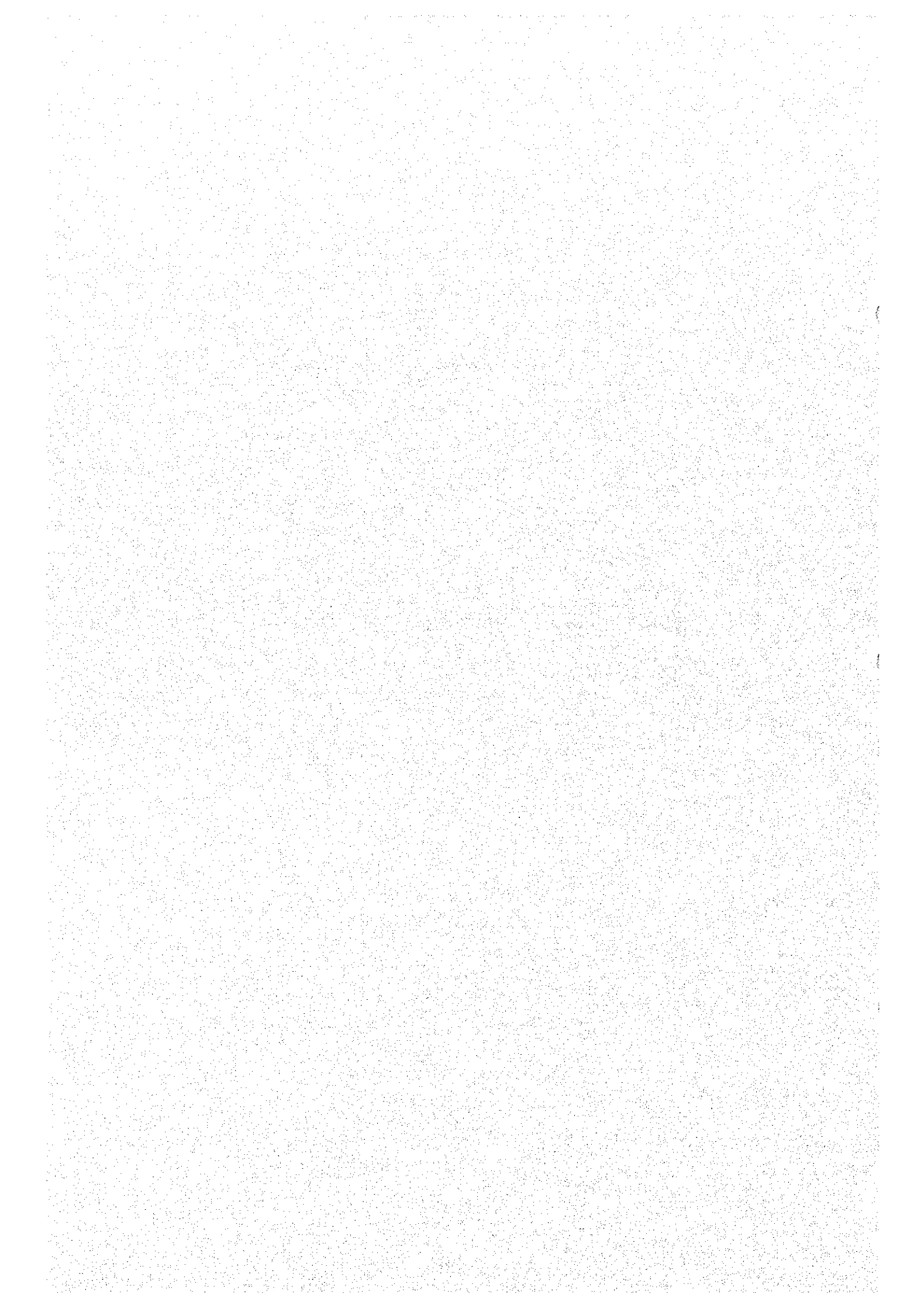


第Ⅲ部 結論及び提言



第1章 結論

本年度は本調査の最終年度にあたり、昨年度までの調査結果に基づいてグザイン地区、ズーハ地区、マケール地区、サラヒ地区において物理探査及びボーリング調査を実施した。各地区の調査結果は以下のように結論付けられる。

(1) グザイン地区

グザイン地区には広い範囲に鉱化作用が認められるが、塊状硫化物鉱体の分布は中央部に限定されることが明らかになった。また、グザイン No.3 鉱体に対するボーリング調査の結果から、鉱体は西側の方が東側より膨らんだ形状を呈し、平均の厚さが厚くなっていること、鉱体が南北方向に 300m の連続性を持つことが判明した。この結果から No.3 鉱体の推定地質鉱量は約 860 万 t、平均銅品位は 1.5% と見積もられた。

(2) ズーハ地区

ズーハ地区には地表徴候としてグザイン地区と同規模のゴッサンが存在し、その周辺部には酸化銅が多く認められる。TDIP 法調査では、ゴッサン周辺からその北方にかけて、鉱床胚胎層準の周辺に高分極率異常が検出された。しかしながら、顕著な低比抵抗異常は検出できなかった。TEM 法調査を TDIP 法調査の高分極率異常に対して実施したが、塊状硫化物鉱体の存在を示す異常は抽出できなかった。また、ゴッサン東方の高分極率異常部で実施したボーリング調査では、下盤の V1-1 層中に優勢な黄鉄鉱化と鉱化変質が認められたのみであった。したがって、本地区には塊状硫化物鉱体は存在しないものと判断される。

(3) マケール地区

マケール地区では、昨年度の調査地域の北方延長部において TDIP 法調査で低比抵抗異常を伴った分極率異常が 2ヶ所で検出され、それらのうちの 1ヶ所では顕著な TEM 異常が抽出された。しかし、この異常に対するボーリング調査では、下盤中に珪化及び黄鉄鉱化が認められたのみで、塊状硫化物鉱体を捕捉することはできなかった。

(4) サラヒ地区

サラヒ地区はズーハ地区の南に位置し、銅鉱徴や鉱化変質が各所で認められる。本地区における TDIP 法調査では、下盤の V1-1 層及び鉱床胚胎層準の分布域に高分極率異常が認められたものの、それらの範囲内には低比抵抗異常は検出されなかった。したがって、本地区には塊状硫化物鉱体は存在しないものと判断された。

第2章 将来への提言

南バチナコースト地域には各所に鉍化作用が認められるが、経済性を持つ規模の塊状硫化物鉍体の存在はグザイン地区に限られることが明らかになった。このグザイン地区には3つの鉍体が存在し、それらの合計の推定鉍量は約1,400万tに達することから、今後はさらに詳細な調査を行い、その経済性評価を行うことを提言する。

しかしながらグザイン地区の鉍体は深度が深いこと及び金をほとんど伴わないことから、本地区単独での開発は現状では困難であることが予想される。したがって、すでに発見され、まだ未開発である（一部のゴッサン部のみは開発されている）ヤンクル地区の鉍床とセットにして経済性評価を行うことを提言するものである。

