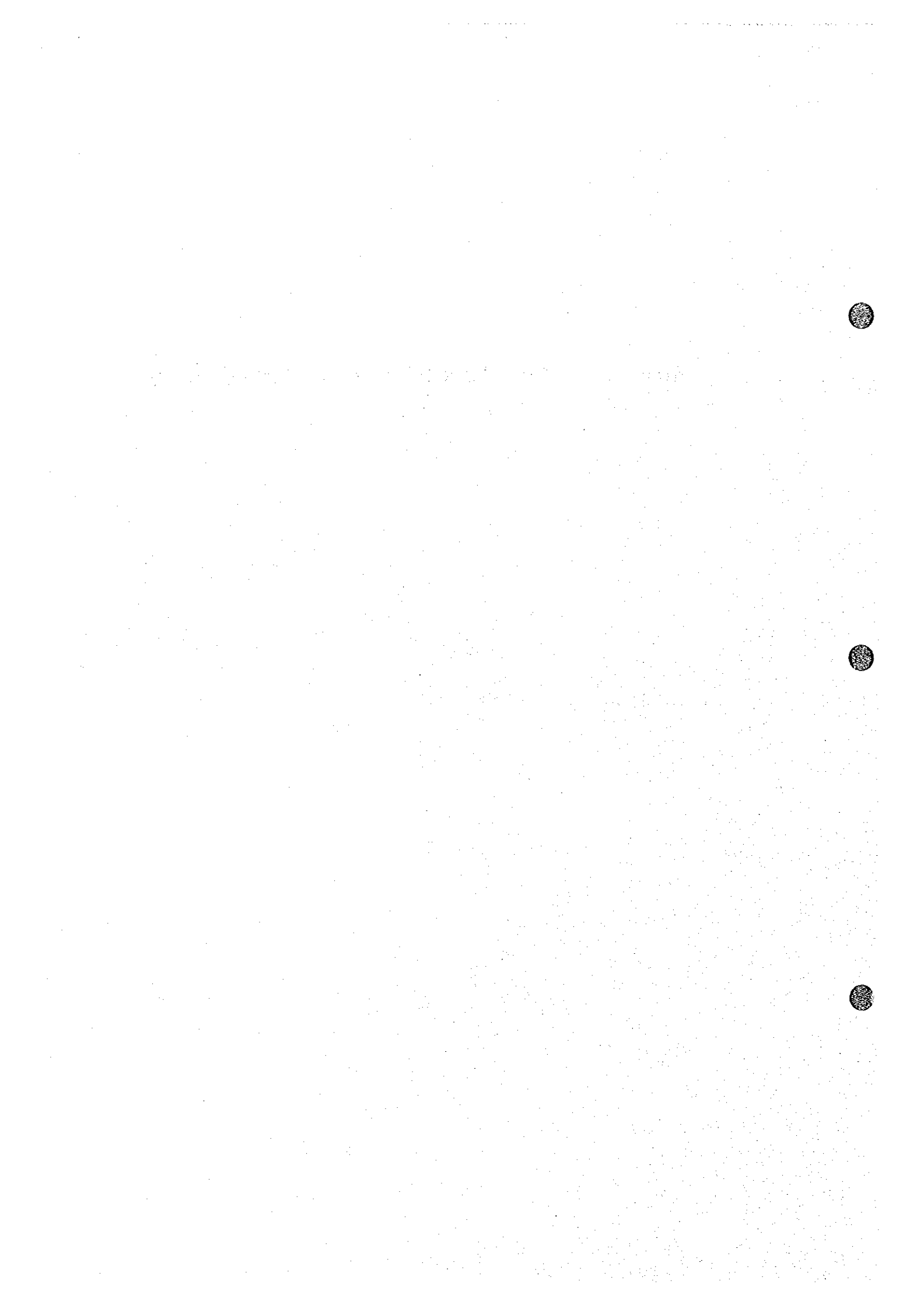


Appendix 3. Miscellaneous Data for the Drilling Survey



Appendix 3-1(1) List of the Used Equipment for Drilling

(MJSN-15,16)

Item	Model	Quantity	Capacity, type and specification
Drilling machine	SKB-41	1	Capacity ϕ 76mm:300m ϕ 59mm:500m Inner diameter of spindle:60mm
Motor for drill	A02-31-4	1	30kw, rpm/1,500 ps
Pump	NB-3	1	Piston ϕ 60mm, Capacity 40/120 liter/min Pressure 4 kg/min
Motor for pump	A02-51-4	1	7.5kw, rpm/1,500 ps
Wire line hoist	LB-5	1	
Motor for hoist		1	4 kw
Generator	—	—	Power line
Engine for generator	—	—	
Mud mixer	GL-12	1	
Derrick	UKB-500	1	Maximum load 15T
Rod holder	TD-12.5	1	
Drill rods	SSK-59	35	4.50 m/pc
	ϕ 50mm	5	4.00 m/pc
	ϕ 42mm	5	4.00 m/pc
Casing pipes	ϕ 108mm	2	3.00 m/pc
	ϕ 89mm	2	3.00 m/pc
	ϕ 73mm	10	4.00 m/pc
Core tube assembly	SSK-59	3	3.50 m/pc
	SSK-59	3	2.50 m/pc
	ϕ 108mm	1	1.00 m/pc
	ϕ 93mm	1	1.00 m/pc
	ϕ 76mm	1	1.00 m/pc
	OKS-73	1	1.00 m/pc

Appendix 3-1(2) List of the Used Equipment for Drilling

(MJML-3~22)

Item	Model	Quantity	Capacity, type and specification
Drilling machine	SKB-41	2	Capacity ϕ 76mm:300m ϕ 59mm:500m Inner diameter of spindle:63mm
Motor for drill	A02-71-4	2	22kw, rpm/1,500 ps
Pump	NB-3	2	Piston ϕ 60mm, Capacity 40/120 liter/min Pressure 4 kg/min
Motor for pump	A02-51-4	2	7.5 kw, rpm/1,500 ps
Wire line hoist	—	—	
Motor for hoist	—	—	
Generator	DES-60P	2	60kVA
Engine for generator	AM-01E	2	Diesel engine : 60kwh, rpm/1,500 ps
Mud mixer	GKL-2	1	
Derrick	MR-4	2	Maximum load 20T
Rod holder	PT-1200	2	
Drill rods	SSK-59	—	4.50 m/pc
	ϕ 50mm	45	4.00 m/pc (SBT-50)
	ϕ 42mm	—	4.00 m/pc
Casing pipes	ϕ 108mm	—	3.00 m/pc
	ϕ 89mm	20	3.00 m/pc
	ϕ 73mm	—	4.00 m/pc
Core tube assembly	SSK-59	—	3.00 m/pc
	SSK-59	—	2.50 m/pc
	ϕ 108mm	—	3.00 m/pc
	ϕ 93mm	2	3.00 m/pc
	ϕ 76mm	8	3.00 m/pc
	OKS-73	4	1.00 m/pc (Ejector)

Appendix 3-2(1) Results of Drilling Works on Individual Drillhole

(MJSN-15)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug. 3, '99 ~ Aug. 12, '99	10.00	4.50	5.50	39	
Drilling	Aug.13, '99 ~ Sept. 11, '99	29.21	26.46	2.75	146	
Dismount	Sept.11, '99 ~ Sept.11, '99	0.63	0.63	0.00	4	
Total	Aug. 3, '99 ~ Sept.11, '99	39.84	31.59	8.25	189	
Drilling length						
Programmed length	110.00 m	Overburden	1.00 m			
Prolongation	0.00 m	Core length	89.10 m			
Effective length	110.00 m	Core recovery	81.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	177.0H	19.8 %	0-103.6	81.0	81.0	
Out drilling	120.0H	13.4 %	103.6-110.0	81.2	81.0	
Recovery from accident	536.0H	59.8 %				
Preparation	21.0H	2.3 %				
Dismount/Mobilization	15.0H	1.7 %				
Others	27.0H	3.0 %	Efficiency			
			Effective length/Total days			
			2.76 m/d			
Total	896.0H	100 %	Effective length/Working days			
			3.48 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	59 m/m	m/m	m/m	m/m	Total
Drilling length	3.00 m	107.00 m				110.00 m
Core length	2.10 m	87.00 m				89.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
73 m/m	3.00 m	2.7 %		100 %		
m/m	m	%		%		

Appendix 3-2(2) Results of Drilling Works on Individual Drillhole

(MJSN-16)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 7, '99 ~ July 25, '99	19.00	4.00	15.00	90	
Drilling	July 26, '99 ~ Aug. 3, '99	9.00	8.58	0.42	43	
Dismount	Aug. 4, '99 ~ Aug. 4, '99	0.50	0.50	0.00	5	
Total	July 7, '99 ~ Aug. 4, '99	28.50	13.08	15.42	138	
Drilling length						
Programmed length	60.00 m	Overburden	3.40 m			
Prolongation	0.00 m	Core length	48.40 m			
Effective length	60.00 m	Core recovery	80.7 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	93.0H	23.3 %	0-60.00	80.7	80.7	
Out drilling	28.0H	7.0 %				
Recovery from accident	95.0H	23.8 %				
Preparation	18.0H	4.5 %				
Dismount/Mobilization	12.0H	3.0 %				
Others	153.0H	38.4 %	Efficiency			
			Effective length/Total days			
			2.11 m/d			
Total	399.0H	100 %	Effective length/Working days			
			4.58 m/d			
Drilling length by diameter						
Bit diameter	76 mm	59 mm	mm	mm	mm	Total
Drilling length	3.50 m	56.50 m				60.00 m
Core length	2.40 m	46.00 m				48.40 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
73 mm	3.50 m	5.8 %		100 %		
m/m	m	%		%		

