

付 帶 資 料

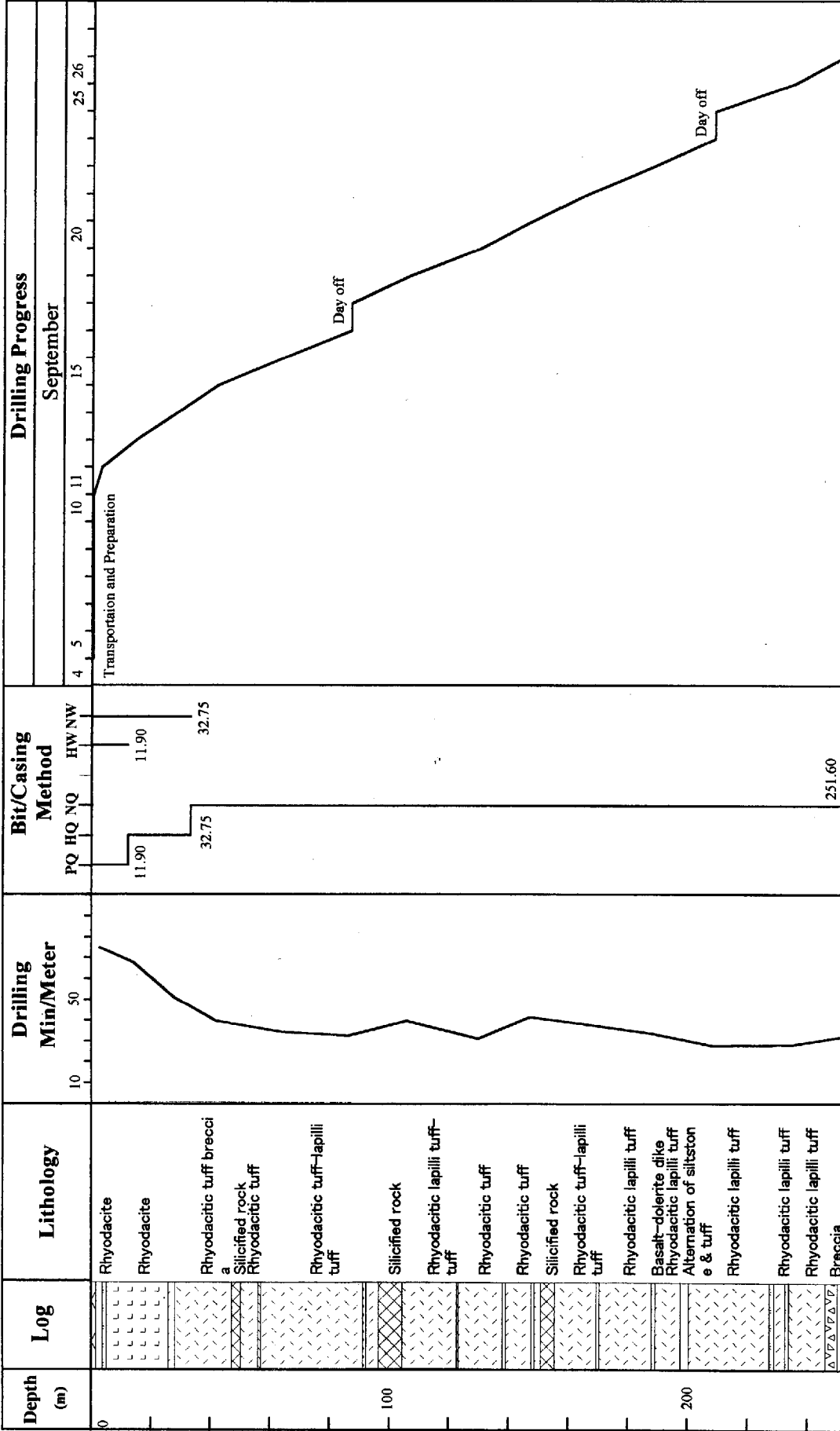
Appendix 1-1 Summary of Drilling Operation of MJSU-1

MJSU-1 Operation	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Transportation/Preparation	Sep. 4, 1999-Sep. 10, 1999	7	6	1	48.0	63.5	
Drilling	Sep. 11, 1999-Sep. 26, 1999	16	14	2	68.0	69.5	
Dismantling	Sep. 26, 1999						
Total		23	20	3	116.0	133.0	
Drilling Length	(m)		(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core Recovery	Cumulative Core Recovery	
Increase/Decrease in Length	1.60	Core Length	251.20	(m)	(%)	(%)	
Length Drilled	251.60	Core Recovery(%)	99.84	0.00 to 100.00	99.60	99.60	
				100.00 to 200.00	100.00	99.80	
				200.00 to 251.40	100.00	99.84	
Working Hours	(h)	(%)	(%)				
Drilling	154.5	71.5	58.5				
Other Work	60.5	28.0	22.9				
Recovering	1.0	0.5	0.4	Efficiency of Drilling			
Subtotal	216.0	100.0	81.8	Total Length/ Drilling Period	m	day	m/day
Preparation	16.0		6.1	251.60	16.0	15.73	
Dismantlement			0.0	Total Length/ Total Drilling Shifts	m	shift	m/shift
Transportation	32.0		12.1	251.60	27.0	9.32	
Grand Total	264.0		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	11.90	11.50	
				HQ	20.85	20.85	
HW	11.9	4.7	100.0	NQ	218.85	218.85	
NW	32.8	13.0	100.0				

Appendix 1-2 Record of Drilling Operation of MJSU-1

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Core (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Sep. 4	Transportation							1	9.0	12.0
5	Transportation							1	9.0	12.0
6	Preparation							1	9.0	12.0
7	Preparation							1	9.0	12.0
8	Preparation							1	9.0	12.0
9	Preparation							1	3.0	3.5
10	Day off									
11	2.80		2.80	2.80	2.80	2.80	1	1	3.0	3.5
12	6.30	5.00	11.30	14.10	10.90	13.70	2	2	5.0	4.5
13	5.30	8.55	13.85	27.95	13.85	27.55	2	2	5.0	5.5
14	4.80	8.95	13.75	41.70	13.75	41.30	2	2	5.0	5.5
15	10.15	12.00	22.15	63.85	22.15	63.45	2	2	5.0	5.5
16	15.00	7.55	22.55	86.40	22.55	86.00	2	2	5.0	5.0
17	Day off		0.00	86.40	0.00	86.00				
18	9.95	9.40	19.35	105.75	19.35	105.35	2	2	5.0	5.0
19	13.00	11.05	24.05	129.80	24.05	129.40	2	2	5.0	5.0
20	8.30	9.10	17.40	147.20	17.40	146.80	2	2	5.0	5.0
21	9.65	9.00	18.65	165.85	18.65	165.45	2	2	5.0	5.0
22	14.00	7.95	21.95	187.80	21.95	187.40	2	2	5.0	5.0
23	17.05	3.40	20.45	208.25	20.45	207.85	2	2	5.0	5.0
24	Day off		0.00	208.25	0.00	207.85				
25	8.60	18.00	26.60	234.85	26.60	234.45	2	2	5.0	5.0
26	13.15	3.80	16.75	251.60	16.75	251.20	2	2	5.0	5.0
Total				251.60		251.20	27	33	116.0	133.0

Appendix 1-3 Drilling Progress of MJSU-1



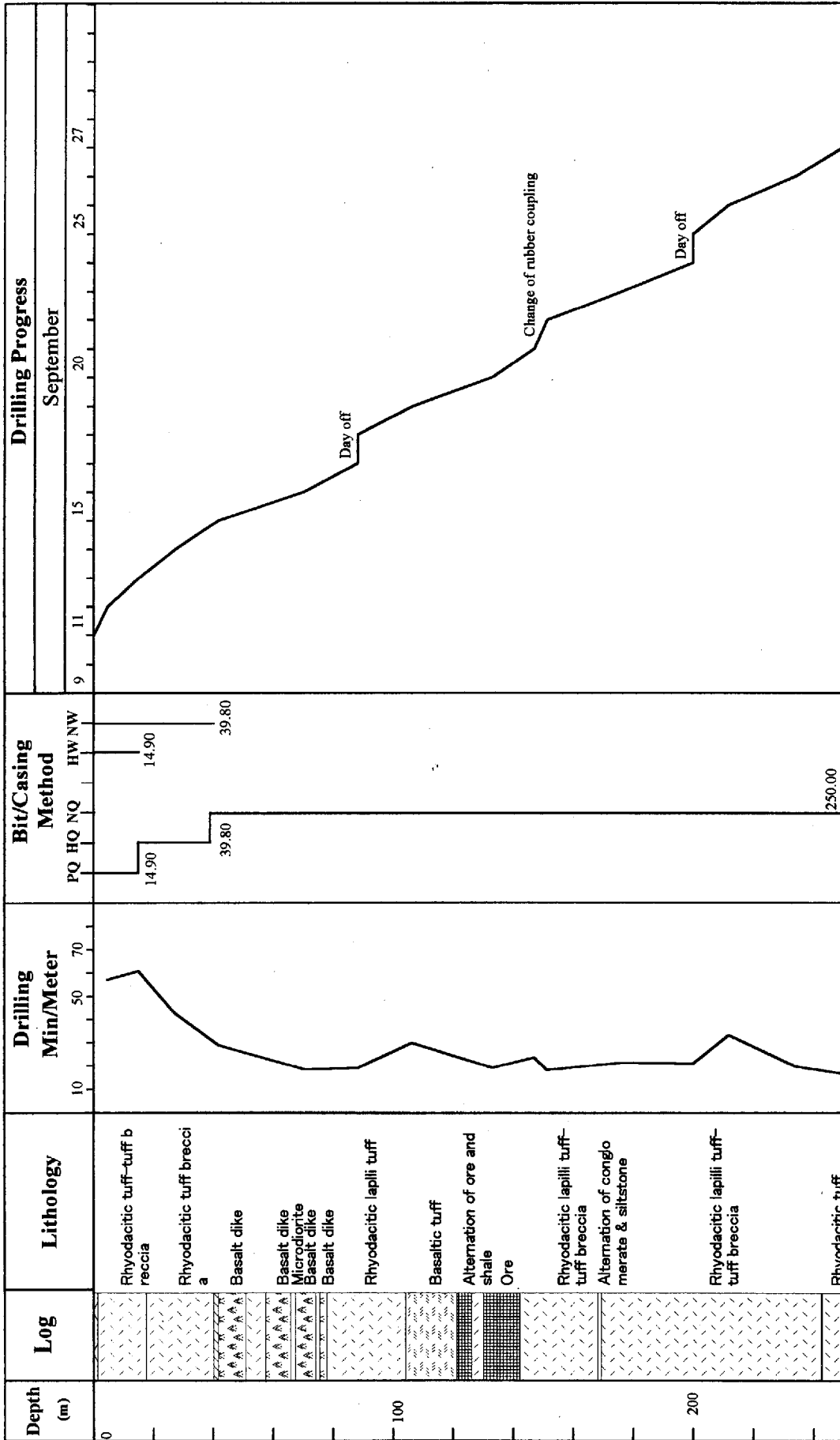
Appendix 1-4 Summary of Drilling Operation of MJSU-2

MJSU-2 Operation	Survey Period				Total Man-day	
	Period	Day	Work Day	Off Day	Engineer	Worker
Preparation	Sep. 9, 1999-Sep. 10, 1999	2	1	1	3.0	3.5
Drilling	Sep. 11, 1999-Sep. 27, 1999	17	15	2	73.0	76.5
Dismantling	Sep. 27, 1999	0	0	0	0.0	0.0
Total		19	16	3	76.0	80.0
Drilling Length	(m)	(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core	Cumulative Core
Increase/Decrease in Length	0.00	Core Length	250.00	(m)	Recovery (%)	Recovery (%)
Length Drilled	250.00	Core Recovery(%)	100.00	0.00 to 100.00	100.00	100.00
				100.00 to 200.00	100.00	100.00
				200.00 to 250.00	100.00	100.00
Working Hours	(h)	(%)	(%)	Efficiency of Drilling		
Drilling	146.2	63.0	60.9	Total Length/ Drilling Period	m 250.00	day 16.5
Other Work	79.4	34.2	33.1			m/day 15.15
Recovering	6.5	2.8	2.7	Total Length/ Total Drilling Shifts	m 250.00	shift 29.0
Subtotal	232.1	100.0	96.7			m/shift 8.62
Preparation	8.0		3.3	Drilling Length/Each Bit(m)		
Dismantlement			0.0	Bit Size	Drilling Length	Core Length
Transportation	0.0		0.0	PQ	14.90	14.90
Grand Total	240.1		100.0	HQ	24.90	24.90
				NQ	210.20	210.20
Casing Pipe Inserted	Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)		
	HW	14.9	6.0	100.0		
	NW	39.8	15.9	100.0		

Appendix 1-5 Record of Drilling Operation of MJSU-2

Date	Drilling Length		Drilling Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Core (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Sep. 9	Preparation							1	3.0	3.5
10	Day off									
11	4.70		4.70	4.70	4.70	4.70	1	1	3.0	4.5
12	5.45	4.75	10.20	14.90	10.20	14.90	2	2	5.0	5.5
13	3.00	9.30	12.30	27.20	12.30	27.20	2	2	5.0	5.5
14	11.70	2.70	14.40	41.60	14.40	41.60	2	2	5.0	5.5
15	13.05	15.60	28.65	70.25	28.65	70.25	2	2	5.0	5.5
16	12.00	5.90	17.90	88.15	17.90	88.15	2	2	5.0	5.0
17	Day off		0.00	88.15	0.00	88.15				
18	7.05	11.05	18.10	106.25	18.10	106.25	2	2	5.0	5.0
19	12.00	14.85	26.85	133.10	26.85	133.10	2	2	5.0	5.0
20	11.65	2.25	13.90	147.00	13.90	147.00	2	2	5.0	5.0
21	0.00	4.25	4.25	151.25	4.25	151.25	2	2	5.0	5.0
22	10.50	14.50	25.00	176.25	25.00	176.25	2	2	5.0	5.0
23	14.00	9.75	23.75	200.00	23.75	200.00	2	2	5.0	5.0
24	Day off		0.00	200.00	0.00	200.00				
25	8.25	3.60	11.85	211.85	11.85	211.85	2	2	5.0	5.0
26	10.00	12.30	22.30	234.15	22.30	234.15	2	2	5.0	5.0
27	15.85	Casing take-out	15.85	250.00	15.85	250.00	2	2	5.0	5.0
Total				250.00		250.00	29	30	76.0	80.0

Appendix 1-6 Drilling Progress of MJSU-2



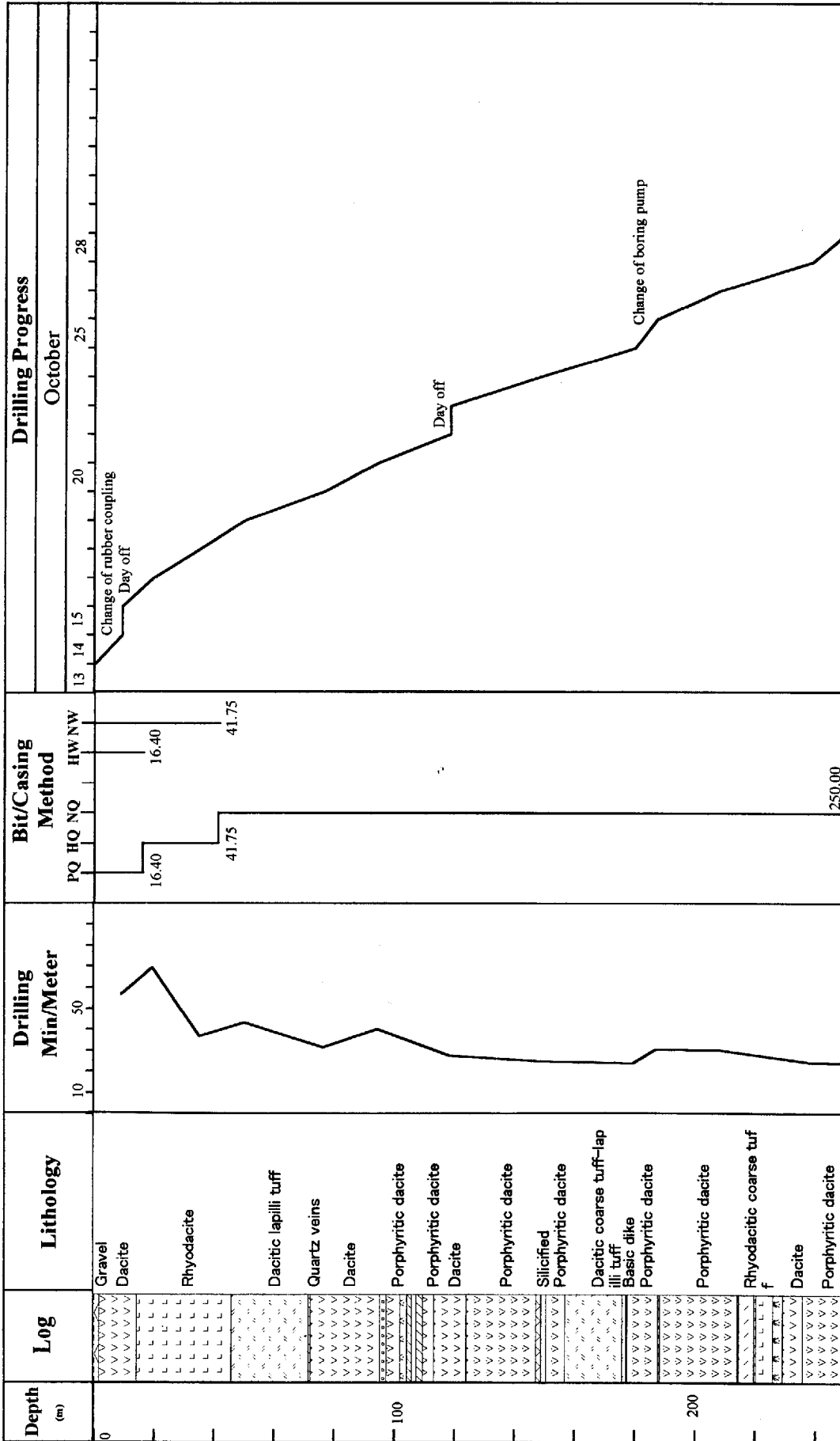
Appendix 1-7 Summary of Drilling Operation of MJSU-3

MJSU-3 Operation	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Preparation	Oct. 13, 1999	1.0	1.0	0.0	5.0	5.0	
Drilling	Oct. 14, 1999-Oct. 28, 1999	14.5	12.5	2.0	65.0	65.0	
Dismantling	Oct. 28, 1999	0.0	0.0	0.0	0.0	0.0	
Total		15.5	13.5	2.0	70.0	70.0	
Drilling Length	(m)		(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core Recovery	Cumulative Core Recovery	
Increase/Decrease in Length	0.00	Core Length	250.00	(m)	(%)	(%)	
Length Drilled	250.00	Core Recovery(%)	100.00	0.00 to 100.00	100.00	100.00	
				100.00 to 200.00	100.00	100.00	
				200.00 to 250.00	100.00	100.00	
Working Hours	(h)	(%)	(%)				
Drilling	134.0	61.2	59.8				
Other Work	61.2	27.9	27.3				
Recovering	23.8	10.9	10.6				
Subtotal	219.0	100.0	97.8	Efficiency of Drilling			
Preparation	5.0		2.2	Total Length/ Drilling Period	m	day	m/day
				250.00	14.5	17.24	
Dismantlement			0.0	Total Length/ Total Drilling Shifts	m	shift	m/shift
Transportation	0.0		0.0	250.00	25.0	10.00	
Grand Total	224.0		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	16.40	16.40	
				HQ	25.35	25.35	
HW	16.4	6.6	100.0	NQ	208.25	208.25	
NW	41.8	16.7	100.0				

