

Woman River Banded Iron Formation channel sample, Marion Township.

Exploration Report

(June – July 2006 Program) on the

Cayenne-Chili Properties

Benton, Genoa, Heenan, Mallard, and Marion Townships Porcupine Mining Division Ontario, Canada Latitude 47.793° North, Longitude 83.314° West NTS Map Sheet 41-O/16

October, 2006

Prepared for



Toronto, Ontario

By Claude Aussant, P.Geol. and Craig Scherba, P.Geol.



#4, 1922 – 9th Avenue SE Calgary, Alberta T2G 0V2 Canada

And With Geophysical Interpretations By

Roman Tykajlo, P.Geo. GeoVector Management Inc. 10 Green Street, Suite 312, Ottawa, Ontario K2J 3Z6



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Summary

The Cayenne-Chili Property is located approximately 110 kilometres southwest of the city of Timmins, and is centered on latitude 47.793 N and longitude 83.314' W within 1:50,000 NTS map sheet 410/16.

The property consists of 57 contiguous mining claims comprising 538 claim units for 8704.84 hectares. Within this claim package there are 46 unpatented mining claims, comprised of 512 claim units, and 5 patented mining claims comprised of 20 claim units that are recorded 100% in the name of VenCan Gold Corporation (VenCan). In addition, there are 4 leased mining claims, comprised of 4 claim units and 2 unpatented mining claims, comprised of 2 claim units that VenCan has optioned from Falconbridge Limited (Falconbridge). The claims are located in the Porcupine Mining Division in the Heenan, Marion, Mallard, and Genoa townships, Ontario.

The primary focus of the summer 2006 exploration program was VMS style mineralization in the area of the Jefferson Zn-Pb deposit (Jefferson) which contains an historical (1948) non-NI 43-101 compliant resource estimate of 30,100 tons at 7.05% Zn and 4.58% Pb. The historical work defined "massive sulphides enriched in zinc and lead over a strike length of 150 meters and to a vertical depth of 30 metres". Deeper drilling to a vertical depth of 85 metres in 1950 indicated continuity of the zinc-lead enriched sulphide body. Some of the better drill intersections documented by the historical work on the Jefferson deposit included 4.43% Zn and 1.25% Pb over 22.9 meters and 9.1% Zn and 11.5% Pb over 6.9 meters.

Work by Falconbridge in the 1980's reinterpreted the mineralization at the Jefferson deposit as associated with cross-cutting fractures and so not strictly of the VMS type. The results of the 2006 exploration program conducted by VenCan supports this interpretation, however, the authors believe that the known mineralization may be stringer type mineralization that indicates that potential exists to discover a proximal VMS source on VenCan's property. A total of 12 diamond drill holes were completed by VenCan during the 2006 exploration program in the area of the Jefferson (holes VG-06-02 through VG-06-13) in an attempt to replicate historical results. The best drill intersections encountered in the 2006 program include 7.24% Zn over 1.85 meters (VG-06-02), 2.34% Zn and 2.10% Pb over 8.70 meters (VG-06-04), 1.83% Zn and 1.29% Pb over 10.20 meters (VG-06-05), and 1.48% Zn over 13.60 meters (VG-06-12). Two holes were drilled to the west of the Jefferson to test for strike extension of known mineralization. HoleVG-06-14 was drilled 300 meters to the west and encountered 8.93% Pb over 3.10 meters. Drill-Hole VG-06-15 was drilled 600 meters to the west and encountered no significant mineralization. VenCan was not able to confirm the thickness or tenor of mineralization at the Jefferson as was historically reported. The gravity survey conducted by MWH outlined a pronounced positive anomaly approximately 550 metres in length coincident with the Jefferson deposit. Based on geological mapping and interpretation of ground geophysical data, the Jefferson is believed to lie on the northern limb of an overturned eastnorth-east plunging isoclinal anticline with vergence to the north, indicating a possible proximal VMS source more deeply buried to the north and/or east of the Jefferson.

Drilling completed near the Burton Shaft Zn-Pb-Au occurrence, located north-east of the Jefferson deposit, has led the to the conclusion that the Burton Shaft occurrence lies within a limb of a complementary syncline to the Jefferson anticline. A single drill hole by Hollinger in 1929 intersected 7.5% Zn, 1.5% Pb and 7.5 g/t Au over 4.8 meters. A hole drilled immediately adjacent to the Burton Shaft during the 2006 exploration program (VG-06-01) encountered 1.55% Zn and 0.35% Pb over 6.05 meters with no significant gold mineralization.

Geologic mapping in conjunction with the ground magnetometer survey identified a previously unknown anticline fold nose of the Woman River Iron Formation 500 meters to the east of the Jefferson deposit which is believed to be a highly prospective base metal-gold target. The anticline appears to plunge shallowly to the east and the gravity survey results have revealed a weak but continuous positive anomaly that is coincident with the projected plunge and which extends for 800 meters in this direction. Considering that the amplitude of the gravity effect is attenuated by even modest depths of burial the "anticline" target merits thorough exploration follow up.

The orientation soil sampling survey was highly successful in identifying the known mineralized zones, as well as highlighting a previously unknown area south of the Burton Shaft which is anomalous in gold, silver, copper, lead, and zinc. This multi-element anomaly is also coincident with the western edge of the "anticline" gravity anomaly at the eastern limit of the present soil survey coverage.

The area around the historical drill intersection of 11.98% Zn over 3.2 meters located approximately 2.0 km to the west of the Jefferson Deposit was investigated during the 2006 exploration program, and an outcrop of sphalerite-rich mineralization corresponding to an AeroTEM helicopter-borne EM/Magnetometer anomaly was discovered. Grab samples from this outcrop yielded assay values ranging from 11.2% Zn to 17.96% Zn. VenCan drill hole VG-06-16 later completed beneath the outcrop intersected 4.22% over 16.85 meters including 7.27% Zn over 8.50 meters on a IP, magnetometer and gravity anomaly that extends 500 meters to the west. Subsequent to the field exploration program, inversion modeling of the 2006 IP data has identified a pronounced anomaly 100 meters to the north-west of the VG-06-16 collar that is open to the west. A channel sample of massive sulphide 100 meters west of hole VG-06-16 assayed 1250 ppm Zn, 538 ppm Pb, and 155 ppm Cu over 1.1 meter, and a regional highly anomalous grab sample taken 1.25 kilometers to the west assayed 8500 ppm Zn and 985 ppm Cu. The potential to discover Zn-rich mineralization with a strike length in excess of 1 kilometer makes this area highly prospective and therefore merits thorough exploration follow up.

Magnetic surveys successfully mapped the complex interior character of the northeast trending **WRIF** and adjacent stratigraphy and revealed local stratigraphic or structural thickening of magnetic units. Discrete detection of the Jefferson Occurrence with magnetics remains problematic.

Gravity surveying successfully defined a local residual gravity high associated with the Jefferson Occurrence, along with several similar anomalies in the VenCan Occurrence and GV Target areas.



IP/RES surveying and subsequent inversion modeling outlined three distinct, high chargeability zones including one directly associated with the Jefferson Occurrence, one spatially associated with the Vencan Occurrence, and several in the GV Target Area.

Recommendations include:

- Linecutting To cover the prospective area to the west of the VenCan Zinc Showing, the existing Genoa Grid should be augmented/extended with the addition of lines 3900E to 5000E from stations 200N to 800S, and lines 2400E to 3800E from stations 0 to 1000S. In total 26 new lines, each 1 kilometer in length, should be cut.
- IP IP/RES surveys and inversion modeling be completed on L51+00E, L52+00E, L57+00E, L58+00E, L61+00E and L66+00E on the existing Genoa grid to complete mapping of anomalies over the VenCan Occurrence and GV Target Areas.
- IP/RES surveys and inversion modeling be completed westward over the extended grid to map the limits and extents of VenCan Showing IP anomaly and possibly similar anomalies along strike westward.
- Magnetometer Detailed magnetic surveying be completed over the extended grid to continue mapping internal complexity of the WRIF and adjacent startigraphy.
- Soil Sampling As the previous exploration program illustrated, soil sampling is efficacious on the property and should be completed over the newly established grid extension (1066 samples over 26 line km). Time permitting, infill soil sampling over the previously established Genoa Grid would entail 1681 samples over 41 line km, and could aid in identifying new mineral occurrences.
- Prospecting The area around the newly identified antiformal nose (~300 meters to the east of the Jefferson), the western portion of the Genoa Grid on strike with the VenCan Showing, and the newly established 'Genoa Grid Extension' should be thoroughly prospected and sampled. Additionally, two weeks of helicopter-supported exploration is proposed for inaccessible areas of VenCan's broader land position.
- Drilling Initially, 6 holes at the VenCan Showing are proposed over 900 meters, with 2 additional holes in the vicinity of the antiformal nose east of the Jefferson and/or the gravity anomaly east of the Burton (over 300 meters). Three drill sections, of 2 holes each, and spaced 100 meters apart are envisioned at the VenCan Showing to test strike extension and grade.
- Mapping The Genoa Grid geology map should be augmented with additional mapping over the newly established 'Genoa Grid Extension'.





1.0 Introduction and Terms of Reference

This report was commissioned by Kirk McKinnon, President of VenCan Gold Corporation (VenCan), to review the base metal exploration developments on the Cayenne-Chili Property, located in the Genoa & Marion townships in the eastern part of the Swazye "greenstone" belt, in the Porcupine Mining District, Ontario, Canada (Figure 1-1).

The exploration program carried out between June and August 2006 incorporated the following work:

- Drilling 17 diamond drill holes (2425 meters).
- Lithological logging of all core, as well as RQD/recovery determinations.
- Line cutting/grid placement over a selected portion of the property area (54 line km).
- Gravity survey over the newly established Genoa grid.
- IP/resistivity surveying over selected portions of the Genoa grid.
- Magnetometer surveying over the entire Genoa grid.
- Soil sampling over selected portions of the Genoa grid.
- Geological mapping and prospecting over the entire Genoa grid.
- Limited channel sampling over selected targets.





Figure 1-1 – Project Location Map



2.0 Disclamer

C. Aussant, P. Geol., and C. Scherba, P. Geol., have supervised and conducted the exploration program on which this report is based and have done so in accordance with normal industry practices. Property information in this report is sourced from assessment files, the Geological survey, or from original official documents held by VenCan Gold Corporation. For the purpose of this report Scherba and Aussant have assumed that VenCan Gold Corporation has appropriate right of title to the property area. Neither is responsible, however, for the accuracy of any property data and they do not make any claim or state any opinion as to the validity of the property disposition described herein.

For the preparation of this report, Aussant and Scherba have relied upon maps, documents and electronic files generated by the current exploration crew, contributing consultants, and service providers working under our supervision. To the extent possible under the mandate of a National Instrument 43-101 review we have verified the material facts relating to the prospectiveness of the properties reviewed in this report.

Considering the number of workers contributing to the project and the amount of information generated thereby, Aussant and Scherba take responsibility for work conducted under their supervision but can in no way be responsible for any inaccuracy, omission or misrepresentation of any historical, external, or third party material used by them in preparation of this report.



3.0 Property Description and Location

The Cayenne-Chili Property is located approximately 110 kilometres southwest of the city of Timmins (Figure 1-1). The property is centered on latitude 47.793 N and longitude 83.314' W within 1:50,000 NTS map sheet 410/16.

The Cayenne and Chili Properties consist of 57 contiguous mining claims (Table 3-1) comprising 538 claim units for 8704.84 hectares (Figure 3-1). Within this claim package there are 46 unpatented mining claims, comprised of 512 claim units (8284.16 hectares) and 5 patented mining claims, comprised of 20 claim units (323.60 hectares) that are recorded 100% in the name of VenCan Gold Corporation. In addition, there are 4 leased mining claims, comprised of 2 claim units (32.36 hectares) that (64.72 hectares) and 2 unpatented mining claims, comprised of 2 claim units (32.36 hectares) that VenCan has optioned from Falconbridge Limited (Falconbridge). The claims are located in the Porcupine Mining Division in Heenan (G-1139), Marion (G-1174), Mallard (G-1171) and Genoa (G1131) townships, Ontario.