Appendix 3-2(3) Results of Drilling Works on Individual Drillhole

(MJML-3)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.11,'99 ~ Aug.14,'99	2.42	2.42	0.00	19	
Drilling	Aug.14,'99 ~ Aug.17,'99	3.71	3.71	0.00	17	
Dismount	Aug.17,'99 ~ Aug.17,'99	0.54	0.54	0.00	4	
Total	Aug.11,'99 ~ Aug.17,'99	6.67	6.67	0.00	40	
Drilling length						
Programmed length	30.00 m	Overburden	2.00 m			
Prolongation	0.00 m	Core length	26.10 m			
Effective length	30.00 m	Core recovery	87.0 %			
Working hours				Core recovery each 100m		
			Length (m)	Each (%)	Cumula.(%)	
Drilling	30.0H	23.1 %	0-30.00	87.0	87.0	
Out drilling	18.0H	13.9 %				
Recovery from accident	41.0H	31.5 %				
Preparation	19.0H	14.6 %				
Dismount/Mobilization	13.0H	10.0 %				
Others	9.0H	6.9 %				
			Efficiency			
			Effective length/Total days			
			4.50 m/d			
Total			Effective length/Working days			
			4.50 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	26.10 m					26.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(4) Results of Drilling Works on Individual Drillhole

(MJML-4)

	Survey period		Breakdown of period		Total workers
	Period	Total days	Working days	No working days	
Preparation	Aug.16,'99 ~ Aug.18,'99	2.33	2.33	0.00	5
Drilling	Aug.18,'99 ~ Aug.19,'99	1.67	1.67	0.00	12
Dismount	Aug.20,'99 ~ Aug.20,'99	0.33	0.33	0.00	4
Total	Aug.16,'99 ~ Aug.20,'99	4.33	4.33	0.00	21
Drilling length					
Programmed length	30.00 m	Overburden	3.20 m		
Prolongation	0.00 m	Core length	25.10 m		
Effective length	30.00 m	Core recovery	83.7 %		
Working hours			Core recovery each 100m		
			Length (m)	Each (%)	Cumula.(%)
Drilling	22.0H	29.7 %	0-30.00	83.7	83.7
Out drilling	10.0H	13.5 %			
Recovery from accident	8.0H	10.8 %			
Preparation	17.0H	23.0 %			
Dismount/Mobilization	8.0H	10.8 %			
Others	9.0H	12.2 %	Efficiency		
			Effective length/Total days		
			6.93 m/d		
Total	74.0H	100 %	Effective length/Working days		
			6.93 m/d		
Drilling length by diameter					
Bit diameter	76 m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m				30.00 m
Core length	25.10 m				25.10 m
Inserted casing pipes					
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery	
89 m/m	3.00 m	10.0 %		100 %	
m/m	m	%		%	

Appendix 3-2(5) Results of Drilling Works on Individual Drillhole

(MJML-5)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.18,'99 ~ Aug.21,'99	3.33	3.33	0.00	5	
Drilling	Aug.21,'99 ~ Aug.23,'99	2.34	2.34	0.00	16	
Dismount	Aug.23,'99 ~ Aug.23,'99	0.33	0.33	0.00	4	
Total	Aug.18,'99 ~ Aug.23,'99	6.00	6.00	0.00	25	
Drilling length						
Programmed length	30.00 m	Overburden	3.00 m			
Prolongation	0.00 m	Core length	25.10 m			
Effective length	30.00 m	Core recovery	83.7 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	22.0H	22.2 %	0-30.00	83.7	83.7	
Out drilling	18.0H	18.2 %				
Recovery from accident	16.0H	16.1 %				
Preparation	17.0H	17.2 %				
Dismount/Mobilization	8.0H	8.1 %				
Others	18.0H	18.2 %	Efficiency			
			Effective length/Total days			
			5.00 m/d			
Total	99.0H	100 %	Effective length/Working days			
			5.00 m/d			
Drilling length by diameter						
Bit diameter	76 mm	mm	mm	mm	mm	Total
Drilling length	30.00 m					30.00 m
Core length	25.10 m					25.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 mm	3.00 m	10.0 %		100 %		
mm	m	%		%		

Appendix 3-2(6) Results of Drilling Works on Individual Drillhole

(MJML-6)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug. 6,'99 ~ Aug. 7,'99	1.66	1.66	0.00	7	
Drilling	Aug. 7,'99 ~ Aug.11,'99	4.34	4.34	0.00	30	
Dismount	Aug.12,'99 ~ Aug.12,'99	0.33	0.33	0.00	5	
Total	Aug. 6,'99 ~ Aug.12,'99	6.33	6.33	0.00	42	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	25.50 m			
Effective length	30.00 m	Core recovery	85.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	25.0H	18.3 %	0-30.00	85.0	85.0	
Out drilling	34.0H	24.8 %				
Recovery from accident	45.0H	32.8 %				
Preparation	16.0H	11.7 %				
Dismount/Mobilization	8.0H	5.8 %				
Others	9.0H	6.6 %	Efficiency			
			Effective length/Total days			
			4.74 m/d			
Total	137.0H	100 %	Effective length/Working days			
			4.74 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	25.50 m					25.50 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(7) Results of Drilling Works on Individual Drillhole

(MJML-7)

	Survey period		Breakdown of period		Total workers		
	Period	Total days	Working days	No working days			
Preparation	July 25, '99 ~ July 27, '99	2.50	2.50	0.00	6		
Drilling	Aug. 27, '99 ~ Aug. 5, '99	8.84	8.84	0.00	59		
Dismount	Aug. 5, '99 ~ Aug. 5, '99	0.33	0.33	0.00	4		
Total	July 25, '99 ~ Aug. 5, '99	11.67	11.67	0.00	69		
Drilling length							
Programmed length	30.00 m	Overburden	0.00 m				
Prolongation	0.00 m	Core length	24.70 m				
Effective length	30.00 m	Core recovery	82.3 %				
Working hours			Core recovery each 100m				
			Length (m)	Each (%)	Cumula. (%)		
Drilling	33.0H	13.2 %	0-30.0	82.3	82.3		
Out drilling	22.0H	8.8 %					
Recovery from accident	157.0H	62.8 %					
Preparation	18.0H	7.2 %					
Dismount/Mobilization	8.0H	3.2 %					
Others	12.0H	4.8 %	Efficiency				
			Effective length/Total days				
			2.57 m/d				
Total	250.0H	100 %	Effective length/Working days				
			2.57 m/d				
Drilling length by diameter							
Bit diameter	76 m/m	m/m	m/m	m/m	n/m	m/m	Total
Drilling length	30.00 m	m					30.00 m
Core length	24.70 m	m					24.70 m
Inserted casing pipes							
Inserted length by diameter		Inserted length/Drilling length x 100			Casing Recovery		
89 m/m	3.00 m	10.0 %			100 %		
m/m	m	%			%		

Appendix 3-2(8) Results of Drilling Works on Individual Drillhole

(MJML-8)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.21, '99 ~ Aug.24, '99	3.50	3.50	0.00	8	
Drilling	Aug.24, '99 ~ Aug.27, '99	2.84	2.84	0.00	17	
Dismount	Aug.27, '99 ~ Aug.27, '99	0.33	0.33	0.00	4	
Total	Aug.21, '99 ~ Aug.27, '99	6.67	6.67	0.00	29	
Drilling length						
Programmed length	30.00 m	Overburden	1.00 m			
Prolongation	0.00 m	Core length	25.10 m			
Effective length	30.00 m	Core recovery	83.7 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	29.0H	25.2 %	0-30.00	83.7	83.7	
Out drilling	29.0H	25.2 %				
Recovery from accident	10.0H	8.7 %				
Preparation	21.0H	18.3 %				
Dismount/Mobilization	8.0H	6.9 %				
Others	18.0H	15.7 %	Efficiency			
			Effective length/Total days			
			4.50 m/d			
Total	115.0H	100 %	Effective length/Working days			
			4.50 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	25.10 m					25.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(9) Results of Drilling Works on Individual Drillhole

(MJML-9)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 22, '99 ~ July 25, '99	2.50	2.50	0.00	13	
Drilling	July 25, '99 ~ July 26, '99	2.25	1.75	0.50	11	
Dismount	July 26, '99 ~ July 26, '99	0.25	0.25	0.00	3	
Total	July 22, '99 ~ July 26, '99	5.00	4.50	0.50	27	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	24.90 m			
Effective length	30.00 m	Core recovery	83.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	24.0H	26.6 %	0-30.00	83.0	83.0	
Out drilling	18.0H	20.0 %				
Recovery from accident	0.0H	0.0 %				
Preparation	16.0H	17.8 %				
Dismount/Mobilization	6.0H	6.7 %				
Others	26.0H	28.9 %	Efficiency			
			Effective length/Total days			
			6.00 m/d			
Total	90.0H	100 %	Effective length/Working days			
			6.67 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	n/m	n/m	n/m	n/m	Total
Drilling length	30.00 m					30.00 m
Core length	24.90 m					24.90 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(10) Results of Drilling Works on Individual Drillhole

