



ENSIGN
MINERALS Inc.

CORPORATE UPDATE

January 2024

Forward Looking Statements

This presentation contains certain statements that constitute forward looking information within the meaning of applicable securities laws. These statements relate to future events of Ensign Minerals Inc. ("Ensign" or "the Company"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "forecast", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe", "outlook" and similar expressions) are not statements of historical fact and may be forward looking information. Forward looking information in this presentation includes, but is not limited to, statements with respect to successfully consolidating further land packages, Ensign's ability to raise sufficient capital to fund its obligations under its property option agreements, closing an initial public offering, drilling plans, financing success, discovery and production of minerals, metal prices and currency exchange rates, timing of technical reports and drill results, corporate and technical objectives, permitting success and relationships with stakeholders.

Forward looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such risks include, among others, the inherent risk of the mining industry; adverse economic and market developments; the risk that the Company will not be successful in completing additional acquisitions; risks relating to the estimation of mineral resources; the possibility that the Company's estimated burn rate may be higher than anticipated; risks of unexpected cost increases; risks of labour shortages; risks relating to exploration and development activities; risks relating to future prices of mineral resources; risks related to work site accidents, potential civil unrest, disputes with neighboring communities; risks related to geological uncertainties and variations; risks related to labor disputes; risks related to government and community support of the company's projects; risks related to global pandemics and other risks related to the mining industry. The Company believes that the expectations reflected in such forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information should not be unduly relied upon. These statements speak only as of the date of this presentation. The Company does not intend, and does not assume any obligation, to update any forward-looking information except as required by law.

The scientific and technical contents of this presentation have been approved by Mr. William Wulftange, P. Geo, Vice President, Exploration of Ensign Minerals Inc., who is a "Qualified Person" as defined by Canadian National Instrument 43-101 (Standards of Disclosure for Mineral Projects). Mr. Wulftange is not independent of Ensign Minerals Inc.

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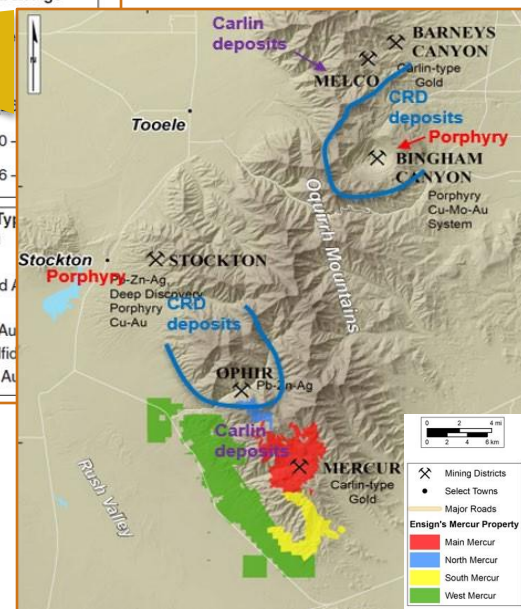
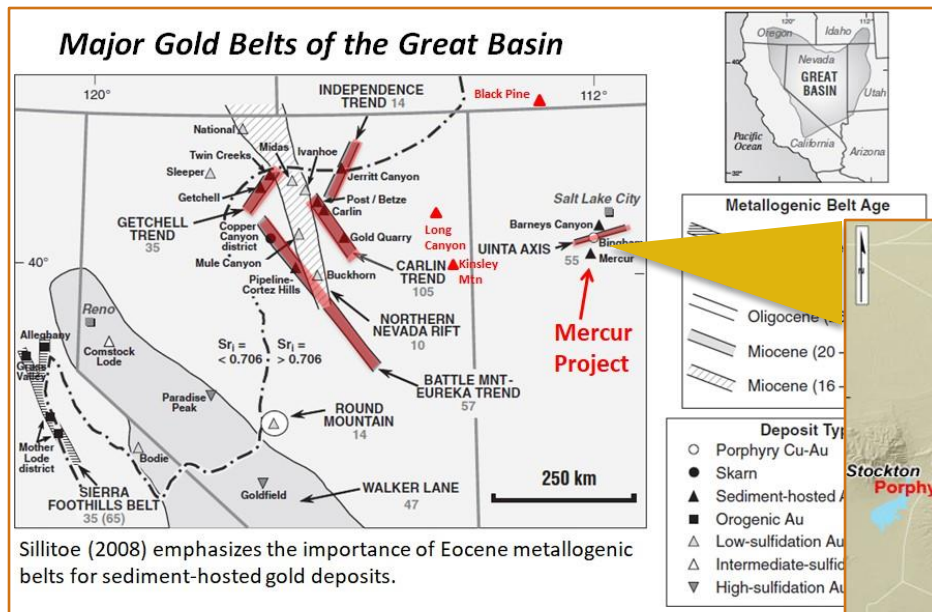
CAMP FLOYD

- 1859 US Government sets up Camp Floyd south of Salt Lake City with 2500 soldiers to quell Mormon 'rebellion'
- With no rebellion discovered, US disbanded camp in 1862
- Few prospectors from the military camp remained and setup the Camp Floyd Mining District in 1870
 - Discovered rich silver mines in the north and the town of Lewiston, "City of Silver" (1500 people)
 - Discovered the gold mineralization in 1883
 - First cyanide mill built in 1890's
 - Second largest town in Utah, Mercur, 5000 residents, a "City of Gold", produced 0.92M oz Au between 1890 and 1913.



OQUIRRH MOUNTAINS – HIGHLY MINERALIZED MOUNTAIN RANGE WITHIN THE GREAT BASIN

- Major gold belts in Great Basin trend north-west
- Mountain ranges trend north-west
- Oquirrh mountain range trends north-west
- Extensional tectonic forces have caused the north-west trending conduits



Utah's Oquirrh Mountains

ABOVE THE OQUIRRH MOUNTAIN BATHOLITH

Bingham Canyon

- Over 100 years in operation
- >\$300B metal content -- 31.5 million tonnes Cu, 50M oz Au, 468M oz Ag

Barneys Canyon¹

- Carlin-type gold deposit
- Produced > 2M oz Au from 1989-2013

Mercur Mine

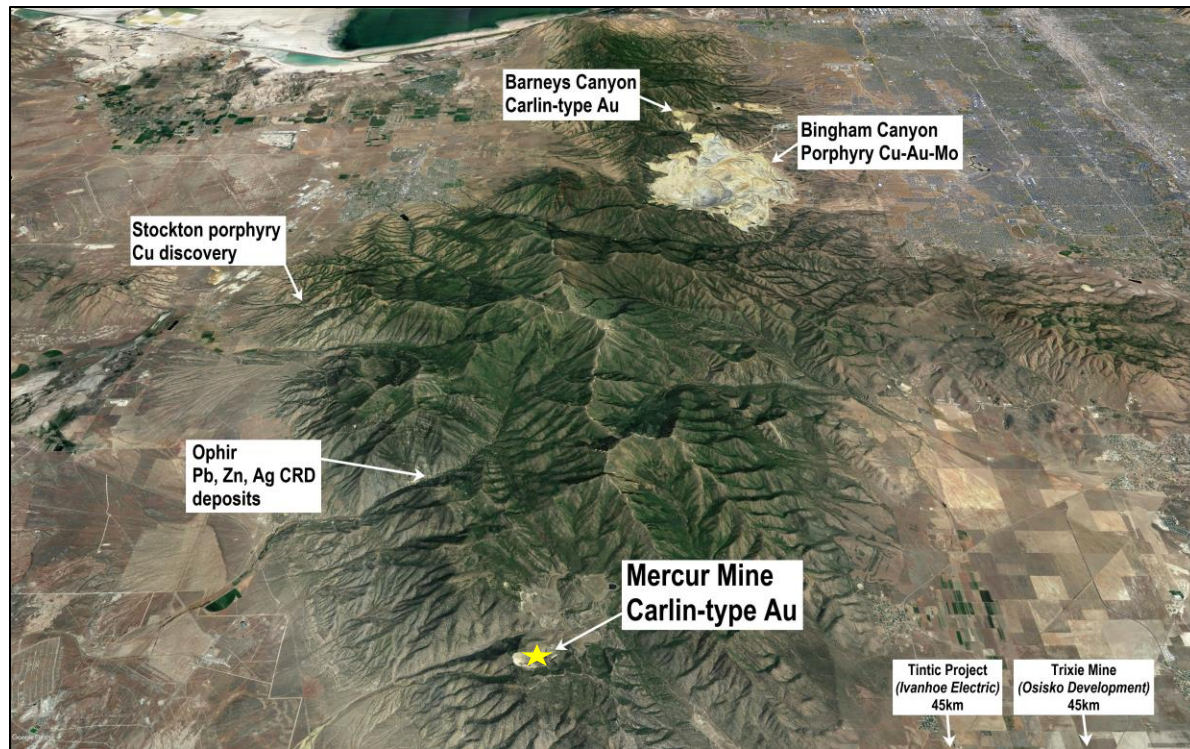
- Carlin-type gold deposit
- Produced > 2.6M oz Au

Ophir & Stockton

- Historical Pb, Zn, Ag districts
- Potential deep porphyry Cu system

Trixie Mine

- High-grade Au deposit
- Osisko Development acquired 100% ownership through acquisition of Tintic Consolidated Metals in May 2022

