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**TECHNICAL REPORT
ON THE
LOST SHEEP FLUORSPAR PROPERTY,
JUAB COUNTY, UTAH,
U.S.A.
UTM WGS84 Zone 12S 311,880 m E, 4,403,550 m N**

**FOR
ARES STRATEGIC MINING INC.**

**NI 43-101 & 43-101F1
TECHNICAL REPORT**

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1.0 EXECUTIVE SUMMARY

The following report was prepared to provide a National Instrument (“NI”) 43-101 Technical Report for the Lost Sheep Fluorspar Property located in the Spor Mountain area, Juab County, western Utah, U.S.A. The Lost Sheep Property is comprised of 111 unpatented claims on Bureau of Land Management (BLM) lands. Ares Strategic Mining Inc. (“Ares”) owns 76.67% of 10 claims known as the Willden Claims and 100.00% of 101 claims known as the New Claims.

This Technical Report discloses conceptual exploration targets based on historical and current geological observations. Exploration targets indicate ranges of tonnages and grades that may potentially be achieved through additional exploration. There is no certainty that further exploration will result in the definition of Mineral Resources.

The description of mining and processing methods in this Technical Report are based on known techniques, however, they are applied to Lost Sheep on a conceptual basis only. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the delineation of a Mineral Resource. There are no current Mineral Resources or Mineral Reserves on the Lost Sheep Property.

1.1 INTRODUCTION

The following report was prepared to provide a National Instrument (“NI”) 43-101 Technical Report for the Lost Sheep Fluorspar Property located in the Spor Mountain area, Juab County, western Utah, U.S.A. The Lost Sheep Property consists of 111 unpatented claims on BLM lands covering approximately 924.6 ha (2,283 acres). The Property is situated in the Basin and Range Province and covers approximately 8 km strike length of Paleozoic sedimentary rocks and overlying Tertiary volcanic rocks hosting fluorite mineralized breccia pipes and veins. The Spor Mountain mining district has been an area of significant fluorite past production dating back to the 1940s, with the Lost Sheep Mine being the largest historical fluorite producer in Utah.

1.2 LOCATION AND PROPERTY DESCRIPTION

The Lost Sheep Property is located 70 km northwest of the City of Delta, in Millard County, and 150 km southwest of Salt Lake City. The past-producing Lost Sheep Mine in the northern part of the Property is located at 39° 45’ 40” N latitude and 113° 11’ 46” W longitude and at UTM coordinates 311,880 m E and 4,403,550 m N (WGS84 Zone 12S).

The Property is accessible by paved highways and gravel roads. The Union Pacific railroad from Salt Lake City to Los Angeles runs through Delta, and the Company has a warehouse and processing facility located on the railroad siding in Delta. Salt Lake City has the closest international airport with local airports in Delta and Nephi. The Lost Sheep Mine is about 280 km by road southwest of Salt Lake City International Airport.

The Lost Sheep Property includes a total of 111 unpatented lode mining claims on Federal Bureau of Land Management (“BLM”) lands. Each claim is nominally 8.37 ha (20.66 acres) and the Property covers approximately 924.6 ha (2,283 acres). Ares Strategic Mining Inc. (“Ares”)

owns 76.67% of 10 claims known as the Willden Claims and 100.00% of 101 claims known as the New Claims. A review by Dorsey & Whitney LLP did not identify any royalties, production payments, deeds of trust, financing statements, or other security instruments burdening the Claims.

All claims are unpatented and do not include surface rights. To maintain the validity of these claims, an annual rental or holding fee, currently US\$165/claim/year must be paid to the BLM prior to the end of each assessment year on September 1st.

The region lies within the Koppen climate type BSk characterized by a cold semi-arid (steppe) climate, with hot dry summers and cool, relatively arid winters. Average temperatures range from a summer maximum of 30°C (July) to minimum of -8°C (January). Exploration can be carried out year-round, with minor delays due to periodic snowstorms.

The Property benefits from proximity to Delta and Salt Lake City. Delta with a population of 3,436 can supply workers, water, fuel, lodging, food, vehicle maintenance and some construction services. Major services and mining equipment can be sourced from Salt Lake City and other nearby centres. Delta is well serviced by paved highways and the Union Pacific Railroad. A 1.9 Gw coal-burning power plant supplying the states of Utah and California with electricity is located 10 km northwest of Delta. The active Materion Natural Resources Inc. beryllium mine, is 5 km to the southwest of the Lost Sheep Mine, and is adjacent to the Lost Sheep Property.

The Property is located in the Basin and Range Province that is defined by a series of north-south trending fault-bounded mountains and ranges, separated by basins. Spor Mountain has less pronounced topographic variation and gentler ridge topography than the Thomas Range to the east. The highest point on Spor Mountains is 2,004 m and elevations on the Property range from 1,200 to 1,740 metres. Wide, flat valley floors at elevations of 1,200 metres are generally moderately incised. Above the valley floors, the land is generally not accessible by vehicles unless roads are constructed. Drainage and active run-off are seasonal, with the drainage to the east and north into the Dell, a flat lying area between Spor Mountain and the Thomas Range and ultimately to the Great Salt Lake Desert some 20 km to the north. Natural vegetation is comprised of scattered low brush, scrub or grass, and at moderate to higher elevations, there are stands and expanses of juniper.

1.3 HISTORY

The mineral deposits at Spor Mountain, western Utah, are well-known examples of the association of fluorine with lithophile metal mineralization in a volcanic environment. In addition to fluorspar, the Spor Mountain district contains large deposits of beryllium and is a past-producer of uranium. The Spor Mountain mining district was a major fluorite producer dating back to the 1940s, with the Lost Sheep Mine being the largest fluorite producer in the State.

Cumulative production at the Lost Sheep from 1948 - 2014 is estimated to be approximately 170,000 tons of fluorite. The most active production years were from the 1940s to 1950s. The Lost Sheep Mine produced from three breccia pipes during the period from 1948 to 2007 with the Purple Pit being the source of approximately 160,000 tons. From 2008 to 2017, there were

periodic attempts to re-start production with small scale mining in preparation for larger scale production.

1.4 GEOLOGY AND MINERALIZATION

Spor Mountain is a faulted block of west-dipping, north to north-easterly striking, Paleozoic sedimentary rocks overlain by Tertiary volcanic flows, tuffs and related pyroclastic rocks. The volcanic and older sedimentary rocks are locally intruded by rhyodacitic to rhyolitic dykes and breccias related to the Oligocene Thomas Caldera that is one of several volcanic centres in western Utah. The volcanic events were coincident with Mid- to Late Cenozoic extensional tectonics with extensive normal faulting, and the creation of the north-south trending parallel mountain ranges of the Basin and Range Province.

Significant fluorine, beryllium, uranium mineralization and associated lithium and rare earths are associated with volcanic-hydrothermal fluids within or adjacent to the structural features related to faulting. In the Spor Mountain district, the largest fluorite deposits are steeply plunging mineralized breccia pipes, typically emplaced between the Ordovician Swan Peak Quartzite and Silurian Lost Sheep Dolomite. Tertiary volcanic rocks to the south and west of Spor Mountain host extensive beryllium mineralization that is typically associated with the Beryllium Tuff member of the Spor Mountain Formation. These volcano-sedimentary tuffs form a shallow west dipping blanket over the older sediments.

On the Lost Sheep Property, fluorite mineralization is usually hosted within discordant breccia pipes, minor dyke-like breccias and concordant replacement features oriented sub-parallel to stratigraphy. Mineralized pipes are funnel shaped becoming smaller at depth and generally plunge steeply east, in part due to block rotation. Low-grade uranium occurs in the fluorite pipes, with a gradual increase in uranium concentrations toward the south part of the district.

The Purple Pit Pipe is the largest deposit with surface dimensions of 56 m by 25 m and becomes smaller at depth. The pipe occurs on the western edge of a rhyolite breccia plug and is structurally controlled by a normal fault that truncates the mineralization below the 120 m level.

The Little Giant Pit is a more recent working on the Lost Sheep Property. At Little Giant, the main pipe extends approximately 22 m north-south and 16 m east-west and has been mined down to 20 m. The pit faces show extensive multi-stage epithermal mineralization, within and adjacent to semi-brittle or brittle faults. Host dolomites are west dipping and display localised brecciation, with argillic alteration, de-dolomitisation, and banded fluorite-calcite-chalcedony/silica. Overprinting this is more intense fluorite mineralization, seen as a sub-vertical 'plume', with internal, almost concentric replacement and layering, characteristic of multiple mineralizing events within a permeable, low pressure and temperature setting.

At Bell Hill, breccia pipes and veins were exploited, with the despite being described as H-shaped in outline with a maximum length of 40 m, and a width of 15 m at the H-junction. Mineralization at lower depths was more silicic.

Lost Sheep Property fluorspar mineralization consists of 65-95% fluorite, with montmorillonite, dolomite, quartz, chert, calcite, chalcedony and opal as impurities. The fluorspar closely resembles brown, white, or purple clay and forms either pulverulent masses or box works. With

depth, the grade of the mineralization commonly decreases, and masses of montmorillonite, chert, or quartz and dolomite have been found in increasing abundance.

1.5 DEPOSIT MODEL

The Spor Mountain fluorite deposits belong to the class of volcanic-epithermal deposits associated with sub-alkaline magmatism. The deposits occur as siliceous vein fillings, breccia pipes, disseminated and replacement deposits along faults, fractures in intermediate to felsic volcanic and volcanoclastic rocks.

The Spor Mountain fluorspar breccia pipes and fluorite-rich replacement deposits are related to the adjacent beryllium deposits. The associated high silica topaz rhyolites have high concentrations of Be, F, Li and other lithophile elements. In most cases, these deposits are related to rift or extensional geological settings. Brecciation and textural evidence within the fluorite deposits and tuff-hosted beryllium indicate formation at low pressure, typically, <1-1.5 kbar, and shallow emplacement.

1.6 EXPLORATION AND DRILLING

Surface exploration by Ares was conducted in 2019 and 2020 with Lidar DEM and orthophoto analysis delineating areas of disturbed stratigraphy and recessive topography possibly related to dissolution features or intrusive breccia pipes. Potential locations for fluorite bearing breccia pipes were identified as topographic lows at the intersections of faults. Ares conducted IP surveys in 2021 with lines over known fluorspar locations to identify and define their geophysical signatures, which could then be used to identify new potential targets by response comparison. The IP surveys were successful in showing lower resistivity anomalies correlated with surface exposures of fluorspar breccias pipes breaking through the carbonate host rock.

Ares conducted a 12 hole, 1,160 m first phase RC drilling program in early 2020 to delineate mineralization at the Little Giant Pit and adjacent targets. A further 11 RC drill holes totaling approximately 890 metres were drilled in late 2020 and primarily targeted the Purple Pit area.

The reader is cautioned that there has been insufficient exploration to define a Mineral Resource Estimate on the Lost Sheep Property. This Technical Report discloses conceptual exploration targets based on historical and current geological observations. Exploration targets indicate ranges of tonnages and grades that may potentially be achieved through additional exploration.

The Lost Sheep Fluorspar Property is host to approximately 39 occurrences of visible fluorite in surface outcrops. Of those occurrences, five more prominent areas (Purple Pit, Little Giant Pit (LGP), Dell No. 5, Fluorine Queen No. 3 and No. 4, and Bell Hill) are located on Ares claims exhibiting loosely quantifiable tonnages and fluorite grades that qualify as Exploration Targets. The Estimated Exploration Target is 200,000 to 350,000 tonnes at a fluorite grade of 40 to 60%.

The reader is cautioned that there is uncertainty that further exploration will result in the definition of Mineral Resources on these exploration targets.

The reader is further cautioned that exploration targets on the claims known as the Willard Claims are not 100% owned by Ares. The Willard Claims include the Purple Pit and Little Giant Pit exploration targets.

1.7 ANALYSIS, DATA VERIFICATION AND SITE VISIT

The reverse-circulation drill samples were collected with an airstream cyclone and then passed into a splitter that quarters the large sample. The resulting quartered sample was bagged, sealed with identification, and cuttings were photographed and logged at the drill site. Each sample group had blanks, standards and duplicates inserted into the sample stream. Samples were analyzed by SGS in Lakefield (ON), with approximately three control samples inserted (one blank, one standard and one field duplicate for each twenty samples). The samples were analyzed for fluorine element using GC XRF76V (included F 0.1-50%) package, that also includes SiO₂%, Al₂O₃%, Fe₂O₃%, MgO%, CaO%, Na₂O%, K₂O%, TiO₂%, P₂O₅%, MnO%, Cr₂O₃% and V₂O₅%. Comparison to control samples and their standard deviations indicates acceptable accuracy of the assays.

Drill samples from Phase 2 (Purple Pit drilling) followed the same field procedures for chain of custody and expedition, but for this phase Ares chose AGAT Laboratories in Mississauga, Ontario for final assays. Assay method for CaF₂ consisted of 201-676 Lithium Borate Fusion, Summation of Oxides and XRF Finish.

Mr. Fred Brown, P.Geo., of P&E, a Qualified Person under the terms of NI 43-101, completed a site visit to the Lost Sheep Project on August 16, 2021 that included drill sites, surface workings, discussions with the site geologist and examination of local mineralization. A data verification sampling program was conducted as part of the on-site review. Mr. Brown collected five samples on site from available RC coarse rejects. The results of the CaF₂ analysis by Activation Laboratories of Ancaster Ontario, Canada compared favourably with the original client results.

1.8 METALLURGICAL TESTWORK

In 2020, Ares undertook scoping metallurgical testwork on material from the Lost Sheep fluorite mine. The scoping testwork was performed with the purpose of developing operating parameters and flowsheet to produce both an acid-spar product (CaF₂ > 97% purity) and also a metspar product (CaF₂ > 92% purity). QEMSCAN conducted on the run of mine (“ROM”) sample indicated that Fluorite was the dominant F-bearing mineral with quartz as the dominant gangue mineral. The main carbonate minerals are dolomite and calcite. Bond work index (“BWI”) testing on the ROM sample showed a ball mill work index of 13.4 kWh/t indicating the material as moderately soft. Flotation testes conducted on the ROM sample (38.2% CaF₂) with six stages of cleaning achieving a final concentrate grade in excess of 97% albeit at reduced recoveries. Flotation tests conducted on a high-grade (HG) sample with 53% CaF₂ resulted in grades in excess of 97% CaF₂ with higher recoveries.

1.9 MINING METHODS

Historical operations at Lost Sheep were partially conducted by open pit mining. The mines consisted of relatively shallow open pits with steep wall angles from surface down into the

breccia-fluorspar pipes. This type of mining is no longer considered safe or practical. The deposit geometry and steep topographical relief results in high strip ratios that reduce the economic opportunities to mine the deposits by open pit methods.

The following description of mining methods in this Technical Report are based on known techniques, however, they are applied to Lost Sheep on a conceptual basis only. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the delineation of a Mineral Resource. There are no current Mineral Resources or Mineral Reserves on the Lost Sheep Property.

For potential future operations, underground mine development and a sublevel longhole mining method would be undertaken by a mining contractor. This choice of a mining method is primarily aimed at achieving the lowest cost to finished product with manageable risk while maintaining a safe mining environment and achieving the desired production rate. The mining contractor would use conventional electric hydraulic jumbos, load-haul-dump (LHD), mechanized rock bolters, ANFO/emulsion blasthole loaders and mine haulage trucks to execute the mine development. Main ramp or adit accesses (depending on topography) and sublevel accesses would be either 4 m x 4 m for most pipes, or 3 m x 3 m for pipes requiring more selective mining.

The adit portal would be collared at a location that is at or near elevation of the fluorspar pipe bottom. Adit development and sumps would be developed at gradients of -15%. Lateral development will be developed at a gradient of +2% to facilitate water drainage off of the level and directed to a sump. Up-hole drilling may be used to mine certain areas of the pipes, however, most drilling would be down-hole. Underground mine production could average approximately 500 tpd of fluorspar material.

Trucks would haul material from the underground via the decline to the surface ROM pad. Mineralized material would be either stockpiled near the crusher or dumped directly into the primary crusher.

1.10 RECOVERY METHODS

The following description of recovery methods in this Technical Report are based on known techniques, however, they are applied to Lost Sheep on a conceptual basis only. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the delineation of a Mineral Resource. There are no current Mineral Resources or Mineral Reserves on the Lost Sheep Property.

The process plant design was based on a nominal 500 tonnes per day (“tpd”) of mineralized material with an average feed grade of 40% CaF₂ mineralized material into a high-purity 97% grade fluorite (CaF₂) at a minimum 80% total fluorite recovery. Of note, the recovery methods and design in summary only apply to the process and upgrading via flotation.

Process plant mineralized material from the mine would be trucked to the facility and deposited on the ROM pad (Pad). From the Pad, mineralized material would be loaded into the ROM bin and fed by a vibrating grizzly to a jaw crusher and conveyor. Material with a P₈₀ < 9 mm passes

to a third conveyor and reports to a day-use fine mineralized material bin. Material with a $P_{80} > 9$ mm would report to a cone crusher for further size reduction.

Crushing would operate 7 days per week, 12 hours per day to maintain stockpile capacity. Mineralized material feeds from the fines bin to the primary ball mill. Water would be added to create slurry and the mill would reduce the particle size to 75 microns. After primary milling, the mineralized material may pass through a de-sliming cyclone for removal of fine and clay particles. De-slimed mineralized material slurry reports to the high-intensity conditioning tanks where reagents are added to improve flotation efficiency. Soda ash, OMC-1234, Tan-XS, and Sep-X50 are blended with the milled solids, and the slurry is pumped to the rougher cells for bulk flotation. The rougher tails report to the scavenger module, and scavenger tailings are pumped to the tailings thickener and vacuum filter for solid-liquid separation. The filter cake would be dried in a rotary dryer to achieve $<8\%$ moisture such that the material may be trucked back to the mine for backfilling open pits. Scavenger concentrate returns to the rougher inlet for re-processing. Rougher concentrate would be pumped to the first cleaner cell, then to the regrind mill for further comminution. After secondary conditioning, the slurry would pass through a series of up to eight cleaner flotation modules to increase the fluorite grade to over 97% (acid-spar grade) while maintaining total fluorite recovery of 80%. The acid-spar concentrate product would be pumped from the cleaner cells to the product thickener, then to a vacuum disc filter for solid-liquid separation. The filter cake would be dried in a rotary dryer to achieve $<0.5\%$ moisture prior to packaging. If the flotation process does not meet acid-spar grade, a second thickener would be installed to collect metspar grade concentrate. Metspar would pass through the same vacuum filter, dryer and bagging machine for offloading in order to maintain a revenue stream.

The Lost Sheep Project operating concept would comprise of a satellite mine site located 70 km northwest of the process plant feeding mineralized material to a process plant site located in Delta. Currently there is limited on-site infrastructure in place at both the mine site and plant site, however, both localities will have access to the substantial required infrastructure, services and skilled labour from localities located in Nevada and Utah within a days' drive. The satellite mine site would be operated by an underground mining contractor while the Delta plant site operation would be operated by Ares. There is a very experienced community of mining equipment and concentrator operators, mine workers, technical personnel and consumable and equipment suppliers all located within a day's drive of Delta, Utah.

Ares Strategic Mining presently owns land in Delta, Utah and the proposed plan would be to utilize this area to construct and install the flotation recovery facility.

1.11 ENVIRONMENT AND PERMITTING

The Lost Sheep Mine would involve both surface and underground mining, however, it is expected that only a small amount of surface disturbance would occur. Most of the surface facilities would be contained in areas previously disturbed by past mining activities, and the mining would not affect any U.S. Bureaus of Land Management ("BLM") Areas of Critical Environmental Concern or similar sensitive environmental areas. There are no threatened or endangered wildlife or vegetation species, no wetlands, and minimal soils and vegetation would be affected by future mining. The mine's remote location and configuration also mean that there would be a general lack of cumulative impacts.

In 2017, the BLM prepared and released an environmental assessment (“EA”) – DOI-BLM-UT-W020-2017-0024-EA - for the Lost Sheep Mine based on a Plan of Operations (“POO”) that had been submitted for the site to both the BLM and the Utah Division of Oil, Gas and Mining (“UDOGM”). For the EA, the BLM used information from existing sources and their experience in this region of Utah to assess the environmental effects of mining and found that no significant environmental impacts would result from the proposed POO. With future exploration and expanded mining at the Lost Sheep Mine and surrounding areas, coupled with approved environmental mitigation measures and reclamation, it is expected that the BLM conclusions about no significant environmental impacts reached would remain.

The BLM tribal consultation as part of the 2017 Lost Sheep Mine EA did not identify any environmental effect on Tribes or Traditional Cultural Properties.

Ares has obtained or would require a number of other federal, Utah, and local permits and approvals for the Lost Sheep Mine Project and the associated processing facility.

Ares understands that reclamation is an integral and important component of exploration and mining operations and has BLM and UDOGM approved mine closure and reclamation plans for the Lost Sheep Mine. The emphasis of Ares’ reclamation plan would be to seal mine portals, adits and shafts for any underground operations, to remove any surface facilities and infrastructure used for operations, and to backfill or otherwise stabilize, where practical, pit areas or glory holes generated by past surface and underground mining. Ares will work to establish a self-sustaining vegetative community on the surface areas disturbed by exploration and mining activities.

Ares currently maintains closure and reclamation bonds with the BLM and UDOGM in the amount of \$74,330 for existing and approved exploration activities and mining operations. Ares would continue to maintain such bonding funds for its project work as additional exploration and mining operations are implemented.

The statutory and regulatory authority of the BLM and UDOGM require that Ares execute closure and reclamation financial assurance agreements for site activities. These agreements will ensure that sufficient monies are available to reclaim disturbed areas and conduct monitoring and other measures to prevent or control any long-term environmental impacts in the event that Ares was unable to meet its closure and reclamation obligations.

No construction, exploration or mining operations can commence without the approval of plans of operations, appropriate approvals and permits from BLM and UDOGM, and the execution of financial assurance agreements for reclamation funds to these agencies responsible for the oversight of project closure and reclamation.

1.12 CONCLUSIONS AND RECOMMENDATIONS

The author of this Technical Report section considers that the Lost Sheep Property hosts significant occurrences of high-grade fluorite mineralization and warrants further exploration. The author of this Technical Report section recommends that the next exploration phase be focused on diamond core drilling and RC drilling to define a Mineral Resource.

The author of this Technical Report section has noted that five areas (Purple Pit, Little Giant Pit (LGP), Dell No. 5, Fluorine Queen No. 3 and No. 4, and Bell Hill) on Ares claims currently exhibit potential tonnages and potential fluorite grades that qualify as Exploration Targets. A multi-pronged approach for the property going forward is recommended as follows:

1. For the Lost Sheep Mine area, approximately 24 diamond drill holes with an average depth of 200 m for a total of approximately 4,800 m are recommended. A portion of these are recommended to twin existing RC holes, focusing on core recovery, to deal with poor recovery reported from sections of these holes in the 2021 drilling programs. A resource estimate for this area could be done on completion of the drilling.
2. In parallel with this, RC drilling of the recently mapped areas at Bell Hill, and at Lost Sheep that have also had potential breccia pipe targets identified from geophysics is proposed. Any new discovered zones should be then followed up on. 36 RC holes at an average depth of 150 m for a total of 5,400 m are recommended
3. In the longer term, other geophysical methods should be tested, including possibly a radio-metric airborne survey and/or use of Track-Etch. This was recommended by Tripp in 2015 due to the presence of small amounts of Uranium associated with fluorite in the Spor Mountain Belt.

Once the drilling and surface trenching program is completed, Ares should be in a position to provide a Mineral Resource Estimate for the Lost Sheep Property. The estimated budget to complete the recommendations is approximately CAD\$2,485,000. The author of this Technical Report section recommends that the Mineral Resource Estimate be completed prior to undertaking further engineering studies to advance mine development.

TABLE 1.1			
RECOMMENDED BUDGET			
Recommended Program and Budget			
Program	Units (m)	Unit Cost (\$/m)	Budget (CAD\$)
Diamond Drilling	4,800	\$200/m	960,000
RC Drilling	5,400	\$125/m	675,000
Trenching			50,000
Assaying	4,000	\$60	240,000
Mineralogy-Bulk Density			10,000
Metallurgical Optimization Testwork			200,000
Field personnel, core logging, mapping and office, support			200,000
Resource Estimate			150,000
Total			\$2,485,000

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 TERMS OF REFERENCE

The following report was prepared to provide a National Instrument (“NI”) 43-101 Technical Report for the Lost Sheep Fluorspar Property located in the Spor Mountain area in Juab County, western Utah, U.S.A. The Lost Sheep Property is 100% owned by Ares Strategic Mining Inc. (“Ares”) and consists of 111 claims on BLM lands covering approximately 924.6 ha (2,283 acres).

This Technical Report was prepared by P&E Mining Consultants Inc. (“P&E”) at the request of Mr. James Walker, President and CEO, Ares Strategic Minerals Inc., a public company listed on the TSX Venture Exchange that trades under the symbol “ARS”. Ares has its head office at:

Ares Strategic Mining Inc.
409 Granville Street, Suite 1001
Vancouver, BC, V6C 1T2, Canada

This Technical Report has an effective date of September 17, 2021.

Mr. Fred Brown, P.Geo., a Qualified Person as defined by NI 43-101, conducted a site visit to the Property on August 16, 2021. An independent verification sampling program was conducted by Mr. Brown at that time. In addition, Mr. Alan Czarnowsky visited the Property on June 3, 2021 where environmental and regulatory aspects of the Project were viewed and discussed with Ares management.

In addition to the site visit, P&E held discussions with technical personnel from the Company regarding all pertinent aspects of the Project and carried out a review of all available literature and documented results concerning the Property. The reader is referred to those data sources, which are outlined in the References section of this Technical Report, for further detail.

The Qualified Person for each section of the Technical Report is listed in Table 2.1.

Qualified Person	Employer	Sections of Technical Report
Eugene Puritch, P.Eng., FEC, CET	P&E Mining Consultants Inc.	Author 9.4, 16 Co-author 1, 25, 26
Richard Sutcliffe, Ph.D, P.Geo.	P&E Mining Consultants Inc.	Author 2 to 7, 14, 15, 19, 21 to 24, Co-author 1, 25, 26
Fred Brown, P.Geo.	P&E Mining Consultants Inc.	Author 8, 9.1 to 9.3, 10, 11, 12.1, 12.3 and 12.4 Co-author 1, 25, 26
David J. Salari, P.Eng.	D.E.N.M. Engineering Ltd	Author 12.2, 13, 17, 18, Co-author 1, 25, 26
Alan Czarnowsky	Independent Consultant	Author 20, Co-author 1, 25, 26

This Technical Report is prepared in accordance with the requirements of NI 43-101F1 of the Ontario Securities Commission (“OSC”) and the Canadian Securities Administrators (“CSA”).

2.2 SOURCES OF INFORMATION

This Technical Report is based, in part, on internal company technical reports, and maps, published government reports, company letters, memoranda, public disclosure and public information as listed in the References at the conclusion of this Technical Report. This Technical Report is supplemented by publicly available information from the United States Geological Survey (“USGS”) Utah Geological Survey (“UGS”), and the Bureau of Lands and Management (“BLM”). This includes but is not restricted to, previous geological reports, recorded mineral occurrences in the Property area, government produced maps and documents, and claim registration.

In 2019, T.N.J. Hughes, P.Geo. of Antediluvial Consulting Inc. (Hughes, 2019) completed a NI 43-101 Technical Report on the Lost Sheep Property for Ares Strategic Mining Inc. (then named Lithium Energy Products). This NI 43-101 Technical Report makes extensive reference to the Hughes (2019) Technical Report.

2.3 UNITS AND CURRENCY

Unless otherwise stated, the Metric System is the primary system of measure and length used in this Report. The CAD\$ is used throughout this report unless the US\$ is specifically stated.

Element concentrations are generally expressed as weight percent (%). Commodity prices are typically expressed in US dollars (“USD\$”) and will be so noted where appropriate. Quantities are generally stated in Système International d’Unités (“SI”) metric units including metric tons (“tonnes”, “t”) and kilograms (“kg”) for weight, kilometres (“km”) or metres (“m”) for distance, hectares (“ha”) for area, grams (“g”) and grams per tonne (“g/t”) for metal grades. Abbreviations and terminology are summarized in Table 2.2 and 2.3.

Grid coordinates for maps are given in the UTM NAD83/WGS84 Zone 12S or as latitude/longitude.

TABLE 2.2 TERMINOLOGY AND ABBREVIATIONS	
Abbreviation	Meaning
\$	dollar(s)
°	degree(s)
°C	degrees Celsius
<	less than
>	greater than
%	percent
3-D	three-dimensional
Ag	silver
AGAT	AGAT Laboratories
Ares or the Company	Ares Strategic Mining Inc.

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
asl	above sea level
ATF	(Bureau of) Alcohol, Tobacco, Firearms and Explosives
ATV	all-terrain vehicles
Au	gold
BLM	(Federal) Bureau of Land Management
BWI	bond work index
°C	degree Celsius
CAA	Federal Clean Air Act
CAD\$	Canadian Dollar
CaF ₂	fluorite
cm	centimetre(s)
Company, the or Ares	Ares Strategic Mining Inc.
CSA	Canadian Securities Administrators
DEQ	Division of Environmental Quality (Utah)
DOD	Department of Defense (United States)
DOGM	Division of Oil, Gas and Mining (Utah)
\$M	dollars, millions
DWRi	Division of Water Rights (Utah)
EA	environmental assessment
EM	electromagnetic
EPA	Environmental Protection Agency (United States)
ESA	Endangered Species Act (United States)
ft	foot/feet
g	gram
g/t	grams per tonne
ha	hectare(s)
HAP	hazardous air pollutant
HG	high-grade
ID	identification
k	thousand(s)
kg	kilograms(s)
km	kilometre(s)
L	litre(s)
LGP	Little Giant Pit
LHD	load-haul-dump (truck)
LiDAR	Light Detection and Ranging
LSM	Lost Sheep Mine
M	million(s)
m	metre(s)
m ³	cubic metre(s)
Ma	millions of years
mm	millimetre

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
MS	mass spectrometer
MSGP	Multi-Sector General Permit
MSHA	Mine Safety and Health Administration
Mt	mega tonne or million tonnes
NAAQS	National Ambient Air Quality Standards
NAD	North American Datum
NE	northeast
NI	National Instrument
NOI	notice of intent
NRHP	National Register of Historic Places
NSAO	New Source Review Approval Order
NSPS	(EPA) New Source Performance Standards
NW	northwest
OSC	Ontario Securities Commission
P ₈₀	80% passing
Pad	ROM mineralized material pad
P&E	P&E Mining Consultants Inc.
P.Eng.	Professional Engineer
P.Geo.	Professional Geoscientist
POO	plan of operations
ppm	parts per million
Property, the	the Lost Sheep Property that is the subject of this Technical Report
PSD	prevention of significant deterioration
QA/QC	quality assurance/quality control
RC	reverse circulation
ROM	run of mine
S	sulphur
SART	sulfidization, acidification, recycling and thickening)
SGS	SGS Laboratories
SHPO	(Utah) State Historic Preservation Office
SIC	(United States) Standard Industrial Classification
SITLA	School and Institutional Trust Lands Administration
SPCC	spill prevention control and countermeasure
SW	southwest
SWPPP	Storm Water Pollution Prevention Plan
t	metric tonne(s)
T	short ton(s)
T&E	threatened or endangered
Technical Report	this NI 43-101 Technical Report
t/m ³	tonnes per cubic metre
tpd	tonnes per day
TSCA	Toxics Substance Control Act

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
UDOGM	Utah Division of Oil, Gas and Mining
UGS	Utah Geological Survey
UPDES	Utah Pollutant Discharge Elimination System
US\$	United States dollar(s)
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UTHP	Utah Natural Heritage Program
UTM	Universal Transverse Mercator grid system
wt %	weight percent
XRD	X-ray diffraction

TABLE 2.3
UNIT MEASUREMENT ABBREVIATIONS

Abbreviation	Meaning	Abbreviation	Meaning
µm	microns, micrometre	m ³ /s	cubic metre per second
\$	dollar	m ³ /y	cubic metre per year
\$/t	dollar per metric tonne	mØ	metre diameter
%	percent sign	m/h	metre per hour
% w/w	percent solid by weight	m/s	metre per second
¢/kWh	cent per kilowatt hour	Mt	million tonnes
°	degree	Mtpy	million tonnes per year
°C	degree celsius	min	minute
cm	centimetre	min/h	minute per hour
d	day	mL	millilitre
ft	feet	mm	millimetre
GWh	Gigawatt hours	MV	medium voltage
g/t	grams per tonne	MVA	mega volt-ampere
h	hour	MW	megawatts
ha	hectare	oz	ounce (troy)
hp	horsepower	Pa	Pascal
k	kilo, thousands	pH	Measure of acidity
kg	kilogram	ppb	part per billion
kg/t	kilogram per metric tonne	ppm	part per million
km	kilometre	s	second
kPa	kilopascal	t or tonne	metric tonne
kV	kilovolt	tpd	metric tonne per day
kW	kilowatt	t/h	metric tonne per hour
kWh	kilowatt-hour	t/h/m	metric tonne per hour per metre
kWh/t	kilowatt-hour per metric	t/h/m ²	metric tonne per hour per

TABLE 2.3
UNIT MEASUREMENT ABBREVIATIONS

Abbreviation	Meaning	Abbreviation	Meaning
	tonne		square metre
L	litre	t/m	metric tonne per month
L/s	litres per second	t/m ²	metric tonne per square metre
lb	pound(s)	t/m ³	metric tonne per cubic metre
M	million	T	short ton
m	metre	tpy	metric tonnes per year
m ²	square metre	V	volt
m ³	cubic metre	W	Watt
m ³ /d	cubic metre per day	wt%	weight percent
m ³ /h	cubic metre per hour	yr	year

3.0 RELIANCE ON OTHER EXPERTS

P&E has not conducted a review of the status of Ares's mining claims with the BLM. P&E is in receipt of a Mineral Status Report letter dated September 17, 2021 from the firm of Dorsey & Whitney LLP, 111 S. Main Street, Suite 2100, Salt Lake City, UT, 84111-2176 which is Utah counsel to Ares. The letter states that as of September 17, 2021, the unpatented lode mining claims included in the Lost Sheep Property are valid and in good standing under applicable laws. P&E has reviewed a copy of the Quit Claim Deed that transfers mining claims Lost Sheep No. 1 through 4, Low Boy No. 1, 2, 5, 6, 7 and Canyon from Michael S. Provstgaard to 101017BC, Inc. that was filed with the Juab County Recorder, State of Utah on June 3, 2021. P&E has not conducted a review of third party agreements and believes it has a reasonable basis to rely upon Ares to have conducted the proper legal due diligence.

4.0 PROPERTY DESCRIPTION AND LOCATION

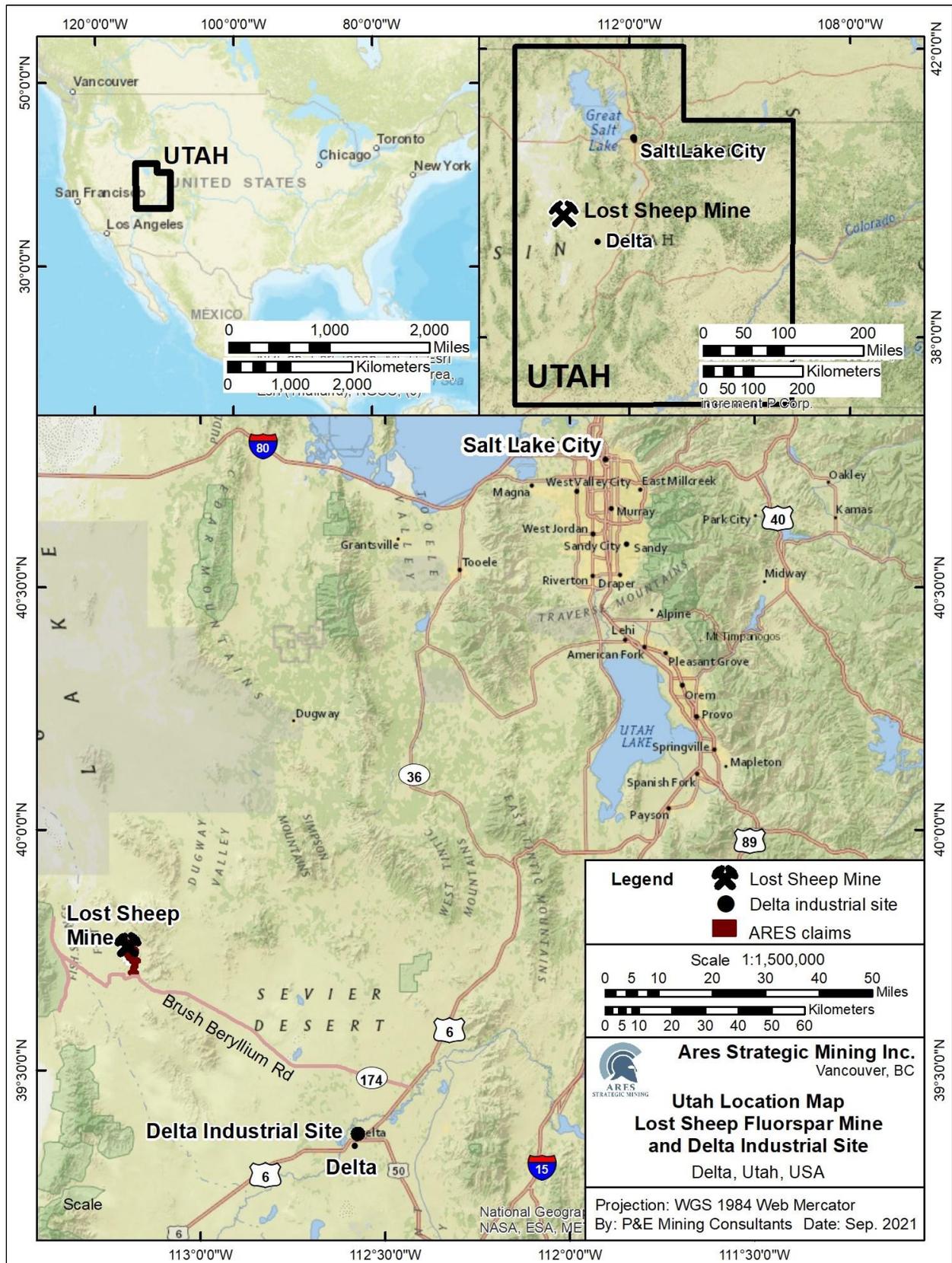
4.1 LOCATION

The Lost Sheep Property is located in Juab County, western Utah, U.S.A. (Figure 4.1). The area has historically been known as the Spor Mountain Mining District and includes several past-producers of fluorite, including the Lost Sheep Mine. The Property is located 70 km northwest of the City of Delta, located in Millard County, and 214 km southwest of Salt Lake City.

The Lost Sheep Property is located in section 21, T.12S. 12W, and T.13S. 12W, SLBM of Juab County, Utah. The past-producing Lost Sheep Mine in the northern part of the Property is located at 39° 45' 40" N latitude and 113° 11' 46" W longitude and at UTM coordinates 311,880 m E and 4,403,550 m N (WGS84 Zone 12S).

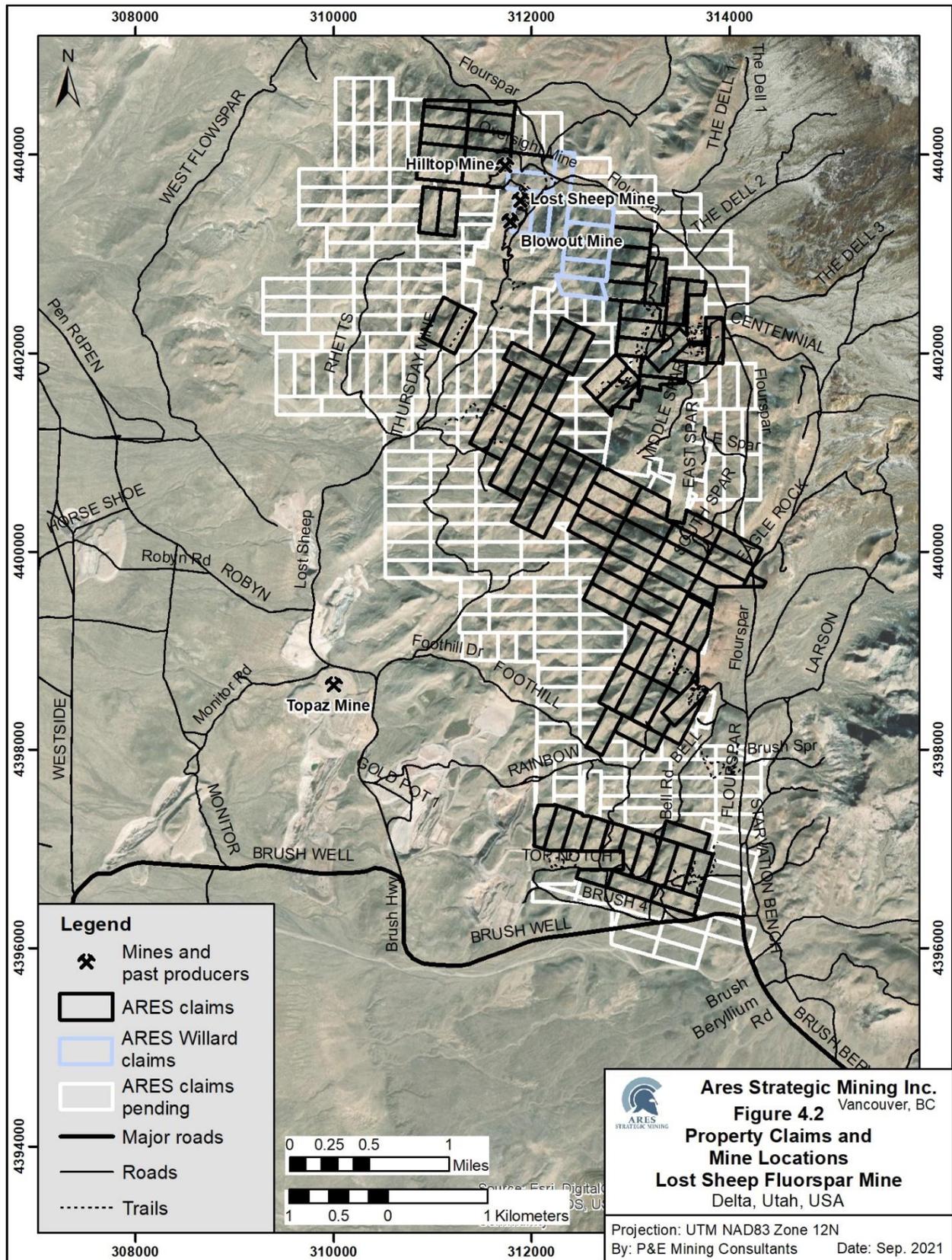
Access to the Property and local topography is shown in Figure 4.2.

FIGURE 4.1 LOST SHEEP PROPERTY LOCATION MAP



Source: P&E (2021)

FIGURE 4.2 LOST SHEEP PROPERTY LOCAL ACCESS MAP



Source: P&E (2021)

4.2 PROPERTY DESCRIPTION AND TENURE

The Lost Sheep Property includes a total of 111 unpatented lode mining claims on Federal Bureau of Land Management (“BLM”) lands. Each claim is nominally 8.37 ha (20.66 acres) and the Property covers approximately 924.6 ha (2,283 acres). The claims are listed in Tables 4.1 and 4.2 and shown in Figure 4.3.

The Canyon, Low Boy 1, 2, 5, 6, 7 and Lost Sheep 1, 2, 3 and 4 claims were acquired by Ares through 101017 BC. Inc., a wholly owned subsidiary of Ares, from Michael Provstgaard by a quit claim deed dated June 3, 2021. These claims are known as the Willden Claims. The title examination by Dorsey and Whitney LLP dated September 17, 2017 reports that the Willden claims are 76.67% owned by 101017 BC Inc. a wholly owned subsidiary of Ares. Dorsey and Whitney LLP report that the Willden Claims are 13.33% owned by the Estate of Albert Reid, 5.00% owned by the Estate of Earl Willden, and 5.00% owned by the Estate of N.S. Bassett.

Dorsey and Whitney LLP report that their September 17, 2021 title examination included a Lease Agreement (Short Form) dated January 15, 1980, by and between Al Willden and Naomi Willden, husband and wife, N. S. Bassett and Dorothy Bassett, husband and wife, Thorpe Waddingham and Norma Waddingham, husband and wife, Hatch Farnsworth and Lola Farnsworth, husband and wife, and Albert Reid and Leah Reid, husband and wife, individually and DBA Willden Fluorspar Company, as lessors, and Sunoco Energy Development Co. (“Sunoco”), as lessee (the “Sunoco Lease”). Pursuant to the Sunoco Lease, Sunoco received the exclusive right to explore for, mine, mill, store, stockpile, remove, sell or otherwise dispose of all ores and minerals (excluding oil) from certain lands including the Canyon, Low Boy No 1, Low Boy No 2, Low Boy No 5, Low Boy #6, and Low Boy #7 Claims. The term of the Sunoco Lease is not described in the Sunoco Lease, and the Materials Examined by Dorsey and Whitney LLP did not include any document releasing the Sunoco Lease or evidencing that the Sunoco Lease has terminated.

The Lost Sheep 5 to 63, 65 to 105 and 108 were located by 101017 BC Inc. and acquired by Ares by an amalgamation agreement completed on February 18, 2020. These claims are known as the New Claims. Dorsey and Whitney LLP report that the New Claims are currently 100% owned by Ares. and Ares management reports that the Property is not subject to royalties. All claims are unpatented and do not include surface rights.

Dorsey and Whitney LLP’s review of the title materials did not identify any royalties, production payments, deeds of trust, financing statements, or other security instruments burdening the Claims.

To maintain the validity of these claims, an annual rental or holding fee, currently US\$165/claim/year must be paid to the BLM prior to the end of each assessment year at September 1st. This amount is adjusted for accumulated inflation every five (5) years. A “Small Miner Exemption” allows a holder of 10 or fewer claims in total the right to substitute the performance of “assessment work” in lieu of paying these annual rental fees. The current total BLM fee to hold all 111 claims is US\$18,315 and is due on September 1, 2021.

