

SPT, Calvert Cliffs - B409-75

AWJ

OP: KB

Test date: 22-Jun-2006

AR: 1.19 in²

SP: 0.492 k/ft³

LE: 80.5 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.00

FMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute
EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	()
1	0.00	AV1	25.73	15.22	0.285	81.5	**	0.285	0.264	1.33	0.70
2	0.00	AV1	25.95	15.15	0.289	82.6	55.9	0.289	0.272	1.10	0.71
3	0.00	AV1	26.02	15.07	0.291	83.1	55.7	0.291	0.272	1.31	0.72
4	0.00	AV1	25.93	15.73	0.292	83.3	55.7	0.292	0.271	1.14	0.65
5	0.00	AV1	26.34	15.36	0.296	84.5	56.3	0.296	0.279	0.97	0.72
6	0.00	AV1	25.90	15.62	0.294	84.0	56.3	0.294	0.275	0.92	0.64
7	0.00	AV1	25.72	15.71	0.296	84.7	56.5	0.296	0.276	0.93	0.62
8	0.00	AV1	25.91	16.00	0.296	84.7	56.4	0.296	0.272	0.85	0.64
9	0.00	AV1	26.00	15.52	0.294	84.0	56.7	0.294	0.274	0.85	0.65
10	0.00	AV1	26.36	15.72	0.298	85.1	56.8	0.298	0.276	0.91	0.68
11	0.00	AV1	25.91	16.01	0.300	85.7	56.3	0.300	0.274	0.82	0.65
12	0.00	AV1	26.41	15.75	0.300	85.6	56.7	0.300	0.279	0.86	0.69
13	0.00	AV1	25.66	15.86	0.297	84.9	56.7	0.297	0.276	0.62	0.62
14	0.00	AV1	26.34	15.80	0.301	86.0	56.6	0.301	0.278	0.69	0.70
15	0.00	AV1	25.28	15.95	0.298	85.2	56.8	0.298	0.271	1.02	0.60
16	0.00	AV1	26.31	15.67	0.302	86.2	56.9	0.302	0.276	0.89	0.70
17	0.00	AV1	26.08	15.79	0.304	86.9	56.3	0.304	0.273	0.83	0.69
18	0.00	AV1	26.31	15.66	0.303	86.4	56.9	0.303	0.275	0.66	0.68
19	0.00	AV1	25.68	16.31	0.306	87.5	56.3	0.306	0.277	0.43	0.62
20	0.00	AV1	25.37	15.81	0.296	84.5	57.0	0.296	0.273	0.34	0.61
21	0.00	AV1	26.14	16.22	0.301	86.1	56.4	0.301	0.277	0.49	0.64
22	0.00	AV1	25.23	15.94	0.295	84.4	56.7	0.295	0.271	0.30	0.61
23	0.00	AV1	25.87	15.88	0.299	85.5	56.7	0.299	0.274	0.33	0.71
24	0.00	AV1	25.53	15.68	0.292	83.5	56.8	0.292	0.267	0.51	0.64
25	0.00	AV1	26.06	16.14	0.302	86.4	56.2	0.302	0.274	0.63	0.69
Average			25.92	15.74	0.297	84.9	56.5	0.297	0.274	0.79	0.66

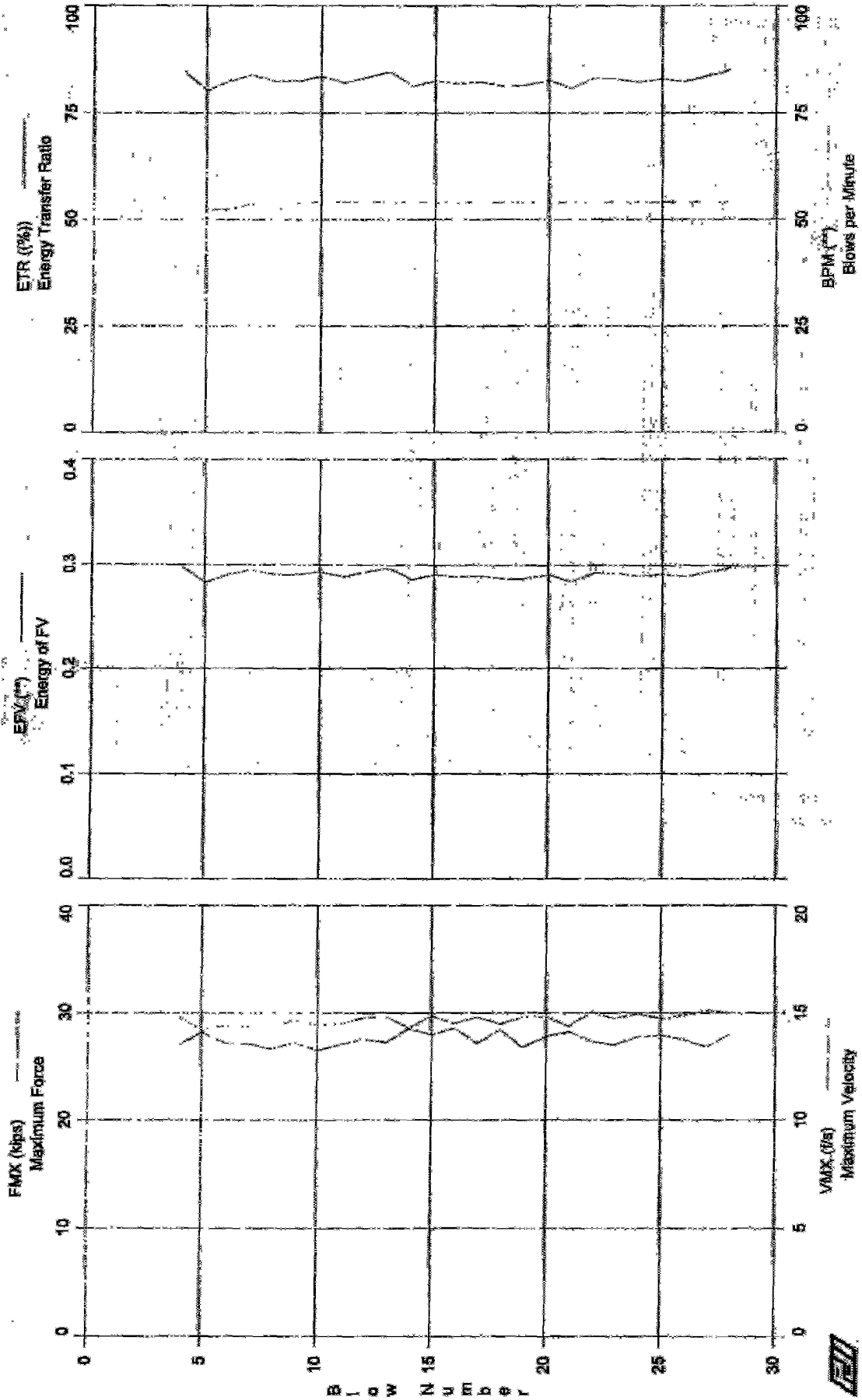
Total number of blows analyzed: 25

Time Summary

Drive 25 seconds

2:43:57 PM - 2:44:22 PM (6/22/2006) BN 1 - 25

SPT, Calvert Cliffs, B409-90



SPT, Calvert Cliffs - B409-90
OP: KB

AWJ
Test date: 23-Jun-2006

AR: 1.19 in² SP: 0.492 k/ft³
LE: 95.5 ft EM: 30,000 ksi
WS: 16,807.9 f/s JC: 0.00

EMX: Maximum Force EMX: Max Transferred Energy
VMX: Maximum Velocity EF2: Energy of F²
EFV: Energy of FV DEN: Final Displacement
EFR: Energy Transfer Ratio FVP: Force/Velocity proportionality
BPM: Blows per Minute

BL#	depth	TYPE	FMX	VMX	EFV	EFR	BPM	EMX	EF2	DEN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	l
4	0.00	AV1	25.95	14.82	0.297	84.9	**	0.297	0.311	2.05	0.57
5	0.00	AV1	28.20	14.21	0.281	89.2	52.4	0.281	0.311	1.35	0.56
6	0.00	AV1	27.17	14.40	0.289	82.5	52.4	0.289	0.309	0.85	0.58
7	0.00	AV1	27.08	14.34	0.294	84.0	53.6	0.294	0.312	0.89	0.72
8	0.00	AV1	26.60	14.32	0.289	82.5	54.1	0.289	0.310	0.75	0.60
9	0.00	AV1	27.21	14.66	0.289	82.5	53.8	0.289	0.310	0.72	0.66
10	0.00	AV1	26.50	14.41	0.292	83.6	54.2	0.292	0.312	0.70	0.61
11	0.00	AV1	27.05	14.49	0.287	82.0	54.1	0.287	0.306	0.79	0.69
12	0.00	AV1	27.54	14.76	0.292	83.4	54.2	0.292	0.312	0.59	0.67
13	0.00	AV1	27.22	14.81	0.296	84.6	53.9	0.296	0.312	0.90	0.70
14	0.00	AV1	28.52	14.28	0.284	81.3	54.2	0.284	0.313	0.71	0.68
15	0.00	AV1	27.95	14.84	0.289	82.5	54.0	0.289	0.313	0.80	0.69
16	0.00	AV1	28.57	14.51	0.287	81.9	54.0	0.287	0.317	0.90	0.73
17	0.00	AV1	27.16	14.80	0.288	82.2	54.3	0.288	0.310	0.90	0.66
18	0.00	AV1	28.42	14.47	0.285	81.3	54.0	0.285	0.316	0.97	0.68
19	0.00	AV1	26.74	14.81	0.285	81.5	54.2	0.285	0.304	0.95	0.64
20	0.00	AV1	27.79	14.81	0.289	82.7	54.0	0.289	0.313	0.88	0.65
21	0.00	AV1	28.24	14.38	0.282	80.7	54.2	0.282	0.314	0.79	0.72
22	0.00	AV1	27.31	15.03	0.291	83.2	53.9	0.291	0.310	0.83	0.67
23	0.00	AV1	26.99	14.72	0.291	83.0	54.2	0.291	0.312	0.94	0.69
24	0.00	AV1	27.77	14.94	0.288	82.2	54.1	0.288	0.310	0.86	0.65
25	0.00	AV1	27.90	14.72	0.290	82.9	54.1	0.290	0.314	1.05	0.74
26	0.00	AV1	27.46	14.85	0.288	82.4	54.2	0.288	0.311	0.85	0.65
27	0.00	AV1	26.82	15.10	0.293	83.7	54.0	0.293	0.311	0.80	0.69
28	0.00	AV1	27.98	15.02	0.298	85.1	54.2	0.298	0.312	0.96	0.71
Average			27.48	14.66	0.289	82.7	53.9	0.289	0.311	0.91	0.67

