

NYE County NWRPO -Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description
7577.00	Walker	NWRPO	QARC	Nye	2DB, 19D,	Phase V Geologic Cross Section B-B'
Doc. Date	12/11/2008	General Doc. Type	QA Program Doc	Keyword2	EWDP V	
Entry Date	1/8/2009	Detailed Doc. Type	Map	Keyword3	cross section	
Data Originator Preparer	Jamie Walker					
Title of Data	Phase V Geologic Cross Section B-B'					
Description of Data	Geologic cross section compiling and projecting geologic information data from EWDP wells (NC-EWDP-24P, 29P, 19D1, 2DB and 32P) and geologic inferences (thickness and structural pattern) from geophysical datasets (magnetics and gravity). Section is a general interpretation of structural-stratigraphic relationships derived from EWDP drilling and geophysical studies. Cross section consists of an AutoCAD 2007 vector graphics file ("Phase V section B-B'.dwg"). The section graphic is also converted to a high resolution Adobe Acrobat file (Phase V Section B-B'.pdf").					
Data Collection Method	Product compiled from existing datasets. Geological information from summary lithologic logs. Borehole location data collected by GPS surveys. Water level data from routine water level sounding data. Geophysical data from USGS/YMP studies including airborne magnetics and gravity surveys with inversions. A limited seismic survey (between wells 29P and 19D1) was also used.					
Data Location(s)	N/A					
Data Collection Period(s)	12/2008					
Data Source(s)	Borehole survey data: RIDs 3970, 3698, 6027, 7103 Summary Lithologic Logs: 24P (RID 6707), 29P (RID 6710), 19D1 (RID 2568), 2DB (RID 7196), 32P (RID 7282). Water table (water level) data: RID 7421					
Data Censoring	None					
Data Processing	The cross section line (B-B') was projected through wells NC-EWDP-24P, 29P and 19D(1) and 32P with a bend in the section line at the 19D1 location. Borehole data from well 2DB was projected on to a plane defined by B-B' (see Figure 1.4-1 In Phase V Drilling Report). No borehole deviation data was used in the construction of the section. Boreholes were drawn as vertical lines. The depth to Pre-Cenozoic (Paleozoic rocks) was derived from gravity inversions of Blakely and Ponce, 2001 with steeper (and generally deeper) gravity gradients interpreted as early growth faults that are buried by Paintbrush Group members, A preliminary version of this section was presented as a talk entitled "Update to Conceptual Cross-Sections and Associated Interpretations" at the Devils Hole Workshop in May 2008. Approximate water table surface was drawn based on recent water level soundings. The topographic profile was drawn as a simplified surface based on topographic maps.					
Data Limitations	Cross section B-B' presents a generalized geologic interpretation of data from many varied sources. As such, it is meant to illustrate only general geologic relationships. Alternative interpretation or conceptualizations are possible and likely based on the limited subsurface data available. The section presents a geologic model of the Highway 95 Fault (fault zone), the terminus of the Miocene volcanics of the Southwest Nevada Volcanic Field and the transition to valley-fill in northern Amargosa Valley. The Highway 95 fault zone preserves a sequence (Tsy1,Tsy2 and Tsy3) of post-volcanic valley-fill deposits and the unique tuff unit intercepted in 19D1 (Tmt). Subsequent data acquisition (drilling and geophysics) will confirm or refute this model. Gravity data (and the interpreted "depth to pre-Cenozoic") support the general sag-like form of the Highway 95 fault zone at this location, but appears to be offset to the north approximately 1,000 m, compared with the resistivity data. Nye County has proposed the collection of					

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higher density gravity and seismic reflection data to resolve this discrepancy. A discussion of the geologic and hydrologic significance of sectional interpretations is contained in the Phase V Drilling Report.

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**Governing
QA Docs.** QAP-3.2, Rev. 3

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**Frequency
of
Transmittal** As required

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**Direct Questions
About Data
To-** NWRPO QA Records Center