Appendix 1-8 Record of Drilling Operation of MJSU-3

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Core (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Oct. 13	Preparation	Repairing	0.00	0.00	0.00	0.00	0	2	5.0	5.0
14	3.65	5.60	9.25	9.25	9.25	9.25	2	2	5.0	5.0
15	Day off		0.00	9.25	0.00	9.25				
16	5.55	4.85	10.40	19.65	10.40	19.65	2	2	5.0	5.0
17	7.75	7.85	15.60	35.25	15.60	35.25	2	2	5.0	5.0
18	6.50	8.45	14.95	50.20	14.95	50.20	2	2	5.0	5.0
19	12.45	13.85	26.30	76.50	26.30	76.50	2	2	5.0	5.0
20	7.80	10.20	18.00	94.50	18.00	94.50	2	2	5.0	5.0
21	15.45	8.55	24.00	118.50	24.00	118.50	2	2	5.0	5.0
22	Day off		0.00	118.50	0.00	118.50				
23	10.85	19.15	30.00	148.50	30.00	148.50	2	2	5.0	5.0
24	19.50	11.70	31.20	179.70	31.20	179.70	2	2	5.0	5.0
25	7.35	Repairing	7.35	187.05	7.35	187.05	1	2	5.0	5.0
26	10.80	10.00	20.80	207.85	20.80	207.85	2	2	5.0	5.0
27	12.65	18.25	30.90	238.75	30.90	238.75	2	2	5.0	5.0
28	11.25	Casing take-out	11.25	250.00	11.25	250.00	2	2	5.0	5.0
Total				250.00		250.00	25	28	70.0	70.0

Appendix 1-9 Drilling Progress of MJSU-3



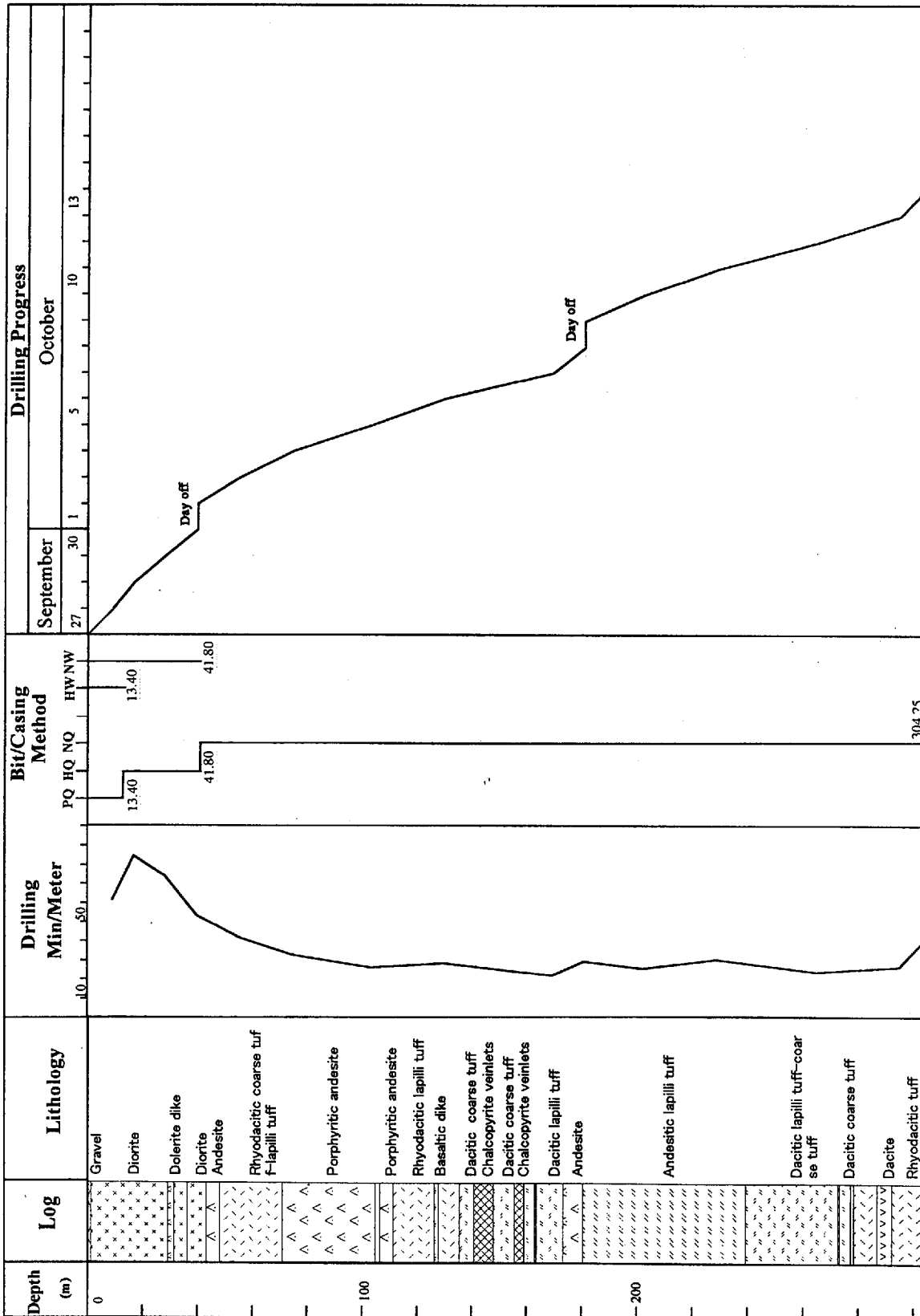
Appendix 1-10 Summary of Drilling Operation of MJSU-4

MJSU-4 Operation	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Preparation	Sep. 27	0.0	0.0	0.0	0.0	0.0	
Drilling	Sep. 27, 1999-Oct. 13, 1999	17.0	15.0	2.0	75.0	75.0	
Dismantling	Oct. 13, 1999	0.0	0.0	0.0	0.0	0.0	
Total		17.0	15.0	2.0	75.0	75.0	
Drilling Length	(m)	(m)	Core Recovery of 100m Hole				
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core Recovery	Cumulative Core Recovery	
Increase/Decrease in Length	54.25	Core Length	302.85	(m)	(%)	(%)	
Length Drilled	304.25	Core Recovery(%)	99.54	0.00 to 100.00	98.60	98.60	
				100.00 to 200.00	100.00	99.30	
Working Hours	(h)	(%)	(%)	200.00 to 300.00	100.00	99.53	
Drilling	168.3	71.5	70.1	200.00 to 304.25	100.00	99.54	
Other Work	62.1	26.4	25.9				
Recovering	4.9	2.1	2.0	Efficiency of Drilling			
Subtotal	235.3	100.0	98.0	Total Length/ Drilling Period	m	day	m/day
Preparation	4.8		2.0	304.25	17.0	17.90	
Dismantlement			0.0	Total Length/ Total Drilling Shifts	m	shift	m/shift
Transportation	0.0		0.0	304.25	30.0	10.14	
Grand Total	240.1		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	13.40	13.40	
				HQ	28.40	27.00	
HW	13.4	4.4	100.0	NQ	262.45	262.45	
NW	41.8	13.7	100.0				

Appendix 1-11 Record of Drilling Operation of MJSU-4

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Core (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Sep. 27	2.50	6.55	9.05	9.05	9.05	9.05	2	2	5.0	5.0
28	4.00	3.80	7.80	16.85	7.80	16.85	2	2	5.0	5.0
29	5.00	6.15	11.15	28.00	11.15	28.00	2	2	5.0	5.0
30	6.20	5.60	11.80	39.80	10.40	38.40	2	2	5.0	5.0
Oct. 1	Day off		0.00	39.80	0.00	38.40				
2	3.35	12.15	15.50	55.30	15.50	53.90	2	2	5.0	5.0
3	12.85	6.70	19.55	74.85	19.55	73.45	2	2	5.0	5.0
4	11.45	17.00	28.45	103.30	28.45	101.90	2	2	5.0	5.0
5	16.00	10.50	26.50	129.80	26.50	128.40	2	2	5.0	5.0
6	18.50	21.00	39.50	169.30	39.50	167.90	2	2	5.0	5.0
7	5.45	6.20	11.65	180.95	11.65	179.55	2	2	5.0	5.0
8	Day off		0.00	180.95	0.00	179.55				
9	9.30	12.05	21.35	202.30	21.35	200.90	2	2	5.0	5.0
10	12.85	13.65	26.50	228.80	26.50	227.40	2	2	5.0	5.0
11	17.00	19.20	36.20	265.00	36.20	263.60	2	2	5.0	5.0
12	18.30	11.75	30.05	295.05	30.05	293.65	2	2	5.0	5.0
13	8.10	1.10	9.20	304.25	9.20	302.85	2	2	5.0	5.0
Total				304.25		302.85	30	30	75.0	75.0

Appendix 1-12 Drilling Progress of MJSU-4



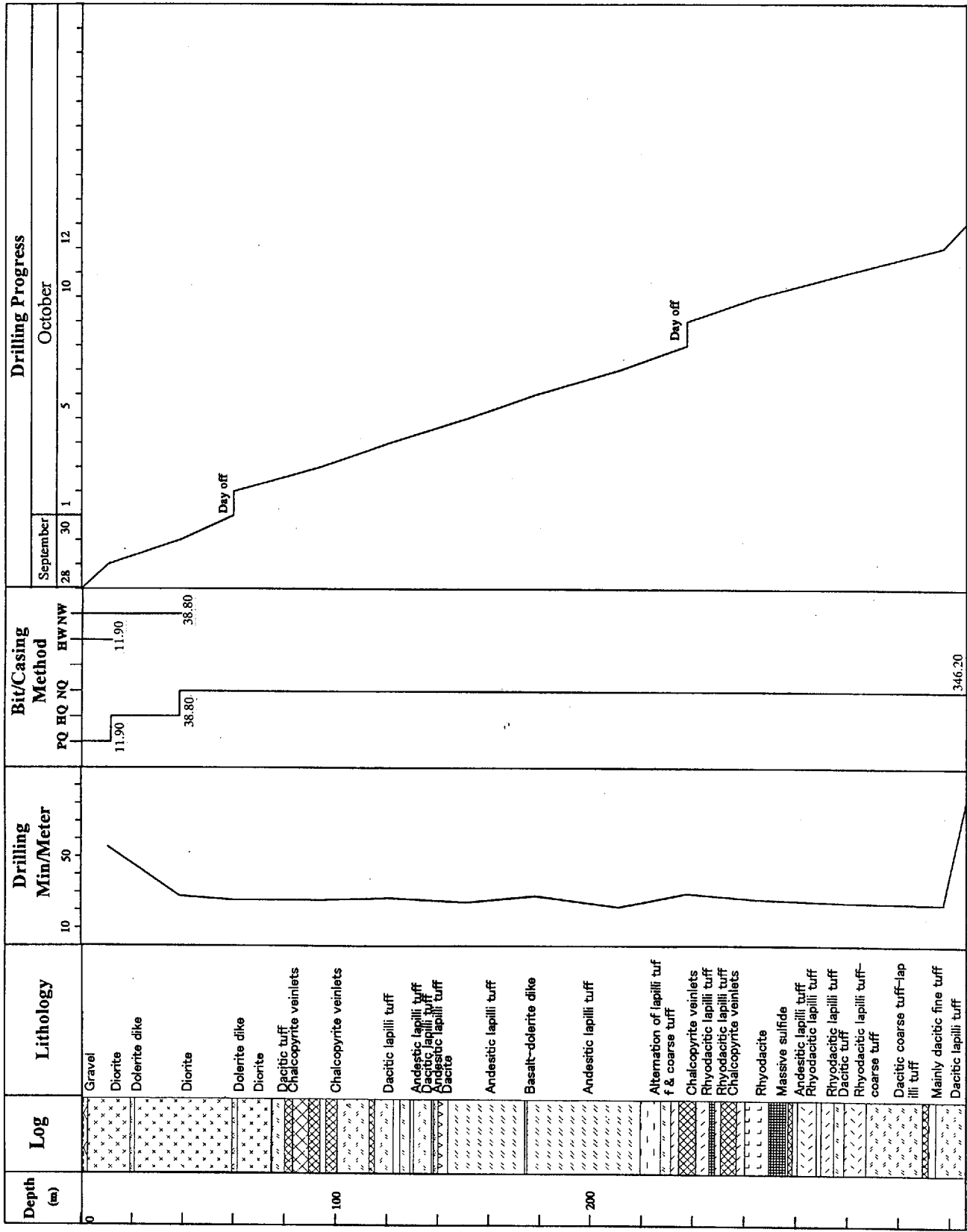
Appendix 1-13 Summary of Drilling Operation of MJSU-5

MJSU-5		Survey Period				Total Man-day	
		Period	Day	Work Day	Off Day	Engineer	Worker
Operation							
Preparation	Sep. 28, 1999		0.0	0.0	0.0	0.0	0.0
Drilling	Sep. 28, 1999-Oct. 12, 1999		15.0	13.0	2.0	65.0	65.0
Dismantling	Oct. 12, 1999		0.0	0.0	0.0	0.0	0.0
Total			15.0	13.0	2.0	65.0	65.0
Drilling Length	(m)		(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core	Cumulative Core	
Increase/Decrease in Length	96.20	Core Length	346.20	(m)	Recovery (%)	Recovery (%)	
Length Drilled	346.20	Core Recovery(%)	100.00	0.00 to 100.00	100.00	100.00	
				100.00 to 200.00	100.00	100.00	
Working Hours	(h)	(%)	(%)	200.00 to 300.00	100.00	100.00	
Drilling	160.6	78.9	77.2	200.00 to 346.20	100.00	100.00	
Other Work	42.0	20.6	20.2				
Recovering	1.0	0.5	0.5	Efficiency of Drilling			
Subtotal	203.6	100.0	97.8	Total Length/Drilling Period	m	day	m/day
Preparation	4.5		2.2	346.20		15.0	23.08
Dismantlement			0.0	Total Length/Total Drilling Shifts	m	shift	m/shift
Transportation	0.0		0.0	346.20		26.0	13.32
Grand Total	208.1		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	11.90	11.90	
				HQ	26.90	26.90	
HW	11.9	3.4	100.0	NQ	307.40	307.40	
NW	38.8	11.2	100.0				

Appendix 1-14 Record of Drilling Operation of MJSU-5

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Drilling (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Sep. 28	3.40	7.15	10.55	10.55	10.55	10.55	2	2	5.0	5.0
29	7.90	20.35	28.25	38.80	28.25	38.80	2	2	5.0	5.0
30	8.60	12.60	21.20	60.00	21.20	60.00	2	2	5.0	5.0
Oct. 1	Day off		0.00	60.00	0.00	60.00				
2	18.65	15.55	34.20	94.20	34.20	94.20	2	2	5.0	5.0
3	14.00	13.00	27.00	121.20	27.00	121.20	2	2	5.0	5.0
4	18.00	12.20	30.20	151.40	30.20	151.40	2	2	5.0	5.0
5	13.80	13.00	26.80	178.20	26.80	178.20	2	2	5.0	5.0
6	17.45	15.35	32.80	211.00	32.80	211.00	2	2	5.0	5.0
7	12.20	14.30	26.50	237.50	26.50	237.50	2	2	5.0	5.0
8	Day off		0.00	237.50	0.00	237.50				
9	18.50	9.05	27.55	265.05	27.55	265.05	2	2	5.0	5.0
10	13.45	21.55	35.00	300.05	35.00	300.05	2	2	5.0	5.0
11	19.15	18.00	37.15	337.20	37.15	337.20	2	2	5.0	5.0
12	9.00	Casing take-out	9.00	346.20	9.00	346.20	2	2	5.0	5.0
Total				346.20		346.20	26	26	65.0	65.0

Appendix 1-15 Drilling Progress of MJSU-5



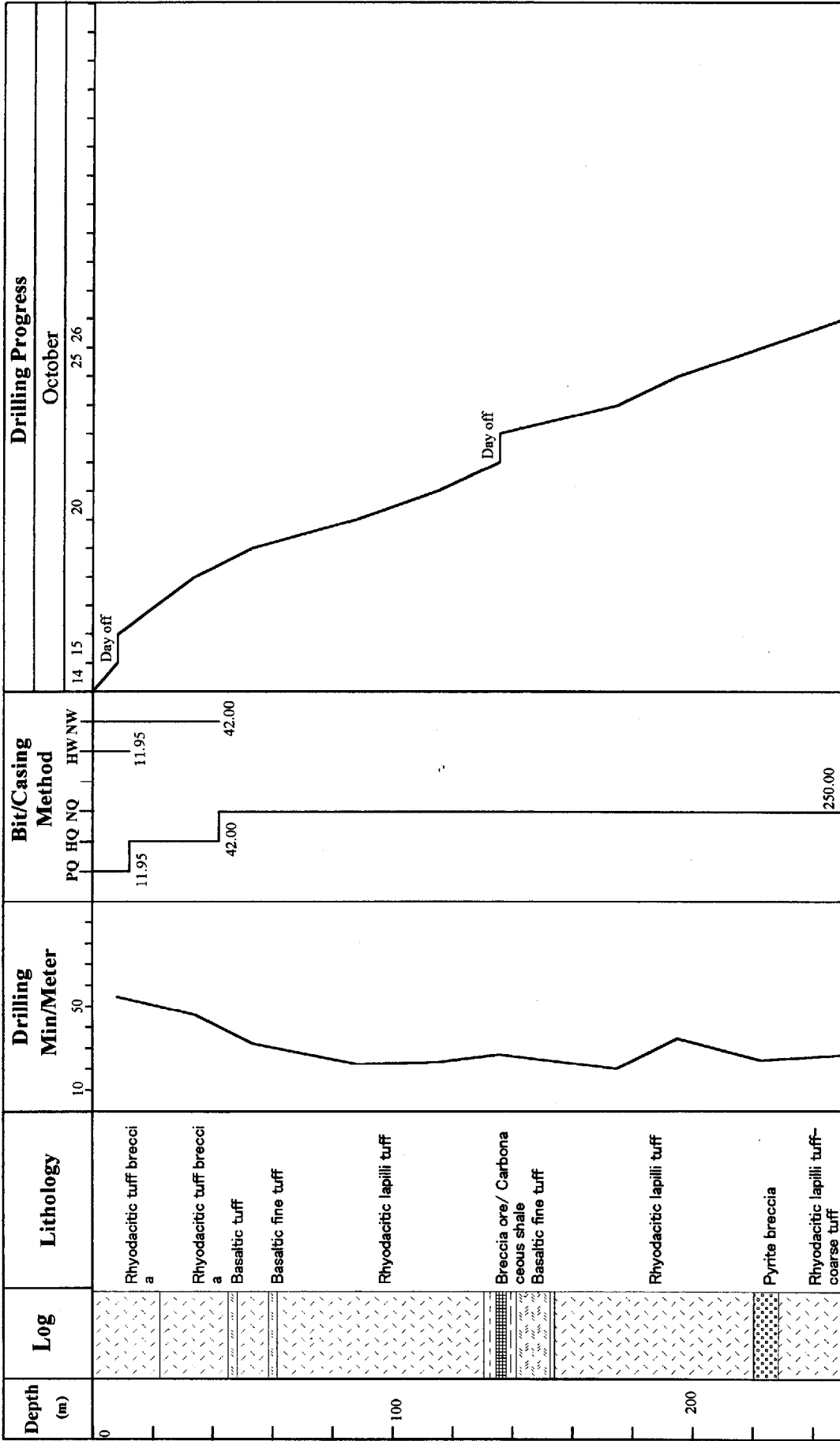
Appendix 1-16 Summary of Drilling Operation of MJSU-6