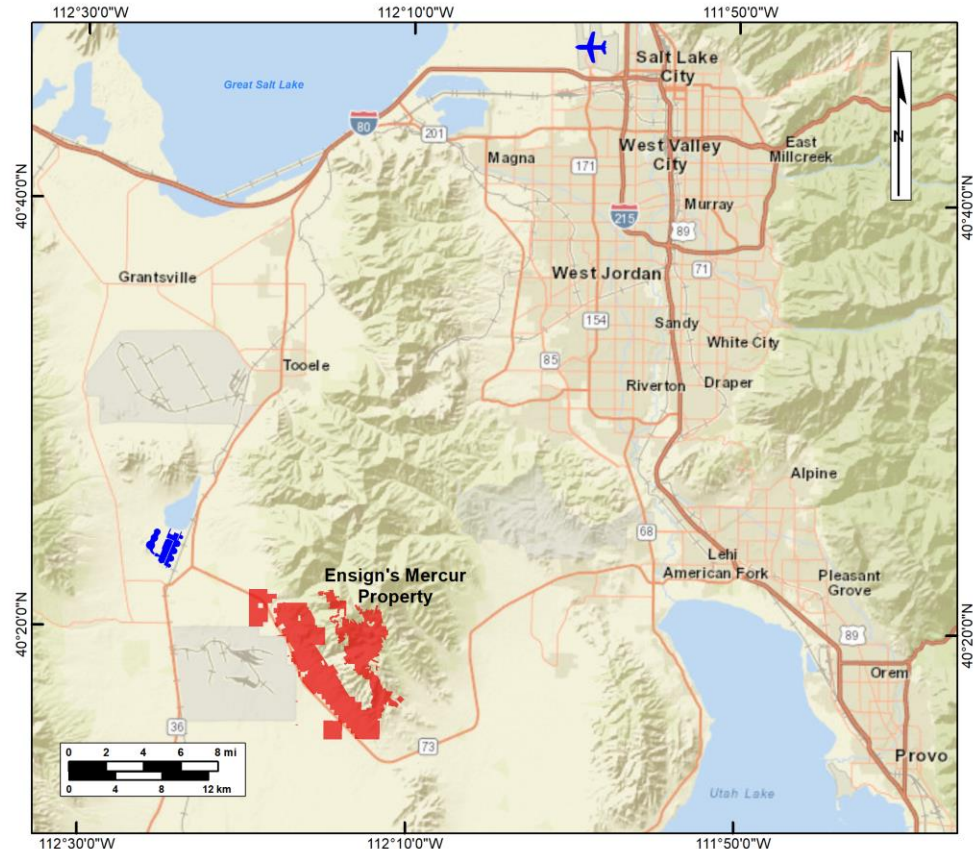


Location and Access

EASY ACCESS

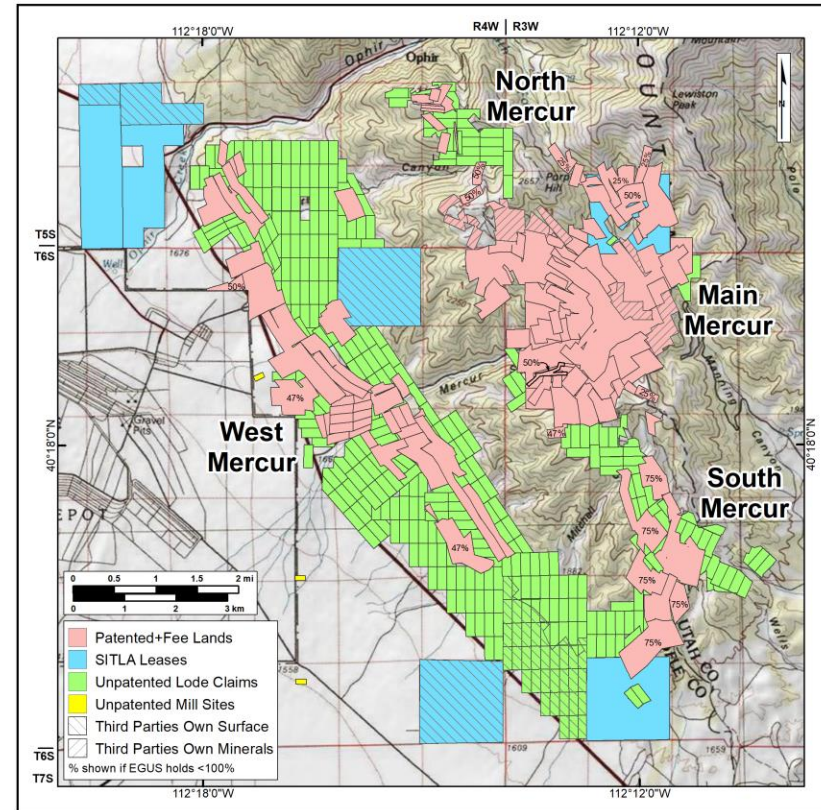
Mercur Site INFRASTRUCTURE

- A 1-hour drive from SLC airport, 30-minute drive from Tooele, 40-minute drive from Lehi, both potential workforce hubs
- Former Barrick mine offices and security gate still operational
- **Paved access road to Mercur Mine security gate**
- **Connected to grid power – 460Kw**

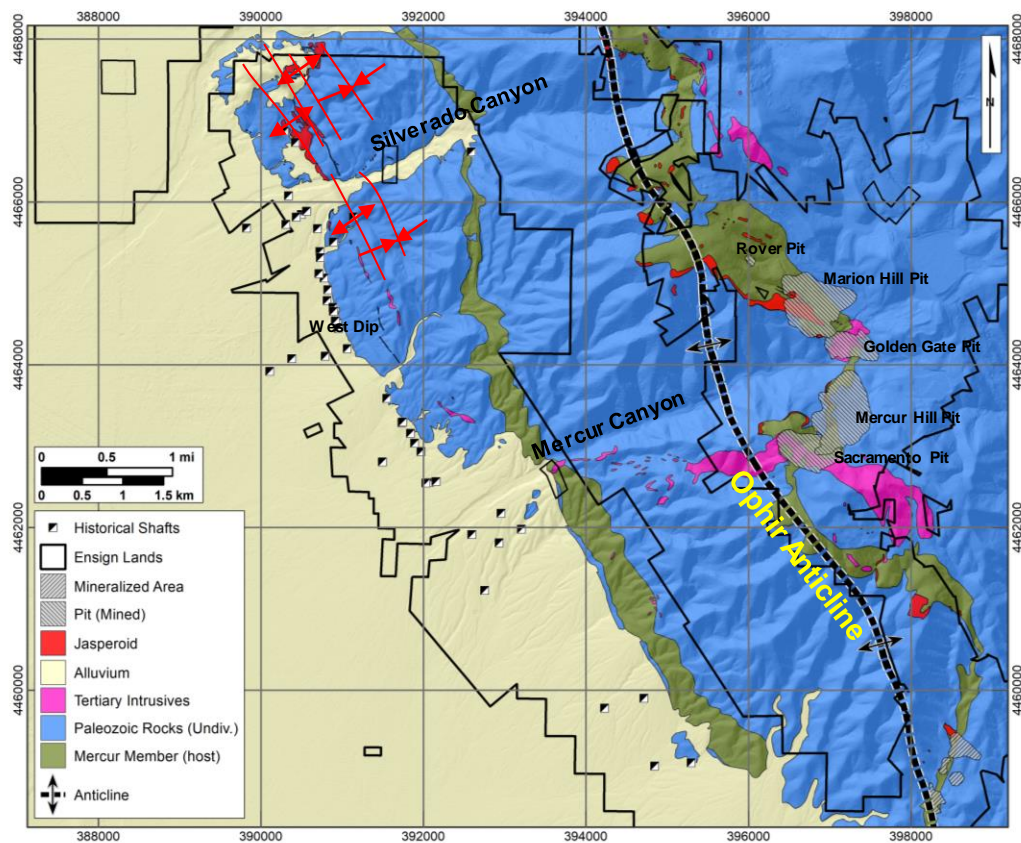


Known Gold Resource is on Private Land

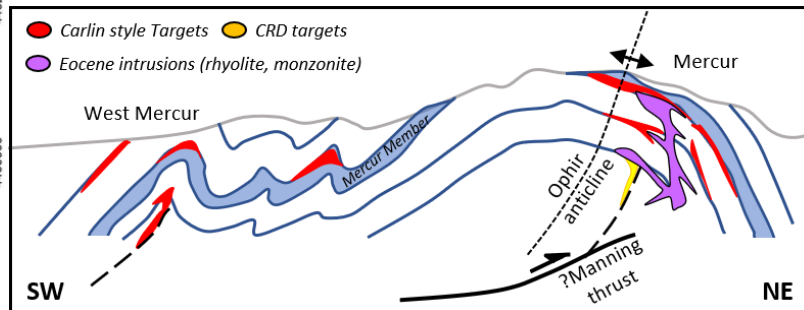
- Located in mining-friendly Utah, USA
 - Ensign consolidated a 6,255 ha (15,450 acres) land position over past 10 years
 - All mineral resources on private land allowing for ease of development (salmon-colored lands in adjacent map)
 - Historical Au produced from Carlin-type deposits
 - 1890-1917 – 0.92M oz from UG mines
 - 1931-1945 – 0.19M oz from reprocessing
 - 1983-1997 – 1.49M oz from OP (Getty/Barrick)
- Total Production ~2.60M oz Au
- Gold price was ~\$300/oz when mining stopped in 1997
 - No surface or groundwater in the mineralized area; no threatened/endangered species
 - Main Mercur area optioned from Barrick with a recently extended 2026 payment of C\$20M to own 100% interest



Mercur Property and Generalized Geology



- Folded NW-trending Paleozoic carbonate sequence with principal structure the Ophir Anticline, and inclined easterly vergent major open fold of Sevier (Cretaceous) age
- Rhyolite sills, dikes (Eagle Hill, Porphyry Hill) and stocks of late Eocene age intrude the sequence and are spatially associated with mineralization
- Carlin style mineralization at Mercur mainly on east limb-hinge area of Ophir Anticline in Mercur Member of Mississippian Great Blue Limestone
- At West Mercur, mineralization occurs at higher stratigraphic levels, illustrating the potential for mineralization at different horizons



MERCUR INFERRED RESOURCE

- Inferred resource estimate of 89 million tonnes, containing ~1.6 million ounces Au @ 0.57 g/t Au, prepared in accordance with NI 43-101.

Deposit	Ore Tonnes	Au g/t	Gold (Ounces) *
Main Mercur	74,100,000	0.57	1,350,000
South Mercur	15,600,000	0.59	290,000
Total	89,600,000	0.57	1,640,000

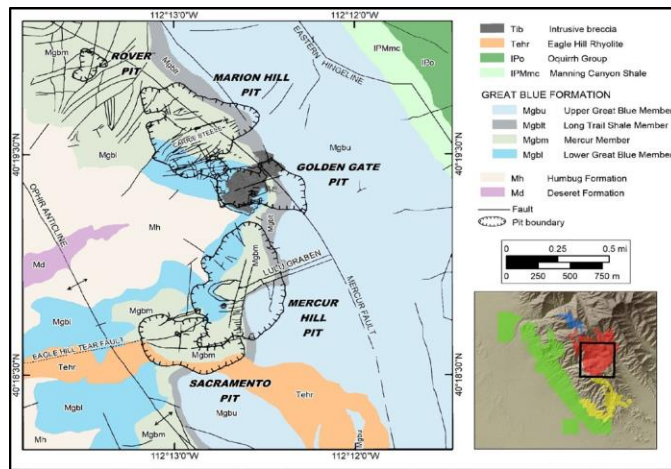
- Substantial historical work undertaken (over 272km of drilling and up to US\$4m of direct cyanide (“DCN”) testing performed).

- Ensign has also spent ~US\$8m including:

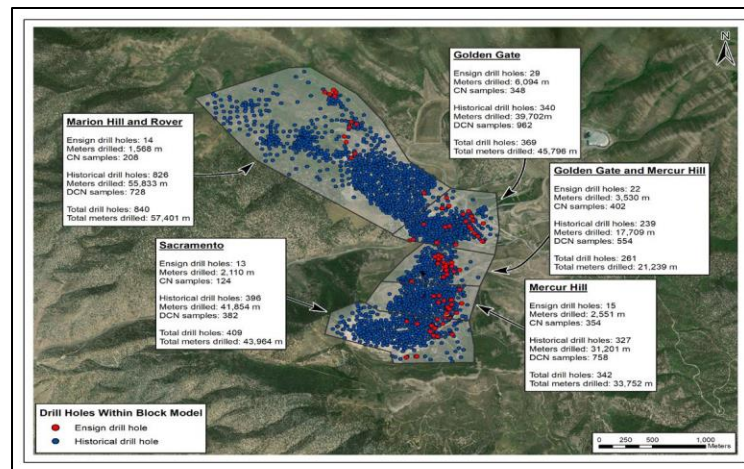
- Main Mercur:
 - 87 RC holes (14,221m) and 10 core holes (1,778m).
- South Mercur: 13 RC holes (1,724m).
- West Mercur: 4 RC holes (495m)

* Rounding may result in apparent discrepancies between tonnes, grade and contained metal content.

Deposits Located in the Main Mercur Area



Drilling and DCN Testing Performed



TAURA GOLD TRANSACTION

- October 23rd, 2023 Ensign and Taura announced a transaction for two Taura shares (C\$0.23/sh) to one Ensign share valuing Ensign at C\$0.46/share
- In January 2024, Ensign and Taura mutually terminated the agreement after discovering a topographical error that reduced the resource from 1.7M oz to 1.64M oz – and were not able to come to terms on valuation
- Fund raising for junior gold companies remains challenging – no different for Taura

