



## NEWS RELEASE

### **AURCANA CORPORATION ANNOUNCES PRELIMINARY ECONOMIC ASSESSMENT FOR THE SHAFTER MINE**

#### **Shafter Project PEA – Post-Tax NPV(5) of \$18 million, IRR of 40.9% and Pre-Production Capex of \$13.2 million**

**Vancouver, B.C., August 31, 2016** – Aurcana Corporation (TSX:AUN - "Aurcana" or the "Company") today announced that it has received the results of an updated Preliminary Economic Assessment (the "PEA") for its 100%-owned Shafter Project oxide silver deposit in Texas ("Shafter" or the "Project").

The PEA incorporates the results of the Company's recent mineral resource estimate, as disclosed in the Company's news release dated January 12, 2016 (the "Resource Estimate"). The PEA is based on reopening the existing Aurcana underground access ramp, recommissioning of the existing leach-milling operation at 600 tons per day (TPD). This approach will focus on higher-grade mineralization and improved silver recovery.

Kevin Drover, President & CEO of Aurcana noted, "The PEA is a significant step forward for Aurcana. It provides a solid foundation for advancing the Project to the next stages of development. The fully permitted Shafter deposit is ideally poised in terms of project economics, with existing underground development, a mill and established infrastructure."

#### **PEA HIGHLIGHTS:**

- Base Case\* post-tax NPV (5% discount rate) of \$18 million, internal rate of return ("IRR") of 40.9%. Aurcana has sufficient U.S. based tax losses to offset Federal tax liabilities.
- Initial capital costs of approximately \$13.2 million, including \$1.1 million contingency.
- Pre-production development of less than one year.
- Mine production of just over 6 years.
- Net average post-tax undiscounted operating cash flow of approximately \$5.5 million per year.
- Life of Mine payable production of 9.3 million ounces of silver
- Average annual silver production during first six years of operation of 1.5 million ounces
- Life of mine average silver recovery of 81.73%
- Payback is approximately 1.7 year

\*Base Case uses \$20/oz silver.

The PEA is preliminary in nature and includes Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the economic results described in the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.



The Base Case discounted cash flows in the PEA are provided both pre-tax and post-tax, and are prepared in compliance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) of the Canadian Securities Administrators. The PEA was completed by Mine Development Associates (“MDA”), and Samuel Engineering, Inc. (“Samuel”), both independent engineering firms. Unless otherwise noted, a reference to “\$” in this news release is to United States currency. Due to rounding, some of the totals in the tables in this news release may not sum exactly.

Table 1 summarizes key economic indicators from the PEA. A pre-tax analysis of the cashflow from the project was completed. The property incurred in excess of \$100 million in losses that Aurcana believes is available to offset any U.S. Federal tax liability of the property. Since any taxes due should be reduced by the prior property losses, the pre-tax and after tax evaluation will be the same with the exception of the Texas Franchise Tax (0.75% of adjusted revenue).

**Table 1. Key Economic Indicators (\$20/oz Silver Base Case).**

Parameter	PEA Base Case* Results
Post-tax IRR	40.9%
Post-tax NPV (5%)	\$18 million
Post-tax Payback	1.7 years
Initial CAPEX ( <i>Including contingency</i> )	\$13.2 million
Total CAPEX ( <i>Including sustaining and contingency</i> )	\$52.6 million
Average Annual Silver Production for first 6 years	1.5 million ounces
Life of Mine Silver Production	9.3 million ounces

Table 2 summarizes the metal price sensitivity of the main economic outputs of the PEA.

**Table 2. Sensitivity of Shafter PEA Key Economic Indicators (Post-Tax).**

		Low Case	Base Case	High Case
Silver Price	\$/oz	\$18	<b>\$20</b>	\$22
Post Tax NPV (5%)	\$ Million	3.4	<b>18.0</b>	32.6
IRR	%	11.9	<b>40.9</b>	69.2
Payback Period	Years	6.7	<b>1.7</b>	1.3
Net Average Annual Operating Free Cash Flow (Post	\$ Million	2.9	<b>5.5</b>	8.1

Note: The Base Case metal prices are based on a review of current analyst consensus reports and recent SEDAR filings for similar reports.



