

เอกสารแนบ 12
สำเนาใบอนุญาตของพ่อตบดุมการระเบิด
และเอกสารบันทึกการระเบิด

Blast Name: Blast 2 (มิลิน)

Site Name: วนอุทยานแห่งชาติ

Drilling Date: 13

Blast Date: ANFO

Type of Explosive:

Number of Holes:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

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Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Hole Depth:

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

No.9

No.10

No.11

No.12

No.13

No.14

No.15

No.16

No.17

No.18

No.19

No.20

No.21

No.22

No.23

No.24

No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

No.9

No.10

No.11

No.12

No.13

No.14

No.15

No.16

No.17

No.18

No.19

No.20

No.21

No.22

No.23

No.24

No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

No.9

No.10

No.11

No.12

No.13

No.14

No.15

No.16

No.17

No.18

No.19

No.20

No.21

No.22

No.23

No.24

No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

No.9

No.10

No.11

No.12

No.13

No.14

No.15

No.16

No.17

No.18

No.19

No.20

No.21

No.22

No.23

No.24

No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

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No.10

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No.20

No.21

No.22

No.23

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No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

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No.10

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No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

No.6

No.7

No.8

No.9

No.10

No.11

No.12

No.13

No.14

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No.24

No.25

No.26

No.27

No.28

No.29

No.30

No.31

No.32

No.33

No.34

No.35

No.36

Date: 31/5/63

Hole Size: 3.5

Stone Quantity: 4715.20

ANFO: 28

Bulk:

Powder factor: 0.30

Non - Electric (Double det):

Surface Delay:

Electric Blasting Cap:

No.1

No.2

No.3

No.4

No.5

Date: 29/5/68

in.
Ton.
Kg.
Kg.

Hole Size: 3.5
Stones Quantity: 588
ANFO: 1
Bulk: 0.10

Powder factor: kg/BCM
Non - Electric (Double det):
Surface Delay:
Electric Blasting Cap:
No.1 2 Pes. No.6 2
No.2 2 Pes. No.7 2
No.3 2 Pes. No.8 2
No.4 2 Pes. No.9 3
No.5 2 Pes. No.10 2

Blast Name: Blast 2 Windy

Site Name: 1st Toe
Drilling Date: #4
Blast Date: ANFO

Type of Explosive: ANFO
Number of Holes: 21
Hole Depth: 3.5 m. Hole. 21
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Burden: m Sub drilling m...
Spacing: m Stemming: 7
Emulsion 35x400 mm. Pes. 7
Oil: 2 L. Electric Wire: Pes.

Blast Pattern

1st Toe 21

Site Controller: _____

Date: 29/5/68

in.
Ton.
Kg.
Kg.

Hole Size: 3.5
Stones Quantity: 1920
ANFO: 4
Bulk: 0.12

Powder factor: kg/BCM
Non - Electric (Double det):
Surface Delay:
Electric Blasting Cap:
No.1 7 Pes. No.6 6
No.2 6 Pes. No.7 7
No.3 7 Pes. No.8 6
No.4 6 Pes. No.9 7
No.5 7 Pes. No.10 6

Blast Name: Blast 1 Windy

Site Name: 1st Toe
Drilling Date: #5
Blast Date: ANFO

Type of Explosive: ANFO
Number of Holes: 65
Hole Depth: 3.5 m. Hole. 65
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Hole Depth: m. Hole.
Burden: m Sub drilling m...
Spacing: m Stemming: 21
Emulsion 35x400 mm. Pes. 21
Oil: 9 L. Electric Wire: Pes.

Blast Pattern

1st Toe 65

Site Controller: _____

Site Controller:

11th Toe nintu 226 msl

Site Controller: [REDACTED]

[illegible]

Blast Pattern

rk
gr

42
44
46

E ↑

Site Controller:

MM-C35

Date: 24/5/68

Hole Size: 2.5 in.

Stone Quantity: 1620 Ton.

ANFO:	Pos.	Kg.
2		

Bulk: Kg.

D.07 kg/BCM

Pcs.

Pos.

Pcs.

No.6	Pcs.
6	

No.7	6	Pcs.
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
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90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

No.8	Pcs.
6	

No.9	6	Pcs.
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No.10	Pcs.
6	

Blast Pattern

Toe 60 η

Site Controller:

น.12/8

Blast Name: Blast 2 Ground Water

Site Name: เขาใหญ่พิเศษ

Drilling Date: #3, #4

Blast Date:

Type of Explosive: Bulk

Number of Holes;	Hole.
199	

Hole Depth:	m.	Hole.
10.5	8.4	168

Hole Depth:	m.	Hole.
3.5	15	5

Hole Depth:	m.	Hole.
10	10	10
20	20	20
30	30	30
40	40	40
50	50	50
60	60	60
70	70	70
80	80	80
90	90	90
100	100	100
110	110	110
120	120	120
130	130	130
140	140	140
150	150	150
160	160	160
170	170	170
180	180	180
190	190	190
200	200	200
210	210	210
220	220	220
230	230	230
240	240	240
250	250	250
260	260	260
270	270	270
280	280	280
290	290	290
300	300	300
310	310	310
320	320	320
330	330	330
340	340	340
350	350	350
360	360	360
370	370	370
380	380	380
390	390	390
400	400	400
410	410	410
420	420	420
430	430	430
440	440	440
450	450	450
460	460	460
470	470	470
480	480	480
490	490	490
500	500	500
510	510	510
520	520	520
530	530	530
540	540	540
550	550	550
560	560	560
570	570	570
580	580	580
590	590	590
600	600	600
610	610	610
620	620	620
630	630	630
640	640	640
650	650	650
660	660	660
670	670	670
680	680	680
690	690	690
700	700	700
710	710	710
720	720	720
730	730	730
740	740	740
750	750	750
760	760	760
770	770	770
780	780	780
790	790	790
800	800	800
810	810	810
820	820	820
830	830	830
840	840	840
850	850	850
860	860	860
870	870	870
880	880	880
890	890	890
900	900	900
910	910	910
920	920	920
930	930	930
940	940	940
950	950	950
960	960	960
970	970	970
980	980	980
990	990	990
1000	1000	1000

Depth:	m.	Hole.
100	100	100
200	200	200
300	300	300
400	400	400
500	500	500
600	600	600
700	700	700
800	800	800
900	900	900
1000	1000	1000
1100	1100	1100
1200	1200	1200
1300	1300	1300
1400	1400	1400
1500	1500	1500
1600	1600	1600
1700	1700	1700
1800	1800	1800
1900	1900	1900
2000	2000	2000
2100	2100	2100
2200	2200	2200
2300	2300	2300
2400	2400	2400
2500	2500	2500
2600	2600	2600
2700	2700	2700
2800	2800	2800
2900	2900	2900
3000	3000	3000
3100	3100	3100
3200	3200	3200
3300	3300	3300
3400	3400	3400
3500	3500	3500
3600	3600	3600
3700	3700	3700
3800	3800	3800
3900	3900	3900
4000	4000	4000
4100	4100	4100
4200	4200	4200
4300	4300	4300
4400	4400	4400
4500	4500	4500
4600	4600	4600
4700	4700	4700
4800	4800	4800
4900	4900	4900
5000	5000	5000
5100	5100	5100
5200	5200	5200
5300	5300	5300
5400	5400	5400
5500	5500	5500
5600	5600	5600
5700	5700	5700
5800	5800	5800
5900	5900	5900
6000	6000	6000
6100	6100	6100
6200	6200	6200
6300	6300	6300
6400	6400	6400
6500	6500	6500
6600	6600	6600
6700	6700	6700
6800	6800	6800
6900	6900	6900
7000	7000	7000
7100	7100	7100
7200	7200	7200
7300	7300	7300
7400	7400	7400
7500	7500	7500
7600	7600	7600
7700	7700	7700
7800	7800	7800
7900	7900	7900
8000	8000	8000
8100	8100	8100
8200	8200	8200
8300	8300	8300
8400	8400	8400
8500	8500	8500
8600	8600	8600
8700	8700	8700
8800	8800	8800
8900	8900	8900
9000	9000	9000
9100	9100	9100
9200	9200	9200
9300	9300	9300
9400	9400	9400
9500	9500	9500
9600	9600	9600
9700	9700	9700
9800	9800	9800
9900	9900	9900
10000	10000	10000

Burden:	3 m	Sub drilling	0.5 m...

