



DESERT SUN MINING CORPORATION

**AN UPDATED MINERAL RESOURCE AND MINERAL
RESERVE ESTIMATE AND RESULTS OF 2004
EXPLORATION PROGRAM FOR THE JACOBINA AND
BAHIA GOLD BELT PROPERTY, BAHIA STATE,
BRAZIL**

MARCH 2005



TABLE OF CONTENTS

1.0	SUMMARY	1
1.1	GEOLOGY AND MINERALIZATION	3
1.2	MINERAL RESOURCES	4
1.3	MINERAL RESERVES	4
1.4	CONCLUSIONS AND RECOMMENDATIONS	5
2.0	INTRODUCTION AND TERMS OF REFERENCE	7
3.0	DISCLAIMER.....	9
4.0	PROPERTY DESCRIPTION AND LOCATION	10
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	12
6.0	HISTORY	13
7.0	GEOLOGICAL SETTING.....	15
7.1	REGIONAL GEOLOGY	15
7.2	PROPERTY GEOLOGY	19
7.2.1	Host Rocks.....	19
7.2.2	Structural Geology	24
8.0	DEPOSIT TYPES	26
8.1	THE WITWATERSRAND BASIN	26
8.2	TARKWA.....	27
8.3	THE RORAIMA GROUP	27
8.4	JACOBINA.....	27
9.0	MINERALIZATION.....	29
9.1	GOLD MINERALIZATION	29
9.2	ORE ZONE DESCRIPTIONS.....	29
9.3	STRATIGRAPHY OF THE GOLD MINERALIZED UNITS OF THE LOWER CONGLOMERATE MEMBER.....	30
9.4	STRATIGRAPHY OF THE GOLD MINERALIZED UNITS OF THE UPPER CONGLOMERATE MEMBER.....	33
10.0	EXPLORATION.....	38
10.1	JMC EXPLORATION.....	38
10.2	PHASE I (2002) EXPLORATION PROGRAM	38
10.3	PHASE II (2003) EXPLORATION PROGRAM.....	38
10.4	2004 EXPLORATION PROGRAM.....	41
10.4.1	Jacobina Mine Area.....	41
10.4.2	Exploration program, Bahia Gold Belt (excluding Jacobina Mine area).....	41



Pindobaçu	42
Fumaça	45
Água Branca.....	46
Entry Points.....	46
Northern Extension of Serra do Córrego Formation.....	46
Samburá/Biquinha/Cercadinho	46
11.0 DRILLING	48
11.1 JMC.....	48
11.2 DSM.....	49
11.2.1 Drilling Results	49
João Belo Zone.....	49
Morro do Vento.....	53
Morro do Vento Extension (Basal/Main Reefs - Cuscuz).....	66
Canavieiras 69	
Serra do Córrego – Maneira Reef	82
Serra do Córrego – Lagartixa/Viuva	82
Serra do Córrego – Maricota.....	82
João Belo Sul.....	82
Campo Limpo.....	84
Rio Coxo	84
12.0 SAMPLING METHOD AND APPROACH	85
12.1 JMC EXPLORATION.....	85
12.2 DSM EXPLORATION.....	85
13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY.....	86
13.1 JMC.....	86
13.2 DSM GENERATED DATA.....	87
13.2.1 Security	87
13.2.2 Sample Preparation and Analyses.....	87
14.1 JMC.....	93
14.1.1 Production Reconciliation.....	93
14.2 DSM.....	94
14.2.1 QA/QC	94
14.2.2 Database Checks	98
15.0 ADJACENT PROPERTIES	99
16.0 MINERAL PROCESSING AND METALLURGICAL TESTING.....	100
16.1 SNC LAVALIN FEASIBILITY STUDY.....	100
16.2 MORRO DO VENTO TESTWORK	101
17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES.....	103
17.1 OVERVIEW.....	103
17.2 MINERAL RESOURCE ESTIMATES	103



17.2.1 Database.....	103
17.2.2 Specific Gravity	103
17.2.3 Estimation Methodology.....	103
17.3 RESOURCE CLASSIFICATION	104
17.4 MINERAL RESOURCES	105
17.5 MINERAL RESERVES.....	109
17.5.1 Reserve Estimation Methodology	114
Specific Gravity.....	114
Geometry	114
Methodology	114
Mining Method.....	115
Dilution	115
Block Cut off Grade	119
17.6 RESPONSIBILITY FOR ESTIMATION	120
18.0 OTHER RELEVANT DATA AND INFORMATION	121
19.0 INTERPRETATION AND CONCLUSIONS	122
19.1 MINERAL RESOURCES	122
19.2 MINERAL RESERVES.....	123
19.3 EXPLORATION AND DEVELOPMENT.....	123
19.2.1 Exploration.....	123
19.2.2 Development and Exploration.....	124
20.0 RECOMMENDATIONS.....	126
REFERENCES.....	127
CERTIFICATE.....	129
CERTIFICATE.....	131
APPENDIX 1: TITLE OPINION, LIST OF CLAIMS AND MAPS SHOWING LOCATION AND EXTENT OF CLAIMS	133
APPENDIX II: OPINION LETTER CONCERNING MINERAL RESOURCE ESTIMATION BY MICON INTERNATIONAL.....	134



List of Tables

	Page
Table 1.1 MINERAL RESOURCE SUMMARY FOR THE JACOBINA PROJECT	4
Table 1.2: Estimated mineral reserves as of March 1, 2005	5
Table 6.1 JACOBINA ANNUAL PRODUCTION HISTORY	14
Table 7.1 CHARACTERISTICS OF THE PRINCIPAL MINERALIZED REEFS	24
Table 10.2 TOTAL DRILLED BY DSM - From Sep 2002 to Dec 2004	41
Table 11.1 SUMMARY OF DRILLING, JACOBINA MINE.....	48
Table 11.2 ASSAY SAMPLES IN DATABASE.....	49
Table 11.3: Significant Drilling Results, Jacobina Mine (Joao Belo Zone).....	50
Table 11.4: Significant Drilling Results, Morro do Vento	55
Table 11.5 SIGNIFICANT DRILLING RESULTS, HISTORICAL HOLES, MORRO DO VENTO	64
Table 11.6: Significant Drilling Results, Morro do Vento Extension	67
Table 11.7: Summary of Significant New Drilling Results, Canavieiras.....	72
Table 11.8: Summary of Significant Results from Sampling of Historic Drill Holes, Canavieiras.	73
Table 11.9: Significant Drilling and Sampling Results, Serra do Córrego.....	78
Table 11.10: Significant Drilling Results, Joao Belo Sul	83
Table 17.1: Summary of Mineral Resources Updated by DSM.....	105
Table 17.2: Mineral Resources by Mine and Zone.....	108
Table 17.3 Mineral Resource Summary, Joao Belo Zone, August 2003 by Micon (Hennessey 2003b)	109
Table 17.4 Mineral Reserve Summary Joao Belo Zone, August 2003 by Dynatec (SNC Lavalin 2003)	110
Table 17.5 Updated Mineral Resource Summary, Joao Belo Zone, December 15, 2005	110
Table 17.6 Updated Mineral Reserve Summary, Joao Belo Zone, March 1, 2005	111
Table 17.7: Estimated mineral reserves as of March 1, 2005.....	114
Table 17.8 Grade of Dilution, Joao Belo Zone.....	118
Table 19.1 MINERAL RESOURCE SUMMARY FOR THE JACOBINA PROJECT	122
Table 19.2: Estimated mineral reserves as of March 1, 2005	123



List of Figures

	Page
Figure 1.1 JACOBINA PROJECT LOCATION MAP	2
Figure 4.1 JACOBINA PROJECT LOCATION MAP	11
Figure 7.1 Geotectonic setting of the East Part of the São Francisco Craton, Bahia, Brazil.....	17
Figure 7.2 Geology of the Serra de Jacobina Region and the Bahia Gold Belt.....	18
Figure 7.3 Property Geology and Major Targets, Jacobina Mine Area.....	20
Figure 7.4 Stratigraphic Column of the Serra do Córrego Formation – Jacobina Group.....	21
Figure 7.5 Jacobina Mine Area Geology	22
Figure 7.6 Stratigraphic Correlation of Mine Packages at Jacobina.....	23
Figure 9.1 Morro do Vento, Schematic Cross Section, looking north.....	32
Figure 9.2 Joao Belo Cross Section	35
Figure 9.3 Canavieiras Cross Section, looking north	37
Figure 10.1 Major Targets in the Jacobina Mine area.	40
Figure 10.2 Distribution of gold deposits and occurrences in the Bahia Gold Belt	44
Figure 11.1 Longitudinal Section of Joao Belo Zone	52
Figure 11.2 Longitudinal Section, Morro do Vento	65
Figure 11.3 Cross Section, Morro do Vento Extension	68
Figure 11.4: Canavieiras Cross Section 8758300N looking north.	75
Figure 11.5: Canavieiras Cross Section 8758458N looking north.	76
Figure 11.6: Longitudinal Section of MU Reef, Serra do Córrego.	80
Figure 11.7: Longitudinal Section of LU Reef, Serra do Córrego.....	81
Figure 13.1 Graph of Analytical Results at Lakefield for Standard OREAS 6Pb.....	90
Figure 13.2 Graph of Analytical Results at Lakefield for Standard OREAS 7Pa.	91
Figure 13.3 Graph of Analytical Results at Lakefield for Standard OREAS 53P.....	92
Figure 14.1: Comparison of All Check Assay Data, New Sample Preparation Protocols (3 graphs with different scales showing the overall data set)	95
Figure 14.1: Comparison of All Check Assay Data, New Sample Preparation Protocols (3 graphs with different scales showing the overall data set)	96
Figure 14.2: Comparison of Check Assay Data, New Sample Preparation Protocols – Lakefield versus Chemex Pulps.	97
Figure 14.3: Comparison of Check Assay Data, New Sample Preparation Protocols – Lakefield versus Chemex Rejects.	98
Figure 17.1: Longitudinal Section of the Jacobina Mine (Joao Belo Zone) showing Reserve Blocks	112
Figure 17.2: Plan Map of 590 Level, Jacobina Mine showing Reserve Blocks and Development Plan	113
Figure 17.3: Typical Drilling Pattern for Stope Layout, Jacobina Mine	117
Figure 17.4 Schematic Diagram showing Typical Example of Dilution, Joao Belo Zone.....	118



1.0 SUMMARY

This report summarizes the results of the 2004 exploration program and presents updated mineral resource and mineral reserve estimates incorporating new drilling results in the Jacobina Mine area and the 155km long Bahia Gold Belt property owned by Desert Sun Mining Corp. (DSM) in Bahia, Brazil. This report and the updated mineral resource estimate draws heavily from a previous NI 43-101 report prepared by Terry Hennessey, P.Geo. of Micon International Limited (Micon) in August 2003 and filed on SEDAR carried out a review of the mineral resources in the Jacobina mine area prepared by DSM. Similarly, the updated mineral reserve estimate draws from the Feasibility study prepared by SNC Lavalin-Dynatec in September 2003 and filed on SEDAR. Both of these reports were prepared by independent qualified persons from Micon for the mineral resources (Terry Hennessey, P.Geo.) and for the mineral reserves from Dynatec (Mr. Leo Hwozdyk, P.Eng.)

The Jacobina mine and mill, which are located near the town of Jacobina, in Bahia State, Brazil, belong to Jacobina Mineração e Comércio SA (JMC). DSM initially earned a 51% interest in the Jacobina property by spending US\$2,000,000 in exploration which was completed by September 2003. At this time, DSM exercised its option to purchase the remaining 49% for \$CDN5,000,000 in cash and shares in September 2003, so that DSM owns a 100% interest in the property and surface assets including the processing plant and mine infrastructure. DSM began exploring the property in September 2002 and has had on-going exploration programs ever since. Over the past two and one-half years to December 31, 2004, a total of 40,000m in 125 diamond drill holes has been completed. Results of this exploration which have been positive are discussed in detail within this report.

In September 2003, DSM announced results of the SNC Lavalin Feasibility study (filed on www.sedar.com) that indicated that the mine can produce at a rate of 102,000 ounces of gold per year at an average cash cost of US \$189 per ounce. The study used a gold price of US \$350 per ounce and a Real (Brazilian currency) to \$ US exchange rate of 3:1. DSM began the process of re-developing the Jacobina mine in April 2004 and expects to be in steady state production by the second quarter of 2005. The Company recently announced that the first gold pour will be in April 2005.

The Jacobina property, as shown in Figure 1.1, is located in the state of Bahia in northeastern Brazil approximately 340 km northwest of the city of Salvador. Salvador, the state capital of Bahia, has a population of 2.5 million. The property is comprised of 5,996.3 ha of mining concessions, 117,757.1 ha of granted exploration concessions and 10,406.57 ha of filed exploration claims. The Jacobina property forms a contiguous elongated rectangle extending 155 km in a north-south direction, and varying from 2.5 to 4 km in width. This shape is a reflection of the underlying geology with the gold-mineralized host rocks trending along the property's north-south axis.

The Jacobina mine operations consist of a plant and metallurgical facility, which is adjacent to the former Itapicurú mine, as well as two former mines, the João Belo mine (now being re-activated as the Jacobina mine), approximately three kilometres from the metallurgical site, and the smaller Canavieiras mine, about five kilometres away.

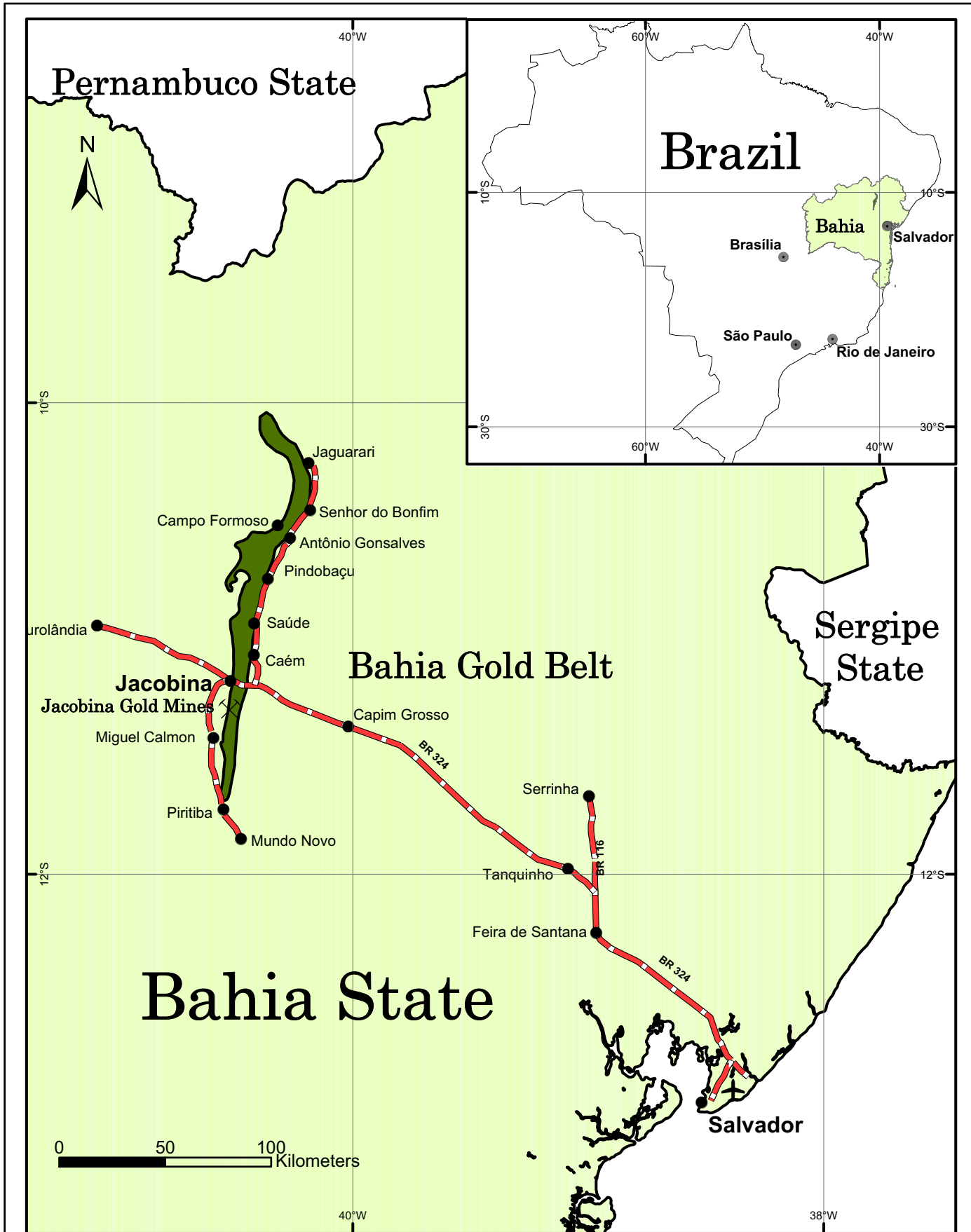


Figure 1.1 - Jacobina Project Location Map

March 2005



1.1 GEOLOGY AND MINERALIZATION

The gold mineralization of the Jacobina mine is hosted almost entirely within quartz pebble conglomerates of the Serra do Córrego Formation, the lowermost sequence of the Proterozoic-age Jacobina Group. This Formation is typically 500 m thick but locally achieves thicknesses of up to one kilometre. Overall, the property covers 155 km of strike length (8728800N – 8,900,000N) along the trend of the Jacobina Group. Within the property the Serra do Córrego Formation is exposed for 75 km (8,728,800 N – 8,810,330 N). Despite the extensive exposure of the mine sequence most of the exploration and all of the non-artisanal mining activities have been concentrated along a 10-km long (8749000N - 8759000N) central zone.

The host rocks to the Jacobina gold mineralization are highly sorted and rounded quartz pebble conglomerate reefs of the Serra de Córrego Formation. Gold as fine grains 20 to 50 microns in size predominantly within well packed conglomeratic layers in which medium to larger- sized quartz pebbles are present. The gold occurs within the matrix and often in association with pyrite and fuchsite. However, these accessory minerals also occur in the absence of gold. Gold-rich reefs show a characteristic greenish aspect because of the presence of the chromium-rich muscovite, fuchsite. Intra-reef quartzites typically contain low gold grades (<0.70 g/t Au). Higher concentrations of gold are often encountered within the foreset beds, adjacent to topset beds, within a cross-bedded reef although this may also reflect structural upgrading. An important example of this style of mineralization is the Canavieiras mine, an important exploration targets.

The gold-bearing reefs range in size from 1.5 to 25 m wide and can be followed along strike for hundreds of metres, and in some cases for kilometres. Some contacts between reefs and the later crosscutting mafic and ultramafic intrusives are enriched in gold.

Not all conglomerates of the Serra do Córrego Formation are mineralized, and many are completely barren of gold. Although they are quite homogeneous along their strike and dip extensions, the mineralized conglomerates differ from one another in stratigraphic position and mineralization patterns. The differences are likely due to changes in the depositional environment, and possibly also in the source areas. Recent work by DSM, however, indicates that structure has a more important role in localizing gold mineralization than previously recognized.



1.2 MINERAL RESOURCES

Measured and indicated mineral resources for all zones at Jacobina now total 24,800,000 tonnes grading 2.53 g Au/t containing 2,050,000 ounces of gold as shown in Table 19.1 below. This is significant increase of 690,000 ounces of gold compared to the August 2003 measured and indicated resource of 14,800,000 tonnes at 2.86 g Au/t containing 1,360,000 ounces of gold. Most of this increase has been at the Joao Belo Zone where an additional 3,500,000 tonnes grading 2.48 g Au/t containing 280,000 ounces of gold was added to indicated resources and in the Morro do Vento area where 5,000,000 tonnes grading 2.07 g Au/t containing 350,000 ounces of gold above the 800 level were added to the indicated category.

Inferred mineral resources in all zones now total 22,200,000 tonnes grading 2.61 g Au/t containing 1,900,000 ounces of gold. This a reduction of 600,000 ounces compared to the August 2003 inferred resource of 29,500,000 tonnes grading 2.62 g Au/t containing 2,500,000 ounces of gold. This reduction reflects the successful achievement of the drilling program's objectives to upgrade inferred resource blocks to the indicated category.

**Table 1.1
MINERAL RESOURCE SUMMARY FOR THE JACOBINA PROJECT**

Category	Tonnes	Grade (g/t Au)	Contained Gold (ounces)
Measured	2,620,000	2.83	240,000
Indicated	22,200,000	2.49	1,810,000
Total Measured and Indicated	24,800,000	2.53	2,050,000
Inferred	22,200,000	2.61	1,900,000

Micon reviewed the updated resources estimation and agreed that they were properly estimated classified according to the requirements of NI 43-101.

1.3 MINERAL RESERVES

DSM has completed an updated mineral reserve estimate for its Jacobina mine - Joao Belo zone - based on the new measured and indicated mineral resource estimates described in this report. Mineral reserves in the Joao Belo zone as estimated in the SNC feasibility study of September, 2003, were 7,471,000 tonnes at 2.10 grams per tonne gold containing 504,000 ounces of gold.

Proven and probable mineral reserves in the Joao Belo zone are now 11,102,000 tonnes grading 2.04 grams per tonne gold containing 727,000 ounces, an increase of 44 per cent in contained ounces. Total proven and probable mineral reserves in all zones at Jacobina, which previously were 10,746,000 tonnes at 2.20 grams per tonne gold, containing 758,000 ounces of gold, are now 14,378,000 tonnes at 2.12 grams per tonne gold containing 980,000 ounces of gold as summarized in Table 19.2 below. The conversion rate of the new indicated resource to mineral reserve is about 75 per cent, which is comparable with the historical experience at the mine and to the conversion rate of the SNC Lavalin feasibility study.



This new reserve is now being used in the Jacobina mine development plan and increases mine life by over two years. The other major zones -- Morro do Vento, Morro do Vento extension (basal/main reef), Canavieiras and Serra do Córrego -- will have updated and/or new mineral reserves estimated as mine planning/feasibility studies for each area are completed. The total measured and indicated mineral resource at Jacobina for all zones is 24.8 million tonnes grading 2.53 grams per tonne gold containing 2.05 million ounces of gold.

Table 1.2: Estimated mineral reserves as of March 1, 2005

Area	Proven		Probable		Proven & Probable		Ounces Gold Contained
	Tonnes	g Au/t	Tonnes	g Au/t	Tonnes	g Au/t	
Joao Belo*	1,955,000	2.02	9,147,000	2.04	11,102,000	2.04	727,000
Basal Reef**	Nil	Nil	2,304,000	2.51	2,304,000	2.51	186,000
Serra de Corrego**	Nil	Nil	972,000	2.14	972,000	2.14	67,000
Total	1,955,000	2.02	12,423,000	2.14	14,378,000	2.12	980,000

+ Mineral reserves have been classified in accordance with CIM standards under NI 43-101

* Desert Sun Mining internal reserve estimation March 1, 2005 following procedures outlined in SNC Lavalin feasibility study.

** As per original Dynatec mineral reserve estimation September 2003 in the SNC Lavalin feasibility study

1.4 CONCLUSIONS AND RECOMMENDATIONS

It is recommended that a two part Exploration and Development program estimated to cost US\$10,600,000 be carried out to extend known mineral resources and define new resources in the Jacobina Mine area. Exploration should also be expanded in the northern area especially at Pindobaçu where excellent drill results have been obtained and a major mineralized structure has been identified.

A major development and exploration program is recommended to define additional reserves in the south-eastern and downdip extension of the Joao Belo Ore zone. It is further recommended that Morro do Vento become a development project with underground development, bulk sampling and underground drilling to be completed to form the basis for a feasibility study.

Exploration

A continuation of the intense exploration program in the Jacobina mine area carried out in 2004 is recommended for 2005 along with a considerable increase in funds allocated to explore the northern area. The proposed program which will cost an estimated \$US5,200,000 (\$R2.6 = \$US1.00) as summarized in Table 19.3 includes at least 25,000m of diamond drilling as follows:

- Basal/Main Reef in Morro do Vento Extension – 6,800m of surface and underground drilling to followup high grade intersections in both reefs and test if the Main reef extends to surface in the Morro do Vento Extension;



- Canavieiras – 6,500m of underground drilling focussing on the south-eastern and southern extensions of the MU/LU reefs and the Piritoso/Liberino reefs;
- Serra do Córrego – 3,000m of definition to test the downdip and on-strike extension of the existing mineral resource;
- Serra do Córrego (LGX, Viuva, Maneira) – 3,600m of surface drilling to test targets where limited previous drilling suggests the potential for higher grade mineralization;
- Pindobaçu – 6,300m of surface drilling to followup the excellent results of the 2004 program and also test other targets identified on-strike; and
- Regional Exploration – 1,500m of drilling to test for potential entry point areas in the northern area

In addition to drilling, approximately 50 line kilometres of induced polarization surveys will be completed in the Pindobaçu Fumaça area to better define targets in the major hydrothermal alteration zone. Coverage of grids will be extended and soil geochemical surveys also completed.

Development and Exploration

A two part development and exploration program focussed on extending the Joao Belo zone to the south and evaluating the newly developed Morro do Vento zone. The total cost of the program is estimated to be US\$5,400,000. The recommended 2005 development and exploration program will consist of:

JOAO BELO

Objective: Expand and define the Joao Belo II ore zone in the south.

- 8,000 meters of under ground diamond drilling
- 300 meters of development drifts
- US\$ 325,000 Capital investments

MORRO DO VENTO

Objective:

1. Determine the continuity of the ore zone above the 800 meter level.
 2. Determine the continuity of the ore zone by actual drifting
- 2,400 meters from the 750 meter level.
 - 3,450 meters from the 750 meter level.
 - 70 meters of slashing development
 - 480 meters cross-cut development
 - 300 meters of exploration development in ore
 - 290 meters (equivalent) for drilling stations
 - US\$ 577,000 for equipping and services.
 - US\$ 3,367,000 Capital investments



2.0 INTRODUCTION AND TERMS OF REFERENCE

This report summarizes the results of the 2004 exploration program and presents updated mineral resource and mineral reserve estimates incorporating new drilling results in the Jacobina Mine area and the 155km long Bahia Gold Belt property owned by Desert Sun Mining Corp. (DSM) in Bahia, Brazil. This report and the updated mineral resource estimate draws heavily from a previous NI 43-101 report prepared by Terry Hennessey, P.Geo. of Micon International Limited (Micon) in August 2003 and filed at www.sedar.com who carried out a review of the mineral resources in the Jacobina mine area prepared by DSM. Similarly, the updated mineral reserve estimate draws from the Feasibility study prepared by SNC Lavalin-Dynatec in September 2003 and filed on www.sedar.com. Both of these reports were prepared by independent qualified persons from Micon for the mineral resources (Terry Hennessey, P.Geo.) and for the mineral reserves from Dynatec (Mr. Leo Hwozdyk, P.Eng.)

The Jacobina mine and mill, which are located near the town of Jacobina, in Bahia State, Brazil, belong to Jacobina Mineração e Comércio SA (JMC). DSM initially earned a 51% interest in the Jacobina property by spending US\$2,000,000 in exploration which was completed by September 2003. At this time, DSM exercised its option to purchase the remaining 49% for \$CDN5,000,000 in cash and shares in September 2003, so that DSM owns a 100% interest in the property and surface assets including the processing plant and mine infrastructure. DSM began exploring the property in September 2002 and has had on-going exploration programs ever since. Over the past two and one-half years to December 31, 2004, a total of 40,000m in 125 diamond drill holes has been completed. Results of this exploration which have been positive are discussed in detail within this report.

In September 2003, DSM announced results of the SNC Lavalin Feasibility study (filed on www.sedar.com) that indicated that the mine can produce at a rate of 102,000 ounces of gold per year at an average cash cost of US \$189 per ounce. The study used a gold price of US \$350 per ounce and a Real (Brazilian currency) to \$ US exchange rate of 3:1. DSM began the process of re-developing the Jacobina mine in April 2004 and expects to be in steady state production by the second quarter of 2005. The Company recently announced that the first gold pour will be in April 2005.

The Jacobina mine operations consist of a plant and metallurgical facility, which is adjacent to the former Itapicurú mine, as well as two former mines, the João Belo mine (now being re-activated as the Jacobina mine), approximately three kilometres from the metallurgical site, and the smaller Canavieiras mine, about five kilometres away.

The authors of this report, Dr. William N. Pearson, P.Geo. and Mr. Peter Tagliamonte, P.Eng., are both experienced exploration and mining professionals who have extensive experience at Jacobina and in Brazil. Dr. Pearson is Vice President, Exploration for DSM and has made numerous trips to Jacobina in the course of the exploration carried out since August 2002 and is the qualified person responsible for the scientific and technical work for all exploration at DSM. In addition, he worked at the Jacobina Mine from 1996 to 1998 while with the previous owner, William Resources. Mr. Tagliamonte is the Vice President, Operations and Chief Operating Officer for DSM, responsible for overseeing all aspects of the re-development of the Jacobina



mine. He has been on-site at Jacobina since April 2004. Prior to joining DSM, he was Manager of the Sao Bento mine in Minas Gerais, Brazil for Eldorado Resources.



3.0 DISCLAIMER

All of the technical information presented in this report has been prepared by DSM or in the case of work by previous operators, reviewed and verified by DSM. In the course of the exploration and mine development program, DSM has employed a number of independent consultants to perform various reviews including Micon International (review exploration program and mineral resources – Hennessey 2003a and 2003b), SRK Consulting (preliminary economic evaluation - 2004) and SNC Lavalin (feasibility study - 2003). All of these reports have been filed and are available on www.sedar.com.

The various agreements under which DSM through its wholly owned Brazilian subsidiary Jacobina Mineração e Comércio (JMC) holds title to the mineral lands for this project have been reviewed by Mr. Marco Antonio Morherdauí of Monaco Morherdauí, a legal firm based in Sao Paulo, Brazil who is the legal counsel for DSM in Brazil. DSM maintains a comprehensive mineral title administration system in Jacobina using ArcView, a well known GIS software package. The DIÁRIO OFICIAL DA UNIÃO (Official Diary) of the Brazilian government, which is issued daily, is regularly reviewed by DSM personnel and any updates to the claims recorded as they are published.

The metallurgical, geological, mineralization and exploration technique and results descriptions used in this report are taken from reports and internal memorandums prepared by DSM, Micon, William Resources, the BLM Service Group and the JMC mine staff. The name Jacobina, as used herein, refers to the mountain range, stratigraphic group designation, mine or town as specified.

All currency amounts are stated in US dollars with occasional reference to the Real, the Brazilian currency. Quantities are stated in SI units, the Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, grams (g) and grams per metric tonne (g/t) for gold grades (g/t Au). Precious metals quantities may also reported in Troy ounces (ounces, oz), a common practice in the gold mining industry.



4.0 PROPERTY DESCRIPTION AND LOCATION

The Jacobina property, as shown in Figure 4.1, is located in the state of Bahia in northeastern Brazil approximately 340 km northwest of the city of Salvador. Salvador, the state capital of Bahia, has a population of 2.5 million.

The property is comprised of 5,996.3 ha of mining concessions, 117,757.1 ha of granted exploration concessions and 10,406.57 ha of filed exploration claims. A complete list of all exploration concessions and claims, with their current status and the text of an opinion letter by Marco Moherdau of Monaco Moherdau, a Brazilian legal firm located in Sao Paulo, are given in Appendix I. The leases and granted exploration concessions were surveyed a number of years ago and are marked by concrete monuments at each corner which remain in place.

The Jacobina property forms a contiguous elongated rectangle extending 155 km in a north-south direction, and varying from 2.5 to 4 km in width. This shape is a reflection of the underlying geology with the gold-mineralized host rocks trending along the property's north-south axis. DSM has a full computerized claim management system in place to closely monitor its land holdings.

The Brazilian government department responsible for mining lands (DNPM) has recently introduced an internet-based system for accessing information on exploration concessions granted in Brazil. DSM monitors this site regularly and updates its claim data as appropriate as well as monitoring the DIÁRIO OFICIAL DA UNIÃO (Official Diary) which is published daily with legal details on issuance of claims.

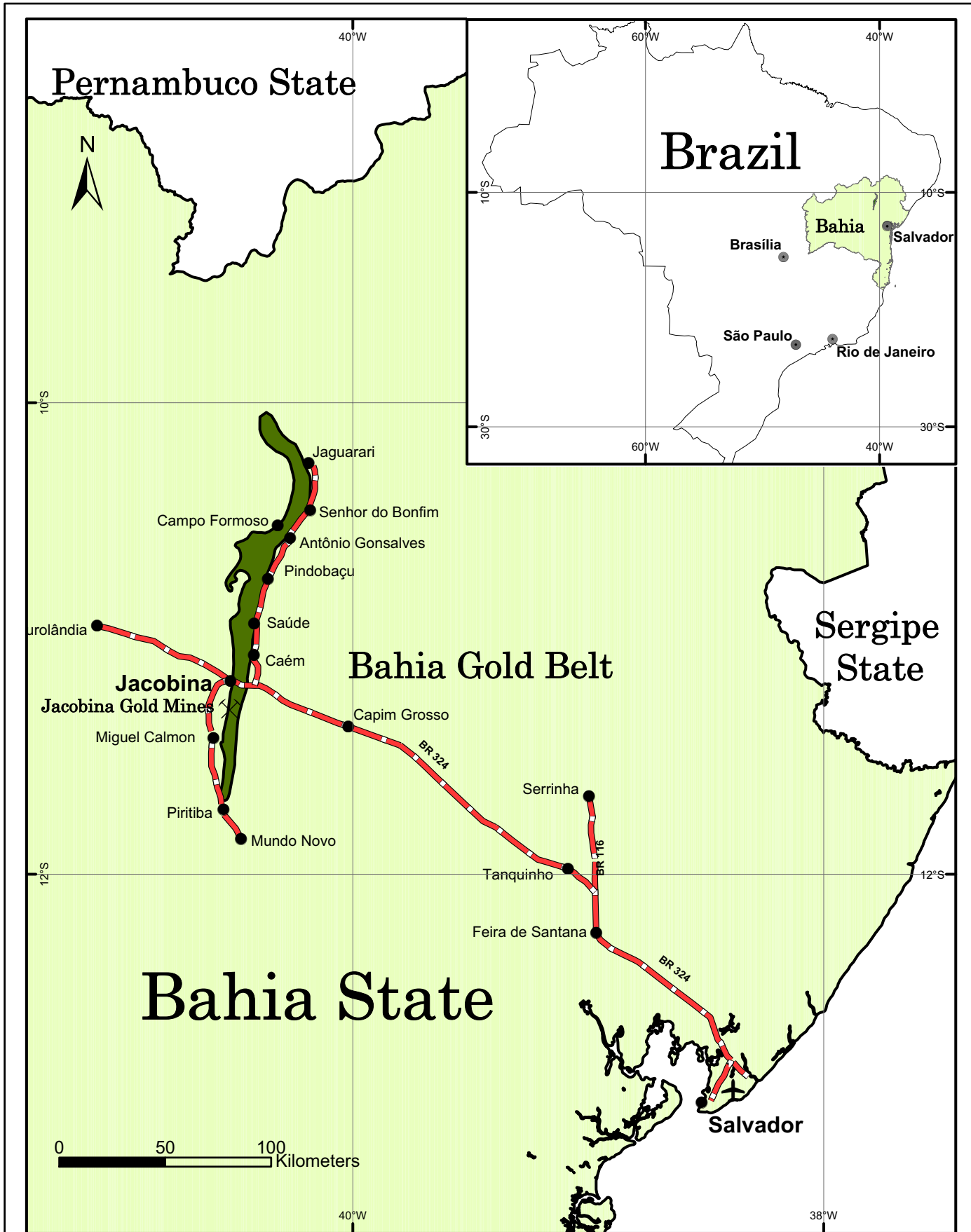


Figure 4.1 - Jacobina Project Location Map

March 2005



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Salvador is a key commercial centre in Brazil and is serviced by an international airport with numerous daily flights, as well as by a large port facility. It is one of the oldest cities in the country and, until about two centuries ago, was the capital. Access to the property from Salvador is via paved secondary highway up to the town of Jacobina, and by a well-maintained paved road from the town to the mine site and the recently active mining operations of Canavieiras, Itapicurú and João Belo. Travel times are typically 4 to 5 hours from the mine to Salvador and less than 20 minutes from the mine to Jacobina.

The town of Jacobina was founded in 1722 and is a regional agricultural centre with an official population of 76,484 updated in 2003 by the INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). It provides all the accommodation, shopping and social amenities necessary for the mine's labour force. As part of the re-development of the Jacobina Mine, electrical services were re-established to the mine by COELBA – Companhia de Eletricidade da Bahia. Telephone and high speed internet service are available in Jacobina and these services have been installed at both the mine site and at the exploration offices in the town of Jacobina.

The Jacobina project is located in a region of sub-tropical, semi-arid climate with generally flat to low rolling hills. Precipitation at Jacobina is somewhat higher than the regional average, likely due to the mountain range which hosts the deposits. Average annual precipitation is 84 cm with the May to October period being somewhat drier than the rest of the year. Temperatures vary little throughout the year. July is the coldest month with average daytime highs of 26° and nightly lows of 17°. February is the warmest month with average daily highs of 32° and nightly lows of 20° (Weather Underground website at www.wunderground.com).

The Jacobina mine itself is located within the heart of the Serra do Jacobina mountain chain, a local exception to the regional topography. The mountains exist due to the resistant weathering of the quartzite and quartz pebble conglomerate of the Serra do Córrego and Rio do Ouro Formations from which they are formed and which have been thrust faulted to surface at this location. The mountains have resulted in a local micro-climate of highly variable but somewhat greater rainfall amounts than the surrounding region.



6.0 HISTORY

The Serra do Jacobina mountains have been mined for gold since the late 17th century. Numerous old workings (garimpos) from artisanal miners (garimpeiros) can be seen along a 15 km strike length, following the ridges of the mountain chain. Garimpeiro activity, on a small scale, has taken place sporadically up to the present day, mining mostly weathered ores.

From 1889 to 1896, Companhia Minas do Jacobina operated the Gomes Costa Mine in the Morro do Vento area. Total reported production is 84 kg of gold from a 130-m long drift. In the 1930's, when the price of gold rose, the garimpeiro activity increased until the easily accessible weathered surface ore was mostly exhausted.

In the 1950's three mines opened, Canavieiras, João Belo, and Serra Branca. Canavieiras was the largest of these operations, and, at a capacity of 30 t per day (t/d), it produced 115,653 t with an average recovered grade of 18.13 g/t Au. By the 1960's all three of these operations were shut down due to political circumstances.

The modern history of the Jacobina mining camp began in the early 1970's with extensive geological study and exploration carried out by Anglo American. The company was attracted to the Jacobina area because of the apparent strong similarity of the local gold bearing conglomerates to the well-known Witwatersrand reefs in South Africa. This work, which was carried out from 1973 to 1978, provided the basis for proceeding with a feasibility study in 1979-80.

The feasibility study recommended that a mine be developed at Itapicurú with an initial plant capacity of 20,000 t per month (t/m). Development of the Itapicurú mine to access the Main Reef commenced in October, 1980. The processing plant was commissioned in November, 1982. In 1983, the first full year of production, production was 242,550 t with a recovered grade of 4.88 g/t Au yielding 38,055 ounces of gold.

From 1984 to 1987, exploration focussed on evaluating the mineralized conglomerates of the João Belo Norte Hill, located about two kilometres south of the Itapicurú mine. This work outlined sufficient reserves to warrant an open pit operation, development of which commenced in August, 1989. Concurrently, the processing plant capacity was increased to 75,000 t/m. In 1990, 538,000 t grading 1.44 g/t Au were produced, mainly from the open pit. Total production at Jacobina in 1990 was 45,482 ounces of gold from 680,114 t milled for a recovered grade of 2.08 g/t Au. Underground development at João Belo commenced in 1990, as pit reserves were limited.

William Resources Inc. (now Valencia Ventures Inc.) acquired 100% of the Jacobina gold mine and assumed management effective August 1, 1996, by purchasing JMC from subsidiaries of Minorco of Luxembourg and Banque Paribas de France.

William operated the João Belo and Itapicurú mines from August, 1996 until December, 1998 when the mines were closed due to depressed gold prices. The Canavieiras mine was also dewatered and rehabilitated during this period with a small amount of production. William did



considerable work on optimizing the operations, increasing plant capacity and it began an evaluation of the exploration potential however only limited exploration drilling was carried out due to a lack of funds.

From 1983 to 1998 JMC processed 7.96 million t of ore at a recovered grade of 2.62 g/t Au to produce approximately 670,000 ounces of gold as shown in Table 6.1. The bulk of production came from the Itapicurú and João Belo areas. João Belo production during 1989 to 1993 was predominantly from open pit reserves whereas Itapicurú and post-1993 João Belo production has been from underground.

**Table 6.1
JACOBINA ANNUAL PRODUCTION HISTORY**

	Itapicurú		Canavieiras		João Belo		Stockpile		Total		
	Tonnes	g/t Au ¹	Tonnes	g/t Au ¹	Tonnes	g/t Au ¹	Tonnes	g/t Au ¹	Tonnes	g/t Au ¹	Ounces
1983	218,117	4.68	24,433	6.67					242,550	4.88	38,055
1984	233,059	4.73	60,490	5.26	8,397	2.97			301,946	4.79	46,500
1985	202,088	4.48	46,470	4.88	34,319	1.78			282,877	4.22	38,380
1986	246,500	3.91	34,506	3.20	30,128	1.58			311,134	3.61	36,111
1987	290,322	3.98	30,271	4.57	866	1.71			321,459	4.03	41,651
1988	267,076	3.82	32,370	4.93	23,819	2.71			323,265	3.85	40,014
1989	116,713	3.61	23,908	4.09	58,259	2.26	82,024	0.90	280,904	2.58	23,301
1990	113,726	4.36	27,960	5.19	538,428	1.44			680,114	2.08	45,482
1991	142,160	3.99	29,371	6.22	604,069	1.75			775,600	2.33	58,101
1992	105,750	4.50	2,802	5.64	485,629	1.81			594,181	2.31	44,129
1993	7,532	3.62			511,355	2.14			518,887	2.16	36,035
1994	105,167	3.94			445,974	1.90			551,141	2.29	40,578
1995	105,865	3.82			474,048	2.15			579,913	2.45	45,679
1996	105,683	3.63			447,745	2.00	34,741	0.93	588,169	2.23	42,380
1997	107,732	3.38			540,283	2.07	217,666	0.84	865,681	1.92	53,562
1998²	82,728	2.09	30,013	2.27	593,957	1.68	34,391	1.61	741,089	1.76	39,695
Total	2,450,218	4.04	342,594	4.75	4,797,276	1.88	368,822	0.93	7,958,910	2.62	669,653

¹ Recovered.

² To November 30, 1988

Prior to DSM's involvement, the most recent mineral resource and reserve statement issued by the mine was produced in May, 1998. The mineral resources and reserves from this statement were reviewed in Hennessey (2002, 2003a). Micon was of the opinion in these reports that the historical mineral resources were relevant at that time and that it was reasonable for DSM to rely on them as justification for its proposed exploration program. This information was superseded by an updated mineral resource estimate incorporating diamond drilling results in 2002-2003 by DSM and reviewed by Micon in August 2003 (Micon 2003b). The August 2003 resource estimate has been further updated in this current report to include diamond drilling results in 2004 by DSM. This resource estimate has also been reviewed by Micon. The feasibility study completed by SNC-Lavalin and Dynatec established a new mineral reserve for Jacobina and was based on the resource estimate of August 2003 reviewed by Micon (2003b). The current report updates the mineral reserves in the Joao Belo zone based on the updated mineral resource estimate presented in this report.

7.0 GEOLOGICAL SETTING

Figure 7.1 shows the geology of the central part of the Bahia Gold Belt and its neighborhood. The Bahia Gold Belt overlays most of the Jacobina range, where quartzites, metaconglomerates and schists of the Paleoproterozoic Jacobina Group constitute a series of north-south, elongated, mountain ranges that rise up to 1,200 metres above sea-level. The deep and longitudinal valleys, bordering the mountains, correspond to deeply weathered ultramafic sills and dikes. The east-west oriented valleys represent weathered mafic to intermediate dikes. Archean tonalitic, trondhjemitic and granodioritic gneiss-dominated basement and related remnants of supracrustal rocks, grouped as the Mairi Complex, are found on both flat to slightly hilly areas east of the Jacobina range. At its eastern border and also in a flat landscape, there are the fine grained biotite gneisses of the Archean Saúde Complex. The transition between the hilly and the scarp domains of the eastern border corresponds to the exposures of the Archean Mundo Novo Greenstone Belt. To the west of the Jacobina range, Paleoproterozoic late- to post-tectonic, peraluminous granites (the Miguel Calmon-Itapicuru, Mirangaba-Carnaíba, and Campo Formoso granitoids) outcrop as hilly landscapes.

The gold mineralization of the Jacobina mine is hosted almost entirely within quartz pebble conglomerates of the Serra do Córrego Formation, the lowermost sequence of the Proterozoic-age Jacobina Group. This Formation is typically 500 m thick but locally achieves thicknesses of up to one kilometre. The geological map of most of the Bahia Gold Belt (Figure 7.2) shows the location of the DSM property and major rock formations within the concession boundaries. Overall, the property covers 155 km of strike length (8728800N – 8,900,000N) along the trend of the Jacobina Group. Within the property the Serra do Córrego Formation is exposed for 75 km (8,728,800 N – 8,810,330 N). Despite the extensive exposure of the mine sequence most of the exploration and all of the non-artisanal mining activities have been concentrated along a 10-km long (8749000N - 8759000N) central zone.

Past production has occurred from three separate larger mines, Canavieiras, João Belo, and Itapicuru. Several smaller mines, such as João Belo Sul (South) and Galleria 5, have also produced gold. Numerous inactive garimpos pepper the hillsides from one end of the belt to the other. The former Joao Belo mine is now being re-activated by DSM and is referred to as the Jacobina Mine (João Belo Zone).

