



SAWYER CONSULTANTS INC.

826985

SUMMARY REPORT  
on the  
BLACK PANTHER AND HIGH GRADE VEIN PROSPECTS  
Mount McQuillan Area  
Victoria Mining Division, B.C.

for

JAN RESOURCES LTD.

MAY 30th, 1981

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## INTRODUCTION

Jan Resources Ltd., together with their joint venture partner, Oliver Resources Ltd., have carried out exploration programs on their Jan, Mar, and Remy claims, and optioned Crown Grants which lie within the area of the claims, in the period October 1979 to March 1981. Sawyer Consultants Inc. has supervised these work programs and has prepared a number of reports covering the various phases of the exploration program. A list of these reports is appended. Copies of all of them are available at the offices of Jan Resources Ltd. and of most of them including the two most recent ones dated December 31st, 1980, and April 27th, 1981, are also available at the office of the Superintendent of Brokers. Readers interested in reviewing all of the data in detail are referred to these reports.

This summary presents the salient points of the work programs completed and the results obtained, on which the recommendations for further drilling on the High Grade Vein and for underground exploration on the Black Panther Mine, contained in our report dated April 27th, 1981, are based. This summary has been prepared in cooperation with the office of the Superintendent of Brokers, British Columbia Ministry of Consumer and Corporate Affairs.

## SUMMARY OF WORK PROGRAMS AND RESULTS

Following preparatory surface work including prospecting and reconnaissance mapping, geochemical soil sampling, covering the Mar and Jan claims mainly, but extending to a limited degree onto the Remy claim also, detailed sampling of vein mineralization in three old adits excavated in the 1940's on the Black Panther Mine was carried out in the summer of 1980. Similar detailed channel sampling was also carried out on veins exposed at surface at Summit Lake and at the High Grade Vein showing. Following this a program of diamond drilling was begun which involved drilling five holes from two separate locations at Summit Lake, two holes from a single set-up at the south end of the High Grade Vein structure, and a total of five holes from a single set-up at the Black Panther Mine area.

Significant gold and some associated silver values were obtained at all three locations however on the basis of all of the results to date the two most promising areas are considered to be the High Grade Vein and the Black Panther area. Because of difficulties of access and shortage of water it was possible to complete only two diamond drill holes on the High Grade Vein structure in the 1980 season. These were located at the extreme southern end of the vein. Significant intersections of gold mineralization were obtained as follows:

HG 80-1	126'-128.5'	0.43 oz./ton Au	0.27 oz./ton Ag
HG 80-2	111'-114'	0.32 oz./ton Au	0.296 oz./ton Ag
HG 80-2	167.5'-169'	0.68 oz./ton Au	0.32 oz./ton Ag

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These results supported the interesting and fairly high grade assay results obtained from surface sampling on this vein. Original plans were to drill two holes on each of four other sections spaced to the north along the High Grade Vein structure. It was not possible to complete this work program in 1980, and an expanded drilling program involving drilling a minimum of twelve additional holes over the 1200 feet strike length with six additional optional holes, depending on results, are recommended for the 1981 season at an estimated cost of \$175,800.00 if twelve holes are drilled, or \$252,100.00 if the six additional optional holes are drilled. In conjunction with this drilling some surface trenching to provide sampling sites along parts of the structure not presently exposed is also recommended. The costs of this work are included in the drilling costs quoted above.

Sampling in the three adits, A, B, and C, at the Black Panther Mine similarly yielded significant gold assay values with associated silver values also. The terrain is difficult in the area of these workings thus it was possible to make only one drill site located 370 feet east of A Adit, which is approximately 170 feet east of the projected lodes and 120 feet above the A Adit level. A total of five drill holes involving 3,230 feet of NQ drilling was completed from this set-up. Detailed drill logs and graphic vertical sections for all of the drill holes have been prepared and accompany our original reports.

We have used the data from this drilling program, which provided good core recovery and sufficient assay data on which reasonable estimates of ore bearing structures can be based, to evaluate a part of the Black Panther vein system. Using normal mining practice with regard to area of influence of the drill holes and averaging of assay values in individual holes, and cutting the highest values, our calculations indicate possible ore reserves in one relatively small section of 13,500 tons at a grade of 0.2 oz./ton of recoverable gold. These values represent only a part of the A Adit vein system. Other veins are exposed in adits B and C, and at surface between these points. After due consideration of all of the geological factors involved we have recommended to Jan Resources Ltd. that, rather than continue a surface drilling program on the Black Panther zone a program of underground exploration would provide more reliable and more useful data. The recommended program involves rehabilitation of the C Adit, cross-cutting 800 feet through the C Adit, and drifting along the contact shear for approximately 200 feet, and a program of 3,000 feet of underground drilling to define production target areas if possible. The estimated cost of this underground exploration program is \$587,300.00. This program would provide bulk sample and vein characteristic data, and provide access from which later development can be carried out. Because of the relatively high costs involved, the work program has been divided into three phases.