Project Name	Township	G-Plan	Claim Number	Recording Date	Claim Due Date	Units	Hectares
Cayenne	Heenan	G-1139	3004853	2003-Mar-05	2006-Mar-05	16	258.88
Cayenne	Heenan	G-1139	3004858	2003-Mar-05	2006-Mar-05	15	242.7
Cayenne	Heenan	G-1139	3005870	2004-Jul-20	2006-Jul-20	12	194.16
Cayenne	Heenan	G-1139	3005872	2004-Jul-20	2006-Jul-20	9	145.62
Cayenne	Heenan	G-1139	3011886	2004-Jul-20	2006-Jul-20	2	32.36
Cayenne	Heenan	G-1139	3011914	2004-Jul-20	2006-Jul-20	16	258.88
Cayenne	Heenan	G-1139	3003895	2004-Sep-07	2006-Sep-07	8	129.44
Cayenne	Heenan	G-1139	3003896	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Heenan	G-1139	3003897	2004-Sep-07	2006-Sep-07	15	242.7
Cayenne	Mallard	G-1171	3003893	2004-Sep-07	2006-Sep-07	12	194.16
Cayenne	Mallard	G-1171	3003894	2004-Sep-07	2006-Sep-07	6	97.08
Cayenne	Marion	G-1174	3003877	2004-Sep-07	2006-Sep-07	9	145.62
Cayenne	Marion	G-1174	3003878	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Marion	G-1174	3003879	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Marion	G-1174	3003880	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Heenan	G-1139	3005871	2004-Jul-20	2007-Jul-20	9	145.62
Cayenne	Heenan	G-1139	4200151	2005-Jul-25	2007-Jul-25	12	194.16
Cayenne	Heenan	G-1139	4200152	2005-Jul-25	2007-Jul-25	14	226.52
Cayenne	Heenan	G-1139	3003889	2005-Sep-06	2007-Sep-06	3	48.54
Cayenne	Heenan	G-1139	3003900	2005-Sep-15	2007-Sep-15	6	97.08
Chili	Heenan	G-1139	WS8	Patented Claim	Patented Claim	6	97.08
Chili	Heenan	G-1139	WS9	Patented Claim	Patented Claim	4	64.72
Chili	Heenan	G-1139	WS10	Patented Claim	Patented Claim	6	97.08
Chili	Heenan	G-1139	WS11	Patented Claim	Patented Claim	2	32.36
Chili	Heenan	G-1139	WS12	Patented Claim	Patented Claim	2	32.36

Table 3-1 - Claims Status



					TOTALS	538	8704.84
Cayenne	Genoa	G-1131	P583885	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583884	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583881	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583880	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	583878	1980-Sep-15	2007-Sep-15	1	16.18
Cayenne	Genoa	G-1131	583877	1980-Sep-15	2007-Sep-15	1	16.18
Cayenne	Marion	G-1174	4200200	2005-May-12	2007-May-12	8	129.44
Cayenne	Marion	G-1174	4200199	2005-May-12	2007-May-12	16	258.88
Cavenne	Marion	G-1174	4200198	2005-May-12	2007-May-12	8	129.44
Cavenne	Marion	G-1174	4200197	2005-May-12	2007-May-12	16	258.88
Cavenne	Marion	G-1174	4200196	2005-Mav-12	2007-May-12	16	258.88
Cavenne	Marion	G-1174	4200195	2005-May-12	2007-May-12	8	129.44
Cavenne	Marion	G-1174	4200194	2005-May-12	2007-May-12	8	129.44
Cavenne	Marion	G-1174	4200193	2005-May-12	2007-May-12	16	258.88
Cavenne	Marion	G-1174	4200192	2005-Mav-12	2007-May-12	16	258 88
Cavenne	Genoa	G-1131	4200204	2005-Mav-12	2007-May-12	14	226.52
Cavenne	Genoa	G-1131	4200203	2005-Mav-12	2007-May-12	5	80.9
Cavenne	Genoa	G-1131	4200202	2005-Mav-12	2007-May-12	8	129.44
Cayenne	Genoa	G-1131	4200201	2005-May-12	2007-May-12	16	258.88
Cayenne	Genoa	G-1131	4200167	2005-May-12	2007-May-12	13	210.34
Cayenne	Genoa	G-1131	4200166	2005-May-12	2007-May-12	8	129.44
Cayenne	Genoa	G-1131	3007651	2005-May-12	2007-May-12	12	194.16
Cayenne	Marion	G-1174	1239269	2001-Aug-08	2008-Aug-08	4	64.72
Cayenne	Marion	G-1174	3008050	2003-Jun-24	2007-Jun-24	4	64.72
Cayenne	Marion	G-1174	3008049	2003-Jun-18	2007-Jun-18	4	64.72
Cayenne	Marion	G-1174	1239274	2001-Oct-02	2006-Oct-02	8	129.44
Cayenne	Marion	G-1174	1239273	2001-Oct-02	2006-Oct-02	12	194.16
Cayenne	Marion	G-1174	1239272	2001-Sep-06	2006-Sep-06	10	161.8
Cayenne	Marion	G-1174	1239271	2001-Sep-06	2006-Sep-06	6	97.08
Cayenne	Marion	G-1174	1199604	2002-Mar-06	2006-Mar-06	16	258.88
Cayenne	Marion	G-1174	1199603	2002-Mar-06	2006-Mar-06	16	258.88
Cayenne	Marion	G-1174	1199601	2002-Mar-06	2006-Mar-06	16	258.88

VenCan Gold Corporation Cayenne-Chili Property Exploration





Figure 3-1 – Property Map



4.0 Accessibility, Physiography, Climate, Local Resources & Infrastructure

Access is via paved road from Timmins Ontario, a distance of 60 kilometers along highway 101, to the Kenoqaming logging road located immediately after Sewell Creek, and then 60 kilometers along logging roads to the centre of the area investigated during the June to August exploration program (Figure 4-1).

The claim area is relatively low and flat with a mean elevation of 400 meters. Occasional ridges, which have a maximum relief of 55 meters, provide locally variable topographic relief. Numerous swamps are present in the area, and Rush Lake to the southeast is the principal body of water. The area is drained northward by the Woman River and its tributaries: Opeepeesway River in the south; Heenan Creek in the west; and Rush River, which drains Rush Lake, in the west.

Rock outcropping exposure is less than 5 percent, with the claim area dominated by spruce and cedar bogs in low-lying areas, and poplars with intermittent maple and minor oak over ridgelines and well drained areas.

The claim area has a Continental climate that is characterized by cold dry winters and warm dry summers. The coldest month of the year is January with a mean temperature of -17 C, with July being the warmest month with a mean temperature of 18 C. Annual precipitation is roughly 900 millmetres, with the majority of precipitation falling between June and August.*

Local resources are dominated by merchantable timber, with Domtar Inc. holding the harvest rights within its Pineland Forest Area (378900 hectares)**, over much of VenCan Gold's claim area. As a result, accessibility to the claim areas is greatly enhanced due to Domtar Inc.'s extensive logging road network.

The area is subject to tourism, with a fly-in fishing lodge located on the north shore of Rush Lake, roughly 1.5 kilometers south of the area investigated during the June to August exploration program.

The property is of sufficient size to accommodate all facilities required to allow mining activities if economic mineralization in sufficient quantities is discovered on the property.

Timmins is the largest center of commercial and social activity in the region, with services and manpower related to exploration and mining activities readily available. Scheduled commercial airlines, rail service, bus service, and numerous truck transportation companies service the Timmins area.

^{*} Data from Environment Canada website (<u>http://weatheroffice.ec.gc.ca</u>)

^{**} Data from Domtar Inc. website (<u>http://www.domtar.com/en</u>)



old ON

Figure 4-1 – Property Access



5.0 Exploration History

VenCan Gold Corporation's property area, a small portion of which was investigated during the current exploration program, encompasses the Woman River iron range which extends across Genoa, Marion, and Heenan townships in the eastern part of the Swayze "greenstone" belt in the District of Sudbury. The iron formation and adjoining rocks have been explored at various times by means of trenching, diamond drilling and limited underground work, in search of iron, base metals, and gold deposits. Iron deposits of significant size have been outlined; lead-zinc mineralization associated with banded iron formation has been located; and some small gold prospects have been drilled. As VenCan's current property configuration has seen work by various companies in the past over discontinuous land holdings, previous work is summarized below in three areas: 1) East – east of Rush River; 2) Central – between Rush and Woman Rivers; and 3) West – west of Woman River.

5.1 East - East of Rush River

A history of the most significant exploration programs conducted on and immediately adjacent to the portion of the VenCan property located east of Rush River is summarized below.

The earliest reported work was during the 1908-1910 period by Jefferson Mining Corporation following the discovery of several bodies of high-sulphur iron ore. In 1910 about 4,000 feet of diamond drilling was completed in search of iron ore. At that time, galena, sphalerite and chalcopyrite was encountered in one of the drill holes (Jefferson Showing). As a result, in 1912, an 8-foot deep test pit was dug on the best lead-zinc showing (Claim W.D.717). Additional drilling was completed in 1928 and 1929 to further test the lead-zinc mineralization on claim W.D.717. The property was subsequently acquired by Excelsior Mines Limited with work on the property carried out by Central Sudbury Lead-Zinc Mines Limited. In 1950-1951, 23 diamond drill holes (CS 1-23), totalling 6,300 feet, were completed to test the mineralization on the eastern part of claim W.D. 717. A magnetometer survey was completed covering claims W.D.715-721, W.D.723-727 and W.D.1728 covering a large potion of the current exploration area.

Central Sudbury Lead-Zinc Mines Limited subsequently changed their name to Stackpool Mining Company Limited and further to Stackpool Mining and Holding Corporation (Stackpool). In 1957-1958 Stackpool completed 27,747 feet of diamond drilling (50 drill holes) along 14,000 feet of the iron range covered by claims W.D.715-719,721, 723-728 and 1729. In addition electromagnetic surveys were completed over claims W.D.715, 717-719 and 721.

Geological and geophysical work, as well as diamond drilling, was conducted in the area in 1972 by Rush Lake Explorations. Reconnaissance work identified prospective VMS targets as well as 4 geophysical targets which were subsequently drilled. The results of the drilling are unknown however, as no assays were submitted for assessment purposes.

Texas Gulf Ltd. (Texas Gulf) conducted ground magnetics and HLEM surveys over targets in the Genoa Township in 1976. Texas Gulf subsequently completed 2,085 feet of diamond

drilling (5 drillholes – G-62-1 to 5) over targets generated from their geophysical program. The drillholes appear to have been testing the easterly strike extent of the Jessop Showing on the west edge of Northcott Bay, Rush Lake. Hole G-62-1 reportedly intersected 0.46% Cu over 3 feet, while G-62-2 intersected 0.68% Zn and 0.29% Pb over 7.5 feet.

Falconbridge Exploration commenced a large program in 1982 focused on gold exploration along the Woman River Iron Formation. Work performed included geological mapping, lithogeochemical surveying (288 samples), mechanical stripping, and magnetometer surveying. Falconbridge found a strong geochem anomaly associated with the Jefferson Deposit.

In 1985, Noranda Exploration Ltd. conducted magnetometer and HLEM surveys in the area, and recommended geologic mapping and IP surveys be conducted to delineate future targets.

Falconbridge Exploration resumed exploration in the area with an aggressive program in 1992. An airborne geophysical survey was conducted in the area with subsequent ground-based magnetometer, VLF, and HLEM surveys delineating targets. Falconbridge completed 4014 meters of diamond drilling over 9 holes (GA61-01 to 07, MN56-01, and MN66-01) in the area to test geophysical anomalies. Of significance, hole GA61-01 encountered 2.7% Zn over 9.12 meters, and 1.6% Zn over 13.83 meters in separate intervals while hole GA61-07 encountered 1.7% Zn over 17.2 meters.

In 1999, an integrated OPAP exploration program was completed over the eastern edge of the property. The program included linecutting (13.3 km), mapping, prospecting (28 grab samples), soil geochemical surveying (38 samples), and HLEM (7.7 km) and magnetometer (13.2 km) surveys over sulphide facies iron formation. A coincident HLEM-magnetic anomaly associated with anomalous Cu and Zn mineralization was identified during the program and recommended for drill testing.

5.2 Central – Area between Rush and Woman Rivers

VenCan's property area between Rush River and Woman River was originally staked by the C. K. Leith interests in 1906 and 1907. The iron formation was explored at this time by limited trenching and sampling in conjunction with the work being completed to the west of the Woman River. The area was subsequently explored by Stackpool Mining who completed a magnetometer survey over the iron formation in 1958-1959. Two magnetic anomalies were outlined over the iron formation which were subsequently checked by 12 short diamond drill holes.

5.3 West – West of Woman River

A history of the most significant exploration programs conducted on and immediately adjacent to the portion of the VenCan property in the October Lake to Claim Lake area, west of Woman River, is summarized below.

The earliest reported work on the property was during the 1906-1908 period and was related to an evaluation of the iron ore potential of the Woman River Iron Formation. This evaluation was

completed by a syndicate consisting of C.K. Leith and C.R. Van Hise of Madison, Wisconsin. The work consisted of reconnaissance dip-needle surveys, regional and detailed geological mapping and 2848 metres (9344 feet) of trenching and pitting within the iron formation. The results of this work outlined low grade iron with values up to 43% iron (Goodwin, 1965).

In 1946, Fumerton Mining and Development Company held a number of claims covering the area between Claim Lake and W. S.8. A program of magnetic surveying, prospecting and mapping was completed. Two small syenite occurrences at the centre of claim W.S.8 were reported to contain gold. No significant results were obtained.

During the 1963-65 period bedrock geological mapping was competed by the Ontario Department of Mines (Goodwin, 1965) in Heenan and Marion Townships.

In 1975, U.S. Steel International Limited (W.G. Wahl, 1975) completed work to evaluate the iron ore potential of the Woman River Iron Formation within Benton, Heenan, Marion and Mallard Townships. The work consisted of reconnaissance and detailed ground VLF-EM and magnetic surveys, and rock geochemical sampling. The results of this work outlined twelve (12) VLF-EM anomalies.

During the 1980-1985 period, Falconbridge Limited carried out a significant amount of work over much of the Woman River Iron Formation in search of base metals and gold. This work consisted of an extensive grid with northeast trending baseline and tie-lines and northwest-southeast trending cross lines over much of the current property (Manchuk, 1985). Geophysical (VLF-EM, magnetometer, HLEM), geological mapping and geochemical (humus) surveys were completed over the grid area. Several areas had follow-up trenching and diamond drilling completed. This work located several gold rich zones in quartz-pyrite veins in the iron formation, quartz-carbonate pyrite veins in the felsic volcanics, sulfide facies iron formation and in shear-related alteration zones (hematization, silicification, carbonatization, pyritization) within felsic volcanics and quartz-feldspar porphyries.

In 1987-88 Ressources Halex Inc. (AGEOS, 1987; Zemeroz, 1988) completed 83.5 km of line cutting, 30 km of I.P. surveys and 2307 metres of diamond drilling in six (6) drill holes. This work was completed in the Claim Lake area with no significant results.