7.1 REGIONAL GEOLOGY

The Jacobina Group, consisting of conglomerate, quartzite, and pelite of Proterozoic age, was originally deposited over early Precambrian basement rocks (see Figure 7.2). The Group is greater than 5,000 m in thickness and is divided into three formations which form a continuous north-south belt extending for 180 km. The Jacobina Group strikes in a northerly direction with moderate to steeply easterly dipping sedimentary and deformation structures. The sedimentary markers found indicate an eastbound source of sediments.

During the Transamazonian Orogeny (~ 2.0 Ga), the 5,000 m-thick sedimentary package was thrust towards the west, forming tectonic slabs. The Jacobina Group reflects either a rift or a



foreland sequence association. The rift model has been proposed by a number of workers since the 1970's while more recent researchers have favoured a foreland basin model.

Three sedimentary cycles, represented by individual stratigraphic formations, are traditionally account for the development of the Jacobina Group. From oldest to youngest these are the Serra do Córrego, Rio do Ouro and Cruz das Almas Formations. The Serra do Córrego Formation consists of interbedded quartzite and conglomerate, with preserved sedimentary structures characteristic of a braided stream type of deposition. The two conglomeratic members are separated by an intermediary quartzitic member. The Rio do Ouro Formation consists mainly of quartzite, locally with some interbedded conglomerates. The Cruz das Almas Formation consists of a package of chlorite and quartz-muscovite schists, along with phyllonite, phyllites and quartzites, which are cyclically interbedded. Work by DSM, however, indicates that the Cruz das Almas Formation may, in fact, consist of slices of Serra do Córrego and Rio do Ouro Formation quartzites tectonically imbricated with slices of Mn- and Fe- rich chemical sediments and volcanoclastics of the Archean Mundo Novo Formation.

The sedimentary sequence of the Jacobina Group indicates a continental environment evolving towards a marine turbiditic phase. The deposits are believed to be the product of a metallogenic cycle of erosion, sedimentation and mineral deposition similar to the South African Witwatersrand gold ores

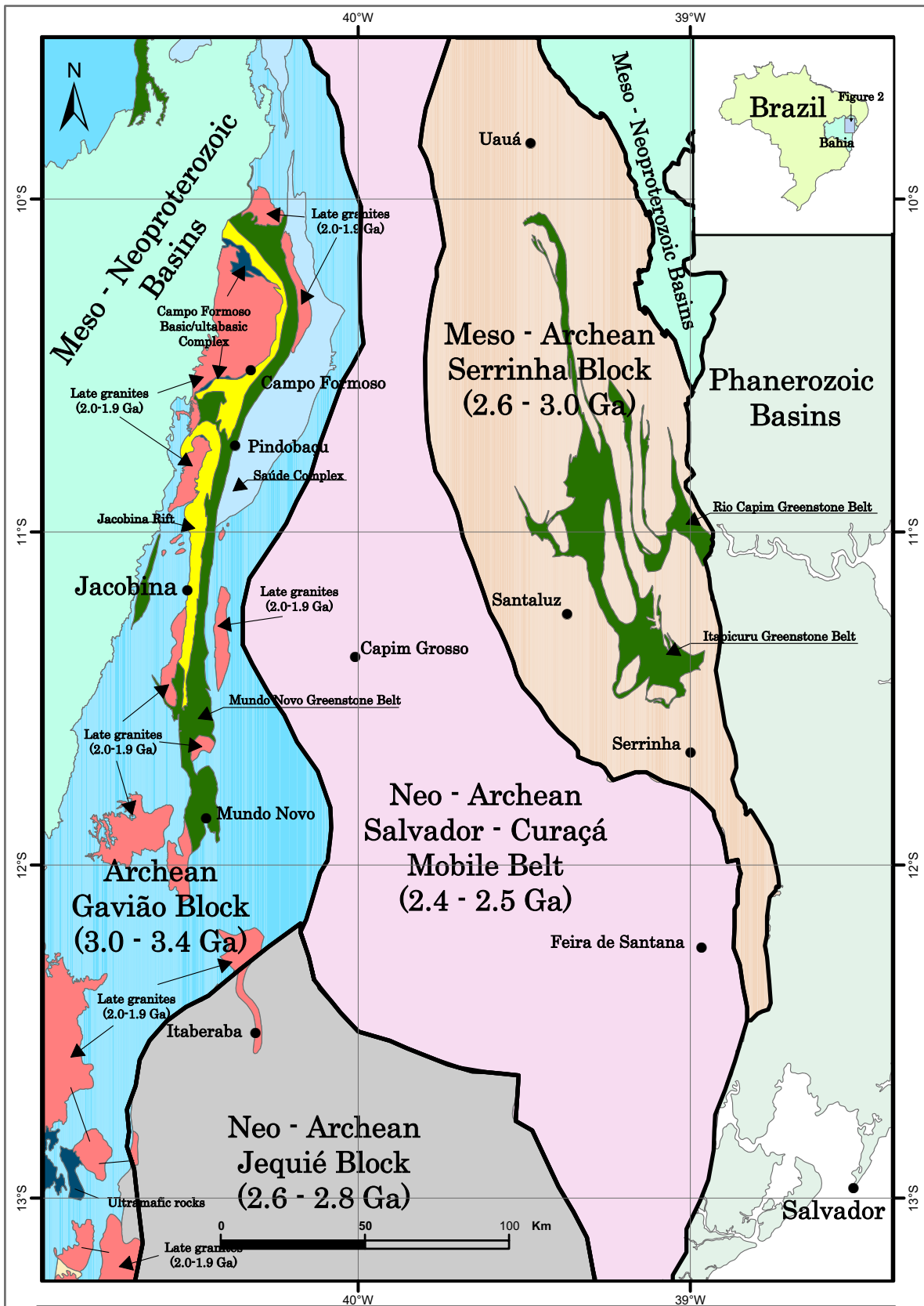


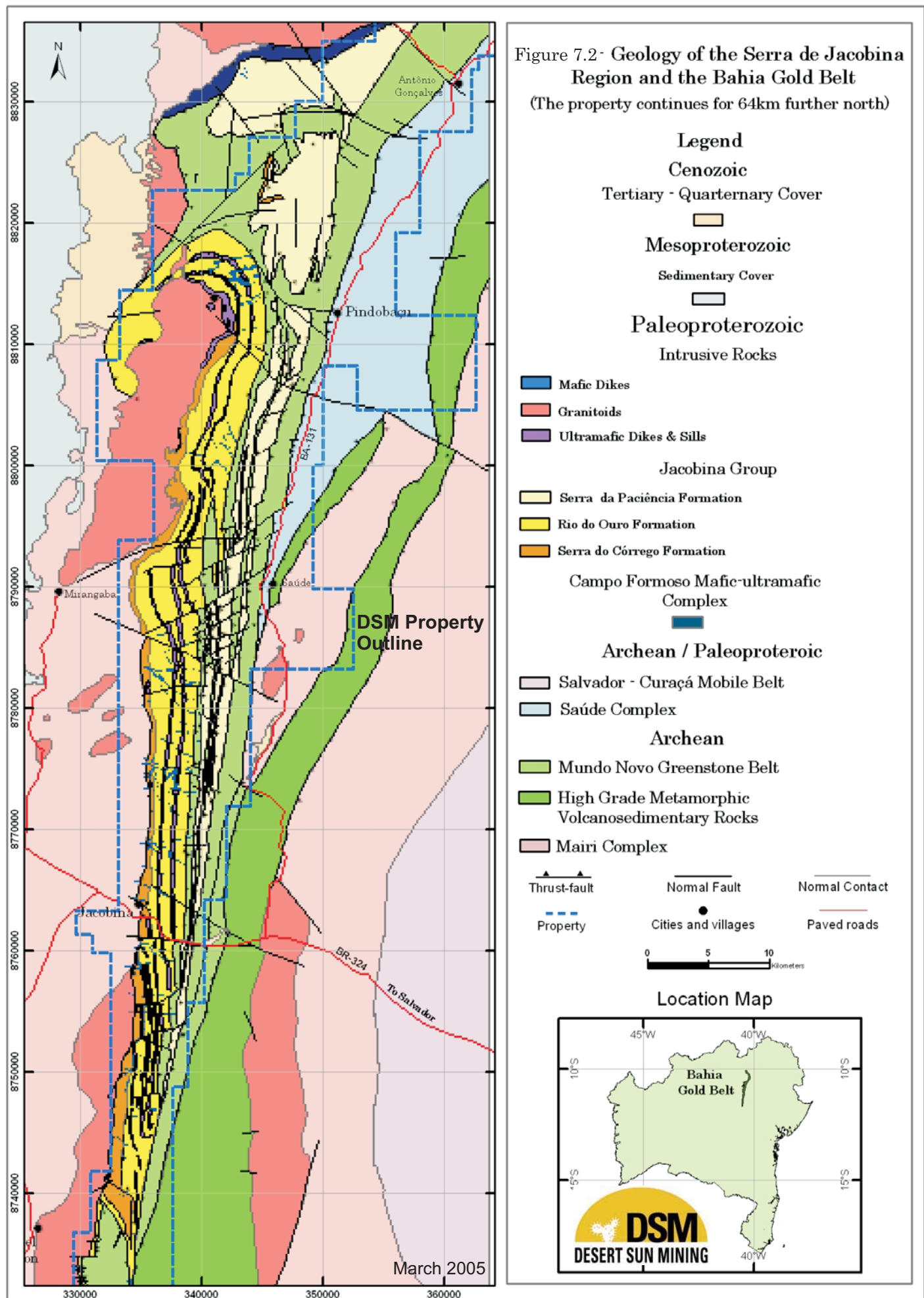
Figure 7.1 - Geotectonic Setting of the Eastern Part of the São Francisco Craton, Bahia, Brazil

Source: Geology and Mineral Resources of the Bahia State - CPRM / 2003

March 2005



Figure 7.2- Geology of the Serra de Jacobina Region and the Bahia Gold Belt
(The property continues for 64km further north)





7.2 PROPERTY GEOLOGY

7.2.1 Host Rocks

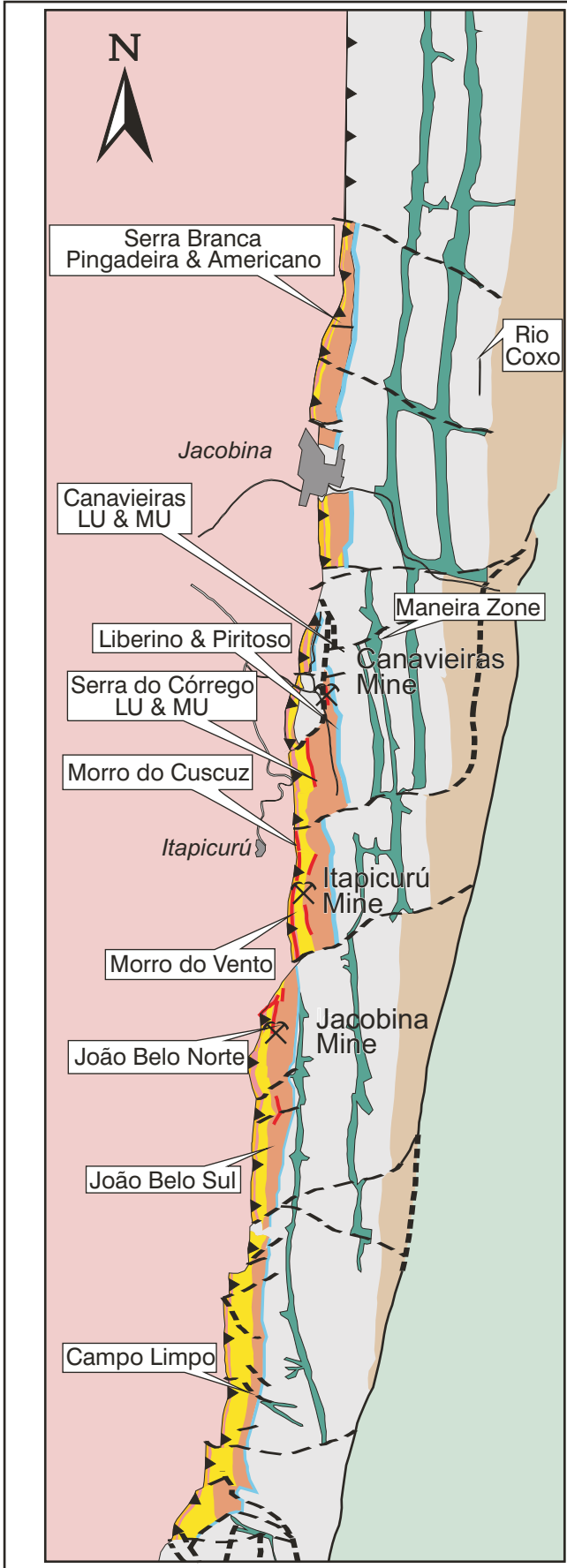
The Jacobina sequence forms a prominent ridge, which is, on average, more than 400 m in elevation above the surrounding countryside, peaking at 1,200 m above sea level. As shown in Figure 7.3, the gold-bearing quartz-pebble conglomerate in the Serra do Córrego Formation forms a thrust contact with the basement gneiss-greenstone terrane. The formation is exposed for 75 km along strike, from Campo Limpo in the south to southeast of Carnaíba in the north, with a maximum thickness of 1,000 m at Itapicurú.

Originally it was thought that outcrop of the Serra do Córrego Formation only continued to 5 km north of the town of Jacobina in Serra Branca, after which the cyclical accumulations of fluvial gravel and sand layers fine upward into marine quartzite that forms the Rio do Ouro Formation. However, work by DSM indicates that the Serra do Córrego Formation is actually much more extensive, extending 50 km north of Jacobina, however the amount of conglomerate in the sequence diminishes considerably after about 20 km north of Jacobina. The underground mine excavations at Jacobina expose structures that characterize the fluvial system which controlled the deposition of the Serra do Córrego Formation. Cross-bedding and ripple marks show that the most prominent direction of stream flow was up the dip and to the north. The series appears as a monoclinical structure with the beds striking north and dipping from 45° to 65° to the east.

The Serra do Córrego Formation is subdivided into three main members as shown in Figure 7.4. The thickness of these members is variable from section to section. Within each member are several units of quartz pebble conglomerate. These conglomerate units are called reefs, following the nomenclature used for the geologically similar region of the Witwatersrand in South Africa. Several of the reefs within the Upper and Lower Members have been mined, specifically the Basal, Main, Piritoso, Liberino, Holandez, Maneira, Intermediario, LMPC and MPC. All of these are situated less than 4 km from the Itapicurú plant (Figure 7.5), and contain extensions of mineralization at depth and often along strike. Other conglomerate units, situated further from the plant, are lesser known and constitute further potential for the discovery of new mineral resources. Amongst these are the Serra Branca, João Belo Sul and Campo Limpo areas where gold mineralization has been encountered in surface trenches or limited diamond drilling. Blind mineralization may also occur north of Jacobina, where the conglomerates are covered by the Rio do Ouro Formation. This formation is also characterized by auriferous quartz veins associated with mafic to ultramafic shear zones.

The main characteristics of the mineralized reefs are summarized in Table 7.1 and Figure 7.6 shows the stratigraphic correlation of mine packages. The individual reefs are described in more detail in the following sub-sections.

FIGURE 7.3 PROPERTY GEOLOGY and MAJOR TARGET AREAS



LEGEND

- Basic & Ultrabasic Intrusives
- Cruz das Almas Formation
- Cruz das Almas and Rio do Ouro Formations

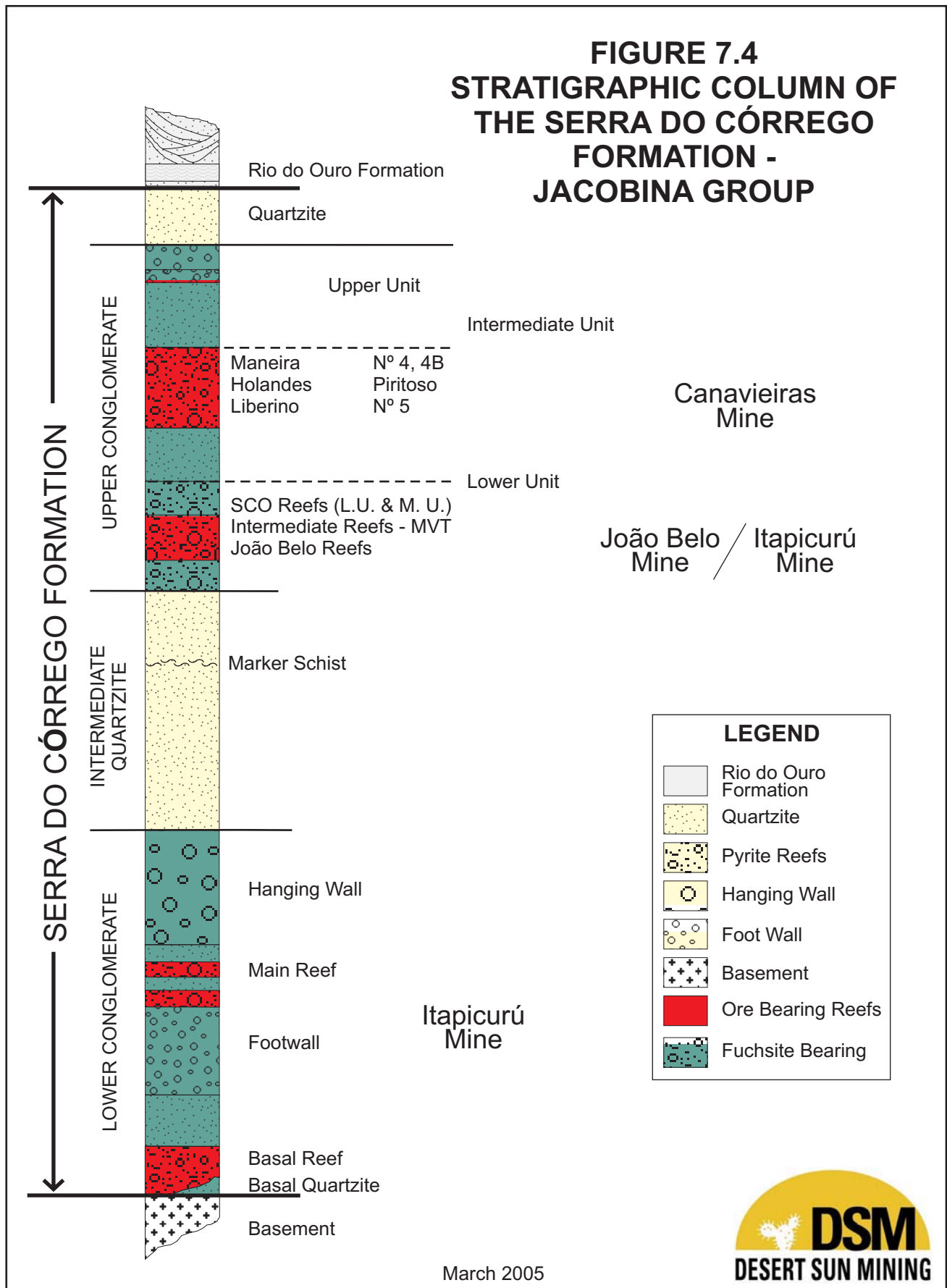
- Serra do Córrego Formation**
- Upper Quartzite
- Upper Conglomerate
- Intermediate Quartzite
- Lower Conglomerate
- Basal Quartzite

- Mundo Novo Greenstone Belt
- Basement

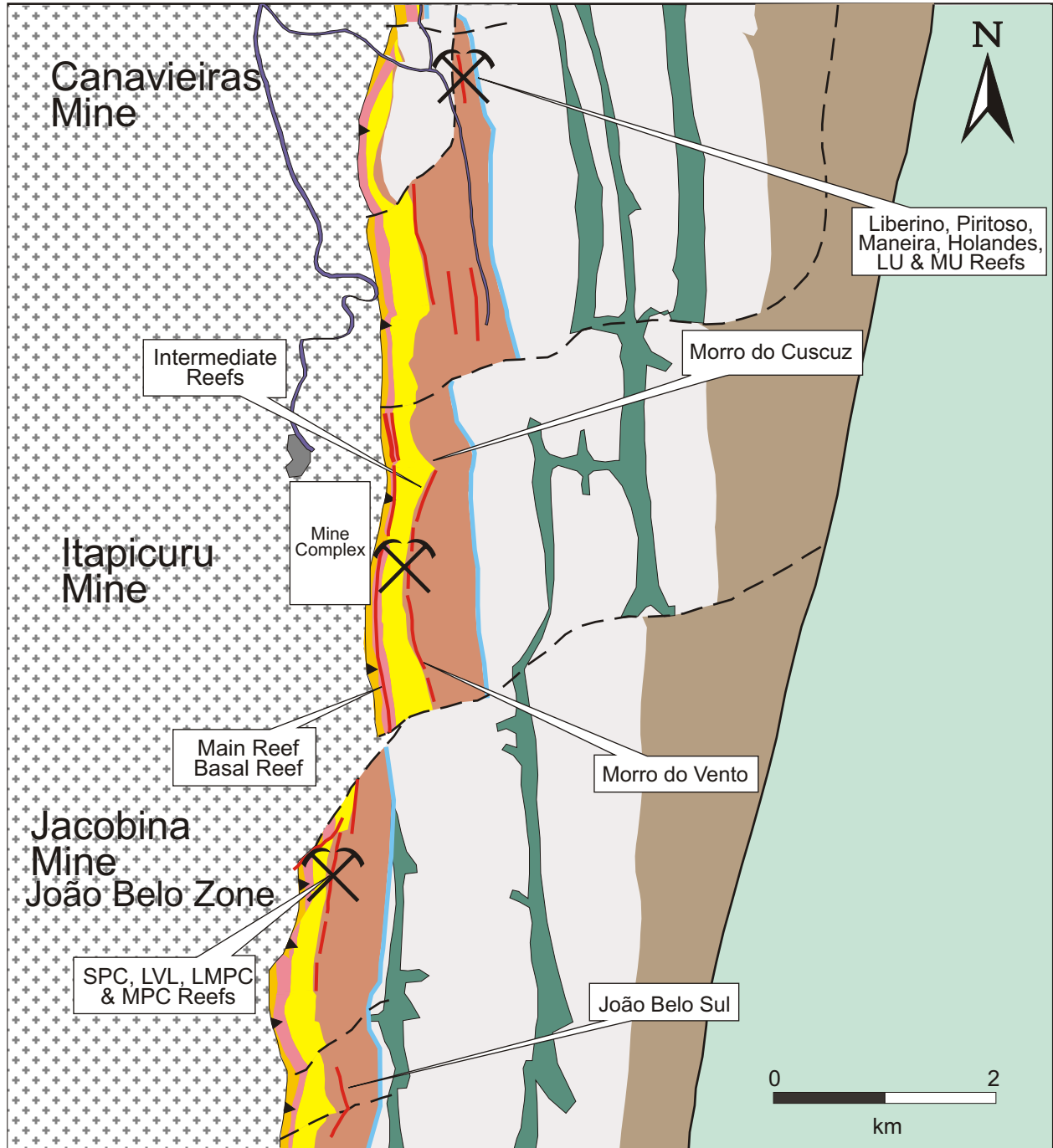
- Gold Bearing Reefs
- Faults
- Thrust Fault
- Road
- Settlements



**FIGURE 7.4
STRATIGRAPHIC COLUMN OF
THE SERRA DO CÓRREGO
FORMATION -
JACOBINA GROUP**



**FIGURE 7.5
JACOBINA MINE AREA GEOLOGY**

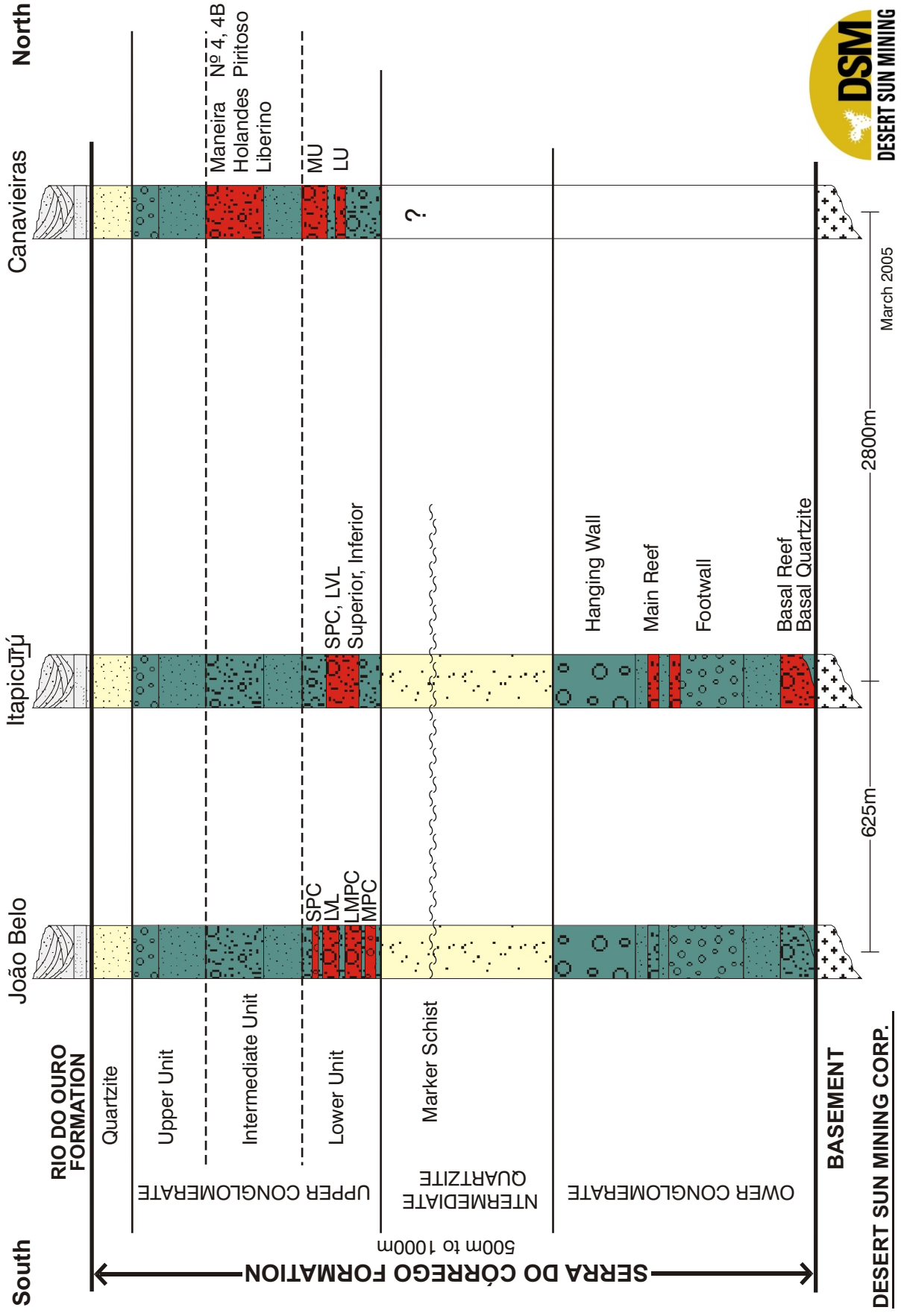


LEGEND

- | | | |
|---|------------------------|--------------------|
| Basic & Ultrabasic Intrusives | Upper Conglomerate | Gold Bearing Reefs |
| Cruz das Almas Fm. | Intermediate Quartzite | Faults |
| Cruz das Almas and Rio do Ouro Formations | Lower Conglomerate | Thrust Fault |
| Mundo Novo Greenstone | Basal Quartzite | Road |
| Serra do Córrego Formation | Basement | Settlements |
| Upper Quartzite | | |

FIGURE 7.6

STRATIGRAPHIC CORRELATION OF MINE PACKAGES AT JACOBINA



**Table 7.1
CHARACTERISTICS OF THE PRINCIPAL MINERALIZED REEFS**

Mine	Zone	Location	Strike	Thickness	Description
Itapicurú	LVLPC	Morro de Vento	210 m	1.5m	Large and very large pebbles, only locally mineralized.
	Superior Reef	Morro de Vento	300 m	6.8 m	Medium to small pebbles, irregularly mineralized.
	Inferior Reef	Morro de Vento	250 m	1.4 m	Medium to large pebbles.
	Main Reef	60 to 90 m above basement, Itapicurú	3,000 m	Beds of 0.1 to 3.0 m, Zone up to 12 m	Pyritic, small to medium pebble conglomerate beds. Three channels of deposition, broken by faults.
	Basal Reef	Base Itapicurú	1,600 m	3.0 to 8.0 m	Small to medium pebbles, enrichment of gold at its upper and lower portions.
Canaveiras	Piritoso	Canaveiras	500 m	0.9 to 1.7 m	Average grade of 9.5 g/t Au, medium size pebbles.
	Liberino	Canaveiras	500 m	1.3 m	10 m above Piritoso, average grade of 6.1 g/t Au, medium to large pebbles.
	MU	Canaveiras	400 m	5 to 25 m	Pyritic, medium to large pebble conglomerates.
	LU	Canaveiras	400 m	1 to 10 m	Pyritic, large pebble conglomerates.
João Belo	LVLPC	João Belo Norte	600+ m	3 to 5 m	Large to very large pebbles.
	LMPC	João Belo Norte	600+ m	3 to 15 m	Large to medium pebbles, variable gold values.
	MPC	João Belo Norte	600 m	1.0 to 3.5 m	Medium size pebbles, locally contains pay values.

7.2.2 Structural Geology

Ductile deformation of the Jacobina Group package appears to be limited due to the very high quartz content of the rocks as evidenced by the presence of numerous primary sedimentary fabrics. Deformation therefore typically consists of brittle faults. Major faults are widely spaced, usually on the scale of hundreds of metres, with minor parallel ancillary faults. These major faults are moderate to high angle transverse faults and they are often accompanied by mafic to ultramafic intrusives. Often bordering the intrusives are narrow zones of recemented quartz pebble conglomerate breccia. Where intrusives are lacking, these units display wider breccia zones of a few metres. Numerous moderate- to high-angle brittle block faults are apparent and result in small offset of units.

Where exposed, the contact between the Precambrian basement and the Serra do Córrego Formation is highly sheared and is likely a thrust contact. It is represented by a single, relatively sharp, chloritic fault which parallels, or is slightly discordant to, bedding in the sediments. The



entire sequence of the Jacobina Group, comprising the mountains of the Jacobina mine area, is a thrust slice onto the Precambrian basement rocks.

The property is crosscut and broken up by N70 E trending faults. These faults have a right lateral movement of several hundred to one thousand metres and cause successive blocks of the Jacobina Group to shuffle to the east, as one moves north. These faults have some vertical component of movement to them and may be occupied by mafic dykes. The N70 E structures break the Jacobina Group up into 2 to 5 km long blocks. The structures are frequently occupied by streams which have carved deep, steep-sided valleys and which represent the dividing lines between the major mines within the area. Much more minor, bedding-parallel faults also occur near the Jacobina mines.

Within the large blocks mentioned above, the stratigraphic sequence is often a monoclinial one, dipping steeply at 60° to 70° to the east. An exception to this is the block containing the Canavieiras mine where a broad rolling fold, hosting the mineralization, changes from steep east, through flat and shallow west dips before resuming the typical steep east dip.

8.0 DEPOSIT TYPES

Anglo American was attracted to the Jacobina area in the early 1970's by what it felt was the remarkable similarity of the local gold-bearing conglomerates to the well-known Witwatersrand reefs in South Africa. More recently, Goldfields' success at Tarkwa in Ghana highlighted the unique gold-bearing quartz pebble conglomerates in the lower Proterozoic of Africa and South America.

Africa and South America were originally part of a supercontinent known as Gondwanaland. Gondwanaland was originally part of an even greater land mass known as Pangea, but separated from that continent about 180 million years ago. Later, Africa and South America broke apart and drifted to their present positions.

Africa and South America have large Precambrian shield areas which underlie significant portions of both continents. The shields are composed of ancient rocks such as granite, gneiss, schist, and greenstone which were part of the primordial surface of the Earth. Sedimentary and metamorphic rocks of younger Precambrian age overlie the older rocks. The younger Precambrian rocks contain gold-bearing conglomerates. These include the Roraima, Tarkwa, and Witwatersrand sequences in South America and Africa, which are many thousands of feet in thickness (Heylman, 2000).

8.1 THE WITWATERSRAND BASIN

The Witwatersrand Basin lies within the Kaapvaal Craton of southern Africa, formed 3.7 to 2.7 Ga. The strata of the basin lie unconformably on the Archean cratonic basement. The basal sequence, the Dominion Group, is a sequence of thin conglomerates and thick lava flows containing only one known gold-bearing zone and a uranium-rich stratum. The basal sequence was deposited approximately 3.0 to 2.7 Ga. After a hiatus of 100 million years, the Witwatersrand Supergroup was deposited. The Supergroup is divided into two units, the lower West Rand Group and the upper Central Rand Group. The West Rand Group was deposited at approximately 2,970 Ma and consists of shales, quartzites, grits and conglomerates and only one gold-rich conglomerate bed. In contrast, the Central Rand Group, deposited from approximately 2,914 Ma on, consists of quartzites (90%), grits and rare shale and, most importantly, numerous gold-bearing conglomerate horizons.

The exceptional gold reefs of the Witwatersrand Basin dip at 20 to 25° towards the centre of the basin and are found to persist over areas of 10 to 100 km², maintaining consistent gold grades (approximately 15 g/t) and reef mineralogy. The auriferous reefs are commonly no more than one metre in thickness, although some of the richest reefs within the mid-fan facies are only centimetres thick. These reefs are conglomeratic units commonly overlying "interformational" unconformities in the alluvial fan deposits (Barnicoat et al., 1997). The conglomerate units are typically pebble-supported, mature (free of clays and silts) and tightly cemented.

There are two families of thought on the formation of the Witwatersrand deposits, the paleoplacer group and the hydrothermal group. There is some evidence supporting both models.



Today most writers seem to believe that these deposits were placers which have locally experienced some remobilization of gold by fluids after lithification.

The Witwatersrand has produced over 43,000 t of gold and the remaining reserves are known to contain another 40,000 t, making it, by well over an order of magnitude, the greatest gold producing area in the world.

8.2 TARKWA

The Tarkwa mine is located in south central Ghana. In Ghana, the Birimian greenstone belt sequence occurs as irregular basins of predominantly metasedimentary strata, separated by a series of north-east trending belts of metavolcanics, on which the majority of the major gold deposits are clustered, and a north-northwest striking belt, the Lawra belt, which extends northwards into Burkina Faso. The Birimian greenstone belts in Ghana are unconformably overlain by Proterozoic age Tarkwaian metasediments, which are host to the gold mineralization at the Tarkwa mine. The style of the gold mineralization is similar to that found in the Witwatersrand Basin, concentrated in conglomerate reefs.

The deposit at Tarkwa is composed of a succession of stacked tabular palaeoplacer units, consisting of quartz pebble conglomerates, developed within Tarkwaian sedimentary rocks. Approximately ten such separate economic units occur in the concession area within a sedimentary package ranging between 40 m and 110 m in thickness. Low grade to barren quartzite units are interlayered between the separate reef units.

Five separate production areas are located on and around the Pepe Anticline, a gently north-plunging fold structure that outcrops as a whaleback hill. The sedimentary sequence and the interlayered waste zones between the mineralized units thicken to the west. In 2002, Goldfields reported reserves of 150.7 million t grading 1.4 g/t Au containing 6.530 million ounces (Moz) of gold. Total measured and indicated resources were reported as 329.9 million t grading 1.8 g/t Au containing 18.890 Moz of gold.

8.3 THE RORAIMA GROUP

The Roraima group in northern Brazil, southern Venezuela and the Guyanas contains conglomerate beds in which are found gold and diamonds. Most of the placer gold and diamonds found in Venezuela and northern Brazil are thought to have been derived from paleoplacers in the Roraima (Heylman, 2000). The gold-bearing quartz pebble conglomerates of the Serra do Córrego Formation at Jacobina are the most significant known deposit of this type in South America.

8.4 JACOBINA

Anglo American proposed a Witwatersrand-type paleoplacer model for the deposits of the Jacobina area and operated its mines on this principle, concentrating on stratigraphic mapping and correlation. DSM is of the view, however, that the majority of gold mineralization formed as a result of extensive hydrothermal alteration related to fluid flow along the Pindobaçu Fault



system which forms the eastern margin of the Jacobina basin. Fuchsite, which is widespread and often associated with gold, is a hydrothermal alteration mineral. Gold mineralization is associated with strong silicification and pyritization and occurs both within the conglomerates in the Jacobina mine area as well as strongly fractured and brecciated quartzites in the Pindobaçu area, 50km In addition, the highest-grade mineralization known to exist in the area occurs at Canavieiras where the most extensive structural deformation occurs.

DSM has employed a hydrothermal model for mineralization in its exploration however, stratigraphy is very important because the conglomerates are the most permeable units in the package and are prime sites for hydrothermal mineralization.



9.0 MINERALIZATION

9.1 GOLD MINERALIZATION

The host rocks to the Jacobina gold mineralization are highly sorted and rounded quartz pebble conglomerate reefs of the Serra de Córrego Formation. Gold as fine grains 20 to 50 microns in size predominantly within well packed conglomeratic layers in which medium to larger- sized quartz pebbles are present. The gold occurs within the matrix and often in association with pyrite and fuchsite. However, these accessory minerals also occur in the absence of gold. Gold-rich reefs show a characteristic greenish aspect because of the presence of the chromium-rich muscovite, fuchsite. Intra-reef quartzites typically contain low gold grades (<0.70 g/t Au). Higher concentrations of gold are often encountered within the foreset beds, adjacent to topset beds, within a cross-bedded reef although this may also reflect structural upgrading. An important example of this style of mineralization is the Canavieiras mine, an important exploration targets.

The gold-bearing reefs range in size from 1.5 to 25 m wide and can be followed along strike for hundreds of metres, and in some cases for kilometres. Some contacts between reefs and the later crosscutting mafic and ultramafic intrusives are enriched in gold.

Not all conglomerates of the Serra do Córrego Formation are mineralized, and many are completely barren of gold. Although they are quite homogeneous along their strike and dip extensions, the mineralized conglomerates differ from one another in stratigraphic position and mineralization patterns. The differences are likely due to changes in the depositional environment, and possibly also in the source areas. Recent work by DSM, however, indicates that structure has a more important role in localizing gold mineralization than previously recognized.

9.2 ORE ZONE DESCRIPTIONS

While the reefs are variable in thickness, they are very continuous in strike length and down dip extension, reflecting their sedimentary origins (Figures 7.3 & 7.5). Gold has a heterogeneous distribution within these reefs, with higher-grade concentrations often found at the upper contacts. These higher-grade zones have been interpreted as being due to paleo-weathering, but more likely in the view of DSM reflect structural upgrading. There are, however, other zones of gold enrichment related to tectonic activity. In some cases (e.g. Canavieiras) the structural enrichment by remobilization is very important in forming higher grade zones of mineralization.

Most of the gold occurs in the form of free gold, hosted almost exclusively in the matrix of the quartz pebble conglomerates. Locally, economic zones of gold mineralization are found within the adjacent quartzites, but these are of limited importance. The gold-mineralized matrix of both the conglomerates and adjacent quartzites are typically rich in fuchsite, giving the rocks a distinctive green colour on a fresh surface. However, fuchsite-bearing conglomerates with little or no gold also occur.



Several of the conglomerates also have significant pyrite concentrations in their matrix. The presence or absence of pyrite rather than the amount of pyrite is a useful indicator of gold grades. Typically the quartz pebbles in the gold-bearing conglomerates have a bluish-grey colour.

Similar to other gold-bearing quartz pebble conglomerates of the world, the reefs at Jacobina also contain trace amounts of uranium, a potentially useful exploration tool especially in areas covered by later sediments. In addition, due to the heavy minerals concentrated in the conglomerates (principally monazite), the Serra do Córrego Formation is marked by a prominent Thorium anomaly in the airborne radiometric survey. Results of this survey were critical in DSM recognizing that the Serra do Córrego Formation extended much further north of Jacobina than previously thought.

9.3 STRATIGRAPHY OF THE GOLD MINERALIZED UNITS OF THE LOWER CONGLOMERATE MEMBER

The Lower Conglomerate Member contains two principal reefs, the Basal Reef and the Main Reef as shown in Figure 9.1, a schematic geological cross section of the Morro do Vento target area.

The Basal Reef is presently known only at Itapicurú where it has been recognized along 1,600 m of strike, 700 m of which is exposed by underground development. It constitutes the first conglomerate of the sequence, usually laid directly over the gneiss-greenstone basement although a narrow, basal quartzite bed is found locally between the basal conglomerate and the basement. Typically the basal conglomerate is 3 to 8 m thick and pyritiferous, with small- to medium-sized well-packed pebbles. Economic concentrations of gold occur along its lower portions, which are interpreted to result from the concentration of gold along shear zone contacts. A layer of pebbly quartzite and a poorly-packed large pebble conglomerate with erratic and uneconomic concentrations of gold covers it.

The Main Reef is the next gold-mineralized conglomerate in the sequence and is composed dominantly of cross-bedded quartzite, with local conglomerate horizons. This zone is up to 12 m thick, and is located about 60 to 90 m above the basement. As with the Basal Reef the Main Reef zone occurs at Itapicurú, extending for 3,000 m from the Morro do Cuscuz area in the north, to Morro do Vento, in the south.

Along its full extent, the Main Reef Zone lies between two remarkably continuous and contrasting conglomerates. The Footwall Conglomerate is a very well packed and sorted, oligomictic, pyritiferous, medium-sized pebble conglomerate. It is 35 to 45 m thick. The Hangingwall Conglomerate is a 30 m- to 40 m-thick, poorly packed, oligomictic, large pebble conglomerate, devoid of pyrite and gold grades, and locally occupies channels cut in the Main Reef Zone.

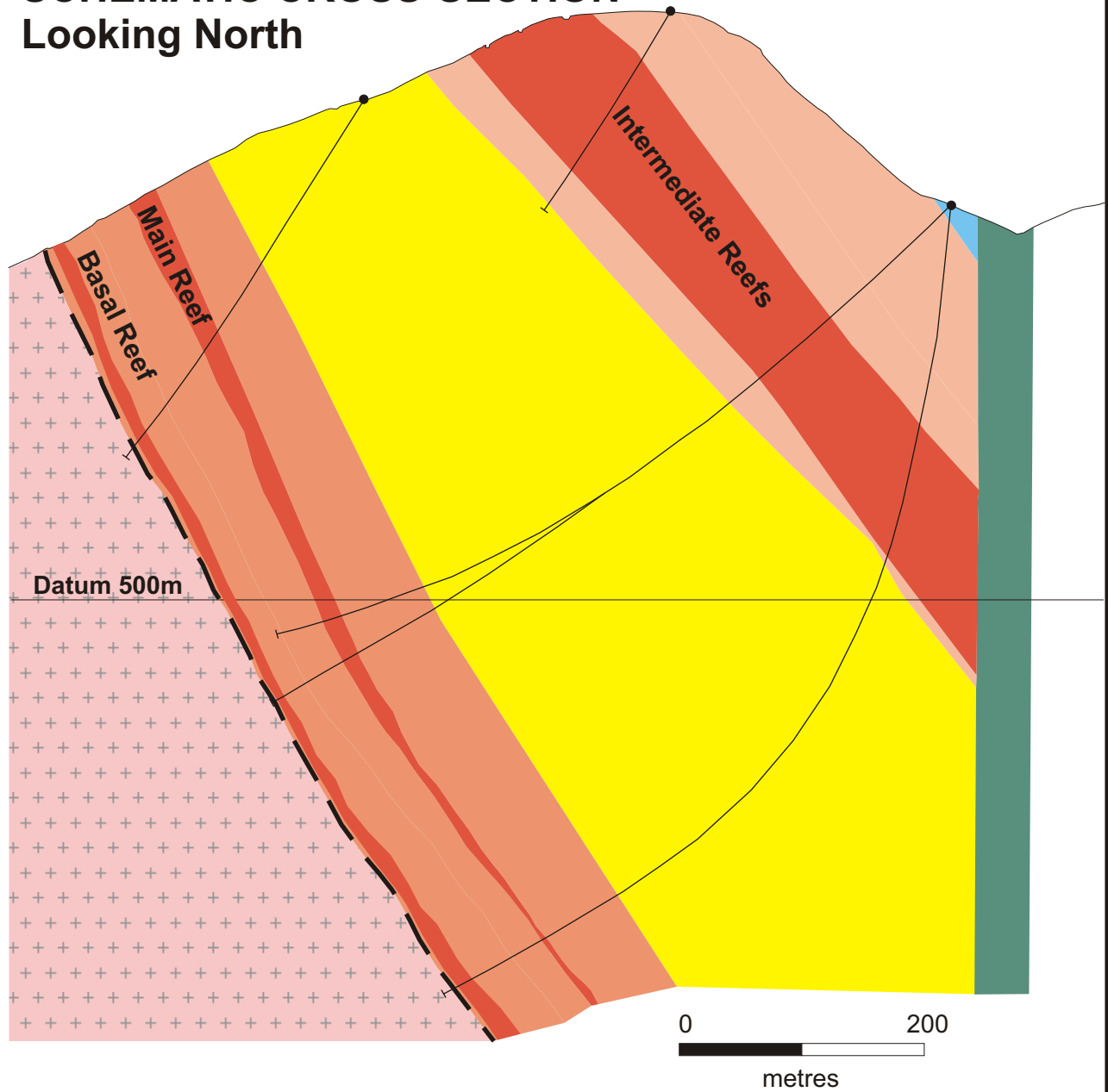
The Main Reef is exposed underground along its complete strike length. It consists of a bed of pyritiferous, small to medium pebble conglomerate. It varies from 0.1 to 3.0 m in thickness, with an average of about 2.0 m. Three channels of deposition have been identified, which



usually narrow gently towards their edges and locally host enriched gold concentrations due to possible reworking.

