



Mannering Colliery Monthly Website Report – April 2026

Site:	Mannering Colliery
Department:	Health Safety and Environment
Report Title:	Monthly Environmental Report – April 2026
Report Date:	5 th May 2026
Distribution:	Delta Coal website

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Summary

Environmental monitoring results are presented in this report for monitoring undertaken during the period of April 2026.

Introduction

Great Southern Energy Pty Ltd (trading as Delta Coal) operates Manning Colliery, an underground coal mine at the southern end of Lake Macquarie.

Manning Colliery operates under the following regulatory instruments:

- Section 66(6) of the *Protection of the Environmental Operations Act 1997*, to make monitoring data related to an Environment Protection Licence (EPL) publicly available;
- Condition 10 & 13, Schedule 5, of Project Approval 06_0311 (as modified) to provide details of monitoring results and environmental performance;
- An Environment Protection Licence (EPL 191) issued under the *Protection of the Environment Operations Act 1997*; and
- A Water Access Licence (WAL40461), Aquifer (Sydney Basin – North Coast Groundwater Source) for 450-unit shares (megalitres).

Details of the Manning Colliery EPL 191 are provided below.

Manning Colliery Information	
Premises name	Manning Colliery
Address	Ruttleys Road, Doyalson, NSW, 2262
Licensee	Great Southern Energy Pty Ltd
EPL #	191
EPL location	EPL 0191 - 24 June 2025

The overall purpose of this monthly report is to keep stakeholders informed of the environmental monitoring results at Manning Colliery and maintain a transparent and accountable reporting system.

Scope

This report presents the results from the various environmental monitoring programs undertaken for Manning Colliery. Results are presented monthly with annual data, averages and trends in data also shown where relevant.

Where applicable, the results of the monitoring programs are compared with the relevant criteria (from the EPL or Project Approval) to assess compliance.

Monitoring results presented include:

- Water – quality;
- Water – volume;
- Air Quality – Depositional Dust
- Air Quality – PM₁₀
- Air Quality – PM_{2.5}; and
- Meteorological data.

Definitions

g/m²/month – grams per square metre per month;

kL – kilolitre;

ML – megalitre;

mg/L – milligrams per litre;

TSS – total suspended solids;

µg/L – micrograms per litre; and

µS/cm – microSiemens per centimetre.

References

Project Approval MP06_0311 (as modified)

Environment Protection Licence 191 (Licence version date: 9 April 2025)

ALS - Dust Deposition Report **April 2026**

ALS – MC Water Analysis Reports **April 2026**

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Monitoring Results

Water – Quality

Weekly water quality results for discharge point LDP001 are presented below.

April 2026				
EPL	191			
Licensee	Great Southern Energy Pty Ltd			
Premises	Manningering Colliery			
Location	LDP001 (EPA ID # 1)			
Sample Frequency	Weekly			
pH limit	6.5 - 8.5			
TSS limit (mg/L)	50			
Oil and grease limit (mg/L)	10			
Water Quality Results				
Date	pH	TSS (mg/L)	Oil and grease (mg/L)	Electrical Conductivity (µS/cm)
31/03/2026	7.92	17	<5	27500
9/04/2026	8.19	10	<5	5660
14/04/2026	7.81	11	<5	28500
23/04/2026	7.76	16	<5	28100
28/04/2026	7.75	8	<5	28200
Average	7.79	12.4	<5	23592

There were no exceedances of water quality criteria in April 2026 at Manningering Colliery.

Monthly water quality results, primarily metals and metalloids, at LDP001 are presented below.