(MJML-10)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.21, '99 ~ Aug.24, '99	3.25	3.25	0.00	5	
Drilling	Aug.24, '99 ~ Aug.26, '99	2.25	2.25	0.00	12	
Dismount	Aug.26, '99 ~ Aug.26, '99	0.50	0.50	0.00	4	
Total	Aug.21, '99 ~ Aug.26, '99	6.00	6.00	0.00	21	
Drilling length						
Programmed length	30.00 m	Overburden	2.00 m			
Prolongation	0.00 m	Core length	28.00 m			
Effective length	30.00 m	Core recovery	93.3 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	38.0H	33.3 %	0-30.00	93.3	93.3	
Out drilling	11.0H	9.7 %				
Recovery from accident	5.0H	4.4 %				
Preparation	30.0H	26.3 %				
Dismount/Mobilization	12.0H	10.5 %				
Others	18.0H	15.8 %	Efficiency			
			Effective length/Total days			
			5.00 m/d			
Total	114.0H	100 %	Effective length/Working days			
			5.00 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	28.00 m					28.00 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(11) Results of Drilling Works on Individual Drillhole

(MJML-11)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.17,'99 ~ Aug.20,'99	3.50	3.50	0.00	7	
Drilling	Aug.20,'99 ~ Aug.22,'99	2.50	2.50	0.00	13	
Dismount	Aug.23,'99 ~ Aug.23,'99	0.50	0.50	0.00	4	
Total	Aug.17,'99 ~ Aug.23,'99	6.50	6.50	0.00	24	
Drilling length						
Programmed length	30.00 m	Overburden	2.20 m			
Prolongation	0.00 m	Core length	28.00 m			
Effective length	30.00 m	Core recovery	93.3 %			
Working hours				Core recovery each 100m		
				Length (m)	Each (%)	Cumula.(%)
Drilling	47.0H	42.4 %	0-30.00	93.3	93.3	
Out drilling	11.0H	9.9 %				
Recovery from accident	2.0H	1.8 %				
Preparation	21.0H	18.9 %				
Dismount/Mobilization	12.0H	10.8 %				
Others	18.0H	16.2 %	Efficiency			
			Effective length/Total days			
			4.62 m/d			
Total	111.0H	100 %	Effective length/Working days			
			4.62 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	28.00 m					28.00 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(12) Results of Drilling Works on Individual Drillhole

(MJML-12)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	Aug.14,'99 ~ Aug.17,'99	3.50	3.50	0.00	10	
Drilling	Aug.17,'99 ~ Aug.19,'99	2.00	2.00	0.00	15	
Dismount	Aug.19,'99 ~ Aug.19,'99	0.50	0.50	0.00	5	
Total	Aug.14,'99 ~ Aug.19,'99	6.00	6.00	0.00	30	
Drilling length						
Programmed length	30.00 m	Overburden	2.60 m			
Prolongation	0.00 m	Core length	27.10 m			
Effective length	30.00 m	Core recovery	90.3 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	34.0H	34.4 %	0-30.00	90.3	90.3	
Out drilling	11.0H	11.1 %				
Recovery from accident	3.0H	3.0 %				
Preparation	21.0H	21.2 %				
Dismount/Mobilization	12.0H	12.1 %				
Others	18.0H	18.2 %	Efficiency			
			Effective length/Total days			
			5.00 m/d			
Total	99.0H	100 %	Effective length/Working days			
			5.00 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	27.10 m					27.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(13) Results of Drilling Works on Individual Drillhole

(MJML-13)

	Survey period		Breakdown of period		Total workers
	Period	Total days	Working days	No working days	
Preparation	Aug. 5, '99 ~ Aug. 8, '99	2.84	2.84	0.00	12
Drilling	Aug. 8, '99 ~ Aug. 14, '99	6.50	6.50	0.00	42
Dismount	Aug. 14, '99 ~ Aug. 14, '99	0.33	0.33	0.00	4
Total	Aug. 5, '99 ~ Aug. 14, '99	9.67	9.67	0.00	58
Drilling length					
Programmed length	30.00 m	Overburden	1.00 m		
Prolongation	0.00 m	Core length	26.10 m		
Effective length	30.00 m	Core recovery	87.0 %		
Working hours			Core recovery each 100m		
			Length (m)	Each (%)	Cumula. (%)
Drilling	29.0H	14.3 %	0-30.00	87.0	87.0
Out drilling	35.0H	17.2 %			
Recovery from accident	92.0H	45.3 %			
Preparation	21.0H	10.4 %			
Dismount/Mobilization	8.0H	3.9 %			
Others	18.0H	8.9 %	Efficiency		
			Effective length/Total days		
			3.10 m/d		
Total	203.0H	100 %	Effective length/Working days		
			3.10 m/d		
Drilling length by diameter					
Bit diameter	76 m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m	m			30.00 m
Core length	26.10 m	m			26.10 m
Inserted casing pipes					
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery	
89 m/m	3.00 m	10.0 %		100 %	
m/m	m	%		%	

Appendix 3-2(14) Results of Drilling Works on Individual Drillhole

(MJML-14)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 30, '99 ~ Aug. 2, '99	3.50	3.50	0.00	10	
Drilling	Aug. 2, '99 ~ Aug. 6, '99	4.00	4.00	0.00	20	
Dismount	Aug. 6, '99 ~ Aug. 6, '99	0.50	0.50	0.00	4	
Total	July 30, '99 ~ Aug. 6, '99	8.00	8.00	0.00	34	
Drilling length						
Programmed length	30.00 m	Overburden	0.90 m			
Prolongation	0.00 m	Core length	26.10 m			
Effective length	30.00 m	Core recovery	87.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	39.0H	26.5 %	0-30.00	87.0	87.0	
Out drilling	27.0H	18.4 %				
Recovery from accident	30.0H	20.4 %				
Preparation	21.0H	14.3 %				
Dismount/Mobilization	12.0H	8.2 %				
Others	18.0H	12.2 %	Efficiency			
			Effective length/Total days			
			3.75 m/d			
Total	147.0H	100 %	Effective length/Working days			
			3.75 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m	m				30.00 m
Core length	26.10 m	m				26.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(15) Results of Drilling Works on Individual Drillhole

(MJML-15)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 25, '99 ~ July 28, '99	3.50	3.50	0.00	9	
Drilling	July 28, '99 ~ July 31, '99	3.00	3.00	0.00	16	
Dismount	July 31, '99 ~ July 31, '99	0.50	0.50	0.00	5	
Total	July 25, '99 ~ July 31, '99	7.00	7.00	0.00	30	
Drilling length						
Programmed length	30.00 m	Overburden	2.40 m			
Prolongation	0.00 m	Core length	26.20 m			
Effective length	30.00 m	Core recovery	87.3 %			
Working hours				Core recovery each 100m		
				Length (m)	Each (%)	Cumula.(%)
Drilling	39.0H	31.7 %	0-30.00	87.3	87.3	
Out drilling	9.0H	7.3 %				
Recovery from accident	24.0H	19.5 %				
Preparation	21.0H	17.1 %				
Dismount/Mobilization	12.0H	9.8 %				
Others	18.0H	14.6 %	Efficiency			
			Effective length/Total days			
			4.29 m/d			
Total	123.0H	100 %	Effective length/Working days			
			4.29 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	n/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	26.20 m					26.20 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(16) Results of Drilling Works on Individual Drillhole

(MJMI-16)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 23, '99 ~ July 26, '99	3.50	3.50	0.00	9	
Drilling	July 26, '99 ~ July 27, '99	1.17	1.17	0.00	6	
Dismount	July 27, '99 ~ July 27, '99	0.33	0.33	0.00	4	
Total	July 23, '99 ~ July 27, '99	5.00	5.00	0.00	19	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	26.10 m			
Effective length	30.00 m	Core recovery	87.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	23.0H	30.6 %	0-30.00	87.0	87.0	
Out drilling	5.0H	6.7 %				
Recovery from accident	0.0H	0.0 %				
Preparation	21.0H	28.0 %				
Dismount/Mobilization	8.0H	10.7 %				
Others	18.0H	24.0 %	Efficiency			
			Effective length/Total days			
			6.00 m/d			
Total	75.0H	100 %	Effective length/Working days			
			6.00 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	26.10 m					26.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(17) Results of Drilling Works on Individual Drillhole

(MJML-17)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 21, '99 ~ July 24, '99	3.00	3.00	0.00	11	
Drilling	July 24, '99 ~ July 25, '99	1.50	1.50	0.00	7	
Dismount	July 25, '99 ~ July 25, '99	0.50	0.50	0.00	4	
Total	July 21, '99 ~ July 25, '99	5.00	5.00	0.00	22	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	25.30 m			
Effective length	30.00 m	Core recovery	84.3 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	16.0H	17.8 %	0-30.00	84.3	84.3	
Out drilling	8.0H	8.9 %				
Recovery from accident	12.0H	13.3 %				
Preparation	24.0H	26.7 %				
Dismount/Mobilization	12.0H	13.3 %				
Others	18.0H	20.0 %	Efficiency			
			Effective length/Total days			
			6.00 m/d			
Total	90.0H	100 %	Effective length/Working days			
			6.00 m/d			
Drilling length by diameter						
Bit diameter	76 n/m	n/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	25.30 m					25.30 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 n/m	3.00 m	10.0 %		100 %		
n/m	m	%		%		

