ERRATA SHEET

The Following Corrections and Clarifications Apply to: Phase I Transport Model of Corrective Action Units 101 and 102: Central and Western Pahute Mesa, Nevada Test Site, Nye County, Nevada

SNJV Document Number: S-N/99205--111

Revision: 1

Original Document Issuance Date: February 2009

This errata sheet was issued under cover letter from DOE on: July 9, 2009

The comment from the state of Nevada, NDEP for comment 17 is 'Page 6-13, table 6-2 and 6-3: The column labeled "All" is not defined. Please indicate what value is given in this column'.

The tables are referenced back to Drellack et al., 1997, Analysis of Fractures in Volcanic Cores from Pahute Mesa, Nevada Test Site, DOE/NV/11718-160, Bechtel Nevada, Las Vegas, Nevada (pages from the referenced document are attached).

Fracture analysis of cores UE-18r, UE-18t, UE-19x, UE-20c/U-20c, UE-20f is addressed in the report by Drellack et al. (1997) and fracture properties are reproduced in tables 6-2 and 6-3. Fracture properties for multiple fractures are evaluated and averaged for each borehole core for each hydrogeologic unit through which the borehole passes. The average fracture properties are tabulated in Tables 6-2 and 6-3 for the welded-tuff aquifer and lava-flow aquifer hydrogeologic units, respectively. The columns in the tables that are labeled "All" are the average value of the particular fracture property for each fracture at all of the wells as an ensemble measure.

Source Data for Errata Sheet referencing SNJV Document Number: S-N/99205—111, Revision 1, February 2009*: Phase I Transport Model of Corrective Action Units 101 and 102: Central and Western Pahute Mesa, Nevada Test Site, Nye County, Nevada*

Tables 6-2 and 6-3 on page 6-13 of the above referenced document were compiled from data provided in the Bechtel Nevada report DOE/NV/11718-160: *Analysis of Fractures in Volcanic Cores from Pahute Mesa, Nevada Test Site* (Drellack et al., 1997).

The fracture aperture data for the WTA and LFA hydrogeologic units were derived from Table 4-2 in the Drellack et al., 1997 report. The vertical spacing data were compiled from Figures 4-7a, 4-7b and 4-7c in the Drellack et al., 1997 report. The porosity data were calculated based on the aperture and spacing data.

Table 4-2 and Figures 4-7a, 4-7b and 4-7c from the Drellack et al. report are attached for reference.

Table 6-2
Fracture Properties for WTA

		UE-18r	UE-18t	UE-19x	UE-20c/U-20c	UE-20f	All
Aperture (m)		4.00E-05	2.19E-03	2.10E-04	4.20E-04	7.00E-04	3.40E-04
Vertical Spacing (m)		1.02	1.02	0.36	0.36	0.36	0.48
	Degrees from Vertical						
Horizontal spacing (m), corrected for fracture angle	10	0.18	0.18	0.06	0.06	0.06	0.08
	20	0.35	0.35	0.12	0.12	0.12	0.16
	30	0.51	0.51	0.18	0.18	0.18	0.24
Porosity [a]	10	2.3E-04	1.2E-02	3.4E-03	6.7E-03	1.1E-02	4.1E-03
	20	1.1E-04	6.3E-03	1.7E-03	3.4E-03	5.7E-03	2.1E-03
	30	7.8E-05	4.3E-03	1.2E-03	2.3E-03	3.9E-03	1.4E-03

Source: Drellack et al., 1997

[a] Estimated with Equation (6-2).

Table 6-3
Fracture Properties for LFA

		UE-18r	UE-19x	UE-20f	All
Aperture (m)		2.09E-03	9.80E-04	5.30E-04	9.10E-04
Vertical Spacing (m)		1.32	2.54	2.54	2.17
	Degrees from Vertical				
Horizontal spacing (m), corrected for fracture angle	10	0.23	0.44	0.44	0.38
	20	0.45	0.87	0.87	0.74
	30	0.66	1.27	1.27	1.09
Porosity [a]	10	9.1E-03	2.2E-03	1.2E-03	2.4E-03
	20	4.6E-03	1.1E-03	6.1E-04	1.2E-03
	30	3.2E-03	7.7E-04	4.2E-04	8.4E-04

Source: Drellack et al., 1997

[a] Estimated with Equation (6-2).

Bechtel Nevada

DOE/NV/11718-160

ANALYSIS OF FRACTURES IN VOLCANIC CORES FROM PAHUTE MESA, NEVADA TEST SITE

by

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Table 4-2
Fracture Aperture and Percent Open Data Summary
(Data Grouped by Hydrogeologic Units)

	Average Aperture (millimeters)								Percent Open Category							
Hydrogeo-logic Units	UE-18r	UE-18t	UE-19x	UE-20 bh #1	UE-20c U-20c	UE-20 e#1	UE-20f	Average of Data[1]	UE-18r	UE-18t	UE-19x	UE-20 bh#1	UE-20c U-20c	UE-20 e#1	UE-20f	Average of Data[1]
Vitric-Tuff Aquifer (VTA)	*	0.95	*	—	—	—	—	0.95	*	10-50	*	—	—	—	—	10-50
Welded-Tuff Aquifer (WTA)	0.04	2.19	0.21	—	0.42	—	0.17	0.34	1-10 and 50-90	1-10	50-100	—	1-50	—	50-99	50-99
Lava-Flow Aquifer (LFA)	2.09	—	0.98	*	*	0.08	0.53	0.91	50-90	—	1-50	*	*	1-10	1-50	1-50
Tuff Confining Unit (TCU)	1.51	—	0.57	0.84	0.14	0.03	0.09	0.47	50-90 and 1-10	—	1-50	1-50	1-10	1-10	1-10	1-50

1 UE-18t skews data set.
* Core representing unit was logged, but no open fractures recognized.
— Core representing unit not available from drill hole.

