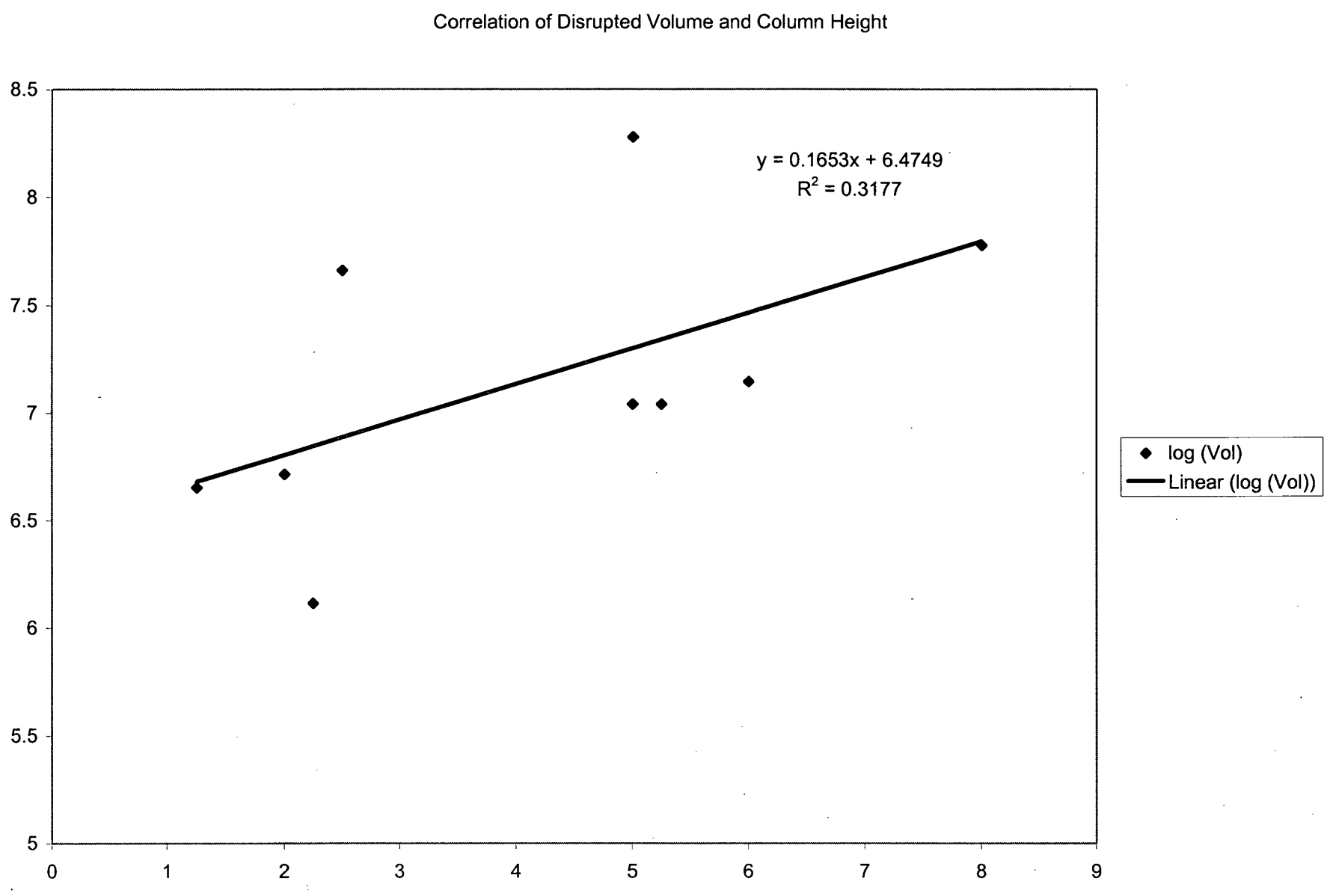
