## **REPORT ON 2018 DIAMOND DRILLING**

JAMIESON TOWNSHIP (KAMISKOTIA LAKE AREA)

PORCUPINE MINING DIVISION, ONTARIO

(DISTRICT OF COCHRANE)

FOR

INTERNATIONAL EXPLORERS AND PROSPECTORS INC. (IEP)

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&

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NTS: 42A/12A January 2019

UTM: NAD 83 Zone 17 457013<sup>E</sup> 5380945N Timmins, Ontario

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#### 1.0 **SUMMARY**

Two diamond drill holes were completed by International Explorers & Prospectors Inc. between May 24 and June 8, 2018 on their wholly owned Jameland Property in Jamieson Township, 22 kilometres due northwest of Timmins, Ontario.

The holes were to test the main zone of mineralization on the historic Cu-Zn-Au Jameland Mines Property. The drilling was to fill the need of having core to examine as all historic drill core had been lost over the years.

IJJ-18-01 was collared on section 85E of the old mine grid, and area where a good representative intersection of the mineralized zone could be expected. IJJ-10-02 was collared behind IJJ-18-01 so as to undercut and sample at a deeper location on the same section.

IJJ-18-01 was completed successfully to a depth of 279.0 metres, intersecting three main intervals of chalcopyrite mineralization between 148.3 and 181.6 metres. The principal chalcopyrite-assay zones were at 148.3-149.5 (1.2) meters 3.67% Cu , 156.8-157.6 (0.8) metres 1.34% Cu and 179.5-181.6 (2.1) metres 3.86% Cu with the latter being recognized as the mine's "main" zone. Chalcopyrite in the central assay interval was not picked up in the logging but was recognized in the sample book description.

Intermediate Andesitic volcanics dominate the cored stratigraphy and host the two deeper chalcopyrite-bearing zones. The upper zone of chalcopyrite is hosted by intermediate rock of Andesitic to possibly Dacitic composition. Typical depositional regimes included flow rock, flow-breccias and tuffs. Two narrow Quartz-Feldspar Porphyries were encountered above 99.0 metres in IJJ-18-01 and a Dacite to Rhyodacite interval was present at 194.7-234.0 metres - all significantly distal to the principal zones of notable mineralization. Intermediate volcanic materials make up about 85 percent of the cored section in IJJ-18-01.

IJJ-18-02 encountered exclusively felsic volcanics of suspected Dacitic to Rhyodacitic composition after 54.9 metres (casing to 50.2 metres). With the exception of a number of chert occurrence these felsics continued to a depth of 192.2 metres. From 192.2 metres to the end of the hole at 268.0 metres where a break-through into open mine workings occurred the sequence was exclusively Andesitic with minor chemical chert horizons. Massive Sulphides at the break-through probably represented in situ remnant ore from the mine workings and thus one of the main Sphalerite zone assayed 1.1 m 6.4 % Cu 5.52% Zn 496 ppb Au and 21.3 g/t Ag

These holes confirmed the massive sulphide ore and the stringer type ore mined on the property. Assay results from IJJ-18-01 and IJJ-18-02 are appended to this report. Sampling intervals with sample numbers are tabled in sections 4.11 and 4.21.

### 2.0 INTRODUCTION

International Explorers & Prospectors Inc. (IEP) currently owns the former Jameland Mines Limited's "Jameland Property" (or part thereof), inclusive of the "Jameland Sulphide Zone" – a trend of variable copper – zinc – gold mineralization.

Little, if any, historic core exists from previous work on the property so in the early months of 2018 IEP scheduled a small drilling program to retrieve fresh core information at two elevation levels from a representative section of the "Jameland Sulphide Zone".

Based on historic results mine-grid section 85E was considered the best location to intersect a representative sample of the sulphide zone. The old casings were located, and the azimuth was confirmed along with the dip. A 3 D model was created with a drone survey for accuracy .It was determined that the magnetic declination varied from the original grid and programs completed post 1992 had assumed an azimuth of 208 degrees while the casings were 220 degrees. The drill program was able to confirm this error by tying the results with mine plans obtained from MNDM in their records.