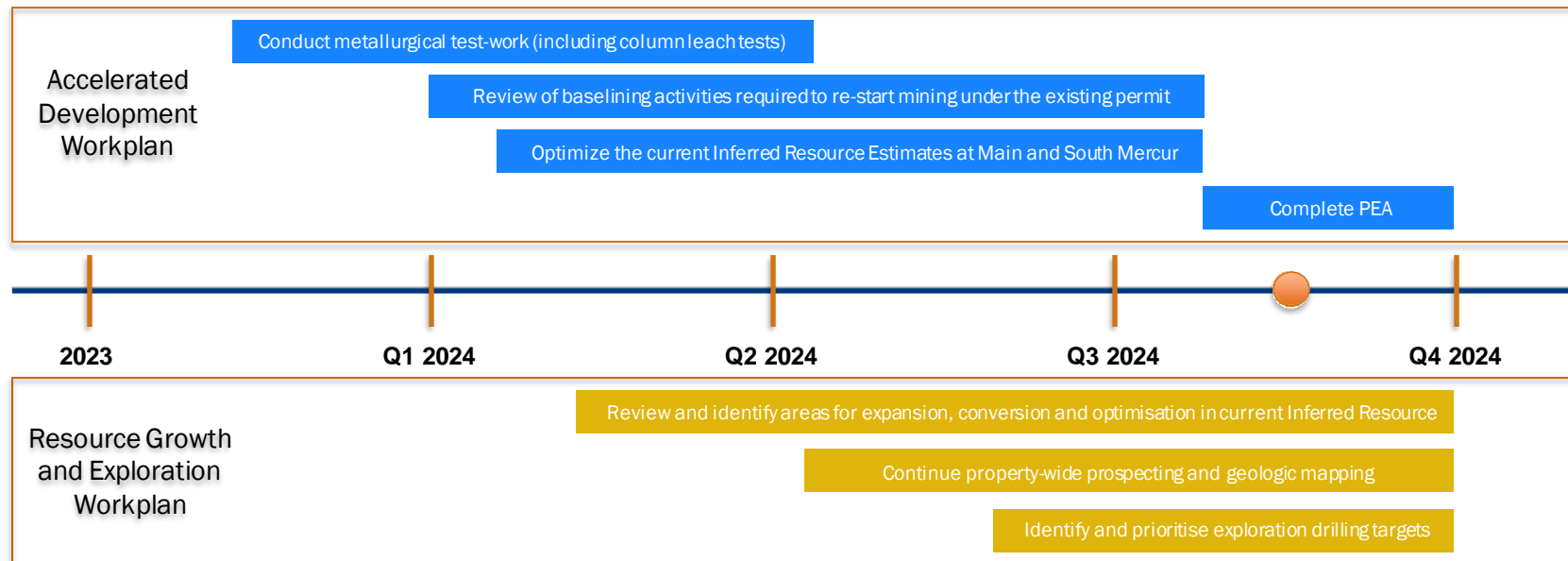
LESSONS FROM TAURA TRANSACTION

1. Taura proposed a mine development scenario with open pit heap leach operation first and then exploration from mine cash flow to enlarge the endowment
 - Favorable development scenario on private lands in Utah
 - Accelerated PEA, then Feasibility Study
2. Barrick Option Agreement with \$20 million upfront payment expensive in this market environment – working on renegotiating agreement to four \$5 million payments out of mine production
3. Junior public companies have a difficult time raising money like Ensign, a private junior mining company – **we need to combine with a larger mining company with better access to capital markets**

A PROPOSED DEVELOPMENT PATHWAY

Key Focus over the next 12 to 18 months

- Development Pathway: Targeting a Preliminary Economic Assessment (“PEA”) in Q4 2024 by incorporating metallurgical test work and confirming baseline studies and other permitting activities required to restart mining under the existing Mercur Mine Permit (M/045/0017)
- Resource Growth and Exploration: Continue to focus on resource expansion and exploration opportunities to grow the project.



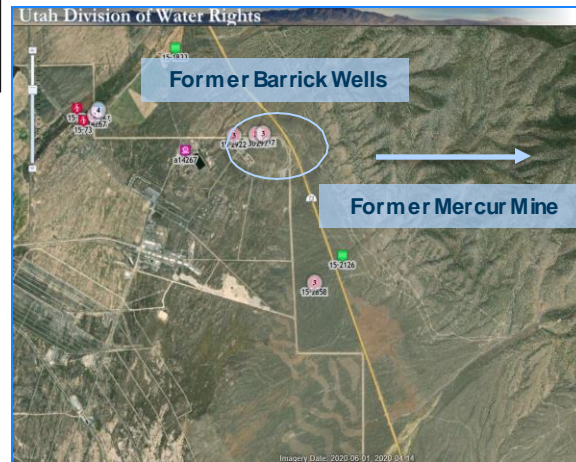
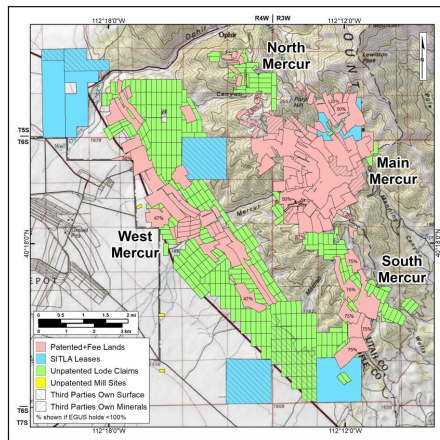
PERMITTING ADVANTAGES AND INFRASTRUCTURE

Permitting Advantages

- Mining friendly jurisdiction – Utah was ranked 4th in the Fraser Institute Investment Policy Perception Index.
- Permitting advantages with the Mercur Mine Permit (M/045/0017) still active.
- Existing mineral resources primarily on private land allowing for ease of development.
- No surface or groundwater in the mineralized area and there are no threatened or endangered species.

Excellent Infrastructure

- Paved access road to Mercur Mine security gate.
- Former Barrick mine offices and security gate still operational.
- Site connected to grid power – 460Kw.
- Potential access to water - Barrick sold its water wells, water rights and a 50% interest in the land that holds 3 of the wells to Tooele County. The wells provided sufficient water for mining operations and are currently not in use.



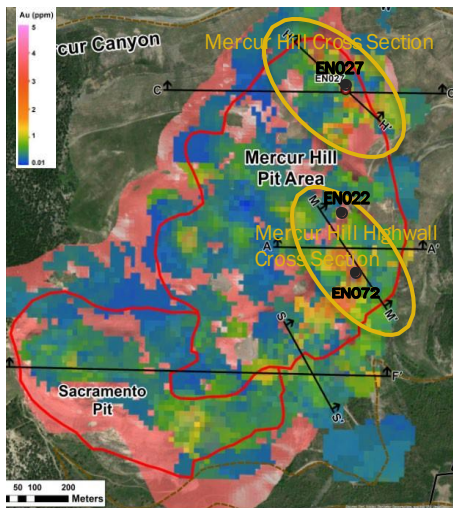
MERCUR HILL -- HIGHER GRADE POTENTIAL TO EAST

■ Drilling results include:

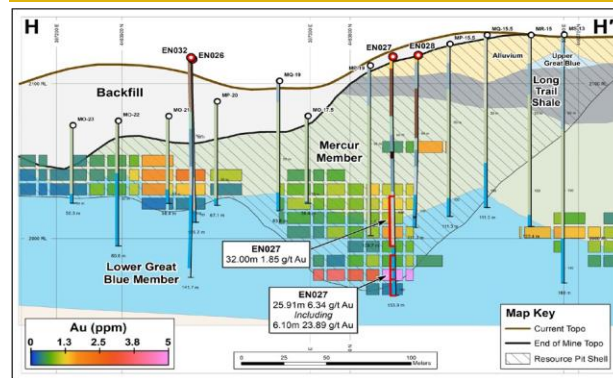
- 38.1 meters @ 2.05 g/t from 68.6m in drill hole EN022
- 24.4 meters @ 1.24 g/t from 79.2m and 47.2 meters @ 2.20 g/t from 135.6m in drill hole EN072
- 32 meters @ 1.85 g/t in the Mercur Member and 25.9 meters @ 6.34 g/t in the Lower Great Blue limestone in drill hole EN027, one of the highest-grade mineral intercepts ever drilled on the property.

■ Resource expansion potential includes:

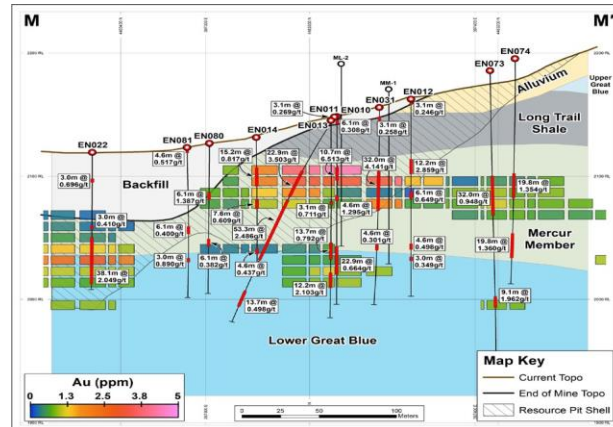
- Mercur Pit highwall contains high-grade and continuous gold mineralization.
- Continued expansion to the SE.
- Possible structural feeder beneath Mercur Hill Pit as highlighted by EN027.



Mercur Hill Cross Section

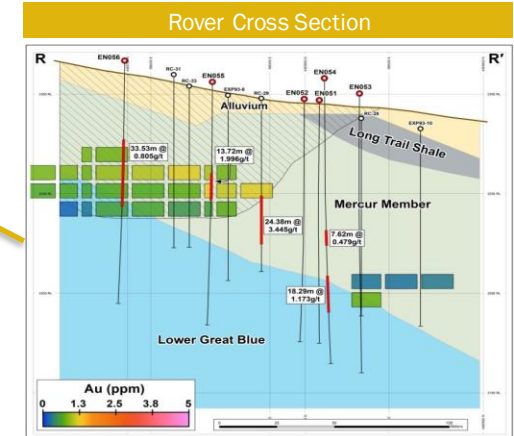
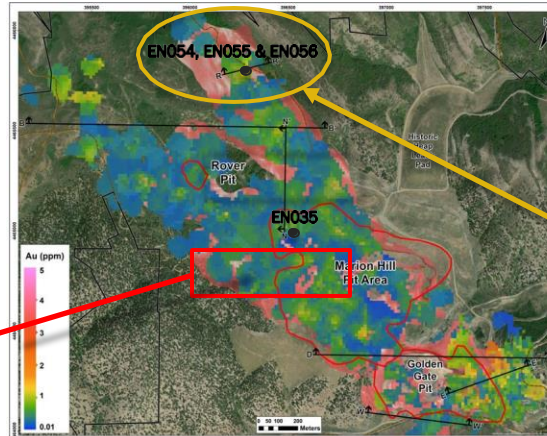


Mercur Hill Highwall Cross Section



MARION HILL-ROVER OXIDE POTENTIAL

- NW trending mineral envelope with broad, near surface mineralization.
- Several resource expansion opportunities including:
 - Marion Hill – up dip to the NW



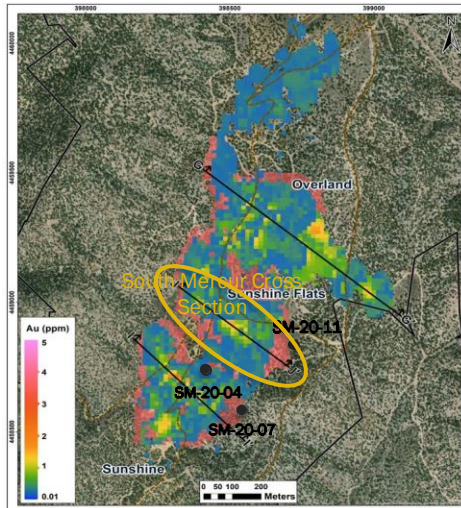
- Drilling results include:
 - 33.5 meters @ 0.80 g/t from 39.6m in drill hole EN056
 - 16.8 meters @ 0.72 g/t from 51.8m in drill hole EN035

- Targets for resource expansion include the northernmost area where drilling by Ensign returned:
 - 7.6m @ 0.48 g/t Au from 76.2m and 18.3m @ 1.17 g/t Au from 99.1m in drill hole EN054
 - 13.7m @ 2.00 g/t Au in drill hole EN055

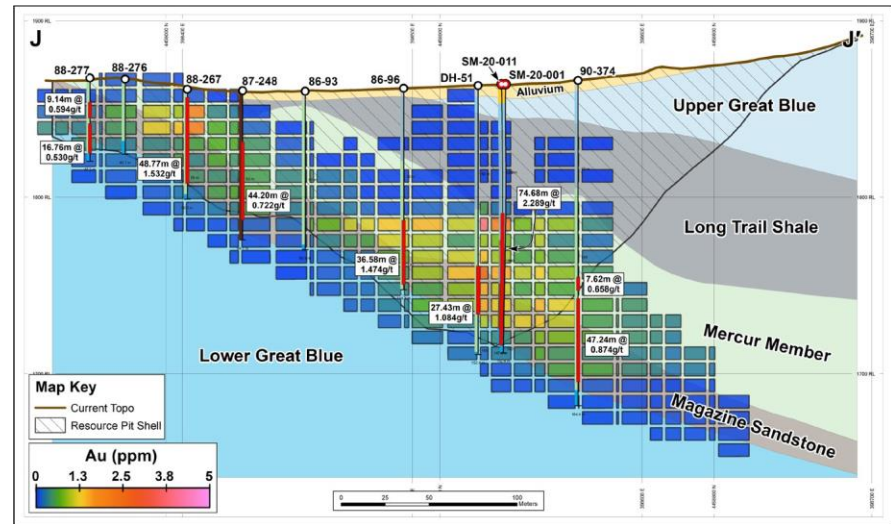


SOUTH MERCUR

- Historical underground production of approximately 20,000 ounces occurred during the periods 1895-1913 and 1936-1941.
- Gold mineralization occurs along a 2.3km-long corridor and considered to be a southern continuation of the deposits in the Main Mercur area.



