

## ENVIRONMENT PROTECTION LICENCE 20350 MONITORING DATA

<b>Licence Holder:</b>	Santos NSW (Eastern) Pty Ltd
<b>Premises:</b>	Narrabri Gas Field X-Line Road, Narrabri, NSW 2390
<b>Licence No:</b>	20350
<b>EPL LINK:</b>	<a href="https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20350&amp;id=20350&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20lice">https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20350&amp;id=20350&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20lice</a> <b>Version 17FEB2025</b>
<b>EPL Period:</b>	1 May 2025 to 30 April 2026
<b>Reporting Period:</b>	<b>Quarter 3</b> <b>1 November 2025 - 31 January 2025</b>
<b>Published Date:</b>	Feb-26
<b>Monitoring Location:</b>	Refer to Table 1
<b>Scheduled Activity:</b>	Coal seam gas exploration, assessment and production
<b>General Notes:</b>	Monitoring points visited and reported dry : 26, 28, 38, 39, 40, 43, 62, 66 and 78.  Grab samples for monitoring points with "Special Frequency 2" are taken annually in June unless results trigger above baseline values.  Monitoring Point 69, 70 & 76 - no sample required in accordance with EPL20350 Condition M2.8 and M2.9.  Monitoring Point 77 - no sample required in accordance with EPL20350 Condition M2.7 (Plant not operating).  Monitoring Point 80, 81 & 82 - no sample required in accordance with EPL20350 Condition M2.11 .  Monitoring Point 83, 84, 85 & 86 - no sample required in accordance with EPL20350 Condition M2.11.

**Table 1: EPL20350 Water Monitoring Locations**

EPA Identification No	Monitoring Type	Location	Latitude	Longitude
26	Groundwater Quality Monitoring	BWDMW12S	-30.63189	149.64828
27	Groundwater Quality Monitoring	BWDMW12D	-30.63188	149.64829
28	Groundwater Quality Monitoring	BWDMW12I	-30.63189	149.64830
37	Groundwater Quality Monitoring	LWDMW1D	-30.49124	149.61902
38	Groundwater Quality Monitoring	LWDMW1S	-30.49124	149.61903
39	Groundwater Quality Monitoring	LWDMW1I	-30.49125	149.61905
40	Groundwater Quality Monitoring	LWDMW2S	-30.50545	149.61643
41	Groundwater Quality Monitoring	LWDMW2D	-30.50545	149.61642
42	Groundwater Quality Monitoring	LWDMW3D	-30.50645	149.62451
43	Groundwater Quality Monitoring	LWDMW3S	-30.50644	149.62452
56	Groundwater Quality Monitoring	WPKMW9D	-30.36301	149.66006
57	Groundwater Quality Monitoring	WPKMW9S	-30.36299	149.66007
59	Groundwater Quality Monitoring	WPKMW13I	-30.36122	149.65886
60	Groundwater Quality Monitoring	WPKMW13S	-30.36122	149.65889
61	Groundwater Quality Monitoring	WPKMW14D	-30.36252	149.65694
62	Groundwater Quality Monitoring	WPKMW14S	-30.36253	149.65695
63	Groundwater Quality Monitoring	WPKMW15D	-30.36086	149.65691
64	Groundwater Quality Monitoring	WPKMW15S	-30.36088	149.65691
65	Groundwater Quality Monitoring	WPKMW16D	-30.36313	149.65370
66	Groundwater Quality Monitoring	WPKMW16S	-30.36315	149.65369
69	Produced Water Storage Pond	BWDPD2	-30.63370	149.64930
70	Produced Water Storage Pond	BWDPD3	-30.63240	149.64890
71	Produced Water Storage Pond	LWDPD1CELL4	-30.49437	149.62000
72	Produced Water Storage Pond	LWDPD1CELL3	-30.49608	149.61991
73	Produced Water Storage Pond	LWDPD1CELL2	-30.49788	149.61962
74	Produced Water Storage Pond	LWDPD1CELL1	-30.4995960	149.6192690
75	Produced Water Storage Pond	TFDPD1	-30.3618000	149.6595000
76	Produced Water Storage Pond	TFDPD2	-30.3613000	149.6583000
77	Treated Water Quality Monitoring	LWWTPDM1	-30.5033940	149.6220560
78	Groundwater Quality Monitoring	WPKMW18S	-30.3619300	149.6629520
79	Groundwater Quality Monitoring	WPKMW18I	-30.3618930	149.6629630
80	Groundwater Quality Monitoring	LWDMW4	-30.4985200	149.6264300
81	Groundwater Quality Monitoring	LWDMW5	-30.4960700	149.6306400
82	Groundwater Quality Monitoring	LWDMW6	-30.4972600	149.6325100
83	Soil Quality Monitoring	LWDSMP1	-30.4994300	149.6250150
84	Soil Quality Monitoring	LWDSMP2	-30.4975570	149.6272740
85	Soil Quality Monitoring	LWDSMP3	-30.4976290	149.6315310
86	Soil Quality Monitoring	LWDSMP4	-30.5009170	149.6304170

**Note:**

Monitoring points in accordance with Environmental Protection Licence (EPL) 23050 ammended 17 February 2025.