In August 2021, Ares staked an additional 251 claims, SM 001 to SM 258, on the land surrounding their existing Lost Sheep area claims. These claims have been submitted to the Utah BLM and are pending approval.

TABLE 4.1
ARES STRATEGIC MINING INC. CLAIMS FORMING THE WILLARD CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims

BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
CANYON	UT101405938	UMC134362	11/17/1951	10/11/1979	20.6600	101017 BC INC
LOW BOY NO 1	UT101422513	UMC134333	8/5/1948	10/11/1979	20.6600	101017 BC INC
LOW BOY NO 2	UT101404247	UMC134334	9/21/1948	10/11/1979	20.6600	101017 BC INC
LOW BOY NO 5	UT101408781	UMC134337	11/5/1957	10/11/1979	20.6600	101017 BC INC
LOW BOY # 6	UT101401692	UMC134338	11/5/1957	10/11/1979	20.6600	101017 BC INC
LOW BOY # 7	UT101496367	UMC134339	5/3/1958	10/11/1979	20.6600	101017 BC INC
LOST SHEEP # 1	UT101403056	UMC134322	5/10/1948	10/11/1979	20.6600	101017 BC INC
LOST SHEEP # 2	UT101403692	UMC134323	5/10/1948	10/11/1979	20.6600	101017 BC INC
LOST SHEEP # 3	UT101401965	UMC134324	5/24/1948	10/11/1979	20.6600	101017 BC INC
LOST SHEEP # 4	UT101606453	UMC134325	9/1/1952	10/11/1979	20.6600	101017 BC INC
Total	10 claims					

TABLE 4.2
ARES STRATEGIC MINING INC. CLAIMS FORMING THE NEW CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims						
BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
LOST SHEEP 5	UT101572835	UMC445459	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 6	UT101572836	UMC445460	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 7	UT101574042	UMC445461	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 8	UT101574043	UMC445462	10/11/1979	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 9	UT101574044	UMC445463	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 10	UT101574045	UMC445464	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 11	UT101574046	UMC445465	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 12	UT101574047	UMC445466	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 13	UT101574048	UMC445467	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 14	UT101574049	UMC445468	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 15	UT101574050	UMC445469	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 16	UT101574051	UMC445470	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 17	UT101574052	UMC445471	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 18	UT101574053	UMC445472	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 19	UT101574054	UMC445473	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 20	UT101574055	UMC445474	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 21	UT101574056	UMC445475	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 22	UT101574057	UMC445476	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 23	UT101574058	UMC445477	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 24	UT101574059	UMC445478	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 25	UT101574060	UMC445479	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 26	UT101574061	UMC445480	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 27	UT101574062	UMC445481	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 28	UT101575190	UMC445482	10/9/2019	11/15/2019	20.6600	101017 BC INC

TABLE 4.2
ARES STRATEGIC MINING INC. CLAIMS FORMING THE NEW CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims

BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
LOST SHEEP 29	UT101575201	UMC445483	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 30	UT101575202	UMC445484	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 31	UT101575203	UMC445485	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 32	UT101575204	UMC445486	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 33	UT101575205	UMC445487	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 34	UT101575206	UMC445488	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 35	UT101575207	UMC445489	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 36	UT101575208	UMC445490	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 37	UT101575209	UMC445491	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 38	UT101575210	UMC445492	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 39	UT101575211	UMC445493	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 40	UT101575212	UMC445494	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 41	UT101575213	UMC445495	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 42	UT101575214	UMC445496	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 43	UT101575215	UMC445497	10/10/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 44	UT101575216	UMC445498	10/10/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 45	UT101575217	UMC445499	10/10/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 46	UT101575218	UMC445500	10/10/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 47	UT105233214	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 48	UT105233215	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 49	UT105233216	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 50	UT105233217	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 51	UT105233218	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 52	UT105233219	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 53	UT105233220	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC

TABLE 4.2
ARES STRATEGIC MINING INC. CLAIMS FORMING THE NEW CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims

BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
LOST SHEEP 54	UT105233221	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 55	UT105233222	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 56	UT105233223	n.e.	2/23/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 57	UT105233224	n.e.	2/25/2021	4/5/2021	17.2825	101017 BC INC
LOST SHEEP 58	UT105233225	n.e.	2/25/2021	4/5/2021	19.6281	101017 BC INC
LOST SHEEP 59	UT105233226	n.e.	2/25/2021	4/5/2021	17.5275	101017 BC INC
LOST SHEEP 60	UT105233227	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 61	UT105233228	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 62	UT105233229	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 63	UT105233230	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 65	UT105233231	n.e.	2/22/2021	4/5/2021	17.7383	101017 BC INC
LOST SHEEP 66	UT105233232	n.e.	2/22/2021	4/5/2021	20.6600	101017 BC INC
LOST SHEEP 67	UT101575219	UMC445501	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 68	UT101575220	UMC445502	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 69	UT101576382	UMC445503	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 70	UT101576383	UMC445504	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 71	UT101576384	UMC445505	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 72	UT101576385	UMC445506	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 73	UT101576386	UMC445507	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 74	UT101576387	UMC445508	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 75	UT101576388	UMC445509	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 76	UT101576389	UMC445510	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 77	UT101576390	UMC445511	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 78	UT101576391	UMC445512	10/9/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 79	UT101576392	UMC445513	10/11/2019	11/15/2019	20.6600	101017 BC INC

TABLE 4.2
ARES STRATEGIC MINING INC. CLAIMS FORMING THE NEW CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims

BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
LOST SHEEP 80	UT101576393	UMC445514	10/11/2019	11/15/2019	20.6600	101017 BC INC
LOST SHEEP 81	UT101612119	UMC448654	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 82	UT101612120	UMC448655	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 83	UT101612121	UMC448656	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 84	UT101612122	UMC448657	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 85	UT101612123	UMC448658	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 86	UT101612124	UMC448659	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 87	UT101612125	UMC448660	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 88	UT101612987	UMC448661	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 89	UT101612988	UMC448662	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 90	UT101612989	UMC448663	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 91	UT101612990	UMC448664	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 92	UT101612991	UMC448665	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 93	UT101612992	UMC448666	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 94	UT101613822	UMC448667	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 95	UT101613823	UMC448668	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 96	UT101613824	UMC448669	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 97	UT101613825	UMC448670	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 98	UT101613826	UMC448671	10/13/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 99	UT101613827	UMC448672	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 100	UT101613828	UMC448673	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 101	UT101613829	UMC448674	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 102	UT101613830	UMC448675	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 103	UT101613831	UMC448676	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 104	UT101613832	UMC448677	10/12/2020	12/1/2020	20.6600	101017 BC INC

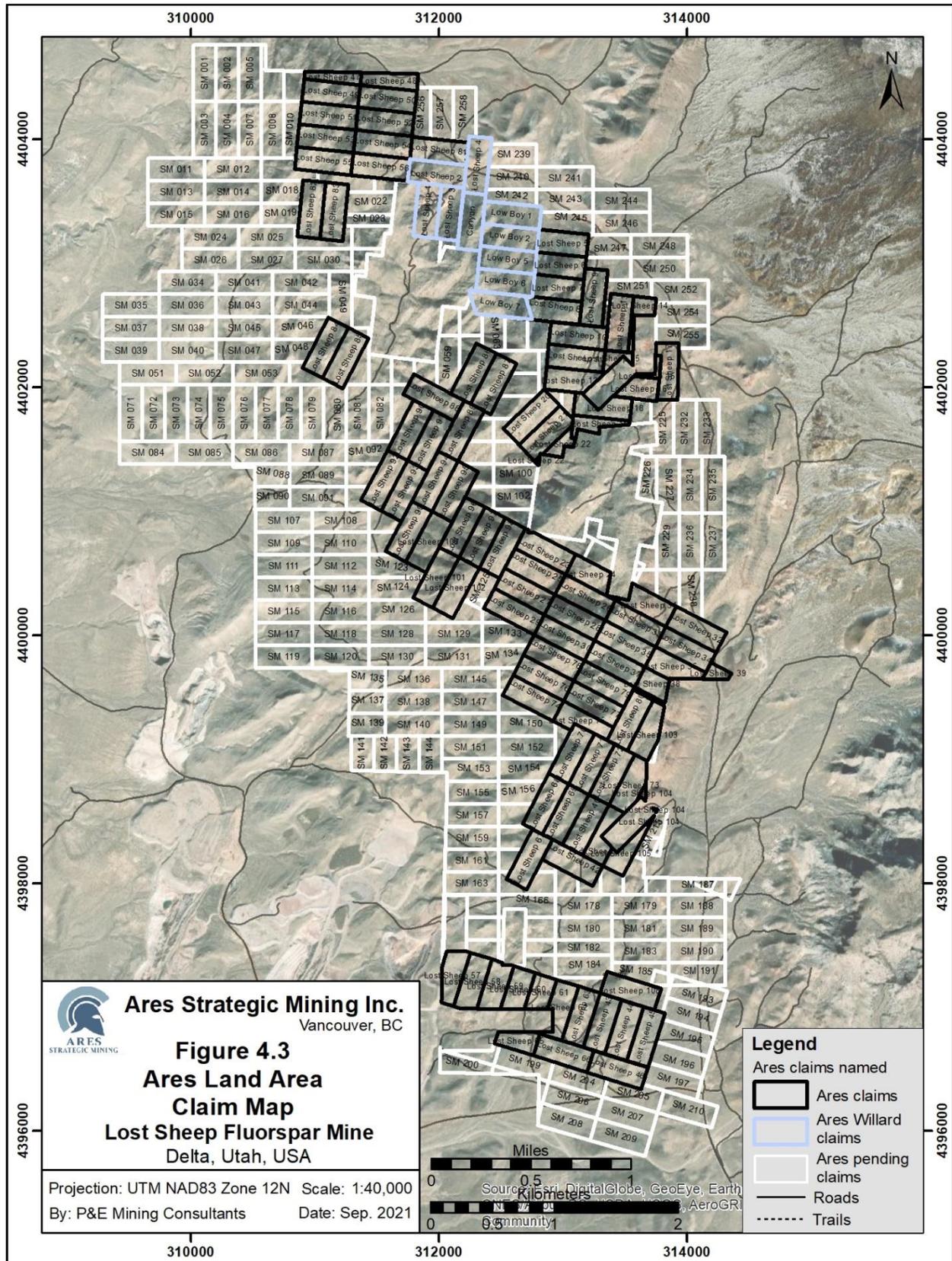
TABLE 4.2
ARES STRATEGIC MINING INC. CLAIMS FORMING THE NEW CLAIMS OF THE LOST SHEEP PROPERTY

Bureau of Land Management (BLM), Utah, Unpatented Lode Mining Claims						
BLM Claim Name	BLM Serial No.	BLM Legacy Serial No.	BLM Field Locate Date	BLM File Date	BLM Area (acres)	BLM Claimant
LOST SHEEP 105	UT101613833	UMC448678	10/12/2020	12/1/2020	20.6600	101017 BC INC
LOST SHEEP 108	UT101613834	UMC448679	10/12/2020	12/1/2020	20.6600	101017 BC INC
Total	101 claims					
Ares Claims Staked in August 2021 and Submitted to BLM						
SM 001 to SM 258		Pending				101017 BC INC
Total	251 claims	Pending				

Source: Ares (2021)

Note: n.e. = non-existent.

FIGURE 4.3 ARES STRATEGIC MINING INC. LOST SHEEP CLAIM MAP



Source: P&E (2021)

4.2.1 BLM Lands

Information in this section is summarized from Hughes (2019).

The BLM, as agent for the U.S. Secretary of the Interior, has responsibility for managing federally-owned locatable mineral resources (which includes fluorspar) under the General Mining Law of 1872, and subsequent laws such as the Multiple Surface Act of 1955 and the National Environmental Policy Act of 1969. Although the U.S. Congress has passed numerous environmental and safety statutes within the past half century, and restricted mineral exploration and development in certain areas such as National Parks and designated wilderness areas, it has generally been the federal policy to make lands available for mineral exploration and development, albeit in a safe and environmentally acceptable manner, consistent with the federal laws, regulations and agency guidelines.

Under the Mining Law of 1872, which governs the location of unpatented mining claims on Federal lands, and subsequently, under Title 30 of the United States Code and Title 40 of the Utah Revised Statutes, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the BLM. The claim owner has the right to mine, extract and remove minerals with income tax payable for any profit made from such mining. With mining operations, compensation is due to surface owners if the surface is privately owned.

4.2.2 Property Agreements

On February 18, 2020, the Company completed the acquisition of 100% interest in the past-producing Lost Sheep Fluorspar Mine and the Lost Sheep Property from American Strategic Minerals Inc., a private company incorporated under the laws of British Columbia, through an amalgamation agreement. American Strategic Minerals' wholly owned subsidiary, 101017 BC Inc., incorporated in the state of Delaware, USA, is the corporate entity that holds the Lost Sheep Property assets.

The Property acquisition included:

- The Lost Sheep Mine, (“LSM”), comprising 10 unpatented mining claims, (Lost Sheep # 1-4, Canyon, and Low Boy No. 1, 2, and 5, and Low Boy # 6 and 7), totalling 202 acres. These claims record Michael Provstgaard as the BLM claimant.
- An additional 101 claims (Lost Sheep 5 to 63, 65 to 105 and 108) that were filed with the BLM on November 15, 2019 and record 101017 BC Inc. as the BLM claimant.
- A nine-acre plant site located in the City of Delta beside the Union Pacific railroad siding.

The plant site, located on North 300 West in the City of Delta, has a three-part warehouse with a mineral processing plant (see Figure 4.4). The Property consists of parcel D3864-3-1 (registered in the names of joint tenants Michael and Gail Provstgaard [2/3] and Steven Long [1/3]) and

parcels D3864-3, D3864-4 and D3864-7 registered in the names of Michael Provstgaard and Gail Provstgaard (deceased). These four parcels total 8.84 acres (3.5 hectares) and are located in the SW.NW. and NW.SW. section 6, T.17S., R.6W., SLBM, Delta (Lunbeck, 2017).

The three-part warehouse has a small bagging plant in which 50 pound sacks of beneficiated fluorite are prepared for shipping. Most of the construction is on Lot D3864-3-1. The assessed valuation of the parcels total \$20,853 in land and \$77,950 in buildings. In 2016, taxes on all these parcels and improvements totalled \$ 1,217 (Lunbeck, 2017).

FIGURE 4.4 DELTA PLANT SITE LOCATION MAP



Source: Hughes (2019)

4.3 ENVIRONMENTAL AND PERMITTING

Information in this section is based on the Technical Report by Hughes (2019).

Exploration work on unpatented claims is permitted by the BLM, (St. George Field Office), under a Plan of Operations. The Utah Division of Oil, Gas and Mining (“DOGM”) administers permitting and bonding relating to land disturbance. Where land is leased, oversight and approval may also be required from the School and Institutional Trust Lands Administration (“SITLA”).

Permitting for mining operations requires various approvals from the state DOGM and the BLM.

The Lost Sheep Mine (LSM), comprising the 10 unpatented mining claims (Lost Sheep # 1-4, Canyon and Low Boy No. 1-2 and 5-7), and totalling 202 acres, has an exploration permit. All other Property mining claims have no permit.

For the Lost Sheep Mine, permits in place include:

- An operating permit, ‘Notice of Intent’, to conduct Large Mining Operations, DOGM M0370043 and BLM UTU68060, issued by the BLM and UDOGM. Area disturbance is limited to a maximum of two acres, (0.8 ha) of land without further approval. Associated is a paid bond of \$20,000 primarily for land reclamation.
- As of December 2018, the LSM was subject to regulation by the DOGM, BLM, and Mine Safety and Health Administration (“MSHA”), of the Ministry of Labor. The MSHA permit ID number for Lost Sheep (Mine) is 4200158 and was updated by S. Long in 2017. Officially listed as abandoned by the MSHA, the property has been ‘idle’ since 2007, though minor extraction continues intermittently.
- A small mine permit, number S/023/0029, issued by the DOGM. This is issued for operations with less than five acres of land disturbance. A reclamation bond is in place for the Lost Sheep Mine. Areas of disturbance that were created prior to 1976, including the Purple Pit, are grandfathered, therefore no bond is required, and no reclamation necessarily required when the claims are relinquished.
- Notice of Intent to conduct Exploration, DOGM E0370133.

A Plan of Operations report was prepared by North American Mine Services of Kaysville, Utah, on behalf of Clearwater Group Inc., BLM reference 3809 (U-010), UTU-092293, and dated May 15, 2017, in order to resume mining on the Lost Sheep Mine, ‘LSM’. The Lost Sheep (Mine) serial number is S/023/0029. Currently, the land disturbance area covers two acres. An application is being made to increase the area of disturbance to permit increased development.

The proposed work includes underground mining from a single adit, additional surface development, including the expansion of pit walls, blasting and drilling, and related exploration. The document also provides a broad, reclamation plan covering waste piles, spoil heaps, hazard mitigation and monitoring.

The BLM is the administrator of the majority of the surface and mineral resources in and adjacent to Spor Mountain. Other lands are held by the State of Utah, the Utah School and Institutional Trust Lands Administration and the private sector. The U.S. Fish and Wildlife Service (“USFWS”) administers the Fish Springs National Wildlife Refuge which is approximately 16 km to the northwest of the LSM. The Department of Defense (“DOD”) administers the Utah Test and Training Range, a very large tract of restricted access land about 25 km miles north of the LSM.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESS

The Lost Sheep Property is located 150 km southwest of Salt Lake City. From Salt Lake City, the Property is accessed via State Route 68, then south on US Route 6, and then west on Utah State Route 174, also known as the Brush-Wellman Road, and subsequently using seasonally maintained gravel roads. Total driving distance by road from Salt Lake City is approximately 280 km.

The closest community to the Property is Delta with a population of 3,436 based on the 2010 census. Delta is located 70 km southeast of the Property. Overall distance by road from Delta to the Lost Sheep Mine is 98 km. Road access from Delta is achieved taking local county roads north for approximately 10 km, then turning west onto State Route 174 known as the Brush Wellman Road and Brush Highway. The paved highway 174 ends at the Fish Springs Road, the turn-off to the Beryllium Mine located to the west. The dirt road continuation of the Brush Highway continues to the north. The southern portion of the Lost Sheep Property is immediately west of the dirt road and by following the dirt road a further 10 km to the north and northwest, the Lost Sheep Mine is accessed.

The claims contain a number of unmaintained roads and trails, in places, suitable for off road vehicles such as an ATV.

The Union Pacific railroad from Salt Lake City to Los Angeles runs through Delta, with rail sidings in Delta and Lynndyl, located 25 km northeast of Delta. The Lost Sheep warehouse and processing facility are located beside the railroad siding in Delta, on land to be acquired by LEP under the terms of an agreement.

The closest international airport is in Salt Lake City with local airports in Delta and Nephi. The Lost Sheep Mine is about 280 km by road southwest of Salt Lake City International Airport, 70 km northwest of the Delta Municipal Airport and 115 km west of the Nephi Municipal Airport.

5.2 CLIMATE

Information in this section is based on the Technical Report by Hughes (2019).

Climate information for the Property can be obtained from the weather station at Deseret, just southwest of Delta. The region lies within the Koppen climate type BSk: Cold semi-arid (steppe) climate, characterised by hot dry summers and cool, relatively arid winters.

Climate data for Topaz Mountain located 5 km southeast of the Property at 39.71°N 113.1° W, 2,051 m asl are provided from:

https://www.meteoblue.com/en/weather/forecast/modelclimate/topaz-mountain_united-states-of-america_5548584.

Average temperatures over a 30 year period are a mean daily summer maximum of 30°C, (July) and a mean daily minimum of -8°C. (January). Annual precipitation is approximately 160-250 mm, with a peak maximum in April, of 22 mm. Snowfall can be expected between October and May. Exploration can be carried year-round, with minor delays of a few days due to periodic snowstorms.

5.3 INFRASTRUCTURE

Information in this section is derived from Hughes (2019). The nearest significant population centre is Delta, in neighbouring Millard County, with a population of approximately 3,436. Delta is well serviced by paved highways and the Union Pacific Railroad main line runs through Delta, with a yard office in the town.

A 1.9 Gw coal-burning power plant supplying the states of Utah and California with electricity is located 10 km northwest of Delta on the Brush-Wellman road. The line to California and southwest Utah passes between the Property and Delta, within the basin. Adjacent to the station is a carbon sequestration area. The main regional electric power line is approximately 30 km southwest of Delta. A natural gas pipeline operated by Questa is located southwest of Delta.

Delta can supply workers, water, fuel, lodging, food, vehicle maintenance and some construction services. Major services and mining equipment can be sourced from Salt Lake City and nearby centres. Other proximal communities include Spanish Fork, Payson, Santaquin, and Nephi.

The active Materion Natural Resources Inc. beryllium mine, is 5 km to the southwest of the Lost Sheep Mine, and is adjacent to the Lost Sheep Property. Materion provided drilling water for the Lost Sheep and worked with Deseret Mining and Development, past owners of the Lost Sheep Mine, on various projects. This included the drilling of a water well in the southwest, supplying the Lost Sheep Mine (Lunbeck 2017). The Materion mine operates periodically with 24-hour on-site security and maintenance.

Dairy farming is significant around Delta, with ranges extending as far as the Lost Sheep Property area. Rights are governed by Federal and State permits, with Lost Sheep BLM land administered by the Filmore Field Office of the West District. Both cattle and sheep graze in the region, with area and population limits set for individual permits. The Spor Mountain allotment covers the Property area. Additional information may be obtained at the U.S. Bureau of Land Management (BLM). Local grazing would have minimal impact on exploration and mining due to the paucity of vegetation in the area.

5.4 PHYSIOGRAPHY

The Property is located in the Basin and Range province. The Basin and Range province of Nevada and western Utah is defined by a series of north-south trending fault-bounded mountains and ranges, separated by basins that are partially filled by Recent to Tertiary age sediments. The Spor Mountain Range has an area of approximately 54 km² in area.

The Thomas Range to the east is characterised by moderate to rugged topography, especially at higher elevations, while Spor Mountain has less pronounced topographic variation and gentler

ridge topography. The Property elevation ranges from 1,200 to 1,740 m asl, with an average of 1,579 m asl. The highest point in the Spor Mountains is 2,004 m. Wide, flat valley floors at elevations of 1,200 m asl are variably, generally moderately incised. Above the valley floors, the land is generally not accessible by vehicles unless roads are constructed.

Drainage and active run-off are highly seasonal, with the drainage to the east and north into the Dell, a flat lying area between Spor Mountain and the Thomas Range, and then north and west into Fish Springs Flat. In the south and southwest, run-off is west into the flats west of Spor Mountain with drainage northwards into the Fish Springs Flat and ultimately, the Great Salt Lake Desert 20 km to the north.

Natural vegetation is comprised of scattered low brush, scrub or grass, and at moderate to higher elevations, there are stands and expanses of juniper. Regional desert species include various grasses, forbs, sagebrush, greasewood, rabbit brush, shadscale, blackbrush, Mormon tea, leadbush, and prickly pear cactus. There are few recorded animal species, but these may include rodents, jackrabbits, lizards, and snakes, with insignificant to rare recordings of coyotes, deer, owls, and raptors. There is no commercial land in the area except mining and limited sheep grazing.

Information of water resources in the following paragraphs is from Hughes (2019). The Utah Division of Water Rights (“DWRi”) administers the appropriation and distribution of water resources. The Property area lies in DWRi Water Right Area 18, Snake Valley (<https://maps.waterrights.utah.gov/EsrMap/map.asp>).

In Area 18, DWRi states that surface waters are open to appropriation if unappropriated sources with adequate supply and quality can be found. Most known sources of useable size have been appropriated. For Ground Water, the State Engineer is of the opinion that water is available for development in the Snake Valley. As future water development occurs, water available for future appropriation under new applications will be re-evaluated. Applicants are allowed to appropriate a limited amount of water up to the amount of water needed for: the irrigation and livestock watering. However, in an effort to protect the resource from over development, and to provide for an orderly and carefully monitored development of the water resource while carefully reviewing each application for speculation or monopoly in the Snake Valley area, applicants, their successors, or related entities will be limited to one application to appropriate water which must be placed to beneficial use and certificated before any subsequent application can be approved.

In its online database, DWRi listed only a single water well within 4 miles of the Lost Sheep Property, this drilled by Materion, under water right 18-225. Now abandoned, it is located three km west of the Property.

6.0 HISTORY

Mineral deposits at Spor Mountain, of western Utah, are well-known examples of the association of fluorine with lithophile metal mineralization in a volcanic environment. In addition to fluorspar, the Spor Mountain district contains the world's largest economic deposits of beryllium and has produced uranium in the past. The Spor Mountain mining district was a major fluorite producer dating back to the 1940s, with the Lost Sheep Mine being the largest fluorite producer in the State of Utah.

Information in this section is based on the Technical Report by Hughes (2019). Fluorite exploration was traditionally by prospecting, examining exposures for fluorspar mineralization (Bullock, 1976). Subsequently, the spatial relationships between mineralized breccia pipes, brecciation, intrusions, alteration, topographic features, fault intersections, and stratigraphic controls were better understood, and incorporated into exploration methodologies. Scintillometer and beryllometer surveys were used in some areas, and one regional magnetic airborne survey was reported by Tripp (2015). Some radiometric surveys were run locally, however, overall, uranium concentrations are low.

A history of mineral exploration and mining is summarised as follows from Hughes (2109):

- 1936 Discovery of fluorspar by Chad and Ray Spor at Spor Mountain.
- 1941 George Spor and his sons staked the Fluorine claim at Spor Mountain.
- 1944 Fluorite shipments commenced and around this time other claims saw exploration and, in some cases, production, including Florine Queen, Bell Hill and Lost Sheep mines. The Spor family sold 8,750 tons of fluorite from 1941 to 1948, with the material shipped to the Geneva Steel Mill, in Orem, Utah.
- 1948 Staking of a portion of the Lost Sheep claims by Albert and Earl Wilden. The Lost Sheep Mine produced fluorite from three pipes, and was mined to a depth of 372 feet. The first discovery was at the Badger Hole Pipe in 1948. Initially surface mined, the 8.5 m by 4.9 m pipe was later exploited by an 85 ft long adit at Badger Hole, driven to intersect the pipe 17 m (45 ft) below the surface, with a raise driven to the surface. A total of 600 tons of fluorite was removed from the Badger Hole pipe. The first fluorite produced at the Lost Sheep Mine was in 1948.
- 1950–52 The Purple Pit is an open pit developed to a depth of 21.6 m (71 ft) in 1952. Open pit operations continued to the 110-foot (33.5 m) level. An inclined shaft was then sunk to the 200-foot (60.96 m) level. Later a vertical shaft was sunk at the northeast side of the pit. It reached the 400-foot (121.92 m) level by summer of 1975 and was developed with cross cuts at the 150, 250, 325, and 400 foot levels (respectively 45.72, 76.2, 99.06, 121.92 m). Mining was done through a series of raises, removing all fluorite above the 325-foot level. Starting in 1950, the adit was driven southwest to the Blowout pit to develop the lower part of the Blowout pipe and to prospect ground along the route. In

- 1950 and 1951, mining of the Blowout pipe was done by a series of stopes above the Blowout north adit level.
- 1952 A single churn drill hole (large diameter drill for soft rock) completed in the Purple Pit of the Lost Sheep Mine. No logs or analyses are available for this hole.
- 1953 Discovery of uranium on the east side of Spor Mountain by prospectors, with the Yellow Chief group claims located. Little work was carried out until the Topaz Uranium Company leased the claims, with development commencing in 1959, by way of an open pit. Mining ended in 1962, with excavation over a 1,200 ft long x 300-500 ft wide area, to a maximum 150 ft depth.
- 1959 Discovery of beryllium in mineralized tuffs at Spor Mountain by Dr. Norman William of the University of Utah, this by detection of the element using a beryllometer on a fluorspar sample. Soon after, mining claims were filed and the Brush Beryllium Company, later Brush-Wellman Company acquired several properties in the following years.
- 1968 Be production started with a process plant completed in 1969. The company, Brush-Wellman later became Materion Corporation, and the company remains the only Be producer in the State of Utah, and effectively controls the U.S. Be supply, and arguably, prices worldwide. In 2016, Materion Corporation reported proven Mineral Reserves of 9.6 million tonnes grading 0.7 weight percent beryllium oxide, and an estimated 70-year supply of beryllium at current rates of production (Materion Corporation, 2016). A Qualified Person has not reviewed this estimate for this Technical Report.
- 1972 The USGS conducted reconnaissance geology and assessed the mineral potential of the nearby Thomas, Keg, and Caldera craters. A broad magnetic 'high' over the Dell was outlined, with this area recommended for exploration for fluorite, uranium, beryllium and precious metals. Later, Avalon Rare Metals would test this target.
- 1973–1978 The Atomic Energy Commission's (now Department of Energy), National Uranium Resources Evaluation program included large scale airborne magnetic and gamma ray mapping of the region.
- 1978 The Department of Energy evaluated the potential for uranium and beryllium in Juab County. Samples were taken at the Bell Hill Mine, but only radiometric data was reported. (Leedom and Mitchell, 1978). A total of 21 rotary holes and nine diamond drill holes were completed on and around Spor Mountain. None was on the LSM ground. Drilling tested the Miocene beryllium tuff member of the Spor Mountain Formation (Bendix Field Engineering Corporation, 1979; Morrison, 1980). This formation is younger than the strata hosting the fluorspar breccias and associated intrusion-related mineralization.

- 1980s Surface exploration using a scintillometer by Michael Provstgaard discovered the Little Giant Pipe. To date, only backhoe surface mining has been conducted.
- 1990 As part of a regional program evaluating primarily uranium mineralization, the USGS carried out lithochemical sampling throughout the Delta 1 x 2 quadrangle (Zimbelman et al., 1991).

6.1 HISTORICAL DRILLING

The following section is summarized from Tripp (2015). In May 2003, Phillips Geothermal contracted Dynatec drilling to drill a 500-ft hole in the centre of the Lost Sheep Property, at the eastern edge of the Little Giant Pipe. This hole was a test of a new rig for overseas fluorite shipment. The upper 170 ft (51 m) intersected fluoride mineralization and the remainder of the hole appeared unmineralized, grey, with quartzite intersected around 380 ft. Tripp's 2015 sampling returned 48.5% and 70% fluorite. The precise location is not known.

In 1948, Darrell Willden, a previous operator of the Lost Sheep Mine, drilled a hole near the hoist house that intersected about 20 ft of high-grade fluorspar near the top of the hole. The total depth of the hole is unknown but probably less than 150 ft. Michael Provstgaard drilled a hole near the trailer, 60 to 80 ft deep, that was entirely in red rhyolite.

In circa 1980, Materion drilled an 80-foot-long, westward directed horizontal hole, immediately west of the Dynatec hole, on the first bench of the northwest extension of the Little Giant Pit. The drill hole is still visible in the vertical working face approximately 2 m above the floor of the bench. All of the drilling was reportedly in high-grade fluorspar.

Dynatec Corporation of Salt Lake City, Utah drilled and logged a 500-ft, vertical hole on the east margin of the Little Giant Pipe in 2003. The first 170 ft was in high-grade fluorspar and then the rest of the hole, to total depth, was in dolomite.

A few shallow holes were drilled about 1,800 ft east of the Purple Pit in the Thursday dolomite in circa 2003, but no data is available for these holes.

6.2 HISTORICAL MINERAL RESOURCE ESTIMATES

There are no known resource estimates on the Property that would comply with NI43-101.

6.3 PAST PRODUCTION

Cumulative production at the Lost Sheep from 1948–2014 is estimated to be approximately 170,000 tons of fluorite. The most active production years were from the 1940s to 1950s. The Lost Sheep produced mineralized material from three breccia pipes from 1948 to 2007 with the Purple Pit being the source of approximately 160,000 tons (Lunbeck 2017). From 2008 to 2017, there were periodic attempts to re-start production with small scale mining in preparation for larger scale production. From December 2014 to December 2018, no production is recorded,

however Hughes (2019) reports that some small amounts of fluorite concentrate were shipped during this period.

At the Lost Sheep Mine mineralization was selectively mined to provide a metallurgical grade of 60-95% fluorite for shipment (Bullock 1981). Most of the early production was shipped to the Geneva Steel plant at Vineyard (near Orem) in Utah County. All of the early production was run of mine mineralization.

Production after about 1990 was crushed and screened before shipping. The fluorspar is screened at the mine, with about 80 percent of the mined material passing a 3/8-in screen before crushing. Oversize is crushed in a 4- x 8-in jaw crusher and rescreened. The fluorspar tends to be concentrated in the finer fractions and the grey chalcedony and other gangue minerals tends to concentrate in the coarser fractions. The screened fluorspar is air dried at the mine.

Recent mining at Lost Sheep has employed jacklegs, for driving adits and shafts and a backhoe for surface excavation and hauling. Historical mining employed drifting, stoping and raises often to surface to extract more mineralized material. Elsewhere, several mines were of sufficient tonnage to install haul carts on a small rail system.

The fluorspar contains about 6% moisture as mined and is dried to about 4% moisture. The bulk fluorspar is then hauled to the Delta plant in dump trucks where it is bagged in 50-lb paper bags and put on pallets and shipped by truck. The bagging machine can process about 4.5 tons per hour (Tripp, 2015).

Additionally, several thousand tons of montmorillonite clay were mined by Materion along the access road into the Little Giant Pit (Tripp, 2015).

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The following section of this Technical Report is summarized from Hughes (2019).

7.1 REGIONAL GEOLOGY

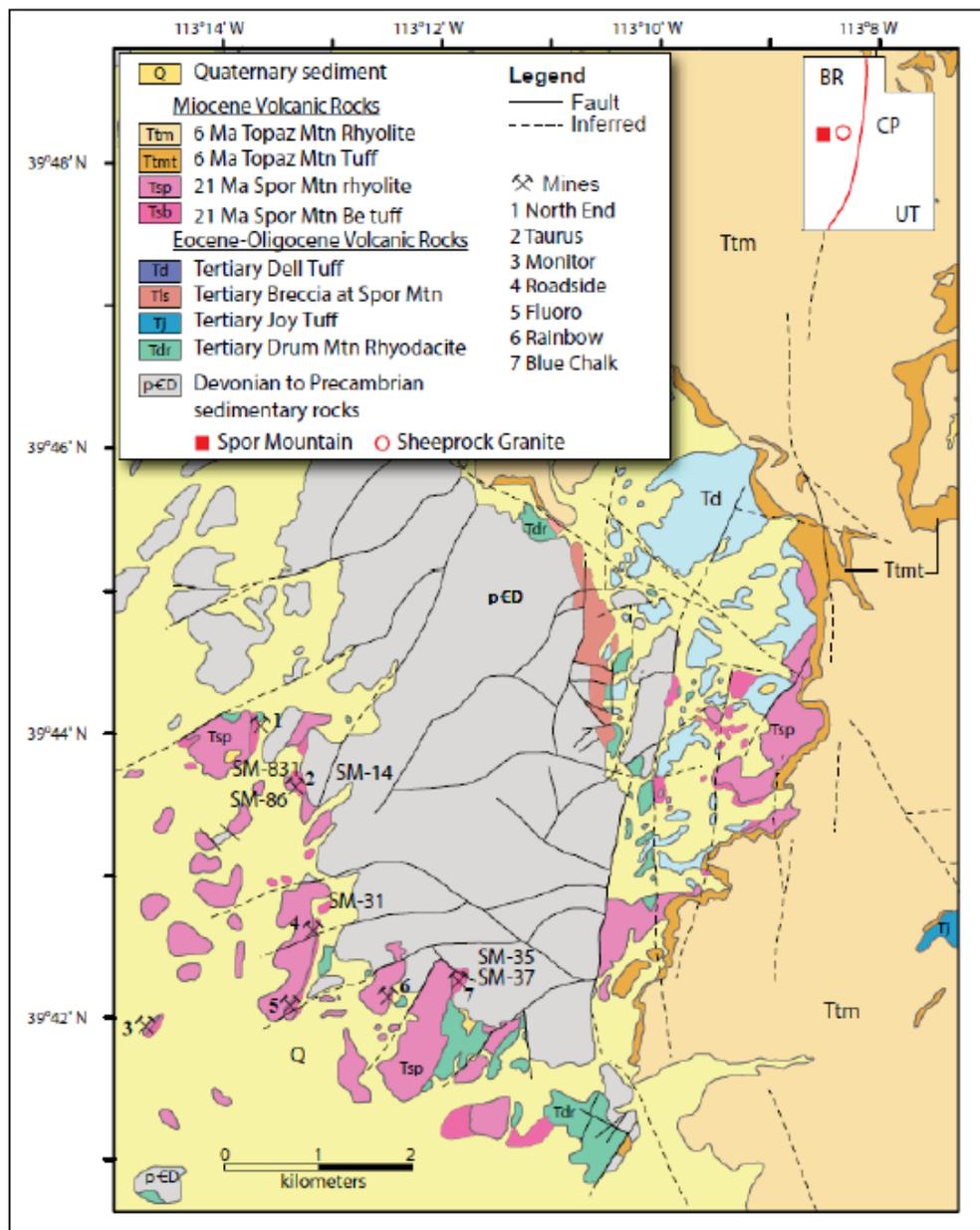
Spor Mountain (Figure 7.1) is a faulted block of gently to moderately west-dipping, north to north-easterly striking Paleozoic sedimentary rocks overlain by Tertiary volcanic flows, tuffs and related pyroclastic rocks. The volcanic and older sedimentary rocks are locally intruded by rhyodacitic to rhyolitic dykes and breccias related to the sub-alkalic Thomas Mountains Intrusive Complex. The eastern boundary of Spor Mountain is defined as a normal fault marking the western edge of the Oligocene Thomas Caldera.

The Thomas Caldera is one of several volcanic centres in western Utah. The Thomas Range that is east of Spor Mountain is comprised mainly of Miocene-age sub-alkalic to alkalic rhyolite flow, plugs, breccias and pyroclastic and volcanoclastic rocks formed during and following the collapse of the Thomas Caldera.

The volcanic events were coincident with Mid- to Late Cenozoic extensional tectonics with extensive normal faulting, and the creation of the north-south trending parallel mountain ranges of the Great Basin. The Basin and Range province was dissected by normal faults in an NE-SW to east-west extensional regime. These normal faults bound a series of basin and topographic highs that have been developing since the Oligocene. Extension in the Basin and Range is still active today.

Brecciation is spatially related to and in part controlled by re-activated semi-regional scale normal and subsidiary-reverse faulting. Mineral deposits or significant mineralization of fluorine, beryllium, lithium, rare earths, arsenic and uranium are associated with volcanic-hydrothermal fluids within or adjacent to these structural features.

FIGURE 7.1 REGIONAL GEOLOGY OF THE SPOR MOUNTAIN AREA



Source: Dailey et al. (2018)

7.1.1 Regional Stratigraphy

Lindsey (1979) documents faulted Precambrian to Devonian sediments that are the oldest rocks in the Spor Mountain District. Ordovician to Silurian sedimentary rocks in this sequence are the host of the fluorspar deposits of the Spor Mountain District. Descriptions of the main sedimentary formations in the Spor Mountain District are provided in Table 7.1. The older sedimentary rocks are flanked, partially covered or locally intruded by younger Tertiary volcanic rocks and Quaternary sediments.

The largest fluorite deposits are steeply plunging mineralized breccia pipes, typically emplaced between the Ordovician Swan Peak Quartzite and Silurian Lost Sheep Dolomite. No exploitable deposits of fluorite have been found below the Swan Peak Quartzite, though mineralization and associated structures continue into the Swan Peak rocks.

Tertiary volcanic rocks to the south and west of Spor Mountain host extensive beryllium mineralization that is typically associated with the Beryllium Tuff member of the Spor Mountain Formation. These volcano-sedimentary tuffs form a shallow west dipping blanket over the older sediments.

TABLE 7.1
DESCRIPTION OF MAIN SEDIMENTARY FORMATIONS IN THE SPOR MOUNTAIN DISTRICT
FROM LUNBECK, 2017

Formation	Age	Thickness (ft)	Description
Sevy Dolomite	Devonian	1120	Fine-grained, thin- to medium-bedded, mouse grey, laminated dolomite.
Thursday Dolomite	Silurian	330	Thick-bedded, light grey, sandy textured, medium-grained dolomite.
Lost Sheep Dolomite	Silurian	215 – 270	Upper part is grey dolomite containing numerous small parallel bands of grey or pink chert. Lower and middle parts are light grey, sandy textured dolomite with some blue-grey, mottled dolomite and one thin bed of black, cherty dolomite.
Harrisite Dolomite	Silurian	110 – 175	Massive, dark-grey, sandy-textured dolomite containing numerous poorly preserved <i>Halysites</i> .
Bell Hill Dolomite	Silurian	340 – 430	Upper part is light-grey, fine-grained dolomite. Middle and lower parts are massive dark-grey, sandy-textured dolomite.
Fluoride Dolomite	Silurian / Ordovician	100 - 135	Thin-bedded, fine-grained, smooth weathering grey dolomite and calcareous dolomite.
Fish Haven Dolomite	Ordovician	225 – 310	Upper one-third is massive, black mottled dolomite. Lower two-thirds is slope forming, thin- to medium-bedded, smooth-weathering dolomite.
Swan Peak Formation	Ordovician	440 – 840	Upper 1/2 to 2/3 is thick bedded white, vitreous quartzite. Lower one-third to one-half is brownish green shale interbedded with thin beds of hematitic red quartzite, limestone and a little dolomite.
Garden City Formation	Ordovician	1725	Upper one-quarter is grey, thin-bedded, nodular limestone and tan- to pink weathering, medium-bedded limestone with a few beds of green shale. Lower three-quarters is grey, thin-bedded limestone with numerous thin beds of intraformational conglomerate.

The stratigraphy of Tertiary volcanic rocks in the Thomas Range was defined classified by Lindsay (1979), and later summarized by Bullock (1981), with focus on the Spor Mountain area. The following is summarized from Bullock (1981).

Drum Mountain Rhyodacite

The Drum Mountain Rhyodacite of Eocene age unconformably overlies the Palaeozoic age sediments. These are dark, rusty brown weathering, volcanic flows and flow breccias composed of plagioclase, hypersthene, with plagioclase microlites and glass. Much of the sequence crops out over a 2.2 km long, northwest trend at the southern end of Spor Mountain. It occurs as intrusive and effusive rhyodacite, (hypersthene latite), with exposures of plugs, dykes, flows and breccias on the east and west sides of Spor Mountain; porphyritic rhyolite, quartz-sanidine tuff, vitric tuff and intrusive breccia, (Statz, 1963).

Intrusive breccias are considered to have formed in a proximal or vent-facies setting, perhaps as fall-back deposits. The country rock may appear reddish, dolomitised, shattered, fractured and locally, with dislocation into megablocks. The breccia contains fragments of older volcanic material, and is heterolithic, mineralogically heterogeneous, with a dolomitic, fine grained silicic or fine-medium grained volcanic matrix, with varying percentages of phenocrystic feldspar.

Oligocene Landslide Breccia

The Oligocene Landslide Breccia occurs as large masses along the eastern base of Spor Mountain, along a 3 km north-south trend that is up to 0.4 km wide. Lindsay (1979) interpreted this unit to represent debris and landslide material along a scarp, defined as the western margin of the Thomas caldera, and possibly related to continuation of caldera collapse. The massive and unsorted breccias are composed of a mix of limestone, dolomite and quartzite within a finer, generally dolomitic matrix. Locally, there are very minor wavy beds suggestive of aqueous deposition as saturated debris flows. Maximum thickness of the flows is approximately 80 metres.

Oligocene Dell Tuff

The Oligocene Dell Tuff defined by Lindsey, (1979), is a welded grey to pink rhyolitic ash-flow cropping out extensively in The Dell, to the east side of Spor Mountain. Previously termed a quartz-sanidine crystal tuff, the groundmass is composed of quartz and feldspar crystals, pumice, and glass shards. Welded and interbedded crystal tuff exposures have also been noted by Statz, (1963). The Dell Tuff is overlain by vitric tuff and lacustrine sandstone of possible Miocene age.

Porphyritic rhyolites are found in the northern and southern parts of the Dell and in the south of Spor Mountain, as ridges and hills up to 170 metres in height. They are overlain by vitric tuff and extend north to the Dugway Range.

Spor Mountain Formation

The Spor Mountain Formation is of Miocene age and is the youngest group of volcanic rocks of the Thomas Range and consists of alkali rhyolite tuff and flows of the Spor Mountain Formation,

which erupted at approximately 21 Ma, and the Topaz Mountain Rhyolite, which formed at 7-6 Ma accompanying Basin and Range block faulting. The Spor Mountain Formation unconformably overlies older rocks and consists of two members: the lower beryllium tuff member and an upper porphyritic flow member. Sanadine from the beryllium tuff member has an age of 21.73 +/- 0.19 Ma. Most of the Be mineralization at Spor Mountain is contained in the beryllium tuff member. The type section is located on the southwest side of Spor Mountain, in the area hosting the Beryllium deposits.

The beryllium tuff is comprised of stratified, vitric tuff and tuffaceous breccia, and may contain abundant heterogenous assemblages of older rocks. Tuffs contains ash-flow beds (water lain surge deposits), and bentonite. Dell area lithologies also include epiclastic tuffaceous sandstone and conglomerate. Overall thickness ranges from 20 m to 60 m. The member contains deposits of beryllium and uranium.

The red to grey rhyolite member conformably overlies the beryllium tuff, and crops out as lava domes, flows and small plugs. Compositionally sanidine, quartz, plagioclase, biotite bearing, it contains abundant matrix topaz. The rhyolite has a maximum thickness of approximately 500 metres.

To the east in the Topaz Mountain area of the Thomas Range, the Topaz Mountain Rhyolite is a complex of rhyolite flows, domes and intercalated stratified tuff. The Topaz Mountain Rhyolite unconformably overlies all older Tertiary volcanic rocks which have been tilted and faulted across the Range. Small plugs of alkali rhyolite cutting the Palaeozoic rocks in the Spor Mountains are interpreted by Bullock (1981) to belong to either the Topaz Mountain Rhyolite or the porphyritic rhyolite member of the Spor Mountain Formation, or both.

