## Fundamental Research Corp. Investment Analysis for Intelligent Investors

February 20, 2017

www.foranmining.com

# Foran Mining Corporation (TSXV: FOM) - Initiating Coverage: Copper / Zinc in Saskatchewan with Strong Backing

#### Sector/Industry: Junior Resource

Market Data (as of February 20, 2017)

	or <u>uary 20, 2017)</u>
Current Price	C\$0.44
Fair Value	C\$1.18
Rating*	BUY
Risk*	5 (Highly Spec)
52 Week Range	C\$0.08 - C\$0.47
Shares O/S	96,881,275
Market Cap	C\$42.63 mm
Current Yield	N/A
P/E (forward)	N/A
P/B	1.6x
YoY Return	340.0%
YoY TSXV	58.3%
*agg had af ranget for rati	na and risk definitions

\*see back of report for rating and risk definitions. \* All figures in C\$ unless otherwise specified.



#### **Investment Highlights**

- Foran Mining Corporation ("company", "Foran") is advancing a new base metals camp in east-central Saskatchewan.
- Their flagship deposit is the McIlvenna Bay deposit, which is just one hour drive from the mining centre of Flin Flon. The region has a long history of base metals and gold production.
- A Preliminary Economic Assessment ("PEA") completed in 2014, showed an after-tax Net Present Value ("NPV") @ 7% of \$263 million, and an after-tax Internal Rate of Return ("IRR") of 19%.
- > Foran has identified satellite deposits on their land package.
- > Management's primary focus at this time is to seek project financing options, joint venture ("JV") partnerships, and/or off-take financing to advance McIlvenna to production. The company is also simultaneously conducting exploration to advance satellite targets and deposits.
- Foran is the most advanced junior operating in the region. We estimate that Hudbay Minerals will start looking for new deposits in the region as two of their three producing mines are expected to be mined out in the next 2 to 4 years.
- The company has an excellent management team with a strong track record in M&A. Management and directors hold 16.55 million shares, or 17.1% of the total outstanding shares. Pierre Lassonde, the Chairman of Franco Nevada, holds 11%.
- > We are initiating coverage on Foran with a BUY rating and a fair value estimate of \$1.18 per share.

#### Risks

- > The value of the company is highly dependent on copper and zinc prices.
- > Exploration and development risks.
- > Financing may take longer than expected.
- > Access to capital and potential share dilution.

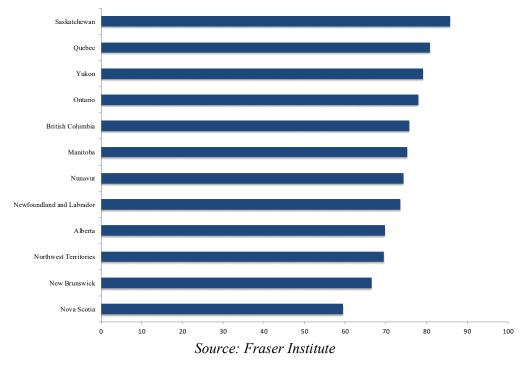
(C\$)	2015	2016 (9M)
Cash	\$1,016,037	\$1,216,349
Working Capital	\$969,749	\$1,178,779
Mineral Assets	\$25,276,393	\$25,630,410
TotalAssets	\$27,014,677	\$27,630,410
Net Income (Loss)	-\$1,575,649	-\$793,751
EPS	-\$0.02	-\$0.01

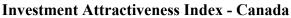
#### Flin Flon – Snow Lake

The Flin Flon-Snow Lake belt, spread over northern Manitoba and Saskatchewan, is one of the most prolific mining belts in the world with a long track record of base metals and gold production. The belt, which stretches over 250 km west to east, and by over 75 km north to south, is estimated to contain over 200 million tons of ore (90+ deposits), predominantly of the polymetallic, volcanogenic massive sulphide (VMS) type. Per square kilometer, the Flin Flon belt is the richest greenstone belt in Canada for base metals, with a value five times greater than that of the Abitibi Greenstone Belt in Ontario and Quebec.

The first significant discovery in the belt was made in 1916. Mining commenced in the 1920s, and the region has seen continuous mining since then. Over 30 deposits have been put in to production so far.

The 2015 Fraser Institute Survey of Mining Companies ranked Saskatchewan the second best jurisdiction, behind Western Australia, for investment attractiveness out of 109 jurisdictions around the world. The ranking was based on a combination of their geologic attractiveness and policy attractiveness. Among the provinces in Canada, Saskatchewan was ranked number one (2<sup>nd</sup> in the world) and Manitoba was ranked number six (19<sup>th</sup> in the world).





The survey also ranked Saskatchewan the number one (3rd in the world) and Manitoba number two ( $9^{th}$  in the world) jurisdiction in Canada on the 'Current Mineral Potential Index'.

In addition to the geological attractiveness, the Flin Flon - Snow Lake belt's two other



strengths are its excellent infrastructure (road, rail, power and water infrastructure) and low cost electricity.

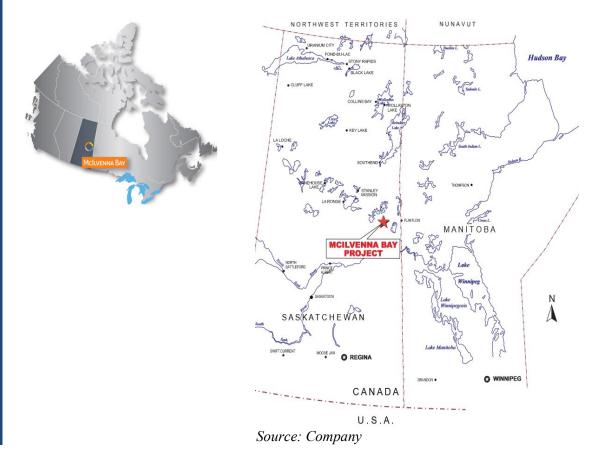
*VMS Deposits* VMS deposits are typically associated with volcanic and / or sedimentary rocks. They consist of massive and / or semi-massive accumulations of sulphide minerals, and form in flat lens-like bodies parallel to the bedding.

VMS deposits are base metal-rich deposits, with major sources of zinc, copper, and lead, with gold and silver as byproducts. Within VMS deposits, copper sulphides tend to form in the central parts of the deposit where the temperature is higher, while zinc sulphides form away from the center, where the temperature is lower. Gold is often present in the copper-rich zones, while silver is more commonly associated with zinc.

They commonly occur in clusters (1 - 20 Mt), and the individual deposits when combined, form mining districts / camps. Canada's three largest VMS camps are the Flin Flon - Snow Lake (Saskatchewan and Manitoba), Bathurst (New Brunswick) and Noranda (Quebec) camps. While depths of the smaller deposits (under 4Mt) are in the 0 to 300m range, the larger ones (10+ Mt) extend deeper to the 1,000 to 2,000 m range.

## Hanson Lake Camp

Foran's 20,382 hectare (30 claims) McIlvenna Bay property is located in east-central Saskatchewan, 375 km northeast of Saskatoon, and approximately 95 km west of Flin Flon, Manitoba. The following maps show the location.