International Explorers & Prospectors Inc. contracted NPLH Drilling, a private company in Timmins Ontario, to carry out the program. Larger size NQ core would better sample the rock and mineralization. The drill program commenced with IJJ-18-01 on May 24, 2018 and ended June 8, 2018 with the completion of IJJ-18-02.

Drill hole IJJ-18-01 was collared at UTM coordinate NAD 83 Zone 17, 456980E, 5380885N. Drilling direction was to the southwest at 220 degrees – roughly orthogonal to the northwest trending mineralization. Collar inclination was -60 degrees. The drill hole finished at a depth of 279.0m.

Hole IJJ-1-02's collar location was NAD 83 Zone 17, 457045E, 5381013N. Orientation was azimuth 220 degrees, inclination -55 degrees allowing it to undercut IJJ-18-01. Unfortunately as it was entering mineralization IJJ-18-02 encountered open underground workings and had to be stopped prematurely.

Total drill meterage was 547 of which 92 was casing – leaving 455 metres of recovered core.

At the time of drilling sampling was undertaken for copper, lead, zinc, silver and gold in those areas where it was felt the degree of sulphide mineralization warranted it. Logging and sampling were carried out in the same facility. Laboratoire Expert Inc. in Rouyn-Noranda, Quebec received and analyzed the samples.

Sampling tables can be found in Sections 4.11 and 4.21. Assay Certificates are in Appendix C.

### 3.0 JAMELAND PROPERTY

The Jameland Property formerly claim P4275108 has been divided into cells in April 2018. The area of drilling is on the new cell Numbers 129870,279161. An Exploration permit #PR-17-11090 was issued to IEP on May 15,2017 for a period of 3 years. An M.O.U. is awaiting revisions with Wabun Tribal council acting on behalf of the First Nations interest. Mattagami First Nation, Tawkwa Tagamou First Nation, Mushkegowuk Tribal Council, Metis Nation of Ontario were notified of the work proposal and comments were followed when the work was performed.

### 3.1 LOCATION

The Jameland property is located in Jamieson Township in northeastern Ontario, about 22 kilometres due northeast of Timmins, Ontario. The NAD 83 UTM coordinate for the work area is Zone 17, 457008E, 5380950N. The NTS reference is 42A/12A.

### 3.2 ACCESS

The claim can be accessed by travelling on highway 101 west from Timmins for a distance of 6 km then turning north on the Kamkotia Road which is paved to the end of a gate at 14 km where the MNDM has waste water treatment plant at the old Kamkotia mine. A gravel road beyond the gate for 2 km leads to the work area.

### 3.3 **DESCRIPTION**

The vegetation on the property consist of tag alders of poplar, birch and spruce trees as described in The Romeo Mallette Forest Block 45537 The soil is clay covered with minor humus and the ground elevations are very flat with drainage to a south creek flowing into the Kamkotia River,. NPLH was responsible to complete the work and were advised of a requirement of sumps to be created for the cuttings of the drill program which were then backfilled and not enter the Kamkotia River. This requirement was requested as a condition of the issuance of the drill permit by various First Nations

## 3.4 CLAIM SCHEDULE

The mining claim P4275108 was converted to 6 boundary cells and 4 cell claims. The new description is as follows:

Cell Claim numbers 164400, 164401, 223165, 268351 and Boundary claim numbers 118974, 129870, 158290, 183866, 243850, 279161. The anniversary date for all cell claims and boundary cells is December 8, 2019.

The work was carried out on boundary claim number 279161 and 129870.

## 4.0 DIAMOND DRILLING

Two NQ diamond drill holes were completed on the Jameland Property between May 24 and June 8, 2018. The program was managed by International Explorers & Prospectors Inc. the owners of the property.

Drilled meterage totalled 547 metres. Casing accounted for 92 metres - leaving 455 metres of recovered NQ core 47.6 mm in diameter.

The drilling contractor was NPLH Drilling, a private company in Timmins, Ontario.