Although it presents attractive grades and thickness, as demonstrated by core holes and the underground exposures, the central channel is broken by a zone of closely-spaced faults, and split into small slices, inhibiting mechanized mining. Only a small part of this channel was exploitable with the methods used and was not considered a mineral reserve for the mine. However, the southern channel is remarkably continuous and uniform and constitutes most of the resources and reserves previously reported by JMC for this conglomerate.

FIGURE 9.1
MORRO DO VENTO
SCHEMATIC CROSS-SECTION
Looking North



LEGEND

- | | | |
|-----------------|------------------------|-----------|
| Intrusives | Intermediate Quartzite | Basement |
| Reefs | Upper Conglomerate | Fault |
| Upper Quartzite | Lower Conglomerate | Drillhole |



9.4 STRATIGRAPHY OF THE GOLD MINERALIZED UNITS OF THE UPPER CONGLOMERATE MEMBER

The Upper Conglomerate Member contains sections of mineralized conglomerate units along its complete strike length, from Serra Branca in the north to Campo Limpo in the south, a distance of 30 km. The better-known conglomerates are those already exposed by mining at Canavieiras, Serra do Córrego, Morro do Vento and João Belo.

The Upper Member has a great number of conglomerates, all well-packed, pebble-supported, oligomictic, and dominantly consisting of medium to very large quartz pebbles. The conglomerates are concentrated in three massive units, each one aggregating to 65 to 80 m in thickness, all containing interbeds of planar or trough cross-bedded quartzite. The three conglomerate units (Lower, Intermediate, and Upper) are separated by two quartzites with widths ranging up to 90 to 100 m.

The Lower Conglomerate Unit of the Upper Conglomerate Member (Figure 7.4) hosted most of JMC's resource base reported at the time of mine closure, including the LMPC Reef at the João Belo mine and the Intermediate Reef sequence at the Itapicurú mine. The conglomerate beds consist typically of medium to large quartz pebbles supported in a sandy matrix. The fuchsite-rich matrix has significant but variable amounts of pyrite. The individual conglomerate beds can be traced on surface and in underground workings for hundreds of metres along strike and possess significant down dip extension.

At the João Belo mine, the Lower Unit of the Upper Conglomerate Member consists of three consecutive, well-packed, pyritiferous quartz-pebble conglomerate units (Figure 9.2) all of which host mineralization that was previously mined. The lower conglomerate layer, or MPC Reef, is mostly comprised of medium-sized pebbles, with a thickness of 1.0 to 3.5 m. The second conglomerate layer, or LMPC Reef, consists of large and medium pebbles and is 3 to 15 m thick with variable gold values. The upper conglomerate layer, or LVLPC Reef, varies from 3.0 to 5.0 m in thickness and consists of large to very large pebbles in a greyish matrix. At some sites there is a mineralized small pebble conglomerate, known as the SPC Reef, at the upper contact of the LVLPC. Thin wedges of quartzite often mark the contacts between the three conglomerates. There are also differences in the colour of some pebbles, ranging from pink to yellow to green. The mined zones extend for at least 900 m along strike and mine workings are presently focused in the LMPC Reef.

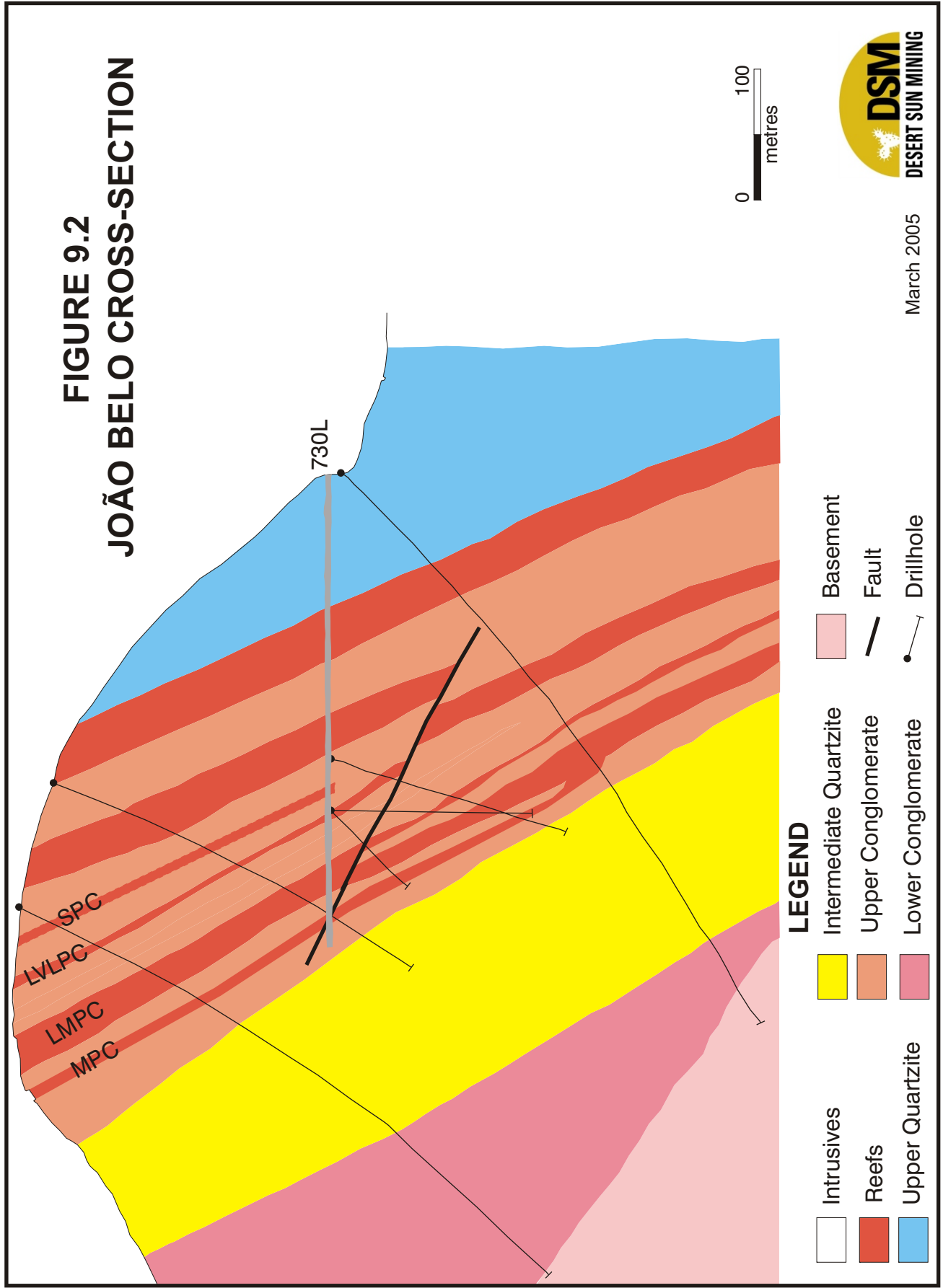
The João Belo mine included ore zones north and south of the cross cutting mafic dike. The area immediately south of the dike is called João Belo Sul Extension and was originally drilled during 1997, confirming the continuity of the mine stratigraphy over 450 m to the south of the mine workings with similar grades and widths. In 2004, DSM completed significant additional drilling which has significantly increased the mineral resources in this area as outlined in Section 17 below.

At Morro do Vento, two conglomerates of the Lower Unit of the Upper Conglomerate were previously developed and partially exploited underground. These have a pyrite-rich matrix and are well packed. The lower is the Inferior (LU) Reef, with medium to large pebbles and about



30m above it, the Superior (MU) Reef (marked LMPC on the section) is characterized by medium to small pebbles toward the top and medium to large pebbles in the base. These two reefs are within a larger package known as the Intermediate reefs which are from 40-70m thick and extend along strike at Morro do Vento for 2km. This area was extensively drilled by DSM in 2004 and is discussed in more detail in Section 17 below.

FIGURE 9.2
JOÃO BELO CROSS-SECTION





At Serra do Córrego and Canavieiras the LU and MU Reefs (Lower Unit and Middle Unit) are located in the base of the Upper Conglomerate Member. At the Canavieiras mine, these two reefs do not outcrop but were originally identified by three drill holes below the Piritoso Reef (Figure 9.3) and are limited by faults and intrusive rocks. The LU Reef occurs in the top of a conglomerate layer with medium-sized pebbles. The MU Reef is pyritiferous, with large- to medium-sized pebbles and is more than 20 m thick. This target was drilled more extensively by DSM in 2004.

At Serra do Córrego the LU and MU Reefs outcrop along a strike length of over one kilometre. They are pyritic and contain medium-sized pebbles with locally higher gold values near the top.

In the Intermediate Unit of the Upper Conglomerate Member, mineralized conglomerates are more frequent in the lower section, and frequently amongst non-economic conglomerate beds. They have a pyrite and fuchsite-rich matrix, and typically are one to several metres in thickness, with hundreds of metres of strike extension and a significant down-dip extension. Some have smaller pebbles and better packing at their upper contact, clear indications of alluvial reworking.

At the Canavieiras mine, the Intermediate Unit of the Upper Member is 80 m thick and is characterized by six well-mineralized and well-packed oligomictic, and highly-pyritiferous conglomerates, of which the lower two, the Piritoso and the Liberino, were more developed and exploited along 500 m of strike length. Both are extensively oxidized on the developed levels. The most productive is the Piritoso Reef, located 10 m below the Liberino Reef, with 0.9 to 1.7 m of thickness and pebbles of medium size, where higher than average grades have been discovered (average grade 9.0 g Au/t). The Liberino Reef, averaging 6.1 g/t Au, is typically 1.3 m thick and consists of medium to large pebbles, in a greenish matrix (fuchsite). The other reefs of the Intermediate Member are the 4A, 4B, N5, Holandez and Maneira. These were only mined locally.

When the 1997 mineral resources were estimated, the Canavieiras mine was considered to be of secondary importance. However, structural and stratigraphic reviews had shown that the MU-LU Reef could exist below the previously-mined Piritoso Reef. One diamond drill hole was drilled in October/November, 1997 which gave results of 7.07 g/t Au over a 24.0 m true width from the MU Reef, and 2.55 g/t Au over 3.01 m from the LU Reef (see Figure 9.3). Results obtained by DSM in 2004 as described in Section 11 have confirmed that the MU-LU Reefs are much more extensive than previously thought and are a significant exploration targets.

These results significantly added to the knowledge of these deeper ore zones, and indicate a potential for the discovery of significant new mineral resources, not only in the Canavieiras mine, but throughout all of the mineralized zones of the Serra do Córrego Formation.

The Liberino and Piritoso Reefs in the Canavieiras mine contain some of the highest grade ore ever mined by JMC. This mine has very complex structural geology and the mineralized zones are limited by large faults, many of them filled with sheared volcanic material. The higher-grade nature of this mineralization almost certainly related to its structural complexity.

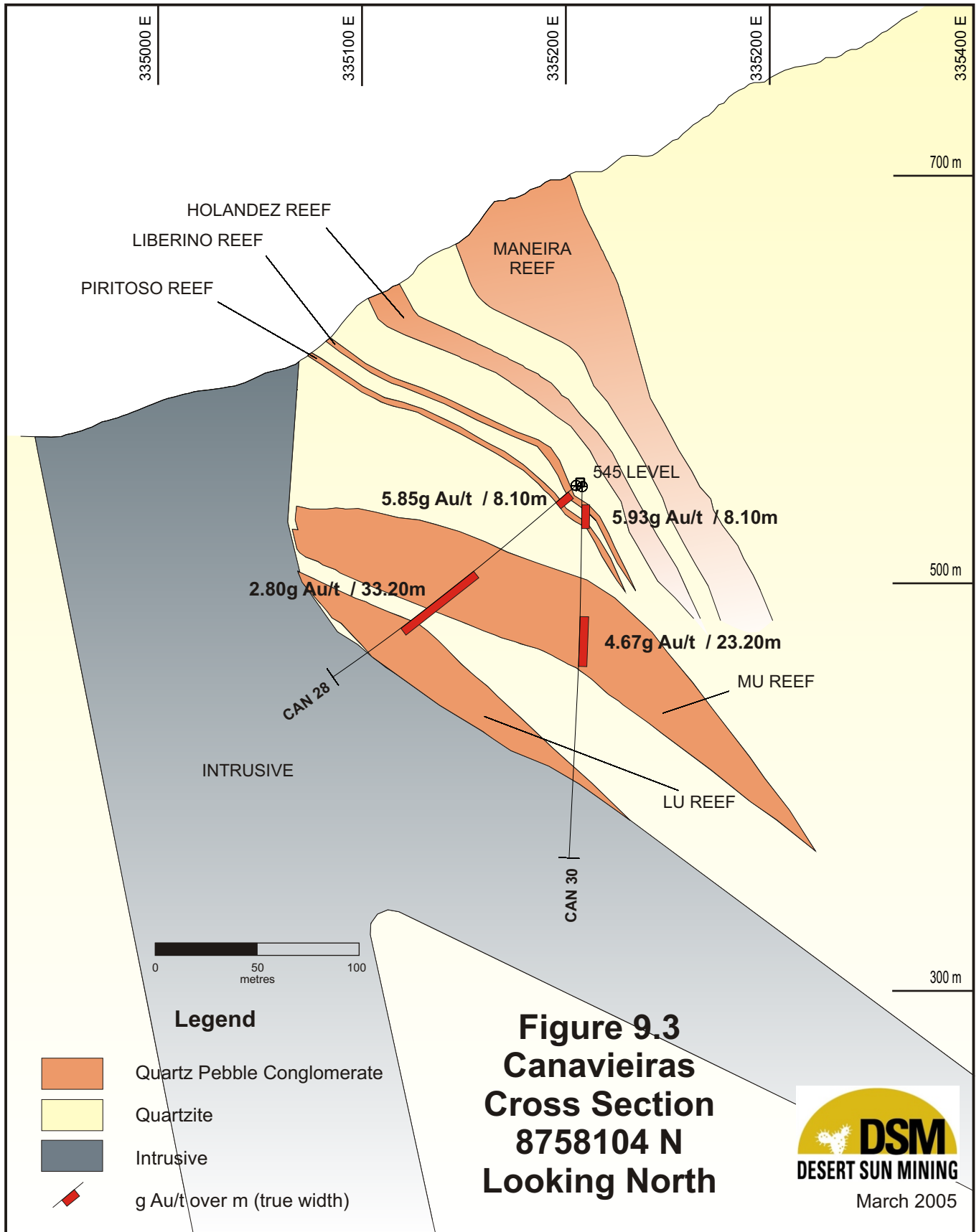


Figure 9.3
Canaveiras
Cross Section
8758104 N
Looking North





10.0 EXPLORATION

10.1 JMC EXPLORATION

Anglo American conducted several decades of extensive exploration work on the Serra do Córrego Formation, principally in the area of the Itapicurú, João Belo and Canavieiras mines, resulting in the discovery of these deposits. Once the mines were discovered however, regional exploration of the Serra do Jacobina was limited.

William completed a limited exploration program in 1997 to search for depth extensions to the Canavieiras mine and southerly extensions to the João Belo mine. The results of this program are discussed in Sections 7, 8, 9 in this report and in Section 19 of DSM's previously filed Technical Report entitled "A Review of The Exploration Potential of, and A Proposed Exploration Program For, The Jacobina Property, Bahia State, Brazil" (Hennessey, 2002).

Except for work by garimpeiros, most of the belt of exposure for the Serra do Córrego Formation remains relatively unexplored. DSM has been carrying out systematic exploration of the Jacobina property since September 2002. In late 2003, as a result of positive results, the exploration program was substantially increased. The following sections summarize results of the exploration programs in 2002, 2003 and 2004. The discussion of the results in each of the major target zones discussed in Section 10.4 "2004 Exploration Program Results" incorporate results of the 2002 and 2003 program and therefore these are not discussed separately. Figure 10.1 shows the locations of the major target areas in the Jacobina mine area discussed in the following sections.

Assaying for the programs has been carried out by Lakefield Geosol, an ISO 9000-2001 certified laboratory based in Brazil, using fire assay on 50-g pulps. Check assaying was routinely carried out, by ALS Chemex in Vancouver, on 10% of sample pulps and 5% of sample rejects. External reference standards are also routinely added to monitor the quality of analyses by the laboratories. Security is maintained at the core logging and sampling facility. Dr. William N. Pearson, P.Geo., is DSM's QP, as defined under NI 43-101, responsible for the scientific and technical work on the programs and has regularly visited the site from 2002 to the present.

10.2 PHASE I (2002) EXPLORATION PROGRAM

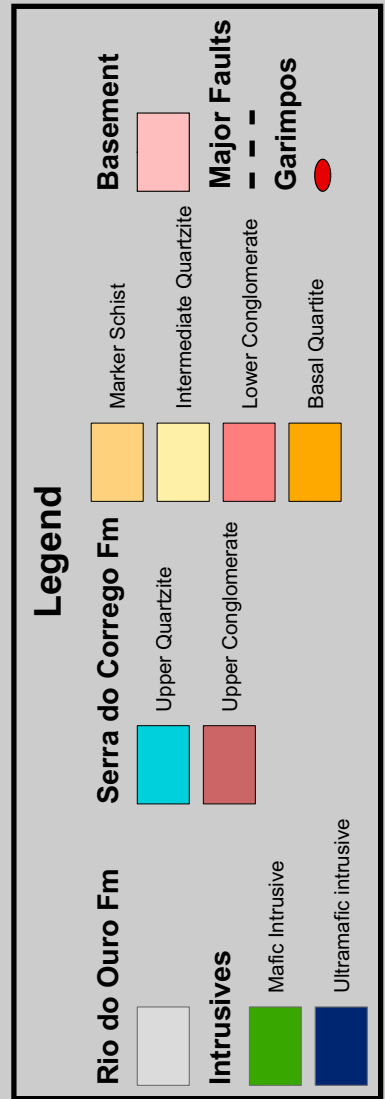
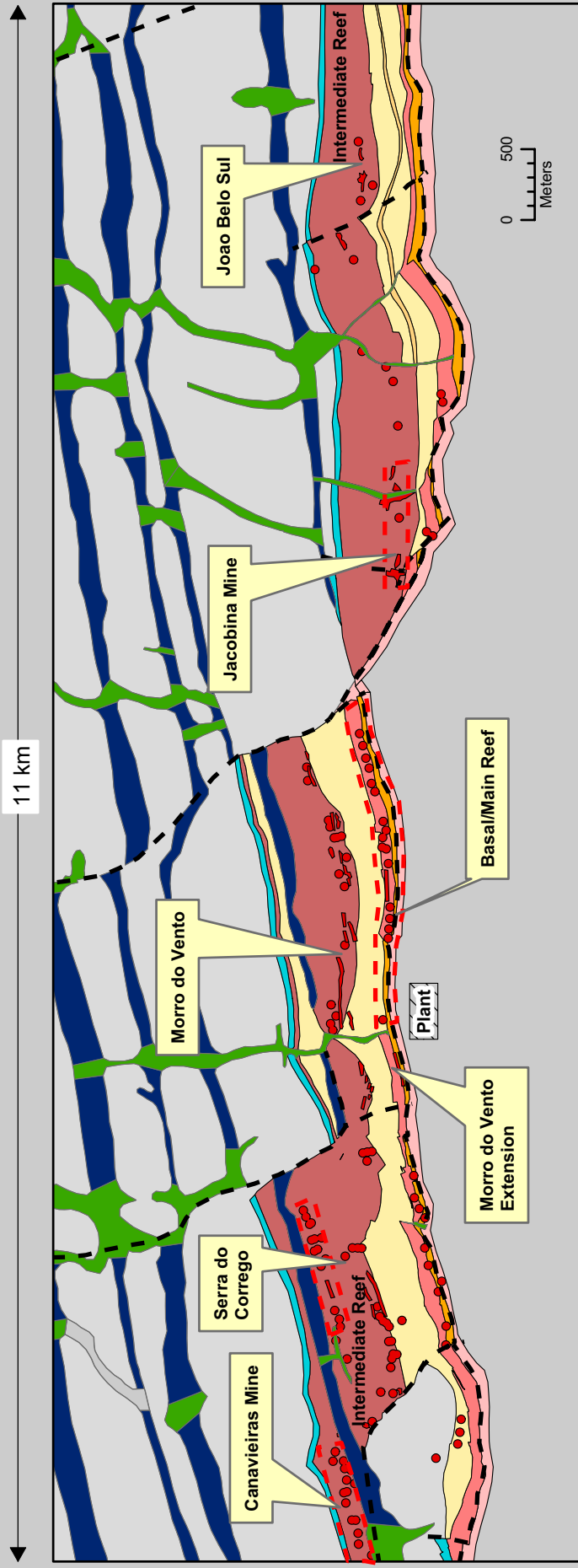
The results of DSM's Phase I exploration program are described in Hennessey (2003a) a Technical Report which is available on SEDAR (www.sedar.com). The Phase I exploration drill program consisted primarily of 12 NQ-sized (47.6 mm core) diamond drill holes totalling 2,245 m however, additional work included a regional exploration program using remote sensing imagery, analysis of airborne geophysical data, geological data compilation using GIS (geographic information system software), and a program of prospecting, sampling and mapping using garimpeiros. Total expenditures on the Phase I program were US\$500,000.

10.3 PHASE II (2003) EXPLORATION PROGRAM



The Phase II (2003) exploration program commenced in March, 2003 and included 8,988m of diamond drilling in 75 NQ-sized (47.6 mm core) holes, induced polarization (IP) geophysical surveys and

Figure 10.1
Jacobina Mine Area Geology
With Targets And Major Zones





continuation of the regional exploration program. The bulk of the drilling in this program tested the Serra do Córrego, Morro do Vento and Joao Belo Sul areas. The budget for the program was \$US1.5 million. Upon completion of this work in September 2003 and the Feasibility study, DSM earned a 51% interest in the Jacobina property and triggered its option to acquire the remaining 49% to own a 100% interest in the property.

10.4 2004 EXPLORATION PROGRAM

10.4.1 Jacobina Mine Area

In 2004, the program was substantially expanded with a total of 28,866m of NQ diamond drilling in 125 holes was completed. The prime target areas drilled were Morro do Vento, Joao Belo Norte, Joao Belo Sul and Canavieiras as shown in Figure 10.1. Included in this total was 2,000m of diamond drilling completed in the northern area of the Bahia gold belt property to test several targets outlined by geological mapping, sampling, soil geochemical surveys and induced polarization surveys.

Table 10.2 lists the number of holes and total meterage drilled for each of the major target areas from September 2002 to December 2004 inclusive. Results of the drilling in the Jacobina mine area is discussed in Section 11 below. Drilling in targets in the Bahia Gold Belt excluding the Jacobina mine area, are discussed in section 10.3.2 immediately following.

Table 10.2
TOTAL DRILLED BY DSM - From Sep 2002 to Dec 2004

AREA	Total Drilled
Canavieiras CAN	6,589.46
Rio do Coxo COX	189.18
João Belo JBA	12,221.35
Morro do Cuzcus MCZ	2,119.90
Morro do Vento MVT	13,599.05
Serra do Córrego SCO	2,779.54
TOTAL	37,498.48

10.4.2 Exploration program, Bahia Gold Belt (excluding Jacobina Mine area)

DSM holds property in the Bahia Gold Belt totalling 134,160 ha (see Section 4.0) and essentially controls the entire Bahia Gold Belt which extends for some 155km along strike in a north-south direction.

In 2004 DSM carried out a program of regional and detailed geological mapping, prospecting, and rock and soil geochemical sampling that has identified four major target areas across the belt outside of the Jacobina mine area. These target areas, from north to south are:

- Gold-bearing quartz veins, stockworks and extensive silicified zones in a thick package of fuchsite-bearing, locally oxidized (after pyrite) quartzites and metaconglomerates in the Pindobaçu -Fumaça area which may be the northern and separate extension of the Serra do Córrego Formation. Ultramafic dykes and sills emplaced in these sediments

also host gold-bearing pyritic quartz veins. This target zone, which extends along strike for about 21 km from Pindobaçu, a small town located 55 km north-northeast of Jacobina, is close to a major fault contact zone with the Archean Mundo Novo greenstone belt. Zones of silicification with pyrite are also present within these older metavolcanic and metasedimentary rocks indicating that the mineralizing system may be very extensive.

- Targets in the “Pindobaçu Outlier”, which extends for 23km along strike starting about 25 km north-northeast of Jacobina. Gold mineralization occurs in steeply dipping quartz veins and associated hydrothermal alteration (silicification, sericitization, chloritization and pyritization) in fine-grained quartzites and meta-pelites (andalusite schists);
- The Maravilha Fault zone which extends for 60 km along strike northwards from the Rio Coxo garimpo 4km east of Jacobina. There are a large number of gold occurrences associated with this structure in shallow west dipping shear zones in Rio do Ouro quartzites;
- Gold-bearing quartz pebble conglomerate of the Serra do Córrego Formation extension that extends for 45km along strike north from the town of Jacobina. This formation hosts the mineral resources at the Jacobina mine area to the south.

In addition to the work sited above, Fugro-LASA-Geomag was contracted by DSM to complete an induced polarization (IP) survey over a number of targets identified in these major areas. Results of this survey along with soil and rock chip sampling results and detailed geological mapping were used to outline drill targets. A drilling program totaling 2,000m to test principally the Pindobaçu-Fumaça area was completed in late 2004.

Figure 10.2 shows the geology of the Bahia Gold Belt with locations of gold deposits and occurrences as well as principal target areas where work was completed in 2004. The following provides a summary of the major target areas identified and results of the 2004 drilling program.

Pindobaçu

The Pindobaçu target is located 50km due north of Jacobina and 2km west of the town of Pindobaçu. At Pindobaçu, there are a number of active garimpos on a small north-south hill, locally known as Barroco hill. Geologically, there are three major tectono-stratigraphic domains in the target area:

- Eastern Domain - Saúde Complex to the east comprised of fine-grained garnet-biotite gneiss;
- Central Domain - Mundo Novo Greenstone Belt which is a succession of submarine metabasalts, greywackes with conglomerate horizons, pyrite-bearing graphic metapelites, banded iron formation and cherts; and
- Western Domain – Paleoproterozoic Jacobina Group specifically the Serra da Paciência Formation which is made up of fine-to coarse-greenish grey fuchsitic/sericitic quartzites with minor metaconglomerate lenses and fuchsite or sericite schists.

The boundaries between these domains are marked by major north-south trending faults of the regional Pindobaçu-Itaitú Fault system.



The Pindobaçu (Barrocão) is the main gold occurrence and corresponds approximately to a 1,200m long by 300m wide hill where gold has been detected at surface between elevations 540m and 680m for 1,000m in strike length. Gold is fine to locally coarse-grained and occurs associated with fine grained pyrite or goethite, tourmaline and fuchsite related to quartz veins along low-angle thrust faults, high-angle reverse faults and fractures. The host rocks are metagraywacke, banded iron formation and metachert of the Mundo Novo

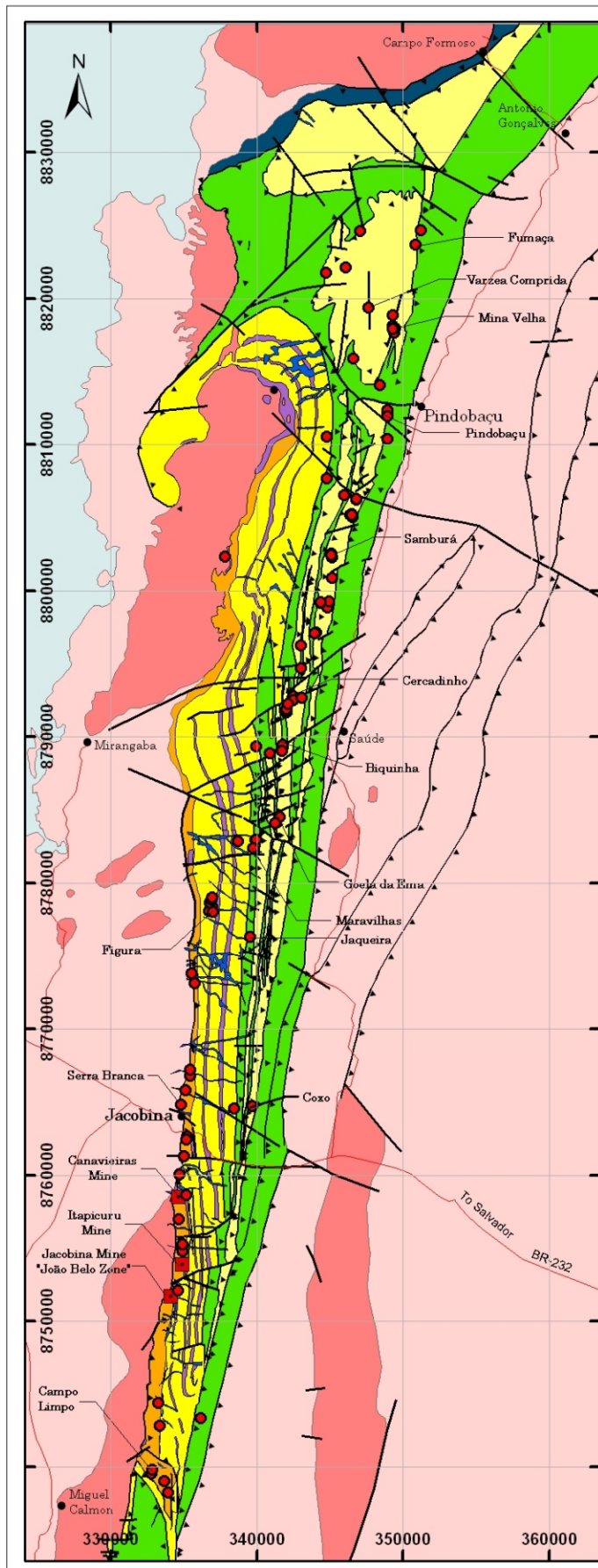


Figure 10.2 - Distribution of Gold in the Bahia Gold Belt

Legend

Mesoproterozoic

Sedimentary Cover



Paleoproterozoic

Intrusive Rocks

- Mafic Dikes
- Granitoids
- Ultramafic Dikes & Sills

Jacobina Group

- Serra da Paciência Formation
- Rio do Ouro Formation
- Serra do Córrego Formation

Campo Formoso Mafic-ultramafic Complex



Archean

- Mundo Novo Greenstone Belt
- Basement

- Thrust-fault
- Normal Fault
- Normal Contact
- Cities and villages
- Paved roads
- Gold Mine
- Gold occurrence



Location Map



March 2005



Formation and strongly silicified and fuchsitic, fine to coarse-grained quartzite with minor metaconglomerates lenses of the Jacobina Group (Serra da Paciencia Formation)

Montana Minerals is reported to have investigated this gold mineralization during the mid-1980's by trenching and shallow diamond drilling. After Montana, a number of garimpeiros starting mining some of the mineralized outcrops and carried out shallow underground mining, an activity that is locally and currently underway.

Only partial information on the results of the Montana work is available from a report filed with the Departamento Nacional de Produção Mineral (DNPM). Trenching and pitting by Montana was reported to outline a N10°E trending mineralized zone 18 metres thick with an average grade of 1.91 g Au/t. According to the DNPM report, Montana completed 18 shallow diamond drill holes of which only partial results are included in the report from which samples from 13 of these holes were selected for metallurgical testing. The head grade of the composite of core samples was reported to be 4.52 g Au/t with recovery after a 30 day bottle roll test of 82.1%.

Geological mapping, IP surveys and rock/soil geochemical surveys by DSM indicate that the hydrothermal alteration is much more extensive than indicated by the previous work. The zone has been traced for at least 3.2km along strike and it probably extends a further 10km to the north to Fumaça. A three hole drill program totalling 450m was completed to test different areas of the alteration system:

Highlights of this drilling are as follows:

- Hole PB-1 intersected 7.20 g Au/t over 2.0 true width in a strongly altered satellite zone about 50m east of the Pindobaçu mineralized trend.
- Hole PB-2, collared 100m south of PB-1, intersected 5.46 g Au/t over 21.9m in the Pindobaçu mineralized trend; and
- Hole PB-3, collared 250m south of PB-2 intersected a very pyritic zone in strongly silicified quartzite which returned 1.46 g Au/t over a true width of 24.4m. This zone is deeper than that intersected by Hole PB-02 and was likely not intersected by the previous drilling.

Dr. Paul Karpeta, an expert on Precambrian conglomerate-hosted gold deposits from South Africa spent 10 days on the project in October 2004. He has worked extensively at both Witwatersrand and Tarkwa and considers the Pindobaçu mineralizations have geological similarities to that of the Damang deposit in the Tarkwa district of Ghana.

Fumaça

Fumaça, located 10km north of Pindobaçu is the likely northern extension of the Pindobaçu zone. Rock chip sampling across the Guiné garimpo adit at Fumaça returned 4.5 metres at 7.36 g/t Au including 0.30 metres grading 90.0 g/t Au and 0.30 metres at 6.68 g/t Au. This target was tested down-dip by DDH FN-01, which intersected a 55.0 metres thick, strongly silicified, greenish-grey metachert with hematite, fuchsite and pyrite dissemination in matrix and along fractures. Only low grade gold values were intersected, however, faulting may have prevented the hole from actually intersecting the down dip extension of the zone in the garimpo.



DDH FN-02A was drilled in the southern portion of the Fumaça Target to investigate a gold anomalous trend in soil (high value of 251 ppb Au) with a coincident IP chargeability anomaly. This hole intersected 0.72 g Au/t over 10.1m true width in strongly silicified and weathered quartz-sericite schist and metagraywackes, locally conglomeratic. This hole, which was drilled in an area that is completely covered with no outcrop, confirms the effectiveness of soil geochemistry and IP to outline mineralization.

FN-3 was drilled to set a second coincident soil and IP anomaly but did not return any significant gold values although altered sediments of the Jacobina group were intersected. Assay results from Hole FN-4 which tested another coincident anomaly south of the Guiné garimpo are pending.

Agua Branca

The Agua Branca target is located 24 km north/northeast of Pindobaçu. The area is underlain by quartzites, phyllites and metachert/banded iron formation of the Mundo Novo Greenstone Belt. CPRM reported a soil geochemical anomaly of 5.6ppm (5.6 g Au/t) in a survey completed in 1978. A soil survey by DSM outlined a northeast-southwest oriented Au anomaly 400m long and open along strike in both directions. Values ranged from 28 to 212 ppb Au. This trend is also outlined by Cr, Cu, Fe, V and Zn. A second weaker soil anomaly about 350m long with a peak value of 66ppb Au is located about 600m east of the stronger anomaly.

Entry Points

Dr. Paul Karpeta's indicated to DSM on his October 2004 trip that the Witwatersrand Basin in South Africa has six recognized entry points and the Tarkwa Basin in Ghana, four. Entry points are the areas of a basin in which major river systems carry the majority of detritus that is deposited into the basin. High energy sediments especially conglomerates are most abundant in the entry points of basins.

At Jacobina, on the other hand, only one entry point is referred to in the literature and that is in the Jacobina mine area. However, it is highly unlikely that a basin as extensive as that which formed the Jacobina Group (some 200km) and which is of a similar order of magnitude to the Tarkwa Basin, would have only one entry point. If one or more entry points can be identified in the Jacobina Basin, these would be highly prospective areas for conglomerate-hosted gold mineralization.

Northern Extension of Serra do Córrego Formation

Field work in 2004 verified that the Serra do Córrego Formation extends at least 45km north of Jacobina. One drill hole completed in 2004 confirmed the present of conglomerates with fuchsite alteration but did not return any significant values. Nevertheless, the entire area of the extension is marked by a similar stream sediment geochemical response to the Jacobina mine area in the south. The possibility of faulted slices of favourable conglomerate layers similar to that at Canavieiras also needs to be investigated.

Samburá/Biquinha/Cercadinho

These are group of prospects with extensive garimpos. At Samburá, about 50km north-northeast of Jacobina and 15km north of the town of Saúde, grab samples of pyrite-rich material returned values to 2.46 g Au/t. At Guardanapo, 900m north of Samburá, samples of narrow (1-2cm) quartz veins cutting andalusite-graphite-quartz schists, have returned high grade gold values of 15-30 g Au/t. One drill hole was completed at Samburá to test the complete section across the altered zone but no significant values were obtained.



At Biquinha, 3 km west of Saúde, gold mineralization occurs in quartz veins and veinlets filling tension fractures developed in andalusite schist. One drill hole tested the strongest part of a 600m long soil geochemical anomaly with a peak value of 2,758 ppb Au (2.76 g Au/t) but did not return any significant results.

At Cercadinho, located 5 km northwest of Saúde, gold occurs within an oxidized shear zone developed in the upper contact of a 2.0 metre wide thick immature metaconglomerate lens within a thick quartzite bed. An extensive garimpo, 150m long, and up to 6m deep has been developed on this structure. Assays of five composite samples from the waste pile assayed 8.53 g Au/t to 26.67 g Au/t. There are also extensive quartz vein stockworks in the quartzite to the east of the shear zone; however, chip samples taken across this stockwork did not return any significant values.

11.0 DRILLING

11.1 JMC

The original database, from which JMC estimated the mineral resources at the Jacobina project in 1998 (Hennessey 2002, 2003b) is comprised of two types of samples: drill core and chip/channel samples. Until the mid 1990's, the database was strictly a paper one with holes and sample information plotted on plan, section and longitudinal sectional projections. JMC partially computerized the database after acquisition by William. DSM later completed a detailed verification of all the old drill holes including the checking of original drill logs, assay certificates, survey data and maps and sections. All holes have now been verified and entered into the electronic database by DSM.

The drill holes in the JMC database are a mixture of BQ-sized (core diameter = 36.5 mm) and TT-sized (slightly smaller than BQ) core. The BQ core was drilled from company-owned surface exploration drill rigs and the TT core from underground.

All drill hole setups were marked up underground, in paint, by a surveyor. The markup included a foresight and backsight in addition to the hole number, inclination and hole length. Drill holes were stopped by the driller at the specified footage, but the drill was not moved to the next hole without the permission of the geological technician in charge, who inspected the core prior to moving.

In addition to drill hole logging and sampling, all development headings were mapped at 1:200 scale and sampled when in, or near, conglomerate. The mapping and chip channel sampling was plotted on plans and is available for interpretation purposes during resource estimation. The chip/channel sampling was also sometimes composited into pseudo drill holes for use in resource estimation.

There are 1,191 drill holes totalling 157,642 m of drilling in the DSM database for the Jacobina Mine area. A complete description of the drilling is not possible within the scope of this report. However, a summary of the drill holes available by mine or major exploration area is set out in Table 11.1 below. Table 11.1 also contains a summary of all drilling completed by DSM since acquisition of the project (excluding northern area drilling).

Table 11.1
SUMMARY OF DRILLING, JACOBINA MINE

Area	Holes in Data Base		Old Drill Holes		New DSM Drill Holes	
	Number of Holes	Length (m)	Number of Holes	Length (m)	Number of Holes	Length (m)
Campo Limpo (CLP)	9	1,744.23	9	1,744.23	0	0
Canaveiras (CAN)	152	17,919.73	107	11,330.27	45	6,589.46
Rio Coxo (COX)	2	189.18	0	0.00	2	189.18
João Belo Norte (JBA)	369	44,087.45	345	31,244.23	24	12,843.22
João Belo Sul (JBS)	10	1,890.28	10	1,890.28	0	0.00
Lagedo Preto (LGP)	22	3,724.47	22	3,724.47	0	0.00
Serra da Lagartixa (LGX)	1	740.42	1	740.42	0	0.00
Morro do Cuscuz (MCZ)	93	13,329.78	88	11,209.88	5	2,119.90
Morro da Viuva (MVA)	8	1,257.98	8	1,257.98	0	0.00



Morro do Vento (MVT)	410	55,717.88	330	42,118.83	80	13,599.05
Serra Branca (SBC)	7	2,050.71	7	2,050.71	0	0.00
Serra do Córrego (SCO)	109	14,990.06	85	12,210.52	24	2,779.54
TOTAL	1192	157642.17	1012	119,521.82	180	38,120.35

The total number of assay samples in the database is set out in Table 11.2 below.

Table 11.2
ASSAY SAMPLES IN DATABASE

Samples from Old Drill Holes	129,918
Samples from New Drill Holes - 2002	2,840
Samples from New Drill Holes - 2003	14,261
Samples from New Drill Holes - 2004	29,443
Total Samples in Data Base	176,462

11.2 DSM

All DSM drilling was conducted by contract diamond drillers using modern wireline surface drill rigs. The drills were aligned using foresights and backsights set up by DSM geologists. All holes were stopped under geological control to ensure that target horizons had been reached.

Several of the current DSM geological staff are former JMC employees. They are familiar with the local rock types, stratigraphic sequence, mineralization controls and rock codes previously used. Similar logging techniques and rock codes are being employed by DSM to allow for ease of use with the previous data. The lithologic codes were developed after extensive study by Anglo American geologists and sedimentologists. More extensive sampling is being performed however compared with historical sampling.

Logging was originally performed on paper and transferred to an Excel database. Gemcom was contracted to write a software entry program know as “Logger” for the electronic capture of data into a Gemcom format during logging. This program was tested and implemented in September 2003. The logging process is now fully automated with all data capture in the Logger program.

Summary results of the targets tested are provided below and shown in figures attached.

11.2.1 Drilling Results

Joao Belo Zone

Drilling on the Joao Belo zone in 2004 was very successful with a significant increase in indicated resources of 3,500,000 tonnes grading 2.48 g Au/t containing 280,000 ounces of gold as outlined in Section 17. The zone is open along strike to the south and at depth to at least the 0 elevation, which is 1,000m below the top of the Joao Belo hill. More drilling is also needed on the northern end to better define the mineralized zone there as problems with faulting and technical problems with drilling limited the success there. The upgraded Joao Belo model in Gemcom was completed in mid-December 2004. In addition, all historic channel sampling has been entered and the complete database including the new model was transferred to the DSM mine department in December 2004. Further exploration drilling from



Joao Belo will be done from underground using hanging wall cross cuts. Work on establishing cross cuts has already begun at the mine. The Exploration Department continues to provide technical support to the Mine Geological Department as required.

Significant results of drill holes in the Joao Belo Zone are shown in Table 11.3 below and in a vertical longitudinal section in Figure 11.1.

Table 11.3: Significant Drilling Results, Jacobina Mine (Joao Belo Zone)

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Depth Below 670 Adit Level** (m)	
						above	below
JBA-295	N 8751220	E 34445	EI 786				
dip - 73°	276.62	278.40	1.29	1.78	1.4		150
	376.96	380.27	1.09	3.31	2.6		245
	426.15	426.81	4.42	0.66	0.5		290
	486.87	488.31	2.20	1.44	1.1		340
NOTE: Hole caved before LMPC target reef intersected wedged as JBA-295D							
JBA-295D	N 8751220	E 34445	EI 786				
dip - 73°	485.52	487.82	2.01	2.30	1.8		350
	501.06	503.12	2.39	2.06	1.6		365
	541.88	544.34	1.76	2.46	1.9		405
	729.03	731.58	3.12	2.55	2.0		580
	755.83	768.32	1.23	12.49	9.6		605
JBA-298	N 8750874	E334406	EI 803				
dip - 69°	386.87	389.91	1.38	3.04	2.6		235
incl	527.37	550.25	2.12	22.88	19.9		385
incl	527.37	540.86	2.70	13.49	11.7		370
JBA-305	N8750944	E334413	EI 784				
dip - 61°	477.33	479.35	5.40	2.02	1.7		310
	498.23	522.36	2.30	24.13	20.8		350
incl	498.23	511.81	2.83	13.58	11.7		345
incl	518.87	522.36	3.86	3.49	3.0		355
	712.52	717.9	1.13	5.38	4.6		535
JBA-307	N 8750875	E334095	EI 1032				
dip - 77°	349.70	361.41	2.54	11.71	8.0	2	
incl	349.70	354.90	5.00	5.20	3.5	5	
	407.68	416.40	2.14	8.72	5.9		45
	441.38	445.90	2.49	4.52	3.1		73
	509.02	510.39	6.16	1.37	0.9		135
JBA-308	N8750674	E334427	EI 841				
dip - 58°	542.24	557.00	1.82	14.76	13.3		310
	542.24	551.91	2.12	9.67	8.7		305
	571.42	575.89	1.53	4.47	4.0		328

JBA-309	N 8750772	E334415	El 834				
dip - 69°	571.51	584.47	1.76	12.96	10.1	383	
incl	578.35	584.47	3.28	6.12	4.8	385	
JBA-310	N 8750823	E334096	El 1028				
dip - 47°	351.47	355.36	4.77	3.89	3.7	115	
JBA-311	N 8751158	E334426	El 799				
dip - 70°	482.00	483.47	7.29	1.47	1.1	330	
	496.31	505.13	1.71	8.82	6.9	344	
incl	501.45	505.13	2.12	3.68	2.9	350	
	546.86	550.43	3.17	3.57	2.8	390	
JBA-312	N 851075	E334095	El 1032				
dip - 87°	509.6	520.97	4.34	11.37	6.1	180	
		highs cut to 30g/t	3.61				
incl	516.1	520.97	9.48	4.87	2.6	180	
		highs cut to 30g/t	7.78				
	568.33	594.71	2.77	26.38	14.2	245	
JBA-313	N 8751370	E334427	El 741				
dip - 69°	415.60	420.36	1.33	4.76	3.7	325	

* all holes are NQ diamond drill core size

** depth calculated based on midpoint of intersection; 670m level is the main haulageway at Jacobina Mine

The Morro do Vento target area is located about 1.5 km from the processing plant and approximately 9 km from the town of Jacobina. The Intermediate reef package here is consistently about 60-70m wide and extends along the full 2km strike length with extensive garimpos (free miners workings). This target was identified as a result of drilling in the adjacent Morro do Vento Extension (Cuscuz) area in 2002 and compilation of historical drilling data. The results of an induced polarization survey completed in 2003 at Morro do Vento indicated that the mineralized horizon likely extended over 400 metres down dip into the valley.

At Morro do Vento, the Intermediate Reef package consists of quartz pebble conglomerate layers interbedded with quartzite that averages about 40 to 70 metres in width and extends along strike for 2 km. This package had been previously explored by 20 wide-spaced diamond drill holes over the 2-km strike length as well as in limited underground workings. Conglomerates comprise approximately 25% to 40% of the package.