The key economic indicators are summarized on an annual basis in Table 3.

**Table 3. Key Economic Indicators by Year**

Key Economic Indicator	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Life of Mine
Recovered Ag Ounces (millions)	1.8	1.7	1.4	1.1	1.3	1.5	0.5	9.3
State Franchise Tax (\$millions)	0.18	0.18	0.15	0.11	0.14	0.16	0.05	0.96
Total Post Franchise Tax Revenue (\$millions)	34.3	33.6	27.6	21.0	25.6	29.9	9.0	181.2
Total Operating Costs (\$millions)	14.7	14.7	16.4	17.4	17.3	17.3	5.2	103.1
Post Tax Net Profit (\$millions)	19.6	18.8	11.2	3.7	8.3	12.7	3.8	78.1
\$/Ton Milled	70.20	70.20	78.00	82.66	82.63	82.32	77.72	77.67
Total Operating Cost per Ounce (\$/oz Ag)	8.4	8.6	11.6	16.2	13.1	11.2	11.3	11.1

### **MINING OPERATION**

The PEA contemplates an underground mine at Shafter maximizing the use of the extensive pre-existing underground development and feeding the modified existing mill at a rate of 600 tons per day (TPD). Mining will use conventional mechanized methods. The total mill throughput in the PEA is estimated to be 1.3 million tons, of which 59% are currently classified in the Resource Estimate as Measured and Indicated material, and 41% are currently classified as Inferred material. A 5 oz/t breakeven cutoff grade was reflected in the underground mine design. The breakeven cut-off incorporates grade, mine and process plant operating costs and recovery data.

### **MINERAL RESOURCE ESTIMATE**

MDA completed the updated Resource Estimate for the Shafter deposit in January 2016 – see Aurcana news release dated January 12, 2016 and the technical report dated January 11, 2016, titled “Technical Report on the Shafter Silver Project, Presidio County, Texas”, which is filed on SEDAR.

### **Key Features:**

- The Shafter drill-hole assay database contains 20,006 silver assays from 1,694 drill holes. Of the drill holes, 155 were drilled by Aurcana. The majority of drill holes (992 holes) in the database are underground core holes completed by American Metal Company (“Amax”) prior to 1942, followed by Gold Fields Mining with 403 holes.
- Silver grades fall into two natural populations as low- and high-grade silver domains. The low-grade domain is associated with weakly fractured and silicified limestone characterized by silver grades between 0.8 ounces Ag/ton and 5.0 ounces Ag/ton. The high-grade domain (>5.0 ounces Ag/ton) is associated with strongly silicified, fractured



limestone.

- Resource blocks having five percent or greater underground workings were removed from the classified mineral resource.
- Compositing was done to 4-foot down-hole lengths, matching the model block size and honoring all mineral-domain boundaries.
- Four tonnage factors ranging from 12 to 14 ft<sup>3</sup>/ton were used, reflecting low-grade, high-grade domains, non-mineralized units and zones of clay or rubble.
- The reported mineral resources were estimated by inverse-distance to the third power to estimate the grade of each block; ordinary kriging and nearest-neighbor estimates were used for comparison and validation. The stated resource is fully diluted to 10 foot by 10 foot by 4 foot blocks and is tabulated on a silver cutoff grade of 4.0 ounces Ag/ton.

Kevin Drover, President and CEO of Aurcana commented, “The updated resource estimates reflect the experiences and knowledge gained by Aurcana’s engineers and geologists during three years of development at Shafter. Sophisticated modeling and the application of stringent modeling parameters has resulted in a tightly constrained model of the deposit that has an attractive grade with potential to be expanded by successful in-fill and step-out exploration drilling. Additional drilling, underground mapping and sampling, geotechnical work and targeted metallurgical tests are recommended by MDA”

Table 4 shows the mineral resources at a series of silver cutoff grades, 4 oz/t silver cutoff grade is the basis for the reported resource estimate. The effective date of the resource estimate is December 11, 2015 and the resource estimate was prepared by Paul Tietz, C.P.G of MDA an independent qualified person within the meaning of NI 43-101.