The following map show the project's locations relative to the Flin Flon and Snow Lake Camps.

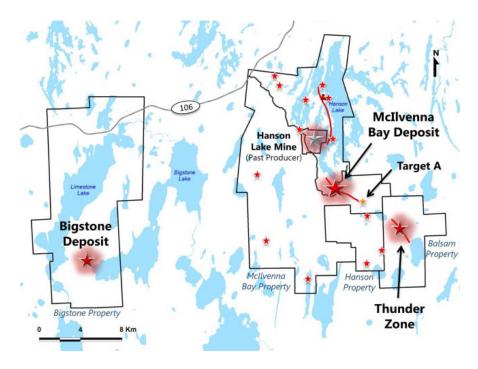


Source: Company

The above map also shows the locations of the currently producing three mines in the region - 777, Lalor and Reed - all three are underground mines operated by Hudbay Minerals Inc. (TSX: HBM). Hudbay has dominated the Flin Flon-Snow Lake area, and has mined over 145 Mt of ore from over 85 years of operations. Their best mine to date was the 62 Mt Flin Flon mine, which produced from 1930 to 1992.

The following map shows Foran's land package in the region. The key identified deposits are McIlvenna Bay, Bigstone (25 km west of McIlvenna), and Balsam, which includes the recently discovered Thunder Zone (7 km south of McIlvenna).





Source: Technical Report

The past producing Hanson Lake Mine (operated by Western Nuclear Mines Ltd) is located approximately 5 km to the northwest of McIlvenna Bay. The mine operated from 1967 and 1969, and produced 162,200 tons grading 9.99% Zn, 5.83% Pb, 0.51% Cu, and 4.0 oz/t Ag.

### Accessibility and Infrastructure

On a visit to Flin Flon in 2008, we observed that the mining infrastructure at Flin Flon was excellent. The town is built around the local mining industry, and has an airport, hospital, hotels, and services for exploration including contractors, mining equipment sales and service. Due to the long track record of mining, labour, experienced mining professionals, and a variety of contractors are available in the area. Local communities are generally supportive of mining. The company has built a positive relationship with First Nations in the region primarily by hiring contractors and employees from local communities. For example, the baseline environmental studies in 2012, at McIlvenna Bay, were completed by a 100% aboriginal owned company. The McIlvenna Bay project has the potential to create 240 new long-term jobs.

The McIlvenna Bay deposit is just one hour drive from the mining centre of Flin Flon. The site is accessible via an 18 km long all weather gravel road which connects to Saskatchewan Provincial Highway #106. Flin Flon provides a railhead that connects the area to the North American railway system, and the town's airport has commercial air service to Winnipeg. Low-cost hydroelectricity can be accessed from either Creighton, Saskatchewan, or potentially directly from the Island Falls power generation facility.

#### *McIlvenna Bay* Ownership / Historic Development and Production Foran owns a 100% interest in McIlvenna Bay. The property is subject to a 1% Net Smelter



Royalty (NSR) held by Cameco Corporation (TSX: CCO) and BHP Billiton (ASX: BHP), which can be purchased by Foran at any time for \$1 million. The project also has a Net Tonnage Royalty of \$0.75/t of ore due to Copper Reef Mining (CSE: CZC).

The McIlvenna Bay deposit was discovered in 1988 during a drill program by a JV between the predecessor of Cameco (Saskatchewan Mining Development Corporation / SMDC) and Esso Minerals. Esso subsequently abandoned their interest, and Billiton Canada Ltd. came in as a JV partner. After drilling 67 holes, Cameco suspended exploration activities in 1991 due to a corporate decision to discontinue exploration of base metals. **Cameco had estimated a resource of 13 million tons grading 1.26% copper, and 4.95% zinc, for the McIlvenna Bay deposit at that time.** 

The property remained idle until Foran optioned the property from the Cameco / Billiton JV in 1998, for an upfront payment of \$3 million. Foran was formed in 1989. As per the agreement, Foran had the option to acquire a 100% interest by paying another \$7 million by 2001. Although Foran spent \$5.5 million on the project (in addition to the upfront \$3 million payment) by 2001, they were unable to raise enough capital and exercise the option to acquire the project. The property was subsequently returned to the Cameco / Billiton JV in 2002.

Subsequently, in January 2005, Foran entered into another agreement with the Cameco / Billiton JV, which gave Foran the right to acquire a 100% interest in McIlvenna Bay for just \$3.5 million (50% discount to the original \$7 million price) by:

- > paying \$1.50 million in cash to the JV, and
- > paying an additional \$2 million to the JV by May 2006

Foran then assigned its interest to Copper Reef Mines Ltd., which was then a private company formed by Foran's CEO at that time, Stephen Masson. In return, Copper Reef funded the initial \$1.5 million payment to the JV, and issued 5.50 million common shares of Copper Reef to Foran. Stephen Masson resigned from his CEO/Director position with Foran to avoid any conflict of interest. Foran also invested \$0.50 million in Copper Reef for another 2.50 million shares, which gave Foran a 48.41% equity interest in Copper Reef. Foran and Copper Reef subsequently entered into a dispute regarding the option agreement. This matter was resolved on May 2006. As per the revised agreement, Foran made the second payment of \$2 million to the JV to earn a 75% interest in the McIlvenna Bay property, while Copper Reef retained the remaining 25% interest.

Although the ownership issue was resolved, no significant work was conducted on the project (except for a 7-hole program in 2007) up until 2010, when a new management team took over control and transformed the company.

### New management team and transformation

In 2010, Foran's current Executive Chairman, Darren Morcombe, came in as an investor through a \$0.50 million investment (\$0.12 per unit – each unit consisted of a common share



and a warrant). Mr. Morcombe was initially appointed as a Director, and then as the Chairman of the Board shortly thereafter. One of his first moves was to convince the controlling shareholders at that time (members of the Summach family of Saskatoon) to divest 14 million of the 15.8 million shares they held and then bring in several high-profile investors, including the following:

- Pierre Lassonde and David Harquail Mr. Lassonde and Mr. Harquail are currently the Chairman and CEO of Franco Nevada Corporation (TSX: FNV), respectively.
- Seamans Capital Management LLC
- Metech No2 Super Fund, an entity owned by Charlie Bass, and
- Laguna Bay Capital Pty Ltd., an entity controlled by Stephen Timothy (Tim) Biggs

The company went on to hire a brand new management team and board. In November 2010, Patrick Soares joined as the President and CEO. Mr. Soares, a professional geologist, came with a strong track record of building small juniors and selling them to larger firms, including the acquisition of Brett Resources Inc. by Osisko Mining Corporation (TSX: OSK) for \$372 million in early 2010. Mr. Soares also invested \$1.16 million in the company at \$0.58 per unit (each unit consisted of one common share and one-half share purchase warrant).

In 2011, Roger March, P.Geo., and Dave Fleming P.Geo., were appointed to spearhead the exploration division, and Tim Thiessen was appointed as the Chief Financial Officer.