The former Itapicurú mine had workings in the Morro do Vento and Morro do Vento Extension (Cuscuz) areas although most of the previous production came from the Basal and Main Reefs. These are stratigraphically 350 m and 300 m, respectively, below the Intermediate Reefs. Previous mining and exploration focused on the high-grade zones in these reefs which were mined in stopes that were typically 2 to 2.5 m wide. Past production from the Intermediate Reefs was 413,974 tonnes grading 3.87 g/t Au from one conglomerate layer 1.9 m thick at the north end of the area.

The package is exposed on the east flank of the Morro do Vento hill. The slope of the hill is a dip slope averaging about 55° E dip. The reefs extend from the top of the hill, at elevation 1,000 m, to the valley, at elevation 630 m, where they are truncated by a steeply dipping mafic intrusive. There are numerous garimpos along the entire strike. The largest garimpo on the north end extends for 230 m along strike and is 10 to 20 m wide. Because of the geometry of the zone, and its location on the flank of a hill, it is believed that the zone could potentially be open pit mined with a relatively low waste rock stripping ratio. Alternatively, ready access from existing underground workings is also a potential option for possible future development.

In 2003-2004, DSM drilled at total of 14,000m in 80 drill holes which outlined a new higher grade indicated resource of 5,000,000 tonnes grading 2.07 g Au/t containing 350,000 ounces of gold above the 800 level as outlined in Section 17 below. The potential open pit resource estimate, which will include this higher grade underground resource, is in progress and is expected to be completed in March 2005. Both underground and open pit scenarios are being looked at in a preliminary economic evaluation which is being done by the DSM Mining Development Group with support from SRK Consulting. Metallurgical tests using a Falcon and column leach tests are also in progress. This project is now identified as a development project and has been budgeted separately from exploration as outlined in Section 20. Further drilling below the 800 level will need to be done from underground.

Highlights of the 2003-2004 drilling are as follows:

- Hole MVT-289, collared at the south end of the target area, intersected 4.42 g Au/t over 11.8 metres true width (4.12 g Au/t with the one high assay cut to 30 g Au/t) from 161.23 to 181.64 metres. A second intersection from 201.76 to 228.89 metres returned 1.39 g Au/t over 15.7 metres true width including 2.81 g Au/t over 6.1 metres true width.
- Hole MVT-290 was collared 100 metres north of MVT-289 beneath an area where there are no garimpos (free miner workings) on surface, returned 2.92 g Au/t over 4.9 metres

true width.

- Hole MVT-291, collared about 500m north of MVT-289 under an area with extensive garimpos, returned 1.48 g Au/t over 44.3 metres true width including 2.58 g Au/t over 17.1 m true width.
- Hole MVT-293 which intersected 0.81 grams gold per tonne (g Au/t) over a true width of 49.5m including 1.35 g Au/t over a true width of 13.5m and MVT-295 on the same section, 50m vertically below, which intersected 0.81 g Au/t over a true width of 57.1m including 1.04 g Au/t over 23.9m.
- Hole MVT-297, collared 250m north of these holes intersected 0.96 g Au/t over a true width of 48.0m including 1.44 g Au/t over a true width of 27.3m.
- Hole MVT-301 drilled 100m north and at the same elevation as MVT-291, intersected 0.74 g Au/t over 62.0m true width including 1.34 g Au/t over a 12.9m true width.
- Hole MVT-300 which intersected 0.84 grams gold per tonne (g Au/t) over a true width of 63.0m including 1.99 g Au/t over a true width of 11.1m and 1.37 g Au/t over a true width of 12.6m.
- Hole MVT-303 intersected 0.80 g Au/t over a true width of 66.0m including 3.13 g Au/t over 4.1m and 2.59 g Au/t over a true width of 8.5m.
- Hole MVT-305 intersected 0.83 over 70.6m true width including 3.22 g Au/t over a true width of 8.1m and 1.49 g Au/t over a true width of 12.2m.
- Hole MVT-309 intersected 0.66 g Au/t over 74.6m true width including 1.39 g Au/t over a 17.6m true width and 2.45 g Au/t over 5.5m true width. Collectively holes MVT -300, -303,-305 and -309 cover a strike length of about 300m.
- MVT-310 which intersected 0.96 grams gold per tonne (g Au/t) over a true width of 50.8m including 3.00 g Au/t over a true width of 10.9m (2.65 g Au/t cut to 30g);
- MVT-312 which returned 0.79 g Au/t over 61.1m including higher grade zones of 5.54 g Au/t over 2.9m and 1.36 g Au/t over 12.1m true width; and
- MVT-313, 50m vertically below MVT-291, which intersected 0.94 g Au/t over a true width 41.3m
- MVT-314 intersected 0.92 grams gold per tonne (g Au/t) over a true width of 75.8m including 4.16 g Au/t over a true width of 6.9m and 2.95 g Au/t over a true width of 8.6m.
- MVT-335 which intersected 1.01 grams gold per tonne (g Au/t) over a true width of 54.3m including higher grade intersections of 3.10 g Au/t over a true width of 6.3m and 2.17 g Au/t over a true width of 4.17m; and
- MVT-324 which returned 0.79 g Au/t over a true width of 40.5m including 2.42 over a true width of 8.1m g Au/t. Results from MVT-322 to MVT-324 fill in a major gap in previously drilling in the northern part of the target zone and indicate that the mineralized zones are continuous through that area.
- MVT-316 which intersected 0.76 g Au/t over a true width of 73.5m including higher grade intersections of 2.87 g Au/t over 7.4m true width and 2.33 g Au/t over 6.8m true

width;

- MVT-335 which intersected 1.01 grams gold per tonne (g Au/t) over a true width of 54.3m including a higher grade intersection of 2.65 g Au/t over a true width of 8.6m;
- MVT-336 which returned 0.71 g Au/t over a true width of 67.2m including higher grade intersections of 3.41 g Au/t over a true width of 4.2m and 4.06 g Au/t over a true width of 1.5m.
- MVT-339 which intersected 1.03 grams gold per tonne (g Au/t) over a true width of 61.8m including a higher grade intersection of 2.27 g Au/t over a true width of 9.8m;
- MVT-340 which intersected 0.82 g Au/t over a true width of 44.2m including 2.30 g Au/t over 7.5m true width
- MVT-347 which returned 0.95 g Au/t over a true width of 58.5m including 2.30 g Au/t over a true width of 20.7m;
- MVT-348 which intersected 0.92 g Au/t over a true width of 39.2m including a higher grade intersection of 3.55 g Au/t over 7.5m true width; and
- MVT-353 which intersected 0.93 g Au/t over a true width of 80.5m including a higher grade intersection of 2.04 g Au/t over 11.0m true width; and
- MVT-346 which returned 0.88 g Au/t over a true width of 65.9m including 2.93 g Au/t over a true width of 10.2m;
- MVT-357 which intersected 0.81 g Au/t over a true width of 46.7m including 1.67 g Au/t over 10.4m true width

Significant results of drill holes in Morro do Vento including the highlights noted above are shown in Table 11.4 below. Results of sampling from historical holes are shown in Table 11.5. The area in which the bulk of drilling was completed above the 800 level is shown in a vertical longitudinal section in Figure 11.2.

Table 11.4: Significant Drilling Results, Morro do Vento

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Depth Below Surface** (m)
MORRO DO VENTO						
MVT-289	N8753232	E334855	E1 935			
dip -61 deg.	161.23	181.64	4.42	20.41	11.2	80
MVT-290	N8753277	E334844	E1 945			
dip -63 deg.	142.46	148.06	2.92	5.60	4.9	90
MVT-291	N8753640	E334709	E1 970			
dip -70 deg.	35.46	38.25	1.42	2.79	2.3	40
	51.32	58.95	1.73	7.63	6.3	58
	74.60	128.64	1.48	54.04	44.3	106
Incl.	74.60	95.48	2.58	20.88	17.1	90



MVT-293	N8753571	E334701	EI 977			
dip -33 deg.	18.76	68.27	0.81	49.51	49.5	30
Incl.	54.75	68.27	1.35	13.52	13.5	35
MVT-294	N8753660	E334694	EI 970			
dip -46 deg.	78.17	85.40	4.49	7.23	7.2	60
MVT-295	N8753572	E334703	EI 977			
dip -76 deg.	28.14	109.73	0.81	81.59	57.1	69
Incl.	69.87	103.94	1.04	34.07	23.9	85
MVT-296	N8753906	E334674	EI 988			
dip -32 deg.	27.90	82.30	0.57	54.40	54.4	60
MVT-297	N8753827	E334669	EI 985			
dip -76 deg.	14.35	62.35	0.96	48.00	48.0	25
Incl.	35.03	62.35	1.44	27.32	27.3	35
MVT-298	N8753827	E334671	EI 985			
dip -32 deg.	34.69	40.86	0.96	6.17	4.2	30
MVT-299	N8753986	E334635	EI 999			
dip -32 deg.	11.09	68.15	0.64	57.06	55.9	32
Incl.	40.07	47.11	1.76	7.04	6.9	40
MVT-300	N8753906	E334675	EI 988			
dip -68 deg.	37.19	112.23	0.84	75.04	63.0	80
Incl.	37.19	39.89	2.18	2.70	2.3	32
Incl.	61.83	76.87	1.37	15.04	12.6	100
Incl.	99.07	112.23	1.99	13.16	11.1	134
MVT-301	N8753725	E334722	EI973			
dip -59 deg.	41.37	112.61	0.74	71.24	62.0	72
Incl.	80.97	95.83	1.34	14.86	12.9	82
MVT-302	N8754057	E334655	EI 995			
dip -87 deg.	38.27	168.05	0.48	129.78	68.8	103
Incl.	56.97	61.07	1.90	4.10	2.2	62
Incl.	105.79	115.20	1.31	9.41	5.0	110
Incl.	152.74	161.20	2.04	8.46	4.5	160
MVT-303	N8754000	E334653	EI 995			
dip -71 deg.	29.84	115.53	0.80	85.69	66.0	90
Incl.	29.84	35.14	3.13	5.30	4.1	31
Incl.	104.53	115.53	2.59	11.00	8.5	120
MVT-304	N8753728	E334688	EI 974			
dip -45 deg.	16.65	75.32	0.49	58.67	57.5	35
Incl.	23.64	31.37	1.37	7.73	7.6	21
Incl.	37.64	40.60	2.01	2.96	2.9	32



MVT-305	N8754057	E334655	EI 995			
dip -59 deg.	21.12	97.98	0.83	76.86	70.7	60
Incl.	32.75	36.53	1.45	3.78	3.5	34
Incl.	58.63	71.84	1.49	13.21	12.2	62
Incl.	89.17	97.98	3.22	8.81	8.1	92
MVT-306	N8753951	E334669	EI 990			
dip -89 deg.	31.65	124.40	0.43	92.75	53.8	77
Incl.	53.20	57.86	1.00	4.66	2.7	55
Incl.	87.35	92.10	2.50	4.75	2.8	90
MVT-307	N8754100	E334638	EI 998			
dip -55	66.57	70.08	0.78	3.51	3.2	62
	Faulted					
MVT-308	N8754138	E334673	EI 968			
dip -57	59.55	66.19	1.00	6.64	6.2	70
	Faulted					
MVT-309	N8754204	E334653	EI 969			
dip -61 deg.	2.50	85.38	0.66	82.88	74.6	48
Incl.	43.17	62.71	1.39	19.54	17.6	53
Incl.	79.31	85.38	2.45	6.07	5.5	88
MVT-310	N8754268	E334666	EI 951			
dip -58	3.60	58.82	0.96	55.22	50.8	45
Incl.	25.96	27.5	4.88	1.54	1.4	30
Incl.	47.00	58.82	3.00	11.82	10.9	60
			2.65	cut to 30 g/t)		
MVT-311	N8754407	E334712	EI 920			
dip -54	50.53	55.31	1.09	4.78	4.6	55
	72.12	78.61	1.35	6.49	6.2	80
MVT-312	N8753906	E334676	EI 987			
dip -80	34.85	191.62	0.79	156.77	61.1	100
	105.74	136.74	1.36	31.00	12.1	108
Incl.	170.1	177.63	5.54	7.53	2.9	150
MVT-313	N8753639	E334710	EI 970			
dip -90	37.87	105.54	0.94	67.67	41.3	72
	37.87	44.49	1.78	6.62	4.0	41
	65.57	72.55	3.24	6.98	4.3	69
	93.06	105.54	1.33	12.48	7.6	99
MVT-314	N8753538	E334754	EI 973			
dip -73	63.72	157.25	0.92	93.53	75.8	120
Incl.	82.29	90.80	4.16	8.51	6.9	90
Incl.	113.19	123.85	2.95	10.66	8.6	122
MVT-315	N8754012	E334676	EI 983			
dip -85	46.4	172.38	0.65	125.98	63.0	109



	Incl.	119.88	132.29	1.46	12.41	6.2	125
	Incl.	154.82	172.38	2.13	17.56	8.8	163
MVT316		N8754099	E334754	EI 915			
dip -65		52.05	138.54	0.76	86.49	73.5	110
	incl	65.28	69.86	1.73	4.58	3.9	80
	incl	98.20	106.15	2.33	7.95	6.8	120
	incl	126.12	134.88	2.87	8.76	7.4	160
MVT-317		N8754270	E334723	EI 928			
dip -89		77.96	167.39	0.42	89.43	52.8	122
	Incl.	127.09	141.50	2.09	14.41	8.5	134
MVT-319		N8753725	E334733	EI 975			
dip -84		69.97	150.84	0.72	80.87	52.6	110
	Incl.	78.50	90.11	1.77	11.61	7.5	84
	Incl.	104.43	117.55	1.67	13.12	8.5	110
	Incl.	144.24	150.84	1.20	6.60	4.3	148
MVT-320		N8753710	E334707	EI 973			
dip -47		25.59	78.15	0.65	52.56	51.5	36
	Incl.	25.59	30.94	2.34	5.35	5.2	16
	Incl.	40.73	46.98	1.64	6.25	6.1	28
MVT-321		N8753867	E334667	EI 990			
dip -72		46.21	219.54	0.52	173.33	50.3	110
	Incl.	61.30	74.30	1.37	13.00	3.8	50
	Incl.	108.92	119.10	3.67	10.18	3.0	90
MVT-322		N8754375	E334705	EI 922			
dip - 83		67.99	171.33	0.40	103.34	72.3	110
	incl	78.80	84.62	2.39	5.82	4.1	74
	incl	161.09	163.30	4.55	2.21	1.5	144
	incl	197.39	205.05	2.75	7.66	5.4	174
MVT-323		N8754407	E334712	EI 922			
dip - 75		57.97	156.57	0.56	98.60	54.2	92
	incl	57.97	61.06	1.39	3.09	1.7	50
	incl	67.32	77.25	1.68	9.93	5.5	60
	incl	120.10	130.61	1.40	10.51	5.8	108
MVT-324		N8754409	E334715	EI 922			
dip -38		99.91	215.76	0.79	115.85	40.5	45
	incl	99.91	107.55	2.12	7.64	2.7	34
	incl	123.94	129.28	1.92	5.34	1.9	32
	incl	160.59	183.64	2.42	23.05	8.1	40
MVT-325		N8754623	E334906	EI 675			
dip +8°		60.18	69.43	1.14	9.25	6.7	45
		Faulted					



MVT 326	N 8754690	E334900	EI 672				
dip +8°	No significant values						
MVT 327	N 8754818	E 334859	EI 671				
dip +23°	51.09	52.03	4.82	0.94	0.4		25
incl.	51.09	58.85	1.02	7.76	3.5		27
MVT 328	N 8754768	E 334879	EI 662				
dip +18°	45.55	47.65	1.63	2.1	1.1		33
MVT 329	N8753233	E334853	EI 935				
dip - 81°	172.00	247.2	0.78	75.20	33.1		170
incl	175.13	181.86	3.39	6.73	3.0		140
incl	220.97	233.9	1.82	12.93	5.7		180
incl	243.81	247.2	1.86	3.39	1.5		200
MVT-330	N753259	E334848	EI 942				
dip -86°	157.69	272.41	0.40	114.72	72.3		214
incl	187.67	191.7	1.22	4.03	2.5		193
incl	224.89	240.13	1.41	15.24	9.6		232
MVT-333	N8753950	E334636	EI 991				
dip - 55°	5.81	74.95	0.58	69.14	69.1		36
incl	46.93	48.40	5.48	1.47	1.5		40
MVT 334	N8754379	E334702	EI 927				
dip - 42°	61.98	66.43	2.80	4.45	2.8		50
MVT-335	N8753634	E334710	EI 971				
dip - 82°	35.23	122.85	1.01	87.62	54.3		78
incl	35.23	38.63	2.17	3.40	2.1		40
incl	50.72	55.80	2.11	5.08	3.1		47
incl	83.43	93.67	3.10	10.24	6.3		88
incl	115.22	122.85	2.17	7.63	4.7		118
MVT336	N875363	E334709	EI 971				
dip - 55°	26.78	101.44	0.71	74.66	67.2		60
incl	26.78	31.43	3.41	4.65	4.2		30
incl	41.67	46.38	1.45	4.71	4.2		42
incl	60.45	66.00	1.05	5.55	5.0		60
incl	97.72	99.38	4.06	1.66	1.5		86
MVT337	N8753610	E334707	EI 973				
dip - 83°	33.56	120.10	0.60	86.54	58.0		70
incl	33.56	35.84	1.37	2.28	1.5		25
incl	49.77	51.81	2.22	2.04	1.4		45
incl	71.87	79.90	1.00	8.03	5.4		73
incl	100.64	120.10	1.24	19.46	13.0		105



MVT338	N8753740	E334687	EI 980			
dip - 70°	98.95	104.46	2.64	5.51	1.9	85
	155.36	161.11	5.12	5.75	2.0	128
	155.36	178.50	1.46	23.14	7.9	134
MVT339	N8753685	E334718	EI 973			
dip - 68°	36.67	110.27	1.03	73.60	61.8	72
incl	36.67	39.00	2.18	2.33	2.0	40
incl	54.19	65.90	2.27	11.71	9.8	60
incl	83.22	97.12	1.76	13.90	11.7	90
incl	105.65	110.27	3.06	4.62	3.9	120
MVT340	N8753684	E334722	EI 972			
dip - 82°	94.25	186.40	0.82	92.15	44.2	130
incl	94.25	105.39	1.73	11.14	5.3	92
incl	127.15	142.73	2.30	15.58	7.5	130
incl	184.71	196.26	1.07	11.55	5.5	180
MVT 341	N 8753489	E 334750	EI 989			
dip -71°	353.76	359.80	2.65	6.04	6.0	230
incl.	356.54	359.80	4.01	3.26	3.3	244
MVT 342	N8754319	E334662	EI 964			
dip - 73°	0.80	1.87	2.12	1.07	0.8	2
	31.32	34.54	0.70	3.22	2.4	33
MVT343	N8753280	E334849	EI 974			
dip - 79°	no significant values					
MVT344	N8754236	E334676	EI 968			
dip - 87°	16.26	19.67	1.21	3.41	1.5	15
	50.49	51.65	1.47	1.16	0.5	50
	77.44	87.60	0.65	10.16	4.6	77
MVT 345	N8753866	E334665	EI 991			
dip - 36°	16.65	90.80	0.62	74.15	74.2	40
incl	42.51	44.67	1.64	2.16	2.2	35
incl	51.16	61.17	1.92	10.01	10.0	45
incl	80.24	90.80	1.44	10.56	10.6	60
MVT 346	N 8753585	E 334742	EI 966			
dip -88°	74.60	173.03	0.88	98.43	65.9	130
incl.	74.60	77.89	4.12	3.29	2.2	80
incl.	114.62	129.80	2.93	15.18	10.2	125
incl.	168.01	173.03	2.05	5.02	3.4	175
MVT 347	N8753614	E334664	EI 977			
dip - 41°	8.80	67.26	0.95	58.46	58.5	18



	incl	25.71	46.38	2.30	20.67	20.7	20
MVT 348		N8753538	E334751	EI 973			
dip - 59°		54.00	99.00	0.92	45.00	39.2	70
incl		54.00	57.00	1.35	3.00	2.6	52
incl		69.47	73.27	1.04	3.80	3.3	65
incl		90.40	99.00	3.55	8.60	7.5	87
MVT 349		N8753687	E334680	EI 980			
dip -40°		3.00	83.14	0.61	80.14	78.5	38
incl.		37.93	46.32	2.10	8.39	8.2	38
incl.		81.19	83.14	3.00	1.95	1.9	70
MVT 350		N8753935	E334663	EI 990			
dip -40°		50.14	56.00	0.65	5.86	5.9	35
incl.		81.00	82.83	2.19	1.83	1.8	45
MVT351		N8753937	E334663	EI 991			
dip -62°		33.29	111.00	0.63	77.71	67.6	73
incl.		55.18	73.63	1.08	18.45	16.1	64
incl.		100.47	111.00	1.52	10.53	9.2	102
MVT 352		N 8753509	E 334.750	EI 987			
dip -89°		102.20	105.39	1.62	3.19	1.6	100
MVT353		N8753889	E334669	EI 992			
dip -86°		63.50	246.43	0.93	182.93	80.5	100
incl.		81.00	89.12	2.06	8.12	3.6	57
incl.		128.11	153.00	2.04	24.89	11.0	94
incl.		219.55	246.43	1.97	26.88	11.8	138
MVT 354		N8753939	E334666	EI 993			
dip -72°		46.70	237.00	0.50	190.30	68.5	104
incl.		86.17	94.91	1.75	8.74	3.1	70
incl.		148.40	177.66	1.07	29.26	10.5	118
incl.		220.21	237.00	1.01	16.79	6.0	165
MVT 355		N8754082	E 334622	EI 1004			
dip -72°		16.86	205.24	0.69	188.38	67.8	95
incl.		147.26	156.43	1.83	9.17	3.3	125
incl.		193.92	205.24	4.36	11.32	4.1	164
MVT 356		N8754142	E334615	EI 997			
dip -87°		13.65	96.95	0.71	83.30	56.6	54
incl.		13.65	20.50	0.99	6.85	4.7	18
incl.		50.50	52.96	1.46	2.46	1.7	50
incl.		84.51	96.95	3.23	12.44	8.5	88



MVT 357	N8753968	E334647	EI 997			
dip -70°	42.55	222.34	0.81	179.79	46.7	105
incl.	116.37	156.30	1.67	39.93	10.4	106
incl.	201.70	208.46	2.51	6.76	1.8	158
MVT 358	N8753 995	E334689	EI 978			
dip -75°	72.62	232.87	0.60	160.25	67.3	118
MVT 359	N 8754138	E334674	EI 967			
dip -73°	66.84	217.90	0.53	151.06	46.8	110
incl.	66.84	75.29	1.46	8.45	2.6	57
incl.	91.44	96.30	1.74	4.86	1.5	75
incl.	160.03	174.10	2.57	14.07	4.4	132
incl.	165.58	174.10	3.88	8.52	2.6	132
MVT 360	N 8754299	E 334.665	EI 944			
dip -50°	45.94	47.06	1.31	1.12	1.0	51
	Faulted					
MVT 361	N8754257	E 334664	EI 951			
dip -73°	3.65	91.22	0.51	87.57	69.2	50
incl.	3.65	6.77	1.04	3.12	2.5	5
incl.	15.63	21.57	1.29	5.94	4.7	19
incl.	85.29	91.22	2.76	5.93	4.7	94
MVT 362	N 8754054	E334631	EI 1000			
dip -43°	13.89	17.12	1.30	3.23	3.2	12
incl.	33.51	35.86	0.56	2.35	2.3	26
incl.	63.27	70.79	0.59	7.52	7.4	47
MVT363	N 8754120	E334735	EI 923			
dip -48°35'	44.76	114.79	0.76	70.03	67.9	97
incl.	44.76	48.00	1.39	3.24	3.1	60
incl.	87.31	94.49	2.74	7.18	7.0	110
incl.	110.57	114.79	3.46	4.22	4.1	137
MVT364	N 8754137	E334673	EI 968			
dip -80°	34.06	132.39	0.57	98.33	69.8	93
incl.	34.06	40.65	1.89	6.59	4.7	45
incl.	49.81	52.71	2.93	2.90	2.1	58
incl.	95.95	100.48	1.83	4.53	3.2	106
incl.	128.85	132.39	2.52	3.54	2.5	140
MVT 365	N 8754100	E334638	EI 997			



	dip -87°	26.15	141.16	0.42	115.01	67.9	83
	incl.	36.34	40.20	1.04	3.86	2.3	39
	incl.	87.79	93.06	2.02	5.27	3.1	90
	incl.	135.97	141.16	2.99	5.19	3.1	135
MVT 366	N 8754330	E334700	EI 932				
	dip -81°	84.76	92.05	3.24	7.29	5.0	95
	incl.	82.41	92.05	2.52	9.64	6.7	92
MVT367	N 8754010	E 334675	EI 988				
	dip -77°	36.16	135.76	0.58	99.60	73.7	95
	incl.	50.90	54.38	1.87	3.48	2.6	60
	incl.	83.57	90.73	2.38	7.16	5.3	96
	incl.	129.39	135.76	1.70	6.37	4.7	140
MVT368	N 8754240	E 334663	EI 955				
	dip -76°	6.45	95.27	0.43	88.82	68.4	53
	incl.	18.30	25.10	0.64	6.80	5.2	24
	incl.	59.26	63.44	0.79	4.18	3.2	65
	incl.	89.24	95.27	2.84	6.03	4.6	98
MVT 369	N 8754409	E 334677	EI 938				
	dip -43°	27.03	29.34	3.37	2.31	2.3	27
	incl.	24.66	29.34	1.93	4.68	4.6	27
MVT370	N 8754385	E334711	EI 923				
	dip -83°	76.96	83.03	0.90	6.07	3.3	75

* all holes are NQ diamond drill core size and have been drilled \pm perpendicular to the north-south strike of the zones.

** depth calculated based on midpoint of intersection



Table 11.5
SIGNIFICANT DRILLING RESULTS, HISTORICAL HOLES, MORRO DO VENTO
(South to North)

Hole No.*	Dip (°)	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Depth Below Surface** (m)
MORRO DO VENTO							
MVT-200	-60	123.83	136.55	2.04	12.72	11.1	94
MVT-206	-72	214.10	227.94	1.74	13.84	7.2	180
		255.24	258.09	2.08	2.85	1.5	210
MVT-5	-75	110.34	113.85	2.82	3.51	2.9	87
		150.55	159.70	2.16	9.15	7.5	126
MVT-99A	-59	85.23	95.18	1.44	9.95	8.4	84
		118.94	129.89	2.04	10.95	9.2	117
MVT-99	-90	66.90	72.95	1.41	6.05	3.6	70
		84.76	87.46	2.02	2.70	1.6	85
		151.11	157.52	1.83	6.41	3.9	153
MVT-98	-88	46.38	49.10	1.60	2.72	1.6	48
		58.68	82.78	2.35	24.10	15.3	72
		106.30	112.66	1.39	6.36	11.0	108
MVT-96	-89	48.92	52.54	3.10	3.62	2.1	50
		79.07	99.16	0.91	20.09	11.4	85
MVT-11	-45	51.09	63.13	1.40	12.04	12.0	46
		80.53	86.20	2.51	5.67	5.7	65

* all holes are NQ diamond drill core size

** depth calculated based on midpoint of intersection

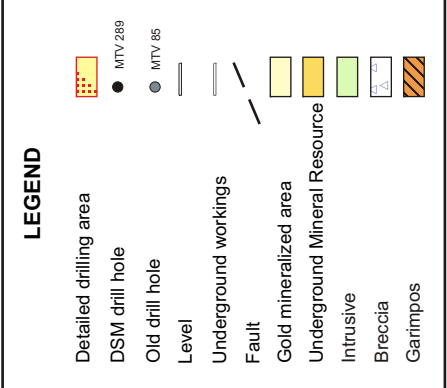
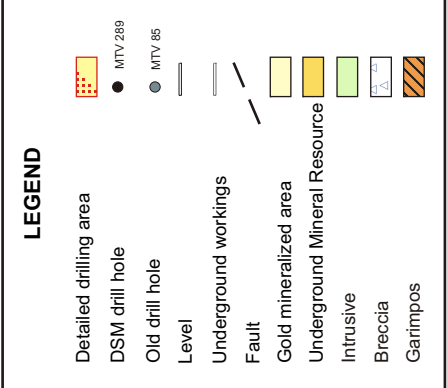
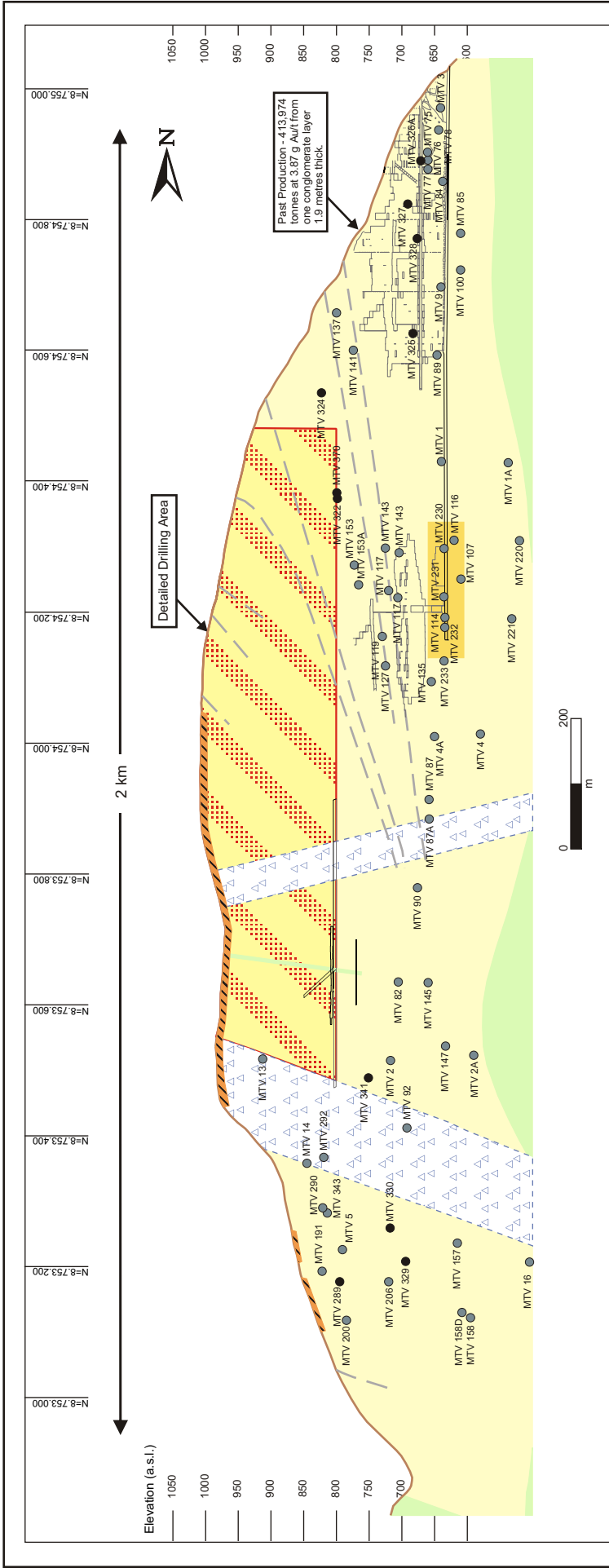


Figure 11.2
Morro do Vento
Vertical Longitudinal Section
(Looking West)

March 2005



Morro do Vento Extension (Basal/Main Reefs - Cuscuz)

A total of 1,911 metres of diamond drilling in 4 holes were completed to test the Basal and Main Reefs in the Morro do Vento Extension (Cuscuz) area in 2004. These reefs are the northern extension of the same reefs in the Morro do Vento area that were previously mined. The Main Reef in the Morro do Vento Extension is a major new extension that potentially could be up to 1 km in strike length while the results from the Basal Reef confirm the downdip continuity below measured and indicated mineral resources estimated in August 2003 (Hennessey 2003b). These reefs are about 50m apart and approximately 200 metres stratigraphically below the Intermediate Reefs that are being explored at Morro do Vento discussed above. The Intermediate Reefs are stratigraphically equivalent to the main conglomerate zone at the Jacobina Mine.

Highlights of the 2004 drilling included:

- Hole MCZ-83 intersected 4.94 g Au/t over a true width of 12.6m and Hole MCZ-79 intersected 3.17 g Au/t over 9.8 m true width, both in the Main Reef
- Hole MCZ-81 intersected 2.84 g Au/t over a true width of 13.8m and Hole MCZ-80 intersected 2.13 g Au/t over a true width of 15.1m, both in the Basal Reef

Past production from the Basal and Main Reefs in both the Morro do Vento and Morro do Vento Extension areas as reported by Anglo American data totalled 2,036,634 tonnes at a recovered grade of 4.14 g Au/tonne producing 271,046 ounces of gold. Of the total past production, about 72% came from the Main Reef zone, however no previous production is recorded from this reef in the Morro do Vento Extension area. The Basal Reef in the Morro do Vento Extension area contains measured and indicated mineral resources of 2,148,000 tonnes at 2.75 g Au/t containing 190,000 ounces of gold and an inferred mineral resource of 645,000 tonnes at 2.67 g Au/t containing 55,000 ounces of gold as previously reported (Hennessey 2003b and Section 17). Historic underground and surface diamond drill holes that tested the Basal Reef also intersected the Main Reef target zone area however most drill core in this zone was not previously assayed because of the predominantly structural style of the mineralization. This core was sampled as part of the current program.

Significant results of drill holes in the Morro do Vento Extension zone including the highlights above are shown in Table 11-6 below. Figure 11-3 is a cross section showing Hole MCZ-83 which intersected 4.94 g Au/t over a true width of 12.6m in the Main Reef.



Table 11.6: Significant Drilling Results, Morro do Vento Extension

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Reef/Zone	Depth Below Surface** (m)
MORRO DO VENTO EXTENSION (CUSCUZ)							
MCZ-79	N8755332	E334888	El 673				
dip -58°	348.15	349.68	2.32	1.53	1.4	Satellite	430
	462.48	484.48	1.68	22.00	20.0	Main-FW	510
incl.	462.48	473.25	3.17	10.77	9.8	Main	505
MCZ-80	N8755397	E334.869	El 689				
dip -48°	371.35	374.42	2.86	3.07	3.0	Main	410
	389.04	402.97	1.33	13.93	13.8	FW	420
	427.86	443.09	2.13	15.23	15.1	Basal	450
MCZ-81	N 8755332	E 334888	El 673				
dip -42°	357.89	362.22	2.70	4.33	4.2	Main	310
	415.05	438.91	2.21	23.86	23.1	Basal	393
incl.	424.65	438.91	2.84	14.26	13.8	Basal	396
MCZ-83	N 8755290	E 334882	El 664				
dip -48°	415.43	428.69	4.94	13.26	12.6	Main	400

* all holes are NQ diamond drill core size and have been drilled perpendicular to the north-south strike of the zones.

** depth calculated based on midpoint of intersection

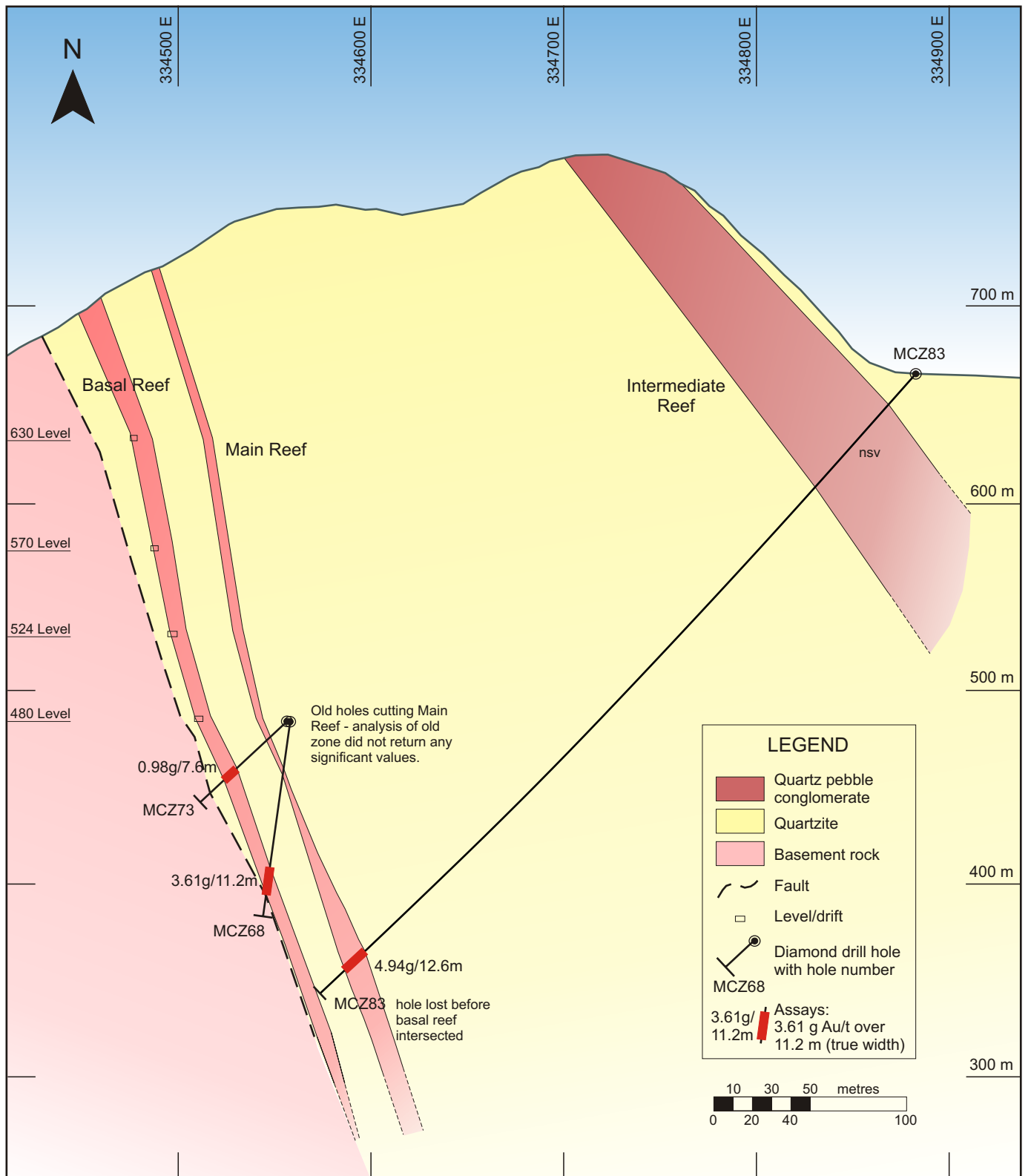


FIGURE 11.3
MORRO DO VENTO EXTENSION
CROSS SECTION 8755275 N
LOOKING NORTH

March 2005





Canaveiras

The former Canaveiras mine is located 3 km north of the processing plant and is located in a block bounded by faults that is approximately 1.2 km long and 400 metres wide. In contrast to the main conglomerate trend, Canaveiras is characterized by moderate folding resulting in structural upgrading of gold mineralization in the reefs. Past production, primarily from the Piritoso and Liberino reefs, in the Canaveiras Mine is reported by Anglo American to total 458,247 tonnes at a grade of 8.65 g Au/t. Work by DSM has focused on evaluating the full stratigraphic package hosting the favourable conglomerate beds which is estimated to be over 300m thick.

Major targets at Canaveiras include:

- 1) MU and LU reefs covering a target area of 160m by 220m about 50m below the Canaveiras mine workings;
- 2) Potential high grade extension zone in a target area 130m by 120m in the Piritoso-Liberino reefs adjacent to the old stope in the southern end of the mine.
- 3) Hollandez-Maneira reefs covering a target area of 500m by 200m about 20m above the mine workings.

Highlights from this drilling include:

MU/LU (below old workings)

- CAN-28 intersected 6.19 g Au/t (5.39 g Au/t cut) over 5.7m true width in the MU reef and 3.68 g Au/t (3.56 g Au/t cut) over a true width of 11.7m in the LU reef. The combined zone averages 2.80 g Au/t (2.62 g Au/t cut) over a true width of 33.2m;
- CAN-30 intersected 4.67 g Au/t over 23.2m true width in the MU reef.
- CAN-37 intersected 2.71 g Au/t over a true width of 22.2m including 4.51 g Au/t over a true width of 9.8m at the top of the MU reef and 4.41 g Au/t over a true width of 3.2m at the base;
- CAN-47 intersected 2.85 g Au/t over 27.5m true width including 4.63 g Au/t over a true width of 13.4m. A separate reef lower in the same hole returned 2.06 g Au/t over a true width of 22.3m including 5.05 g Au/t over a true width of 6.2m; and
- CAN-38 returned 8.77 g Au/t (7.25 g Au/t with highs cut to 30 g/t) over a true width of 3.9m in the MU reef.
- CAN-42 intersected 1.75 g Au/t over 26.7 m true width in the MU reef including a higher grade portion in the upper part of the reef grading 10.01 g Au/t (8.73 g Au/t cut) over 2.2m true width and 2.26 g Au/t over a true width of 6.6m of the LU reef.

Piritoso/Liberino (extension of zones previously mined)

- CAN-28 intersected 9.69 g Au/t (9.23 g Au/t highs cut to 30g/t – “cut”) over a true width of 1.9m in the Liberino reef and 12.95 g Au/t (7.53 g Au/t cut) over a true width of 2.2m in the Piritoso reef. The combined zone averages 5.85 g Au/t (4.28 g Au/t cut) over a true width of 8.1m;



- CAN-30 on the same section as CAN-30 intersected 5.32 g Au/t over a true width of 2.3m in the Liberino reef and 18.81 g Au/t (16.10 g Au/t cut) over a true width of 1.8m in the Piritoso reef. The combined zone averaged 5.93 g Au/t (5.33 g Au/t cut) over a true width of 8.1m;
- CAN-15 intersected 16.13 g Au/t (15.63 g Au/t cut) over a true width of 2.5m in the Piritoso reef.
- CAN-47 returned 20.79 g Au/t over 0.7m in the Liberino reef
- CAN-53 returned 13.83 g Au/t over a true width of 1.0m in the Liberino reef;
- CAN-49 intersected 3.77 g Au/t (1.97 g Au/t cut) over a true width of 6.0m in the combined Piritoso and Liberino reefs;

Hollandez-Maneira (above old workings)

- Hole CAN-18 intersected 3.96 g Au/t over a true width of 5.0m within a wider intersection grading 2.57 g Au/t over 10.4m true width in the Hollandez reef.
- Hole CAN-23, drilled 70m south of CAN-18 intersected 3.32 g Au/t over a true width of 6.9m in the Hollandez reef and 3.45 g Au/t over 1.8m true width in the Maneira reef.
- Hole CAN-21, drilled 160m south of CAN-18, intersected 8.47 g Au/t over a core length of 13.02m (8.07g Au/t with highs cut to 30 g/t; true width 5m – 10m) in a strongly silicified zone near the base of the Hollandez reef adjacent a steeply dipping fault zone filled with a mafic dyke.
- Hole CAN-22 on the same section as CAN-21 intersected 2.17 g Au/t over 15.8m true width in the upper part of Liberino and the Hollandez reefs.
- CAN-29 returned 8.09 g Au/t over a true width of 1.1m in the Maneira reef; and
- CAN-31 intersected 4.08 g Au/t over 2.0m in the Maneira reef.

The **MU and LU reefs** are about 50 to 100 metres below the old workings. Hole CAN-14, drilled in 1997, intersected 7.0 g Au/t over 24.0m true width in these reefs. Initial surface drilling 40m south of this hole by DSM in 2002-03 (CAN-14 and CAN-15) was not successful in confirming this intersection because of structural complications. However, once the mine was dewatered in late 2003 and underground drilling could be carried out, the results from MU and LU have been very positive. It is important to note that CAN-14 is now bracketed by two holes – CAN-38 to the north and CAN-42 to the north, both of which had good intersections as sited above. The early surface holes CAN-14 and -15, therefore, intersected a small fault block where mineralization was locally disrupted and the results in these holes are not indicative of the overall potential of this target.

The strike length of the MU and LU reefs is now at least 300m with a width of about 200m. The zone is open to the south and there is also potential for a significant extension to the southeast of the old workings. Thickness of the MU reef ranges from 8.8m to 27.5m with an average of 21.9m and that of the LU reef, from 0.9m to 22.3m with an average of 5.2m. Stratigraphically the two reefs are very close in the southern holes but become progressively more separated to the north by an interbedded quartzite unit. In the northernmost hole to intersect MU/LU, the quartzite unit separating these reefs is about 12m thick.



Measured and indicated resources in MU and LU are estimated at 790,400 tonnes grading 3.16 and inferred mineral resources of 1,900,000 tonnes at 2.30 g Au/t as outlined below in Section 17.

Drilling in 2004 provided much better definition of the MU and LU reefs below the old workings and extended the strike length of the mineralized zone to 300m. This zone is typically 20-25 metres thick with an average grade of 3+ g Au/t in the core. Mineralization is open to the south and likely extends further east.

The **Piritoso and Liberino reefs** were previously mined at Canavieiras over a strike length of about 600m and these were the richest reefs in the camp. Piritoso is a very pyritic medium sized quartz pebble conglomerate reef that is from 0.1m to 5.6m thick averaging about 2.6m thick. Average grade in the reef mined was 9.5 g Au/t. The Liberino reef is about 10m stratigraphically above the Piritoso reef with a thickness ranging from 0.1m to 3.2m with an average thickness of 1.2. Pebble size in Liberino ranges from medium to large with less packing as compared to Piritoso. Average grade in the reef mined was 6.1 g Au/t.

Measured and indicated mineral resources in the Piritoso and Liberino reefs are 113,400 at 8.23 g Au/t, much of which is in a block immediately southeast of the old workings. Inferred mineral resources in both reefs are 493,000 tonnes grading 4.72 g Au/t which are south of the old workings (see Section 17).

