

*Teys Australia Jindalee* PO Box 352 Temora NSW 2666

# Teys Australia Southern Property Pty Ltd (Teys Australia Jindalee)

Monitoring Data Summary

# Environmental Protection Licence 3584

### Executive Summary

Teys Australia Jindalee is the holder of Environmental Protection Licence (EPL) 3584. This Licence is administered by the *NSW Environmental Protection Authority* (*EPA*), and includes conditions relevant to the site's operation, including environmental monitoring, as is outlined in this report. All environmental monitoring results required under EPL 3584 are submitted to the *EPA* each year in a formal annual return, and interpreted, and submitted in an Annual Environmental Management Review (AEMR).

All monitoring specified under EPL 3584 was completed in the 2021/2022 annual reporting period, which covered the period between 25 February 2021 and 24 February 2022. Monitoring has commenced for the 2021/2022 reporting period.

Nil instances of non – compliance with any of the conditions in EPL 3584 occurred during the reporting period.

Further information is available by contacting the Teys Corporate Environmental team on (07) 3298 9192.

A full copy of EPL 3584 can be obtained on the EPA website from the following URL using the search function for licence number "3584":

https://apps.epa.nsw.gov.au/prpoeoapp/

	Units of	Monitoring frequency	No of times measured during	Date of	Date data	Minimum	Maximum	Mean	Date
Pollutant	measure	required by licence	year	Sampling	obtained	Value	Value	Value	<b>Published</b>
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	11	210	110.33	30/03/22
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	13	27.3	20.67	30/03/22
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.19	0.31	0.27	30/03/22
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	6.6	17	13.20	30/03/22
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	3.4	9	5.67	30/03/22
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.48	1.4	1.4	30/03/22
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.36	1.2	0.67	30/03/22
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	27	37	31.67	30/03/22
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	500	2300	1367	30/03/22
pH	pH	Annual X 3 Sub Samples	1	08/03/22	22/03/22	6.2	8.7	7.47	30/03/22
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	100	150	123.33	30/03/22
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	3000	16000	11000	30/03/22

#### *EPA Monitoring point 1:* Summary of results for soil monitoring in South Irrigation paddock

The monitoring data in the table above is taken from monitoring point 1 in EPL 3584. During this period manure or effluent was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the South irrigation paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

EPA Monitoring Point 2:	Summary of results for soil r	nonitoring in West Irrigation paddock
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	8	140	55.33	30/03/22
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	10.1	13.7	12.5	30/03/22
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.26	1.5	0.68	30/03/22
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.4	2.8	1.4	30/03/22
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	3.5	11	8.17	30/03/22
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.58	3.3	1.76	30/03/22
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.58	1.4	1.06	30/03/22
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.7	4.4	2.27	30/03/22
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	500	1400	800	30/03/22
рН	рН	Annual X 3 Sub Samples	1	08/03/22	22/03/22	7	8.3	7.47	30/03/22
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	43	110	76	30/03/22
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	2000	18000	8000	30/03/22

The monitoring data in the table above is taken from monitoring point 2 in EPL 3584. During this period manure or effluent was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the West irrigation paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60-90cm) samples.

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	рН	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

#### EPA Monitoring Point 3: Summary of results for soil monitoring in North/West Shed paddock

The monitoring data in the table above is taken from monitoring point 3 in EPL 3584. During this period manure was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the North/West shed paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 – 90cm) samples.

EPA Monitoring Point 11:	Summary of results for soil	l monitoring in Old East Irrigation pade	lock
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	pH	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

The monitoring data in the table above is taken from monitoring point 11 in EPL 3584. During this period no manure or effluent was applied, therefore no testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the Old East irrigation paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

EPA Monitoring Point 12:	Summary of results for soil monitoring in Front paddock
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	pH	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

The monitoring data in the table above is taken from monitoring point 12 in EPL 3584. During this period no manure or effluent was applied, therefore no testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the Front paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

### *EPA Monitoring point 13:* Summary of results for soil monitoring in PBO paddock

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	pH	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

The monitoring data in the table above is taken from monitoring point 13 in EPL 3584. During this period no manure or effluent was applied, therefore no testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the PBO paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 – 90cm) samples.