参 考 文 献

- 1) BECHENNEC F., BEURRIER M., RABU D. and HUTIN G.(1986): Geological map of BARKA,-Sheet NF 40-3B, scale 1:100,000: explanatory notes.
- 2) BECHENNEC F., ROGER J., MRTOUR J.L., WYNS R. and CHEVREL S.(1992): Geological map of IBRI,-Sheet NF 40-02, scale 1:250,000: explanatory notes.
- 3) BECHENNEC F., ROGER J., MRTOUR J.L. and WYNS R.(1992): Geological map of SEEB, -Sheet NF 40-03, scale 1:250,000: explanatory notes.
- 4) BEURRIER M., BECHENNEC F., RABU D. and HUTIN G.(1986): Geological map of ASSUWAYQ, -Sheet NF 40-3A, scale 1:100,000: explanatory notes.
- 5) BEURRIER M., BECHENNEC F., RABU D. and HUTIN G.(1986): Geological map of RUSTAQ, -Sheet NF 40-3A, scale 1:100,000: explanatory notes.
- 6) BISHIMETAL EXPLORATION CO LTD.(1987): Report on a copper exploration programme in thenorthern part of the Oman mountains: Volume I: General
- 7) BISHIMETAL EXPLORATION CO LTD.(1991): Report on geologic and geophysical surveys in the TAWI RAKAH area, Sultanate of Oman
- 8) BISHIMETAL EXPLORATION CO LTD.(1992): Geophysical study in the prospects of Lasail west and Aarja in Sohar area and Hayl As Safil in Rakah area, Sultanate of Oman: Final Report
- 9) BRGM(1994): Mineral occurrences catalogue, BRGM, 119 p..
- 10) Cooper, N. J. and Swift, R.(1994): Application of TEM to Cyprus-type massive sulfideexploration in Cyprus, Geophysics],vol.59,No.2, 202-214 p..
- 11) HADDADIN M.A., SULAIMAN Z.K. and AL-FORI S.S.(1983): The Ghuzayn copper-iron prospect, re-evaluation, Khaburah district, Oman. M.P.M., Department of Minerals, 28 p..
- 12) ISLES D.J. and WITHAM W.J.A.(1993): Explanatory notes on the solid geological interpretation of AS SUWAYQ 1:100,000 sheet NF40-3A, World Geoscience Corporation, 15 p..
- 13) Interpex Limited(1993): TEMIX v3.0 User's Manual, Transient Electromagnetic Data Interpretation Software
- 14) ISLES D.J. and WITHAM W.J.A.(1993): Explanatory notes on the solid geological interpretation of BARKA 1:100,000 sheet NF40-3B, and part of NAKHL 1:100,000 sheet NF40-3E, World Geoscience Corporation, 13 p..
- 15) ISLES D.J. and WITHAM W.J.A.(1993): Explanatory notes on the solid geological interpretation of SIB 1:100,000 sheet NF40-3C, and part of FANJAY 1:100,000 sheet NF40-3F, World Geoscience Corporation, 11 p..
- 16) JEBRAK M., LETALENET J. and LESCUYER(1985): Detailed and semi-detailed exploration for copper and associated gold in the Daris, Mahab, Rakah, Ghuzayn, Wadi Andam, Washihi and Al Ajal Area, Interim report, BRGM, 52-57 p..

- 17) JICA and MMAJ(1990): Report on the mineral exploration in the Rakah area, Sultanate of Oman, Bishimetal Exploration Co. Ltd..
- 18) JICA and MMAJ(1996): Report on the cooperative mineral exploration in the central Batinah coast area, Sultanate of Oman,
- 19) JICA and MMAJ(1998): Report on the cooperative mineral exploration in the south Batinah coast area, Sultanate of Oman
- 20) LESCUYER J.L. and DEGAY E.(1986): Detailed and semi-detailed exploration for copper and associated gold in the DARIS, MAHAB, RAKAH, SHINAS, GHUZAYN, WADI ANDAM, WASHIHI and AL AJAI areas: Final report, BRGM, 125 p.. 4appendices.
- 21) LESCUYER J.L., VACHETTE C. and BEURRIER M.(1989): Selection of zones for additional copper reserves between SHINAS and AL KHABURAH, northern Oman mountains: Final report, BRGM, 245p..
- 22) M.P.M.(1991): Summary of Cu prospects and recommendation for next programme M.P.M. of sultanate of Oman, 19 p..
- 23) M.P.M.(1995): GEOLOGY AND MINERAL WEALTH OF THE SULTANATE OF OMAN
- 24) O.C.M.C.(1994): Daris-part 5: Geological ore reserves at Daris 3A-5 as on 28 September 1994, Oman Mining Company, 10 p..
- 25) RABU D., BECHENNEC F., BEURRIER M. and HUTIN G.(1986): Geological map of NAKHL, -Sheet NF 40-3E, scale 1:100,000: explanatory notes.
- 26) VILLEY M., BECHENNEC F., BEURRIER M., METOUR J. and RABU D.(1986): Geological map of YANQUL, -Sheet NF 40-2C, scale 1:100,000: explanatory notes.
- 27) World Geoscience Co.(1994): Report on ground geophysical surveys in the Sultanate of Oman, 5.4 Daris 3A-5 prospect, O.M.C.O., 15-21 p..
- 28) Webster, S.(1995):Discussion on The application of TEM to Cyprus-type massive sulfide exploration in Cyprus,Geophysics,vol.60,No.5, 1 p..

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Appendix 1	Drilling equipments and consumed materials
Appendix 2	Generalized drilling results and Progress record of drilling
Appendix 3	Drilling logs
Appendix 4	Assay results of drilling cores

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Appendix 1

Drilling equipments and consumed materials

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Drilling Equipment

	Rig-1	Rig-2	Rig-3
Model	RAMROD-II	VOL-180	N-18(f4L)
Maker	Joy Manufacturing Co. USA	Voltas Ltd. India	Acker Drill Co. USA
Mounting	Truck mounted 4WD	Truck mounted 4WD	Skid Mounted
Drilling capacity with NX size wire Line coring	450 m	650 m	400 m
Angle hole drilling capacity	Upto 60 deg.	Vertical only	Upto 60 deg.
Circulation pump	35 GPM 800 PSI	37 GPM 1000 PSI	35 GPM 800 PSI

Consumed material

Hole No.	MJOB-G40	MJOB-G41	MJOB-G42	MJOB-G43	MJOB-G44	MJOB-Z1	MJOB-M1
Bit: NW	1	1	1	1	1	1	1
Bit: NX	1	1	1	1	1	1	2
Bit: BX	-	-	-	-	-	-	-
Light Oil (l)	30	20	35	20	25	25	35
Mud (kg)	210	160	290	120	180	190	380
Cement (kg)	100	200	250	250	50	100	50

Hole No.	MJOB-M2	MJOB-M3
Bit: NW	1	1
Bit: NX	2	1
Bit: BX	-	-
Light Oil (l)	25	20
Mud (kg)	240	220
Cement (kg)	200	300