MJSU-6	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Preparation	Oct. 14, 1999	0.0	0.0	0.0	0.0	0.0	
Drilling	Oct. 14, 1999-Oct. 26, 1999	13.0	11.0	2.0	55.0	55.0	
Dismantling	Oct. 26, 1999	0.0	0.0	0.0	0.0	0.0	
Total		13.0	11.0	2.0	55.0	55.0	
Drilling Length	(m)		(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core Recovery	Cumulative Core Recovery	
Increase/Decrease in Length	0.00	Core Length	250.00	(m)	(%)	(%)	
Length Drilled	250.00	Core Recovery(%)	100.00	0.00 to 100.00	100.00	100.00	
				100.00 to 200.00	100.00	100.00	
Working Hours	(h)	(%)	(%)	200.00 to 250.0	100.00	100.00	
Drilling	119.5	69.9	67.9				
Other Work	47.0	27.5	26.7				
Recovering	4.5	2.6	2.6	Efficiency of Drilling			
Subtotal	171.0	100.0	97.2	Total Length/ Drilling Period	m	day	m/day
Preparation	5.0		2.8	250.00	13.0	19.23	
Dismantlement	0.0		0.0	Total Length/ Total Drilling Shifts	m	shift	m/shift
Transportation	0.0		0.0	250.00	22.0	11.36	
Grand Total	176.0		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	11.95	11.95	
				HQ	30.05	30.05	
HW	12.0	4.8	100.0	NQ	208.00	208.00	
NW	42.0	16.8	100.0				

Appendix 1-17 Record of Drilling Operation of MJSU-6

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Core (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Oct. 14	3.45	4.80	8.25	8.25	8.25	8.25	2	2	5.0	5.0
15	Day off		0.00	8.25	0.00	8.25				
16	5.50	7.35	12.85	21.10	12.85	21.10	2	2	5.0	5.0
17	7.05	6.00	13.05	34.15	13.05	34.15	2	2	5.0	5.0
18	7.85	11.30	19.15	53.30	19.15	53.30	2	2	5.0	5.0
19	19.60	15.10	34.70	88.00	34.70	88.00	2	2	5.0	5.0
20	18.00	9.15	27.15	115.15	27.15	115.15	2	2	5.0	5.0
21	11.85	8.75	20.60	135.75	20.60	135.75	2	2	5.0	5.0
22	Day off		0.00	135.75	0.00	135.75				
23	22.75	16.30	39.05	174.80	39.05	174.80	2	2	5.0	5.0
24	10.20	10.15	20.35	195.15	20.35	195.15	2	2	5.0	5.0
25	9.85	18.00	27.85	223.00	27.85	223.00	2	2	5.0	5.0
26	16.50	10.50	27.00	250.00	27.00	250.00	2	2	5.0	5.0
Total				250.00		250.00	22	22	55.0	55.0

Appendix 1-18 Drilling Progress of MJSU-6



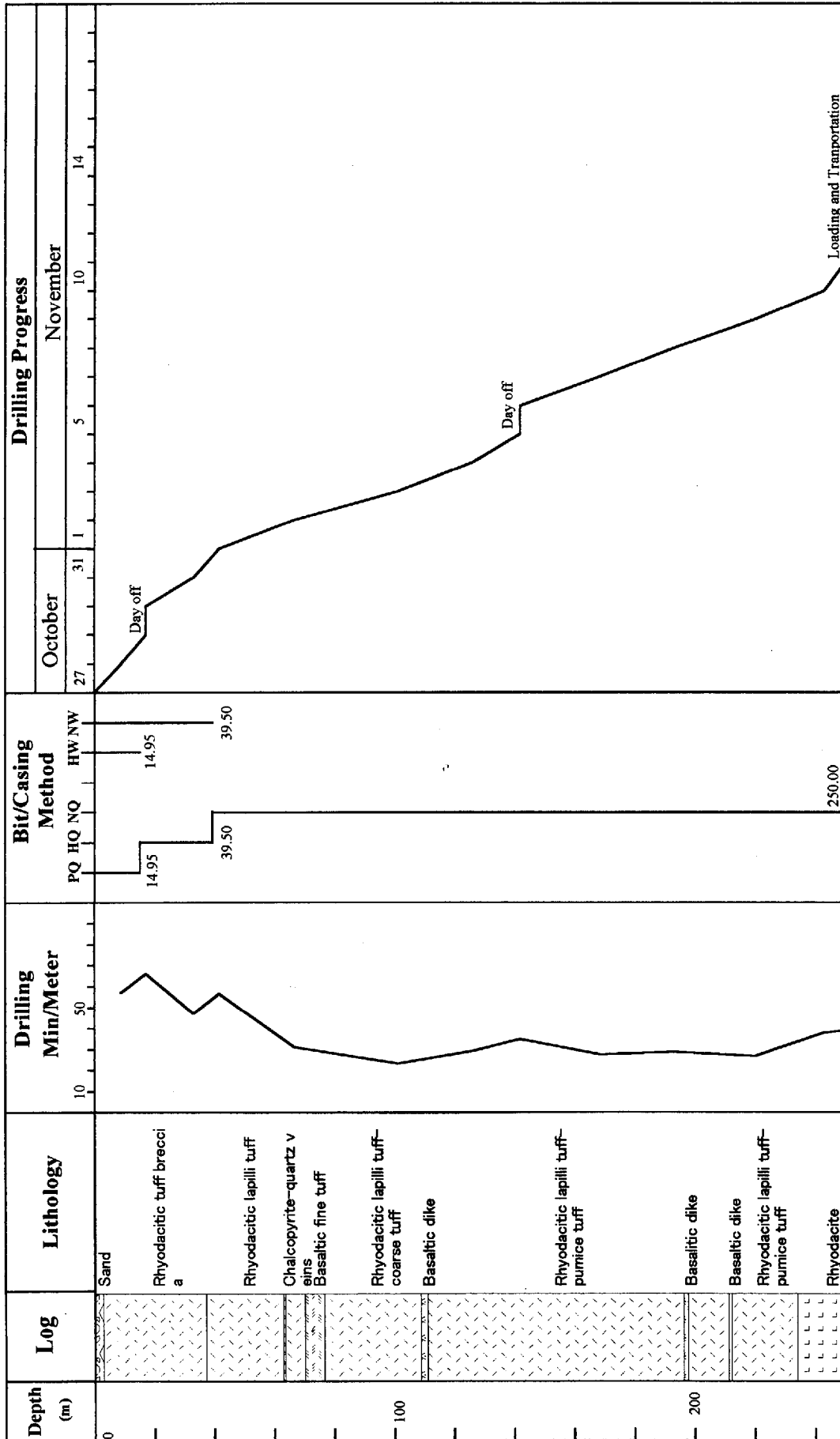
Appendix 1-19 Summary of Drilling Operation of MJSU-7

MJSU-6 Operation	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Preparation	Oct. 27, 1999	0.0	0.0	0.0	0.0	0.0	
Drilling	Oct. 27, 1999-Sep. 10, 1999	15.0	13.0	2.0	70.0	70.0	
Dismantling/Transport	Sep. 11, 1999-Sep.14, 1999	4.0	3.0	1.0	10.0	10.0	
Total		19.0	16.0	3.0	80.0	80.0	
Drilling Length	(m)	(m)	Core Recovery of 100m Hole				
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core	Cumulative Core	
Increase/Decrease in Length	0.00	Core Length	249.65	(m)	Recovery	Recovery	
Length Drilled	250.00	Core	99.86	0.00 to 100.00	(%)	(%)	
		Recovery(%)		100.00 to 200.00			
Working Hours	(h)	(%)	(%)	200.00 to 250.0	100.00	99.86	
Drilling	140.8	68.6	60.7				
Other Work	64.3	31.4	27.7				
Recovering	0.0	0.0	0.0	Efficiency of Drilling			
Subtotal	205.1	100.0	88.4	Total Length/ Drilling Period	m	day	m/day
Preparation	3.0		1.3	250.00	15.0	16.67	
Dismantlement	24.0		10.3	Total Length/ Total Drilling Shifts	m	shift	m/shift
Transportation	0.0		0.0	250.00	26.0	9.62	
Grand Total	232.1		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	14.95	14.95	
				HQ	24.55	24.20	
HW	15.0	6.0	100.0	NQ	210.50	210.50	
NW	39.5	15.8	100.0				

Appendix 1-20 Record of Drilling Operation of MJSU-7

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	Core (cum m)	Drilling (m)	Core (cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Oct. 27	1.60	7.10	8.70	8.70	8.70	8.70	2	2	5.0	5.0
28	5.55	2.85	8.40	17.10	8.05	16.75	2	2	5.0	5.0
29	Day off		0.00	17.10	0.00	16.75				
30	8.00	7.95	15.95	33.05	15.95	32.70	2	2	5.0	5.0
31	6.45	2.05	8.50	41.55	8.50	41.20	2	2	5.0	5.0
Nov. 1	14.95	10.05	25.00	66.55	25.00	66.20	2	2	5.0	5.0
2	19.45	15.20	34.65	101.20	34.65	100.85	2	2	5.0	5.0
3	15.80	8.85	24.65	125.85	24.65	125.50	2	2	5.0	5.0
4	10.05	5.95	16.00	141.85	16.00	141.50	2	2	5.0	5.0
5	Day off		0.00	141.85	0.00	141.50				
6	13.65	13.00	26.65	168.50	26.65	168.15	2	2	5.0	5.0
7	12.50	12.00	24.50	193.00	24.50	192.65	2	2	5.0	5.0
8	13.00	14.00	27.00	220.00	27.00	219.65	2	2	5.0	5.0
9	12.00	11.05	23.05	243.05	23.05	242.70	2	2	5.0	5.0
10	6.95	Casing take-out	6.95	250.00	6.95	249.65	2	2	5.0	5.0
11	Loading							1	5.0	5.0
12	Day off									
13	Loading							1	5.0	5.0
14	Transportation							1	5.0	5.0
Total				250.00		249.65	26	29	80.0	80.0

Appendix 1-21 Drilling Progress of MJSU-7



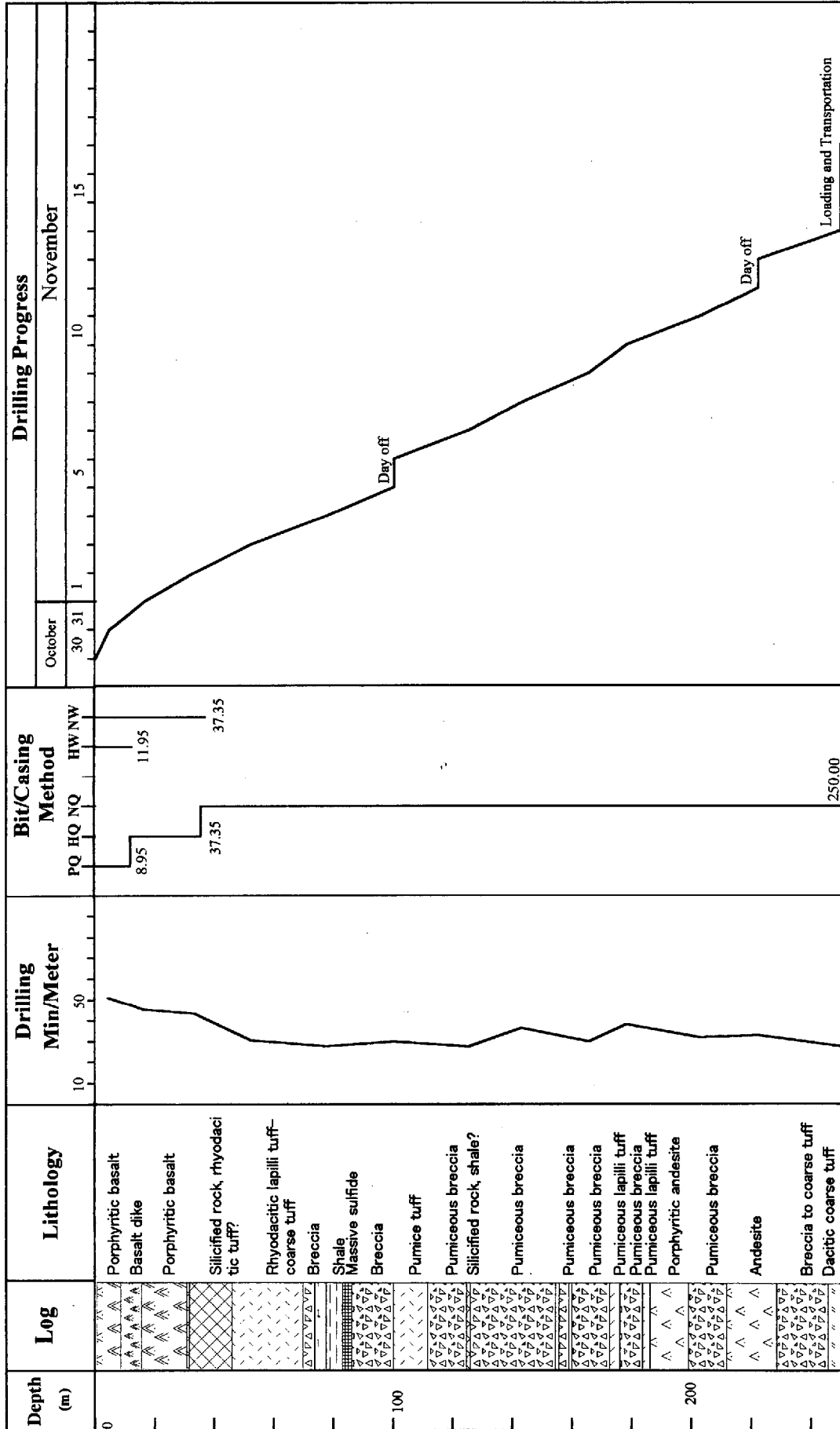
Appendix 1-22 Summary of Drilling Operation of MJSU-8

MJSU-6 Operation	Survey Period				Total Man-day		
	Period	Day	Work Day	Off Day	Engineer	Worker	
Preparation	Oct. 29, 1999	1.5	0.5	1.0	2.5	2.5	
Drilling	Oct. 30, 1999-Sep. 13, 1999	14.5	13.5	1.0	62.5	62.5	
Dismantling/Transportation	Sep. 14, 1999-Sep. 16, 1999	3.0	3.0	0.0	15.0	15.0	
Total		19.0	17.0	2.0	80.0	80.0	
Drilling Length	(m)		(m)	Core Recovery of 100m Hole			
Length Planned	250.00	Overburden	0.00	Depth of Hole	Core Recovery	Cumulative Core Recovery	
Increase/Decrease in Length	0.00	Core Length	249.40	(m)	(%)	(%)	
Length Drilled	250.00	Core Recovery(%)	99.76	0.00 to 100.00	99.40	99.40	
				100.00 to 200.00	100.00	99.70	
Working Hours	(h)	(%)	(%)	200.00 to 250.0	100.00	99.76	
Drilling	135.8	61.7	56.6				
Other Work	83.3	37.8	34.7				
Recovering	1.0	0.5	0.4	Efficiency of Drilling			
Subtotal	220.1	100.0	91.7	Total Length/ Drilling Period	m	day	m/day
Preparation	4.0		1.7	250.00	14.5	17.24	
Dismantlement/Transportation	16.0		6.7	Total Length/ Total Drilling Shifts	m	shift	m/shift
				250.00	27.0	9.26	
Grand Total	240.1		100.0	Drilling Length/Each Bit(m)			
Casing Pipe Inserted				Bit Size	Drilling Length	Core Length	
Size	Meterage (m)	Meterage/Drilling Length × 100(%)	Recovery (%)	PQ	8.95	8.95	
				HQ	28.40	27.80	
HW	12.0	4.8	100.0	NQ	212.65	211.65	
NW	37.4	14.9	100.0				

Appendix 1-23 Record of Drilling Operation of MJSU-8

Date	Drilling Length		Daily Total				Shift		Man Working	
	Shift 1 (m)	Shift 2 (m)	Drilling (m)	(cum m)	Core (m)	(cum m)	Drilling (Shift)	Total (Shift)	Engineer (man)	Worker (man)
Oct. 29	Day off									
30	Preparation	4.70	4.70	4.70	4.70	4.70	1	2	5.0	5.0
31	6.55	5.40	11.95	16.65	11.35	16.05	2	2	5.0	5.0
Sep. 1	8.35	8.25	16.60	33.25	16.60	32.65	2	2	5.0	5.0
2	4.10	15.05	19.15	52.40	19.15	51.80	2	2	5.0	5.0
3	18.00	7.40	25.40	77.80	25.40	77.20	2	2	5.0	5.0
4	13.60	9.00	22.60	100.40	22.60	99.80	2	2	5.0	5.0
5	Day off		0.00	100.40		99.80				
6	10.60	14.55	25.15	125.55	25.15	124.95	2	2	5.0	5.0
7	7.70	10.05	17.75	143.30	17.75	142.70	2	2	5.0	5.0
8	11.10	11.40	22.50	165.80	22.50	165.20	2	2	5.0	5.0
9	5.50	7.10	12.60	178.40	12.60	177.80	2	2	5.0	5.0
10	15.00	9.50	24.50	202.90	24.50	202.30	2	2	5.0	5.0
11	9.50	10.10	19.60	222.50	19.60	221.90	2	2	5.0	5.0
12	Day off		0.00	222.50		221.90				
13	7.70	19.80	27.50	250.00	27.50	249.40	2	2	5.0	5.0
14	Casing take-out	Casing take-out					2	2	5.0	5.0
15	Loading							1	5.0	5.0
16	Transportation							1	5.0	5.0
Total				250.00		249.40	27	30	80.0	80.0

Appendix 1-24 Drilling Progress of MJSU-8



Appendix 1-25 Drilling Meterage of Diamond Bit Used

Item	Size	Bit No.	Drilling Meterage/Each Bit								Total (m)			
			MJSU-1	MJSU-4	MJSU-6	MJSU-7	MJSU-2	MJSU-5	MJSU-3	MJSU-8				
Diamond Bit	PQ	#162468	10.30										10.30	
		#5557-2	1.60	9.05	4.80								15.45	
		#162469		4.35	3.45								7.80	
		#845581			3.70								3.70	
		#845579				1.60							1.60	
		#843664				8.60							8.60	
		#162465				4.75							4.75	
		#5557-3					14.90	11.90	12.75	7.45			47.00	
		#843657							3.65	1.50			5.15	
		Subtotal		11.90	13.40	11.95	14.95	14.90	11.90	16.40	8.95		104.35	
		Average											11.59	
		HQ	#9283361	20.85	14.05									34.90
			#9283405		4.30									4.30
	#845581			3.45									3.45	
	#81588			6.60	2.95								9.55	
	#9283398				27.10	0.55							27.65	
	#83341					9.55							9.55	
	#18773					14.45							14.45	
	#9283401						24.90	26.90	25.35	17.10			94.25	
	#83535									11.30			11.30	
	Subtotal		20.85	28.40	30.05	24.55	24.90	26.90	25.35	28.40			209.40	
	Average											23.27		
	NQ	#9284332	97.20	6.70									103.90	
		#8459261	11.05										11.05	
		#9284330	45.00										45.00	
		#8459264	65.60	26.35									91.95	
		#8459222		115.40									115.40	
		#8459263		104.80									104.80	
		#9284224		9.20	93.60	77.50							180.30	
		#8459227			52.10								52.10	
		#186532			8.30	31.20							39.50	
		#8459256			54.00					2.95			56.95	
		#9284763				24.85				36.20			61.05	
		#186544				76.95							76.95	
		#9284335					55.40	26.80					82.20	
		#8459262					20.50						20.50	
		#845976					38.50						38.50	
		#9284334					57.65	24.90					82.55	
		#8459259					38.15						38.15	
		#9284709						76.00					76.00	
#9284331							11.70					11.70		
#8459257							77.80					77.80		
#9284208							81.20	87.60				168.80		
#9284268							9.00					9.00		
#9284225								78.50				78.50		
#9284717								42.15	69.85			112.00		
#9284329									22.95			22.95		
#186531									35.65			35.65		
#186547									20.00			20.00		
#8459192									25.05			25.05		
Subtotal		218.85	262.45	208.00	210.50	210.20	307.40	208.25	212.65			1,838.30		
Average												65.65		
Total		251.60	304.25	250.00	250.00	250.00	346.20	250.00	250.00			2,152.05		