In 1994-95 Conquest Yellowknife Resources Inc. (Lashbrook, 1995) completed a program of mechanical stripping, trenching, mapping and sampling in the area of Claim Lake. The best results obtained were 0.28 oz/ ton Au over 12 feet and 0.155 oz/ton Au over 9.5 feet. In addition, 630 metres of diamond drilling in seven (7) drill holes were completed with no significant results.

In 1997, prospectors A. MacDonnell and R. Lashbrook (Lashbrook, 1997) completed 16 km of line cutting, 4.0 km of I.P. surveys and prospecting. This work was completed in the Claim Lake area. The most significant result was a grab sample of a sheared outcrop of mafic volcanic with pyrite bearing quartz veins which assayed 0.14 oz/ton gold.



An exploration program was conducted in the summer of 2005 by GeoVector Management Inc. on behalf of VenCan, but no results were available at the time of writing of this report.

6.0 Geological Setting

6.1 Regional Geology (from Tykajlo et al., 2006)

The Swayze greenstone belt is bounded in the north by the Nat River granitoid complex, to the west by the Kapuskasing uplift, to the south by the Ramsay-Algoma granitoid complex and to the east by the Kenogamissi batholith (Figure 6.1-1). The volcanic and sedimentary rocks of the Swayze greenstone belt were previously classified into five stratigraphic groups (Heather and van Breemen 1994; Becker and Benn, 2003). From oldest to youngest, these are the Chester group, the Marion group, the Trailbreaker group, the Swayze greenstone belt are not abundant and they are as yet insufficient to tightly constrain the absolute timing and duration of deposition for the different groups.

The Chester group (2736 to 2746 Ma; Heather 1998) is the oldest stratigraphic group in the Swayze greenstone belt. This group is composed of mafic volcanic rocks and amphibolites overlain by felsic to intermediate volcanic rocks, intercalated with chemical and clastic sedimentary rocks.

The Marion group consists of massive, calc-alkalic intermediate to felsic volcanic flows, ash and crystal tuffs interbedded with lapilli tuff and volcanic breccia. The Marion group is capped by iron formations, the most significant are contained within the Woman River Iron Formation. Ages of ca. 2729 Ma, obtained by U/Pb analyses of a quartz-eye bearing rhyolite breccia, are considered to be close to the beginning of the deposition of this group (Heather et al. 1996; Heather 1998).

The lower Trailbreaker group conformably overlies the Marion group and consists of a thick succession of massive, pillowed, Fe- to Mg-tholeiitic mafic volcanic rocks. The upper part of the Trailbreaker group is made up of calcalkalic, intermediate to felsic volcanic rocks, including pyroclastic, volcanoclastic and minor clastic sedimentary facies that are intruded by synvolcanic feldspar +/- quartz porphyry dikes and stocks. A U/Pb zircon age of 2705±2 Ma from a quartz-phyric rhyolite of the Trailbreaker group (Heather and van Breemen 1994) is used as an approximate upper bracket for deposition of the Trailbreaker Group.

The Swayze group occupies the largest area in the mapped parts of the Swayze greenstone belt. The basal part of the Swayze group comprises pillowed Mg-tholeiites and basaltic komatiites intercalated with picritic komatiites. This succession exhibits well developed hyaloclastic, variolitic and flow-top breccias. Komatiitic rocks are also common in the Swayze group. The overlying upper part of the Swayze group consists of felsic to intermediate pyroclastic and volcanoclastic rocks, interlayered with clastic sediments. The sedimentary rock mainly consists of intercalated quartz and/or feldspar rich sandstones, siltstones, polymictic conglomerates, wackes and mudstones. The absence of clasts of iron formation or





Figure 6.1-1 – General geology Map of Swayze Greenstone Belt



granitoids in the conglomerates of the Swayze group distinguishes them from the conglomerates in the overlying Ridout group (see below). Ages determined for the Swayze group are 2697 Ma and 2695 Ma (Heather 1998) for felsic to intermediate volcanic rocks at the top of the Swayze group.

The Ridout group is the youngest stratigraphic group recognized by previous workers. Predominantly, it is made up of greywackes and conglomerates with minor amounts of feldspar quartz porphyry dikes and sheets. A maximum depositional age of 2690 Ma for the Ridout group is based on the youngest ages obtained from zircons from a quartz feldspar-rich sandstone (Heather 1998).

Two major tectonic events have been recognized in the Swayze Greenstone Belt. An earlier deformation event generated north-south trending folds. The second deformation event generated east-west trending folds. No large fault zones have been mapped in the Swayze greenstone belt, however, high-strain zones have been mapped by Heather et al. (1996). While most of these high-strain zones are only of local significance, the Ridout high-strain zone south of the Rice Lake batholith extends into the Abitibi greenstone belt and may be is the western extension of the Larder-Cadillac deformation zone (Milne 1972; Hall 2001; Heather et al. 1995). An east-striking shear zone to the north of the Kenogamissi batholith may correspond to the Porcupine-Destor deformation zone in the Abitibi belt (Milne, 1972).

6.2 Local Geology

6.2.1 Map Physiography

Grid mapping was conducted at a scale of 1:2500 over the Genoa Grid by the author (C. Scherba) on an intermittent basis between June 18th and July 20th, 2006. The grid comprised 40 lines of variable length, spaced at 100 meter intervals; outside dimensions were roughly 1.2 to 1.8 km north-south, and 4 km east-west. Line azimuth was approximately 170/350 +/- 5 degrees. Extensive vegetative cover coupled with poor outcrop exposure (typically less than 5%), resulted in traverses undulating back and forth across cut grid lines in search of outcrop.

The grid area was dominated topographically by an east-north-east trending ridgeline consisting predominantly of banded iron formation that was roughly coincident with the grid baseline. This ridgeline rises between 25 to 30 metres above flat low-lying swamps and lakes to the north, 10 to 15 metres above low rolling glacially sculpted hills to the south, and 20 to 25 metres above Oldscamp Lake to the south-west.

6.2.2 Map Methodology

The Genoa Grid was lithostratigraphically and structurally bedrock mapped at a scale of 1:2500, and was augmented by selected drill hole data, geophysical interpretation of ground based IP/resistivity, magnetometer and gravity surveys, and AeroTEM helicopter-borne EM/magnetometer survey data. Lithogeochemical data provided by Falconbridge was utilized in conjunction with U-Pb geochemical



work conducted by Heather and Shore (1999) to elucidate the litho-stratigraphic associations throughout the map area. Geologic units identified on the accompanying geology map are based upon those utilized by Heather and Shore (1999) in their 1:50000 geological maps.

6.2.3 Lithology

6.2.3.1 Strata Lake Formation - MSf

Felsic volcanics of the Strata Lake Formation of the Marion Group are the lowermost stratigraphic unit in the map area. Compositionally, these rocks are predominantly rhyolitic to dacitic, monolithic lapilli tuff and volcanic breccias with phenocrysts of quartz and/or feldspar (Photo 6.2.3.1-1). Outcrops tend to weather white or buff with some localized areas weathering light pink. Pink outcrops usually have a gneissose texture with variable amounts of quartz, feldspar, and black mica, and are believed to be metamorphosed felsic flows



incorporating sediments.

Photo 6.2.3.1-1 – Feldspar lapilli tuff.

Sericitic alteration is pervasive throughout the felsic volcanics, with variably chloritized zones in proximity to the overlying iron formation. Locally sulphidized breccia zones are also prevalent in association with the iron formation.

6.2.3.2 Woman River Iron Formation – WMif, WMifsi, WMifsu

Overlying the felsic volcanics is the Woman River Formation of the Marion Group.



magnetite, and hematite.

Compositionally, rocks of this formation can be subdivided into three units; sedimentary rocks (WMif), oxide facies iron formation (WMifsi), and sulphide facies iron formation (MWifsu). Sedimentary rocks consist of fine- to mediumgrained wacke, and siliceous siltstone and argillite with minor banded chert and minor amounts of one or more



Photo 6.2.3.2-2 – Sulphide facies iron formation with >75% pyrite and pyrrhotite; Channel #7.

of magnetite, hematite, jasper, siderite, pyrite, and pyrrhotite. Oxide

facies iron formation rocks consist of iron-rich sedimentary rocks composed of banded chert and magnetite which may contain one or more of hematite (Photo 6.2.3.2-1), siderite, pyrite, pyrrhotite,

carbonaceous chert, and/or ferrigenous siliceous argillite. Sulphide facies iron formation rocks (Photo 6.2.3.2-2) consist of massive sulphide-bearing iron formation with greater than 50% pyrite and/or pyrrhotite interbedded within fine- to medium-grained wacke, siliceous siltstone, and/or argillite, and may contain rare sphalerite, galena, chalcopyrite, and/or bornite.

Goodwin (1965) and Manchuk (1982) have classified the Woman River Iron Formation as *Algoma*type iron formation which is classically recognized as iron formation interbedded with mafic to felsic volcanics and volcaniclastic greywacke and shales in Archean greenstone belts (Cannon *et al.*, 1986).

6.2.3.3 October Lake Formation – TOmv

Overlying the Woman River Formation are mafic volcanics of the October Lake Formation of the Trailbreaker Group. Compositionally these rocks consist of massive and pillowed tholeiitic basalt flows (Photo 6.2.3.3-1), pillow breccias, medium- to coarse-grained flows/sills, and finely laminated tuffaceous beds. These rocks are typically light to dark green and exhibit very little alteration.



Photo 6.2.3.3-1 – Tholeiitic basalt flow.



6.2.3.4 Kenogamissi Granitoid Complex – KBbt, KBbtd

The south-eastern corner of the property is underlain by the large granitic/dioritic Kenogamissi Complex. Compositionally, these rocks appear to be massive to foliated medium- to coarsegrained meso- to leucocratic biotite tonalite to granodiorite (KBbt (Photo 6.2.3.4-1)) zoned with meso- to melanocratic diorite (KBbtd).

Photo 6.2.3.4 – Massive leucocratic granodiorite.

6.2.3.5 Rush River Gabbro/Diorite Complex – RR

The southern portion of the mapped area is bisected by a north-south trending gabbroic/dioritic complex. Manchuk (1982) and Heather and Shore (1999) identified this unit as belonging to the Rush River Gabbro/Diorite Complex (RR). The unit is characterized by being massive to foliated





fine- to medium-grained mesocratic to melanocratic hornblende diorite (Photo 6.2.3.5-1), quartz diorite, and gabbro.



Photo 6.2.3.5-1 – Mesocratic diorite.

Immediately east of the Rush River lithologic unit is a massive to foliated fine-to medium-grained melanocratic pyroxenite and/or lamprophyre intrusion of unknown stratigraphic association. The unit appears to bisect rocks of the Marion Group, but its temporal association with the Kenogamissi Granitoid Complex and the Rush River Gabbro/Diorite Complex is unknown due to the lack of any observed cross-cutting relationships. The stratigraphic association has therefore been inferred through interpretation of the ground magnetometer data.

6.2.3.6 Dykes of Unknown Stratigraphic Association – Um, Uqfp

Massive aphanitic mafic/diabase dykes were observed to cross-cut rocks of the Marion Group, while massive to foliated medium- to coarse-grained felsic leucocratic quartz- and feldspar-phyric dykes were observed cross-cutting rocks of the Trailbreaker and Marion Groups. The stratigraphic association of these rocks with the Kenogamissi Granitoid and the Rush River Gabbro/Diorite Complex, as well as the intrusive pyroxenite/lamprophyre is not known however. The mafic dykes may be coeval with the mafic volcanics of the October Lake Formation while the felsic dykes may be coeval with the emplacement of the Kenogamissi batholith, but whole rock geochemistry would be required for this determination.

6.2.4 Structure

The mapped area is bound to the immediate north by the doubly plunging Brett Lake Syncline, and more distally to the south by the west plunging Woman River Anticline. The localized geology on the Genoa Grid is dominated structurally by an overturned east-north-east plunging isoclinal anticline with sub-vertical limbs and vergence to the north. This 'Genoa Anticline' has been interpreted as a second order parasitic Z-fold to the regional Brett Lake Syncline and the Woman River Anticline. Due to a paucity of outcrop in the vicinity of the Genoa Anticline nose, the fold geometry is based upon interpretation of the ground-based magnetometer and gravity geophysical surveys, bedding attitudes, and the stratigraphic relationship of the mapped lithologies.

Bedding (S_o) measurements in the mapped area generally strike between 080° and 090° with an average dip of 82° . A well defined steeply dipping penetrative S₁ foliation was identified subparallel (striking 096°) to S_o, and is overprinted by a penetrative regional foliation (S₂) striking 130° . A third



foliation (S_?) striking north-south was identified during the mapping program, but its generation could not be discerned. Joint analysis indicates a preponderance of north-south joints with subsidiary joints striking 030° and 060° . Identifiable faults are transverse in nature, have a northwest strike, and a subvertical dip. Mineral lineations in the mapped area were predominantly of sericite and were steeply dipping on an azimuth between 245° and 260° .

6.2.5 Quaternary Geology

To elucidate the glacial ice direction within the Genoa Grid area, glacial striae (Photo 6.2.5-1) measurements were recorded when encountered. The striae varied in strike direction from 180 to 220 degrees, with an average strike direction of 192 degrees.



Photo 6.2.5-1 – Glacial striae, with pencil pointing in direction of glacial movement.