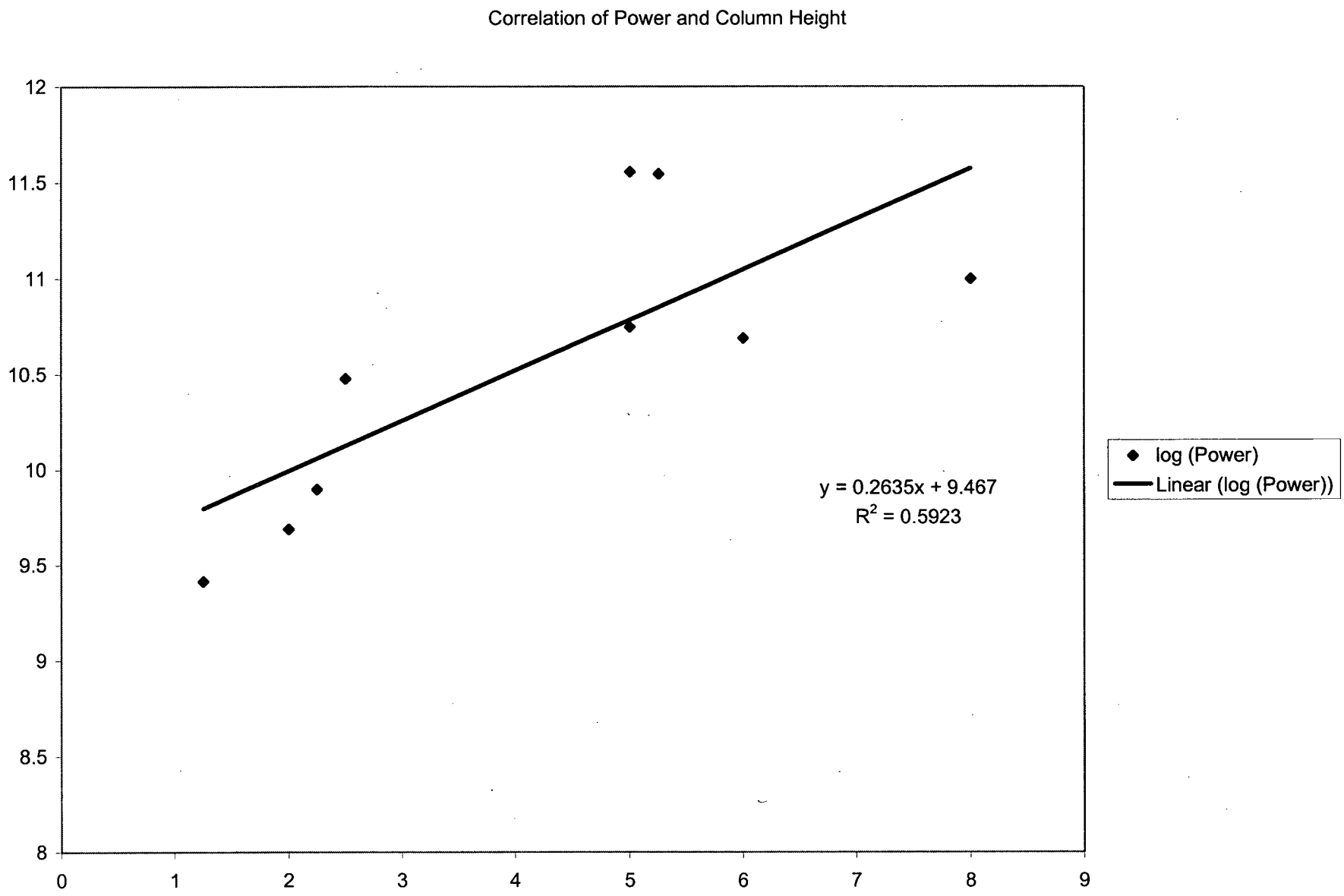
LSNReviews