Appendix 1-26 Consumables Used

Expendable Items	Spec.	Unit	Drill Hole No.								Total Amount
			MJSU-1	MJSU-2	MJSU-3	MJSU-4	MJSU-5	MJSU-6	MJSU-7	MJSU-8	
Diesel Fuel		l	1,055	1,020	1,005	1,140	1,125	990	1,115	1,100	8,550
Gasoline		l	218	211	265	283	233	216	250	285	1,961
Hydraulic. Oil		l	38	70	40	15	30		20	40	253
Engine Oil		l	48	43	34	39	45	23	45	68	345
Gear Oil		l	2	7	9	5	9	6	2	6	46
Grease		kg	4	13	10	8	21	5	3	13	77
Soda		kg								2	2
Polymer GS550		kg	128	105	123	147	130	115	114	117	979
GS20		l	8	35		4	34		9	4	94
Lubtub		kg				2				9	11
Solcut		l	89	40	23	45	40	56	76	75	444
Stop Plus		kg			6			3	5	5	19
Bentonite		kg								50	50
Diamond Bit	PQ	pcs						1			1
Diamond Bit	HQ	pcs				2			2		4
Diamond Bit	NQ	pcs	2		2	3	3	3	3	3	19
Reaming Shell	NQ	pcs	1		1	1			1	1	5
Core Lifter	HQ	pcs				3	1				4
Core Lifter	NQ	pcs	7	1		3	5	5	6	9	36
Core Lifter Case	HQ	pcs				1					1
Core Lifter Case	NQ	pcs		1		1	2		1	3	8
Core Barrel	NQ	pcs				2					2
Outer Tube	NQ	pcs	1								1
Outer Tube Barrel	HQ	pcs							1		1
Temperature Gauge		pcs	1								1
Oil Pressure Gauge		pcs	1								1
Shaft Off Valve	NQ	pcs	2	1							3
Stop Ring	NQ	pcs	1								1
Adapter Coupling	NQ	pcs	1		1	2		1	1		6
Locking Coupling	NQ	pcs			1			1	1		3
Engine Belt		pcs	2								2
Barrel Outer	NQ	pcs			1						1
Stabilizer	NQ	pcs			1						1
Landing Ring	NQ	pcs			1						1
Latch Spilling	NQ	pcs			1						1
Inner Tube Head	NQ	pcs			1						1
Water Swivel		pcs				1				1	2
Pipe Wrench		pcs					1	4			5
Drill Rod	NQ	pcs					1			1	2
Rubber Coupling		pcs		1		1					2

Appendix 1-27 Geological Logs of MJSU-1 to MJSU-8

Drill Hole No.:

MJSU-1

Easting:

E 708.478

Date Started:

September 11

Northing:

N 2,617.501

Date Completed:

September 26

Elevation(mSL):

955

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
0	Gravel	
1.40	Silicified rhyodacite, weathered, flow-banded.	
3.50	Basaltic dike, dark green, weathered.	
5.00	Weathered rhyodacite, flow-banded.	
6.30		6.30-7.95m: Moderately oxidized part, reddish.
7.95		
10	Rhyodacite, light green, flow-banded. 12T: Rhyodacite, weakly meta, porphyritic.	
<12T		
14.55	Basaltic dike, dark green.	
15.00		
15.75		15.75-17.40m: Moderately oxidized part.
17.40		
20	Altered rhyodacite, greenish.	
23.05	Sporadically oxidized.	
24.20		24.20-25.75m: Oxidized part, reddish.
25.75	Boundary between lava and pyroclastic rocks is not clear. Weakly oxidized.	
26.65	Oxidized.	
27.30		
27.95	Bottom of oxidation zone.	
30		
	Rhyodacitic tuff breccia, green, banded, containing rhyodacite fragments (size: <10cm), partly pyrite disseminated (31.00-33.75m—pyrite <5%).	
35		
37.10	Weakly oxidized part	
37.20		
40		
	Lapilli tuff, light green, partly tuff breccia, containing chlorite thin layers.	
45		
46.90		46.90-49.90m: Silicified rock, weakly oxidized.
49.90		
50		

Drill Hole No.: MJSU-1 Easting: E 708.478
 Date Started: September 11 Northing: N 2,617.501
 Date Completed: September 26 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50	Quartz vein, barren, very weakly oxidized.	
52.35 52.50	Tuff, light green, partly containing thin chlorite layers.	
55		55.85-56.85m: Quartz veinlets, barren, weakly oxidized.
55.85 56.85	Tuff, light green, containing thin pyrite layers (very few) and chlorite thin layers.	
60		
65	Weakly silicified part, pyrite 5%.	
64.85 67.00	Rhyodacitic tuff-lapilli tuff, green, containing thin chlorite layers, pyrite disseminated. 75T: Rhyodacite lapilli tuff, weakly meta, clastic.	
70		
75		
80		
85		
90		91.05-92.20m: Siliceous part, decolored, containing disseminated pyrite and thin layered pyrite, pyrite 20%, (Zn 0.51%).
91.05 92.20	Siliceous part, pyrite disseminated.	96.35-96.50m: Quartz veinlets, containing chalcopyrite, (Cu 2.19%).
95		
96.35 96.50	99.20- .30m: Sandstone.	99.00m: Chalcopyrite
96.50		
100		

Drill Hole No.:

MJSU-1

Easting:

E 708.478

Date Started:

September 11

Northing:

N 2,617.501

Date Completed:

September 26

Elevation(mSL):

955

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100	Silicified part, tuff? light gray-light green.	100.40m: Chalcopyrite.
105	Lapilli tuff-tuff, light green, partly pyrite disseminated.	103.50m: Pyrite-chalcopyrite disseminated. 103.8m: Pyrite fragment (1x2cm).
110		
115		
120	Shale? black, chloritized, pyrite disseminated.	120.85-121.50m: Silicified part, containing very small amount of chalcopyrite stringers 122.50-123.00m: Silicified part, containing chalcopyrite stringers. 123.00-123.10m: Quartz veinlet, containing chalcopyrite, (Cu 0.70%, Zn 0.76%).
125		
130	Rhyodacitic layered tuff (coarse tuff), light green, containing chloritized pumice layers. 129T: Rhyodacite coarse tuff, weakly meta, clastic to porphyritic.	
135		
140	Silicified rhyodacite, white, quartz phenocryst 1-2mm.	
145	Rhyodacitic tuff, light green, partly alternating with thin sandstone layers, dip 50.	
147.60	Silicified rhyodacitic tuff, greenish white, very hard.	
150	Rhyodacitic tuff, light green, banded, partly brecciated, breccia containing quartz phenocryst 1-2mm, weakly pyrite disseminated.	
	Dolerite dike, dark green, with calcite veinlets.	

Drill Hole No.: MJSU-1 Easting: E 708.478
 Date Started: September 11 Northing: N 2,617.501
 Date Completed: September 26 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150		
150.70	Silicified rhyodacitic tuff, white, very hard.	152.70-152.30m: Weakly pyrite disseminated, with reddish jasper.
152.30	Dolerite dike	150.70-153.40m: Weakly pyrite disseminated.
152.70	Rhyodacitic tuff, light green, banded.	153.40-154.10m: Chalcopyrite stringers, and hematite veinlets.
153.40	Silicified rhyodacitic tuff, very hard.	154.10-155.30m: Weakly pyrite disseminated, with reddish jasper.
<153P	Rhyodacitic tuff, partly silicified, very hard, fragment contains quartz phenocryst 1-2mm.	
154.10		
155		
155.30	Dolerite dike, dark green.	
156.30		
156.70	Rhyodacitic tuff, light green, flow-banded.	
160		
162.00		
165	Silicified lapilli tuff, white, very hard.	
169.30		
170	Breccia, size of fragment 5-10mm.	
170.40		
175	Lapilli tuff, hard, light gray, partly containing black thin layers (chlorite?, 5mm in thickness).	
180		
185		
187.80	Basalt-dolerite dike, dark green, with calcite veinlets.	
189.15		
190	Lapilli tuff, light green, containing silicic fragments (size 2-3mm), banded.	
195		
197.50		
200	Alternating bed of siltstone and tuff, with grading. 199T: Dacitic tuff, weakly meta, clastic.	
<199T		

Drill Hole No.: MJSU-1 Easting: E 708.478
 Date Started: September 11 Northing: N 2,617.501
 Date Completed: September 26 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200		
200.30		
205	Lapilli tuff, light green, weakly silicified, pyrite disseminated (<5%), containing hard silicic rock fragments (size: <5mm).	
210		209.00m: Chalcopyrite-pyrite vein, width 1 cm, dip 50.
215		212.80m: chalcopyrite-pyrite vein, width 4cm, dip 50, (212.75-.85m: Ag 213g/t, Cu 0.90%, Zn 2.98%, Pb 1.09%).
215.45-215.60		215.45-215.60m: two chalcopyrite-pyrite-sphalerite veins, dip 50, (Ag 150g/t, Cu 0.95%, Zn 1.91%).
220		
224.05	Jasper layer, reddish.	
224.20		
225	Basaltic dike.	
225.35		
226.25		
227.15	Basaltic dike	
228.80		
230	Lapilli tuff, light green, banded, containing silicic rock fragments (size: <5mm).	
232.55	Basaltic dike, green.	
233.90		
235	Lapilli tuff, green.	
240		
245		
246.00	Breccia, containing fragments of shale, silicic rock, and volcanic rocks (size: 1-2cm). 248T: Volcanic breccia, weakly meta, clastic.	
250		

Drill Hole No.:

MJSU-1

Easting:

E 708.478

Date Started:

September 11

Northing:

N 2,617.501

Date Completed:

September 26

Elevation(mSL):

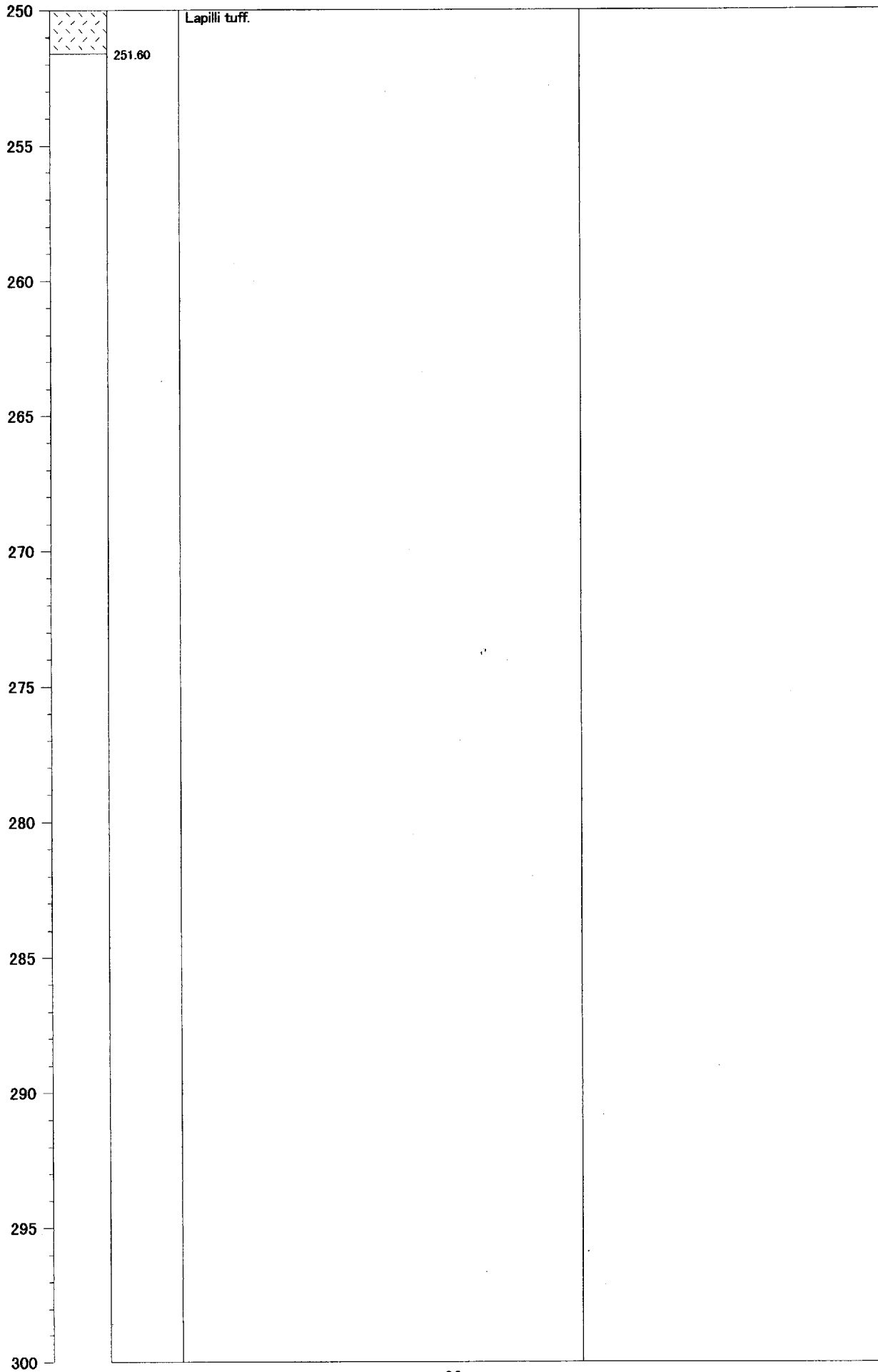
955

Drilled by DMMR/BRGM

Depth

Lithology

Mineralization & Alteration



Drill Hole No.:

MJSU-2

Easting:

E 708.524

Date Started:

September 11

Northing:

N 2,617.686

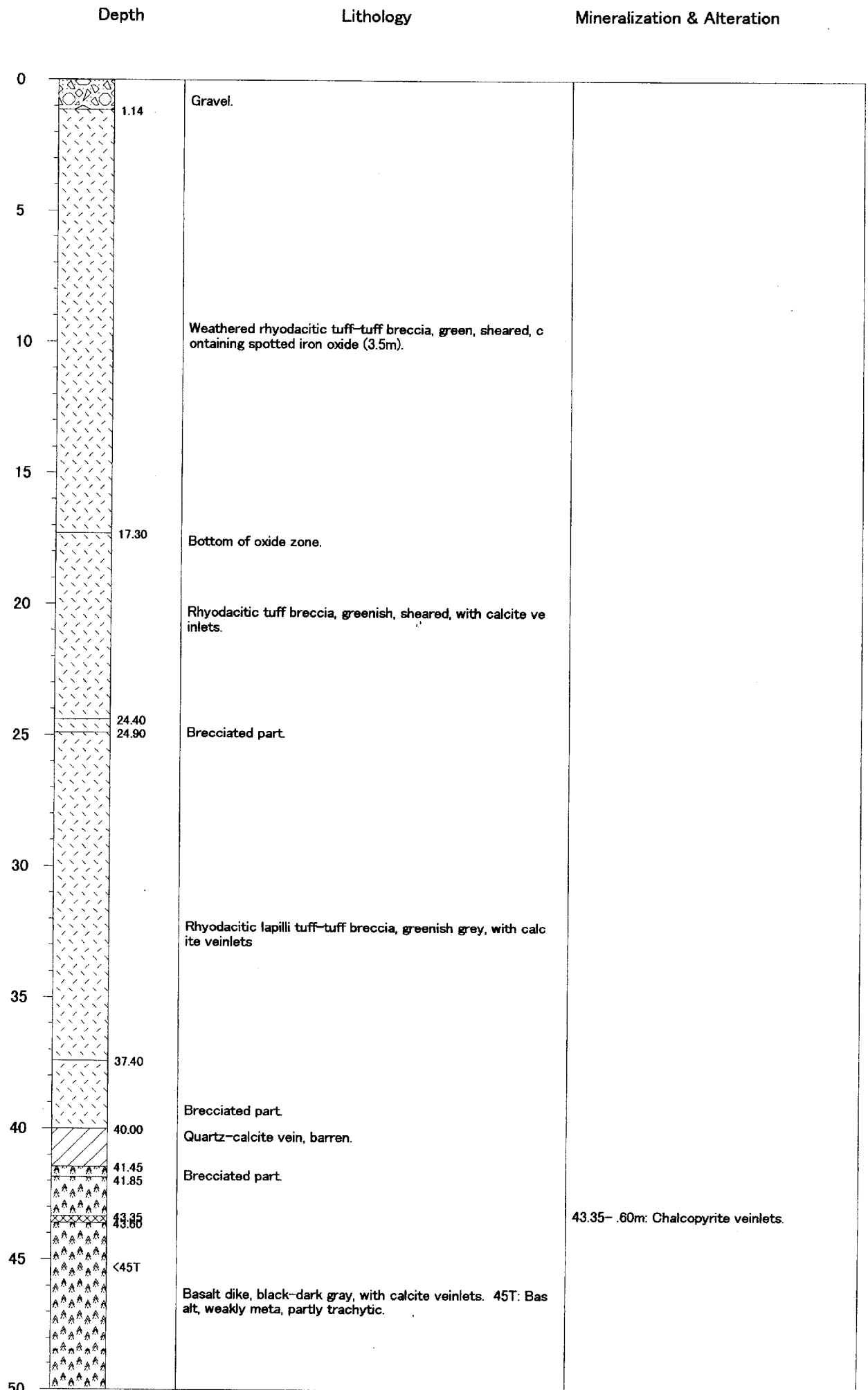
Date Completed:

September 27

Elevation(mSL):

958

Drilled by DMMR/BRGM



Drill Hole No.: MJSU-2 Easting: E 708.524
 Date Started: September 11 Northing: N 2,617.686
 Date Completed: September 27 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50		
50.50	Brecciated part of pyroclastic rock	
55		
55.75	Basalt, gray, with pyrite veinlets.	
56.40	Brecciated pyroclastic rocks.	
57.25		
60	Basalt, greenish gray, partly brecciated, with epidote. 63T: Basalt, weakly meta, originally aphyric.	
<63T		64.20- .40m: Chalcopyrite veinlets in basalt
65		
65.60	Microdiorite, greenish gray. 65T: Microdiorite, weakly meta	
<65T	, micro-ophitic.	
67.20		
70	Basalt, partly brecciated, with pyrite and calcite veinlets.	
72.80	Lapilli tuff.	
73.15		
74.00	Lapilli tuff.	
75		
75.30	Basalt. 75T: Basalt, weakly meta, porphyritic.	
<75T		
77.80	Silicified tuff.	
79.25	Basalt, with pyrite veinlets	
79.90		
80		
85	Lapilli tuff-tuff, light green, banded, with pyrite veinlets.	
90		
95		
<98X		
99.10	Silicified.	
100		

Drill Hole No.:

MJSU-2

Easting:

E 708.524

Date Started:

September 11

Northing:

N 2,617.686

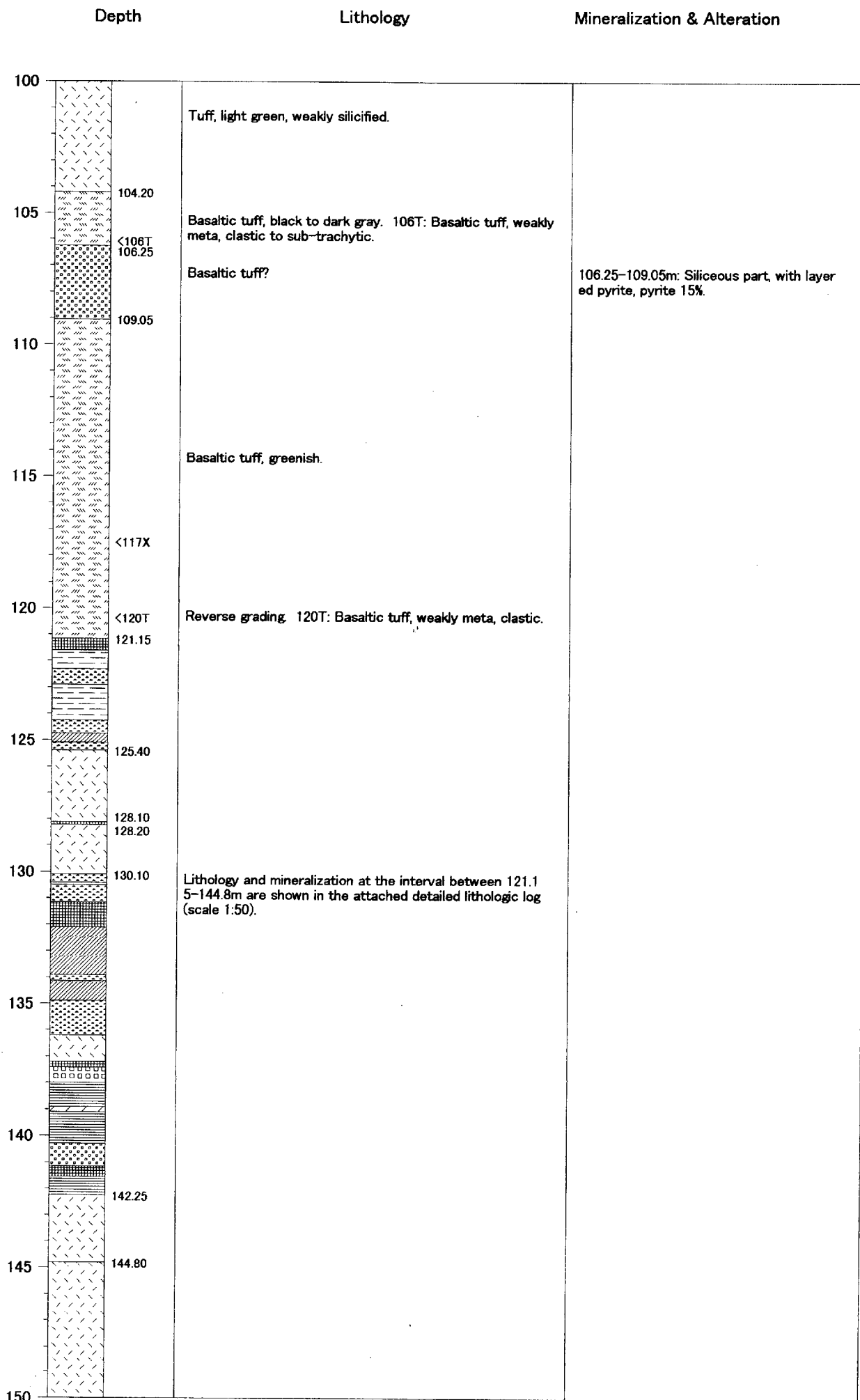
Date Completed:

September 27

Elevation(mSL):

958

Drilled by DMMR/BRGM



Drill Hole No.: MJSU-2 Easting: E 708.524
 Date Started: September 11 Northing: N 2,617.686
 Date Completed: September 27 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	Lapilli tuff, greenish light gray, partly tuff breccia.	
153.25 153.80	Quartz veinlets, barren.	
155		155.30m: Quartz vein, 1cm width, containing pyrite, dip 45.
156.30 157.00	Shale, dark gray, hard, containing pyrite (grain size: 1-2mm), dip 50.	
160		
163	Tuff breccia, greenish light gray, hard, containing silicic rock fragments (size: 0.5-4cm).	163.75m: Quartz vein, 1cm width, containing chalcopyrite.
165		
168.25 169.40	Alternating bed of conglomerate (consisting of silicic rock fragment, 1-3cm) and siltstone, greenish light gray, hard.	
170	Lapilli tuff, light gray.	
172.60 172.95	Siltstone, light gray, hard, dip 50.	
175	Lapilli tuff, rhyodacitic, greenish light gray, hard, containing silicic rock fragments (size: <5mm).	
180	Lapilli tuff, rhyodacitic, light green, partly conglomeritic, banded.	
185	Basalt-dolerite dike, greenish.	
185.20 185.70		
190	Lapilli tuff-tuff breccia, rhyodacitic, green, containing chlorite layers, pyrite disseminated.	
195		
196.30 199.00	Weakly silicified tuff, hard, banded, pyrite disseminated, pyrite <1%.	
200		

Drill Hole No.: MJSU-2 Easting: E 708.524
 Date Started: September 11 Northing: N 2,617.686
 Date Completed: September 27 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200	Lapilli tuff, greenish light gray, alternating with silty layers.	
202.00	Silicified and brecciated part, locally pyrite vein (0.5-1cm in thickness).	
203.60		
205	Lapilli tuff-tuff breccia, light green, silicified, containing pyrite layers (5-7mm in thickness).	
210		
211.00		
215	Lapilli tuff, light green, partly pyrite disseminated.	
220		
225		221.95m: Pyrite-sphalerite vein, width 1.0-1.5cm, (221.85-222.00m: Zn 0.71%)
		224.05- .15m: Pyrite, chalcopyrite, sphalerite disseminated, (Zn 0.51%).
230	Bedding	229.15m: Pyrite-sphalerite vein, width 1.0-2.0 cm.
229.00		
229.55		
235	Lapilli tuff, greenish light gray, containing silicic rock fragments, banded.	
240		
242.60		
243.00	Layered pyrite (max 1cm in thickness), and disseminated pyrite, pyrite 5%.	
245	Tuff, greenish light gray.	
250		

Drill Hole No.:

MJSU-3

Easting:

E 709.596

Date Started:

October 14

Northing:

N 2,619.288

Date Completed:

October 28

Elevation(mSL):

957

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
0		Gravel.
2.00		Dacite, green, weakly chloritized, massive, fractured, with quartz-eye (size: 0.2-1.5cm). 10T: Dacite, weakly meta, porphyritic.
5		<10T
10		Boundary not clear.
15		Rhyodacite? greenish, silicified, flow structure, hard, no quartz-eye.
20		Basic dike, brownish light green, weathered, aphyric.
21.25		Rhyodacite, green, plagioclase (size: 2-3mm), partly silicified, no quartz-eye. 25T: Silicified volcanic rock, weakly meta, porphyritic.
22.20		Basic dike, dolerite? light green, plagioclase (size: 1-2mm).
25		Rhyodacite, green, plagioclase (size: 2-3mm), containing small quartz, no quartz-eye.
<25T		Rhyodacite, green, plagioclase (size: 2-3mm), containing small quartz, no quartz-eye.
27.25		Rhyodacitic rock, dark green, chloritized. 41T: Silicified volcanic rock, weakly meta, porphyritic.
27.85		46.00m: Bottom of oxidation zone.
30		Dacitic lapilli tuff, greenish gray, massive, containing plagioclase (size: 2-3mm), fragments (size: 0.5-3cm), and quartz-eye (size: 0.5-1cm).
35		<41T
40		46.00m: Bottom of oxidation zone.
45		Dacitic lapilli tuff, greenish gray, massive, containing plagioclase (size: 2-3mm), fragments (size: 0.5-3cm), and quartz-eye (size: 0.5-1cm).
46.00		Dacitic lapilli tuff, greenish gray, massive, containing plagioclase (size: 2-3mm), fragments (size: 0.5-3cm), and quartz-eye (size: 0.5-1cm).
46.20		Dacitic lapilli tuff, greenish gray, massive, containing plagioclase (size: 2-3mm), fragments (size: 0.5-3cm), and quartz-eye (size: 0.5-1cm).
50		Dacitic lapilli tuff, greenish gray, massive, containing plagioclase (size: 2-3mm), fragments (size: 0.5-3cm), and quartz-eye (size: 0.5-1cm).

Drill Hole No.: MJSU-3 Easting: E 709.596
 Date Started: October 14 Northing: N 2,619.288
 Date Completed: October 28 Elevation(mSL): 957 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50	50.00-55.90m: Dacitic lapilli tuff, greenish gray, with rounded quartz-eyes (size: 1.0-1.5cm) and light green plagioclase (size: 2-3mm).	50.00-53.30m: Moderately silicified, pyrite veinlets, pyrite 2-3%.
55	55.90-56.15m: Chloritized part, pyrite disseminated and banded, pyrite 10%.	
60	59.05-59.90m: Pyrite veinlets sporadically.	59.05-.90m: Quartz vein, parallel to core, containing small amount of pyrite.
65	<63T: Dacitic lapilli tuff, greenish gray, pale green plagioclase (size: 2-3mm), pale green andesitic fragments (zenolith?, size: < 4cm), quartz-eyes, pyrite weakly disseminated. 63T: Dacitic lapilli tuff, weakly meta, clastic.	
70	68.85-71.85m: Weakly chloritized, pyrite dissemination and veinlets, few.	
75	71.85-72.60m: Quartz veins, 5-6 veins, 1-3cm wide, barren.	
80	76.10-76.25m: Quartz vein (3cm wide), barren.	
85	81.55-85.60m: Dacite, greenish dark gray, massive, quartz-eyes (size: 0.2-0.7cm), pyrite weakly disseminated.	81.55-85.60m: Fractured, sheared, partly pyrite disseminated and veinlets.
90	<89T: Dacite, greenish gray, lava? massive, partly porphyritic (size of plagioclase: 2-3mm). 89T: Dacite, weakly meta, porphyritic.	
95	95.65-97.75m: Chloritization become strong downward.	95.65-97.75m: Strongly chloritized part, black, pyrite disseminated and veinlets, pyrite 15%.
100	Chloritization become weak downward.	

Drill Hole No.: MJSU-3 Easting: E 709.596
 Date Started: October 14 Northing: N 2,619.288
 Date Completed: October 28 Elevation(mSL): 957 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100	Dacite, porphyritic, intrusive?	
102.35	Boundary not clear.	
104.60	Basic dike, dark green, with calcite veinlets and quartz-eyes.	104.60-106.20m: Quartz veinlets, pyrite veinlets few.
106.20	Porphyritic dacite, with quartz-eyes.	
107.80		107.80-110.00m: Quartz veinlets, pyrite veinlets few.
110.00	Porphyritic dacite, greenish gray, plagioclases (size:2-4mm), with quartz-eyes.	
113.60	Weakly silicified, plagioclase few.	
114.80		114.80-116.25m: Epidote veins, with hematite and pyrite.
116.25	Silicified, no mineralization.	
117.70		117.70-120.75m: Weakly silicified, pyrite veinlets, epidote veins.
120.75	Silicified dacite, greenish gray, plagioclase few, quartz-eye few.	
124.50		
131T	Porphyritic dacite, greenish gray, with quartz-eyes (size: 0.5-1.0cm), pyrite weakly disseminated, epidotized plagioclases (size: 2-3mm). 131T: Porphyritic dacite, weakly meta, porphyritic.	
147.65	Moderately silicified, brownish white.	
149.35		

Drill Hole No.: MJSU-3 Easting: E 709.596
 Date Started: October 14 Northing: N 2,619.288
 Date Completed: October 28 Elevation(mSL): 957 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	Microdiorite, reddish dark gray. 150T: Microdiorite, sub-trachytic.	
<150T 150.95		
153.15		153.15-154.50m: Pyrite-epidote veinlets few.
154.50		
155	Porphyritic dacite, dark gray, with quartz-eyes.	
157.15		
157.40		157.40-160.55m: Pyrite-chlorite veinlets, containing chalcopyrite sporadically.
160		
160.55	Chloritized part, with quartz-eyes. Plagioclase is not confirmed.	
162.85		162.85-164.00m: Silicified part, reddish white.
164.00		
164.45		164.45-.75m: Pyrite veinlets, containing chalcopyrite few.
165		
164.75		
170	157.15-178.10m: Dacitic coarse tuff-lapilli tuff, dark gray, with quartz-eyes, volcanic rock fragments (size: 2-3cm) sporadically. 171T: Dacite coarse tuff, weakly meta, clastic.	
175		
<171T		
175.25	Jasper, reddish.	
176.30	176.30-177.60m: Basic dike.	
177.60		
178.50		177.60-178.50m: Pyrite-chalcopyrite-epidote veinlets, pyrite 5%.
180	below 178.10m: Porphyritic dacite, greenish dark gray, plagioclases (size: 2-4mm), quartz-eyes (0.5-0.7cm).	
185		
188.20		
188.75	Chloritized part, porphyritic dacite? with quartz-eyes.	188.20-.75m: Chloritized part, chalcopyrite-pyrite veinlets, (Cu 1.57%).
189.45		
190	Moderately silicified part, brown-light green.	
192.15		
195	Porphyritic dacite, greenish gray, weakly chloritized, with quartz-eyes (size: 5-10mm), plagioclases (size: 2-5mm).	
200		

Drill Hole No.: MJSU-3 Easting: E 709.596
 Date Started: October 14 Northing: N 2,619.288
 Date Completed: October 28 Elevation(mSL): 957 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200	Porphyritic dacite, greenish gray, weakly silicified, with quartz-eyes (size: 0.3-2.0cm), plagioclase (size: 3-5mm).	
204.25		
205	Brecciated, with quartz-eyes.	204.25-206.70m: Chloritized part, weakly silicified, chalcopyrite-pyrite veinlets sporadically.
206.70		
210	Porphyritic dacite, greenish gray, silicified, brecciated, weakly chloritized, plagioclase (size: 2-5mm), quartz-eyes (5-7mm), sporadically chalcopyrite veinlets.	
211X		
214.70		
215.05		214.70-215.05m: Strongly chloritized part, chalcopyrite-pyrite vein network, (Cu 5.05%).
217T		
217X	Rhyodacitic? coarse tuff, greenish gray, partly lapilli tuff, fragments (size: 5mm), moderately silicified, weakly chloritized, brecciated, with small quartz. 217T: Rhyodacite coarse tuff, weakly meta, clastic to porphyritic.	
220.10		
220.90		220.10-220.90m: Pyrite-chalcopyrite vein network, (Cu 2.48%).
222P		
224X	Silicified volcanic rocks, rhyodacite? greenish light gray, with small quartz, brecciated.	
225		
226.30	226.30-229.60m: Basic dike, dolerite? plagioclase (size: 2-3mm), calcite veinlets.	
227.60		
227.95	Quartz vein, barren, dip 60-70.	
229.60		
230		
232T		
232C	Dacite, greenish light gray, weakly silicified, no quartz-eye, with small quartz, massive. 232T: Dacite, weakly meta, porphyritic.	
235		
236.40		
240	Porphyritic dacite, plagioclase (size: 2-4mm), quartz-eyes (0.2-1.2cm), weakly epidotized.	
241C		
241.85		241.85-243.25m: Moderately silicified part, pyrite dissemination few, chalcopyrite very few.
243.25		
243T		
245		
250	Porphyritic dacite. 243T: Porphyritic dacite, weakly meta, porphyritic.	

Drill Hole No.:

MJSU-4

Easting:

E 709.167

Date Started:

September 27

Northing:

N 2,619.582

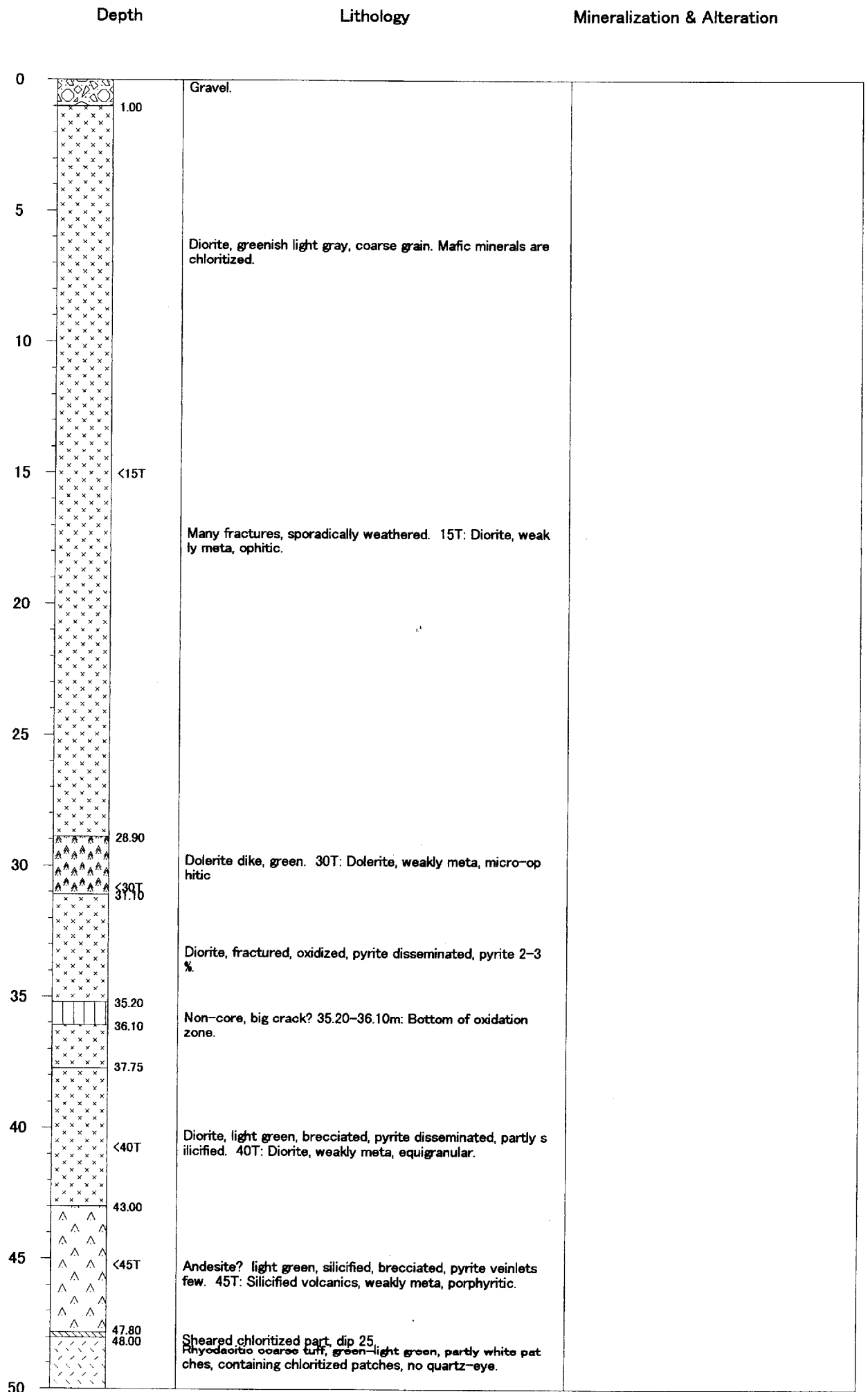
Date Completed:

October 13

Elevation(mSL):

958

Drilled by DMMR/BRGM



Drill Hole No.: MJSU-4 Easting: E 709.167
 Date Started: September 27 Northing: N 2,619.582
 Date Completed: October 13 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50	<52T Rhyodacitic coarse tuff, green, partly lapilli tuff. 52T: Rhyodacite coarse tuff, weakly meta, clastic to porphyritic.	
54.65	54.65-55.50m: Basic dike, fractured, calcite veinlets.	
55	55.30 55.50 <56X Strongly silicified part, rhyodacitic? tuff, with epidote veinlets, very small amount of pyrite.	
57.70	Rhyodacitic coarse tuff, green, no quartz-eye.	
60	60.25 <61X Strongly-moderately silicified part, very small amount of pyrite.	
63.15	Rhyodacitic lapilli tuff, green, pyrite veinlets, small amount of pyrite.	
64.30	64.30-66.50m: Altered basic dike.	
65	65.15 Strongly-moderately silicified part, very small amount of pyrite.	
66.50	Strongly silicified part.	
67.20		
67.60		
67.85		
70	Rhyodacitic coarse tuff, dark green, white patches.	
70.75	Porphyritic andesite, greenish gray, size of plagioclase: 2-5 mm. Mafic minerals (size: 2-3mm) are chloritized.	
72.30		
75	76.30-76.70m: Calcite-quartz vein, barren, width 1cm. dip 90.	
80	<80T Andesite, greenish light gray, medium grain, partly porphyritic. Mafic minerals are chloritized. 80T: Porphyritic andesite, weakly meta, porphyritic.	
84.25		
85	85.00 Silicified andesite.	
90	Porphyritic andesite, greenish light gray-greenish gray, size of plagioclase: 5mm, weakly epidotized. 95T: Porphyritic andesite, weakly meta, porphyritic.	
95	<95T	
100	99.75-100.00m: Quartz vein, width 4cm. barren. dip 70.	