Appendix 2

Generalized drilling results and Progress record of drilling

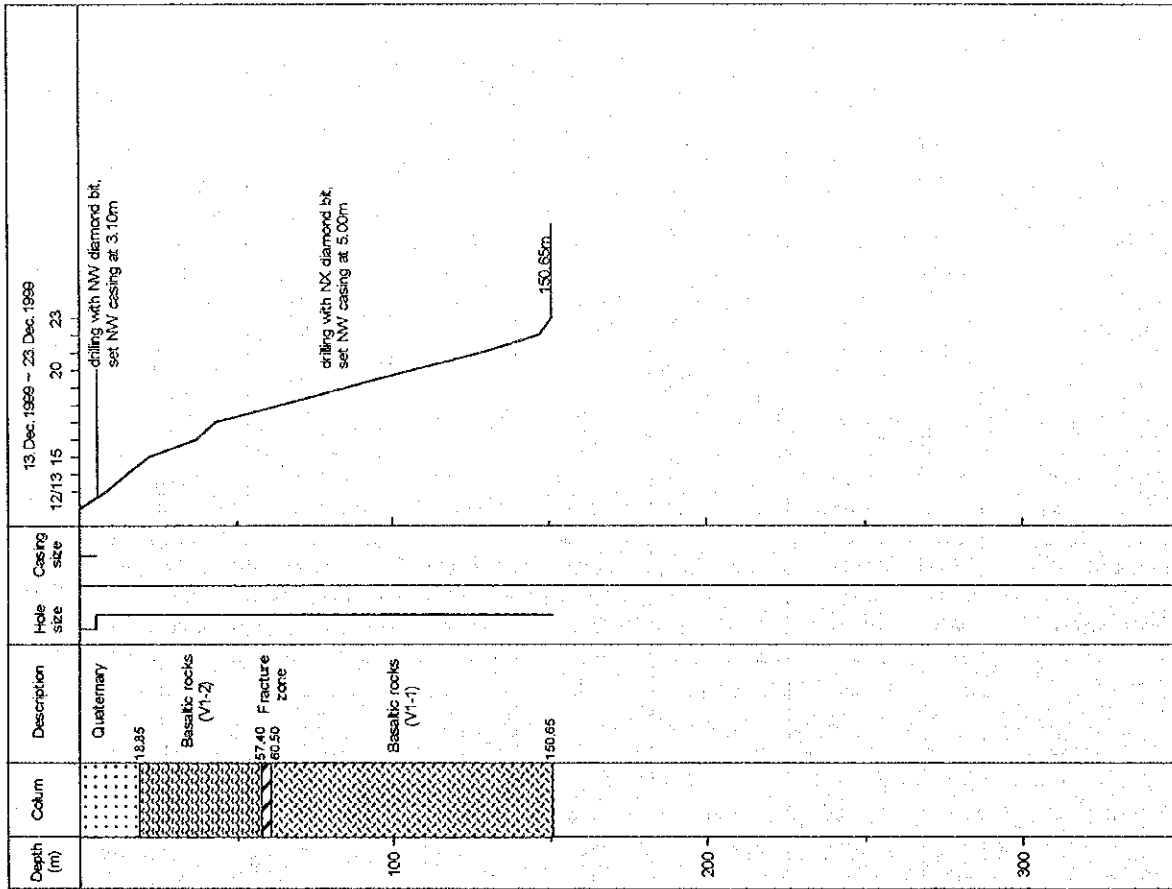


Progress record of drilling

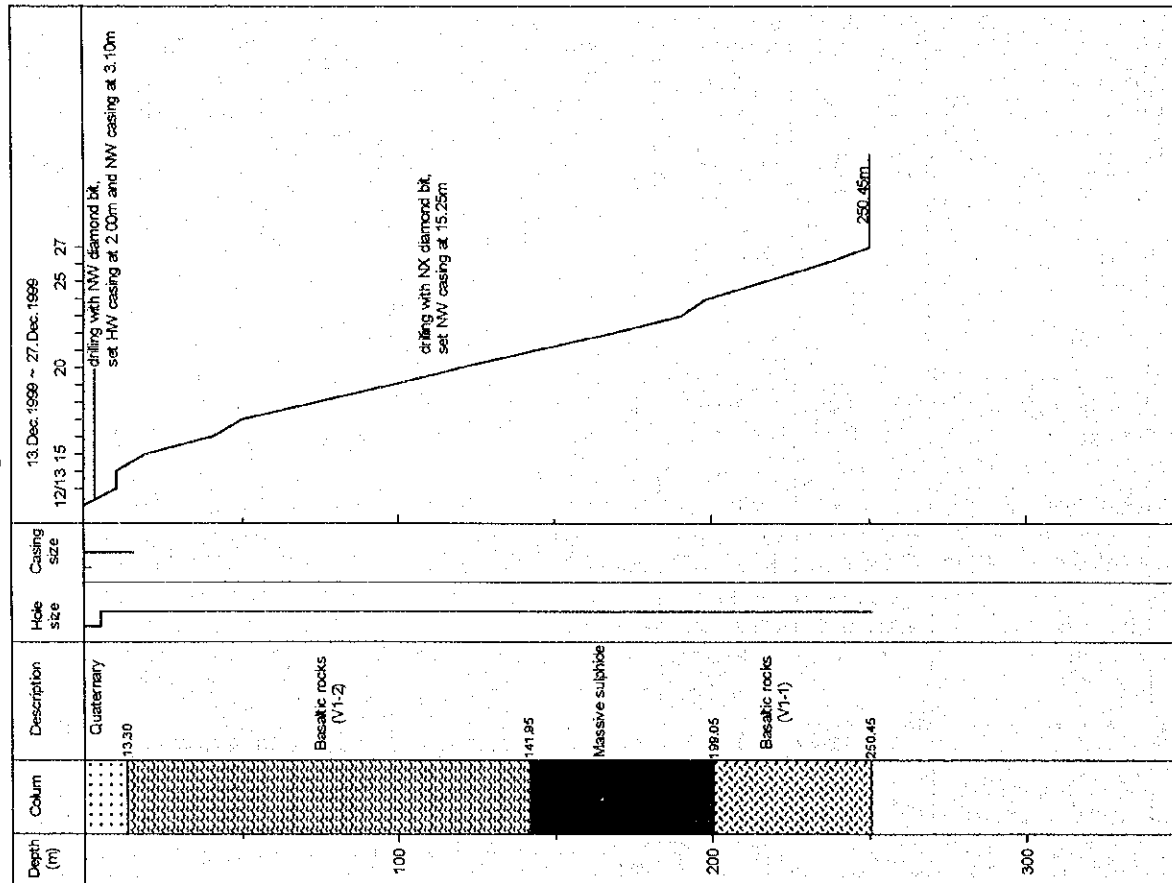
Hole No.		MJOB-G40	MJOB-G41	MJOB-G42	MJOB-G43	MJOB-G44	MJOB-Z1	MJOB-M1
Drilling Period	Preparation Days (A)	12/12 1	12/12 1	12/24 1	12/28 0.5	1/10 1	1/25 1	2/2 1
	Drilling Days (B)	12/13 to 12/27 15	12/13 to 12/23 10.5	12/25 to 1/15 22	12/29 to 1/5 8	1/11 to 1/23 13	1/26 to 2/7 13	2/3 to 2/27 25
	Removing Days (C)	12/28 0.5	12/23 0.5	1/16 1	1/6 0.5	1/24 1	2/8 1	2/28 1
	Total days (D)	16.5	12	24	9	15	15	27
Depth	Planned depth (E)	250m	150m	300m	150m	300m	250m	330m
	Drilled depth (F)	250.45m	150.65m	301.80m	150.45m	300.15m	250.90m	330.00m
Recovery	Overburden (G)	13.30m	18.85m	5.50m	16.20m	9.10m	0.00m	2.75m
	Core length (H)	243.25m	144.95m	299.00m	142.95m	295.50m	250.15m	327.70m
	Recovery (H/F)	97%	96%	99%	95%	98%	100%	99%
Casing	HW casing	2.00m	0.00m	0.00m	3.00m	2.00m	0.00m	0.00m
	NW casing	15.25m	5.00m	6.10m	6.15m	15.25m	3.05m	3.00m
	NX casing	-	-	-	-	-	-	-
Rate	meter /day (F/B)	16.70m	14.35m	13.72m	18.81m	23.09m	19.30m	13.20m
	meter/ total day (F/D)	15.18m	12.55m	12.58m	16.72m	20.01m	16.73m	12.22m