The new management team acquired the remaining 25% interest on McIlvenna Bay from Copper Reef in November 2010. The transaction included the 25% interest, 3 million Copper Reef shares, and the North Hanson property (located in close proximity to McIlvenna Bay) in exchange for 4 million Foran shares, \$1 million in cash, a royalty of \$0.75/t of future ore produced, and five other properties from Foran's Mantioba properties.

Encouraged by the change in management, their active strategy to advance McIlvenna Bay, and the strong rise in copper and zinc prices, investors ran up the share price of Foran from \$0.12 in April 2010, to a high of \$1.20 by March 2011. However, like most junior resource companies, Foran's share price also experienced a declining trend from 2011 to 2016, until the recent resurgence.

Foran's new management team has been very active from 2010 through 2015, and were highly successful in raising capital and advancing the projects. After taking over in 2010, the company raised approximately \$25 million over the next 2 years. They conducted several drill programs, significantly increased the resource estimate, completed a PEA in 2014, and made new discoveries in the region. Management chose to remain relatively inactive in 2016, due to overall market softness. However, with the recent strong recovery in zinc and copper prices, management is currently planning to recommence activities and resume drilling in 2017.

The following table summarizes the drill programs at McIlvenna Bay from its discovery in 1988, to the most recent 2013 drill program. A total of 191 holes / 88,681 m were drilled.



Year	Company	Number of Holes	Meters Drilled
1988	Cameco/Esso/TriGold	26	7,702
1989	Cameco/TriMin	30	14,565
1990	Cameco/Billiton	13	7,869
1998	Foran	3	978
1999	Foran	62	28,993
2000	Foran	3	2,938
Aug-07	Foran	7	6,525
2011	Foran	28	13,214
2012	Foran	15	3,825
2013	Foran	4	2,243
Total		191	88,681

#### **Property Geology**

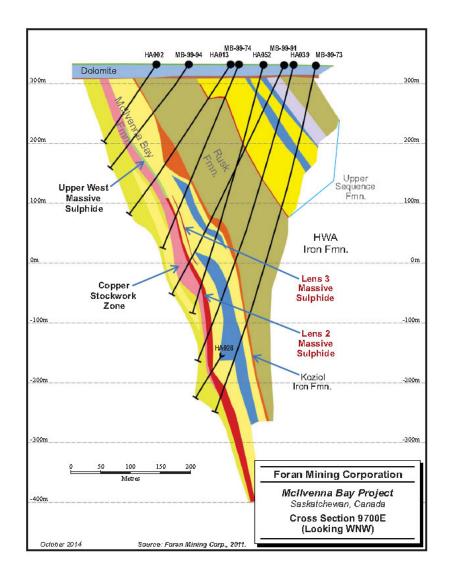
The McIlvenna Bay deposit contains copper and zinc, with relatively low gold, silver and lead. The deposit area lies on top of variably metamorphosed sedimentary and volcanic rocks of Proterozoic age, capped by Winnipeg Formation sandstones. The stratigraphy of the deposit area, which is divided into six formations, is defined over a 2 km strike length, and 200 m thick.

The deposit dips to the north at  $65^{\circ}$  to  $70^{\circ}$ , and vertically in certain areas. It consists of five different zones made up of three distinct styles of mineralization, namely massive sulphides, semi-massive sulphides, and stockwork.

Zones
1. Lens 2 massive sulphide (L2MS),
2. Upper West (UW-MS),
3. Copper Stockwork Zone (CSZ)
4. Footwall Stockwork Zone (FW), and
5. Lens 3 (L3)

A type cross-section showing the geometry of the mineralized zones is shown below.





#### Source: Company

The majority of the currently identified resources are in the first three zones – namely the Lens 2 massive sulphides (L2MS), Upper West Zone (UW-MS) and the Copper Stockwork Zone (CSZ). All three zones have a plunge length of 1,900 m, and remain open at depth for further expansion. The following table shows a summary of their dimensions and style of mineralization:



Zone	Style	Stike	Average Thickness
Zone 2 (L2MS)	zinc-silver-rich massive sulphide	400m to 550m	5.55m
Upper West Zone (UW-MS)	copper-zinc-gold- enriched massive to semi-massive sulphide	150m to 300m	4.81m
Copper Stockwork Zone (CSZ)	copper-gold-rich	300m to 600m	8.08m

As each style is mineralogically and texturally distinct, the best metal recoveries will be achieved by processing the three zones independently. However, this should not be of concern as metallurgical testing has shown that materials from all the zones are amenable to floatation, and the fact that the operating mines in the region have a similar geological structure.

#### **Resource Estimate**

The first NI 43-101 compliant resource estimate on the property was announced in November 2006, calculated by Scott Wilson Roscoe Postle. They estimated an indicated resource of 6.67 Mt at 0.87% Cu, 6.51% Zn and 26.0 g/t Ag, and an inferred resource of 6 Mt of 0.83% Cu, 5.89% Zn and 24.8 g/t Ag.

An updated resource estimate was calculated in 2011, which expanded the 2006 estimate by adding the following resource estimate on the CSZ:

- Indicated resource of 5.56 Mt at 1.55% Cu, 11 gpt of Ag, 0.53 gpt of Au and 0.27% Zn
- ▶ Inferred resource of 3.57 Mt at 1.48% Cu, 10 g/t Ag, 0.35 g/t Au and 0.43% Zn.

A second update was announced in January 2013 (see table below), based on a NSR cut-off of US\$60/t. The updated resource estimate included material from all of the known zones, including the massive and semi-massive sulphide lenses and the underlying stockwork zones.



L3MS CSZ

Total

INDICATE	D					_					
Zone	Tonnes (kt)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	CuEq (%)	ZnEq (%)	Cu (Mlb)	Zn (Mlb)	Au (Koz)	Ag (Koz)
L2MS	3,390	0.31	7.15	0.24	23.7	1.51	10.19	23.0	534.0	25.7	2,580
UW-MS	2,150	1.66	4.1	0.88	30.7	2.79	18.75	78.7	194.0	61.0	2,120
L3MS	760	1.23	2.55	0.3	14.5	1.79	12.03	20.5	42.4	7.3	353
CSZ	7,610	1.6	0.28	0.51	10.6	1.94	13.07	269.0	46.5	126.0	2,600
Total	13,900	1.28	2.67	0.49	17.1	1.96	13.2	391	817	220	7,650
INFERRED	)										
Zone	Tonnes (kt)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	CuEq (%)	ZnEq (%)	Cu (Mlb)	Zn (Mlb)	Au (Koz)	Ag (Koz
L2MS	2,800	0.5	7.13	0.38	26.1	1.79	12.04	31.1	439.0	33.8	2,35
UW-MS	2,910	1.62	3.68	0.51	19	2.47	16.62	104.3	236.0	47.8	1,78
0 w-wis	2,910										· · · · ·

1.87

2.01

12.59

13.54

188.0

328.0

57.0

740.0

73.1

157.0

2,140

6,340

The following image shows the distribution of the resource across the three primary zones.