The objective of the drill program was the acquisition of physical material from mineralized zone as all historic core had been lost over time. Re-examination of the zone on a favourable section would provide the necessary elements with which to reconsider the potential of the deposit.

It was decided to intersect the Cu-Zn-Au mineralization zone at two elevations on the Section 85 of the old mine grid, with the second hole undercutting the first.

IJJ-18-01 successfully intersected the mineralized zone, encountering three significant chalcopyrite intervals with variably attendant pale sphalerite. The assay results and sampling intervals are tabled in the sections that follow.

## 4.1 **DRILL HOLE IJJ-18-01**

#### **Summary Log**

0.0-41.6	Overburden/Casing	
41.6-41.75	Intrusive - Diabase (overburden?)	
41.75-69.45	Intermediate Volcanic – Andesite	4/

61.25-68.7	pyritic -	3-5%
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69.45-70.3	Felsic Intrusive - Quartz-Feldspar Porphyry
70.3-84.5	Intermediate Volcanic - Andesite - minor local py
84.5-87.0	Intermediate Volcanic - Andesite - pyritic - 10-15%, 20% at 10-20cm widths
87.0-99.0	Felsic Intrusive - Quartz-Feldspar Porphyry - pyritic - 3-5%, 10% locally
99.0-133.5	Intermediate Volcanic - Andesite - pyritic - 2-3%, 5-10% at cm-scale
133.5-141.5	Intermediate Volcanic - Andesite
141.5-149.4	Intermediate Volcanic - Andesite to Dacite - Mineralized Zone
	141.5-148.3 pyritic - 5-10%, 10-15% at cm-scale
	<b>#1</b> 148.3-148.9 chalcopyrite 5%, pyrrhotite tr-1%
	148.9-149.3 15-18% chalcopyrite, minor pyrite, minor pyrrhotite
149.4-160.3	Intermediate Volcanic - Andesite - Mineralization
	<b>#2</b> 157.18-157.47 - chalcopyrite 5% + pyrite
160.3-166.0	Intermediate Volcanic - Andesite - variably pyritic - 5-8%, 20% at cm-scale
166.0-179.5	Intermediate Volcanic - Andesite
179.5-181.6	Intermediate Volcanic - Andesite - Mineralized Zone (Main Mine Zone)
	#2 170 6 190 2 main culphide section 70% by 10% cby E% be tr 1% cbb
	#3 179.6-180.3 main sulphide section - 70% py, 10% cpy, 5% po, tr-1% sph
	#3 180.3-181.6 variably pyritic - 5-8%, trace to 3% chalcopyrite
181.6-194.7	Intermediate Volcanic - Andesite
194.7-234.0	Felsic Volcanic - Dacite to Rhyodacite - finely quartz-phyric
234.0-236.0	Intermediate Volcanic - Andesite - variably pyritic - 5-8%, 15-18% at cm-scale
236.0-250.32	Intermediate Volcanic- Andesite - variably pyritic - 5-8%, 15-20% at cm-scale
250.32-266.58	Intermediate Volcanic - Andesite - massive
266.58-279.0	Intermediate Intrusive - Diorite (synvolcanic?) - very magnetic (3% magnetite)
279 N	End of Hole