7.1.2 Regional Structure

Spor Mountain and area structures are related to the regional Sevier orogeny, the emplacement and subsequent collapse of the Thomas caldera, and subsequent modification by a series of largely extensional Cenozoic age events at ca. 21 - 7 Ma that produced the present-day Basin and Range topography across the western U.S.A. (Lindsay, 1982). The Palaeozoic strata has been uplifted, tilted to the west and northwest, and extensively faulted.

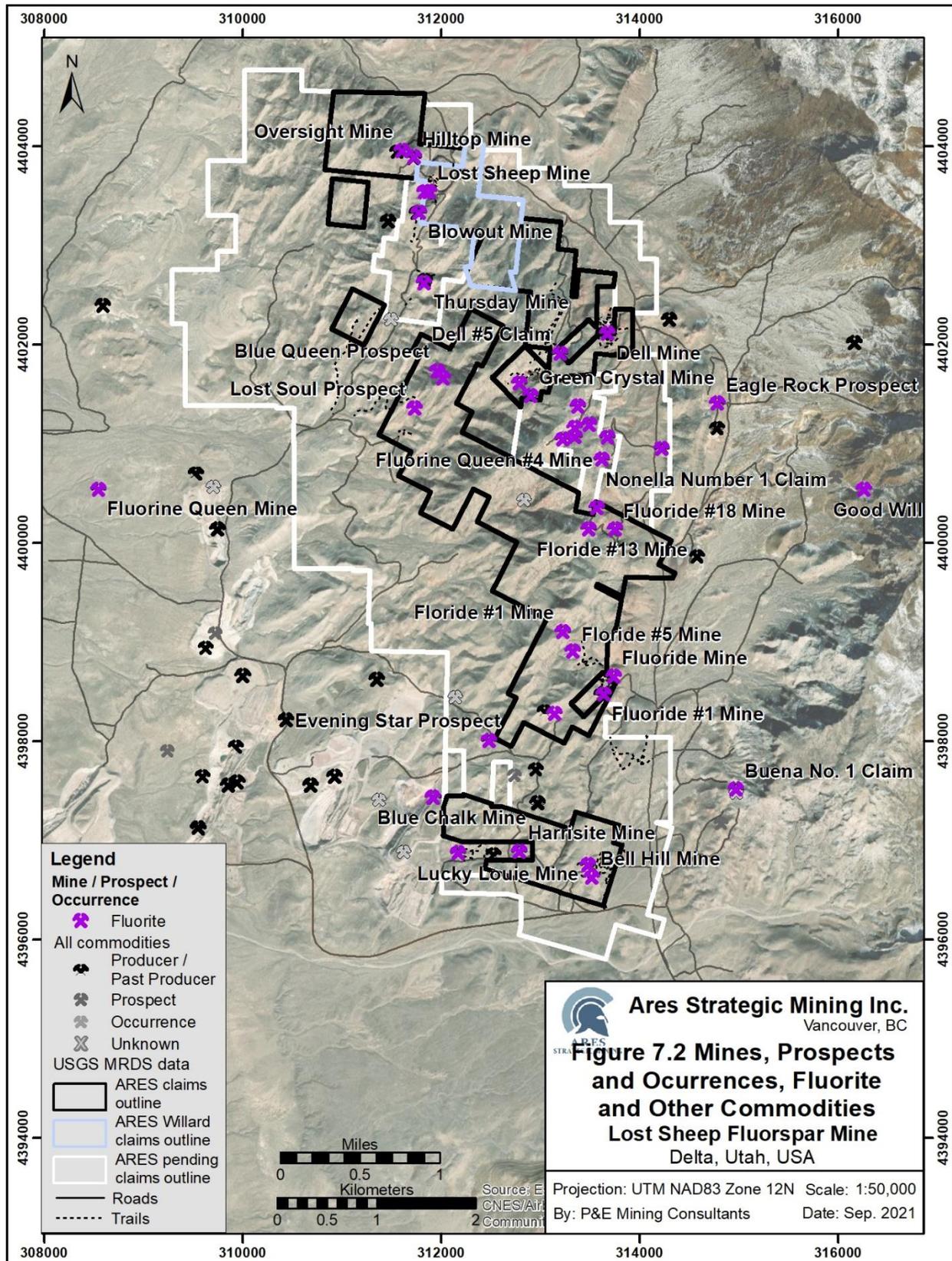
Bullock (1981) recognises four major episodes of deformation: an early, thrust-related compressional event; second event of transverse and strike-slip faults, possibly related to the waning stages of the Sevier orogeny and onset of continental detachment; third, Tertiary caldera collapse and the re-activation of older faults; and lastly, Basin and Range extensional faulting with graben-basin development and normal and reverse high angle faulting.

7.2 PROPERTY GEOLOGY

The underlying geology of the Lost Sheep Property is a series of dolomite formations including the Bell Hill, Harrisite and Lost Sheep formations. Striking at approximately 040-045°, dipping 37-42° northwest, they are intruded by breccias and cut by at several faults that effectively control the distribution of fluoride mineralization.

The Spor Mountain fluorspar deposits, though occurring dominantly in Palæozoic sedimentary rocks, are associated with Tertiary age volcanic rocks and are spatially and genetically related to topaz-bearing and Be-bearing rhyolite and rhyolite tuffs. (Staatz, 1963; Shawe, 1968). A total of 29 past producing fluorspar mines and prospects are located at Spor Mountain, along with several Be mines and prospects, and two Uranium deposits, notably Yellow Chief, located in The Dell (Bullock 1981) Figure 7.2.

FIGURE 7.2 SIGNIFICANT FLUORITE OCCURRENCES AND PAST-PRODUCING MINES WITH LOST SHEEP PROPERTY CLAIM OUTLINES



Source: P&E (2021)

7.3 DEPOSIT GEOLOGY

The Purple Pit Pipe has a vertical extent of 400 ft through the Lost Sheep and Harrisite Dolomite and terminates in Silurian Bell Hill Dolomite. The Purple Pit lies along the western edge of a rhyolite breccia plug measuring 1,150 ft in length and 400 ft in width. A normal fault that controls the location of the pipe strikes 055° and dips 38° southeast. Movement along this fault juxtaposes the Bell Hill Dolomite in the hanging wall against the top of the Swan Hill Quartzite in the footwall. For this reason, the Purple Pit Pipe was not expected to extend below the 400 ft level (Bullock, 1976).

The surface expression of the Purple Pit is a crescent-shape with slight eastward orientation over a length of 185 ft and a maximum width of about 75 ft. The pipe is relatively continuous down to the 150 ft level the pipe then splits and at the 250 ft level, there are three distinct mineralized zones, with the eastern, more vein-like in appearance, and measuring 4 ft in width and 20 ft length. At the 400 ft level, the main pipe is approximately 25 ft in diameter, and the western pipe is apparently terminated by the normal fault that dips beneath the pipe. Mineralization at this depth is reported as quite siliceous.

The Little Giant Pit is a more recent working on the Lost Sheep Property. On surface it is characterized by a “Y” shaped open cut which trends to the west with the two “arms” extending to the northwest and southwest. The pit extends 200 feet east-west and 220 feet north-south. The discovery point for this mineralization was a small pipe at the south end of southwest arm which was mined to a depth of about 60 feet. Discontinuous fluorspar bodies along a fault were followed for about 110 feet to the northeast where the main Little Giant pipe was encountered. This main pipe extends about 73 feet north-south and 49 feet east-west and has been mined down about 60 feet. It is reported to have widened with depth. A lobe of this pipe extends into the northwest arm of the pit. One bench about 25 feet above the floor of the pit has been mined about 90 feet to the northwest. Two near vertical veins, exposed in the pit wall, have been explored for a few feet on the north and east sides of the pit. The access road into the pit from the east is at the bottom of a long deep cut related to clay mining.

The pit faces clearly show extensive multi-stage epithermal mineralization, within and adjacent to semi-brittle or brittle faults. Host dolomites are west dipping and display preliminary vertical to steeply dipping faulting and localized brecciation, with argillic alteration, de-dolomitization, and banded fluorite-calcite-chalcedony/silica. Overprinting this is more intense fluorite mineralization, seen as a sub-vertical ‘plume’, with internal, almost concentric replacement and layering, characteristic of multiple mineralizing events within a permeable, low pressure and temperature setting.

At the Bell Hill Mine, all known fluorspar bodies are surrounded on surface by the Silurian Bell Hill dolomite, the thickest of the Silurian formations. Overall strike and dip for the strata is 015-055°/25-45° northwest. A dark grey, coarse clastic dolomite, with a finer, pale upper 45 ft, it forms prominent outcrops and steep hills. Marker beds are rare.

At Bell Hill, (breccia) pipes and veins were exploited, with the largest pipe described as H-shaped in outline by Bullock, (1976). The mineralization is bounded by two parallel faults striking 060° and with steep NW dip. Dimensions were a maximum length of 130 ft, and a width of 50 ft at the H-junction. Average plunge at the 168 ft level is 70° S, 81° E, with a hook-

like cross section. The two main ‘veins’ coalesce at the 69 ft level, but two separate zones were mined at the 168 ft level, with pipe dimensions of 30 ft width and 55 ft length, and 40 ft length and 27 ft width. Mineralized material at lower depths was more silicic, cherty. Irregular fine-grained bands of dark brown rhyolite tuff were exposed at the 87 ft level.

Mineralization was initially mined from surface, subsequently an adit was driven for 230 ft from the east, continuing in mineralization for 110 ft, starting at the 87 ft level. A raise with three levels was developed above the adit level and a 54° winze was sunk at the 87 ft or adit level. Sub-levels were developed from the winze at the 108, 129, 150, 168, 200, 230, 260 and 280 ft levels, with fluor spar mining from the 108, 129, 150, 168 and 200 ft levels, plus exploratory work in the three lowermost levels. Any pillars were later removed leaving the present open-pit configuration.

Surface workings included four bulldozed trenches and two open pits. Pit 1 was excavated at the top of the large H-shaped pipe. Other occurrences along a fault, some 100 m to the north were mined. The trend apparently was parallel to the main faults at the Main Pipe. Pit 2 on the north side of this fault exposed the second largest pipe on the Property, with areal extent 50 ft long and 30 ft width. Fluorite was mined from surface to a vertical depth of 90 ft with the 65° S 58° east plunging mineralization pinching out.

Trench 1 mined 6 ft wide, 60 ft long mineralization cutting dolomite, and Trench 2 mined 70 ft long, 12 ft wide mineralization. Delea Mining extracted 4,327 tons of mineralized material from the second trench area, via two inclined shafts, a 150 ft shaft, and a shallow shaft 50 ft to the southwest. Mineralized material width at the bottom was 3.3 ft. A third, small pipe from a third trench was mined from surface to 20 ft depth, with mineralization pinching. The fourth trench exposed a small, sub-metre wide vein. Bullock noted diamond drilling by the company failed to intersect new ‘ore bodies’ on their claims.

Fluorite mineralization was described as soft, pulverant and white to dark purple, with main gangue minerals of montmorillonite, dolomite and quartz. The deposits replace dolomite along faults and fractured zones, typically as brecciated zones along faults. There are reports that silica content increased and fluorite content decreased with depth, and this resulted in mine closure.

From 1950 to 1974, total production was 26,194 tons, with two-thirds from the Bell Hill Mine over the H-shaped pipe. The first 5,991 tons average 78.8% F and 0.89% SiO₂. Assays reported by Bullock, 1976, taken at 69, 87, 108, 129, 150 and 168 ft levels averaged 80.3% F. Below the 200 ft level, samples returned an average of 40.7% F, 13.7% silica and 0.124% U. Two samples from the lowest level, 260 returned 67.9% F, 13.7% silica and 0.124% U. Bullock estimated that with continuation of mineralization within a 50% smaller pipe, there may remain approximately 10,000 tons that would require processing to remove silica.

7.4 STRUCTURE

The structure of the Spor Mountain area is dominated by significant faulting (Bullock 1981). Dominant structures on the Lost Sheep Property are similar to the regionally observed structures. These include:

- A dominant early set of northeast-trending normal and reverse faults that typically dip 35° to 60° southeast and have variable displacements of up to 300 metres. The topographic ridges and valleys follow this fault trend that includes thrust faulting during the late stages of the Sevier orogeny;
- Northwest trending traverse faults are common and typically cut the northeast trending faults. They usually dip steeply and have variable displacements sometimes exceeding 200 metres;
- East-trending traverse faults are less common. They dip steeply southwest, range in displacement from 100 to 175 metres and cut both the normal and reverse faults and the northwest-trending traverse faults. East-trending faults may be related to waning caldera subsidence in a manner similar to radial fracturing;
- North-trending faults, associated with late extensional Basin and Range normal faulting.

Caldera-related features are seen as semi-regional arcuate structures, low angle reverse faulting, step-faulting and block rotation. Minor block uplift may also have taken place for accommodation reasons. Some north-south trending faults could be related to block subsidence during caldera collapse, e.g., in The Dell.

The fluorspar deposits on Spor Mountain are typically hosted within, proximal to, or controlled by faults cutting the host Ordovician Fish Haven and Fluoride Dolomites, and the Silurian Bell Hill, Harrisite, Lost Sheep and Thursday Dolomites. There is a strong spatial relationship between fluorite mineralization and Tertiary intrusions and breccias.

The majority of known fluoride mineralization is located stratigraphically above the Silurian Swan Peak Quartzite and below the Silurian Thursday Dolomite. Rhyolitic flows, plugs, dykes and breccias are spatially related to the deposits, and represent possible high-level expressions of a larger Oligocene intrusion. Silicification of the country rock and the fluorite mineralization are common associated features. The lower Palaeozoic rocks that host the intrusive breccias form most of the bedrock of the Spor Mountain mining district, and have been sub-divided on the basis of regional correlation with established formations, aided by fossiliferous evidence

7.5 MINERALIZATION

Information in this section is primarily summarized from Hughes (2019). Fluorite mineralization is usually hosted within breccia pipes, minor dyke-like breccias and replacement features oriented sub-parallel to stratigraphy generally plunging steeply east, possibly oriented in part due to block rotation. Lesser bodies include sub-strata parallel replacement bodies and metre to dm-scale vein-type fluorite. There is some potential for high-grade fluorspar deposits along the contact between dolomite and the porphyritic rhyolite in volcanic vents.

Deposits are strongly fault controlled, occurring within or adjacent to faults, and may contain trace amounts of beryllium, lithium and uranium. The breccia pipes are characterised as very steeply east-plunging and related to faults and small rhyolitic intrusive bodies (Staatz and Carr,

1964). Nearly all of the pipes are funnel-shaped, becoming smaller at depth. Low-grade uranium occurs in the fluorite pipes, with a gradual increase in grade from the northern portion of the district toward the south. The Yellow Chief uranium mine produced modest quantities of low-grade mineralization from a series of Oligocene tuffaceous sandstone and conglomeratic lenses in The Dell, just east of Spor Mountain. The area has been extensively faulted by mainly small-displacement normal faults.

Fluorite has also been recorded in volcanoclastic sediments at Spor Mountain (Staatz and Griffiths, 1961, Staatz, 1963).

Bullock (1981) reports that Lost Sheep Property fluorspar mineralization consists of 65-95% fluorite, with montmorillonite, dolomite, quartz, chert, calcite, chalcedony and opal as impurities. The fluorspar closely resembles brown, white, or purple clay and forms either pulverulent masses or box works. With depth, the grade of the mineralization commonly decreases, and masses of montmorillonite, chert, or quartz and dolomite have been found in increasing abundance. In some deposits, the fluorspar mineralization contains 0.003-0.33% U, and uranium grade varies considerably from place to place.

Chalcedony occurs within F mineralization or within cherty dolomites, quartz and calcite are often late, fine, prismatic, partially infilling voids and boxwork textures, accompanied by montmorillonite and fine to, rarely, relatively coarse prismatic fluorite.

Bullock (1981) describes five fluorspar mineralization types:

- Pulverulent mineralized material constitutes the majority of mineralization mined, it being friable, white to tan to brown or purplish, soft, almost clay-like, with significant extraction from Bell Hill, Blowout, LSM, and Fluorine Queen. Associated with such mineralization are boxwork textures with dolomite-calcite replacement by fluorite, and late recrystallization by quartz and/or calcite, with gangue montmorillonite.
- Boxwork mineralization is intimately associated with the preceding, occurring in large, open space replacement zones within breccias. These are very typical of volcanic-hydrothermal systems, and texturally appear quite similar to epithermal deposits. Boxworks have a fluorite-rich network with vein or boxwork calcite/dolomite surrounding fragmented dolomite. Dolomite is completely or partially dissolved, leaving vugs and voids, or there is often later open-space replacement mineralization, characterised by fluorite, montmorillonite, calcite-quartz/chalcedony, dolomite in highly varying combinations. Boxwork mineralization was mined at e.g., Bell Hill, Fluoride No. 5, LSP, and Hilltop mines.
- Aphanitic mineralization is hard, compact, fine, relatively dense, occurring as masses within more boxwork ore, 'lumps' or veins. Banded mineralization is also noted, with these textures clearly representative of epithermal-type 'veins' or replacement. Examples include at Dell No. 5, and Green Crystal mines. This type is uncommon and does not form large scale deposits despite a high F grade exceeding 80%.

- Sponge Mineralization is rarely noted, and defined by Bullock as rounded, hollow, tubular and columnar. Forming a very minor component of mineralization, Bullock surmised their origin to be related to relatively unrestricted hydrothermal fluid circulation and deposition within cavities and open channel ways.
- Crystalline Mineralization is represented by small, prismatic, 1-2 mm cubic F crystallisation, often seen as drusy 'crusts' with carbonate and very rarely, idiomorphic topaz. Rare and collected more for gem quality, samples areas include Blue Queen and Green Crystal. Commercial grade crystalline mineralized material came from the Fissure Pit of the Fluorine No. 2 Mine, where it is associated with coarsely crystalline masses and banded F mineralization. Some Be deposits in the Beryllium Tuff contain fine crystalline F and may be considered a sub-class of Crystalline mineralization.

8.0 DEPOSIT TYPES

Spor Mountain fluorite belongs to the class of volcanic-epithermal fluorspar deposits, more specifically, 'sub-alkaline epithermal' type. Chemically, they have near-saturated potassium and sodium, containing plagioclase and alkali feldspar, are silica-saturated, with late quartz crystallising from a differentiated melt (Hayes et al, 2017). Deposits occur as siliceous vein fill, breccia pipes, disseminated and replacement deposits along faults, fractures in intermediate to felsic volcanic and volcanoclastic rocks. Tectonic settings are extensional back-arc or marginal-peri-cratonic, with bimodal volcanism (covering rhyolitic and alkaline igneous systems). Mineralization textures typically associated with epithermal deposits include open-space, cavity fill, drusy, comb, crustiform, colloform banding, (multi-stage) brecciation, lattice (read 'boxwork'), and sheeting (Dowling and Morrison, 1989).

Skarn, greisen and replacement deposits in carbonate-bearing host rocks generally contain abundant fluorite. Barton and Young, (2002), include the Spor Mountain fluorspar breccia pipes and fluorite-rich replacement deposits in their genetic model for the adjacent beryllium deposits. The carbonate lithic-rich tuff volcanogenic Spor Mountain geochemistry is metaluminous to weakly peraluminous and deposits of this type generally host Be, and by extension, F, in carbonate and volcanic rocks associated with felsic, biotitic leucogranites and high-silica rhyolites, coeval syenites and calc-alkaline granites. Weakly mafic volcanic rocks and manganese replacement and vein mineralization may also occur.

Be deposits are commonly associated with peraluminous (aluminium oxide higher than total sodium oxide, potassium oxide and calcium oxide) granitoids containing high F and Al, elevated Li, Sn, and W. Fluorite, F-rich silicates, micas, topaz, albite, K-feldspar can all be abundant, with Be minerals represented by chrysoberyl, phenakite, beryl, bertrandite, and euclase. In most cases, all these deposits are related to rift or extensional geological settings.

At such crustal levels, with related pressure-temperatures and salinities, the deposits represent a volcanic-epithermal style of mineralization.

Brecciation and textural evidence within the fluorite deposits and tuff-hosted beryllium indicate formation at low pressure, typically, <1-1.5 kbar, and shallow emplacement. Associated fluids tend to be more saline, with extensive metal transport. In the case of Spor Mountain, proximity to more felsic volcanic or quartzite units may produce a higher silica mobility and lower fluid salinities, especially at higher pressures. (Barton and Young, 2002).

A bimodal distribution of topaz rhyolites occurs throughout western Utah. They have high concentrations of Be, F, Li and other lithophile elements. Uranium-lead dating of uraniferous silica yields an estimated oldest age of 20.8 Ma for Be mineralization (See Ludwig et al. 1980, and Christiansen et al., 1984).

As a class, low-T replacement deposits comprise the bulk of high-grade Be mineralization, whether as fluorite-silica-bertrandite after carbonate clasts at Spor Mountain, fluorite-diaspore-micas-chrysoberyl at Lost River, or fluorite-adularia-phenakite at Ermakovskoe and Mount Wheeler. Replacements of carbonate or skarn by fluorite and iron-rich oxides, sulphides and sheet silicates form another major group.

Foley et al. (2012) describe the various stages of mineralization as follows:

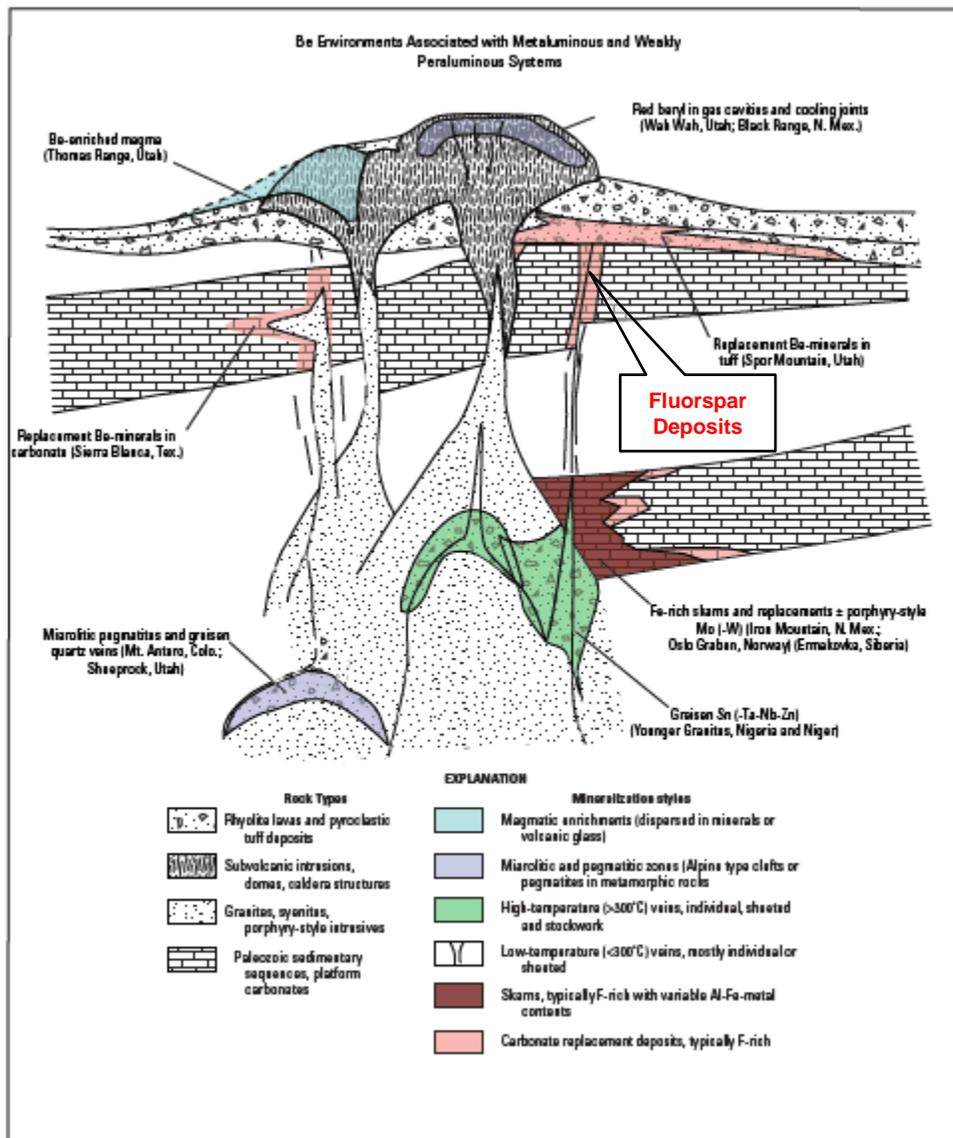
- **Stage 1** – Intrusion of a high-silica, volatile- and lithophile-element-rich peralkaline to alkaline magma;
- **Stage 2a** – Explosive eruption of tuffaceous volcanic rocks by mixing of two magmas in the magma chamber. The explosive volcanism created the breccia pipes (that are later filled with fluorspar) associated with the intrusive breccias and spread large amounts of tuff across the carbonate paleotopography. The tuffs had a high lithic content with abundant dolomite fragments. The breccia pipes acted as conduits for magmatic fluids to mix with meteoric water, setting up circulating hydrothermal cells;
- **Stage 2b** – Eruption of rhyolitic flows and domes covered the tuffaceous rocks and intrusive breccias. The permeable, chemically reactive, stratified tuffs and tuffaceous breccias were confined between relative low permeability rhyolite flows and domes and the underlying, low permeability Palaeozoic carbonate rocks. The upper and lower confining rock units caused hydrothermal convection cells to move a large amount of fluid through the tuffs and breccias;
- **Stage 3** – Beryllium, fluorine and other lithophile elements were liberated either by leaching of large volumes of lithophile-element-rich volcanic source rocks or by shallow degassing of the magma or by a combination of the two mechanisms. The presence of large amounts of chemically reactive dolomite fragments in the breccia pipes and stratified tuff allowed formation of large amounts of fluorite in the pipes and fluorite, beryllium, lithium and rare earth mineralization in the beryllium tuff.

Bullock (1981) stated that several of the breccia pipes are vertical but many show an eastward plunge at angles of 50° to 90° and commonly flair toward the top. They can be cone shaped but are often irregular in outline at the surface and can split into several “roots” at depth. Size varies from a few feet in diameter to 145 ft by 73 ft. The fluorspar grade commonly decreases downward with an accompanying increase in clay and silica.

Barton and Young, (2002), described the Be deposits at Spor Mountain as shallow, low-temperature (150-250°C) epithermal - type, replacement and vein deposits linked to volcanic and hypabyssal high-silica rhyolites and granite porphyries.

A summary of the relationship between Be and F relationships is presented in Figure 8.1 from Foley et al., (2012). Purple ellipses represent replacement, epithermal fluorspar mineralization observed at Spor Mountain.

FIGURE 8.1 SCHEMATIC SECTION SHOWING BE AND F MINERALIZATION IN EPITHERMAL DEPOSITS ABOVE A METALUMINOUS TO PERALUMINOUS MAGMA CHAMBER



Source: Foley et al. (2012)

Note: Be = beryllium, F = fluorine.

The fluorspar deposits occur as epithermal veins and breccia filling dolomites and limestones, and in some locales, more recent Oligocene age peralkaline rhyolitic intrusions and related alkali feldspar rhyolites. The occurrence of mineralized material minerals in vuggy cavities and veins coupled with silica and calcite suggests a final mineralized material stage post-dates hydrothermal alteration. A saline-meteoric water mixing model with initial (saline) temperatures lowered by episodic or intermittent interaction or influx by lower saline, meteoric water would drop pH levels and precipitate much higher concentrations of fluorine (with carbonate, likely calcite). Epithermal deposits within Utah (and adjacent states), were reported and discussed by

Thurston et al. (1954). They classified Spor Mountain deposits as epithermal, based on mineralogical and textural evidence.

Epithermal-related Fluorine forms in a setting analogous to low-sulphidation deposits described by e.g., Plumlee et al., 1968, for the Colorado Au-Ag mineralization. These deposits are associated with veins, stockwork veins and mineralized breccias associated with intermediate to felsic volcanic centres in areas of regional faulting. Gangue minerals include carbonate, quartz and baryte. Wall rock alteration assemblages include silica, propylitic, argillic and advanced argillic assemblages. Intense silicification and pervasive argillic and advanced argillic alteration are common adjacent to shallow parts of veins, wall rock near deep parts of veins is moderately affected by silicification (\pm potassic alteration), and wall rock distal to veins contains propylitic mineral assemblages.

9.0 EXPLORATION

9.1 SURFACE EXPLORATION

Surface exploration by Ares Strategic Mining began in 2019 and 2020 with LiDAR DEM and orthophoto analysis delineating areas of disturbed stratigraphy and recessive topography possibly related to dissolution features or intrusive breccia pipes. Potential locations for fluorite bearing breccia pipes were identified as topographic lows (often surface depressions) at the intersections of faults, mapped from orthophotos or Google Earth. Evidence on the photos of purplish colored rock exposed on surface was also reported.

All targets identified from the above remote sensing were visited during the summer of 2020 by a geologist. Notes were taken of whether evidence of breccias were visible, the type of breccia, or if there was fluorspar seen on surface.

9.2 IP GEOPHYSICAL SURVEYS

The reader is cautioned that some portions of the IP lines are on property that is not currently owned by Ares and consequently some anomalies and targets may not be on property currently owned by Ares.

Ares conducted a detailed IP survey during April and May 2021 on the Lost Sheep permitted mining area and Bell Hill zone. Work was done by KLM Geoscience of Las Vegas, NV. The IP program at the Lost Sheep Mine consisted of 6 lines, each of them 800 m long, with dipoles located 25 m apart (Figure 9.1). Some of the lines were designed to run over known fluorspar locations to identify and define their geophysical signatures, which could then be used to identify new potential targets by response comparison. Some parallel lines were planned away from those to test for potential blind targets. Two orthogonal lines were also planned as tie lines for structure and stratigraphic correlation.

FIGURE 9.1 LOCATION OF IP SECTION LINES, AND POSITION OF THE NEWLY LOCATED POTENTIAL BRECCIA PIPE TARGETS



Source: Ares (2021)

Notes: Breccia pipe targets = red circled area.

Lines 3 and 5 on the Lost Sheep Mine area show clear anomalies that can be correlated with breccias pipes breaking through the limestone host rocks. The anomaly in Line 3 (Figures 9.2, 9.3, 9.4) is 50 m long in an ENE-WSW direction and open to a depth of approximately 50 m from surface. The anomaly is located right between the known Blowout / Badger Hole known fluor spar pipes and the LGP / Purple Pit fluor spar pipes, suggesting the continuation of an almost linear trend. Line 5 shows three anomalies (Figures 9.5, 9.6 and 9.7), the smaller clearly related to the down dip projection of the known Blowout Mine (possibly indicating additional non-mined fluor spar mineralization). Under the Badger Hole a thin elongated anomaly may indicate the presence of a narrow pipe, as indicated also by the nature and extent of historic workings. A larger more elongated anomaly extending at depth and to the north at moderate angle to an inferred depth between 75 and 100 m is known to correlate at surface where volcanic intrusive breccia and fluorite are also reported and mapped.

FIGURE 9.2 IP SECTION 3 INDICATING THE PRESENCE OF A DISRUPTION OF THE LIMESTONE PACKAGE LIKELY RELATED WITH A BRECCIA PIPE

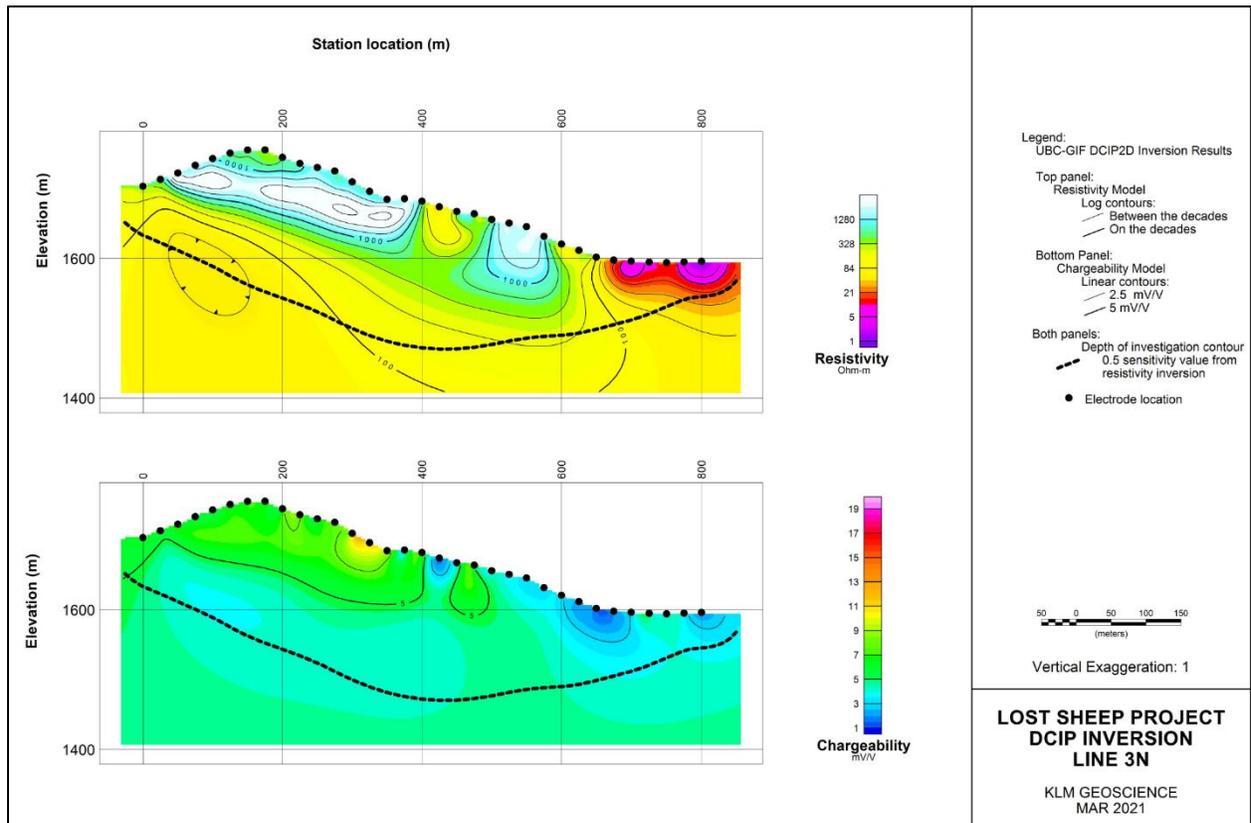
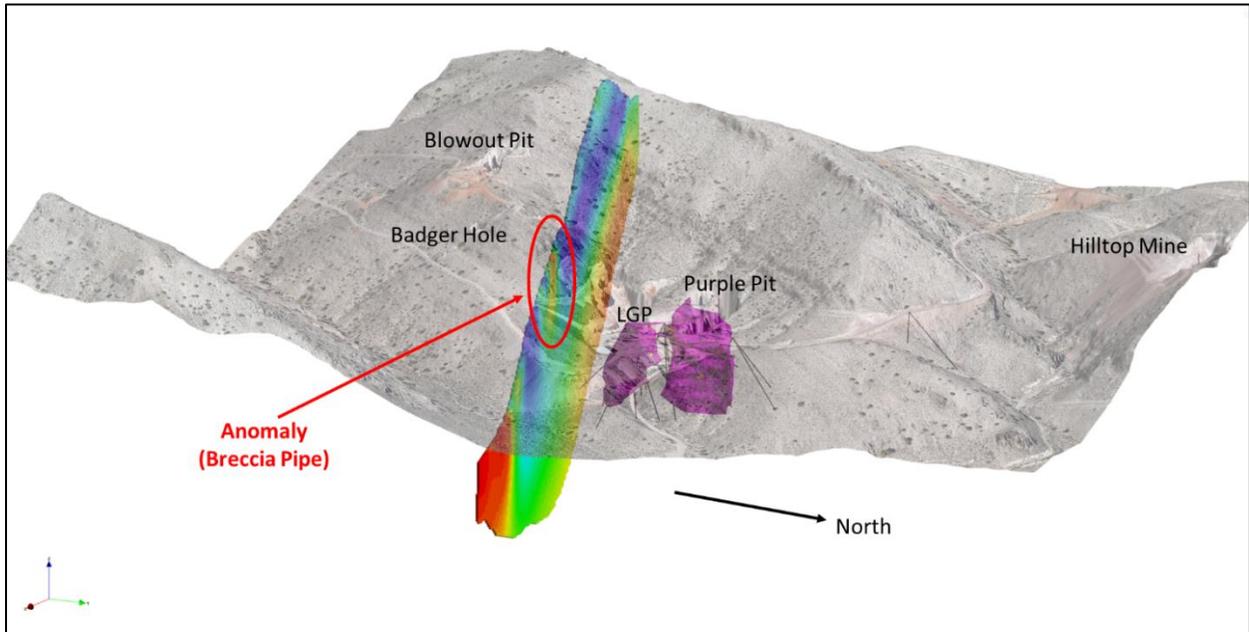
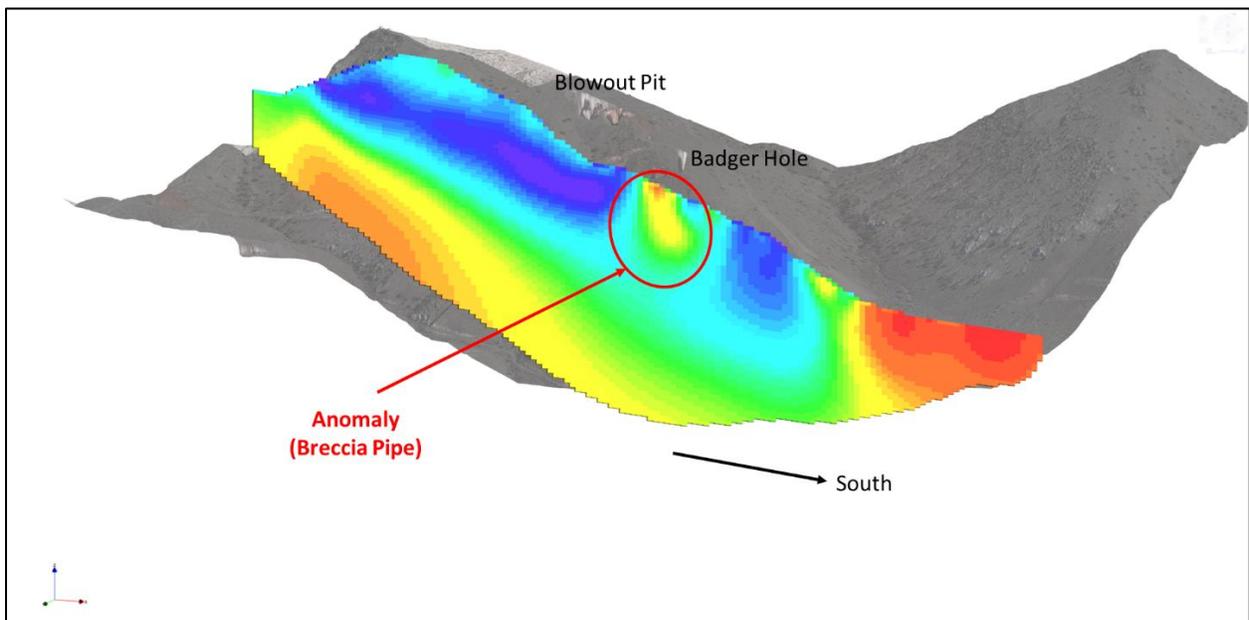


FIGURE 9.3 ISOMETRIC VIEW OF IP SECTION 3 ON TOP OF DEM MODEL INDICATING THE PRESENCE OF THE IP ANOMALY AND SURROUNDING KNOWN BRECCIA PIPES



*Notes: Breccia pipe = red circled area.
The IP anomaly could possibly correlate with a breccia pipe.*

FIGURE 9.4 ISOMETRIC VIEW OF IP SECTION 3 LOOKING NE FROM BELOW INDICATING THE PRESENCE OF THE IP ANOMALY AND SURROUNDING KNOWN BRECCIA PIPES



*Notes: Breccia pipe = red circled area.
IP anomaly likely related with a breccia pipe.*

FIGURE 9.5 IP SECTION 5 INDICATING THE PRESENCE OF DISRUPTIONS OF THE LIMESTONE PACKAGE LIKELY RELATED WITH BRECCIA PIPES

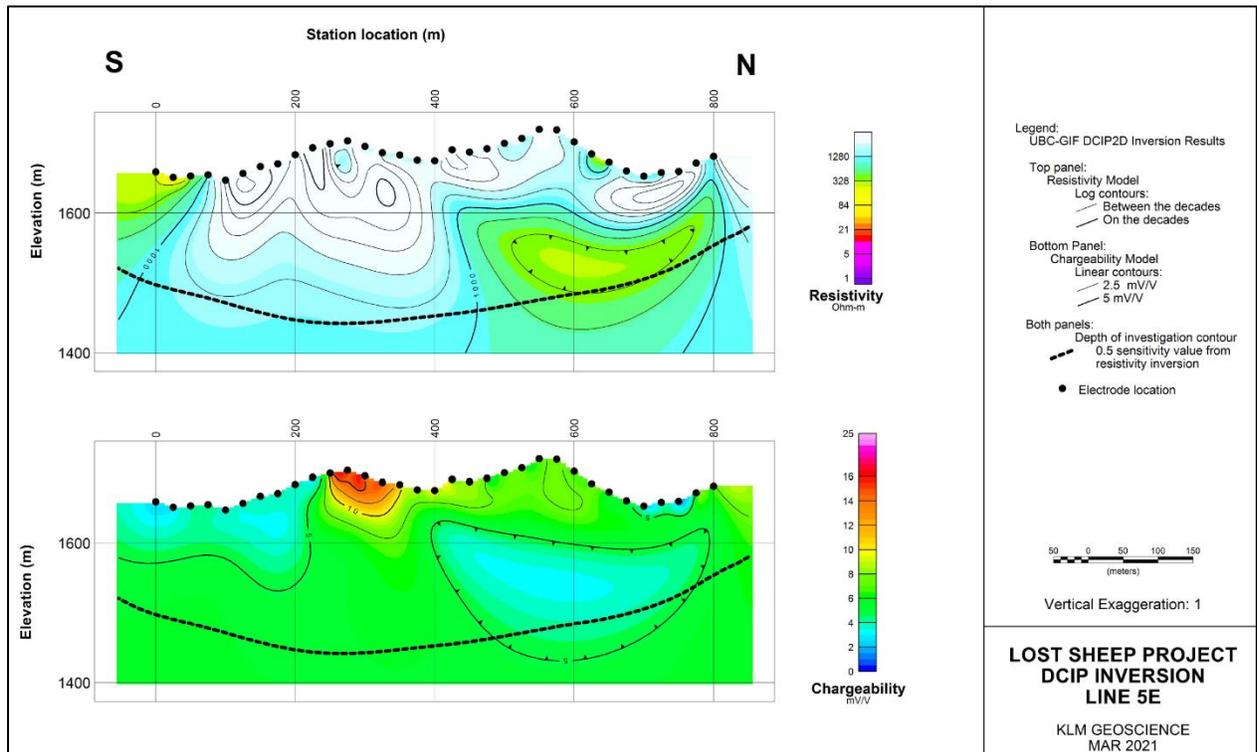
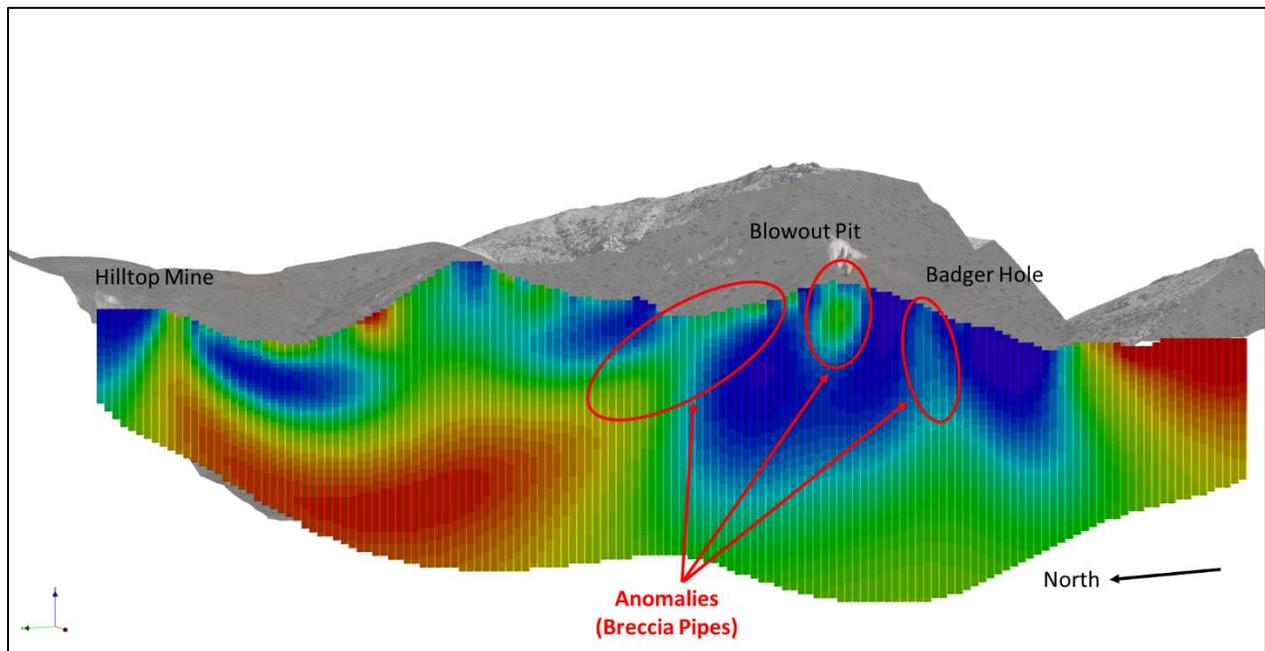


FIGURE 9.6 VIEW OF IP SECTION 5 LOOKING EAST FROM BELOW INDICATING THE PRESENCE OF THE IP ANOMALIES AND SURROUNDING KNOWN FLUORSPAR BEARING BRECCIA PIPES

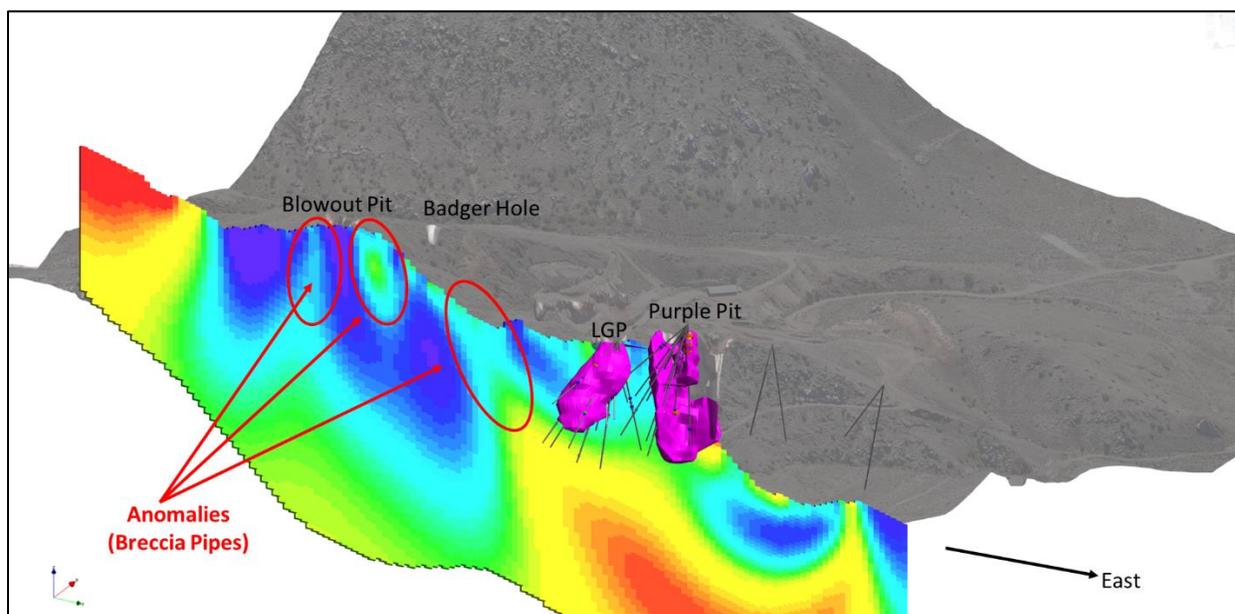


Notes: Breccia pipes = red circled areas, IP anomalies likely related with breccia pipes.