South Mercur Cross Section



South Mercur has been lightly explored and holds potential for near-term resource expansion with several attractive results returned along the eastern flank of the deposit, including:

- 44.2m @ 1.50 g/t Au from 13.7m downhole in drill hole SM-20-04
- 65.5m @ 2.39 g/t Au from 39.6m including 3.0m @ 15.12 g/t Au in drill hole SM-20-07
- 74.7m @ 2.29 g/t Au from 73.2m including 4.6m @ 6.93 g/t Au in drill hole SM-20-011



PATHWAY FORWARD

- Small financing of 1M shares at C\$0.34 to provide six months window of cash to merge with larger public gold company (less than \$10/oz Au = 52M shares*\$C0.34/share*0.74 USD/\$CND*1/1.6M oz Au)
- Complete NI 43-101 Technical Report
- Re-negotiate Barrick Agreement

Capital Structure & Current Ownership

Capital Structure

As at Jan 18, 2024

Basic Shares Outstanding (M)	52.0
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Warrants (M)

6.8

1.2M @ C\$1.00

8.1M @ C\$1.50

3.0M @ C\$0.25

1.2M @ C\$0.50

Options (M)

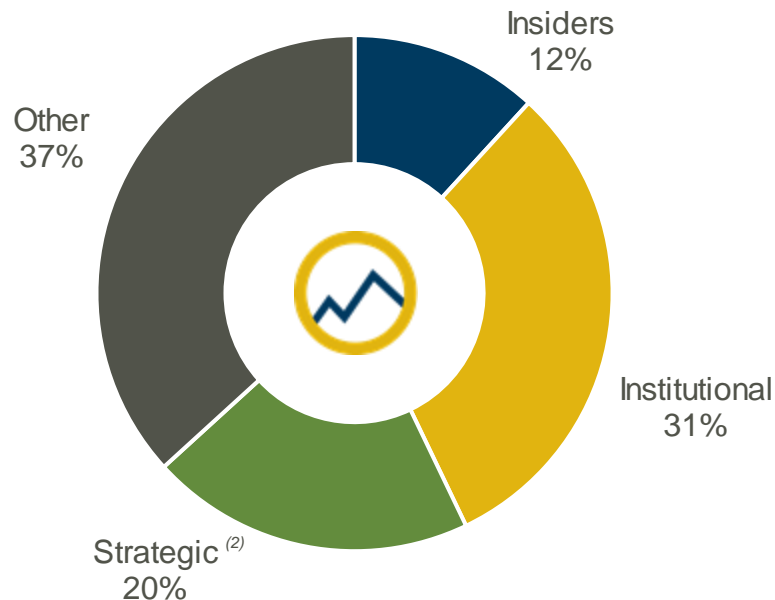
3.8

Fully Diluted Shares Outstanding (M)	60.0
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Cash on Hand (US\$M) ⁽¹⁾	\$0.10
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Debt Outstanding (US\$M)	-
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Ownership Structure



BOARD OF DIRECTORS

John Knowles, Chairman

+30 years of board and executive experience in Canadian and international resource companies
Served as a senior officer of a number of resource companies
Chartered Professional Accountant and holds a Bachelor of Commerce degree

Wayne Hubert, Director

+25 years of senior management experience in the mining sector
Former President & CEO of Andean Resources Ltd., until the acquisition for \$3.5B
Holds a Bachelor of Science degree in Chemical Engineering and an MBA

Norm Pitcher, P. Geo, Non-Executive Director

+30 years of experience in the mining industry
Former President & COO of Eldorado Gold
Professional Geologist and holds a Bachelor of Science in Geology

Krista Muhr, Non-Executive Director

+20 years of experience working with public companies in the global metals and mining sector
Former Senior Vice President, External Affairs and Sustainability for Eldorado Gold
Holds a Bachelor of Commerce degree

Ann Carpenter, Non-Executive Director

+35 years of international experience in mining and mineral development.
CEO and Director of Remote Energy Solutions LLC
Holds a Bachelors in Geology

Stabro Kasaneva, Non-Executive Director

+30 years of experience in production geology, exploration and management of precious metal mining operations
Executive Director & CEO of Austral Gold

MANAGEMENT

Wayne Hubert, President & CEO, Director

+25 years of senior management experience in the mining sector
Former President & CEO of Andean Resources Ltd., until the acquisition for \$3.5B
Holds a Bachelor of Science degree in Chemical Engineering and an MBA

David Mako, P. Geo, MSc, VP, Generative Geology & Land

+35 years exploration experience.
Former VP USA Exploration for Barrick
Certified professional geologist

Greg Smith, Corporate Secretary

+30 years experience practicing corporate and securities law
Retired lawyer and a former partner of a national Canadian law firm

David Rhys, P. Geo, Advisor, Consulting Structural Geologist

+30 years in the mining industry applying geological studies with a structural geology focus to exploration, development and mining
Holds a BSc., and a M.Sc., Geological and Earth Sciences/Geosciences

CONTACT US

Wayne Hubert
whubert@ensigngold.com
www.ensignminerals.com



Appendix A – Sections from the N to S (Viewing North)

Direct CN- (%)
 ▲ Clipped Block Model DCN Points

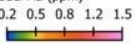


Net Smelter Return

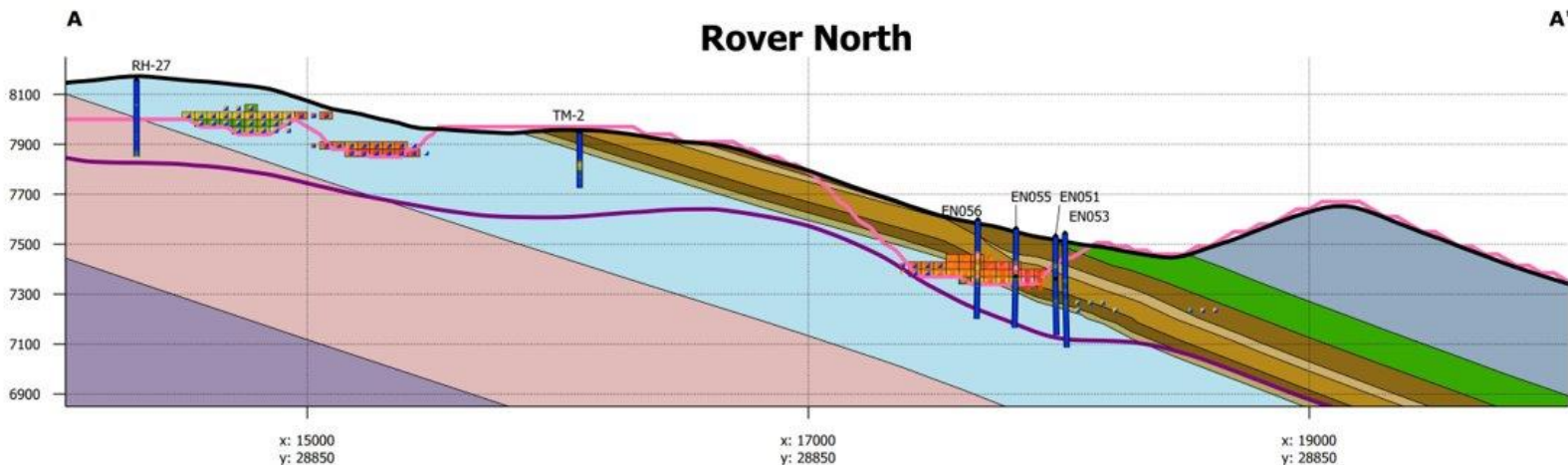
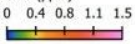
▼ Mercur Model



Block Model Au (ppm)



Drill Holes Au (ppm)



Surfaces

— Topo Current — Mineralized Zone Base — Heap Leach 1800 Pit Base — Topo EOM

Main Mercur Geologic Model

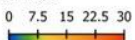


View to the North

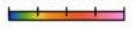
Direct CN- (%)
 ▲ Clipped Block Model DCN Points



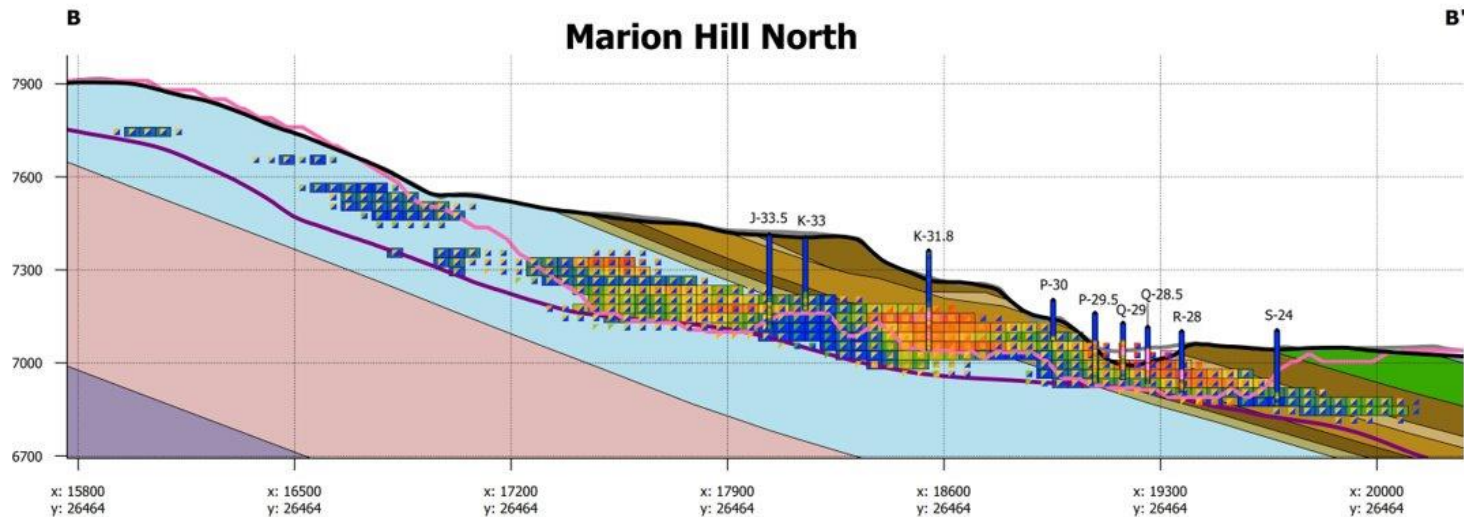
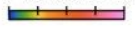
Net Smelter Return
 ▽ Mercur Model



Block Model Au (ppm)



Drill Holes Au (ppm)