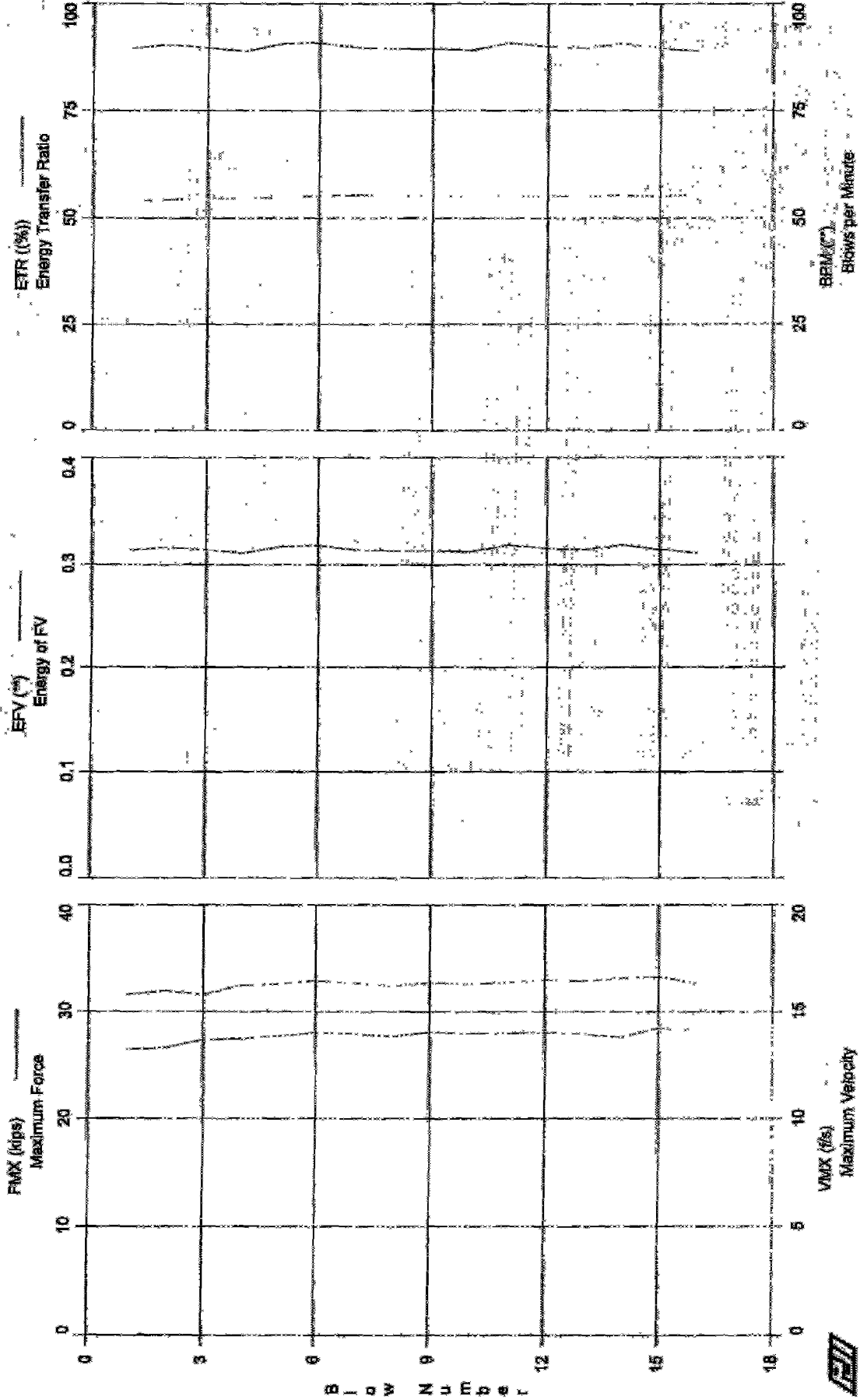
Total number of blows analyzed: 25

Time Summary

Drive 27 seconds

8:25:11 AM - 8:25:38 AM (6/23/2006) BN 4 - 28

SPT, Calvert Cliffs - B409-105



SPT, Calvert Cliffs - B409-105
QP: KB

AWJ
Test date: 23-Jun-2006

AR: 1.19 in²
LE: 110.5 ft
WS: 16,807.9 f/s

SP: 0.492 k/ft³
EM: 30,000 ksi
JC: 0.00

EMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute

EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

Bl#	depth	TYPE	EMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
and	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	[]
1	0.00	AV1	26.44	15.80	0.314	89.6	54.0	0.314	0.285	2.10	0.64
2	0.00	AV1	26.58	15.97	0.316	90.4	54.3	0.316	0.282	2.14	0.65
3	0.00	AV1	27.38	15.79	0.314	89.7	54.5	0.314	0.287	2.10	0.64
4	0.00	AV1	27.46	16.23	0.311	88.9	54.6	0.311	0.284	1.67	0.60
5	0.00	AV1	27.72	16.30	0.317	90.7	54.9	0.317	0.291	1.59	0.62
6	0.00	AV1	28.01	16.44	0.318	90.9	55.1	0.318	0.290	1.44	0.59
7	0.00	AV1	27.93	16.34	0.314	89.8	55.2	0.314	0.289	1.31	0.58
8	0.00	AV1	27.68	16.20	0.313	89.5	55.0	0.313	0.290	1.17	0.64
9	0.00	AV1	28.07	16.35	0.313	89.5	55.1	0.313	0.292	1.09	0.60
10	0.00	AV1	27.93	16.30	0.312	89.1	55.1	0.312	0.291	0.96	0.58
11	0.00	AV1	27.97	16.37	0.318	90.8	55.1	0.318	0.282	1.04	0.60
12	0.00	AV1	27.99	16.48	0.315	89.9	55.1	0.315	0.290	0.78	0.59
13	0.00	AV1	27.91	16.41	0.314	89.7	54.9	0.314	0.292	0.70	0.64
14	0.00	AV1	27.59	16.56	0.318	90.7	55.4	0.318	0.294	0.72	0.67
15	0.00	AV1	28.42	16.83	0.314	89.7	54.9	0.314	0.292	0.71	0.58
16	0.00	AV1	28.34	16.33	0.311	89.0	55.5	0.311	0.291	0.93	0.58
Average			27.71	16.28	0.315	89.9	54.9	0.315	0.289	1.28	0.61

Total number of blows analyzed: 16

Time Summary

Drive 16 seconds

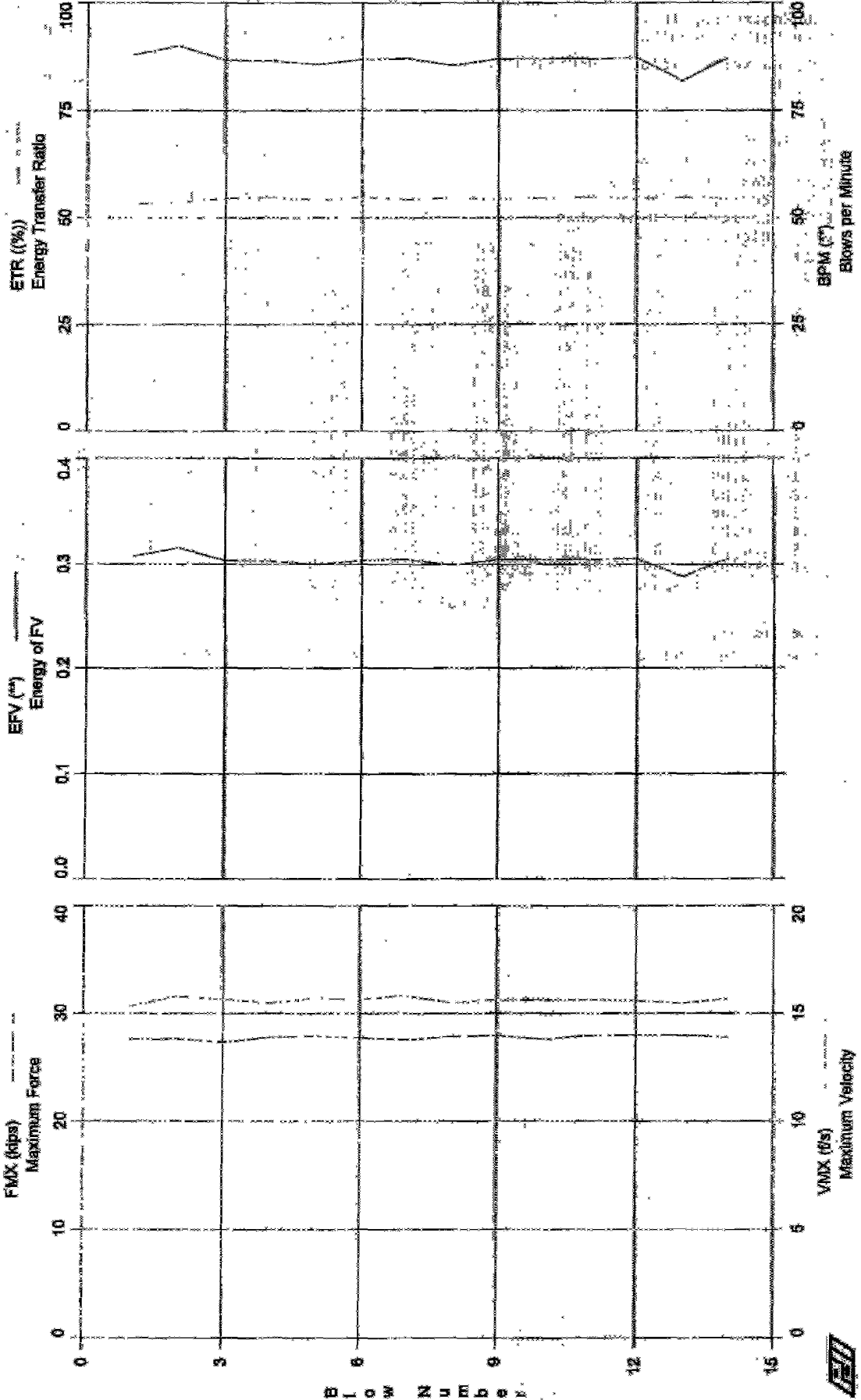
10:17:01 AM - 10:17:17 AM (6/23/2006) BN 1 - 16