The correlation of the anomalous areas under the Blowout and Badger Hole pits is very evident.

The reader is cautioned that anomalies under the Blowout Pit and south of it are not on mineral claims belonging to Ares.

FIGURE 9.7 ISOMETRIC VIEW OF IP SECTION 3 LOOKING NW FROM BELOW INDICATING THE PRESENCE OF THE IP ANOMALIES AND SURROUNDING KNOWN FLUORSPAR BEARING BRECCIA PIPES

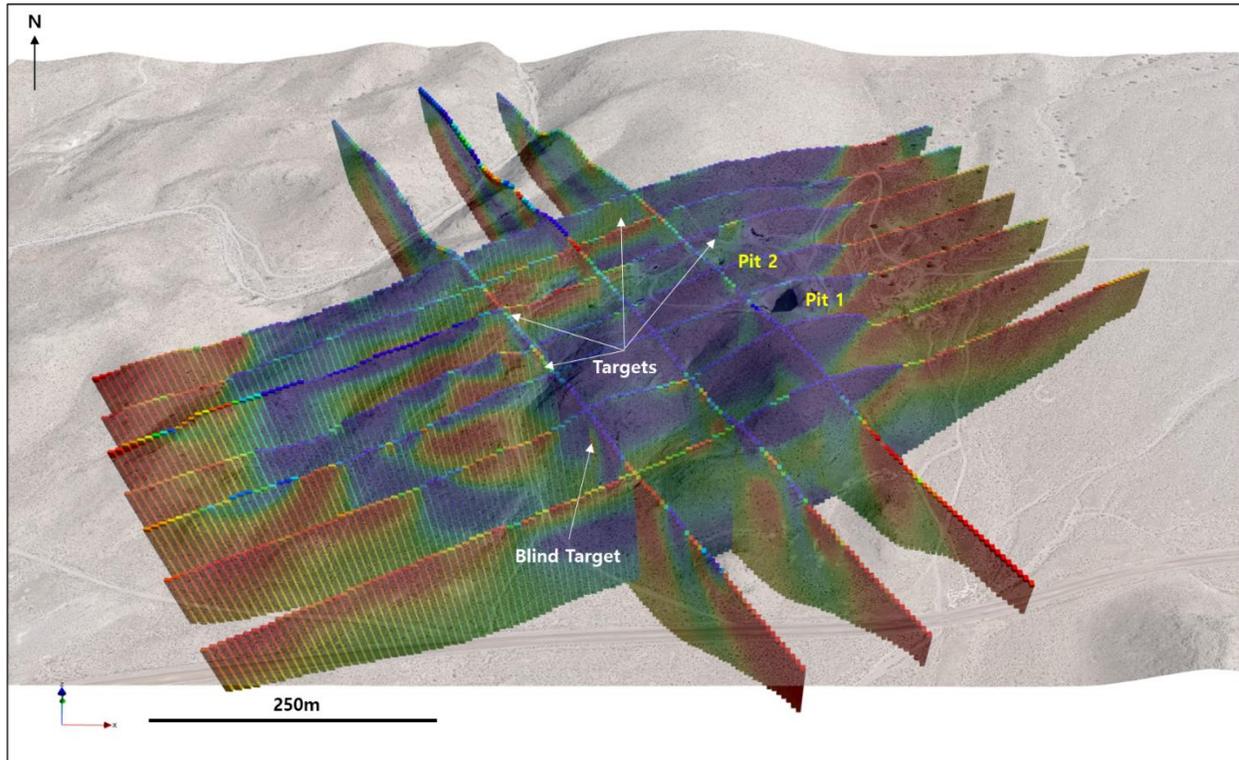


Note: Possible Breccia pipes = red circled areas.

The IP anomalies may be related to intrusive breccia bodies (red circled areas) and surrounding known fluorspar bearing breccia pipes, including the wireframes for the known LGP-Purple Pits and drill hole traces for reference.

One of the most prospective zones outside of the Lost Sheep Mine area is the Bell Hill area. There are some historic mines and prospects identified and the IP Survey was planned consisting of 10 lines, each of them 800 m long, with dipoles located 25 m apart (Figure 9.8). The lines were designed to run over known fluorspar locations to identify and define their geophysical signatures, which could then be used to identify new potential targets immediately below surface. A grid with seven parallel lines spaced about 50 m between each other were planned on top of historically known mineralized zones. Some of these zones show fluorspar mineralization at surface and had not been previously mined. The IP survey was designed to test for geophysical signatures immediately below these zones to test for continuity and also correlating other anomalous zones with potential blind targets. Three orthogonal lines were also planned as tie lines for structure and stratigraphic correlation.

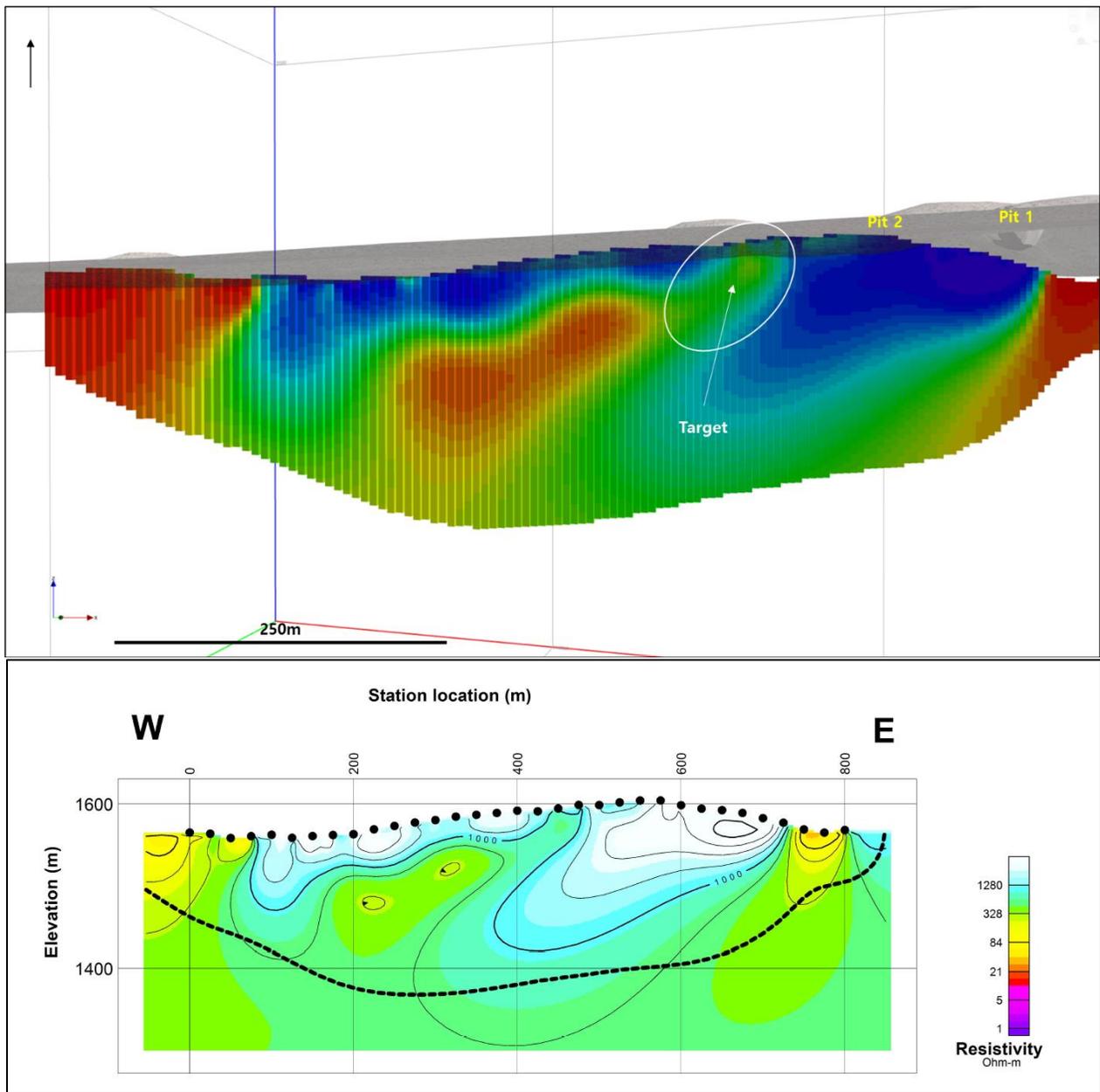
FIGURE 9.8 ISOMETRIC VIEW LOOKING NORTH WITH LOCATION OF IP SECTION LINES, AND POSITION OF THE NEWLY LOCATED TARGETS AT THE BELL HILL AREA



Lines 7, 12 and 14 show clear anomalies that can be correlated with fluorspar breccias pipes breaking through the limestone host rock, particularly when coincident fluorspar mineralization has been identified at surface in them (Figures 9.9, 9.10, 9.11).

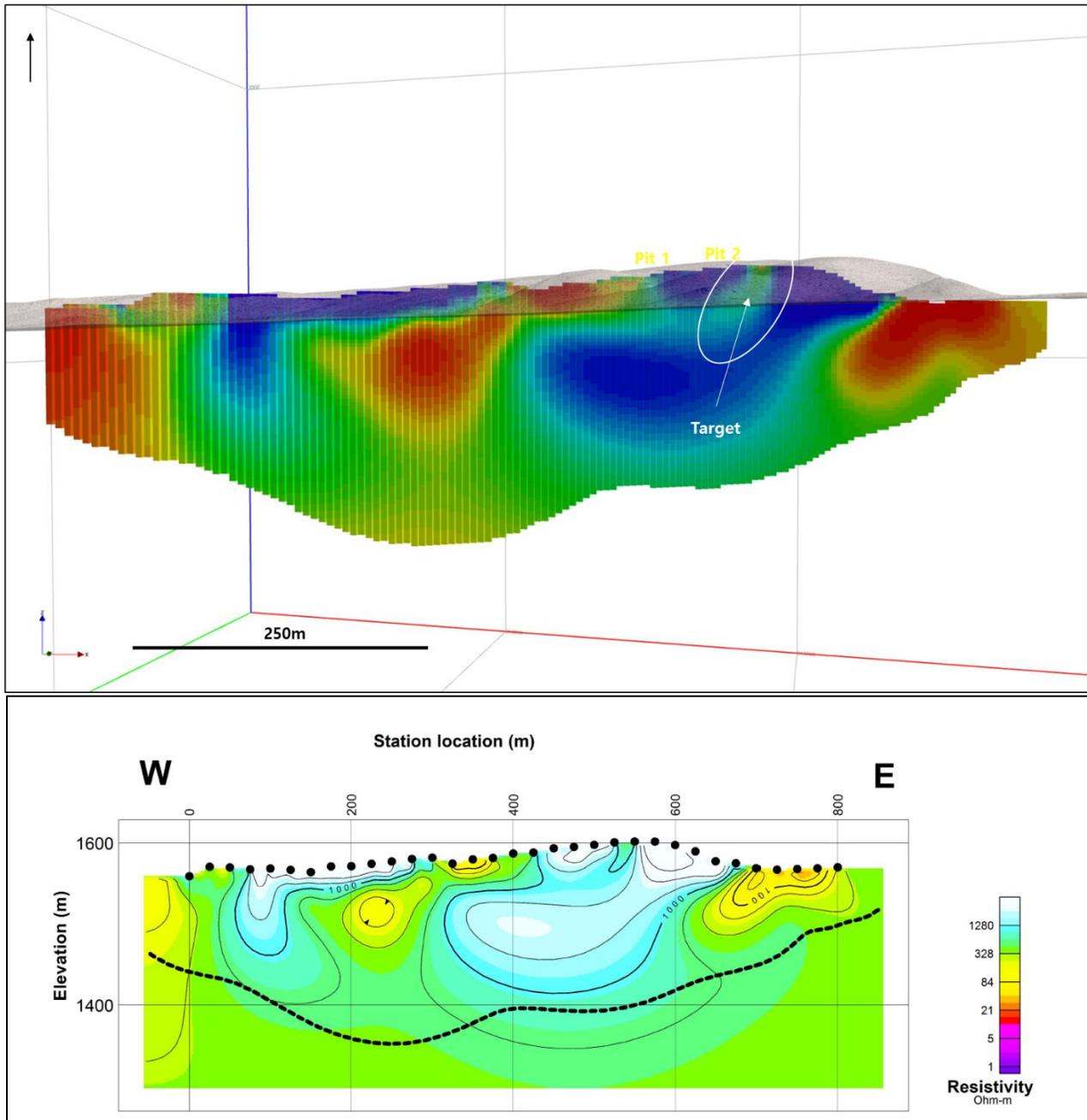
Line 14 (Figure 9.9) indicates the presence of a very discrete anomaly reaching the surface with approximate dimensions of 40 m wide and near 100 m of vertical depth, very similar to the size of historic Bell Hill Pit 1 deposit. The anomaly is on trend with Bell Hill Pits 1 and 2, suggesting it may be part of the same feeding intrusive.

FIGURE 9.9 **LINE 14 (RESISTIVITY OHM-M)**



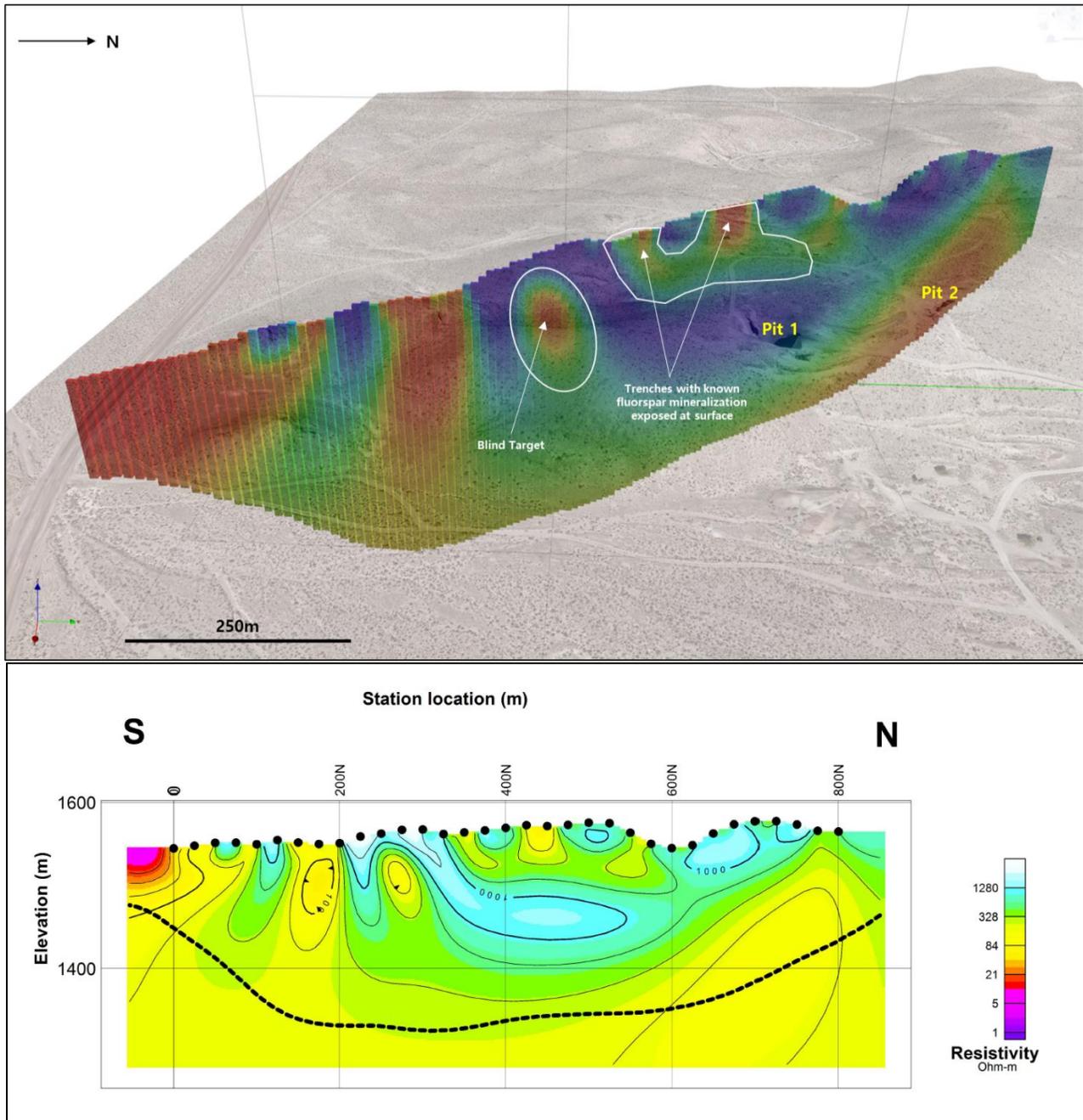
Line 12 (Figure 9.10) shows a discrete anomaly immediately north of the known Pit 2 mineralized breccia pipe, indicating it may well be the continuation of that pipe towards the north and to about 75 m at depth.

FIGURE 9.10 LINE 12 (RESISTIVITY OHM-M)



Line 7 (Figure 9.11) is orthogonal to lines 12 and 14. The IP line runs on top of three known fluorspar occurrences, two of them historic (fluorspar vein, Trench 1) and one found after ground prospecting of a feature identified from LiDAR and satellite imagery. There are a series of anomalies related to the down dip projection of the known showings reaching a depth of approximately 50 m. There is also a very discrete anomaly starting 60 m below surface and extending for at least 75 m below that depth that may indicate the presence of a breccia pipe as a blind target.

FIGURE 9.11 LINE 7 (RESISTIVITY OHM-M)



9.3 SURFACE MAPPING

A program of detailed surface mapping at a scale of 1:1,000 began in May 2020 and is continuing. The mapping started at the areas which had been identified previously as having the highest potential: the Lost Sheep, Bell Hill, and Hidden Treasure.

In the mapping, focus is on recording structures that may be related to the formation of breccia pipes that could bear fluorine. Areas previously identified as having potential from the remote

sensing, DEM study, are focussed on, as are locations identified as having potential from the 2021 geophysical survey. Mapping has been completed on approximately 30% of the 111 claims controlled or owned by Ares.

Information recorded on the geologic maps includes locations of historic workings, orientations of bedding and geologic structures, sedimentary formations, intrusive and tectonic breccias, alteration types, fluorspar occurrences and fluorspar mineralized material types. Special attention is given to the structures controlling fluorspar. The targets will be ranked for further exploration work including trenching and drill testing in select areas. Results of IP work at Lost Sheep and Bell Hill in 2021 will also be used along with detailed geologic mapping for delineation of trenching and drilling in those areas.

9.4 EXPLORATION TARGET

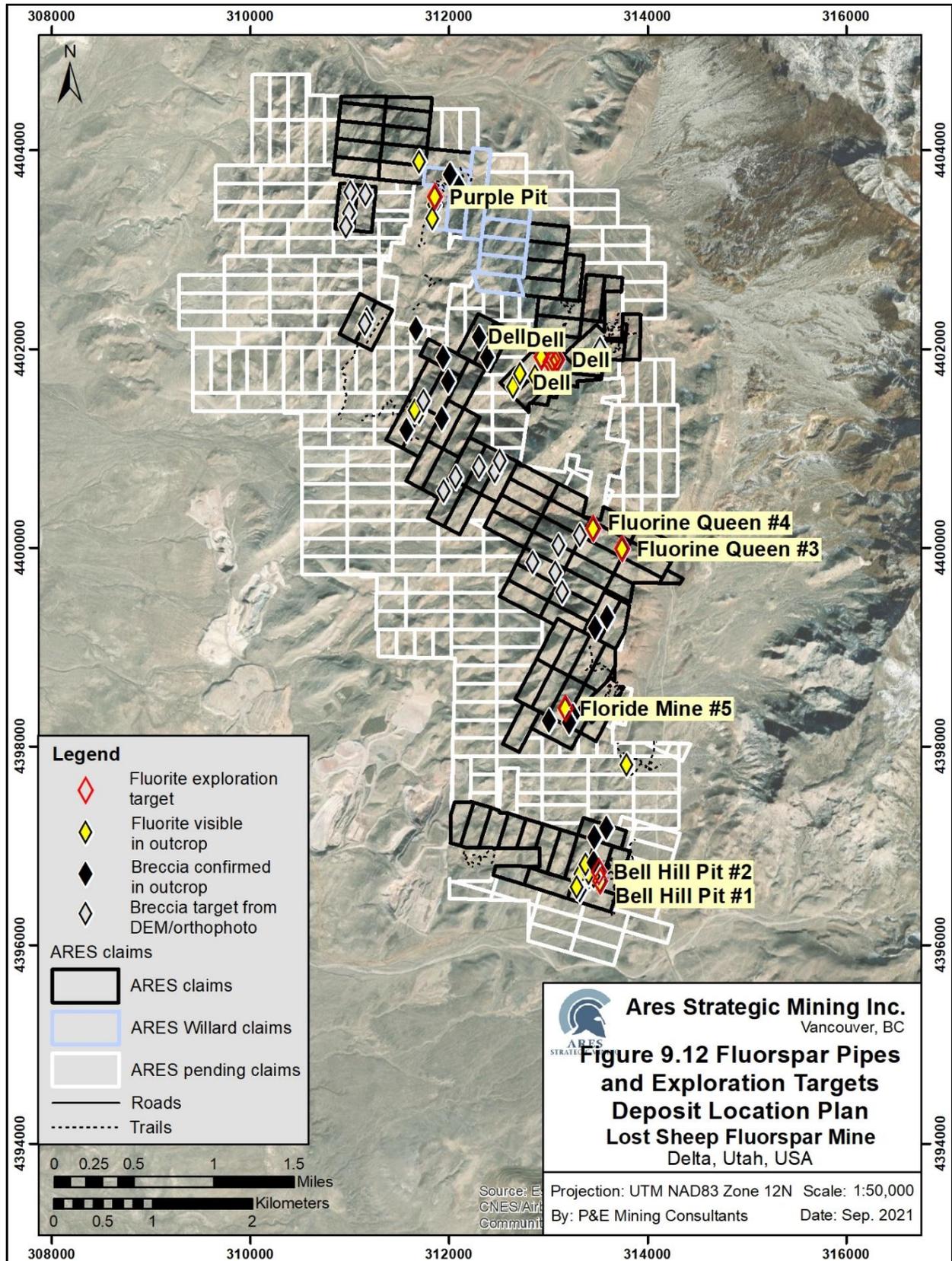
The Lost Sheep Fluorspar Property is host to approximately 39 occurrences of visible fluorite in surface outcrops. Of those occurrences, five more prominent areas (Purple Pit, Little Giant Pit (LGP), Dell No. 5, Fluorine Queen No. 3 and No. 4, and Bell Hill) are located on Ares claims, Figure 9.12, exhibiting loosely quantifiable tonnages and fluorite grades that qualify as Exploration Targets. The Estimated Exploration Target is 200,000 to 350,000 tonnes at a fluorite grade of 40 to 60%.

The potential quantity and grade of the Exploration Target in this Technical Report is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the Exploration Target being delineated as a Mineral Resource. There are no current Mineral Resources or Mineral Reserves on the Lost Sheep Property.

The reader is further cautioned that exploration targets on the claims known as the Willard Claims are not 100% owned by Ares. The Willard Claims include the Purple Pit and Little Giant Pit exploration targets.

The specific targets are discussed by target below and illustrated by a purple line around the target area in Figures 9.13 to 9.18.

FIGURE 9.12 LOST SHEEP PROPERTY EXPLORATION TARGETS



Source: P&E (2021)

9.4.1 Purple Pit

The Purple Pit mineralized body has been roughly outlined with eight drill holes and has dimensions of 10 to 15 m wide x 25 to 30 m long and 100 to 110 m in depth (from drill holes) for an estimated volume of 25,000 to 50,000 m³ or 60,000 to 120,000 tonnes. Approximated grades are 40% to 60% fluorite. The Purple Pit is shown in Figure 9.13 located beside Lost Sheep Mine buildings.

FIGURE 9.13 PURPLE PIT EXPLORATION TARGET



9.4.2 Little Giant Pit

The Little Giant Pit mineralized body has been roughly outlined with eight drill holes and has dimensions of 15 to 20 m wide x 25 to 30 m long and 50 to 60 m in depth, from drill holes, for an estimated volume of 20,000 to 35,000 m³ or 50,000 to 85,000 tonnes. Approximated grades are 55% to 70% fluorite. The Little Giant Pit is shown in Figure 9.14 located beside Lost Sheep Mine infrastructure.

FIGURE 9.14 LITTLE GIANT PIT EXPLORATION TARGET



9.4.3 Dell

The Dell No. 5 Deposit mineralized body has been roughly outlined by surface mapping and grab sampling and has dimensions of 12 to 15 m in diameter and 60 to 70 m in depth (from historical underground workings) for an estimated volume of 7,000 to 12,000 m³ or 18,000 to 30,000 tonnes. Approximated grades are 65% to 75% fluorite. The Dell No. 5 target is shown in Figure 9.15.

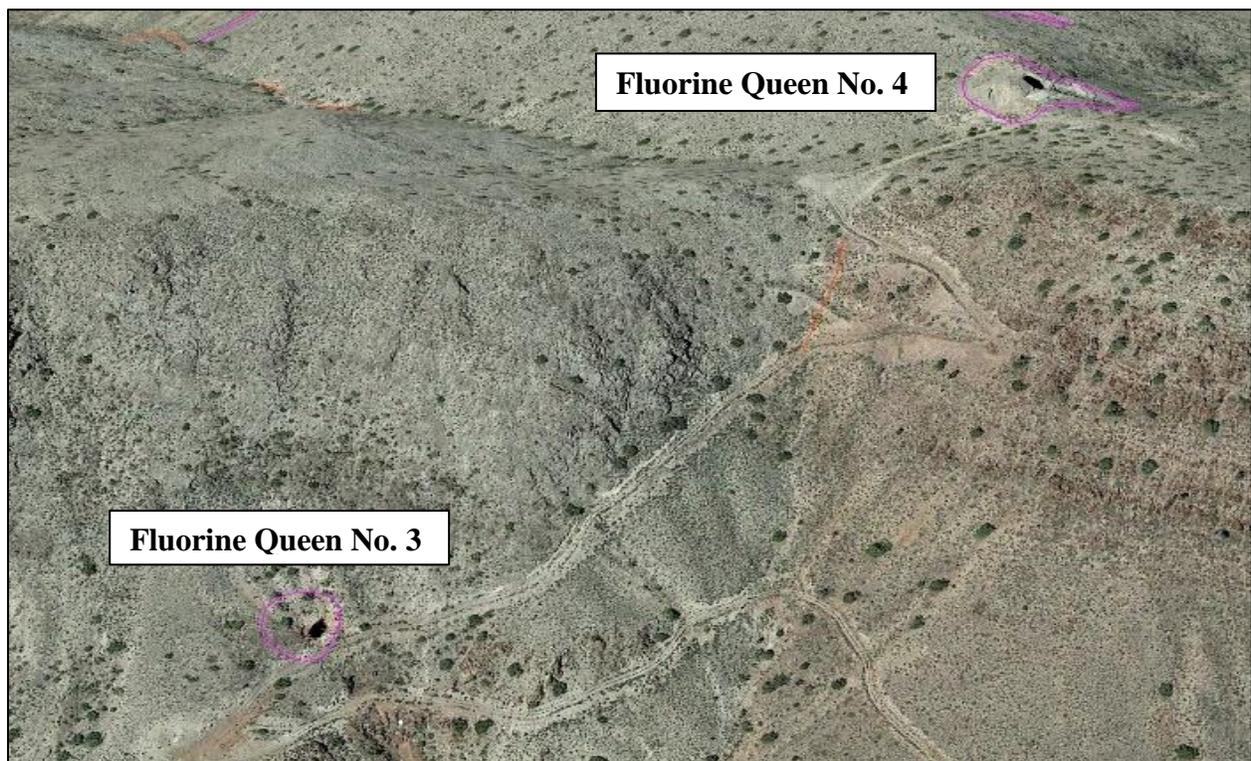
FIGURE 9.15 DELL EXPLORATION TARGET



9.4.4 Fluorine Queen No. 3 and No. 4 Targets

The Fluorine Queen No. 3 and No. 4 deposits' mineralized bodies have been roughly outlined by surface mapping and grab sampling and have respective dimensions of 12 to 15 m in diameter (No. 3) and 15 to 20 m width and 25 to 30 m length (No. 4), both 25 to 30 m in depth (approximated from nearby workings on other pipes) for an estimated combined volume of 10,000 to 20,000 m³ or 25,000 to 45,000 tonnes. Approximated grades are 65% to 75% fluorite from nearby workings. The Fluorine Queen No. 3 and No. 4 targets are shown in Figure 9.16.

FIGURE 9.16 FLUORINE QUEEN EXPLORATION TARGETS



9.4.5 Bell Hill

The Bell Hill Deposit mineralized body has been roughly outlined by surface mapping and grab sampling and has approximate dimensions of 15 to 20 m width and 30 to 35 m length and 55 to 65 m in depth (approximated from nearby historical workings) for an estimated volume of 25,000 to 35,000 m³ or 60,000 to 80,000 tonnes. Approximated grades are 70% to 80% fluorite from historical data. The Bell Hill target is shown in Figure 9.17.

FIGURE 9.17 **BELL HILL EXPLORATION TARGET**



10.0 DRILLING

During 2020 there were two drilling campaigns conducted at the Lost Sheep Mine area, targeted on testing the fluorspar grades in the Little Giant Pit, and the area between it and the previously mined Purple Pit.

Phase 1 drilling started April 16, 2020 and extended into June 2020 and consisted of 12 reverse circulation (“RC”) holes, testing the breccia body hosting the historic Little Giant Pit (“LGP”).

Phase 2 drilling commenced on September 10, 2020 and extended until October 28, 2020. Drilling was directed under the shallower parts of the Purple Pit, a total of 11 RC drill holes, drilling approximately 890 metres, were collared between the two known fluorspar bearing breccia pipes (LGP and Purple Pit) on the Company’s permitted mining area.

Table 10.1 lists drill holes completed in these two programs.

Hole-ID	Easting*	Northing*	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)
LS-20-01	311,869.0	4,403,467.5	1,627.0	68.6	280.0	45
LS-20-02	311,869.0	4,403,467.5	1,627.0	91.5	280.0	65
LS-20-03	311,869.0	4,403,467.5	1,627.0	79.9	320.0	55
LS-20-04	311,869.0	4,403,467.5	1,627.0	91.5	250.0	65
LS-20-05	311,869.0	4,403,467.5	1,627.0	90.0	250.0	45
LS-20-06	311,869.0	4,403,465.5	1,627.0	91.5	220.0	55
LS-20-07	311,853.0	4,403,473.6	1,624.0	36.6	320.0	45
LS-20-08	311,851.0	4,403,468.4	1,624.0	56.4	360.0	90
LS-20-09	311,853.0	4,403,473.6	1,624.0	38.1	250.0	45
LS-20-10	311,853.0	4,403,471.5	1,624.0	93.0	170.0	65
LS-20-11	311,853.0	4,403,471.5	1,624.0	76.3	170.0	45
LS-20-12	311,853.0	4,403,471.5	1,624.0	46.0	210.0	40
LS-20-13	311,835.0	4,403,701.0	1,658.0	80.0	285.0	45
LS-20-14	311,835.0	4,403,701.0	1,658.0	46.0	240.0	45
LS-20-15	311,899.0	4,403,576.0	1,636.5	70.0	280.0	45
LS-20-16	311,899.0	4,403,576.0	1,636.5	70.0	315.0	60
LS-20-17	311,899.0	4,403,576.0	1,636.5	35.0	135.0	60
LS-20-18	311,893.0	4,403,511.0	1,640.0	88.5	265.0	53
LS-20-19	311,893.0	4,403,511.0	1,640.0	66.0	255.0	35
LS-20-20	311,893.0	4,403,511.0	1,640.0	98.0	255.0	65
LS-20-21	311,893.0	4,403,511.0	1,640.0	92.0	245.0	50

TABLE 10.1						
2020 DRILLING PROGRAM HOLE LOCATION						
Hole-ID	Easting*	Northing*	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)
LS-20-22	311,893.0	4,403,511.0	1,640.0	55.0	230.0	35
LS-20-23	311,893.0	4,403,511.0	1,640.0	87.0	275.0	45
LS-20-24	311,893.0	4,403,511.0	1,640.0	100.0	285.0	50
LS-20-25	311,893.0	4,403,511.0	1,640.0	100.0	285.0	30
LS-20-26	311,893.0	4,403,511.0	1,640.0	70.2	270.0	30
LS-20-27	311,893.0	4,403,511.0	1,640.0	35.0	300.0	35
LS-20-28	311,893.0	4,403,511.0	1,640.0	99.0	300.0	50
Total	23 holes			2,051.0		
* Coordinates are in UTM NAD83 Zone 12N						

The 2020 COVID-19 pandemic had a significant impact on the 2020 drilling at Lost Sheep. The on-site geologist during the drill program was not a Qualified Person. He had daily phone calls with R. Sanabria, who was in Vancouver, and did his best to follow instructions. He also took large number of photographs and emailed them to R. Sanabria daily.

Drill hole collars were located using a handheld GPS. Holes were aligned on azimuth and dip using a handheld Brunton Compass. There were no downhole surveys. The actual drill collar was not surveyed for location, azimuth, or dip, on completion of any drill hole.

Drilling was done with a track mounted RC drill rig owned by Ares. Drillers were supplied by More Core Diamond Drilling Corp. of Chehalis, Wa. Drill pipe 4.5 inches in diameter was used. Water and drill stabilizing fluids were added to the hole, to stabilize it and reduce dust levels.

Samples were collected in large sample bags inside a 5-gallon plastic bucket. These were split using a riffle splitter, which reduced sample volume to 25% of what was put in at the top. Where sample volume warranted, the sample was run through the splitter twice. Use of the riffle splitter was problematic with wet samples, as it was designed for dry samples only.

For Phase 1 of the drilling, the sample rejects were preserved and are stored at the Lost Sheep Mine and also at the assay labs where they were processed. For the Phase 2 drilling, no sample rejects were preserved at site, however, sample rejects have been preserved at the assay labs where they were processed.

There does not appear to have been any recording of the volume of sample for each interval. This is a concern as it has been reported by the geologist who was present at the drill rig, that it could at times be extremely variable. The geologist reports that there were many instances where voids would be intercepted and no sample would be possible, and other cases where very small amounts of sample would be taken.

Material from each five foot interval was put into numbered chip trays. These were photographed, and emailed to the R. Sanabria, in Vancouver, on a daily basis. The chip trays were also sent to him for logging. Holes were drilled with five foot pipe lengths, and depths were converted to metres for logging and reporting purposes.

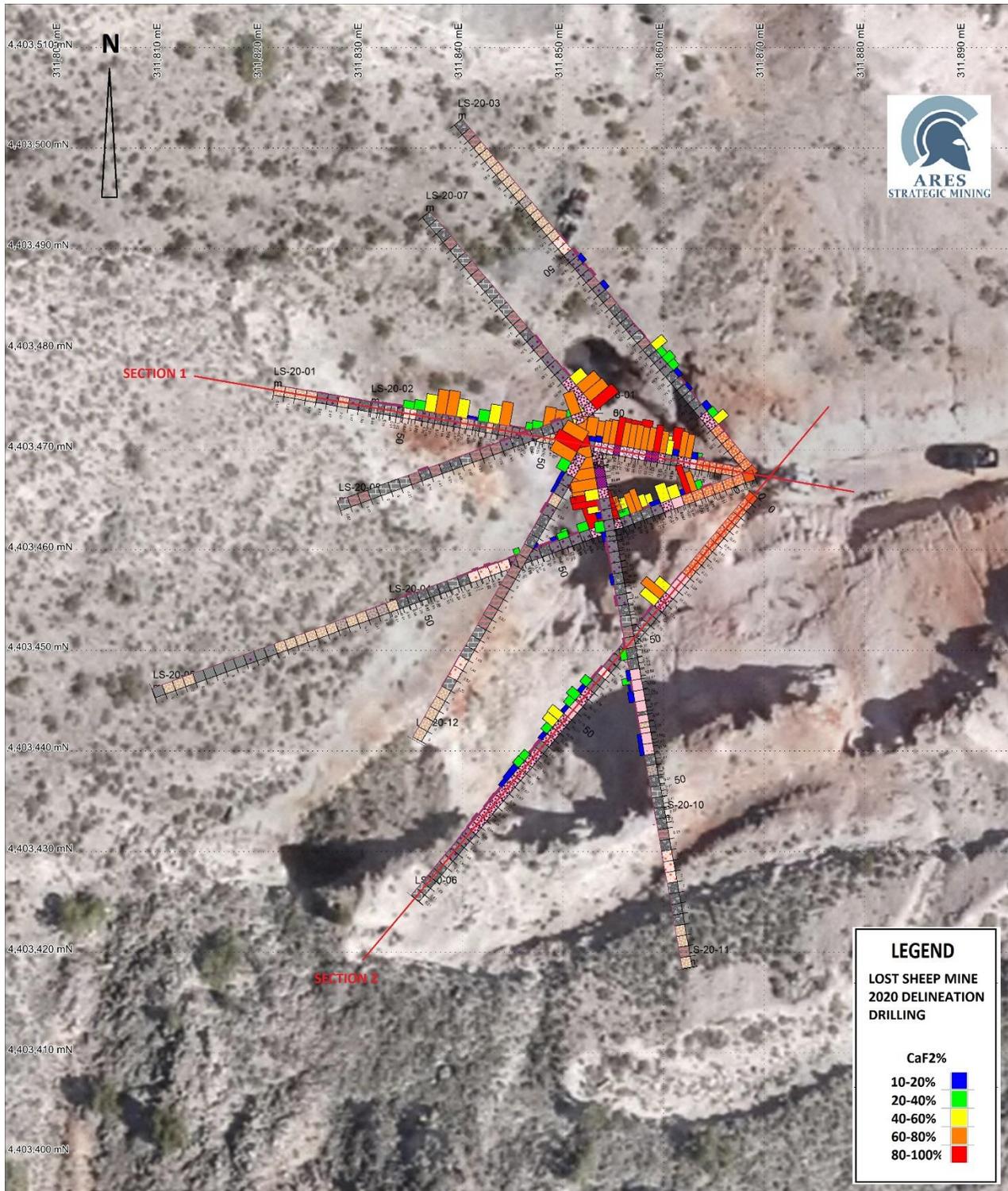
At Lost Sheep, high-grade fluorspar is located within discrete near vertical fluorite bearing volcanic breccia pipes hosted within competent dolomite. Phase 1 drilling from April 16, 2020 to June 2020 and consisted of 12 RC holes directed to delineate mineralization at the Little Giant Pit (LGP) fluorite pipe target, two holes to test a siliceous breccia pipe 200 m north of the LGP and three holes behind the hoist room of the Purple Pit. A total of 1,160 m was drilled in the Phase 1 program.

Due to working safety and space limitations inside the LGP pit, all 12 RC drill holes were drilled from two pads and holes were drilled as a fan through the fluorite bearing breccia pipe to delineate the shape and grade distribution of the fluorspar mineralization (Figures 10.1 and 10.2).

FIGURE 10.1 RC DRILLING IN THE LITTLE GIANT PIT 2020



FIGURE 10.2 PLAN VIEW OF THE LGP RC DELINEATION DRILL PROGRAM 2020



Section 1 (Figure 10.3) shows drilling and fluorite analyses in LGP.

RC drilling shown in Section 2 of the fluorite bearing pipe indicates the continuity of the fluorspar mineralization below 75 m from surface, though at lower grades (between <10 to 30% CaF₂) than those found near surface (Figure 10.4).

FIGURE 10.3 RC DRILLING SECTION 1 INDICATING STRONG HIGH-GRADES OF FLUORSPAR IN THE UPPER PART OF THE FLUORITE BEARING PIPE

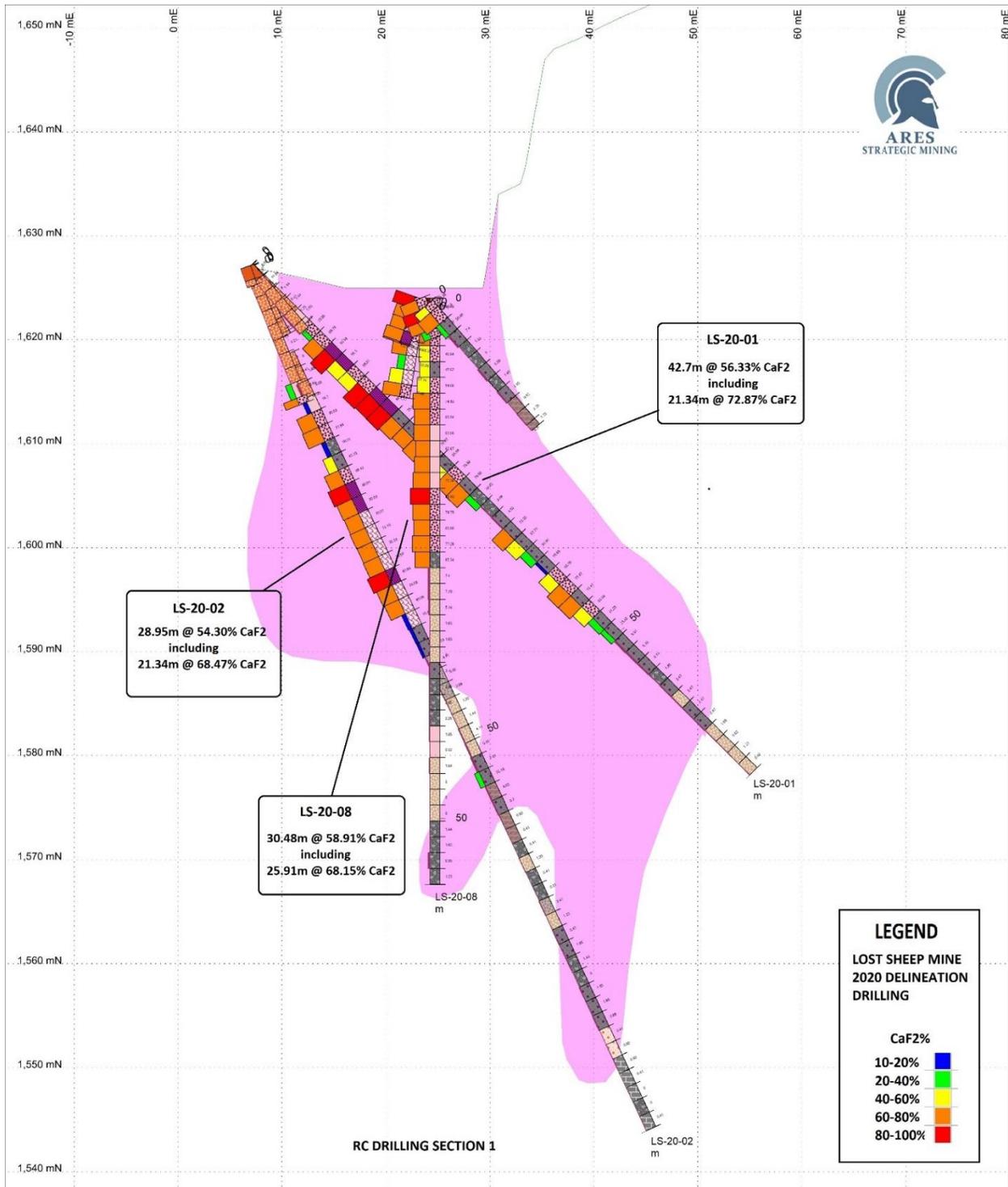
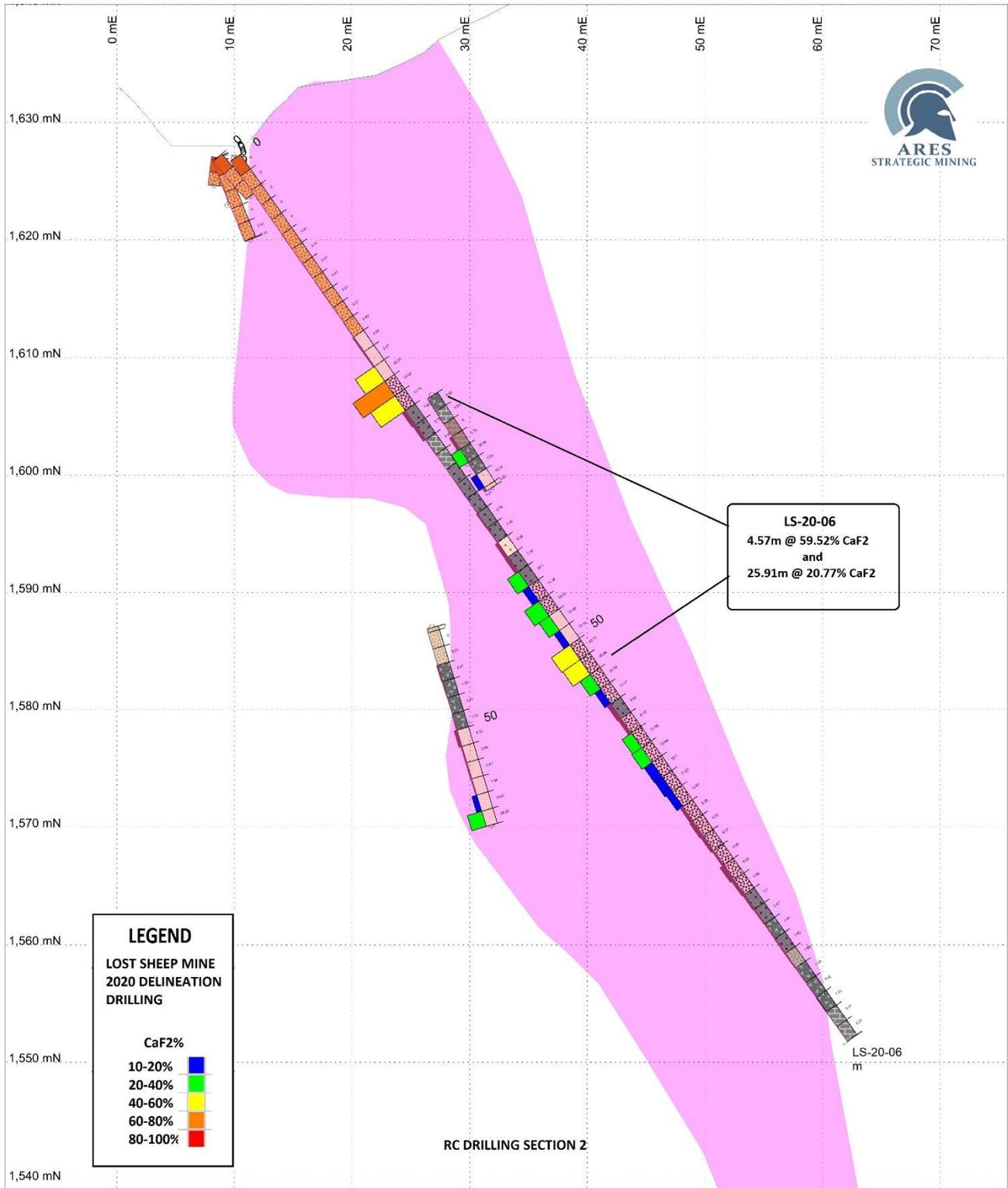


FIGURE 10.4 RC DRILLING SECTION 2 OF THE FLUORITE BEARING PIPE INDICATING THE CONTINUITY OF THE FLUORSPAR MINERALIZATION BELOW 75 M FROM SURFACE



A summary of the drill intersects and grades at the LGP Zone can be seen in Table 10.2.

