

TABLE VIII.—Results of the Analyses of some of the Samples of Gas extracted from Waters from Various Depths.

Number.	LATITUDE.	LONGITUDE.	Depth.	Temperature.		Tot. Vol. of Gas, c.c. per Litre.	Carbonic Acid.			Nitrogen, c.c. per Litre.		Deficiency.	Oxygen.					
				Observed °C.	Calculated °C.		Per Cent.	c.c. per Litre.	Extr. by Distillation, c.c. per Litre.	Observed.	Calculated.		Per Cent.	c.c. per Litre.	Deficiency.			
			<i>d</i>	<i>t</i>	<i>T</i>	<i>V</i> ₀	100 $\frac{c}{V_0}$	<i>a</i>	<i>C</i>	100 $\frac{c}{C}$	<i>v</i> ₀	<i>n</i>	<i>n'</i>	<i>n'-n</i>	100 $\frac{o}{v_0}$	<i>o</i>	<i>q</i>	<i>o-q</i>
BOTTOM WATERS, Antarctic Ocean.																		
888	65 42 S.	79 49 E.	1675	1	-2.3	28.91	22.83	6.59	42.20	15.6	22.32	18.57	...	...	25.74	5.75	2.92	3.67
895	64 37 "	85 49 "	1800	1	-1.2	29.81	23.60	7.08	29.82	24.0	23.78	16.07	...	...	29.46	6.71	1.73	5.30
414	58 55 "	108 35 "	1950	1	+3.5	23.45	14.62	8.48	22.55	15.2	20.02	14.33	...	...	28.42	5.69	1.79	1.64
North Pacific.																		
771	5 31 N.	145 13 E.	2325	1.9	15.9	27.03	49.98	13.51	31.51	42.0	13.52	11.17	14.80	3.72	17.36	2.35	3.38	10.13
964	37 52 "	100 17 W.	2740	1.8	2.5	27.84	36.53	10.17	21.48	47.3	17.67	14.67	14.92	0.25	16.05	3.00	4.67	5.50
974	38 9 "	156 25 "	3090	1.7	3.2	...	...	...	15.32	...	17.72	14.45	14.96	0.51	18.46	3.27	4.27	...
1096	7 35 "	149 49 "	2900	1.5	2.9	34.11	46.41	15.83	17.46	90.6	18.28	14.55	15.08	0.48	20.40	3.73	3.87	11.06
South Atlantic.																		
1496	36 9 S.	48 22 W.	2800	0.3	4.3	25.40	25.23	6.41	26.37	24.3	18.99	14.08	15.45	1.37	25.88	4.91	2.43	3.98
1588	37 29 "	37 31 "	2200	1.1	4.7	23.14	19.50	4.55	28.71	19.2	18.59	13.95	15.17	1.22	24.98	4.64	2.63	1.92
1644	35 30 "	21 12 "	2025	1.8	2.2	24.72	18.56	4.59	22.70	20.2	20.13	14.76	14.92	0.16	26.67	5.35	2.38	2.21
INTERMEDIATE WATERS.																		
1001	30 22 N.	154 56 W.	2875	1.8	1.4	22.46	30.20	6.78	...	...	15.68	15.08	14.92	-0.16	3.84	0.60	7.01	-0.83
1009	27 33 N.	154 55 "	2850	1.6	5.6	30.62	37.01	11.61	...	...	19.01	13.63	15.00	+1.77	28.31	5.38	1.71	+9.90
1244	40 3 S.	132 58 "	2125	1.7	4.4	22.45	20.89	4.62	...	...	17.83	14.26	14.96	0.70	21.19	3.78	3.64	1.08
1269	28 22 "	141 22 "	1975	1.8	4.5	22.52	20.84	4.69	26.06	17.9	17.83	14.28	14.92	0.69	21.88	3.81	3.50	1.19
1241	36 32 "	132 53 "	1925	1.7	6.8	22.72	21.74	4.94	...	...	17.78	13.33	14.96	1.63	25.01	4.45	2.48	2.46
1296	39 22 "	98 46 "	1775	1.7	2.2	25.23	26.07	6.58	...	...	18.05	14.79	14.90	0.17	20.72	3.56	3.87	3.71
1269	39 13 "	118 49 "	1775	1.7	7.3	23.74	22.24	5.30	21.53	24.0	18.44	13.19	14.96	1.77	28.48	5.25	1.60	3.70
1645	0 15 S.	14 25 W.	1500	3.3	6.6	22.26	30.70	6.84	...	...	15.42	13.38	14.40	1.02	13.24	2.04	4.91	1.93
1592	37 29 S.	37 31 "	1400	2.9	6.4	22.76	18.55	4.22	...	...	18.54	13.43	14.54	1.11	27.54	5.11	1.87	3.35
1220	32 36 S.	137 43 W.	800	3.2	5.4	21.19	10.90	3.58	...	...	17.61	13.78	14.37	0.64	22.05	3.88	3.26	0.32
1528	37 47 S.	30 20 W.	800	2.8	4.1	23.03	20.38	4.09	...	...	18.34	14.13	14.51	0.38	22.95	4.21	3.16	1.53
1546	35 45 "	18 31 "	800	2.9	-0.5	26.89	23.41	6.29	...	...	20.60	15.81	14.54	-1.27	23.25	4.79	3.51	2.78
1615	10 6 "	13 44 "	900	3.5	+0.5	23.03	19.21	4.42	...	...	18.61	13.40	14.46	+1.06	27.90	5.21	1.75	2.67
1655	3 10 N.	14 51 "	800	4.2	12.8	21.71	29.98	6.51	...	...	15.20	11.80	14.12	2.32	22.22	3.38	2.71	4.80