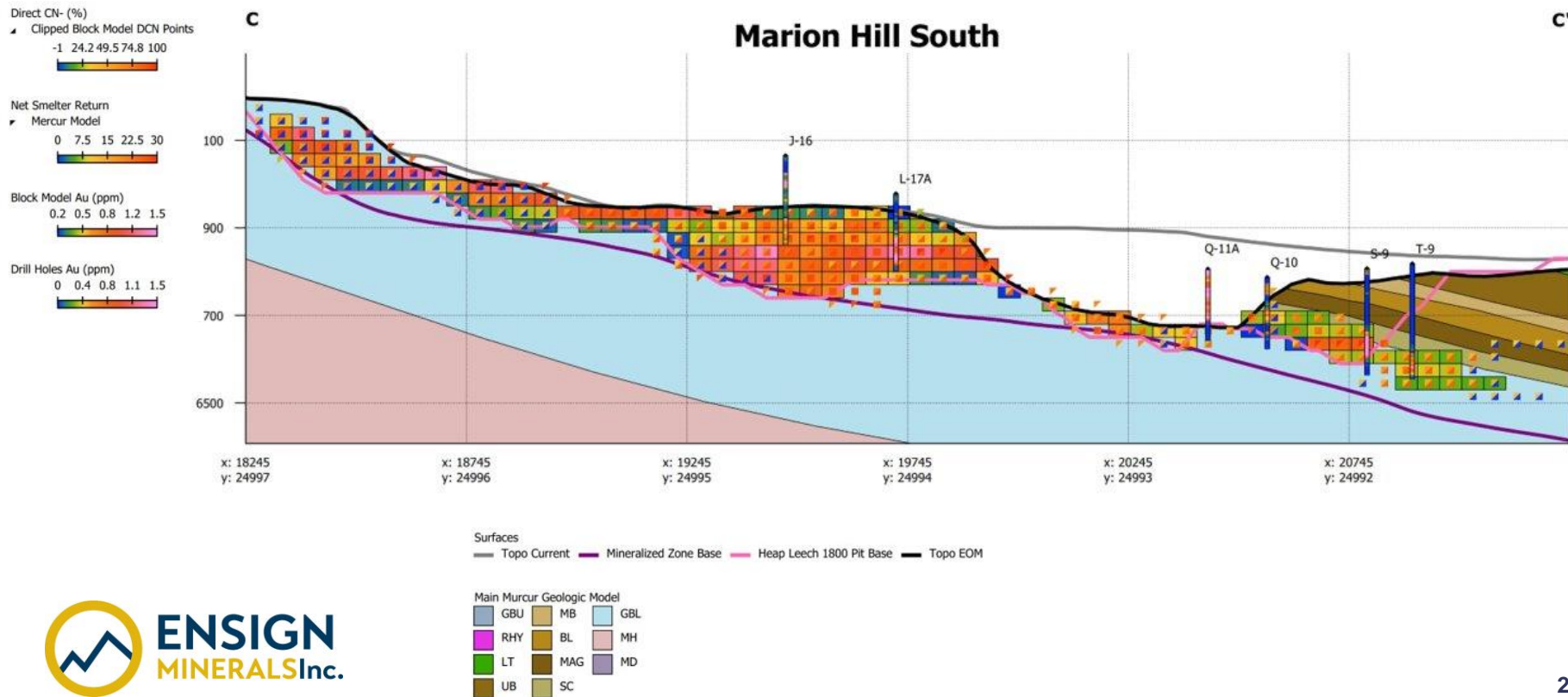
Surfaces

— Topo Current — Mineralized Zone Base — Heap Leech 1800 Pit Base — Topo EOM

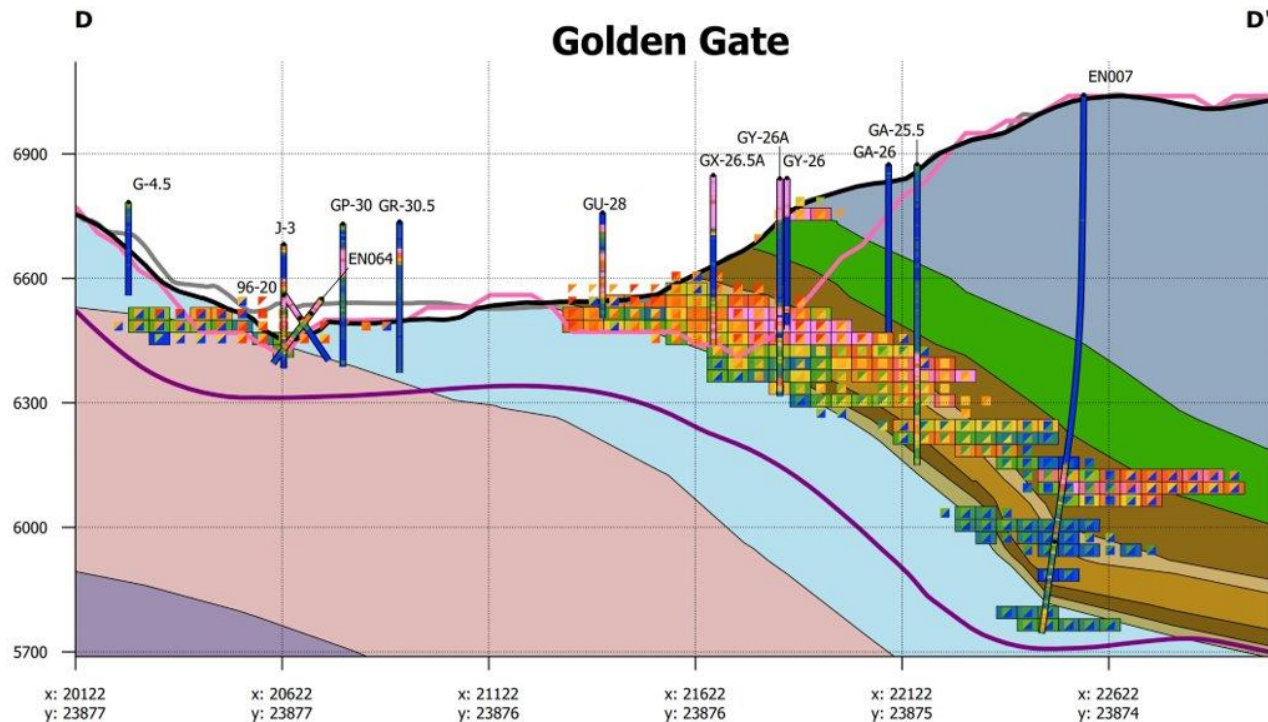
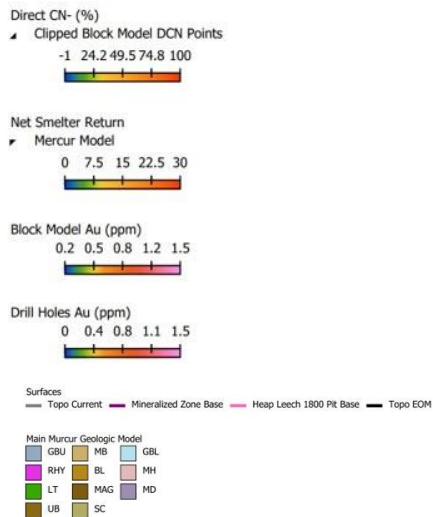
Main Murcur Geologic Model



View to the North



View to the North



View to the North

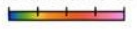
Direct CN- (%)
 ▲ Clipped Block Model DCN Points



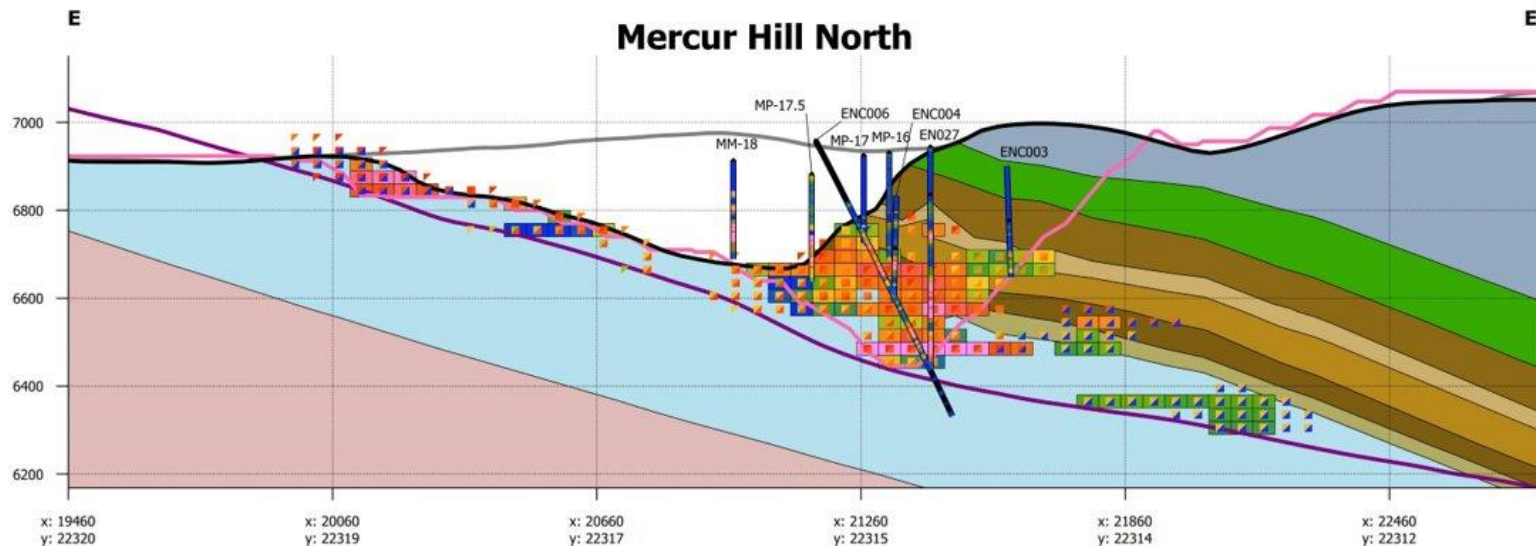
Net Smelter Return
 ▽ Mercur Model



Block Model Au (ppm)



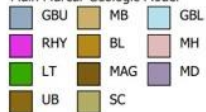
Drill Holes Au (ppm)



