

7. Registration Renewal Career Episode Report (CER)

Competency Element	<p>Dates of Career Episode: 8/10/2012 to 16/11/2012</p>
	<p>Abstract: My involvement with the project commenced with initial consultation with the client, quoting the job, searches, field and office work and despatching the final job and account to the client.</p> <p>Client's Drilling Engineer requested a "Directional Drill Plan" for CSG Wells DM251H (Horizontal Well) & DM251V (Vertical Well) to include Meridian, Grid Distance, Ground Distance & Ellipsoidal Distance. The leases for DM251H & DM251V had already been constructed and I was instructed to wait until the "Cellars and Conductors" had been put in place.</p> <p>DM251V had previously been scouted as DM239 and DM239 had previously been scouted as DM251V.</p> <p>Newly named, DM239, now to be scouted and pegged as a larger "Frac Pond Lease" – standard dimensions supplied.</p> <p>Request also for the "Contour & Detail Survey" of the 3 leases. As DM251H & DM251V are already constructed, the available drilling platform area was also required. Volumes of the spoil stockpiles on DM251H & DM251V were also requested if time permitted.</p>
SA5.1 (i) (ii) (iii)	<ul style="list-style-type: none"> • Received email request for "Directional Drilling Survey" of DM251H & DM251V, restake DM239 as a larger "Frac Lease" and "Contour & Detail Survey" of the 3 leases • Telephone discussion with the Drilling Engineer about the survey requirements and timing of the survey • Prepare and dispatch quote for the job – purchase order received by return email • Liaise with Land Liaison Officer by written application for entry to property • Access granted, but 2 other separate contractors also working on DM251H & DM251V on the requested date • Liaised with additional contractors – one was working at DM251H and agreed to supply a spotter while I entered the cellar for my work and the other contractor agreed to supply a spotter at DM251V. Both contractors had to stop their work process while I was in the cellar, however, this was at the direction of the Drilling Engineer
SA2.2 (i)	<ul style="list-style-type: none"> • Search relevant Smart Map, relevant PSM's and cadastral plan online
SA3.4 (i) (ii)	<ul style="list-style-type: none"> • Cellar and Conductor already in place at DM251H & DM251V • JSA prepared prior to site visit and cleared to proceed by Client Company WHSO – no permits were required • Enter Cellar by ladder, seal top of conductor with plastic lid and seal with duct tape • Mark centre of Collar for RTK / GPS measurements • Observer required at each site • Install site benchmarks – deep driven star pickets in concrete collars with red and white witness posts

SA2.1 (i) (ii) (iii)
SA2.3 (i) (ii) (iii)
(iv) (vi)
SA3.1 (i) (ii) (iv)
SA3.2 (i) (ii) (iii)
SA3.3 (i) (ii)
SA3.4 (i) (ii)
SA6.1 (i)
SA6.3 (i) (ii)

DM251H & DM251V sites visited to establish 1 site benchmark & 1 back site dumpy per site. These sites and the Collar centres were measured twice in the morning from PSM 173585 as the base station and twice in the afternoon using PSM 173586 as the base station. Equipment used was a Trimble R8 GNSS / RTK system with a base station and 1 rover. Tripods were used on the installed benchmarks and dumpies, and a range pole and bipod were used to measure the collars due to lack of room in the cellars to set up tripods. Measurements with the range pole and bipod were read through 4 quadrants to make a set of readings to mean out any bubble error on the pole. Observer in place while in the cellar.

This was done for the following reasons :-

- Check GPS setup in both morning and afternoon
- Multiple satellite ephemeris constellations
- A large number of points to mean for final co-ordinates
- Survey recorded in MGA 94 Zone 55 co-ordinates and Australian Height Datum (AHD)
- Check measurements with Trimble S6 Robotic Total Station from site benchmark to well collar centre using the dumpy as a back site
- Stake out DM239 to prescribed measurements from previous scouted well centre
- Contour & Detail Survey of the 3 sites between readings of the Benchmarks and Well Collars at DM251H & DM251V through the day

SA2.5 (i)
SA4.4 (i) (ii)
SA4.5 (i) (ii)

- Data backed up to protect from loss
- Grid Bearing, Horizontal Ground Distance, Grid Distance & Ellipsoidal Height were gained using the Trimble TSC2 data recorder software
- Reduced data using Civilcad v7.15, Excell, Gday2.1 and Redfearns Formulae on Geoscience Australia website (Appendix "D")
- Stockpile volumes calculated using the "Prism", "Slices" and "Grid" methods with the Civilcad v7.15 software
- As part of this CER exercise, I have manually reduced the data to produce Grid Bearing, Grid Distance and Ellipsoidal Distance using Redfearns Formulae and a HP35s calculator (Appendix "D")
- Produced plans in .pdf format as requested by client (Appendix "B")
- Produced digital files in 3D.dwg and 3D.dxf format on MGA 94 Zone 55 co-ordinates and AHD heights as requested
- Checked plans against QA Forms "Plan Check List" (Appendix "C")
- Digital files forwarded to client by email

Registrant's Name: [REDACTED]

Registration No: [REDACTED]

Current Registration: Surveying Associate

Registration & Endorsement Renewal Sought: Surveying Associate

Contact No: [REDACTED]

Checklist

- I have included an abstract,
 - I have included documentary evidence to support the details of my CER,
 - I have fully described the methodology to undertake the work including references to quality assurance procedures,
 - I have mapped my work description to the competency framework elements,
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Documents Attached:-
Search
Plans
Plan Checks
Calculations
JSA (Job Safety Analysis)