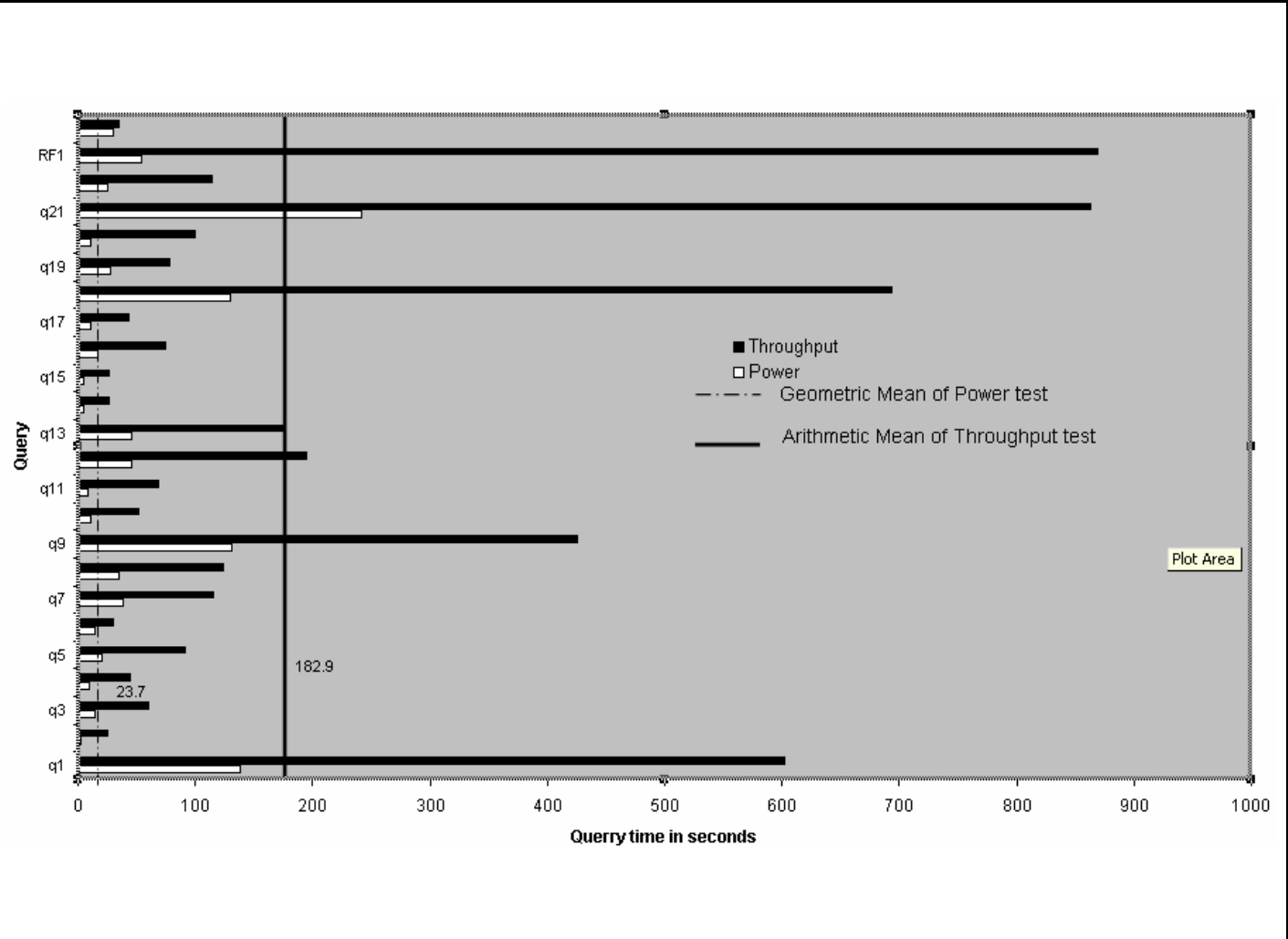
	DELL PowerEdge 6800 with SQL Server 2005 Enterprise (x64) Edition™	TPC-H Revision 2.3.0
		Report Date: May 1, 2006
Total System Cost \$128,847 USD	TPC-H Composite Query per Hour 11,529.1 QphH@100GB	Price/Performance \$11.18 USD/ QphH@100GB
Database Size 100GB	Database Manager SQL Server 2005 Enterprise (x64) Edition™	Operating System Microsoft Windows Server 2003 Enterprise x64 Edition™
Other Software Visual C++ Standard Edition Visual Basic 2003 .Net Professional		Availability Date May 1, 2006



Database Load Time 1:27:34	Total Disk/Database Size 40.66	Load Includes Backup Y
RAID (Base tables only) N	RAID (Base tables and auxiliary data structures) N	RAID (Everything) N

System Configuration : 1 node
Processors (per node) : 4x Dual-Core Intel® Xeon™ 7041/3.0GHz 2x2MB L2 Cache
Memory: (per node) : 64GB RAM
Disk Drives: 112 – 36GB 15k HDD & 8 – 73GB 10k HDD

“Database Size includes only raw data (e.g., no temp, index, redundant storage space, etc.)”