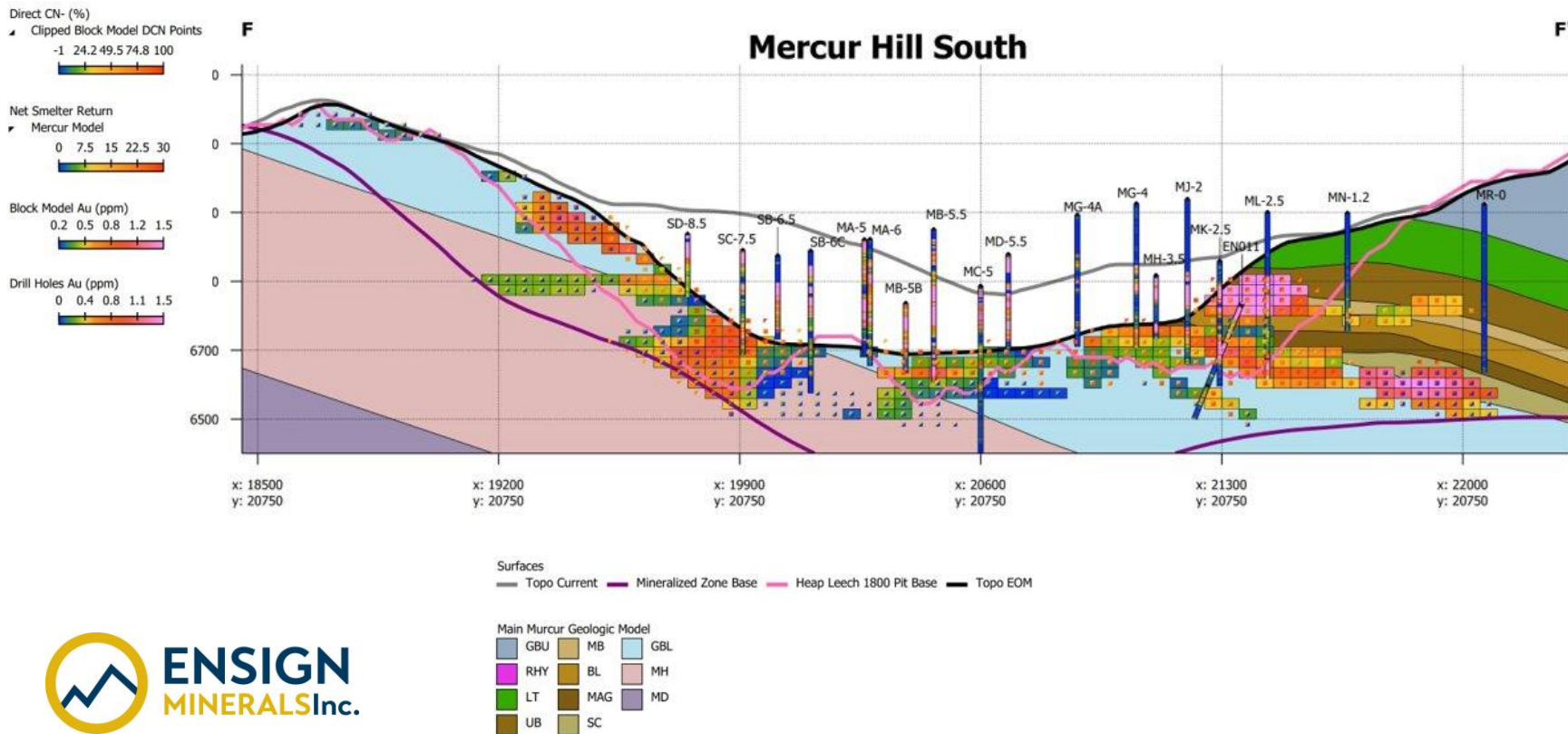
Surfaces

— Topo Current — Mineralized Zone Base — Heap Leach 1800 Pit Base — Topo EOM

Main Mercur Geologic Model



View to the North



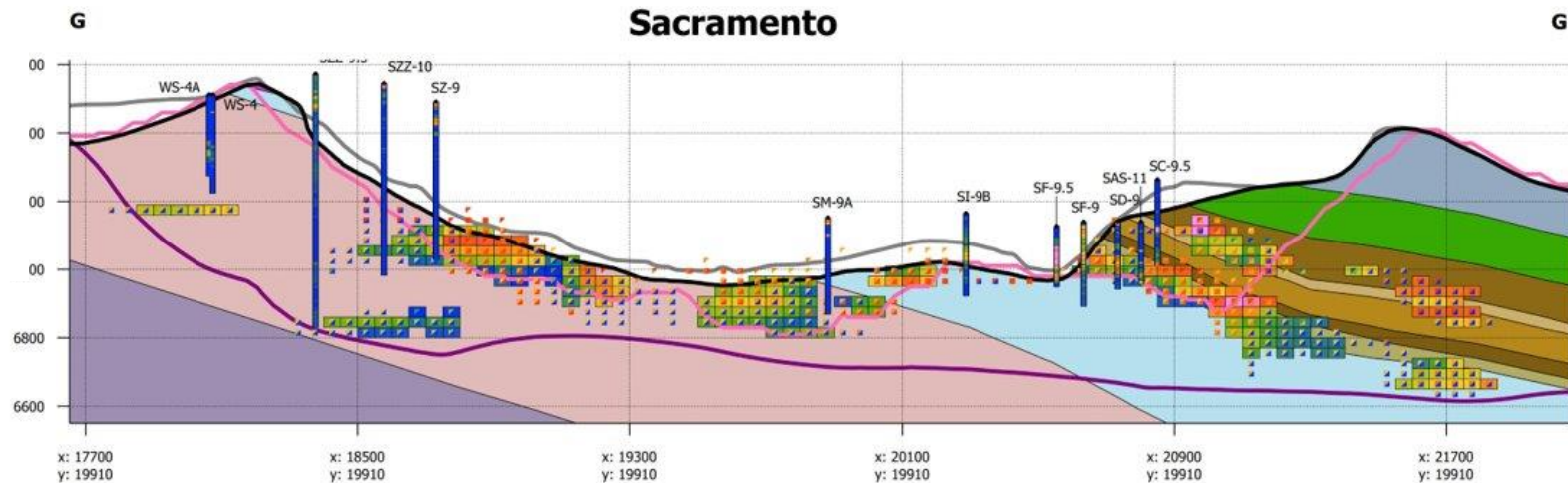
View to the North

Direct CN- (%)
 ▲ Clipped Block Model DCN Points
 -1 24.2 49.5 74.8 100

Net Smelter Return
 ▽ Mercur Model
 0 7.5 15 22.5 30

Block Model Au (ppm)
 0.2 0.5 0.8 1.2 1.5

Drill Holes Au (ppm)
 0 0.4 0.8 1.1 1.5



APPENDIX B - 2021 Mercur Mine RC Drill Program Assay Results

SIGNIFICANT 2021 Assay Results Mercur Mine					Observations	
DHID	From (m)	To (m)	Length (m)	Avg Grade (ppm)	Host Lithologies	TARGET
EN001	0.0	9.1	9.1	2.24	Dump	GG
EN002	109.7	135.6	25.9	3.01	Upper Beds, Historical Workings	GG
EN003	117.3	147.8	30.5	1.26	Mercur Beds, Tailings, Barren Limestone	GG
EN004	120.4	146.3	25.9	2.84	Mercur Beds, Barren Limestone	GG
EN007	272.8	295.7	22.9	1.50	Upper Beds	GG
EN009	51.8	82.3	30.5	1.46	Dump, Magazine Sandstone, Rhyolite, Lower Great Blue	SC pit
EN010	41.1	51.8	10.7	6.51	Upper Beds	SC pit
EN011	50.3	73.2	22.9	3.50	Upper Beds	SC pit
and	76.2	129.5	53.3	2.49	Mercur Beds, Barren Limestone, Magazine Sandstone, Lower Great Blue	SC pit
EN012	48.8	61.0	12.2	2.86	Upper Beds	SC
EN013	123.4	135.6	12.2	2.10	Lower Great Blue	SC
EN018	13.7	27.4	13.7	2.60	Rhyolite, Upper Beds	SAC
and	65.5	103.6	38.1	2.21	Magazine Sandstone, Silver Chert, Lower Great Blue	SAC
EN022	68.6	106.7	38.1	2.05	Magazine Sandstone, Lower Great Blue	MH
EN024	45.7	59.4	13.7	2.10	Barren Limestone	SAC
EN025	68.6	77.7	9.1	3.59	Mercur Beds, Barren Limestone	SAC
and	82.3	99.1	16.8	4.91	Barren Limestone	SAC
and	126.5	143.3	16.8	1.05	Silver Chert, Lower Great Blue	SAC
EN026	71.6	96.0	24.4	1.61	Barren Limestone, Mag Sandstone, Silver Chert	MH
EN027	59.4	67.1	7.6	1.47	Barren Limestone, WRK	MH
and	89.9	121.9	32.0	1.85	Magazine Sandstone, Silver Chert	MH
and	128.0	153.9	25.9	6.34	Lower Great Blue	MH
Cutoff= 0.2ppm, QAQC program approved.						
GG=Golden Gate, SC=Sacramento, MH=Mercur Hill, MrH=Marion Hill, SMO=South Mercur Overland.						

SIGNIFICANT 2021 Assay Results Mercur Mine					Observations	
DHID	From (m)	To (m)	Length (m)	Avg Grade (ppm)	Host Lithologies	TARGET
EN028	54.9	59.4	4.6	1.68	Mercur Beds	MH
EN029	36.6	41.1	4.6	3.73	Upper Beds	MH
and	48.8	62.5	13.7	2.05	Upper Beds, Mercur Beds	MH
EN030	41.1	50.3	9.1	3.09	Upper Beds, Mercur Beds	MH
EN031	51.8	83.8	32.0	4.14	Upper Beds, Mercur Beds	SAC
EN032	71.6	88.4	16.8	2.89	Magazine Sandstone, Silver Chert	MH
EN033	0.0	19.8	19.8	1.16	Dump	GG
EN035	51.8	68.6	16.8	0.72	Magazine Sandstone, Silver Chert	MrH
EN036	27.4	83.8	56.4	0.82	Barren Limestone, Magazine Sandstone, Silver Chert, Lower Great Blue	RV
EN037	57.9	83.8	25.9	0.68	Barren Limestone, Magazine Sandstone	RV
EN038	48.8	62.5	13.7	1.94	Magazine Sandstone, Silver Chert	RV
EN043	29.0	68.6	39.6	0.86	Mag SS, Silver Chert, Lower Great Blue	MrH
EN044	0.0	15.2	15.2	1.32	Dump, Upper Great Blue	GG
EN045	0.0	16.8	16.8	1.38	Dump, Alluvium, Upper Great Blue	GG
EN047	138.7	150.9	12.2	2.47	Upper Beds, Mercur Beds	GG
EN048	134.1	144.8	10.7	1.41	Upper Beds, Mercur Beds	GG
EN049	129.5	144.8	15.2	1.01	Upper Beds, Mercur Beds	GG
WM003	59.4	73.2	13.8	2.87	Alluvium, Upper Great Blue	LC
SM012	80.8	88.4	7.6	2.89	Barren Limestone	SMO
SM013	129.5	143.3	13.7	1.75	Upper Beds, Mercur Beds, Barren Limestone	SMO
Cutoff= 0.2ppm, QAQC program approved.						
GG=Golden Gate, SC=Sacramento, MrH=Mercur Hill, MH=Marion Hill, SMO=South Mercur Overland.						

APPENDIX B (con't) - 2022 Mercur Mine RC Assay Results

RC Drilling: 2022 Assay Results ¹					Observations	
DHID	From (m)	To (m)	Length (m)	Avg Grade (g/t)	Host Lithologies	Target ²
EN054	76.2	83.8	7.6	0.48	Barren Limestone	RH
and	99.1	117.3	18.3	1.17	Magazine Sandstone, Silver Chert, Lower Great Blue	RH
EN055	45.7	59.4	13.7	2.00	Barren Limestone	RH
EN056	39.6	73.2	33.5	0.80	Barren Limestone, Magazine Sandstone, Silver Chert, Lower Great Blue	RH
EN057	53.3	64.0	10.7	0.59	Magazine Sandstone, Silver Chert	MH
and	111.3	117.3	6.1	0.32	Lower Great Blue	MH
EN059	195.1	204.2	9.1	2.69	Upper Beds	GG
and	216.4	227.1	10.7	0.43	Upper Beds, Mercur Beds	GG
and	277.4	288.0	10.7	0.36	Silver Chert, Lower Great Blue	GG
EN060	0.0	4.6	4.6	1.82	Dump	GG
EN061	6.1	16.8	10.7	1.64	Mercur Beds, U/G Workings	GG
and	53.3	77.7	24.4	0.56	Magazine Sandstone, Silver Chert, Lower Great Blue	GG
EN062	0.0	10.7	10.7	0.45	Dump	GG
EN063	0.0	7.6	7.6	0.50	Dump	GG
and	24.4	27.4	3.0	0.28	Lower Great Blue	GG
EN064	0.0	30.5	30.5	0.64	Dump	GG
and	35.1	47.2	12.2	0.93	Dump, Humbug Formation	GG
EN065	1.5	15.2	13.7	0.92	Dump	GG
EN066	1.5	27.4	25.9	0.56	Dump	MrH
and	71.6	76.2	4.6	2.74	Magazine Sandstone	MrH
and	109.7	117.3	7.6	0.31	Lower Great Blue	MrH
and	123.4	126.5	3.0	0.88	Lower Great Blue	MrH
EN067	0.0	3.0	3.0	0.62	Dump	MrH
and	9.1	16.8	7.6	0.32	Dump	MrH
and	83.8	105.2	21.3	2.18	Blue Limestone, Magazine Sandstone, Silver Chert	MrH
and	112.8	115.8	3.0	0.51	Lower Great Blue	MrH
EN068	0	36.6	36.6	0.36	Dump	MrH
and	61.0	94.5	33.5	1.80	Magazine Sandstone, Silver Chert, Lower Great Blue	MrH
and	99.1	103.6	4.6	0.41	Lower Great Blue	MrH
EN069	0.0	36.6	36.6	0.44	Dump	MrH
and	44.2	47.2	3.0	0.49	Mercur Beds	MrH
and	77.7	83.8	6.1	0.83	Magazine Sandstone, Silver Chert	MrH