Appendix 3-2(18) Results of Drilling Works on Individual Drillhole

(MJML-18)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 20, '99 ~ July 22, '99	2.54	2.54	0.00	9	
Drilling	July 22, '99 ~ July 24, '99	1.80	1.80	0.00	15	
Dismount	July 24, '99 ~ July 24, '99	0.33	0.33	0.00	4	
Total	July 20, '99 ~ July 24, '99	4.67	4.67	0.00	28	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	24.40 m			
Effective length	30.00 m	Core recovery	81.3 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	23.0H	28.0 %	0-30.00	81.3	81.3	
Out drilling	20.0H	24.4 %				
Recovery from accident	0.0H	0.0 %				
Preparation	22.0H	26.8 %				
Dismount/Mobilization	8.0H	9.8 %				
Others	9.0H	11.0 %	Efficiency			
			Effective length/Total days			
			6.42 m/d			
Total	82.0H	100 %	Effective length/Working days			
			6.42 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	24.40 m					24.40 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(19) Results of Drilling Works on Individual Drillhole

(MJML-19)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 16,'99 ~ July 20,'99	4.66	4.66	0.00	18	
Drilling	July 20,'99 ~ July 21,'99	1.34	1.34	0.00	10	
Dismount	July 22,'99 ~ July 22,'99	0.33	0.33	0.00	5	
Total	July 16,'99 ~ July 22,'99	6.33	6.33	0.00	33	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	25.10 m			
Effective length	30.00 m	Core recovery	83.7 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	24.0H	26.1 %	0-30.00	83.7	83.7	
Out drilling	8.0H	8.7 %				
Recovery from accident	0.0H	0.0 %				
Preparation	25.0H	27.2 %				
Dismount/Mobilization	8.0H	8.7 %				
Others	27.0H	29.3 %	Efficiency			
			Effective length/Total days			
			4.74 m/d			
Total	92.0H	100 %	Effective length/Working days			
			4.74 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m	m				30.00 m
Core length	25.10 m	m				25.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(20) Results of Drilling Works on Individual Drillhole

(MJML-20)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 13,'99 ~ July 16,'99	3.41	3.41	0.00	9	
Drilling	July 16,'99 ~ July 19,'99	3.50	3.50	0.00	25	
Dismount	July 20,'99 ~ July 20,'99	0.42	0.42	0.00	5	
Total	July 13,'99 ~ July 20,'99	7.33	7.33	0.00	39	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	24.60 m			
Effective length	30.00 m	Core recovery	82.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	54.0H	41.2 %	0-30.00	82.0	82.0	
Out drilling	30.0H	22.9 %				
Recovery from accident	0.0H	0.0 %				
Preparation	19.0H	14.5 %				
Dismount/Mobilization	10.0H	7.6 %				
Others	18.0H	13.8 %	Efficiency			
			Effective length/Total days			
			4.09 m/d			
Total	131.0H	100 %	Effective length/Working days			
			4.09 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m	m				30.00 m
Core length	24.60 m	m				24.60 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(21) Results of Drilling Works on Individual Drillhole

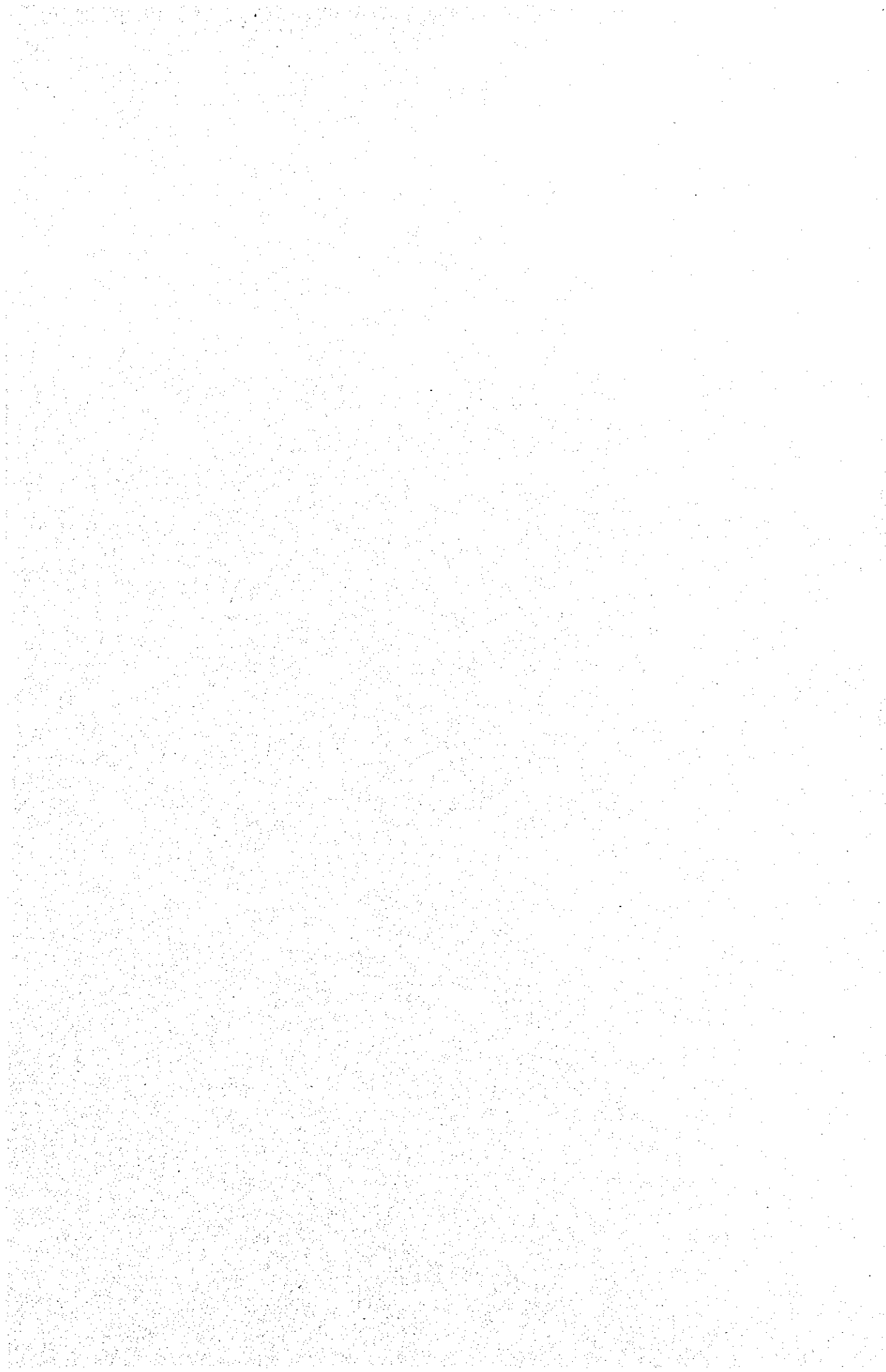
(MJML-21)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 19, '99 ~ July 22, '99	3.33	3.33	0.00	7	
Drilling	July 22, '99 ~ July 23, '99	0.92	0.92	0.00	8	
Dismount	July 23, '99 ~ July 23, '99	0.25	0.25	0.00	4	
Total	July 19, '99 ~ July 23, '99	4.50	4.50	0.00	19	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	25.10 m			
Effective length	30.00 m	Core recovery	83.7 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	15.0H	23.8 %	0-30.00	83.7	83.7	
Out drilling	7.0H	11.1 %				
Recovery from accident	0.0H	0.0 %				
Preparation	17.0H	27.0 %				
Dismount/Mobilization	6.0H	9.5 %				
Others	18.0H	28.6 %	Efficiency			
			Effective length/Total days			
			6.67 m/d			
Total	63.0H	100 %	Effective length/Working days			
			6.67 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	25.10 m					25.10 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		

Appendix 3-2(22) Results of Drilling Works on Individual Drillhole

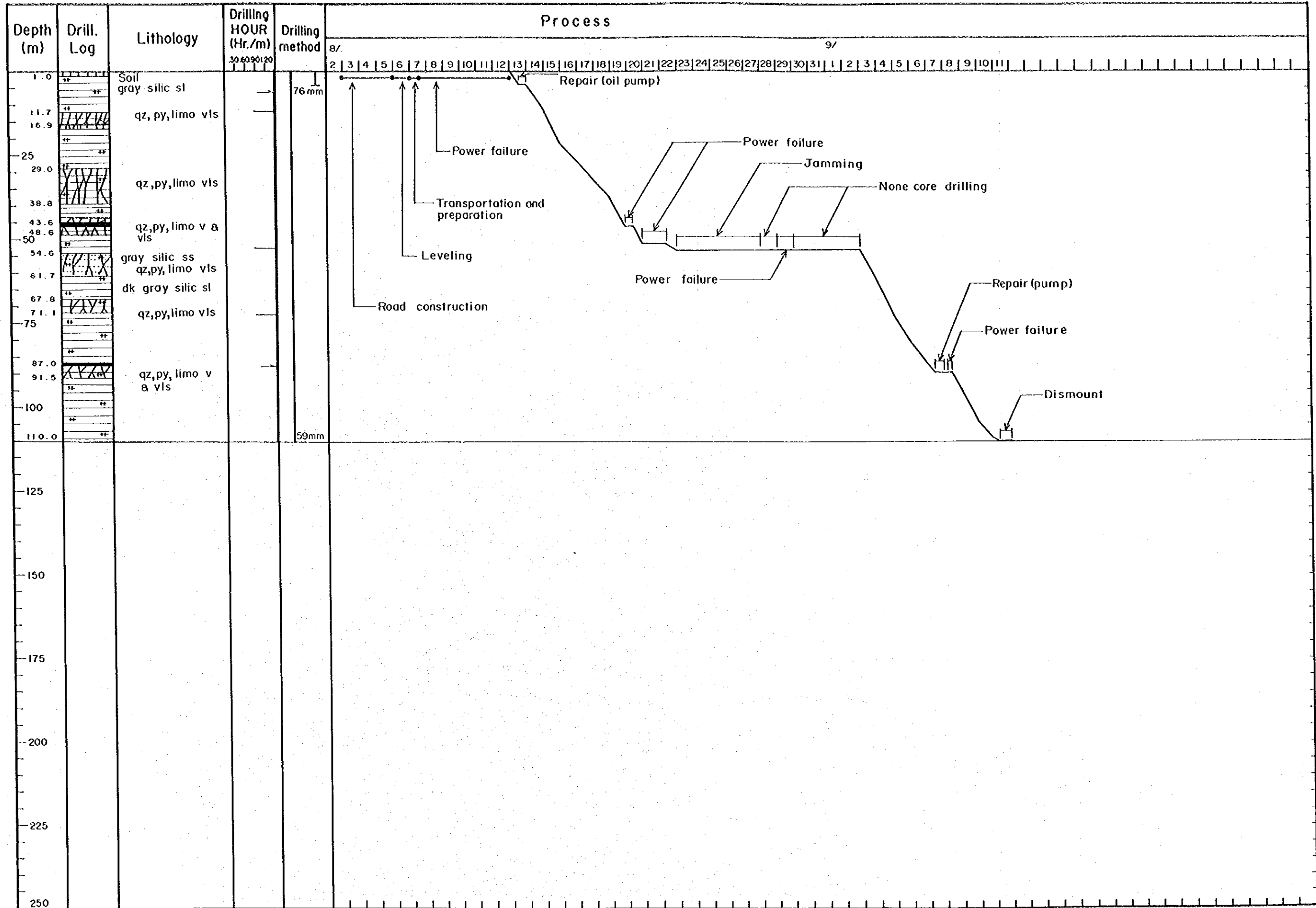
(MJML-22)