The drill results in the 2004 program confirm that there is excellent potential to outline higher grade resources (>6 g Au/t) in these reefs especially Piritoso in the southeast extension. Both reefs are also open to the south.

The **Hollandez reef** is typically 15 to 20m thick, although in places is up to 40m thick, with significant gold mineralization occurring in the lower part of the reef. The reef extends along a north-south strike for at least 1km of which 500m of this strike length would be readily accessible from existing mine workings in the Canavieiras Mine. The most significant intersection in this reef was in Hole CAN-21 which intersected 8.47 g Au/t over a core length of 13.02m (8.07g Au/t with highs cut to 30 g/t; true width 5m – 10m) in a strongly silicified zone near the base of the Hollandez reef adjacent a steeply dipping fault zone filled with a mafic dyke. Mineralization occurs as disseminated pyrite and very fine native gold in a “silica gel” that is clearly the product of hydrothermal alteration. The extent and true orientation of this zone needs to be determined in order to assess the true potential of this intersection.

The **Maneira Reef**, which is 30m stratigraphically above the Hollandez reef, comprises the upper sequence of conglomerates in the Serra do Córrego Formation. It is typically 70 metres thick dipping 55 degrees to the east, and comprises a very large quartz pebble conglomerate at the base which grades to a medium-sized quartz pebble conglomerate at the top. The conglomerates typically have a fuchsite-rich matrix, sometimes oxidized. Gold mineralization is presented at both the base and top.

Inferred mineral resources in the Maneira reef are estimated to be 998,000 tonnes grading 1.66 g Au/t and in the Hollandez reef, 257,000 tonnes at 1.73 g Au/t (see Section 17).

Significant results of drill holes at Canavieiras including the highlights above are shown in Table 11.7 below. Table 11.8 lists significant results from sampling of core from historical drill holes. Figures 11.4 and 11.5 are E-W cross sections showing the typical geometry of the reefs and the gentle fold structure.



Table 11.7: Summary of Significant New Drilling Results, Canavieiras

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Reef	Depth Below Surface** (m)
CANAVIERAS							
CAN-18	N8758458	E335089	EI 579				
dip +40 deg.	0.00	11.61	2.57	11.61	10.4	Hollandez	78
Incl.	0.00	8.02	3.34	8.02	7.2	Hollandez	82
	77.46	78.78	3.87	1.32	1.2	Maneira	67
CAN-19	N8758458	E335089	EI 578				
dip +0 deg.	12.38	15.59	2.02	3.21	2.7	Hollandez	80
	90.98	97.39	1.03	6.41	5.4	Maneira base	140
CAN-20	N8758419	E335063	EI 571				
dip +46 deg.	0.48	1.04	1.55	0.56	0.6	n/a	75
	15.63	18.23	1.47	2.60	2.6	Hollandez	68
	27.46	28.95	2.71	1.49	1.5	Hollandez	65
	92.21	93.51	2.10	1.30	1.3	Maneira	50
	102.08	107.94	1.38	5.86	5.9	Maneira	45
CAN-21	N8758300	E335141	EI 578				
dip +0 deg.	0.00	13.02	8.47	13.02	5m – 10m	Near base	95
			8.07	Cut to	30g/t	Hollandez	
	28.86	34.59	1.10	5.73	4.4	Maneira base	110
Incl.	33.61	34.59	6.22	0.98	0.8	Maneira base	110
	65.33	68.26	0.82	2.93	2.3	Maneira top	125
CAN-22	N8758300	E335094	EI 580				
dip +37 deg.	0.00	17.50	2.17	17.50	15.8	Liberino/ Hollandez	62
	63.16	70.50	1.05	7.34	6.6	Maneira	55
CAN-23	N8758390	E335066	EI 579				
dip +33 deg.	30.86	40.73	3.32	9.87	6.9	Hollandez	68
	86.55	89.15	3.45	2.6	1.8	Maneira	72
CAN-26	N8758489	E335083	EI 548				
dip +23°	89.77	92.93	1.57	3.16	3.0	Maneira	120
	90.27	97.00	1.28	6.73	6.5	Maneira	122
CAN27	N8758447	E335098	EI 548				
dip +33°	24.91	26.96	2.05	2.05	2.1	Piritoso	118
	81.90	102.45	1.01	20.55	20.6	Maneira	110
CAN 29	N8758350	E335113	EI 548				
dip +19°	33.11	41.10	1.15	7.99	6.9	Piritoso/ Liberino	137
incl.	33.11	33.94	10.42	0.83	0.7	Piritoso	135

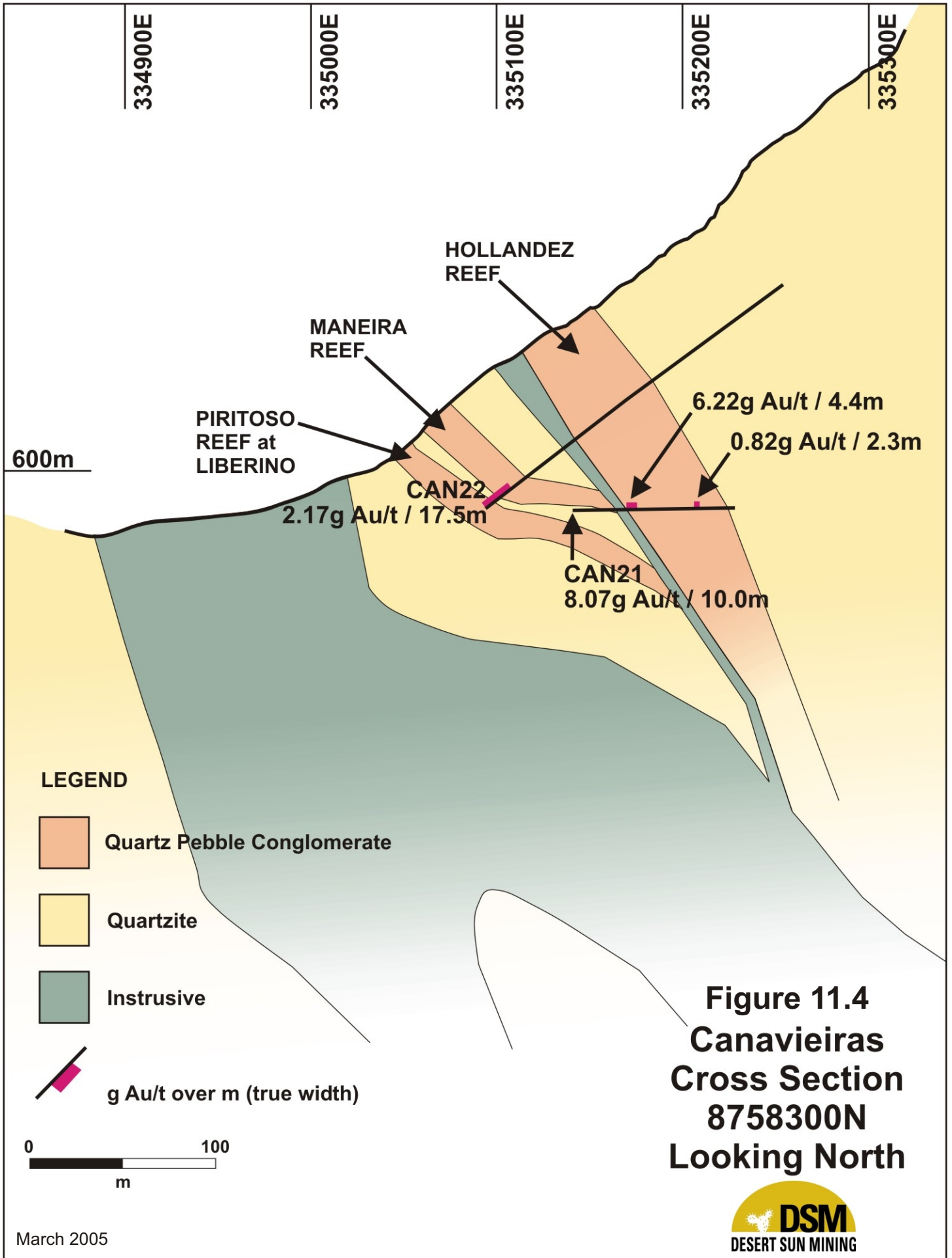


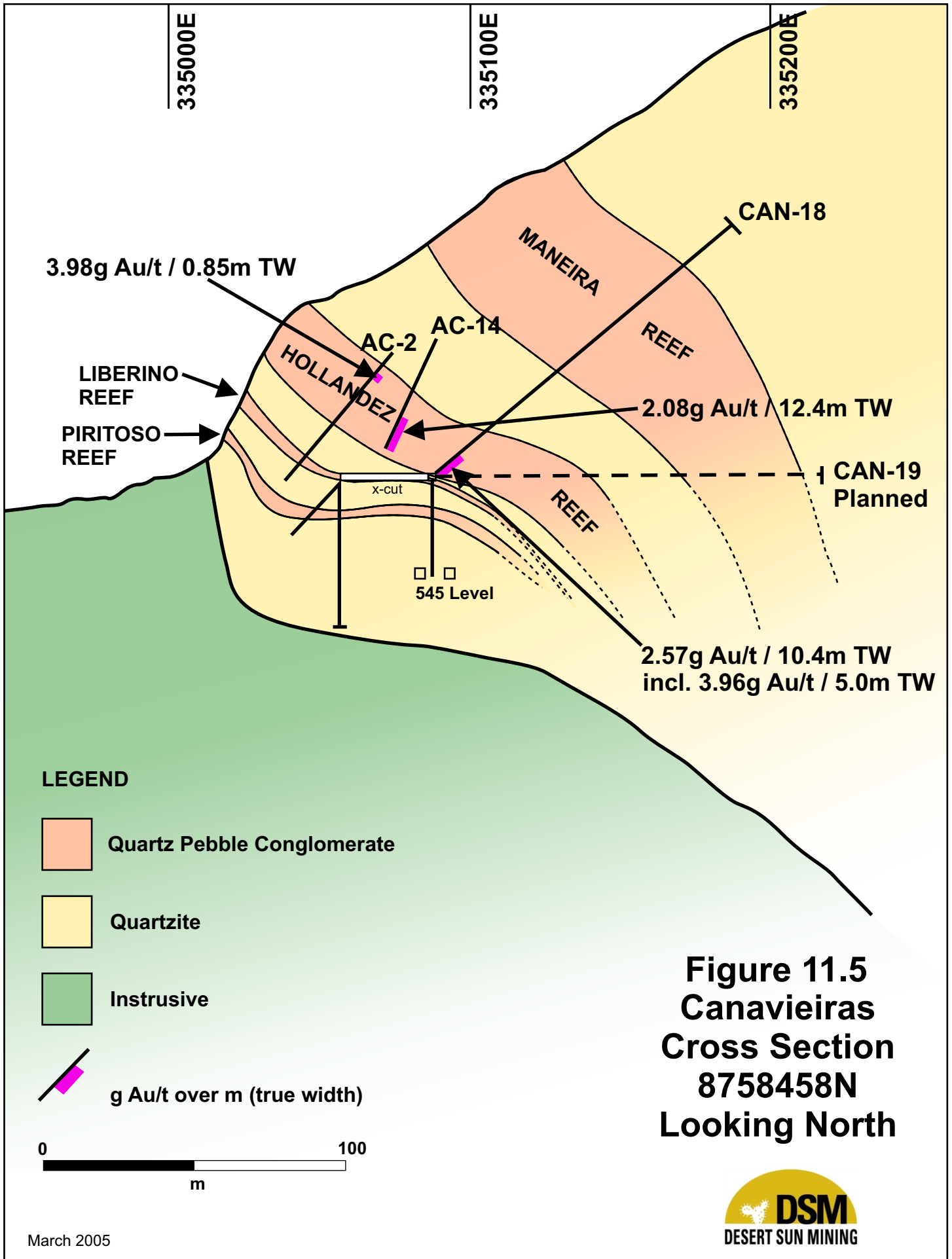
Table 11.8: Summary of Significant Results from Sampling of Historic Drill Holes, Canavieiras.

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Reef	Depth Below Surface** (m)
MC36	N8758528	E33507					
Dip 0 deg.	64.25	7 80.42	EI 547 9.81 6.75	16.17 cut to 30g/t	11.3	Holandez	155
AC14	N8758456	E33507					
Dip +65 deg.	0.00	2 12.63	EI 589 2.08	12.63	12.4	Holandez	71
AC 24	N8758445	E33503					
Dip +50 deg.	39.46	8 47.25	EI578 2.14	7.79	7.80	Holandez	42
MC4	N8758272	E33510					
Dip +60 deg.	30.57	2 38.55	EI572 3.29	7.98	8.0	Holandez	68
MC 37	N8757972	E33517					
Dip 0 deg.	5.65	1 14.93	EI549 2.12	9.28	5.9	Holandez	90
MC 32	N8757962	E33516					
Dip -71 deg.	25.40	1 36.50	EI 577 4.61 1.74	11.10 cut to 30g/t	5.2	Holandez	83
MC 38	N8757947	E33517					
Dip 0 deg.	10.59	1 40.97	EI 549 2.02	30.38	14.9	Holandez	72
Incl.	31.75	40.97	6.05	9.22	4.5	Holandez	72
CAN5	N8757857	E33526					
Dip -90 deg.	127.51	3 131.56	EI 641 2.43	4.05	2.5	Holandez	240
CAN 8	N 757800	E33516					
Dip -60 deg.	70.78	5 77.21	EI 640 2.12	6.43	3.2	Holandez	60



- * Historic holes are BQ or AQ diamond drill core size
- ** depths calculated based on midpoint of intersection







Serra do Córrego

The Serra do Córrego target area, located 2 kilometres north of the processing plant, is a 900 metre long target zone. Two reefs known as MU and LU which are equivalent to reefs of the same name in Morro do Vento to the south and Canavieiras to the north, are the principal targets. Extensive garimpos are found across the hillside following these conglomerates. The MU reef is best developed in the southern part of the target area and thins northward. In contrast, the LU reef continues across the majority of the hillside with characteristically deeply incised garimpos. DSM has carried out resampling of available old core in the vicinity of the MU and LU Reefs which suggests that there may, in places, be underestimation of grade in lower grade areas such as the quartzites between reefs.

The drilling results have been incorporated into the mineral resource estimate completed in August 2003 reviewed by Micon (2003b) and discussed in Section 17.

A second target is the Hollandez and Maneira reefs which are exposed continuously over a strike length of 1,800 meters on the east flank of the Serra do Córrego hill. These reefs are approximately 200 m stratigraphically above the MU and LU reefs.

Highlights from the drilling completed in 2002-2003 are as follows:

- Hole SCO-83 returned 3.70g Au/t tonne over a true width of 9.9 meters in the Maneira reef and 0.86 g Au/t over 7.4 meters true width in the Holandez reef.
- Hole SCO-84, collared in the south end of the target zone 90 m south of SCO-82, returned 1.39 g Au/t over a true width of 32.2 meters at a depth of about 40 meters below surface. This intersection includes a higher-grade section of 6.92 g Au/t over a true width of 3.8m.
- Hole SCO- 87 which intersected 1.30 g Au/t over a true width of 25.7m including a higher grade section grading 3.19 g Au/t over a true width of 6.3m
- Hole SCO-89 that returned 1.30 g Au/t over a true width of 33.3m including higher grade intersections of 5.30 g Au/t and 3.06 g Au/t over true widths of 3.1m and 7.9m, respectively.

Significant results of drill holes at Serra do Córrego including the highlights above are shown in Table 11.9 below. Figures 11.6 and 11.7 are vertical longitudinal sections of the MU (Middle Unit) and LU (Lower Unit), respectively.



Table 11.9: Significant Drilling and Sampling Results, Serra do Córrego

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Depth Below Surface** (m)
SCO-83	N8756774	E335185	EI 651			
dip -53°	62.66	74.12	3.70	11.46	9.9	68
	118.71	127.34	0.86	8.63	7.4	123
	220.97	221.83	2.65	0.86	0.7	250
SCO-84+	N8756950	E334776	EI 908			
dip -40°	19.71	20.45	10.68	0.74	0.6	10
	53.46	90.38	1.39	36.92	32.1	40
Incl.	53.46	54.78	4.24	1.32	1.2	30
Incl.	86.04	90.38	6.92	4.34	3.8	45
SCO-85	N8756975	E334780	EI 910			
dip -45°	51.26	91.95	0.38	40.69	31.3	48
Incl.	51.26	58.75	0.76	7.49	5.8	38
Incl.	87.72	91.95	0.71	4.23	3.3	53
SCO-86	N8756999	E334811	EI 899			
dip -44°	53.06	62.40	1.19	9.34	7.1	50
	123.70	129.45	2.21	5.75	4.4	97
SCO-87	N8757075	E334739	EI 920			
dip -44°	46.34	77.34	1.30	31.00	25.7	31
Incl.	46.34	53.96	3.19	7.62	6.3	25
Incl.	73.19	77.34	1.53	4.15	3.4	36
SCO-88	N8757018	E334765	EI 915			
dip -50°	56.23	103.87	0.58	47.64	34.8	50
	56.23	61.03	1.63	4.80	3.5	40
	89.69	103.87	1.03	14.18	10.4	60
SCO-89	N8757100	E334729	EI 921			
dip -41°	40.29	82.98	1.30	42.69	33.3	35
Incl.	40.29	44.22	5.30	3.93	3.1	25
Incl.	72.87	82.98	3.06	10.11	7.9	40
Re-Sampling of Core from Old Holes						
SCO-71	N8756960	E334814	EI 897			
dip -49°						
Original Result	59.80	101.80	0.88	42.00	34.9	70
	119.06	122.77	0.20	3.71	3.1	97



DSM Sampling	59.80	101.80	1.52	42.00	34.9	70
	119.06	122.77	1.96	3.71	3.1	97

- * all holes are NQ diamond drill core size
- ** depth calculated based on midpoint of intersection
- + results previously released

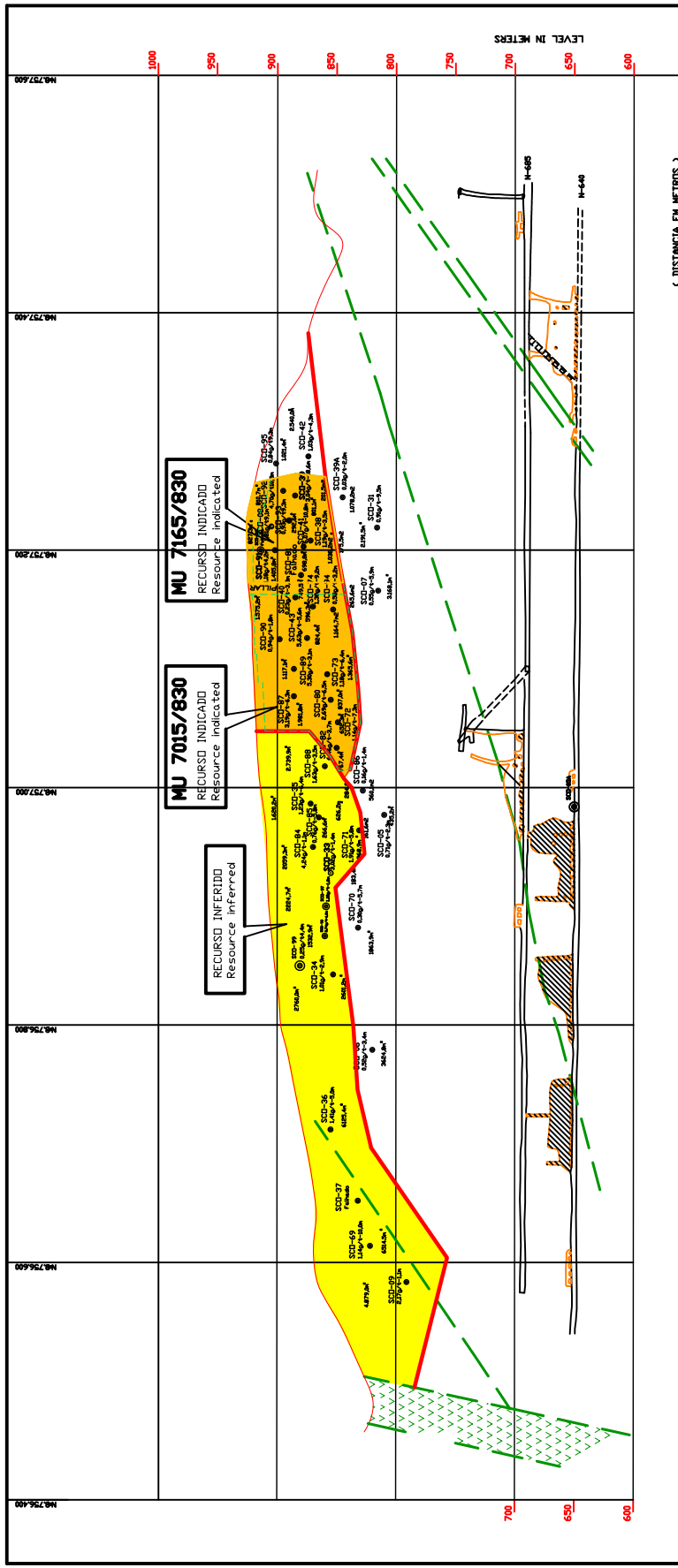


Figure 11.6

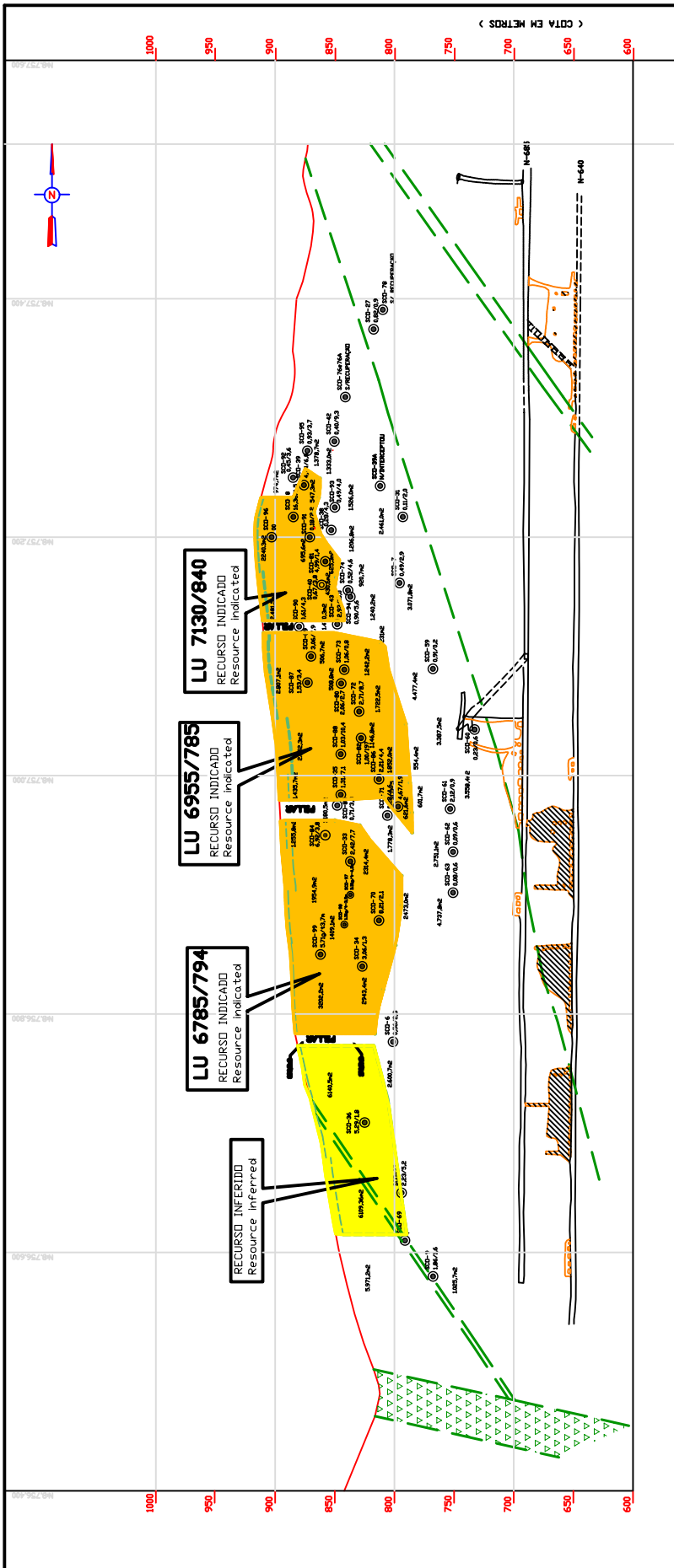
SERRA DO CORREGO MINE
 MU REEF
 Vertical Longitudinal Section
 (Looking West)



- LEGENDA**
- FURTO ANTIGO
 - FURTO PROGRAMADO
 - g/t Au / True Width (m) 0.69 g/t 690m
 - FALT
 - Underground Level
 - Mined Area
 - Development
 - R.M- RECURSO MEDIDO Resource measured
 - R.I.D.- RECURSO INDICADO Resource indicated
 - R.I.F. - RECURSO INFERIDO FURTO ANTIGO Resource inferred
 - LEVEL 640



March 2005



(DISTANCIA EN METROS)

SERRA DO CORREGO MINE LU REEF Vertical Longitudinal Section (Looking West)



- LEGENDA**
- R.M.- RECURSO MEDIDO
Resource measured
 - R.I.D.- RECURSO INDICADO
Resource indicated
 - R.I.F.- RECURSO INFERIDO FURO ANTIGO
Resource inferred
 - FURO ANTIGO
 - FURO PROGRAMADO
 - g/t Au / True Width (m) 0,69 g/t 690m
 - FALT
 - Underground Level
 - Mined Area
 - Development

LU 7130/840
RECURSO INDICADO
Resource indicated

LU 6955/785
RECURSO INDICADO
Resource indicated

LU 6785/794
RECURSO INDICADO
Resource indicated

RECURSO INFERIDO
Resource Inferred

Figure 11.7

March 2005





Serra do Córrego – Maneira Reef

The Maneira reef is exposed at surface on the east side of the Serra do Córrego hillside for a strike length of about 700m. Inferred mineral resources in two blocks total 1,252,000 tonnes grading 3.53 g Au/t. Hole SCO-84 drilled in 2003 to followup a high grade intersection of 100 g Au/t over 2.0m in an old Anglo hole returned an excellent result of 4 g Au/t over 10.0m true width. Highlights from earlier Anglo holes also include 6.80 g Au/t over 5.70m true width in Hole SCO-55, 4.48 g Au/t over 5.81m true width in Hole SCO-57A and 3.36 g Au/t over a true width of 7.36 g Au/t in Hole SCO-54.

Serra do Córrego – Lagartixa/Viuva

This area is located on the west side of the Serra do Córrego hillside about 3 km (Lagartixa) to 4.5 km (Viuva) north of the processing plant. Geological this is a complicated area with thrusting and repetition of stratigraphy. Lagartixa/Viuva appear to be potential extensions of the upper stratigraphy that hosts the gold-bearing conglomerates at Canavieiras. There is a 170m long garimpo in the Lagartixa portion of the target area. Limited drilling by Anglo at Viuva returned several significant intersections: Hole MVA intersected 12.00 g Au/t (10.38 g/t cut) over a true width of 2.2m and Hole MVA-3A returned 12.25 g Au/t (7.49 g/t cut) over a true width of 1.8m. These two holes are about 50m apart along strike. Several other Anglo holes elsewhere in Viuva did not intersect significant values but this appears to reflect disruption of the mineralization by faulting. There is no previous drilling at Lagartixa.

Serra do Córrego – Maricota

At Maricota, which is located beside the main mine highway and entrance to the road to Serra do Córrego, garimpos have been mining high grade gold (5-6 g Au/t?) along fault structures cutting the Basal Reef very close to the basement contact. The target area here has at least a 100m strike length but may be more extensive. There is no previous drilling in the area.

Joao Belo Sul

In 2003, two holes, totalling 266 metres, were drilled at Joao Belo Sul, located 2km south of the former Joao Belo Norte mine. Hole JBA-292 intersected 3.75 grams gold per tonne over a true width of 14.6 metres at a depth of about 69 metres below surface. This intersection included a high-grade section of 10.62 grams gold per tonne over 3.6 metres true width. JBA-293 returned 1.69 grams gold per tonne over a true width of 11.4 meters at a depth of about 94 metres below surface with a higher grade section of 3.68 grams gold per tonne over 2.8 metres true width.

In 2004, 10 holes totaling 4,754m were completed to followup the favourable results from 2003. These holes were successful in outlining a zone of mineralization to a depth of about 450m that is estimated to contain an inferred mineral resource of 3,890,000 tonnes grading 1.67g Au/t. However, this drilling did not confirm the depth extent of mineralization although the favourable stratigraphy was intersected. Faulting may be complicating the distribution of mineralization. The mineralized horizons intersected in the holes at Joao Belo Sul continue to the south for an additional 9 km of strike length to the Campo Limpo area.

Significant results of drill holes at Joao Belo Sul highlights above are shown in Table 11.10 below.



Table 11.10: Significant Drilling Results, Joao Belo Sul

Hole No.*	From (m)	To (m)	Gold (g/t)	Interval (m)	True Width (m)	Depth Below Surface** (m)
JOAO BELO SUL						
JBA-292	N8748712	E333912	El 1079			
dip - 64°	104.75	121.20	3.75	16.45	14.64	74
			3.06	cut 30 g/t		
incl.	108.32	121.20	4.46	12.88	11.46	77
			3.56	cut 30 g/t		
incl.	112.71	121.20	6.15	8.49	7.56	81
			4.79	cut 30 g/t		
incl.	115.24	119.29	10.62	4.05	3.60	83
			7.79	cut 30 g/t		
incl.	104.75	121.20	3.75	16.45	14.64	74
			3.06	cut 30 g/t		
JBA-293	N8749152	E333932	El 990			
dip – 58°	35.23	36.47	4.92	1.24	1.13	72
incl.	94.07	106.55	1.69	12.48	11.36	124
JBA294	N8748975	E334257	El 1025			
dip - 71°	398.08	400.54	1.40	2.46	2.0	380
JBA 296	N8748606	E334274	El 1019			
dip - 65°	285.64	286.40	2.84	0.76	0.7	320
	370.08	370.58	1.90	0.50	0.4	410
	390.99	393.74	1.02	2.75	2.4	435
	569.44	574.32	2.08	4.88	4.2	595
	594.87	597.83	1.72	2.96	2.6	610
JBA 297	N8748790	E333912	El 1079m			
dip - 67°	127.40	140.86	1.97	13.5	11.7	110
incl	132.43	140.86	2.33	8.40	7.3	112
JBA299	N8748650	E333945	El 1090			
dip - 65°	no significant values					
JBA 292A	N8748714	E333911	El 1080			
	135.28	191.28	0.49	56.00	31.9	163
incl	135.28	139.26	1.42	3.98	2.3	150
incl	163.67	171.36	0.97	7.69	4.4	167
incl	186.52	191.28	1.37	4.76	2.7	194
	397.00	399.50	0.74	2.50	1.4	398



JBA300	N8749140	E334061	El 992m			
dip - 65°	228.45	230.10	2.38	1.65	1.4	206
	275.72	289.92	1.51	14.20	11.6	268
incl.	284.35	289.92	2.69	5.57	4.6	268
JBA301	N8748874	E333919	El 1075			
dip - 53°	no significant values					
JBA302	N8748599	E333893	El 1075			
dip - 64°	84.56	86.01	1.32	1.45	1.3	63
	97.17	100.05	1.10	2.88	2.6	75
	119.11	120.16	2.53	1.05	1.0	84

* all holes are NQ diamond drill core size

** depth calculated based on midpoint of intersection

Campo Limpo

This target is situated 11 km to the south of the mine plant. A total of ten wide-spaced drill holes were previously completed in the area over a strike length of 800m. Significant assay results include 3.58 g Au/t over a true width of 9.06m in Hole CLP-01; 2.16 g Au/t over 3.5m true width in CLP-03 and 1.18 g Au/t over 14.8m true width in LGP-4. There is potential for an open pit resource as there are numerous garimpos along the entire strike length. In 1997, JMC estimated an inferred resource at Campo Limpo of 1,165,050 tonnes grading 2.10 g Au/t. The average width was reported to be 8.6m.

Rio Coxo

Rio Coxo is located 12 km north-northeast of the processing plant. Garimpeiros (free miners) are currently working at Rio Coxo in an area about 300m long using short adits and a decline. Two drill holes were completed in 2003 as well as a garimpo channel sampling program. Gold mineralization occurs in a shallowly dipping (25 to 40 degrees west dipping), north striking shear zone with highly altered ultramafics and quartz veins. Gold is hosted primarily within the quartz veins associated with pyrite.

No significant values were obtained in the drill holes although the host structure was intersected in both holes. Two garimpo workings (Galleria 1 and Galleria 2) approximately 30 metres apart were channel sampled which returned 4.23 g Au/t (4.11 g Au/t with highs cut to 60 g Au/t) over an average true thickness of 1.65 metres and a 15 metre horizontal width at Galleria 1. Galleria 2 returned 7.23 g Au/t (4.66 g Au/t with highs cut to 60 g Au/t) over an average true thickness of 1.69 metres and a 17 metre horizontal width.



12.0 SAMPLING METHOD AND APPROACH

12.1 JMC EXPLORATION

JMC geologists lithologically logged and sampled all drill holes. Previous practice was to sample all conglomerates, but William staff changed this to a practice of sampling through the conglomerates into adjacent quartzites on both sides. Surface holes, which tend to be exploration drilling, were split, half-core sampled and then stored for future reference. Underground definition drill holes are whole-core sampled resulting in similar sample volumes to those taken from surface core. Generally, all samples were submitted to the mine's assay laboratory but, in later years, William began submitting samples from exploration holes to an outside laboratory.

JMC beat geologists collected chip panel samples at regular intervals from all underground development headings which were in, or near, mineralization. Samples were continuous chip/channel samples collected by hammer andmoil onto a canvas mat. Historically the samples were collected over narrow widths, often less than 20 cm, however in 1996 this was modified to a standard 50 cm sample except when approaching a lithological contact when shorter samples were permitted.

12.2 DSM EXPLORATION

DSM has followed similar drill core sampling procedures to those used by JMC with some modification. All drill core to be sampled was split in half and one half submitted for assay. In the early portions of the program a hand splitter was used. In the latter part, a diamond saw was obtained and sawing replaced most of the splitting except for lower priority samples. Sample lengths were selected based on lithology with the typical sample being about 0.5 m long and the longest being approximately 1.0 m. Much more extensive sampling of the surrounding quartzites is now being conducted because of the potential for low gold grades to affect potential open pit economics.

All samples were tagged with the sample tag stapled to the core box at the start of the sample and a second tag with the same number placed in the sample bag. Care was taken to thoroughly clean the splitter after each sample to avoid contamination of subsequent samples. All drill core, with the exception of some sections of barren intrusive, was split and sent for assay.



13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1 JMC

During its operation the Jacobina mine had a relatively modern, well-equipped assay laboratory on site, near the plant and metallurgical facility at the Itapicurú mine. The laboratory was equipped for performing both fire assay (FA) and atomic absorption spectrophotometry (AAS) analyses. AAS determinations of precious metals at Jacobina were used only for process control samples which contain soluble gold. All samples from the geology department were analysed by the FA method with gravimetric finish.

The sample preparation facility at the laboratory consisted of a sample drying and handling area and a crushing room. After drying, samples were crushed in stages using a jaw crusher and roll crusher. Samples were then split with a Jones riffle splitter to produce a large sample which was ground to minus 100 mesh pulp in a disk pulverizer. The final pulp was rolled on a rubber mat and then quartered. Sample increments were selected from opposite quarters to composite an analytical subsample or aliquot. This sample was then subjected to FA analysis.

Historically JMC used 100-g aliquots for its fire assays. After a study performed in 1996, which compared 50 g and 100 g samples, it was decided that all FA aliquots at Jacobina would continue to be 100 g in size. In Micon's experience this is a very large aliquot size and is likely to result in relatively little variability being introduced at the final sample preparation stage. The 100-g samples were fused in a single large crucible. Crucibles for metallurgical and geological samples were kept separate.

Micon's review in 1998 (Hennessey 1998) concluded that the sample preparation procedure described above is a conventional one used in the mining industry for decades. It was noted, however, that in recent years the use of disk pulverizers has been discouraged in the preparation of samples which may contain native gold, as these devices have a tendency to smear gold onto the plates and retain it, only to release the gold later in a following sample. Present best practice is considered to be a ring and puck (or puck and bowl) pulverizer. The practice of rolling a sample on a rubber mat was initiated to homogenize it before selecting a subsample for further preparation or analysis. In a situation where free gold grains exist in a matrix of pulverized silicate minerals, the extreme density contrast between them (19.3 for gold versus 2.7 to 3.1 for most minerals) means that the gold grains are very quickly sifted to the bottom of the pulp and left on the trailing edge as the sample is rolled. A sample processed this way has not been homogenized but, rather, has been segregated. As a result, adequate subsampling for analysis can become difficult. The practice of quartering the pulp to subsample, as used at Jacobina, tends to mitigate this effect somewhat. The preferred practice is to select multiple sample increments from a pulp, having disturbed it as little as possible, or to split a subsample using a very small riffle splitter.

In 1998, Micon expressed its opinion that both of the items outlined above should be generally discouraged given that they are not best analytical practice and tend to magnify problems associated with nugget effect. Nevertheless, given the relatively low and even gold grades of the mineralization at Jacobina, and the general lack of coarse or even visible gold, Micon believed



that they have had a very limited effect on the accuracy of the resource estimation. The discussion on data quality below tends to support this view.

In Micon's view the Jacobina mine laboratory was generally well-operated. It exhibited a high degree of general cleanliness and good housekeeping.

13.2 DSM GENERATED DATA

13.2.1 Security

At the Jacobina mine, DSM maintains a large covered storage facility (roof only), with office, for logging and racking of core. This facility was protected by wire mesh and had a locked gate to prevent unauthorized access. It has power and water and was located behind the mine's main gate. DSM maintains a 24hr security presence at the mine and this has been the case since closure of the mine in 1998. Old core retained by the previous operators is intact and in relatively good condition.

Core is transported directly here, from the drill rigs, and is logged and sampled at the core logging facility. Bagged samples are stored in this secure environment at the mine until transported to the laboratory.

13.2.2 Sample Preparation and Analyses

The primary analyses of all samples were performed by Lakefield Geosol Ltda. (Lakefield), an ISO 9001, 2000 certified laboratory located in Belo Horizonte, Brazil. Samples were routinely shipped each 2-3, in batches of 100 to 250, by truck to Salvador and then by air freight to Belo Horizonte. Turnaround time in the laboratory was approximately 7 to 10 days after receipt of samples. Lakefield regularly provides DSM with a detailed status of all samples shipped to the laboratory, when samples were received and when analytical work is planned to be completed.

Lakefield Geosol employed the following method for sample preparation and analysis in Phase I:

- Core samples are initially crushed using a jaw crusher and then 250 g is split and pulverized using a "ring and puck" pulverizer to 95% passing 150 mesh. (Note: this procedure was changed early in the Phase II program, see below.)
- Prior to processing of samples from new projects, pilot samples are analyzed to determine the correct flux and flux composition for best analysis, as determined by the size of the lead button produced.
- Fifty grams of pulverized material is weighed and transferred to plastic bags containing 120 g (+/-) of the pre-mixed flux as indicated in the worksheet. The addition or omission of other fluxes such as flour and nitre is based upon the sample appearance and/or data gleaned from the pilot samples.



- The sample and fluxes are mixed, inquarted with AgNO_3 and fused for approximately 45 minutes to 1 hour at $1,050^\circ\text{C}$.
- The samples are then removed from the furnace and poured into molds.
- Once cooled, the slag is separated from the lead button and the button is pounded into a cube to remove all remaining attached slag. A button weighing approximately 28 g is the ideal result. The button size is evaluated and any anomalies recorded.
- The buttons are then transferred to cupels that have been preheated for approximately 15 minutes. The cupels are placed in the cupellation furnace for approximately 50 minutes at 950°C , ensuring that all the lead is oxidized.
- The cupels are removed from the furnace and the remaining precious metal beads/prills separated for parting and acid digestion.
- The beads are digested in aqua regia and bulked to a predetermined volume prior to analysis by Atomic Absorption Spectrophotometer (AAS). All test tubes are calibrated to ensure equal bulk up volumes.
- Fire assay trays hold 24 samples always including one in-house reference sample, a blank, and one duplicate.
- Samples solutions are read by AAS with the data captured directly into the Laboratory Information Management System (LIMS). All sample data along with QC data are stored in the LIMS with a secure paper trail for traceability.
- The detection limit for the AUFA50 procedure is 5 parts per billion (ppb).

After completion of DSM's Phase I exploration program an analysis of the QA/QC data was undertaken. Scatter plots of duplicate samples (both Lakefield vs. Lakefield and Lakefield vs. ALS Chemex) showed regression lines without strong biases but a lot of scatter within the data (see discussion in Section 14 below). A program of screen metallics fire assaying did not find any significant nugget effect so a "cluster nugget effect" problem was suspected. Cluster nugget effect is the tendency, in some deposits, of fine gold particles to be found near other fine gold particles, in small clusters, rather than more evenly distributed. If care is not taken in sample preparation this type of mineralization will behave like a nugget. The gold at Jacobina is known to be generally fine in size hence it was considered possible that there may be a "cluster nugget" effect.

Generally, the most effective method of dealing with cluster nugget effect is to crush/pulverize to a finer size before any splitting of the sample is done. This separates the clusters of fine gold particles and distributes them more evenly through the sample before splitting. Additionally, a larger aliquot may be used for assaying. Micon recommended to DSM that it look into this phenomenon and a revised sample preparation protocol was introduced as of the end of April,



2004. One kilogram of sample was now pulverized (increased from 250 g) to 95% passing minus 200 mesh (increased from 150 mesh). Check samples on rejects assayed at the second laboratory used the same procedure. DSM has retained coarse sample rejects for the program so any necessary reassays can be easily completed.

For all batches of samples, 10% of the pulps and 5% of the rejects were routinely sent to a second laboratory, ALS Chemex (Chemex) in Vancouver, B.C. Selected pulps and rejects are sent to ALS Brasil by Lakefield Geosol. ALS Brasil rebags and numbers the pulps and pulverizes the rejects to 95% passing 150 mesh (changed to 95% passing 200 mesh in April, 2004 as described above). These samples are shipped to Vancouver for analysis.

The fire assay procedure at Chemex is as follows:

- A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.
- The bead is digested in 0.5 ml dilute nitric acid in a microwave oven.
- 0.5 ml concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting.
- The digested solution is cooled, diluted to a total volume of 4 millilitres (ml) with de-mineralized water, and analyzed by AAS against matrix-matched standards. The detection limit is 5 ppb.

Samples with greater than 10 parts per million (ppm) Au (10 g/t) are assayed by gravimetric finish as follows:

- A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button.
- The lead button containing the precious metals is cupelled to remove the lead.
- The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver, if requested, is then determined by the difference in weights.

In June 2004, DSM introduced three (3) external analytical standards developed by Ore Research & Exploration Pty Ltd. of Australia and marketed in Canada by Analytical Solutions Ltd. The standards, which come in sealed foil packages containing 50g of material, were inserted into batches of samples at the rate of 1 per 75 samples. Lakefield also employs external standards and blanks in each batch of samples as part of their standard laboratory procedures. Results of the standards inserted by DSM were within acceptable analytical limits as shown in Figures 13.1, 13.2 and 13.3. Virtually all of the samples are with + or - 2 standard deviations of the recommended values and the Best Fit line in each graph is very close to the recommended value.

Figure 13.1 Graph of Analytical Results at Lakefield for Standard OREAS 6Pb.

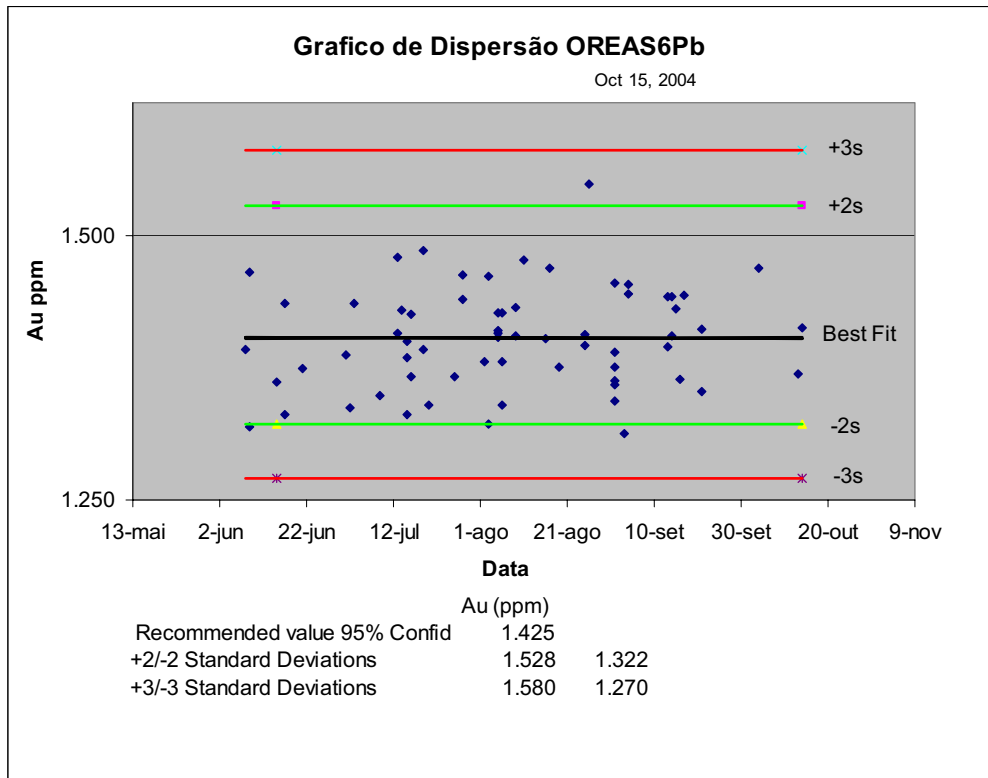




Figure 13.2 Graph of Analytical Results at Lakefield for Standard OREAS 7Pa.

