

PROCEDURE FOR THE CONTROL OF THE STRENGTH OF BLACKFAST 183 SOLUTION

PURPOSE: To maintain the correct solution strength of Blackfast 183.

RESPONSIBILITIES: The shift foremen would normally be responsible for checking the Blackfast 183 solution prior to the commencement of each each shift or Blackfast 183 operation.

- PROCEDURE:
- 1 Take a 10ml sample of solution from the Blackfast tank with a sampling pipette. Transfer sample into a conical flask.
 - 2 Add 10 drops of Bromocresol green indicator to the conical flask swirling gently to mix. The solution turns a YELLOW colour.
 - 3 Fill a burette with 0.1M (N/10) solution of Sodium Hydroxide (NaOH).
 - 4 Add the Sodium Hydroxide solution slowly into the conical flask until the solution just turns **BLUE**.
 - 5 An addition of 13ml indicates the working solution is satisfactory.
 - 6 The following table indicates the necessary addition to the tank solution.

SODIUM HYDROXIDE ADDED TO ACHIEVE BLUE COLOUR (ml)	BLACKFAST TO BE ADDED TO TANK (LITRES)				
	20.00	75.00	100.00	200.00	250.00
13.00	0.00	0.00	0.00	0.00	0.00
12.00	0.15	0.56	0.75	1.50	1.88
11.00	0.30	1.13	1.50	3.00	3.75
10.00	0.45	1.69	2.25	4.50	5.63
9.00	0.60	2.25	3.00	6.00	7.50
8.00	0.75	2.81	3.75	7.50	9.38
7.00	0.90	3.38	4.50	9.00	11.25
6.00	1.05	3.94	5.25	10.50	13.13
5.00	1.20	4.50	6.00	12.00	15.00
4.00	1.35	5.06	6.75	13.50	16.88
3.00	1.50	5.63	7.50	15.00	18.75
2.00	1.65	6.19	8.25	16.50	20.63

- 7 Chemicals required
Sodium Hydroxide (NaOH) 0.10M (N/10)
Bromocresol green indicator.