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Sub-Matrix: WATER (Matrix: WATER)		Sample ID		LDP001
		Sampling date / time		23-Apr-2026 09:30
Compound	CAS Number	LOR	Unit	EN2606248-001
				Result
ED040F: Dissolved Major Anions				
Sulfur as S	63705-05-5	1	mg/L	166
Silicon as SiO2	7440-21-3	0.1	mg/L	11.6
ED093T: Total Major Cations				
Calcium	7440-70-2	1	mg/L	318
Magnesium	7439-95-4	1	mg/L	312
Potassium	7440-09-7	1	mg/L	44
EG020F: Dissolved Metals by ICP-MS				
Aluminium	7429-90-5	10	µg/L	<10
Arsenic	7440-38-2	1	µg/L	<1
Beryllium	7440-41-7	1	µg/L	<1
Cadmium	7440-43-9	0.1	µg/L	<0.1
Chromium	7440-47-3	1	µg/L	<1
Cobalt	7440-48-4	1	µg/L	<1
Copper	7440-50-8	1	µg/L	<1
Lead	7439-92-1	1	µg/L	<1
Manganese	7439-96-5	1	µg/L	65
Molybdenum	7439-98-7	1	µg/L	5
Nickel	7440-02-0	1	µg/L	3
Selenium	7782-49-2	10	µg/L	<10
Silver	7440-22-4	1	µg/L	<1
Vanadium	7440-62-2	10	µg/L	<10
Zinc	7440-66-6	5	µg/L	19
EG020T: Total Metals by ICP-MS				
Aluminium	7429-90-5	10	µg/L	<10
Antimony	7440-36-0	1	µg/L	<1
Arsenic	7440-38-2	1	µg/L	<1
Beryllium	7440-41-7	1	µg/L	<1
EG020T: Total Metals by ICP-MS - Continued				
Barium	7440-39-3	1	µg/L	215
Cadmium	7440-43-9	0.1	µg/L	<0.1
Chromium	7440-47-3	1	µg/L	<1
Cobalt	7440-48-4	1	µg/L	<1
Copper	7440-50-8	1	µg/L	<1
Lead	7439-92-1	1	µg/L	<1
Lithium	7439-93-2	1	µg/L	673
Molybdenum	7439-98-7	1	µg/L	6
Nickel	7440-02-0	1	µg/L	3
Selenium	7782-49-2	10	µg/L	<10
Silver	7440-22-4	1	µg/L	<1
Tin	7440-31-5	1	µg/L	3
Titanium	7440-32-6	10	µg/L	<10
Vanadium	7440-62-2	10	µg/L	<10
Zinc	7440-66-6	5	µg/L	15
Boron	7440-42-8	50	µg/L	470
Iron	7439-89-6	50	µg/L	280
EG035F: Dissolved Mercury by FIMS				
Mercury	7439-97-6	0.1	µg/L	<0.1
EG035T: Total Recoverable Mercury by FIMS				
Mercury	7439-97-6	0.1	µg/L	<0.1
EK055G: Ammonia as N by Discrete Analyser				
Ammonia as N	7664-41-7	0.01	mg/L	1.06
EK067G: Total Phosphorus as P by Discrete Analyser				
Total Phosphorus as P	----	0.01	mg/L	0.03

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Water – Volume

Monthly water volumes discharged via MC's LDP1 during April 2026 at Mannering Colliery are summarised below.

EPL	191
Licensee	Great Southern Energy Pty Ltd
Premises	Mannering Colliery
Date Sampled	Daily
Discharge volume limit	4000 kilolitres per day
Sampling Point	LDP001 (EPA ID # 1)

Date (24 hour period)	LDP 1 Volume (kL/day)	Rainfall (mm)
1/04/2026	1241.01	0
2/04/2026	781.55	0
3/04/2026	841.58	0
4/04/2026	1368.98	21.6
5/04/2026	1215.01	1.6
6/04/2026	388.81	0
7/04/2026	0.00	0
8/04/2026	76.34	0
9/04/2026	2583.86	0
10/04/2026	1502.59	0
11/04/2026	1482.01	0
12/04/2026	1457.50	0
13/04/2026	1258.92	0
14/04/2026	1120.16	0
15/04/2026	1008.65	0
16/04/2026	1269.55	0
17/04/2026	1114.79	0
18/04/2026	1310.30	0
19/04/2026	1376.78	0
20/04/2026	2047.04	0
21/04/2026	1377.01	0.2
22/04/2026	1303.24	0.4
23/04/2026	1132.80	0
24/04/2026	925.04	2
25/04/2026	989.29	0.8
26/04/2026	1012.38	0
27/04/2026	1013.73	0
28/04/2026	1016.29	0
29/04/2026	982.37	0.2
30/04/2026	734.45	6.2

Average	1131.1 kL/day	1.1 mm/day
Maximum	2583.9 kL/day	21.6 mm/day

Volumetric discharge remained below the daily limit of 4,000 kL per day.