TABLE 10.2						
DRILL INTERSECTS AND GRADES AT THE LITTLE GIANT PIT ZONE						
Hole ID	Azimuth (°)	Dip (°)	From (m)	To (m)	Interval (m)	CaF₂ (%)
LS-20-01	280	45	7.62	50.29	42.67	56.33%
including			10.67	30.48	21.34	72.87%
LS-20-02	280	65	12.19	41.15	28.95	54.30%
including			15.24	36.57	21.34	68.47%
LS-20-03	320	55	10.67	28.96	18.29	20.15%
LS-20-04	250	65	12.19	35.052	22.86	41.97%
LS-20-05	250	45	9.14	28.56	19.81	37.04%
LS-20-06	220	55	21.36	25.91	4.57	59.52%
and			39.62	68.58	25.91	20.77%
LS-20-07	320	45	0	6.07	9.07	69.19%
LS-20-08	360	90	0	30.48	30.48	58.91%
including			0	25.91	25.91	68.15%
LS-20-09	250	45	0	6.1	6.1	39.50%
LS-20-10	170	65	0	19.81	19.91	63.60%
and			56.39	60.96	5.57	17.46%
LS-20-11	170	45	0	13.71	13.71	51.60%
including			0	9.14	9.14	70.75%
LS-20-12	210	40	0	9.14	9.14	47.70%

Note: these selected intervals are based on grade and do not represent true thickness, as the orientation of the structures intercepted is not known. These intervals may not represent discrete structures within the Little Giant breccia body.

Following Phase 1, a total of 11 reverse circulation drill holes (Table 10.3), drilling approximately 890 metres, were collared between the two known fluorspar bearing breccia pipes (LGP and Purple Pit) on the Company's permitted mining area (Figures 10.5 and 10.7). Drilling commenced September 10, 2020 and continued until October 28, 2020. Drilling was directed under the shallower part of the Purple Pit, where large areas of unmined fluorspar mineralization were intersected, proving an additional 60 m of high-grade fluorspar (see Figure 10.6 and Figures 10.8, 10.9 and 10.10), remaining open at depth.

TABLE 10.3			
2020 DRILLING PROGRAM PHASE 2 SUMMARY			
Hole ID	Azimuth (°)	Dip (°)	Depth (m)
LS-20-18	265	53	88.5
LS-20-19	255	35	66
LS-20-20	255	65	98
LS-20-21	245	50	92

TABLE 10.3			
2020 DRILLING PROGRAM PHASE 2 SUMMARY			
Hole ID	Azimuth (°)	Dip (°)	Depth (m)
LS-20-22	230	35	55
LS-20-23	275	45	87
LS-20-24	285	50	100
LS-20-25	285	30	100
LS-20-26	270	30	70.2
LS-20-27	300	35	35
LS-20-28	300	50	99

FIGURE 10.5 DRILLING BETWEEN THE LITTLE GIANT PIT AND THE PURPLE PIT



FIGURE 10.6 **EXAMPLE OF HIGH-GRADE FLUORSPAR IN RC CHIPS**

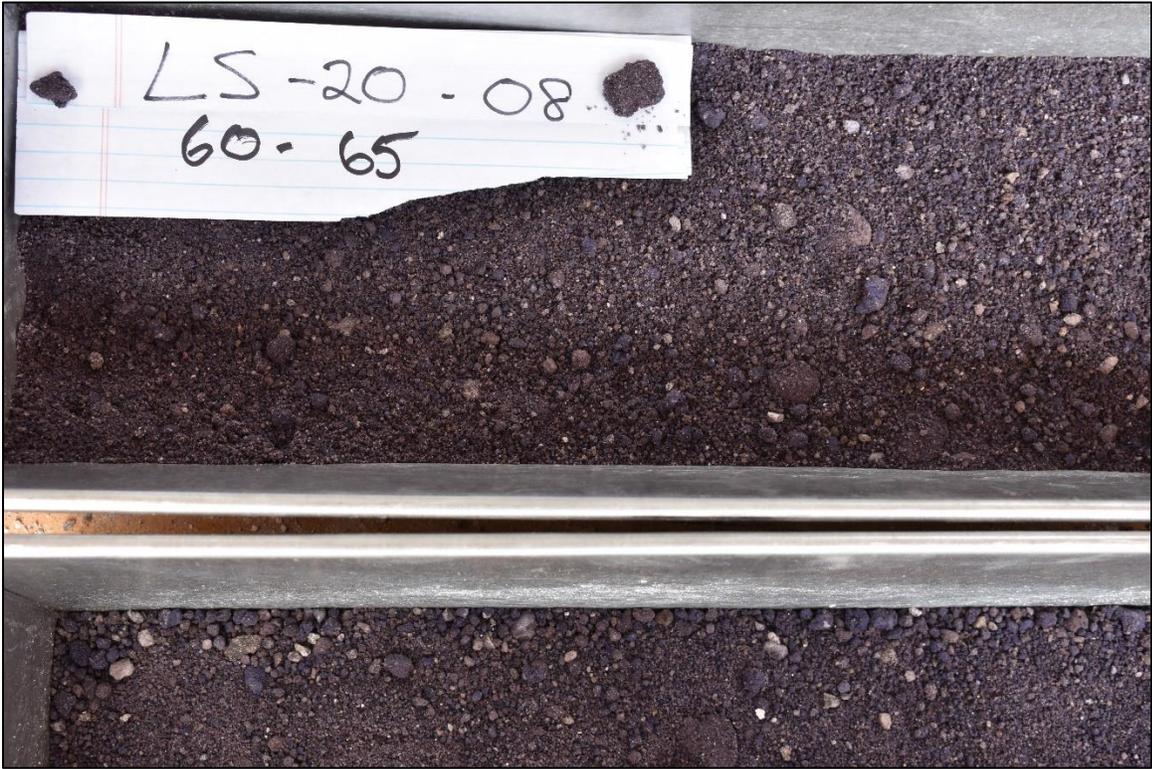


FIGURE 10.7 DRILL HOLE PLAN SECTION OUTLINING THE DISTRIBUTION OF FLUORSPAR MINERALIZATION AT LGP AND PURPLE PIT

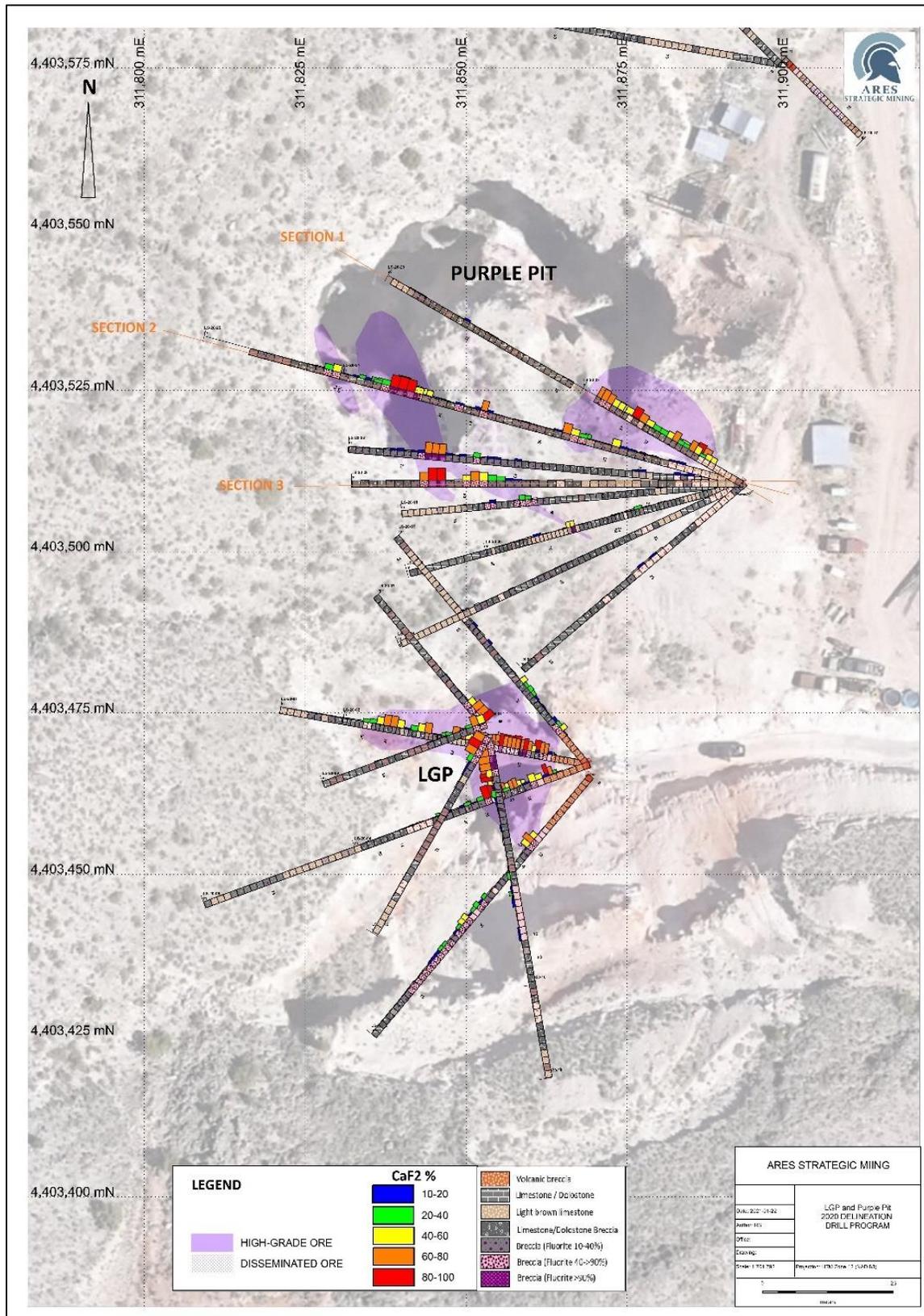


FIGURE 10.8 DRILL HOLE SECTION 1 (LS-20-27 AND LS-20-28) OUTLINING THE DISTRIBUTION OF FLUORSPAR MINERALIZATION

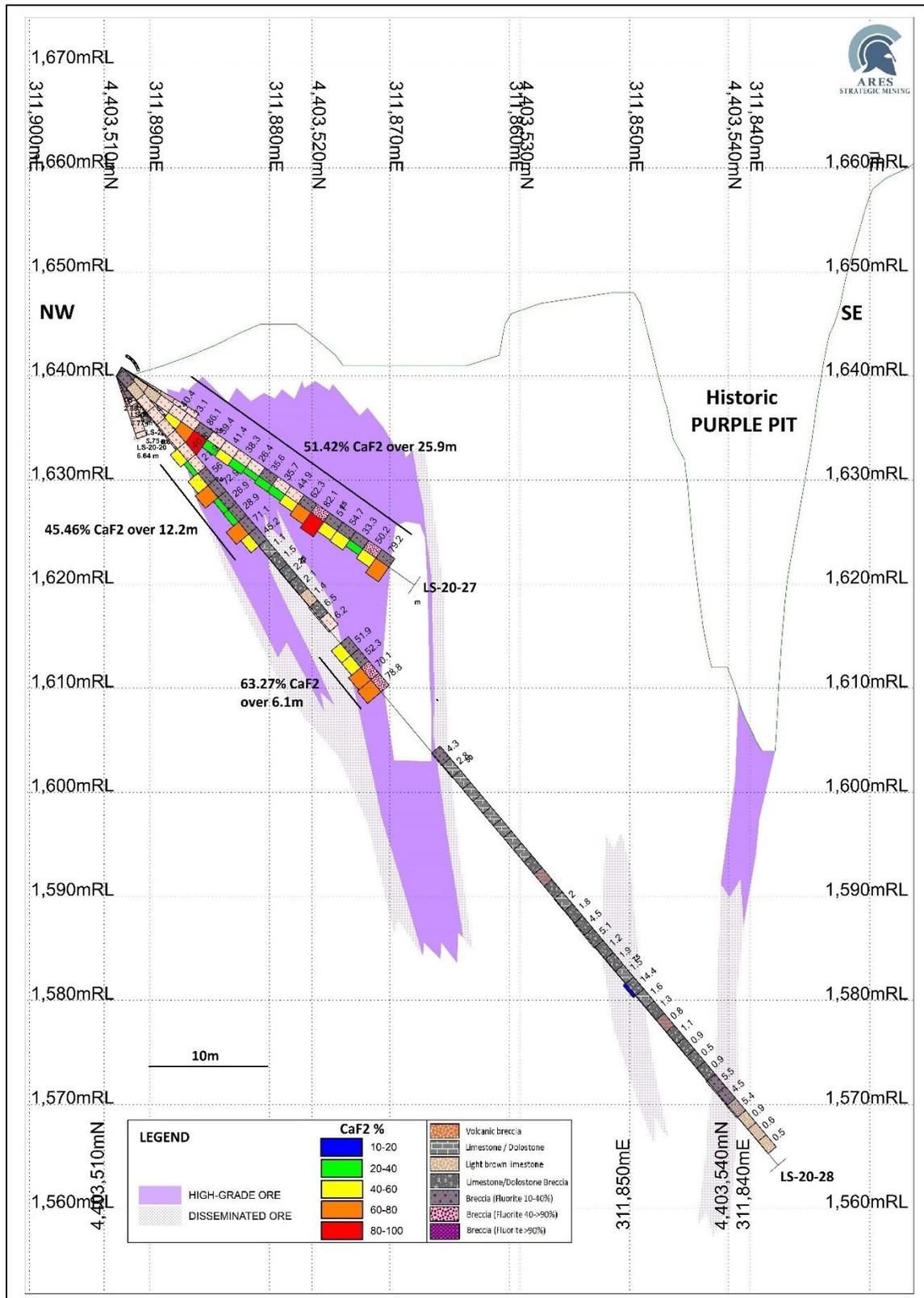


FIGURE 10.9 DRILL HOLE SECTION 2 (LS-20-24 AND LS-20-25) OUTLINING THE DISTRIBUTION OF FLUORSPAR MINERALIZATION

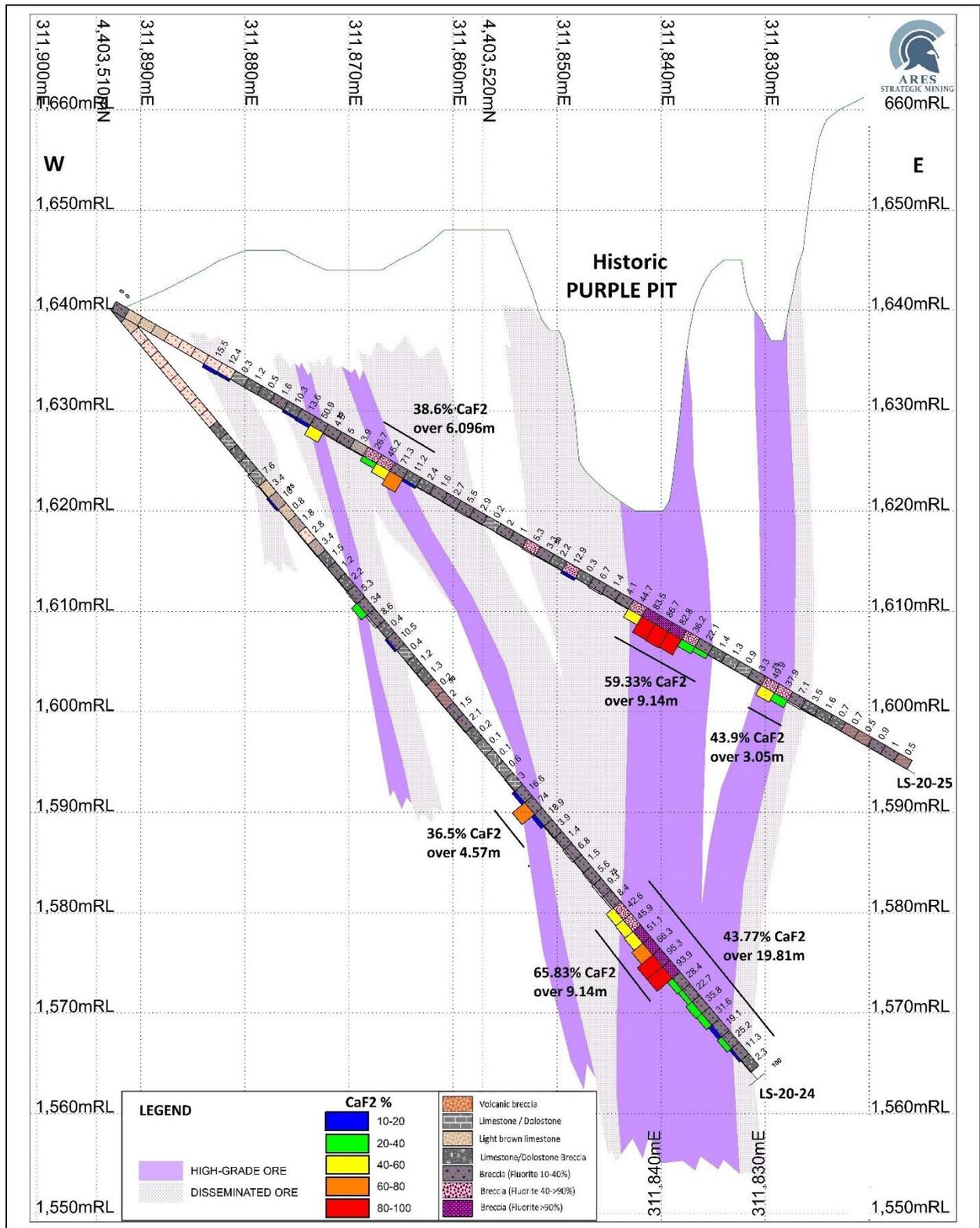
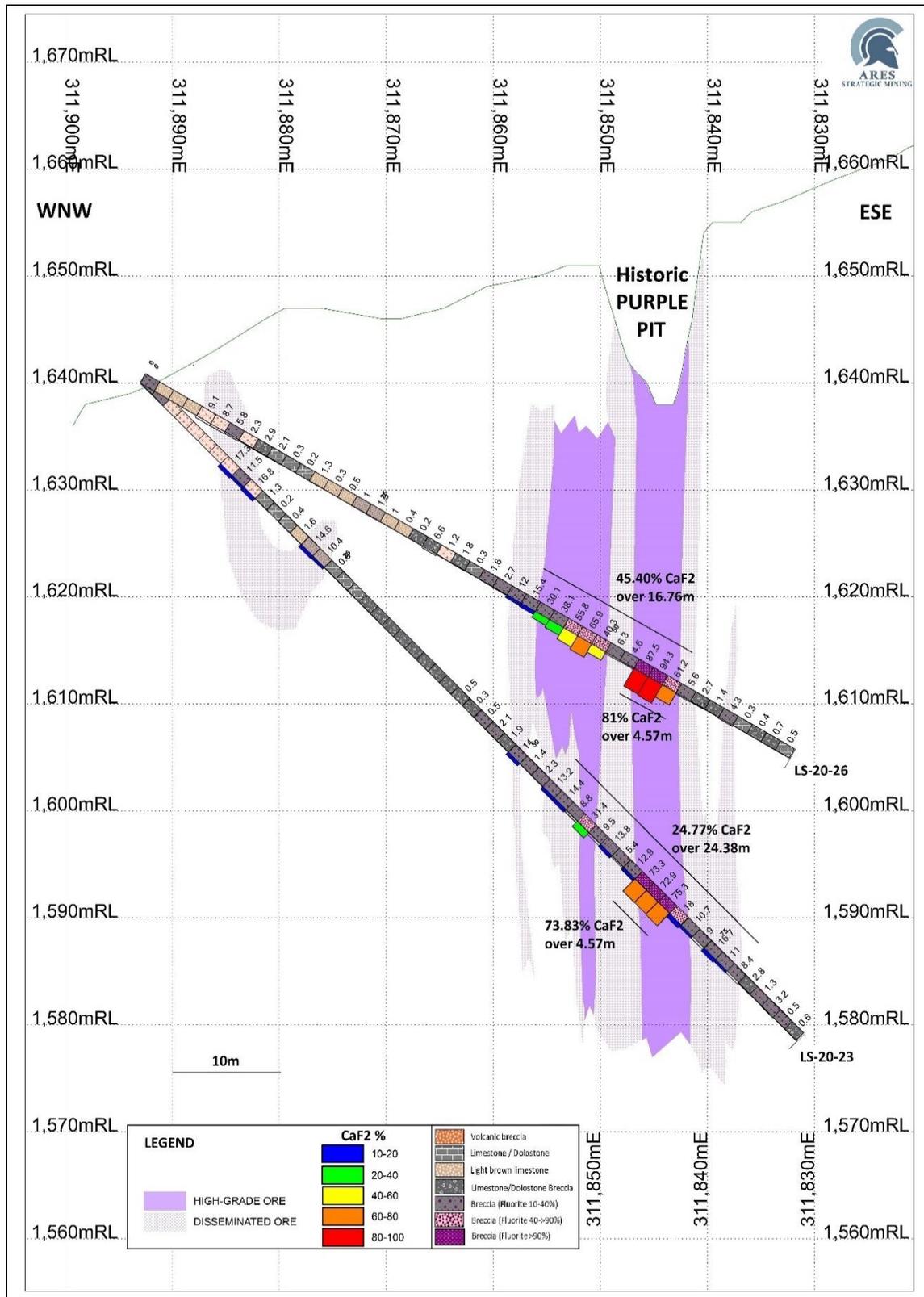


FIGURE 10.10 DRILL HOLE SECTION 3 (LS-20-23 AND LS-20-26) OUTLINING THE DISTRIBUTION OF FLUORSPAR MINERALIZATION



Drill Holes LS-20-27 and LS-20-28, Section 1, intersected a very shallow zone of fluorspar mineralization at surface that extends 20 m x 10 m in plan view and 30 m down dip (Figure 10.8, Table 10.4).

TABLE 10.4				
SECTION 1 DRILL HOLE ASSAY HIGHLIGHTS				
Hole ID	From (m)	To (m)	Length (m)	CaF₂ (%)
LS-20-27	6.10	32.00	25.90	51.42
LS-20-28	9.14	21.33	12.19	45.46
and	33.52	39.62	6.1	53.28

Hole LS-20-27 averaged **25.91 m of 51.42% CaF₂** over an interval from 6.1 to 32.0 metres down hole. Hole LS-20-28 averaged **12.19 m of 45.46% CaF₂** over an interval from 9.14 to 21.33 m down hole and **6.1 m of 63.27% CaF₂** from 33.52 to 39.62 m down hole.

Drill holes LS-20-24 and LS-20-25, Section 2, (Figure 10.9, Table 10.5) test the down dip projection of the fluorspar mineralization left at the bottom of the Purple Pit and successfully intercepted mineralization over 50 metres beneath the historic pit floor. The zone remains open at depth.

TABLE 10.5				
SECTION 2 DRILL HOLE ASSAY HIGHLIGHTS				
Hole ID	From (m)	To (m)	Length (m)	CaF₂ (%)
LS-20-25	28.96	35.05	6.09	38.60
and	59.44	68.58	9.14	59.33
and	74.67	77.72	3.05	43.90
LS-20-24	62.48	67.06	4.58	36.50
and	77.72	97.54	19.82	43.77

In Section 2 the main pipe appears to split into two zones, indicating a smaller pod to the west of the main pipe that intersected **3.05 m of 43.9% CaF₂** from 74.67 to 77.72 m. Drill hole LS-20-25 also intersected fluorspar mineralization in the main pipe that returned **59.33% CaF₂ over 9.14 m from 59.44 to 68.58 m down hole**, including a high-grade zone at 60.96 to 65.53 m down hole (**4.57 m of 84.33% CaF₂**). Drill hole LS-20-24 undercut LS-20-25 and intersected the main mineralized below the Purple Pit returning **43.77% over 19.81 m from 77.72 to 97.54 m down hole** (including a high-grade sub-interval of **3.05 m of 94.58% CaF₂ from 83.82 to 86.87 m down hole**). The upper part of hole LS-20-24 intersected a thin zone of fluorite mineralization also found in drill holes LS-20-27 and LS-20-28, and returned **4.57 m of 36.50% CaF₂** from 62.48 to 67.06 m down hole.

Drill holes LS-20-23 and LS-20-26, Section 3, also show over a 50-metre extension of fluorspar mineralization from the Purple Pit floor and mineralization remains open at depth (Figure 10.10, Table 10.6).

TABLE 10.6				
SECTION 3 DRILL HOLE ASSAY HIGHLIGHTS				
Hole ID	From (m)	To (m)	Length (m)	CaF₂ (%)
LS-20-26	41.15	57.91	16.76	45.40
incl	53.34	57.91	4.57	81.00
LS-20-23	41.15	57.91	16.75	45.41
incl	53.34	57.91	4.57	73.83

Fluorspar mineralization is very homogeneous in the upper intersect in hole LS-20-26 from 41.15 to 57.91 m down hole **averaging 45.40% CaF₂** over **16.76 m** (including **4.57 m of 81% CaF₂**). Drill hole LS-20-23 undercut the previous hole and intersected strong fluorspar mineralization from 53.34 to 77.72 m down hole **averaging 24.77% CaF₂** over **24.4 m**, including a high-grade interval of **4.57 m of 73.83% CaF₂**. The true width of the fluorspar mineralization in these areas range between 10 and 15 metres.

Figure 10.11 shows the preliminary 3-D breccia body hosting the fluorspar mineralization.

FIGURE 10.11 PRELIMINARY 3-D RENDERING OF THE BRECCIA BODY



Figure 10.11 shows the preliminary 3-D rendering of the breccia body, which hosts fluor spar mineralization distribution after completion of 2020 delineation drilling at the Lost Sheep Mine, see buildings for scale.

The author believes that due to the reported frequent loss of material from the sample stream that the results of this drilling program, where this occurred, may not all be highly reliable. For this reason, it is recommended that during the 2021 drill program a number of these drill holes be twinned with drill core

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Reverse-circulation (RC) drill cuttings / samples were prepared on-site by the company's project geologist, and subsequently put into sealed plastic bags. The hole number, and from and to distances in feet were written on each sample bag. The RC drill samples were collected with an airstream cyclone. If samples were large enough the on-site geologist then passed them into a splitter that quartered the large sample. The resulting quartered sample was bagged, sealed with identification, and the geology was photographed and logged at the drill site.

Phase 1 samples (LGP drilling) were sent by courier to Ares' VP Exploration in Vancouver, BC, who inspected the samples, put sample tags, either into the bags or affixed them to the sample bags, created sample duplicates, and inserted sample bags containing either blanks or a standards into the sample stream, before shipping the samples on to SGS Laboratories ("SGS") in Burnaby, BC for preparation. After initial preparation, SGS internally sent the samples to SGS in Lakefield, ON for analysis, with approximately three control samples inserted (one blank, one standard and one field duplicate for each twenty samples). The samples were analyzed for fluorine element using GC XRF76V (Included F 0.1-50%) package, that also includes SiO₂%, Al₂O₃%, Fe₂O₃%, MgO%, CaO%, Na₂O%, K₂O%, TiO₂%, P₂O₅%, MnO%, Cr₂O₃% and V₂O₅%. Comparison to control samples and their standard deviations indicates acceptable accuracy of the assays.

Drill samples from Phase 2 (Purple Pit drilling) followed the same field procedures for chain of custody and expedition, but for this phase Ares chose AGAT Laboratories ("AGAT") in Mississauga, ON for final assays. Routine blank, standard, and field duplicates were inserted in the sample batches in the same manner as described for Phase 1 of the drilling (above). There was one exception to this, however, due to lack of Standard Material, coarse reject remnants of the Standards used in Phase 1 drilling were pulled from SGS Labs and were re-inserted into the sample stream being sent to AGAT Laboratories. Assay method for CaF₂ consisted of 201-676 Lithium Borate Fusion, Summation of Oxides and XRF Finish.

11.2 QUALITY ASSURANCE/QUALITY CONTROL

Routine blank, standard, and field duplicates were inserted in the sample batches following standard QA/QC practices. P&E was not provided with results of blank, standard and field duplicates and was not able to provide an analysis of QA/QC results.

For the 2020 drill programs, the Covid-19 global travel restrictions prevented site visits during the execution of the Phase 1 and Phase 2 drill programs. The author believes the sample preparation and analytical procedures used by Ares are adequate and that the description of sampling methods and details of location, number, type, nature, and spacing or density of samples collected, and the size of the area covered, are all adequate for the current stage of the Lost Sheep Project. There was no bias in the sampling program completed on the Lost Sheep Project.

The two assay labs (SGS and AGAT) gave comparable results for the samples collected by Ares.

Observations of the drilling programs during the site visits and inspection and analyses of the validation of collected sample data indicates that the drilling programs and related sample collection and analyses has been conducted according to basic standards associated with early stage exploration.

11.3 COMMENT

Ares should develop an improved QA/QC protocol with appropriate certified reference materials to ensure that reference materials, blanks and duplicates are included within the assay stream. Given the limited availability of certified fluorite standards, consideration could be given to developing an internal standard to augment certified reference materials.

12.0 DATA VERIFICATION

12.1 EXPLORATION, DRILLING AND SAMPLE PREPARATION, ANALYSIS AND SECURITY VERIFICATION

Exploration data was verified from reports, data files and plots by a Nevada geophysics contractor. Drilling data was verified by reviewing survey records and drill logs maintained at the Project office. Sample Preparation, Analysis and Security procedures were verified by reviewing Company procedures for prior drilling/sampling programs and examining analytical laboratory certificates.

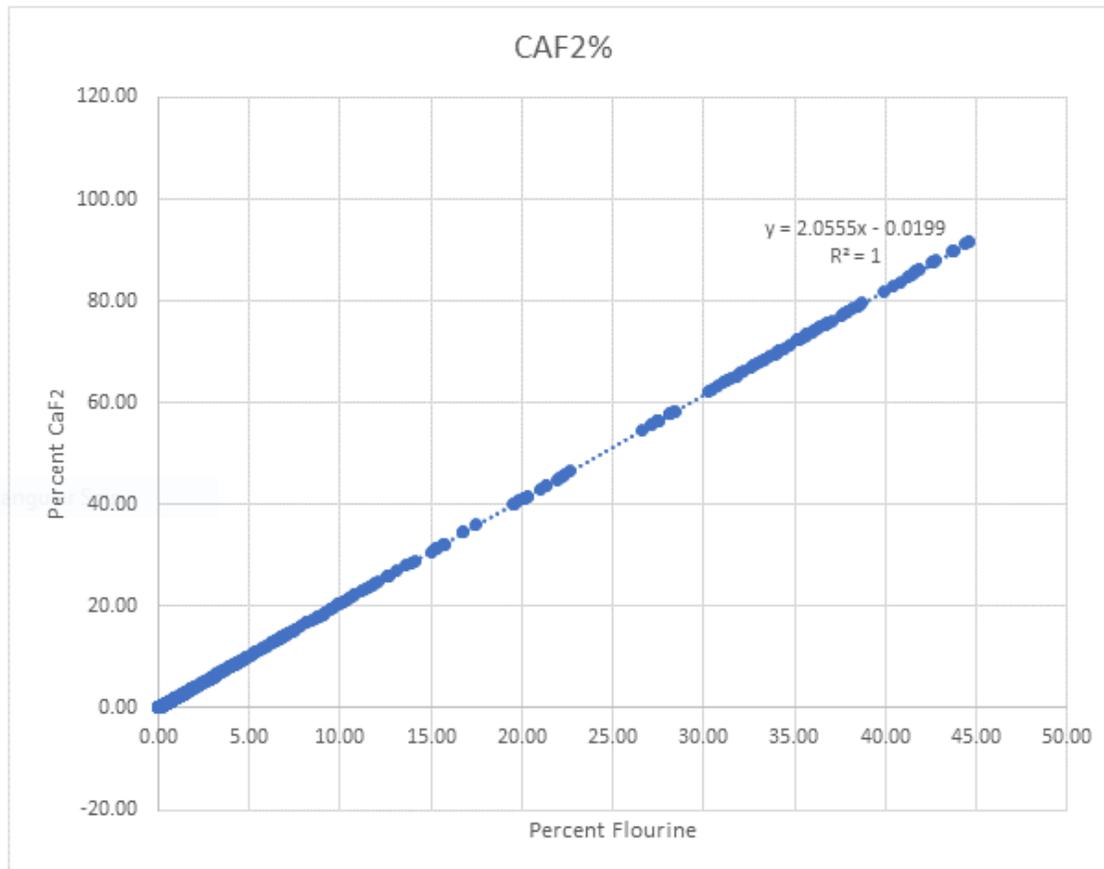
12.2 METALLURGICAL DATA VERIFICATION

Metallurgical testwork data was incorporated and verified from two SGS reports (June 2020 and May 2021) as found in the References Section 27.

12.3 DATABASE VERIFICATION

A comparison of results reported for % CaF₂ vs % F for 661 assay samples analysed by SGS shows an excellent linear correlation indicating that all F is present in fluorite, Figure 12.1.

FIGURE 12.1 RELATIONSHIP OF % CaF_2 TO % F FOR 661 LOST SHEEP PROPERTY ANALYSES



n= 661 fluorine determinations

12.4 P&E SITE VISIT AND INDEPENDENT SAMPLING

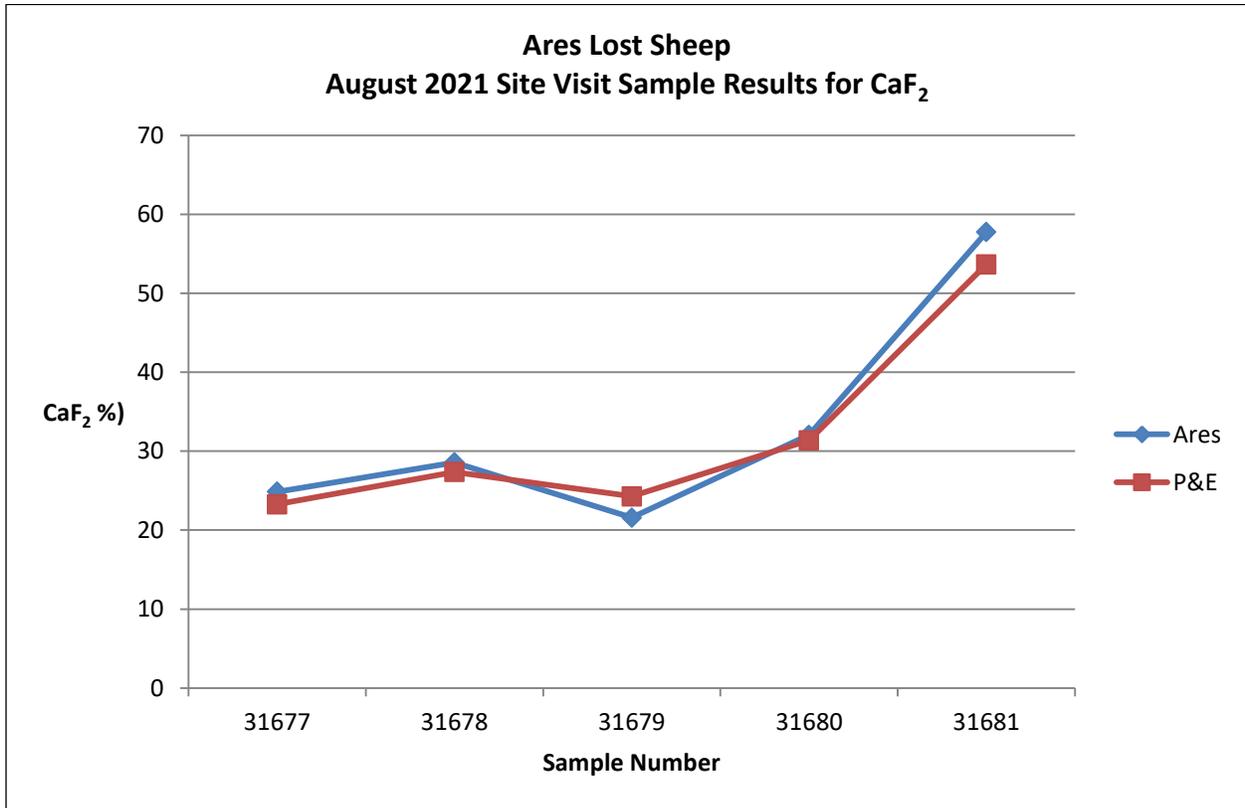
Mr. Fred Brown, P.Geo., of P&E, a Qualified Person under the terms of NI 43-101, completed a site visit to the Lost Sheep Project on August 16, 2021 that included drill sites, surface workings, discussions with the site geologist and examination of local mineralization. A data verification sampling program was conducted as part of the on-site review.

Surface workings including open pits and historical shafts were examined, as well as mineralized dump material, wall rock mineralization and fluorspar samples. Mr. Brown also reviewed local drilling sites and drilling procedures.

Mr. Brown collected five samples on site from available RC coarse rejects which were stored in a locked trailer. Available samples were collected in their original plastic sample bags with drill hole ID and sample intervals recorded directly on the bag. Each sample was then placed in an individual polyester sample bag by Mr. Brown and the sample identification details recorded. Samples were shipped by UPS courier directly to the P&E office in Brampton, Ontario, Canada

for analysis. The results of the CaF_2 analysis by Activation Laboratories of Ancaster Ontario, Canada compared to the original client results are shown in Figure 12.2.

FIGURE 12.2 SITE VISIT SAMPLE SELECTION COMPARISON



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 SUMMARY OF THE METALLURGICAL TESTING – SGS CANADA INC. BURNABY, BC

In 2020, Ares undertook scoping metallurgical testwork on material from the Lost Sheep fluorite mine located at the Spor Mountain area, Julab County, Utah. The site is approximately 214 km southwest of Salt Lake City. The scoping testwork was performed in two (2) phases at SGS Burnaby, B.C. The purpose of both phases was to develop operating parameters and flowsheet to produce both an acid-spar product ($\text{CaF}_2 > 97\%$ purity) and also a metspar product ($\text{CaF}_2 > 92\%$ purity). The samples used for these tests were a combination of the following and supplied by Ares geological department.

- Run of Mine (ROM).
- High Grade (HG).
- Composite Samples (ROM-A).

The head assays for Phase 1 of the main elements are shown in Table 13.1.

Sample ID	F (%)	CaF ₂ Calc. (%)	CaF ₂ Direct (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	MgO (%)	CaO (%)	Na ₂ O (%)	K ₂ O (%)
ROM - Head Sample	18.6	38.2	38.4	47.8	1.29	0.17	2.27	31.3	0.02	0.01
LOW - Head Sample	14.2	29.2	-	61.2	0.22	0.34	0.56	25.8	0.03	0.02
HIGH - Head Sample	25.8	53	-	38	0.11	0.11	0.14	43.2	< 0.01	< 0.01

Sample ID	TiO ₂ (%)	P ₂ O ₅ (%)	MnO (%)	Cr ₂ O ₃ (%)	V ₂ O ₅ (%)	LOI (%)	Sum (%)	S (%)	C (t) (%)	Hg (g/t)
ROM - Head Sample	< 0.01	< 0.01	0.01	0.01	< 0.01	7.86	< 98.5	0.03	1.43	0.3
LOW - Head Sample	< 0.01	0.02	0.02	0.03	< 0.01	3.87	92.1	0.04	0.58	0.5
HIGH - Head Sample	< 0.01	0.01	0.02	0.02	< 0.01	3.97	85.5	0.04	0.58	<0.3

Source: SGS (2020)

Notes: CaF₂ = calcium fluoride, SiO₂ = silicon dioxide, Al₂O₃ = aluminium oxide, Fe₂O₃ = iron oxide (ferric oxide), MgO = magnesium oxide, CaO = calcium oxide, Na₂O = sodium oxide, K₂O = potassium oxide, TiO₂ = titanium dioxide, P₂O₅ = phosphorus pentoxide, MnO = manganese oxide, Cr₂O₃ = chromium oxide, V₂O₅ = vanadium pentoxide, LOI = loss on ignition, S = sulphur, C (t) = total carbon, Hg = mercury.

The head assays for Phase 2 of the two new composites are shown in Table 13.2.

TABLE 13.2 HEAD ASSAYS – PHASE 2									
Sample ID	F (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	MgO (%)	CaO (%)	Na ₂ O (%)	K ₂ O (%)
LS2008 Composite	33.7	69.2	20.9	3.91	0.26	1.19	49.5	0.08	0.02
ROM-A Composite	32.0	65.8	21.5	4.59	0.31	1.44	47.8	0.23	0.25
Sample ID	TiO ₂ (%)	P ₂ O ₅ (%)	MnO (%)	Cr ₂ O ₃ (%)	V ₂ O ₅ (%)	LOI (%)	Sum (%)		
LS2008 Composite	< 0.01	0.01	0.02	0.03	< 0.01	7.20	83.2		
ROM-A Composite	0.01	0.03	0.01	< 0.01	< 0.01	7.36	83.6		

Source: SGS (2020)

Notes: CaF₂ = calcium fluoride, SiO₂ = silicon dioxide, Al₂O₃ = aluminium oxide, Fe₂O₃ = iron oxide (ferric oxide), MgO = magnesium oxide, CaO = calcium oxide, Na₂O = sodium oxide, K₂O = potassium oxide, TiO₂ = titanium dioxide, P₂O₅ = phosphorus pentoxide, MnO = manganese oxide, Cr₂O₃ = chromium oxide, V₂O₅ = vanadium pentoxide, LOI = loss on ignition, S = sulphur.

Reported results from the scoping testwork Phase 1 and Phase 2 are as follows:

- Phase 1 QEMSCAN conducted on the ROM sample indicated that Fluorite was the dominant F-bearing mineral with quartz as the dominant gangue mineral. The main carbonate minerals are dolomite and calcite. Grain size distribution indicated an overall P₈₀ of 97 microns and 144 microns for all particles.
- Phase 1 Fourteen (14) flotation tests were conducted on the ROM samples with six (6) stages of cleaning achieving a final concentrate grade in excess of 97% albeit at reduced recoveries.
- Phase 1 Three (3) flotation tests were conducted on the high-grade (“HG”) sample resulting again in grades in excess of 97% with higher recoveries
- Phase 2 Cleaner Flotation testing on the ROM sample to confirm upgradability of the concentrate at a primary grind of 74 microns and no regrinding. Reagent type and dosage were also tested but target grade was limited only achieving a maximum of 95.5% CaF₂.
- Phase 2 Cleaner Flotation testing on the above noted composite was conducted with regular feed material and also scrubbing, desliming and screening prior to flotation. Desliming proved to yield good results producing target grade albeit with lower recovery (64-86%) and high losses (39-53%) in the slimes and fines.
- Phase 2 Similar flotation testing was carried out on the ROM-A samples testing grind, reagent dosage and type with limited success – i.e., low recovery with only meeting target grade partially.