7.0 Exploration Model

Based upon field observation, the authors believe that the Woman River Iron Formation observed within the Genoa Grid fits an Algoma-type Banded Iron Formation (BIF) genetic model with stringer mineralization from a Bimodal-Siliciclastic Volcanic-Associated Massive Sulphide (VMS) introducing cross-cutting Zn and Pb mineralization.

7.1 Algoma-Type Iron Formation

Previous work by Manchuk (1982) purported that the iron formation found within the Genoa Grid most closely fits the Algoma-type BIF deposit genetic model. Algoma-type BIF is commonly found within greenstone belts, and is characterized as being interbedded with submarine mafic to felsic volcanic rocks, and volcaniclastic greywacke and shale (Gross, 1996; and Goodwin, 1973). Favoured depositional environments for Algoma-type BIF include island arc/back arc basins and intracratonic rift zones (Harnmeijer, 2003). Analysis of both the lithologies found within the core, and observed in outcrop by the authors, supports the interpretation by Manchuk that the Woman River Iron Formation most closely fits the Algoma-type genetic model. The depositional environment for the iron formation is not adequately explained by this genetic model however.

Work centered in northern Michigan by Harold James in the early 1950's resulted in a facies concept to explain the genesis of iron formation based upon different water depths. James' (1954) facies classification proposed that iron formations with (1) a carbon-rich and/or sulphide-rich facies were indicative of formation within a highly reduced, deep water, euxinic basin; (2) a carbonate-rich facies reflected non-euxinic but still poorly oxygenated water; (3) a silicate facies indicated deposition in waters having an intermediate oxidation state; and (4) an oxidized facies indicated variably oxygenated shallow-water deposition. Using James' classification, iron formation found



within the Genoa Grid has been classified as either oxide facies or sulphide facies. Oxide facies iron formation rocks consist of iron-rich sedimentary rocks composed of banded chert and magnetite which may contain one or more of hematite, siderite, pyrite, pyrrhotite, carbonaceous chert, and/or ferrigenous siliceous argillite. Sulphide facies iron formation rocks consist of massive sulphide-bearing iron formation with greater than 50% pyrite and/or pyrrhotite interbedded within fine- to medium-grained wacke, siliceous siltstone, and/or argillite, and may contain rare sphalerite, galena, chalcopyrite, and or bornite. Generally, sulphide facies iron formation is found basally in the Woman River Formation, while oxide facies iron formation is found higher in the stratigraphic sequence. Lateral variation of facies is also evident in the map area as sulphide and oxide facies grade in and out at the base of the Woman River Formation.

The variation of iron formation facies, both laterally and vertically, indicate a changing depositional environment with sulphide facies iron formation being deposited in relatively deep, anoxic waters, and oxide facies iron formation being deposited in relatively shallow, aerated waters according to James' facies classification. As the accompanying geology map illustrates however, sulphide and oxide facies iron formation within the Genoa Grid are found grading immediately adjacent to one another which indicates deposition at drastically different water depths is unlikely. A locally reducing environment in proximity to a volcanic exhalation would account for the facies distribution observed within the Genoa Grid however.

An analysis of rare-earth element profiles and Nd and Fe isotopes found within BIFs, indicates the source of iron was the result of deep ocean hydrothermal activity admixed with sea water (Klein, 2005; Polat and Frei, 2005; Krapex *et. al.*, 2003). Work by Morris (1993) suggests that the rhythmic layering of chert- and iron-rich bands is due to fluctuations in two major oceanic supply systems: 1) silica saturated surface currents, generating chert layers; and 2) Fe-enriched hydrothermal convective upwelling from a mid-ocean ridge or hot spot activity, depositing the iron dominated layers during episodic volcanic activity. That the silica and iron were decoupled during banded iron formation deposition is supported by Ge/Si ratios within BIF chert layers which indicate weathering of a continental landmass (Hamade *et. al.*, 2003). The episodic influx of admixed sediments of the Woman River Formation between BIF is most likely due to turbiditic influx of shelf-derived sediments.

7.2 Bimodal-Siliciclastic Volcanic-Associated Massive Sulphide

The authors believe that the Woman River Iron Formation observed within the Genoa Grid fits an Algoma-type genetic model, but do not believe this model adequately explains cross-cutting Zn- and Pb-rich zones found within both the iron formation and the underlying felsic volcanics. Stringer mineralization from a Bimodal-Siliciclastic Volcanic-Associated Massive Sulphide (VMS) is proposed as the genetic model to explain the cross-cutting Zn and Pb mineralization.

Work by Falconbridge Limited in the 1980's interpreted Zn-Pb mineralization at the Jefferson 'deposit' as associated with cross-cutting fractures and so not strictly of the VMS type. The authors support this interpretation based on field observations, however, it is believed that the known mineralization may be stringer type mineralization that indicates that potential exists to discover a proximal VMS source on VenCan's property.



Stratigraphically, the lithologies observed within the Genoa Grid consist of felsic volcanics of the Strata lake Formation overlain by volcanogenic/exhalative sediments (BIF) and turbidites of the Woman River Formation, which are then in turn overlain by tholeitic mafic volcanics of the October Lake Formation. Lead and zinc mineralization observed in core cross-cuts rocks of both the Strata Lake and Woman River Formations, and is emplaced sub-vertically.

Hannington *et. al.* (1996) describe generalized VMS deposits (Figure 7.2-1) as being 'exhalative' in nature with two components: 1) a stratabound body composed principally of massive (>40%) sulphide typically underlain by discordant to semi-concordant stockwork veins/stringers and disseminated sulphides, and; 2) iron oxide minerals and altered silicate wallrock. Metal zonation within VMS deposits has been correlated with heat intensity (Figures 7.2-2 and 7.2-3) since 1955 by numerous workers (Large, 1992). It is therefore reasonable to surmise that the Pb-Zn mineralization found within the Genoa Grid indicates a VMS deposit may be found stratigraphically overlying the felsic volcanics within the volcanogenic/exhalative sediments of the Woman River Formation, and more proximal to a heat source.



Figure 7.2-1 – Schematic of modern sulphide deposit on the Mid-Atlantic Ridge identifying a concordant semimassive to massive sulphide lens underlain by a discordant stockwork vein system and associated alteration halo (Hannington et. al., 1996).



Figure 7.2-2 – Metal zonation within VMS depsoits attributable to differences in temperature of the host rock and/or proximity to a hydrothermal heat source (Large, 1992).



Figure 7.2-3 – Metal zonation within VMS deposits and spatial association with BIF attributable to proximity to a hydrothermal heat source (Large, 1977).

VMS deposits with approximately equal proportions of siliciclastic and volcanic rocks (predominantly felsic volcanics), are classified by Barrie and Hannington (1999) as Bimodal-Siliclastic Type VMS. These deposits can form in epi-continental arcs and back-arcs (Allen *et. al.*, 2002), and are therefore often overlain by tholeiitic basalt.



The stratigraphic association of felsic volcanics overlain by volcanogenic exhalative sediments, which are in turn overlain by tholeiitic basalt and mafic flows, coupled with the presence of Pb-Zn veins and/or stringers within the Genoa Grid indicates that potential exists to discover a proximal Bimodal-SiliciclasticVMS source on VenCan's property.

8.0 Mineralization

The Woman River Iron Formation consists of two distinct facies: 1) oxide facies iron formation with iron-rich sedimentary rocks composed of banded chert and magnetite which may contain one or more of hematite, siderite, pyrite, pyrrhotite, carbonaceous chert, and/or ferrigenous siliceous argillite; and 2) sulphide facies iron formation with greater than 50% pyrite and/or pyrrhotite interbedded within fine- to medium-grained wacke, siliceous siltstone, and/or argillite, and which may contain rare sphalerite, galena, chalcopyrite, and or bornite.

Lead and zinc mineralization observed in core cross-cuts rocks of both the Strata Lake and Woman River Formations, is emplaced sub-vertically, and is interpreted to be due to stringer mineralization from a Bimodal-Siliciclastic Volcanic-Associated Massive Sulphide.



9.0 June to August 2006 Exploration Program

The June to August 2006 exploration program completed on VenCan's Genoa property consisted of investigation by prospecting, diamond drilling, geophysical surveying, soil sampling, channel sampling, and geological mapping the base metal potential of the area. Details of the various surveys are discussed in the following sections.

9.1 Genoa Grid Establishment

Cut-and-picketed 100-meter spaced lines with 25-meter station intervals were placed over the Jefferson and Burton target areas located within the Genoa and Marion townships. The grid line emplacement was subcontracted to Exsics Exploration Ltd. (Exsics) from Timmins, Ontario. A total of 45.2 line kilometres were emplaced, with an additional 3.9 line kilometres emplaced along a baseline bisecting the grid (Figure 9.1-1).



Figure 9.1-1 – Genoa Grid

9.2 Geological Mapping

Refer to section 6.2, Local Geology.

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Figure 9.2-1: GenOa Grid Geologic Map


9.3 Soil Geochemical survey

As part of the current exploration program soil sampling was completed over selective portions of the grid coverage. A summary of the analytical results along with sample descriptions is presented in Appendix B.

The soil samples were collected from the "B" horizon along 100 meter spaced grid lines at 25 meter station intervals. Figure 9.3-1 depicts the survey coverage area.



Figure 9.3-1 Genoa Grid Soil Sample Coverage

Analytical work was completed by ALS Chemex in Sudbury Ontario, Canada. All the samples were analyzed for 50 element aqua regia ICP-MS, with Au analysis by 30g fire assay ICP-AES finish. Assay results, assay certificates and analytical procedures are presented in the accompanying Appendices. The grid location and survey coverage is presented in figure 9.3-1 with the correlation plots and ICP analytical results presented in the accompanying sketches (Appendix B). Figures 9.3-2 to 9.3-6 display the raw, colour plotted analytical results for Au, Ag, Cu, Pb and Zn over a gridded percentrank background.

The soil sampling was highly successful in identifying mineralized outcrops at the Jefferson, the Burton, and along the Woman River Iron Formation. Additionally, anomalous Au, Ag, Cu, Pb, and Zn-in-soils anomalies were found to correlate with massive sulphide occurrences discovered while





Au-in-Soils (ppb)

Figure 9.3-2: Au-in-Soils



Ag-in-Soils (ppm)

Figure 9.3-3: Ag-in-Soils





Cu-in-Soils (ppm)

Figure 9.3-4: Cu-in-Soils





Pb-in-Soils (ppm)

Figure 9.3-5: Pb-in-Soils





Zn-in-Soils (ppm)

Figure 9.3-6: Zn-in-Soils



prospecting, as well as identifying a highly prospective area to the south of the Burton Shaft with no outcrop.

An extensive QA/QC program was followed throughout the program consisting of the insertion of standards, blanks and duplicates, the parameters and results of which will be presented in a later section of this report.

9.4 2006 Ground Geophysics

The geophysical follow-up approach at Genoa was predicated on limited physical rock property testing on hand samples from the Jefferson Zn-Pb-Cu Occurrence that indicated mineralization was non-magnetic and non-conductive. The occurrence is embedded in a thick sulphide facies iron formation of the Woman River Iron Formation (**WRIF**) that is highly magnetic and conductive. The resulting magnetic contrast is dramatic and could allow the occurrence to be directly detectable with detailed magnetic surveys if it is of economically significant size. Electromagnetic (**EM**) anomalies would not be expected from a Jefferson-like deposit but perturbations in the **EM** continuity of the **WRIF** would be useful indicators of the possible presence of a deposit embedded within the **WRIF**.

Similarly, the excess mass of a dense, economically sized Zn-Pb-Cu occurrence embedded within the **WRIF** would be expected to produce a recognizable gravity anomaly along the trend of the **WRIF**.

The chargeability (IP) properties of the Jefferson Occurrence are expected to be moderate and perhaps not uniquely distinguishable from the high chargeabilities that can be expected from the **WRIF**.

The geophysical target properties for Jefferson-type deposits of economic scale are therefore assumed to be correlations of:

- Local magnetic lows within the WRIF, or indistinct magnetic signatures in other stratigraphy
- Non-conductive
- Residual gravity highs
- Chargeability highs

The objectives of the summer 2006 geophysical program were to:

- Map the internal complexity of the highly magnetic **WRIF** in the vicinity of, and along strike of the non-magnetic Jefferson Occurrence with magnetic surveying, and attempt to map the extent of the occurrence and possibly similar occurrences within the **WRIF**,
- Characterize and map possible density anomalies related to the Jefferson and Burton Occurrences, and locate similar or larger anomalies over the grid area with gravity surveying, completed by MWH Geo-Surveys Inc. (**MWH**) of Vernon BC. Both contractors completed the work under contract to VenCan Gold Corporation.

Each component of the 2006 exploration work program is discussed in the following sections.



9.4.1 IP/resistivity Survey

IP/resistivity surveying was completed by **Exsics** on 23 selected lines covering the Genoa Grid (Figures 9.4.1-1 and 9.4.1-2; maps in pocket) between June 29 and July 17, 2006. The survey was completed to test for chargeable sources (disseminated sulphides) associated with possible Zn-Pb-Cu mineralization similar to Jefferson Showing, and within the Woman River Iron Formation and adjacent mafic and felsic volcanic rocks. **Exsics** used a GDD 3600W transmitter, and Elrec Pro receiver, to acquire approximately 29 line kilometres of IP and resistivity data in a standard pole-dipole array with dipole "a" spacing of 25m and "n" levels 1 through 8. Data was acquired in the time domain with chargeability measurement window starting at 240 ms and extending to 1840 ms after transmitter current shut-off. The transmitter pulse was a 50% duty cycle alternating square wave with 2 sec on and 2 sec off duration. Readings were recorded at 25 metre station intervals along each surveyed line. Apparent resistivity and chargeability pseudosections were prepared by **GeoVector** (see Sections in pocket) and further survey instrument specifications with names of field personnel are documented in a survey logistics report (Appendix A) prepared by **Exsics**.