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Water – Groundwater Discharge

Groundwater discharged from underground workings to the MCs surface retention Dams has been detailed below. Manning Colliery operates Water Access License 40461 permitting the extraction of 450 megalitres per financial year and reports annual use to the Water NSW, Water Accounting System (iWAS).

MC Groundwater Pumped to Surface Totals FY2025-2026		
Date (month)	GW Discharge (ML/Month)	GW Discharge (Cumulative ML YTD)
July 2025	22	22
August 2025	24	46
September 2025	20	66
October 2025	25	91
November 2025	23	114
December 2025	22	136
January 2026	20	156
February 2026	25	181
March 2026	19	200
April 2026	28	228

Air Quality – Depositional Dust

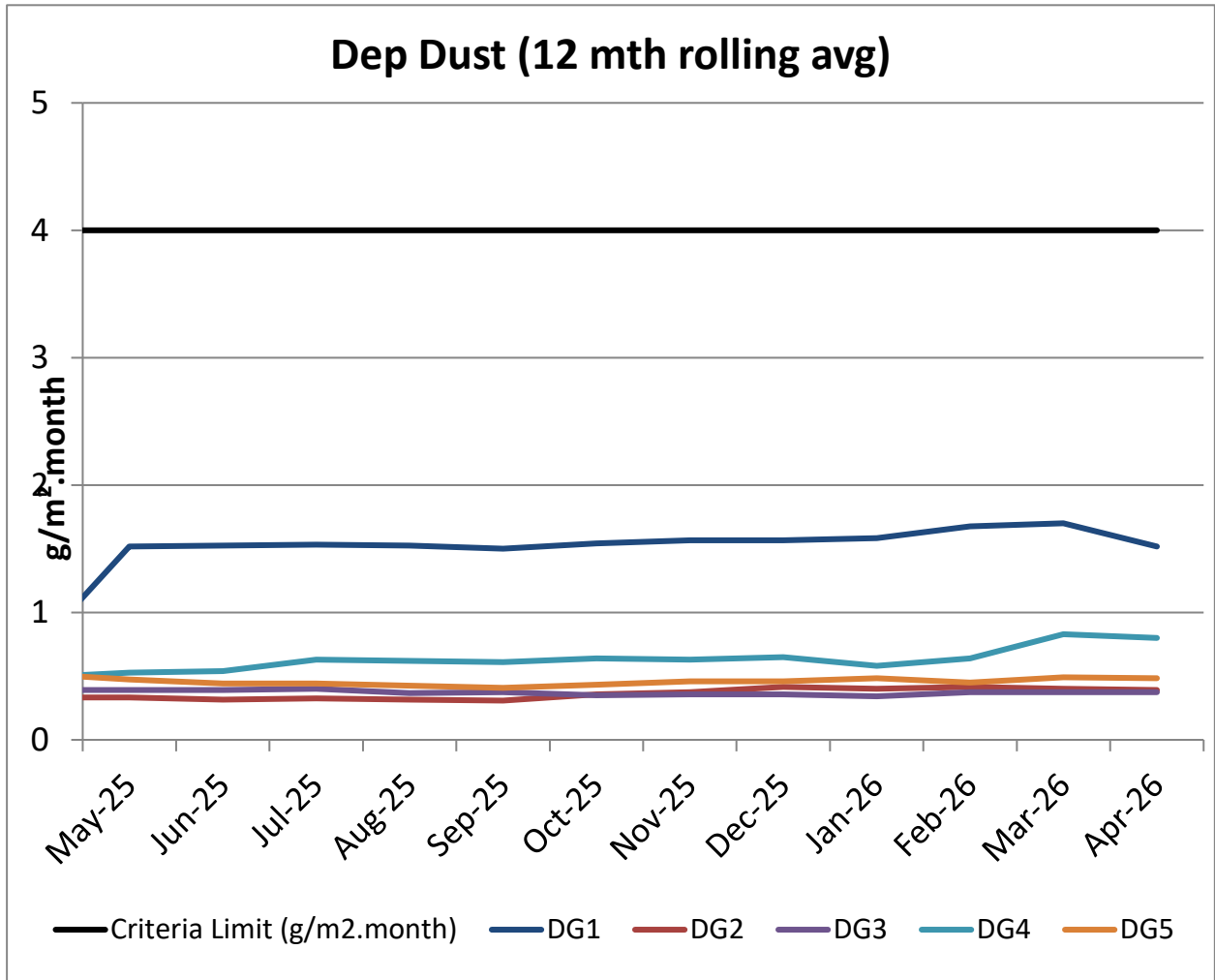
Monthly depositional dust results are shown below.