EPA Monitoring Point 14:	Summary of results for soil	l monitoring in South East paddock
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	6	38	17.67	30/03/22
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	4.9	11.9	8.6	30/03/22
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.05	0.09	0.07	30/03/22
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	2.7	5.2	4.13	30/03/22
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	1.3	5.4	3.43	30/03/22
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.55	0.85	0.65	30/03/22
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	0.14	0.68	0.38	30/03/22
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	1.3	11	4.63	30/03/22
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	500	1000	667	30/03/22
рН	pН	Annual X 3 Sub Samples	1	08/03/22	22/03/22	5.8	8	7	30/03/22
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	69	100	87.67	30/03/22
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	08/03/22	22/03/22	2000	12000	5333.3 3	30/03/22

The monitoring data in the table above is taken from monitoring point 14 in EPL 3584. During this period manure or effluent was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the South East paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

*EPA monitoring Point 15:* Summary of results for soil monitoring in East Lot paddock

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	5	76	28.67	03.03.2022
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	14	21.2	18.63	03.03.2022
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.15	0.27	0.21	03.03.2022
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	4.8	8.1	6.13	03.03.2022
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	5.5	12	9.5	03.03.2022
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.4	2.6	1.4	03.03.2022
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.37	3	1.49	03.03.2022
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	1.7	20	8.23	03.03.2022
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	500	1200	733	03.03.2022
рН	pН	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	7.2	9.4	8.43	03.03.2022
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	72	87	79.67	03.03.2022
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	2000	13000	5666.6 7	03.03.2022

The monitoring data in the table above is taken from monitoring point 15 in EPL 3584. During this period manure or effluent was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the East Lot paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

EPA Monitoring Point 16:	Summary of results for soil	il monitoring in North Lot paddock
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	5	140	58.33	03.03.2022
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	6.5	10.4	8.33	03.03.2022
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.16	0.2	0.18	03.03.2022
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.3	2	1.1	03.03.2022
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	2.4	8	5.17	03.03.2022
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.62	1.8	1.21	03.03.2022
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	0.34	1.3	0.76	03.03.2022
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	3.8	9.1	7.1	03.03.2022
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	600	1100	800	03.03.2022
pH	pH	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	6.8	8.6	7.63	03.03.2022
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	28	48	35.33	03.03.2022
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	02.02.2022	28.02.2022	2000	10000	5000	03.03.2022

The monitoring data in the table above is taken from monitoring point 16 in EPL 3584. During this period manure or effluent was applied, therefore testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the North Lot paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

EPA Monitoring Point 17:	Summary of results for soil	l monitoring in North Stock paddo	эck
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	pH	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

The monitoring data in the table above is taken from monitoring point 17 in EPL 3584. During this period no manure or effluent was applied, therefore no testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the North Stock paddock. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

EPA Monitoring Point 18:	Summary of results for soil	l monitoring in Reid's Offsit	e Irrigation
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Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
Available Phosphorus	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
pH	pH	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA

The monitoring data in the table above is taken from monitoring point 18 in EPL 3584. During this period no manure or effluent was applied, therefore no testing is required. The monitoring point has been established to monitor the soil on which captured runoff water is applied. The monitoring point is located within in the Reid's Offsite Irrigation. The monitoring point consists of surface soil (0-30cm), sub surface soil (30-60cm) and sub soil (60 - 90cm) samples.

			No of times						
Pollutant	Units of measure	Monitoring frequency required by licence	measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
				25.01.2022	NA	NA	NA	NA	03.03.2022
Nitrogen (Ammonia)	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Conductivity	(µS/cm)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Nitrate	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
pH	pН	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Orthophosphate	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Standing Water level	(m)	6 Monthly	2						

**EPA Monitoring point 4:** Summary of results for groundwater bore P1 (bore was dry at time of sample collection therefore no sample was obtained).

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*EPA Monitoring point 5:* Summary of results for groundwater bore P2 (*bore was dry at time of sample collection therefore no sample was obtained*).

			No of times						
	Units of	Monitoring frequency	measured during	Date of	Date data	Minimum	Maximum	Mean	Date
Pollutant	measure	required by licence	year	Sampling	obtained	Value	Value	Value	Published
				25.01.2022	NA	NA	NA	NA	03.03.2022
Nitrogen (Ammonia)	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Conductivity	(µS/cm)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Nitrate	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
рН	pН	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Orthophosphate	(mg/L)	6 Monthly	2						
				25.01.2022	NA	NA	NA	NA	03.03.2022
Standing Water level	(m)	6 Monthly	2						