1605	12 16 S.	13 44 W.	400	4.6	6.0	21.18	20.99	4.45	...	...	16.73	13.57	13.98	0.41	18.90	3.16	3.90	0.55
988	37 41 N.	177 4 "	400	4.2	3.9	22.74	20.12	7.62	19.95	38.2	15.12	13.46	14.12	0.66	12.03	1.66	...	...
594	5 24 S.	130 37 E.	400	6.4	10.7	21.39	31.91	6.83	20.36	38.5	14.56	12.31	13.44	1.13	15.44	2.25	4.11	2.72
1661	5 28 N.	14 38 W.	300	6.7	5.4	22.14	30.49	7.25	...	...	15.39	13.74	13.35	-0.39	10.75	1.65	5.60	1.65
1672	9 9 "	16 41 "	300	6.9	10.7	20.29	31.20	6.33	...	...	13.96	12.29	13.29	+1.00	11.98	1.67	4.58	1.75
828	22 1 "	140 27 E.	300	11.1	13.6	18.92	18.94	3.58	17.40	20.6	15.34	11.65	12.21	0.56	24.06	3.69	2.30	1.28
797	14 44 N.	142 13 E.	200	11.5	18.8	17.60	21.73	3.82	17.15	22.3	13.78	10.58	11.11	0.69	23.25	3.20	2.20	1.62
1181	22 21 S.	160 17 W.	200	13.4	17.8	17.86	15.90	2.84	21.95	12.9	15.02	10.80	11.69	0.89	28.10	4.22	1.31	1.53
1205	28 22 "	141 22 "	200	12.5	20.8	16.88	15.61	2.63	18.20	14.4	14.25	10.28	11.88	1.60	27.84	3.97	1.27	1.36
543	15 58 "	160 50 E.	200	13.0	13.0	20.96	26.75	5.61	22.60	24.4	15.35	11.76	11.77	0.01	23.40	3.59	2.47	3.14
1589	35 36 S.	21 12 W.	100	12.8	14.8	18.59	12.08	2.24	18.05	11.9	16.35	11.89	11.21	0.42	30.31	4.96	0.89	1.35
1585	17 26 "	13 52 "	100	15.4	18.5	16.92	11.90	2.01	...	...	14.91	10.43	11.26	0.83	30.02	4.48	1.10	0.91
1633	2 42 "	14 41 "	100	12.9	9.0	20.36	23.04	4.69	...	...	15.67	12.74	11.79	-0.95	18.70	2.93	3.67	1.02
1704	32 41 N.	36 6 W.	100	17.3	18.9	17.40	12.99	2.27	...	...	15.22	10.61	10.89	+0.28	30.29	4.61	0.81	1.46
678	5 47 N.	124 1 E.	50	25.4	30.3	19.82	35.91	7.12	15.20	40.8	12.70	8.91	9.56	0.65	20.86	3.79	0.69	6.43
880	26 29 "	137 57 "	50	18.9	19.3	18.38	16.26	2.99	16.70	17.9	15.39	10.53	10.60	0.07	31.55	4.86	0.52	2.47
897	63 30 S.	89 6 "	50	-1.8	1.6	25.11	14.27	3.48	35.94	9.7	21.53	15.00	16.35	1.35	30.32	6.53	1.32	2.16
SURFACE WATERS, Antarctic Ocean.																		
				Pressure of Dry Air, millim.														
886	66 29 S.	78 0 E.	728	-0.7	-1.0	28.32	16.75	4.74	28.63	16.5	23.58	15.99*	15.88	-0.11	35.01	8.61*	-0.22	4.95
887	65 10 "	78 42 "	724	+0.7	+3.5	25.19	17.15	4.32	26.32	15.2	20.87	14.32*	15.33	+1.01	34.86	7.63*	-0.13	4.45
889	64 4 "	83 26 "	728	-1.7	0.25	25.79	12.64	3.26	24.09	13.2	22.53	15.49*	16.30	+0.81	34.25	8.04*	+0.09	3.17
896	64 1 "	87 41 "	716	+0.4	2.70	23.69	11.70	2.76	24.79	11.1	20.84	14.62*	15.44	0.82	34.17	7.66*	0.10	2.66
Atlantic Ocean, Tropical.																		
1590	14 33 S.	13 42 W.	743	25.1	24.0	16.31	12.66	2.06	17.00	11.5	14.25	9.76*	9.61	-0.15	33.21	4.85*	0.09	1.97
1687	21 33 N.	31 15 "	740	22.8	23.3	16.07	13.34	2.22	19.00	11.9	14.45	9.87*	9.95	+0.12	33.33	4.94*	0.07	2.15
1699	29 50 "	35 55 "	758	20.5	20.5	16.70	17.57	3.34	17.18	10.8	15.36	10.26*	10.32	0.04	33.28	5.12*	0.13	3.21
Pacific Ocean, Equatorial.																		
682	4 33 N.	127 6 E.	733	28.9	...	13.73	18.68	1.88	12.78	14.7	11.85	8.21*	9.33	1.12	33.11	4.06*	0.10	1.78
759	3 21 "	145 35 "	735	28.6	26.2	15.54	13.85	2.07	...	...	13.47	9.45*	9.12	-0.33	32.20	4.49*	0.27	1.80
761	4 21 "	145 18 "	785	28.7	32.9	15.42	20.16	3.11	15.42	20.2	12.31	8.59*	9.11	+0.52	32.58	4.15*	0.18	2.97

* The observed volumes of nitrogen and oxygen in the surface waters are corrected, so as to give the volumes which would have been absorbed under a dry air pressure equivalent to 760 millimetres of mercury.