The program suite was used to calculate an unconstrained, smooth model depth section of a possible resistivity and chargeability distribution with depth that explains the field data. The algorithms assume that subsurface anomalous features are 2D (i.e. of infinite strike length and orthogonal to the survey line). In practice, features will be modeled less accurately as the strike length, and angle with survey line, of anomalous features deviates from the 2D assumption.

Each of the model sections is presented (see Sections in pocket) as a series of stacked sections at 1:2500 scale showing six panels of colour-contoured data. The top three panels illustrate the apparent resistivity pseudosection, the synthetic pseudosection predicted from the depth section model, and the resistivity depth section model. The bottom three panels show the same series of sections for apparent chargeability.

Values of chargeability and resistivity derived from inversion model results at an arbitrary depth of 75 metres below surface, were extracted from each relevant model section and plotted as depth slice plans at 1:2500 scale (see maps in pocket).

Most coincident high-chargeability/low resistivity anomalies are due to formational pyrite/pyrhotite/magnetite of the **WRIF**. Three zones of high chargeability stand out as follows:

- Coincident with the Jefferson Occurrence and residual gravity anomaly.
- Within zones of structural or stratigraphic thickening proximal to the VenCan Occurrence and drill holes VG-06-16 and VG-06-17
- Within zones of structural or stratigraphic thickening in the GV Target area

Except for the Jefferson anomaly, these high amplitude chargeability anomalies are not directly associated with higher resistivity and in some cases appear to cross-cut the dominant magnetic trends. They are of priority exploration interest as they may represent possible Zn-Pb-Cu zones or gold bearing, disseminated sulphides.



WenCan Gold



Figure 9.4.1-1: Genoa Grid – Total Apparent Chargeability





Figure 9.4.1-2: Genoa Grid – Apparent Resistivity



9.4.2 Magnetometer Survey

Magnetic surveying was completed on the Genoa Grid (Figure 9.4.2-1); maps in pocket) by **Exsics**. A total of approximately 54 line-km of diurnal drift corrected magnetic survey was completed at 5m station intervals between June 27 and July 10th, 2006.

The Genoa Grid was centered over highly magnetic iron formation of the **WRIF** where very high magnetic gradients were expected. **Exsics** utilized an Overhauser magnetometer (Hrvoic, 200?) that is tolerant of very high magnetic gradients, to collect tightly spaced data along the survey profiles. Further survey instrument specifications and names of field personnel are documented in a survey logistics report (Appendix A) prepared by **Exsics**.

The survey clearly outlined a 100-200m wide, east-northeast trending, intense magnetic high of the **WRIF** trend and related parallel and sub-parallel trends. Correlation of magnetic anomalies line-toline (see map in pocket) maps multiplicity of discrete units of the **WRIF**, and highlights local areas where magnetic layering thickens either structurally or stratigraphically. The most marked areas of stratigraphic thickening and discontinuity are highlighted as the VenCan Occurrence and GV Target areas (see map in pocket).

Several magnetic trends discordant from the main east-northeast **WRIF** trend indicate structurally disrupted segments of the **WRIF**, and possibly dykes.

Magnetic lows proximal to the Jefferson Occurrence that occur within the most intensely magnetic parts of the **WRIF** can be identified on profiles and are possibly related to the non-magnetic occurrence. The lows do not appear however, to be unique to the occurrence as similar lows are present along the length of the **WRIF**. There are no uniquely identifiable magnetic characteristics related to the Burton Occurrence.

The majority of the **WRIF** trend is also conductive as indicated by a helicopter-borne EM survey completed by Aeroquest Limited in spring 2006 (Appendix A).

9.4.3 Gravity Survey

Gravity and elevation surveys (Figures 9.4.3-1 and 9.4.3-2; maps in pocket) were completed on the Genoa Grid by **MWH** between July 12 and August 5, 2006. A total of 1809 unique stations, of which 110 were repeated for quality control, covered approximately 45 line-km at 25m intervals. Further survey and instrument specifications and names of field personnel are documented in a survey logistics report (Appendix A) prepared by MWH.

The Bouguer Gravity survey results show a dominant regional gradient descreasing from north to south. The gradient clearly maps a regional density change due to the contact between dense mafic vlocanics to the north of the **WRIF**, with less dense felsic volcanics to the south of the **WRIF**. Local





Figure 9.4.2-1: Genoa Grid – Total Field Magnetometer Survey





Figure 9.4.3-1: Genoa Grid – Bougeur Gravity Survey





Figure 9.4.3-2: Genoa Grid – Residual Gravity Survey



anomalies due to the much higher density of the WRIF are superimposed on the regional Bouguer Gravity trend.

A regional-residual separation (see map in pocket) was calculated by Geovector Management Inc. (**Geovector**) to highlight local anomalies superimposed on the regional trend. The highest amplitude residual anomaly of about 0.5 mGal is centered on the Jefferson Occurrence and strikes for about 500m along the **WRIF**. Several lesser amplitude residual anomalies occur elsewhere on the grid and particularly in the WRIF proximal to the VenCan Occurrence and GV target areas.

Linear residual gravity trends are generally coincident with magnetic trends of the WRIF.

9.5 Channel Sampling

A series of 70 channel samples averaging 0.9 meters in length were collected over 13 channels as part of the current exploration program. The samples were collected over massive sulphide occurrences located while prospecting or geologically mapping the gridded area. Figure 9.5-1 illustrates the channel sampling locations. Table 9.7-1 highlights channel sample assay results where values are of the 95th or higher percentile ranking.

Sample	Channel	Au	Ag	Cu	Pb	Zn	UTMX	UTMY
	#	ppb	ppm	ppm	ppm	ppm		
7768	13		1.1	155	538	1250	407754	5298090
7778	11	3	0.2	268	1	281	407864	5298134
7780	11	2	0.4	76	1110	1920	407861.5	5298131
7781	11	3	1.5	175	331	1060	407861.7	5298130
7842	1	96	0.3	64	1	40	410211	5298511
7843	1	27	0.8	83	560	459	410211	5298510
7853	4	10	0.1	216	1	45	410204	5298510
7857	5	124	0.5	106	1	195	410226	5298518
7861	6		2	182	980	1140	410335	5298740
7875	8	150	0.4	67	1	275	409671	5298573
7880	9	14	1.1	257	176	286	409642	5298564
7881	9	6	0.4	105	1200	1180	409639	5298564
7886	10		0.7	186	1	220	409299	5298538

Table 9.5-1 – Summary of Anomalous Channel Sample Results

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Figure 9.5-1 – Genoa Grid Channel Sampling Location Map



9.6 Prospecting, Sampling, and Airborne Geophysical Anomaly Investigation

9.6.1 Prospecting and Grab Sampling

The Genoa Grid was prospected in conjunction with geological mapping. When areas of potential economic mineralization were encountered, samples were taken, and an experienced prospector was directed to thoroughly explore and sample the area in detail. Consequently, 101 rock grab samples were collected over prospective mineralized zones within the Genoa Grid (Appendix B).

With the assistance of a Bell 206 Jet Ranger from Cochrane-based Expedition Helicopters, regional exploration of VenCan's Cayenne and Chili properties was conducted July 22nd and 23rd, 2006. During this time, 31 rock grab samples were collected over prospective mineralized zones. Figures 9.6.1-1 to 9.6.1-5 illustrate percentranked Au-, Ag-, Cu-, Pb-, and Zn-in-rocks results. Table 9.6.1-1 summarizes anomalous rock grab geochemistry.

Sample	Au	Ag	Cu	Pb	Pb	Zn	Zn	UTMX	UTMY
	ppb	ppm	ppm	ppm	%	ppm	%		
7896	206	4.4	144	112		3380		406676	5297761
7894		3.1	985	191	8500 40662		406627	5297909	
7882	62	1.5	659	127		3870		408677	5298478
7814	27	2	145	6000		7980		409984	5298666
7812	45	2.4	69	>10000	1.58	7640		409961.5	5298614
7811	62	26	664	>10000	41.5	>10000	3.85	409960	5298614
7810	24	2	135	>10000	1.27	>10000	3.44	409957	5298615
7755		1.2	590	4		1410		405536	5297426
7754	96	0.7	174	1		327		405530	5297490
7753	151	1.1	216	20		739		405529	5297513
7748	446	0.6	24	24		81		396791	5291681
7743	7	5.3	39	7420		>10000	12.1	407846	5298111
7742	7	3.5	22	244		>10000	17.96	407846	5298111
7741	10	3.6	21	2100		>10000	11.2	407846	5298111
7722	34	1.7	799	2		3940		409450	5298588
7714	202	1.4	936	1		58		409898	5297969

Table 9.6.1-1 – Summary of Anomalous Rock Sample Results

9.6.2 Genoa Grid Airborne Geophysical Anomaly Investigation

Milton, Ontario based Aeroquest Limited (Aeroquest) was commissioned by VenCan to conduct a helicopter-borne AeroTEM II electromagnetic and magnetic survey over VenCan's land position. A total of 1380 line kilometres were surveyed along north-south lines spaced 80 meters apart between May 7th and 14th, 2006. Aeroquest generated 1084 target anomalies from the data (Figure 9.6.2-1) and submitted a technical report to VenCan with their interpretations (Appendix A).





Figure 9.6.1-1: Percentranked Gold-in-Rocks





Figure 9.6.1-2: Percentranked Silver-in-Rocks





Figure 9.6.1-3: Percentranked Copper-in-Rocks





Figure 9.6.1-4: Percentranked Lead-in-Rocks





Figure 9.6.1-5: Percentranked Zinc-in-Rocks





Figure 9.6.2-1 – Aeroquest AeroTEM Targets (Aeroquest Total Field Airborne Magnetics Background)



Due to the quantity of targets generated by Aeroquest, and a paucity of time for investigation due to the arrival of the data so late in the field program, the data was reviewed by the authors and targets pared down with the assistance of Bill Nielsen and of GeoVector Management Inc.'s Roman Tykajlo (Appendix A). These 'short-listed' targets were then further prioritized by the authors, with non-prioritized targets added to the target list if time permitted investigation (Table 9.6.2-1; Figure 9.6.2-2).

Township	Target	GeoVector #	Nielsen #	υтмх	UTMY	Comments
						13 and 26S anomalies with
Benton	I	12	Н	398520	5289400	a mag association
Benton	I	12		398579	5289366	major WNW faults inferred cutting through area of disrupted HTEM anomalies and mag trends
Benton	II	24		399030	5289861	WNW faults inferred cutting through area of Benton-3 Au showing
Heenan	111	8	D	396800	5291700	21 and 32S and 26S anomalies near a magnetic IF
Heenan	Ш	8		397097	5291842	at least three parallel EW striking HTEM trends possibly along structures
Heenan	111	13		397100	5291483	short, weak NW trending 100m length isolated HTEM anomaly trend along possible NW structure
Heenan	IV	29	F	397930	5292950	isolated 42S anomaly
Heenan	IV	29		398078	5292936	WNW faults inferred crosscutting IF through area of HALEX Au showing
Heenan	V	28		398697	5293405	WNW faults inferred crosscutting IF through zone of elevated Au in bedrock
Marion	VI	6	L	401860	5295340	isolated 45 and 21S anomalies west of a mag anomaly
Marion	VI	6		402123	5295500	EW faults inferred cutting through IF and into Au bearing porphyry intrusion at Gagne prospect
Marion	VII	5		402030	5294964	EW faults inferred cutting through IF and into Au bearing porphyry intrusion at Gagne prospect

Table 9.6.2-1 – Prioritized Airborne Anomalies



						66 and 53S anomalies with
Marion	VIII	4	Ν	405280	5297050	a mag assoc
Marion	VIII	4		405259	5297080	200m long conductive trend striking parallel with inferred NW fault
Marion	IX	3	р	405530	5297360	stacked 54 and 31S anomalies with a mag
Marion	IX	3		405535	5297366	IF trend disrupted by inferred WNW faults in proximity to mapped porphyry intrusive - analogue to Gagne target
Marion	Х	3	0	405530	5297550	isolated 23S anomaly next to a mag anomaly Stacked 59 and 56S anomalies with a mag
Marion	XI	1	Q	406650	5297750	assoc
Marion	XI	1		406716	5297762	conductive trend disrupted by major NNW fault
Heenan	Non- prioritized	9	А	391770	5292100	several 22S anomalies near a dyke (magnetic)
Heenan	Non- prioritized	20	В	394750	5292700	several isolated 22S anomalies
Heenan	Non- prioritized		Ι	390770	5292620	isolated 22S anomaly with mag assoc
Marion	Non- prioritized		K	401770	5293600	isolated 19S anomaly with mag assoc
Marion	Non- prioritized		R	408100	5298200	stacked 39 and 22S anomalies with a mag assoc.
Marion	Non- prioritized	27	S	408480	5298600	AEM anomaly cluster in a mag low
Genoa	Non- prioritized		Т	409150	5298600	AEM anomaly cluster in a mag low
Genoa	Non- prioritized		V	410200	5298500	isolated 60 and 55S anomalies with a mag assoc
Genoa	Non- prioritized		W	410700	5298740	cluster of AEM responses in a mag trend break
Genoa	Non- prioritized		Х	410975	5299350	isolated 20S anomaly with a mag association
Genoa	Non- prioritized	10		409883	5297981	250m long isolated HTEM anomaly, no direct mag association



					conspicuous absence of HTEM and reduction of mag intensity along an otherwise
	Non-				conductive and magnetic
Marion	prioritized	30	408409	5298731	trend

As many of the airborne geophysical targets selected for investigation fell within the Genoa Grid, they were investigated by foot. The following descriptions summarize the field observations of the Genoa Grid targets.