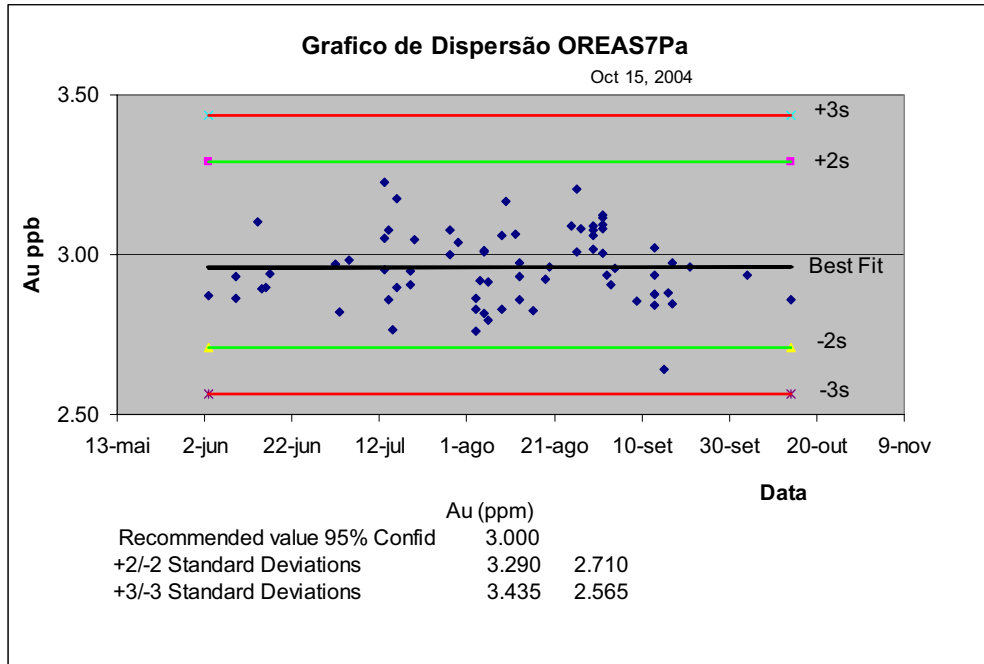
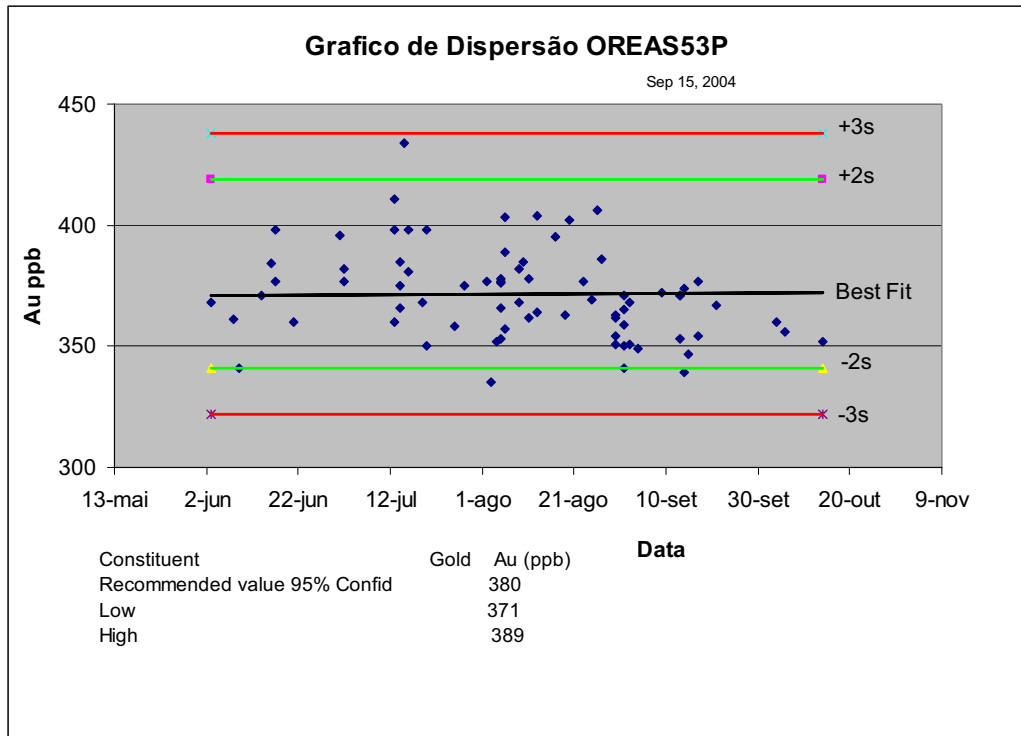




Figure 13.3 Graph of Analytical Results at Lakefield for Standard OREAS 53P.





14.0 DATA VERIFICATION

14.1 JMC

The old Jacobina mine laboratory ran a quality assurance/quality control (QA/QC) program. This program consisted of introducing one sample duplicate and one blank sample with each tray of 35 fire assays. At the time of Micon's first visit in 1998 it was William's intention to expand the QA/QC program by purchasing and including an analytical standard and to involve the laboratory in a round-robin cross checking program with other laboratories in Brazil and/or elsewhere in South America.

William also performed an initial statistical analysis of a portion of the Jacobina database after its acquisition of JMC. The data used for the estimation of the resource at João Belo were studied and this study was reviewed by Micon in 1998. Frequency histograms and log probability curves were plotted for the raw data.

The plots of raw data from João Belo showed a single, lognormally distributed population from just above the 10th, out to beyond the 99th percentile, representing a gold grade range of about 0.1 to over 100 g/t Au. Below the 10th percentile, or approximately 0.1g/t Au, most of the data reported as having a value of 0.01 g/t Au. No analytical results were reported with values of 0.02 to 0.04 g/t Au and very few for 0.05 g/t to 0.09 g/t Au. This probably indicates an inability to discriminate between gold values in this concentration range and likely means that the mine laboratory has an accuracy of about ± 0.1 g/t Au. The data also show very few outliers. Of the 39,664 assays in the database, only 32 were above 30.0 g/t Au.

It was Micon's opinion (Hennessey 2003b) that the portion of the database used by JMC to estimate the resources at João Belo was a "clean" and well-sampled one and was suitable for use in the accurate estimation of a resource. It is likely that the remainder of the database is of similar quality.

14.1.1 Production Reconciliation

During its operation the Jacobina mine reconciled its annual production with the mineral resource estimates. Each year the portion of the mineral resource extracted by mining was determined and multiplied by planned recovery and dilution factors. The grade of this diluted mineral resource was reconciled to production figures, as determined by the mill, and a mine call factor (MCF) was calculated and used to adjust diluted resource grades to produce the reported mineral reserve grades. The MCF was calculated using the formula:

$$\text{(Recovered Grade + Tails Grade)/Diluted Resource Grade}$$

The MCF in use at mine closure was 0.954 indicating that the true head grade was 95.4% of the grade estimated from the mineral resources (prior to application of the MCF). Micon reviewed the methodology used for the resource reconciliation and found it to be appropriate.



The results of the reconciliation show that the diluted resource estimates were predicting the head grade of mill feed to within a discrepancy of less than 5%. This indicates that the assay data produced by the mine were, on average, producing an acceptable level of accuracy for the resource estimates. Micon considered this to be within the normal range for mines and an acceptable level of reconciliation, particularly once the MCF was applied (Hennessey 2003b).

14.2 DSM

14.2.1 QA/QC

In Hennessey (2003a) Micon discussed the QA/QC results for DSM's Phase I exploration program. Micon noted that scatter plots of pulp and reject duplicate assays showed that Chemex was biased high relative to Lakefield. At the time Micon speculated that this bias was likely caused by a few of the higher-grade assays and may be the result of nugget effect.

At the request of DSM, Lakefield carried out a test program of metallic screen assays where, following pulverizing, the samples were screened at 200 mesh and the resulting size fractions analyzed separately. The metallics assays at Lakefield essentially confirmed the original assays and did not detect a significant amount of coarse gold, a result consistent with visual observations. However, another effect was noted. Graphs for results on both pulps and rejects examined by Micon (Hennessey 2003a) showed a fair amount of scatter between 500 and 1,500 ppb, even though the regression line showed relatively little bias. Micon felt at the time that this type of behaviour suggested the possible existence of "cluster nugget effect". As a consequence DSM instituted a modified sample preparation protocol designed to deal with the cluster nugget effect, as of the end of April, 2003. Micon concluded (Hennessey 2003a) that the new sample preparation protocols have successfully dealt with the earlier problems noted.

Figures 14.1, 14.2 and 14.3 show results of check assay samples for all samples check, pulps only and rejects only, respectively. The results between the two laboratories compare within acceptable limits and there is no evidence of systemic bias from one laboratory to another. Samples which do not correlate very well are routinely checked and results indicate that this problem is usually due to the nugget effect or in a few cases, misnumbering of samples when they are sent out for checks.



Figure 14.1: Comparison of All Check Assay Data, New Sample Preparation Protocols (3 graphs with different scales showing the overall data set)

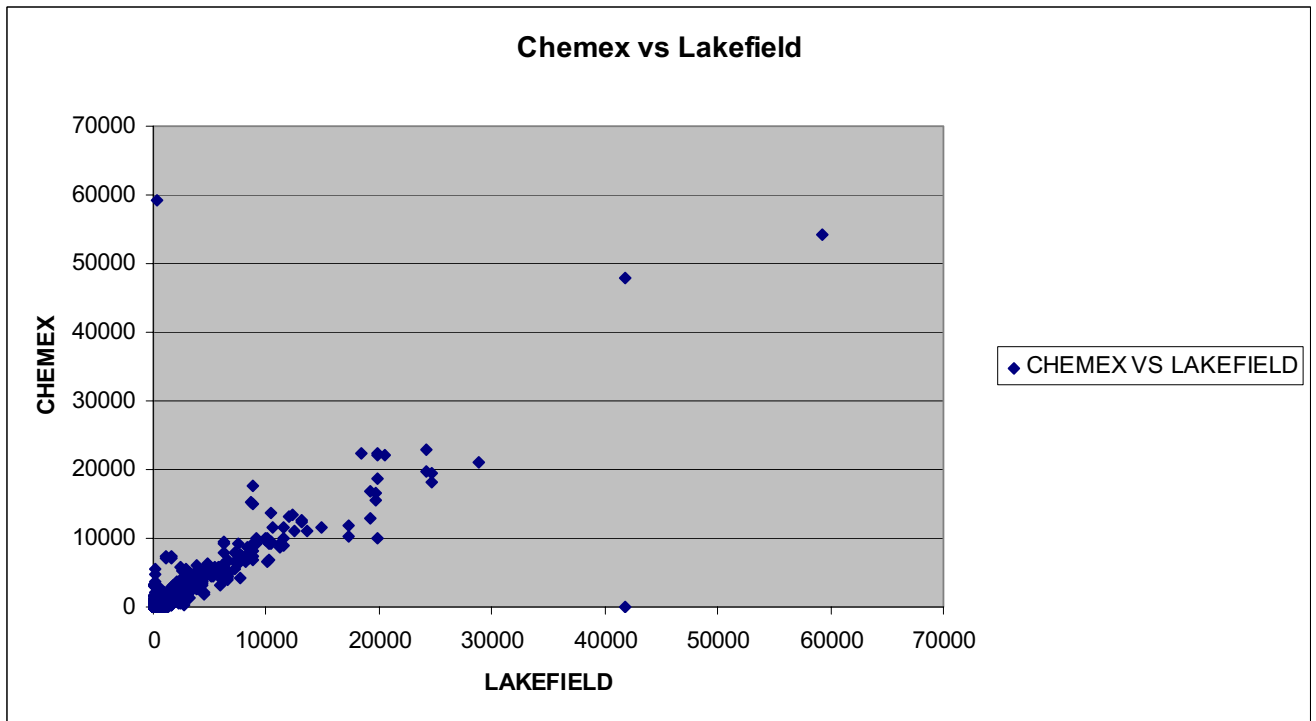
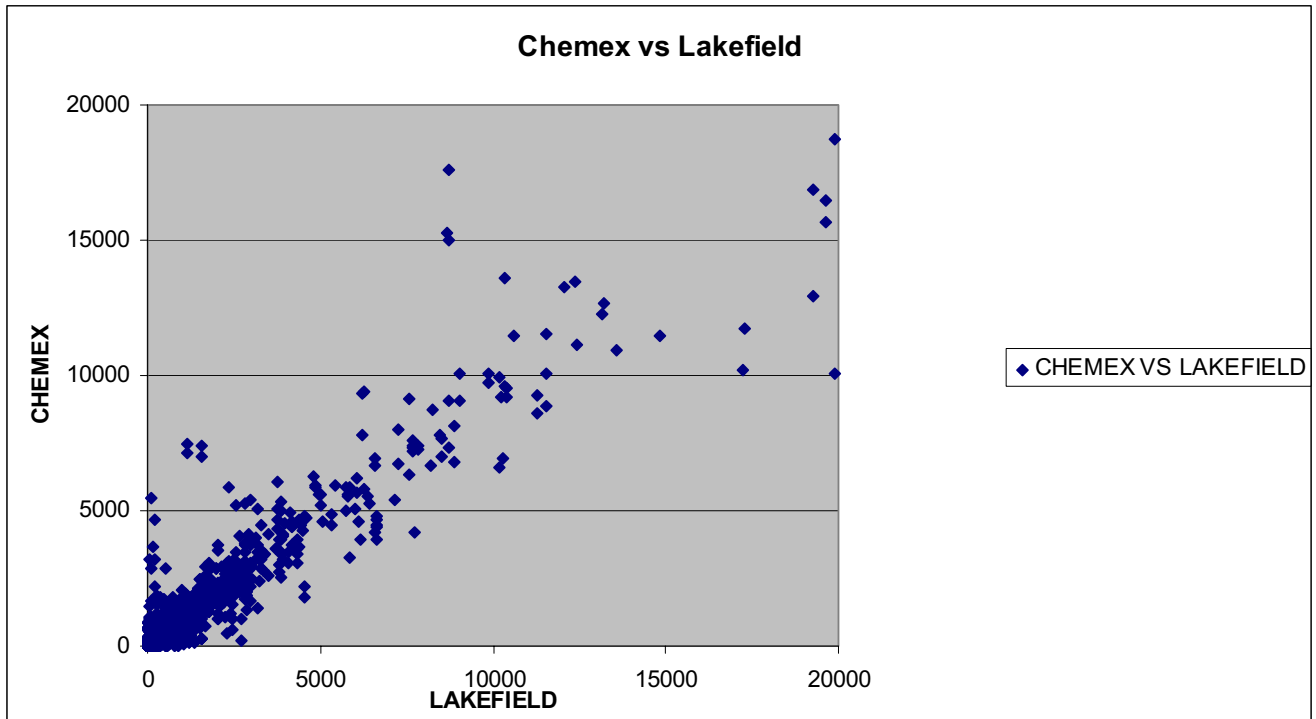




Figure 14.1: Comparison of All Check Assay Data, New Sample Preparation Protocols (3 graphs with different scales showing the overall data set)

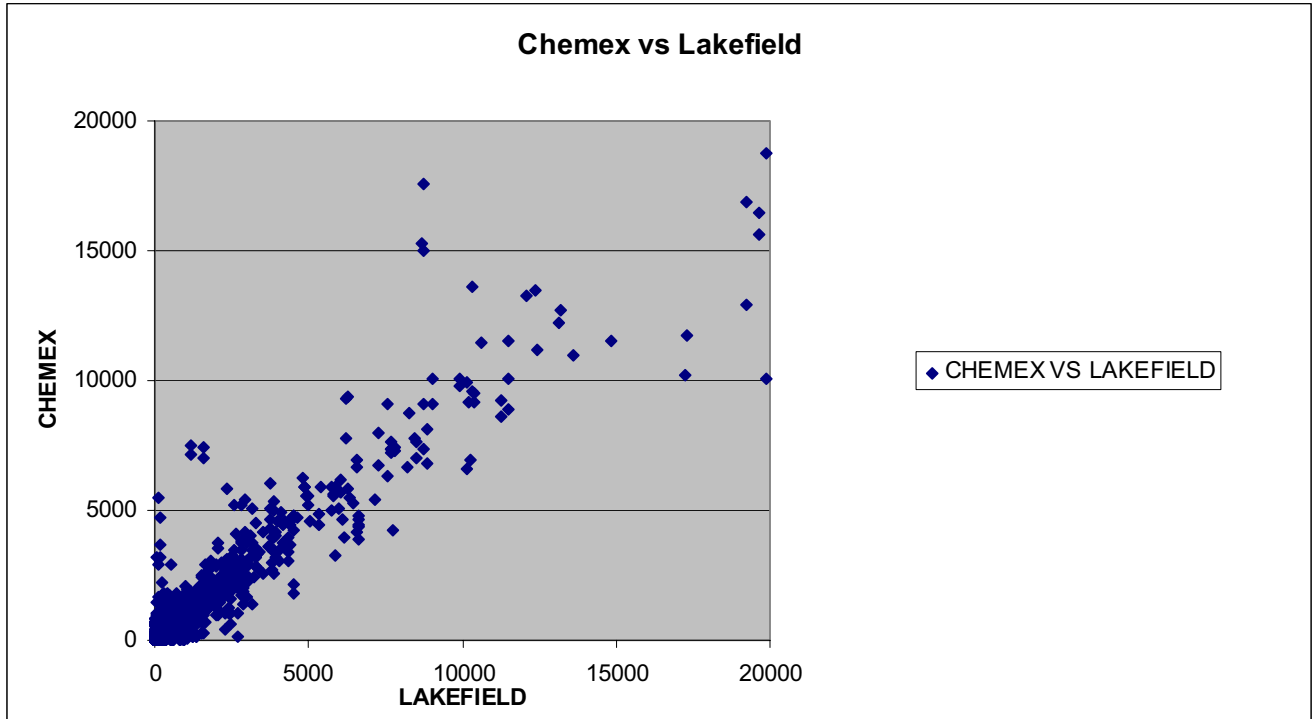




Figure 14.2: Comparison of Check Assay Data, New Sample Preparation Protocols – Lakefield versus Chemex Pulps.

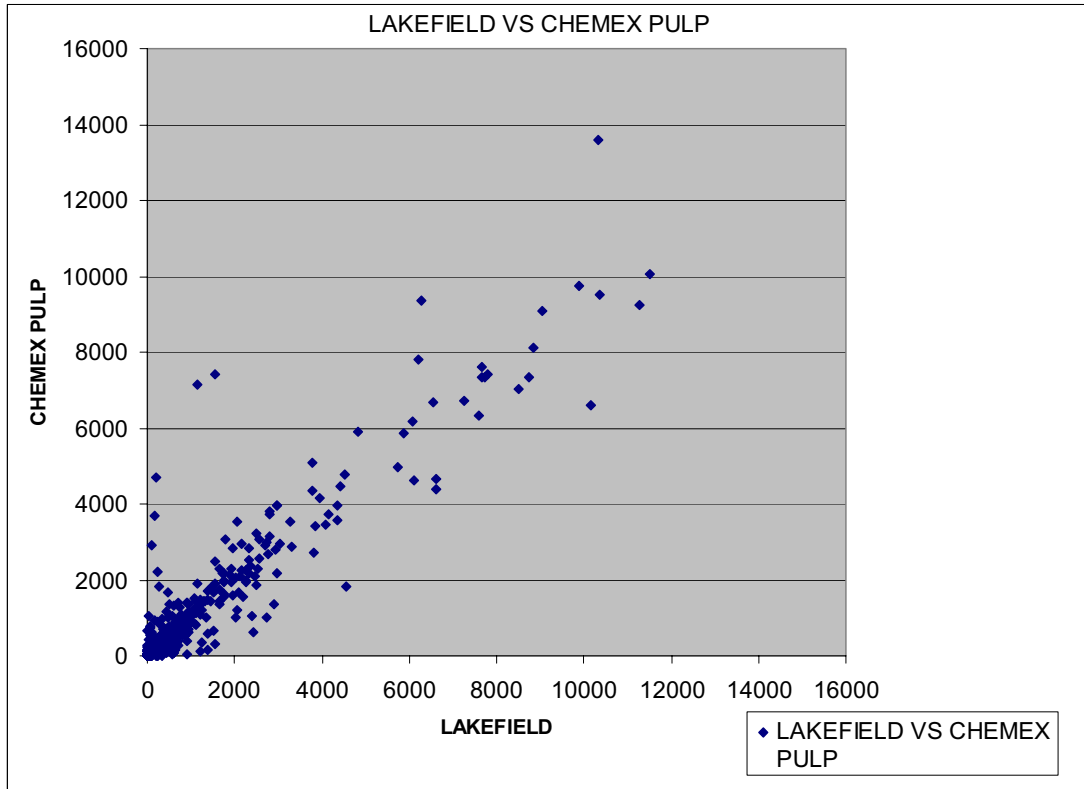
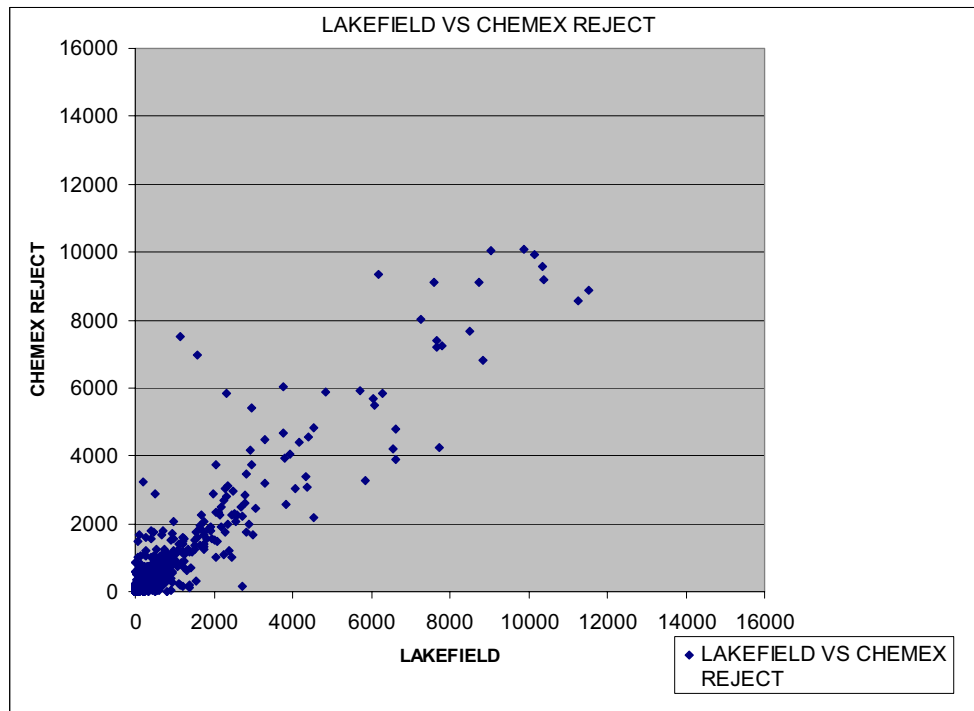




Figure 14.3: Comparison of Check Assay Data, New Sample Preparation Protocols – Lakefield versus Chemex Rejects.



14.2.2 Database Checks

All assay results are received electronically from the laboratories along with assay certificates, in paper form, which are mailed separately. These data are added into the Gemcom drill hole database as results become available. In the Phase I program drill hole logging was performed manually with information entered into Excel spreadsheets for importing into Gemcom. All JMC holes were also entered manually into spreadsheets. During Phase II exploration Gemcom was contracted to write a direct-entry software system which allowed data to be captured electronically as logging occurs. Gemcom has now developed and tested the software which was fully implemented in July, 2003.

DSM felt it was necessary to fully check the manually entered database files for mistakes. For each drill log the original assay certificates were checked to ensure that the assays had been entered correctly. Data, once confirmed, were entered into a spreadsheet for importation into Gemcom. Once entry was complete, the spreadsheet was printed out and rechecked against the drill log. Survey data for the drill hole collars were also checked to ensure that they were located correctly. Once this stage of the checking was complete, plan maps and cross sections were plotted at the same scale as the historical archive. The new sections were overlain on the old and any discrepancies checked and corrected as necessary. DSM completed the data verification process for the historical data in July 2003 with every record checked.



15.0 ADJACENT PROPERTIES

DSM controls most of the Bahia Gold Belt including exposures of the Serra do Córrego Formation in the entire Serra do Jacobina range with the exception of a few small garimpeiro reservations. There are no known adjacent properties whose description or mineralization materially affect the value of DSM's land holdings.



16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

16.1 SNC LAVALIN FEASIBILITY STUDY

SGS Lakefield Research under the direction of SNC Lavalin completed testwork on samples from the Jacobina mine area. The metallurgical results are summarized in the SNC Lavalin feasibility study of September 2003 and filed on www.sedar.com as follows:

“A programme of metallurgical test work was carried out on samples of mineralized material from the Serra do Córrego deposit by Lakefield. SNC-Lavalin is of the opinion that the procedures reported by Lakefield in their report entitled “An Investigation of Gold Recovery From Jacobina Project Samples” to have been carried out by them met industry accepted standards. The test work comprised leach kinetics testing and was completed under the direction of SNC-Lavalin, although SNC-Lavalin did not observe the test work. Although the Jacobina property is reported to have an operating history of many years, it was recognized by SNC-Lavalin and DSM that there was value in carrying out a test work programme, as material from Serra do Córrego had not been previously milled.

Material for the test work was made available from surface exploration drill holes drilled by DSM in the first half of 2003 in the Serra do Córrego deposit. SNC-Lavalin did not observe the drilling. The selection of samples was carried out by SNC-Lavalin, which was intended to be representative, and was based on geological and assay information from the drill core logs made available by DSM. In selecting the samples for metallurgical testing, it was SNC-Lavalin’s objective to provide material from the three lithologies where mineralization has been identified, based on Micon’s analysis of mineralization, namely the Upper Conglomerate, Lower Conglomerate and quartzite, for samples below the anticipated cut-off grade, and material approximating low-grade, medium-grade and higher-grade material. In addition, it was intended to ensure that the two reported size gradations of pebble conglomerate (large-to-medium pebble conglomerate (LMPC) and medium-to-large pebble conglomerate (MLPC)) were fairly represented. The sample consisted of seven composites that covered a grade range of 0.44 g/t to 3.19 g/t for quartzite material, LMPC and MLPC. The grade range was selected to cover low-grade material, historical ore-grade material and high-grade material. The selected samples had already been prepared and shipped to Lakefield Geosol Ltda. (Geosol) in Belo Horizonte by DSM for drill core assaying. Geosol packaged the samples and forwarded them to Lakefield of Ontario where the test work was carried out.

The estimated grade of the combined samples as assayed by Geosol was 1.34g/t; the calculated head as estimated by Lakefield was 1.28 g/t. The results indicated that for the samples studied, leach extractions of 97% could be achieved in 24 hours leaching at a grind size of 80% passing 100 μm , which represented the reported historical plant grind size. Leach kinetics were also evaluated at grind sizes of 80% passing 82 μm and 125 μm . Extractions were unaffected by grind size within the range examined.

On a basis of the test work, the plant will be fitted with four additional agitated leach tanks to increase the leach capacity to 24-hour residence time from the pre-existing 16 hours.



According to information provided by DSM, the existing plant has nine hours residence time in the pachuca tanks and an additional seven hours residence time in the carbon tanks for a total of sixteen hours at a throughput rate of 190 t/h. Four new agitated tanks will be added to the leach train as part of the expansion of the plant. This will add 8 hours leach time to bring the leach residence time up to 24 hours.

In 1997, DSM reported the plant recovery experience to be 92.3%. The recent metallurgical test work conducted at Lakefield indicated that extractions for the sample received at eight hours were 88% to 89%, and that the leach was completed in 48 hours with a very small reduction in leach extraction at 24 hours. The leach kinetics curve is very flat from 24 hours to 48 hours.

Based on the test work results, SNC-Lavalin is of the opinion that the proposed expanded leach capacity would result in an average extraction of approximately 97% for feed which has the same composition as the test samples. Also in the opinion of SNC-Lavalin, solution losses from a carbon adsorption plant, such as Jacobina, typically are 0.5% or less. SNC-Lavalin recommends using 0.5% solution loss for a recovery of 96.5%. This recovery is reflected in the analyses included in this Report.”

16.2 MORRO DO VENTO TESTWORK

DSM carried out metallurgical tests on samples from diamond drill holes on the Morro do Vento target area. Morro do Vento is located about 1.5 km from the processing plant and existing mines, and approximately 9 km from the town of Jacobina. The metallurgical test work was conducted to determine recoveries using conventional milling. DSM is continuing further test work to determine the heap leach potential for Morro do Vento.

SGS Lakefield Research Limited of Lakefield, Ontario completed the test work on six grade/ore type composites and one overall master composite prepared from rejects of diamond drill hole samples from the Morro de Vento project. Samples were selected by DSM to provide a representative range of grade and proportion of oxide/sulphide. Sample selection and the metallurgical test process was reviewed by Bruce Ferguson, P.Eng. consulting metallurgist of Kappes, Cassidy & Associates. All samples were originally prepared and tested for gold by fire assay by Lakefield Geosol in Brazil.

The six grade/ore type composites and one overall Master Composite were crushed to -10 mesh. Metallurgical tests consisted of grinding tests on the Master Composite, followed by cyanidation tests on the Master Composite and the individual Grade/Ore Type composites. Averaged gold assay results for the individual composites ranged from 0.53 g Au/t for the Low Grade Oxide composite to 3.50 g Au/t for the High Grade Oxide composite. Direct assay of the Master composite by screened metallics indicated a grade of 1.73 g Au/t.

SGS Lakefield reported that the overall gold extraction for the Master composite was 96.4% with a range of 95.7% to 97.0%. No significant difference in extraction was observed for the tests conducted at shorter, 12 hour, and longer, 48 hour, leach times. Cyanide and lime consumption for the Master Composite were found to be at 0.81 kg/t and 0.22 kg/t, respectively. Extractions



for the individual grade/ore type composites ranged from 90.8% for Low Grade Oxide to 98.5% for High Grade Mixed. Tailings gold grades for these samples ranged from 0.02 to 0.07 g Au/t.

Metallurgical tests were carried out by Lyn Jones, P.Eng., Project Metallurgist and Inna Dymov, P.Eng., Senior Metallurgist of SGS Lakefield Research in Lakefield, Ontario. Mr. Jones and Ms. Dymov are Qualified Persons as defined under National Instrument 43-101. Original sample preparation was carried out by Lakefield Geosol, an ISO 9001-2000 laboratory based in Brazil. Sample selection was done by DSM and reviewed by Mr. Bruce Ferguson, P.Eng. consulting metallurgist for DSM with Kappes, Cassidy & Associates. Mr. Ferguson is a Qualified Person as defined under National Instrument 43-101.



17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

17.1 OVERVIEW

DSM's estimated mineral resources for the Jacobina property in August 2003 and these were reviewed and confirmed by Terry Hennessey, P.Geol. of Micon International and outlined in the report of Hennessey (2003b). This report provides an update of the mineral resources incorporating results of the 2004 diamond drilling as discussed in Section 11 above. The methodology employed in preparing the new estimation follows that outlined in Hennessey (2003b) using the polygonal longitudinal method. Some geostatistical analysis has been completed on some of the zones and this work is continuing with intent of eventually moving to a block model methodology. However, past production indicates that the polygonal longitudinal method provides a reliable estimate of resources sufficient to provide the basis for mineral estimation.

17.2 MINERAL RESOURCE ESTIMATES

17.2.1 Database

The assay database, from which the mineral resources at the Jacobina project are estimated, is comprised of two sample types, drill core and chip/channel samples. All of the historical data has been verified and entered into the Gemcom digital database by DSM. New drill holes are logged and information entered directly in a digital database using the Logger program. As assays are received, they are loaded into the Gemcom database which automatically matches the assay results to the correct samples. Chip/channel samples have been composited into pseudo drill holes for use in the resource estimation.

17.2.2 Specific Gravity

JMC has used a specific gravity (SG) of 2.70 for all resource estimation at the mine because the host rocks were composed dominantly of quartz and did not appear to be porous. This number appeared to be confirmed by initial physical property work for DSM by Buckle (2002) who obtained an average SG of 2.68 from twelve hand specimen samples. However, as part of the feasibility study being conducted by SNC-Lavalin, DSM submitted 18 core samples for a "waxed core bulk density test". The waxed core test returns a true bulk density allowing for porosity in the rock samples.

The average result for the 18 bulk density tests was 2.62 with very little scatter to the data. As a consequence DSM has chosen to pursue a somewhat conservative course and use a bulk density of 2.60 tonnes per cubic metre for resource estimation. Micon concurred with the decision.

17.2.3 Estimation Methodology

The estimation methodology utilized is the same as outlined in the Hennessey (2003b) using the conventional polygonal method on vertical longitudinal sections. Geological interpretation of the extent of mineralization for each reef is plotted on the long sections after interpretation has been performed,



using plans and drill sections. Individual polygons are created around separate drill hole pierce points. This process is accomplished by plotting the halfway points between all drill holes which then become the vertices at which two, or more, lines of a polygon join. Polygons at the outer edge of the area drilled are terminated against bounding faults and dykes, projected to appropriate depth and terminated or finished against blank polygons around low grade drill holes.

The interpreted extent of mineralization is also subdivided into separate blocks which overly the polygons. The blocks conform to, and are limited by, existing or projected development, as appropriate. These blocks represent individual mineable blocks or stopes or, in unplanned areas of the mine, reasonable projection distances for assay data.

Polygons were done in AutoCAD and areas measured. The determination of volumes and conversion to tonnes was done by the following formula:

$$\text{Resource (tonne)} = \text{PLV (m}^2\text{)} * \text{T. Width (m)} * 2.6 / 0.87$$

Where:

PLV (m²) = area on vertical longitudinal plane

T. Width (m) = true width of drill intersection

2.6 = Specific Gravity

0.87 = sin dip 60°

In the case of the Joao Belo zone, the dip in the lower extension of the LMPC reef is flatter at 60 degrees as compared to the 70 degree dip higher up in the deposit, hence the sin component was adjusted appropriately. High assays were cut to 30 g Au/t however this only affected a small number of assays.

General economic criteria were applied to the resource estimation by DSM in that resource blocks had to meet the average cash cost cut off grade in order to remain in the published table of mineral resources. This was in practice about 1.3 – 1.5 g/t Au depending on the deposit.

17.3 RESOURCE CLASSIFICATION

The mineral resource estimate reported here in which is an update of the August 2003 estimate was done in accordance with the standards of Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves Definitions and Guidelines adopted by CIM Council on August 20, 2000 (the CIM Code) and reportable under NI 43-101. Terry Hennessey, P.Geol. of Micon visited the site from General economic criteria have been applied to the resource estimation in that blocks must meet the average cash cost cut off grade to remain in the published table of resources. The resources are classified into confidence categories of measured, indicated and inferred using the following criteria;

João Belo Area

- Measured Resources are located between drifting on two underground levels and grades are estimated from channel samples from development headings with maximum intervals of 5 m, cross cuts every 15m and drill holes every 20 m along the drifts.



- Indicated Resources are delimited by one underground drift along the strike of the zone with similar sampling/drilling as in the measured resources. Below the drift the distance between the drill holes is variable with an average of 130 m along strike and 50 m vertically. In the southern extensions of the João Belo North block the limits are established by a higher drill hole density and the 730 level extension. In addition, the extensive mined out stopes to the north strongly support indicated mineral resources in this area.
- Inferred Resources have been estimated where wide spaced diamond drilling, surface geological data (including garimpos) and underground data indicate geological continuity. Inferred blocks are defined by at least one drill hole.

Basal Reef, Main Reef, Serra do Córrego, Intermediate MVT Reefs, Canavieiras and Other areas

- Measured Resources are located between drifting on two underground levels. Grades are determined from channel samples which were consistently taken from the face of the two on-reef drifts with a maximum interval of 5.0 m.
- Indicated Resources are defined by a high density of diamond drill holes with a maximum spacing of 50 m (Basal Reef - 50 m horizontal by 40 m vertical; Serra do Córrego - 25 m horizontal by 30 m vertical; Intermediate MVT - 50 m horizontal by 50 m vertical and Canavieiras – 30 m horizontal in flat zone). Where the drilling density is not as high, extensive mined out stopes indicate continuity of structure and support grades estimated from adjacent drill holes.
- Inferred Resources have been estimated where wide spaced drilling, surface geological data (including garimpos) and underground data indicates geological continuity. Inferred blocks are defined by at least one drill hole.

17.4 MINERAL RESOURCES

The mineral resources, as updated and determined by DSM, are set out, by area in Table 17.1 below.

Table 17.1: Summary of Mineral Resources Updated by DSM

Category	Mine	Tonnes	Grade (g/t Au)	Contained Gold (ounces)
Measured	João Belo	2,300,000	2.41	180,000
	Itapicurú **	250,000	5.70	45,000
	Serra do Córrego	10,000	7.50	3,000
	Canavieiras	56,000	6.73	12,000
	Subtotal	2,620,000	2.83	240,000
Indicated	João Belo	10,300,000	2.37	790,000
	Itapicurú **	9,390,000	2.63	790,000



	Serra do Córrego	910,000	2.39	70,000
	Canavieiras	850,000	3.61	100,000
	Joao Belo Sul	770,000	2.55	60,000
	Subtotal	22,200,000	2.49	1,810,000
Total Measured and Indicated	João Belo	12,600,000	2.38	970,000
	Itapicurú**	9,630,000	2.71	840,000
	Serra do Córrego	920,000	2.44	72,000
	Canavieiras	900,000	3.80	110,000
	Joao Belo Sul	770,000	2.55	60,000
	Total	24,800,000	2.53	2,050,000
	Inferred	João Belo	5,300,000	2.33
João Belo - other reefs		1,000,000	3.88	120,000
Itapicurú **		3,800,000	3.17	390,000
Serra do Córrego		1,800,000	2.95	170,000
Canavieiras		3,700,000	2.41	290,000
Joao Belo Sul +		3,900,000	1.67	210,000
Other Areas		2,700,000	3.23	280,000
Total		22,200,000	2.61	1,900,000

*Totals have been rounded

** Itapicurú includes Morro do Vento, Morro do Vento Extension and Basal/Main Reef includes indicated resources above 800level of Morro do Vento of 5,000,000 tonnes grading 2.07 g Au/t

+ Previously included in Other Areas

Table 17.2 below is a more-detailed summary of the mineral resources at Jacobina reported by mine and principal zones showing the major increases from the August 2003 estimate.

The mineral resources at Jacobina have been estimated using the polygonal method. This is a long established method of resource estimation which has been shown to be capable of producing accurate global grade estimates when properly used. Jacobina's production grade reconciliations discussed in Section 14, below, have demonstrated that the mineral resource estimates have predicted mining block grades with reasonable accuracy.

However, it is recognized by DSM that the polygonal method does have some drawbacks as pointed out by Hennessey (2003b). Individual polygon grades are based on single drill holes. The normal variability in sampling for gold makes it unlikely that individual polygon grades have been determined with great accuracy even if the average of a large number of polygons is accurate. Therefore using individual polygon grades to "high grade" or selectively mine a deposit is likely to lead to unachievable expectations.

At Jacobina this side effect is of little material impact as the extents of the zones have generally been selected based on recognizable geological criteria and the extension of previous mining experience. As such the grades of each level of the mine or annual production can be predicted with some confidence. DSM is actively engaging experience geostatistical consultants to



determine a more optimum grade interpolation method to provide better local grade estimates to facilitate mine planning.

The updated resource estimate has been reviewed and confirmed by Terry Hennessey, P.Geo. of Micon International. Mr. Hennessey, who is an independent qualified person as defined under National Instrument 43-101, visited the site from November 30 to December 2, 2004. His opinion letter is included in this report in Appendix II. The resource estimation methodology and classification used is the same as outlined in the August 2003 report by Mr. Hennessey filed on SEDAR.

Mr. Hennessey in his review letter concludes *"It is Micon's opinion that the resource estimate presented is a reasonable one and its classification is consistent with practices previously applied at Jacobina and approved of by Micon. It is also consistent with the Canadian Institute of Mining, Metallurgy and Petroleum's (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council August 20, 2000. However, it has the same limitations on accuracy of local estimation of individual polygon grades as described in the Micon report. DSM is working on addressing this limitation with the geostatistical studies under way."*

Table 17.2: Mineral Resources by Mine and Zone

Mine / Area	Reef	Measured Resources		Indicated Resources		Measured + Indicated		Inferred Resources	
		Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)
João Belo									
		974,000	2.25	8,661,000	2.32	9,635,000	2.32	5,261,000	2.33
	L MPC - Blocks*								
	L MPC - Pillars**	1,245,000	2.47	1,158,000	2.14	2,403,000	2.31	0	
	MPC	82,000	3.35	495,000	3.66	577,000	3.61	0	
	LVL	0		0		0		0	
	Total	2,300,000	2.41	10,300,000	2.37	12,600,000	2.38	5,261,000	2.33
João Belo - Inferred other reefs									
	MPC	0		0		0		930,000	3.82
	LVL	0		0		0		117,000	4.38
	Total	0		0		0		1,047,000	3.88
João Belo Sul									
	Undefined	0		768,000	2.55	768,000	2.55	3,892,000	1.67
	Total	0		768,000	2.55	768,000	2.55	3,892,000	1.67
Itapicuru***									
	Basal Reef MCZ - FW Mined	0		683,000	2.82	683,000	2.82	0	
	Basal Reef - MCZ - Blocks	0		1,503,000	2.64	1,503,000	2.64	884,000	3.17
	Basal Reef - MCZ - Old Pillars	0		69,000	2.93	69,000	2.93	0	
	BASAL REEF - MCZ - New Pillars	0		86,000	2.50	86,000	2.50	0	
	Basal Reef - MCZ - Lateral	0		51,000	2.22	51,000	2.22	0	
	Basal Reef - MVT	25,000	4.20	557,000	3.07	582,000	3.12	150,000	3.29
	Main Reef	220,000	5.88	639,000	6.16	859,000	6.09	350,000	8.48
	Intermediate INFERIOR - MVT	0		2,052,000	2.38	2,052,000	2.38	696,000	2.58
	Intermediate SUPERIOR - MVT	0		3,675,000	2.02	3,675,000	2.02	1,385,000	2.46
	Intermediate LVLPC - MVT	0		70,000	4.83	70,000	4.83	131,000	2.29
	Intermediate - SPC	0		0		0		252,000	1.79
	Total	245,000	5.70	9,390,000	2.63	9,630,000	2.71	3,848,000	3.17
Serra Do Corrego (SCO)									
	Lower Unit (LU)	10,000	7.50	0	0.00	10,000	7.50	0	
	Lower Unit (LU) - New	0		582,000	2.15	582,000	2.15	96,000	3.21
	Middle Unit (MU) - New	0		327,000	2.81	327,000	2.81	464,000	1.34
	Maneira Sul - SCO	0		0		0		341,000	3.53
	Maneira Norte - SCO	0		0		0		911,000	3.53
	Total	10,000	7.50	909,000	2.39	919,000	2.44	1,812,000	2.95

Table 17.2 (cont'd) Mineral Resources by Mine and Zone

Mine / Area	Reef	Measured Resources		Indicated Resources		Measured + Indicated		Inferred Resources		
		Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	
Canavieiras										
		Piritoso/ Liberino Reef	56,000	6.73	57,000	9.71	113,000	8.23	493,000	4.72
		Intermediate LU - CAN	0		64,000	2.20	64,000	2.20	473,000	2.60
		Intermediate MU -CAN	0		726,000	3.25	726,000	3.25	1,433,000	2.20
		Maneira	0		0		0		998,000	1.66
		Hollandez	0		0		0		257,000	1.73
		Total	56,000	6.73	847,000	3.61	903,000	3.80	3,654,000	2.41
Other Areas										
Jacobina Sul										
		Campo Limpo	0		0		0		1,122,000	2.10
		Lagedo Preto	0		0		0		138,000	3.54
		Subtotal	0		0		0		1,260,000	2.26
Jacobina Norte										
		Serra Branca -1	0		0		0		241,000	4.21
		Serra Branca -2	0		0		0		591,000	5.50
		Serra Branca -3	0		0		0		590,000	2.64
		Subtotal	0		0		0		1,422,000	4.09
		Total Other Areas	0		0		0		2,682,000	3.23
		Total	2,611,000	2.83	22,214,000	2.49	24,820,000	2.53	22,196,000	2.61

Includes pillars above the existing workings

**Includes all pillars below existing workings

***Itapicuru includes Morro do Vento, Morro do Vento Extension and Basal/Main Reef

Note: zones with changed resources from August 2003 are highlighted



17.5 MINERAL RESERVES

The updated Jacobina Mine (João Belo Zone - LMPC reef) mineral reserves were estimated based on the measured and indicated mineral resources estimated by DSM and reviewed by Micon International as outlined in Section 17.4 above. The methodology employed to estimate the new resource was the same as outlined in the Micon report of August 2003 (Hennessey, 2003b).

The following tables summarizes the mineral resources and mineral reserves of the Jacobina Mine, João Belo Ore Zone, developed from the initial reserve estimate done by Dynatec in August 2003 (SNC Lavalin, 2003) and the updated reserve estimate done by DSM described in this report, following the 2004 drilling program.

Table 17.3 Mineral Resource Summary, Joao Belo Zone, August 2003 by Micon (Hennessey 2003b)

MINERAL RESOURCE SUMMARY			
CATEGORY	Tonnes	"in situ" Grade (g/ton)	Gold Content (ounces)
Measured	2,301,000	2.41	178,100
Indicated	6,818,000	2.31	506,700
Total Measured + Indicated	9,119,000	2.34	684,800
Inferred	8,574,000	2.77	764,100

The August 2003 mineral resource estimate for the Joao Belo Zone was prepared by DSM under the direction of Dr. William N. Pearson, Vice President, Exploration for DSM. The resource estimate was reviewed and confirmed by Terry Hennessey, P.Geo. of Micon International as outlined in his report dated August 2003 (Hennessey, 2003b).