12.1

17.5

## McIlvenna Bay: CSZ + UW MS + Zone 2 MS

0.42

0.43

1.56

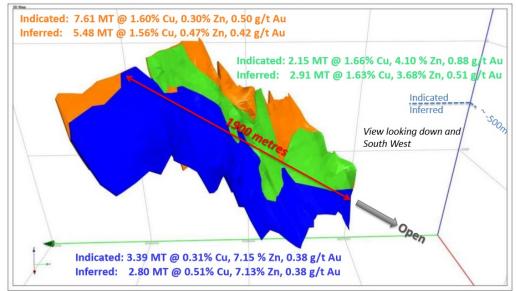
1.32

5.480

11,300

0.47

2.97



Source: Company

As the high-grade materials are spread out over a longer vertical distance (leading to low tonnage extracted per vertical meter), the deposit is considered to be better suited for a lower cost - high tonnage operation. One of the key benefits of these types of deposits is that the zones are partitioned nicely, allowing the company to target and selectively mine metals of interest.

#### **Preliminary Economic Assessment**

A PEA was completed on the project by JDS Energy & Mining Inc. (JDS), and the study results were announced in November 2014. The PEA assumed that the McIlvenna Bay deposit will be developed as an underground mine utilizing longhole mining methods with cemented paste backfill. The ore will be fed to a 5,000 tonne per day (tpd) milling and multi-



stage flotation plant to produce copper concentrates, zinc concentrates and a polymetallic bulk concentrate. **The proposed operation is similar to the operations at the nearby 777 mine, operated by Hudbay.** The produced concentrates can be transported to smelters in North America and/or Asia.

The following table shows a summary of the PEA results. The PEA showed an after-tax NPV @ 7% of \$263 million, and an after-tax RR of 19%.

	Pre-Tax	Post-Tax
NPV @ 7%	\$382M	\$263M
IRR	22%	19%
Payback	4 years	4 years
Mine Life	14 years	
Plant Throughput	5,000 tpd	
CAPEX	\$249M Pre-Production / \$150	M Sustaining
Operating Expenses	\$51.03/t milled	
Cu (Cash Cost)	US\$0.84/lb	
Zn (Cash Cost)	(US\$0.37/lb)	

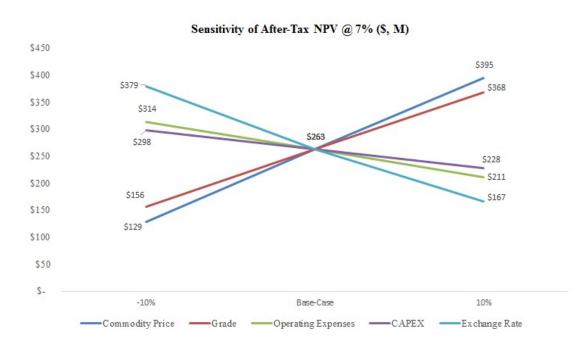
The PEA was based on a mine life of 14 years, which will see the extraction of 23.7 million tonnes (Mt) of ore. The initial CAPEX is estimated to be \$249 million, which includes a 20% contingency (\$42 million), mining cost of \$73 million, \$54 million in concentrator costs and the rest for infrastructure. The mine construction and build-out is expected to take up to 24 months.

The following table shows the expected production rates, and the commodity prices used in the PEA versus current commodity prices.

	Annual Production	LOM Production	PEA Price (US\$)	PEA Price (C\$)	Current Price (C\$)
Zinc	58.9 Mlbs	804.7 Mlbs	US\$1.06 / lb	C\$1.19 / lb	C\$1.74 / lb
Copper	37.6 Mlbs	513.7 Mlbs	US\$3.08 / lb	C\$3.46 / lb	C\$3.61 / lb
Gold	16 koz	218 koz	US\$1,238 / oz	C\$1,391 / oz	C\$1,592 / oz
Silver	398 koz	5.44 Moz	US\$17 / oz	C\$19 / oz	C\$23 / oz

The PEA assumed a very conservative C\$:US\$ exchange rate of 0.89. As shown in the table above, the current commodity prices in C\$ are well above the prices used in the PEA. The following chart shows the NPV's sensitivity to key inputs.





A feasibility study ("FS") and supporting work (engineering studies and resource upgrade) is estimated to cost \$13.0 million.

Another key benefit of the project is its scalability. The CAPEX can be reduced by lowering the throughput rate to 2k to 3k tones per day. A lower throughput (under 3,000 tpd) has another benefit – the mine can proceed with a provincial approval and will not need approval from the federal government.

Also, the availability of toll milling options is a major advantage in the area, which will lower the CAPEX significantly. Details of the toll milling options in the region are presented later in the report.

### Environmental Assessment ("EA")

Like all mining projects, McIlvenna Bay will be subject to an EA in accordance with provincial and federal requirements. The company completed a baseline environmental study in 2012. The project area does not represent undisturbed conditions as it has already been subject to extensive silica sand mining. The company will have to address the project's impact on the following:

- vegetation species considered rare in Saskatchewan
- 15 wildlife species (especially woodland caribou) of provincial and federal conservation priority.
- aquatic habitat
- a tailing disposal site; the company has identified 12 potential sites within a 10 km radius of McIlvenna Bay



### Regional Exploration

Foran has the potential to extend the life of operations at McIlvenna Bay through resource expansion at depth, or delineation of nearby satellite deposits. Balsam and Bigstone are the primary focus areas for satellite deposits. Foran also holds an interest in several other properties, including the Comeback Bay property, located between the Hanson Lake Camp and Flin Flon, and the Reed Lake property, located in the Snow Lake-Lalor area of west-central Manitoba.

The following section presents a brief overview of Balsam and Bigstone.

## Balsam

This 100% owned property is contiguous with, and 7km southeast of the McIlvenna Bay deposit. Foran acquired the 100% interest from Aur Resources (in 2003) and from Troymin Resources (in 2011). Certain claims are also subject to a 2% NSR.

The following table shows the drilling conducted on the property since 1984. The Balsam zone was discovered in 1986 during a drill program.

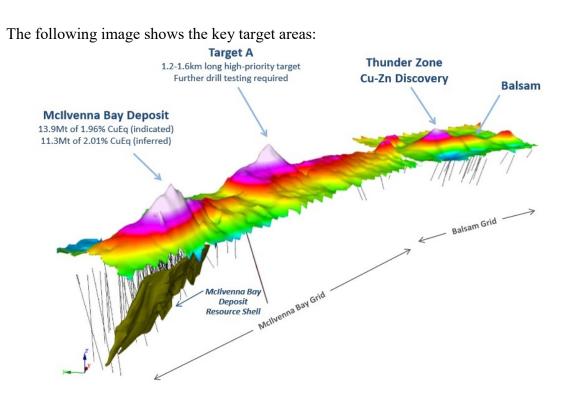
Year	Company	Number of Holes	Meters Drilled
1984	Granges	1	72
1985	Granges	2	218
1986	Granges	23	3,493
1990	Cameco	3	672
1991	Cameco	7	2,488
1996	Aur Resources	3	2,097
1997	Aur Resources	7	2,549
2002	Aur Resources	1	225
2013	Foran	9	3,211
2015	Foran	5	1,914
Total		61	16,939

The property was idle from 2002 to 2013. Foran recommenced exploration in 2013, with drilling in the Balsam area, and the completion of a ground EM survey covering a 7 km trend from McIlvenna Bay to Balsam. The ground EM survey identified several targets along the trend including:

- Target A, located approximately 2km from McIlvenna Bay, is a strong conductor with a similar signature as the McIlvenna Bay deposit, and
- > Target B, a smaller conductor located approximately 7km from McIlvenna Bay

Drill testing of Target B resulted in the discovery of the Thunder zone in 2013, with an intersection of high-grade massive sulphides (4.1% Cu, 0.43g/t Au over 3.7m).