Some airborne geophysical work carried out by Western Geophysical Aero Data Ltd. in 1981 has detected some electromagnetic and magnetic anomalies in the area of the High Grade Vein and Black Panther Mine showings. Glen E. White, P.Eng. has interpreted the results of this work and has outlined a strong EM-Mag anomaly which is roughly coincident with the High Grade Vein. Similar EM-Mag features occur near the Black Panther Vein, and also beyond the limits of the Jan Resources properties in the vicinity of another known gold bearing vein structure.

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## CONCLUSIONS

- (1) Economic gold potential in the High Grade and Black Panther Vein systems is good and further exploration in both areas is required.
- (2) Gold mineralization is associated with north-south striking quartz carbonate veins dipping to the east at the Black Panther and, as presently known, with one westerly dipping shear zone at High Grade Vein.
- (3) The Black Panther drilling results indicate three separate shear veins the most promising of which has been called the "Contact Shear." The A Adit footwall shear is believed to be closely associated with it.
- (4) The minimum possible tonnage in the Black Panther above the 2638' level (C Adit) is estimated at 12,500 tons of 0.2 oz./ton gold. It is anticipated that further work will define other mineralized structures of at least comparable grade.
- (5) Results from Western Geophysical Aero Data Ltd. survey indicate an "extremely favourable" magnetics/EM anomaly coincident with the High Grade Vein. Proximity to the Black Panther Vein suggests that mineralization in both areas is possibly related.
- (6) Estimates of minimum possible tonnage in the two surface sample zones in the High Grade Vein total 6600 tons @ 0.17 oz./ton (cut) gold, however consistency at surface and at depth (DDH HG 80-1, 80-2) is excellent and increased tonnage is therefore expected given further work.
- (7) Further delineation drilling of the High Grade Zone is warranted.

## RECOMMENDATIONS

### (1) Black Panther

The recommended program would entail the rehabilitation of the C Adit, cross cutting 800 feet through the C Adit, drifting along the contact shear (200 feet), and underground drilling at an estimated cost of \$587,300.00. The main target would be those values encountered in what is believed to be the contact shear. Other targets are also projected in two other zones, one unnamed and one which is projected as being the footwall shear. These values are not as consistent or as high as those encountered in the contact shear, but could be tested by this underground work. Diamond drilling from the underground stations will provide detailed information on a production target area of 230 feet by 200 feet by an average of 3 feet width. Bulk sampling and vein characteristics would also be obtained.

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(2) High Grade Vein

Given the results indicated to date in the High Grade Zone (see Sawyer Consultants Inc. report, December 31st, 1980), and the geophysical anomaly outlined by Western Geophysical Aero Data Ltd., further work is required in this area. Due to high cost surface access, the property does not lend itself to exploration in the same way that the Black Panther does. However, once that access has been provided, the relief in the area lends itself to underground development at a number of levels. With the information to date from surface sampling and two drill holes, the tonnages and grades indicated could be greater than indicated on the Black Panther. It is therefore recommended that further drilling be initiated from set-ups located adjacent to the vein structure.

The program recommended will provide six sections through the structure by drilling twelve holes over the 1200 feet strike length. Holes should be at  $-65^{\circ}$  and  $-80^{\circ}$  in each section. An optional third hole in each section could be drilled at  $-90^{\circ}$ . Footage involved in twelve holes would be 3000 feet. If all six optional (vertical) holes are drilled a further 2000 feet will be required. Additionally, trenching will provide good surface information in areas that have not previously been exposed due to overburden. The crew assigned to performing the trenching work should also be capable of putting in a chain and compass grid, and building the necessary set-ups in each of the locations to provide the six sections proposed. This will require some blasting and levelling.

(3) Numerous anomalies indicated in the airborne geophysical anomalies warrant further attention. However the Black Panther and High Grade Veins indicate the best potential and most advanced stages of exploration to date. The other anomalies are contained within the present land package and can be followed up in due course.

COST ESTIMATESBlack Panther 1981 Underground Program

Due to the large expenditures required to complete the Black Panther work the program is recommended in three phases, as follows:

Phase I - provide road access, build dump facilities, clean out C Adit in preparation for drifting.

Mobilization/demobilization, mining	\$ 10,000.00
Road access	50,000.00
Construct dump facility, bins, etc.	20,000.00
Prepare/slash "C" Adit to "C" vein	20,000.00
Bulk sample	1,000.00
	<u>101,000.00</u>