	Survey period		Breakdown of period		Total workers	
	Period	Total days	Working days	No working days		
Preparation	July 8, '99 ~ July 14, '99	7.33	7.33	0.00	18	
Drilling	July 15, '99 ~ July 21, '99	6.17	6.17	0.00	34	
Dismount	July 21, '99 ~ July 21, '99	0.50	0.50	0.00	5	
Total	July 8, '99 ~ July 21, '99	14.00	14.00	0.00	57	
Drilling length						
Programmed length	30.00 m	Overburden	0.00 m			
Prolongation	0.00 m	Core length	27.60 m			
Effective length	30.00 m	Core recovery	92.0 %			
Working hours			Core recovery each 100m			
			Length (m)	Each (%)	Cumula.(%)	
Drilling	34.0H	14.7 %	0-30.00	92.0	92.0	
Out drilling	23.0H	10.0 %				
Recovery from accident	91.0H	39.4 %				
Preparation	26.0H	11.2 %				
Dismount/Mobilization	12.0H	5.2 %				
Others	45.0H	19.5 %	Efficiency			
			Effective length/Total days			
			2.14 m/d			
Total	231.0H	100 %	Effective length/Working days			
			2.14 m/d			
Drilling length by diameter						
Bit diameter	76 m/m	m/m	m/m	m/m	m/m	Total
Drilling length	30.00 m					30.00 m
Core length	27.60 m					27.60 m
Inserted casing pipes						
Inserted length by diameter		Inserted length/Drilling length x 100		Casing Recovery		
89 m/m	3.00 m	10.0 %		100 %		
m/m	m	%		%		



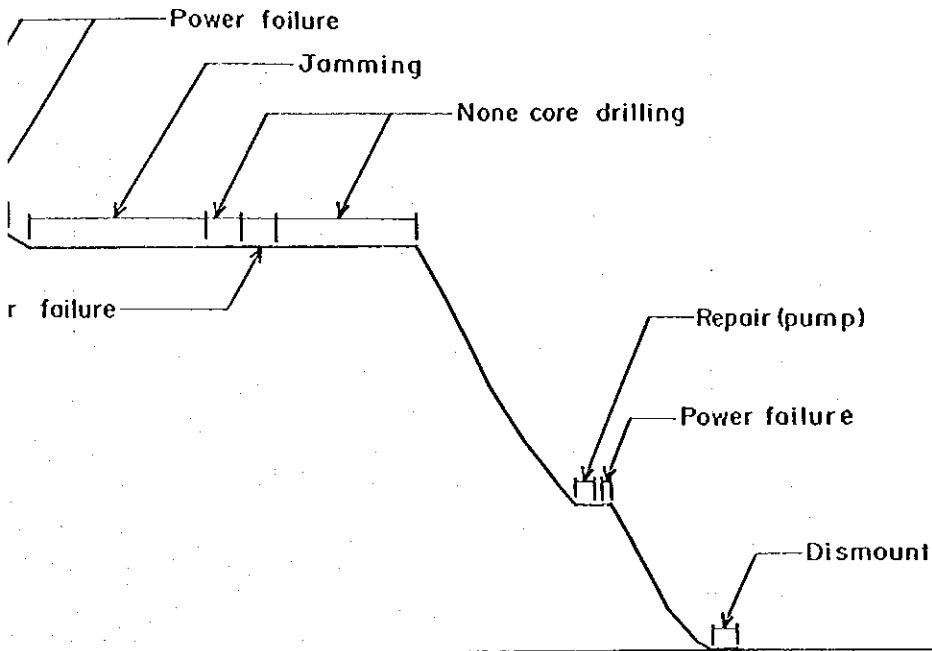
Appendix 3-3 (1) PROGRESS RECORD OF DIAMOND DRILLING

(MJSN--15)



9/

2|23|24|25|26|27|28|29|30|31|1|2|3|4|5|6|7|8|9|10|11|



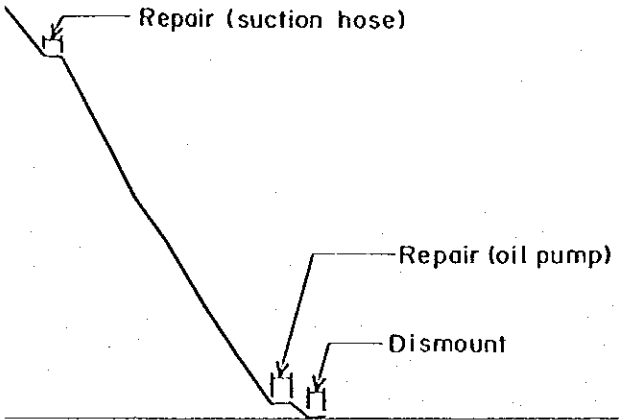
Appendix 3-3 (2) PROGRESS RECORD OF DIAMOND DRILLING

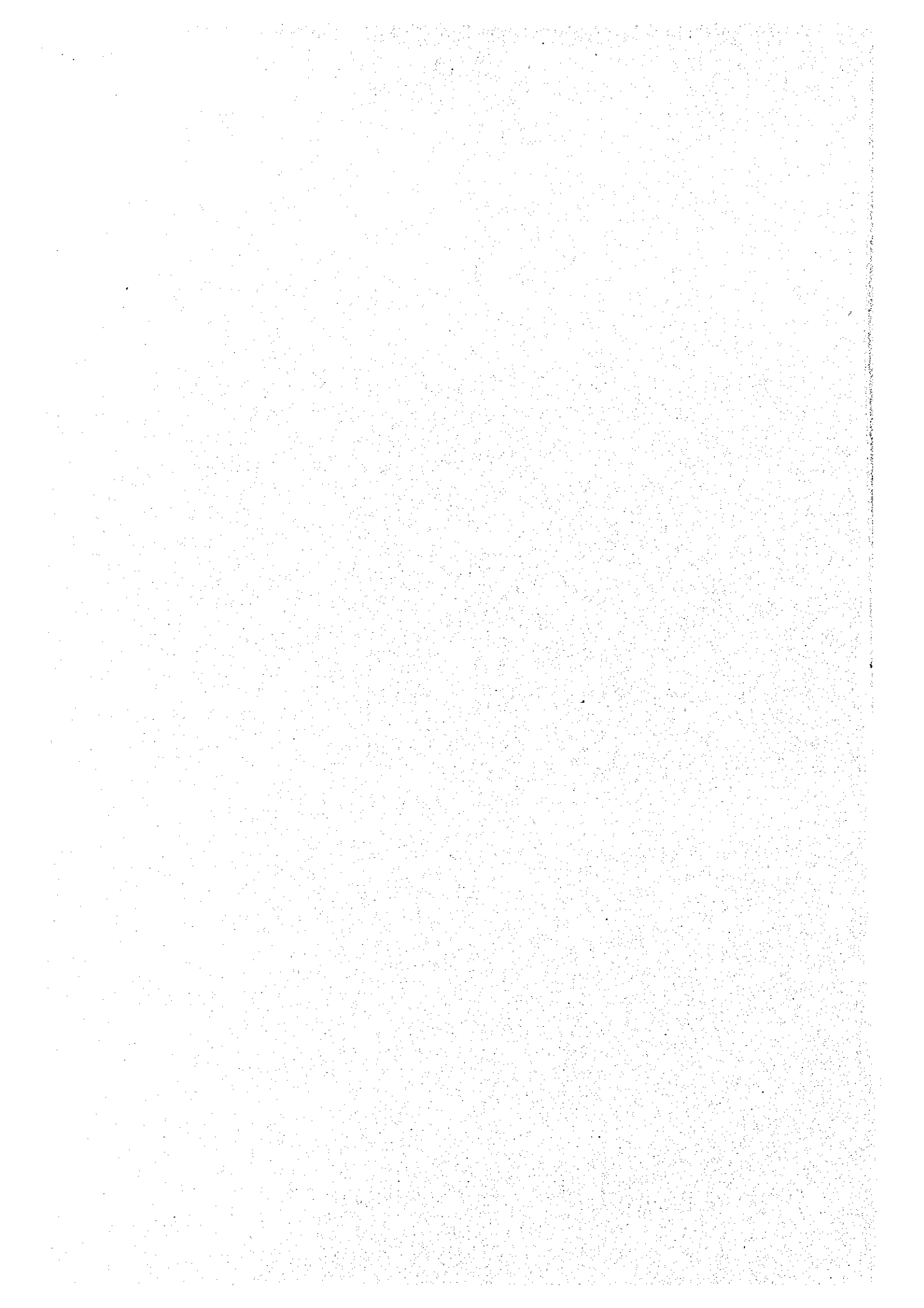
(MJSN-16)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																															
					7/	8/																								1	2	3	4			
			30.60	90	20	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	
3.4		Soil gray silic sl																																		
11.0		qz, py, limo vls																																		
16.3																																				
24.3		qz, py, limo vls																																		
25																																				
28.3																																				
39.95		qz, py, limo v & vls																																		
49.8																																				
50																																				
51.0																																				
51.8																																				
60.0																																				
75																																				
100																																				
125																																				
150																																				
175																																				
200																																				
225																																				
250																																				

