

Table D-37: Effect 1000 ml volume of iron solution at 20 mg/L of concentration at 20
volts

Time	Conc.	Ave. Conc.	Current	Surface area (cm ²)	Current Density A/cm ²
0	19.97	19.98	2.82	90	0.031
	19.98				
	19.98				
30	6.34	6.34	2.82	90	0.031
	6.35				
	6.34				
60	1.15	1.15	2.82	90	0.031
	1.15				
	1.14				
90	0.87	0.89	2.82	90	0.031
	0.89				
	0.90				
120	0.29	0.28	2.82	90	0.031
	0.26				
	0.28				
150	0.11	0.10	2.82	90	0.031
	0.11				
	0.09				
180	0.03	0.03	2.82	90	0.031
	0.03				
	0.04				
210	0.00	0.00	2.82	90	0.031
	0.00				
	0.00				
240	0.00	0.00	2.82	90	0.031
	0.00				
	0.00				
270	0.00	0.00	2.82	90	0.031
	0.00				
	0.00				
300	0.00	0.00	2.82	90	0.031
	0.00				
	0.00				

Table D-38: Treatment of iron using actual groundwater from Kelantan with volume 1000 mL, electrode distance 1 cm, pH 7, applied potential 20 V, electrode surface area 90 cm²

Groundwater from Kg. Chicha (GW-C), Kelantan									
Time	Conc.	Ave. Conc.	Current	Surface area (cm ²)	Current Density A/cm ²	pH	Aluminum (mg/L)	Ave. alum	Eh (mV)
0	10.04	10.04	2.82	90	0.031	6.72	0.01	0.01	20
	10.03						0.02		
	10.04						0.01		
30	5.44	5.45	2.78	90	0.031	6.8	0.03	0.04	35
	5.45						0.04		
	5.46						0.04		
60	1.04	1.05	2.64	90	0.029	6.95	0.06	0.07	55
	1.05						0.06		
	1.05						0.08		
90	0.24	0.24	2.54	90	0.028	7.04	0.1	0.11	24
	0.25						0.1		
	0.23						0.12		
120	0.05	0.05	2.22	90	0.025	7.77	0.14	0.15	-15
	0.05						0.15		
	0.05						0.16		
150	0.00	0.00	1.98	90	0.022	8.3	0.19	0.18	-30
	0.00						0.18		
	0.00						0.17		

Table D-39: Treatment of iron using actual groundwater from Kelantan using 1000 ml contained 5.50 mg/L iron concentration supplied by 20 volts to 90 cm² surface area of aluminum electrodes

Groundwater from Kg. Chicha (GW-C), Kelantan									
Time	Conc.	Ave. Conc.	Current	Surface area (cm ²)	Current Density A/cm ²	pH	Aluminum (mg/L)	Ave. alum	Eh (mV)
0	8.80	8.81	2.70	90	0.030	6.8	0.01	0.01	15
	8.82						0.01		
	8.81						0.01		
30	2.22	2.06	2.62	90	0.029	6.97	0.02	0.02	45
	1.98						0.02		
	1.97						0.01		
60	0.30	0.27	2.56	90	0.028	7.02	0.05	0.06	20
	0.27						0.06		
	0.25						0.08		
90	0.12	0.09	2.45	90	0.027	7.44	0.09	0.09	-30
	0.07						0.1		
	0.08						0.08		
120	0.06	0.05	2.30	90	0.026	8.12	0.11	0.12	-88
	0.04						0.13		
	0.06						0.12		
150	0.00	0.00	2.22	90	0.025	8.91	0.15	0.13	-95
	0.00						0.12		
	0.00						0.13		

Table D-40: Treatment of 5.50 mg/L iron in groundwater from GW-T (1000 ml, 20 volts to 90 cm² surface area)

Time	Conc.	Ave. Conc.	Current	Surface area (cm ²)	Current Density (A/cm ²)	pH	Aluminum (mg/L)	Ave. alum	Eh (mV)
0	5.45	5.50	2.68	90	0.030	6.8	0.02	0.02	-50
	5.52						0.02		
	5.53						0.01		
30	1.12	1.03	2.54	90	0.028	7.1	0.05	0.05	-14
	0.98						0.05		
	0.99						0.04		
60	0.29	0.28	2.50	90	0.028	7.13	0.07	0.07	25
	0.28						0.06		
	0.27						0.08		
90	0.12	0.12	2.44	90	0.027	7.21	0.09	0.11	33
	0.13						0.11		
	0.12						0.12		
120	0.08	0.09	2.30	90	0.026	7.3	0.12	0.12	-10
	0.09						0.13		
	0.09						0.12		
150	0.05	0.04	2.21	90	0.025	7.8	0.13	0.15	-22
	0.05						0.15		
	0.02						0.17		
180	0.00	0.00	1.98	90	0.022	8.8	0.17	0.18	-40
	0.00						0.18		
	0.00						0.19		

Table D-41: Treatment of iron using actual groundwater from UTP monitoring well (GW-T) using 1000 ml contained 5.50 mg/L iron concentration supplied by 20 volts to 90 cm² surface area of aluminum electrodes

Time	Conc.	Ave. Conc.	Current	Surface area (cm ²)	Current Density A/cm ²	pH	Aluminum (mg/L)	Ave. alum	Eh (mV)
0	3.45	3.50	2.65	90	0.029	6.89	0.03	0.02	-50
	3.55						0.02		
	3.50						0.01		
30	1.05	1.06	2.50	90	0.028	7.1	0.03	0.03	-16
	1.06						0.03		
	1.07						0.04		
60	0.29	0.28	2.40	90	0.027	7.18	0.05	0.04	20
	0.28						0.04		
	0.28						0.04		
90	0.11	0.11	2.24	90	0.025	7.30	0.07	0.08	45
	0.11						0.09		
	0.12						0.08		
120	0.04	0.06	2.12	90	0.024	7.56	0.09	0.11	-5
	0.06						0.11		
	0.07						0.12		
150	0.00	0.00	1.88	90	0.021	8.86	0.14	0.15	-23
	0.00						0.15		
	0.00						0.17		