Client ID: Fonterra Australia Limited (Stanhope)
Project Name: Stanhope Groundwater Monitoring
Site Location: 20 Midland Hwy, Stanhope VIC 3623
Report Date: 5 February 2025

Fonterra Australia Limited (Stanhope)

Attachment 3: Table 1 - Laboratory Monitoring Results

CTS ENVIRONMENTAL
AIR WATER SOIL

Well ID	Sample Date	Time	Geographical Coordinates MGA 94 (Zone 5		pH value	ORP	Electrical Conductivity	Temperature	Salinity	Turbidity	Dissolved Oxygen % Sat.	Dissolved Oxygen	*Total Dissolved Solids#	Sulphate as SO4	Chloride	Sodium	*Nitrate as N	Total Kjeldahl Nitrogen as N	*Ammonia as N	Total Nitrogen as N	Total Phosphorous as P
			Easting	Northing																	
		Units			Units	mV	µs/cm	oC	ppt	NTU	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		LOR			0 - 14	±2000	0 - 9999	-5 - 50	0 - 70	0 - 3000	0 - 500	0 - 50	1	1	1.0	0.1	0.01	0.10	0.01	0.1	<0.05
Assessment Guidelines																					
Water Dependent Ecosystems and Species (ANZECC 2000 Fresh Water 95%)																	2.4 a		0.69		
Agriculture and Irrigation - Stock Watering (ANZECC 2000 Livestock DW Low Risk Trigger Values)										5 #1			2000 #1	1000			90.3 *				
Water-based Recreation - Primary Contact Recreation (ANZECC 2000 Recreational water quality and aesthetics)					6.5-8.5					5 #1	>80%		1000	400	400	300	10		0.01		
Buildings and Structures (AS2159-2009 Pilings – Design and Installation)					<5.5									1000	6000						
West Road Monitoring Bores																					
B01	22-Jan-25	9:51	319828.79	5959890.12	7.4	1	9387	18.2	5.3	9	5	0.5	10800	1200	5270	2560	0.20	1.1	0.02	1.3	0.27
B02	22-Jan-25	10:19	319829.29	5959889.29	7.5	6	15110	18.8	8.8	141	11	1.0	18800	1920	9110	4870	0.69	2.3	0.10	3.0	0.6
B03	22-Jan-25	10:33	319551.81	5959797.49	8.3	-105	3309	19.3	1.7	119	9	0.8	1890	200	533	716	<0.05	0.4	<0.01	0.4	0.1
B08	22-Jan-25	13:51	319241.93	5960484.60	7.6	28	10860	18.2	6.2	5	92	8.2	19100	1740	10100	4550	0.81	<0.1	0.10	0.8	0.04
B09	22-Jan-25	14:08	319241.91	5960485.48	7.3	23	14740	19.0	8.6	129	8	0.7	28000	2420	12700	5930	1.54	0.3	0.09	1.8	0.05
B10	22-Jan-25	9:10	319816.95	5960495.54	8.0	5	7680	17.1	4.3	7	79	7.3	9100	1140	5030	2370	1.58	0.3	0.04	1.9	0.03
B11	22-Jan-25	9:32	319816.09	5960495.06	7.9	-16	4448	17.9	2.4	62	27	2.4	2990	211	1260	940	0.59	0.5	0.02	1.4	0.06
B12	22-Jan-25	11:16	319253.97	5959861.31	7.7	-1	10220	17.8	5.8	31	76	6.8	17300	1720	8250	4290	0.63	0.2	0.03	0.8	0.03
B13	22-Jan-25	10:52	319254.90	5959861.25	8.0	-81	3851	18.9	2.0	403	7	0.6	2620	236	852	775	0.01	2.8	<0.01	2.8	0.58
B20	22-Jan-25	11:30	319260.50	5960089.55	7.0	-96	11070	20.0	6.3	179	9	0.7	50000	3160	24400	9230	0.05	0.6	0.18	0.6	0.41
B21	22-Jan-25	12:48	319316.59	5960090.51	7.0	-83	12940	19.0	7.5	45	15	1.3	55600	3540	26800	10100	0.07	2.6	0.66	2.7	0.66
B21A	22-Jan-25	13:04	319339.15	5960090.85	7.6	-20	11770	19.7	6.8	200	41	3.5	17100	1890	8340	4360	5.11	0.4	0.05	5.5	0.04
B22	22-Jan-25	12:27	319257.27	5960258.78	7.3	-20	12300	19.3	7.1	73	21	1.8	34200	2490	15400	6350	0.24	0.7	0.23	1.0	0.42
B23	22-Jan-25	12:10	319312.92	5960259.82	7.1	-79	12120	18.9	7.0	1000	42	3.7	50300	4660	25300	10700	<0.05	5.8	0.20	5.8	0.92
B23A	22-Jan-25	11:45	319335.41	5960259.25	7.6	-17	10910	20.0	6.2	457	35	3.0	22800	1980	10200	4510	4.23	0.7	0.08	4.9	0.21
B26	22-Jan-25	13:20	319833.00	5960176.72	7.3	9	10310	22.2	5.8	382	12	1.0	19600	9240	4450	4620	0.02	2.7	0.15	2.7	0.45
B31	22-Jan-25	14:25	319156.49	5962024.03	6.8	24	1899	19.1	1.0	594	12	1.1	1560	108	633	423	0.93	1.5	0.02	2.5	0.32
Bakers Monitoring Bores																					
B32	21-Jan-25	14:51	317955.90	5960421.35	7.6	-133	8839	18.7	5.0	17	2	0.2	9100	856	4880	2480	0.97	0.4	0.18	1.5	0.14
B35	21-Jan-25	8:02	319190.71	5959363.99	7.6	-142	8964	21.9	5.0	22	6	0.5	9640	596	7170	2510	0.28	1.1	0.25	1.6	0.13
B36	21-Jan-25	8:39	319185.99	5959876.74	7.2	-101	12410	20.6	7.1	43	10	0.9	17900	708	9520	4310	0.01	0.2	0.11	0.2	0.06
B37	21-Jan-25	14:23	319168.74	5960393.10	7.5	-95	11840	22.9	6.8	30	6	0.5	28800	2190	13600	6080	0.02	<1.0	0.06	<1.0	0.22
B39	21-Jan-25	14:02	319151.92	5961179.26	7.4	-93	11630	21.9	6.6	47	23	1.9	22200	1150	10900	5350	0.05	0.7	<0.05	0.8	0.25
B42	21-Jan-25	9:51	318602.53	5958830.59	7.5	-135	11330	21.5	6.5	27	8	0.6	14400	932	7760	3680	0.04	1.7	0.48	1.7	0.24
B46	21-Jan-25	13:30	317991.30	5960376.87	7.5	-10	10200	22.9	5.8	42	7	0.6	10800	882	5650	2840	6.99	1.9	0.09	9.1	0.16
B47	21-Jan-25	13:51	317974.18	5960747.48	7.6	-94	11520	18.5	6.6	62	28	2.5	13300	826	6840	3630	0.03	11.4	0.06	11.4	0.9
B49	21-Jan-25	10:17	317475.64	5958807.04	7.3	-39	15260	17.4	8.9	132	29	2.6	16400	1040	8720	4120	0.10	9.4	0.07	9.5	0.86
B51	21-Jan-25	10:37	316899.89	5959404.43	7.7	-28	11130	20.1	6.3	12	56	4.8	11000	936	6250	2930	12.4	0.9	<0.01	13.3	0.11
B52	21-Jan-25	11:30	316844.76	5959859.70	8.0	-10	10410	23.8	5.9	911	25	2.1	8800	762	4690	2180	21.5	2.6	0.01	24.4	0.39
B53	21-Jan-25	11:57	316864.01	5960345.47	7.3	-71	11990	19.7	6.9	38	10	0.8	17500	1030	7940	3900	0.04	0.4	0.06	0.4	0.11
B55	21-Jan-25	11:03	316403.38	5959360.24	7.8	-70	11700	19.5	6.7	34	18	1.6	21400	1340	10300	4790	3.24	0.9	0.06	4.2	0.22
B72	21-Jan-25	13:10	318411.03	5959940.58	7.6	5	12590	18.8	7.3	606	13	1.1	17000	1090	7680	3800	6.46	0.4	0.01	6.9	0.17
B73	21-Jan-25	9:31	318418.54	5959229.60	7.7	-95	10290	19.7	5.8	12	16	1.4	12100	908	6040	2820	2.9	1.2	0.42	4.1	0.19
B74	21-Jan-25	12:33	317951.53	5959895.30	7.2	28	15150	18.5	8.9	76	70	6.2	24100	1780	11200	5460	2.27	0.1	0.02	2.4	0.16
B75	21-Jan-25	12:44	317951.13	5959900.38	7.5	-4	15740	18.8	9.2	51	45	3.9	24900	1620	11100	5600	2.17	<0.1	0.03	2.2	0.13