SRL Engineers, Inc. - Case Method Results

FDIPILOT Ver. 2005.2 - Printed: 18-Jul-2006

Test date: 26-Jun-2006

SPT, Calvert Cliffs - B409-120



SPT, Calvert Cliffs - B409-120

AWJ

OP: KB

Test date: 26-Jun-2006

AR: 1.19 in²

SP: 0.492 k/ft³

LR: 124.0 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.00

FMX: Maximum Force

EMX: Max Transferred Energy

VMX: Maximum Velocity

EF2: Energy of F²

EFV: Energy of FV

DFN: Final Displacement

ETR: Energy Transfer Ratio

FVP: Force/Velocity proportionality

BPM: Blows per Minute

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		klps	f/s	**	(%)	**	k-ft	k-ft	in	()
1	0.00	AV1	27.59	15.32	0.308	88.0	53.2	0.308	0.287	0.79	0.52
2	0.00	AV1	27.65	15.78	0.316	90.2	53.6	0.316	0.295	0.80	0.53
3	0.00	AV1	27.34	15.66	0.304	86.7	54.5	0.304	0.289	0.87	0.54
4	0.00	AV1	27.78	15.48	0.303	86.6	54.7	0.303	0.291	0.88	0.52
5	0.00	AV1	27.92	15.70	0.300	85.8	54.1	0.300	0.290	0.83	0.64
6	0.00	AV1	27.73	15.63	0.304	87.0	54.9	0.304	0.294	0.87	0.53
7	0.00	AV1	27.56	15.84	0.305	87.2	54.3	0.305	0.293	0.94	0.54
8	0.00	AV1	27.84	15.49	0.299	85.6	54.7	0.299	0.287	1.16	0.62
9	0.00	AV1	27.95	15.65	0.305	87.1	54.3	0.305	0.290	0.96	0.66
10	0.00	AV1	27.60	15.62	0.305	87.1	54.6	0.305	0.292	1.11	0.55
11	0.00	AV1	27.95	15.64	0.305	87.0	54.7	0.305	0.290	1.11	0.66
12	0.00	AV1	27.93	15.59	0.306	87.3	54.5	0.306	0.292	1.04	0.65
13	0.00	AV1	27.95	15.47	0.287	81.9	54.7	0.287	0.289	0.88	0.59
14	0.00	AV1	27.75	15.67	0.306	87.3	54.4	0.306	0.290	1.22	0.54
Average			27.75	15.61	0.304	86.8	54.4	0.304	0.291	0.96	0.58

Total number of blows analyzed: 14

Time Summary

Drive 15 seconds

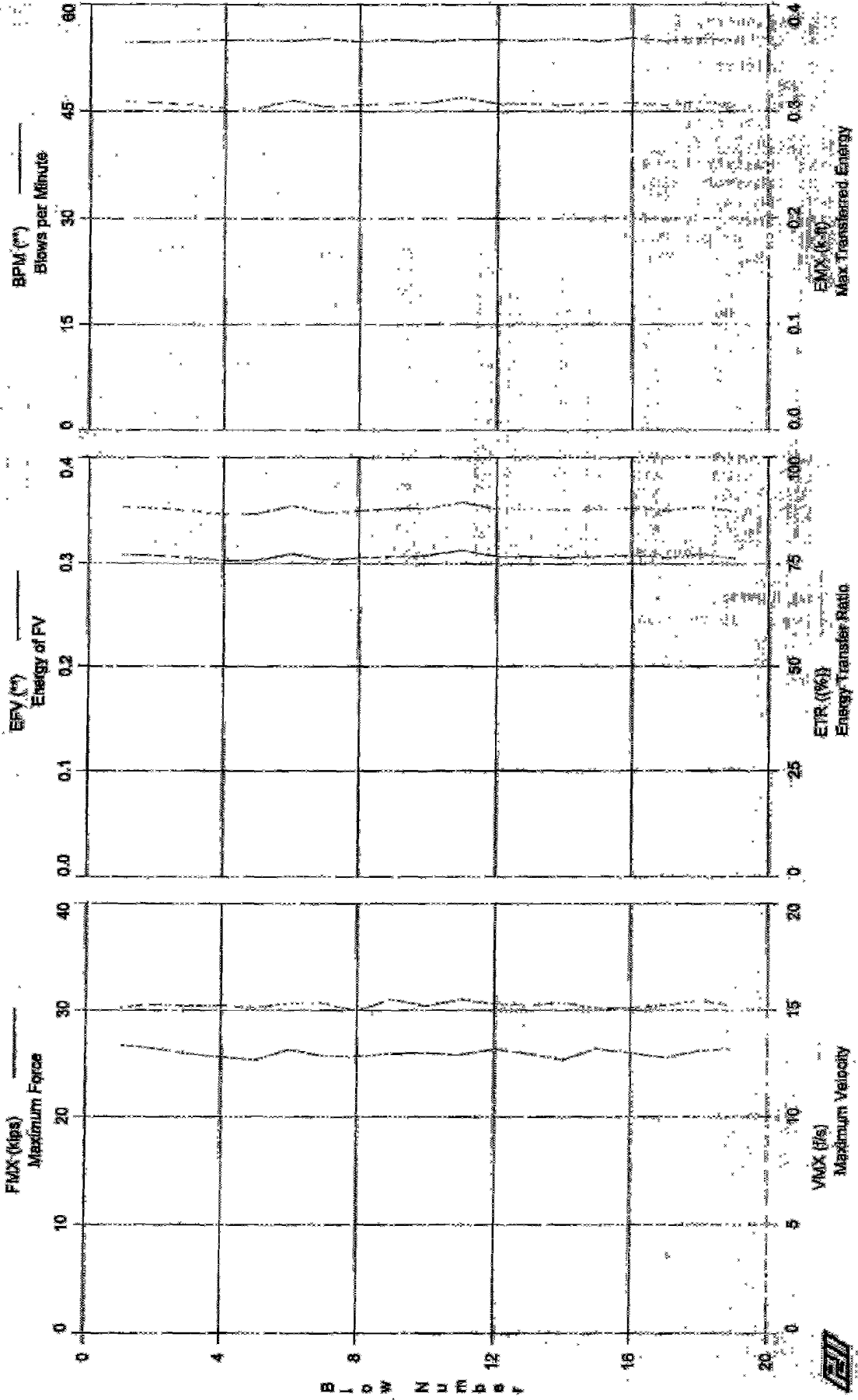
12:27:42 PM - 12:27:57 PM (6/26/2006) BN 1 - 14

GRL Engineers, Inc. - Case Method Results

PDIPLOT Ver. 2005.2 - Printed: 18-Jul-2006

Test date: 27-Jun-2006

SPT, Calvert Cliffs - 8408-135



SPT, Calvert Cliffs - B409-135

AWJ

OP: KA

Test date: 27-Jun-2006

AR: 1.19 in²

SP: 0.492 #/ft³

LE: 140.5 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.00

FMX: Maximum Force

EMX: Max Transferred Energy

VMX: Maximum Velocity

EF2: Energy of F²

EFV: Energy of FV

DFN: Final Displacement

ETR: Energy Transfer Ratio

FVP: Force/Velocity proportionality

BPM: Blows per Minute

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	F/s	**	(%)	**	k-ft	k-ft	in	[1]
1	0.00	AV1	26.71	15.12	0.309	88.3	54.7	0.309	0.301	1.31	0.62
2	0.00	AV1	26.40	15.25	0.308	88.0	54.7	0.308	0.297	1.25	0.62
3	0.00	AV1	25.89	15.18	0.306	87.4	54.8	0.306	0.293	1.25	0.59
4	0.00	AV1	25.59	15.21	0.303	86.5	55.0	0.303	0.289	1.37	0.59
5	0.00	AV1	25.32	15.10	0.303	86.7	54.9	0.303	0.290	1.22	0.58
6	0.00	AV1	26.28	15.31	0.310	88.6	54.9	0.310	0.293	1.22	0.63
7	0.00	AV1	25.71	15.30	0.304	86.8	55.2	0.304	0.286	0.97	0.60
8	0.00	AV1	25.62	14.97	0.306	87.4	54.7	0.306	0.293	1.18	0.59
9	0.00	AV1	25.88	15.50	0.307	87.8	55.1	0.307	0.292	1.12	0.61
10	0.00	AV1	25.97	15.18	0.308	87.9	54.8	0.308	0.292	0.81	0.60
11	0.00	AV1	25.79	15.49	0.313	89.3	55.1	0.313	0.292	1.10	0.59
12	0.00	AV1	26.31	15.29	0.307	87.7	55.1	0.307	0.293	0.51	0.60
13	0.00	AV1	25.87	15.22	0.307	87.7	54.9	0.307	0.289	1.03	0.60
14	0.00	AV1	25.33	15.33	0.306	87.6	55.2	0.306	0.286	0.94	0.59
15	0.00	AV1	26.38	15.10	0.307	87.6	54.8	0.307	0.298	0.65	0.60
16	0.00	AV1	25.97	15.11	0.308	87.9	55.3	0.308	0.293	0.87	0.60
17	0.00	AV1	25.51	15.19	0.306	87.3	54.9	0.306	0.289	0.77	0.59
18	0.00	AV1	26.17	15.43	0.309	88.2	55.2	0.309	0.291	0.80	0.62
19	0.00	AV1	26.31	15.20	0.305	87.2	54.9	0.305	0.290	1.00	0.60
Average			25.95	15.24	0.307	87.7	55.0	0.307	0.292	1.02	0.60