Hole No.		MJOB-M2	MJOB-M3
Drilling Period	Preparation Days (A)	2/9 1	2/25 1
	Drilling Days (B)	2/10 to 2/21 12	2/26 to 3/7 11
	Removing Days (C)	2/22 1	3/8 1
	Total days (D)	14	13
Depth	Planned depth (E)	200m	200m
	Drilled depth (F)	201.15m	200.25m
Recovery	Overburden (G)	1.80m	0.00m
	Core length (H)	201.10m	200.25m
	Recovery (H/F)	100%	100%
Casing	HW casing	0.00m	0.00m
	NW casing	3.00m	3.00m
	NX casing	-	-
Rate	meter /day (F/B)	16.76m	18.20m
	meter/ total day (F/D)	14.37m	15.40m

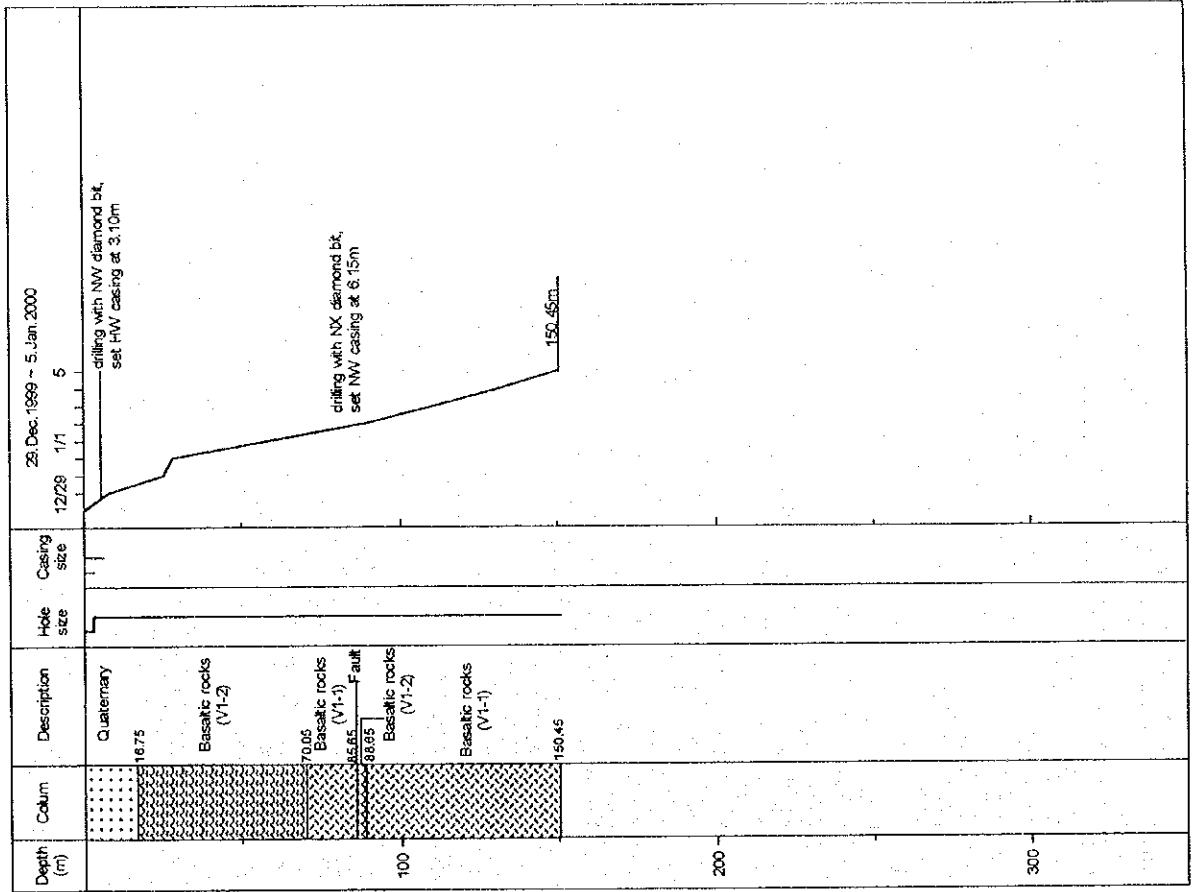
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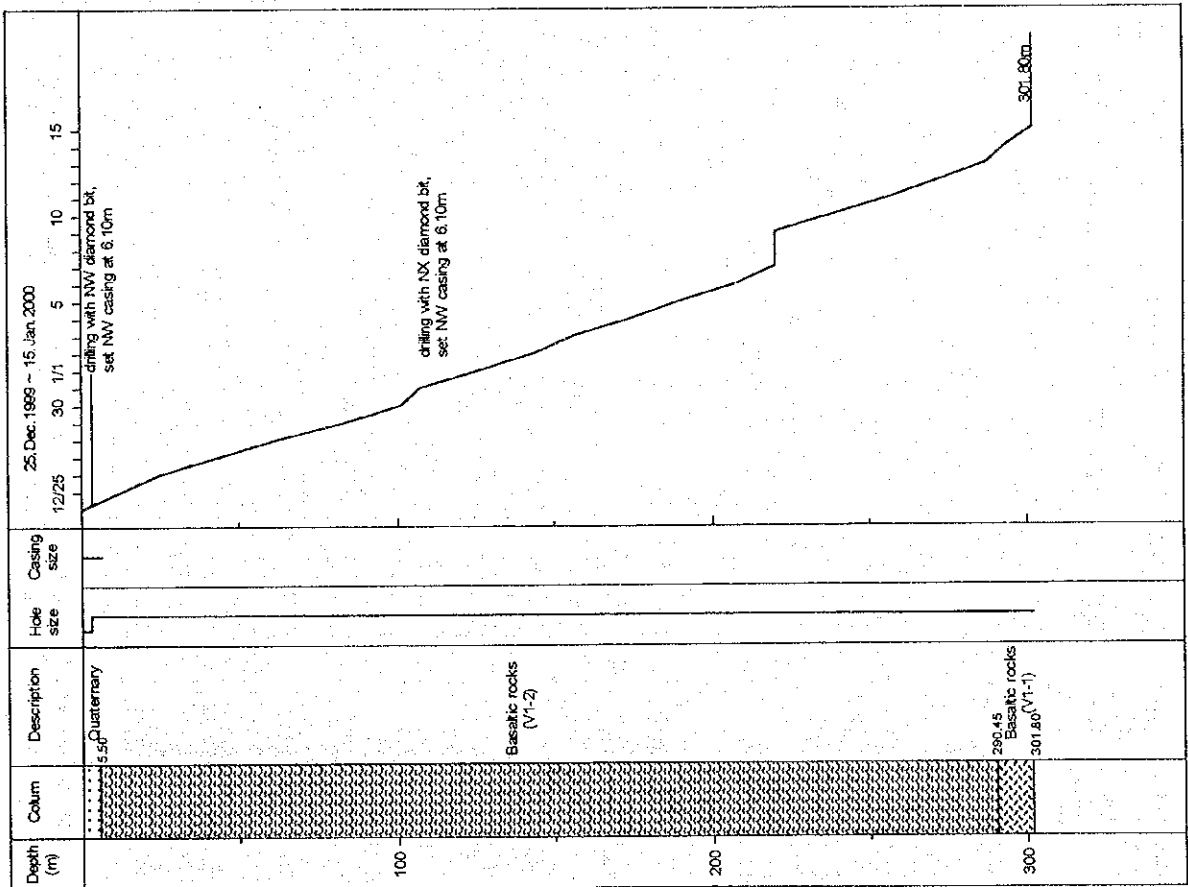
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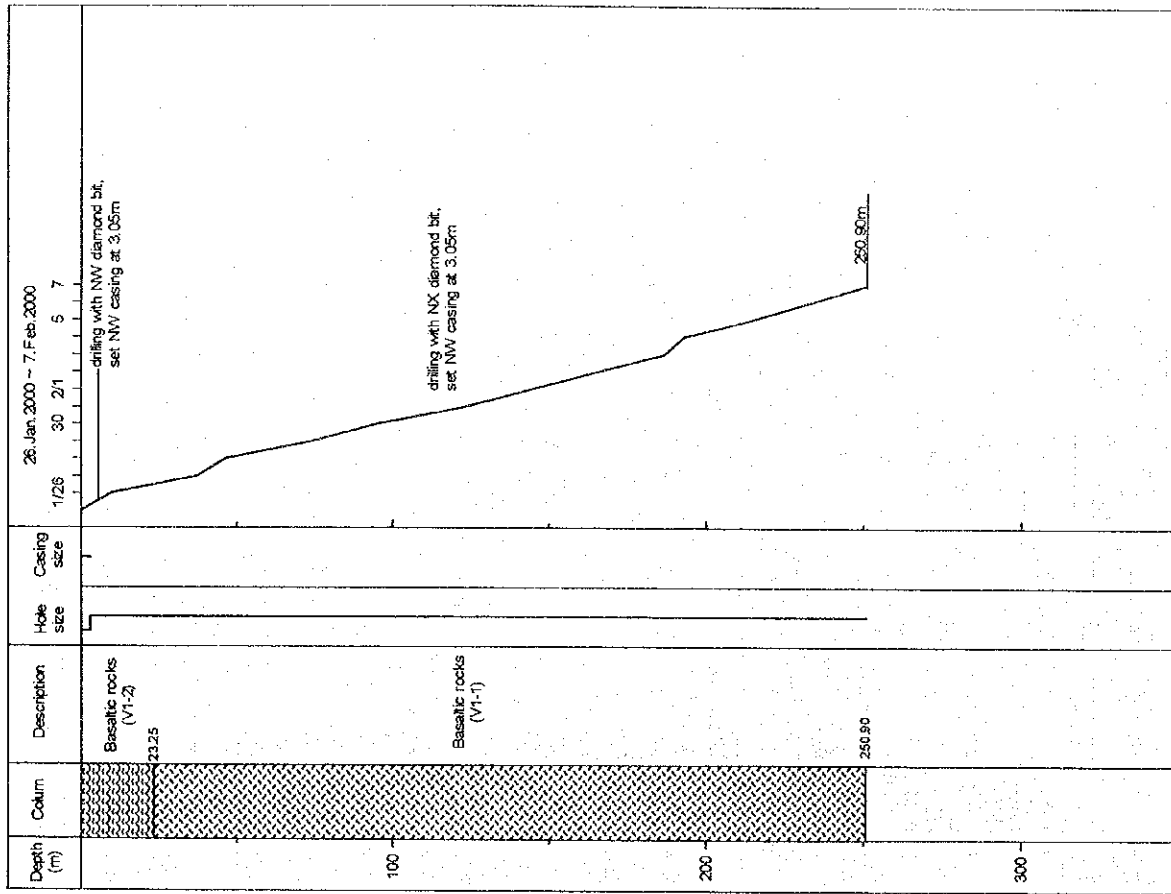
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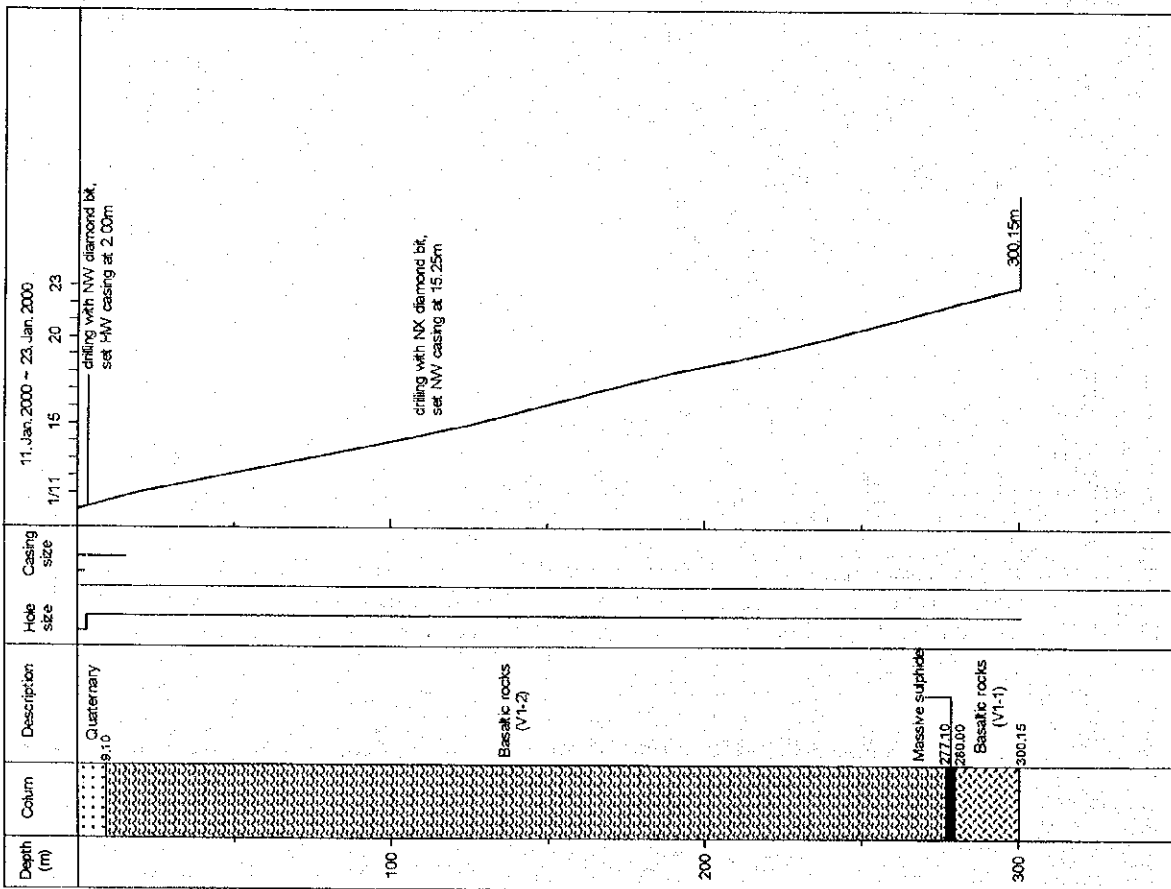
G42



