

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 2015/2016 annual reporting period, which covered the period between 25 February 2015 and 24 February 2016. Monitoring has commenced for the 2015/2016 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) 3287 2188.

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":

http://www.environment.nsw.gov.au/prpoeoapp/

EPA Monitoring point 1: Summary of results for soil monitoring in South Irrigation 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
рН	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

The monitoring data in the table above is taken from monitoring point 1 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 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 monitoring in West Irrigation 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	01/02/17	14/02/17	6	68	27.67	16/02/17
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	7.5	16	11.23	16/02/17
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.12	0.25	0.19	16/02/17
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.2	2.1	1.1	16/02/17
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	3.7	12	7.53	16/02/17
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.20	0.55	0.37	16/02/17
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.89	3	2.23	16/02/17
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	4	17	9.33	16/02/17
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	200	1300	600	16/02/17
рН	рН	Annual X 3 Sub Samples	1	01/02/17	14/02/17	6	9.3	7.77	16/02/17
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	42	110	76.33	16/02/17
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	2000	19000	9000	16/02/17

The monitoring data in the table above is taken from monitoring point 2 in EPL 3584. 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.

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

	Units of	Monitoring frequency	No of times measured during	Date of	Date data	Minimum	Maximum	Mean	Date
Pollutant	measure	required by licence	year	Sampling Sampling	obtained	Value	Value	Value	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	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Phosphorus Sorption	•	Samples Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	0						

The monitoring data in the table above is taken from monitoring point 3 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/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 monitoring in Old East Irrigation 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	1	Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	0		.1 .		CCI	1' 1	.1

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

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	1	Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	<u>0</u>		.1 • •		CCI	1' 1	.1

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	1	01/02/17	14/02/17	<5	36	15.33	16/02/17
Cation Exchange Capacity	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	16	29.5	22.07	16/02/17
Conductivity	(dS/m)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.11	0.31	0.18	16/02/17
Exchangeable Calcium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	6.8	9.4	7.7	16/02/17
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	5.6	15	10.53	16/02/17
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.62	2.8	1.43	16/02/17
Exchangeable Sodium	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.66	4.3	2.35	16/02/17
Nitrate	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	1	6	3.33	16/02/17
Nitrogen (total)	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	400	2300	1266.6 7	16/02/17
рН	рН	Annual X 3 Sub Samples	1	01/02/17	14/02/17	7.2	9.2	8.37	16/02/17
Phosphorus Sorption Capacity	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	89	100	93.33	16/02/17
Total Organic Carbon	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	2000	13000	5666.6 7	16/02/17

The monitoring data in the table above is taken from monitoring point 13 in EPL 3584. 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 monitoring in South East 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
		Annual X 3 Sub	<u>, </u>	NA	NA	NA	NA	NA	NA
Available Phosphorus	(mg/kg)	Samples	0						
Cation Exchange		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(cl/kg)	Samples	0						
		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Conductivity	(dS/m)	Samples	0						
Exchangeable		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Calcium	(cl/kg)	Samples	0						
Exchangeable Magnesium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable	(CI/Ng)	Annual X 3 Sub	<u> </u>	NA	NA	NA	NA	NA	NA
Potassium	(cl/kg)	Samples	0						
Exchangeable		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Sodium	(cl/kg)	Samples	0						
		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Samples	0						
		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Samples	0						
		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
pH	pН	Samples	0						
Phosphorus Sorption		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples	0						
		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	0						

The monitoring data in the table above is taken from monitoring point 14 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 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	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	1	Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	<u>0</u>		.1 • •		CCI	1' 1	.1

The monitoring data in the table above is taken from monitoring point 15 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 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 monitoring in North Lot paddock