8/

6|27|28|29|30|31| 1 | 2 | 3 | 4 |


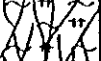

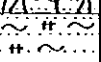
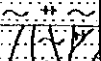
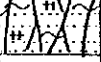
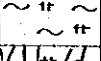





Appendix 3-3(3) PROGRESS RECORD OF DIAMOND DRILLING (MJML-3)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process															
					8/															
					10	11	12	13	14	15	16	17								
2.0		Soil		93mm																
5.9		gray silic sdy phy																		
7.7		qz, py v & vls																		
8.1		frac zone																		
9.8		gray silic phy																		
11.0																				
11.8																				
13.4																				
20																				
23.7		gray silic sdy phy					76mm													
30																				
40																				
50																				
60																				
70																				
80																				
90																				
100																				

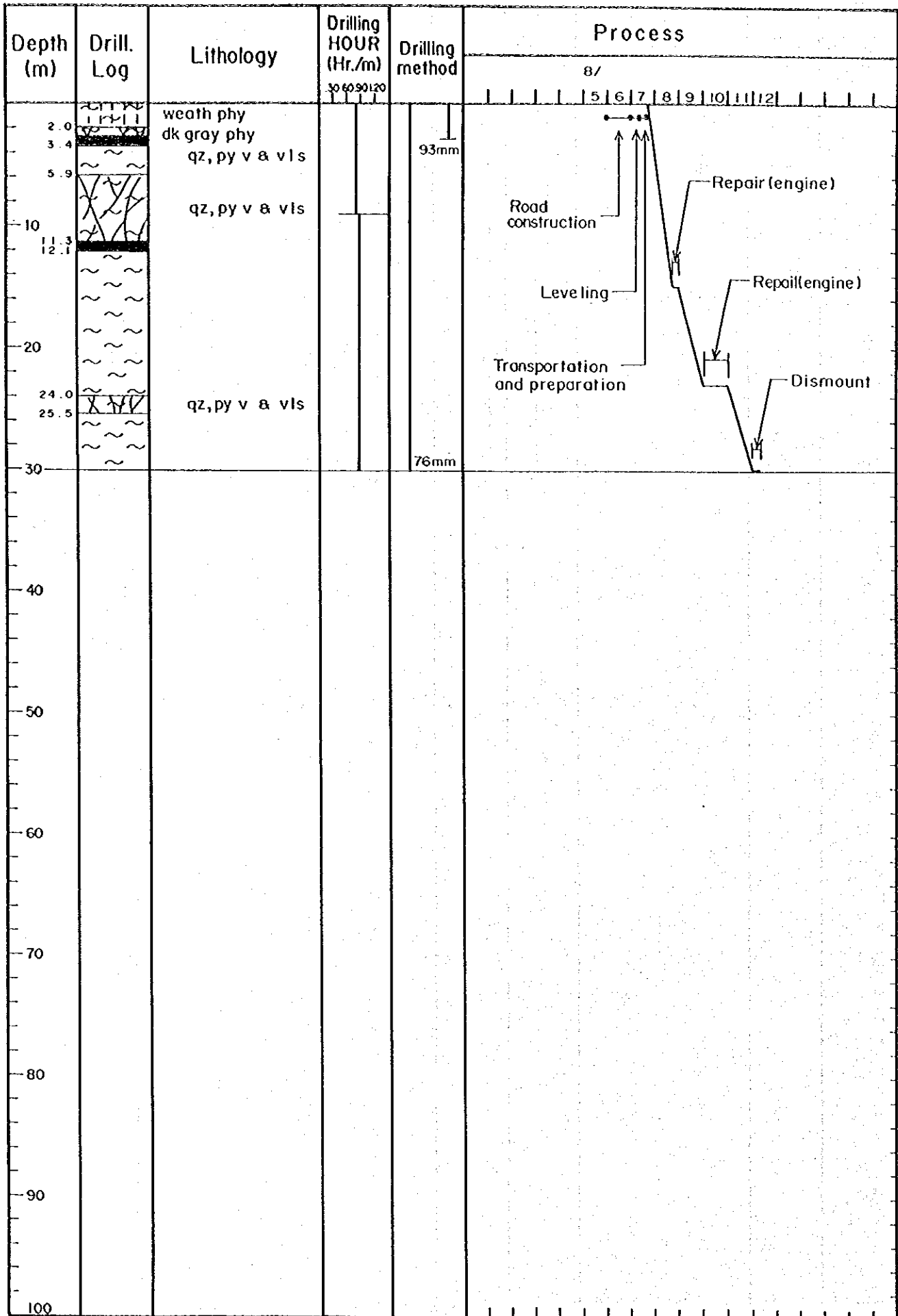
Appendix 3-3(4) PROGRESS RECORD OF DIAMOND DRILLING (MJML-4)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process	
					8/	15 16 17 18 19 20
3.2		Soil				
6.6		dk gray silic phy qz vls		93mm		
8.9		gray silic sdy phy frac zone				Road construction
11.0		qz vis				Leveling
15.0		qz, py vls				Transportation and preparation
20.0		dk gray silic phy				
23.0		qz, py vls				
28.0		qz, py vls				Dismount
30				76mm		
40						
50						
60						
70						
80						
90						
100						

Appendix 3-3(5) PROGRESS RECORD OF DIAMOND DRILLING (MJML - 5)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process															
					8/															
			30 60 90 120																	
3.0		Soil																		
4.7		dk gray phy																		
6.1		qz v & vls																		
10																				
15.2		qz py vls																		
16.9																				
20																				
30																				
40																				
50																				
60																				
70																				
80																				
90																				
100																				

Appendix 3-3(6) PROGRESS RECORD OF DIAMOND DRILLING (MJML- 6)



Appendix 3-3(7) PROGRESS RECORD OF DIAMOND DRILLING (MJML-- 7)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process													
					7/	8/												
					24	25	26	27	28	29	30	31	1	2	3	4	5	
1.0		weath phy dk gray phy																
4.3		frac zone w/ qz v & vls																
6.3		qz, py v																
10		qz, py v																
11.1		qz, py v																
12.2		qz, py v																
20		qz v & vls																
25.7		qz v & vls																
26.9		qz v & vls																
30																		
40																		
50																		
60																		
70																		
80																		
90																		
100																		

Appendix 3-3(9) PROGRESS RECORD OF DIAMOND DRILLING (MJML- 9)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)		Drilling method	Process																
						7/																
			30	60	90	120																
3.6		weath sdy phy.																				
4.6		gray silic sdy phy																				
6.6		qz, py v & vls frac zone																				
8.7																						
10		qz, py vls																				
10.5																						
12.9																						
14.4		qz, py vls																				
20																						
20.7																						
23.5		dk gray silic phy																				
		qz, py, chl vls																				
30																						
40																						
50																						
60																						
70																						
80																						
90																						
100																						

Appendix 3-3(10) PROGRESS RECORD OF DIAMOND DRILLING (MJML-10)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																
2.0		Soil																			
5.6		gray silic sdy phy																			
10.7		qz,py,limo vls																			
13.9		frac zone w/ qz vls																			
24.2		qz,col,limo v																			
27.5		qz,col,py vls																			
28.8																					
30																					
40																					
50																					
60																					
70																					
80																					
90																					
100																					

Appendix 3-3(11) PROGRESS RECORD OF DIAMOND DRILLING (MJML-11)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process								
					8/								
			30 60 90 120										
2.2		Soil											
5.7		gray silic phy frac zone w/ abu qz v		93mm									
7.5		gray silic sdy phy frac zone											
9.8		qz, py v & vls											
12.5		frac zone w/ qz, py v & vls											
13.7		frac zone w/ qz, py v & vls											
15.4		frac zone w/ qz, py v & vls											
19.7		frac zone w/ qz, py v & vls											
20		frac zone w/ qz, py v & vls											
30		frac zone w/ qz, py v & vls		76mm									
40													
50													
60													
70													
80													
90													
100													

Appendix 3-3(12) PROGRESS RECORD OF DIAMOND DRILLING (MJML-12)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process	
					8/	13 14 15 16 17 18 19
2.6 3.2		Soil gray silic sdy phy		93mm		
7.6		qz, py vls				Road construction
10		qz, py vls				Leveling
12.7		network qz vls				Transportation and preparation
20 20.0		network qz vls				
24.5		str silic rock w/py				
27.4		qz, py vls		76mm		Dismount
29.1		qz, py vls				
30						
40						
50						
60						
70						
80						
90						
100						