Nielsen Target R

The target falls in an area of no outcrop exposure. Only glacially deposited diamict and sand was uncovered. This area falls on strike with drill holes VG-06-16 and VG-06-17, and is only 220 metres to the ENE of VG-06-17. As sphalerite and galena mineralization were encountered in

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Figure 9.6.2-2 – Prioritized 2006 Airborne Targets (Aeroquest Total Field Airborne Magnetics Background)



both holes, Target R may represent the strike extension of the mineralized zone. As such, the target should be drill tested during a future drill program.

Nielsen Target S, GeoVector Targets 27 and 30

The targets fall in a swamp to the West of Smithette Lake. As a consequence, no outcrop exposure was found. Based on the recommendation of a Geophysicist, these targets could be drill tested in the future. Any drilling in these areas would need to be following freeze-up.

Nielsen Target T

The target is centered on metasedimentary rocks associated with the Woman River Iron Formation. A silicate-facies banded iron formation is found 30 metres to the South of the anomaly. This target is adequately explained by the outcrop exposure, and is not recommended for follow-up.

Nielsen Target U, GeoVector Target 10

The outcrop exposure in the target area consists of massive sulphide (predominantly pyrite and pyrrhotite with trace to minor chalcopyrite and trace bornite), highly chloritic fissile metasediments with up to 35% disseminated pyrite, and an amphibole-rich mafic-ultramafic intrusive. Massive sulphide exposures to 3 by 10 metres have been uncovered and extensively grab sampled. All other outcrop exposures are small (<1 metre) in size, with the exception of an amphibolite exposure roughly 5 by 2 metres in size. This amphibolite exposure is brecciated in part, with rafts of highly metamorphosed xenoliths of banded iron formation. Based on field investigation, this target is determined to be a high priority gold target and should be drill tested during a future exploration program.

Nielsen Target V

The target is centered on 5 trenches exposing massive sulphide to 5 metres wide (predominantly pyrite and pyrrhotite with minor chalcopyrite and trace to minor bornite), and gneissose felsic volcanics. The sulphide mineralization appears to be structurally related and is considered to be a high priority gold target. A total of 20 channel samples (averaging 1 metre in length) were collected from the trenches. Sample 7843 from channel area 5 returned a Pb value of 560 ppm and a Zn value of 459 ppm, while sample 7845 from the same channel area returned a Zn value of 569 ppm. Sample 7857 from channel area 5 returned a Au value of 124 ppb. No other samples were anomalous, and as a consequence no additional work is recommended over this target at this time.

Nielsen Target W

The target falls in an area of no outcrop exposure on as East-facing gently sloping ridgeline. Quaternary sediments (diamict and sand) dominate, with angular boulders of metasediment, and rounded to sub-rounded boulders of diorite, granodiorite, and granite uncovered. A property-



scale fault has been interpreted in the target area by GeoVector. Ground investigation could not determine the source of the anomaly, and any future exploration should be based on the recommendation of a Geophysicist.

Nielsen Target X

The target area falls within an area of mafic volcanic flows and tuffs which are bisected by a logging road. The anomaly could be cultural (i.e. equipment on the road during the survey), or caused by road fill sourced from an anomalous area (e.g. Banded Iron Formation). No further work is warranted for this anomaly.

9.6.3 Regional/Property Scale Investigation of Airborne Geophysical Anomalies

With the assistance of a Bell 206 Jet Ranger from Cochrane-based Expedition Helicopters, regional exploration of VenCan's Cayenne and Chili properties was conducted July 22nd and 23rd, 2006.

Benton Township

Target I (GeoVector target 12, Nielsen target H)

The target falls on a WNW trending regional fault that parallels the Woman River Iron Formation, and is bisected by a NW trending dyke. A small outcrop (50 cm by 2 metres) of highly oxidized banded iron formation with 15-20% small (<5 cm wide) quartz veinlets and 10-15% pyrite (both disseminated and vein-hosted) was found and sampled, but yielded no significant results. No other significant sulphide occurrences were noted, but the area is heavily treed, with abundant Quaternary sediments. Lithologically, the area appears to be dominated by a lightly oxidized sheared rhyolite (BED 268/86 (Right Hand Rule)) with trace disseminated pyrite. A magnetic gabbro was also found during the investigation.

Based on the brief field visit, this target appears to be a valid gold target. An overgrown local grid was identified over the target area. Data from previous exploration programs should be compiled for the target area before further ground investigations be conducted.

Target II (GeoVector target 24)

The target area consists of low, rolling, hummocky terrain rising from lowland swamp. The hummocks over the targeted area consist of glacially deposited sands and sandy diamict. A local grid was found to the immediate north (200 metres of the target). Data from previous exploration should be compiled for the area before further ground investigations be conducted.

Heenan Township

Target III (GeoVector targets 8 and 13, Nielsen target D)



The target area lies on the western slope of a large hill. Abundant highly brecciated banded iron formation was encountered on the hillside amidst very dense replanted (~10 years old) coniferous forest. Pockets of massive sulphide (>1 m wide) with quartz veinlets (<5 cm wide) were found interspersed throughout the brecciated iron formation. Four samples were collected within the target area. Sample 7748 yielded a gold assay value of 446 ppb, while the other three samples returned negligible assay results.

As the target area is aerially expansive, and appears highly brecciated, it appears to be a very good target for gold mineralization. Before further ground exploration is conducted however, previous data should be compiled for the area.

Target IV (GeoVector target 29, Nielsen target F)

The target location consists of a large pile of brush piled atop Quaternary sediments. Only a cursory examination of the immediate area was conducted however as the target falls on the gridded area from VanCan's 2005 Heenan program.

An examination of the data collected during last year's program by GeoVector is recommended to explain the AeroTEM anomaly.

Target V (GeoVector target 28)

As per Target IV, this target falls on the gridded area from VanCan's 2005 Heenan program. As such, an examination of the data collected during last year's program by GeoVector is recommended to explain the AeroTEM anomaly.

Marion Township

Targets VI and VII (GeoVector targets 5 and 6, Nielsen target L)

Targets VI and VII are both within the 'Gagne Property' of VenCan's land package. The area has seen extensive work in the past, and no attempt to duplicate previous work was made. Rather, the four hours spent on the property were used to traverse East-West trending structures interpreted by GeoVector, and to visit the targets (VI and VII) identified from the AeroTEM data.

A moderately to strongly oxidized cherty metasediment with trace to 2% pyrite and trace chalcopyrite was found in the area of Target VI and subsequently sampled with sample 7897 returning a Zn value of 700 ppm. The area is overlain by abundant overburden, and should be mechanically trenched in a future exploration program to follow up the anomalous Zn.

Target VII is dominated by an East-West trending scarp of highly oxidized banded iron formation. No 'fresh' samples of the iron formation were obtained for assaying. A felsic volcanic with minor to 1% sub-mm cubic disseminated pyrite was sampled immediately adjacent to the iron formation with no significant results. A thorough examination of the



East-West scarp should be conducted during a future exploration program, and this examination should include channel sampling.

Targets VIII, IX, and X (GeoVector target 3, Nielsen targets O and P)

Due to the thick vegetation over the targeted area, the helicopter had to land 600 metres East of Target X. During the traverse to the target, 6 samples were collected within outcrop exposed below the roots of 'blown down' trees. The samples were from brecciated iron formation and semi-massive sulphide with pyrite to 40%, pyrrhotite to 2%, galena to 1%, and trace chalcopyrite. Anomalous assays were identified from samples 7752 (500 ppm Cu, 505 ppm Zn), 7753 (151 ppb Au, 216 ppm Cu, 739 ppm Zn), and 7754 (96 ppb Au, 174 ppm Cu, 327 ppm Zn).

During the traverse to Target IX from Target X, two samples were collected. One sample was from the contact between a rhyolite and a mafic volcanic with 10-15% contact-parallel pyrite (sample 7755 with 590 ppm Cu and 1410 ppm Zn), while the other was collected from a moderately oxidized felsic volcanic on a North-South striking scarp face (sample 7756 with 104 ppm Pb and 343 ppm Zn). There was a paucity of outcrop over the Target IX area, and as a consequence no further samples were collected.

Due to the mineralization observed in outcrop within the vicinity of Target X, its being 2.4 kilometres west along strike from the 'Zinc Zone' (drill holes VG-06-16 and 17), and the anomalous rock grab sample results, this target is very prospective. The extension of the current Genoa grid by 2.5 kilometres to the WSW should be considered for future exploration to encompass what might be the strike extension of the mineralization encountered in holes VG-06-16 and 17.

Target VIII, immediately south of IX, was not visited due to time constraints.

Target XI (GeoVector target 1, Nielsen target Q)

Target XI is roughly halfway, on strike, between the 'Zinc Zone' currently being drilled, and Target X. The area is heavily wooded with a paucity of outcrop. Three samples were collected from exposed outcrop beneath the roots of 'blown down' trees. The samples were from highly oxidized banded iron formation/semi-massive sulphide with pyrite to 35%, pyrrhotite to 20%, and chalcopyrite to 2%. Highly anomalous assays were returned for sample 7894 (3.1 ppm Ag, 985 ppm Cu, 191 ppm Pb, and 8500 ppm Zn), and sample 7896 (206 ppb Au, 4.4 ppm Ag, 144 ppm Cu, 112 ppm Pb, and 3380 ppm Zn).

Due to the mineralization observed in outcrop within the vicinity of Target X, the anomalous assay results, and its being 1.3 kilometres west along strike from the 'Zinc Zone', this target is very prospective. The extension of the current Genoa grid by 2.5 kilometres to the WSW should be considered for future exploration to encompass targets IX through XI. Ground geophysics, mapping, channel sampling, and soil sampling is recommended over these areas to ascertain if they are strike extensions of the 'VenCan Zinc' showing.



Non-Prioritized Target Observations

Due to time constraints and/or poor landing conditions, some lower priority targets were not visited during the regional exploration. The following targets were observed through the air with observations summarized below.

Nielsen Target A

The target area falls within an oxidized sand and gravel quarry. The surrounding area seems to be dominated by sand. It is highly likely that any anomalies identified by the AeroTEM survey were caused by glacial deposition of varying lithologies within the gravel pit area.

Nielsen Target B

The target area is on the edge of a swamp dominated by black spruce, and has no outcrop exposure. There was no suitable landing site available so the site was not visited. The site could be accessed via a logging road roughly 3 kilometres to the East. Any future ground investigation in the region should include a visit to the anomaly.

Nielsen Target K

No suitable landing site was available to visit this anomaly within a 3-5 kilometre radius. A ground investigation of the anomaly should be conducted however, as a large (roughly 10 by 20 metre) highly oxidized outcrop was observed from the air.

9.7 Diamond Drilling

Seventeen (17) drill holes, VG-06-01 to VG-06-17, comprising 2425 meters of diamond drilling were completed from June 14 to July 25, 2006 on the Genoa Grid area. The objective of the drill program was to investigate several historical Pb/Zn occurrences and/or geological targets defined during the course of exploration programs completed on the property, with the aim of confirming past exploration results and to investigate the mineral potential of targets defined. Pertinent drill hole data are listed below (Table 9.7-1).

								Depth		
Drill Hole #	Easting	Northing	Elev	Azi	Dip	HQ	NQ	(m)	Start	Finish
VG-06-01	410356.01	5298911.84	394.27	0	-45	7	103	110	June 14,2006	June 15,2006
VG-06-02	409919.69	5298610.25	430.40	350	-45	5	51	56	June 16,2006	June 17,2006
VG-06-03	409921.58	5298579.95	428.05	350	-45	6	125	131	June 17,2006	June 19,2006
VG-06-04	409923.70	5298550.42	426.72	350	-45	4	169	173	June 19,2006	June 22,2006
VG-06-05	409927.51	5298519.52	421.52	360	-45	4	193	197	June 22,2006	June 24,2006
VG-06-06	409872.24	5298581.95	427.08	355	-45	4	118	122	June 24,2006	June 26,2006
VG-06-07	409880.70	5298518.13	423.00	354	-45	7	187	194	June 26,2006	July 4,2006
VG-06-08	409884.21	5298487.11	424.30	355	-45	4	223	227	July 5,2006	July 7,2006
VG-06-09	409832.31	5298513.94	419.33	355	-45	7	184	191	July 8,2006	July 10,2006
VG-06-10	409830.22	5298546.69	425.41	355	-45	4	148	152	July 10,2006	July 12,2006
VG-06-11	409831.01	5298473.97	419.58	355	-45	4	238	242	July 12,2006	July 17,2006
VG-06-12	409962.96	5298585.66	426.41	355	-45	4	106	110	July 17,2006	July 18,2006

Table 9.7-1: Drill Hole Data



VG-06-13	410015.42	5298592.33	423.73	355	-45	4	115	119	July 18,2006	July 20,2006
VG-06-14	409653.59	5298534.44	417.89	355	-45	4	94	98	July 20,2006	July 21,2006
VG-06-15	409343.05	5298484.86	415.44	355	-45	7	91	98	July 21,2006	July 22,2006
VG-06-16	407861.83	5298086.87	405.35	330	-45	7	103	110	July 23,2006	July 24,2006
VG-06-17	407904.42	5298106.55	404.74	340	-45	4	91	95	July 24,2006	July 25,2006

Diamond drill hole locations are shown on Figure 9.7-1, Drill Hole Location Plan Map and on the Geological Compilation map. The drill results are depicted on cross-section sketches (Figures 9.7-2 to 9.7-11) and in the accompanying Appendices to this report.