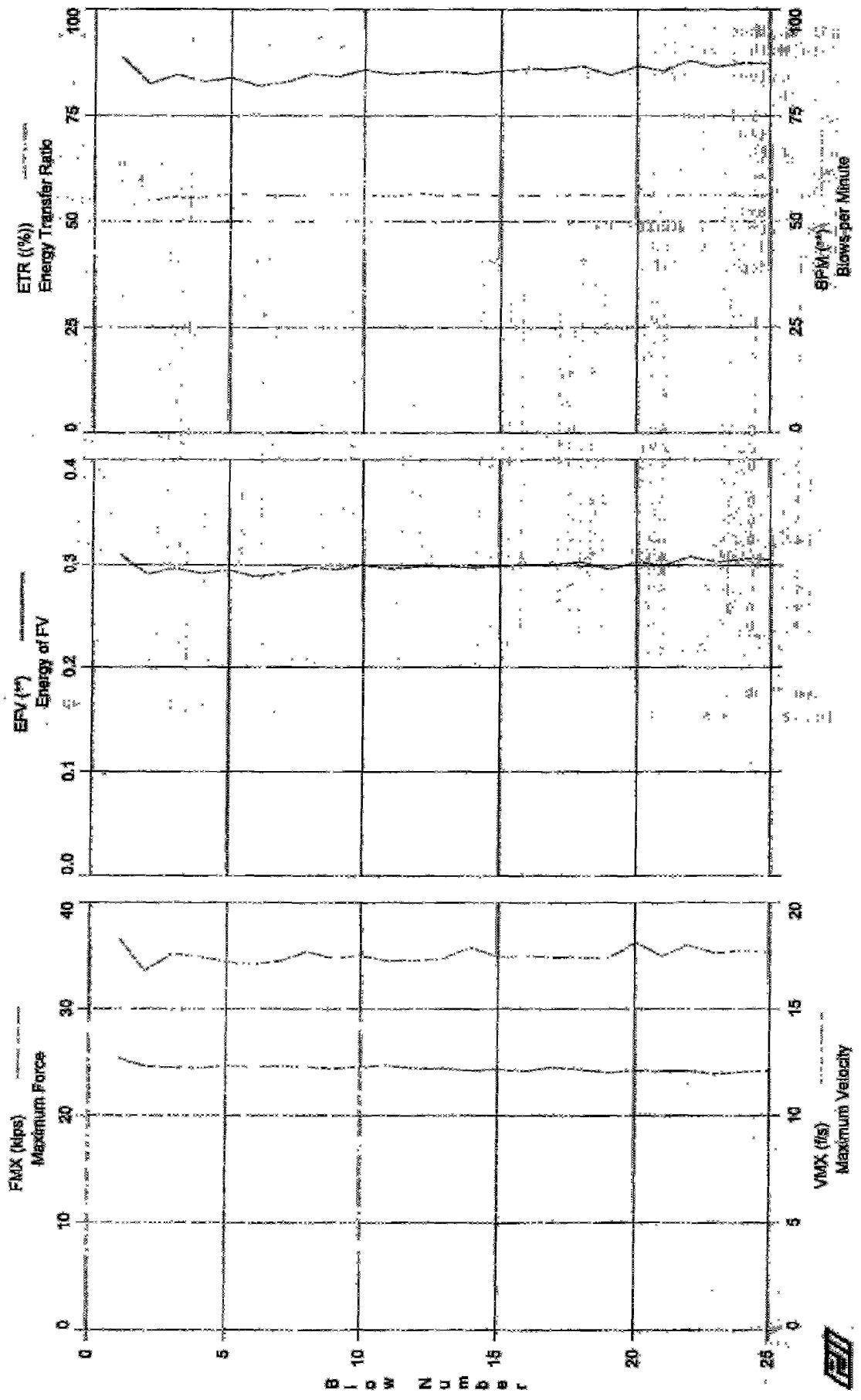
Total number of blows analyzed: 19

Time Summary

Drive 19 seconds

8:02:44 AM - 8:03:03 AM (6/27/2006) BN 1 - 19

SPT, Calvert Cliffs - B408-150



SPT, Calvert Cliffs - B409-150

AWJ

OP: KB

Test date: 27-Jun-2006

AR: 1.19 in²

SP: 0.492 k/ft³

LE: 154.0 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.00

FMX: Maximum Force

EMX: Max Transferred Energy

VMX: Maximum Velocity

EF2: Energy of F²

EFV: Energy of FV

DFN: Final Displacement

ETR: Energy Transfer Ratio

FVP: Force/Velocity proportionality

BPM: Blows per Minute

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	[]
1	0.00	AV1	25.46	18.48	0.311	88.9	**	0.311	0.287	0.78	0.42
2	0.00	AV1	24.62	16.78	0.289	82.6	55.0	0.289	0.276	0.43	0.44
3	0.00	AV1	24.50	17.59	0.296	84.6	55.8	0.296	0.266	0.71	0.37
4	0.00	AV1	24.44	17.46	0.290	83.0	55.6	0.290	0.263	0.68	0.37
5	0.00	AV1	24.63	17.22	0.294	83.9	56.5	0.294	0.264	0.76	0.36
6	0.00	AV1	24.53	17.11	0.287	82.0	56.3	0.287	0.262	0.82	0.37
7	0.00	AV1	24.63	17.25	0.290	82.8	56.1	0.290	0.263	0.81	0.36
8	0.00	AV1	24.55	17.70	0.297	84.8	56.2	0.297	0.266	0.98	0.41
9	0.00	AV1	24.38	17.38	0.295	84.2	56.5	0.295	0.265	0.80	0.37
10	0.00	AV1	24.59	17.51	0.300	85.8	56.3	0.300	0.268	0.85	0.36
11	0.00	AV1	24.65	17.27	0.296	84.7	55.8	0.296	0.267	0.71	0.43
12	0.00	AV1	24.44	17.29	0.298	85.1	56.8	0.298	0.266	0.71	0.44
13	0.00	AV1	24.44	17.35	0.299	85.4	56.0	0.299	0.267	0.71	0.37
14	0.00	AV1	24.19	17.93	0.297	84.8	56.4	0.297	0.266	0.67	0.40
15	0.00	AV1	24.35	17.46	0.299	85.6	56.1	0.299	0.268	0.67	0.43
16	0.00	AV1	24.14	17.50	0.301	86.0	56.2	0.301	0.265	0.74	0.37
17	0.00	AV1	24.48	17.43	0.301	86.0	56.0	0.301	0.271	0.66	0.37
18	0.00	AV1	24.26	17.42	0.303	86.7	56.4	0.303	0.268	0.68	0.43
19	0.00	AV1	24.02	17.40	0.296	84.6	56.1	0.296	0.268	0.67	0.37
20	0.00	AV1	24.23	18.14	0.303	86.7	56.3	0.303	0.269	0.75	0.39
21	0.00	AV1	24.14	17.49	0.300	85.6	56.0	0.300	0.264	0.76	0.38
22	0.00	AV1	24.17	18.02	0.308	88.0	56.3	0.308	0.271	0.83	0.41
23	0.00	AV1	23.89	17.63	0.303	86.5	56.4	0.303	0.268	0.85	0.40
24	0.00	AV1	24.04	17.75	0.306	87.5	56.0	0.306	0.267	0.86	0.38
25	0.00	AV1	24.18	17.67	0.305	87.2	56.4	0.305	0.268	0.91	0.44
Average			24.40	17.53	0.299	85.3	56.2	0.299	0.268	0.75	0.39