**Table 4. Shafter Deposit Mineral Resources – December 11, 2015.**

Shafter Measured Resources			
Cutoff (oz Ag/ton)	Tons	Ag oz/t	Contained Silver Ounces
2	220,000	5.55	1,200,000
3	170,000	7.39	1,006,000
<b>4</b>	<b>100,000</b>	<b>8.73</b>	<b>888,000</b>
5	80,000	9.77	799,000
6	70,000	10.70	719,000
7	60,000	11.68	637,000
8	50,000	12.53	567,000
9	40,000	13.49	494,000
10	30,000	14.48	426,000
12	20,000	16.84	299,000
15	10,000	20.14	185,000
20	3,000	25.71	80,000



### Shafter Indicated Resources

Cutoff (oz Ag/ton)	Tons	Ag oz/t	Contained Silver Ounces
2	2,490,000	5.60	13,967,000
3	1,940,000	7.56	11,646,000
<b>4</b>	<b>1,110,000</b>	<b>9.15</b>	<b>10,171,000</b>
5	880,000	10.41	9,114,000
6	710,000	11.53	8,230,000
7	580,000	12.69	7,363,000
8	470,000	13.89	6,550,000
9	380,000	15.22	5,757,000
10	310,000	16.47	5,122,000
12	210,000	19.07	4,039,000
15	130,000	22.67	2,954,000
20	60,000	28.71	1,772,000

### Measured and Indicated Resources

Cutoff (oz Ag/ton)	Tons	Ag oz/t	Contained Silver Ounces
2	2,710,000	5.60	15,167,000
3	2,110,000	6.00	12,652,000
<b>4</b>	<b>1,210,000</b>	<b>9.14</b>	<b>11,059,000</b>
5	960,000	10.33	9,913,000
6	780,000	11.47	8,949,000
7	640,000	12.50	8,000,000
8	520,000	13.69	7,117,000
9	420,000	14.88	6,251,000
10	340,000	16.32	5,548,000
12	230,000	18.86	4,338,000
15	140,000	22.42	3,139,000
20	63,000	29.40	1,852,000

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### Inferred Resources

Cutoff (oz Ag/ton)	Tons	Ag oz/t	Contained Silver Ounces
2	2,610,000	4.29	11,189,000
3	1,370,000	6.00	8,193,000
<b>4</b>	<b>870,000</b>	<b>7.47</b>	<b>6,511,000</b>
5	650,000	8.49	5,518,000
6	490,000	9.47	4,649,000
7	370,000	10.41	3,887,000
8	280,000	11.45	3,160,000
9	200,000	12.50	2,549,000
10	150,000	13.57	2,044,000
12	70,000	16.25	1,207,000
15	40,000	19.28	712,000
20	10,000	24.34	267,000

**Notes:**

1. MDA is reporting the resources at cutoff grades that are reasonable for deposits of this nature that will be mined by underground methods. As such, some economic considerations were used to determine cutoff grades at which the resource is presented. MDA considered reasonable metal prices and extraction costs and recoveries, albeit in a general sense, and then dropping the resource cut-off grade a bit to account for that material that would become mill feed using internal cutoffs.
2. No assumptions were made for mining recovery.
3. An external dilution factor was not considered during this resource estimation.
4. Internal dilution within a 10 foot x 10 foot x 4 foot SMU (selective mining unit) was considered.
5. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
6. Rounding errors may occur

**METALLURGY AND PROCESSING**

Samuel Engineering was retained to review the metallurgy of the Shafter deposit as well as assess the suitability of the existing 1,500 TPD process plant and estimate process operating and capital costs. The Shafter mine has a history of operations and test work that indicate the mineralization is amenable to several techniques of beneficiation and extraction. Though slight improvements in recovery can be achieved through concentration of the mill feed and focused leaching, the main factor for achieving desirable recovery is affected by grinding and cyanide leaching.

Predicted recovery rates are dependent on the head grade due to a relatively constant tails grade. The consistency of the tails grade is due to occluded silver and silver mineral, locked in quartz or jarosite minerals at or below 10 micron range. Practically all the non-encapsulated silver appears to be recoverable, making the recovery prediction highly dependent on the mill feed head grade.

