

# NYE County NWRPO -Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description
5477	Gilmore	NYE	Qarc	NYE	19IM1,	NC-EWDP-19IM1 and J-13 Water Geochemistry Data Analyzed by NEL Laboratories (including QA lab report)
Doc. Date	1/10/2003	General Doc. Type	QA PROGRAM DOC	Keyword2	H2O	
Entry Date	2/6/2003	Detailed Doc. Type	DATA	Keyword3	ANALYSES	
Data Originator Preparer	Bruce Cunningham					
Title of Data	NC-EWDP-19IM1 and J-13 Water Geochemistry Data Analyzed by NEL Laboratories (including QA lab report;Supersedes RID 4801)					
Description of Data	Data was superseded because instrument detection limits and method detection limits were added to the data set along with QA lab reports. Water geochemistry data from water obtained 11/14/01 - 11/15/01 during 19IM1 pumping and from water obtained 11/28/01 from J-13. Data is included for the following water samples: GWS 0001 - 19IM1 zone 1 water; GWS 0002 - 19IM1 blind field duplicate (zone 1 water); GWS 0003 - 19IM1 zone 2 water; GWS 0004 - 19IM1 zone 3 water; GWS 0005 - 19IM1 zone 4 water; GWS 0006 - 19IM1 zone 5 water; GWS 0007 - J-13 water; and GWS 0008 - J-13 blind field duplicate. Included in the data package: relative percent difference values for analyses of GWS 0001 and GWS 0002 (19IM1 zone 1 field duplicates) and GWS 0007 and GWS 0008 ( J-13 field duplicates).					
Data Collection Method	Groundwater was pumped to the ground surface with a submersible impeller pump. The well was purged and samples collected, processed, bottled, and shipped to the testing laboratory following standard methods documented in Nye County QA technical procedure TP-8.1. Groundwater samples were analyzed by NEL Laboratories using EPA procedures listed in the attached analytical results database report.					
Data Location(s)	NC-EWDP-19IM1 and J-13					
Data Collection Period(s)	11/14/01 to 11/28/01					
Data Source(s)	NEL Laboratories, Las Vegas, NV. Refer to RIDs 4658 and 4674 for field chemistry parameters.					
Data Censuring	N/A					
Data Processing	Exports from database processed in Excel spreadsheets by NEL Laboratories					
Data Limitations	<p>With several exceptions, analytical results for all chemical parameters of concern in all laboratory QC samples (method blanks, laboratory control spikes, laboratory control spike duplicates, matrix spikes, and matrix spike duplicates) met standard laboratory QC specifications. The exceptions for QC samples associated with GWS 0001, GWS 0002, GWS 0003, GWS 0004, and GWS 0005 were as follows: recovery limits were not met for antimony in both the matrix spike and matrix spike duplicate samples. The only exception for QC samples associated with GWS 0006 was as follows: selenium did not meet recovery limits in the matrix spike sample. Finally, the exceptions for QC samples associated with GWS 0007 and GWS 0008 were as follows: sulfate did not meet recovery limits in the matrix spike sample and recovery limits for sodium were not met in the matrix spike duplicate sample.</p> <p>Relative percent difference values (RPDs) between the blind duplicate sample (field QA sample) and the original sample from NC-EWDP-19IM1 zone 1 (i.e. GWS 0001 and GWS 0002) and similar samples for J-13 (GWS 0007 and GWS 0008) are generally less than 30% (an acceptable value) for most analytes. Higher RPD values found for number of analytes present at low concentrations (e.g. trace metals and gross alpha and beta) were not unexpected and do not necessarily indicate field or laboratory error. However, an unacceptably high RPD for nitrate in J-13 duplicate samples (200%) suggests field and/or laboratory error.</p>					

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It should be noted that groundwater collected from zones 1, 2, 3, and 4 in the alluvial aquifer in NC-EWDP-19IM1 may be impacted to some unknown extent by water from zone 5 and deeper zones in the volcanic aquifer. Groundwater was likely flowing upward from screen 5 to shallower screens in two different multiple screen wells (NC-EWDP-19D and -19IM2) located within 80 ft of NC-EWDP-19IM1 for at least a month prior to sampling NC-EWDP-19IM1. Both these nearby wells did not contain packer systems to isolate well screens for this time period, and since water pressures in zone 5 are significantly higher than in the overlying alluvial aquifer zones, water was free to move from the volcanic aquifer into the shallower alluvial zones in these wells. It is possible that some lateral flow of this mixed water also occurred from these nearby wells towards NC-EWDP-19IM1 and impacted the alluvial zones in this well.

Governing QA Docs.	TP-8.1, Rev. 0
Frequency of Transmittal	As required by PI
Direct Questions About Data To-	Nye County QA Records Center