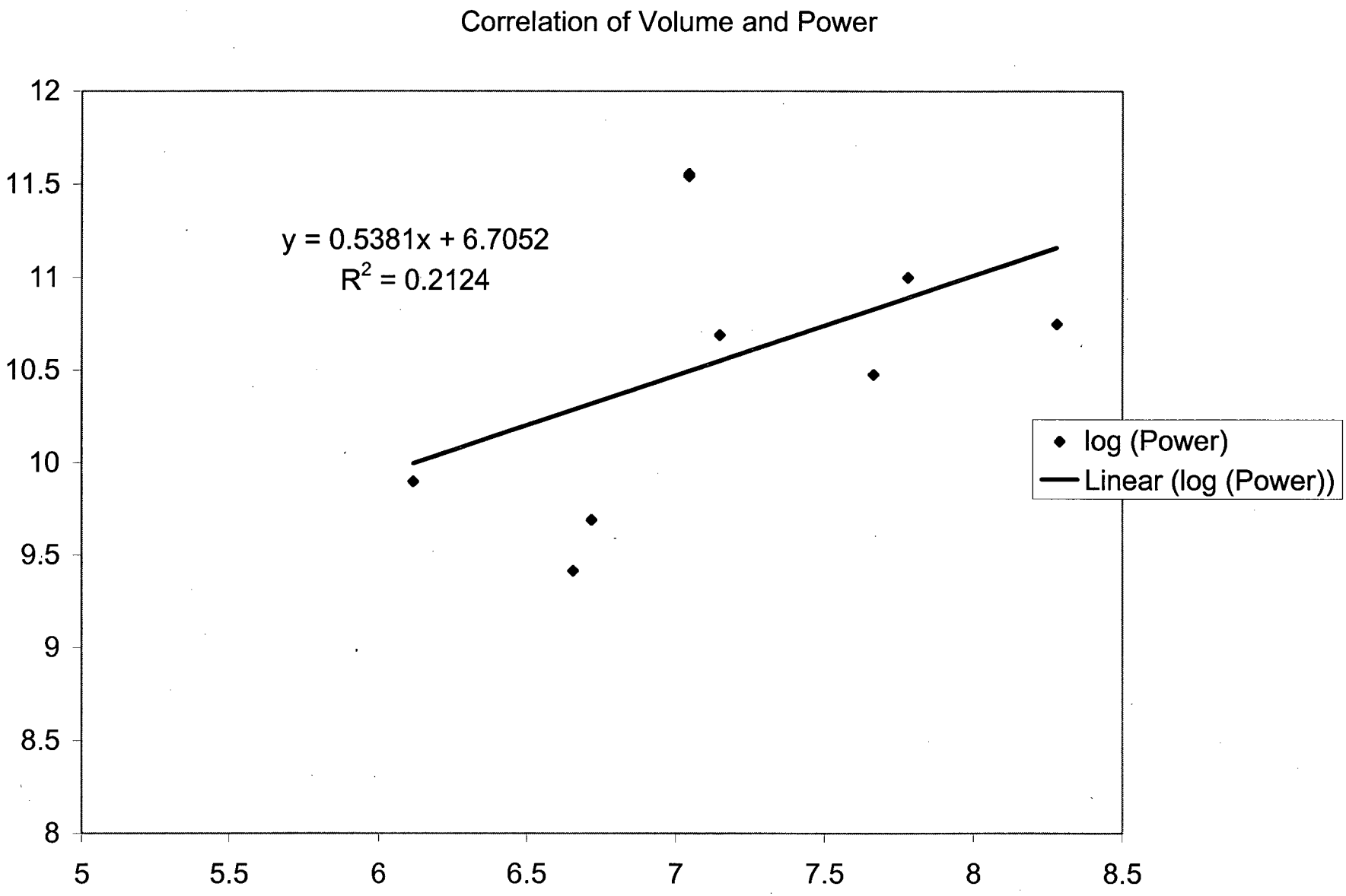
From: David Esh [DWE@nrc.gov]
Sent: Thursday, November 08, 2001 4:19 PM
To: BHILL@cnwra.swri.edu; RJANETZKE@cnwra.swri.edu; CJG2@nrc.gov
Cc: SMOHANTY@cnwra.swri.edu
Subject: TPA 5.0 - code change 55?
Attachments: Igneous_correlations.xls