Figure 9.7-1 – Drill Hole Location Plan Map – Collar Locations

The diamond drilling was completed using a Boyles 35 skid-mounted wire-line rig, owned and operated by Bradley Brothers Diamond Drilling (Bradley Brothers), a full service contractor out of Timmins, Ontario, Canada. The initial 4 to 7 meters of drilling was cased with NW casing. Once reasonably competent rock was encountered NQ size core drilling (47.8 mm diameter) was undertaken.

The drill moves were completed using Bradely Brothers' D-7 caterpillar equipped with a blade and winch. Drill pads and road access were prepared using the D-7 caterpillar. Water for the drill program was pumped from a nearby lake to the drill site.



Drill core was stored in wooden core boxes, 1.5 meters in length holding 4.5 meters NQ core. All core is stored in Timmins at the Moneta Mines core storage facility under corregated metal core hangers.

Drill casing was retained for all drill holes and used to mark the location of the hole. All holes were subsequently surveyed by MWH Geo-Surveys by differential GPS.


























Bradley Brothers used Reflex equipment on all diamond drill holes to measure down hole azimuths and declinations. Measurement were taken after the casing, at an approximate depth of 20 meters, and at the end of the drill hole, and dependent of the hole depth towards the centre of the hole. All readings were subject to hole conditions and magnetism of the surrounding rocks.

The drill core was hauled to the drill camp at the end of each drill shift where geological logging and RQD/recovery measurements were undertaken by qualified staff. Following the completion of all logging, the marked core was digitally photographed and subsequently cut in half using a diamondbladed rock saw. For those intervals where the drill core was extremely silicious, a Longyear mechanical splitter was used to split the core in half in order to keep up with the drilling. The core was usually sampled in 1.0 to 1.5 meter intervals and according to lithological intervals. A copy of the core photos are included on a DVD disk located in the accompanying map folder.

Samples were placed in doubled plastic bags along with a numbered Tyvek tag, with the sample numbers also marked on the outside of each sample bag. The samples were then re-bagged in rice sacks for transport to Swastika Laboratories Ltd. located in Swastika Ontario. Once a truck load of samples had been accumulated, the samples were trucked to Swastika Laboratories by VenCan personnel, generally once every two weeks. The reject material is being stored at the Swastika Laboratories until further notice. The remaining half of the sampled core is retained in the original core boxes at the Moneta Mines core storage facility in Timmins.

An extensive QA/QC program was followed throughout the program consisting of the insertion of standards, blanks and duplicates, the parameters and results of which will be presented in a later section of this report.

The analytical methods used for gold and silver are fire assay with atomic absorption or gravimetric finish. The analytical methods used for base metals (Cu, Pb, Zn) are aqua-regia digestion with atomic absorption finish.

The geological logging was recorded in the field on hand written logs, with the hand written logs later entered into a Microsoft Excel template file formatted with data verification parameters. These files were then edited by a third party and then extracted and imported into an Excel database. Drill logs, assay results, and assay certificates are presented in the accompanying appendices.

9.7.1 Jefferson Deposit and Burton Shaft Area

The primary focus of the summer 2006 exploration program was VMS style mineralization in the area of the Jefferson Zn-Pb deposit (Jefferson) which contains an historical (1948) non-NI 43-101 compliant resource estimate of 30,100 tons at 7.05% Zn and 4.58% Pb. The historical work defined "massive sulphides enriched in zinc and lead over a strike length of 150 meters and to a vertical depth of 30 metres". Deeper drilling to a vertical depth of 85 metres in 1950 indicated continuity of the zinc-lead enriched sulphide body. Some of the better drill intersections documented by the historical work on the Jefferson deposit included 4.43% Zn and 1.25% Pb over 22.9 meters and 9.1% Zn and 11.5% Pb over 6.9 meters.



Work by Falconbridge Limited in the 1980's reinterpreted the mineralization at the Jefferson deposit as associated with cross-cutting fractures and so not strictly of the VMS type. The results of the 2006 exploration program conducted by VenCan supports this interpretation, however, the Company believes that the known mineralization may be stringer type mineralization that indicates that potential exists to discover a proximal VMS source on VenCan's property. A total of 12 diamond drill holes were completed by VenCan during the 2006 exploration program in the area of the Jefferson (holes VG-06-02 through VG-06-13) in an attempt to replicate historical results. The best drill intersections encountered in the 2006 program include 7.24% Zn over 1.85 meters (VG-06-02), 2.34% Zn and 2.10% Pb over 8.70 meters (VG-06-04), 1.83% Zn and 1.29% Pb over 10.20 meters (VG-06-05), and 1.48% Zn over 13.60 meters (VG-06-12). Two holes were drilled to the west of the Jefferson to test for strike extension of known mineralization. HoleVG-06-14 was drilled 300 meters to the west and encountered 8.93% Pb over 3.10 meters. Drill-Hole VG-06-15 was drilled 600 meters to the west and encountered no significant mineralization. VenCan was not able to confirm the thickness or tenor of mineralization at the Jefferson as was historically reported. The gravity survey outlined a pronounced positive anomaly approximately 550 metres in length coincident with the Jefferson deposit.

Drilling was also completed near the Burton Shaft Zn-Pb-Au occurrence located north-east of the Jefferson deposit which is interpreted to lie within a limb of a complementary syncline to the Jefferson "anticline". A single drill hole by Hollinger in 1929 intersected 7.5% Zn, 1.5% Pb and 7.5 g/t Au over 4.8 meters. A hole drilled immediately adjacent to the Burton Shaft during the 2006 exploration program (VG-06-01) encountered 1.55% Zn and 0.35% Pb over 6.05 meters with no significant gold mineralization.

9.7.2 'VenCan Zinc Showing' Area

The area around the historical drill intersection of 11.98% Zn over 3.2 meters located approximately 2.0 km to the west of the Jefferson Deposit was investigated during the 2006 exploration program, and an outcrop of sphalerite-rich mineralization corresponding to an AeroTEM helicopter-borne EM/Magnetometer anomaly was discovered. Grab samples from this outcrop yielded assay values ranging from 11.2% Zn to 17.96% Zn. VenCan drill hole VG-06-16 later completed beneath the outcrop intersected 4.22% over 16.85 meters including 7.27% Zn over 8.50 meters on a IP, magnetometer and gravity anomaly that extends 500 meters to the west. Drill hole VG-06-17 drilled 50 meters east of VG-06-16 intersected 4.45% Zn over 1.38 meters and 2.94% Zn over 4.6 meters, the eastward extension of the mineralization encountered in VG-06-16.

DDH #	Area	From (m)	To (m)	Interval (m)	Pb (%)	Zn (%)
VG-06-01	Burton	19.25	25.30	6.05	0.35	1.55
VG-06-02	Jefferson	14.20	17.90	3.70	1.10	2.96
		26.40	28.25	1.85	7.24	0.13
VG-06-03	Jefferson	11.55 47.95	12.70 50.70	1.15 2.75	2.42 0.37	3.79 1.33

 Table 9.7-2 – Summary of Significant DDH Intersections

		53.70	55.90	2.20	1.92	3.32
		60.15	61.15	1.00	0.79	2.23
		80.00	81.95	1.95	4.71	2.10
		85.45	86.25	0.80	2.32	2.49
VG-06-04	Jefferson	78.50	87.20	8.70	2.10	2.34
		111.10	119.00	7.90	0.89	2.07
		133.45	149.00	15.55	0.55	0.86
VG-06-05	Jefferson	138.10	148.30	10.20	1.29	1.83
VG-06-06	Jefferson	74.00	75.40	1.40	0.64	1.57
		103.90	104.90	1.00	0.53	1.71
VG-06-07	Jefferson	117.20	124.80	7.60	0.33	0.90
		188.00	189.00	1.00	0.26	1.12
VG-06-08	Jefferson	154.55	154.95	0.40	0.59	3.10
		162.90	164.20	1.30	0.44	1.71
VG-06-09	Jefferson	82.90	83.60	0.70	0.19	1.12
		99.30	100.40	1.10	1.42	3.29
		154.50	154.80	0.30	1.66	4.30
VG-06-10	Jefferson	38.00	38.50	0.50	0.62	1.30
		59.50	60.20	0.70	0.87	3.06
VG-06-11	Jefferson	208.80	209.80	1.00	0.28	0.91
VG-06-12	Jefferson	22.90	24.40	1.50	0.14	0.51
		32.40	33.70	1.30	1.42	0.66
		72.10	85.70	13.60	0.80	1.48
		90.90	94.80	3.90	0.33	1.54
		108.75	109.40	0.65	0.49	1.49
VG-06-13	Jefferson	96.20	99.40	3.20	0.55	2.00
	Jefferson					
VG-06-14	Extension	54.60	57.70	3.10	8.93	0.29
	Jefferson	no significant				
VG-06-15	Extension	results				
VG-06-16	VenCan	34.80	47.00	12.20	0.54	5.70
incl.		39.50	47.00	7.50	0.66	8.19
		50.84	51.65	0.81	0.30	1.23
VG-06-17	VenCan	41.82	43.20	1.38	0.49	4.45
		51.60	56.20	4.60	0.46	2.94

9.8 GPS Control Surveying

MWH Geo-Surveys Inc. (MWH) was contracted to conduct a gravity survey by VenCan over the Genoa Grid between July 12, and August 5, 2006. To establish accurate station readings, MWH utilized three Thales dual frequency RTK GPS Z Max receivers to accurately survey gird stations to sub-cm X, Y, and Z accuracy. An accurate topographic contour map of the Genoa Grid with 1 meter contour intervals was then constructed (Figure 9.1-1). VenCan also utilized MWH's technical capability to accurately survey all 2006 diamond drill holes, with sub-cm accurate collar locations



listed in Table 9.7-1. Technical parameters of the GPS control surveying conducted by MWH, as well as accurate grid station coordinates, are attached in Appendix A

10.0 Quality Assurance/Quality Control

VenCan implemented protocols for a quality assurance and quality control program incorporating: standards, blanks, and quartered duplicate samples during the 2006 exploration program. A quality assurance and quality control program incorporating: standards, blanks, and duplicate samples was also implemented during this same time period for the soil sampling survey. The samples were collected to develop the QA/QC database for the project in anticipation of the requirements for the completion of resource/reserve estimations for feasibility studies and to provide controls for data management and data quality of the data.

10.1 QA/QC Protocol – DDH Core

Drill samples collected during the Genoa drill program were submitted to Swastika Laboratories Ltd. (Swastika) located in Swastika Ontario for analysis. The samples were analyzed for Au, Ag, Cu, Pb and Zn.

Appendix A of this report provides a thorough description of the analytical procedures followed by Swastika. The QA-QC sample insertion protocol for the diamond drill sampling includes the following samples:

- 4 certified standard control samples per 100 samples;
- 3 blank samples of barren material per 100 samples;
- 1 split and quartered core duplicate sample per 100 samples.

Some 56 control samples were inserted within a sample sequence of 575 core samples from the Genoa drill program. The control samples make up 9.74% of the total sample analyses. The following sections briefly review each type of QA/QC sample and the results for the diamond drill samples.

10.2 Certified Standard Controls-DDH Core

VenCan used one certified standard purchased from CDN Resource Laboratories Ltd. of Delta B.C. Canada. CDN Resources Laboratories provides reference material with a range of low-grade, mid grade, and high-grade precious and base metal standards with known values, and within statistically acceptable limits. The maximum and minimum limits are plus two standard deviations (+2st.dev.) and minus two standard deviations (-2st.dev.) from the mean value of the control sample. Table 10-1 lists the statistical values for the control samples.

Table 10.1: Standard Reference Material-DDH Core



Standard ID	Au Grade	Cu Grade	Zn Grade	
	(ppm)	(%)	(%)	
HLLC 0.85		1.47	3.0	

A total of 28 certified standards were inserted within the drill core sample sequence.

All of the results for the certified standards fell between the minimum and maximum range of acceptable values. Therefore Swastika Laboratories was not required to re-analyze any certificates because of unacceptable standard values.

10.3 Blank Samples-DDH Core

VenCan sourced material for use as blank samples near the Genoa property. The rock employed as a blank consisted of massive unaltered granite. Although the samples are considered to consist of barren rock without any appreciable precious metal or base metal content, occasionally low levels of mineralization may occur which could negate the usefulness of these samples.

A total of 22 blank samples were submitted within the sample sequence for the recent program. The results for the blanks all fell within acceptable limits for all the elements.

10.4 Duplicate Samples-DDH Core

The duplicate samples were prepared by splitting the diamond drill core sample and submitting two samples for the same sample interval. Differences between the sample values normally reflect the inherent nugget effect of the mineralization. A total of six (6) samples were submitted and the results are presented on graphs in Appendix A. The distribution for the elements analysed follows the reference with a correlation coefficient for gold-0.0309, Ag-0.9911, Cu-0.9824, Pb-0.992, and Zn-0.9987.

10.5 QA/QC Conclusions and Recommendations-DDH Core

The results for the QA-QC samples are acceptable, and the QA-QC program has performed as intended. VenCan has identified where potential problems could occur in the sample preparation and analytical stages. Recommendations are as follows:

- A designated individual should solely be responsible for preparation and insertion of QA-QC samples. This person would also be responsible for inventory control of standard materials.
- Pulp blanks, material with known values, should be inserted in the sample stream, 1 per 100 samples, while cleaner blank material should be sourced to reduce the possibility of low-grade mineralization contamination.
- A selection of pulp duplicates from Swastika should be sent to a second laboratory for an external check. About 3% covering all grade ranges for each metal should be submitted to the lab.