Source: Company

A follow up drill program in 2015 (1,914 m / 5 holes) confirmed and expanded the 2013 discovery. Four of the five holes intersected high grade copper and zinc. Key highlights below:

- > 5.0% Cu, 2.1% Zn, 0.84g/t Au & 41g/t Ag over 2.26m
- ➤ 2.0% Cu, 3.5% Zn, 0.37g/t Au & 11.6g/t Ag over 3.46m
- > 0.7% Cu, 7.2% Zn, 0.29 g/t Au & 42.8 g/t Ag over 3.70m

### Bigstone

Foran owns a 100% interest in the 16,117 hectare Bigstone Property. Some of the claims are subject to a 2% NSR. Foran acquired the interest from Aur Resources (in 2003) and from Cameco (in 2012). Certain claims are also subject to a 2% NSR.

The property is approximately 25 km west of the McIlvenna Bay deposit, and is accessible via helicopter, boat or winter road.

The deposit was discovered in 1982 by drilling by a Granges Inc. / SMDC (Cameco) joint venture. The JV continued exploration on the property until 1994. Several historic mineral resources have been prepared for the Bigstone deposit; the most recent was prepared by



Cameco in 1990 (see table below) – which indicated 3.75Mt grading 2.03% Cu, and 0.33 g/t Au, in the Main Zone (copper), and 0.53Mt grading 9.62% Zn, and 15.9 g/t Ag, in the zinc rich massive sulphides.

Cu cut-off (%Cu)	Tonnage	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
1.0	3,747,500	2.03	0.14	0.33	9.3
1.5	3,136,600	2.26	0.15	0.36	9.9
2.0	1,983,600	2.57	0.17	0.48	11.3
2.5	1,199,300	3.11	0.2	0.61	13.5
Zn cut-off (%Zn)	Tonnage	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Zn cut-off (%Zn) 2.0	<b>Tonnage</b> 755,200	Cu (%) 0.20	Zn (%) 7.75	Au (g/t) 0.27	<b>Ag (g/t)</b> 11.7
· · · · ·	0	· · ·			
2.0	755,200	0.20	7.75	0.27	11.7
2.0 3.0	755,200 692,600	0.20 0.21	7.75 8.22	0.27 0.28	11.7 12.6

Foran conducted VTEM Time Domain Electromagnetic ("EM") surveys in 2007 and 2011, followed by a 1,176 m drill program targeting regional VTEM conductors in 2012. The company drilled six infill holes in 2015 (2,545 m) into the historic Bigstone resource after conducting another ground-based EM survey in 2014. The 2015 program focused on the central parts of the deposit, at depths of 200 to 350m below surface, to confirm the historic drilling, and intersected significant copper / zinc mineralization in all six holes. Key highlights below:

- > 2.0% Cu over 105.0m, including 4.1% Cu over 20.4m and 3.2% Cu over 19.0m
- ➤ 18.4% Zn over 11.8m (including 27.0% Zn over 7.6m
- ➤ 1.42% Cu over 10.6m and 1.3% Cu over 8.5m
- 2.5% Cu over 53.6m (including 4.0% Cu over 12.3m)
- ➤ 2.5% Cu over 58.0m (including 3.8% Cu over 15.3m) and 11.2% Zn over 3.0m
- 15.1% Zn and 778 g/t Ag over 4.8m (including 32.4% Zn and 2,322 g/t Ag over 1.6m)
- ➤ 1.2% Cu and 7.8% Zn over 29.0m

In November 2015, Foran announced positive initial metallurgical testwork. All styles of mineralization produced high-grade concentrates with good recoveries (90%+ for Cu concentrates and 90%+ for Zn concentrates).

Development Timeline/ Strategy

Foran's management is planning a drill program on Bigstone in the second half of the year to convert the historic resources into a NI 43-101 compliant resource estimate. The company also has plans to drill one hole on Target A in the coming weeks.

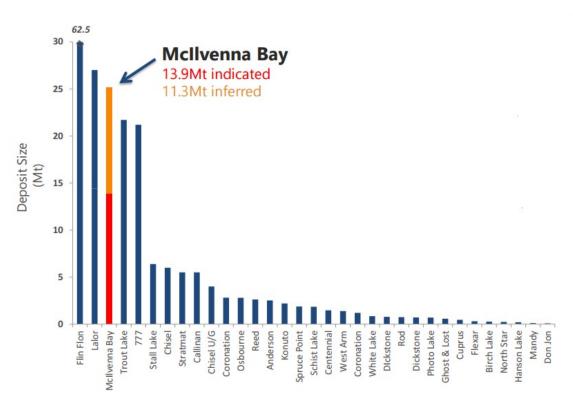
Management's primary focus at this time is to seek project financing options, JV partnerships, and off-take financing, to advance McIlvenna Bay to production, while



simultaneously continuing regional exploration to identify and advance satellite deposits.

Toll milling / M&A options

McIlvenna's current resource estimate puts it in the third largest deposit in the region after the Flin Flon mine and Lalor, see chart below.



Source: Company

The following table shows a summary of Hudbay's three operating mines in the region.



777	Lalor	Reed
Flin Flon	210 km east of Flin Flon	120 km east of Flin Flon
2004	2014	2014
underground	underground	underground
zinc, copper	gold, zinc, copper	copper
gold, silver	silver	gold, silver, zinc
100%	100%	70%
4,200 tpd	3,000 tpd	1,300 tpd
27 Kt	6 Kt	15 Kt
49 Kt	67 Kt	
71 Koz	51 Koz	
\$(0.52)/ Cu lb	\$(0.07)/ Zn lb	\$1.64/ Cu lb
\$88/t	\$70/t	\$90/t
\$88/t	\$104/t	\$88/t
4 years	14	2 years
	Flin Flon         2004         underground         zinc, copper         gold, silver         gold, silver         100%         4,200 tpd         27 Kt         49 Kt         71 Koz         \$(0.52)/ Cu lb         \$88/t	Flin Flon       210 km east of Flin Flon         2004       2014         2004       2014         underground       underground         zinc, copper       gold, zinc, copper         gold, silver       silver         100%       100%         100%       100%         4,200 tpd       3,000 tpd         4,200 tpd       3,000 tpd         49 Kt       67 Kt         49 Kt       51 Koz         \$10 Koz       \$100 Xoz         \$88/t       \$70/t         \$88/t       \$104/t

Ore from the 777 and Reed mines are transported to Hudbay's 6,000 tpd concentrator in Flin Flon for processing into copper and zinc concentrates. Copper concentrate is subsequently sold to third party purchasers, and zinc concentrate is sent to Hudbay's zinc plant in Flin Flon for conversion to high grade zinc. Ore from the Lalor mine is processed at Hudbay's 3,000 tpd concentrate in Snow Lake.