Appendix 3-3(13) PROGRESS RECORD OF DIAMOND DRILLING (MJML-13)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process													
					8/													
					4	5	6	7	8	9	10	11	12	13	14	1		
1.0		Soil gray silic sdy phy																
7.6		frac zone w/ qz, limo vls		93mm														
13.2		blk sl																
17.8		blk sl																
20.3		gray silic phy frac zone																
21.2		gray silic phy frac zone																
22.4		gray silic phy frac zone																
25.6		qz, py, limo vls																
30		qz, py, limo vls		76mm														
40																		
50																		
60																		
70																		
80																		
90																		
100																		

Appendix 3-3(14) PROGRESS RECORD OF DIAMOND DRILLING (MJML-14)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																	
					7/	8/	9/	10/	11/	12/	13/	14/	15/	16/	17/	18/						
0.9		Soil gray silic sdy phy		93mm																		
7.3		frac zone w/ qz vls																				
10.4																						
14.1		qz vls																				
16.8		dk gray phy																				
17.8																						
20																						
22.9		gray silic sdy phy																				
24.2		qz vls																				
24.7																						
27.6		frac zone w/ clay & qz vls		76mm																		
30																						
40																						
50																						
60																						
70																						
80																						
90																						
100																						

Appendix 3-3(15) PROGRESS RECORD OF DIAMOND DRILLING (MJML--15)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process													
					7/	24	25	26	27	28	29	30	31					
2.4	Soil	gray silic sdy ph		93mm														
7.5	dk gray silic phy	qz,py v & vls																
10	frac zone																	
13.4	gray silic sdy phy	qz v & vls																
14.6																		
15.2																		
20																		
28.0																		
28.9																		
29.7																		
30				76mm														
40																		
50																		
60																		
70																		
80																		
90																		
100																		

Appendix 3-3(16) PROGRESS RECORD OF DIAMOND DRILLING (MJML-16)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process															
					7/	22	23	24	25	26	27									
1.0		weath sdy phy																		
3.0		qz v																		
4.8		gray silic sdy phy																		
5.8		qz vls																		
6.8		qz v																		
7.8																				
10																				
11.5		qz vls																		
14.8																				
20																				
25.0		frac zone																		
27.9		qz, py vls																		
30																				
40																				
50																				
60																				
70																				
80																				
90																				
100																				

Appendix 3-3(17) PROGRESS RECORD OF DIAMOND DRILLING (MJML-17)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																
					7/	20	21	22	23	24	25										
2.3		weath sdy phy																			
3.0		gray sdy phy																			
4.9		qz v																			
5.7		qz v																			
6.4		qz, py v & vls																			
10		dk gray phy																			
12.5		dk gray phy																			
13.5		dk gray phy																			
16.6		silic phy frac zone																			
20		qz vls																			
24.5		frac zone																			
27.0		qz vls																			
30		qz vls																			
40																					
50																					
60																					
70																					
80																					
90																					
100																					

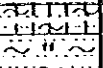
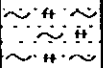
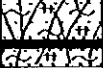
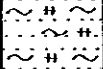
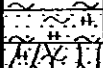

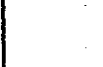


Appendix 3-3(18) PROGRESS RECORD OF DIAMOND DRILLING (MJML-18)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																
					7/																
			30 60 90 120																		
3.3		weath phy																			
4.7		dk gray phy gray silic sdy phy		93mm																	
8.5																					
9.5		frac zone																			
10.9		qz,py,chl v & vls																			
20		qz,py,chl v																			
24.3																					
30				76mm																	
40																					
50																					
60																					
70																					
80																					
90																					
100																					

Appendix 3-3(20) PROGRESS RECORD OF DIAMOND DRILLING (MJML--20)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process												
					7/												
					12	13	14	15	16	17	18	19	20				
2.2		weath phy dk gray phy		93mm													
5.0		frac zone w/ qz v & vls															
8.9																	
10																	
11.8		qz v & vls															
13.8																	
16.8		qz v & vls															
17.8																	
20																	
20.7		qz v & vls															
22.5																	
30				76mm													
40																	
50																	
60																	
70																	
80																	
90																	
100																	

Appendix 3-3(21) PROGRESS RECORD OF DIAMOND DRILLING (MJML-21)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process	
					7/	18 19 20 21 22 23
1.8		weath sdy phy dk gray sdy phy		93mm		
10		qz, py v & vls			Road construction	
14.4		qz, py v & vls			Leveling	
18.5		dk gray phy			Transportation and preparation	
20		dk gray phy				
24.0		gray silic sdy phy		76mm		
25.6		qz, py vls				
27.2		qz, py vls				
29.2		qz, py vls				Dismount
30						
40						
50						
60						
70						
80						
90						
100						

Appendix 3-3(22) PROGRESS RECORD OF DIAMOND DRILLING (MJML-22)

Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process											
					7/	8/	9/	10/	11/	12/	13/	14/	15/	16/	17/	18/
2.0		weath phy blk phy	30 40 50 120 	93mm												
5.2 5.8		gray silic sdy phy														
10		blk phy qz v & vls														
13.5 15.9		gray silic sdy phy														
17.6		blk phy qz v & vls														
20		gray silic sdy phy														
24.2 26.0		blk phy qz v & vls														
30		gray silic sdy phy														
30				76mm												
40																
50																
60																
70																
80																
90																
100																

Appendix 3-4 Results of Hole Deviation Measurement

MJSN-15			MJSN-16			MJML-3		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
5	333°	74°30'	5	333°	74°30'	5	202°	75°00'
20	333°	75°30'	20	333°	75°30'	20	203°	74°15'
40	333°	76°00'	40	333°	76°30'	24	204°	74°00'
60	331°	76°30'	55	333°	77°00'			
80	330°	77°00'						
100	330°	77°00'						
108	330°	77°00'						

MJML-4			MJML-5			MJML-6		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
3	202°	74°30'	4	199°	74°15'	5	204°	75°45'
20	203°	74°00'	20	201°	74°00'	20	200°	75°15'
						27	198°	75°45'

MJML-7			MJML-8			MJML-9		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
5	202°	74°45'	5	200°	75°00'	5	202°	75°00'
12	203°	74°15'	10	201°	74°45'	20	203°	74°45'
25	204°	74°00'	25	203°	74°30'			

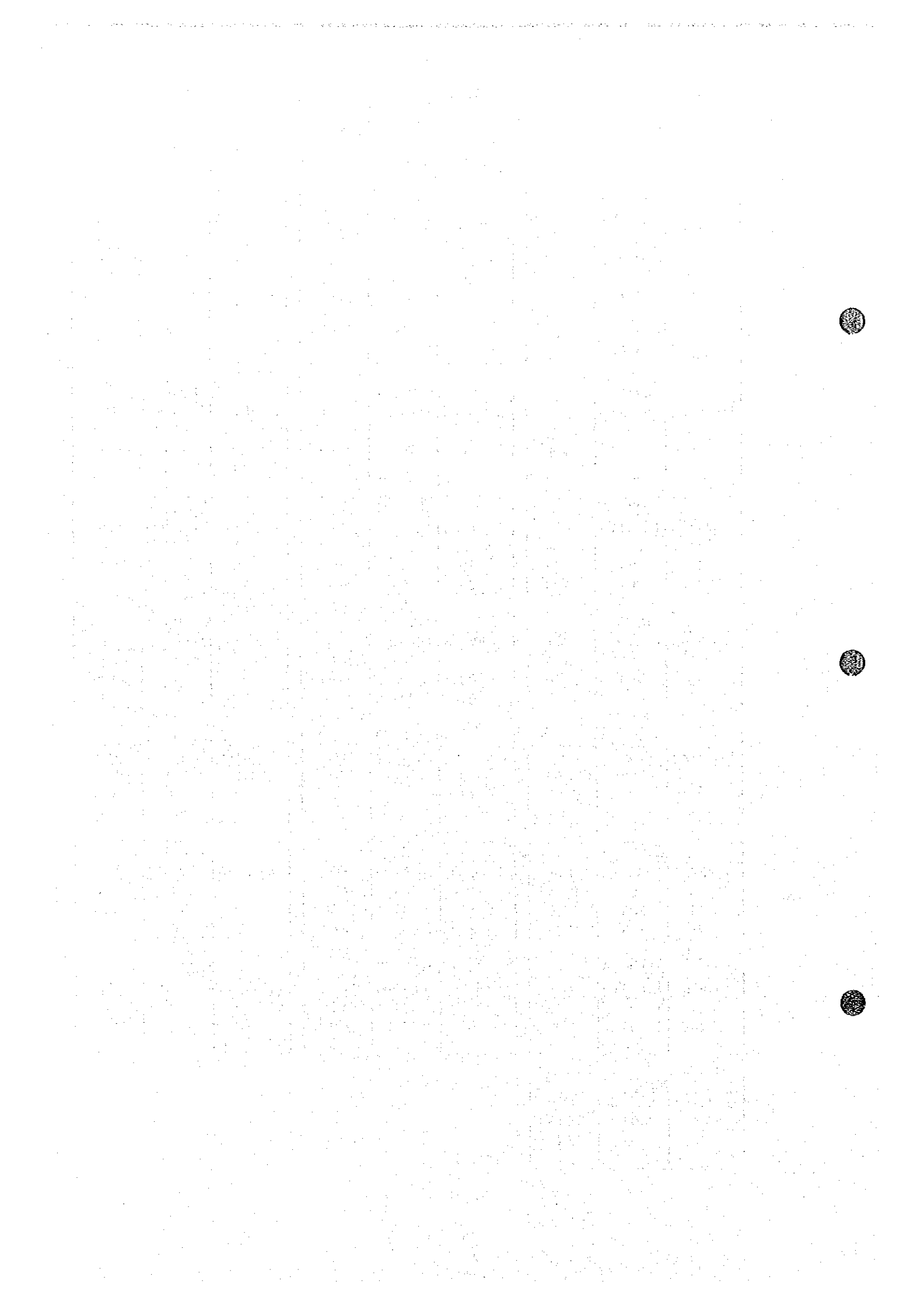
MJML-10			MJML-11			MJML-12		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
5	201°	75°15'	5	203°	76°00'	4	205°	75°30'
20	200°	75°30'	20	206°	75°45'	20	203°	75°00'
			25	205°	75°30'			