10.6 QA/QC Protocol & Results-Soil Sampling

Soil samples collected during the program were placed in kraft paper bags for direct shipment to ALS Chemex, Sudbury, Canada (Chemex) for analysis. All the samples were analysed for 50 element Aqua Regia ICP-MS methods, with Au analysis 30g fire assay ICP-AES finish. Appendix A provides a thorough description of the analytical procedures followed by Chemex.

The QA/QC sample insertion protocol for the soil sampling includes the insertion of a control standard sample every 25th sample with duplicate samples randomly inserted within the sample stream. Table 10-2 summarizes the GEOSTATS Standard Reference Material statistics for the standard inserted. There were no blanks inserted.

Table 10-2. GEOSTATS Standard Reference Material-Son Survey					
			95%	Copper	
Standard ID	Matrix	Gold Grade	Confidence		
			Level	Grade	
OREAS 53P	QMP	0.380 ppm	+/- 0.009 ppm	0.413%	

Table 10-2: GEOSTATS Standard Reference Material-Soil Survey

A total of 28 control samples were inserted within a sample sequence of 427 soil samples. The control samples make up 6.6% of the total sample analyses. The control samples consisted of 18 certified standards, with an addition 10 duplicate samples inserted. The results are presented on graphs in Appendix A.

All of the results for the certified standards fell between the minimum and maximum range of acceptable values. Therefore Chemex was not required to re-analyze any certificates because of unacceptable standard values. One sample (#6550) returned a fairly low value for gold but there was no follow up deemed necessary. Somehow a second standard was inserted within the sample stream (four samples). The source of this second standard has not been determined. The correlation coefficients of the duplicate samples are as follows: Au 0.0388, Ag 0.6916, Cu 0.6537, Pb 0.659 and Zn 0.7278. The lower correlation coefficient for gold reflects the nugget effect for this element.

10.7 QA/QC Protocol & Results – Rock Sampling

Rock samples collected during the Genoa exploration program were submitted to Swastika Laboratories Ltd. located in Swastika Ontario for analysis. All the samples were analyzed with the same procedures as was employed for the drill core. There was no QA/QC program implemented.



11.0 Interpretation and Conclusions

11.1 Jefferson Deposit and Burton Shaft Area

The primary focus of the summer 2006 exploration program was VMS style mineralization in the area of the Jefferson Zn-Pb deposit (Jefferson) which contains an historical (1948) non-NI 43-101 compliant resource estimate of 30,100 tons at 7.05% Zn and 4.58% Pb. The historical work defined "massive sulphides enriched in zinc and lead over a strike length of 150 meters and to a vertical depth of 30 metres". Deeper drilling to a vertical depth of 85 metres in 1950 indicated continuity of the zinc-lead enriched sulphide body. Some of the better drill intersections documented by the historical work on the Jefferson deposit included 4.43% Zn and 1.25% Pb over 22.9 meters and 9.1% Zn and 11.5% Pb over 6.9 meters.

Work by Falconbridge Limited in the 1980's reinterpreted the mineralization at the Jefferson deposit as associated with cross-cutting fractures and so not strictly of the VMS type. The results of the 2006 exploration program conducted by VenCan supports this interpretation, however, the authors believe that the known mineralization may be stringer type mineralization that indicates that potential exists to discover a proximal VMS source on VenCan's property. A total of 12 diamond drill holes were completed by VenCan during the 2006 exploration program in the area of the Jefferson (holes VG-06-02 through VG-06-13) in an attempt to replicate historical results. The best drill intersections encountered in the 2006 program include 7.24% Zn over 1.85 meters (VG-06-02), 2.34% Zn and 2.10% Pb over 8.70 meters (VG-06-04), 1.83% Zn and 1.29% Pb over 10.20 meters (VG-06-05), and 1.48% Zn over 13.60 meters (VG-06-12). Two holes were drilled to the west of the Jefferson to test for strike extension of known mineralization. HoleVG-06-14 was drilled 300 meters to the west and encountered 8.93% Pb over 3.10 meters. Drill-Hole VG-06-15 was drilled 600 meters to the west and encountered no significant mineralization. VenCan was not able to confirm the thickness or tenor of mineralization at the Jefferson as was historically reported. The gravity survey conducted by MWH outlined a pronounced positive anomaly approximately 550 metres in length coincident with the Jefferson deposit. Based on geological mapping and interpretation of ground geophysical data, the authors conclude that the Jefferson lies on the northern limb of an overturned east-north-east plunging isoclinal anticline with vergence to the north, indicating a possible proximal VMS source more deeply buried to the north and/or east of the Jefferson.

Drilling completed near the Burton Shaft Zn-Pb-Au occurrence located north-east of the Jefferson deposit has led the authors to conclude that the Burton Shaft occurrence lies within a limb of a complementary syncline to the Jefferson anticline. A single drill hole by Hollinger in 1929 intersected 7.5% Zn, 1.5% Pb and 7.5 g/t Au over 4.8 meters. A hole drilled immediately adjacent to the Burton Shaft during the 2006 exploration program (VG-06-01) encountered 1.55% Zn and 0.35% Pb over 6.05 meters with no significant gold mineralization.

11.2 Base Metal and Gold Targets

Geologic mapping in conjunction with the ground magnetometer survey identified a previously unknown anticline fold nose of the Woman River Iron Formation 500 meters to the east of the Jefferson deposit which the authors believe is a highly prospective base metal-gold target. The anticline appears to plunge shallowly to the east and the gravity survey revealed a weak but



continuous positive anomaly that is coincident with the projected plunge and which extends for 800 meters in this direction. Considering that the amplitude of the gravity effect is attenuated by even modest depths of burial the "anticline" target merits thorough exploration follow up.

11.3 Soil Sampling

The orientation soil sampling survey was highly successful in identifying the known mineralized zones, as well as highlighting a previously unknown area south of the Burton which is anomalous in gold, silver, copper, lead, and zinc. This multi-element anomaly is also coincident with the western edge of the "anticline" gravity anomaly at the eastern limit of the present soil survey coverage.

11.4 'VenCan Zinc Showing' Area

The area around the historical drill intersection of 11.98% Zn over 3.2 meters located approximately 2.0 km to the west of the Jefferson Deposit was investigated during the 2006 exploration program, and an outcrop of sphalerite-rich mineralization corresponding to an AeroTEM helicopter-borne EM/Magnetometer anomaly was discovered. Grab samples from this outcrop yielded assay values ranging from 11.2% Zn to 17.96% Zn. VenCan drill hole VG-06-16 later completed beneath the outcrop intersected 4.22% over 16.85 meters including 7.27% Zn over 8.50 meters on a IP, magnetometer and gravity anomaly that extends 500 meters to the west. Subsequent to the field exploration program, inversion modeling of the 2006 IP data has identified a pronounced anomaly 100 meters to the north-west of the VG-06-16 collar that is open to the west. A channel sample of massive sulphide 100 meters west of hole VG-06-16 assayed 1250 ppm Zn, 538 ppm Pb, and 155 ppm Cu over 1.1 meter, and a regional highly anomalous grab sample taken 1.25 kilometers to the west assayed 8500 ppm Zn and 985 ppm Cu. The potential to discover Zn-rich mineralization with a strike length in excess of 1 kilometer makes this area highly prospective and it is the opinion of the authors that it merits thorough exploration follow up.

11.5 Ground Magnetics

Magnetic surveys successfully mapped the complex interior character of the northeast trending **WRIF** and adjacent stratigraphy and revealed local stratigraphic or structural thickening of magnetic units. Discrete detection of the Jefferson Occurrence with magnetics remains problematic.

12.0 Recommendations

- Linecutting To cover the prospective area to the west of the VenCan Zinc Showing, the existing Genoa Grid should be augmented/extended with the addition of lines 3900E to 5000E from stations 200N to 800S, and lines 2400E to 3800E from stations 0 to 1000S. In total 26 new lines, each 1 kilometer in length, should be cut.
- IP IP/RES surveys and inversion modeling be completed on L51+00E, L52+00E, L57+00E, L58+00E, L61+00E and L66+00E on the existing Genoa grid to complete mapping of anomalies over the VenCan Occurrence and GV Target Areas.



- IP/RES surveys and inversion modeling be completed westward over the extended grid to map the limits and extents of VenCan Showing IP anomaly and possibly similar anomalies along strike westward.
- Magnetometer Detailed magnetic surveying be completed over the extended grid to continue mapping internal complexity of the WRIF and adjacent startigraphy.
- Soil Sampling As the previous exploration program illustrated, soil sampling is efficacious on the property and should be completed over the newly established grid extension (1066 samples over 26 line km). Time permitting, infill soil sampling over the previously established Genoa Grid would entail 1681 samples over 41 line km, and could aid in identifying new mineral occurrences.
- Prospecting The area around the newly identified antiformal nose (~300 meters to the east of the Jefferson), the western portion of the Genoa Grid on strike with the VenCan Showing, and the newly established 'Genoa Grid Extension' should be thoroughly prospected and sampled. Additionally, two weeks of helicopter-supported exploration is proposed for inaccessible areas of VenCan's broader land position.
- Drilling Initially, 6 holes at the VenCan Showing are proposed over 900 meters, with 2 additional holes in the vicinity of the antiformal nose east of the Jefferson and/or the gravity anomaly east of the Burton (over 300 meters). Three drill sections, of 2 holes each, and spaced 100 meters apart are envisioned at the VenCan Showing to test strike extension and grade.
- Mapping The Genoa Grid geology map should be augmented with additional mapping over the newly established 'Genoa Grid Extension'.

13.0 Acknowledgements and Certificates

13.1 Acknowledgements

A list of personnel from VenCan and a variety of contractors cited in Appendix A of this report, acknowledges those workers who were directly concerned with the conduct of the 2006 June to August Genoa exploration program. They provided the myriad of technical and support services needed to make the program a success. The authors gratefully acknowledge the strong support of the many people whose efforts allowed the 2006 summer Genoa program to be completed. Without their valuable contributions, the program would not have been possible.

Many people contributed to this report, however, the primary authors listed on the cover page are C. H. Aussant, P. Geol. And C. Scherba, P. Geol. The former acted as drill manager, while the later acted as project manager both contracted from Taiga Consultants Ltd. For practical purposes relating to the filing of documents with the various stock exchanges and securities commissions, the author



list was confined to the primary Qualified Persons responsible for the conduct of the program. The authors would like to personnally acknowedge the contributions of the following personnel:

Jacob Mckinnon, for his excellent logistical organization.

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Lastly but not least, the authors acknowledge the contributions of the line cutting crews and the geophysical crews from Exsics Exploration Services and MWH Geo-Surveys.

Certificates for the primary authors are presented below.



13.2 Certificate of Qualification – C.H. Aussant

I, Claude H. Aussant, of #4, 1922-9th Ave S.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

- I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at #4, 1922 - 9th Avenue SE, Calgary, Alberta.
- I am a graduate of the University of Calgary, B.Sc. Geology (1976), and I have practiced my profession continuously since graduation.
- I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
- I am a "qualified person" as defined by National Instrument 43-101.
- I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the technical report, the omission to disclose which makes the technical report misleading.
- I am the co-author of this report.
- I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of VenCan Gold Corporation or any of its related companies in respect of services rendered in the preparation of this report.
- I have read National Instrument 43-101 and Form 43-101F1 and the technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

DATED at Calgary, Alberta, this _____ day of _____, A.D. 2006.

Respectfully submitted, signed

Claude H. Aussant, B.Sc., P.Geol.



13.3 Certificate of Qualifications-C. S. Scherba

I, Craig S. Scherba, of #35, Royal Birch Point N.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

- I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at #4, 1922 - 9th Avenue SE, Calgary, Alberta.
- I have practiced my profession continuously since 2000, and am a graduate of the University of Alberta, B.Sc. Biology (1994) and Geology (2001).
- I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I am a "qualified person" as defined by National Instrument 43-101.
- I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- I am the co-author of this report.
- I have visited the site that is the subject of the Technical Report, and was present for the duration of the reported program.
- I have had no prior involvement with the property that is the subject of the Technical Report.
- I have read National Instrument 43-101 and Form 43-101F1 and the technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files of their websites accessible by the public, of the Technical Report.

DATED at Calgary, Alberta, this _____ day of _____, A.D. 2006.

Respectfully submitted, signed

Craig S. Scherba, B.Sc., P.Geol.

STATEMENT OF QUALIFICATIONS

I, Roman Tykajlo of 74 Stonebriar Drive, Ottawa, in the Province of Ontario DO HEREBY CERTIFY:

- 1. THAT I am a Consulting Geoscientist with GeoVector Management Inc. with an office at 10 Green Street, Suite 312, Ottawa, Ontario, K2J 3Z6.
- 2. THAT I am a graduate of Lakehead University with a Bachelor of Science Honours degree in Geology/Physics (1978) and I have been practicing my profession since graduation.
- 3. THAT I am a Professional Geoscientist (P.Geo.) registered in good standing with the Association of Professional Geoscientists of Ontario (APGO), member # 0685.
- 4. THAT this report describes property geophysics work conducted by Exsics Exploration Limited and MWH Geo-Surveys Inc., and supervised by me for VenCan Gold Corporation on the Cayenne and Chili Property during summer 2006.

DATED at Ottawa, Ontario, this 29th day of September, 2006.



Roman Tykajlo, H.B.Sc., P.Geo.



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