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Date Published
				25.01.2022	25.02.2022	0.1	0.1	0.1	03.03.2022
Nitrogen (Ammonia)	(mg/L)	6 Monthly	2						
				25.01.2022	25.02.2022	2070	2070	2070	03.03.2022
Conductivity	(µS/cm)	6 Monthly	2						
				25.01.2022	25.02.2022	1.1	1.1	1.1	03.03.2022
Nitrate	(mg/L)	6 Monthly	2						
				25.01.2022	25.02.2022	7.2	7.2	7.2	03.03.2022
pH	pН	6 Monthly	2						
				25.01.2022	25.02.2022	1.88	1.88	1.88	03.03.2022
Orthophosphate	(mg/L)	6 Monthly	2						
				25.01.2022	25.02.2022	0.3	0.3	0.3	03.03.2022
Standing Water level	(m)	6 Monthly	2						

## *EPA Monitoring point 6:* Summary of results for groundwater bore P3

## <u>EPA Monitoring point</u> 7: Summary of results for groundwater bore P4

			No of times						
	Units of	Monitoring frequency	measured during	Date of	Date data	Minimum	Maximum	Mean	Date
Pollutant	measure	required by licence	year	Sampling	obtained	Value	Value	Value	Published
				25.01.2022	25.02.2022	0.1	0.1	0.1	03.03.2022
Nitrogen (Ammonia)	(mg/L)	6 Monthly	2						
				25.01.2022	25.02.2022	1650	1650	1650	03.03.2022
Conductivity	(µS/cm)	6 Monthly	2						
				25.01.2022	25.02.2022	5.1	5.1	5.1	03.03.2022
Nitrate	(mg/L)	6 Monthly	2						
				25.01.2022	25.02.2022	7.7	7.7	7.7	03.03.2022
pН	pН	6 Monthly	2						
	-	-		25.01.2022	25.02.2022	0.22	0.22	0.22	03.03.2022
Orthophosphate	(mg/L)	6 Monthly	2						
	-			25.01.2022	25.02.2022	0.3	0.3	0.3	03.03.2022
Standing Water level	(m)	6 Monthly	2						

Ground water monitoring for EPA monitoring points 4, 5, 6 and 7 is completed to assess for any impacts to groundwater from irrigation and manure application processes on site. Along with the soil monitoring data, it is used to confirm that there are no cumulative impacts being caused by site processes.

Surface water monitoring for EPA monitoring points 8, 9 and 10 is completed to assess the quality of the water used for irrigation on site. Along with the soil monitoring data, it is used to confirm that there are no cumulative impacts being caused by site processes.

			No of times				
	Units of	Monitoring frequency	measured during	Date of	Date data	Result	Date
Pollutant	measure	required by licence	year	Sampling	obtained	(units)	Published
				25.01.2022	25.02.2022	30	03.03.2022
Ammonia	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	3620	03.03.2022
Conductivity	(µS/cm)	Annual	1				
				25.01.2022	25.02.2022	99	03.03.2022
Nitrogen (total)	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	8.1	03.03.2022
pН	pН	Annual	1				
				25.01.2022	25.02.2022	29.8	03.03.2022
Phosphorus (total)	(mg/L)	Annual	1				

**EPA Monitoring point 8:** Summary of results for Holding Pond 1

# *EPA Monitoring point 9:* Summary of results for Holding Pond 2

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Result (units)	Date Published
				25.01.2022	25.02.2022	36	03.03.2022
Ammonia	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	5300	03.03.2022
Conductivity	(µS/cm)	Annual	1				
				25.01.2022	25.02.2022	117	03.03.2022
Nitrogen (total)	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	8.3	03.03.2022
pН	pН	Annual	1				
				25.01.2022	25.02.2022	51.9	03.03.2022
Phosphorus (total)	(mg/L)	Annual	1				

## *EPA Monitoring point 10:* Summary of results for Tail water

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Result (units)	Date Published
				25.01.2022	25.02.2022	45	03.03.2022
Ammonia	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	9350	03.03.2022
Conductivity	(µS/cm)	Annual	1				
				25.01.2022	25.02.2022	167	03.03.2022
Nitrogen (total)	(mg/L)	Annual	1				
				25.01.2022	25.02.2022	9.7	03.03.2022
pН	pН	Annual	1				
				25.01.2022	25.02.2022	67.6	03.03.2022
Phosphorus (total)	(mg/L)	Annual	1				

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	(minimum		08.03.2022	50
Manure applied	Tonnes)	Annual		
	(maximum		08.03.2022	430
Manure applied	Tonnes)	Annual		
			08.03.2022	240
Manure applied	(average Tonnes)	Annual		
Number of days			08.03.2022	3
manure applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
••			NA	NA
Effluent applied	(average ML)	Annual		
Number of days			NA	NA
effluent applied	Days	Annual		

*EPA Monitoring point 1:* Summary of manure and effluent applied to South Irrigation Paddock

Monitoring of the volumes and number of days of manure and effluent applied to different paddocks on site, is completed to track the volume of nutrients applied to the land to ensure that activities are completed in compliance with the nutrient and water balance prepared for the site. This is the case for all paddocks on site.