279.0 End of Hole 5/

# 4.1.1 SAMPLING TABLE

Assay Sam	ples							
Date:	2018-05-30							
Drill Hole:	IJJ-18-01							
Sample	From	То	Width	Cu	Pb	Zn	Ag	Au
	metres	metres	metres	ppm	ppm	ppm	ppm	ppb
A 20801	63.1	64.4	1.3	130	20	149	<0.2	<5
A 20802	78.8	80.0	1.2	86	22	173	<0.2	<5
A 20803	84.5	85.8	1.3	97	20	120	<0.2	10
A 20804	85.8	87.0	1.2	74	21	182	<0.2	<5
A 20805	87.0	88.5	1.5	50	18	280	<0.2	<5
A 20806	88.5	90.0	1.5	27	11	161	<0.2	<5
A 20807	90.0	91.5	1.5	20	10	134	<0.2	<5
A 20808	91.5	93.0	1.5	26	11	108	<0.2	<5
A 20809	93.0	93.8	0.8	101	23	137	<0.2	<5
A 20810	93.8	95.3	1.5	43	14	159	<0.2	5
A 20811	95.3	96.0	0.7	46	12	165	0.2	<5
A 20812	96.0	97.5	1.5	43	19	111	0.3	<5
A 20813	97.5	99.0	1.5	40	19	109	0.5	<5
A 20814	121.7	122.7	1.0	76	18	87	0.3	<5
A 20815	141.5	142.5	1.0	121	135	442	0.5	6
A 20816	142.5	143.5	1.0	97	84	313	0.4	<5
A 20817	143.5	145.0	1.5	96	37	696	0.3	8
A 20818	145.0	146.5	1.5	210	37	1664	0.6	11
A 20819	146.5	147.4	0.9	602	29	1458	0.4	9
A 20820	147.4	148.3	0.9	348	21	1831	<0.2	11
A 20821	148.3	149.5	1.2	3.67%	24	519	1.8	49
A 20822	149.5	151.0	1.5	805	15	160	<0.2	<5
A 20823	155.8	156.8	1.0	622	15	132	<0.2	<5
A 20824	156.8	157.6	0.8	1.34%	26	446	1.4	9
A 20825	157.6	158.6	1.0	413	21	190	<0.2	<5
A 20826	158.6	160.0	1.4	210	17	124	<0.2	<5
A 20827	160.0	161.5	1.5	121	24	100	0.3	5
A 20828	161.5	163.0	1.5	99	60	153	1	8
A 20829	163.0	164.5	1.5	82	64	273	0.4	<5
A 20830	164.5	166.0	1.5	79	37	161	0.5	<5
A 20831	166.0	167.0	1.0	65	19	148	<0.2	<5
A 20832	178.5	179.5	1.0	474	18	139	<0.2	<5
A 20833	179.5	180.5	1.0	6.20%	35	719	3.5	31
A 20834	180.5	181.6	1.1	1.74%	32	1797	1.2	40
A 20835	181.6	182.6	1.0	1152	16	160	<0.2	<5
A 20836	233.7	234.7	1.0	325	18	184		
A 20837	234.7	235.5	0.8	37	14	125	0.4	
A 20838	235.5	237.0	1.5	46	17	118		
A 20839	237.0	238.5	1.5	54	17	140	<0.2	
A 20840	238.5	240.0	1.5	42	16	131	<0.2	
A 20841	240.0	241.0	1.0	39	16	135	<0.2	
A 20842	241.0	242.5	1.5	48	17	135	<0.2	
A 20843	242.5	243.5	1.0	39	19	130	<0.2	
A 20844	243.5	244.3	0.8	50	18	99	<0.2	

# 4.2 DRILL HOLE IJJ-18-02

## **Summary Log**

0.0-50.2	Overburden/Casing
50.2-54.9	Intermediate Volcanic - Andesite - (possible synvolcanic intrusive)
54.9-75.7	Felsic Volcanic - Dacite to Rhyodacite Flow(s)
75.7-84.85	Felsic Volcanic - Dacite to Rhyodacite Lithic Fragmental (Flow Breccia?)
84.85-90.07	Sediment - Chemical - Chert
90.07-128.4	Felsic Volcanic - Dacite to Rhyodacite - Fragmental (Flow Breccia?)
	102.34-102.8 Chert
	111.37-115.5 Chert Zone
128.4-132.3	Felsic Volcanic - Dacite to Rhyodacite - Crystal Tuff (Hyaloclastite?)
132.3-134.95	Felsic Volcanic - Dacite to Rhyodacite - Flow
134.95-136.7	Felsic Volcanic - Dacite to Rhyodacite - Crystal Tuff (Hyaloclastite?)
	136.0-136.2 Chert
136.7-138.14	Felsic Volcanic - Dacite to Rhyodacite - Flow
138.14-138.48	Sediment - Chemical Chert
138.48-144.1	Felsic Volcanic - Dacite to Rhyodacite - Flow
144.1-150.4	Felsic Volcanic - Dacite to Rhyodacite - Flow Breccia
150.4-154.78	Felsic Volcanic - Dacite to Rhyodacite - Flow
	153.37-154.0 Chert
154.78-155.2	Sediment - Chemical Chert
155.2-157.3	Felsic Volcanic - Dacite to Rhyodacite - Flow Breccia
157.3-174.3	Felsic Volcanic - Dacite to Rhyodacite - Crystal Tuff
174.3-192.2	Felsic Volcanic - Dacite to Rhyodacite - Flow Breccia