Spacing: 3 m Stemming: 95 m.

Emulsion	35x400	mm.	Pcs.
		173	

Oil:	L.	Electric Wire:	Pcs.

1

Blast Pattern

[illegible]

3 3
 = =
 4 5
 3 3 3
 = = =
 1 2 3

Top 157

32

Site Controller:

Date: 23/12/168

(Jackhammer)

Blast Name: ลานปลูกหญ้า

Site Name: วนอุทยานฯ
 Drilling Date: 22/05/68
 Blast Date: 23/05/68
 Type of Explosive: ANFO

Number of Holes: 10 Hole.
 Hole Depth: 3 m. 10 Hole.
 Hole Depth: m. m. Hole.
 Hole Depth: m. m. Hole.
 Hole Depth: m. m. Hole.
 H's Depth: m. m. Hole.
 Burden: 1.5 m Sub drilling 0.5 m...
 Spacing: 1.5 m Stemming: 2 m.
 Emulsion 35x400 mm. 2 Pes.
 Oil: - L. Electric Wire: Pes.
 Powder factor : kg/BCM
 Non - Electric (Double det): Pes.
 Surface Delay: Pes.
 Electric Blasting Cap: 10 Pes.
 No.1 Pes. No.6
 No.2 Pes. No.7
 No.3 Pes. No.8
 No.4 Pes. No.9
 No.5 10 Pes. No.10

Blast Pattern

วนปลูก Jackhammer 108

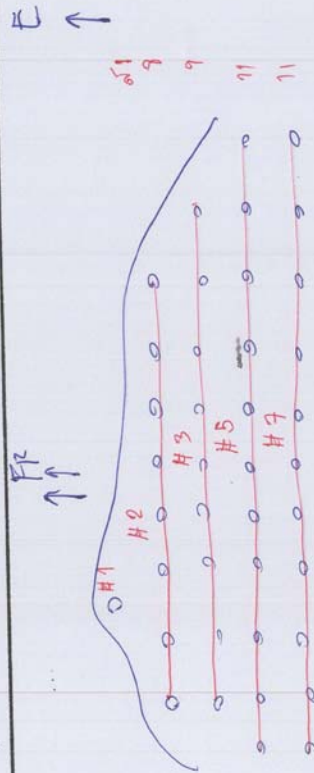
Site Controller: _____

Blast Name: Blast 2 (วนปลูกหญ้า)

Site Name: วนอุทยานฯ วนปลูก 85 msl
 Drilling Date: 16/11
 Blast Date: ANFO
 Type of Explosive: ANFO

Number of Holes: 40 Hole.
 Hole Depth: 4.5 m. 40 Hole.
 Hole Depth: m. m. Hole.
 Hole Depth: m. m. Hole.
 H's Depth: m. m. Hole.
 Burden: 9.5 m Sub drilling 0.5 m...
 Spacing: 3 m Stemming: 4.5 m.
 Emulsion 35x400 mm. 40 Pes.
 Oil: 92 L. Electric Wire: Pes.
 Powder factor : kg/BCM
 Non - Electric (Double det): Pes.
 Surface Delay: 40 Pes.
 Electric Blasting Cap: 40 Pes.
 No.1 1 Pes. No.6
 No.2 9 Pes. No.7
 No.3 9 Pes. No.8
 No.4 11 Pes. No.9
 No.5 11 Pes. No.10

Blast Pattern



Site Controller: _____

Blast Name: ၁၇၆၆၀၅၄၄ Date: 23/01/68

Site Name: ၁၇၆၆၀၅၄၄ Hole Size: 3.5 in.

Drilling Date: 20-23/01/68 Stone Quantity: 12993.75 Ton.

Blast Date: 23/01/68 ANFO: - Pes. - Kg. -

Type of Explosive: Bulk Bulk: 3025 Kg.

Number of Holes: 55 Powder factor: 0.59 kg/BCM

Hole Depth: 10.5 m. 55 Non - Electric (Double dut): 55 Pes.

Hole Depth: m. Surface Delay: 4 Pes.

Hole Depth: m. Electric Blasting Cap: 1 Pes.

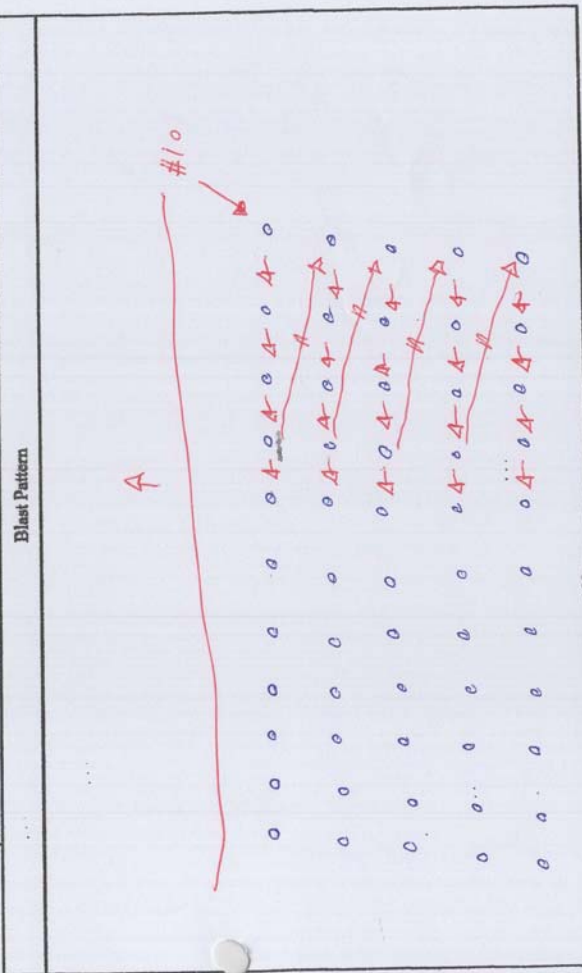
Hole Depth: m. No.1 15 Pes. No.6

Burden: 3 m Sub drilling 0.5 m. No.2 Pes. No.7

Spacing: 3 m Stemming: 3.5 m. No.3 Pes. No.8

Emulsion 35x400 mm. 110 Pes. No.4 Pes. No.9

Oil: - L. Electric Wire: 1 Pes. No.5 Pes. No.10



Site Controller:

Blast Name: ၁၇၆၆၀၅၄၄ Date: 23/05/68

Site Name: ၁၇၆၆၀၅၄၄ Hole Size: 3.5 in.

Drilling Date: 22/5/68 Stone Quantity: 551.575 Ton.

Blast Date: 23/5/68 ANFO: 23 Pes. 575 Kg.

Type of Explosive: ANFO Bulk: - Kg. -

Number of Holes: 47 Powder factor: 0.26 kg/BCM

Hole Depth: 5.25 m. 47 Non - Electric (Double dut): - Pes.

Hole Depth: m. Surface Delay: - Pes.

Hole Depth: m. Electric Blasting Cap: 47 Pes.