Hudbay's Flin Flon concentrator is currently operating at approximately 90% capacity (5,000 to 5,500 tpd) while the Snow Lake concentrator is operating at full capacity, as shown in the table below. The table also shows that the production and grades have dropped over the past few years.



777	2012	2013	2014	2015	2016 (9M)
Ore mined (t)	1,528,103	1,625,532	1,452,933	1,235,053	999,694
Tonnes per day	4,187	4,454	3,981	3,384	3,703
Copper grade in ore (%)	2.32	1.85	1.91	1.99	1.54
Zinc grade in ore (%)	4.16	3.81	3.05	3.04	3.37
Gold grade in ore (gpt)	2.18	2.02	1.72	1.58	1.48
Silver grade in ore (gpt)	25.77	23.01	21.48	19.42	20.53

Reed	2012	2013	2014	2015	2016 (9M)
Ore mined (t)					338,842
Tonnes per day					1,255
Copper grade in ore (%)					4.28
Zinc grade in ore (%)					0.62
Gold grade in ore (gpt)					0.52
Silver grade in ore (gpt)					7.10

Lalor	2012	2013	2014	2015	2016 (9M)
Ore mined (t)	72,293	400,590	551,883	934,277	814,206
Tonnes per day	198	1,098	1,512	2,560	3,016
Copper grade in ore (%)	0.63	0.84	0.88	0.71	0.64
Zinc grade in ore (%)	11.83	9.44	8.52	8.18	6.88
Gold grade in ore (gpt)	1.67	1.21	2.29	2.53	2.30
Silver grade in ore (gpt)	19.29	19.39	23.83	21.38	21.60

The following table shows the 2015 year-end reserve estimates of the three mines.

Proven + Probable	Tonnes	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	Cu (lbs)	Zn (lbs)	Au (oz)	Ag (oz)
777	6,302,000	1.66%	4.82%	1.88	27.23	230,334,560	669,886,482	378,178	5,490,597
Lalor	15,285,000	0.72%	5.65%	2.54	25.29	242,623,126	1,903,917,589	1,242,365	12,369,845
Reed	1,194,000	4.09%	0.38%	0.42	5.41	107,550,750	10,057,047	16,185	206,588
Total Reserves	22,781,000	1.16%	5.15%	2.25	24.78	582,592,686	2,586,510,634	1,640,232	18,064,422

Although McIlvenna Bay's gold grades are significantly lower, its copper grades are similar to 777 and higher than Lalor.

We believe Hudbay will start looking for new deposits in the region as 777 and Reed (totaling 5,500 tpd) are expected to be mined out in the next 2 to 4 years. This offers Foran a very attractive opportunity to either partner with Hubday, and process McIlvenna's ore at Hudbay's facilities in Flin Flon, or even position itself as an acquisition target. Note that Foran is the most advanced junior operating in the region. The other juniors operating in the region are in earlier stages. Callinex Mines Inc. (TSXV: CNX), Rockcliff Copper Corporation (TSXV: RCU), and Murchison Minerals Ltd. (CSE: MUR) are a few of the



Management

One of the key attributes of the company is the high share ownership by management. Management and board members hold 16.55 million shares, or 17.1% of the total outstanding shares. The two largest investors are Chairman, Darren Morcombe (12.2%), and Pierre Lassonde (10.9%).

Management	Shares	% of Total
Darren Morcombe, Chairman	11,815,500	12.2%
Patrick Soares, President, CEO and Director	3,732,500	3.9%
Sharon Dowdal, Director	100,000	0.1%
Maurice Tagami, Director	506,500	0.5%
David Petrof, Director	-	0.0%
Roger March	210,000	0.2%
TimThiessen	121,000	0.1%
Dave Fleming	60,000	0.1%
	16,545,500	17.1%
Key Investors	Shares	% of Total
Pierre Lassonde	10,551,069	10.9%
	10,551,069	10.9%

Brief biographies of the management team and board members, as provided by the company, follow:

### Darren Morcombe, Executive Chairman

Mr. Morcombe joined the Board of Directors in mid-2010 and was appointed Chairman shortly thereafter. Mr. Morcombe has more than 20 years of international experience in a variety of roles in in the natural resource sector. This includes over 10 years in senior roles with Normandy Mining and Newmont Mining Corporation in the areas of financing, treasury, mergers and acquisitions. Mr. Morcombe is the founder of Springtide Capital Pty. Ltd., a private investment company specializing in micro-cap listed companies, venture capital and resource-oriented companies. He was Chairman and a major shareholder of European Gold Refineries SA, Europe's largest gold refinery, and Director of AGR Matthey, one of the world's largest gold refineries. He retired from this position in 2008 and these businesses are now owned by Newmont Mining Corporation. Mr. Morcombe is a major shareholder of several public companies.

### Patrick Soares, P.Geo., President, CEO, & Director

Mr. Soares was appointed President and CEO of Foran Mining Corporation and a member of the Board of Directors in November, 2010. Mr. Soares served as the President and CEO of





Brett Resources Inc. from late 2007 until its acquisition by Osisko Mining Corp. in May, 2010. During his tenure as President and CEO of Brett Resources, the market capitalization of the company increased from \$60M to approximately \$370M. Mr. Soares holds a B.Sc. (Hons.) from the University of British Columbia and is a Professional Geoscientist with APEGBC. Mr. Soares began his professional career in 1983 as an exploration and mine geologist in northern Canada. Subsequently, he worked in the field of investor relations and corporate development, and held positions with Sutton Resources Ltd. (acquired by Barrick Gold in 1999), EuroZinc Mining Corp. (now part of Lundin Mining Corporation) and Aurizon Mines Ltd. Mr. Soares was the Chairman of SnipGold Corp. (acquired by Seabridge Gold in June 2016).

### Tim Thiessen, B. Comm., CA, CFO

Mr. Thiessen has20 years of international experience in public accounting and the mining industry. He also currently holds the position of CFO for Metallic Minerals Corp. Previously he was CFO of SnipGold Corp. (acquired by Seabridge Gold in June 2016) and of Aurcana Corporation Prior to this, Mr. Thiessen spent 7 years as Vice President of Finance for TSX-listed Endeavour Financial, an advisory firm in the mining industry specializing in mergers and acquisitions, and debt and equity financing. He was part of a team that spawned industry-leading companies such as Silver Wheaton, UrAsia Energy, Peak Gold and Coastal Energy Corp. Mr. Thiessen is a member of the Chartered Professional Accountants of Canada and has also held positions as Controller with Endeavour Mining Capital Corp. and as an auditor for Deloitte LLP, with a focus in the mining and financial service industries.