Stanhope Milk Processing Plant Monitoring Bores																				
B58	20-Jan-25	9:30	319369.75	5964115.01	7.7	51	7774	22.3	4.3	1000	46	3.9	9430	1470	1950	1770	41.7	12.0	4.04	53.8	2.48
B59	20-Jan-25	9:33	319542.79	5964087.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B60	21-Jan-25	9:00	319792.10	5964018.19	7.7	51	7092	20.6	3.9	1000	53	4.6	4970	604	2020	1450	31.2	4.8	0.12	36.3	0.97
B61	20-Jan-25	11:00	319720.70	5963859.97	7.4	78	7455	19.7	4.1	910	37	3.3	5330	666	1830	1030	67.9	11.7	0.86	80.0	3.38
B62	20-Jan-25	11:35	319689.21	5963786.86	7.3	72	5991	19.3	3.3	1000	35	3.2	4610	598	1440	838	36	3.6	0.04	39.8	1.7
B63	20-Jan-25	11:53	319625.69	5963695.81	7.6	78	10350	20.0	5.9	1000	29	2.6	8750	853	3880	2190	8.63	2.6	0.06	11.2	0.97
B65	20-Jan-25	12:19	319405.16	5963841.63	7.2	-63	8255	21.9	4.6	662	38	3.2	6540	616	3090	1480	0.03	1.4	0.32	1.4	0.55
B67	20-Jan-25	13:20	319356.74	5963944.57	7.8	-149	7944	20.7	4.4	172	19	1.7	6120	628	2980	1440	0.56	14.0	1.33	14.6	3.96
B69	20-Jan-25	10:39	319711.89	5963836.46	5.9	111	7425	17.6	4.1	1000	4	0.3	4830	474	2500	1350	0.88	0.5	0.02	1.4	0.26
B70	20-Jan-25	12:40	319408.34	5963847.20	6.6	118	4846	18.6	2.6	17	3	0.3	2980	247	1130	762	4.01	0.4	<0.01	4.4	0.01
B71	20-Jan-25	13:50	319163.23	5963990.24	6.1	69	6061	18.8	3.3	237	3	0.2	3910	477	1770	1040	0.01	0.8	0.19	0.8	0.09
Quality Assurance / Quality Control																					
'Primary' Sample Identification - B23 - 22/01/2025					-	-	-	-	-	-	-	-	50300	4660	25300	10700	<0.05	5.8	0.20	5.8	0.92
Blind Field Duplicate' (BFD) Identification - QC1 - 22/01/2025					-	-	-	-	-	-	-	-	50800	4250	25400	10700	<0.05	5.9	0.31	5.9	1.02
Relative Percentage Difference (RPD%)					-	-	-	-	-	-	-	-	1.0%	9.2%	0.4%	0.0%	#	1.7%	43.1%	1.7%	10.3%
'Primary' Sample Identification - B74 - 21/01/2025					-	-	-	-	-	-	-	-	24100	1780	11200	5460	2.27	0.1	0.02	2.4	0.16
Blind Field Duplicate' (BFD) Identification - QC2 - 21/01/2025					-	-	-	-	-	-	-	-	25400	1760	11300	5960	1.9	<0.1	0.02	1.9	0.16
Relative Percentage Difference (RPD%)													5.3%	1.1%	0.9%	8.8%	17.7%	#	0.0%	23.3%	0.0%
'Primary' Sample Identification - B69 - 20/01/2025					-	-	-	-	-	-	-	-	4830	474	2500	1350	0.88	0.5	0.02	1.4	0.26
Blind Field Duplicate' (BFD) Identification - QC3 - 20/01/2025					-	-	-	-	-	-	-	-	4760	482	2190	1320	0.88	1	0.03	1.9	0.26
Relative Percentage Difference (RPD%)					-	-	-	-	-	-	-	-	1.5%	1.7%	13.2%	2.2%	0.0%	66.7%	40.0%	30.3%	0.0%
RINSATE 1 - B10 Centrifugal Pump - 22/01/2025					-	-	-	-	-	-	-	-	<10	<1	<1	<1	<0.01	<0.1	<0.01	<0.1	0.02
RINSATE 2 - B32 Centrifugal Pump - 21/01/2025					-	-	-	-	-	-	-	-	<10	<1	<1	<1	<0.01	<0.1	<0.01	<0.1	<0.01
RINSATE 3 - B69 Water Dipper - 20/01/2025					-	-	-	-	-	-	-	-	<10	<1	<1	<1	<0.01	0.1	<0.01	0.1	<0.01