Dell		PowerEdge PE6800			TPC-H REV 2.3 EXECUTIVE SUMMARY		
		Server			Report Date: 1-May-06		
					Revision Date: 1-May-06		
Description	Part Number	Third Party		Unit Price	Qty	Extended Price	3 yr. Maint. Price
		Brand	Pricing				
Server Hardware							
Dell PowerEdge 6800 3.0GHz Dual Core XEON w/2+2MB	222-0685			\$4,094.00	1	\$4,094.00	\$300.00
L2 cache, 800MHZ FSB, 2 onboard Gigabit NICs							
3.0GHZ/2+2MB_Dual Core XEON,QUAD PROC	311-6107			\$10,497.00	1	\$10,497.00	
1.44 Floppy Drive	341-1308			\$30.00	1	\$30.00	
24X IDE CD-ROM Drive	313-2694			\$30.00	1	\$30.00	
Motherboard PERC4ei cntr RAID 10, PE6800	341-1959			\$5.58	1	\$5.58	
64GB_DDR2,400MHZ(16X4GB),2R	311-5706			\$59,998.00	1	\$59,998.00	
PERC4e/Di 256MB	341-1903			\$299.00	1	\$299.00	
PERC4eDC,128MB,2-EXT CHN	341-1642			\$799.00	4	\$3,196.00	
73GB U320M SCSI 10K RPM Hard Drive (OS+LOG)	341-1287			\$299.00	8	\$2,392.00	
Dell E773,17 in Gray (16.0 VIS)	320-2907			\$159.00	1	\$159.00	
					Subtotal	\$80,700.58	\$300.00
PowerVault Disk Subsystem							
PV220S, U3	220-4476			\$2,255.00	8	\$18,040.00	\$3,208.00
ZEMM,U320,PV22XS,SINGLE	340-9324			\$399.00	8	\$3,192.00	
600W,PWR SPLY,PV22XS	310-0677			\$0.00	8	\$0.00	
600W,PWR SPLY,PV22XS	310-0683			\$89.00	8	\$712.00	
SCSI Cables	310-0679			\$99.00	8	\$792.00	
36GB U320M SCSI 15K RPM Hard Drive *	340-9371			\$249.00	112	\$27,888.00	
RACK-111/24U/Dell	A0213544			\$479.95	1	\$479.95	
					Subtotal	\$51,103.95	\$3,208.00
Server Software							
SQL Server 2005 Enterprise x64 Edition **	810-04793	Microsoft	1	\$8,487.00	1	\$8,487.00	
SQL Server 2005 Client Licence **	359-01911	Microsoft	1	156	25	\$3,900.00	
Windows Server 2003 Enterprise x64 Server **	P72-00274	Microsoft	1	\$2,334.00	1	\$2,334.00	
Visual C++ Standard Edition **	254-00170	Microsoft	1	\$109.00	1	\$109.00	
Visual Basic 2003 Standard	046-00856	Microsoft	1	\$109.00	1	\$109.00	
Professional Support (1 Incident)		Microsoft	1	\$245.00	1		\$245.00
					Subtotal	\$14,939.00	\$245.00
All components from Dell are discounted 16% based on total dollar volume of this configuration.				Other Discounts (16%)		\$21,650.00	
					Total	\$125,094	\$3,753
Notes: * Maint. included in PowerVault 220 disk pod					Three-Year Cost of Ownership:		\$128,847 USD
** All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server					QphH@100G		11,529.1
Pricing: 1 = Microsoft, all others are Dell							
Pricing may be verified by calling 1-800-BUY-DELL and referencing quote # 291512779 as a complex quote.							
Audited by Lorna Livingtree, Performance Metrics Inc.					\$ / QphH@100G:		\$11.18 USD
Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these items, please inform the TPC at pricing@tpc.org.							