#### Roger March, B.Sc. (Hons.), P.Geo., Vice President, Project Exploration

Mr. March has 25 years of progressive exploration and project management experience, focused mainly on the design, implementation and supervision of advanced exploration programs. In his prior role as Senior Project Geologist at Cumberland Resources, Mr. March spent 11 years as part of the team responsible for the completion of prefeasibility and feasibility level studies for the Meadowbank Gold Project, including resource increases from 0.8 million to over 4 million ounces of gold. He has multi-commodity exploration experience and has held positions with Inco, Redfern Resources, Lac Minerals and the Newfoundland and Labrador Department of Mines and Energy. Mr. March has extensive experience integrating exploration with geotechnical, metallurgical and environmental programs for project development, and is using this background to advance the exploration and development of the McIlvenna Bay Project. Mr. March is a Professional Geoscientist with the PEGNL and holds a B.Sc. (Hons.) from Memorial University.

#### Dave Fleming, B.Sc., P.Geo., Vice President, Exploration

Mr. Fleming has over 35 years' experience in the generation, management and implementation of successful mineral exploration throughout North America. He began his career with Amax Minerals/Canamax Resources Inc., an exploration group responsible for Yukon exploration and development at the Ketza River Gold Mine and Sa Dena Hes zinclead-silver mine. Mr. Fleming has worked with several major mining companies, including Cyprus Canada, Kennecott Canada and Billiton Metals. More recently, he was part of exploration and development at the Meadowbank Gold Deposit from exploration to feasibility stage with Cumberland Resources Ltd. (acquired by Agnico-Eagle Mines Ltd. in



2007). Using his background in district and regional scale exploration, Mr. Fleming is focused on the advancement of both McIlvenna Bay and Foran's other properties in Saskatchewan and Manitoba. Mr. Fleming is a Professional Geoscientist with the APEGBC and holds a B.Sc. from the University of British Columbia.

#### Sharon Dowdall, B.A. (Hons.), LL.B., Director

Ms. Dowdall joined the Board of Directors in 2011 and has over 30 years' experience in the legal field, including experience as a practicing lawyer and as a senior executive in the resource sector. Ms. Dowdall is a consultant to Franco-Nevada, working on Special Projects. Previously, she was Chief Legal Officer and Corporate Secretary of Franco-Nevada Corporation, and prior to the IPO of Franco-Nevada, Ms. Dowdall had a 20 year association with the royalty portfolio assets of Franco-Nevada, including serving as an Officer of Newmont Capital from 2002 to 2007. Ms. Dowdall holds a B.A. (Hons.) from the University of Calgary and an LL.B, from Osgoode Hall at York University. Ms. Dowdall was the recipient of the 2011 Canadian General Counsel Award for Business Achievement and currently sits on the Boards of NovaGold Resources Inc. and Olivut Resources Ltd.

#### Maurice Tagami, BASc., P.Eng., Director

Mr. Tagami joined the Board of Directors in 2011 and has over 30 years' experience in mining development and operations. Mr. Tagami holds a degree in Metallurgical Engineering from the University of British Columbia and is a Professional Engineer with APEGBC. During his career, has played a significant role in the metallurgical and project management of numerous open pit, underground and heap leach projects worldwide. Mr. Tagami is the Vice President, Mining Operations at TSX-listed Silver Wheaton Corp., the largest metals streaming company in the world. Previously, he held the positions of President and CEO, with Keegan Resources Inc. and Senior Project Manager (Onca Puma Project) with Canico Resource Corp. (acquired by CVRD in 2005). Mr. Tagami served on the Board of Brett Resources Inc. (acquired by Osisko Mining Corp. in 2010) and currently sits on the Boards of Northair Silver Corp. and SnipGold Corp (acquired by Seabridge Gold in June 2016).

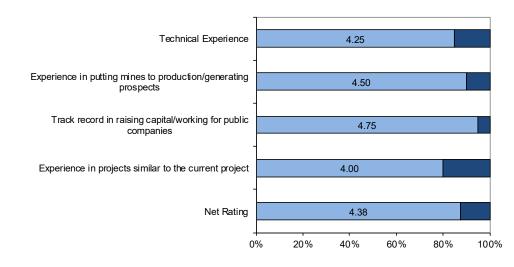
#### David M. Petroff, B.Math., MBA, Director

Mr. Petroff joined the Board of Directors in 2012 and has over 30 years' experience in the mining and investment industry, including holding senior management and financial positions with several prominent, publicly-traded mining companies and working in Investment Banking with a major Canadian investment dealer. Mr. Petroff was previously President, CEO and Director of Jaguar Mining Inc. From early 2009 until its acquisition by Nyrstar NV in mid-2011, he held the role of President, CEO, and Director of zinc producer Breakwater Resources Ltd. Mr. Petroff, who holds a B. Math from the University of Waterloo and an MBA from the Schulich School of Business, also sits on the Board of St Andrew Goldfields Ltd. and Pancontinental Uranium Corporation.

#### Our net rating on Foran's management team is 4.4 out of 5.0 (see below).



#### **Management Rating**



The company's board has five members, of which, three are independent. We believe that the Board of Directors of a company should include independent or unrelated directors who are free of any relationships or business that could materially interfere with the director's ability to act in the best interest of the company. An unrelated/independent director can be a shareholder. The following table shows our analysis on the strength of Foran's board.

	Poor	Average	Good
Three out of five directors are independent			X
Two out of five directors hold significant shares of the company		X	
The Audit committee is composed of 3 board members, all 3 are independent			X
The Compensation committee is composed of 3 board members, all 3 are independent			X

**Financials** 

At the end of Q3-2016 (ended September 30, 2016) the company had cash and working capital of \$1.22 million and \$1.18 million, respectively. We estimate the company had a burn rate (cash spent on operating and investing activities) of \$88k per month in the first nine months of 2016. The following table summarizes the company's liquidity position:



(in C\$)	2015	2016 (9M)
Cash	\$1,016,037	\$1,216,349
Working Capital	\$969,749	\$1,178,779
Current Ratio	7.61	12.69
LT Debt / Assets	-	-
Monthly Burn Rate (incl. investing activities)	(252,870)	(88,133)
Cash from Financing Activities	-	\$993,512

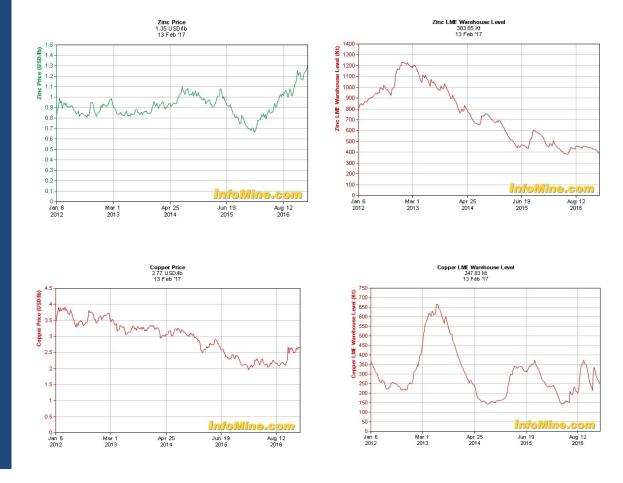
We estimate the company currently has 6.42 million options outstanding (weighted average exercise price of \$0.23 per share) and 2.94 million warrants (weighted average exercise price of \$0.25 per share) outstanding. At this time, 5.29 million options and 2.94 million warrants are in-the-money. The company can raise up to \$1.54 million if all the in-the-money options and warrants are exercised.