The Shafter mine processing facility proposed in the PEA will use whole cyanide leach to extract silver from the mill feed. Metal recovery will be accomplished using a standard Merrill Crowe CCD zinc precipitation method. Run of mine material will be crushed to a nominal 1 inch crushed product using a single jaw crusher for primary crushing and a cone crusher in closed circuit with a product screen.

Milling to the final leach feed product size of 80 percent passing 74 microns will be achieved by a single ball mill in closed circuit with cyclones for classification. The leach tanks are designed for 72 hour retention to achieve an estimated silver extraction rate of 82 percent. The slurry from the leach circuit will report to the counter current decantation (CCD) circuit using four thickeners for cleaning of the slurry of pregnant leach solution at an anticipated efficiency of 96 percent. The pregnant solution from the CCD circuit will flow to the deaeration vessel and then to the zinc precipitation circuit. Cleaned residue from the CCD circuit is pumped to the tailings plate and frame filters for one final wash before the residue cake is conveyed to a tailings load out area where it will be haul to a lined dry stacked tailings storage facility.

The zinc precipitation circuit will mix zinc with silver bearing pregnant solution causing the silver to precipitate from solution. The Silver precipitated slurry is pumped through the zinc precipitation filters to capture the silver as a cake. The silver precipitate cake is transferred to a retort for drying and to remove any contained mercury which will be collected for removal off site. The dried cake from the retort is then mixed with flux and melted in a gas fired furnace for pouring in silver doré. The silver doré is stored in a safe until it is shipped off site to a refiner.

### **CAPITAL COSTS**

The pre-production capital cost estimate includes the mine capital expenditures, environmental costs, owner's and indirect costs, preparation of the existing mill, expansion of the CCD circuit, addition of instrumentation and contingency. The mine equipment is assumed purchased in year 1 with 25% down payment during the preproduction period.

Sustaining capital costs include mine equipment replacement, infrastructure upgrades and reclamation costs.

Development capital costs for the PEA are reflective of the condition of the present underground workings and work necessary to recommence underground mining operations.

Initial capital and sustaining capital costs for the PEA, summarized below in Table 5, were estimated using current data and pricing.

**Table 5. Summary of Shafter capital cost estimates.**

Category	Capital Cost (\$ Millions)		
	Pre-Production	Sustaining Capital	Total Capital
Mine	3.6	34.4	38.0
Processing & Indirects	7.1	1.2	8.3
Environmental & Closure	0	.7	.7
Owner's Costs	1.4	0	1.4
Contingency	1.1	3.1	4.2
<b>Total</b>	<b>13.2</b>	<b>36.3</b>	<b>52.6</b>

### **OPERATING COSTS**

Total operating costs for the Project are estimated to be \$77.67/ton of mill feed. Mining costs were estimated as \$40/ton milled. Table 6 below shows a breakdown of the operating cost categories on an average cost per ton of mill feed basis.



**Table 6. Summary of PEA operating cost estimates.**

<u>Operating Cost</u>	<u>\$/ton milled</u>
Mining (mill feed and waste)	40.00
Cement for paste fill	4.75
Paste Plant and Distribution	1.32
Surface Transport	1.40
Processing	21.70
G&A	8.50
<b>Total On-Site Costs</b>	<b>77.67</b>

### **PERMITTING**

Permits required for the development of the Shafter project are in place. Aurcana is not aware of any permitting-related impediment to commencing operations.

### **AURCANA NEAR-TERM DEVELOPMENT AND EXPLORATION PLANS**

With the release of a positive PEA study, Aurcana believes future work should include commencing the rehabilitation of the Shafter ramp which will permit establishment of underground drill stations to begin definition drilling.

Additional exploration and advanced engineering studies include:

- In-fill and step-out drilling.
- Variability tests of potential mill feed to confirm process plant performance and
- Refinement of engineering studies (mining, process, geotechnical, infrastructure, operating and capital cost estimation, etc.).

### **PEA PREPARATION AND QUALIFIED PERSONS**

The PEA was completed independently by Mine Development Associates, Reno and Samuel Engineering, Denver. The information in this news release that relates to the geology, resources and mining portions of the PEA was prepared by: Neil Prenn, P.Eng. and Paul Tietz, CPG, both from MDA. The information in this news release that relates to the processing and metallurgy portions of the PEA was prepared by: George Burgermeister P.E., of Samuel Engineering. Mr. Prenn, Mr. Tietz and Mr. Burgermeister are each independent qualified persons within the meaning of NI 43-101.