RC Drilling: 2022 Assay Results ¹					Observations	
DHID	From (m)	To (m)	Length (m)	Avg Grade (g/t)	Host Lithologies	Target ²
EN070	0.0	93.0	93.0	0.73	Dump, Magazine Sandstone, Silver Chert	MrH
and	108.2	115.8	7.6	1.17	Lower Great Blue	MrH
EN071	9.1	36.6	27.4	1.66	Upper Beds, Mercur Beds, Barren Limestone	MrH
EN072	79.2	103.6	24.4	1.24	Upper Beds, Mercur Beds, Barren Limestone	MrH
and	135.6	182.9	47.2	2.20	Silver Chert, Lower Great Blue	MrH
EN073	85.3	117.3	32.0	0.95	Upper Beds, Mercur Beds	MrH
and	182.9	192.0	9.1	1.96	Lower Great Blue	MrH
EN074	93.0	112.8	19.8	1.35	Upper Beds, Mercur Beds, Barren Limestone	MrH
and	141.7	161.5	19.8	1.36	Silver Chert, Lower Great Blue	MrH
EN075	74.7	83.8	9.1	1.15	Upper Beds	MrH
and	134.1	150.9	16.8	0.35	Silver Chert	MrH
EN076	96.0	117.3	21.3	0.57	Silver Chert, Lower Great Blue	MrH
EN077	50.3	56.4	6.1	1.67	Upper Beds	MrH
and	105.2	115.8	10.7	2.31	Silver Chert, Lower Great Blue	MrH
and	178.3	182.9	4.6	0.37	Lower Great Blue	MrH
EN078	157.0	166.1	9.1	0.26	Lower Great Blue	MrH
EN080	0.0	3.0	3.0	0.48	Dump	MrH
and	39.6	45.7	6.1	1.39	Mercur Beds	MrH
and	77.7	83.8	6.1	0.38	Magazine Sandstone, Silver Chert	MrH
EN081	0.0	4.6	4.6	0.52	Dump	MrH
and	64.0	70.1	6.1	0.40	Magazine Sandstone	MrH
and	89.9	93.0	3.0	0.89	Lower Great Blue	MrH
EN082	0.0	3.0	3.0	0.32	Dump	MrH
and	102.1	115.8	13.7	1.25	Magazine Sandstone, Silver Chert	MrH
EN083	0.0	22.9	22.9	0.35	Dump	MrH

¹ Cutoff = 0.2g/t

² RH – Rover Hill, GG=Golden Gate, SC=Sacramento, MrH=Mercur Hill, MH=Marion Hill

APPENDIX C - Footnotes

QAQC

The Company has a thorough QA/QC program in place to ensure that all assay results are accurate and reliable and conform with NI 43-101 Best Practices and other international monitoring standards and practices. The program includes advising the drill crew on proper sample collection methods prior to beginning a drill hole, periodic monitoring of sample collection at the drill rig and collection of the samples once the hole is completed and the samples have had time to dry. Certified standards, blanks, drill and lab duplicates are used in the QAQC program to monitor accuracy, lab equipment cleanliness and precision of the analysis. These standards are sourced from certified providers that source the standard material from similar deposit types, in this case, moderate grade Carlin style material.

During reverse circulation drill programs, 20" x 24" sample bags are delivered to the drill rig prenumbered with both the sample number and depth of the sample to be collected. The pulp standards and blanks are inserted into the sample sequence prior to delivery of the bags to the rig and the drillers are instructed not to fill these bags with drill chips and to set them aside. Drill sample duplicates are collected at the rig using a "Y" splitter and are numbered as sequential samples. The target insertion rate of QAQC samples into the sample stream is approximately 1 every 10 drill samples.

During diamond core drill programs, the QAQC program is slightly modified due to irregular sample length intrinsic to core drilling and the ability of the geologists to recognize potential mineral zones. Once the core is logged and sample intervals chosen, the core is cut in half using a diamond saw and the sample bagged. The insertion of standards, blanks and duplicates is modified to place a standard proximal to the beginning of the mineral interval, a blank within the interval and another standard or blank beyond the perceived mineralization. Duplicate pulp samples are prepared within the perceived mineral interval to check for precision of the analysis.

The RC and Core samples are stored onsite in a secured location for collection by the assay lab on a weekly basis. The drill samples are collected and processed by Bureau Veritas in Elko NV, Reno NV, and North Vancouver, B.C.

Sample Preparation

The samples are organized in descending order and dried in low temp ovens. The entire sample is crushed 70% passing a 2mm mesh and is then split to obtain 250 grams which is pulverized to 85% less than 75 micrometers. This is shipped to the Bureau Veritas facility in Reno, Nevada where a 30-gram pulp is split out and assayed using Bureau Veritas procedure FA430. Over limits (>10 ppm) are re-assayed using a Fire Assay and Gravimetric finish (FA530). Concurrently, a second split of the pulp is shipped to North Vancouver, B.C., for a 35 element multi-acid digest, ICP-ES finish analysis (MA200).

QAQC Approval

All results are reviewed by the Company QAQC manager. Should standards assay beyond the 3rd SD or a blank show contamination, the lab is contacted, and an appropriate number of samples are re-submitted for assay. If the newly assayed samples pass QAQC protocols, the new results and prior approved results are entered into the database.

The Company is not aware of any drilling, sampling, recovery or other factors that could materially affect the accuracy or reliability of the data referred to herein.

APPENDIX D - Mercur Mining District - Historical Mine Production

Recorded Metal Production, Camp Floyd (Mercur) Mining District

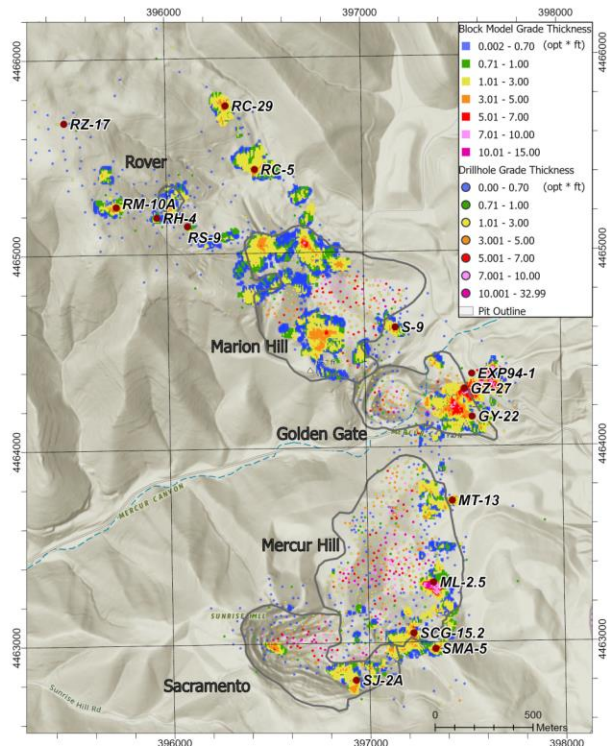
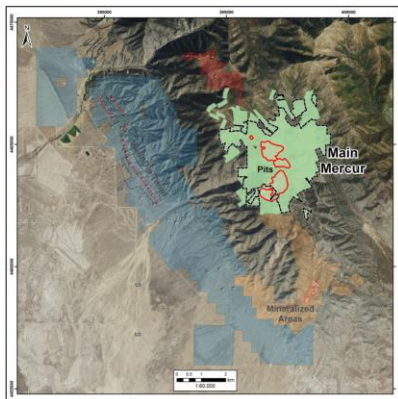
	Ore Mined	*Contained	Reprocessed	Recovered	Recovered	Recovered	
Period	(tons)	troy oz. Au	Tailings (tons)	troy oz. Au	troy oz. Ag	flasks Hg	Sources
1871-1881	?	?		?	438,000		Gemmell, 1897
1890-1917	5,583,983	1,200,000		920,843	2,760	3,338	Butler et al., 1920
1931-1942	1,425,399	200,000	502,205	189,135	8,933		Gloyn, 1999
1942-1945	94,858	6,000	-	5,059	165,022		" "
1983-1998	34,298,383	2,077,375	1,723,000	1,490,000	569,009	131	Mako, 1999
Totals	41,402,623	3,483,375	2,225,205	2,605,037	1,183,724	3,469	

Mercur Historical Mine Production, 1983-1998

Pit Name	Oxide Ore			Refractory Ore			Dump Leach Ore			Total Ore Tons	Total Avg Grade oz Au/ton	Total Contained oz Au	Total Recovered oz Au
	Tons	oz Au/ton	oz Au	Tons	oz Au/ton	oz Au	Tons	oz Au/ton	oz Au				
Mercur Hill	6,785,796	0.087	590,364	1,275,685	0.081	103,330	2,920,420	0.035	102,215	10,981,901	0.072	795,909	562,706
Marion Hill	7,193,976	0.067	481,996	585,124	0.075	43,884	6,584,322	0.032	210,698	14,363,422	0.051	736,579	497,976
Sacramento	4,223,534	0.073	308,318	632,022	0.087	54,986	842,604	0.035	29,491	5,698,160	0.069	392,795	282,726
Golden Gate	1,628,206	0.062	100,949	147,017	0.088	12,937	1,242,605	0.025	31,065	3,017,828	0.048	144,951	100,094
Rover	74,760	0.045	3,364	1,168	0.060	70	161,144	0.023	3,706	237,072	0.030	7,141	4,435
Historical Tails				1,723,000	0.053	91,319				1,723,000	0.053	91,319	42,062
TOTALS	19,906,272	0.075	1,484,992	4,364,016	0.070	306,527	11,751,095	0.032	377,176	36,021,383	0.060	2,168,694	1,490,000

Appendix E - Positive Historical Exploration Drilling at Main Mercur¹

Selected historical drilling at Mercur in areas that are outside or below the previous open pit mines



SELECTED HISTORICAL DRILL RESULTS

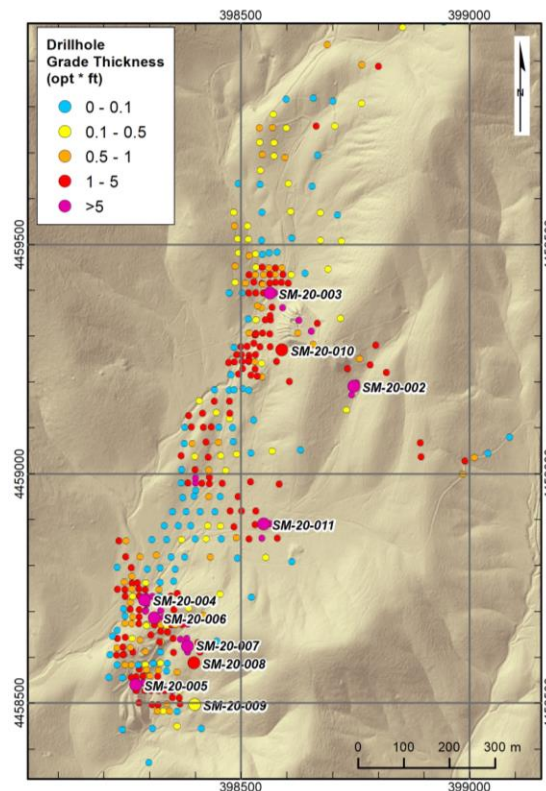
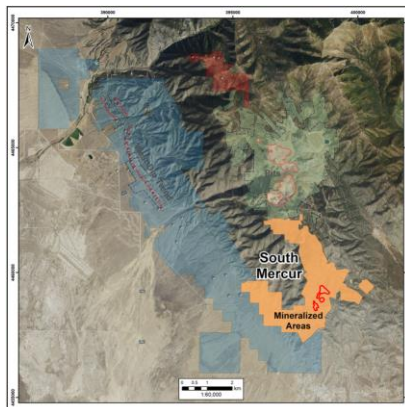
In Apparently Unmined Areas

DH ID	From m	To m	Interval m	Au g/t
RC-29	51.8	68.6	16.8	4.61
RZ-17	32.0	45.7	13.7	3.26
RC-5	38.1	70.1	32.0	1.59
RM-10A	0.0	10.7	10.7	1.75
and	18.3	39.6	21.3	1.65
RH-4	3.0	6.1	3.1	1.39
and	9.1	35.1	26.0	1.86
RS-9	38.1	41.2	3.1	1.75
and	82.3	105.2	22.9	1.48
S-9	44.2	62.5	18.3	2.05
EXP94-1	164.9	178.8	13.9	6.38
GZ-27	112.8	129.5	16.8	5.02
GY-22	118.9	125.0	6.1	7.52
MT-13	125.0	140.2	15.2	3.60
ML-2.5	57.9	68.6	10.7	10.08
and	74.7	86.9	12.2	4.11
and	132.6	140.2	7.6	2.94
and	144.8	147.9	3.1	3.07
SCG-15.2	70.1	73.15	3.0	12.27
SMA-5	193.5	201.2	7.6	7.41
SJ-2A	88.4	126.5	38.1	2.05

¹ These drill results are historical in nature. Ensign has not undertaken any independent investigation of the sampling, nor has it independently analyzed the results of the historical exploration work in order to verify the results. Ensign considers these historical drill results relevant as the Company will use this data as a guide to plan future exploration programs. The Company also considers the data to be reliable for these purposes, however, the Company's future exploration work will include verification of the data through drilling.