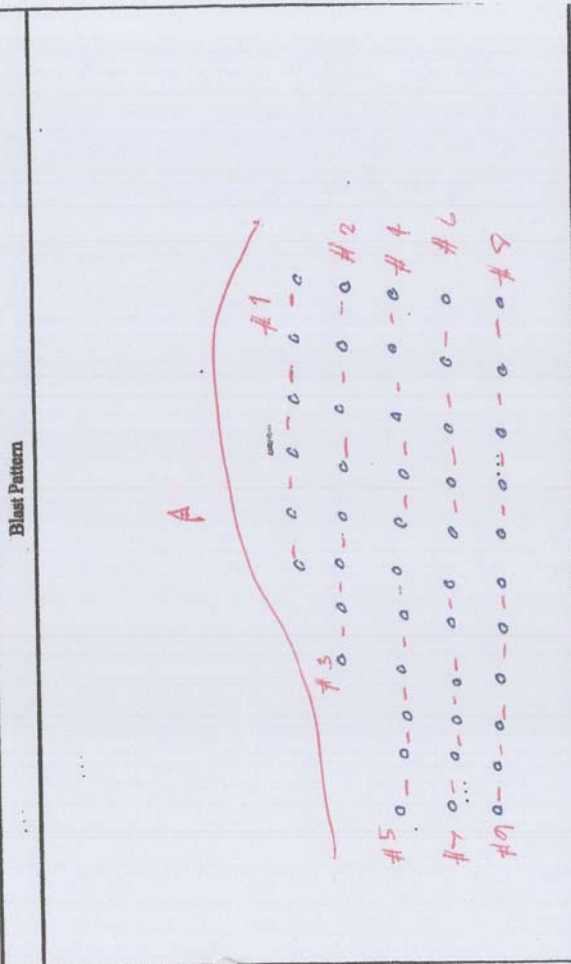
Hole Depth: m. No.1 6 Pes. No.6 5 Pes.

Burden: 3 m Sub drilling 0.5 m. No.2 4 Pes. No.7 6 Pes.

Spacing: 3 m Stemming: 3.2 m. No.3 4 Pes. No.8 5 Pes.

Emulsion 35x400 mm. 24 Pes. No.4 5 Pes. No.9 6 Pes.

Oil: 46 L. Electric Wire: 6 Pes. No.5 6 Pes. No.10



Site Controller:

Date: 21/5/60

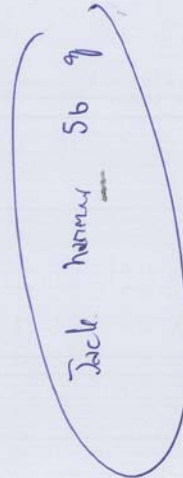
Blast Name: Blast 1

Site Name: Jack Hammer
 Drilling Date: 252
 Blast Date: ANFO
 Type of Explosive: ANFO

Number of Holes: 56
 Hole Depth: 3 m
 Hole Depth: 2 m
 Hole Depth: 36
 Hole Depth: 56
 Hole Depth: 6
 Burden: 3 m
 Spacing: 3 m
 Emulsion: 35x400 mm
 Oil: 6 L
 Electric Wire: 3

Powder factor: 0.70
 Non - Electric (Double det):
 Surface Delay: 56
 Electric Blasting Cap: 56
 No.1 6
 No.2 6
 No.3 6
 No.4 6
 No.5 6
 No.6 6
 No.7 5
 No.8 5
 No.9 5
 No.10 5

Blast Pattern



Site Controller: [Redacted]

Blast Name: 22/5/60

Date: 22/5/60

Site Name: 22/5/60
 Drilling Date: 22/5/60
 Blast Date: 22/5/60
 Type of Explosive: ANFO

Number of Holes: 45
 Hole Depth: 3.5 m
 Hole Depth: 5.25 m
 Hole Depth: 25
 Hole Depth: 45
 Hole Depth: 45
 Burden: 3 m
 Spacing: 3 m
 Emulsion: 35x400 mm
 Oil: 22 L
 Electric Wire: 15

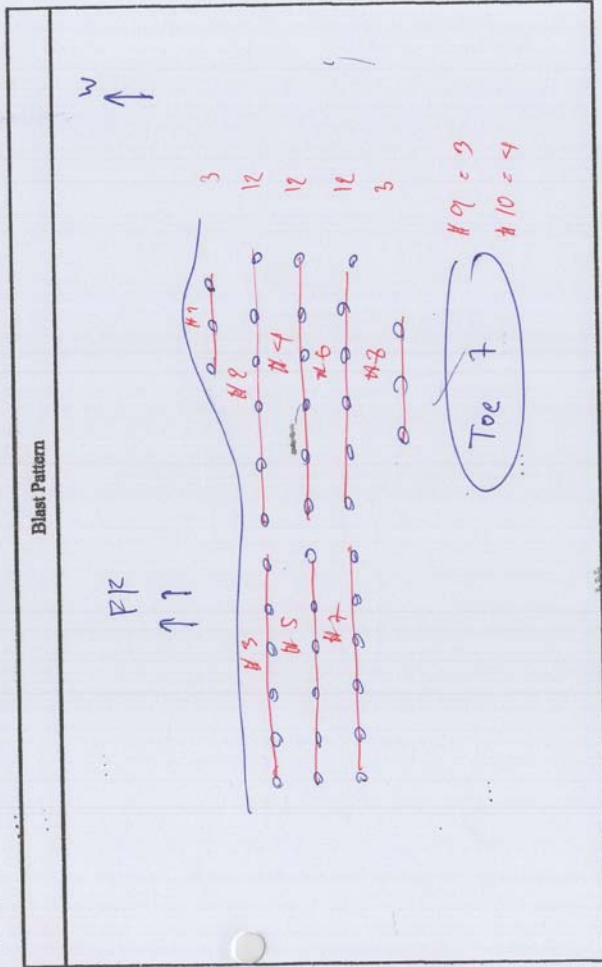
Powder factor: 0.159
 Non - Electric (Double det):
 Surface Delay: 45
 Electric Blasting Cap: 45
 No.1 7
 No.2 6
 No.3 4
 No.4 4
 No.5 4
 No.6 4
 No.7 4
 No.8 4
 No.9 4
 No.10 4

Blast Pattern



Site Controller: [Redacted]

Blast Name: <u>Blast 2</u>		Site Name: <u>พื้นที่ทำเหมือง</u>		Date: <u>21/5/68</u>	in.
Drilling Date: <u>13, 14, 16</u>		Stone Quantity: <u>4463.90</u>		Hole Size: <u>3.5</u>	Ton.
Blast Date: <u>ANYO</u>		ANFO: <u>62</u>		Pcs.	Kg.
Type of Explosive: <u>ANYO</u>		Bulk:		Pcs.	Kg.
Number of Holes: <u>49</u>		Powder factor: <u>0.31</u>		kg/BCM	
Hole. <u>49</u>	Hole. <u>42</u>	Non - Electric (Double det):		Pcs.	
Hole. <u>7</u>	Hole. <u>2</u>	Surface Delay:		Pcs.	
Hole.	Hole.	Electric Blasting Cap: <u>49</u>		Pcs.	
Hole.	Hole.	No.1 <u>3</u>	Pcs. No.6 <u>6</u>	Pcs.	
Burden: <u>3</u> m	Sub drilling <u>0.5</u> m.	No.2 <u>6</u>	Pcs. No.7 <u>6</u>	Pcs.	
Spacing: <u>3.3</u> m	Stemming: <u>3</u> m.	No.3 <u>6</u>	Pcs. No.8 <u>3</u>	Pcs.	
Emulsion <u>35x400</u> mm.	<u>46</u> Pcs.	No.4 <u>6</u>	Pcs. No.9 <u>3</u>	Pcs.	
Oil: <u>124</u> L.	Electric Wire: <u>4</u>	No.5 <u>6</u>	Pcs. No.10 <u>4</u>	Pcs.	