April 2026		
EPL	191	
Limits	Max. total deposited dust level	4g/m ² /month
	Max. increase in deposited dust level	2g/m ² /month
Sampling Date	5/03/2026 – 2/04/2026	
EPA ID no.	Site	Insoluble Matter (g/m ² /month)
3	DG1	0.4
4	DG2	0.1
5	DG3	0.1
6	DG4	0.1
7	DG5	0.3
Notes:	Sampling locations provided in Delta Coal Air Quality and Greenhouse Gas Management Plan available on the Delta Coal website.	

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A 12-month rolling average of depositional dust concentrations has been presented below. Manning Colliery's dust gauges are located around the perimeter of the Manning Colliery site boundary.

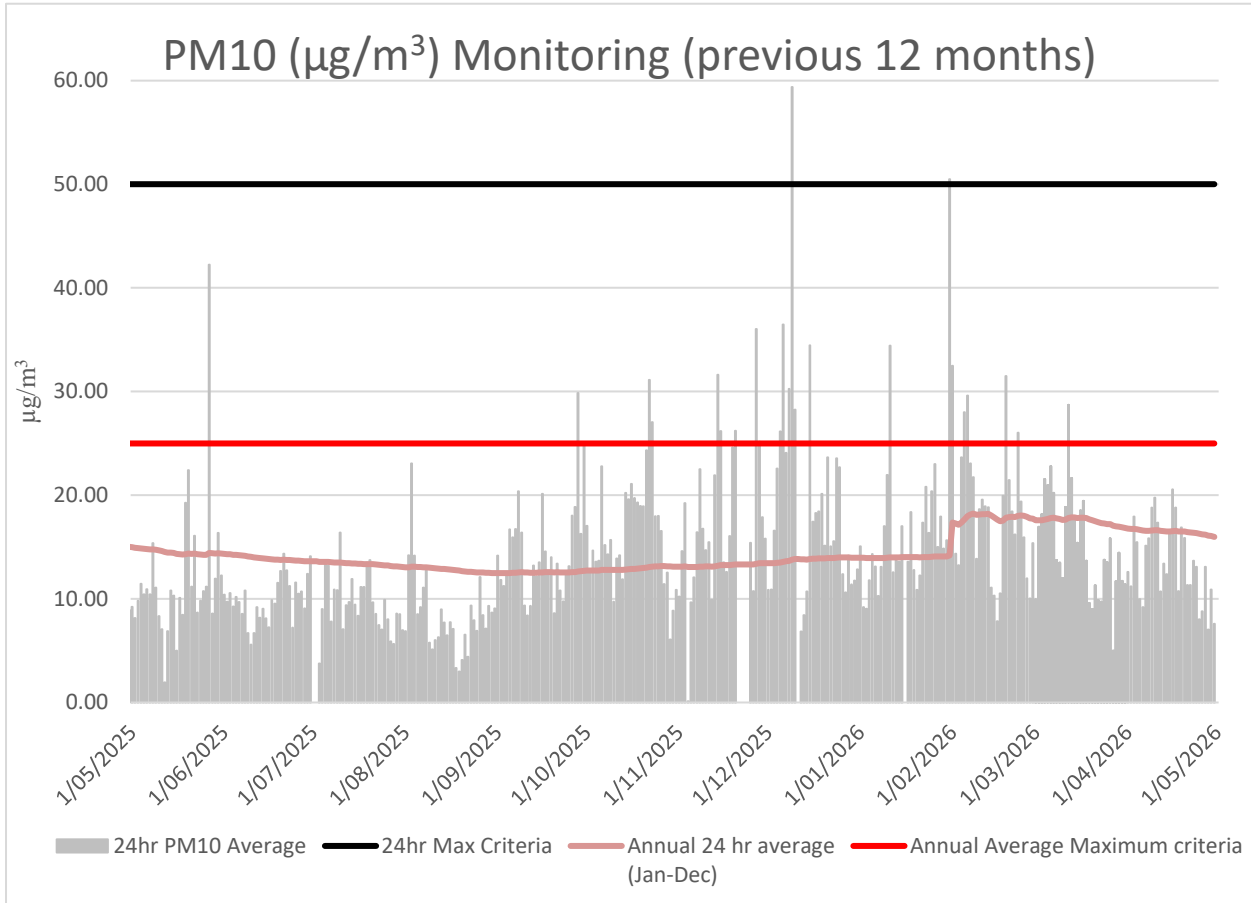


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Air Quality – PM₁₀

The 24hr PM₁₀ average from Delta Coal’s Tapered Element Oscillating Microbalance (TEOM), located at the Manning Park Sewage Treatment Plant, is presented below for the previous 12 months.