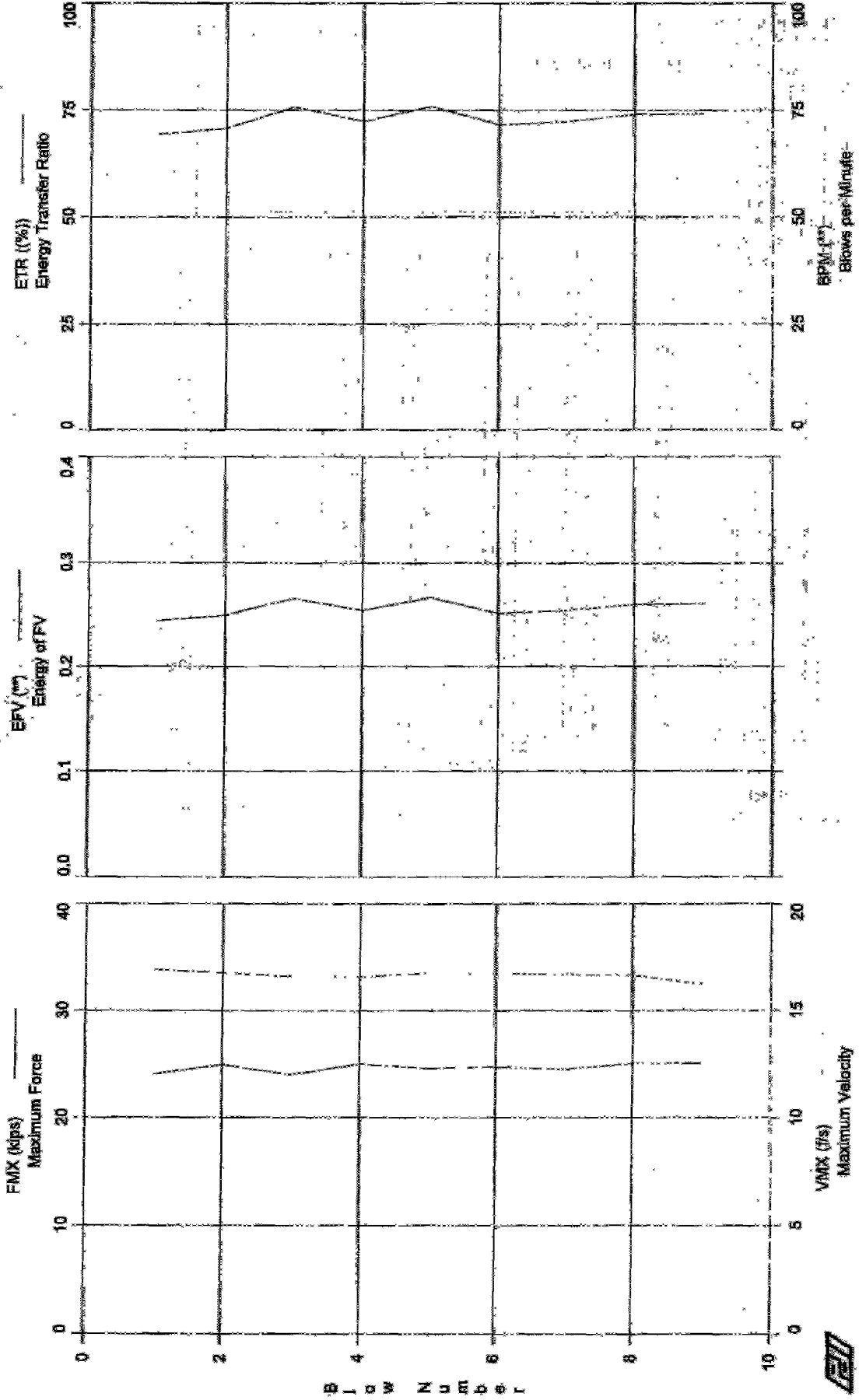
Total number of blows analyzed: 25

Time Summary

Drive 26 seconds

10:29:48 AM - 10:30:14 AM (6/27/2006) BN 1 - 25

Calvert Cliffs - B-744-15



Calvert Cliffs - B-744-15
OP: SDW

SPT
Test date: 20-Jun-2006

AR: 1.19 in² SP: 0.492 k/ft³
LE: 19.0 ft EM: 30,000 ksi
WB: 16,807.9 f/s JC: 0.70

FMX: Maximum Force EMX: Max Transferred Energy
VMX: Maximum Velocity EF2: Energy of F²
EFV: Energy of FV DFN: Final Displacement
ETR: Energy Transfer Ratio FVP: Force/Velocity proportionality
BPM: Blows per Minute

Bl#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
and	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	
1	0.00	AV1	24.05	16.92	0.243	69.3	**	0.243	0.223	1.89	0.88
2	0.00	AV1	24.92	16.76	0.248	70.7	51.1	0.248	0.228	0.75	0.85
3	0.00	AV1	24.01	16.60	0.265	75.8	51.2	0.265	0.226	2.13	0.89
4	0.00	AV1	24.97	16.57	0.253	72.4	51.1	0.253	0.226	2.03	0.89
5	0.00	AV1	24.61	16.74	0.266	75.9	51.2	0.266	0.227	2.29	0.82
6	0.00	AV1	24.70	16.73	0.250	71.5	51.2	0.250	0.223	1.98	0.83
7	0.00	AV1	24.51	16.68	0.253	72.2	51.1	0.253	0.228	1.67	0.86
8	0.00	AV1	25.02	16.65	0.259	74.0	51.1	0.259	0.227	1.66	0.82
9	0.00	AV1	25.08	16.24	0.260	74.2	51.2	0.260	0.226	2.15	0.82
Average			24.65	16.65	0.255	72.9	51.1	0.255	0.226	1.84	0.85

Total number of blows analyzed: 9

Time Summary

Drive 10 seconds

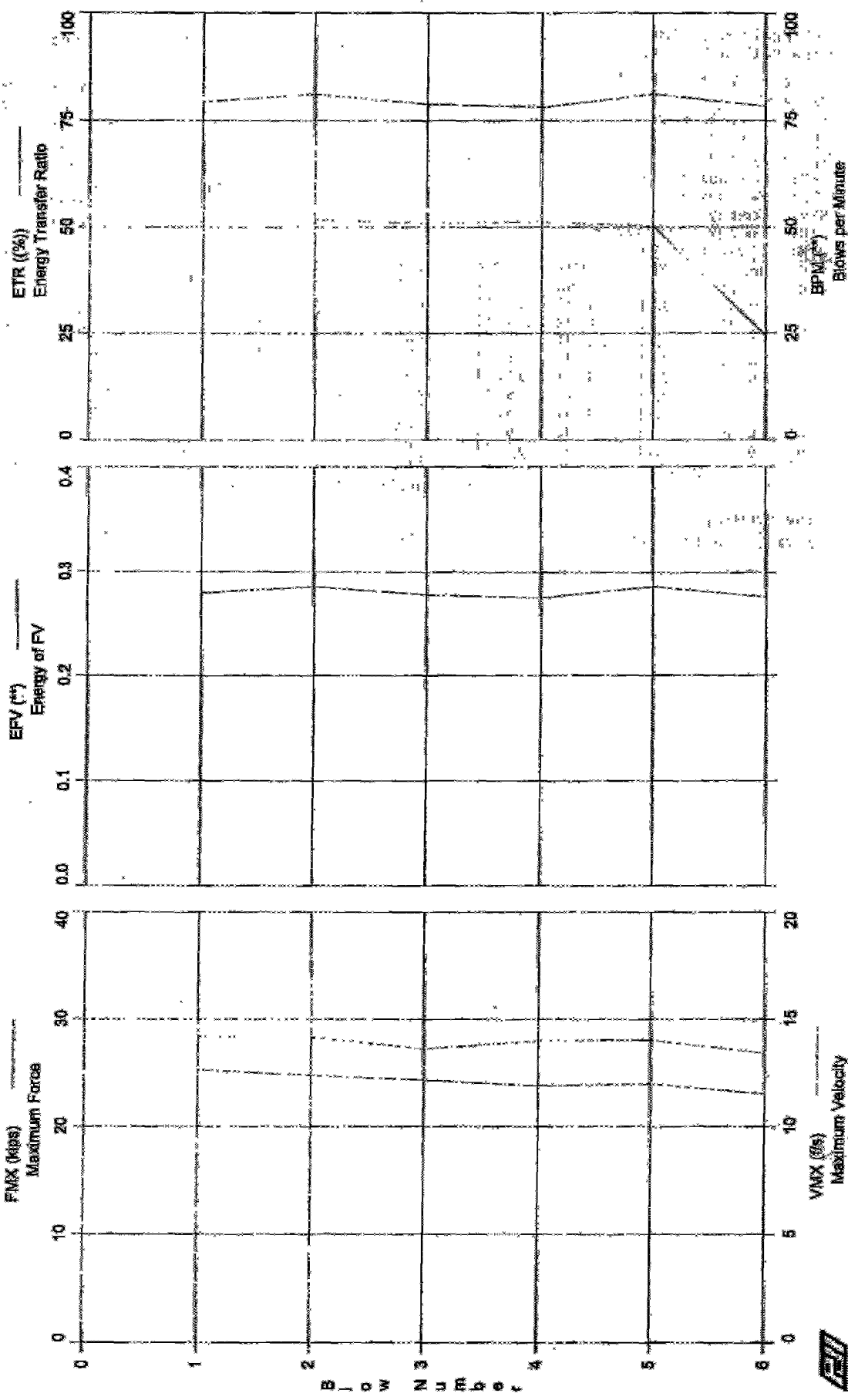
12:53:23 PM - 12:53:33 PM {6/20/2006} BN 1 - 9

GRL Engineers, Inc. - Case Method Results

Test date: 20-Jun-2006

PDIPLOT Ver. 2005.2 - Printed: 18-Jul-2006

Calvert Cliffs - B-744-30



Calvert Cliffs - B-744-30

SPT

OP: SDW

Test date: 20-Jun-2006

AR: 1.19 in²

SP: 0.492 k/ft³

LE: 34.0 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.70

FMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute
EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	()
1	0.00	AV1	25.25	14.20	0.278	79.4	**	0.278	0.263	2.07	0.84
2	0.00	AV1	24.73	14.16	0.284	81.2	51.7	0.284	0.263	3.18	0.81
3	0.00	AV1	24.29	13.61	0.276	78.8	50.9	0.276	0.261	2.22	0.78
4	0.00	AV1	23.73	14.00	0.273	78.1	51.2	0.273	0.259	1.90	0.80
5	0.00	AV1	23.92	14.02	0.284	81.2	50.2	0.284	0.268	1.94	0.76
6	0.00	AV1	23.02	13.41	0.274	78.3	24.3	0.274	0.261	1.88	0.77
Average			24.16	13.90	0.278	79.5	45.7	0.278	0.263	2.20	0.79