Carried forward

\$101,000.00

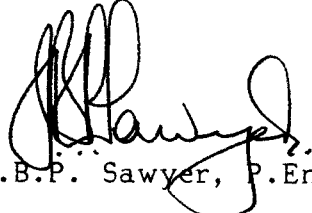
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	Brought forward	\$101,000.00	
Phase II - cross cut to Black Panther Veins, drifting on main structure, and sampling.			
Drive 700' 8'x8' clear crosscut (trackless) @ \$285.00	\$199,500.00		
Crosscut 100' 8'x8' finished (trackless) @ \$385.00	38,500.00		
Drive 200' 8'x8' clear drift on vein @ \$285.00	57,000.00		
Bulk sample	<u>3,000.00</u>		
	\$298,000.00	298,000.00	
Phase III - 3000 feet of underground drilling to delineate production targets.			
Mobilization/demobilization, drilling	\$ 3,000.00		
3000' BQ @ \$23.00	69,000.00		
Engineering, Supervision	50,000.00		
Assaying 155 samples @ \$13.00	<u>2,000.00</u>		
	\$124,000.00	124,000.00	
Contingency @ 10%		52,300.00	
General			
Consulting, 30 days @ \$300.00	\$ 9,000.00		
Travel, Accommodation	<u>3,000.00</u>		
	\$12,000.00	<u>12,000.00</u>	
		\$587,300.00	
<u>High Grade</u>			
Mobilization/demobilization	\$ 10,000.00		
Site preparation and grid	10,000.00		
Drill 3000' NQ @ \$30.00	90,000.00		
Helicopter Time			
Drill moves 30 hours @ \$420.00	12,600.00		
Other 30 hours @ \$420.00	12,600.00		
Camp	10,000.00		
Supplies 300 man days @ \$20.00	6,000.00		
Assaying 200 samples @ \$13.00	2,600.00		
Consulting, Supervision, Reporting	6,000.00		
Contingency @ 10%	<u>16,000.00</u>		
	\$175,800.00		
	Carried forward	\$175,800.00	

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	Brought forward	\$175,800.00
Optional		
Drill 2000' NQ @ \$30.00	\$60,000.00	
Supplies 250 man days @ \$20.00	5,000.00	
Assaying 100 samples @ \$13.00	1,300.00	
Consulting, Supervision, Reporting	3,000.00	
Contingency @ 10%	<u>7,000.00</u>	
	\$76,300.00	<u>76,300.00</u>
		<u>\$252,100.00</u>
Total Estimated Cost, all programs on Black Panther and High Grade Veins		\$839,400.00

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J.B.P. Sawyer, P.Eng.

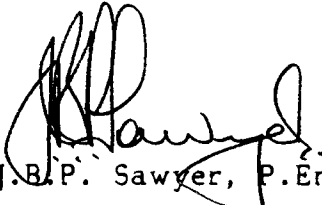
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CERTIFICATE

I, J.B.P. Sawyer, DO HEREBY CERTIFY:

- (1) That I am a consulting geologist with business office at 1201 - 675 W. Hastings St., Vancouver, B.C., V6B 1N2, and President of Sawyer Consultants Inc.
- (2) That I am a graduate in geology of Manchester University (B.Sc. - 1953) and of the University of Western Ontario (M.Sc. - 1957).
- (3) That I am a Registered Professional Engineer (geological) in the Association of Professional Engineers of the Province of British Columbia, and a Registered Chartered Engineer with the Council of Engineering Professions, London.
- (4) That I am a Fellow of the Geological Association of Canada, a Member of the Canadian Institute of Mining & Metallurgy, a Fellow of the Geological Society of London, and Fellow of the Institution of Mining & Metallurgy, London.
- (5) That I have practised my profession as a geologist for the past twenty-six years.
- (6) That the information, opinions, and recommendations in the original reports from which the attached report is summarized are based on the results of the work program carried out by Sawyer Consultants Inc. in the period May to September 1980 including personal observations on the property in October and November 1979, and through the 1980 field work program, and on personal knowledge of the drilling program, on personal logging of drill core, and observations at the drill sites in the period September 1980 to March 1981.
- (7) That I own no interest in the shares or securities of Jan Resources Ltd., or any associated companies, nor in the subject properties.

  
J.B.P. Sawyer, P.Eng.

Dated at Vancouver, British Columbia, this 30th day of May, 1981.

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APPENDIX

List of Reports on Jan-Mar-Remy Claims Work  
prepared by Sawyer Consultants Inc. for Jan Resources Ltd.

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|---|---|
| November 14th, 1979<br>Amended May 22nd, 1980 | Report on the Jan, Mar, and Remy Claims, Mount McQuillan Area, Victoria Mining Division, British Columbia.  |
| June 5th, 1980                                | Progress Report on the 1980 Work Program on the Jan, Mar, and Remy Claims, Mount McQuillan Area, Victoria Mining Division, British Columbia.  |
| September 17th, 1980                          | Report on the Initial Exploration Program on the Jan, Mar, and Remy Claims, Mount McQuillan Area, Victoria Mining Division, British Columbia.   |
| December 31st, 1980                           | Report on the 1980 Diamond Drilling Program on the Summit Lake, High Grade, and Black Panther Veins, Jan-Mar-Remy Claims, Mount McQuillan Area, Victoria Mining Division, B.C.                                    |
| April 27th, 1981                              | Report on the Diamond Drilling Program, Black Panther Veins to March 1981 with Recommendations for the Jan-Mar-Remy Claims for the 1981 Season, Mount McQuillan Area, Victoria Mining Division, British Columbia. |

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