On February 13, 2017, the company announced that Pierre Lassonde, Darren Morcombe, and several other insiders have decided to exercise a total 1.88 million warrants (exercise price of \$0.25 per share), which will result in a capital infusion of \$0.47 million.

### The company currently has \$1.6 million in cash.

### Valuation & Rating

Zinc and copper were two of the best performing commodities in the past six months.





We believe a significant decline in inventory levels (as shown in the charts above) and the "Trump" effect were the primary price drivers. The new U.S. President has expressed his intent to spend approximately \$1 trillion on infrastructure (causing inflation and demand for copper). Our models use conservative long-term price forecasts of US\$2.50/lb copper, US\$1.00/lb zinc, US\$1,300/oz gold and US\$20/oz silver.

The following table shows a summary of our Discounted Cash Flow ("DCF") model, which gives a fair value estimate of \$120 million, or \$1.18 per share, on Foran's shares.

DCF Valuation	
Throughput (tpd)	5,000
Operating Life (years)	12
Average Price of Au (US\$/oz)	\$1,300
Average Price of Ag (US\$/oz)	\$20.00
Average Price of Zn (US\$/lb)	\$1.00
Average Price of Cu (US\$/lb)	\$2.50
Average exchange rate (C\$:US\$)	1.10
Operating Cost (LOM) in \$/t	\$57.5
Initial Capital Cost (\$)	\$250,000,000
Expected Cost of Equity	11.5%
Estimated Cost of Debt (p.a.)	5.0%
Debt / Initial CAPEX	50%
Equity / Initial CAPEX	50%
Tax	26.5%
After-Tax Net Asset Value (\$)	\$119,019,568
Working Capital	\$1,188,112
Fair Value of FOM	\$120,207,680
No. of Shares *	101,605,419
Fair Value per Share (\$)	\$1.18

\* calculated based on the treasury stock method

Our valuation was primarily based on the base-case production scenario suggested by the 2014 PEA. The key differences between our valuation and the PEA lie in the long-term commodity price assumptions, the discount rate, and the following two inputs:

- We used a conservative mine life of 12 years versus the PEA's 14 years. Our estimate was based on 100% of the indicated resources, and 50% of the inferred resources on McIlvenna Bay, and 50% of the historic resource estimate on Bigstone.
- $\blacktriangleright$  We have also used a higher operating cost estimate (\$57.5/t versus \$51/t).



C\$:US\$ - 1.1			Copper P	rice (US\$/lb)		
		\$2.00	\$2.25	\$2.50	\$3.00	\$3.50
	\$0.60	-\$0.39	-\$0.04	\$0.31	\$1.01	\$1.71
	\$0.80	\$0.04	\$0.40	\$0.75	\$1.45	\$2.15
Zinc Price (US\$/lb)	\$1.00	\$0.48	\$0.83	\$1.18	\$1.88	\$2.58
(033/10)	\$1.25	\$1.03	\$1.38	\$1.73	\$2.43	\$3.13
	\$1.50	\$1.58	\$1.93	\$2.28	\$2.98	\$3.68

The following table shows the sensitivity of our fair value estimate to the key inputs.

,		Exchange Rate (C\$:US\$)						
		1.00	1.05	1.10	1.20	1.30		
	\$50.00	\$1.06	\$1.36	\$1.67	\$2.28	\$2.90		
	\$57.50	\$0.57	\$0.88	\$1.18	\$1.80	\$2.41		
Operating Cost (\$/t)	\$65.00	\$0.08	\$0.39	\$0.70	\$1.31	\$1.92		
Cost (\$/1)	\$75.00	-\$0.57	-\$0.26	\$0.05	\$0.66	\$1.28		
	\$85.00	-\$1.22	-\$0.91	-\$0.60	\$0.01	\$0.63		

We typically use a comparables valuation model, in addition to the DCF model, to arrive at the fair value estimate. The comparables are chosen based on their target commodity, location, stage and the type of deposit. We do not believe there is a direct comparable to Foran as the McIlvenna Bay project is significantly more advanced than the other exploration / development projects in the region. Although there are other similar stage copper / zinc projects in Canada, none of them are directly comparable to Foran because of the differences in the type of deposit. Also, we believe that Foran's proximity to Hudbay puts them in a much stronger position.

Management and key investors' substantial shareholding strongly aligns their interest with other investors, and ensures that they will not pursue an M&A transaction unless it is a highly attractive offer. The company has several potential upcoming catalysts, including a positive drill program at Target A, advancement in management's efforts for financing / off-take options, and the strength in copper and zinc prices. All these factors and Hudbay's need to seek new ore supply, we believe, make Foran a very attractive speculative investment at this time. We are initiating coverage with a BUY rating and a fair value estimate of \$1.18 per share on Foran.

### Risks

We believe the company is exposed to the following key risks (not exhaustive):

- > The value of the company is highly dependent on copper and zinc prices.
- > Exploration and development risks.
- > Financing may take longer than expected.
- Access to capital and potential share dilution.





As with most junior exploration / development companies, we rate FOM's shares a risk of 5 (Highly Speculative).



Buy – Annual expected rate of return exceeds 12% or the expected return is commensurate with risk
Hold – Annual expected rate of return is between 5% and 12%
Sell – Annual expected rate of return is below 5% or the expected return is not commensurate with risk
Suspended or Rating N/A— Coverage and ratings suspended until more information can be obtained from the company regarding recent events.

#### Fundamental Research Corp. Risk Rating Scale:

1 (Low Risk) - The company operates in an industry where it has a strong position (for example a monopoly, high market share etc.) or operates in a regulated industry. The future outlook is stable or positive for the industry. The company generates positive free cash flow and has a history of profitability. The capital structure is conservative with little or no debt.

2 (Below Average Risk) - The company operates in an industry where the fundamentals and outlook are positive. The industry and company are relatively less sensitive to systematic risk than companies with a Risk Rating of 3. The company has a history of profitability and has demonstrated its ability to generate positive free cash flows (though current free cash flow may be negative due to capital investment). The company's capital structure is conservative with little to modest use of debt.

3 (Average Risk) - The company operates in an industry that has average sensitivity to systematic risk. The industry may be cyclical. Profits and cash flow are sensitive to economic factors although the company has demonstrated its ability to generate positive earnings and cash flow. Debt use is in line with industry averages, and coverage ratios are sufficient.

4 (Speculative) - The company has little or no history of generating earnings or cash flow. Debt use is higher. These companies may be in start-up mode or in a turnaround situation. These companies should be considered speculative.

5 (Highly Speculative) - The company has no history of generating earnings or cash flow. They may operate in a new industry with new, and unproven products. Products may be at the development stage, testing, or seeking regulatory approval. These companies may run into liquidity issues, and may rely on external funding. These stocks are considered highly speculative.

#### **Disclaimers and Disclosure**

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