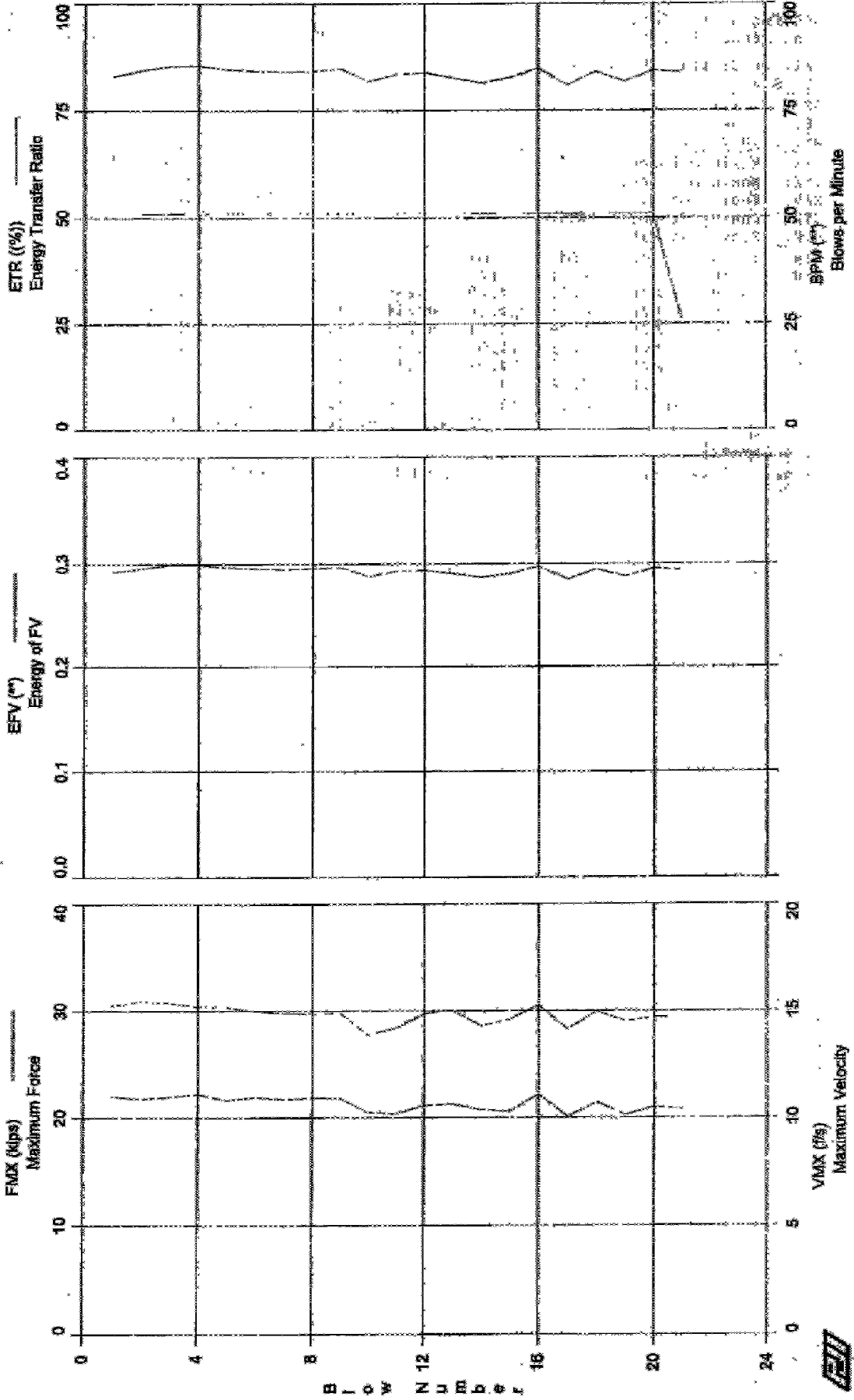
Total number of blows analyzed: 6

Time Summary

Drive 7 seconds

2:04:06 PM - 2:04:13 PM (6/20/2006) BN 1 - 6

Calvert Cliffs - B-744-45



Calvert Cliffs - B-744-45
OP: SDW

SPT
Test date: 20-Jun-2006

AR: 1.19 in²
LE: 49.0 ft
WS: 16,807.9 f/s

SP: 0.492 k/ft³
EM: 30,000 ksi
JC: 0.70

FMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute
EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	[]
1	0.00	AV1	21.99	15.25	0.291	83.0	**	0.291	0.253	1.30	0.59
2	0.00	AV1	21.71	15.43	0.295	84.3	50.9	0.295	0.256	1.07	0.58
3	0.00	AV1	21.91	15.38	0.299	85.4	50.9	0.299	0.258	1.22	0.58
4	0.00	AV1	22.17	15.19	0.299	85.5	51.1	0.299	0.257	1.20	0.67
5	0.00	AV1	21.60	15.17	0.296	84.6	51.1	0.296	0.255	0.99	0.59
6	0.00	AV1	21.88	14.95	0.295	84.3	51.0	0.295	0.257	0.82	0.67
7	0.00	AV1	21.67	14.89	0.294	84.0	51.1	0.294	0.253	0.89	0.65
8	0.00	AV1	21.81	14.83	0.295	84.2	51.1	0.295	0.252	0.86	0.61
9	0.00	AV1	21.76	14.89	0.296	84.7	51.0	0.296	0.243	0.88	0.60
10	0.00	AV1	20.49	13.85	0.286	81.8	51.1	0.286	0.239	0.74	0.70
11	0.00	AV1	20.36	14.18	0.292	83.4	51.1	0.292	0.238	0.70	0.61
12	0.00	AV1	21.09	14.85	0.293	83.8	51.0	0.293	0.247	0.43	0.58
13	0.00	AV1	21.23	15.02	0.289	82.6	51.2	0.289	0.251	0.41	0.65
14	0.00	AV1	20.72	14.29	0.285	81.4	51.0	0.285	0.244	0.78	0.68
15	0.00	AV1	20.55	14.60	0.289	82.6	51.1	0.289	0.247	0.67	0.66
16	0.00	AV1	22.11	15.25	0.297	84.7	50.9	0.297	0.249	0.95	0.63
17	0.00	AV1	20.08	14.13	0.283	81.0	51.0	0.283	0.240	0.60	0.67
18	0.00	AV1	21.38	14.95	0.294	84.0	51.1	0.294	0.247	0.78	0.59
19	0.00	AV1	20.24	14.50	0.286	81.7	50.9	0.286	0.240	0.48	0.66
20	0.00	AV1	20.94	14.67	0.295	84.2	51.0	0.295	0.246	0.49	0.67
21	0.00	AV1	20.76	14.70	0.293	83.8	26.0	0.293	0.245	0.52	0.60
Average			21.26	14.81	0.292	83.6	49.8	0.292	0.248	0.80	0.63