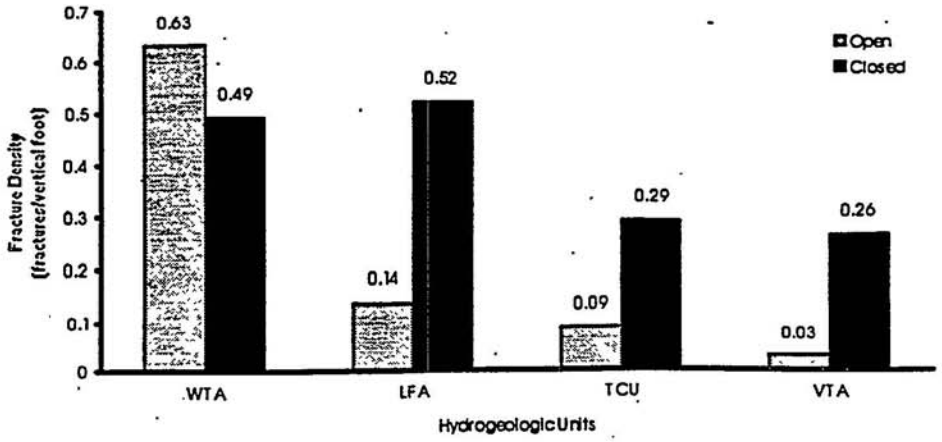

Figure 4-7a
Density of Open and Closed Fractures Relative to Hydrogeology for All Holes

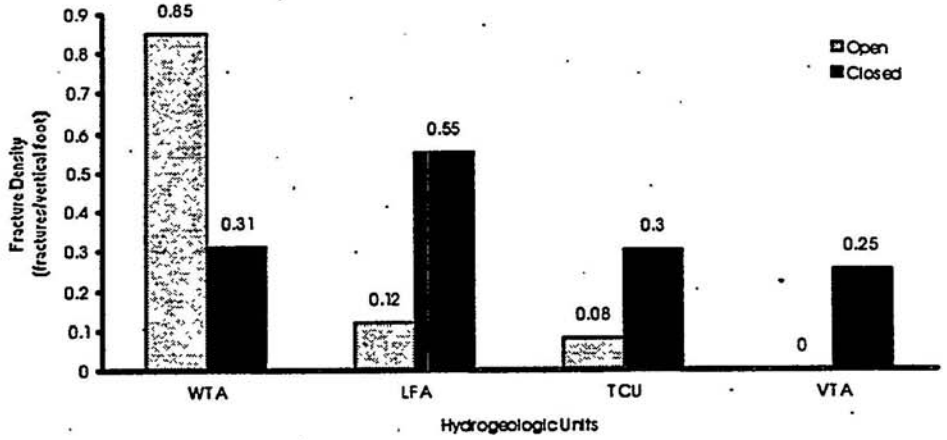

Figure 4-7b
Density of Open and Closed Fractures Relative to Hydrogeology for Pahute Mesa Holes Only

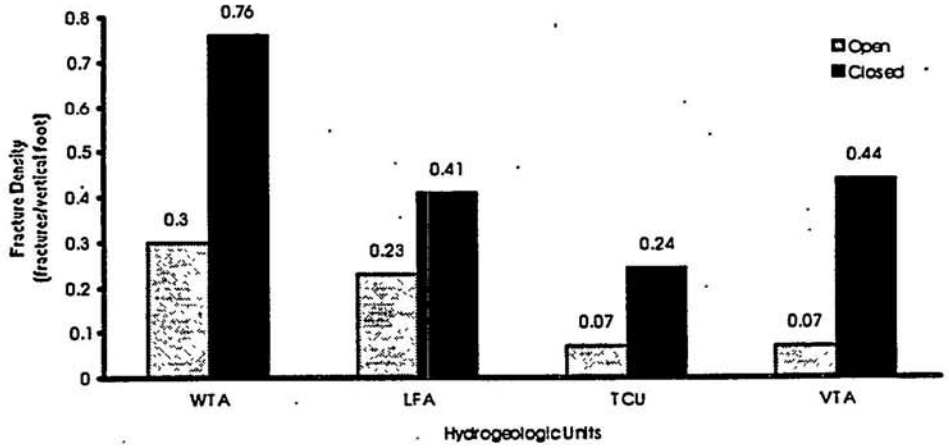

Figure 4-7c
Density of Open and Closed Fractures Relative to Hydrogeology for Area 18 Holes Only

Figure 4-7a-c
Summary of Fracture Density Relative to Hydrogeology