- Phase 2 BWI testing on the ROM sample showed a ball mill work index of 13.4 kWh/t indicating the material as moderately soft.

As a matter of record, the complete testing details were supplied and incorporated in the following two (2) reports – and referenced accordingly:

- “An Investigation into Scoping Metallurgical Testing for Fluorite Samples prepared for Ares Strategic Mining – Project 17707-01A Final Report, September 1, 2020” – 222 pages.
- “An Investigation into Scoping Metallurgical Testing for Fluorite Samples prepared for Ares Strategic Mining – Project 17707-01A Report No. 2, May 5, 2021” – 219 pages.

13.2 PHASE 1 TESTING CONCLUSIONS - DETAILS

The ROM and HG samples have shown their potential for producing acid-spar grade fluorspar with CaF₂ values of >97% purity and less than 1.2% SiO₂. The two composites tested were found to have the following characteristics and behaviour:

Run of Mine (ROM)

- Head characterization of 18.6% F, 38.4% CaF₂, and 47.8% SiO₂;
- Main F bearing mineral was fluorite at 31.9% of the sample;
- Fluorite liberation was at 77.8% and exposure (>20% exposed) was 98.2%;
- Quartz was the dominant gangue mineral, at 48.5%;
- The main carbonate minerals were dolomite (10.4%) and calcite (4.93%);
- Mineralogical grain size distribution indicated an overall P₈₀ of 97 microns for fluorite, 161 microns for quartz and 144 microns for all particles;
- The flowsheet will require stage grinding of material to reduce fines generation;
- The target primary grind size was found to be P₈₀ of around 115 microns;
- The regrind size to achieve target grade was found to be P₈₀ of 25 microns;
- The reagent configuration incorporated soda ash as the pH modifier, Tan-XS as depressant, SEP- X50 as dispersant and OMC-1234 as collector;
- The pulp pH was maintained at 9.5 for the rougher and first cleaner stage, with natural pH for the remaining cleaner stages;

- The flowsheet included six (6) stages of cleaning, with pulp temperature of around 20°C;
- This flowsheet achieved a final concentrate grade of 97.5% CaF₂ at recovery of 25.1%, as well as a SiO₂ grade of 1.02% (Test ROM-F10).

High Grade (HG)

- Head characterization of 25.8% F, 53.8% Calculated CaF₂, and 38.0% SiO₂.
- Requires stage grinding of material to reduce fines generation.
- Target primary grind size was found to be a P₈₀ of 75 microns, but good rougher results were also produced at a P₈₀ of 115 microns.
- The regrind size required to achieve the target CaF₂ grade was found to be P₈₀ of 25 microns.
- The reagent configuration and pH profiles were the same as for the ROM sample.
- The flowsheet included six (6) stages of cleaning with pulp temperature of around 20°C.
- This sample generally produced higher grades and recoveries in comparison to the ROM under similar flotation conditions.

13.3 PHASE 2 TESTING CONCLUSIONS - DETAILS

The flotation program achieved promising results with the newly created composites, LS2008 and ROM-A. This was mainly due to the higher feed grade of these two composites (66-69% CaF₂) compared to the original ROM sample (~37% CaF₂), making it easier to attain the target grade of > 97% CaF₂. The following observations were made:

Run of Mine (ROM)

- BWI test categorized the sample as moderately soft with a ball mill work index of 13.4 kWh/t.
- Clay XRD analysis showed the sample is primarily composed of fluorite (40.4%) and quartz (47.1%), along with minor dolomite, chlorite, montmorillonite, kaolinite and calcite.
- The utilization of a new batch of OMC-1234 improved the upgradability of the concentrate, increasing the CaF₂ grade from 84% to 93.3%, after seven stages of

cleaning with the same conditions. However, recovery decreased from 59% to 36% and was quite poor in all the flotation tests with the original ROM sample.

- Despite the signs of improvement, it was not possible to achieve the target grade or acceptable recoveries of CaF₂ in any of the tests with the original ROM sample.

LS2008 Composite

- Head characterization of 33.7% F, 69.2% CaF₂, and 20.9% SiO₂. The sample contained a higher proportion of slimes than the other composites.
- The removal of slimes and fines contributed to the success of upgrading the concentrate, achieving the target 97% CaF₂ grade with recoveries in the range 64-86% in the flotation stage and 39-53% after incorporating losses in the deslime and fines.
- High intensity conditioning was crucial for optimizing flotation performance as it ensured good mineralization in the froth.
- Without the deslime and fines removal stage, the best grade that could be achieved was 94.1% CaF₂, at a recovery of 80.3%.

Table 13.3 shows the flotation testwork results for LS2008.

TABLE 13.3
LS2008 FLOTATION TEST RESULTS SUMMARY

Test	Product	Wt %*	Assay						Distribution					Stage Distribution				
			F (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)
LS2008-F1	Cln 7 Conc	19.9	48.6	99.9	0.55	0.12	0.23	70.6	26.1	0.5	5.7	5.7	25.6	27.9	2.2	9.7	10.7	27.6
	Cln 6 Conc	24.5	48.5	99.7	0.59	0.13	0.25	70.4	32.1	0.7	7.3	7.6	31.4	34.3	2.9	12.5	14.3	33.9
	Cln 5 Conc	28.7	48.4	99.5	0.66	0.13	0.27	70.4	37.5	0.9	8.7	9.7	36.8	40.0	3.8	14.9	18.3	39.7
	Cln 4 Conc	35.4	48.2	99.1	0.79	0.14	0.31	70.2	46.1	1.4	11.6	13.4	45.2	49.2	5.6	19.8	25.2	48.8
	Cln 3 Conc	41.3	47.9	98.4	1.09	0.15	0.34	69.9	53.4	2.3	15.0	17.3	52.5	56.9	9.0	25.7	32.5	56.6
	Cln 2 Conc	50.1	47.3	97.2	1.81	0.19	0.38	69.2	64.0	4.6	22.6	23.8	63.0	68.3	18.1	38.7	44.8	68.0
	Cln 1 Conc	69.7	46.3	95.2	3.41	0.23	0.45	67.7	87.2	11.9	38.4	38.6	86.0	93.0	47.4	65.8	72.7	92.7
	Ro Conc	78.1	44.5	91.4	6.43	0.32	0.55	65.2	93.7	25.2	58.4	53.1	92.7	100	100	100	100	100
	Ro Tail	21.9	10.6	21.8	68.0	0.80	1.73	18.3	6.3	74.8	41.6	46.9	7.3					
Head (calc)	100	37.1	76.1	19.9	0.42	0.81	54.9	100	100	100	100	100						
LS2008-F2	Cln 7 Conc	68.0	47.0	96.6	1.20	0.18	0.70	69.3	85.9	4.2	23.4	58.1	85.3	87.1	12.6	38.7	62.7	86.5
	Cln 6 Conc	71.0	46.8	96.1	1.32	0.18	0.76	69.1	89.3	4.8	24.8	65.5	88.7	90.4	14.4	40.9	70.6	90.0
	Cln 5 Conc	72.1	46.7	95.9	1.41	0.18	0.78	69.0	90.5	5.2	25.4	69.0	89.9	91.7	15.6	42.0	74.4	91.3
	Cln 4 Conc	75.1	46.4	95.4	1.64	0.19	0.83	68.7	93.7	6.3	27.7	76.4	93.2	94.9	18.9	45.7	82.4	94.6
	Cln 3 Conc	76.4	46.2	94.9	1.92	0.21	0.86	68.4	94.9	7.5	30.0	80.2	94.5	96.2	22.6	49.5	86.4	95.9
	Cln 2 Conc	78.8	45.8	94.1	2.52	0.23	0.89	67.8	96.9	10.1	35.0	85.5	96.6	98.2	30.5	57.7	92.2	98.1
	Cln 1 Conc	80.7	45.0	92.5	3.87	0.28	0.90	66.8	97.7	16.0	43.8	88.7	97.5	99.0	48.1	72.3	95.7	98.9
	Ro Conc	85.2	43.1	88.5	7.63	0.37	0.89	63.9	98.7	33.2	60.6	92.8	98.5	100	100	100	100	100
	Ro Tail	14.8	3.30	6.78	88.4	1.39	0.40	5.55	1.3	66.8	39.4	7.2	1.5					
Head (calc)	100	37.2	76.4	19.6	0.52	0.82	55.3	100	100	100	100	100						
LS2008-F3	Cln 7 Conc	62.5	47.5	97.6	0.76	0.14	0.59	69.8	79.8	2.4	16.6	45.7	79.0	80.2	6.3	27.1	48.4	79.5
	Cln 6 Conc	66.8	47.3	97.1	0.85	0.14	0.66	69.6	84.9	2.9	18.3	54.7	84.2	85.3	7.6	29.7	58.0	84.7
	Cln 5 Conc	69.6	47.1	96.7	0.96	0.15	0.71	69.4	88.2	3.4	19.6	61.3	87.6	88.7	8.9	31.9	64.9	88.1
	Cln 4 Conc	74.2	46.8	96.1	1.19	0.16	0.77	69.1	93.4	4.5	22.3	71.3	92.9	93.9	11.7	36.3	75.5	93.5
	Cln 3 Conc	75.9	46.5	95.5	1.50	0.17	0.81	68.7	95.0	5.8	25.0	76.1	94.6	95.5	15.2	40.7	80.6	95.2
	Cln 2 Conc	77.9	46.0	94.5	2.25	0.20	0.84	68.1	96.4	8.9	30.3	80.9	96.0	96.9	23.4	49.3	85.6	96.7

TABLE 13.3
LS2008 FLOTATION TEST RESULTS SUMMARY

Test	Product	Wt %*	Assay						Distribution					Stage Distribution				
			F (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)	CaF ₂ Calc. (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	MgO (%)	CaO (%)
	Cln 1 Conc	81.7	44.8	92.0	4.35	0.25	0.89	66.4	98.5	18.0	38.8	90.2	98.3	99.0	47.3	63.1	95.5	98.9
	Ro Conc	86.8	42.6	87.5	8.64	0.37	0.88	63.1	99.5	38.1	61.4	94.4	99.4	100	100	100	100	100
	Ro Tail	13.2	1.40	2.88	92.7	1.54	0.34	2.66	0.5	61.9	38.6	5.6	0.6					
	Head (calc)	100	37.2	76.3	19.7	0.53	0.81	55.2	100	100	100	100	100					
LS2008 -F4	Cln 7 Conc	60.5	47.2	97.0	0.88	0.14	0.63	69.6	76.7	2.7	14.9	46.9	76.1	77.3	6.6	22.8	50.1	76.8
	Cln 6 Conc	66.7	46.9	96.4	1.04	0.15	0.71	69.3	84.1	3.6	17.5	58.6	83.6	84.7	8.6	26.8	62.6	84.4
	Cln 5 Conc	74.4	46.6	95.7	1.33	0.17	0.80	68.9	93.1	5.1	21.7	73.6	92.7	93.8	12.3	33.2	78.6	93.5
	Cln 4 Conc	77.4	46.3	95.2	1.63	0.18	0.84	68.6	96.3	6.5	24.5	80.3	95.9	97.0	15.6	37.4	85.8	96.8
	Cln 3 Conc	78.3	46.1	94.6	2.03	0.20	0.86	68.2	96.9	8.2	27.3	82.8	96.6	97.6	19.7	41.7	88.4	97.4
	Cln 2 Conc	79.5	45.6	93.7	2.79	0.23	0.87	67.6	97.5	11.5	32.6	85.3	97.2	98.2	27.6	49.8	91.1	98.1
	Cln 1 Conc	82.3	44.5	91.5	4.76	0.31	0.88	66.0	98.5	20.2	44.4	89.3	98.2	99.2	48.7	67.7	95.4	99.1
	Ro Conc	87.4	42.3	86.9	9.20	0.43	0.87	62.7	99.3	41.5	65.5	93.6	99.1	100	100	100.0	100	100
	Ro Tail	12.6	2.10	4.31	89.6	1.55	0.41	3.83	0.7	58.5	34.5	6.4	0.9					
	Head (calc)	100	37.2	76.4	19.3	0.57	0.81	55.3	100.0	100.0	100	100	100					

Source: SGS (2021)

Notes: * Wt % = weight percent, calc. = calculated.

F = fluorine, CaF₂ = calcium fluoride, SiO₂ = silicon dioxide, Al₂O₃ = aluminium oxide, MgO = magnesium oxide, CaO = calcium oxide.

13.4 SGS PHASE 1 AND PHASE 2 RECOMMENDATIONS

Phase 1 additional testing on ROM sample to further optimize conditions and improve CaF₂ recovery:

- Consider alternative flowsheet (i.e., a split circuit producing both acid-spar grade and metallurgical grade concentrates). Note – incorporated into the Process Flow Description in Section 17.
- Additional testing with the HG sample based on the optimized conditions developed for the ROM sample, for metallurgical behaviour comparison.
- Variability flotation testing based on optimized conditions, to investigate metallurgical performance with varying feed grades.
- Larger scale testing to produce products for further characterization and to allow for the design of downstream processing.
- Comminution testing to identify energy requirements for crushing and grinding.

Phase 2 additional testing is required for the original low-grade ROM sample to define optimum conditions for achieving the target grade at higher CaF₂ recovery. Consider further testing with alternative reagents or investigate the effect of desliming or fines removal since it showed improvement in the LS2008 tests. Note – desliming has been incorporated into the Process Flow Description in Section 17.

- Explore processing methods to recover CaF₂ from the slimes and fines generated in the LS2008 testwork. Success in this will help minimize the losses of CaF₂ recovery in the overall process.
- Further testing may be conducted on the HG material as final concentrate has yet to achieve target grade or acceptable recovery.
- Optimize conditions at expected plant feed grade as the successes achieved here with the high-grade samples may not be reproducible with lower grade feed.
- Variability flotation testing based on optimized conditions to investigate metallurgical performance with varying feed mineralogy.
- Larger scale testing to produce products for further characterization and to allow for the design of downstream processing.

14.0 MINERAL RESOURCE ESTIMATES

This section is not applicable to this Technical Report.

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable to this Technical Report.

16.0 MINING METHODS

16.1 OPEN PIT MINING

Historical operations at Lost Sheep were partially conducted by open pit mining. They consisted of relatively shallow open pits with steep wall angles from surface down into the breccia-fluorspar pipes. This type of mining is no longer considered safe or practical, Figure 16.1.

FIGURE 16.1 HISTORICAL OPEN PIT MINING METHOD



The deposit geometry and steep topographical relief results in high strip ratios that reduce the economic opportunities to mine the deposits by open pit methods. However, Ares will continue to investigate open pit mining opportunities wherever possible in the future.

Ares has not completed a Feasibility Study on, nor has Ares completed a Mineral Reserve or Mineral Resource Estimate at the Lost Sheep Mine and as such the financial and technical viability of the Project is at higher risk than if this work had been completed. Based on historical engineering work, geological reports, historical production data and current engineering work completed or in progress by Ares, Ares intends to move forward with the development of this asset. Ares further cautions that it is not basing any production decision on a Feasibility Study of Mineral Reserves demonstrating economic and technical viability, and therefore there is a much greater risk of failure associated with its production decision. Ares has decided to proceed without established Mineral Resources or Mineral Reserves, basing its decision on past production and internal projections.

16.2 UNDERGROUND MINING

Underground mine development and the sublevel longhole mining method is proposed based on the known mineralized zone geometry and limited rock mechanics and engineering. This choice

of a mining method is primarily aimed at achieving the lowest cost to finished metal with manageable risk while maintaining a safe mining environment and achieving the desired production rate. The mining contractor would use conventional electric hydraulic jumbos, load-haul-dump (LHD) (Figures 16.2 and 16.3), mechanized rock bolters, ANFO/emulsion blasthole loaders and mine haulage trucks to execute the mine development. Main ramp or adit accesses (depending on topography) and sublevel accesses would be either 4 m x 4 m for most pipes, or 3 m x 3 m for pipes requiring more selective mining.

During the pre-production period, the owner will assist the contractor by supplying equipment and personnel for training purposes, in order to facilitate transitioning from contractor to owner operations. The operation is planned to be mined as an owner operation after the pre-production period with only adit and potentially surface geotechnical drilling being performed by a contractor.

FIGURE 16.2 **ELECTRIC HYDRAULIC JUMBO**



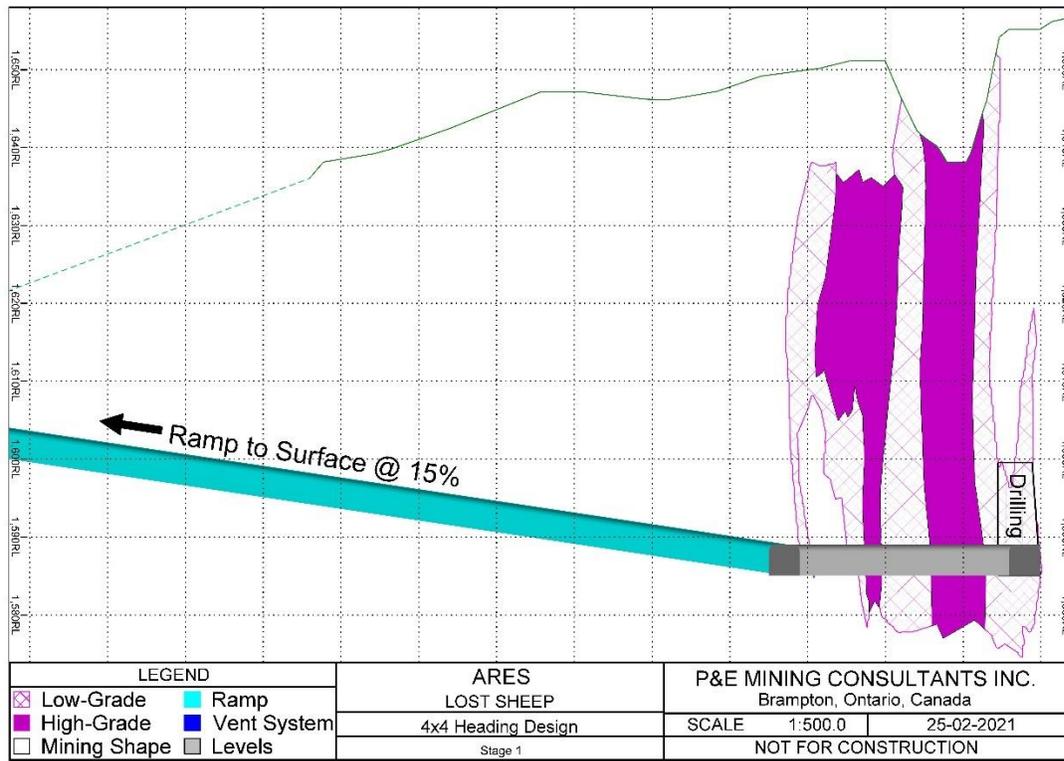
FIGURE 16.3 **LOAD HAUL DUMP UNIT**



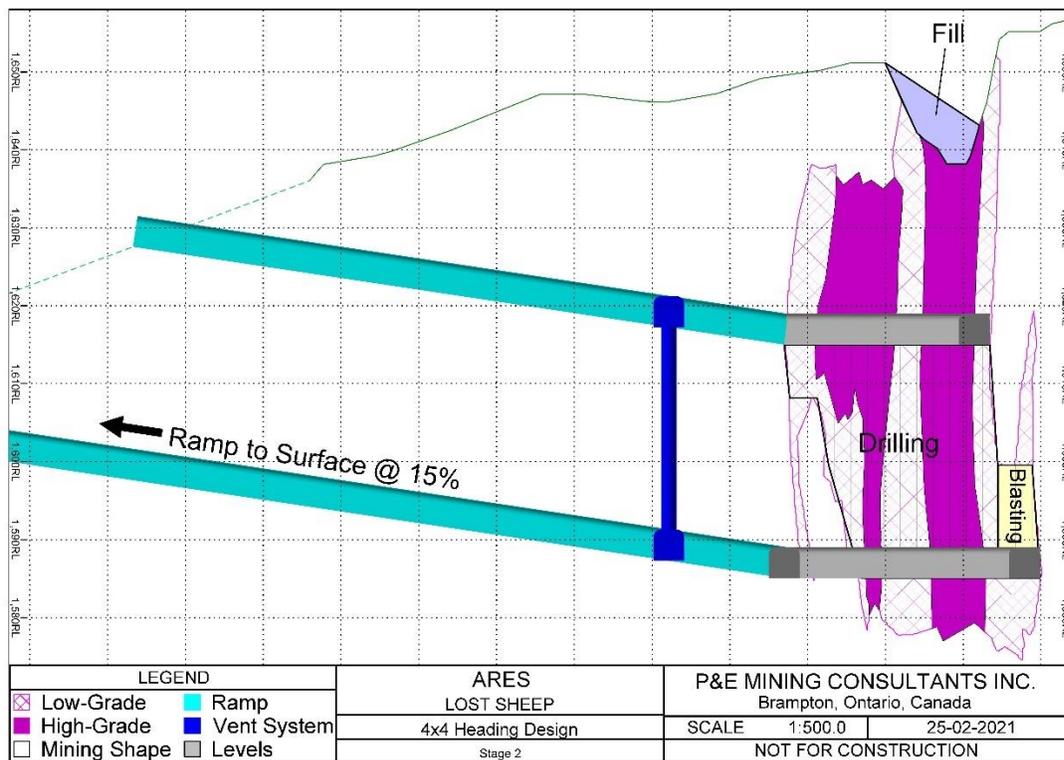
The adit portal would be collared at a location that is at or near elevation of the fluorspar pipe bottom. Adit development and sumps will be developed at gradients of -15%. Lateral development will be developed at a gradient of +2% to facilitate water drainage off of the level and directed to a sump. Modeled water inflows into the development areas are not high and it is planned to use ANFO as the primary explosive and emulsion as a secondary explosive in wet holes. Advance rates used for scheduling are conservative.

Ventilation raises would be driven at 2.0 m x 2.0 m and will be equipped with ladders for secondary egress. Sill drifts on 25 m to 30 m vertical intervals would undercut and overcut the mineralization that would be longhole drilled and blasted. Up-hole drilling may be used to mine certain areas of the pipes, however, most drilling would be down-hole. Underground mine production could average 500 tpd of fluorspar material. Figure 16.4 presents underground mining sequence drawings to illustrate the sublevel longhole mining method.

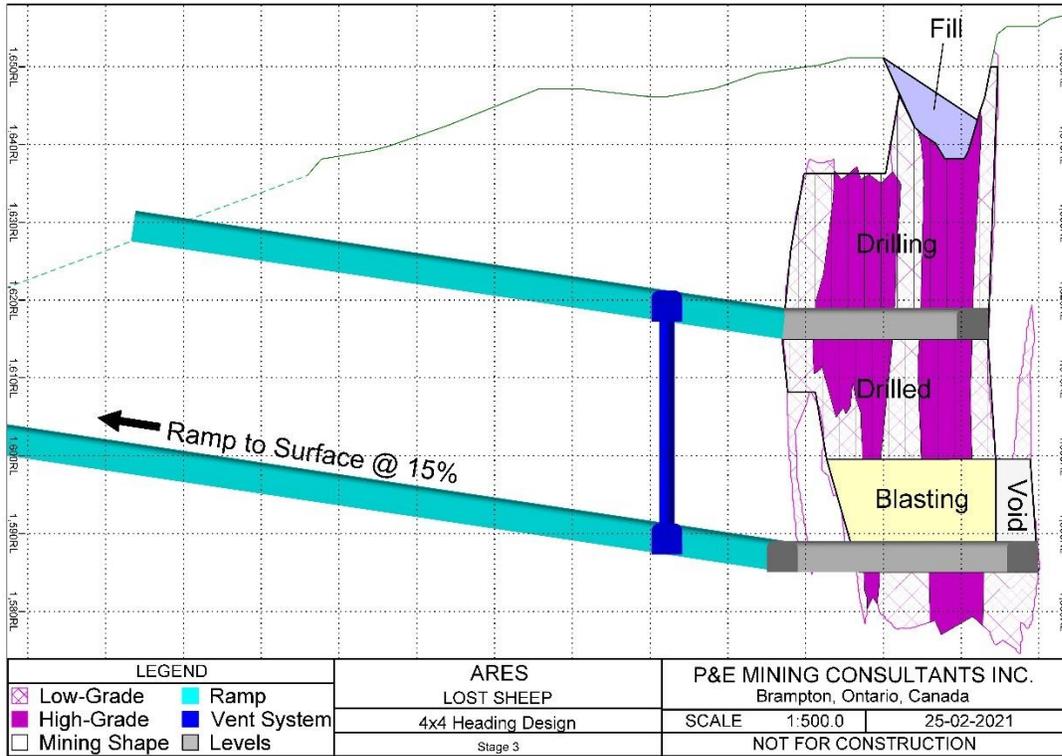
FIGURE 16.4 PROPOSED UNDERGROUND MINING SEQUENCE



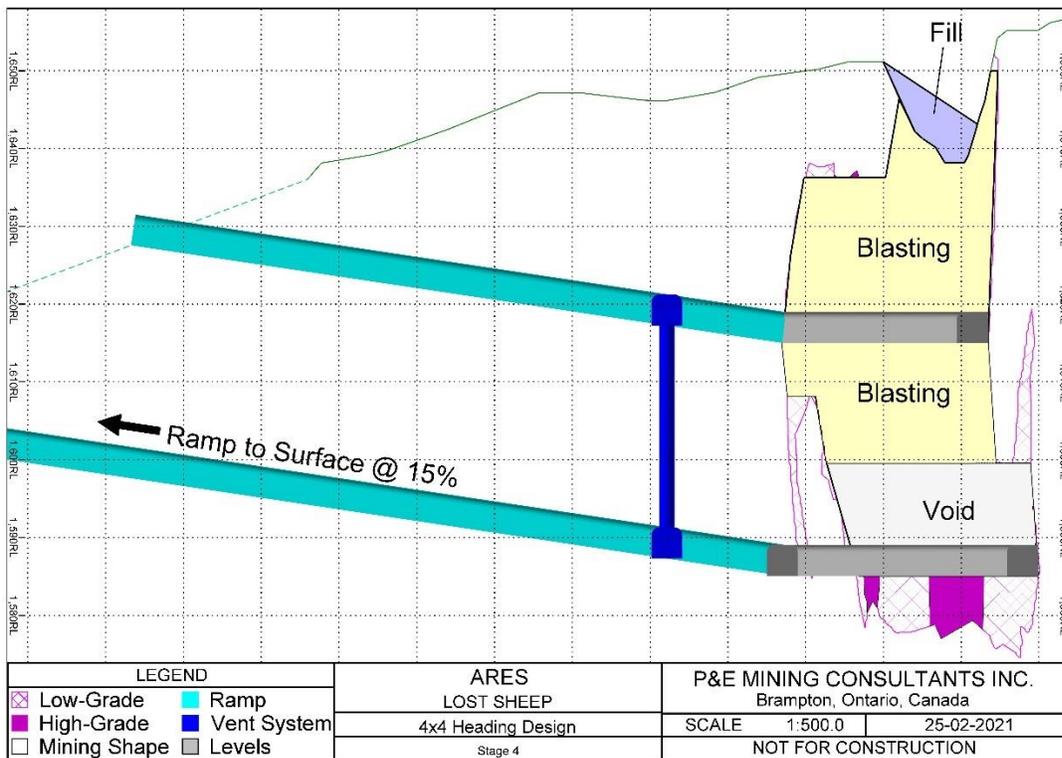
Ramp or level access driven to bottom of pipe, drill up-holes if required.



Establish second level access and ventilation raise.



Drill, blast, remove fluorspar material, fill top of pipe with waste rock and tailings.



Blast, draw material from bottom level until fill material is too dilutive.

Trucks will haul material from the underground via the decline to the surface ROM pad. Mineralized material will be either stockpiled near the crusher or tipped directly into the primary crusher. See Figure 16.5. Waste will be stockpiled separately and used for site construction purposes. Development waste will be loaded directly into trucks at underground re-muck bays and level accesses. Development and production material will be loaded directly into trucks or from chutes located vertically off of the decline or sublevel access.

FIGURE 16.5 SURFACE MATERIAL HANDLING



Standard ground support will be required for the majority of the waste and mineralized material development. An increase in support requirements may be required in development located in the initial adit development used to access each pipe. Additional ground support drilling and analysis will be performed on each additional fluorspar target to account for:

- Ground Water – inflows from the joints as well as surface run-off recharge would need to be investigated.
- Infrastructure Data – additional information would be required to determine rock conditions for infrastructure.
- Shear Zone Properties – additional drilling information would be required in the pipes to determine rock mass properties.

Numerical Modeling – numerical modeling analyses would be required to determine stability of the pipe walls and induced stresses around the mine infrastructure.

All ramp and adit level accesses, and overcuts/undercuts pre-production costs would be estimated from mining contractor quotes. Mineralized material production costs would be estimated from some of the contractor unit costs and also from owner operator labour and consumable and G&A cost estimates.

17.0 RECOVERY METHODS

Ares has not completed a Feasibility Study on, nor has Ares completed a Mineral Reserve or Mineral Resource Estimate at the Lost Sheep Mine and as such the financial and technical viability of the Project is at higher risk than if this work had been completed. Based on historical engineering work, geological reports, historical production data and current engineering work completed or in progress by Ares, Ares intends to move forward with the development of this asset. Ares further cautions that it is not basing any production decision on a Feasibility Study of Mineral Reserves demonstrating economic and technical viability, and therefore there is a much greater risk of failure associated with its production decision. Ares has decided to proceed without established Mineral Resources or Mineral Reserves, basing its decision on past production and internal projections.

17.1 SUMMARY – FLOTATION

The recovery methods used for the design of the Lost Sheep Mine crushing and process facilities are described in this section. The preliminary testwork presented in Section 13 were used a basis for flowsheet development and design criteria. The plant design was based on a nominal 500 tonnes per day (“tpd”) of mineralized material with an average feed grade of 40% CaF₂ mineralized material into a high-purity 97% grade fluorite (CaF₂) at a minimum 80% total fluorite recovery. Of note, the recovery methods and design in summary only apply to the process and upgrading via flotation. A separate process for a CaF₂ lump recovery will be detailed briefly later in this section.

The test results indicate the grind particle size target, conditioning times, number of cleaner stages, and quantities and locations of reagent additions to achieve the target acid-spar production.

The testing process flow consists of:

- Grind to 75-micron P80 target.
- Multi-stage high-intensity conditioning for 7 minutes total.
- Rougher flotation.
- One cleaner stage.
- Re-grind to 50-micron P80 target.
- Multi-stage conditioning for 7 minutes total.
- Seven (7) to nine (9) cleaning stages.

Reagents are added in the conditioning tanks and cleaner feeds:

- Soda ash to control slurry pH.
- OMC-1234, or oleic acid, as a collector to improve fluorite flotation selectivity.
- Tan-XS for the depression of calcite to the tails phase.
- Sep-X50, or sodium silicate, for the depression of silica to the tails phase.

To allow flexibility in processing and ensure that the acid-spar grades are achieved, the scaled-up plant design includes nine (9) cleaner stages, with the option to remove product from earlier cleaner stages.

Primary milling is performed at 70% solids pulp density and a circulating load of 250%. Mill discharge is diluted to 55% solids pulp density for cyclone particle size selection. Flotation pulp is assumed at 25% solids density.

17.2 PROCESS FLOW DESCRIPTION – FLOTATION RECOVERY

Process plant feed mineralized material from the mine is trucked to the facility at 500 tpd and deposited on the ROM mineralized material pad (“Pad”). mineralized material quantity is measured by truck scales when entering the plant site Pad and leaving the Pad. Three to four days of process plant feed mineralized material is stockpiled at the Pad. To accommodate this quantity, the Pad dimensions are approximately 35 m x 17 m x 4 m high sloped sides (1,000 m³ = ~2,000 tonnes) excluding truck maneuvering space.

From the Pad, mineralized material is loaded into the ROM mineralized material bin in the southeast corner of the plant site facility. From the ROM mineralized material bin, mineralized material is fed by a vibrating grizzly to a jaw crusher and conveyor. The conveyor scissors back to a sizing screen. Material with a P₈₀ < 9 mm passes to a third conveyor and reports to a day-use fine mineralized material bin. Material with a P₈₀ > 9 mm report to a cone crusher for further size reduction. Cone crushed material reports to the first conveyor and joins the jaw-crushed material passing to the scissor conveyor and to the sizing screen. A dust collector suppresses dust from the area.

Crushing operates 7 days per week, 12 hours per day to maintain stockpile capacity and minimize disruption to the local community. The fine mineralized material bin has a one-day 500 tonne holding capacity to allow surge and draw-down across the crushing shifts. Over 12 hours, mineralized material must be crushed at 42 tonnes per /hour to achieve the total plant nameplate production of 500 tpd.

Ore feeds from the fine mineralized material bin to a short conveyor into the primary ball mill feed chute. Water is added to create slurry with a pulp density of 70% w/w solids. The mill reduces the particle size to 75 microns, with the discharge slurry passing through a cyclone for particle size selection. The oversized material passes from the cyclone underflow back to the mill inlet for further comminution, and the correctly sized milled mineralized material passes from the cyclone overflow to a pump box for further processing.

After primary milling, the mineralized material may pass through a de-sliming cyclone for removal of fine and clay particles. The slimes are removed to minimize the negative impact on flotation processing, and report directly to the tailings thickener.

De-slimed mineralized material slurry reports to the high-intensity conditioning tanks where reagents are added to improve flotation efficiency:

- Soda ash to control slurry pH.
- OMC-1234, or oleic acid, as a collector to improve fluorite flotation selectivity.
- Tan-XS for the depression of calcite to the tails phase.
- Sep-X50, or sodium silicate, for the depression of silica to the tails phase.

The reagents are blended with the milled solids, and the slurry is pumped to the rougher cells for bulk flotation. The rougher tails report to the scavenger module, and scavenger tailings are pumped to the tailings thickener and vacuum filter for solid-liquid separation. Thickener overflow and filter filtrate water is reclaimed for use at the primary mill. The filter cake is dried in a rotary dryer to achieve <8% moisture such that the material may be trucked back to the mine for backfilling open pits.

Scavenger concentrate returns to the rougher inlet for re-processing. Rougher concentrate is pumped to the first cleaner cell, then to the regrind mill for further comminution.

The regrind mill reduces the particle size from 75 micron to 50 micron, liberating additional fluorite surface area for improved flotation. The regrind mill is closed-circuit, with the discharge cyclone underflow fraction returning to the mill inlet for further milling to the 50 micron target size. The regrind mill cyclone overflow fraction reports to the secondary high-intensity conditioning tanks for additional chemical dosing and blending.

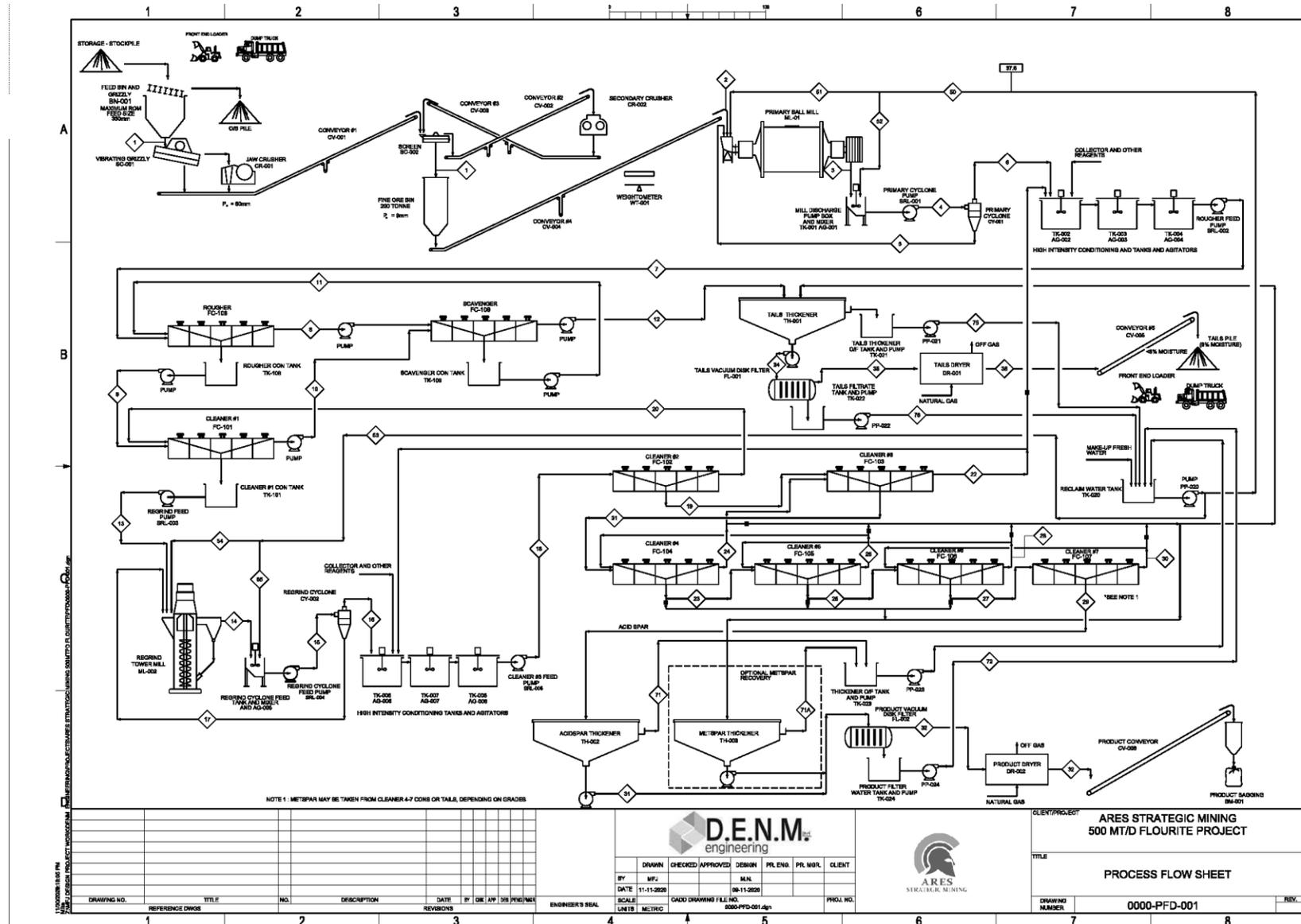
After secondary conditioning, the slurry passes through a series of up to eight cleaner flotation modules to increase the fluorite grade to over 97% (acid-spar grade) while maintaining total fluorite recovery of 80%. The final product may be pulled from an earlier cleaner once 97% grade is achieved. Further cleaning past 97% grade is unnecessary as saleable product has been achieved and additional cleaning stages result in fluorite losses to tails.

The acid-spar concentrate product is pumped from the cleaner cells to the product thickener, then to a vacuum disc filter for solid-liquid separation. Thickener overflow and filter filtrate water is reclaimed for use at the primary mill. The filter cake is dried in a rotary dryer to achieve <0.5% moisture prior to packaging in super-sacs and/or 50 kg paper sacs depending upon user shipping specifications.

If the flotation process does not meet acid-spar grade, a second thickener is installed to collect metspar grade concentrate. Metspar passes through the same vacuum filter, dryer and bagging machine for offloading in order to maintain a revenue stream.

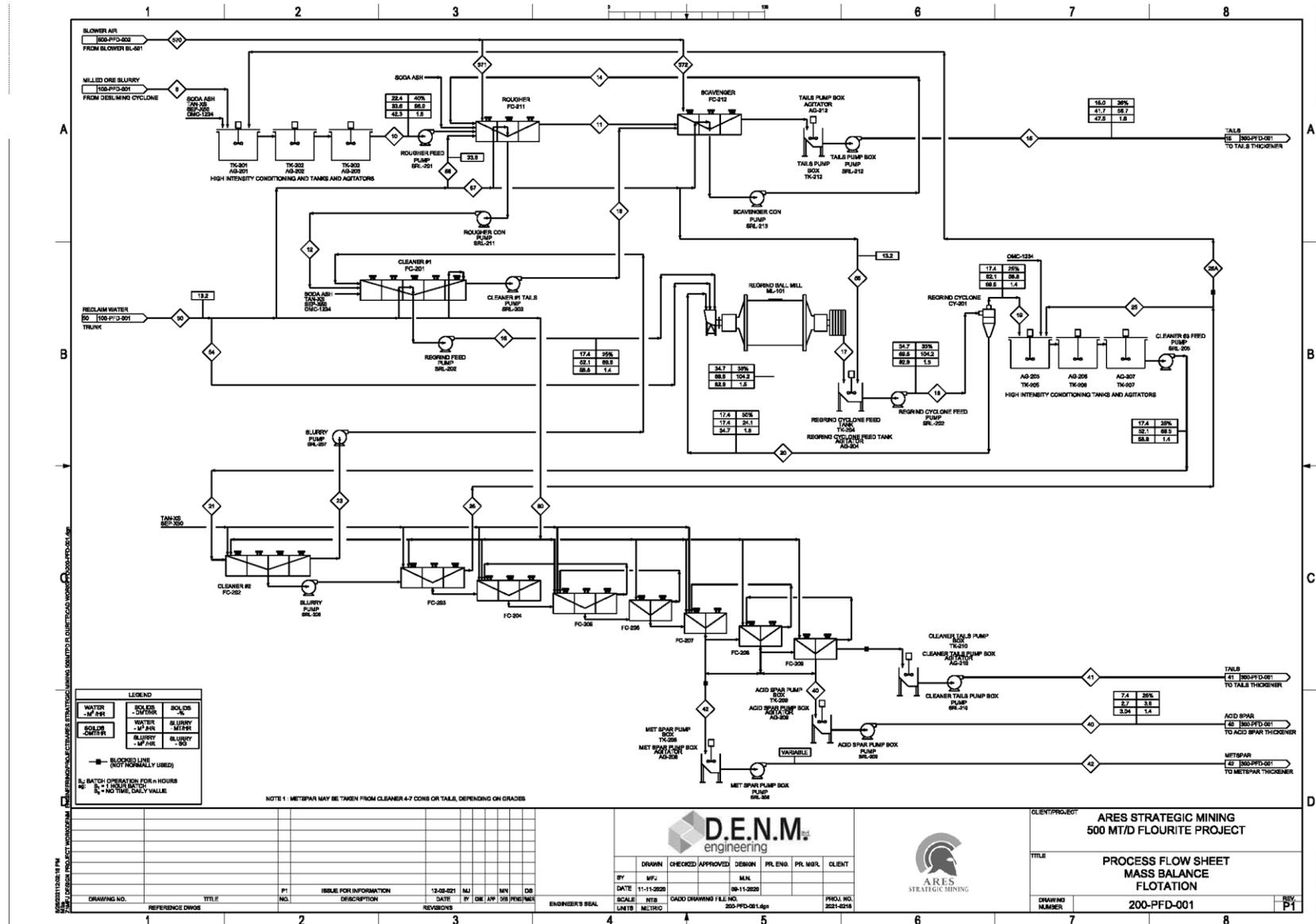
The Lost Sheep (flotation) simplified flowsheet is shown in Figures 17.1 to 17.6.