Jerry Blackwell, P.Geo., Director of Aurcana, a Qualified Person as defined by NI 43-101, reviewed and approved the technical information in this news release.

A technical report supporting the PEA will be filed on SEDAR within 45 days.

### **ABOUT SHAFTER**

- Silver mineralization at Shafter occurs as sub-horizontal bodies of variably silicified oxide mineralization in Permian limestone. Mineralization occurs over a 13,000 feet east-northeast strike length, is locally up to 1,200 feet across, and is locally up to 20 feet





thick. Thicknesses and silver grades can be highly variable.

- The western end of the Shafter Deposit was first exploited by the Presidio Mining Company from 1883 to 1926, when the American Metal Co. acquired the property and continued production (American Metal Co. subsequently merged with Climax Molybdenum Company to form American Metal Climax Inc., or Amax). From 1883 to 1942, when the Presidio mine was closed, total recorded production was 2.307 million tons of ore containing 35.153 million ounces of silver at an average grade of 15.24 ounces Ag/ton. The operation was then known as the Presidio Mine.
- Gold Fields Mining Corporation (“Gold Fields”) held the Shafter property 1977 to 1982. Gold Fields identified the northeastern, down-dip extension of the Shafter deposit, extending more than 5,000 feet from the deepest development workings in the Presidio mine, through a systematic surface-drilling program. During the 1980s, Gold Fields sunk a 1,052-foot shaft to access and explore this extension.
- Rio Grande Mining Company (“RGMC”) acquired Shafter in 1994 and in 2008 RGMC was purchased by Aurcana. Aurcana began exploration at Shafter in 2011 and has conducted geophysical surveying, drilling, mapping, and geochemical sampling since that time. Aurcana re-entered the old Presidio mine through a new decline in June 2012 with limited production commencing in December 2012 from mineralized materials found adjacent to Amax’s old stopes. During this time a mill, mineral processing plant and silver-recovery facility were constructed and brought on-line. The operation was placed on care and maintenance in December 2013.

#### **ABOUT AURCANA CORPORATION**

Aurcana Corporation owns the Shafter Silver Project in Texas, US. The Shafter Silver Project was put on care and maintenance in December 2013, in part due to depressed silver prices.

#### **ON BEHALF OF THE BOARD OF DIRECTORS OF AURCANA CORPORATION**

“Kevin Drover”, President & CEO

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#### **CAUTIONARY NOTES**

This press release contains forward looking statements within the meaning of applicable securities laws. The use of any of the words “anticipate”, “plan”, “continue”, “expect”, “estimate”, “objective”, “may”, “will”, “project”, “should”, “predict”, “potential” and similar expressions are intended to identify forward looking statements. In particular, this press release contains forward looking statements concerning the anticipated future results of mining activities on the Shafter property, including economic results thereof. Although the Company believes that the expectations and assumptions on which the forward looking statements are based are reasonable, undue reliance should not be placed on the forward looking statements because the Company cannot give any assurance that they will prove correct. Since forward looking statements address future events and conditions, they involve inherent assumptions, risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of assumptions, factors and risks. These assumptions and risks include, but are not limited to, assumptions and risks associated with



the result of drilling and exploration activities, that contracted parties provide goods and/or services on the agreed timeframes, risks related to future metals prices, that equipment necessary for exploration is available as scheduled and does not incur unforeseen break downs, that no labour shortages or delays are incurred, that plant and equipment function as specified, that no unusual geological or technical problems occur, and that laboratory and other related services are available and perform as contracted.

Management has provided the above summary of risks and assumptions related to forward looking statements in this press release in order to provide readers with a more comprehensive perspective on the Company's future operations. The Company's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward looking statements will transpire or occur, or if any of them do so, what benefits the Company will derive from them. These forward looking statements are made as of the date of this press release, and, other than as required by applicable securities laws, the Company disclaims any intent or obligation to update publicly any forward looking statements, whether as a result of new information, future events or results or otherwise.

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