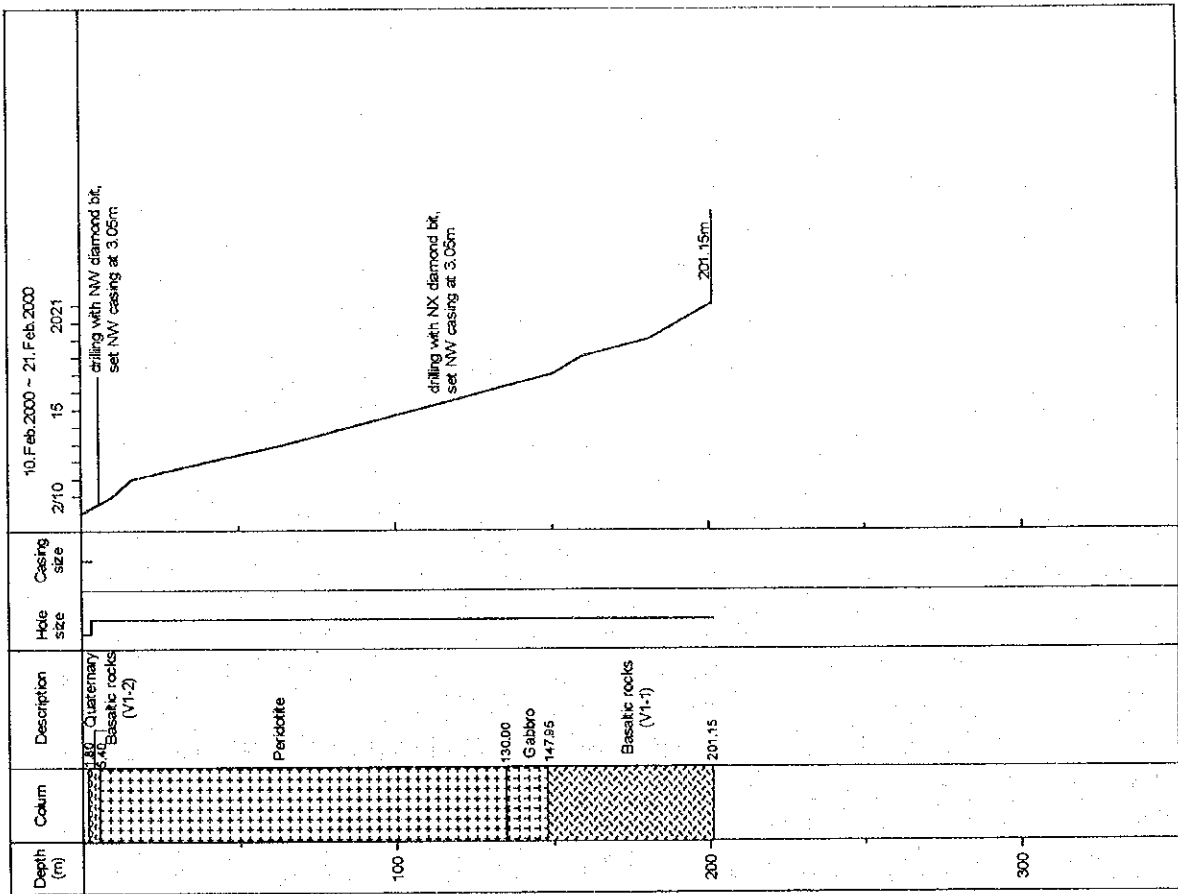
Z1



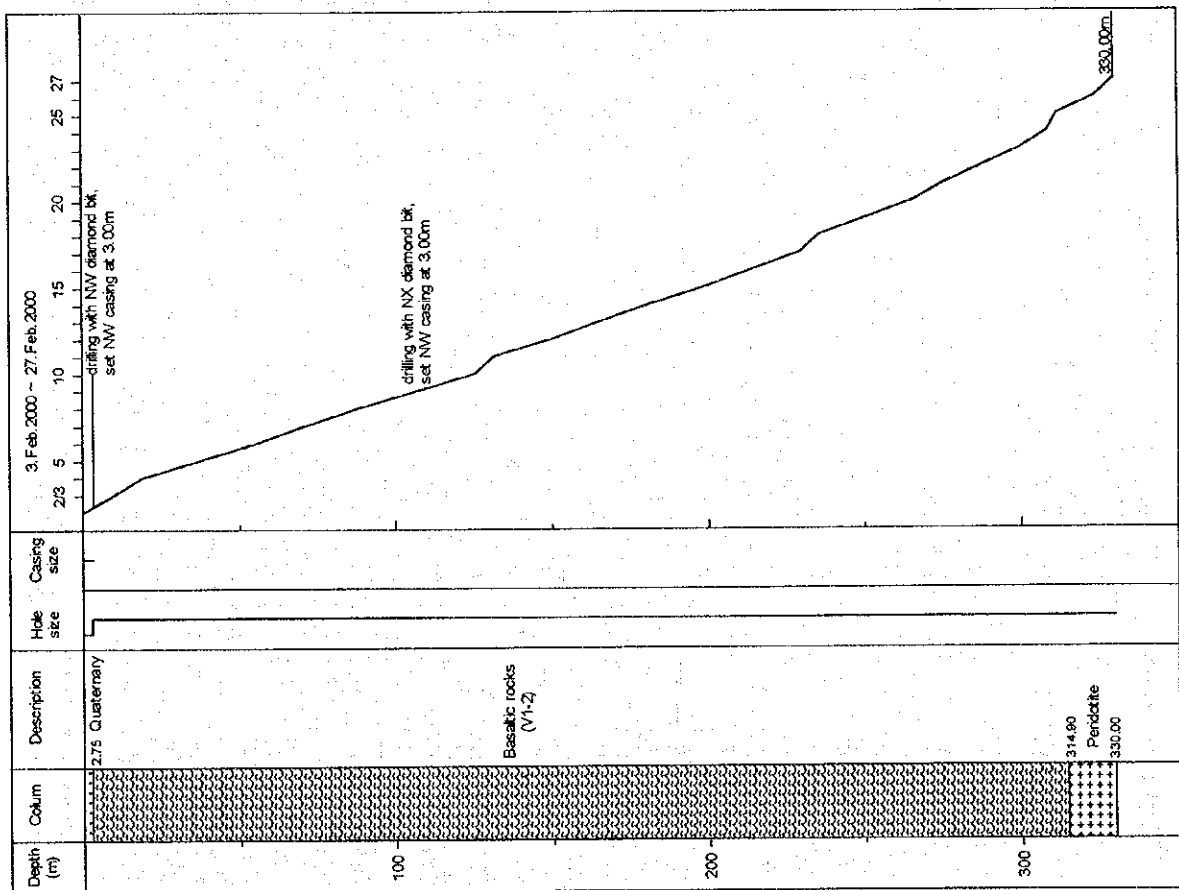
G44



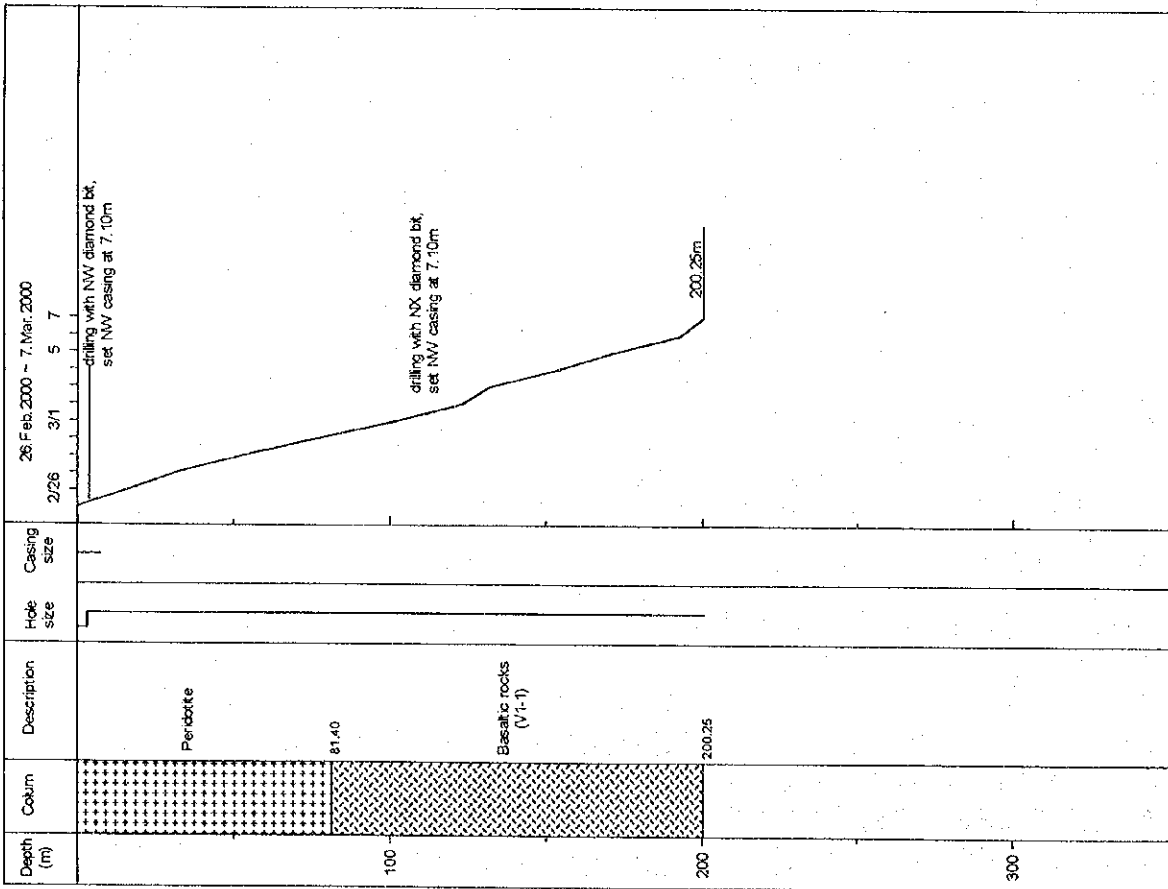