**TABLE 2: GROUNDWATER QUALITY MONITORING (In situ - Quarterly)**

		EPA Identification No	26	27	28	37	38	39
		Location	BWDMW12S	BWDMW12D	BWDMW12I	LWDMW1D	LWDMW1S	LWDMW1I
		Date	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025	12/12/2025
		Sample Method	No sample - dry	in situ	No sample - dry	in situ	No sample - dry	No sample - dry
Parameter	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Dissolved Oxygen - Field	mg/L	-	-	3.6	-	2.1	-	-
Electrical Conductivity - Field	µS/cm	-	-	4791	-	2241	-	-
pH - Field	pH Unit	-	-	6.99	-	6.31	-	-
Redox - Field	mV	-	-	-9	-	193	-	-
Standing Water Level - Field	mTOC	-	-	30.99	-	30.1	-	-

		EPA Identification No	40	41	42	43	56	57
		Location	LWDMW2S	LWDMW2D	LWDMW3D	LWDMW3S	WPKMW9D	WPKMW9S
		Date	12/12/2025	12/12/2025	12/12/2025	12/12/2025	10/12/2025	10/12/2025
		Sample Method	No sample - dry	in situ	in situ	No sample - dry	in situ	in situ
Parameter	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Dissolved Oxygen - Field	mg/L	-	-	3.6	2.59	-	1.6	2.2
Electrical Conductivity - Field	µS/cm	-	-	2010	910	-	1185	3220
pH - Field	pH Unit	-	-	6.87	6.20	-	8.05	7.62
Redox - Field	mV	-	-	81	76	-	-41	-80
Standing Water Level - Field	mTOC	-	-	26.01	21.20	-	15.31	15.60

		EPA Identification No	59	60	61	62	63	64
		Location	WPKMW13I	WPKMW13S	WPKMW14D	WPKMW14S	WPKMW15D	WPKMW15S
		Date	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
		Sample Method	in situ	in situ	in situ	No sample - dry	in situ	in situ
Parameter	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Dissolved Oxygen - Field	mg/L	-	1.9	3.1	1.7	-	1.9	2.2
Electrical Conductivity - Field	µS/cm	-	890	2936	1168	-	1238	8440
pH - Field	pH Unit	-	8.28	7.36	8.21	-	7.85	7.69
Redox - Field	mV	-	75	1	61	-	84	161
Standing Water Level - Field	mTOC	-	16.66	16.82	20.83	-	22.09	22.30

		EPA Identification No	65	66	78	79
		Location	WPKMW16D	WPKMW16S	WPKMW18S	WPKMW18I
		Date	10/12/2025	10/12/2025	10/12/2025	10/12/2025
		Sample Method	in situ	No sample - dry	No sample - dry	in situ
Parameter	Units	LOR	RESULT	RESULT	RESULT	RESULT
Dissolved Oxygen - Field	mg/L	-	2.3	-	-	1.8
Electrical Conductivity - Field	µS/cm	-	1206	-	-	1193
pH - Field	pH Unit	-	7.72	-	-	7.83
Redox - Field	mV	-	188	-	-	103
Standing Water Level - Field	mTOC	-	26.53	-	-	15.97

**TABLE 2: GROUNDWATER QUALITY MONITORING (Grab Sample - Special Frequency 2)**

There were no grab samples taken in the reporting period.

**TABLE 3: TREATED WATER QUALITY MONITORING**

Point 77 no samples taken, the plant is not operating.

**TABLE 4: PRODUCED WATER STORAGE QUALITY MONITORING**

		EPA Identification No	71	72	73	74	75
		Location	LWDPD1CELL4	LWDPD1CELL3	LWDPD1CELL2	LWDPD1CELL1	TFDPD1
		Date	24/09/2025	24/09/2025	24/09/2025	24/09/2025	24/09/2025
		Sample Method	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Grab Sample
Parameter	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT
Dissolved Oxygen*	mg/L		8.9	7.3	9.1	7.2	9.7
Electrical Conductivity*	µS/cm		38230	43950	47670	48821	15980
pH*	pH Unit		9.41	9.55	9.58	9.6	9.80
Redox potential*	mV		7	16	7	23	107