

Survey Report

337

Blue Energy Maryborough November 2008

Project parameters

MGA (GDA94) Zone 56
AHD with Ausgeoid98 geoid model

Introduction

This project consists of approximately 25km of 2D seismic lines pegged at 10m intervals. The project area is situated on low lying but heavily forested terrain about 20km northwest of Maryborough, 32km south of Hervey Bay.

All lines followed existing tracks or roads. Line 1 followed Toogoom Road in a southwest / northeast orientation. The nature of this road required professional traffic management teams to greatly reduce the risks of working on this well used local highway. Line 2 followed a service track that serviced a disused railway track. Line 3 followed the Churchill Mine Road, approximately 12.2km long, forming a T junction at its western extent.

Two survey control points were installed to ensure adequate GPS differential coverage across the entire survey area. These control points were tied to local control in the nearby township of Tobanlea and along the Bruce Highway.

Control coordinates

ID	MGA 56		hor order	Elevation		Description
	E	N		AHD	vert order	
111758	459351.973	7196414.030	1st	29.494	4th	brass plaque
122883	458607.934	7196608.700	3rd	31.180	4th	steel mark
122916	459792.165	7196297.241	3rd	29.120	4th	brass plaque
122983	459968.725	7196861.583	3rd	31.037	4th	steel mark
122984	459538.327	7195931.309	3rd	27.207	4th	steel mark
122986	459024.178	7196992.034	3rd	31.942	4th	steel mark
122988	459363.861	7196979.698	3rd	31.063	4th	steel mark

Checks on control

The following checks show differences in observations compared with published, given coordinates. All observations were taken from control point VS33702.

Name	δE	δN	δEI	Point #
111758	0.003	-0.004	0.000	C110601
111758	0.007	-0.020	-0.027	C110603
122916	0.001	-0.012	-0.003	C110605
122916	0.005	-0.016	0.020	C110607
122984	-0.004	-0.019	-0.007	C110609
122984	-0.005	-0.015	0.006	C110611
122986	-0.009	-0.015	-0.038	C110613
122986	-0.012	-0.012	-0.048	C110615
122883	-0.017	-0.003	-0.071	C110619
122882	0.005	0.021	-0.044	C110621
122882	0.006	0.015	-0.042	C110623
122983	-0.005	-0.005	-0.097	C110625
122983	-0.010	-0.018	-0.066	C110627

Secondary control

Two additional survey points were installed, namely VS33701 and VS33702. These were placed beside the Churchill Mine Road and were used for the all of the pegging.

ID	E	N	Elevation	Description
	MGA 56	MGA 56	AHD	
VS33701	469253.141	7191736.267	22.378	iron spike
VS33702	462602.083	7195529.736	39.142	iron spike

Tertiary control

An additional control point was placed near each secondary point, as needed for daily vehicle integrity checks. These points were observed with the vehicle mounted GPS at the beginning and end of survey sessions, as well as at intermittent times throughout the day.

ID	E	N	Elevation	Description
	MGA 56	MGA 56	AHD	
VS33750	462606.831	7195529.731	39.320	iron spike
VS33752	469254.350	7191712.317	21.603	iron spike

Refer to Appendix 1 for integrity check comparisons.

Lines Surveyed

Lines 1 and 3 were reduced from their original proposed length. Line 1 was slightly shortened to avoid it crossing the main railway line and the Torbanlea to Hervey Bay road. Line 2 did not appear to deviate from design. Line 3 start point (at its eastern end) was shortened to avoid crossing the Churchill Mine Road and entering a narrow bush tract. At the western end of line 3 was shortened by some 2km to avoid it following the powerlines and crossing the Torbanlea to Hervey Bay road. Refer to Appendix 2. Cadastral map of survey area.

Line	Start	End	kms
1	100	676	5.76
2	100	822	7.22
3	100	1328	12.28
		Total kms	25.26

Data

All surveyed line points are compiled in comma delimited ascii files;

337 01.csv

337 02.csv

337 03.csv

Line/Point Number, Easting, Northing, Elevation, Line Number

Appendix 1. Table of integrity checks.

Check #	δE	δN	δEI	Point #
VS33752	0.003	0.001	-0.014	C110301
VS33752	0.025	-0.055	-0.001	C110403
VS33752	0.003	-0.041	-0.003	C110404
VS33752	0.004	-0.017	-0.028	C110501
VS33752	-0.004	0.008	-0.030	C110502
VS33752	-0.009	-0.001	0.022	C110504
VS33750	-0.012	0.000	-0.011	C110701
VS33750	-0.012	0.000	-0.011	C110701
VS33750	0.015	0.007	-0.051	C110703
VS33750	0.015	0.007	-0.051	C110703
VS33750	-0.109	0.037	-0.008	C110801
VS33750	0.008	0.013	-0.036	C110903

Appendix 2. Cadastral map of survey area.