MJML-13			MJML-14			MJML-15		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
5	198°	76°00'	5	204°	75°30'	5	199°	75°15'
20	194°	75°00'	17	203°	76°00'	14	201°	75°30'
						25	202°	75°00'

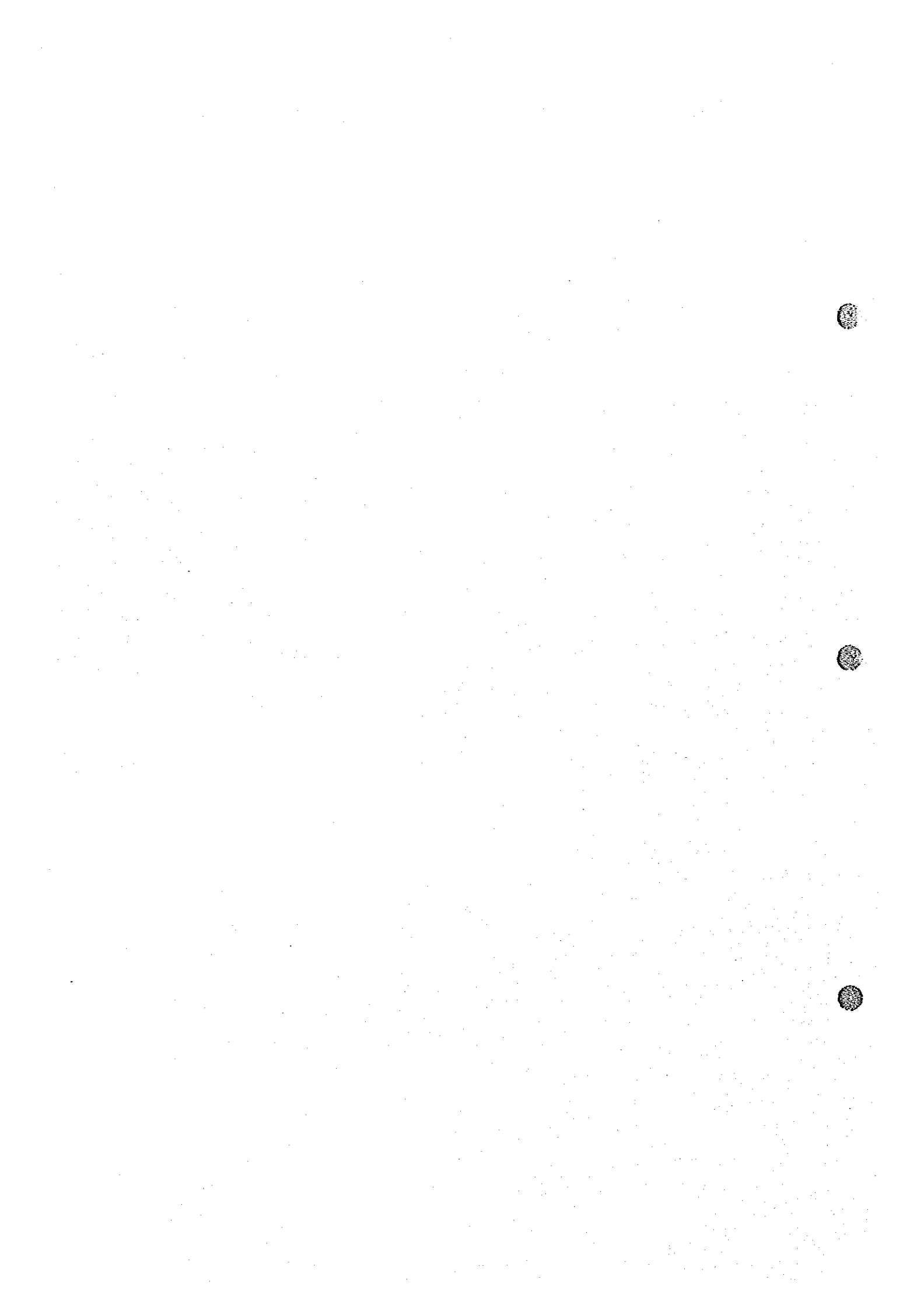
MJML-16			MJML-17			MJML-18		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
5	203°	75°45'	5	206°	74°45'	5	200°	75°30'
14	200°	75°30'	15	204°	75°30'	20	202°	75°15'
25	198°	75°15'	25	203°	76°00'	25	203°	75°00'

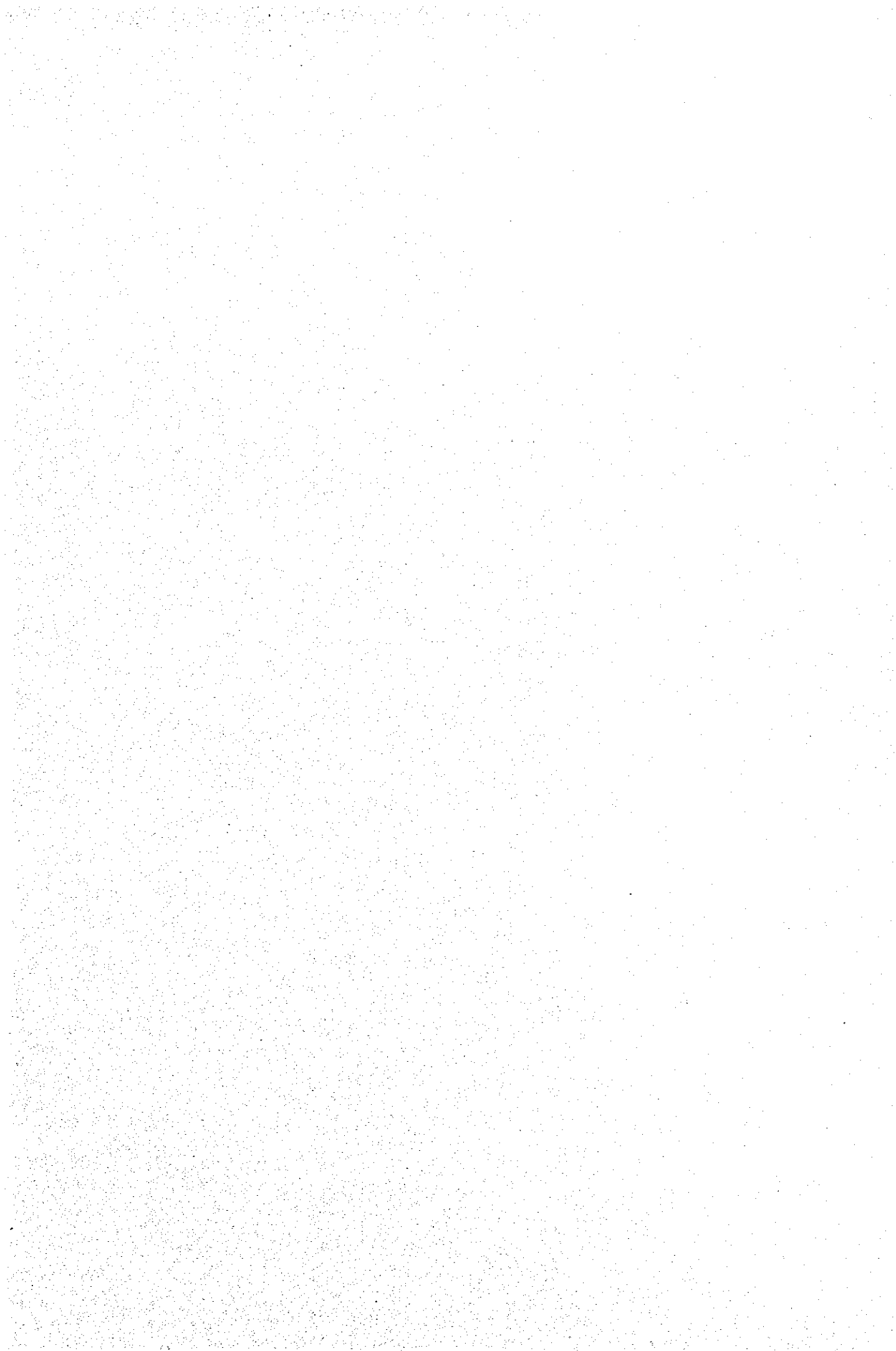
MJML-19			MJML-20			MJML-21		
Depth (m)	Direction	Dip	Depth (m)	Direction	Dip	Depth (m)	Direction	Dip
4	203°	75°30'	5	200°	76°15'	5	202°	74°30'
20	204°	75°00'	18	203°	76°00'	20	208°	75°00'

MJML-22		
Depth (m)	Direction	Dip
5	205°	75°15'
16	203°	75°45'









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