Annual 24hr PM₁₀ average maximum criteria for April 2026 was below the annual average maximum criteria limit. A summary of data availability for Delta Coal’s TEOM is presented below for the reporting period. Delta Coals TEOM had a data availability of 98.4% for the month of April 2026.

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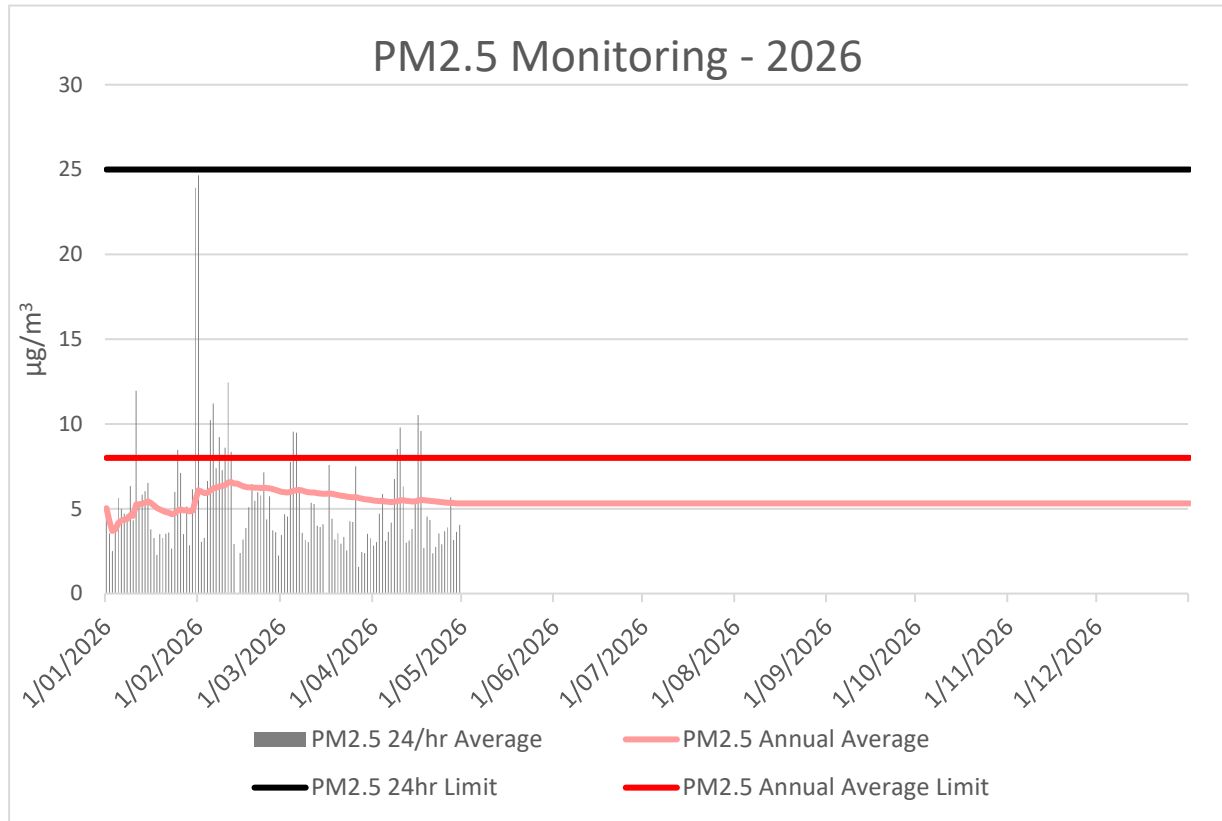
Variable	April	Total	Valid
A/C Temp	100%	8640	8637
A1_Scaled	100%	8640	8637
Band	100%	8640	8637
Bypass Flow	100%	8640	8636
Cap Temp	100%	8640	8637
Case Temp	100%	8640	8636
Config	100%	8640	8637
Dew Point	100%	8640	8637
Dig-In	100%	8640	8637
Dig-Latch	100%	8640	8637
ESN	100%	8640	8637
Filter Freq	100%	8640	8637
Filter Load	100%	8640	8637
Humidity	100%	8640	8637
MC	100%	8640	8637
MC 12Hr	100%	8640	8637
MC 1Hr	100%	8640	8637
MC 24Hr	100%	8640	8637
MC 30min	100%	8640	8637
MC 8Hr	100%	8640	8637
MC Total	100%	8640	8637
Mobile Signal	100%	8640	8637
Noise	100%	8640	8637
PM10 Flow	100%	8640	8636
Pressure	100%	8640	8637
Site	0.0%	8640	0
Temperature	100%	8640	8637
Tube Temp	100%	8640	8636
Vac Pressure	100%	8640	8637
Volts	100%	8640	8637

