



14/04/2022

Cabonne Shire Council - Constructive Energy Proposed Eugowra Wastewater Solar Farm Tom Griffiths

Casuarina Drive

Eugowra, NSW, 2806

Dear Tom,

#### **RE: Geophysical Resistance (Pull Out) Testing**

Following authorisation, a geophysical resistance (pull out) test was conducted across the proposed site for the Cabonne Shire Council proposed Eugowra Wastewater Solar Farm. The purpose of this testing was to gather the data required to assess the site's suitability for the installation of the Jurchen Tech PEG sub-frame as part of a PV array. Subject to geotechnical report and structural certification, the geophysical resistance testing conducted by Meralli indicates that the site is suitable for JT PEG. The information gathered will also be used to inform structural certification. Please find following our report.

Yours sincerely,

**David Mailler** 

Director

Meralli Projects Pty Ltd

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## 1 Testing

Meralli Solar attended site on the 13<sup>th</sup> of April 2022 to conduct testing on the proposed area of the Eugowra Wastewater Solar Farm. Twenty-Four locations across the proposed site were tested. The testing procedure involves driving PEGs to four different nominated depths. A crane scale is then attached to the PEG and the tension required to shift the PEG is measured. The exact location, depth and tension is logged for each test.



1 Test Locations

## 2 Site Information

The site for the proposed solar farm development is located adjacent the Casuarina Drive, Eugowra, NSW 2799.

#### 2.1 Topography

The topography of the area is gentle slope with a northerly aspect.

### 2.2 Soil Type

The soil in the proposed site is a red brown sandy loam.

#### 2.3 Vegetation

2021 cereal stubble fallow.

#### 2.4 Other

The soil moisture profile was wet at the time of site visit.

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There were no refusals.

The site soil does appear to be homogenous, although testing was variable running with the slope. The lower part of the slope had a lower geophysical soil tension.

Note underground electrical and water service in the vicinity of the proposed solar generator.

Piezometers in the vicinity of the proposed solar generator.

### 2.5 Site Photos



2 Site Overview



3 Testing



4 Location and proximity



5 Drainage near meter box



6 2021 Cereal Stubble.



7 Peizometer

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8 Crane Scale

# 3 Results

## 3.1 Raw Data

Test location		Test site	Depth (mm)			
			Resistance (kg)			
Latitude	Longitude	Test #	600mm	700mm	800mm	900mm
-33.448822	148.363289	1	70	70	95	102
-33.449009	148.363270	2	59	75	92	102
-33.449146	148.363310	3	86	120	135	215
-33.449298	148.363297	4	68	99	90	122
-33.449491	148.363199	5	97	95	148	173
-33.449690	148.363096	6	83	93	113	127
-33.449875	148.362987	7	74	87	137	149
-33.440059	148.363116	8	130	195	231	290
-33.450105	148.363087	9	206	245	274	430
-33.450306	148.362901	10	121	173	224	298
-33.450331	148.363035	11	145	152	335	460
-33.450421	148.363117	12	137	183	228	420
-33.450702	148.363818	13	119	139	196	267
-33.450785	148.363720	14	101	126	187	254
-33.450578	148.363837	15	111	138	173	222
-33.450283	148.363952	16	124	129	166	199
-33.450004	148.363987	17	118	121	147	159
-33.449245	148.364003	18	99	102	151	176
-33.449502	148.364028	19	106	113	137	153
-33.449663	148.364154	20	105	110	151	137
-33.449542	148.364201	21	71	97	164	171
-33.449433	148.364222	22	59	87	118	142
-33.449205	148.364290	23	61	73	111	133
-33.449142	148.364245	24	45	78	164	156

The crane scale used had maximum limit of 1000kg.

# 3.2 Graph