Table 17.4 Mineral Reserve Summary Joao Belo Zone, August 2003 by Dynatec (SNC Lavalin 2003)

MINERAL RESERVE SUMMARY			
CATEGORY	Tonnes	Diluted Grade (g/ton)	Gold Content (ounces)
Proven	1,720,000	2,20	121,672
Probable	5,750,000	2,08	384,566
Total Proven + Probable	7,470,000	2,10	504,405

The Qualified Person that prepared the mineral reserve estimate for Dynatec was Mr. L. R. Hwozdyk, P. Eng., an associate of Dynatec.

The updated mineral resource summary as outlined in Section 17.4 above and upon which is being assessed for mineral reserves is set out in Table 17.5 following:

Table 17.5 Updated Mineral Resource Summary, Joao Belo Zone, December 15, 2005

UPDATED MINERAL RESOURCE SUMMARY			
CATEGORY	Tonnes	"in situ" Grade (g/ton)	Gold Content (ounces)
Measured	2,300,000	2.41	180,000
Indicated	10,300,000	2.39	790,000
Total Measured + Indicated	12,600,000	2.38	970,000
Inferred	5,300,000	2.33	390,000

The updated mineral reserve summary estimated by DSM as outlined below is set out in Table 17.6 following:

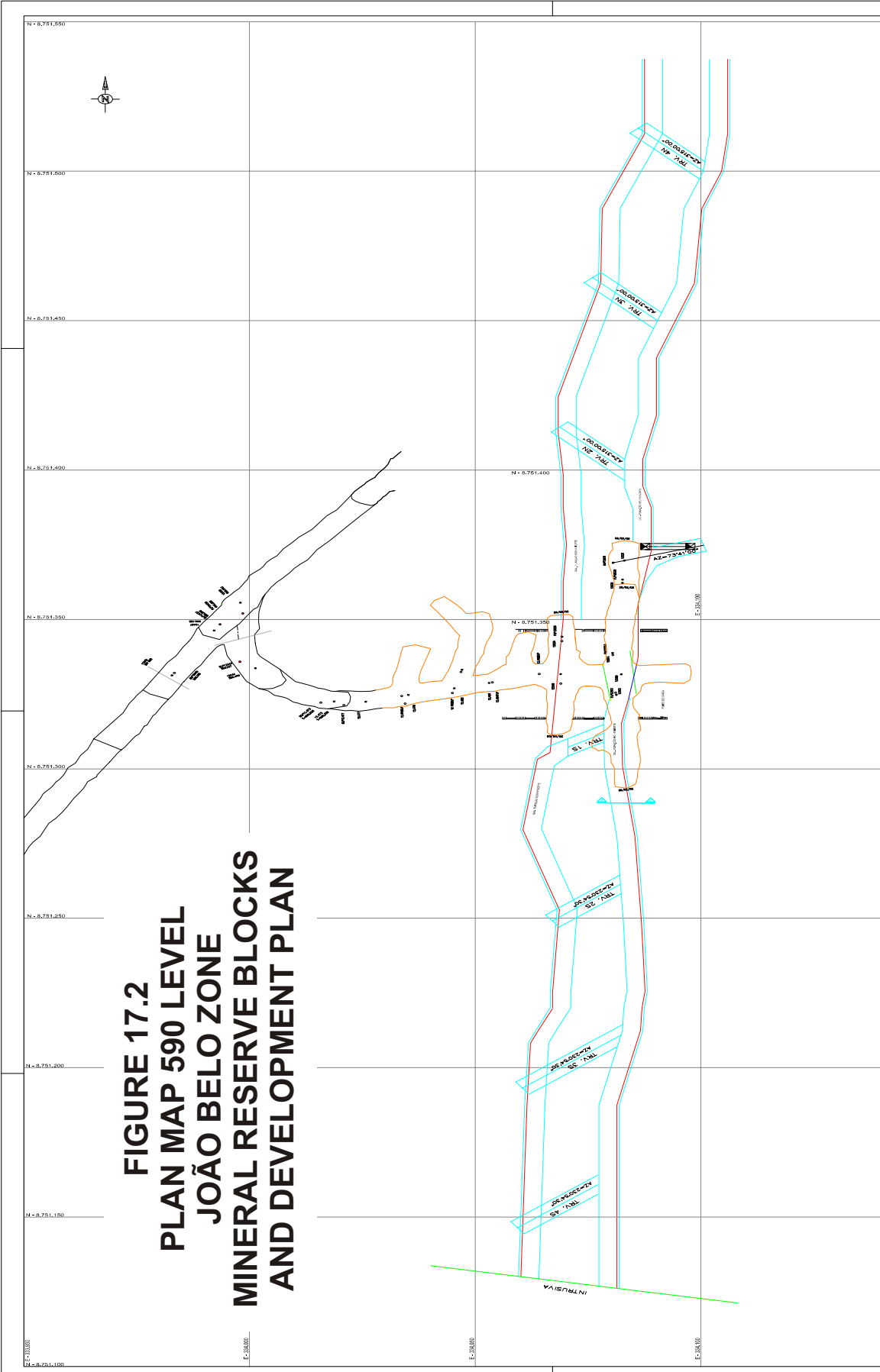


Table 17.6 Updated Mineral Reserve Summary, Joao Belo Zone, March 1, 2005

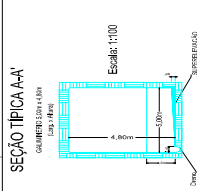
MINERAL RESERVE SUMMARY			
CATEGORY	Tonnes	Diluted Grade (g/ton)	Gold Content (ounces)
Proven	1.955.000	2.02	127,000
Probable	9.147.000	2.04	599,800
Total Proven + Probable	11.102.000	2,04	726,800

The shape and geometry of the mining blocks (stopes) for the reserve calculation was the same used in the mineral resource estimation. Figure 17.1 is a vertical longitudinal section of the Joao Belo Zone showing the location of mineral reserve blocks and Figure 17.2 is a plan map of the 590 level showing reserve blocks and the development plan.

**FIGURE 17.2
PLAN MAP 590 LEVEL
JOÃO BELO ZONE
MINERAL RESERVE BLOCKS
AND DEVELOPMENT PLAN**



REVISÕES		JACOBINA MINERAÇÃO E COMERCIO	
Nº	DESCRIÇÃO	AUTOR	DATA
		PROJETO: DESENVOLVIMENTO	
		LOCAL: NÍVEL 590	
		CONTÉUDO: PLANTA	
		PLANEJADOR: MARIO COLETTI	
		EMP. RESP. FOLIA: MWA	
		REVISOR: FRANCISCO OLIVEIRA	
		SUPERVISOR DA ÁREA:	
		REVISOR:	
		ELABORADO: ELMANO	
		ESCALA: 1:500	
		DATA: 28/02/05	



- E NÍVEL PROJETADO
- CONTATO INDICADO NA LG.
- E NÍVEL REALIZADO
- CONTATO MEDIDO NA LG.
- FALHA



As a result of the significant increase in mineral reserves in the Joao Belo zone, total proven and probable mineral reserves at Jacobina now total 14,378,000 tonnes grading 2.12 g Au/t containing 980,000 ounces of gold as follows:

Table 17.7: Estimated mineral reserves as of March 1, 2005

Area	Proven		Probable		Proven & Probable		Ounces Gold Contained
	Tonnes	g Au/t	Tonnes	g Au/t	Tonnes	g Au/t	
Joao Belo*	1,955,000	2.02	9,147,000	2.04	11,102,000	2.04	727,000
Basal Reef**	Nil	Nil	2,304,000	2.51	2,304,000	2.51	186,000
Serra de Corrego**	Nil	Nil	972,000	2.14	972,000	2.14	67,000
Total	1,955,000	2.02	12,423,000	2.14	14,378,000	2.12	980,000

+ Mineral reserves have been classified in accordance with CIM standards under NI 43-101

* Desert Sun Mining internal reserve estimation March 1, 2005 following procedures outlined in SNC Lavalin feasibility study.

** As per original Dynatec mineral reserve estimation September 2003 in the SNC Lavalin feasibility study

17.5.1 Reserve Estimation Methodology

The mineral reserve estimate is based on the updated mineral resource estimate which was prepared using a conventional polygonal technique on vertical longitudinal sections using the procedures as set out in the report by Hennessey (2003b). Key parameters for the determining the resource estimate are as follows.

Specific Gravity

A specific gravity of 2.6 was used. This is same value that was used in the Micon report (Hennessey 2003b) based on tests by SGS Lakefield (SNC Lavalin 2003). A specific gravity of 2.6 was used in the estimate based on a “waxed core bulk density test” carried out in July 2003 by SGS Lakefield, as proposed by SNC-Lavalin; this lowered the specific gravity from earlier estimates of 2.7 that were previously used at the mine.

Geometry

The average dip of the mineralized ore body (LMPC reef) is 60°E.

Methodology

The area of polygons was determined on vertical longitudinal section using AutoCAD. For volume and tonnage calculation the following formulae was used.

$$\text{Reserve} = \text{Area of polygon (m}^2\text{)} \times \text{true width (m)} \times 2.6 / 0.87$$



Mining Method

The mining will be by sub-level retreat open stoping method as shown in Figure 17.3. The mine plan consists of stopes that approximately extend from 786 level to 730 level, 730 level to 665 level, 665 level to 605 level, and 605 level to 475 level. The vertical stope height is approximately 60 m except for the 605 level to 475 level stope blocks. Pillars will be left based on the rock mechanics study done by MLF Geotecnica e Mechanica de Roches Ltda (MLF). Rib pillars will be left along strike where required but optimized in sections of unpay or low grade zones within the ore body. Sill pillars will be temporary left and removed once the mining above has been completed. Mining recovery based on this application was calculated to be 80%, which is consistent with similar sized ore bodies using Longhole mining methods. Generally, the layout provides for two parallel drill drives to be established in both the footwall contact and hanging wall contact at intervals that generally limit Longhole drilling to approximately 30 m. The Drilling will be by electric hydraulic tire-mounted, ITH hammer drill rigs and will take place from the sub-level to the drill drift or undercut drift. Drill patterns have been revised based on previous DSM experience to parallel holes.

The parallel drill drives to be established in both the footwall contact and hanging wall contact will allow for parallel straight holes with pre-shearing holes to be drilled along both the footwall and hangwall. Parallel holes in conjunction with pre-shearing holes done with ITH electric hydraulic drills will significantly reducing drill hole deviation and the introduction of wall sloughing. ANFO will be the blasting agent used in the down holes and any up holes. Cartridges of emulsion type explosive will be used for drill holes when wet conditions are encountered. All production mucking will be performed by 15 tonne LHD's (load-haul-dump) machines equipped with remote controls. Material haulage will be done with 35 tonne trucks. Haulage trucks will transport the ore from the underground on a dedicated haulage drift to the crusher plant or a surface stockpile. Once the trucks leave the underground they will travel on a high speed double lane hard pack haulage road and dumb directly into the crusher plant or surface stockpile.

Dilution

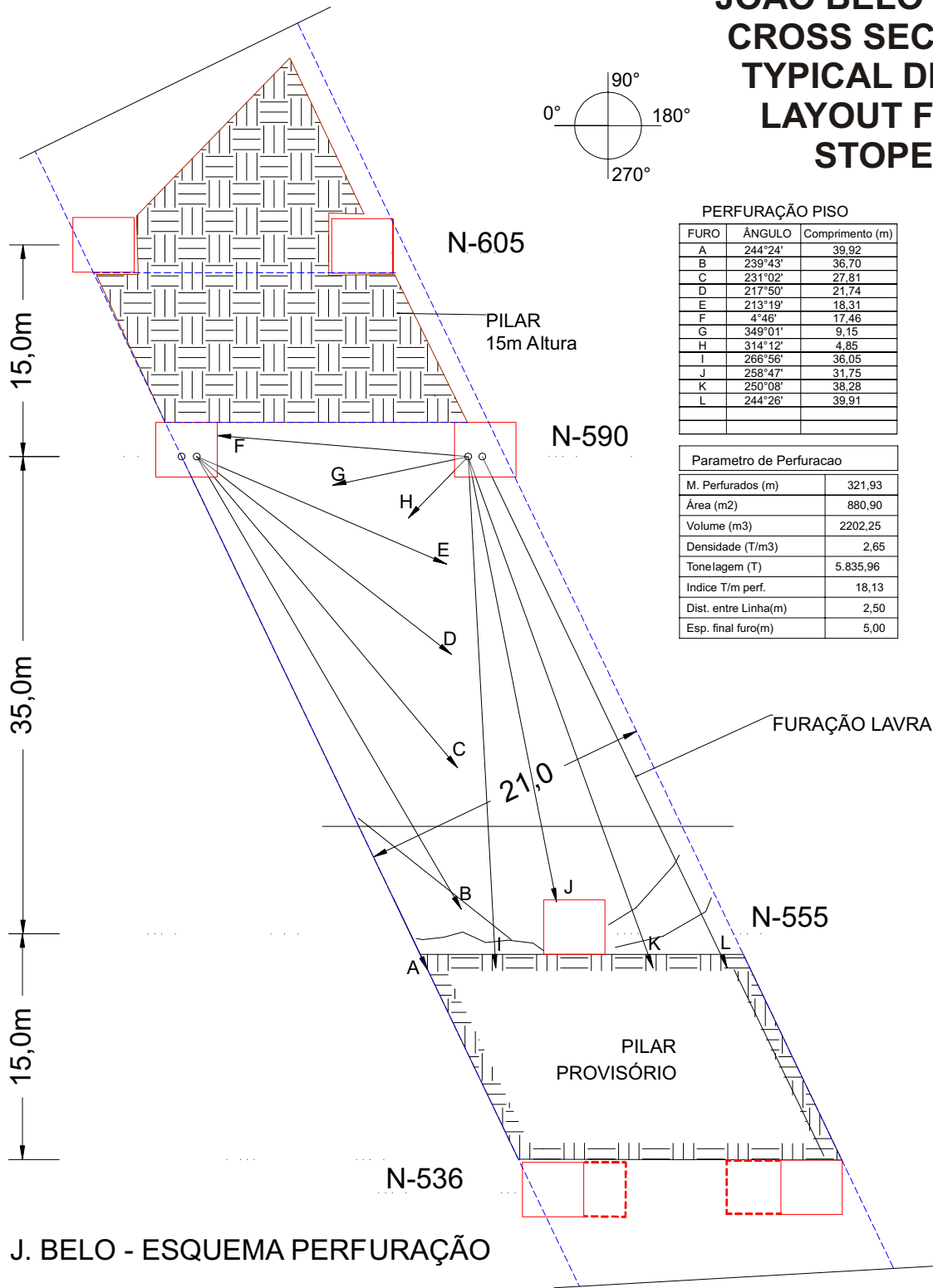
Dilution estimates are the same as those used in the Dynatec Estimated Mineral Reserves done on August 2003 (SNC Lavalin 2003) for Joao Belo which included an overall average of 15%. This was based on based on the assumption by Dynatec that that dilution would be 200 cm, 100 cm and 100 cm respectively from the combined hangingwall and footwall of the stopes for the mine. MLF Geotecnica e Mechanica de Roches Ltda (MLF), a Brazilian-based geotechnical firm which worked on the 2003 feasibility study for SNC Lavalin, also provided information related to dilution in the form of estimated displacement and de-stressing around the stopes. In consistent consideration ore dilution was calculated based on ore width (m) according to drilling or channel sampling information plus two(2) metres dilution, one(1) meter on the hangingwall (HW) and one(1) meter on the footwall (FW).

The grade of dilution was estimated from diamond drill samples as follows: Dilution grade calculations were done on an individual mining block basis with hanging wall and foot wall grades initially kept separate. With known zone widths this was easily translated into a predicted thickness of hanging wall and foot wall rock which would comprise the dilution. All drill holes



in each mining block were then queried for those intervals and their grades weight averaged.
Hanging wall and foot wall were at first

**FIGURE 17.3
JOÃO BELO ZONE
CROSS SECTION
TYPICAL DRILL
LAYOUT FOR
STOPE**



PERFURAÇÃO PISO

FURO	ÂNGULO	Comprimento (m)
A	244°24'	39,92
B	239°43'	36,70
C	231°02'	27,81
D	217°50'	21,74
E	213°19'	18,31
F	4°46'	17,46
G	349°01'	9,15
H	314°12'	4,85
I	266°56'	36,05
J	258°47'	31,75
K	250°08'	38,28
L	244°26'	39,91

Parametro de Perfuracao

M. Perfurados (m)	321,93
Área (m2)	880,90
Volume (m3)	2202,25
Densidade (T/m3)	2,65
Tonelagem (T)	5.835,96
Índice T/m perf.	18,13
Dist. entre Linha(m)	2,50
Esp. final furo(m)	5,00

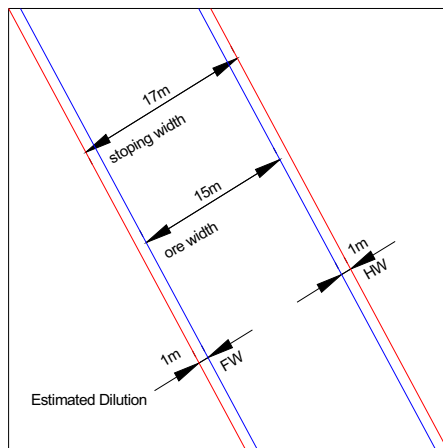
J. BELO - ESQUEMA PERFURAÇÃO

averaged separately, in case the grade of each needed to be known, but were later averaged together. Grades by zone were then averaged for each mining block.

Table 17.8 Grade of Dilution, Joao Belo Zone

CATEGORY	Ture Width (m)	Dilution Grade (g/ton)
Footwall		
Proven	1.0	0.23
Probable	1.0	0.23
Hangingwall		
Proven	1.0	0.53
Probable	1.0	0.53

Figure 17.4 Schematic Diagram showing Typical Example of Dilution, Joao Belo Zone



The following formula was used for diluted grade:

$$\text{Diluted Grade} = ((\text{ore width} \times \text{grade}) + (1.0\text{m HW} \times \text{HW grade}) + (1.0\text{m FW} \times \text{FW grade})) / \text{stopping width}$$

Terry Hennessey, P.Geo. of Micon International reviewed the estimated grades of dilution in his reported dated August 2003 (Hennessey 2003b) and concluded that: *“Micon has reviewed the dilution grade estimation procedures used and the spreadsheets prepared to calculate them and is satisfied that the methodology used to estimate the grades is appropriate.”*

Recommended mining procedures to control dilution by SNC Lavalin (2003) as outlined below were taken into consideration and improved upon by DSM:

“Accurate Longhole drilling with the tire-mounted hydraulic and pneumatic Longhole drills



proposed is mandatory in order that dilution be contained within the estimated limits described above. The layout provides for very few “break through inspection opportunities” to check the accuracy of the drilling and DSM should devise methodologies to check drilling accuracy prior to blasting. The production schedule calls for the stopes to be worked for up to 6 months. Given the longevity of the stopes, there is the potential for dilution within the stopes to increase over time. Although rock mechanics studies completed by MLF indicate ground conditions generally to be very good, DSM needs to be consistent of the potential of unplanned dilution and, where possible, adopt a flexible mining plan should production be disrupted or delayed because of such an eventuality. SNC-Lavalin recommends that a system of ground control monitoring be introduced that measures and predicts (if possible) ground movement within a stope that will allow DSM to take proactive steps in stope design or blasting practice should the need arise. This task could be undertaken at the detailed mine design phase of work. Dilution also needs to be controlled by careful location by DSM of the drill drift that is generally planned to be located on the hanging wall side of the stope. Misallocation of this drift into the hanging wall could cause an initiation point for dilution.”

DSM will be using state of the art electric hydraulic ITH drill capable of drilling accurate straight holes up 100 meters. Development will provides two parallel drill drives to be established in both the footwall contact and hanging wall contact at intervals that generally limit Longhole drilling to approximately 30 m. The Drilling will be by electric hydraulic tire-mounted, ITH hammer drill rigs and will take place from the sub-level to the drill drift or undercut drift. Drill patterns have been revised from ring drilling pattern which when drilled into the hanging wall and/or footwall tends to invoke damage will be modified to parallel holes.

The parallel drill drives to be established in both the footwall contact and hanging wall contact will allow for parallel straight holes with pre-shearing holes to be drilled along both the footwall and hanging wall. Parallel holes in conjunction with pre-shearing holes done with ITH electric hydraulic drills will significantly reducing drill hole deviation and the introduction of wall sloughing. The hanging wall development which is guided by a good physical contact will precede the footwall development. Diamond drilling will be done from the leading hanging wall development on twenty(20) meter spacing. This procedure will allow astute determination of the actual footwall contact prior to the footwall development taking place.

Block Cut off Grade

The Block Cut Off Grade used was 1.33 g / tonne Au and was calculated from the Jacobina Mine Business Plan 2005 using a gold price of U\$350/ounce and total operating costs of U\$14,00/tonne.



17.6 RESPONSIBILITY FOR ESTIMATION

The mineral resource estimates were done DSM employees Anselmo Rubio, Carlos Barbosa and others under the direction of DSM's in-house Qualified Person Dr. William N. Pearson, Ph.D. who accepts responsibility for the mineral resource estimate as DSM's QP for geological and technical work, as required by NI 43-101

Mr. Rubio is a graduate of the school of geology at Universidade Federal Rural do Rio de Janeiro and has extensive experience at the Jacobina property having worked extensively on the original exploration, mine development and production over a period of almost 30 years. Mr. Barbosa is a graduate geological engineer from the Universidade Federal do Ouro Preto who is a computer specialist in the mining industry in Brazil . Both would be considered Qualified Persons except for the lack of membership in an appropriate self regulatory organization; such an organization is not in existence at this time in Brazil.

B. Terrence Hennessey, P.Geo. (APGO membership #0038), the author of several independent reports on the project (Hennessey, 2003a, 2003b and 1998) has reviewed the resource estimation procedures and results on a regular basis used at Jacobina and their results.

The mineral reserve estimate was completed by DSM Mine Department personnel under the supervision of Mr. Peter Tagliamonte, P.Eng., who accepts responsibility for the mineral reserves as DSM's QP for mining and engineering work as required by NI 43-101.



18.0 OTHER RELEVANT DATA AND INFORMATION

SNC Lavalin completed a Feasibility study for DSM (see SNC Lavalin, 2003) which confirmed the economics of bringing the Jacobina Mine, on the Bahia Gold Belt in Brazil, back into production and outlined a mineral reserve of 10,746,000 tonnes grading 2.20 g Au/t containing 758,600 ounces of gold. SRK Consulting extended the SNC Lavalin Feasibility Study mine plan (2004 to 2011) an additional 11 years to early 2023 by scheduling the potentially “mineable tonnes” resulting from the conversion of inferred resources based on historical data. SRK considered that Jacobina has the potential to deliver “economically mineable tonnes” containing 2 million recoverable ounces of gold.

A key objective of further exploration is to upgrade the presently inferred mineral resources to the indicated category to realize these potentially recoverable ounces. It must be cautioned that the SRK study is not adequate to definitely confirm the economics of the inferred mineral resources and that there is no guarantee that further drilling will upgrade the inferred resources. Based on the SNC Lavalin Feasibility, which used a gold price of US\$350 per ounce and a Real (Brazilian currency) to \$US exchange rate of 3:1, the mine can be in production by 2005, producing at a rate of 102,000 ounces of gold per year at an average cash cost of US \$189 per ounce.

The Company is presently reactivating the Jacobina Mine, which has been on standby since 1998, according to the feasibility plan. The first gold pour is expected to take place in April 2005.



19.0 INTERPRETATION AND CONCLUSIONS

The 2004 exploration program was very successful in outlining new mineral resources as well as upgrading existing inferred mineral resources to the indicated category. Considerable further drilling from both surface and underground is warranted on the large number of target zones in the Jacobina mine area.

Exploration in the northern area is continuing to demonstrate the excellent potential of the Bahia Gold Belt to host significant gold deposits. The intersection of 5.46 g Au/t over 21.9m true width at Pindobaçu is very significant. The alteration zone containing this high grade mineralization is up to 100m long and has been traced along strike for at least 15km.

Work is rapidly progressing on reactivating the Jacobina Mine (Joao Belo Zone) with the mine expected to pour its first gold in April 2005 and to reach steady state production at the rate of 100,000 ounces per year by the Q3 of 2005.

19.1 MINERAL RESOURCES

Measured and indicated mineral resources for all zones at Jacobina now total 24,800,000 tonnes grading 2.53 g Au/t containing 2,050,000 ounces of gold as shown in Table 19.1 below. This is significant increase of 690,000 ounces of gold compared to the August 2003 measured and indicated resource of 14,800,000 tonnes at 2.86 g Au/t containing 1,360,000 ounces of gold. Most of this increase has been at the Joao Belo Zone where an additional 3,500,000 tonnes grading 2.48 g Au/t containing 280,000 ounces of gold was added to indicated resources and in the Morro do Vento area where 5,000,000 tonnes grading 2.07 g Au/t containing 350,000 ounces of gold above the 800 level were added to the indicated category.

Inferred mineral resources in all zones now total 22,200,000 tonnes grading 2.61 g Au/t containing 1,900,000 ounces of gold. This a reduction of 600,000 ounces compared to the August 2003 inferred resource of 29,500,000 tonnes grading 2.62 g Au/t containing 2,500,000 ounces of gold. This reduction reflects the successful achievement of the drilling program's objectives to upgrade inferred resource blocks to the indicated category.

**Table 19.1
MINERAL RESOURCE SUMMARY FOR THE JACOBINA PROJECT**

Category	Tonnes	Grade (g/t Au)	Contained Gold (ounces)
Measured	2,620,000	2.83	240,000
Indicated	22,200,000	2.49	1,810,000
Total Measured and Indicated	24,800,000	2.53	2,050,000
Inferred	22,200,000	2.61	1,900,000

Micon reviewed the updated resources estimation and agreed that they were properly estimated classified according to the requirements of NI 43-101.



19.2 MINERAL RESERVES

DSM has completed an updated mineral reserve estimate for its Jacobina mine - Joao Belo zone - based on the new measured and indicated mineral resource estimates described in this report. Mineral reserves in the Joao Belo zone as estimated in the SNC feasibility study of September, 2003, were

7,471,000 tonnes at 2.10 grams per tonne gold containing 504,000 ounces of gold.

Proven and probable mineral reserves in the Joao Belo zone are now 11,102,000 tonnes grading 2.04 grams per tonne gold containing 727,000 ounces, an increase of 44 per cent in contained ounces. Total proven and probable mineral reserves in all zones at Jacobina, which previously were 10,746,000 tonnes at 2.20 grams per tonne gold, containing 758,000 ounces of gold, are now 14,378,000 tonnes at 2.12 grams per tonne gold containing 980,000 ounces of gold as summarized in Table 19.2 below. The conversion rate of the new indicated resource to mineral reserve is about 75 per cent, which is comparable with the historical experience at the mine and to the conversion rate of the SNC Lavalin feasibility study.

This new reserve is now being used in the Jacobina mine development plan and increases mine life by over two years. The other major zones -- Morro do Vento, Morro do Vento extension (basal/main reef), Canavieiras and Serra do Córrego -- will have updated and/or new mineral reserves estimated as mine planning/feasibility studies for each area are completed. The total measured and indicated mineral resource at Jacobina for all zones is 24.8 million tonnes grading 2.53 grams per tonne gold containing 2.05 million ounces of gold.

Table 19.2: Estimated mineral reserves as of March 1, 2005

Area	Proven		Probable		Proven & Probable		Ounces Gold Contained
	Tonnes	g Au/t	Tonnes	g Au/t	Tonnes	g Au/t	
Joao Belo*	1,955,000	2.02	9,147,000	2.04	11,102,000	2.04	727,000
Basal Reef**	Nil	Nil	2,304,000	2.51	2,304,000	2.51	186,000
Serra de Corrego**	Nil	Nil	972,000	2.14	972,000	2.14	67,000
Total	1,955,000	2.02	12,423,000	2.14	14,378,000	2.12	980,000

+ Mineral reserves have been classified in accordance with CIM standards under NI 43-101

* Desert Sun Mining internal reserve estimation March 1, 2005 following procedures outlined in SNC Lavalin feasibility study.

** As per original Dynatec mineral reserve estimation September 2003 in the SNC Lavalin feasibility study

19.3 EXPLORATION AND DEVELOPMENT

A major exploration and development program collectively estimated to cost US\$10,600,000 is recommended for 2005 to followup on the success of 2004 as follows:

19.2.1 Exploration



A continuation of the intense exploration program in the Jacobina mine area carried out in 2004 is recommended for 2005 along with a considerable increase in funds allocated to explore the northern area. The proposed program which will cost an estimated \$US5,200,000 (\$R2.6 = \$US1.00) as summarized in Table 19.3 includes at least 25,000m of diamond drilling as follows:

- Basal/Main Reef in Morro do Vento Extension – 6,800m of surface and underground drilling to followup high grade intersections in both reefs and test if the Main reef extends to surface in the Morro do Vento Extension;
- Canavieiras – 6,500m of underground drilling focussing on the south-eastern and southern extensions of the MU/LU reefs and the Piritoso/Liberino reefs;
- Serra do Córrego – 3,000m of definition to test the downdip and on-strike extension of the existing mineral resource;
- Serra do Córrego (LGX, Viuva, Maneira) – 3,600m of surface drilling to test targets where limited previous drilling suggests the potential for higher grade mineralization;
- Pindobaçu – 6,300m of surface drilling to followup the excellent results of the 2004 program and also test other targets identified on-strike; and
- Regional Exploration – 1,500m of drilling to test for potential entry point areas in the northern area

In addition to drilling, approximately 50 line kilometres of induced polarization surveys will be completed in the Pindobaçu Fumaça area to better define targets in the major hydrothermal alteration zone. Coverage of grids will be extended and soil geochemical surveys also completed.

19.2.2 Development and Exploration

A two part development and exploration program focussed on extending the Joao Belo zone to the south and evaluating the newly developed Morro do Vento zone. The total cost of the program is estimated to be US\$5,400,000. The recommended 2005 development and exploration program will consist of:

JOAO BELO

Objective: Expand and define the Joao Belo II ore zone in the south.

- 8,000 meters of under ground diamond drilling
- 300 meters of development drifts
- US\$ 325,000 Capital investments

MORRO DO VENTO

Objective:

1. Determine the continuity of the ore zone above the 800 meter level.
2. Determine the continuity of the ore zone by actual drifting



- 2,400 meters from the 750 meter level.
- 3,450 meters from the 750 meter level.
- 70 meters of slashing development
- 480 meters cross-cut development
- 300 meters of exploration development in ore
- 290 meters (equivalent) for drilling stations
- US\$ 577,000 for equipping and services.
- US\$ 3,367,000 Capital investments

The recommended work program and the estimated costs for each target area are set out in Table 19.2 below.



20.0 RECOMMENDATIONS

It is recommended that a two part Exploration and Development program estimated to cost US\$10,500,000 be carried out to extend known mineral resources and define new resources in the Jacobina Mine area. Exploration should also be expanded in the northern area especially at Pindobaçu where excellent drill results have been obtained and a major mineralized structure has been identified.

A major development and exploration program is recommended to define additional reserves in the south-eastern and downdip extension of the Joao Belo Ore zone. It is further recommended that Morro do Vento become a development project with underground development, bulk sampling and underground drilling to be completed to form the basis for a feasibility study.

“William N. Pearson”

William N. Pearson, Ph.D., P.Geo.
Vice President, Exploration

“Peter Tagliamonte”

Peter Wilson Tagliamonte M.B.A., P.Eng
Vice President, Operations and COO

March 8, 2005



REFERENCES

Barnicoat, A. C., Henderson, I. H. C., Knipe, R. J., Yardley, B. W. D., Napier, R. W., Fox, N. P. C. et al. 1997, Hydrothermal gold mineralization in the Witwatersrand basin. *Nature*, 386, 820-824.

BLM Service Group, 1997, Operational, Technical Review and Business Plan of the Jacobina Mine Operation, Brazil, prepared for William Resources Inc.

Buckle, J and Alikaj, P, 2002, Physical Property Measurements of Rock Samples From the Jacobina Property, Bahia State, Brazil, An F1 Technical Report for Desert Sun Mining.

Buckle, J, 2003, Processing, Map Production and Interpretation of Airborne Magnetic and Radiometric Data from the Jacobina Area of Brazil for Desert Sun Mining Corp., a technical report for Desert Sun Mining.

DSM, 2003; Desert Sun Mining Corporation website, press release page. Press release dated 4/1/2003, <http://www.desertsunmining.com/website/docs/Newsroom/May1-SNCLavalintoCompleteBankableFeasibility1.htm>

Goldfields Website, 2002, Tarkwa, Ghana
http://www.goldfields.co.za/profile/operations/tarkwa/tarkwa_main.htm

Hennessey, B. T., 2003a; A Review Of The Proposed Phase II Exploration Program For The Jacobina Property, Bahia State, Brazil, a technical report for Desert Sun Mining Corp., filed on SEDAR www.sedar.com.

Hennessey, B. T., 2003b; A Mineral Resource Estimate for the Jacobina Property, Bahia State, Brazil, a technical report for Desert Sun Mining Corp., filed on SEDAR www.sedar.com.

Hennessey, B. T., 2002 (Amended 2003); A Review of The Exploration Potential of, and A Proposed Exploration Program For, The Jacobina Property, Bahia State, Brazil", a technical report for Desert Sun Mining Corp., filed on SEDAR www.sedar.com.

Heylmun, Edgar B. 2000, International California Mining Journal, Gold Gravels in Gondwanaland. ICMJ, June 2000, <http://www.icmj2.com/OtherRecentArticles/GondwanaGold.htm>

Milesi, J.P., Ledru, P., Marcoux, E., Mougeot, R., Johan, V., Lerouge, C., Sabate, P., Bailly, L., Respaut, J.P. and Skipwith, P., 2002, The Jacobina Paleoproterozoic Gold-bearing Conglomerates, Bahia, Brazil; a "Hydrothermal shear-reservoir model": *Ore Geology Reviews* 19 (2002), pp. 95-136.

Pacific Exchange Rate Service Website, 2003, <http://pacific.commerce.ubc.ca/xr/>



Reipas, K., 2003, Jacobina Production Rate Assessment, SRK Consulting, December 2003.

Rodgers, K. R. and Hennessey, B. T., 1998; Review of the Gold Mining Operations of Jacobina Mineração e Comércio Ltda., Bahia State, Brazil. A technical report by Micon International Limited for William Resources Limited.

Rubio, A., Menchen, K. and Pearson, B., 2002, Summary Report, Geology and Exploration Potential, Jacobina Project, State of Bahia, Brazil: technical report for Desert Sun Mining Corp., August 30, 2002, 25p. filed on SEDAR as an appendix to Hennessey, (2002).

Rubio, A., Menchen, K. and Pearson, B., 2003, Summary Report, Phase I Exploration Program, Jacobina Project, State of Bahia, Brazil: technical report for Desert Sun Mining Corp., April 16, 2002, 27p., Filed on SEDAR as an appendix to Hennessey, (2002).

SNC Lavalin Engineers and Constructors Inc., 2003, Jacobina Gold Project, Jacobina, Bahia State, Brazil, Feasibility Report, September 2003 (Filed on SEDAR).

Teixeira, J., de Souza, J., da Silva, M., Leite, C., Barbosa, J., Coelho, C., Abram, M., Filho, V., and Iyer, S., 2001, Gold Mineralization in the Serra de Jacobina region, Bahia Brazil: Tectonic Framework and Metallogenesis, Mineralium Deposita (2001) 36, pp. 332-344.

The Virtual Explorer Website, Geological Research for the Exploration Industry, 2002, Witwatersrand Gold Fields, South Africa page.

<http://www.virtualexplorer.com.au/VEexploration/VEorebodies/Witwatersrand/>

The Weather Underground Website, Seasonal Average Weather Data

<http://www.wunderground.com>



CERTIFICATE

I, William Norman Pearson of Thornhill, Ontario, Canada, do hereby certify that:

I hold the position of Vice President, Exploration with Desert Sun Mining Corporation and am responsible for directing all exploration work on the Jacobina and Bahia Gold Belt property. My principal responsibilities to provide leadership and guidance to the geological team in Brazil to maximize the results of exploration while maintaining good cost control. Additional responsibilities include preparing reports for compliance, preparation of presentation and marketing materials and presentations to investors.

My current office address is Suite 810 – 65 Queen Street West, Toronto, Ontario, Canada M5H 2M5

1. (a) I have the following degrees and qualifications:
 - Bachelor of Science in Honours Geology, 1974, University of British Columbia
 - Masters of Science in Economic Geology, 1977, Queen’s University, Kingston, Ontario
 - Doctor of Philosophy in Economic Geology, 1980, Queen’s University, Kingston, Ontario
 - I hold the following registrations and memberships:
 - Member of Association of Professional Geoscientists of Ontario (P.Ge.), in good standing
 - Member of Association of Professional Engineers and Geoscientists of British Columbia (P.Ge.), in good standing
 - I have been practising as a professional mining engineer since 1974
 - By reason of experience and education, I fulfill the requirements of a qualified person as set out in National Instrument 43-101 (“NI 43-101”).
2. I have visited the Jacobina Mine site in person on a number of occasions. My most recent visit was in February, 2005.
3. I have prepared the report titled “AN UPDATED MINERAL RESOURCE AND MINERAL RESERVE ESTIMATE AND RESULTS OF 2004 EXPLORATION PROGRAM FOR THE JACOBINA AND BAHIA GOLD BELT PROPERTY, BAHIA STATE, BRAZIL
4. I have read NI 43-101 and Form 43-101F1. This technical report updating the mineral reserve and resource estimates has been prepared in compliance with NI 43-101 and Form 43-101F1. It may be used by Desert Sun Mining in support of offerings of securities in Canada.



5. As of the date of this Certificate, I am not aware of any material fact or change with respect to the subject matter of the Report which is not reflected therein, and which the omission to disclose would make the Report misleading.

6. By virtue of my employment with a Desert Sun Mining, I am not independent of Desert Sun Mining. I also beneficially own, directly or indirectly, securities in Desert Sun Mining.

Dated this 09th day of March, 2005.

William Norman Pearson, Ph.D., P.Geo.



CERTIFICATE

I, Peter Wilson Tagliamonte of North Bay, Ontario, Canada, do hereby certify that:

I hold the position of Vice President and Chief Operating Officer with Desert Sun Mining Corporation and am responsible for the Jacobina Mineração e Comércio, a subsidiary of Desert Sun Mining (“Desert Sun”). I have been the Vice President Operations and responsible for the Jacobina Mine for one year. My current principal responsibilities are the reactivation and development of the Jacobina Mine and include providing leadership, guidance, and co-operation to department managers to ensure the production goals are achieved at optimum efficiency and minimum cost consistent with safe operating procedures, applicable laws, and sound business practices in a fashion consistent with the values and principals of the Company. I am responsible for all aspects of the Mine operations, including mining, geology, Milling, Maintenance, and Engineering and reviewing the annual development, ore reserves, and mine business plans

My current office address is Fazenda Itapucuru s/n , Jacobina , BA CEP 44.700-000

1. (a) I have the following degrees and qualifications:
 - Masters of Business Administration (M.B.A.) , 1993, University of Western Ontario
 - Bachelor of Engineering, 1987, Laurentian University
 - I hold the following registrations and memberships:
 - Member of Professional Engineers of Ontario, in good standing
 - Canadian Institute of Mining and Metallurgy, in good standing
 - I have been practising as a professional mining engineer since 1989
 - By reason of experience and education, I fulfill the requirements of a qualified person as set out in National Instrument 43-101 (“NI 43-101”).
2. I have visited the Jacobina Mine site in person. My most recent visit was in March, 2005.
3. I have prepared the report titled “AN UPDATED MINERAL RESOURCE AND MINERAL RESERVE ESTIMATE AND RESULTS OF 2004 EXPLORATION PROGRAM FOR THE JACOBINA AND BAHIA GOLD BELT PROPERTY, BAHIA STATE, BRAZIL
4. I have read NI 43-101 and Form 43-101F1. This technical report updating the mineral reserve and resource estimates has been prepared in compliance with NI 43-101 and Form 43-101F1. It may be used by Desert Sun Mining in support of offerings of securities in Canada.
5. As of the date of this Certificate, I am not aware of any material fact or change with respect to the subject matter of the Report which is not reflected therein, and which the omission to disclose would make the Report misleading.



6. By virtue of my employment with a Desert Sun Mining , I am not independent of Desert Sun Mining. I also beneficially own, directly or indirectly, securities in Desert Sun Mining.

Dated this 09th day of March, 2005.

Peter Wilson Tagliamonte M.B.A., P.Eng



**APPENDIX 1: TITLE OPINION, LIST OF CLAIMS AND MAPS SHOWING
LOCATION AND EXTENT OF CLAIMS**

Maurício Antonio Monaco
Marco Antonio C. Moherdau
Adriana Patah
Michelle Endo
Maria Raquel S. de Toledo Aguiar
Fernanda Franco Bruck Chaves
Alberto Taurisano Nascimento
Marcos Hokumura Reis
Mariana Ozores Michalany
Francisco Mutschele Junior

Alameda Jaú, 1742 – 7º andar
São Paulo – SP 01420-002
Tel. 11 3082-7577 Fax. 11 3082-7795
www.monacomoherdau.adv.br

Márcio C. Silva dos Santos
Marcos Roberto Nunes da Silva
Adriano Neiva P. Freire Formiga
Jorge Eduardo C. Gouvea Júnior
Vanessa Melleiro de Castro

March 7th, 2005

TO

DESERT SUN MINING CORP

65 Queen Street West, Suite 810

Toronto, ON M5H 2M5

At.: Mr. Anthony Wonnacott

Ref.: Title to the Jacobina Mine and Concessions

We have been acting as corporate local counsel to Jacobina Mineração e Comércio Ltda. (“**JMC**”) in the Federative Republic of Brazil and have been asked to render this opinion with respect to matters of Brazilian law only in connection with mining rights presently held by Jacobina in respect the Jacobina mine and concessions.

Our firm has been rendering legal assistance to Canadian mining companies and we have advised **JMC** since 1996. We have also been involved in other transactions related to mining companies, rendering legal services to clients located inside and outside the Federative Republic of Brazil.

Desert Sun Mining Corp. (“**Desert Sun**”) itself and through its subsidiary DSM Participações Ltda. holds (100%) one hundred percent of the capital stock of **JMC**.

In connection with the opinions hereinafter expressed, we have considered such questions of law and examined such public and corporate records, certificates and other documents and concluded such other examinations and obtained and relied on such information from officers of **JMC** as we have considered necessary for the purposes of the opinions hereinbelow stated. In such examinations, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals and the

conformity to authentic original documents of all documents submitted to us as certified, conformed, photostatic or facsimile copies.

Based on the foregoing, we are of the opinion that:

1. **JMC** is a limited liability company duly organized and existing under the laws of the Federative Republic of Brazil and has requisite corporate power and authority to own, lease or operate its property and assets and to carry on its business as presently conducted. **JMC** is duly licensed or otherwise qualified as a company to conduct such business in the Federative Republic of Brazil where the failure to be so licensed or otherwise qualified would have a material adverse effect on it.
2. All of the issued and outstanding quotas in the capital stock of **JMC** has been duly and validly issued and is outstanding as fully-paid and non-assessable.
3. **JMC** is being authorized by Departamento Nacional da Produção Mineral (“DNPM”) of the Federative Republic of Brazil to operate as a mining company and is duly registered with the Registry of Commerce of the State of Bahia (“Junta Comercial do Estado da Bahia”) of the Federative Republic of Brazil, under n.º. 292.019.036.73 dated 10.11.97.
4. The mining rights related to **JMC** were granted according to the Brazilian Mining Code and, if applicable, by authorizations issued by the Ministry of Mines and Energy of the Federative Republic of Brazil. As per Brazilian mineral legislation and depending on the nature of the areas involved, these rights may take the form of (i) applications for prospecting, (ii) exploration permits or (iii) mining concessions. Applications for prospecting must be filed with DNPM in order to have granted to the interested party the right of preference in the exploration of the areas previously specified.
5. Pursuant to the laws of the Federative Republic of Brazil, mining companies may request to the DNPM the issuance of an exploration permit covering areas they intend to explore. The request must be supported by an exploration plan and comply with certain other requirements. Brazilian citizens are also eligible to hold exploration permits. Provided the area of interest is not already covered by a pre-existing application or exploration permit and that all requirements are met, DNPM shall then grant the permit on a first-come, first-served basis. Requests are sequentially numbered and dated upon filing at the DNPM to ensure fair treatment between the parties involved. Companies are given a period of sixty (60) days after filing the request in order to supply additional information that may be required.
6. Permits are granted for three (3) years, renewable upon request, and subject to an annual charge. Exploration is required to commence within sixty (60) days of the issuance of the permit and must not be interrupted for more than three (3) consecutive months – or one hundred and twenty (120) non-consecutive days – at the risk of cancellation of the permit.
7. Any changes in the exploration plan, including interruption of work, are required to be communicated to the DNPM. Upon conclusion of the exploration a final report must also be filed stating geological findings and an assessment of the economic feasibility of the areas. The DNPM has the right to inspect the area to confirm the report before accepting it. New permits shall not be issued to any company, which is in default of the requirements regarding such report.

8. Only companies may obtain mining concessions, having, therefore, one (1) year as from DNPM's approval of their exploration report to request the mining concession for the intended area. Said request must include a mining plan, an economic feasibility analysis and shall demonstrate that funds are available to carry out the plan. The mining company has sixty (60) days after filing its application to answer DNPM's eventual request for additional information.

9. After the publishing of the concession in the Official Gazette the mining company has ninety (90) days to request the possession of the mineral lode or deposit to be mined and six (6) months to start the preparatory work foreseen in the mining plan. Such period may be extended in cases of force majeure. Once mining has started, it should not be interrupted for any period longer than six (6) consecutive months, under the penalty of having the concession revoked. The mining company is also required to file with DNPM annual, detailed statistical reports on mine's performance.