Attached is the Excel file using data from the IA IRSR that I was referring to suggesting that maybe we should add flexibility to evaluating how various igneous things may or may not be correlated. Given a code change that allows flexibility we can always set the parameters to produce exactly what we have now, so I don't see what the problem is.

Dave


Correlation of Disrupted Volume and Column Height
y = 0.1653x + 6.4749
R2 = 0.3177
8.5
8
7.5
7
6.5
6
5.5
5
0
1
2
3
4
5
6
7
8
9
log (Vol)
Linear (log (Vol))


Correlation of Power and Column Height
12
11.5
11
10.5
10
9.5
9
8.5
8
0
1
2
3
4
5
6
7
8
9
y = 0.2635x + 9.467
R2 = 0.5923
log (Power)
Linear (log (Power))


Correlation of Volume and Power
y = 0.5381x + 6.7052
R2 = 0.2124
12
11.5
11
10.5
10
9.5
9
8.5
8
5
5.5
6
6.5
7
7.5
8
8.5
log (Power)
Linear (log (Power))

height	duration	Volume	Power
2	2.20E+06	5.20E+06	4.90E+09
5	7.30E+06	1.90E+08	5.60E+10
8	1.20E+06	6.00E+07	1.00E+11
2.5	3.30E+06	4.60E+07	3.00E+10
5.25	6.60E+04	1.10E+07	3.50E+11
1.25	3.60E+06	4.50E+06	2.60E+09
6	6.00E+05	1.40E+07	4.90E+10
5	6.40E+04	1.10E+07	3.60E+11
2.25	3.50E+05	1.30E+06	7.90E+09

height	duration
2	2.20E+06
5	7.30E+06
8	1.20E+06
2.5	3.30E+06
5.25	6.60E+04
1.25	3.60E+06
6	6.00E+05
5	6.40E+04
2.25	3.50E+05

height	Volume
2	5.20E+06
5	1.90E+08
8	6.00E+07
2.5	4.60E+07
5.25	1.10E+07
1.25	4.50E+06
6	1.40E+07
5	1.10E+07
2.25	1.30E+06

height	Power
2	4.90E+09
5	5.60E+10
8	1.00E+11
2.5	3.00E+10
5.25	3.50E+11
1.25	2.60E+09
6	4.90E+10
5	3.60E+11
2.25	7.90E+09

	Height 1	Height 2	Height 3	
	2	2.2	2.1	2.1
	5	4	3.9	4.3
	8	4.7	4.5	5.733333
	2.5	3.4	3.3	3.066667
	5.25	6.3	6.2	5.916667
	1.25	1.9	1.8	1.65
	6	3.9	3.8	4.566667
	5	6.4	6.2	5.866667
	2.25	2.4	2.4	2.35
	4.138889	3.911111	3.8	
% above 5	0.333333	0.222222	0.222222	
uniform	0.285714			

height	log (Vol)
2	6.716003
5	8.278754
8	7.778151
2.5	7.662758
5.25	7.041393
1.25	6.653213
6	7.146128
5	7.041393
2.25	6.113943

height	log (Power)
2	9.690196
5	10.74819
8	11
2.5	10.47712
5.25	11.54407
1.25	9.414973
6	10.6902
5	11.5563
2.25	9.897627

log (Vol)	log (Power)
6.716003	9.690196
8.278754	10.74819
7.778151	11
7.662758	10.47712
7.041393	11.54407
6.653213	9.414973
7.146128	10.6902
7.041393	11.5563
6.113943	9.897627