October 29, 2001

Federal Communications Commission
Equipment Approval Services
7435 Oakland Mills Road
Columbia, MD 21046
Attn: Andy Leimer

SUBJECT: **Descartes Corporation**
FCC ID: PP9P2000CDPD
731 Confirmation No.: EA102005
Correspondence Ref. No.: 21002

Dear Andy:

On behalf of Descartes Corporation is an amendment in response to your e-mail dated October 19, 2001 requesting additional information regarding the RF exposure evaluation of the subject application.

1. As indicated on the SAR evaluation report the last reported calibration of the ET3DV6 probe was September 1999. At the time the device was evaluated for RF exposure, the specific fluid parameters had not yet been defined by SCC34. The OEM/Calibration facility for the E-field probes was waiting for these parameters to be determined before re-calibrations could commence. Also, the FCC at that time was granting latitude in the calibration dates due to the above conditions.
2. The determination of the 835MHz conversion numbers was performed by the system manufacturer's recommended linear extrapolation routine. The extrapolation was based on the two calibrated data points of 900MHz and 1800MHz head parameters. Included in this response is an example of an identical calibrated E-probe from the same system manufacturer. The graph and tables indicate the linearity of the E-field probe with the associated uncertainty across several frequency bands.
3. As mentioned above, the target parameters and recipes for head and body parameters had not yet been defined. The data associated with the example E-field probe shows little difference in the conversion numbers between head and body at the lower frequencies in question. Also, the error in the conversion numbers obtained by the OEM is significantly greater than the difference between the two points. Since the device tested shows significant margin for SAR, and the associated error in the entire system is significant, the scaling of the test results would be comparatively minor.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Shawn McMillen
General Manager
Celltech Research Inc.
Testing & Engineering Lab

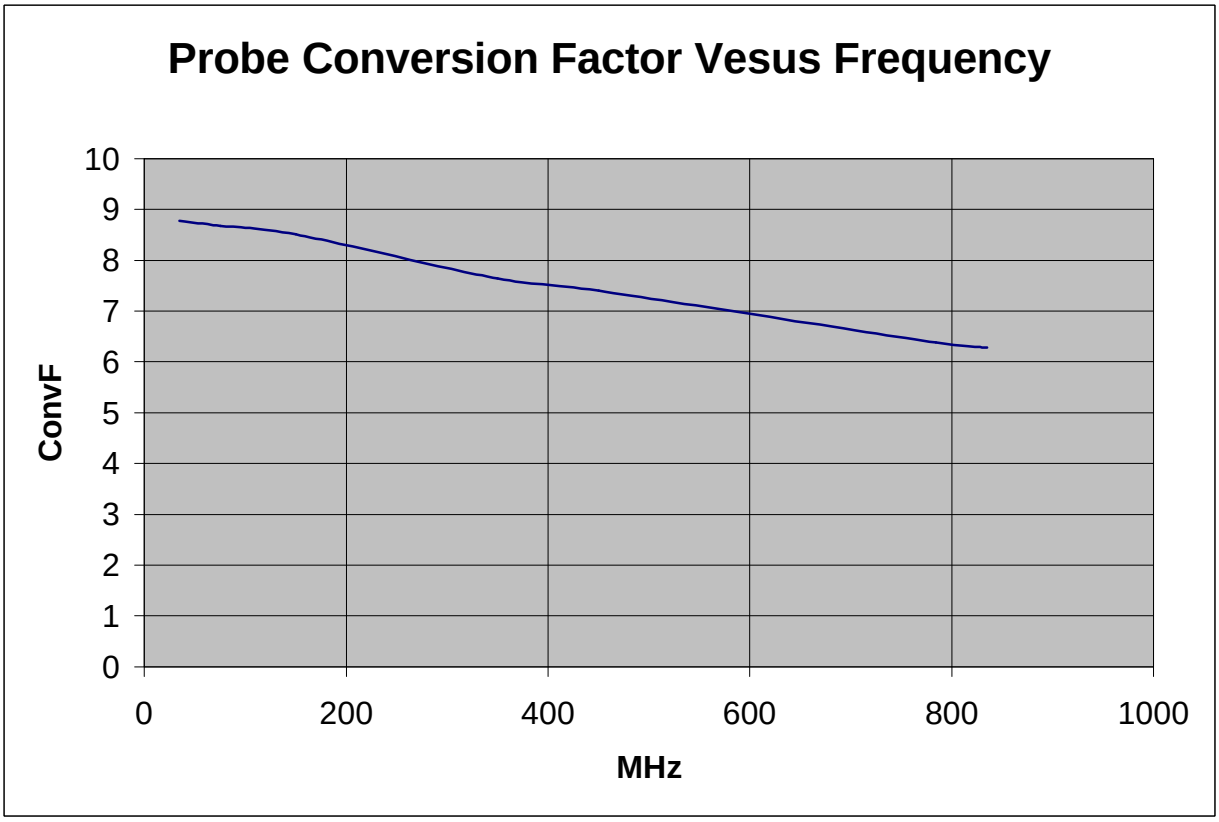
cc: Descartes Corporation
Washington Labs