DELL
PowerEdge 6800
w/ SQL Server 2005
Enterprise (x64) Edition™

TPC-H Revision
2.3.0

Report Date:
May 1, 2006

Numerical Quantities Summary

Measurement Results:

Database Scale Factor	100
Total Data Storage/Database Size	40.66
Start of Database Load	02/10/2006 03:35:09
End of Database Load	02/10/2006 05:02:42
Database Load Time	1:27:34
Query Streams for Throughput Test	5
TPC-H Power	15,208.7
TPC-H Throughput	8,739.8
TPC-H Composite Query-per-Hour Metric (QphH@300GB)	11,529.1
Total System Price Over 3 Years	\$128,847
TPC-H Price Performance Metric (\$/QphH@300GB)	\$11.18

Measurement Interval:

Measurement Interval in Throughput Test (Ts) = 4,531 seconds

Duration of stream execution:

	Seed	Start Date/Time	End Date/Time	Duration
Stream00	210050242	2/10/06 7:50:28	2/10/06 8:06:52	0:16:24
Stream01	210050243	2/10/06 8:07:24	2/10/06 9:12:19	1:04:55
Stream02	210050244	2/10/06 8:07:24	2/10/06 9:16:30	1:09:06
Stream03	210050245	2/10/06 8:07:24	2/10/06 9:11:55	1:04:31
Stream04	210050246	2/10/06 8:07:24	2/10/06 9:14:59	1:07:35
Stream05	210050247	2/10/06 8:07:24	2/10/06 9:16:31	1:09:06
Refresh00		2/10/06 7:49:34	2/10/06 7:50:28	0:00:54
		2/10/06 8:06:52	2/10/06 8:07:23	0:00:31
Refresh01		2/10/06 8:07:24	2/10/06 9:17:48	1:10:24
Refresh02		2/10/06 9:17:50	2/10/06 9:19:05	0:01:16
Refresh03		2/10/06 9:19:07	2/10/06 9:20:24	0:01:18
Refresh04		2/10/06 9:20:26	2/10/06 9:21:35	0:01:08
Refresh05		2/10/06 9:21:36	2/10/06 9:22:55	0:01:19



Numerical Quantities Summary

Timing Intervals in Seconds:

Query	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Stream00	138.8	3.0	14.9	9.9	20.3	14.0	38.0	34.5
Stream01	582.2	16.4	52.3	37.8	78.2	25.0	100.5	110.4
Stream02	688.4	36.5	63.6	42.3	108.3	18.8	110.3	107.9
Stream03	532.1	13.8	64.7	54.1	101.3	25.5	162.4	165.5
Stream04	523.1	18.3	47.1	46.3	103.9	26.2	103.3	138.5
Stream05	684.9	40.2	73.5	39.7	67.2	52.7	99.0	99.4
Min Qi	523.1	13.8	47.1	37.8	67.2	18.8	99.0	99.4
Max Qi	688.4	40.2	73.5	54.1	108.3	52.7	162.4	165.5
Avg Qi	602.1	25.0	60.2	44.0	91.8	29.6	115.1	124.3

Query	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Stream00	130.8	10.5	8.8	46.1	40.5	5.1	5.4	16.9
Stream01	339.0	42.1	80.9	181.9	167.3	20.6	26.8	90.3
Stream02	501.4	63.2	71.3	141.2	171.3	23.7	25.7	65.4
Stream03	487.6	54.0	46.6	197.8	146.3	34.2	22.0	63.4
Stream04	545.8	50.3	60.8	231.1	183.7	26.3	24.8	88.1
Stream05	256.2	46.4	80.6	220.7	204.4	29.9	18.5	67.9
Min Qi	256.2	42.1	46.6	141.2	146.3	20.6	18.5	63.4
Max Qi	545.8	63.2	80.9	231.1	204.4	34.2	26.8	90.3
Avg Qi	426.0	51.2	68.0	194.5	174.6	26.9	23.6	75.0

Query	Q17	Q18	Q19	Q20	Q21	Q22	RF1	RF2
Stream00	10.6	130.4	27.7	10.5	242.1	24.8	54.1	30.5
Stream01	40.2	676.1	59.7	78.6	972.3	116.7	4191.2	32.6
Stream02	54.3	905.5	88.4	92.1	662.1	104.5	39.8	35.4
Stream03	50.6	677.2	52.6	61.4	716.0	141.9	43.0	33.8
Stream04	34.0	549.0	92.5	71.1	989.3	101.6	35.4	32.4
Stream05	37.8	660.8	95.6	193.7	972.6	104.9	37.7	40.1
Min Qi	34.0	549.0	52.6	61.4	662.1	101.6	35.4	32.4
Max Qi	54.3	905.5	95.6	193.7	989.3	141.9	4191.2	40.1
Avg Qi	43.4	693.7	77.8	99.4	862.5	113.9	869.4	34.9