192.2-233.3	Intermediate Volcanic - Andesite - (possibly synvolcanic intrusive)					
233.3-234.85	Intermediate Volcanic - Andesite - Flow?					
234.85-240.0	Intermediate Volcanic - Andesite - (possibly synvolcanic intrusive)					
240.0-241.4	Intermediate Volcanic - Andesite - Flow?					
241.4-242.86	Sediment - Chemical Chert					
242.86-258.05	Intermediate Volcanic - Andesite - Flow/Breccia					
258.05-266.95	Intermediate Volcanic - Andesite - Flow (weak epidote)					
266.95-268.0	Intermediate - Volcanic - Volcanogenic Sediments - Sulphidic					
	267.56-267.9 Semi to massive Sulphides - 5% sph, 15% cpy, 30% po+py					
268.0	End of Hole - break through into mine workings					

## 4.2.1 SAMPLING TABLE

Assay Samples								
Date:	2018-12-13							
Drill Hole:	IJJ-18-02							
Sample	From	То	Width	Cu	Pb	Zn	Ag	Au
	metres	metres	metres	ppm	ppm	ppm	ppm	ppb
A 20845	174.3	175.8	1.5	108	25	159	.02	23
A 20846	264.9	265.9	1.0	62	23	91	>.02	>5
A 20847	265.9	266.9	1.0	138	22	203	>.02	5
A 20848	266.9	268.0	1.1	6.4%	357	5.52%	21.	496

## 5.0 **CONCLUSIONS**

The first hole, IJJ-18-01 successfully sectioned the Jameland Property's zone of mineralization at a vertical depth of about 140 metres. Three zones carrying various concentrations of chalcopyrite mineralization encountered - in sampled intervals 148.3-149.5 (1.2m), 156.8-157.6 (0.8m) and 179.5-181.6 (2.1m). Some anomalous zinc values were also returned within the general area of the copper mineralization the maximum value being 1797ppm Zn (0.1%).

IJJ-18-02 was prematurely terminated as it was about to intersect a major section of chalcopyrite mineralization as indicated by the assays from samples taken at the very end of the hole (see table above).

The lithologies encountered in the two drill holes indicate the mineralized zones crossed by Section 85 are exclusively hosted by intermediate volcanic Andesites of various depositional regimes - flow rock, flow breccias and tuffs. Felsic volcanics form a northeast hanging wall to the Andesites in this area as results in IJJ-18-02 can attest.

It is recommended that all drill holes be surveyed with modern surveys to confirm deviation, dip and plunge of the zones and a new grid be established to further exploration.

### 6.0 <u>AUTHOR'S DECLARATION</u>

I, Wayne D. Corstorphine do declare that,

- 1. My pace of residence is 441 Hart Street in the city of Timmins, Ontario (P4N 6X3)
- I hold a bachelor's degree in Earth Science (1971) from the University of Waterloo,
   Waterloo, Ontario
- 3. I have practiced my profession as a geologist continuously for the last 47 years.
- 4. I personally logged and laid out the samples for the drill holes described in this report.
- 5. I have no interest, direct or indirect, in the Jameland Property.

Dated at Timmins, Ontario this 20<sup>th</sup> day of December, 2018.

Wayne D. Corstorphine

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## **APPENDIX A**

**FINANCIAL STATEMENT OF COSTS** 

### **APPENDIX B**

**DIAMOND DRILL LOGS AND SECTION**