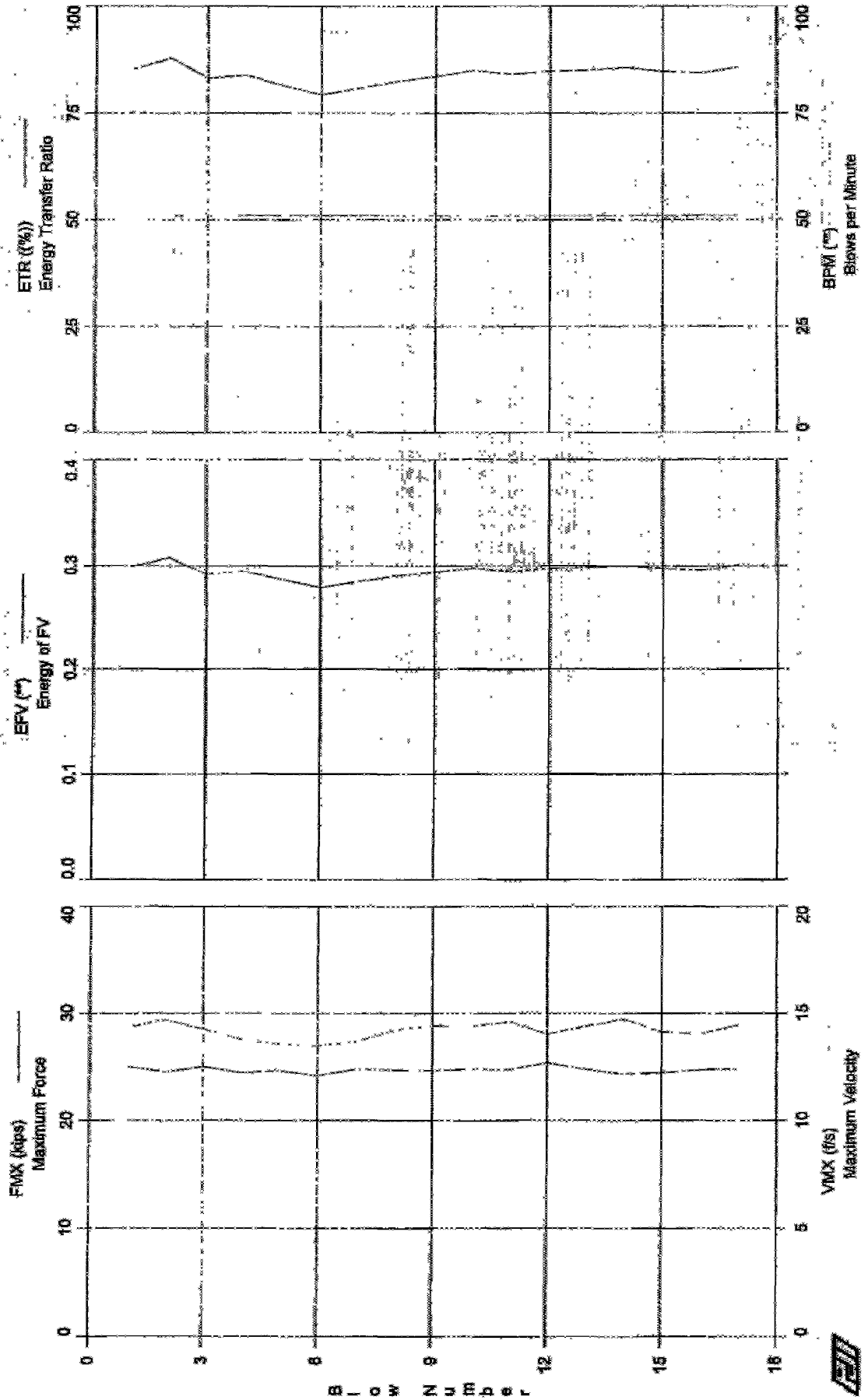
Total number of blows analyzed: 21

Time Summary

Drive 25 seconds

3:05:48 PM - 3:06:13 PM (6/20/2006) BN 1 - 21

Culvert Cliffs - B-744-80



Calvert Cliffs - B-744-60

SPT

OP: SDW

Test date: 20-Jun-2006

AR: 1.19 in²

SP: 0.492 k/ft³

LE: 64.0 ft

EM: 30,000 ksi

WS: 16,807.9 f/s

JC: 0.70

FMX: Maximum Force

EMX: Max Transferred Energy

VMX: Maximum Velocity

EF2: Energy of F²

EFV: Energy of FV

DFN: Final Displacement

ETR: Energy Transfer Ratio

FVP: Force/Velocity proportionality

BEM: Blows per Minute

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	()
1	0.00	AV1	24.98	14.32	0.299	85.3	**	0.299	0.265	1.72	0.82
2	0.00	AV1	24.51	14.70	0.308	87.9	50.9	0.308	0.268	1.19	0.79
3	0.00	AV1	24.99	14.26	0.291	83.1	50.8	0.291	0.265	0.51	0.82
4	0.00	AV1	24.44	13.78	0.294	83.9	50.9	0.294	0.259	1.16	0.78
5	0.00	AV1	24.64	13.58	0.285	81.4	51.0	0.285	0.260	0.78	0.81
6	0.00	AV1	24.17	13.48	0.277	79.3	50.9	0.277	0.261	0.25	0.85
7	0.00	AV1	24.75	13.68	0.283	80.8	51.0	0.283	0.266	0.57	0.80
8	0.00	AV1	24.69	14.23	0.289	82.4	50.9	0.289	0.265	0.65	0.82
9	0.00	AV1	24.62	14.40	0.293	83.6	51.0	0.293	0.264	0.72	0.80
10	0.00	AV1	24.77	14.36	0.297	85.0	50.9	0.297	0.262	0.89	0.81
11	0.00	AV1	24.72	14.60	0.294	84.1	51.0	0.294	0.262	0.59	0.80
12	0.00	AV1	25.36	14.01	0.297	84.9	50.9	0.297	0.265	0.65	0.85
13	0.00	AV1	24.76	14.37	0.298	85.1	51.0	0.298	0.265	0.57	0.81
14	0.00	AV1	24.33	14.72	0.300	85.7	51.0	0.300	0.264	0.62	0.78
15	0.00	AV1	24.45	14.11	0.297	84.8	50.9	0.297	0.267	0.42	0.81
16	0.00	AV1	24.70	14.03	0.295	84.4	51.0	0.295	0.265	0.39	0.83
17	0.00	AV1	24.80	14.44	0.301	85.9	50.9	0.301	0.265	0.44	0.81
Average			24.69	14.18	0.294	84.0	50.9	0.294	0.264	0.71	0.81

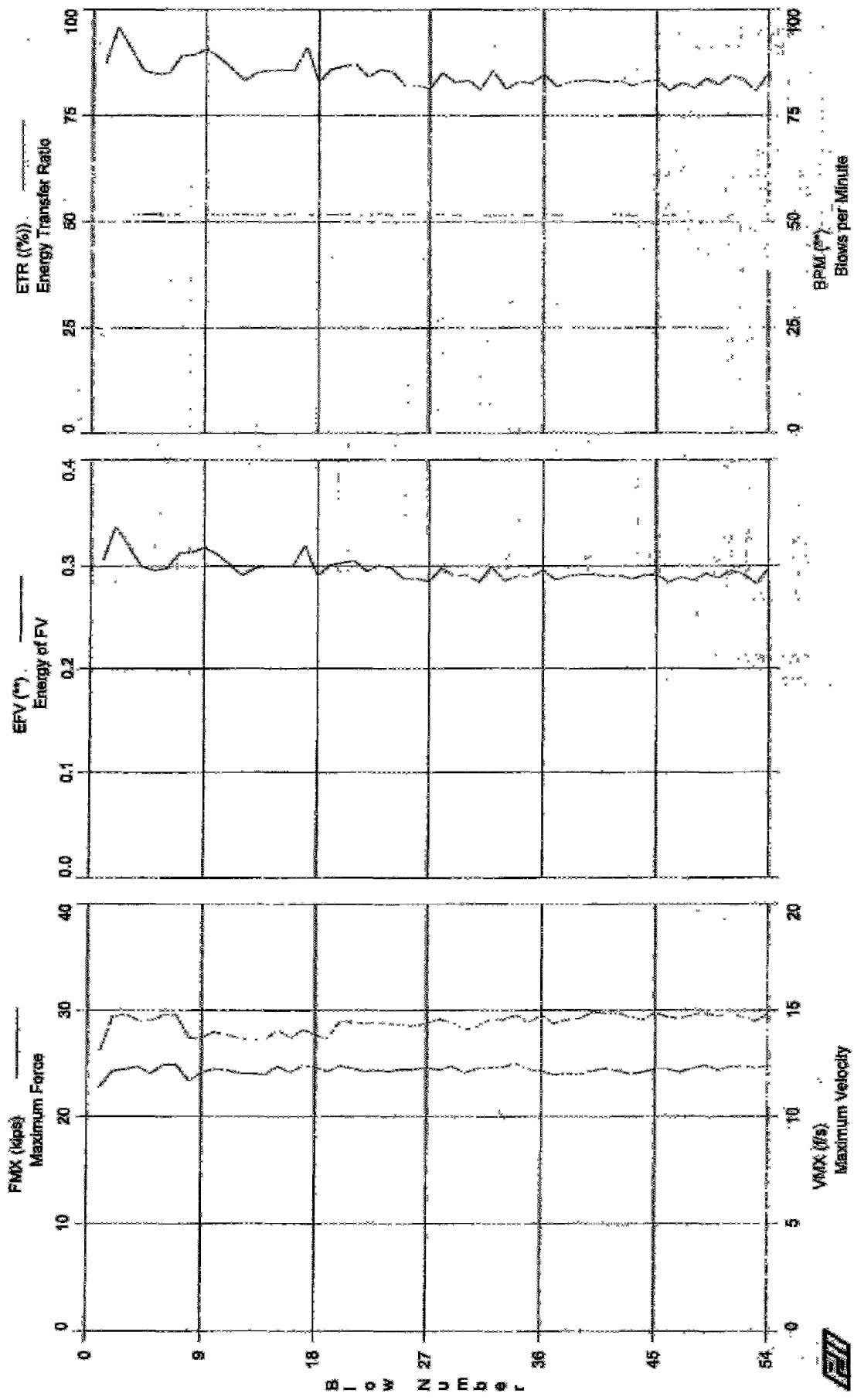
Total number of blows analyzed: 17

Time Summary

Drive 19 seconds

4:06:16 PM - 4:06:35 PM (6/20/2006) BN 1 - 17

Calvert Cliffs - B-744-75



Calvert Cliffs - B-744-75
OP: SDW

SPT
Test date: 21-Jun-2006

AR: 1.19 in²
LE: 79.0 ft
WS: 16,807.9 f/s

SP: 0.492 k/ft³
EM: 30,000 ksi
JC: 6.70

FMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute

EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

BL# end	depth ft	TYPE	FMX kips	VMX F/s	EFV **	ETR (%)	BPM **	EMX k-ft	EF2 k-ft	DFN in	FVP []
1	0.00	AV1	22.81	13.11	0.306	87.3	**	0.306	0.266	2.14	0.62
2	0.00	AV1	24.26	14.69	0.336	95.9	51.5	0.336	0.275	2.33	0.74
3	0.00	AV1	24.42	14.80	0.318	90.8	51.7	0.318	0.275	1.84	0.73
4	0.00	AV1	24.68	14.50	0.300	85.6	51.7	0.300	0.272	1.35	0.75
5	0.00	AV1	24.02	14.52	0.298	84.7	51.7	0.298	0.272	0.65	0.78
6	0.00	AV1	24.87	14.80	0.298	85.0	51.6	0.298	0.275	0.47	0.75
7	0.00	AV1	24.85	14.75	0.312	89.1	51.8	0.312	0.272	1.00	0.75
8	0.00	AV1	23.36	13.67	0.313	89.3	51.8	0.313	0.274	1.13	0.80
9	0.00	AV1	24.11	13.71	0.317	90.7	51.7	0.317	0.269	1.14	0.76
10	0.00	AV1	24.48	13.97	0.311	88.7	51.7	0.311	0.271	0.89	0.77
11	0.00	AV1	24.37	13.83	0.301	86.1	51.7	0.301	0.275	0.27	0.76
12	0.00	AV1	24.07	13.67	0.291	83.3	51.8	0.291	0.266	0.21	0.78
13	0.00	AV1	24.06	13.61	0.298	85.2	51.5	0.298	0.270	0.34	0.76
14	0.00	AV1	23.94	13.61	0.300	85.6	51.9	0.300	0.267	0.57	0.77
15	0.00	AV1	24.71	14.07	0.300	85.8	51.5	0.300	0.275	0.23	0.76
16	0.00	AV1	24.14	13.70	0.300	85.7	51.8	0.300	0.270	0.43	0.76
17	0.00	AV1	24.77	14.07	0.319	91.0	51.8	0.319	0.275	0.84	0.76
18	0.00	AV1	24.66	13.81	0.291	83.0	51.6	0.291	0.268	-0.32	0.79
19	0.00	AV1	24.20	13.68	0.301	85.9	51.7	0.301	0.271	0.43	0.77
20	0.00	AV1	24.76	14.48	0.303	86.6	51.8	0.303	0.274	0.40	0.74
21	0.00	AV1	24.53	14.42	0.305	87.0	51.7	0.305	0.275	0.33	0.73
22	0.00	AV1	24.19	14.38	0.295	84.2	51.5	0.295	0.272	0.05	0.72
23	0.00	AV1	24.36	14.41	0.301	85.9	51.9	0.301	0.272	0.32	0.73
24	0.00	AV1	24.23	14.35	0.298	85.3	51.5	0.298	0.273	0.21	0.73
25	0.00	AV1	24.44	14.28	0.287	82.0	51.7	0.287	0.267	-0.03	0.74
26	0.00	AV1	24.42	14.23	0.287	82.1	51.7	0.287	0.262	0.25	0.75
27	0.00	AV1	24.59	14.39	0.284	81.3	51.6	0.284	0.264	0.00	0.74
28	0.00	AV1	24.39	14.56	0.298	85.1	51.7	0.298	0.271	0.12	0.72
29	0.00	AV1	24.72	14.40	0.290	82.7	51.5	0.290	0.266	0.03	0.74
30	0.00	AV1	24.07	14.07	0.291	83.2	51.5	0.291	0.264	0.30	0.74
31	0.00	AV1	24.51	14.22	0.284	81.0	51.5	0.284	0.264	-0.30	0.75
32	0.00	AV1	24.60	14.56	0.300	85.7	51.5	0.300	0.271	0.12	0.72
33	0.00	AV1	24.63	14.53	0.285	81.3	51.5	0.285	0.270	-0.46	0.73
34	0.00	AV1	25.00	14.76	0.290	83.0	51.5	0.290	0.270	-0.38	0.74
35	0.00	AV1	24.41	14.40	0.289	82.6	51.5	0.289	0.268	-0.37	0.72
36	0.00	AV1	24.30	14.73	0.296	84.6	51.7	0.296	0.271	-0.18	0.71
37	0.00	AV1	23.91	14.36	0.286	81.8	51.5	0.286	0.267	-0.44	0.72
38	0.00	AV1	24.00	14.53	0.290	82.8	51.6	0.290	0.269	-0.25	0.72
39	0.00	AV1	23.93	14.60	0.292	83.3	51.6	0.292	0.269	-0.19	0.71
40	0.00	AV1	24.27	14.89	0.292	83.4	51.5	0.292	0.271	-0.31	0.72
41	0.00	AV1	24.52	14.86	0.290	82.9	51.6	0.290	0.272	-0.30	0.73
42	0.00	AV1	24.32	14.86	0.291	83.2	51.8	0.291	0.270	-0.17	0.72
43	0.00	AV1	24.00	14.66	0.287	82.1	51.4	0.287	0.268	-0.27	0.70
44	0.00	AV1	24.16	14.55	0.291	83.1	51.6	0.291	0.267	-0.08	0.71
45	0.00	AV1	24.47	14.87	0.292	83.4	51.6	0.292	0.268	-0.05	0.72
46	0.00	AV1	24.51	14.86	0.283	80.9	51.4	0.283	0.265	-0.24	0.74
47	0.00	AV1	24.16	14.59	0.289	82.7	51.6	0.289	0.267	-0.17	0.71
48	0.00	AV1	24.51	14.76	0.285	81.4	51.5	0.285	0.266	-0.12	0.72
49	0.00	AV1	24.85	14.85	0.293	83.8	51.6	0.293	0.272	-0.06	0.73
50	0.00	AV1	24.37	14.72	0.288	82.2	51.7	0.288	0.270	-0.28	0.72
51	0.00	AV1	24.65	14.76	0.296	84.7	51.5	0.296	0.270	-0.09	0.75
52	0.00	AV1	24.75	14.69	0.292	83.5	51.6	0.292	0.268	0.02	0.75
53	0.00	AV1	24.60	14.48	0.282	80.7	51.5	0.282	0.264	-0.47	0.75
54	0.00	AV1	24.72	14.81	0.297	84.9	51.7	0.297	0.272	-0.19	0.72
Average			24.36	14.38	0.296	84.7	51.6	0.296	0.270	0.24	0.74