10. A mining concession gives the mining company the right to extract and process the minerals contained in the corresponding deposit, in accordance with the plan approved by DNPM, and also to commercialize the mine production. Because mineral resources are considered by the Constitution of Federative Republic of Brazil (the "Constitution") to be governmental property, the mining concession does not grant upon the mining company ownership of the mineral deposit. However, the mining company has ownership of the mine production as provided for by the Constitution (article 176), and the mining concession enables its holder to exploit the mine until is exhausted, with no fixed term, provided that the normal requirements laid down in the applicable mining laws are fulfilled.

11. **To the best of our knowledge and relying upon the information provided by JMC's officers, the mining rights as regards applications for prospecting, exploration permits and mining concessions granted by the authorities are currently in good standing and correspond to the descriptions and documents contained in Schedule "A" hereto.**

12. **JMC** has full power and authority and has obtained all governmental and statutory approvals necessary to construct, operate and maintain their projects in good standing, as they are presently operated.

13. **JMC** complies with all legal and regulatory requirements to continue to carry on its activities as mining company, and corporate acts, up to the date hereof, and to the extent required by law, have been registered with and approved by DNPM, in accordance with article 79 et seq. of the Brazilian Mining Code.

14. There are no provisions under Brazilian law and pertinent regulations that may prevent mining companies from selling their respective mining production.

We are lawyers qualified to carry on the practice of law in the Federative Republic of Brazil and we express no opinion as to any laws or any matters governed by any laws, other than the laws of the Federative Republic of Brazil applicable therein in effect as of the date hereof.

Yours very truly,

Marco Antonio Cairalla Moherdaui

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

Alvarás

Alvará	Processo	JMC	Protocolo	Área_ha	Ano	DOU	Venc_Alv
5507	870505	128J	14/03/2003	143.76	2003	16/07/2003	16/07/2006
5506	870504	127J	14/03/2003	41.67	2003	16/07/2003	16/07/2006
5008	870208	122J	10/02/2003	1706.20	2003	18/06/2003	18/06/2006
5007	870207	121J	10/02/2003	1261.23	2003	18/06/2003	18/06/2006
5006	870205	119J	10/02/2003	1874.92	2003	18/06/2003	18/06/2006
5003	870202	116J	10/02/2003	1449.83	2003	18/06/2003	18/06/2006
5002	870201	115J	13/02/2003	1863.82	2003	18/06/2003	18/06/2006
5001	870199	113J	10/02/2003	1014.24	2003	18/06/2003	18/06/2006
5000	870196	110J	10/02/2003	1680.25	2003	18/06/2003	18/06/2006
6506	870192	106J	10/02/2003	2000.00	2003	19/08/2003	19/08/2006
4999	870191	105J	10/02/2003	2000.00	2003	18/06/2003	18/06/2006
4997	870189	103J	10/02/2003	1999.50	2003	18/06/2003	18/06/2006
4996	870188	102J	10/02/2003	1695.54	2003	18/06/2003	18/06/2006
9002	870184	98J	10/02/2003	1456.89	2003	18/06/2003	18/06/2006
4994	870181	95J	10/02/2003	598.40	2003	18/06/2003	18/06/2006
2891	871683	91J	12/12/2002	1168.71	2002	23/04/2003	26/04/2006
2890	871682	90J	12/12/2002	1686.85	2002	23/04/2003	23/04/2006
2889	871681	89J	12/12/2002	1985.85	2002	23/04/2003	23/04/2006
4295	871660	88J	04/12/2002	313.73	2002	27/05/2003	27/05/2006
3612	871648	87J	02/12/2002	1104.57	2002	27/05/2003	27/05/2006
3611	871646	85J	02/12/2002	1895.30	2002	27/05/2003	27/05/2006
3610	871645	84J	02/12/2002	1990.59	2002	27/05/2003	27/05/2006
2888	871644	83J	02/12/2002	1982.74	2002	14/04/2003	14/04/2006
2887	871643	82J	02/12/2002	1576.53	2002	14/04/2003	14/04/2006
7585	870857	81J	20/06/2002	854.00	2002	03/12/2002	03/12/2005
9848	870824	80J	05/09/2001	219.46	2001	06/11/2001	06/11/2004
5439	871119	79J	09/06/1997	684.00	1997	28/08/2002	28/08/2005
5438	871118	78J	09/06/1997	636.84	1997	28/08/2002	28/08/2005
5437	871117	77J	09/06/1997	800.00	1997	28/08/2002	28/08/2005

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

5436	871116	76J	09/06/1997	441.50	1997	28/08/2002	28/08/2005
6692	872127	74J	21/11/1995	833.17	1995	12/11/2003	12/11/2006
6703	872126	73J	21/11/1995	779.86	1995	25/11/1999	12/11/2006
6951	872125	72J	21/11/1995	712.54	1995	12/11/2003	12/11/2006
3137	874853	70J	24/11/1993	659.80	1993	05/05/2003	05/05/2006
10162	870825	69Ja	05/09/2001	581.59	2001	23/11/2001	23/11/2004
7117	870890	56J	25/08/1987	1000.00	1987	12/11/2003	12/11/2006
4297	871662	49J	04/12/2002	94.11	2002	23/05/2003	27/05/2006
7584	870856	71J	20/06/2002	968.38	2002	13/12/2002	13/12/2005
4296	871661	45J	04/12/2002	36.46	2002	27/05/2003	27/05/2006
2893	870020	93J	09/01/2003	706.31	2003	23/04/2003	23/04/2006
2892	871684	92J	12/12/2002	229.87	2002	23/04/2003	23/04/2006
6507	870193	107J	10/02/2003	1825.45	2003	19/08/2003	19/08/2006
6508	870194	108J	10/02/2003	1911.29	2003	19/08/2003	19/08/2006
6509	870195	109J	10/02/2003	1988.81	2003	19/08/2003	19/08/2006
6504	871647	86J	02/12/2002	1350.50	2002	19/08/2003	19/08/2006
5004	870203	117J	10/02/2003	1336.60	2003	18/06/2003	18/06/2006
3083	870928	53J	21/10/1986	165.10	1986	12/11/2003	12/11/2005
4993	870180	94J	10/02/2003	1076.81	2003	18/06/2003	18/06/2006
6367	870190	104J	10/02/2003	1025.83	2003	18/06/2003	18/06/2006
5005	870204	118J	10/02/2003	1393.82	2003	18/06/2003	18/06/2006
950	871614	140J	13/08/2003	83.96	2003	10/02/2004	10/02/2007
2039	872470	169J	22/12/2003	454.80	2003	16/03/2004	16/03/2007
2040	872471	170J	22/12/2003	1721.03	2003	16/03/2004	16/03/2007
2041	872472	171J	22/12/2003	1618.06	2003	16/03/2004	16/03/2007
2042	872473	172J	22/12/2003	1614.03	2003	16/03/2004	16/03/2007
2043	872474	173J	22/12/2003	1422.51	2003	16/03/2004	16/03/2007
10786	871431	221 J	23/08/2004	4.24	2004	17/12/2004	17/12/2007
10787	871432	222 J	23/08/2004	138.71	2004	17/12/2004	17/12/2007
10788	871433	223 J	23/08/2004	9.98	2004	17/12/2004	17/12/2007
10829	871488	224 J	27/08/2004	331.15	2004	17/12/2004	17/12/2007
2044	872475	174J	22/12/2003	688.31	2003	16/03/2004	16/03/2007

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

2045	872476	175J	22/12/2003	1401.17	2003	16/03/2004	16/03/2007
2046	872477	176J	22/12/2003	1420.56	2003	16/03/2004	16/03/2007
2047	872480	179J	22/12/2003	1641.00	2003	16/03/2004	16/03/2007
2028	871958	153J	07/10/2003	56.89	2003	16/03/2004	16/03/2007
2027	871956	151J	07/10/2003	335.60	2003	16/03/2004	16/03/2007
2029	871959	154J	07/10/2003	1687.56	2003	16/03/2004	16/03/2007
2030	871960	155J	07/10/2003	1205.72	2003	16/03/2004	16/03/2007
2031	871961	156J	07/10/2003	41.77	2003	16/03/2004	16/03/2007
2032	871964	159J	07/10/2003	143.67	2003	16/03/2004	16/03/2007
2033	871965	160J	07/10/2003	250.99	2003	16/03/2004	16/03/2007
2034	871967	162J	07/10/2003	596.28	2003	16/03/2004	16/03/2007
2035	871968	163J	07/10/2003	61.25	2003	16/03/2004	16/03/2007
330	871512	138J	25/07/2003	250.00	2003	08/01/2004	08/01/2007
331	871519	137J	28/07/2003	475.00	2003	05/01/2204	08/01/2007
336	871584	139J	11/08/2003	1099.74	2003	08/01/2004	08/01/2007
951	871615	141J	13/08/2003	49.99	2003	10/02/2004	10/02/2007
337	871736	147J	29/08/2003	450.58	2003	05/01/2004	05/01/2007
338	871737	148J	29/08/2003	583.49	2003	08/01/2004	05/01/2007
332	871520	136J	28/07/2003	500.00	2003	08/01/2004	08/01/2007
326	871328	134J	04/07/2002	517.00	2003	08/01/2004	08/01/2007
325	871327	133J	04/07/2003	26.38	2003	08/01/2004	08/01/2007
2726	870249	124J	17/10/2003	100.00	2003	30/03/2004	30/03/2007
3707	870094	187J	19/01/2004	367.26	2004	30/04/2004	30/04/2007
3710	870097	190J	19/01/2004	234.35	2004	30/04/2004	30/04/2007
3704	870091	184J	19/01/2004	16.09	2004	30/04/2004	30/04/2007
3705	870092	185J	19/01/2004	98.60	2004	30/04/2004	30/04/2007
3702	870089	182J	19/01/2004	501.70	2004	30/04/2004	30/04/2007
3711	870128	191J	26/01/2004	315.27	2004	30/04/2004	30/04/2007
3708	870095	188J	19/01/2004	27.51	2004	30/04/2004	30/04/2007
3709	870096	201J	19/01/2004	34.70	2004	30/04/2004	30/04/2007
3676	872469	168J	22/12/2003	1642.27	2003	30/04/2004	30/04/2007
3703	870090	183J	19/01/2004	70.02	2004	30/04/2004	30/04/2007
3677	872478	177J	22/12/2003	1724.28	2003	30/04/2004	30/04/2007

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

3706	870093	186J	19/01/2004	132.39	2004	30/04/2004	30/04/2007
3675	872468	167J	22/12/2003	1760.56	2003	30/04/2004	30/04/2007
4608	872479	178J	22/12/2003	572.02	2003	18/05/2004	18/05/2007
4610	872481	180J	22/12/2003	658.85	2003	18/05/2004	18/05/2007
4012	870200	114J	10/02/2003	1079.23	2003	05/05/2004	05/05/2007
4011	870197	111J	10/02/2003	817.99	2003	05/05/2004	05/05/2007
4207	870183	97J	10/02/2003	593.66	2003	05/05/2004	05/05/2007
4008	870182	96J	10/02/2003	1134.49	2003	05/05/2004	05/05/2007
4009	870186	100J	10/02/2003	437.12	2003	05/05/2004	05/05/2007
4674	870294	194J	09/03/2004	142.46	2004	21/05/2004	21/05/2007
3257	870086	47J	21/02/1986	41.13	1986	14/04/2004	16/04/2007
3260	870100	62J	03/02/1992	1000.00	1992	14/04/2004	16/04/2007
3261	870101	63J	03/02/1992	980.00	1992	14/04/2004	16/04/2007
3258	870555	50J	12/08/1986	232.91	1986	14/04/2004	16/04/2007
3256	870309	MN 62	27/04/1984	389.24	1984	14/04/2004	16/04/2007
3268	870730	125J	03/08/2001	1695.03	2001	14/04/2004	16/04/2007
4010	870187	101J	10/02/2003	2000.00	2003	05/05/2004	05/05/2007
3272	871957	152J	07/10/2003	962.69	2003	17/04/2004	17/04/2007
4675	870295	195J	09/03/2004	42.26	2004	21/05/2004	21/05/2007
4673	870293	193J / 196	09/03/2004	44.46	2004	21/05/2004	21/05/2007
7658	870847	39J	20/05/2004	821.40	1985	17/08/2004	17/08/2007
7698	871617	143J	03/06/2004	892.61	2004	23/08/2004	23/08/2007
7723	870591	202J	03/05/2004	1000.00	2004	17/08/2004	17/08/2007
952	871618	144 J	13/08/2003	4.19	2003	10/02/2004	10/02/2007
7167	870080	181J	15/01/2004	456.68	2004	11/08/2004	11/08/2007
7994	870701	55J	20/05/2004	1000.00	1987	30/08/2004	30/08/2007
9028	870893	205 J	11/06/2004	34.70	2004	17/09/2004	17/09/2007
9098	871068	220 J	05/07/2004	1164.46	2004	17/09/2004	17/09/2007
9010	870858	204 J	03/06/2004	93.64	2004	17/09/2004	17/09/2007
9009	870857	203 J	15/09/2004	259.19	2004	17/09/2004	17/09/2007
9089	871056	208J	05/07/2004	1081.63	2004	17/09/2004	17/09/2007
9090	871058	210J	05/07/2004	714.59	2004	17/09/2004	17/09/2007
9091	871059	211J	05/07/2004	1131.29	2004	17/09/2004	17/09/2007

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

9092	871061	213J	05/07/2004	1119.15	2004	17/09/2004	17/09/2007
9093	871062	214 J	05/07/2004	1982.43	2004	17/09/2004	17/09/2007
9094	871639	215J	05/07/2004	1976.42	2004	17/09/2004	17/09/2007
9095	871065	217J	05/07/2004	1400.74	2004	17/09/2004	17/09/2007
9096	871066	218J	05/07/2004	1828.54	2004	17/09/2004	17/09/2007
9097	871067	219 J	05/07/2004	1.34	2004	17/09/2004	17/09/2007
8850	870198	112 J	10/02/2003	1776.72	2004	17/09/2004	17/09/2007
368	871513	129 J	25/07/2003	769.65	2003	11/01/2005	11/01/2008
9090	871058		05/07/2004	714.59	2004	17/09/2004	17/09/2007
12				117757.13			

Total de Alvarás: 136

Área com pedido de prorrogação de prazo

Alvará	Nº_process	Ident_JMC	Protocolo	Área_ha	Município	Ano
416 (manil	4951	28_J		889.14	Jacobina - BA	1935
608 (porta	815715	13_J		807.5	Miguel Calmon - BA	1972
157 (porta	815714	12_J		903.75	Miguel Calmon - BA	1972
1461 (por	815712	10_J		1000	Jacobina - BA	1972
1128 (port	815710	8_J		1000	Jacobina - BA	1972
206	815708	6_J		532.85	Jacobina - BA	1972
539	185706	4_J		863.08	Jacobina - BA	1972
				5996.32		
				7		

Jacobina Mineração e Comércio Ltda

Mineral Claims - Updated to march 7, 2005

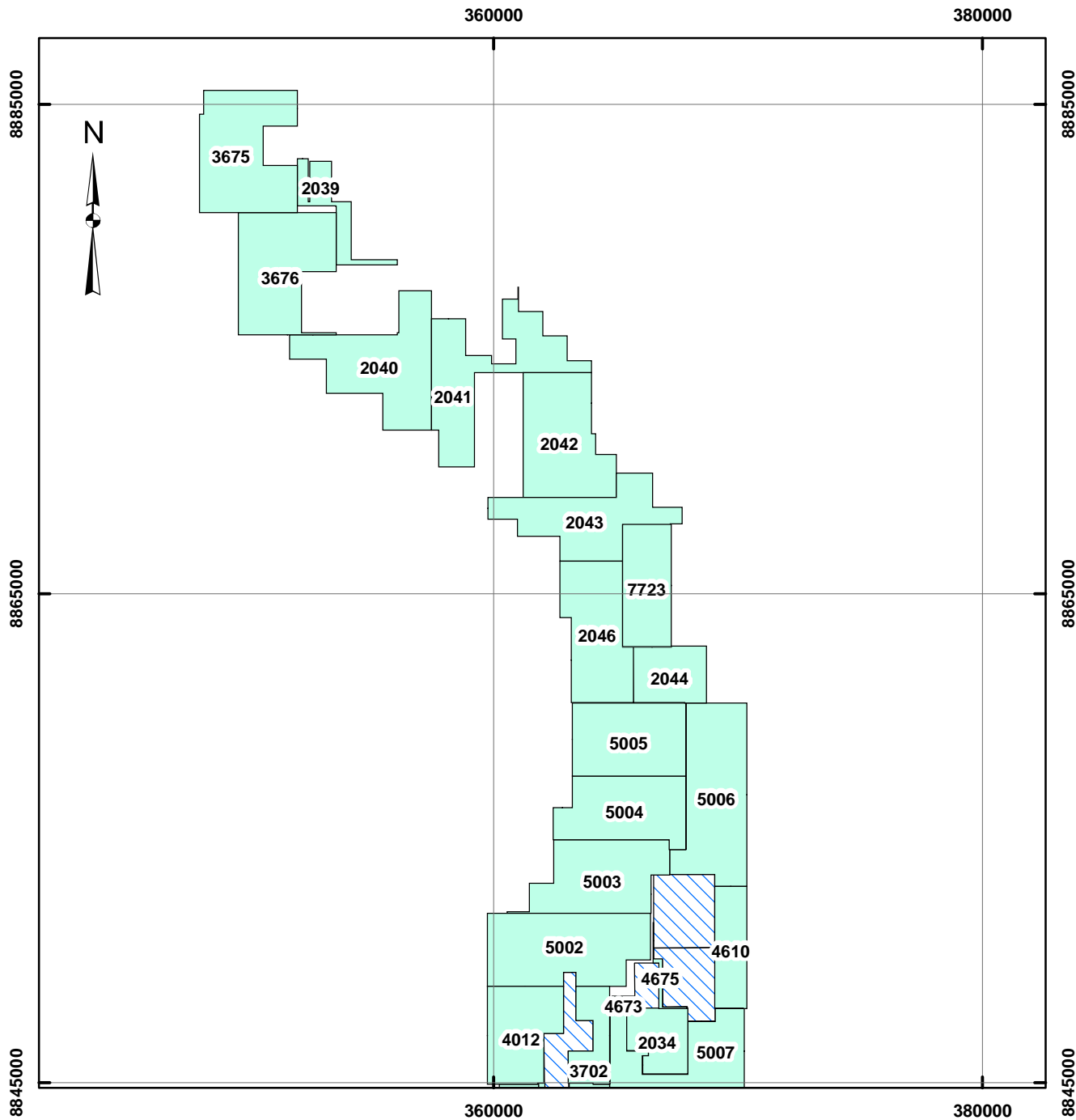
Requerimentos						
Processo	Ident_JMC	Protocolo	Área_ha	Ano	Município	
871706	59_J	20/12/1998	837.00	1988	Miguel Calmon - BA	
872012	165_J	10/10/2003	1704.25	2003	Pindobaçu - BA	
871620	145_J	14/08/2003	737.25	2003	Pindobaçu - Ba	
872411	166_J	15/12/2003	910.86	2003	Pindobaçu - Ba	
870295	67_J/A	27/04/1984	770.80	1984	Mirangaba - BA	
871057	209_J	05/07/2004	1583.04	2004	Jacobina - BA	
872073	230_J	10/12/2004	129.89	2004	Saúde - BA	
871064	216_J	05/07/2004	325.07	2004	Saúde - BA	
871909	227_J	06/12/2004	1207.80	2004	Jacobina - BA	
871908	226_J	06/12/2004	1.02	2004	Pindobaçu - BA	
870298	134_J	23/02/2005	173.81	1984	Mirangaba / Saúde - BA	
870300	MN_53	28/02/2005	49.84	1984	Mirangaba - BA	
870595		28/02/2005	25.36	1986	Jacobina - BA	
870129	54_J	28/02/2005	1000.00	1987	Jacobina/Miguel Calmon - BA	
871910	228_J	06/12/2004	878.14	2004	Jacobina - BA	
872074	231_J	10/12/2004	55.86	2004	Jacobina__BA	
872072	229_J	10/12/2004	16.58	2004	Caém - BA	
17			10406.57			

Em análise pelo DNPM

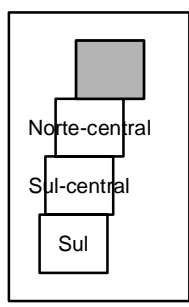
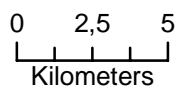
Ident_JMC	Protocolo	Alvará	Nº_Process	Ano	Área_ha	Município
60_J	30/08/1990	646	870524	1990	202.62	Jacobina - BA
69_Ja	05/09/2001	10162	870825	2001	581.59	Jacobina - BA
80_J	05/09/2001	9848	870824	2001	219.46	Jacobina - Ba
					1003.67	

SCHEDULE "B"





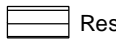





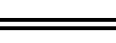
MAP



1:250.000

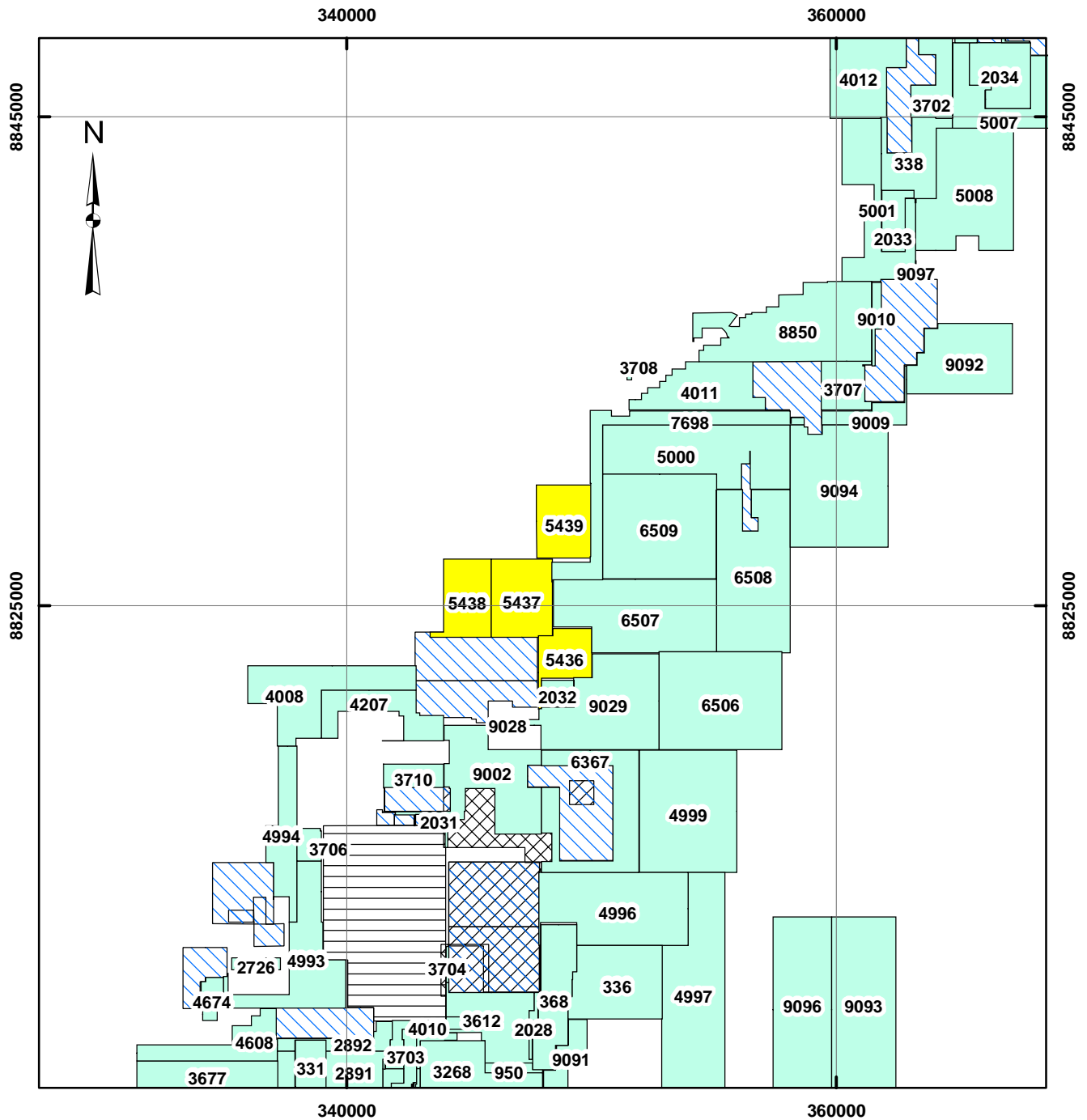


Relatorio Final

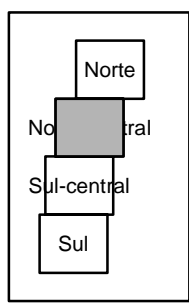
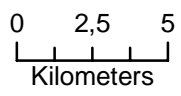
	31 - 60		Grupamento_mineiro		Apresentar_PAE
	61 - 90		Reserva_garimpeira		Em análise_DNPM
	5 - 30		Requerimento_Pesquisa		
	91 - 365				
	366 - 1026				
	Áreas_de_terceiros				

Norte-central

fev 15, 2005

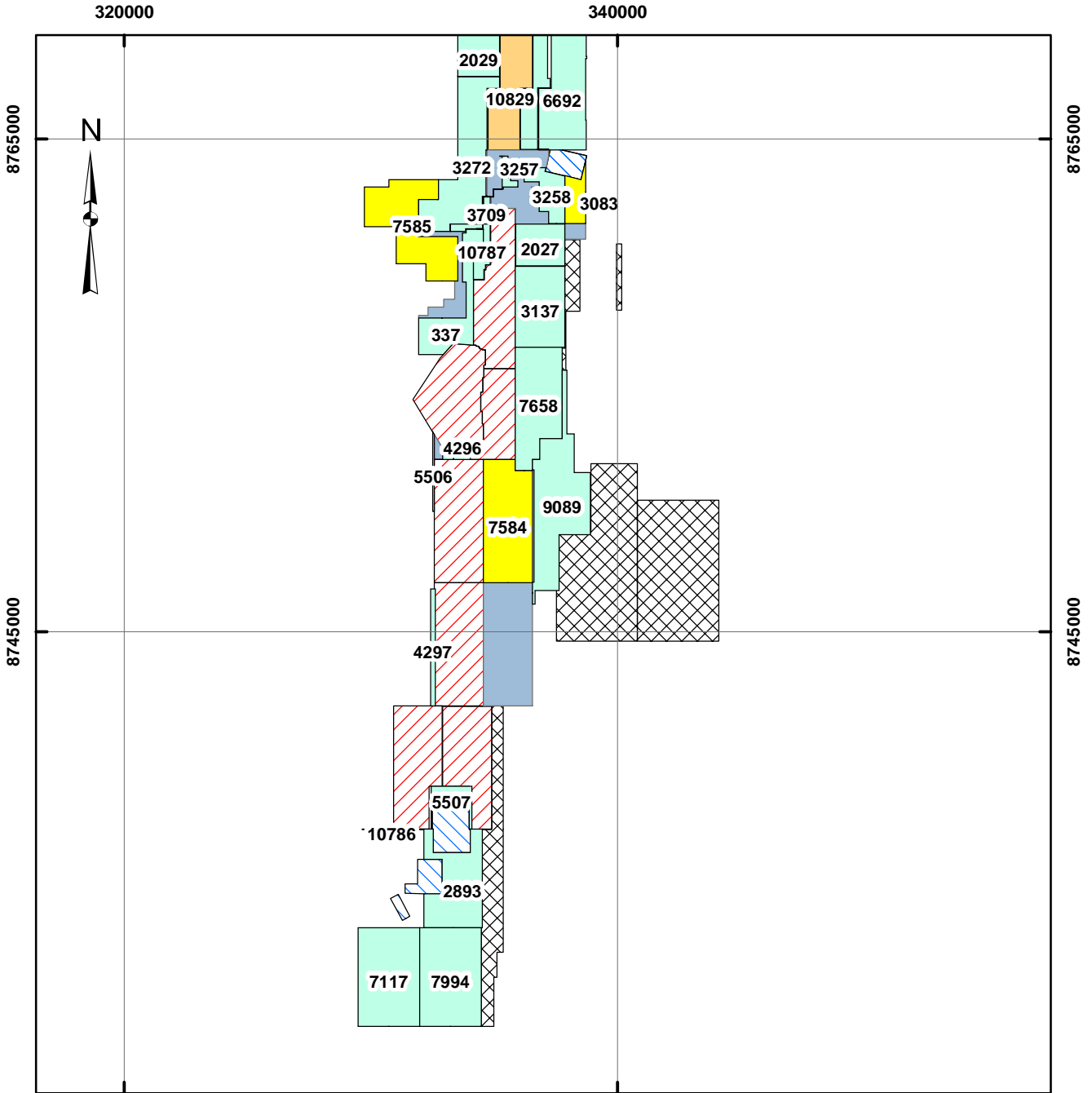


1:250.000



Legend

Relatorio Final	31 - 60	Grupo_mineiro	Apresentar_PAE
Dias	61 - 90	Reserva_garimpeira	Em análise_DNPM
5 - 30	91 - 365	Requerimento_Pesquisa	
366 - 1026	Áreas_de_terceiros		



320000

340000

8765000

8765000



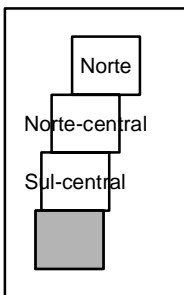
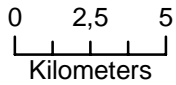
8745000

8745000

320000

340000

1:250.000



Relatorio Final

Dias

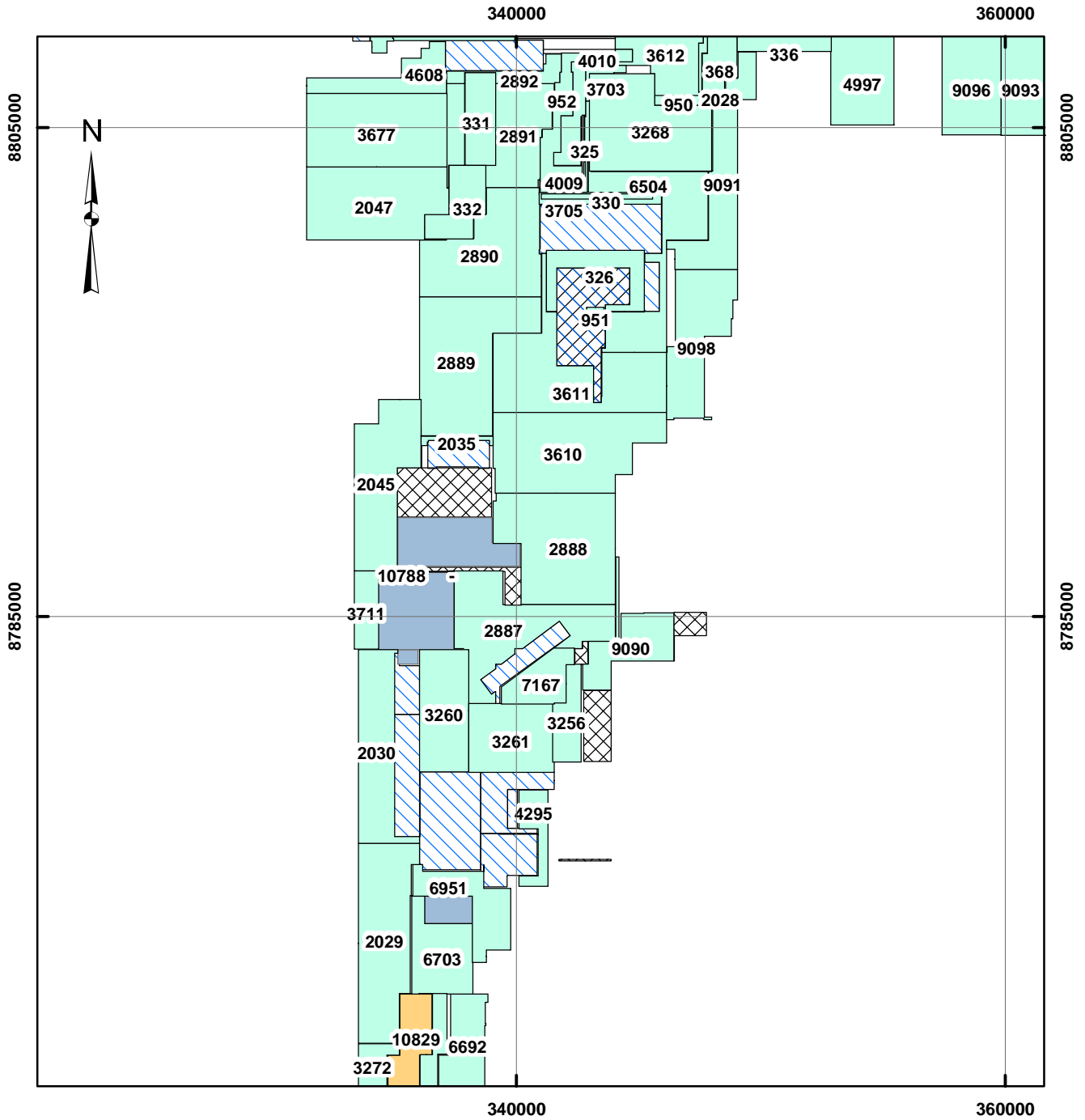
- 5 - 30
- 31 - 60
- 61 - 90
- 91 - 365
- 366 - 1026
- Áreas_de_terceiros

Legend

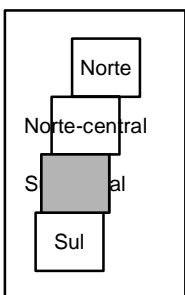
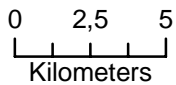
- Grupamento_mineiro
- Reserva_garimpeira
- Requerimento_Pesquisa
- Apresentar_PAE
- Em análise_DNPM

Sul-central

fev 15, 2005



1:250.000



Relatorio Final	
	31 - 60
	61 - 90
	91 - 365
	366 - 1026
	Áreas_de_terceiros

Dias	
	5 - 30

Legend

	Grupamento_mineiro		Apresentar_PAE
	Reserva_garimpeira		Em análise_DNPM
	Requerimento_Pesquisa		



**APPENDIX II: OPINION LETTER CONCERNING MINERAL RESOURCE
ESTIMATION BY MICON INTERNATIONAL**

December 15, 2004

Dr. William N. Pearson
Vice President Exploration
Desert Sun Mining Corp.
65 Queen Street West,
Suite 810
Toronto, Ontario,
M5H 2M5

**Re: Review of the Updated, Year-End 2004 Mineral Resource Estimate
for the Jacobina Mine (All Mines)**

Bill:

At the request of Desert Sun Mining Corp. (DSM) Micon International Limited (Micon) has reviewed a newly updated, in-house mineral resource estimate for the Jacobina mine (see attached Tables 1 and 2). This estimate was prepared after completion of several new diamond drilling programs and the conversion of the existing database and drawings to electronic format using Gemcom and AutoCAD. New drilling, and/or changes to the previously estimated mineral resources, occurred at the Morro do Vento, João Belo, João Belo Sul, Itapicurú (Basal Reef) and Canavieiras deposits.

As part of the review process Micon conducted another site visit to the Jacobina mine in Brazil during the period from November 30 to December 2, 2004. This was Micon's third visit to Jacobina for DSM and the fourth visit overall. During the visit the resource estimation processes which have recently been computerized, as well as the new drill results and their interpretation, were examined. Additionally the locations of recent exploration drill programs in the "northern exploration areas", around the town of Pindobaçu, were also visited.

Micon has been engaged in an ongoing assignment for DSM to review the mineral resources at Jacobina and to advise and comment on them. Earlier in 2004 Micon reviewed a new resource estimate for the João Belo deposit and commented on it in a letter dated November 8, 2004.

Micon has reviewed provided documentation describing and documenting the methods used for resource estimation at Jacobina as well as talking with the personnel involved. The documentation included a DSM memo, authored by you and dated October 28, 2004, which outlined the methodology employed for the estimate at João Belo. Other documents provided included drilling cross sections, resource longitudinal sections, and Microsoft Excel spreadsheets showing the calculations made and the supporting quality assurance/quality control (QA/QC) program results from the period of time during which the João Belo drilling took place. The QA/QC data included a newly implemented program of DSM-inserted analytical reference standards to check the laboratory for accuracy as well as the usual external check assays.

This opinion letter should be read in conjunction with the Pearson memo and the tables attached herein as well as the DSM press release dated December 15, 2004 announcing the year end resource estimates for the Jacobina mine.

Micon has examined the data provided and performed the following reviews and checks:

- Confirmed that methods similar to those employed in the past were used for the resource estimation (a longitudinal polygonal method).
- Performed spot checks with a planimeter to confirm the accuracy of the areas determined for the resource polygons.
- Compared tonnes and grade of the new estimate to previously reviewed estimates at João Belo.
- Reviewed QA/QC data.
- Examined the supporting calculation spreadsheets and spot checked the formulae employed therein.
- Compared the results to previous mineral resource estimates quoted for Jacobina.

The review of the data described above has found that methods similar to those which were used in the previous results examined by Micon (in its last NI 43-101 technical report of August, 2003) were employed to estimate the 2004 adjusted resources. However, contrary to past practices, the locations of diamond drill hole pierce points and their true widths are now calculated using Gemcom. The longitudinal sections are prepared, and polygon areas calculated as before, using AutoCAD. These changes are likely only to increase the accuracy of the estimate. No material errors were found in the checks of any calculations made. The review of the QA/QC data for the João Belo drilling program showed the results to be acceptable, with similar limitations to those discussed in the Micon technical report.

During 2004 DSM began work on a block model for the Morro do Vento (MVT) area with geostatistical grade interpolation. The thought is that it may be possible to bulk mine the Inferior, Superior, LVL and MSPC reefs together using open pit methods and materially reduce the cut off grade. This has proven to be a complex task and the results were not available for the year end reporting. The 2004 mineral resource estimate at MVT was updated using the conventional longitudinal method and reported using an underground mining cutoff grade, until studies evaluating the open pit option are complete.

The new mineral resource estimate at Jacobina represents the upgrading of a significant amount of inferred resource to the indicated category, principally at João Belo, an increase of 3.5 million tonnes (Mt), and the Morro do Vento area of Itapicurú, an increase of 5.5 Mt to the measured plus indicated categories (M + I). A modest increase in the M + I mineral resources has also occurred at Canaveiras and João Belo Sul. The latter also experienced a significant increase in

its inferred resources (3.7 Mt). A small write down of inferred resources in a few zones has occurred but most of the net decrease of 7.3 Mt is a result of the upgrading which occurred at João Belo and Itapicurú.

Several observations can be made:

- The general tonnage ranges presented are consistent with the gains and write downs as viewed on the longitudinal sections.
- The overall grade of the new M + I resource is similar, but somewhat lower than the 2003 estimate (2.53 g/t vs. 2.86 g/t). However, the grade of the new inferred resource estimate is virtually the same, down from 2.62 g/t to 2.61 g/t.
- The contained metal in the measured and indicated mineral resources is now over 2,000,000 ounces (2,050,000 ozs).
- The contained metal in the entire model is up by 90,000 oz from 3,840,000 oz to 3,950,000 oz, consistent with the increased tonnage but overall reduced grade of the mineral resources.

It is Micon's opinion that the resource estimate presented is a reasonable one and its classification is consistent with practices previously applied at Jacobina and approved of by Micon. It is also consistent with the Canadian Institute of Mining, Metallurgy and Petroleum's (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council August 20, 2000. However, it has the same limitations on accuracy of local estimation of individual polygon grades as described in the Micon report. DSM is working on addressing this limitation with the geostatistical studies under way.

Sincerely

MICON INTERNATIONAL LIMITED

B. Terrence Hennessey, P.Geo.
Senior Geologist

Table 1
Summary of Mineral Resources
(Updated by DSM as December 15, 2004 *)

Category	Mine	Tonnes	Grade (g/t Au)	Contained Gold (ounces)
Measured	João Belo	2,300,000	2.41	180,000
	Itapicurú **	250,000	5.70	45,000
	Serra do Córrego	10,000	7.50	3,000
	Canaveiras	56,000	6.73	12,000
	Subtotal	2,620,000	2.83	240,000
Indicated	João Belo	10,300,000	2.37	790,000
	Itapicurú **	9,390,000	2.63	790,000
	Serra do Córrego	910,000	2.39	70,000
	Canaveiras	850,000	3.61	100,000
	Joao Belo Sul	770,000	2.55	60,000
	Subtotal	22,200,000	2.49	1,810,000
Total Measured and Indicated	João Belo	12,600,000	2.38	970,000
	Itapicurú**	9,630,000	2.71	840,000
	Serra do Córrego	920,000	2.44	72,000
	Canaveiras	900,000	3.80	110,000
	Joao Belo Sul	770,000	2.55	60,000
	Total	24,800,000	2.53	2,050,000
Inferred	João Belo	5,300,000	2.33	390,000
	João Belo - other reefs	1,000,000	3.88	120,000
	Itapicurú **	3,800,000	3.17	390,000
	Serra do Córrego	1,800,000	2.95	170,000
	Canaveiras	3,700,000	2.41	290,000
	Joao Belo Sul ⁺	3,900,000	1.67	210,000
	Other Areas	2,700,000	3.23	280,000
	Total	22,200,000	2.61	1,900,000

* Totals have been rounded

** Itapicurú includes Morro do Vento, Morro do Vento Extension and Basal/Main Reef

+ Previously included in Other Areas

Table 2
Mineral Resources by Mine and Zone

Mine / Area	Reef	Measured Resources		Indicated Resources		Measured + Indicated		Inferred Resources	
		Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)
João Belo									
	LMPC - Blocks*	974,000	2.25	8,661,000	2.32	9,635,000	2.32	5,261,000	2.33
	LMPC - Pillars**	1,245,000	2.47	1,158,000	2.14	2,403,000	2.31	0	
	MPC	82,000	3.35	495,000	3.66	577,000	3.61	0	
	LVL	0		0		0		0	
	Total	2,300,000	2.41	10,300,000	2.37	12,600,000	2.38	5,261,000	2.33
João Belo - Inferred other reefs									
	MPC	0		0		0		930,000	3.82
	LVL	0		0		0		117,000	4.38
	Total	0		0		0		1,047,000	3.88
João Belo Sul									
	Undefined	0		768,000	2.55	768,000	2.55	3,892,000	1.67
	Total	0		768,000	2.55	768,000	2.55	3,892,000	1.67
Itapicuru***									
	Basal Reef MCZ - FW Mined	0		683,000	2.82	683,000	2.82	0	
	Basal Reef - MCZ - Blocks	0		1,503,000	2.64	1,503,000	2.64	884,000	3.17
	Basal Reef - MCZ - Old Pillars	0		69,000	2.93	69,000	2.93	0	
	BASAL REEF - MCZ - New Pillars	0		86,000	2.50	86,000	2.50	0	
	Basal Reef - MCZ - Lateral	0		51,000	2.22	51,000	2.22	0	
	Basal Reef - MVT	25,000	4.20	557,000	3.07	582,000	3.12	150,000	3.29
	Main Reef	220,000	5.88	639,000	6.16	859,000	6.09	350,000	8.48
	Intermediate INFERIOR - MVT	0		2,052,000	2.38	2,052,000	2.38	696,000	2.58
	Intermediate SUPERIOR - MVT	0		3,675,000	2.02	3,675,000	2.02	1,385,000	2.46
	Intermediate LVLPC - MVT	0		70,000	4.83	70,000	4.83	131,000	2.29
	Intermediate - SPC	0		0		0		252,000	1.79
	Total	245,000	5.70	9,390,000	2.63	9,630,000	2.71	3,848,000	3.17
Serra Do Corrego (SCO)									
	Lower Unit (LU)	10,000	7.50	0	0.00	10,000	7.50	0	
	Lower Unit (LU) - New	0		582,000	2.15	582,000	2.15	96,000	3.21
	Middle Unit (MU) - New	0		327,000	2.81	327,000	2.81	464,000	1.34
	Maneira Sul - SCO	0		0		0		341,000	3.53
	Maneira Norte - SCO	0		0		0		911,000	3.53
	Total	10,000	7.50	909,000	2.39	919,000	2.44	1,812,000	2.95

Table 2 (cont'd)
Mineral Resources by Mine and Zone

Mine / Area	Reef	Measured Resources		Indicated Resources		Measured + Indicated		Inferred Resources	
		Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)	Tonnes	Grade (g/t Au)
Canavieiras									
		56,000	6.73	57,000	9.71	113,000	8.23	493,000	4.72
	Piritoso/ Liberino Reef	0		64,000	2.20	64,000	2.20	473,000	2.60
	Intermediate LU - CAN	0		726,000	3.25	726,000	3.25	1,433,000	2.20
	Intermediate MU - CAN	0		0		0		998,000	1.66
	Maneira	0		0		0		257,000	1.73
	Hollandes	0		0		0			
	Total	56,000	6.73	847,000	3.61	903,000	3.80	3,654,000	2.41
Other Areas									
Jacobina Sul									
		0		0		0		1,122,000	2.10
	Campo Limpo	0		0		0		138,000	3.54
	Lagedo Preto	0		0		0		1,260,000	2.26
	Subtotal	0		0		0			
Jacobina Norte									
		0		0		0		241,000	4.21
	Serra Branca -1	0		0		0		591,000	5.50
	Serra Branca -2	0		0		0		590,000	2.64
	Serra Branca -3	0		0		0		1,422,000	4.09
	Subtotal	0		0		0		2,682,000	3.23
	Total Other Areas	0		0		0		22,196,000	2.61
	Total	2,611,000	2.83	22,214,000	2.49	24,820,000	2.53	22,196,000	2.61

* Includes pillars above the existing workings

** Includes all pillars below existing workings

*** Itapicuru includes Morro do Vento, Morro do Vento Extension and Basal/Main Reef

Note: zones with changed resources from August 2003 are highlighted