FIGURE 17.1 SIMPLIFIED PROCESS FLOWSHEET FOR 500 TPD



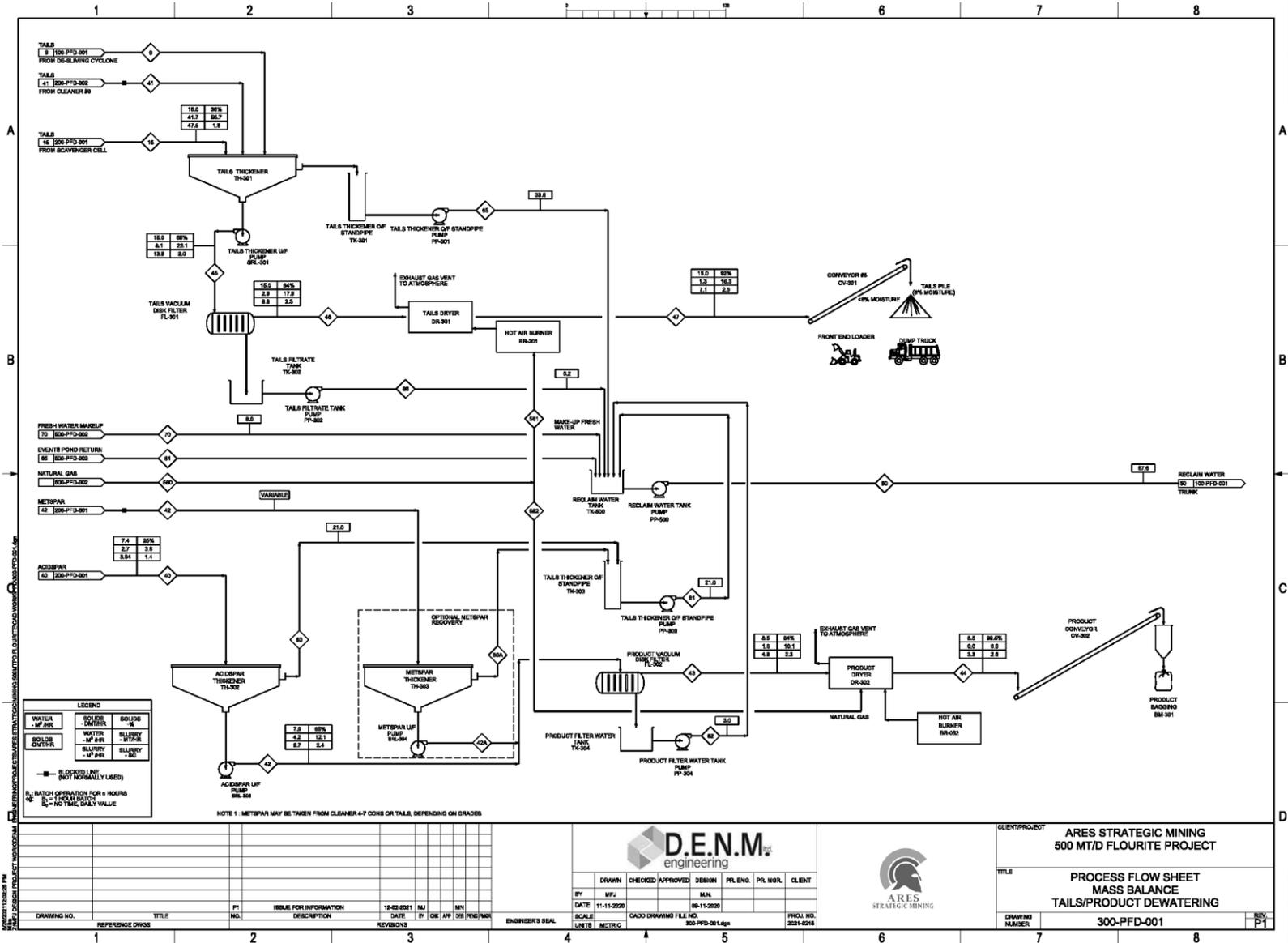
Source: D.E.N.M. (2020)

FIGURE 17.3 PROCESS FLOWSHEET FOR FLOTATION



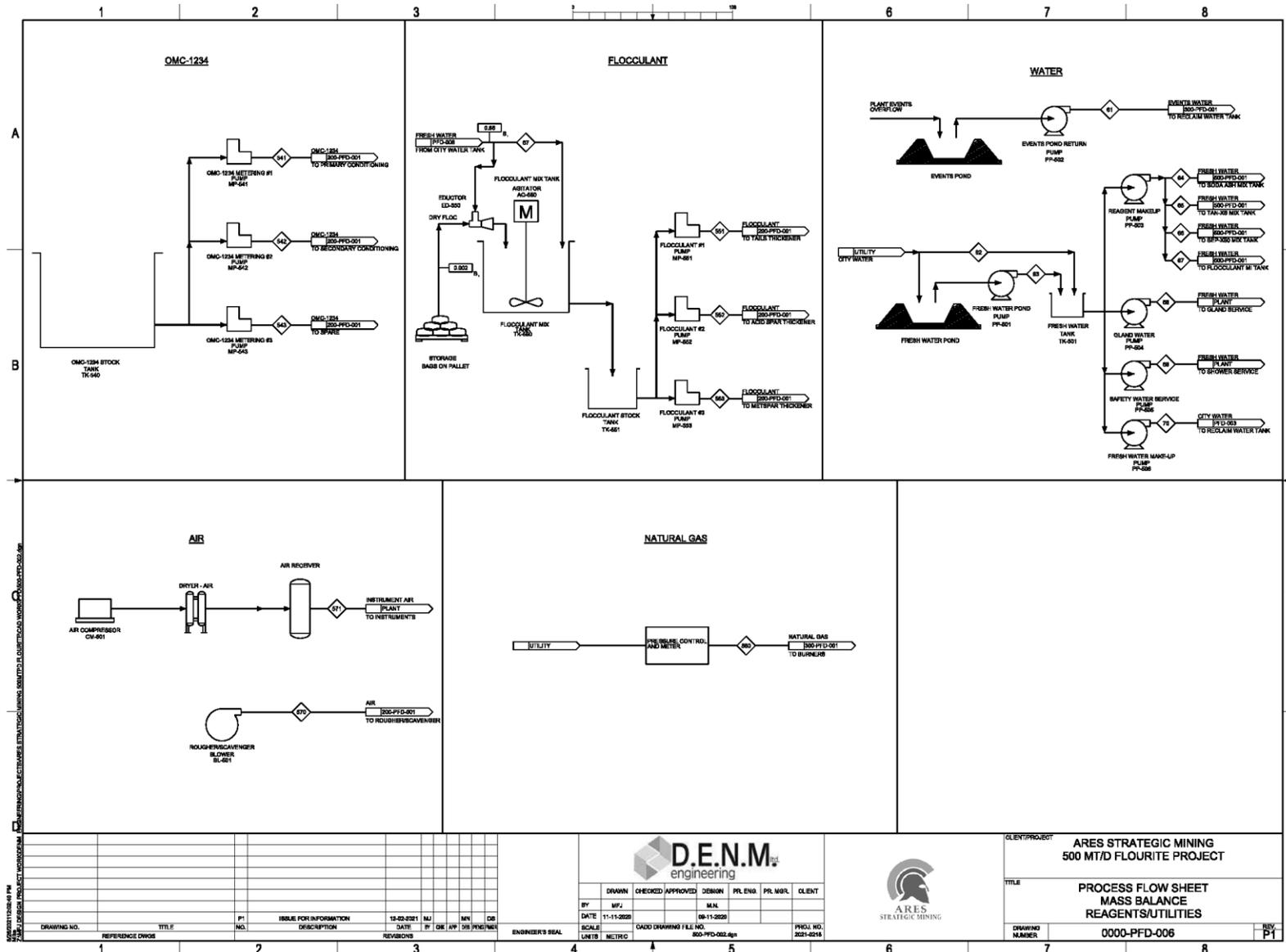
Source: D.E.N.M. (2020)

FIGURE 17.4 PROCESS FLOWSHEET FOR TAILS/PRODUCT DEWATERING



Source: D.E.N.M. (2020)

FIGURE 17.6 PROCESS FLOWSHEET FOR REAGENTS/UTILITIES



Source: D.E.N.M. (2020)

17.3 PLANT DESIGN

17.3.1 Design Criteria

The Lost Sheep flotation process plant has been designed to treat fluorite bearing mineralized material at a nominal rate of 500 Mtpd (198,400 Mtpa). The preliminary key process criteria are shown in Table 17.1.

TABLE 17.1 PROCESS DESIGN CRITERIA		
Criteria	Units	Value
Ore Characteristics		
Specific Gravity	g/cm ³	2.80
Bulk Density	t/m ³	1.50
Moisture Content	%	3.0
Bond Crushing Work Index	kWh/t	13.4
Plant Availability/Utilization		
Overall Plant Feed-Nominal	tpy	198,400
Plant Feed- Nominal	tpd	500
Crushing Plant Feed	tpd	500
Crusher Plant- Plant Utilization	%	50.0
Grinding, Leach and Refinery Utilization	%	92.0
Primary Crushing Circuit Throughout Rate	t/h	42.0
Milling and Flotation Process Rate	t/h	22.6
Plant Production		
Plant Feed Characteristics		
Average Grade CaF ₂	%	40.0
Metal Recoveries		
Anticipated Overall Fluorite Recovery- design	%	80.0
General Plant Process Conditions		
Final Moisture of CaF ₂ Concentrate	%	< 0.5
Final Moisture of Dewatered Tailings (return to mine)	%	<8.0

Source: D.E.N.M. (2021) and Section 13.

17.3.2 Operating Schedule and Availability

The Lost Sheep plant is designed to operate for two (2) 12-hour shifts per day, 365 days per year. Utilization expected for the specific circuits will be 50% for the primary and secondary crusher and 92% for the milling, flotation, regrinding, dewatering (concentrate and tailings), drying (dewatering and tailings) and packaging of the final product. The factors applied here allow for sufficient downtime for maintenance, scheduled and unscheduled, within the crushing and processing areas.

17.4 PROCESS PLANT DESCRIPTION

17.4.1 Primary and Secondary Crushing

The proposed crushing circuit will reduce the delivered run of mine mineralized material from a nominal top size of 350 mm to a product of 80% passing (P_{80}) 9 mm for the ball mill feed material. The front end crushing circuit includes, but is not limited to, the following equipment:

- ROM feed hopper c/w stationary grizzly.
- Vibrating grizzly feeder.
- Jaw Crusher.
- Associated conveyor belts to allow closed circuit secondary crushing.
- Belt Scale and Belt Magnet.
- Secondary Cone crusher.

The feed material will be hauled from the Mine (located 40 miles away) and dumped at the ROM delivery area adjacent to the crusher. The ROM surge bin will have a capacity of 80 Mt with a vibrating feeder that feeds the primary jaw crusher.

The jaw crusher, 500 mm x 750 mm (20 in x 30 in) – 55 kw will process a nominal 42 Mtph of material based on the utilization factor noted in Table 17.1. The jaw crusher discharge will be conveyed to the primary sizing screen upstream of the cone crusher.

The primary crushed material will feed the double deck screen (1,500 mm x 3,500 mm) – 11 kw with undersize material (P_{80} – 8 mm) discharging to the fine mineralized material bin. Oversize material will feed the cone crusher (900 mm diameter) – 55 kw with the resultant product being recirculated back to the screen.

17.4.2 Grinding Circuit

Based on the preliminary testwork and recovery rates, the grinding circuit final product size will have a design P_{80} of 74 μm . The feed rate to the primary ball mill will be a nominal 22.6 Mtph. The grinding circuit ball mill in closed circuit with classifying cyclone (250 mm).

The equipment in this area includes:

- Ball Mill – 2.4 m diameter x 4.5 m long (8-ft x 15 ft) – 380 power installed.
- Mill Discharge pumpbox with associated cyclone feed pumps.
- Cyclone classification – one operating, one spare – 250 mm diameter.
- Grinding circuit control – flow metres, density metres, variable speed pumps.
- Grinding area sump pump(s).

Grinding media will be added to the mill are required to maintain power draw and grinding of the mineralized material to the desired size.

17.4.3 Conditioning and Rougher / Scavenger Flotation / Tailings

The ball mill cyclone overflow will feed a series of three (3) agitated conditioning tanks to allow addition of the required flotation reagents. The conditioned slurry is pumped to the rougher and scavenger flotation banks. Scavenger tailings is pumped to the tailings thickener with dewatering and drying of tails for stacking and return to the mine site for impoundment.

The equipment in this area includes:

- Three (3) conditioning tanks – 1.7 Mt diameter x 2 Mt high – 7.5 kw.
- Two banks of three (3) flotation cells – 4 cu.Mt/cell – 15 kw drives.
- Associated process slurry pumps to movement of concentrate and tailings streams.
- Tails Thickener – 5 Mt diameter – 1.5 kw.
- Dewatering Filter – 30 sq.Mt filtration area – 65 kw – c/w vacuum system with receivers and filtrate pumps.
- Tailing Rotary Dryer – 1.5 Mt diameter x 10.7 Mt L – 10.7 kw c/w 7.7 mmbtu/hr natural gas burner.
- Tailings Stacking Conveyor – 44 Mt L – 3 kw.

The resultant overflow and filtrate from the thickener and filter will be recycled to the process water system.

17.4.4 Cleaner Flotation and Regrinding and Concentrate Handling

In the cleaning circuit, rougher and scavenger concentrate will go through a series of upgrading. Cleaner 1 concentrate will be reground in a closed circuit system followed by additional conditioning and reagent addition and then six (6) stages of cleaning.

The ability to produce both acid-spar and metspar in the circuit via bypassing and less upgrading is included in the process. Final Concentrate is thickened, dewatered and dried to <0.5% for packaging and shipping to the markets.

The equipment in this area includes:

- Cleaner 1 Flotation – 4 cu.Mt/cell – 17 kw.
- Regrind Mill c/w closed circuit cyclone - 1.8 Mt diameter x 3 Mt L – 130 kw.
- Six (6) additional stages of flotation – 4 cu.Mt/cell and 3.8 cu.Mt/cell.
- Associated process slurry pumps to movement of concentrate and tailings streams.
- Concentrate Thickener(s) – (2) – 5 Mt diameter – 1.5 kw.
- Dewatering Filter – 15 sq.Mt filtration area – 42 kw – c/w vacuum system with receivers and filtrate pumps.
- Concentrate Dryer – 1.5 Mt diameter x 10.7 Mt L – 10.7 kw c/w 5.3 mmbtu/hr natural gas burner.

17.4.5 Assay and Metallurgical Laboratory

A fully equipped laboratory will be an integral part to the Lost Sheep – Delta project and located close the main process facility. It will be equipped with the necessary analytics to provide all required data for the mining operation, main process facility, environmental.

It will be an instrumental part in providing on-time process monitoring of said processes, daily production reporting, mine sampling, and any and all exploration samples.

17.4.6 Water Supply

All make-up water for Lost Sheep – Delta site project will be supplied from tie into the city water system. Recycling of process water from the thickeners and filters will be maximized and stored in associated process water tanks and a lined pond at the Delta site.

Make-up water volume calculated of 11.4 cu.Mt/hr to support the process.

17.4.7 Air Supply

An air distribution system will be included to supply required process air to the main plant. Instrument air will be included for required instrumentation and controls.

17.5 LUMP PLANT PROCESSING DESCRIPTION – SIMPLISTIC (TRANSLATED)

The raw mineralized material from mining operations is fed from a vibrating feeder onto a conveyor to a jaw crusher. All mineralized material passing through the jaw crusher will then be fed into a grading screen. Any particulate sizing at -25 mm is advanced to the next processing stage. Any sizing leaving the crushing circuit at +25 mm is recirculated into the crusher feed circuit, and any particulate sized -10 mm is advanced to the intermediate final product collection. The -25 mm crushed mineralized material is advanced to the desliming process, involving a sand washing machine.

After the desliming, all feed (presume this is the de-slimed portion) is fed to a dewatering screen, after which all particles grading at +5 mm are advanced to a mixing barrel, where fresh water is added to the slurry, before being pumped into a three-product cyclone system.

Depending on the weight of the fluorspar particulates, the feed is then separated for various next stage processes. Heavier product is fed to the Heavy Product Vibrating Screen, after which the desired sized particulates is advanced by belt conveyors to the Heavy final product pile, ready for sale. Any fluorspar not meeting the required size is fed to the Heavy Product Magnetic Separator. Two sized products are produced by the magnetic separator.

All particulates containing a density of 2.8 g/cm³ is pumped from the magnetic separator through a mixing barrel, back to the beginning of the cyclone feed process to undergo the process again.

Any product leaving the magnetic separator sizing -10 mm is advanced to the sand washing process to undergo the desliming process. The +10 mm middlings are commingled with the cyclone feed.

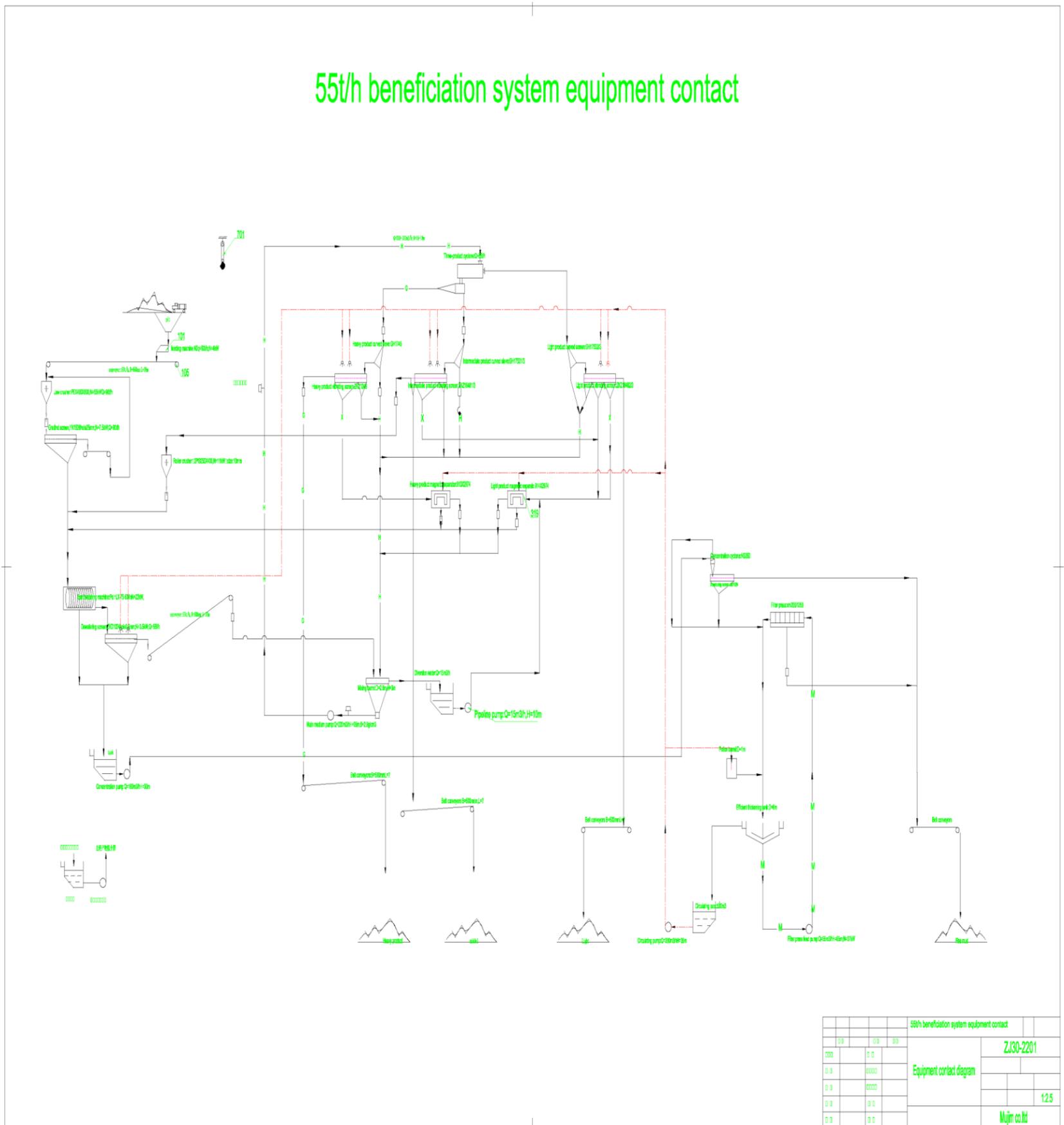
All intermediate sized product leaving the magnetic separator, passes through a sieve, and is fed into the Intermediate Product Vibrating Screen. The smaller sized product from both the sieve and the intermediate vibrating screen is fed again to the mixing barrel, before being fed again back into the initial cyclone stage. Product leaving the Intermediate Product Vibrating which meets the desired specification of the desired intermediate product, is fed by conveyor belt to the final intermediate product pile ready for sale.

Smaller product leaving the Intermediate Product Vibrating screen is fed to the Light Product Magnetic Separator.

The product leaving the cyclone which meets the lower size specifications of output, is fed through the Light Product sieve. Product meeting the certain undesired sizes is advanced from this sieve through the mixing barrel back to join the feed entering the cyclone system.

The simplistic process flowsheet is shown in Figure 17.7.

FIGURE 17.7 PROCESS FLOWSHEET FOR LUMP PLANT



Source: Mujim (2021)

18.0 PROJECT INFRASTRUCTURE

Ares Strategic Mining presently owns land in Delta, Utah and the proposed plan is to utilize this area to construct and install the flotation recovery facility. Presently there is no infrastructure at the mine site, i.e., power, water, natural gas therefore the Delta site was preselected for the location. Within Delta, access to town water, line power, high pressure gas line, telephone, cell coverage, high speed internet, sewage, paved roads and highway is possible.

In addition, the proposed Delta site will have:

- Administration building for senior management, technical and purchasing.
- Warehouse for mechanical parts, process plant supplies.
- Employee change rooms with Safety and HR offices.

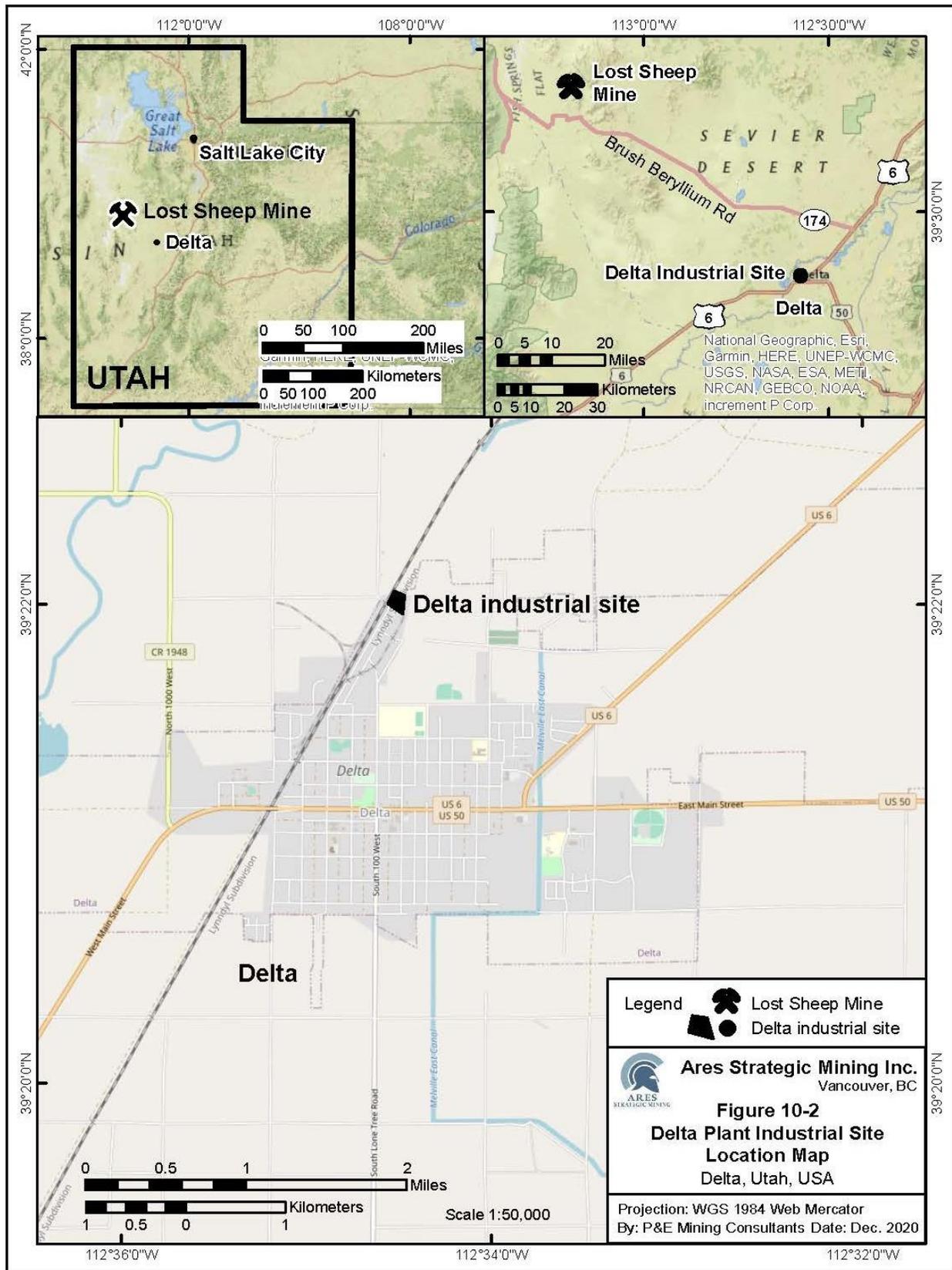
There are limitations at the Delta site and are noted as follows:

- Overall footprint required is strained for the required process requirements.
- Requirement to ship ROM material from Lost Sheep to the process facility.
- No ability to discharge tailings thus the requirement to “return” ship dewatered tailings to the mine site. This adds a drying stage at the Delta site to ensure the back hauled tailings is < 8% moisture.
- The proposed purchase and addition to the Lump plant into the plan is not possible on this site. As noted, there is a requirement for the reject from the lump plant to feed the flotation recovery plant.

Other site locations such as Lyndall, Utah were and are under review at this time. To date the final site location is still a work in progress.

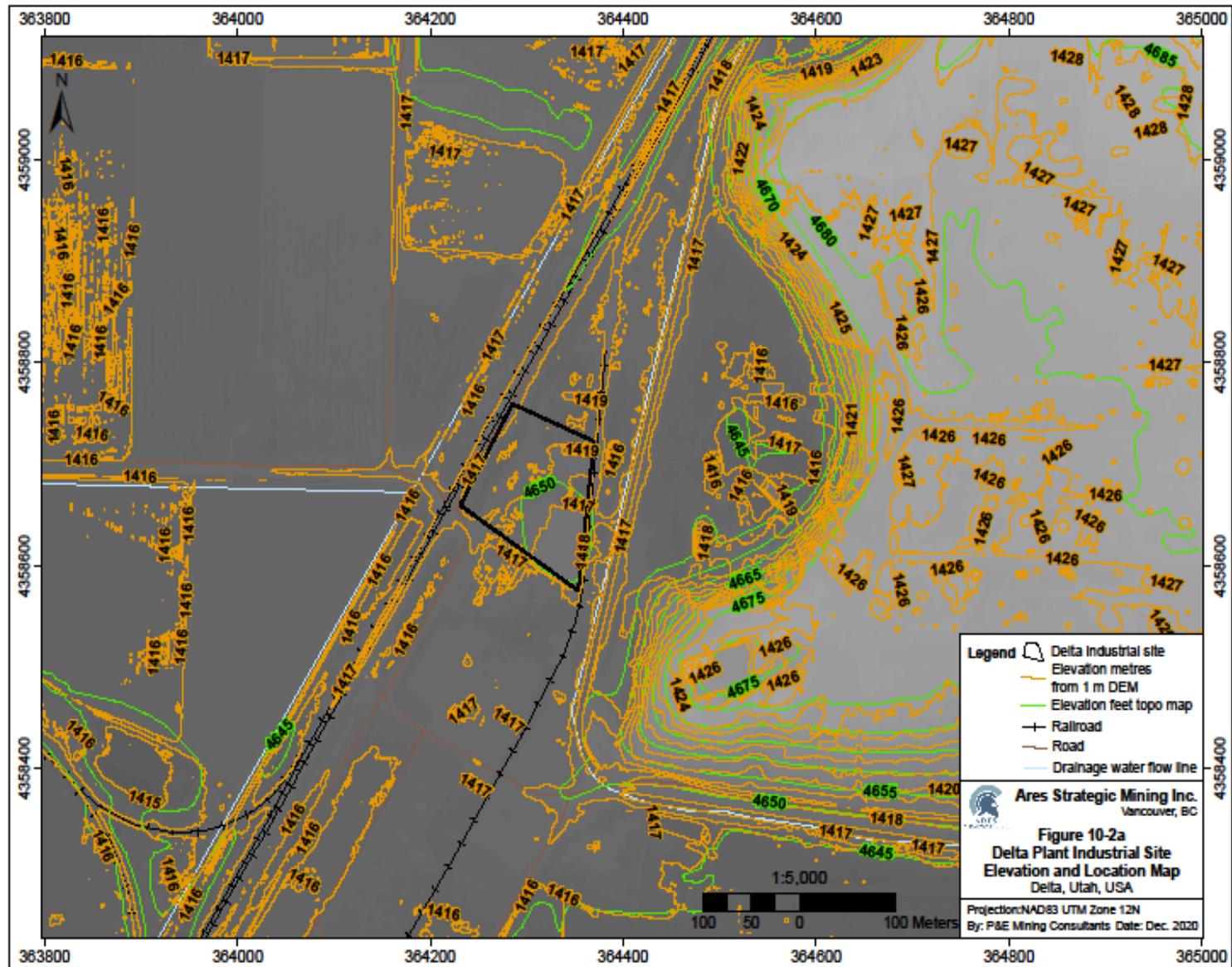
The Delta process plant site details and layout are shown in the attached figures (Figures 18.1 to 18.5).

FIGURE 18.1 DELTA PROCESS PLANT SITE LOCATION MAP



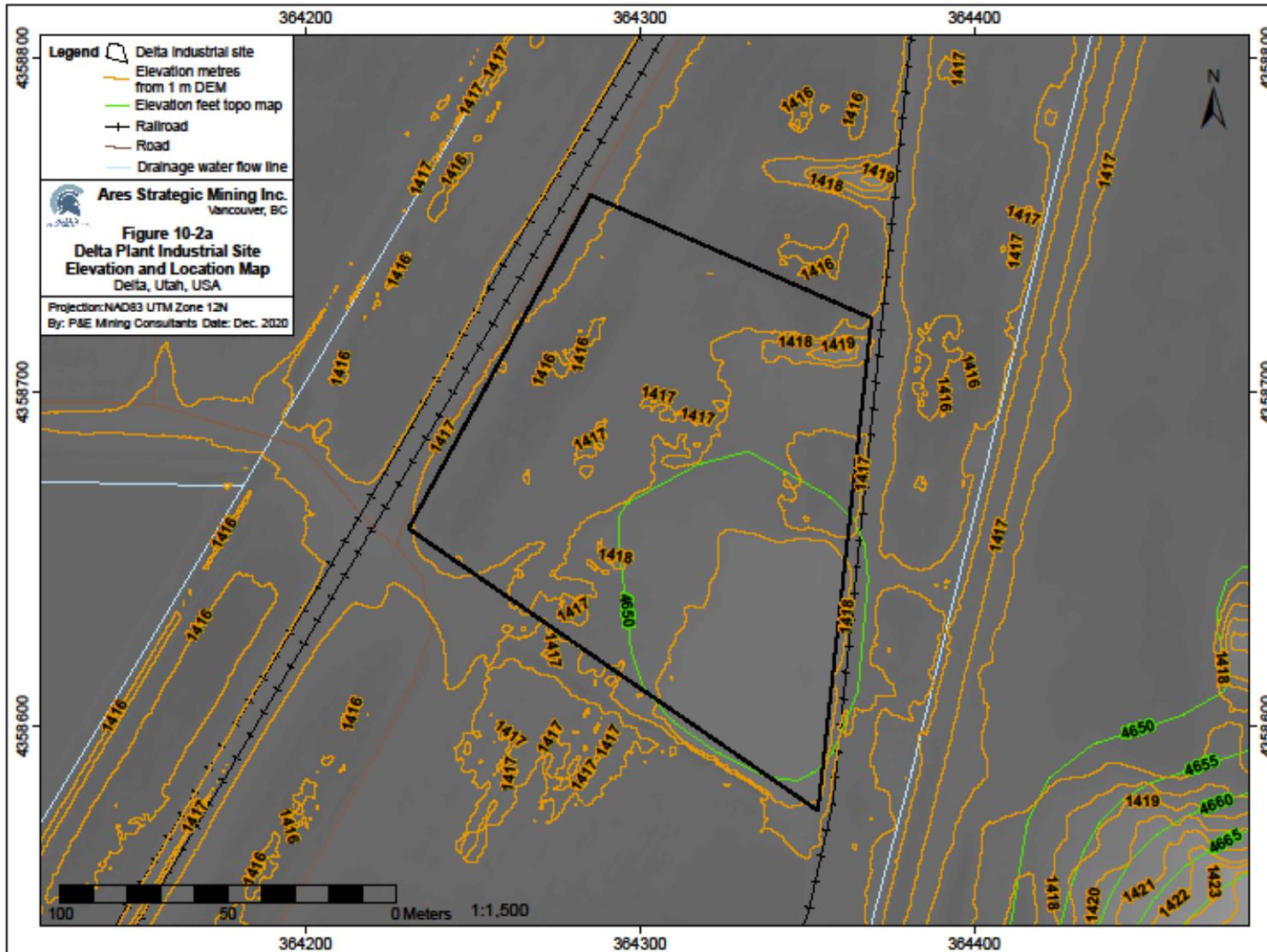
Source: P&E (2020)

FIGURE 18.2 DELTA AREA SITE PLAN – PROCESS PLANT PLAN VIEW NO. 1



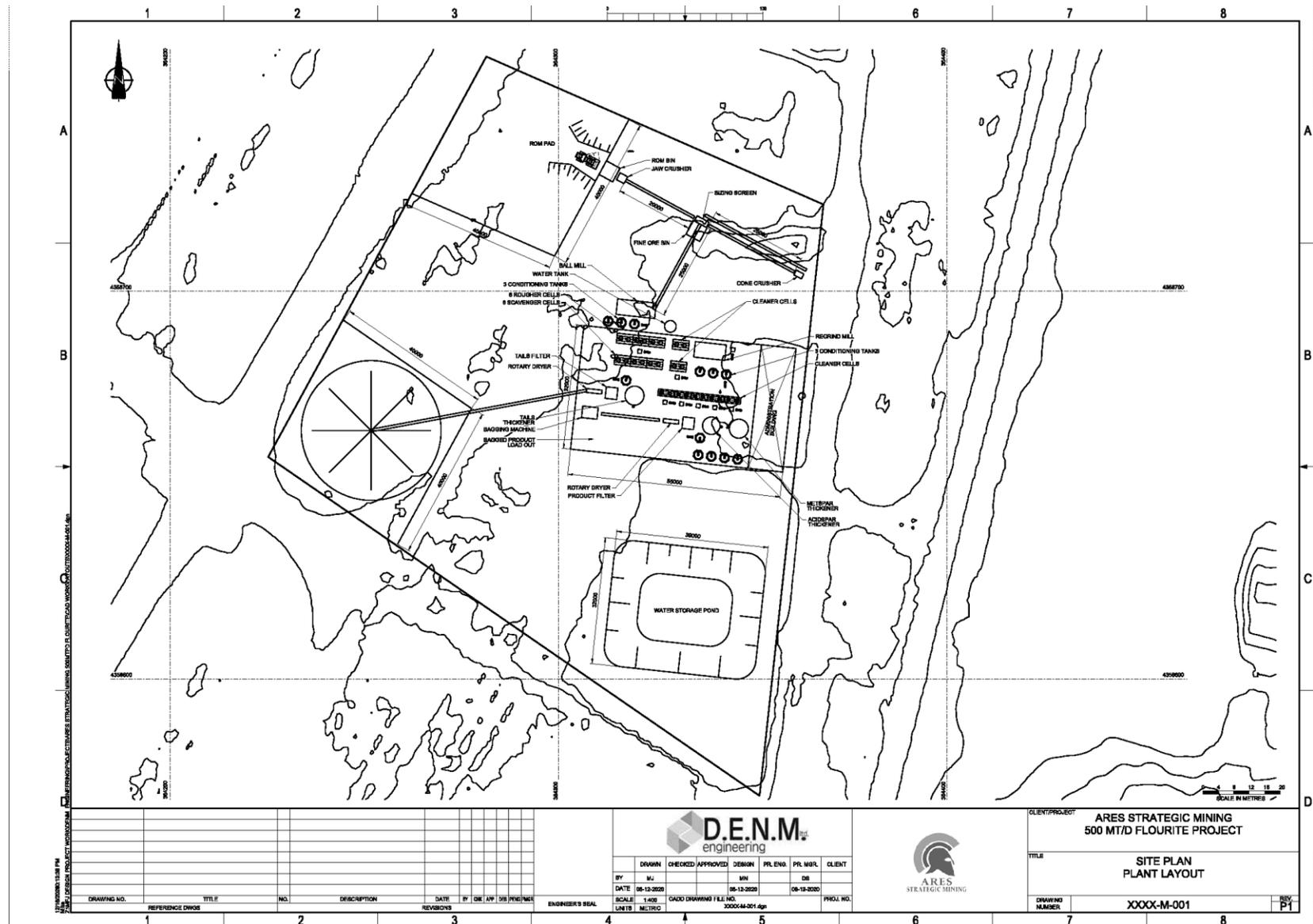
Source: P&E (2020)

FIGURE 18.3 DELTA AREA SITE PLAN – PROCESS PLANT PLAN VIEW NO. 2



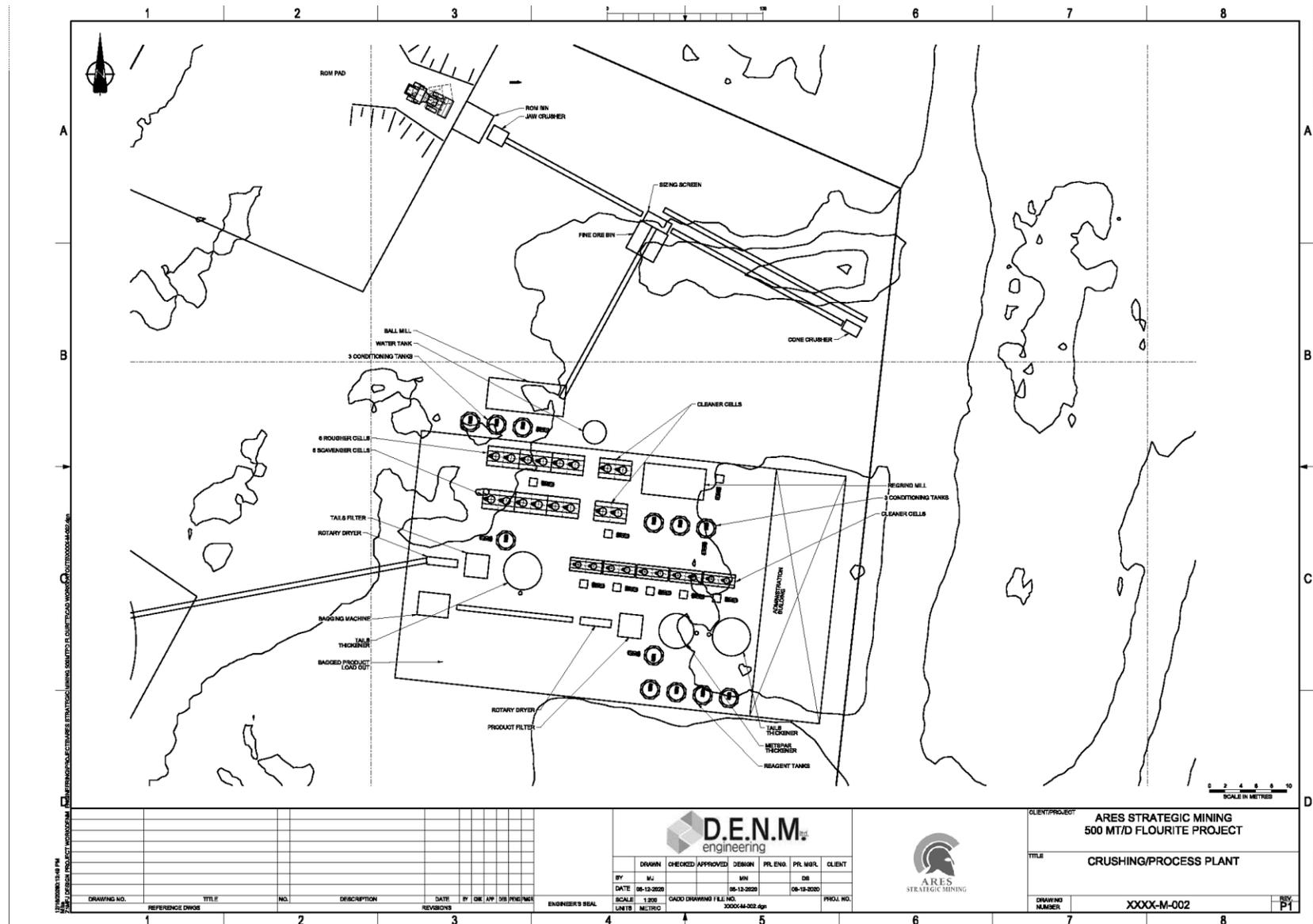
Source: P&E (2020)

FIGURE 18.4 PROCESS PLANT LAYOUT



Source: D.E.N.M. (2020)

FIGURE 18.5 CRUSHING/PROCESS PLANT



Source: D.E.N.M. (2020)

The Lost Sheep Project operating concept will comprise of a satellite mine site located 70 km northwest of the process plant feeding mineralized material to a process plant site located in Delta. Currently there is limited on-site infrastructure in place at both the mine site and plant site, however, both localities will have access to the substantial required infrastructure, services and skilled labour from localities located in Nevada and Utah within a days' drive. The satellite mine site will be operated by an underground mining contractor while the Delta plant site operation will be operated by Ares. There is a very experienced community of mining equipment and concentrator operators, mine workers, technical personnel and consumable and equipment suppliers all located within a day's drive of Delta, Utah.

The services and ancillary facilities required for the Project will include the following:

At the Lost Sheep Mine site:

- Access road upgrade from State Route 174, aka Brush-Wellman Road. Site access roads will accommodate highway transport and dump trucks during the construction and mining phase.
- New service roads to access underground mining contractor administration, maintenance, warehousing structures and mineralized material stockpile facilities.
- Surface contractor infrastructure will include diesel power generation plant, fuel farm, water tank farm, explosives magazines and underground access portals.
- Surface and underground mobile equipment fleets, including a road grader, water truck, service truck, ambulance, pickup trucks, underground mining equipment and haulage trucks.
- A local trucking contractor will haul mineralized material from the mining operations to the Delta plant site for processing and backhaul process tailings to deposited in the open stopes.

At the Delta plant site:

- Surface process plant, administration and warehouse facilities and assay laboratory and feed mineralized material and tailings stockpile facilities.
- Access to an experienced large process plant construction and operator labour pool based in Nevada and Utah.
- Access to experienced industrial contractors and equipment suppliers with process plant construction based in Nevada and Utah.
- Access to State line electrical power supplier.
- Access to state high pressure natural gas supplier.

- Access to City of Delta industrial water supply.
- Surface mobile equipment fleets for the operation of the process plant including front loader, warehousing equipment and pickup trucks.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to this Technical Report.

20.0 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS

20.1 ENVIRONMENTAL STUDIES AND OVERVIEW

The Lost Sheep Mine will involve both surface and underground mining, but it is expected that only a small amount of surface disturbance will occur. Most of the surface facilities will be contained in areas previously disturbed by past mining activities, and the mining will not affect any U.S. Bureaus of Land Management (BLM) Areas of Critical Environmental Concern or similar sensitive environmental areas. There are no threatened or endangered wildlife or vegetation species, no wetlands, and minimal soils and vegetation will be affected by future mining. The mine's remote location and configuration also mean that there will be a general lack of cumulative impacts.

In 2017, the BLM prepared and released an environmental assessment ("EA") – DOI-BLM-UT-W020-2017-0024-EA - for the Lost Sheep Mine based on a Plan of Operations ("POO") that had been submitted for the site to both the BLM and the Utah Division of Oil, Gas and Mining ("UDOGM"). For the EA, the BLM used information from existing sources and their experience in this region of Utah to assess the environmental effects of mining and found no significant environmental impacts would result from the proposed POO mine operations. With future exploration and expanded mining at the Lost Sheep Mine and surrounding areas, coupled with approved environmental mitigation measures and reclamation, it is expected that the BLM conclusions about no significant environmental impacts reached will remain.

Table 20.1, Environmental Status and Studies, presents a general overview of the environmental resources to be encountered or affected by the operations of the Lost Sheep Mine and the Delta processing facility. At present, with the exception of archaeological surveys for areas to be disturbed by future exploration and mining operations at or near the Lost Sheep Mine, no or limited additional field environmental study work is needed to upgrade or expand the permitting approvals for these sites.

The discussion in the following sub-sections provides an overview of the background and baseline environmental conditions for the Lost Sheep Mine and surrounding areas.

20.2 CLIMATE

The climate of west-central Utah is generally characterized as an arid to semi-arid mid-latitude steppe, typified by large daily temperature fluctuations, limited rainfall, low relative humidity, limited cloud cover and bright sunshine.

The closest weather monitoring station to the Lost Sheep Mine is the Fish Springs Refuge (elevation 4,350 feet), which is approximately 12 miles northwest of the mine. Another nearby weather monitoring station is located approximately 3.6 miles southwest of City of Delta Municipal Airport (elevation 4,760 feet).

TABLE 20.1
ENVIRONMENTAL STATUS AND STUDIES

Resources	Status	Studies Needed
Air Quality/Climate	Fugitive dust at mine and plant. Gaseous emissions from dryers at plant to be permitted under required state air permit.	None. Sufficient information available from existing sources.
Aquatic Resources	No fisheries or aquatic habitats such as perennial streams or lakes exist in the areas within or adjacent to mine or plant site.	None.
Areas of Critical Environmental Concern	None as defined in Section 103(a) of the Federal Land Policy and Management Act of 1976 (43 CFR 1610.	None.
Cultural Resources (archaeology and history)	Archaeological and history completed for current exploration and mine areas	Yes - for areas of new disturbance and new activities/operations on BLM-administered lands
Environmental Justice	No minority or economically disadvantaged communities or populations to be affected.	None, although push being made by federal government for more scrutiny in future operations.
Prime or Unique Farmlands	None present.	None.
Floodplains	None present.	None.
Fuels and Fire Management	Negligible. BLM would impose standard practices to control the potential for wildfires at and adjacent to mine site.	None.
Geochemistry	Sulphides not present in Lost Sheep Mine ore. No acid-rock drainage will develop.	None, although unclear now if BLM/UDOGM would require some geochemical testing for tailings to be stockpiled at mine or to be used for mine backfill.
Hydrology	No intermittent or perennial drainages exist in mine or plant site area. No ground encountered in past mining operations	None. Sufficient information available from existing sources.
Invasive Species / Noxious Weeds	None present.	None.

**TABLE 20.1
ENVIRONMENTAL STATUS AND STUDIES**

Resources	Status	Studies Needed
Lands/Access	No existing road rights-of-way on BLM lands at mine. No land use issues at mine or plant.	None.
Noise	The mine is located in remote area. Plant site on north side of Delta. Nearest resident located about 160 metres (about 525 feet).	MSHA requirements at mine. Millard County could classify noise as a “nuisance” under Municipal Code, but no set noise standards.
Soils	Most of the soils in the mine and plant areas already disturbed. Limited soils in undisturbed areas.	None. Sufficient information available from existing sources.
Vegetation	Similar to soils – past disturbance	None. Sufficient information available from existing sources.
Wetlands and Riparian Zones	None present.	None.
Wilderness Areas	No wilderness areas are present.	None.
Wildlife, including threatened and endangered species	The U.S. Fish and Wildlife Service has identified no threatened or endangered wildlife or vegetation species in the mine area.	None. Sufficient information available from existing sources.
Wildlife Horses and Burros	None present.	None.
Wild and Scenic Rivers	None present.	None.
Visual Resources	Under BLM Visual Resource Management (VRM) Class III with objective of retaining character of landscape, although activities allowed that could attract attention.	None. Sufficient information available from existing sources.

Annual precipitation in the region of the Lost Sheep Mine averages slightly less than eight inches, with average annual snowfall varying from around 13 to 25 inches. Temperatures in this area can dip below 0°F (-17.8°C) in the winter and climb over the 100°F (37.8°C) during the summer.

