TABLE 4-5
Fracture Porosity Estimates from Packer Test

Test No.	Test Depth Interval (feet)	Interval Length (ft)	No. of Fractures	K (cm/s)	Calculated Aperture Widths (b) cm	mm	microns	HSU	Fracture Porosity
CB-4-1	37.5 - 42.5	5	NA	4E-07	---	---	---	Upper	---
CB-4-2	67 - 77	10	1	2E-07	0.00203	0.0203	20	Lower	0.00067%
CB-4-3	87 - 96	9	1	9E-09	0.00070	0.0070	7	Lower	0.00025%
CB-4-5	108.7 - 123.7	**15**	**9**	**2.5E-04**	0.01203	0.1203	**120**	Lower	0.02368%
CB-4-7	192 - 202	10	0	1.2E-07	---	---	---	Lower (incl. 2" Tuff Layer)	---
CB-4-8	192 - 202	10	0	3.3E-10	---	---	---	Lower (excl. 2" Tuff Layer)	---
CB-5i-1	32 - 38	6	NA	5.3E-06	---	---	---	Upper	---
CB-5i-2	46 - 56	10	5	9.4E-07	0.00199	0.0199	20	Transition Zone	0.00326%
CB-5i-3	65 - 76.8	11.8	12	5.3E-05	0.00602	0.0602	60	Lower	0.02008%
CB-5i-4	96 - 106.5	10.5	4	4.7E-06	0.00372	0.0372	37	Lower	0.00465%
CB-5i-5	116 - 126.5	10.5	9	5.0E-07	0.00135	0.0135	13	Lower	0.00379%
CB-5i-6	138 - 156	**18**	**1**	**1.4E-04**	0.02192	0.2192	**219**	Lower	0.00400%
CB-6i-1	31.9 - 42	10.1	NA	1.2E-04	---	---	---	Upper	---
CB-6i-2	42 - 48.1	6.1	1	1.1E-05	0.00655	0.0655	65	Transition Zone	0.00352%
CB-6i-3	67 - 77.6	**10.6**	**5**	**1.6E-04**	0.01123	0.1123	**112**	Lower	0.01739%
CB-6i-4	97 - 108	11	9	6.2E-05	0.00682	0.0682	68	Lower	0.01830%
CB-6i-5	114.4 - 124.4	**10**	**2**	**5.8E-05**	0.01066	0.1066	**107**	Lower	0.00700%
CB-6i-6	114.4 - 124.4	10	2	3.5E-05	0.00901	0.0901	90	Lower - Duplicate	0.00591%
CB-7i-1	26.6 - 35	8.4	1	2.2E-07	0.00198	0.0198	20	Transition Zone	0.00077%
CB-7i-2	50.5 - 60.6	10.1	10	8.3E-06	0.00327	0.0327	33	Lower	0.01063%
CB-7i-3	50.5 - 60.6	10.1	10	1.0E-05	0.00348	0.0348	35	Lower - Duplicate	0.01131%
CB-7i-4	77 - 85.7	8.7	4	2.6E-08	0.00062	0.0062	6	Lower	0.00093%
CB-7i-5	103 - 113.6	10.6	1	4.8E-08	0.00129	0.0129	13	Lower	0.00040%
CB-7i-6	130.3 - 140.3	10	1	3.1E-06	0.00506	0.0506	51	Lower	0.00166%
CB-7i-7	157.5 - 167.5	10	0	1.4E-08	---	---	---	Lower	---
CB-7i-8	193.5 - 205	11.5	7	3.5E-09	0.00029	0.0029	2.9	Lower	0.00058%
CB-8i-1	47 - 57.7	10.7	1	3.2E-07	0.00243	0.0243	24	Lower	0.00074%
CB-8i-2	65 - 77.7	12.7	1	6.8E-07	0.00330	0.0330	33	Lower	0.00085%
CB-8i-3	87.7 - 97.7	10	0	3.4E-09	---	---	---	Lower	---
CB-8i-5	112.2 - 125.7	13.5	1	2.8E-06	0.00541	0.0541	54	Lower	0.00131%
CB-8i-6	145 - 156	11	0	4.0E-11	---	---	---	Lower	---
CB-8i-7	166.5 - 176.5	10	4	1.7E-11	0.00006	0.0006	1	Lower	0.00007%
CB-8i-8	194.8 - 204.8	10	2	1.4E-06	0.00308	0.0308	31	Lower	0.00202%

Average Lower HSU Matrix K; Intervals with No Fractures:	3.4E-08	cm/sec
Average Calculated Fracture Aperture:	50	microns
Maximum Calculated Fracture Aperture:	219	microns
Average Calculated Fracture Porosity:	0.0058%	

Note:

Cubic Law Equation: Hydraulic Conductivity of A Fracture

Cubic Law:	Tfr =	(rho*g/mu) * b^3/12	[Fracture Transmissivity: K=T/b]
	rho =	1 (gm/cm^3)	[density]
	g =	980 (cm/s^2)	[gravitational acceleration]
	mu =	0.0112 ($dyne\text{-}s/cm^2$)	[viscosity]
	b =	unknown (cm)	[fracture aperture]
	mu/pg =	1.1E-05 (s*cm)	