Cation Exchange Capacity (Conductivity (Exchangeable	(mg/kg) (cl/kg) (dS/m) (cl/kg)	Annual X 3 Sub Samples Annual X 3 Sub Samples Annual X 3 Sub Samples Annual X 3 Sub	1 1 1	01/02/17 01/02/17 01/02/17	14/02/17 14/02/17 14/02/17	9.5	120	50.67	16/02/17
Cation Exchange Capacity (Conductivity (Exchangeable	(cl/kg) (dS/m)	Annual X 3 Sub Samples Annual X 3 Sub Samples	1				10.4	10	16/02/17
Conductivity (Exchangeable	(dS/m)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.15			
Exchangeable		•	1			0.17	0.25	0.2	16/02/17
	(CI/Kg)	Samples	1	01/02/17	14/02/17	0.8	2.4	1.57	16/02/17
Exchangeable	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	5.4	7.7	6.43	16/02/17
Exchangeable	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.38	1.8	1.06	16/02/17
Exchangeable	(cl/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	0.83	1.2	0.96	16/02/17
,	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	7	31	16.33	16/02/17
	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	400	900	600	16/02/17
pH	pH	Annual X 3 Sub Samples	1	01/02/17	14/02/17	6.7	8.3	7.27	16/02/17
Phosphorus Sorption	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	39	74	58	16/02/17
	(mg/kg)	Annual X 3 Sub Samples	1	01/02/17	14/02/17	3000	13000	6333.3	16/02/17

The monitoring data in the table above is taken from monitoring point 16 in EPL 3584. 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 monitoring in North Stock 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
	(B)	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Available Phosphorus	(mg/kg)	Samples	0	NT A	NY A	NT 4	27.4	37.4	NT A
Cation Exchange		Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(cl/kg)	Samples	0						
Conductivity	(dS/m)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Calcium	(01/1/2)	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Exchangeable	(cl/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Magnesium	(cl/kg)	Samples	0	NIA	NIA	NIA	NIA	37.4	NT A
Exchangeable Potassium	(cl/kg)	Annual X 3 Sub Samples	0	NA	NA	NA	NA	NA	NA
Exchangeable Sodium	(21/122)	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Sodium	(cl/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Nitrate	(mg/kg)	Samples	0						
Nitro con (total)	(*** ~ /1* ~)	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Nitrogen (total)	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
pН	pН	Samples	0						
Phosphorus Sorption	(81)	Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples	0	X	X	N. 1	N. 1	N.T.A.	N7.4
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 monitoring in Reid's Offsite Irrigation

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	1	Annual X 3 Sub		NA	NA	NA	NA	NA	NA
Capacity	(mg/kg)	Samples Annual X 3 Sub	0	NA	NA	NA	NA	NA	NA
Total Organic Carbon	(mg/kg)	Samples	<u>0</u>		.1 • •		CCI	1' 1	.1

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.

EPA Monitoring point 4: Summary of results for groundwater bore P1 (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
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrogen (Ammonia)	(mg/L)	6 Monthly	0						
		•		06.09.17	NA	NA	NA	NA	07.09.17
Conductivity	(µS/cm)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
pН	pН	6 Monthly	0						
		·		06.09.17	NA	NA	NA	NA	07.09.17
Orthophosphate	(mg/L)	6 Monthly	0						
	_	•		06.09.17	NA	NA	NA	NA	07.09.17
Standing Water level	(m)	6 Monthly	0						

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	_					_
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
1 outum	measure	required by ittence	yeur	06.09.17	NA	NA	NA	NA	07.09.17
Nitrogen (Ammonia)	(mg/L)	6 Monthly	0						
		•		06.09.17	NA	NA	NA	NA	07.09.17
Conductivity	(µS/cm)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
рН	pН	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Orthophosphate	(mg/L)	6 Monthly	0						
		·		06.09.17	NA	NA	NA	NA	07.09.17
Standing Water level	(m)	6 Monthly	0						

EPA Monitoring point 6: Summary of results for groundwater bore P3 (bore was dry at time of sample collection therefore no sample was obtained).

		·	No of times	·	, ,		Ĭ		
	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
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrogen (Ammonia)	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Conductivity	(µS/cm)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
pН	pН	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Orthophosphate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Standing Water level	(m)	6 Monthly	0						

EPA Monitoring point 7: Summary of results for groundwater bore P4 (bore was dry at time of sample collection therefore no sample was obtained).

			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
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrogen (Ammonia)	(mg/L)	6 Monthly	0						
-	_			06.09.17	NA	NA	NA	NA	07.09.17
Conductivity	(µS/cm)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Nitrate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
pН	pН	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Orthophosphate	(mg/L)	6 Monthly	0						
				06.09.17	NA	NA	NA	NA	07.09.17
Standing Water level	(m)	6 Monthly	0						

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.