Site Controller: _____

Site Controller:

Blast Name:
 Site Name:
 Drilling Date:
 Blast Date:

Date: 19/5/60
 Hole Size: 3.5 in.
 Stone Quantity: 4410 Ton.
 ANFO: 51 Pcs. 1275 Kg.
 Bulk: Kg.

ANFO

Type of Explosive:	AN P U		Bulk:
Number of Holes:	78		
Hole Depth:	7 m.	Hole. 60	Powder factor : 0.29 kg/BCM
Hole Depth:	3.5 m.	Hole. 6	Pes. Non - Electric (Double dot)
Hole Depth:			Pes. Surface Delay:
Hole Depth:			Pes. Electric Blasting Cap: 78
Hole Depth:			Pes. No.1 6
Burden:	3 m	Sub drilling 0.5 m.	Pes. No.6 14
Spacing:	3.3 m	Stemming: 2.7 m.	Pes. No.7 12
Emulsion	35x400 mm.	66	Pes. No.8 10
Oil:	102 L.	Electric Wire:	Pes. No.4 8
			Pes. No.5 7
			Pes. No.10 9

[illegible]

Site Controller: [REDACTED]

น.12/14

Blast Name: ถ่านหิน
 Site Name: เขาหิน
 Drilling Date: 19/5/68
 Blast Date: 20/5/68
 Type of Explosive: ANFO

Type of Explosive:	HN 10	
Number of Holes:	38	Hole.
Hole Depth:	3.5 m. 15	Hole.
Hole Depth:	6 m. 23	Hole.
Hole Depth:	m.	Hole.
Hole Depth:	m.	Hole.
Burden:	3 m Sub drilling 0.5 m.	
Spacing:	3 m Stemming: 3.2 m.	
Emulsion	35x400 mm. 28	
Oil:	22 L.	Electric Wire:

T

3 2 0

4 0 5 0

5 0 6 0 8 0

7 0 9 0

...

Site Controller:

Date: 2015/68	Hole Size: 3.5	in.
	Stone Quantity: 4286.25	Ton.
ANFO: 11	Pes. 275	Kg.
		Kg.

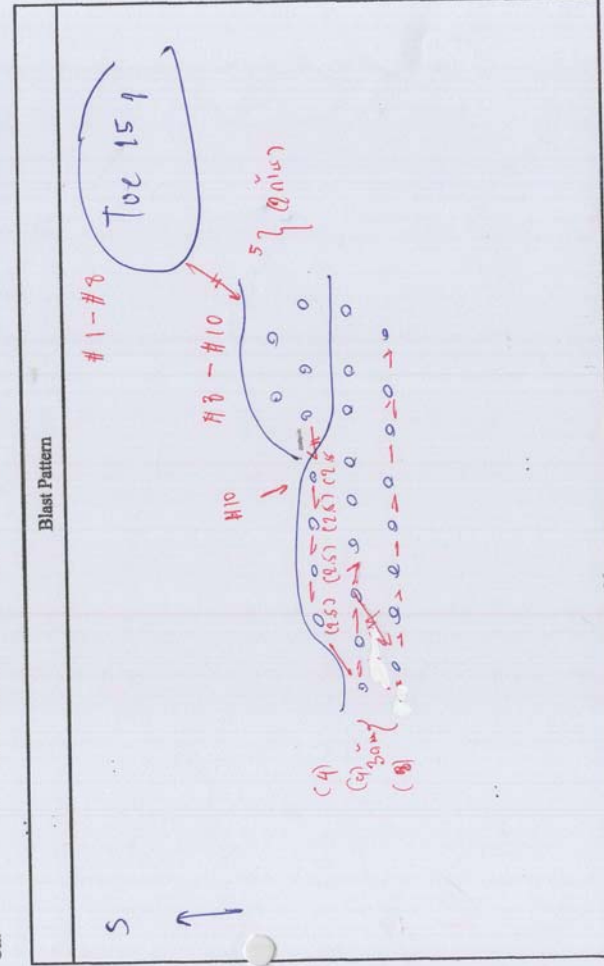
Bulk:	kg/BCM	Pcs.	Pcs.	Pcs.	Pcs.	Pcs.	Pcs.	Pcs.
5	-	-	38	No.6 4	No.7 5	No.8 4	No.9 4	No.10 2

1
2 4 15

1000

Blast Name: Blast 1 (Toe 33)
Site Name: เจ้าใหญ่
Drilling Date: 12/5/18
Blast Date: 12/5/18
Type of Explosive: ANFO
Date: 13/5/18
Hole Size: 3 in.
Stone Quantity: 445.50 Ton.
ANFO: 2 Pes.
Bulk: 0.25 kg/BCM

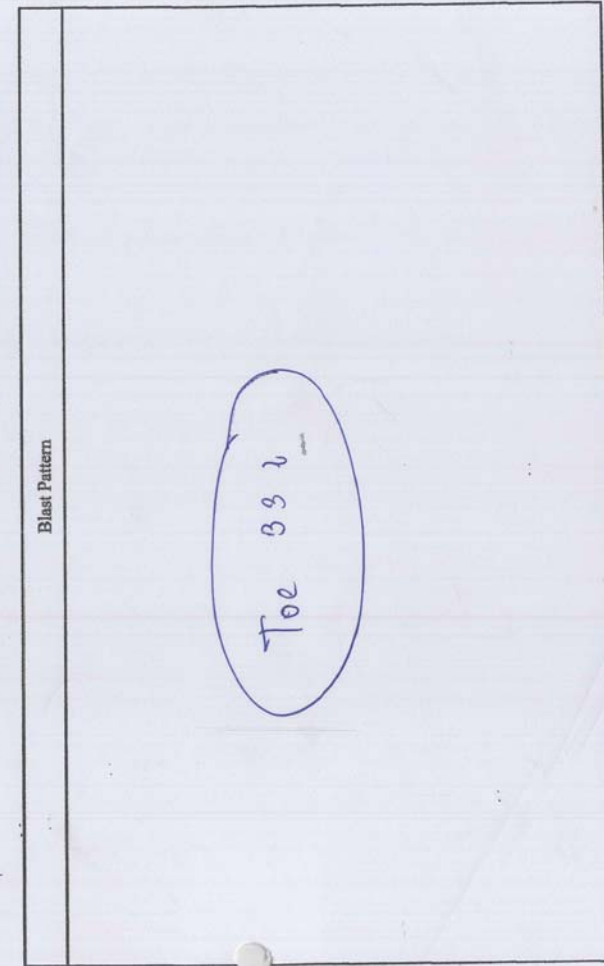
Number of Holes: 33
Hole Depth: 3 m.
Hole Depth: 3 m.
Hole Depth: 3 m.
Hole Depth: 3 m.
Burden: 3 m.
Spacing: 3 m.
Emulsion: 35x400 mm.
Oil: 4 L.
Electric Wire: 4 Pes.
Powder factor: 0.25 kg/BCM
Non - Electric (Double det): 33 Pes.
Surface Delay: 33 Pes.
Electric Blasting Cap: 33 Pes.
No.1 3 Pes. No.6 3 Pes.
No.2 3 Pes. No.7 3 Pes.
No.3 3 Pes. No.8 3 Pes.
No.4 3 Pes. No.9 3 Pes.
No.5 3 Pes. No.10 3 Pes.



Site Controller: _____

Blast Name: Blast 1 (Toe 33)
Site Name: เจ้าใหญ่
Drilling Date: 12/5/18
Blast Date: 12/5/18
Type of Explosive: ANFO
Date: 13/5/18
Hole Size: 3 in.
Stone Quantity: 445.50 Ton.
ANFO: 2 Pes.
Bulk: 0.25 kg/BCM

Number of Holes: 33
Hole Depth: 3 m.
Hole Depth: 3 m.
Hole Depth: 3 m.
Hole Depth: 3 m.
Burden: 3 m.
Spacing: 3 m.
Emulsion: 35x400 mm.
Oil: 4 L.
Electric Wire: 4 Pes.
Powder factor: 0.25 kg/BCM
Non - Electric (Double det): 33 Pes.
Surface Delay: 33 Pes.
Electric Blasting Cap: 33 Pes.
No.1 3 Pes. No.6 3 Pes.
No.2 3 Pes. No.7 3 Pes.
No.3 3 Pes. No.8 3 Pes.
No.4 3 Pes. No.9 3 Pes.
No.5 3 Pes. No.10 3 Pes.