Total number of blows analyzed: 54

Time Summary

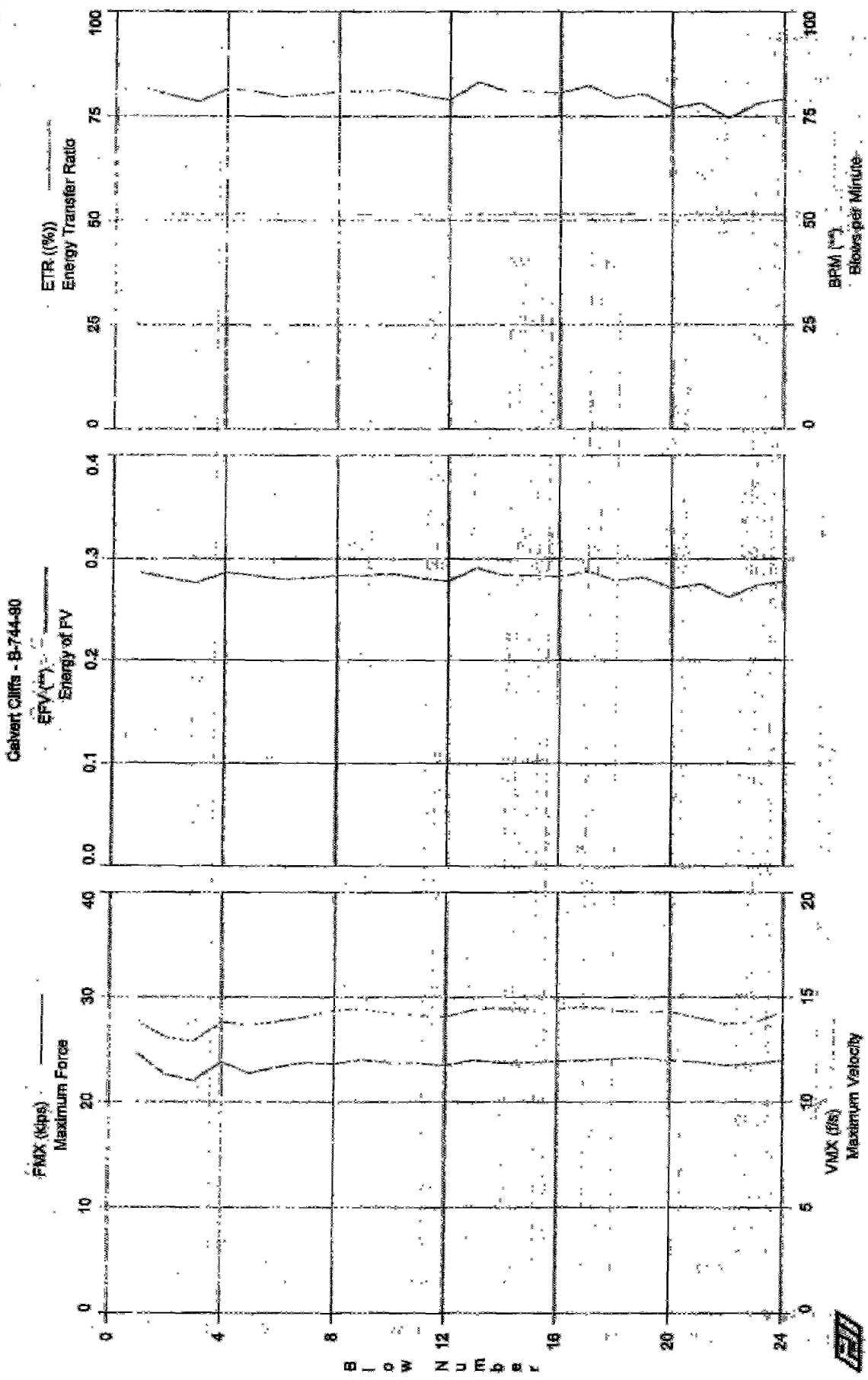
Drive : 1 minute 1 second

8:05:33 AM - 8:06:34 AM (6/21/2006) BN 1 - 54

GRL Engineers, Inc. - Case Method Results

PDPILOT Ver. 2005.2 - Printed: 18-Jul-2006

Test date: 21-Jun-2006



Calvert Cliffs - B-744-90
OP: SDW

SPT
Test date: 21-Jun-2006

AR: 1.19 in²
LE: 94.0 ft
WS: 16,807.9 f/s

SP: 0.492 k/ft³
EM: 30,000 ksi
JG: 0.70

FMX: Maximum Force
VMX: Maximum Velocity
EFV: Energy of FV
ETR: Energy Transfer Ratio
BPM: Blows per Minute
EMX: Max Transferred Energy
EF2: Energy of F²
DFN: Final Displacement
FVP: Force/Velocity proportionality

BL#	depth	TYPE	FMX	VMX	EFV	ETR	BPM	EMX	EF2	DFN	FVP
end	ft		kips	f/s	**	(%)	**	k-ft	k-ft	in	[]
1	0.00	AV1	24.69	13.89	0.286	81.8	**	0.286	0.281	0.39	0.80
2	0.00	AV1	22.60	13.09	0.280	80.0	51.4	0.280	0.271	0.62	0.77
3	0.00	AV1	22.02	12.89	0.275	78.5	51.5	0.275	0.268	0.31	0.76
4	0.00	AV1	23.80	13.80	0.286	81.6	51.4	0.286	0.267	0.90	0.77
5	0.00	AV1	22.76	13.64	0.283	81.0	51.5	0.283	0.275	0.72	0.75
6	0.00	AV1	23.35	13.84	0.279	79.8	51.5	0.279	0.277	0.56	0.73
7	0.00	AV1	23.74	14.07	0.280	80.1	51.5	0.280	0.282	0.30	0.74
8	0.00	AV1	23.64	14.36	0.283	80.9	51.6	0.283	0.282	0.22	0.73
9	0.00	AV1	24.02	14.43	0.283	80.9	51.5	0.283	0.281	0.40	0.74
10	0.00	AV1	23.72	14.21	0.285	81.3	51.6	0.285	0.278	0.36	0.75
11	0.00	AV1	23.69	14.13	0.280	80.0	51.4	0.280	0.280	0.32	0.75
12	0.00	AV1	23.45	14.05	0.277	79.0	51.6	0.277	0.275	0.28	0.72
13	0.00	AV1	23.98	14.41	0.291	83.2	51.5	0.291	0.278	0.78	0.74
14	0.00	AV1	23.73	14.46	0.284	81.1	51.5	0.284	0.275	0.46	0.72
15	0.00	AV1	23.76	14.43	0.283	81.0	51.5	0.283	0.277	0.41	0.72
16	0.00	AV1	23.87	14.41	0.282	80.6	51.5	0.282	0.279	0.12	0.73
17	0.00	AV1	23.93	14.54	0.288	82.3	51.5	0.288	0.277	0.71	0.72
18	0.00	AV1	24.11	14.36	0.278	79.3	51.4	0.278	0.274	-0.03	0.76
19	0.00	AV1	24.19	14.27	0.281	80.4	51.5	0.281	0.276	0.25	0.75
20	0.00	AV1	23.97	14.31	0.270	77.0	51.4	0.270	0.276	-0.54	0.72
21	0.00	AV1	23.80	14.00	0.274	78.2	51.5	0.274	0.273	-0.29	0.75
22	0.00	AV1	23.46	13.71	0.261	74.6	51.4	0.261	0.265	-0.28	0.78
23	0.00	AV1	23.62	13.80	0.273	78.1	51.5	0.273	0.273	-0.23	0.75
24	0.00	AV1	23.91	14.30	0.277	79.2	51.5	0.277	0.275	-0.38	0.73
Average			23.66	14.06	0.280	80.0	51.5	0.280	0.276	0.26	0.75

Total number of blows analyzed: 24

Time Summary

Drive 27 seconds

9:11:55 AM - 9:12:22 AM (6/21/2006) BN 1 - 24