Drill Hole No.: MJSU-4 Easting: E 709.167
 Date Started: September 27 Northing: N 2,619.582
 Date Completed: October 13 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100	Porphyritic andesite, greenish gray, size of phenocrysts: 3-4mm, containing reddish feldspar. Plagioclases are weakly epidotized.	
104.55	Lapilli tuff, greenish light gray, layered, rhyodacitic, size of fragments: <5mm.	
106.40	Porphyritic andesite, greenish dark gray, weakly silicified, with epidote.	
110	Silicified rhyodacitic tuff, greenish gray, white patches.	111.40-.65m: Pyrite-chalcopyrite veinlets, (Cu 1.82%).
111.10 111.40 111.65	Basaltic dike, greenish gray.	
113.40 113.85	Rhyodacitic lapilli tuff, greenish gray-light green, layered, silicified, containing silicic rock fragments (size: 1-3cm), partly tuff breccia. 121T: Rhyodacite lapilli tuff, weakly metaclastic to porphyritic.	
115	<121T	
120	Basaltic dike, greenish gray, with calcite veinlets.	
125	Tuff breccia, greenish gray, rhyodacitic, partly layered.	
126.25 127.60	Basaltic dike, greenish light gray, with calcite veinlets.	
129.75	Coarse tuff, greenish gray, layered.	
130	Lapilli tuff-coarse tuff, light green, layered, containing fragments (size: <1cm) sporadically, clayey.	133.15-.30m: Pyrite 25%, banded.
130.85 <131X	Dacitic coarse tuff, dark green, containing quartz-eye (size: 1cm) sporadically. 136T: Dacite coarse tuff, weakly metaclastic to porphyritic.	
133.15 133.30	Dacitic coarse tuff, containing chlorite patches, quartz-eye sporadically. 143.1m: <143X.	140.50- 141.00m: Chalcopyrite veinlets, width 0.5-1cm, (Cu 1.31%).
135	145.3m: <145X.	143.10-.40m: Chalcopyrite veins, width 4cm, three veins, dip 40, (Cu 10.40%). 143.3m: <143P.
135.20 <136T <138X	146.85-147.00m: Basaltic dike	144.85-145.00m: Chalcopyrite veinlets, (Cu 4.77%).
140	Dacitic coarse tuff, dark green, chloritized, containing quartz-eye sporadically.	146.40-.60m: Chalcopyrite veinlets, (Cu 4.60%). 147.30-.80m: Chalcopyrite veinlets, (Cu 1.37%).
140.50 141.00		149.80-.90m: Chalcopyrite veinlets. 149.9m: <149P
143.10 143.40		
144.85 145.00		
146.40 146.60		
147.30 147.80		
149.80 149.90		

Drill Hole No.: MJSU-4 Easting: E 709.167
 Date Started: September 27 Northing: N 2,619.582
 Date Completed: October 13 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	Massive.	
152.60	Dacitic coarse tuff, dark green, layered, containing white fl at patches (1-2mm thick) and quartz-eyes (size: 1cm).	
155		155.50-156.05m: Chalcopyrite veinlets, (Cu 2.54%). 156.05-.20m: Chalcopyrite vein, dip 40, (Cu 18.95%). 156.1m: <156P.
155.50		
156.05	156.70-.90m: Basaltic dike.	
156.20		
157.45	158.25-.55m: Basaltic dike.	157.45-158.25m: Chalcopyrite veinlets, (Cu 1.82%). 158.55-.85m: Chalcopyrite veinlets, (Cu 3.64%).
158.25		
158.55		
158.85		
160	Dacitic lapilli tuff, dark green, partly layered, with quartz-eyes.	162.85-163.00m: Chalcopyrite veinlets, (Cu 2.72%). 163.30-.40m: Quartz vein containing chalcopyrite, (Cu 1.82%).
162.85		
163.00	164.15-.20m: Basaltic dike.	
163.30		
163.40		
165	Dacitic lapilli tuff, dark green, partly layered, with quartz-eyes.	
167.90-.95m: Basaltic dike.		
168.20-.30m: Basaltic dike, light green.		
168.80	Tuff, dark green, layered, with quartz-eyes.	
170	Sheared part, light green, clayey.	
170.30		
173.15		
175	Andesite, greenish light gray, massive, epidotized plagioclase, with quartz-eyes, partly containing andesitic rock fragments (size: <4cm), lava? 175T: Andesite, weakly meta, porphyritic.	
<175T		
180		
180.45?	Andesitic lapilli tuff, partly layered, with quartz-eyes, white flat patches (1-2mm thick), lava?	
185		
185.00?	Andesitic lapilli tuff, greenish gray, massive, containing fragments (size: 1-2cm) and quartz-eyes, lava?	
189.15?	Andesitic? lapilli tuff, greenish gray, a few fragments, weakly silicified.	
190		
190.55?	Andesitic lapilli tuff, greenish gray, containing andesitic fragments (size: <2cm), with quartz-eye sporadically, massive, weakly pyrite disseminated. Fragments are weakly epidotized. 193T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	
<193T		
195		
197.45-.70m: Quartz vein network, barren.		
200		

Drill Hole No.: MJSU-4 Easting: E 709.167
 Date Started: September 27 Northing: N 2,619.582
 Date Completed: October 13 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200	Andesitic lapilli tuff, gray, partly tuff breccia, massive, with quartz-eye (size: 0.5-1cm), lava? Plagioclases are weakly epidotized.	
205		
210		
212.30	212.30-213.50m: Lapilli tuff, layered, weakly silicified.	213.10- .20m: Chloritized part, with chalcopryite veinlets, (Cu 1.36%).
213.50		213.65- .85m: Chloritized part, with chalcopryite veinlets, (Cu1.34%).
215		215.00- .15m: chalcopryite-quartz veinlet, (Cu 0.64%).
215.00		
215.15		
220	Andesitic lapilli tuff, gray-dark gray, partly tuff breccia, massive, with quartz-eye (size: 0.5-1cm) sporadically, lava? Plagioclases and fragments are weakly epidotized. 222T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	217.05m: chalcopryite vein, width 1cm, (217.00- .10m: Cu 0.76%).
<222T		
225		
227.25		226.80m: chalcopryite vein, width 1cm, (226.75- .85m: Cu3.28%).
228.05		227.25-228.05m: Chalcopryite bearing quartz veins, three veins (width 0.2-1cm).
230	Andesitic lapilli tuff, greenish gray, containing andesitic fragments (size: 0.5-2cm) and quartz-eyes (size: 0.5-1cm), massive.	
231.65		
234.30	Andesitic coarse tuff, greenish dark gray, partly layered lapilli tuff, with quartz-eye (size: 0.5-1cm).	
235	Andesitic lapilli tuff, greenish gray, andesitic fragments (size: <3cm), weakly epidotized, slightly layered. Dolerite dike, greenish gray.	
236.00		
236.50		
<238T		
239.20	Andesitic lapilli tuff, greenish gray, fragments (size: <2cm), weakly epidotized, layered, epidotized plagioclase until 239.20m. 238T: Andesite lapilli tuff, weakly meta, clastic to porphyritic. Dacitic coarse tuff-lapilli tuff, greenish light gray, layered.	
240		
241.20		
242.80	Dacitic coarse tuff, dark green.	241.20-242.80m: Weakly chloritized, with chalcopryite veinlets, Cu very low.
245	Dacitic lapilli tuff-coarse tuff, greenish gray, layered, containing lenticular silicic rock fragments (1cm thick).	
250		

Drill Hole No.: MJSU-4 Easting: E 709.167
 Date Started: September 27 Northing: N 2,619.582
 Date Completed: October 13 Elevation(mSL): 958 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
250		
253.45 253.70	Basic dike, light green.	
255	Dacitic lapilli tuff, greenish gray, layered, containing lenticular silicic rock fragments (1cm thick), with quartz-eyes. 259T: Dacitic lapilli tuff, strongly by carbonete, clastic to porphyritic.	
260	Weakly silicified.	
260.90 261.25	Dacitic lapilli tuff, greenish gray, containing lenticular silicic rock fragments and quartz-eyes.	
263.50 263.75		263.50-.75m: Pyrite veinlets, few chalcopyrite. 263.75-267.05m: Chalcopyrite veinlets, sporadic.
265	267.05-.50m and 267.70-.90m: Basic dike, greenish light gray.	
267.05 267.50		
270	Dacitic coarse tuff, greenish dark gray, with quartz-eyes.	
272.70 273.25 273.60	Weakly silicified.	272.70-273.25m: chloritized veinlets, containing chalcopyrite, (Cu 1.11%).
275	Dacitic coarse tuff, greenish dark gray, containing thin chlorite layers and quartz-eyes.	
276.55 277.35	Bedded chlorite layer and fine tuff. Basic dike, dark green.	
278.45 278.95 279.35		278.95-279.35m: Chloritized, chalcopyrite veinlets, (Cu 2.72%). 279.1m: <279P.
280	Rhyodacitic coarse tuff, greenish gray, layered, white spotted. 282T: Rhyodacite coarse tuff, silicified, clastic to porphyritic.	
283.80	Sheared part, clayey.	
285		
285.70		285.70-286.75m: Pyrite rich, pyrite 10%. 285.8m: <285X.
286.75 287.05	Sheared part.	
288T		
290	Dacitic dike? light green, plagioclase 1mm, siliceous, hard, massive. 288T: Dacite, weakly meta, porphyritic.	
292.30 292.80 293.00	Brecciated rhyodacitic tuff, light green, clayey.	292.30-.60m: Pyrite banded, pyrite 10%. 292.60-293.00m: Banded pyrite and tuff, pyrite 30%. 293.00-294.25m: Pyrite veinlets. 294.25-295.15m: Pyrite veinlets.
294.25 295.15	Silicified tuff, weakly brecciated.	
296T		
300	Rhyodacitic tuff, light green, with chlorite layers. 296T: Rhyodacite tuff, weakly meta, clastic to porphyritic.	

Drill Hole No.:

MJSU-4

Easting:

E 709.167

Date Started:

September 27

Northing:

N 2,619.582

Date Completed:

October 13

Elevation(mSL):

958

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
300	Rhyodacitic lapilli tuff, greenish light gray, containing chlorite layers.	
301.30	Basic dike, green. Central part is porphyritic (plagioclase <5 mm)	
302.10	Rhyodacitic tuff, greenish light green, hard, weakly banded.	
304.25	End of bore hole.	
305		
310		
315		
320		
325		
330		
335		
340		
345		
350		

Drill Hole No.:

MJSU-5

Easting:

E 709.148

Date Started:

September 28

Northing:

N 2,619.738

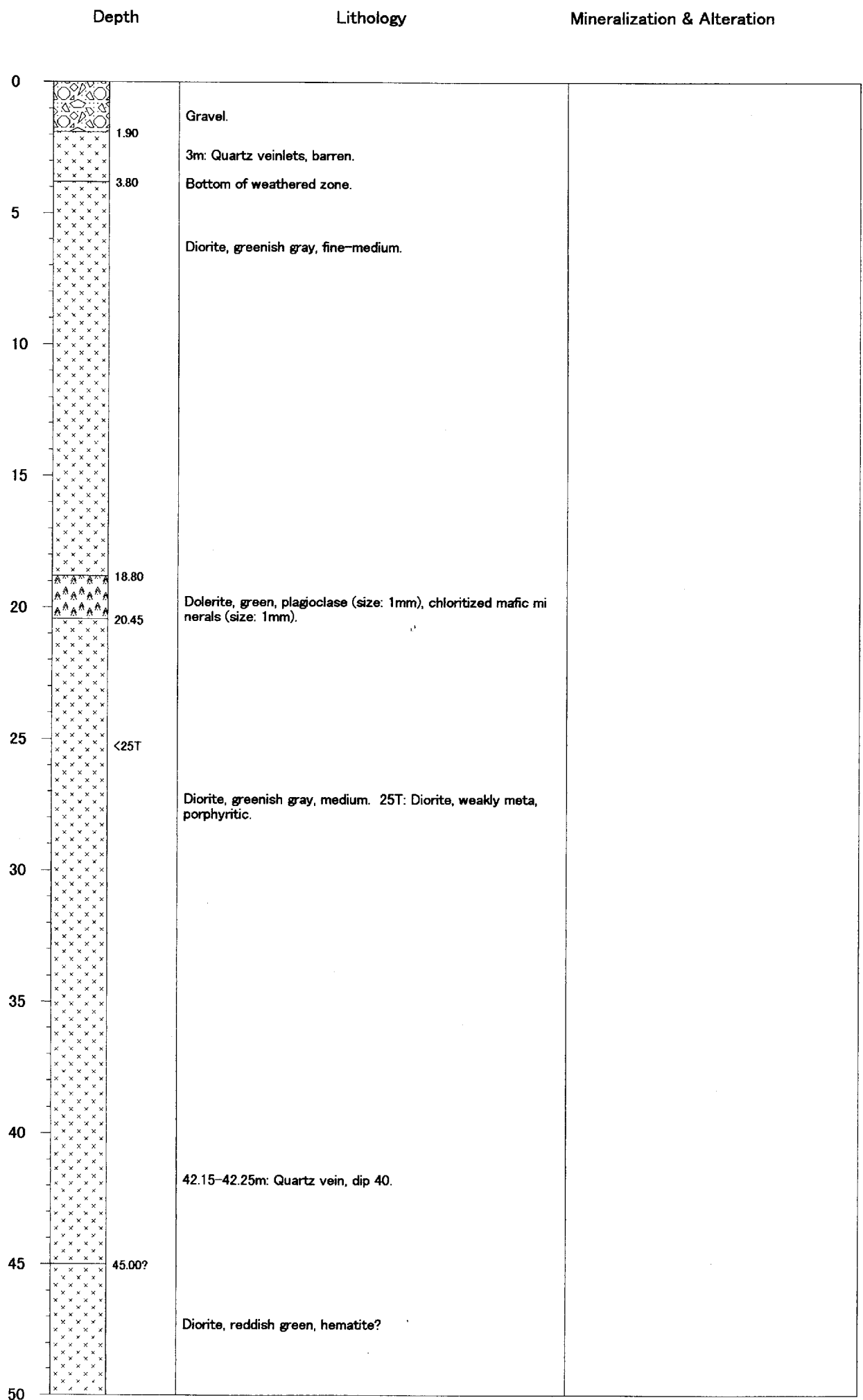
Date Completed:

October 12

Elevation(mSL):

963

Drilled by DMMR/BRGM



Drill Hole No.: MJSU-5 Easting: E 709.148
 Date Started: September 28 Northing: N 2,619.738
 Date Completed: October 12 Elevation(mSL): 963 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50	Diorite, reddish green.	
55		
58.80		
60	Dolerite dike, greenish gray.	
61.00		
<63T 64.00 64.15	Dolerite dike.	
65	Diorite, reddish green, weathered. Plagioclase is altered. Mafic minerals are chloritized. 63T: Diorite, weakly meta, ophtic.	
70		
74.15 74.45	Brecciated part.	
75	Dacitic? tuff, green-dark green, weakly chloritized.	
77.70	Pyrite disseminated, strongly chloritized.	
79.40 79.90 80.55 80.95 81.70 82.55	79.90-80.55m: Strongly chloritized tuff, pyrite dissemination. Silicified, strongly chloritized tuff, pyrite few.	79.40-.90m: Chalcopyrite veinlets, (Cu 1.86%). 79.6m: <79X. 80.55-.95m: Chalcopyrite veinlets, (Cu 4.62%). 81.70-82.55m: Pyrite disseminated & layered, massive sulfide deposit type?, containing chalcopyrite, (Cu 4.28%). 81.8m: <81P.
85	Strongly chloritized & silicified tuff, dacitic? black, pyrite dissemination and veinlets, pyrite 20%.	
88.90	Dacitic lapilli tuff.	88.90-93.20m: Strongly chloritized, weakly silicified, pyrite-chalcopyrite dissemination and veinlets, (Cu 1.93%).
93.20	Dacitic lapilli tuff, green, containing silicic rock fragments (size: 0.2-1.0cm), with epidote veinlets, pyrite dissemination and veinlets.	
95.50 <96X <96P	Strongly chloritized, weakly silicified, dacitic tuff?	95.50-99.90m: Chalcopyrite-pyrite veinlets, (Cu 3.70%).
99.90		
100		

Drill Hole No.: MJSU-5 Easting: E 709.148
 Date Started: September 28 Northing: N 2,619.738
 Date Completed: October 12 Elevation(mSL): 963 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100	Sheared lapilli tuff, weakly chloritized, pyrite disseminated.	
101.00		
105		
109.65	Dacitic coarse tuff-lapilli tuff, dark green, banded, with quartz-eye (size: 0.5-1.0cm).	109.65-.85m: Chalcopyrite veinlets, width 1-5mm.
110		
111.90m		111.90m: Chalcopyrite vein, width 5mm.
112.60-.70m		112.60-.70m: Chalcopyrite veinlets, width <1cm.
114.50	Dacitic coarse tuff, greenish dark gray, containing chlorite patches (size: 2-3mm), with quartz-eye (size: 0.3-1.0cm). Chalcopyrite veinlets are sporadically distributed.	114.35-.50m: Chalcopyrite vein, width 7mm.
115		
<115T		116.50m: Chalcopyrite vein, width 1-2mm.
120	Lapilli tuff, dark green, containing silicic rock fragments (size: 5-10mm), with quartz-eye (size: 0.7-1.0cm). 115T: Dacitic lapilli tuff, weakly meta, clastic to porphyritic.	
121.70		
<124T		
124.40	Andesitic lapilli tuff, with quartz-eye, epidotized plagioclase (size: 2-3mm), epidotized fragments (size: 0.5-0.7cm), silicic rock fragments are very few. 124T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	
125		
128.35	Lapilli tuff, dark green, size of fragments: <1cm, with quartz-eye.	
128.40		
129.85	Chloritized part, with chalcopyrite+pyrite veinlets.	
130	Andesitic lapilli tuff, greenish dark gray, epidotized fragments (size: 0.5-4.0cm), with quartz-eye.	
135	Lapilli tuff, dark green, containing silicic rock fragments (size 5-7mm) sporadically, partly banded, with epidote veinlets.	
136.70		
137.60	Andesitic lapilli tuff, dark green, greenish white altered plagioclase (size: 2-5mm), andesitic? fragments (size: 0.5-3.0cm), with small quartz.	
<138T	Dolerite, greenish gray, with calcite veinlets. 138T: Dolerite, weakly meta, ophitic.	
139.20		
140	Dacite lava?, massive, plagioclase phenocryst (size: <1mm).	
143.15		
143.70	143.15-.50m: Fine tuff, light green, silicified. 143.50-.70m: Chloritized part, quartz vein network, barren	
145	Andesitic lapilli tuff, dark green, containing epidotized andesitic rock fragments (size: 0.5-2.0cm), epidotized plagioclase (size: 2-3mm), and quartz-eye, chloritized.	
150		

Drill Hole No.: MJSU-5 Easting: E 709.148
 Date Started: September 28 Northing: N 2,619.738
 Date Completed: October 12 Elevation(mSL): 963 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150		
151.30 151.65	Choritized tuff, black	151.30-151.65m: Pyrite-chalcocopyrite veinlets.
155		154.90m: Chalcocopyrite-pyrite vein, width 1 cm
160	Andesitic lapilli tuff, greenish dark gray to greenish gray, partly coarse tuff, containing epidotized fragments (size: 0.5-1.0cm), epidotized plagioclase (2-3mm), with quartz-eye. 165T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	
165	<165T	
170		
173.05 174.30	Basalt-dolerite dike, greenish dark gray, with calcite veins.	
175	Andesitic lapilli tuff, greenish dark gray, containing epidotized andesitic fragments (size: 0.5-3.0cm), with quartz-eye (size: 0.7-1.2cm).	
180		
181.85 182.90	Bedded coarse tuff, greenish light gray, with very small flat chlorite patches, dip 20.	
184.70	Dacitic coarse tuff, greenish gray.	
185	185.55 185.85 Silicified part.	
	Andesitic lapilli tuff-coarse tuff, greenish dark gray, containing epidotized andesitic fragments (size: 0.5-1.0cm), plagioclase (size: 2-3mm), with quartz-eye.	
190	190.20 190.35 Strongly chloritized part, sheared, black Andesitic lapilli tuff.	
	192.20 192.25 Quartz vein, barren, width 4cm, dip 35.	
195	<194T	
196.50	Andesitic coarse tuff, greenish dark gray, epidotized plagioclase (size: 2-3mm), with quartz-eye. 194T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	196.50-200.30m: Strong chloritization.
200	Andesitic coarse tuff, dark gray, with quartz-eye and small quartz.	

