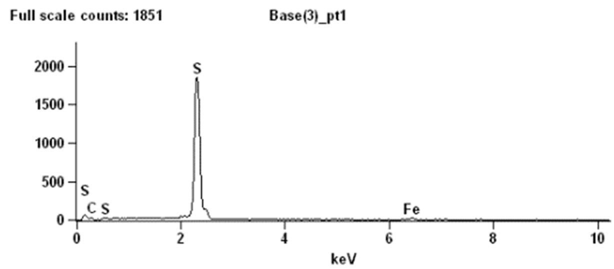
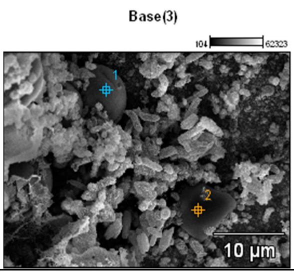
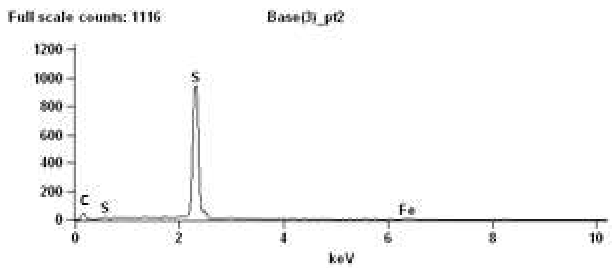
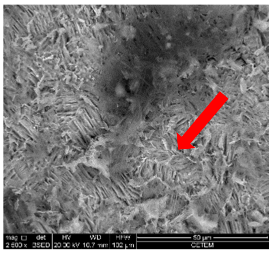
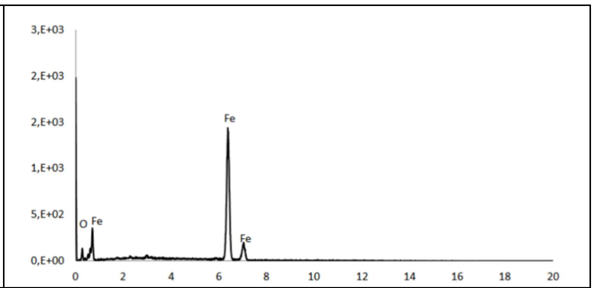
API 5L grau B	28 dias		
API 5L X-65	28 dias		
API 5L X-80	28 dias		
API 5L X-65	35 dias		
API 5L X-80	35 dias		

Figura B.1 – Imagens da superfície dos corpos de prova por microscopia eletrônica de varrerura apresentando a indicação do produto de corrosão caracterizado quimicamente e seu respectivo espectro de EDS para o ensaio com adição de microrganismos (cont.)

API 5L Gr. B

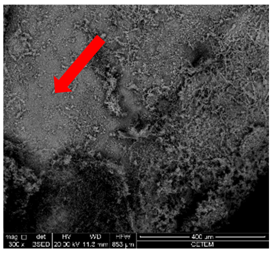
14 dias

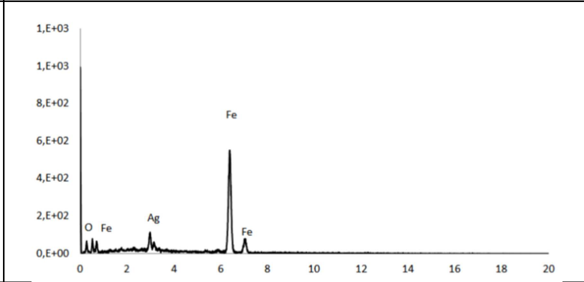




API 5L X-65

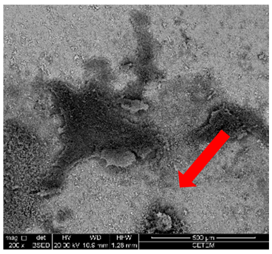
14 dias

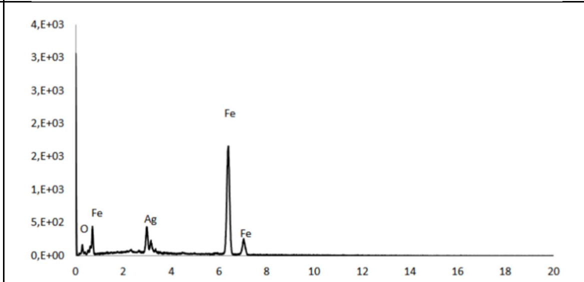




API 5L X-80

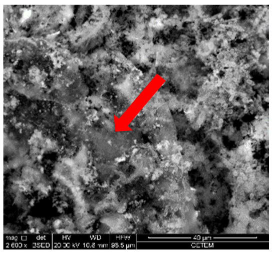
14 dias

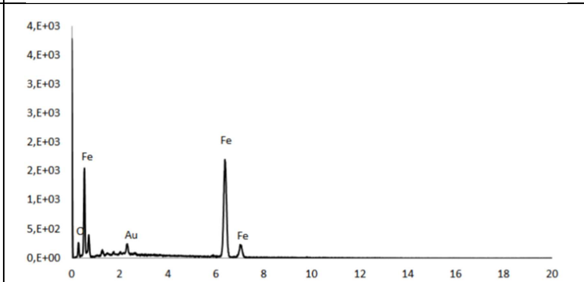




API 5L Gr.B

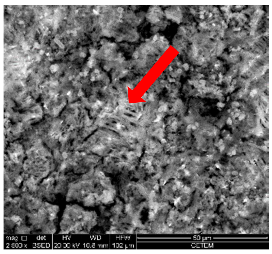
28 dias

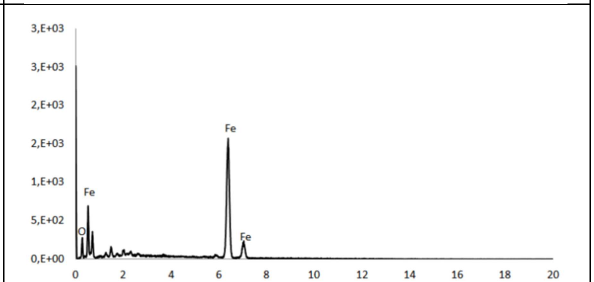




API 5L X-65

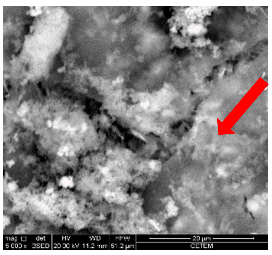
28 dias





API 5L X-80

28 dias



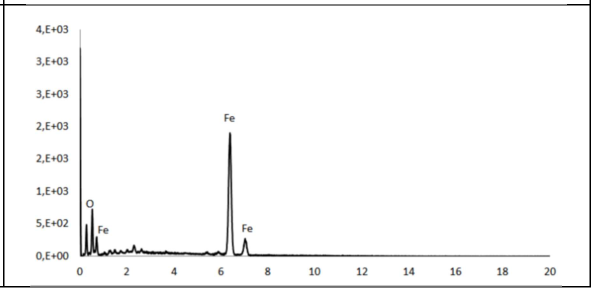


Figura B.2 – Imagens da superfície dos corpos de prova por microscopia eletrônica de varrerura apresentando a indicação do produto de corrosão caracterizado quimicamente e seu respectivo espectro de EDS para o ensaio sem adição de microrganismos.