M2



M1

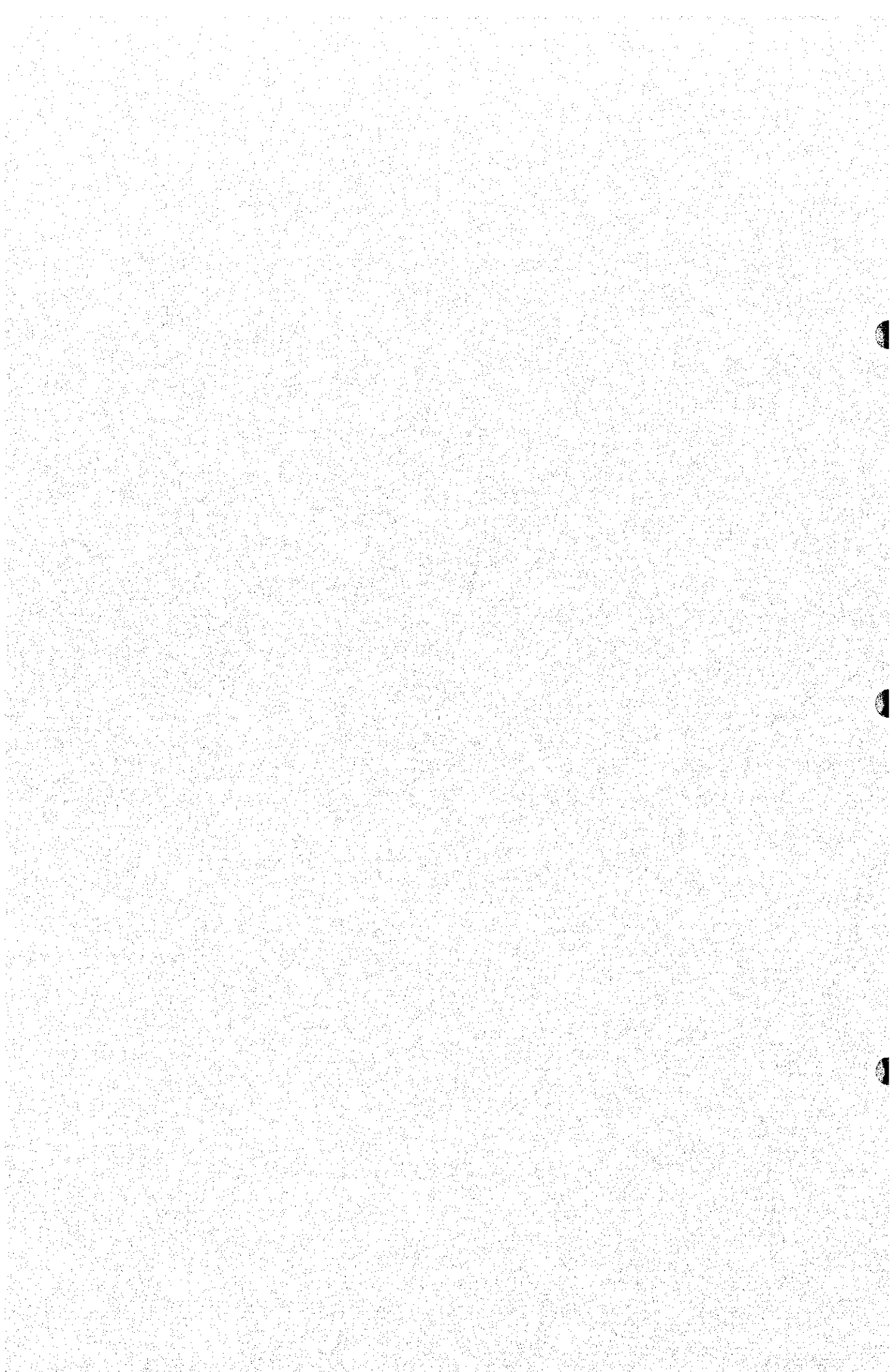


M3



Appendix 3

Drilling logs



Hole No. MJOB-G40 (From 0.00 m to -250.45 m)