***Analysis performed by ALS Environmental (NATA 825) Report ID:** EM2500766, EM2500854 & EM2500909

Calibration Report ID: 20012025-HAN, 21012025-HAN & 22012025-HAN

^ Due to laboratory error/oversight, nitrate was analysed outside of recommended holding times and are considered unreliable.

RPD could not be calculated as one or more results were reported below Laboratory Limit of Reporting (LOR)

RPD% = RPD is above acceptance target.

LOR - Laboratory Limit of Reporting

Where the laboratory LOR is greater than the adopted criteria.

Assessment Criteria Comments:

#1 NHMRC Australian Drinking Water Guideline (Health) adopted

#2 For surface water systems.

#3 Trigger value for prevention of foliar injury. Trigger value for moderately tolerant crops (i.e. lucerne, barley, sorghum)

a	National Institute of Water & Atmospheric Research, NIWA, Updating Nitrate Toxicity Effects on Freshwater Aquatic Species (NIWA, January 2013)
	Australian and New Zealand guidelines for Fresh and Marine Water Quality, Fresh Water Ecosystems, 95% protection (ANZECC/ARMCANZ 2000)
	Australian and New Zealand guidelines for Fresh and Marine Water Quality, Primary Industries (Livestock Watering) (ANZECC/ARMCANZ 2000)
	Australian and New Zealand guidelines for Fresh and Marine Water Quality, Recreational Use Criteria (ANZECC/ARMCANZ 2000)
	Australian Standard Piling - Design and Installation AS2159-2009 (Standards Australia, 2009)

COMMENTS