Prevailing wind direction in west-central Utah during the spring and summer months is generally from the south-southwest. The prevailing winter winds are from the west-northwest. Wind speeds in this region are low, but strong gusts can be associated with cold fronts or passing thunderstorms. As a result of measurements made from 1962 through 1976 at the nearby Fish Springs Refuge, the average pan evaporation rate from May through October was estimated to be around than 70 inches (1,778 mm).

20.3 AIR QUALITY

The air quality in west-central Utah is typically good, and the Lost Sheep Mine site is located in an attainment area that is federally designated as Prevention of Significant Deterioration (PSD) Class II. Under the provisions of the Federal Clean Air Act (CAA), as amended in 1990, the U.S. Environmental Protection Agency (“EPA”) established National Ambient Air Quality Standards (“NAAQS”) for human health protection. Site-specific air quality monitoring data are not available for the mine site; but the mine area is located in a very remote area, and the air pollutant concentration levels for NAAQS criteria pollutants are expected to be quite low in this area.

The nearest Class I areas to the Lost Sheep Mine are the Deseret Peak Wilderness Area, approximately 53 miles to the northeast of the mine site, the Mount Moriah Wilderness Area in Nevada, some 63 miles to southwest of the mine site, and the Great Basin National Park in Nevada, approximately 80 miles to the southwest of the mine site.

20.4 SOILS

A considerable area within and around the Lost Sheep Mine has been disturbed by past exploration activities and mining operations, and soil material was not salvaged or saved in stockpiles by previous operators for use in site closure and reclamation activities. Soil information for the undisturbed areas in and surrounding the Lost Sheep Mine was obtained from the U.S. Natural Resources Conservation Service. No site-specific soil sampling has been conducted at the site.

The soils in this region have a lack of water holding capacity, high calcium carbonate values, and, for certain soil mapping units, high sodium adsorption ratios. The soils units in and around the Lost Sheep Mine are considered poor for reclamation. However, no irrigation is planned as part of the reclamation work, and the texture of the upper 12 to 18 inches of soil material in undisturbed areas, with its gravelly loam constituent and organic matter from existing vegetation could provide a growth medium for future reclamation work, if stockpiled and later reapplied to graded areas.

20.5 VEGETATION

Vegetation at the Lost Sheep Mine site and in the adjoining areas is of the cold desert biome. The topographic and climatological conditions in the Spor Mountains have led to a relatively homogeneous vegetation communities, which consist principally of shrubs with a grass understory. A few sparsely distributed juniper trees are fairly distinctive aspects of the landscape, primarily due to their scarcity.

The vegetation in undisturbed areas is generally dominated by black sagebrush (*Artemisia nova*), snakeweed (*Gutierrezia sarothrae*), Shadscale (*Artemisia confertifolia*), and spiny horsebrush (*Tetradymia spinosa*). Common grasses in the undisturbed areas include galleta grass (*Hilaria jamesii*), cheatgrass (*Brouss tectorum*), and Indian ricegrass (*Stipa hymenoides*).

There are no known threatened, endangered or candidate plant species, or special status sensitive plant species in or around the Lost Sheep Mine site. The Utah Natural Heritage Program (UTHP) did not identify any rare or declining plant species in Juab County at or in the vicinity of the Lost Sheep Mine.

There are no wetlands or waters of the U.S. at or in the immediate surrounding area of the mine site.

20.6 WILDLIFE

Wildlife species and habitats occurring in the area of the Lost Sheep Mine are typical of the eastern Great Basin Desert. Water resources are the limiting habitat for wildlife in the area that surrounds the mine. There is no seeps or springs, no wetlands or riparian habitat or open water for consumption in the immediate area of the mine.

Mule deer and pronghorn are known to use the habitats in this area, but are limited by the amount of summer range and water distribution. Mountain lions and coyotes may roam through the area surrounding the mine, but these animals have relatively large home ranges. The area also has lagomorphs such as the black-tailed jackrabbit and the desert cottontail. Packrats, kangaroo rats and other small rodents are common, but they are predominantly nocturnal. A variety of bats, such as the big brown, Townsend's big-eared, and several species of myotis, are known to reside in this region of west-central Utah.

No waterbird habitat is found in the immediate vicinity of the Lost Sheep Mine, but the area is located within the Pacific Flyway, and waterfowl flights over this region are expected. The closest area to the mine that receives extensive waterbird use in the USFWS-managed Fish Springs National Wildlife Refuge, located about seven aerial miles northwest of the Lost Sheep Mine.

There are no known nesting sites for raptors at or in the immediate vicinity of the Lost Sheep Mine, but the ledges or cavities within the rock outcrops offer cliff-nesting opportunities for species such as the golden eagle, red-tailed hawk, kestrels, northern harriers and turkey vultures. All these raptors are known to hunt, at least occasionally, over habitats similar to those found in the vicinity of the mine.

Chukars are the predominant upland gamebird species occurring in this area. The chukar prefers arid sagebrush/grasslands situated in areas of rocky or rugged terrain. The limitation for these gamebirds (and other birds) in the vicinity of the mine is water availability. No sage grouse breeding sites (leks) are known for the area within or surrounding the Lost Sheep Mine.

Based on inquiry to the U.S. Fish and Wildlife Service (USFWS), no federally proposed or listed threatened or endangered (“T&E”) species are known to occur in the area that includes or surrounds the Lost Sheep Mine.

20.7 GEOCHEMISTRY

Neither the fluorspar mineralization nor the associated waste rock materials associated with the fluorspar contain sulphides, which is a trigger component (along with water) for the creation of acid rock drainage, which can create metal leaching. Fluorite (the major component of fluorspar) occurs as a replacement of late-stage carbonates in a matrix of felsic volcanic rock that has been hydrothermally altered to clay (montmorillonite). Similarly, the waste rock materials associated the site’s fluorspar deposits are also predominantly montmorillonite, but with lessening amounts of chalcedony, quartz, dolomite and calcite, which are all minerals with low-sulphide content and well known as non-acid-forming and non-leachate forming.

20.8 SURFACE WATER HYDROLOGY

The Lost Sheep Mine is located in an area with no or limited surface water. Several unnamed ephemeral drainages occur on the northeasterly-facing slopes of Spor Mountains. These ephemeral drainages flow only in direct response to heavy precipitation or snowmelt. There are no intermittent or perennial drainages within or immediately adjacent to the Lost Sheep Mine.

The unnamed drainages within the area of the Mine and surrounding area track north and then westerly downgradient to the Fish Springs Flat, a broad, relatively-level basin situated on the southern margin of the Great Salt Lake Desert.

20.9 GROUNDWATER HYDROLOGY, INCLUDING SPRINGS

Shallow groundwater is practically non-existent in the Spor Mountains. Materion Natural Resources Inc., the operator of the Topaz Beryllium Mine (west of the Lost Sheep Mine), reported in their 2013 Mining and Reclamation Plan filed with UDOGM that “extensive drilling activity on the lower flanks of Spor Mountain has not encountered ground water (based on drilling to depths in excess of 800 feet).” The existing Purple Pit workings at the Lost Sheep Mine have been excavated to a depth of over 400 feet deep, but no groundwater was encountered during the mining activity, and the bottom of these past workings remain dry.

No drinking water wells exist within in the area surrounding the mine site. There are six water wells (with water rights) within ten miles of the Lost Sheep Mine, but none is closer than three miles. These wells are located in areas external to the Spor Mountains, typically in valley areas

at or near the base of alluvial fans, and are used for either stock watering or for mine dust control at the Materion Natural Resources Inc. Topaz Mine.

There are no known springs located within a mile of the Lost Sheep Mine. The nearest known spring to the mine is identified as the Wildhorse Spring, located at an elevation of about 5,300 feet above sea level, on the southwesterly-facing slopes of the Thomas Mountain Range, in the SW¼ of Section 10, Township 12 South, Range 12 West, about 1.8 aerial miles northeast of the mine. The flow from this spring was small, around 0.5 to 1 gallon per minute and is a non-thermal spring in fractured bedrock from a local valley groundwater system of limited extent.

20.10 CULTURAL RESOURCES

The earliest inhabitants of the Great Basin and what is now west-central Utah were the Paleo people. Based on their study of fluted projectile points, archaeologists date this occupation back to 12,000 B.C. They are thought to have lived near lakes, marshes and rivers, such as the Sevier River in what is now eastern Juab County.

The first known early explorers throughout what is now west-central Utah were two Francisco priests, Atanasio Dominguez and Silvestre Vélez de Escalante, who in 1776 lead the Dominguez-Escalante expedition, from Santa Fe, New Mexico, in search of a route to Monterey, California. Later explorers in this area were Jedediah Smith, John C. Fremont, John Gunnison and J.H Simpson. In 1859, Simpson located the route that would later be used by the Pony Express and transcontinental telegraph.

The first permanent settlement in what would become Juab County occurred in 1851 when a group of Mormon settlers established a settlement that became the present-day Nephi, and these new people began farming in the area. In 1869, prospectors discovered precious and base metals (gold, silver, copper, lead and zinc) in the Tintic region (24 aerial miles northwest of Nephi and 60 miles east-northeast of where the Lost Sheep Mine would eventually be opened), and this Tintic area became an important mining district well into the middle of the twentieth century.

Fluorspar had been first discovered in this area in 1936. With the outbreak of World War II, the U.S. Defense Department authorized the construction of the Geneva Steel Plant in Vineyard, Utah, south of Salt Lake City. The construction of this facility, designed to produce steel products to support the war effort, opened up the need for natural resources, principally iron ore, coal and limestone. It also spurred the need for a reliable source of fluorspar, which is flux used in the steel making process, and this requirement triggered increased fluorspar exploration for and mining in the Spor Mountains.

20.11 NATIVE AMERICAN CONSULTATION

The BLM tribal consultation as part of the 2017 Lost Sheep Mine EA did not identify any environmental effect Tribes or Traditional Cultural Properties.

20.12 LAND USE

Juab County contains 3,406 square miles (2,179,840 acres). About 72% of the land in Juab County is federal public lands, with another 8% owned and managed by the state of Utah. The land at and surrounding the Lost Sheep Mine is public land that is administered and managed by the BLM. This area is open space used for mineral exploration, mining, wildlife habitat, livestock grazing and dispersed recreation. No known rights-of-way exist in or near the mine site.

The lands that include the Lost Sheep Mine are governed by the BLM's 1987 House Range Resource Area RMP, which allows mineral exploration, mining and mineral processing in this region of Utah. With respect to local land use administration, the Lost Sheep Mine falls within an area classified as and "Outlying District" by Juab County, which is an area that does not require conditional use permits for mineral development and processing (Juab County Code 12-1-10).

20.13 NOISE

The Lost Sheep Mine is located in a remote area. There are no occupied residences or potentially sensitive human receptors in the vicinity of the mine. In general, the background noise of the area is quiet (expected to range from 30 to 50 dBA), with wind noise being the principal sound source. Traffic along the Fluorspar County Road would generate sporadic noise as vehicles pass, and would range from 55 to 75 dBA at 50 feet from the passing vehicle. There would also be localized noise from all-terrain vehicles ("ATV"), dirt bikes and/or four-wheel drive vehicles using the two-track roads in the area, as well as the occasional over flight by aircraft.

The closest site with regular human activity is the Topaz Mine, located west and southwest of the Lost Sheep Mine (the closest mine pit at the Topaz Mine is over two aerial miles distant and operated by Materion Natural Resources Inc.). Any noise produced by this beryllium operation would not be heard at the Lost Sheep Mine, as the Spor Mountains topography effectively acts as a noise barrier.

20.14 RECREATION

The BLM administered public lands in area surrounding the Lost Sheep Mine are available for a variety of dispersed recreational uses that include hunting, horseback riding, hiking, camping, picnicking, mountain biking, rock climbing, scenic driving, star-gazing, wildlife-viewing, ATV or off-highway vehicle (OHV) use, and rock collecting.

No developed recreation camping facilities are operated by the BLM or the State of Utah in the area surrounding the Lost Sheep Mine. The City of Delta, where most workers at the Lost Sheep Mine are expected to live, provides many formal recreation facilities and opportunities, such as parks, ball fields, a recreation health club complex, a golf course, a motor car raceway, indoor and outdoor rodeo arenas, and a fairground.

20.15 VISUAL RESOURCES

The landscape characteristics of the Lost Sheep Mine and adjacent area includes landforms of moderately-rounded relief and isolated steep prominences and cliffs/slopes of the Spor Mountains and the Thomas Mountain Range (to the east/northeast of the Lost Sheep Mine). These features are characteristic of the Basin and Range physiographic province of west-central Utah and eastern Nevada. Gently-sloping alluvial fans skirt the bases of the hills and mountains in this region. Vegetation in the area is relatively homogeneous and consists principally of low shrubs (mostly sagebrush) and grasses. A few sparsely distributed trees (junipers) are distinctive due primarily to their scarcity.

Light colors are characteristic of the soils and geologic rocks in the area, with buff, grayish white, gray, brown and reddish brown being the dominant colors. Buff is the dominant color in the adjacent area of the mine site, but light reddish-brown, with purplish-pinkish hues are associated with the mine's cut slopes and waste rock stockpiles, along with other mine disturbances in the adjacent areas being particularly notable components of the landscape.

Manmade features are noticeable from a number of vantage points along the Fluorspar County Road. The most common and recognizable manmade features are the roads and trails throughout the area, along with the numerous closed and abandoned fluorspar mine pit cuts or glory holes. Even with these past mining and exploration sites, the fundamental natural landforms retain their integrity.

20.16 WASTE ROCK AND TAILINGS DISPOSAL, SITE MONITORING, AND OPERATIONAL AND POST-CLOSURE WATER MANAGEMENT

20.16.1 Waste Rock Handling and Disposal

Mining plans have not been finalized, but it is expected that a certain amount of waste rock would be generated by either surface or underground operations. Where available and practical for site operations, waste rock removed from underground mining would be disposed underground where additional future mining would not be conducted or in previously-mined (non-Ares) glory holes located at or near the ongoing underground operations. If such spaces are not available, Ares would haul and place underground waste rock in appropriate surface storage sites, which would be approved under operational plans submitted to and approved by the BLM and UDOGM.

20.16.2 Tailings Management and Disposal

Ore processing plans have not been finalized, but it is expected that reject rock or tailings would be generated by processing operations. At present, Ares plans to separate fluorite from the mineralized material from the fluorspar at a processing and loadout facility in or near the City of Delta by a technique known as flotation, which uses water as part of the separation process. The reject rock will be dried at the processing facility using natural-gas fired equipment to obtain a moisture content of 15% or less, and this reject rock (tailings) would be hauled to the mine site

for disposal. The same trucks that haul the mineralized material to the processing plant would be used to return this material to the mine.

As room is available from areas mined, either from surface or underground mining, this reject rock would be used as mine backfill material. Where practical, so as not to interfere with ongoing mining operations, this reject rock would also be used as backfill in glory holes left on Ares claims by past (non-Ares) mining activities. Ares would also establish an appropriate disposal area at the mine site for this rock material. This storage site would be designed, constructed and operated under plans submitted to and approved by the BLM and UDOGM.

20.16.3 Site Monitoring

Ares would implement site management and monitoring protocol to meet appropriate environmental regulations and guidelines that would be required by permitting agencies to ensure that environmental impacts are minimized or mitigated during construction, mining, mineralized material processing, and closure and reclamation activities. Monitoring measures will provide information to Ares and government regulatory agencies regarding project performance. The information gained from monitoring will be used as the basis for designing additional or altering existing environmental mitigation and reclamation measures.

20.16.4 Water Use and Management

There is no source of surface or shallow groundwater at the Lost Sheep Mine, nor are there any acid water-forming or toxic materials associated with the mineralized material and waste rock at the mine site. The Lost Sheep Mine and surrounding areas are located in an upland area, with ephemeral drainages present that only flow in response to heavy rainfall or snowmelt. Past underground operations at the Lost Sheep Mine, at a depth exceeding 400 feet, encountered no groundwater. Extended underground mining is not expecting to encounter any groundwater.

Ares will contract for water haulage to the site from an off-site source (location yet to be determined). This water will be transferred to storage tank(s) at the mine support facilities and distributed to the areas and facilities via buried pipelines. Water will be used for dust control, as well as for exploration and underground drilling to control dust, remove drill cuttings, and cool drill bits.

At the site's surface facilities, water would be necessary for showers and sanitary use in the miner change facility, with a small amount of water being used in the office and the shop facility. The site would also need a dedicated amount of water stored for fire protection. It is expected that the water transported from off-site would not be acceptable for drinking purposes; therefore, "*Do Not Drink the Water*" warning signs would be posted at the site, and bottled water would be provided at the site for drinking purposes.

Ares would institute a stormwater management plan for the mine site. Drainage from undisturbed areas would be routed around the surface facilities. Stormwater on the site would be controlled by ditching, sediment control basins, proper grading, and, as necessary, placement of silt fencing and wattles.

Ares has approvals from both the BLM and UDOGM for exploration, surface and underground mining operations at the Lost Sheep Mine, as well as for exploration at the nearby Bell Hill site. Both of these sites are located in Juab County, Utah.

20.17 PERMITTING

Ares has obtained or will require a number of other federal, Utah, and local permits and approvals for the Lost Sheep Mine Project and the associated processing facility, Table 20.2.

**TABLE 20.2
POTENTIAL PERMITS, APPROVALS, AND OTHER RESPONSIBILITIES (COORDINATION AND CONSULTATION)**

Agency	Permit or Approval	Jurisdiction at Mine	Jurisdiction at Processing Plant	Miscellaneous Involvement and Responsibilities
FEDERAL GOVERNMENT				
Bureau of Land Management (BLM)	Plan of Operations (43CF 3809); Road Rights-of-Way; and Mineral Material Sales	Yes	No	NEPA Compliance
Environmental Protection Agency (EPA)	None	Yes	Yes	NEPA Compliance; and Spill Prevention Control and Countermeasure (SPCC) Plan.
U.S. Army Corps of Engineers	Section 404 Dredge/Fill Permit	No	No	No jurisdiction waters of the U.S. at either mine or plant.
U.S. Fish & Wildlife Service (USFWS)	None	Yes	No	Threatened and endangered (T&E) species consultation.
Mine Safety and Health Administration (MSHA)	Mine Identification Number; Legal Identity Report; and Ground Control Plan	Yes (Under MSHA)	No (Under OSHA)	Safety Oversight; and Miner Safety and Training Plans
Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)	Transportation permit; User's permit; and Blasting certifications	Yes	No	FBI background checks needed for blasting transportation and handling personnel
STATE GOVERNMENT				
Division of Oil, Gas and Mining (UDOGM)	Permit for Small Mine	Yes	No	Mining operations with 20 acres of disturbance or less.
Department of Environmental Quality, Division of Water Quality	General Multi--Sector Industrial Storm Water Permit.	Yes	Yes	This program overseen by EPA.
Department of Environmental Quality, Division of Air Quality	Small Source Exemption	Yes	Yes	This program overseen by EPA.
Utah Division of Wildlife Resources	None	Yes	No	Consultation with BLM for Sage Grouse Management

**TABLE 20.2
POTENTIAL PERMITS, APPROVALS, AND OTHER RESPONSIBILITIES (COORDINATION AND CONSULTATION)**

Agency	Permit or Approval	Jurisdiction at Mine	Jurisdiction at Processing Plant	Miscellaneous Involvement and Responsibilities
				Area.
State Historic Preservation Office (SHPO)	None	Yes	No	Consultation with BLM on cultural resources
JUAB COUNTY				
Planning and Zoning Department	Conditional Use Permit	No	None	Located in county district where no permit is required.
County Clerk	Business License	Yes	None	To be obtained.
Building Department	Building permit	Yes	None	Depends on structures used.
Road Department	None	None	None	Consultation on county road use.
CITY OF DELTA				
Planning and Zoning Department	Conditional Use Permit	Not applicable	Yes	Compliance with industry code.
County Clerk	Business License	Not applicable	Yes	This license obtained.
Building Department	Building permits	Not applicable	Yes	Includes septic system
Public Works Department	Water Use	Not applicable	yes	Discussions underway.
MILLIARD COUNTY				
Planning and Zoning Department Building Department Road Department	If the Ares property now located in the county is annexed into Delta, then no permits required from Millard County.	None	None if county area annexed into Delta	To be determined

20.18 SOCIAL AND COMMUNITY ASPECTS

Although the Lost Sheep Mine is located in western Juab County, it is expected, given site access, that Ares employees will most likely live in or around the City of Delta in Millard County. Therefore, background socioeconomic conditions for Juab County are not addressed, and the focus of these conditions is directed to Millard County, specifically the City of Delta.

Millard County has a population of approximately 13,400 (as of the 2020 U.S. Bureau of Census). Delta has a population of approximately 3,600 people and is the largest city in the county. The county seat is Fillmore, about 39 driving miles to the southeast, with a population of about 2,700 people.

Delta has available housing and provide a number of community and public services, such as schools, police and fire protection, hospital and other medical, waste supply and wastewater treatment services. Millard County also has an 80-acre Class I landfill is located 6.3 miles east of Delta, adjacent to U.S. Highway 5; this facility accepts general trash and garbage.

Rocky Mountain Power, Inc. develops and provides electricity, and Dominion Energy Company provides natural gas for residential, commercial and industrial customers in Delta and surrounding areas. Delta has adequate electric power and natural gas capacity for current and projected future users.

Being more than 135 miles from the Salt Lake City metropolitan area (with its recent rapid growth), Delta has not experienced a migration of newer residents that are less supportive or opposed to traditional natural resource activities. According to data from the Utah Department of Workforce Services, the average 2018 annual income for workers within Millard County was \$58,644. The mining industry in Millard County (and adjacent Juab County where the Lost Sheep Mine is located) account for less than 2% of total employment in both counties, but individuals employed in mining earned the highest average monthly wages in 2019: \$6,736 for Millard County and \$4,154 for Juab County.

Overall unemployment in Millard County is extremely low, even during the past year with the Covid-virus impact, and peaked in March 2020 at 5.7% (compared to 10.4% for Utah and 14.8% for the U.S. during that same month). In October 2020, unemployment in Millard County had decreased to 2.6%.

Ares is expected to employ 30-40 individuals at its mining and processing operations. It is anticipated that many of the workers will come from Millard County, but any addition of new employees from outside this area will not alter or effect the demographics, utility infrastructure or the housing market in Millard County. The wages earned by Ares employees will benefit the local business community.

20.19 MINE CLOSURE AND RECLAMATION

Ares understands that reclamation is an integral and important component of exploration and mining operations and has BLM and UDOGM approved mine closure and reclamation plans for the Lost Sheep Mine. The overall purpose of reclamation is to return disturbed surface areas to a

stabilized and productive condition following the completion of mining activities, and to protect long-term area land, water and air resources.

The current land use around the Lost Sheep Mine is primarily wildlife habitat, with some rangeland use for livestock (cattle) grazing and with dispersed albeit limited recreation. The area within and around the Ares claims has been previously disturbed by exploration and mining operations.

The emphasis of Ares' reclamation plan will be to seal mine portals, adits and shafts for any underground operations, to remove any surface facilities and infrastructure used for operations, and to backfill or otherwise stabilize, where practical, pit areas or glory holes generated by past surface and underground mining. Ares will work to establish a self-sustaining vegetative community on the surface areas disturbed by exploration and mining activities.

Ares will use well-proven reclamation practices that have been successfully utilized at other exploration and mining operations in the dry and sparsely vegetated terrain of central Utah, as well as throughout similar regions in the western United States. Ares notes that reclamation practices and technology are continually evolving and improving; as a result, Ares will take advantage of future new reclamation techniques and will coordinate with the BLM and UDOGM to utilize any improved reclamation measures.

20.20 MINE CLOSURE COSTS

Ares currently maintains closure and reclamation bonds with the BLM and UDOGM in the amount of \$74,330 for existing and approved exploration activities and mining operations. Ares will continue to maintain such bonding funds for its Project work as additional exploration and mining operations are implemented.

The statutory and regulatory authority of the BLM and UDOGM require that Ares execute closure and reclamation financial assurance agreements for site activities. These agreements will ensure that sufficient monies are available to reclaim disturbed areas and conduct monitoring and other measures to prevent or control any long-term environmental impacts in the event that Ares was unable to meet its closure and reclamation obligations.

No construction, exploration or mining operations can commence without the approval of plans of operations, appropriate approvals and permits from BLM and UDOGM, and the execution of financial assurance agreements for reclamation funds to these agencies responsible for the oversight of Project closure and reclamation.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to this Technical Report.

22.0 ECONOMIC ANALYSIS

This section is not applicable to this Technical Report.

23.0 ADJACENT PROPERTIES

Beryllium at Spor Mountain has been mined by Materion Corp. (formerly Brush Wellman) since about 1970 and remains the major commercial resource of this metal in the United States. mineralized material is mined from linear open pits that follow the strike of the tilted ore-bearing tuff. Deposits are mined to shallow depths (approximately 30-50 m). Depth is limited by the cost of stripping hard rhyolite caprock.

This beryllium tuff hosts the mineralized material being mined at the Materion Mine. In 2016, Materion Corporation reported proven reserves of 9.6 million metric tons grading 0.7 weight percent beryllium oxide, and an estimated 70-year supply of beryllium at current rates of production (Materion Corporation, 2016). A Qualified Person has not reviewed this estimate for the current report. Only beryllium is currently recovered but the beryllium mineralized material is anomalously rich in fluorine, uranium, lithium and rare earths. Fluorite within the altered tuffs is considered sub-economic, requiring significant processing to recover.

The Beryllium Tuff Member within the Spor Mountain Formation is a pyroclastic sequence including water lain, altered surge deposits, and contains partially replaced carbonate strata and breccias locally forming mineralized nodules of beryllium (outer rind), and fluorite, opal, chalcedony, manganese oxide cores (Staatz, 1963). Bertrandite is the primary mineralized material of beryllium, and is sub-microscopic. The Tuff itself was described by Staatz as highly altered, white, fine grained, soft and friable, with silica (pumice) and dolomite pebbles largely replaced by the aforementioned minerals, and also hosting anomalous lithium and uranium.

Gangue minerals are silica, locally, chalcedony, chert, clay, typically montmorillonite, secondary calcite and dolomite. More distal alteration is characterised by haematite, calcite, and minor chlorite.

The Be deposits are mostly located southwest of the Spor Mountain Palaeozoic block and are localized by northeast-trending, down-dropped to the southeast, normal faults/feeders. All of the important Be deposits in the district are associated with the 21 Ma topaz rhyolites of the Spor Mountain Formation. The rhyolite has sanidine, smoky quartz, plagioclase, and biotite phenocrysts with accessory Fe-Ti oxides, fluorite, topaz, zircon, and allanite (Christiansen and others, 1986). The host is the Miocene “beryllium tuff member” of the Spor Mountain Formation which contains abundant carbonate fragments near the base.

A Qualified Person has been unable to verify the information above and that information is not necessarily indicative of the mineralization on the Lost Sheep Property that is the subject of this Technical Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the authors' knowledge there are no other relevant data, additional information or explanation necessary to make this Technical Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The Lost Sheep Property is comprised of 111 unpatented claims on Bureau of Land Management (BLM) lands covering approximately 924.6 ha (2,283 acres). Ares Strategic Mining Inc. (“Ares”) owns 76.67% of 10 claims known as the Willden Claims and 100.00% of 101 claims known as the New Claims. The road accessible Property is located in western Utah, USA and is 150 km southwest of Salt Lake City.

The Property is situated in the Basin and Range Province and covers approximately 8 km strike length of Paleozoic sedimentary rocks and overlying Tertiary volcanic rocks hosting fluorite mineralized breccia pipes and veins. The Spor Mountain Mining District has been an area of significant fluorite past production dating back to the 1940s, with the Lost Sheep Mine being the largest historical fluorite producer in Utah.

Spor Mountain is a faulted block of west-dipping, north to north-easterly striking, Paleozoic sedimentary rocks overlain by Tertiary volcanic flows, tuffs and related pyroclastic rocks. The volcanic and older sedimentary rocks are intruded by felsic dykes and breccias related to the Oligocene Thomas Caldera that is one of several volcanic centres in western Utah. The volcanic events were coincident with Mid- to Late Cenozoic extensional tectonics with extensive normal faulting, and the creation of the north-south trending parallel mountain ranges of the Basin and Range Province.

Significant fluorine, beryllium, uranium mineralization and associated lithium and rare earths are associated with volcanic-hydrothermal fluids within or adjacent to the structural features related to faulting. In the Spor Mountain district, the largest fluorite deposits are steeply plunging mineralized breccia pipes, in Paleozoic carbonate rocks. Tertiary volcanic rocks to the south and west of Spor Mountain host extensive beryllium mineralization that is associated with volcano-sedimentary tuffs form a shallow west dipping blanket over the older sediments.

The Property benefits from proximity to the City of Delta, Utah and Salt Lake City. Delta can supply workers, water, fuel, lodging, food, vehicle maintenance and some construction services. Major services and mining equipment can be sourced from Salt Lake City and nearby centres. Delta is well serviced by paved highways and the Union Pacific Railroad. A 1.9 Gw coal-burning power plant supplying the states of Utah and California with electricity is located 10 km northwest of Delta. The active Materion Natural Resources Inc. beryllium mine, is 5 km to the southwest of the Lost Sheep Mine, and is adjacent to the Lost Sheep Property.

The Spor Mountain Mining District was a major fluorite producer dating back to the 1940s, with the Lost Sheep Mine being the largest fluorite producer in the State. Cumulative production at the Lost Sheep from 1948 - 2014 is estimated to be approximately 170,000 tons of fluorite. The most active production years were from the 1940s to 1950s. The Lost Sheep Mine produced from three breccia pipes during the period from 1948 to 2007 with the Purple Pit being the source of approximately 160,000 tons. From 2008 to 2017, there were periodic attempts to re-start production with small scale mining in preparation for larger scale production.

The Spor Mountain fluorite deposits belong to the class of volcanic-epithermal deposits associated with sub-alkaline magmatism. The deposits occur as siliceous vein fillings, breccia

pipes, disseminated and replacement deposits along faults, fractures in intermediate to felsic volcanic and volcanoclastic rocks.

Surface exploration by Ares since 2019 includes Lidar DEM and orthophoto analysis and IP surveys conducted in 2021. IP was successful in showing lower resistivity anomalies correlated with surface exposures of fluor spar breccias pipes breaking through the carbonate host rock. Ares conducted a 12 hole, 1,160 m RC drilling program in early 2020 to delineate mineralization at the Little Giant Pit and a further 11 RC drill holes later in 2020 totaling approximately 890 m targeting the Purple Pit area.

The reader is cautioned that there has been insufficient exploration to define a Mineral Resource Estimate on the Lost Sheep Property. This technical report discloses conceptual exploration targets based on historical and current geological observations. Exploration targets indicate ranges of tonnages and grades that may potentially be achieved through additional exploration. There are no current Mineral Resources or Mineral Reserves on the Lost Sheep Property.

The Lost Sheep Fluorspar Property is host to approximately 39 occurrences of visible fluorite in surface outcrops. Of those occurrences, five more prominent areas (Purple Pit, Little Giant Pit (LGP), Dell No. 5, Fluorine Queen No. 3 and No. 4, and Bell Hill) are located on Ares claims exhibiting loosely quantifiable tonnages and fluorite grades that qualify as Exploration Targets. The Estimated Exploration Target is 200,000 to 350,000 tonnes at a fluorite grade of 40 to 60%.

The reader is cautioned that there is uncertainty that further exploration will result in the definition of Mineral Resources on these exploration targets.

The reader is further cautioned that exploration targets on the claims known as the Willard Claims are not 100% owned by Ares. The Willard Claims include the Purple Pit and Little Giant Pit exploration targets.

Mr. Fred Brown, P.Geo., of P&E, a Qualified Person under the terms of NI 43-101, completed a site visit to the Lost Sheep Project on August 16, 2021 that included drill sites, surface workings, discussions with the site geologist and examination of local mineralization. A data verification sampling program was conducted as part of the on-site review. Mr. Brown collected five samples on site from available RC coarse rejects. The results of the CaF₂ analysis by Activation Laboratories of Ancaster Ontario, Canada compared favourably with the original client results.

In 2020, Ares undertook scoping metallurgical testwork on material from the Lost Sheep fluorite mine. The scoping testwork was performed with the purpose of developing operating parameters and flowsheet to produce both an acid-spar product (CaF₂ > 97% purity) and also a metspar product (CaF₂ > 92% purity). QEMSCAN conducted on the run of mine (“ROM”) sample indicated that Fluorite was the dominant F-bearing mineral with quartz as the dominant gangue mineral. Flotation testes conducted on the ROM sample (38.2% CaF₂) with six stages of cleaning achieving a final concentrate grade in excess of 97%.

Ares has not completed a Feasibility Study on, nor has Ares completed a Mineral Reserve or Mineral Resource Estimate at the Lost Sheep Mine and as such the financial and technical viability of the Project is at higher risk than if this work had been completed. Based on

historical engineering work, geological reports, historical production data and current engineering work completed or in progress by Ares, Ares intends to move forward with the development of this asset. Ares further cautions that it is not basing any production decision on a Feasibility Study of Mineral Reserves demonstrating economic and technical viability, and therefore there is a much greater risk of failure associated with its production decision. Ares has decided to proceed without established Mineral Resources or Mineral Reserves, basing its decision on past production and internal projections.

For potential future operations, underground mine development and a sublevel longhole mining method is suggested to achieve the lowest cost to finished product with manageable risk while maintaining a safe mining environment and achieving the desired production rate. A mining contractor would use conventional electric hydraulic jumbos, load-haul-dump (LHD), mechanized rock bolters, ANFO/emulsion blasthole loaders and mine haulage trucks to execute the mine development. Main ramp or adit accesses (depending on topography) and sublevel accesses would be either 4 m x 4 m for most pipes, or 3 m x 3 m for pipes requiring more selective mining.

The Lost Sheep Project operating concept will comprise of trucking of mineralized material from the mine site to the process plant located in Delta. The process plant design was based on a nominal 500 tonnes per day (“tpd”) of mineralized material with an average feed grade of 40% CaF₂ mineralized material into a high-purity 97% grade fluorite (CaF₂) at a minimum 80% total fluorite recovery. Mineralized material feeds from the fine mineralized material bin to the primary ball mill. Water is added to create slurry and the mill reduces the particle size to 75 microns. After primary milling, mineralized material slurry reports to the high-intensity conditioning tanks where reagents are added for bulk flotation.

The Lost Sheep Mine will involve both surface and underground mining, but it is expected that only a small amount of surface disturbance will occur. Most of the surface facilities will be contained in areas previously disturbed by past mining activities, and the mining will not affect any U.S. Bureaus of Land Management (“BLM”) Areas of Critical Environmental Concern or similar sensitive environmental areas. There are no threatened or endangered wildlife or vegetation species, no wetlands, and minimal soils and vegetation will be affected by future mining. The mine’s remote location and configuration also mean that there will be a general lack of cumulative impacts.

Ares understands that reclamation is an integral and important component of exploration and mining operations and has BLM and UDOGM approved mine closure and reclamation plans for the Lost Sheep Mine. The emphasis of Ares’ reclamation plan will be to seal mine portals, adits and shafts for any underground operations, to remove any surface facilities and infrastructure used for operations, and to backfill or otherwise stabilize, where practical, pit areas or glory holes generated by past surface and underground mining. Ares will work to establish a self-sustaining vegetative community on the surface areas disturbed by exploration and mining activities.

26.0 RECOMMENDATIONS

The author of this Technical Report section considers that the Lost Sheep Property hosts significant occurrences of high-grade fluorite mineralization and warrants further exploration. The author of this Technical Report section recommends that the next exploration phase be focused on defining a Mineral Resource.

The author of this Technical Report section has noted that five areas (Purple Pit, Little Giant Pit (LGP), Dell No. 5, Fluorine Queen No. 3 and No. 4, and Bell Hill) on Ares claims currently exhibit potential tonnages and potential fluorite grades that qualify as Exploration Targets. The Estimated Exploration Target is 200,000 to 350,000 tonnes at a fluorite grade of 40 to 60% on these areas. The targets are generally steeply plunging pipes with depth limited by a combination of epithermal mineralization processes and favourable carbonate host lithologies. A multi-pronged approach for the Property going forward is recommended.

1. For the Lost Sheep Mine area, approximately 24 diamond drill holes with an average depth of 200 m for a total of approximately 4,800 m are recommended. A portion of these are recommended to twin existing RC holes, focusing on core recovery, to deal with poor recovery reported from sections of these holes in the 2021 drilling programs. A resource estimate for this area could be done on completion of the drilling.
2. In parallel with this, RC drilling of the recently mapped areas at Bell Hill, and at Lost Sheep that have also had potential breccia pipe targets identified from geophysics is proposed. Any new discovered zones should be then followed up on. 36 RC holes at an average depth of 150 m for a total of 5,400 m are recommended
3. In the longer term, other geophysical methods should be tested, including possibly a radio-metric airborne survey and/or use of Track-Etch. This was recommended by Tripp in 2015 due to the presence of small amounts of Uranium associated with fluorite in the Spor Mountain Belt.

The drilling program should be augmented by a surface trenching program to define the surface extent of mineralized pipes.

Ares should develop an improved QA/QC protocol with appropriate certified reference materials to ensure that reference materials, blanks and duplicates are included within the assay stream. Given the limited availability of certified fluorite standards, consideration could be given to developing an internal standard to augment certified reference materials.

Once the drilling and surface trenching program is completed, Ares should be in a position to provide a mineral resource estimate for the Lost Sheep Property.

The estimated budget to complete the recommendations is approximately CAD\$2,485,000 and is presented in Table 26.1. The author of this Technical Report section recommends that a Mineral Resource Estimate be completed prior to undertaking further engineering studies to advance mine development.

TABLE 26.1
RECOMMENDED BUDGET

Recommended Program and Budget			
Program	Units (m)	Unit Cost (\$/m)	Budget
Diamond Drilling	4,800	\$200/m	960,000
RC Drilling	5,400	\$125/m	675,000
Trenching			50,000
Assaying	4,000	\$60	240,000
Mineralogy-Bulk Density			10,000
Metallurgical Optimization Testwork			200,000
Field personnel, core logging, mapping and office, support			200,000
Resource Estimate			150,000
Total			\$2,485,000

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28.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON

EUGENE PURITCH, P. ENG., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report on the Lost Sheep Fluorspar Property, Juab County, Utah, U.S.A.”, (The “Technical Report”) with an effective date of September 17, 2021.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition, I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for a Bachelor’s degree in Engineering Equivalency. I am a mining consultant currently licensed by the: Professional Engineers and Geoscientists New Brunswick (License No. 4778); Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998); Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216); Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252); Professional Engineers of Ontario (License No. 100014010); Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912); and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877). I am also a member of the National Canadian Institute of Mining and Metallurgy.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M. & S. and Inco Ltd., 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
- Self-Employed Mining Consultant – Timmins Area, 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
- President – P&E Mining Consultants Inc. 2004-Present

Relevant/similar fluorspar experience:

- Review/audit of St. Lawrence Fluorspar PFS, Nfld.
- Resource/Reserve for Fospac, Peru.
- Potash Resource modelling for Potash Corp of Sask, Sussex, NB.
- Feasibility Study mine planning for tungsten, fluorite, copper, bismuth, Tiberon Nui Phao, Vietnam.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 9.4, 16 and co-authoring Sections 1, 25 and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 17, 2021

Signed Date: September 28, 2021

{SIGNED AND SEALED}

[Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

CERTIFICATE OF QUALIFIED PERSON

RICHARD SUTCLIFFE, PH.D., P. GEO.

I, Richard Sutcliffe, Ph.D., P. Geo., residing at 130 Foxridge Drive, Ancaster, Ontario, do hereby certify that:

1. I am an independent geological consultant and Senior Geological Advisor, P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report on the Lost Sheep Fluorspar Property, Juab County, Utah, U.S.A.”, (The “Technical Report”) with an effective date of September 17, 2021.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geology (1977). In addition, I have a Master of Science in Geology (1980) from University of Toronto and a Ph.D. in Geology (1986) from the University of Western Ontario. I have worked as a geologist for over 35 years since obtaining my M.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 852).

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Precambrian Geologist, Ontario Geological Survey 1980-1989
- Senior Research Geologist, Ontario Geological Survey 1989-1991
- Associate Professor of Geology, University of Western Ontario. 1990-1992
- President and CEO, URSA Major Minerals Inc. 1992-2012
- President and CEO, Patricia Mining Corp. 1998-2008
- President and CEO, Auriga Gold Corp. 2010-2012
- Founder and President, Pavay Ark Minerals Inc. 2012-present
- Consulting Geologist 1992-present

Relevant/similar fluorspar experience:

- Exploration experience in epithermal mineral deposits in Europe, Kazakhstan and western USA.
- Mapping Proterozoic granitic rocks hosting fluorite mineralization in Ontario.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 2 to 7, 14, 15, 19, 21 to 24, and co-authoring Sections 1, 25 and 26 of this Technical Report.
6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 17, 2021

Signed Date: September 28, 2021

{SIGNED AND SEALED}

[Richard Sutcliffe]

Richard H. Sutcliffe, PhD, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

FRED H. BROWN, P.GEO.

I, Fred H. Brown, of PO Box 332, Lynden, WA, USA, do hereby certify that:

1. I am an independent geological consultant and have worked as a geologist continuously since my graduation from university in 1987.
2. This certificate applies to the Technical Report titled “Technical Report on the Lost Sheep Fluorspar Property, Juab County, Utah, U.S.A.”, (The “Technical Report”) with an effective date of September 17, 2021.
3. I graduated with a Bachelor of Science degree in Geology from New Mexico State University in 1987. I obtained a Graduate Diploma in Engineering (Mining) in 1997 from the University of the Witwatersrand and a Master of Science in Engineering (Civil) from the University of the Witwatersrand in 2005. I am registered with the Association of Professional Engineers and Geoscientists of British Columbia as a Professional Geoscientist (171602) and the Society for Mining, Metallurgy and Exploration as a Registered Member (#4152172).

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Underground Mine Geologist, Freegold Mine, AAC 1987-1995
- Mineral Resource Manager, Vaal Reefs Mine, AngloGold 1995-1997
- Resident Geologist, Venetia Mine, De Beers 1997-2000
- Chief Geologist, De Beers Consolidated Mines 2000-2004
- Consulting Geologist 2004-2008
- P&E Mining Consultants Inc.– Sr. Associate Geologist 2008-Present

Relevant/similar fluorspar experience:

- Fluorite Project Valuation (Zwartkloof, Witkop, Zeerust) while with Anglo American.
- Breccia Pipe Deposit Modeling.

4. I have visited the Property that is the subject of this Technical Report on August 16, 2021.
5. I am responsible for authoring Sections 8, 9.1 to 9.3, 10, 11, 12.1, 12.3 and 12.4, and co-authoring Sections 1, 25 and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 17, 2021

Signed Date: September 28, 2021

{SIGNED AND SEALED}

[Fred H. Brown]

Fred H. Brown, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

DAVID SALARI, P.ENG.

I, David Salari, P.Eng., of 59 West Street, Oakville, Ontario, Canada, L6L 2Y8, do hereby certify that:

1. I am an independent metallurgical engineer with an office at Suite 300-10, 1100 Burloak Drive, Burlington, Ontario, Canada, L6L 2Y8.
2. This certificate applies to the Technical Report titled “Technical Report on the Lost Sheep Fluorspar Property, Juab County, Utah, U.S.A.”, (The “Technical Report”) with an effective date of September 17, 2021.
3. I am a graduate University of Toronto with a Bachelor's of Applied Science (BASc) – Metallurgy and Material Science. I have been actively involved in mining and mineral processing since 1980 with extensive experience in metallurgical and mill testing and design, mill capital and operating costs, construction, commissioning, and mill operations.

I am a member in good standing of the Professional Engineers Ontario - #40416505 and I am the designated P.Eng. for D.E.N.M. Engineering Ltd. – Certificate of Authorization – Professional Engineers Ontario - #100102038 and Designation as a Consulting Engineer – Professional Engineers Ontario - # 4012.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 12.2, 13, 17 and 18 and co-authoring Sections 1, 25 and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 17, 2021

Signed Date: September 28, 2021

{SIGNED AND SEALED}

[David Salari]

David Salari, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

ALAN CZARNOWSKY

I, Alan Czarnowsky, residing at address, 176 Sunset Ridge, Lakeside, Montana USA 59922 do hereby certify that:

1. I am an independent consultant and President of Czarnowsky Inc, 176 Sunset Ridge, Lakeside, Montana USA 59922.
2. This certificate applies to the Technical Report titled “Technical Report on the Lost Sheep Fluorspar Property, Juab County, Utah, U.S.A.”, (The “Technical Report”) with an effective date of September 17, 2021.
3. I am a graduate of Colorado School of Mines with a Bachelor of Science degree in Mining Engineering (December 1974). I have worked as an engineer and regulatory expert in the mining industry for a total of 46 years since graduating/continuously since graduating in December 1974.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- President and Owner, Czarnowsky Inc. 1998-2021
 - Senior Regulatory Advisor and Engineer. TerraMatrix Engineering Inc. 1989-1998
 - President and Owner, ACZ Inc. 1979-1989
 - Chief Mine Engineer, Energy Fuels Corporation 1977-1979
 - Project Engineer, Consolidation Coal Company 1976-1977
 - Mine Engineer, Pacific Power & Light Company 1975-1976
 - Mine Surveyor, Bethlehem Steel Corporation Summer of 1974
 - Technical Draftsman, Western Energy Company Summer of 1973
4. I have visited the Property that is the subject of this Technical Report on six separate times from 2020 to 2021 the last of which was one day in duration on June 3, 2021 where environmental and regulatory aspects of the Project were viewed and discussed with Ares management.
 5. I am responsible for authoring Section 20 of this Technical Report and co-authoring Sections 1, 25 and 26.
 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
 7. I have had prior involvement with the Project that is the subject of this Technical Report whereby I prepared regulatory guidance to Ares management, worked on and filed various permitting documents, gathered environmental information for the site, oversaw the cultural resource consultant and coordinated with various agencies about the Project work.
 8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
 9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 17, 2021

Signed Date: September 28, 2021

{SIGNED AND SEALED}

[Alan Czarnowsky]

Alan Czarnowsky