Site Controller: _____

Blast Name: Blast 1 Date: 12/5/68

Site Name: เจ้าใหญ่พูน Hole Size: 3.5' in.

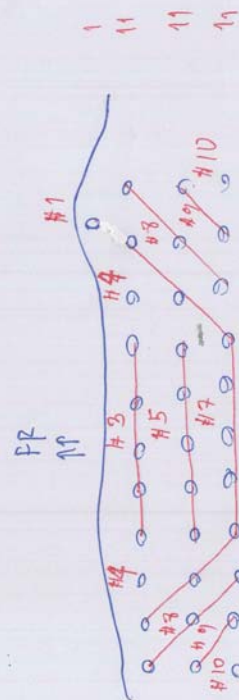
Drilling Date: 4/5 Stone Quantity: 996 Ton.

Blast Date: 4998 ANFO: 73 Pes. Kg.

Type of Explosive: Bulk Bulk: 0.38 kg/BCM

		Hole.	Powder factor :		
Number of Holes:	34	Hole.	Non - Electric (Double det):		Pes.
Hole Depth:	14 m	34	Surface Delay:		Pes.
Hole Depth:	m		Electric Blasting Cap:	34	Pes.
Hole Depth:	m		No.1	1	Pes. No.6
Burden:	3 m	Sub drilling 0.5 m	No.2	9	Pes. No.7
Spacing:	3.5 m	Stemming: 3 m	No.3	5	Pes. No.8
Emulsion	35x400 mm.	68	No.4	2	Pes. No.9
Oil:	146 L	Electric Wire:	No.5	5	Pes. No.10

Blast Pattern



Site Controller: _____

Blast Name: ลานเล็งจ๊อต (จ๊อ) Date: 13/5/2568

Site Name: เจ้าใหญ่พูน Hole Size: 3.5 in.

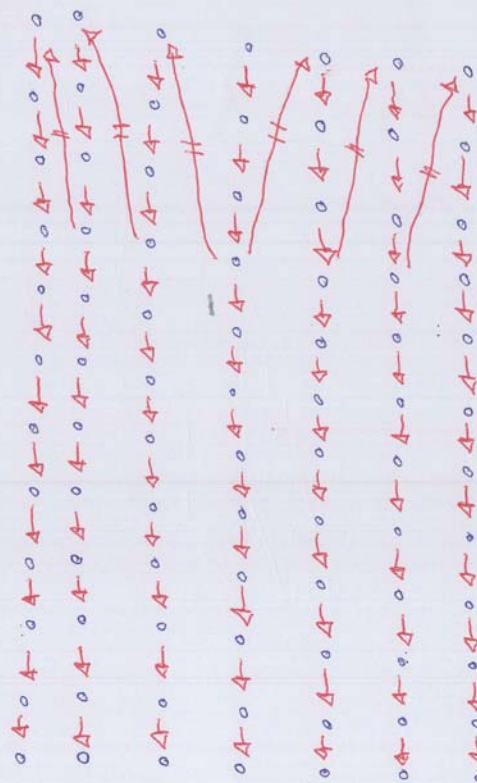
Drilling Date: 12-13/5/2568 (#3, #4, #5) Stone Quantity: 19845 Ton.

Blast Date: 13/5/2568 ANFO: - Pes. Kg.

Type of Explosive: Bulk Bulk: - kg/BCM

		Hole.	Powder factor :		
Number of Holes:	84	Hole.	Non - Electric (Double det):	84	Pes.
Hole Depth:	10.5 m	84	Surface Delay:	6	Pes.
Hole Depth:	m		Electric Blasting Cap:	1	Pes.
Hole Depth:	m		No.1	1	Pes. No.6
Burden:	3 m	Sub drilling 0.5 m	No.2		Pes. No.7
Spacing:	3 m	Stemming: 3.7 m	No.3		Pes. No.8
Emulsion	35x400 mm.	168	No.4		Pes. No.9
Oil:	- L	Electric Wire:	No.5		Pes. No.10

Blast Pattern



Site Controller: _____

Blast Name: Blast 1

Date: 11 / 5 / 68

Site Name: การขุดเจาะ

Hole Size: 3" in.

Stone Quantity: 225 Ton.

ANFO: 1 Pcs.

Bulk: 0.12 kg/BCM

Blast Date:

Type of Explosive:

Number of Holes:	Hole.	Powder factor:	kg/BCM
Hole Depth: <u>3</u> m.	<u>5</u>	Non - Electric (Double det):	Pcs.
Hole Depth: <u>2</u> m.	<u>45</u>	Surface Delay:	Pcs.
Hole Depth: <u> </u> m.	<u> </u>	Electric Blasting Cap:	Pcs.
Hole Depth: <u> </u> m.	<u> </u>	No.1	Pcs. No.6
Burden: <u> </u> m	<u> </u>	No.2	Pcs. No.7
Spacing: <u> </u> m	<u> </u>	No.3	Pcs. No.8
Emulsion <u> </u> 35x400 mm.	<u>2</u>	No.4	Pcs. No.9
Oil: <u>2</u> L.	<u> </u>	No.5	Pcs. No.10

Blast Pattern

Back corner 501

Site Controller:

Blast Name: Blast 2 (นิคม)

Date: 12 / 5 / 68

Site Name: การขุดเจาะ

Hole Size: 3" in.

Stone Quantity: 2,727.05 Ton.

ANFO: 34 Pcs.

Bulk: kg/BCM

Blast Date:

Type of Explosive:

Number of Holes:	Hole.	Powder factor:	kg/BCM
Hole Depth: <u>10.5</u> m.	<u>42</u>	Non - Electric (Double det):	Pcs.
Hole Depth: <u>4.5</u> m.	<u>17</u>	Surface Delay:	Pcs.
Hole Depth: <u> </u> m.	<u> </u>	Electric Blasting Cap:	Pcs.
Hole Depth: <u> </u> m.	<u> </u>	No.1	Pcs. No.6
Burden: <u>3</u> m	<u> </u>	No.2	Pcs. No.7
Spacing: <u>3.3</u> m	<u> </u>	No.3	Pcs. No.8
Emulsion <u> </u> 35x400 mm.	<u>54</u>	No.4	Pcs. No.9
Oil: <u>63</u> L.	<u> </u>	No.5	Pcs. No.10

Blast Pattern

Toe 181

3

7

7

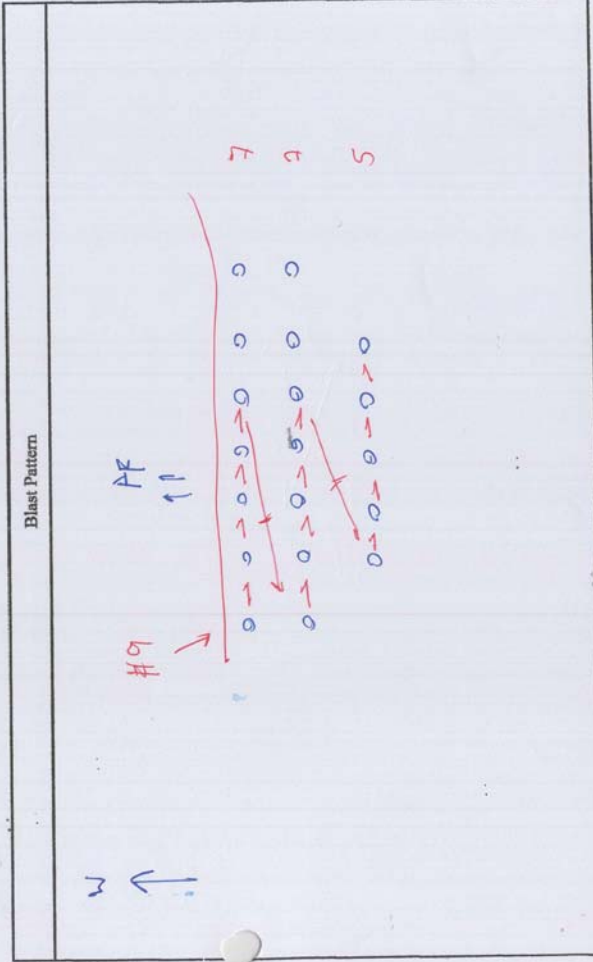
7

Site Controller:

Blast Name: Blast 2 (nilanj) Date: 10/5/68

Site Name: မြန်မာ့တပ်မတော် Hole Size: 3.5 in.
 Drilling Date: #3, #4 Stone Quantity: 2999 Ton.
 ANFO: 13 Kg.
 Bulk: 1902.00 Kg.
 Type of Explosive: ANFO

		Hole.	Powder factor :	kg/BCM
Number of Holes:	<u>19</u>		<u>0.28</u>	
Hole Depth:	<u>7</u> m.	<u>19</u>	Non - Electric (Double det):	Pcs.
Hole Depth:	<u>3</u> m.		Surface Delay:	Pcs.
Hole Depth:	<u>3</u> m.		Electric Blasting Cap:	Pcs.
Hole Depth:	<u>3</u> m.		No.1	Pcs. No.6
Burden:	<u>3</u> m	Sub drilling <u>0.5</u> m.	No.2	Pcs. No.7
Spacing:	<u>3</u> m	Stemming: <u>3.5</u> m.	No.3	Pcs. No.8
Emulsion	<u>35x400</u> mm.	<u>19</u>	No.4	Pcs. No.9
Oil:	<u>25</u> L.	Electric Wire:	No.5	Pcs. No.10

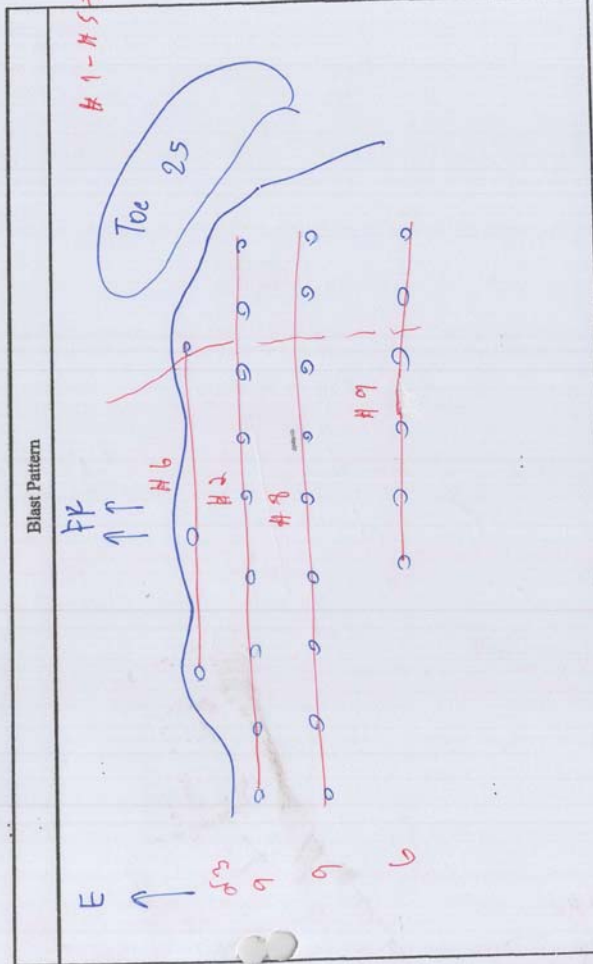


Site Controller: _____

Blast Name: Blast 3 Date: 10/5/68

Site Name: မြန်မာ့တပ်မတော် Hole Size: 3 in.
 Drilling Date: #4, #5 Stone Quantity: 5397.80 Ton.
 ANFO: 35 Kg.
 Bulk: 2699.90 Kg.
 Type of Explosive: ANFO

		Hole.	Powder factor :	kg/BCM
Number of Holes:	<u>52</u>		<u>0.25</u>	
Hole Depth:	<u>10.5</u> m.	<u>19</u>	Non - Electric (Double det):	Pcs.
Hole Depth:	<u>7</u> m.	<u>8</u>	Surface Delay:	Pcs.
Hole Depth:	<u>3.5</u> m.	<u>25</u>	Electric Blasting Cap:	Pcs.
Hole Depth:	<u>3</u> m.		No.1	Pcs. No.6
Burden:	<u>3</u> m	Sub drilling <u>0.5</u> m.	No.2	Pcs. No.7
Spacing:	<u>3</u> m	Stemming: <u>3</u> m.	No.3	Pcs. No.8
Emulsion	<u>35x400</u> mm.	<u>45</u>	No.4	Pcs. No.9
Oil:	<u>70</u> L.	Electric Wire:	No.5	Pcs. No.10



Site Controller: _____

Blast Name: Block 1 Date: 7/5/68

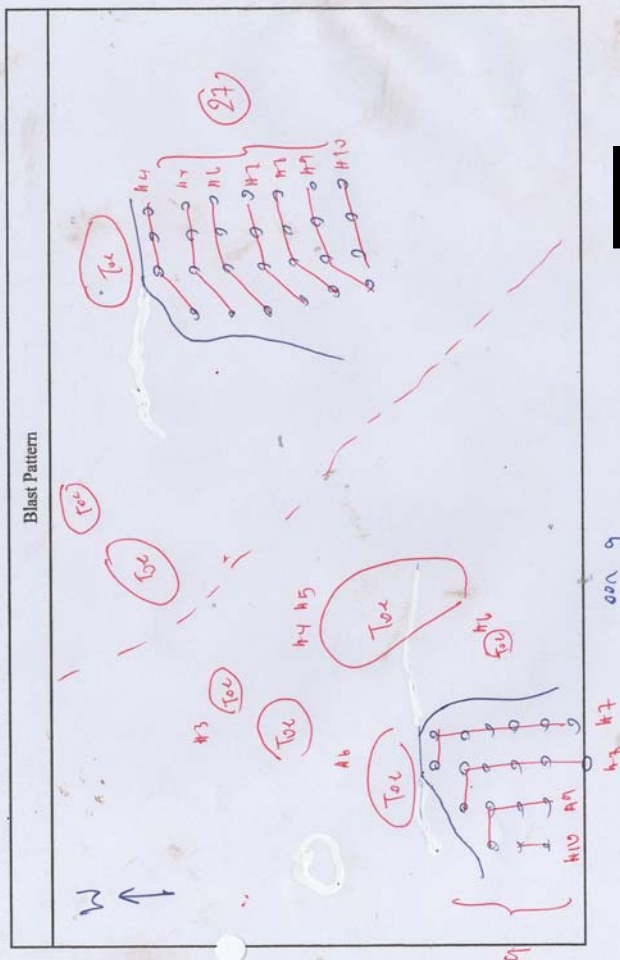
Site Name: เขาใหญ่ (เขาหินซ้อน) Hole Size: 9.5 in.

Drilling Date: 4/5 Stone Quantity: 7002 Ton.

Blast Date: 3901 ANFO: 909 Pes. Kg.