DEPTH (m)	CHART	LITHOLOGY	Alteration					Mineralization					Sampling		Ore Assay						
			Silicification	Argillization	Quartz veins	Epithermal veins	Epithermal dissemi.	Calcite veins	Massive sulphide	Stockwork	Pyrite veins	Pyrite dissemi.	Chalcopyrite dissemi.	Chalcopyrite veins	Sphalerite dissemi.	Sphalerite veins	Magnetite	DEPTH (m)	D.L. (m)	Au (g/t)	Ag (g/t)
-150		MASSIVE SULPHIDE: 148.15 to 151.55m														150.55	1	<0.1	1.4	0.83	0.06
		DYKE: basalt														151.55	1	<0.1	1.3	0.47	0.05
		MASSIVE SULPHIDE: 153.75 to 160.75m														153.75	1	<0.1	0.3	0.13	0.01
		154.05 to 164.90m: with irregular narrow dke.														154.75	1	<0.1	1.1	0.28	0.04
		155.55 to 160.00m: high grade.														155.75	1	<0.1	1.3	1.18	0.05
		DYKE: basalt														156.75	1	<0.1	1.7	2.91	0.04
		MASSIVE SULPHIDE: 160.85 to 161.55m														157.75	1	0.10	2.7	6.13	0.04
		DYKE: basalt														157.75	1	0.10	3.2	6.00	0.07
		MASSIVE SULPHIDE: 161.80 to 162.30m														158.75	1	0.10	2.5	5.03	0.04
		DYKE: basalt														159.95	1	<0.1	2.1	2.46	0.06
		MASSIVE SULPHIDE:														160.75	1	0.10	2.3	1.42	0.04
																161.55	0.8	0.10	1.5	0.50	0.04
																162.60	1.05	0.10	2.6	1.00	0.05
																163.60	1	0.10	2.3	1.60	0.03
																164.60	1	0.10	2.3	1.39	0.03
																165.60	1	0.20	1.4	0.63	0.02
																166.60	1	0.10	1.4	0.73	0.03
																167.60	1	0.20	2.1	1.43	0.07
																168.60	1	0.10	2.1	1.23	0.07
																169.60	1	0.10	2.0	1.14	0.05
																170.60	1	0.10	2.0	2.10	0.05
																171.60	1	0.20	2.6	1.82	0.06
																172.60	1	0.30	2.7	2.12	0.07
																173.60	1	0.30	2.6	1.80	0.06
																174.60	1	<0.1	2.2	1.65	0.07
																175.60	1	0.30	2.5	1.97	0.07
																176.60	1	0.10	1.7	1.24	0.06
																177.60	1	0.10	1.5	0.67	0.04
																178.60	1	0.10	1.4	0.91	0.05
																179.60	1	<0.1	1.5	1.35	0.04
																180.60	1	0.20	1.7	2.75	0.05
																181.60	1	0.20	2.2	2.89	0.05
																182.60	1	0.20	2.2	4.53	0.05
																183.60	1	0.20	1.9	5.34	0.06
																184.60	1	0.20	1.9	4.85	0.06
																185.60	1	0.30	2.2	2.06	0.04
																186.60	1	0.20	2.0	2.89	0.06
																187.70	1	0.10	1.2	2.00	0.06
																188.60	1	0.10	1.4	2.09	0.05
																189.60	1	0.10	1.3	2.07	0.06
																190.60	1	0.10	1.4	3.35	0.06
																191.60	1	0.10	1.6	3.00	0.07
																192.60	1	0.20	1.5	2.92	0.06
																193.60	1	0.10	1.0	2.46	0.07
																194.60	1	0.10	1.4	2.63	0.09
																195.60	1	0.10	1.2	2.65	0.06
																196.60	1	0.10	1.5	2.06	0.06
																197.60	1.45	<0.1	1.4	3.53	0.06
																199.06	1.65	<0.1	1.6	0.14	0.02
-150		MASSIVE SULPHIDE: 148.15 to 151.55m														150.55	1	<0.1	1.4	0.83	0.06
		DYKE: basalt														151.55	1	<0.1	1.3	0.47	0.05
		MASSIVE SULPHIDE: 153.75 to 160.75m														153.75	1	<0.1	0.3	0.13	0.01
		154.05 to 164.90m: with irregular narrow dke.														154.75	1	<0.1	1.1	0.28	0.04
		155.55 to 160.00m: high grade.														155.75	1	<0.1	1.3	1.18	0.05
		DYKE: basalt														156.75	1	<0.1	1.7	2.91	0.04
		MASSIVE SULPHIDE: 160.85 to 161.55m														157.75	1	0.10	2.7	6.13	0.04
		DYKE: basalt														157.75	1	0.10	3.2	6.00	0.07
		MASSIVE SULPHIDE: 161.80 to 162.30m														158.75	1	0.10	2.5	5.03	0.04
		DYKE: basalt														159.95	1	<0.1	2.1	2.46	0.06
		MASSIVE SULPHIDE:														160.75	1	0.10	2.3	1.42	0.04
																161.55	0.8	0.10	1.5	0.50	0.04
																162.60	1.05	0.10	2.6	1.00	0.05
																163.60	1	0.10	2.3	1.60	0.03
																164.60	1	0.10	2.3	1.39	0.03
																165.60	1	0.20	1.4	0.63	0.02
																166.60	1	0.10	1.4	0.73	0.03
																167.60	1	0.20	2.1	1.43	0.07
																168.60	1	0.10	2.1	1.23	0.07
																169.60	1	0.10	2.0	1.14	0.05
																170.60	1	0.10	2.0	2.10	0.05
																171.60	1	0.20	2.6	1.82	0.06
																172.60	1	0.30	2.7	2.12	0.07
																173.60	1	0.30	2.6	1.80	0.06
																174.60	1	<0.1	2.2	1.65	0.07
																175.60	1	0.30	2.5	1.97	0.07
																176.60	1	0.10	1.7	1.24	0.06
																177.60	1	0.10	1.5	0.67	0.04
																178.60	1	0.10	1.4	0.91	0.05
																179.60	1	<0.1	1.5	1.35	0.04
																180.60	1	0.20	1.7	2.75	0.05
																181.60	1	0.20	2.2	2.89	0.05
																182.60	1	0.20	2.2	4.53	0.05
																183.60	1	0.20	1.9	5.34	0.06
																184.60	1	0.20	1.9	4.85	0.06
																185.60	1	0.30	2.2	2.06	0.04
																186.60	1	0.20	2.0	2.89	0.06
																187.70	1	0.10	1.2	2.00	0.06
																188.60	1	0.10	1.4	2.09	0.05
																189.60	1	0.10	1.3	2.07	0.06
																190.60	1	0.10	1.4	3.35	0.06
																191.60	1	0.10	1.6	3.00	0.07
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