Appendix F – Miscellaneous --2020 South Mercur Drilling

2020 drilling confirmed gold mineralization indicated by historical drill results at South Mercur



RESULTS OF 2020 SOUTH MERCUR DRILLING^{1,2,3}

Drill Hole ID	From m	To m	Length m	Au g/t
SM-20-002	155.4	167.6	12.2	1.1
and	170.7	182.9	12.2	2.9
and	184.4	196.6	12.2	0.5
and	198.1	201.2	3.0	2.0
SM-20-003	9.1	71.6	62.5	1.0
SM-20-004	13.7	59.4	45.7	1.5
SM-20-005	0.0	33.5	33.5	1.7
SM-20-006	21.3	22.9	1.5	3.4
and	44.2	73.1	29.0	1.8
SM-20-007	39.6	105.2	65.5	2.4
includes:	44.2	45.7	1.5	22.5
SM-20-008	61.0	68.6	7.6	1.6
and	83.8	85.3	1.5	1.1
SM-20-009	85.3	93.0	7.6	0.5
SM-20-010	85.3	102.1	16.8	1.5
SM-20-011	73.1	147.8	74.7	2.4

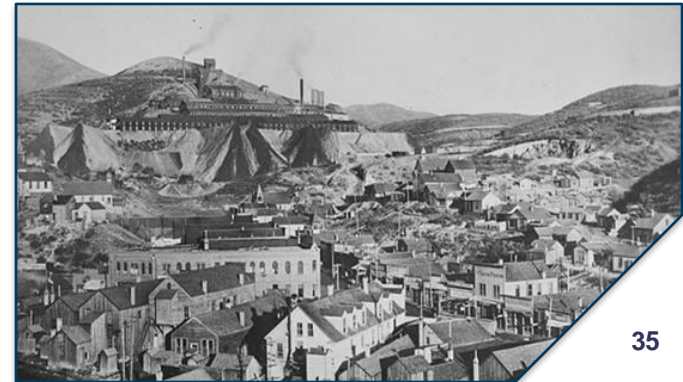
¹ True thickness of mineralization in vertical holes is estimated to be approximately 85% of the significant interval lengths

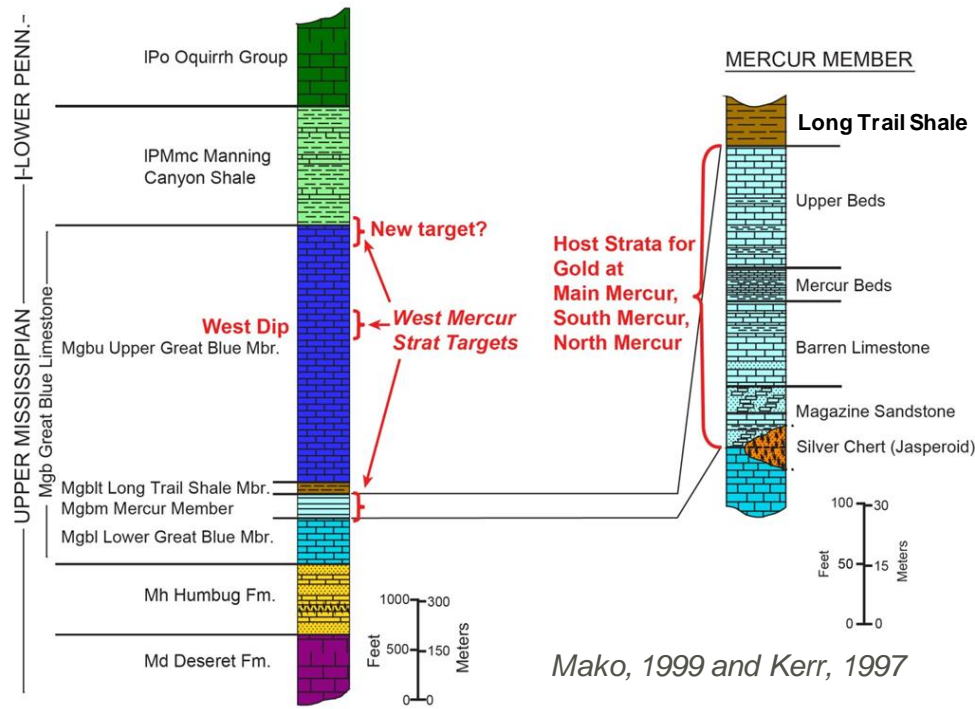
² Hole WM001 (not shown on the table) was drilled to better understand lithologies present at the mouth of Mercur Canyon. Geochemical results show anomalous antimony values up to 35 ppm in the Mercur series lithologies. The assay showed no significant gold.

³ Refer to Appendix C for information on QA/QC

History of the Mercur Project

- **1870-1881:** Underground mining of small bonanza-grade silver deposits
- **1883:** Sedimentary rock-hosted, disseminated gold deposits (Carlin-type) discovered at Mercur
- **1890:** First commercial use of cyanide for gold extraction developed and later proved successful at Mercur
- **1900:** Golden Gate mill constructed at Mercur, the largest gold mill in the US, with a capacity of 1,000 short tons/day
- **By 1913:** Mercur had produced over 920,000 ounces of gold – decades before similar Carlin-type deposits in Nevada were beginning to be discovered
- **1931 – 1945:** Renewed activity on a small scale
- **1970s and early 1980s:** Getty Oil Company consolidated a large land position at Mercur and Homestake Mining Company consolidated a large land position around the historic underground mines at South Mercur. Getty's work ultimately led to the development of the Mercur open pit mine and CIL mill complex in 1983. Homestake's South Mercur project was vended to Priority Minerals and that area remains undeveloped.
- **1985:** Getty sold the Mercur mine to a subsidiary of American Barrick Resources Corporation (later renamed Barrick Gold Corporation). Barrick added a dump leach circuit for low-grade material and added an autoclave to pretreat refractory material for the CIL mill. 1.49M oz Au produced.
- **1998:** Closure of the Mercur mine due to low gold prices (<US\$300/oz)
- **2020:** Ensign commences consolidating land package

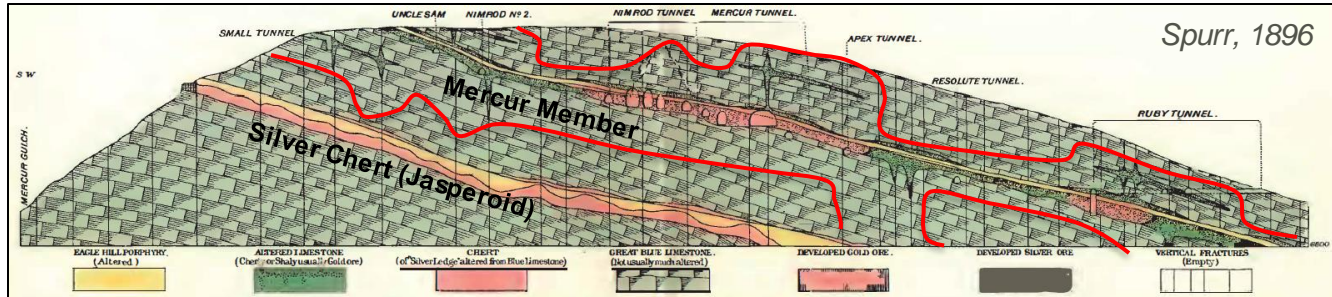




Mako, 1999 and Kerr, 1997

Generalized Stratigraphic Setting

- Mineralization focused in and surrounding Mercur Member of Great Blue limestone as zone of central carbonaceous decalcification, clay alteration and Fe-oxide bearing dissolution breccia
- Silver Chert stratabound jasperoid lies below, and Long Trail Shale above may act as aquitard to focus mineralization
- Mineralization may be vertically continuous in faulted areas between Silver Chert and Long Trail Shale
- Stratabound, NE-trending steep and NW trending faults focus thicker oreshoots
- Minor NW-trending folds may have local ore control



Cross section from Spurr (1896) shows stratabound nature of mineralization (>6 g/t historical underground mining) above Silver Chert (Jasperoid), and in red schematic areas of later Barrick mining

Ensign Land Acquisition History

August 3, 2020

West/North/South Mercur Areas

- Assignment Agreement with Rush Valley Exploration for 3,579 net hectares primarily in West Mercur

August 17, 2020

South Mercur Area

- Merger Agreement with Priority Minerals upon which Ensign acquired 213 net hectares

May 13, 2021

Main Mercur Area

- Lease option agreement with Barrick
 - Explore until January 1, 2024
 - Upfront payment of C\$1M; 3.0M warrants @ C\$0.25
 - Work commitment C\$6M
 - Option to purchase C\$20M

2021

Main Mercur Area

- Staked 4 unpatented mining claims

North Mercur Area

- Staked 9 unpatented claims and leased 1 unpatented claim

South Mercur Area

- Staked 59 unpatented mining claims

West Mercur Area

- Staked 74 unpatented mining claims

August 31, 2021

South Mercur Area

- Option & Assignment Agreement with Mountainwest Minerals

October 25, 2021

Main Mercur Area

- Option & Assignment Agreement with Sacramento Gold Mining Company
 - Three-year option to explore 90 net hectares of mineral interests

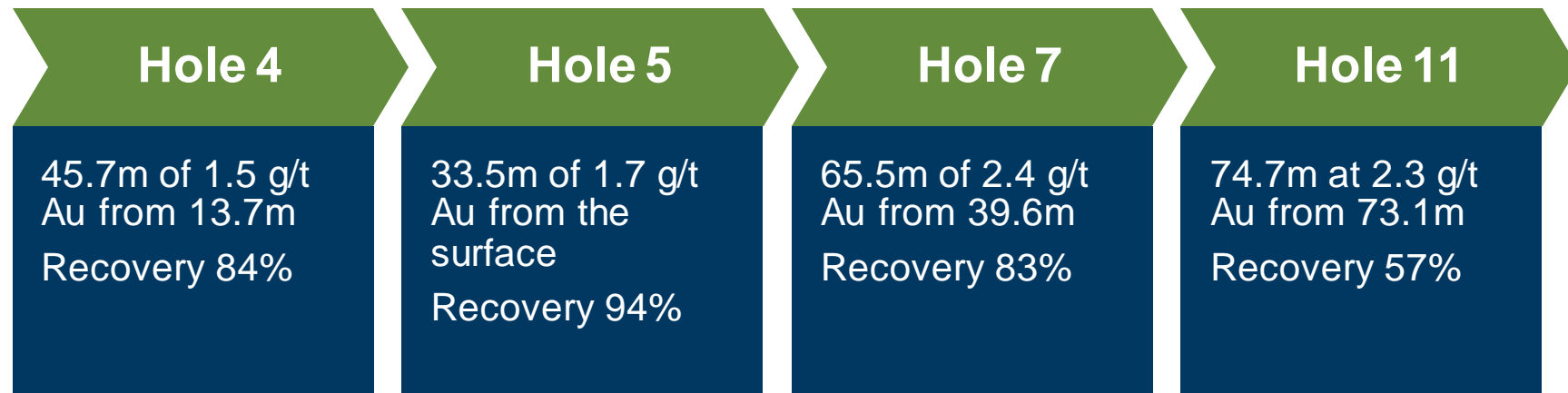
October 25, 2021

Main/West Mercur Areas

- Option & Assignment Agreement with Geyser Marion Gold Mining Company
 - Three-year option to explore 673 net hectares of mineral interests

Update: May 2023
Barrick extended option period to January 2026

2020 South Mercur Cyanide Leach Testing



Recovery based on comparison of average fire assays vs average cyanide leach assays for the interval.