Type of Explosive: ANFO Bulk: 0.26 kg/BCM

Number of Holes	Hole	Powder factor	Non - Electric (Double det)	Pes.
11	46	0.26		
Hole Depth: 7 m	46			
Hole Depth: 3.5 m	65			
Hole Depth:				
Hole Depth:				
Hole Depth:				
Burden: 3 m	Sub drilling 0.5 m			
Spacing: 3.5 m	Stemming: 3 m			
Emulsion 35x400 mm	67			
Oil: L	Electric Wire:			



Site Controller: นาย บัณฑิต

Blast Name: Block 2 Date: 7/10/2569

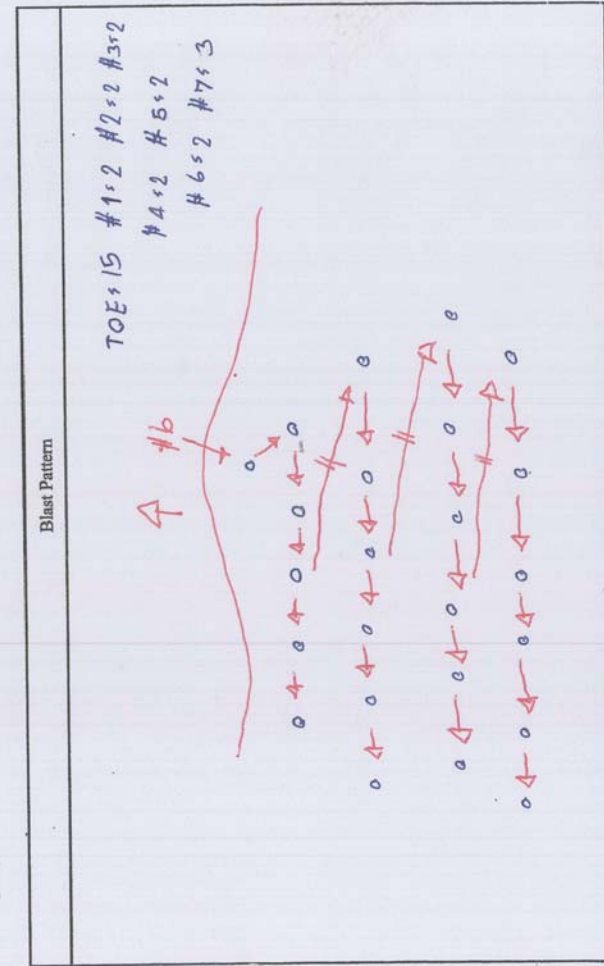
Site Name: เขาใหญ่ (เขาหินซ้อน) Hole Size: 3.5 in.

Drilling Date: 6-7/10/69 Stone Quantity: 6237 Ton.

Blast Date: 7/10/69 ANFO: 27 Pes. 645 Kg.

Type of Explosive: ANFO Bulk: - Kg.

Number of Holes	Hole	Powder factor	Non - Electric (Double det)	Pes.
39	15	0.28		
Hole Depth: 3.5 m	15			
Hole Depth: 10.5 m	24			
Hole Depth:				
Hole Depth:				
Hole Depth:				
Burden: 3 m	Sub drilling 0.5 m			
Spacing: 3.3 m	Stemming: 3.2 m			
Emulsion 35x400 mm	51			
Oil: 54 L	Electric Wire:			



Site Controller: นาย บัณฑิต

Blast Name: Blast 3 (10/14) * 10" Blast 10/5/5/68 Date: 6/5/68

Site Name: 101100/100 (10/14) Hole Size: 3.5 in.

Drilling Date: #3, #4 Stone Quantity: 885 Ton.

Blast Date: ANFO ANFO: 11 Pes.

Type of Explosive: ANFO Bulk: 0.92 kg/BCM

Number of Holes: 21 Hole. 13 Pes.

Hole Depth: 7 m. 13 Hole. 13 Pes.

Hole Depth: 3.5 m. 8 Hole. 4 Pes.

Hole Depth: 3 m. 3 Hole. 3 Pes.

Load: 3 m Sub drilling 0.5 m. 3 Pes.

Spacing: 3 m Stemming: 2.7 m. 4 Pes.

Emulsion 35x400 mm. 17 Pes.

Oil: 22 L. Electric Wire: 2 Pes.

No.1 Pes. No.6 3 Pes.

No.2 Pes. No.7 4 Pes.

No.3 Pes. No.8 4 Pes.

No.4 Pes. No.9 2 Pes.

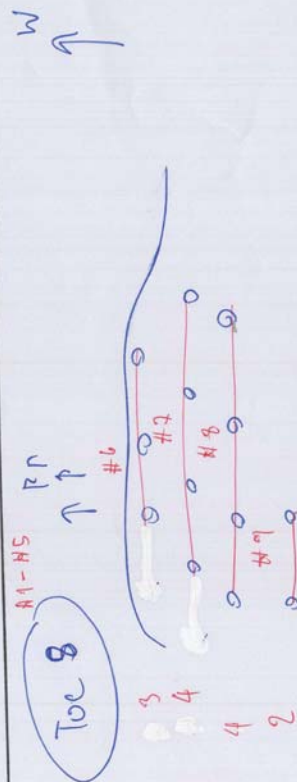
No.5 Pes. No.10 2 Pes.

Powder factor: 21 Non - Electric (Double det): 13 Pes.

Surface Delay: 21 Surface Delay: 4 Pes.

Electric Blasting Cap: 1 Electric Blasting Cap: 3 Pes.

Blast Pattern



Site Controller: _____

Blast Name: Blast 1 (10/14) Date: 6/5/68

Site Name: 101100/100 (10/14) Hole Size: 3.5 in.

Drilling Date: #3, #4 Stone Quantity: 3138.50 Ton.

Blast Date: ANFO ANFO: 18 Pes.

Type of Explosive: ANFO Bulk: 0.90 kg/BCM

Number of Holes: 30 Hole. 26 Pes.

Hole Depth: 10.5 m. 13 Hole. 26 Pes.

Hole Depth: 3.5 m. 17 Hole. 5 Pes.

Hole Depth: 3 m. 3 Hole. 3 Pes.

Load: 3 m Sub drilling 0.5 m. 4 Pes.

Spacing: 3.5 m Stemming: 3.3 m. 4 Pes.

Emulsion 35x400 mm. 31 Pes.

Oil: 36 L. Electric Wire: 2 Pes.

No.1 Pes. No.6 9 Pes.

No.2 Pes. No.7 4 Pes.

No.3 Pes. No.8 4 Pes.

No.4 Pes. No.9 4 Pes.

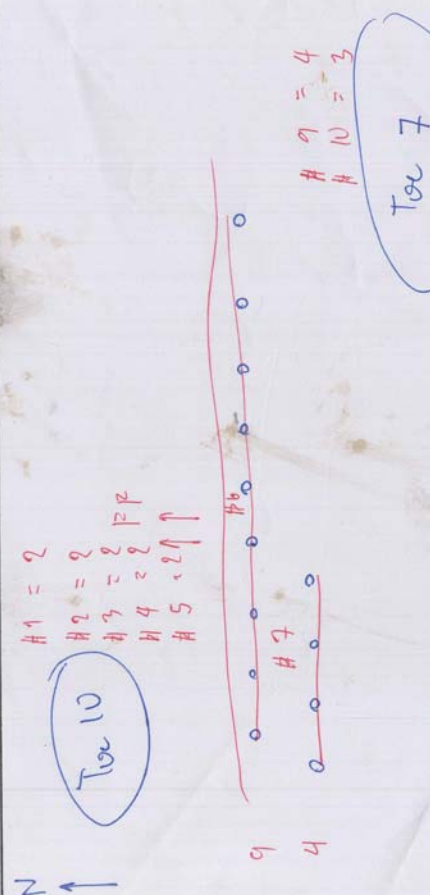
No.5 Pes. No.10 3 Pes.

Powder factor: 21 Non - Electric (Double det): 13 Pes.