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

		·	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
				16.02.17	06.03.17	53	07.03.17
Ammonia	(mg/L)	Annual	1				
	_			16.02.17	06.03.17	4720	07.03.17
Conductivity	(µS/cm)	Annual	1				
				16.02.17	06.03.17	111	07.03.17
Nitrogen (total)	(mg/L)	Annual	1				
				16.02.17	06.03.17	8.5	07.03.17
рН	pН	Annual	1				
				16.02.17	06.03.17	18.8	07.03.17
Phosphorus (total)	(mg/L)	Annual	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
				16.02.17	06.03.17	83	07.03.17
Ammonia	(mg/L)	Annual	1				
	_			16.02.17	06.03.17	7290	07.03.17
Conductivity	(µS/cm)	Annual	1				
				16.02.17	06.03.17	160	07.03.17
Nitrogen (total)	(mg/L)	Annual	1				
				16.02.17	06.03.17	8.5	07.03.17
рН	pН	Annual	1				
				16.02.17	06.03.17	27.0	07.03.17
Phosphorus (total)	(mg/L)	Annual	1				

EPA Monitoring point 10: Summary of results for Tail water (pond was dry at time of sample collection therefore no sample was obtained).

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
				NA	NA	NA	NA
Ammonia	(mg/L)	Annual	0				
	_			NA	NA	NA	NA
Conductivity	(µS/cm)	Annual	0				
·	·			NA	NA	NA	NA
Nitrogen (total)	(mg/L)	Annual	0				
				NA	NA	NA	NA
pН	pН	Annual	0				
				NA	NA	NA	NA
Phosphorus (total)	(mg/L)	Annual	0				

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

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

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

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	166
Effluent applied	(minimum ML)	Annual		
			NA	369
Effluent applied	(maximum ML)	Annual		
			NA	224
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	40
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
	V		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

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 12: Summary of manure and effluent applied to Front 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 13: Summary of manure and effluent applied to PBO 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	74
Effluent applied	(minimum ML)	Annual		
			NA	221
Effluent applied	(maximum ML)	Annual		
			NA	184
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	40
applied	Days	Annual		

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
	Chils of measure	required by the thee	NA 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 15: Summary of manure and effluent applied to East Lot Paddock

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	V	· ·	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 16: Summary of manure and effluent applied to North Lot 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	166
Effluent applied	(minimum ML)	Annual		
			NA	184
Effluent applied	(maximum ML)	Annual		
			NA	169
Effluent applied	(average ML)	Annual		
Number of days effluent			NA	20
applied	Days	Annual		

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

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
	V		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		

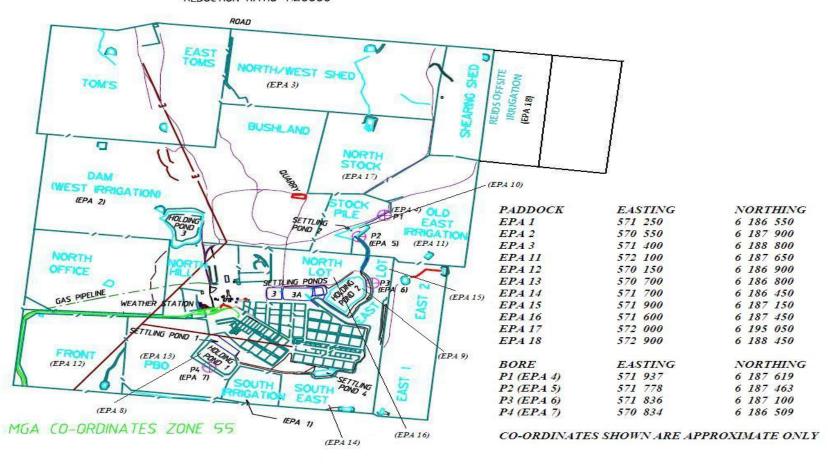
EPA Monitoring point 18: Summary of manure and effluent applied to Reid's Offsite Irrigation

Pollutant	Units of measure	Monitoring frequency required by licence	Date of Sampling	Value
			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.

PLAN OF JINDALEE FEEDLOT SPRINGDALE NSW

REDUCTION RATIO 1.20000



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

Table 5: Modification Log

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