Dosimetric E-Field Probe ET3DV6
Head Tissue Conversion Factor (± standard deviation)

400 MHz	ConvF	7.64 ± 8%	ε_r = 44.4 σ = 0.87 mho/m CENELEC Head Tissue
835 MHz	ConvF	6.54 ± 8%	ε_r = 42.5 σ = 0.98 mho/m CENELEC Head Tissue
900 MHz	ConvF	6.41 ± 8%	ε_r = 42.3 σ = 0.99 mho/m CENELEC Head Tissue
350 MHz	ConvF	7.76 ± 8%	ε_r = 44.7 σ = 0.87 mho/m IEEE Head Tissue
450 MHz	ConvF	7.52 ± 8%	ε_r = 43.5 σ = 0.87 mho/m IEEE Head Tissue
835 MHz	ConvF	6.53 ± 8%	ε_r = 41.5 σ = 0.90 mho/m IEEE Head Tissue
925 MHz	ConvF	6.37 ± 8%	ε_r = 41.45 σ = 0.98 mho/m IEEE Head Tissue
1500 MHz	ConvF	6.04 ± 8%	ε_r = 40.43 σ = 1.23 mho/m IEEE Head Tissue
1900 MHz	ConvF	5.41 ± 8%	ε_r = 40.0 σ = 1.40 mho/m IEEE Head Tissue
2450 MHz	ConvF	5.18 ± 8%	ε_r = 39.2 σ = 1.8 mho/m IEEE Head Tissue
2450 MHz	ConvF	5.40 ± 8%	ε_r = 37.2 σ = 2.09 mho/m H1800 at 2450 MHz

Dosimetric E-Field Probe ET3DV6
Muscle Tissue Conversion Factor (± standard deviation)

35 MHz	ConvF	8.77 ± 15%	ε_r = 85.19 σ = 0.69 mho/m FCC Muscle Tissue
75 MHz	ConvF	8.68 ± 10%	ε_r = 69.93 σ = 0.72 mho/m FCC Muscle Tissue
150 MHz	ConvF	8.51 ± 8%	ε_r = 62.68 σ = 0.75 mho/m FCC Muscle Tissue
350 MHz	ConvF	7.64 ± 8%	ε_r = 58.41 σ = 0.80 mho/m FCC Muscle Tissue
450 MHz	ConvF	7.40 ± 8%	ε_r = 57.62 σ = 0.83 mho/m FCC Muscle Tissue
784 MHz	ConvF	6.38 ± 8%	ε_r = 56.25 σ = 0.93 mho/m FCC Muscle Tissue
835 MHz	ConvF	6.28 ± 8%	ε_r = 56.11 σ = 0.95 mho/m FCC Muscle Tissue
925 MHz	ConvF	6.10 ± 8%	ε_r = 55.9 σ = 0.98 mho/m FCC Muscle Tissue
1500 MHz	ConvF	5.44 ± 8%	ε_r = 54.87 σ = 1.23 mho/m FCC Muscle Tissue
1900 MHz	ConvF	4.82 ± 8%	ε_r = 54.3 σ = 1.45 mho/m FCC Muscle Tissue
2450 MHz	ConvF	4.53 ± 8%	ε_r = 53.57 σ = 1.81 mho/m FCC Muscle Tissue


Probe Conversion Factor Vesus Frequency
ConvF
10
9
8
7
6
5
4
3
2
1
0
0
200
400
600
800
1000
MHz