Surface Delay: 21 Surface Delay: 4 Pes.

Electric Blasting Cap: 1 Electric Blasting Cap: 3 Pes.

Blast Pattern



Site Controller: _____

Blast Name: <u>Blast 2 (100000)</u>		Date: <u>6/5/68</u>
Site Name: <u>เขาใหญ่พลาญ</u>	Hole Size: <u>3</u>	in.
Drilling Date: <u>6/1/68</u>	Stone Quantity: <u>1732.50</u>	Ton.
Blast Date: <u>Aug 11</u>	ANFO: <u>11</u>	Pcs. Kg.
		Bulk: Kg.

Type of Explosive:		ANFO		Bulk:	
Number of Holes:	11	Powder factor :	0.33	kg/BCM	
Hole Depth:	10.5 m.	Non - Electric (Double det):		Pes.	
Hole Depth:	m.	Surface Delay:		Pes.	
Hole Depth:	m.	Electric Blasting Cap:	11	Pes.	
Hole Depth:	m.	No.1	Pes. No.6	Pes.	
Carden:	2.5 m	No.2	Pes. No.7	Pes.	5
Spacing:	3 m	No.3	Pes. No.8	Pes.	
Emulsion	35x400 mm.	No.4	Pes. No.9	Pes.	
Oil:	29 L.	No.5	Pes. No.10	Pes.	6
Electric Wire:					

Blast Pattern

The diagram illustrates a blast pattern with two rows of holes. The top row consists of 7 holes, with the label 'H 5' written above the 4th hole from the left. The bottom row also consists of 7 holes, with the label 'H 7' written above the 4th hole from the left. Arrows indicate the direction of wind and pressure. A large arrow labeled 'W' points from the left, indicating wind direction. Two smaller arrows labeled 'P' point from the right, indicating pressure direction.

Site Controller:

Blast Name: <u>Blast 1 (Jack Hammer)</u>	Date: <u>5 / 5 / 68</u>
Site Name: <u>เขาใหญ่พัฒนา</u>	Hole Size: <u>3.2</u>
Drilling Date: <u>Air man (London)</u>	Stone Quantity: <u>292.50</u>
Blast Date: <u>ANFO</u>	ANFO: <u>1</u>
	Pes. _____
	Bulk: _____
	in. _____
	Ton. _____
	Kg. _____
	Kg. _____

Type of Explosive:	<u>ANFO</u>						Bulk:	Kg.
Number of Holes:	<u>65</u>						Powder factor :	kg/BCM
Hole Depth:	<u>3</u>	m.	<u>26</u>	Hole.	Non - Electric (Double det):			Pes.
Hole Depth:	<u>2</u>	m.	<u>99</u>	Hole.	Surface Delay:			Pes.
Hole Depth:		m.		Hole.	Electric Blasting Cap:			Pes.
Hole Depth:		m.		Hole.	No.1	<u>7</u>	Pes. No.6	Pes.
Burden:	m		Sub drilling	m.	No.2	<u>7</u>	Pes. No.7	Pes.
Spacing:	m		Sterming:	m.	No.3	<u>6</u>	Pes. No.8	Pes.
Emulsion	35x400		<u>mm.</u>	Pes.	No.4	<u>6</u>	Pes. No.9	Pes.
Oil:	<u>2</u>	L.	Electric Wire:	Pes.	No.5	<u>6</u>	Pes. No.10	Pes.

Blast Pattern

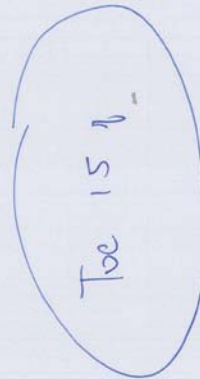
Jack banner 65 y

Site Controller:

Blast Name: Blast 2 (มิลล์ 2)
Site Name: ท่าเรือ (ท่าเรือ)
Drilling Date: # 4 (วันศุกร์)
Blast Date: ANFO
Type of Explosive: ANFO

Date: 4 / 5 / 68
Hole Size: 3.5 in.
Stone Quantity: 240 Ton.
ANFO: 1 Pcs.
Bulk: 0.23 kg/BCM
Powder factor: 0.23
Non - Electric (Double det):
Surface Delay:
Electric Blasting Cap:
No.1 Pcs. No.6 4
No.2 Pcs. No.7 3
No.3 Pcs. No.8 3
No.4 Pcs. No.9 3
No.5 Pcs. No.10 5
Number of Holes: 15 Hole.
Hole Depth: 3.5 m. Hole. 15
Hole Depth: 3.5 m. Hole.
Hole Depth: 3.5 m. Hole.
Hole Depth: 3.5 m. Hole.
Burden: 3 m Sub drilling 5 m.
Spacing: 3 m Stemming: 5 m.
Emulsion 35x400 mm. 5 Pcs.
Oil: 2 L. Electric Wire: 5 Pcs.

Blast Pattern



Site Controller: _____

u.12/29

Blast Name: Blast 1 (มิลล์ 1)
Site Name: ท่าเรือ (ท่าเรือ)
Drilling Date: # 4
Blast Date: ANFO
Type of Explosive: ANFO

Date: 4 / 5 / 68
Hole Size: 3.5 in.
Stone Quantity: 2079 Ton.
ANFO: 12 Pcs.
Bulk: 0.30 kg/BCM
Powder factor: 0.30
Non - Electric (Double det):
Surface Delay:
Electric Blasting Cap:
No.1 Pcs. No.6 3
No.2 Pcs. No.7 3
No.3 Pcs. No.8 3
No.4 Pcs. No.9 3
No.5 Pcs. No.10 3
Number of Holes: 18 Hole.
Hole Depth: 7 m. Hole. 6
Hole Depth: 5.25 m. Hole. 12
Hole Depth: 5.25 m. Hole.
Hole Depth: 5.25 m. Hole.
Hole Depth: 5.25 m. Hole.
Burden: 3 m Sub drilling 0.5 m.
Spacing: 3.3 m Stemming: 3 m.
Emulsion 35x400 mm. 18 Pcs.
Oil: 24 L. Electric Wire: 3 Pcs.

Blast Pattern



Site Controller: _____

Blast Name: บ่อหิน (หินขาว) 01/05Date: 2 / 5 / 67Site Name: เขาใหญ่พัฒนาHole Size: 3.5 in.Drilling Date: 14, 14Stone Quantity: 3,020.60 Ton.

Blast Date: _____

ANFO: 20 Pes.

Type of Explosive: _____

Bulk: _____

Number of Holes: 24Powder factor: 0.33 kg/BCMHole Depth: 10.5 m.Non - Electric (Double det): 14 Pes.Hole Depth: 9.5 m.Surface Delay: 1 Pes.

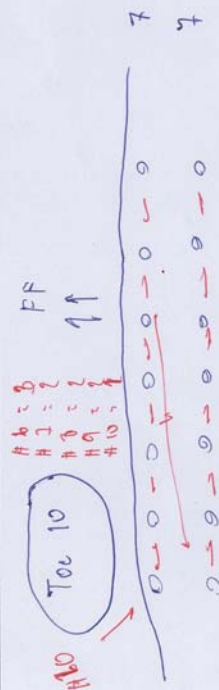
Hole Depth: _____ m.

Electric Blasting Cap: 11 Pes.

Hole Depth: _____ m.

No.1 Pes. No.6 3 Pes.Burden: 3 m Sub drilling 0.5 m.No.2 Pes. No.7 2 Pes.Spacing: 3.3 m Stemming: 3.3 m.No.3 Pes. No.8 2 Pes.Emulsion 35x400 mm. 31 Pes.No.4 Pes. No.9 2 Pes.Oil: 40 L. Electric Wire: _____No.5 Pes. No.10 2 Pes.

Blast Pattern



Site Controller: _____