EPA Monitoring Point 2:	Summary of manure and effluent applied to West Irrigation Paddock	
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Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	~	<b>* *</b>	NA	NA
Manure applied	(minimum Tonnes)	Annual		
			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			08.03.2022	0.18432
Effluent applied	(minimum ML)	Annual		
			08.03.2022	0.55296
Effluent applied	(maximum ML)	Annual		
			08.03.2022	0.36768
Effluent applied	(average ML)	Annual		
Number of days effluent			08.03.2022	24
applied	Days	Annual		

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	· ·		NA	NA
Manure applied	(minimum Tonnes)	Annual		
••			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

*EPA Monitoring point 3:* Summary of manure and effluent applied to North/West Shed Paddock

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
			NA	NA
Manure applied	(minimum Tonnes)	Annual		
			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

*EPA Monitoring point 11:* Summary of manure and effluent applied to Old East Irrigation Paddock

EPA Monitoring point 12:	Summary of manure and effluence	uent applied to Front Paddock
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Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
			NA	NA
Manure applied	(minimum Tonnes)	Annual		
			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
		<u> </u>	NA	NA
Manure applied	(minimum Tonnes)	Annual		
**			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

# *EPA Monitoring point 13:* Summary of manure and effluent applied to PBO Paddock

EPA Monitoring point 14:	Summary of manure and effluent applied to South East Paddock

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	e nus og nædsure		08.03.2022	527
Manure applied	(minimum Tonnes)	Annual		
			08.03.2022	919
Manure applied	(maximum Tonnes)	Annual		
			08.03.2022	723
Manure applied	(average Tonnes)	Annual		
Number of days manure			08.03.2022	2
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
			02.02.2022	293
Manure applied	(minimum Tonnes)	Annual		
			02.02.2022	320
Manure applied	(maximum Tonnes)	Annual		
			02.02.2022	306.5
Manure applied	(average Tonnes)	Annual		
Number of days manure			02.02.2022	2
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

*EPA Monitoring Point 15:* Summary of manure and effluent applied to East Lot Paddock

EI A monuoring 1 ouu 10	• Summary of manufe a	and enruent applied to North	Lot I addock	
Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	
			02.02.2022	300
Manure applied	(minimum Tonnes)	Annual		

**EPA Monitoring Point 16:** Summary of manure and effluent applied to North Lot Paddock

		<i>s</i> <sup>2</sup>	2 0		
Pollutant	Units of measure	required by licence	Sampling	Value	
			02.02.2022	300	
Manure applied	(minimum Tonnes)	Annual			
			02.02.2022	300	
Manure applied	(maximum Tonnes)	Annual			
			02.02.2022	300	
Manure applied	(average Tonnes)	Annual			
Number of days manure			02.02.2022	1	
applied	Days	Annual			
			NA	NA	
Effluent applied	(minimum ML)	Annual			
			NA	NA	
Effluent applied	(maximum ML)	Annual			
			NA	NA	
Effluent applied	(average ML)	Annual			
Number of days effluent			NA	NA	
applied	Days	Annual			

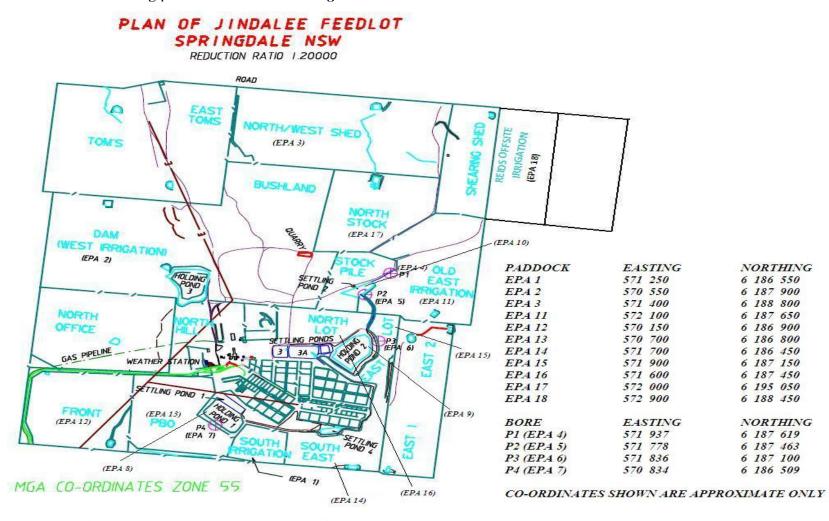
Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
			NA	NA
Manure applied	(minimum Tonnes)	Annual		
••			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