Drill Hole No.: MJSU-5 Easting: E 709.148
 Date Started: September 28 Northing: N 2,619.738
 Date Completed: October 12 Elevation(mSL): 963 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200		
200.30		
205		204.60-205.25m: Chloritized part.
210	Andesitic lapilli tuff, greenish gray, partly tuff breccia, containing epidotized andesitic fragment (size: 0.5-6cm), with epidotized plagioclase. Quartz-eyes (size: 5-10mm) are sporadically distributed. 210T: Andesite lapilli tuff, weakly meta, clastic to porphyritic.	
215		
215.40		
217.20		
217.35	Coarse tuff, greenish dark gray, with quartz-eye, containing chlorite patches.	
218.30	217.35-218.30m: Silicified part (coarse tuff).	217.20-.35m: Chloritized part, black, pyrite disseminated, pyrite 5%.
218.90	Layered fine tuff, gray.	
220		
222.40m	Alternating bed of epidotized lapilli tuff and coarse tuff. Quartz-eyes (size: 5-10mm) are sporadically distributed.	222.40m: Pyrite-chalcopyrite (few) disseminated, 2-3cm width.
225		
225.35	Fine tuff, light gray, laminated.	
226.75		229.80-233.90m: Weakly silicified, chalcopyrite veinlets are partly distributed.
229.80	Dacitic coarse tuff, greenish dark gray, with quartz-eye.	233.90-234.00m: Chalcopyrite veinlets.
230		
230.70	Quartz-eye until 230.70m.	234.50-235.30m: Strongly chloritized part, pyrite disseminated, pyrite 25%.
233.90	Rhyodacitic tuff?, light green, weakly silicified, no quartz-eye.	235.30-235.65m: Weakly silicified, containing chalcopyrite veinlets, (Cu 3.24%).
234.00-.50m	234.00-.50m: Weakly silicified..	236.05-236.20m: Chloritized part, containing chalcopyrite veinlets, (Cu 1.06%). 236.1m: <236P. 236.1m: <236X.
235		
235.30		
235.65		
236.05		
236.20	Coarse-fine tuff, greenish light gray, banded.	237.30-238.55m: Chloritized part, black, layered pyrite, pyrite 20%, (Cu 0.66%)
237.30		
238.55	Dacitic lapilli tuff, greenish dark gray, few pyrite disseminated.	239.20-.35m: Silicified part, containing chalcopyrite film.
239.20		239.55-.75m: Chloritized part, layered pyrite, pyrite 35% (Cu 0.51%)
240	239.75-.95m: Dacitic lapilli tuff, pyrite disseminated.	239.95-240.45m: Chloritized part, layered pyrite, pyrite 30%, (Cu 0.54%).
240.45		
241.80	Rhyodacitic tuff, banded.	
243.90		241.80-243.90m: This interval contains several chloritized parts (5cm thick), silicified, pyrite disseminated, very few chalcopyrite.
245	Rhyodacitic lapilli tuff, greenish gray, banded.	
245.65		245.65-247.70m: This interval contains several chloritized parts (1-5cm thick), mainly pyrite, few chalcopyrite, (Cu 1.02%).
247.70		
249.80	Rhyodacitic lapilli tuff, greenish gray, banded. 249T: Rhyodacite lapilli tuff, weakly meta, clastic to porphyritic.	249.80-250.20m: Chloritized part, layered pyrite, pyrite 10%.
250		

Drill Hole No.: MJSU-5 Easting: E 709.148
 Date Started: September 28 Northing: N 2,619.738
 Date Completed: October 12 Elevation(mSL): 963 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
250	250.20 250.35 Basic dike, not altered.	250.35-251.70m: This interval contains several chloritized parts (approx. 5cm), pyrite 5%, chalcopyrite few, (Cu 0.62%).
	251.70 252.15 Dolerite dike. Rhyodacitic tuff.	
	253.80 253.90 Basic dike.	
255	255.45 256.30 Rhyodacitic lapilli tuff, dark green, containing 2-3mm thick pyrite layers. Bedded rhyodacitic fine-coarse tuff, light gray.	255.45-256.30m: Chloritized, pyrite banded, chalcopyrite veins cut the pyrite bands, (Cu 2.58%).
	258.30 259.10 259.55 Andesitic lapilli tuff, silicified, plagioclase weakly epidotized, mafic minerals (size: 1-2mm) are chloritized. small quartz. 259.10- .55m: Chloritized part, with quartz veinlets.	
260	<264T Rhyodacite dike? greenish light gray, hard, massive, plagioclase 1mm, epidotized. 264T: Rhyodacite, weakly meta, porphyritic.	
265	267.80 268.35 268.90 Dacitic? coarse tuff, dark green, dip 55.	
270	Lithology and mineralization at the interval between 268.90-275.40m are shown in the attached detailed lithologic log (scale 1:50).	
275	275.40 276.35 277.15 277.80 278.15 Dacitic coarse tuff, greenish dark gray, containing flat chlorite patches, with quartz-eye. Dacitic coarse tuff, greenish dark gray, with quartz-eye. Dacitic coarse tuff, containing chlorite patches, with quartz-eye.	276.35-277.15m: This interval contains 4 chalcopyrite veins, each vein is 1-3cm wide, chloritized, (Cu 0.70%). 277.80-278.15m: Chloritized part containing chalcopyrite, (Cu 1.06%).
280	280.00 280.35 Rhyodacitic lapilli tuff, light green, with chlorite patches. 283T: Rhyodacite lapilli tuff, weakly meta, clastic to porphyritic.	280.00- .35m: Siliceous part, containing Jasper fragments, pyrite banded.
285	285.25 285.50 Rhyodacitic coarse tuff, banded with chlorite layers, pyrite disseminated, strongly chloritized.	285.25- .50m: Chloritized, with chalcopyrite veinlets, (Cu 1.96%).
	287.40 287.95 Coarse tuff, greenish gray, grading fine downward.	
	289.20 Alternating beds of light green fine-grained clastic layers and chlorite layers.	
290	Rhyodacitic tuff, greenish gray-greenish dark gray, with chlorite thin layers.	
295	294.20 Dacitic tuff, greenish gray, containing chlorite thin layers, with quartz-eye sporadically.	
	298.20 298.95 299.90 Banded rhyodacitic coarse tuff.	298.95-299.90m: Weakly chloritized, with chalcopyrite veinlets, few.

Drill Hole No.:

MJSU-5

Easting:

E 709.148

Date Started:

September 28

Northing:

N 2,619.738

Date Completed:

October 12

Elevation(mSL):

963

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
300	Rhyodacitic tuff.	299.90-301.60m: Moderately chloritized, sporadic chalcopyrite veinlets.
301.60	Rhyodacitic coarse tuff-lapilli tuff, greenish gray, containing chlorite patches and silicic rock fragments.	303.55- 85m: Weakly chloritized, quartz veinlets containing chalcopyrite.
303.55	Rhyodacitic coarse tuff-lapilli tuff, white spotted.	306.90-308.35m: Weakly chloritized, sporadic quartz veinlets containing chalcopyrite.
305	Dacitic lapilli tuff, with quartz-eye.	310.15- .30m: Weakly chloritized, sporadic chalcopyrite veinlets.
306.90	Lapilli tuff, containing lenticular chlorite patches, with quartz-eye.	314.95-315.05m: Chalcopyrite dissemination.
308.35	Dacitic coarse tuff-lapilli tuff, with quartz-eye.	317.60-318.90: Dacitic coarse tuff, containing chlorite flat patches, with quartz-eye.
310	313.30-317.60m: Dacitic lapilli tuff, greenish gray, containing silicic rock fragments (size: <5cm), weakly epidotized, with quartz-eye. 315T: Dacitic lapilli tuff, weakly meta, clastic to porphyritic.	322.30m: 1cm thick pyrite vein.
313.30	Dacitic coarse tuff, containing chlorite flat patches, with quartz-eye.	328.90-330.40m: Strongly chloritized, silicified, chalcopyrite veinlets, (Cu 7.13%). 331.1m: <331X, 329.6m: <329P. 330.50-331.20m: Strongly chloritized, silicified, chlcopyrite veinlets, (Cu 6.10%).
315	Chloritized part.	331.20-331.65m: Chloritized, silicified, pyrite dissemination and veinlets, pyrite 5%.
317.60	Dacitic coarse tuff-lapilli tuff, greenish gray, containing lenticular silicic rock fragments, with quartz-eye.	342.20-342.50m: Strongly chloritized, pyrite dissemination, pyrite 5%.
318.90	Dacitic coarse tuff-lapilli tuff, greenish gray, containing lenticular silicic rock fragments, with quartz-eye.	Dacitic lapilli tuff-coarse tuff, greenish dark gray, containing chloritized patches, with quartz-eye sporadically.
319.05	Dacitic coarse tuff-lapilli tuff, greenish gray, containing lenticular silicic rock fragments, with quartz-eye.	End of drill hole.
320	Dacitic fine tuff, greenish gray, bedded with chlorite thin layers, containing silicic rock fragments, with quartz-eye.	
325	Dolerite, greenish gray, with calcite veinlets.	
328.90	Dacitic lapilli tuff, greenish dark gray, containing chloritized patches (0.5-1cm thick), with quartz-eye sporadically. 337T: Dacitic lapilli tuff, weakly meta, clastic to porphyritic.	
330	Dacitic lapilli tuff, greenish dark gray, containing chloritized patches, with quartz-eye sporadically.	
330.40		
330.50		
331.20		
331.65		
333.35		
334.05		
335		
<337T		
340		
342.20		
342.50		
345		
346.20		
350		

Drill Hole No.:

MJSU-6

Easting:

E 708.555

Date Started:

October 14

Northing:

N 2,617.812

Date Completed:

October 26

Elevation(mSL):

964

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
0	Fragments of rhyodacitic rock.	
1.80	Rhyodacitic tuff breccia, green-light green, massive, containing silicic rock fragments (size: 3-4cm).	
5	6.60m: Spotted iron oxide (size: 10x5cm).	
10	Fractured.	
15	Breccia—greenish white silicic rocks (size: 5-6cm), matrix—green-dark green chloritized pumices, layered.	
20	Bottom of oxidation zone.	
22.50?		
25		
30	Rhyodacitic tuff breccia, green, fragments (size: <12cm), some silicic rock fragments show flow-structure.	
35		
40	Silicic rock fragments (size: 5-10cm).	
40.70		
45	Rhyodacitic coarse tuff, green, with lenticular chloritized patches (0.5-1cm thick).	
45.15		
45	Basaltic tuff, dark green, pyrite disseminated, calcite veinlets, containing chlorite patches (1-2mm thick). 47T: Basaltic tuff, weakly meta, clastic to porphyritic.	
<47T		
48.10		
50	Rhyodacitic lapilli tuff, light green.	
49.85		

Drill Hole No.: MJSU-6 Easting: E 708.555
 Date Started: October 14 Northing: N 2,617.812
 Date Completed: October 26 Elevation(mSL): 964 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50		
50.55	49.85-50.55m: this interval contains reddish jasper fragments (size: 0.5-3.0cm) in lapilli tuff.	
52.65	Rhyodacitic lapilli tuff-coarse tuff, green. 52.65-58.65m: clayey, calcite veinlets.	
55		
58.65	Basaltic fine tuff, greenish gray, calcite veinlets. 58T: Basaltic fine tuff, weakly meta, clastic to porphyritic.	
60		
61.60	Layered tuff, greenish gray, containing chlorite thin layers.	
64.15		64.15-65.20m: This interval contains pyrite layers (0.5cm thick) sporadically.
65		
65.20		
66.15		66.15-66.90m: This interval contains pyrite layers (1-2mm thick) sporadically.
66.90		
70	Rhyodacitic coarse tuff, layered, white spotted.	
72.60	Basaltic fine tuff, dark green.	
73.00		
74.10	Dolerite, greenish gray, massive, dip 70. 74T: Dolerite, weakly meta, micro-ophitic.	
75		
75.00	Rhyodacitic lapilli tuff-coarse tuff, light green, containing chlorite thin layers.	
80		
82.00	82.00-88.00m: this interval contains jasper fragments sporadically in light green layered tuff.	83.05-85.00m: This interval contains pyrite layers (1cm thick) sporadically.
83.05		
85		
85.00		
88.00?		
90	Layered tuff, light green, containing chlorite bands.	92.60m: 1-4cm thick pyrite layer.
95		
97.00		
98.70	Lapilli tuff, partly tuff breccia.	98.70-99.90m: This interval contains pyrite layers.
100		

Drill Hole No.:	MJSU-6	Easting:	E 708.555	
Date Started:	October 14	Northing:	N 2,617.812	
Date Completed:	October 26	Elevation(mSL):	964	Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100		
105		
110	Rhyodacitic lapilli tuff, light green.	
109.90 110.10	Tuffaceous coarse sandstone, bedded with breccia (granule).	
	Lapilli tuff.	
115	Quartz vein network, barren.	
114.80 115.50	Lapilli tuff.	
120	Quartz vein network, barren.	
119.40 120.20	Lapilli tuff, greenish light gray.	
125		
130	Lithology and mineralization at the interval between 130.65m and 139.30m are shown in the detailed geologic log (scale 1:50).	
130.65		
135		
134.75		
138.00		
139.30		
140	Quartz-calcite vein network. Fine tuff, gray, pyrite disseminated.	
140.18 141.50		
145	Basaltic fine tuff, dark gray, massive, partly brecciated, no phenocryst. 145T: Basaltic fine tuff, weakly meta, clastic to porphyritic.	
<145T		
150		

Drill Hole No.: MJSU-6 Easting: E 708.555
 Date Started: October 14 Northing: N 2,617.812
 Date Completed: October 26 Elevation(mSL): 964 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	Basaltic tuff, calcite veinlets.	
152.75 152.90	Quartz vein, barren Rhyodacitic lapilli tuff, dark green, chloritized.	
154.05 154.25	154.25- .60m: Pyrite-calcite-quartz veinlets, 154.60- .85 m: Rhyodacitic tuff, containing pyrite veinlets.	154.05- .25m: Chloritized lapilli tuff, black, c containing pyrite-chalcopryrite layers.
155	Dolerite dike, greenish light gray, weakly epidotized. Mafic minerals are chloritized.	
155.05 155.90		
	Rhyodacitic coarse tuff, light gray, partly lapilli tuff, white spotted.	
160	159.60 Tuff breccia. 160.75 Sandy coarse tuff. 160.95	
	Layered tuff, light gray, partly lapilli tuff, white spotted.	
165		
166.80 167.05 167.70	Fine-coarse tuff, greenish gray. Lapilli tuff, greenish light gray, containing chlorite patches and layers.	166.80-167.05m: Tuffaceous coarse sands tone, containing thin pyrite layers, pyrite 5 %.
170	170.00 Tuff breccia, greenish light gray. 171.70	
	Layered tuff, greenish light gray, chlorite thin layers, white spotted.	174.20- .35m: Chalcopryrite disseminated v ery few.
175	174.20 174.35	
180		
182.15 182.90		182.15- .90m: Pyrite-chalcopryrite layers in layered tuff.
185	Lapilli tuff-white spotted coarse tuff.	
190		
191.30 191.50	Basic dike, light green.	
195	Rhyodacitic lapilli tuff, greenish light gray.	
200		

Drill Hole No.: MJSU-6 Easting: E 708.555
 Date Started: October 14 Northing: N 2,617.812
 Date Completed: October 26 Elevation(mSL): 964 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200	Rhyodacitic lapilli tuff, greenish light gray, chlorite layers and patches, partly tuff breccia.	
205		
210		
213.55		213.55-214.30m: Pyrite layers, pyrite 15%.
214.30	Lapilli tuff, greenish light gray, containing small quartz.	
215		215.10- .95m: Pyrite layers, pyrite 5%.
215.10		
215.95	Rhyodacitic layered tuff-lapilli tuff, greenish light gray.	
220		219.90-220.70m: Pyrite layers and nodules, pyrite 5%.
219.90		220.70- .90m: Pyrite breccia (size: <4mm), pyrite 50%.
220.70		220.90-223.00m: Pyrite layers in white rhyodacitic lapilli tuff, pyrite 15%.
220.90		
223.00		223.00-227.25m: Layered tuff, containing pyrite layers, pyrite 15%. 224.45- .55m and 225.65- .70m: Pyrite breccia.
225		227.25-228.90m: Alternating bed of rhyodacitic fine tuff and pyrite breccia, pyrite 35%.
227.25		
228.90		
230	Coarse tuff-lapilli tuff, greenish light gray, layered.	
235		
240		
241.55		241.55-244.95m: pyrite-sphalerite disseminated, pyrite 3-4%.
245		
244.95	Rhyodacitic lapilli tuff, light gray-white.	
250		

Drill Hole No.: MJSU-7 Easting: E 708.792
 Date Started: October 27 Northing: N 2,618.171
 Date Completed: November 10 Elevation(mSL): 956 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
0	Coarse sand, brownish gray.	
2.70	Layered tuff, green, fractured, with chloritized layers.	
6.35 6.90	Coarse sand, brownish gray, crack?	
10	Rhyodacitic tuff breccia, light green, fractured.	
15	Oxidized rhyodacitic tuff breccia, reddish green.	
15.60 16.50	weakly oxidized.	
18.25	Moderately oxidized tuff breccia, partly fractured, clayey, sporadically iron-oxide mineral veins (1-2cm wide)	
20	Weakly oxidized, fractured.	
20.50	Rhyodacitic tuff breccia, green-light green, fresh.	
22.90 24.10	Weakly oxidized	
25	Moderately oxidized, with iron-oxide mineral veins.	
25.10 26.75	26.75-28.45m: Weakly oxidized rhyodacitic tuff breccia. 27.20-.30m: Basic dike, dark green, oxidized.	
28.45	Strongly oxidized rhyodacitic tuff breccia.	
30	Weakly oxidized rhyodacitic tuff breccia.	
30.00	Moderately oxidized tuff breccia.	
34.15 35.10 35.30 35.85	Iron-oxide mineral veins (width: 1-2cm) in tuff breccia.	
37.10	Bottom of oxidation zone.	
40	below 37.10m: Rhyodacitic lapilli tuff, light green, silicic rock fragments are pyritized.	
44.50	Rhyodacitic lapilli tuff, light green, layered.	
48.25 49.40	Quartz veins, 1-2cm wide, bearing chalcopyrite, dip 0.	49.80m: Chalcopyrite disseminated, very fe