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Air Quality – PM2.5

Delta Coal utilises PM_{2.5} data obtained from Delta Electricity owned and operated beta attenuation monitor (BAM). The PM_{2.5} monitor is located on Tingley Road, Wyee.



There were no exceedances of the PM_{2.5} daily average limit in April 2026. The 12-month rolling average PM_{2.5} value on 30 April was 5.3 $\mu\text{g}/\text{m}^3$. PM_{2.5} data availability in April was 100%. The 2026 year to date PM_{2.5} data availability is 96.77%.

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Weather Data

A summary of weather data recorded by a meteorological monitoring station at the adjacent Manning Colliery is presented below for the year to date. (EPA ID no. 26).

Monthly Weather Data 2026			
Licensee	Great Southern Energy Pty Ltd		
Location	Manning Colliery Meteorological station		
Date published	Refer report date		
Date sampled	Daily		
Date obtained	5 May 2026		
Month	Total Rainfall/Month (mm)	Min Temp	Max Temp
Jan-26	224	14.9	40.4
Feb-26	114	14.2	37.4
Mar-26	103	12.6	31.9
Apr-26	33	6.8	30.3

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Variable	April	Total	Valid
Baro (Corrected)	100%	2880	2880
10m Temp	100%	2880	2880
2m Temp	100%	2880	2880
A1_Scaled	100%	2880	2880
Assumed Temp	100%	2880	2880
Band	100%	2880	2880
Barometric	100%	2880	2880
Config	100%	2880	2880
Daily Evap	100%	2880	2880
Daily Rain	100%	2880	2880
Delta T	100%	2880	2880
Dew Point	100%	2880	2880
Dig-In	100%	2880	2880
Dig-Latch	100%	2880	2880
ESN	100%	2880	2880
FDI	100%	2880	2880
Heat Index	100%	2880	2880
Humidity	100%	2880	2880
Mobile Signal	100%	2880	2880
Rain	100%	2880	2880
Raw Evap	100%	2880	2880
S Class	100%	2880	2880
Scalar WS	100%	2880	2880
Sigma	100%	2880	2880
Site	0.0%	2880	0
Solar Radiation	100%	2880	2880
Vector WD	100%	2880	2880
Vector WS	100%	2880	2880
Volts	100%	2880	2880
Wind Chill	100%	2880	2880
Wind Direction	100%	2880	2880
Wind Speed	100%	2880	2880
WS Avg	100%	2880	2880
WS Gust	100%	2880	2880