*EPA Monitoring point 17:* Summary of manure and effluent applied to North Stock Paddock

EPA Monitoring point 18:	Summary of manure	and effluent applied to Reid's	Offsite Irrigation

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
		<b>*</b>	NA	NA
Manure applied	(minimum Tonnes)	Annual		
			NA	NA
Manure applied	(maximum Tonnes)	Annual		
			NA	NA
Manure applied	(average Tonnes)	Annual		
Number of days manure			NA	NA
applied	Days	Annual		
			NA	NA
Effluent applied	(minimum ML)	Annual		
			NA	NA
Effluent applied	(maximum ML)	Annual		
			NA	NA
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	NA
applied	Days	Annual		

Locations of all monitoring points are shown in the *Figure 1* below.



### **Correction Log**

This section is included to correct any incorrect data which may have been published in good faith.

# Teys Australia Southern Property Pty Ltd T/A Teys Australia Jindalee EPL number 3584

Pollutant:

Table 4:Correction log

Sample date and time	Original data	Corrected data	Date corrected	Date originally published	Reason

Note: No corrections required to date.

### **Modification Log**

This section is included to detail any changes to the template due to changes to the licence

#### Teys Australia Southern Property Pty Ltd T/A Teys Australia Jindalee EPL number 3584

Date of Modification	Modification Made	Modification Made By	Modification Approved By	
27 November 2012 Update Monitoring Table to include Point 18 "Reids Offsite Irrigation" for soil monitoring and effluent and manure application		Wendy Denning	Charles Hollingworth	
27 November 2012	Update figure 1 "Plan of Jindalee Feedlot" to include Monitoring Point 18 "Reids Offsite Irrigation"	Wendy Denning	Charles Hollingworth	
15 March 2013	Update Monitoring Tables 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18 to include 2 sub samples as frequency, and include the minimum, maximum and mean value to reflect license 3584	Wendy Denning	Shane Bullock	
15 March 2013	Update Frequency Monitoring Tables 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18 from 'annual' to 'annual X 2 sub samples'	Wendy Denning	Shane Bullock	
15 March 2013	Added to the comment below Monitoring Tables 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18 'The monitoring point consists of top soil and sub soil.'	Wendy Denning	Shane Bullock	
29 June 2016	Added the comment below Monitoring Tables 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18 'During this period no manure or effluent was applied, therefore no testing is required'	Jayne Newcombe	Shane Bullock	
29 June 2016	Added the comment above Monitoring Tables 4, 5, 6, 7, 8 & 10 (bore was dry at time of sample collection therefore no sample was obtained).'	Jayne Newcombe	Shane Bullock	
29 June 2016	Added the comment below Monitoring Table 1, page 18 'During this period no manure or effluent was applied to any paddock, therefore no testing is required.'	Jayne Newcombe	Shane Bullock	
29 June 2016	Amended the comment below Monitoring Table Tables 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18 from 'has been taken' to 'is taken'.	Jayne Newcombe	Shane Bullock	

07 March 2017	Amended table for EPA points 8, 9 & 10 to reflect one result.	Jayne Newcombe	Shane Bullock
07 March 2017	Amended table for EPA points 1, 2, 3, 11, 12, 13, 14, 15, 16, 17 & 18.	Jayne Newcombe	Shane Bullock
26 February 2018	Added the comment below Monitoring Table 16, page 10 'During this period no manure or effluent was applied, therefore no testing is required'	Jayne Newcombe	Shane Bullock
26 February 2018	Removed the comment below Monitoring Table 17, page 11 'During this period no manure or effluent was applied, therefore no testing is required'	Jayne Newcombe	Shane Bullock
04 February 2019	Updated comments to reflect where there were no samples collected.	Jayne Newcombe	Shane Bullock
02 February 2020	Updated Executive Summary with current Monitoring Period details. Updated EPA website.	Jayne Newcombe	Shane Bullock
24 March 2020	Amended the comment below Monitoring Table 3 'During this period manure was applied, therefore testing is required'.	Jayne Newcombe	Shane Bullock
24 March 2020	Amended table formatting for Amendment Log	Jayne Newcombe	Shane Bullock
05 March 2021	Updated company logo and dates for monitoring period	Jayne Morris	Shane Bullock
30 March 2022	Updated dates for monitoring period	Jayne Morris	Shane Bullock