Drill Hole No.: MJSU-7 Easting: E 708.792
 Date Started: October 27 Northing: N 2,618.171
 Date Completed: November 10 Elevation(mSL): 956 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50		
55	Rhyodacitic lapilli tuff, light green. Silicic rock fragments are pyritized.	
<56C		
60.00 <60P 60.20		60.00-.20m: Quartz vein, white, bearing chalcopyrite, dip 0, (Cu 0.91%).
62.85 <63P 63.50	Rhyodacitic lapilli tuff, light green, silicic rock fragments sporadically.	62.85-63.50m: This interval contains chalcopyrite bearing quartz veins, 1-2cm wide, (Cu 2.05%).
64.85	Lapilli tuff.	63.50-64.85m: Pyrite-chalcopyrite disseminated sporadically.
65		
70	Lapilli tuff-coarse tuff, light gray, dip 40, pyrite disseminated.	
70.15		70.15-72.65m: Pyrite veinlets.
<72T 72.65	Basaltic fine tuff, dark green, calcite veinlets. 72T: Basaltic fine tuff, weakly meta, clastic to porphyritic.	72.65-73.45m: Pyrite veinlets along layers.
73.45	Rhyodacitic coarse tuff, light green, layered.	73.45-74.30m: Pyrite-calcite veinlets along layers.
74.30	dark green, partly black basaltic? fine tuff,	74.30-76.55m: Pyrite veinlets, pyrite 20%.
<74C		
75	Basaltic? fine tuff, dark green-black.	
76.55 <76P 76.70	Rhyodacitic coarse tuff, light green, layered.	76.55-.70m: Siliceous pyrite ore, containing chalcopyrite-quartz veinlets, pyrite 35%.
78.05	Rhyodacitic coarse tuff, layered.	76.70-78.05m: Pyrite is disseminated, chalcopyrite is disseminated sporadically, pyrite 10%.
80		80.00m: Quartz vein, 5cm wide, bearing small amount of chalcopyrite.
<81C		
85	Coarse tuff & layered lapilli tuff, light green, pyrite disseminated.	
87.30		87.30m: Chalcopyrite is disseminated.
90		
95	Coarse tuff-lapilli tuff, layered, light green, pyrite disseminated, dip 45-60.	
100		

Drill Hole No.:
Date Started:
Date Completed:

MJSU-7
October 27
November 10

Easting:
Northing:
Elevation(mSL):

E 708.792
N 2,618.171
956

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100	Layered tuff (coarse tuff), light green, pyrite disseminated.	
105		
110	Basic dike, dolerite? light green, containing chlorite patches (size: 1-3mm).	108.25- .75m: Pyrite-chalcopyrite veinlets along layers, few.
115	Layered tuff (coarse-fine tuff), light green, pyrite disseminated, partly white spotted.	
120	Pyritization is weak below 119.0m. Barren quartz vein.	
125	Layered tuff (coarse tuff), light green.	
130	Pyrite is very few.	
135		
140	Lapilli tuff, light green, silicic rock fragments (size: <2cm).	
145	Lapilli tuff-layered tuff, light green, containing chlorite thin layers, dip 40.	
150	<149C	

Drill Hole No.: MJSU-7 Easting: E 708.792
 Date Started: October 27 Northing: N 2,618.171
 Date Completed: November 10 Elevation(mSL): 956 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	Lapilli tuff, white-light green.	
155		
156.10 156.65	Basic dike, dolerite? light green, dip 70.	
	Rhyodacitic lapilli tuff, pyrite disseminated, pyrite 2-3%, partly hematite stains.	
160	159.80	
	Rhyodacitic layered tuff, with chlorite layers, white spotted	
165		
170	170.00	
	Tuff breccia, white silicic rock fragments (size: <5cm), with small quartz.	
173.85 174.55	173.85-179.0m: Lapilli tuff-layered tuff.	173.85-174.55m: Chalcopyrite disseminated, very few. 174.55-176.00m: Pyrite-chalcopyrite-sphalerite layers.
175	176.00	
	177.90	177.90m: Chalcopyrite-pyrite-sphalerite veinlets.
179.00		
180	Lapilli tuff, light green, silicic rock fragments (size: <3cm), with small quartz, partly layered, with chlorite layers, weakly pyrite disseminated.	
185		
190	190.30 190.40	Brecciated and silicified part, black, pyrite disseminated.
	Lapilli tuff, layered, light green.	
192.65 193.55	192.65-194.55m: Lapilli tuff, whitish.	192.65-193.55m: Chalcopyrite-sphalerite disseminated, few. 193.55-194.55m: Chalcopyrite-sphalerite disseminated, very few.
194.55 195.00 195.10 195.70 195.95 196.50	195.00-.10m & 195.70-.95m: Basic dike, light green, with chlorite patches. Basic dike, dolerite, green, with chlorite patches.	
197.90 198.30	197.90-198.30m: Pyrite-chalcopyrite-sphalerite veinlets, few.	
200	Layered tuff, greenish light gray, with small quartz.	

Drill Hole No.:

MJSU-7

Easting:

E 708.792

Date Started:

October 27

Northing:

N 2,618.171

Date Completed:

November 10

Elevation(mSL):

956

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200		
205	<p><202T</p>	<p>Layered tuff, greenish, white spotted. 202T: Rhyodacite tuff, weakly meta, clastic to porphyritic.</p>
210	<p>207.95 208.15</p> <p>209.55 <210T 210.30</p> <p>211.20</p> <p>212.25</p>	<p>Sheared part, clayey, with barren quartz veinlets. Tuff.</p> <p>Basic dike, light green, aphyric, dip 50, with chlorite patches (1-5mm thick). Layered tuff.</p> <p>Basalt dike, light green, aphanitic, with chlorite patches. 210T: Basalt, weakly meta, porphyritic.</p>
215		
220		<p>Lapilli tuff, greenish light gray, partly layered tuff, with chlorite layers, partly white spotted.</p>
225		
230	<p>227.85 228.45 228.80</p>	<p>Layered tuff. Brecciated part, clayey.</p>
235	<p>234.30</p>	<p>Layered tuff, greenish light gray, with thin chlorite layers.</p> <p>Boundary is not clear.</p>
240	<p><240T</p>	<p>Rhyodacite, light gray, very hard, flow-structure, partly brecciated, with small quartz. 240T: Rhyodacite, weakly meta, porphyritic.</p>
245		
250		<p>227.85-228.80m: Pyrite-chalcopyrite disseminated, very few.</p>

Drill Hole No.:

MJSU-8

Easting:

E707.196

Date Started:

October 30

Northing:

N2,620.623

Date Completed:

November 13

Elevation(mSL):

955

Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
0	0.50	Slime.
5	Porphyritic rock, light green, plagioclases are dominant (size: 2-8mm), fresh mafic minerals are not confirmed, weakly epidotized and chloritized.	
	8.00	
	9.10	
10	9.70	Non-core, crack
	<10T	8.00-13.30m: Basalt dike, greenish light gray, aphyric, weakly epidotized, partly fractured, calcite veinlets. 10T: Basalt, weakly meta, porphyritic.
	13.30	
	14.20	
15	15.00	14.20-15.30m: Basic dike, 14.20-15.00m: Sheared & oxidized part, 15.00-15.30m: Silicified part.
	15.30	
	<16C	Porphyritic rock.
	18.25	
	18.50	18.25-18.50m: plagioclase small (size: 1-2mm).
20	<20T	
	Porphyritic rock, green-light green, fresh mafic mineral few, plagioclase dominant (size: <0.7 cm), chloritized. 20T: Porphyritic basalt, weakly meta, porphyritic.	
25		
	<28C	
30	30.30	30.30-.70m: Strongly silicified rock, light gray, porphyritic dacite?, with quartz veinlets (1-3cm wide).
	30.70	30.70-31.25m: Oxidized and brecciated part.
	31.25	
	33.30	Basic dike, no mineralization.
	33.70	
35		
	Silicified rock, white-light gray, brecciated, pyrite veinlets, pyrite 10%. 39T: Rhyodacitic tuff? highly silicified, clastic to porphyritic.	
	<38C	
	<39T	
40		
	<41X	
	42.45	42.45-45.65m: Pyrite veins (2-4cm wide) sporadically, pyrite 10%.
45		
	45.65	
	Rhyodacitic lapilli tuff?, dark green, chloritized, containing silicic rock fragments (size: 0.5-1.0cm).	
50		

Drill Hole No.: MJSU-8 Easting: E707.196
 Date Started: October 30 Northing: N2,620.623
 Date Completed: November 13 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
50	Rhyodacitic lapilli tuff-coarse tuff, gray, chloritized, white spotted, with chlorite layers.	
54.00 54.15	Basic dike, light green, dip 70.	
55	54.15-60.45m: Rhyodacitic coarse tuff, gray, carbonatized, chloritized, white spotted. 57T: Rhyodacitic coarse tuff, weakly meta, clastic to porphyritic.	
<57T <58C		
60	60.45-61.00: Coarse tuff, light gray, carbonatized.	
65	Rhyodacitic coarse tuff, dark gray, chloritized, carbonatized, pyrite disseminated.	
69.55-70.65	69.55-70.65m: Tuffaceous breccia bed, consisting of silicic rock fragments (size: <1cm), pyritized rock fragments (size: <3cm), and light green pumices, reverse grading.	
70.65-70.90	70.65-70.90m: Chloritized & carbonatized part, black, calcite crystals (size: <1cm).	
70.90-71.95	70.90-71.95m: Tuffaceous breccia bed, consisting of pyritized rock fragments and silicic rock fragments (size: <1cm).	
71.95-72.60	71.95-72.60m: Chloritized & carbonatized part, black, calcite crystal <1cm.	
72.60-73.25	72.60-73.25m: Coarse tuff, dark gray, with chloritized layers, weakly pyritized.	
73.25-73.55	73.25-73.55m: Mineralized part, copper ore block (4 by 4cm, 73.27m), zinc ore block (7 by 7cm, 73.30-55m), (Cu 0.90%, Zn 12.74%)	
<74X	Clayey fine tuff, light gray, banded with pyrite thin layers, pyrite 20%.	
77.20-77.40	77.20-.40m: Fine-grained pyrite, muddy, pyrite 55%.	
79.20		
82.65-83.35	82.65-83.35m: Shale, dark gray, soft, banded with pyrite layers (<2cm thick), pyrite 20%.	82.65-83.35m: Massive sulfide mainly consisting of fine-grained pyrite, pyrite 45%, (Cu 1.57%), with gray siliceous layer at the depth of 82.50-.60m.
83.35-85.10	83.35-85.10m: Silicified tuff, pyrite disseminated, pyrite 15%, chalcopyrite few.	
85.10-85.85	85.10-.85m: Pyrite breccia, dark gray, muddy, pyrite 25%, consisting of pyrite and mudstone (<5mm).	
85.85	Tuffaceous volcanic breccia, consisting of silicic rock fragments (size :2-5mm) and pyrite disseminated rocks.	
90.75-91.95	90.75-91.95m: Volcanic breccia, silicic rock fragments (size: 0.2-2cm), matrix: pyrite, pyrite 20%, bad sorting. 91T: Volcanic breccia, weakly meta, clastic.	
91.95	Volcanic breccia, dark gray, silicic rock fragments and pyritized volcanic rocks (size: 0.2-0.5cm), tuffaceous, containing dark green pumices (size: 0.2-0.5mm).	
95.00-96.95	95.00-96.95m: Volcanic breccia, dark gray, size: 1.0-2.0 cm, pumiceous, consisting of silicic rock fragments, pyritized and chloritized pumices, and pyritized volcanic rock fragments, matrix: pyrite, pyrite 10%.	
96.95-97.90	96.95-97.90m: Dolerite? gray basic dike.	
97.90-99.80	97.90-99.80m: Tuffaceous breccia, dark gray, size of breccia: <1cm, pumiceous, silicic rock fragments, matrix: pyrite, pyrite 15%. 98T: Volcanic breccia, weakly meta, clastic.	
99.80		

Drill Hole No.: MJSU-8 Easting: E707.196
 Date Started: October 30 Northing: N2,620.623
 Date Completed: November 13 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
100		
101.10	99.80-101.10m: Pumiceous lapilli tuff, dark gray, pumice: light green and clayey, matrix: pyrite, pyrite 15%	
101.80	101.10- .80m: Basic dike, dolerite? dark green 101.80-104.65m: Pumice tuff, dark gray, matrix: 10%, layered pyrite.	
105	104.65- 104.95m: Alternation of dark gray fine tuff (soft) and pumice tuff, dip 70. 104.95- 107.40m: Pumice tuff, dark gray, light green pumice layers, pyritized, pyrite 20%.	
107.40	107.40- .55m: Shale, dark gray, hard, pyrite veinlets.	
107.85	107.75- .85m: Shale	
110	107.85-111.00m: Pumice tuff, dark gray, light green pumice (size: 0.2-0.4cm), pyritized, pyrite 20%, 111.00- .40m: Strongly silicified part, dark gray, shale? pyrite veinlets, pyrite 10%.	
113.00	111.40-113.00m: Pumiceous breccia bed, dark gray, brecciated, silicified, pyrite veinlets, pyrite 10%.	
114.05	113.00-114.05m: Breccia bed, partly silicified, pyrite veinlets, pyrite 15%.	
115		
120	114.05-124.45m: Pumiceous breccia, dark gray, breccia: silicic rock fragments (size: 0.5-1.0cm), light green pumice (size: 0.2-0.4cm), pyrite veinlets, pyrite 10%.	
125	<124C 124.45 124.45-125.80m: Silicified part, shale? dark gray, pyrite veinlets, pyrite 5%.	
125.80	125.80-128.05m: Pumiceous breccia bed, size of fragments: 0.2-0.7cm, chloritized pumice, pyrite 15%.	
128.05	128.05-129.55m: Clayey fine tuff, dark gray, bedded with pyrite thin layers.	
130	129.55-132.15m: Very strongly silicified part, ocher, origin: breccia bed and fine tuff?, size of fragments: 0.2-1.0cm. 132.15-133.00m: Pumiceous breccia bed, size of fragments: 0.3-2.0cm, size of pumice: <3.0cm, matrix: pyritized, pyrite 20%.	
132.15	133.00-133.55m: Very strongly silicified part, ocher.	
133.00	133.55-134.30m: Silicified tuff, dark gray, containing pyrite bands (2.0-3.0 cm thick), pyrite 10%.	
133.55	134.30-134.75m: Very strongly silicified part, ocher.	
134.30	134.75-137.70m: Pumiceous breccia bed, partly fine tuff, size of fragments: 0.2-1.0cm, pyrite veinlets, pyrite 5%.	
134.75		
135		
137.70	137.70-138.85m: Breccia bed, dark gray, partly pumiceous, size of fragments: 2.0-4.0cm, silicified, pyrite veinlets, pyrite 10%.	
138.85	138.85-139.35m: Brecciated fine tuff, dark gray, pyrite few	
139.35	139.35-143.40m: Pumiceous breccia bed, dark gray, size of fragments: 0.2-1.5cm, pyrite veinlets, pyrite 10%.	
140		
<141X		
<143C		
143.40	143.40-144.35m: Fine-coarse tuff, dark gray, pyrite disseminated.	
144.35	144.35-150.00m: Pumiceous breccia bed, dark gray, bad sorting, size of fragment 1.0-4.0cm, pyrite veinlets, pyrite 10%.	
145		
150		

Drill Hole No.: MJSU-8 Easting: E707.196
 Date Started: October 30 Northing: N2,620.623
 Date Completed: November 13 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
150	150.00-154.20m: Pumiceous breccia bed, partly fine tuff, siliceous rock fragments (size: 0.2-0.8cm), pyrite veinlets, pyrite 10%.	
154.20	154.20-155.45m: Pumiceous fine tuff, dark gray, soft.	
155	155.45-158.75m: Pumiceous breccia bed, size of fragments: 0.2-2.0cm, pyrite veinlets, pyrite 10%.	
158.75	158.75-159.95m: Alternation of breccia and fine tuff, dark gray, very strongly silicified.	
160	159.95-168.65m: Pumiceous breccia bed, dark gray, partly siliceous fine tuff, size of fragments: 0.2-2.0cm, pyrite veinlets and disseminated, pyrite 10%.	
165	<167C	
168.65	168.65-169.20m: Siliceous coarse tuff, black, hard, containing quartz fragments (size: 0.1 cm).	
170	169.20-172.50?m: Tuffaceous breccia bed, size of fragments: 0.2-0.6 cm, pyrite veinlets, pyrite 10%.	
	172.50?-175.90?m: Pumiceous lapilli tuff, light green pumice (size 0.2-0.5 cm), size of fragments: <4.0cm, pyrite veinlets, pyrite 5%.	
175	175.90?-182.60m: Pumiceous breccia bed, dark gray, partly fine tuff, size of fragments: 0.2-1.0cm, brecciated and silicified, bad sorting, pyrite veinlets, pyrite 5%.	
180	<181C	
182.60	182.60-183.50m: Silicified rock, white to light green, chlorite dotted. 183T: Sandstone? weakly meta, clastic.	
183.50	183.50-186.05m: Pumiceous lapilli tuff? dark gray, size of fragments: 0.5-1.0cm, max. 4cm, pyritized, pyrite 10%.	
185	<184X	
186.05	186.05-199.00m: Porphyritic andesite, light green, plagioclase dominant (1-6mm), chloritized pyroxene?, epidotized, pyrite weakly disseminated. 192T: Porphyritic andesite, weakly meta, porphyritic	
190	<192T <193C	
195		
200		

Drill Hole No.: MJSU-8 Easting: E707.196
 Date Started: October 30 Northing: N2,620.623
 Date Completed: November 13 Elevation(mSL): 955 Drilled by DMMR/BRGM

Depth	Lithology	Mineralization & Alteration
200		
205	<p><206C</p> <p><207T</p>	<p>199.00-211.15m: Pumiceous breccia bed, dark gray, green-light green pumice (size: 0.2-5.0cm), size of fragments: 0.2-2.0cm, pyrite veinlets, pyrite 5%. 207T: Pumiceous volcanic breccia, weakly meta, clastic.</p>
210	<p>211.15</p> <p>211.55</p>	<p>211.15-211.55m: Coarse tuff, dark gray, silicified, with chlorite patches (size: 0.2-0.5cm).</p>
215		
220	<p><218C</p>	<p>211.55-228.45m: Andesite, light green, intrusive, white patches (size: 1-2mm, plagioclase?). 226T: Andesite, weakly meta, porphyritic.</p>
225	<p><226T</p>	
230	<p>228.45</p> <p>231.45</p> <p><233T</p> <p>233.85</p>	<p>228.45-231.45m: Breccia bed, partly oxidized.</p> <p>231.45-233.85m: Oxidized breccia bed, size of fragments: 0.2-1.0 cm. 233T: Volcanic breccia, weakly meta, clastic.</p>
235	<p><236C</p> <p>236.70</p> <p><239C</p>	<p>233.85-236.70m: Breccia bed, partly oxidized, size of fragments: 0.2-1.0 cm, pyrite veinlets, pyrite 5%.</p>
240		
245	<p><244T</p> <p>245.50</p> <p>246.00</p>	<p>236.70-245.50m: Volcanic breccia to coarse tuff, green to light gray, plagioclase (size: 2-4 mm), strongly epidotized. 244T: Volcanic breccia, weakly meta, clastic.</p> <p>245.50-246.00m: Basic dike, gray, aphyric.</p>
250	<p>250.00</p>	<p>246.00-250.00m: Dacitic coarse tuff?</p>