NI 43-101 TECHNICAL REPORT
ON THE
EL CAPITAN PROJECT,
LINCOLN COUNTY, NEW MEXICO

Prepared for
EL CAPITAN PRECIOUS METALS INC.
5871 Honeysuckle Dr.
Prescott, Arizona, USA, 86305-3764

Prepared by
CLYDE L. SMITH, Ph.D., P.Eng.
Consulting Geologist
106-1680 56th Street
Delta, British Columbia
Canada V4L 2L6

Effective Date March 22, 2022

Table of Contents

Figures

Tables

Appendices

1 Summary

The El Capitan project is located approximately 5 miles NNE of the town of Capitan, in Lincoln County, south-central New Mexico. The property consists of 112 Bureau of Land Management (BLM) unpatented lode claims and four patented claims covering a total area of approximately 2,320 acres. El Capitan Precious Metals Inc. and its subsidiary ECPN Technologies Inc. have 100% ownership of the claims. No property payments or royalties are due on the four patented claims. The author is not aware of any current environmental liabilities on the project.

The El Capitan deposit has been known as a potential iron ore resource for several decades, with early work by the U.S. Bureau of Mines in 1944 and 1948, and Kelley (1952). Small-scale iron ore production totaled approximately 250,000 tons in the years 1961-1988. El Capitan Precious Metals Inc. began work on the project in 2002 with a ground magnetic survey and a drill program of six shallow holes. Although only low precious metals values had been obtained from the deposit by fire assay over the years and no significant exploration had been conducted on the property, beginning in May 2004 Auric Metallurgical Laboratories of Salt Lake City, Utah, began reporting significant gold and platinum results on samples from the project using their proprietary caustic fusion assay method. These results prompted a 32-sample surface sampling and assay program conducted by the author in January 2005, which returned potential ore-grade gold and platinum results on all 32 samples, causing El Capitan to undertake three stages of exploration drilling. Following drilling, the company commissioned a study to verify the Auric proprietary caustic fusion assay method; based on the positive results of this report, the company undertook an initial resource calculation, followed by a full technical report that reported a measured resource in 2007. Since that time, additional analytical testing has been carried out by the company, focusing on developing viable assay and metallurgical extraction methods.

The El Capitan project is located at the most prominent structural intersection in New Mexico within perhaps the greatest exposed concentration of Tertiary intrusions in the state. Air magnetic and gravity surveys suggest that the project is underlain by a large mafic or ultramafic intrusion. The El Capitan deposit is one of 16 Au-Ag-bearing occurrences in a 270-mile-long, north-south trending belt that traverses New Mexico within the Rio Grande Rift. The project is located within a 12-square-mile north-south-trending belt approximately 2 miles wide underlain by Permian (250-296 Ma) limestone and lesser quartz sandstone. These sedimentary rocks crop out intermittently between the bold outcrops of the Miocene Capitan aplite intrusion to the east and rhyolitic volcanics and lesser interbedded basaltic volcanics and conglomerate to the west. The rhyolites are dominantly ash flows and appear to be the extrusive equivalents of the aplite intrusion.

The El Capitan deposit is exposed in a shallow open pit and outcrops within a nearly circular area 1300 feet in diameter. Mineralization consists of a shallow west-dipping skarn body of oxide- and silicate-facies skarn hosted in limestone, sandstone, and aplite. Skarn mineralization includes two magnetite dominant zones and a variety of skarn assemblages including hematite, calcite, phlogopite, diopside, quartz, tremolite, as well as crystalline limestone. These all lie above the Capitan aplite pluton. At this stage, no zonal pattern has emerged among skarn facies. The mineralized body is at least 3000 feet long in an east-west direction, at least 2000 feet wide north-south, and ranges in thickness up to 400 feet. All of the above-described rocks are cut by ubiquitous and commonly abundant hematite, oxidized to limonite or goethite on surface and in the upper parts of drill holes. Hematite occurs as a primary constituent in all skarn assemblages and as post-skarn fracture fillings, stockworks, breccia fillings, and replacements with calcite in skarn, limestone, sandstone, and aplite. Geologic evidence indicates that gold (Au) was introduced both during magnetite skarn formation and during hematite-calcite veining. Mineralization fits into three mineral-deposit classes: 1) skarn deposits; 2) Great Plains Margin deposits; and 3) hydrothermal gold-platinum deposits.

Drilling on the project has consisted of 37 holes of core, open-hole rotary, and reverse-circulation drilling totaling 12,763.5 feet, which took place between April 2005 and May 2006. Drill-hole spacing is irregular, ranging from 150 to 700 feet and averaging approximately 400 feet. The holes are located over an area of 3600 feet east-west by 2100 feet north-south and were drilled to variable depths ranging from 98 feet to 710 feet.

Until recent years, all drill samples were kept in secure storage and under intact chain of custody; the current status of drill samples can not be confirmed by the author. All drill samples were analyzed by Auric Metallurgical Labs using a proprietary caustic fusion assay to generate results for Au, Ag, Pt, and Pd. The lab is independent of El Capitan Precious Metals. Although the fundamental principles of Auric's caustic fusion assay method have been

known for many years and are available in metallurgy textbooks, Auric is reluctant to release details of its method. For this reason, samples analyzed by Auric were subjected to an independent evaluation and verification study. Although questions remain regarding the verification study, it provided independent confirmation of Auric's caustic fusion assay process. Subsequent to Auric's analysis of drill samples, ongoing testing has involved additional laboratories; the author can only comment on sample preparation, analysis, and security and data verification for a limited subset of samples analyzed by other laboratories.

Since 2006, analytical results have been mixed. Auric Metallurgical Labs' caustic fusion assay remains the sole consistently effective assay method used on the project. Focused analytical testing has been carried out since early 2012 in 13 stages; the author has had only intermittent contact with some of these methods. Although potentially encouraging results have been obtained from some methods, many were compromised by unacceptable quality control results. To date, no viable analytical testing method has been developed apart from Auric's caustic fusion assay.

Scanning electron microscope work on gravity concentrates have unequivocally proven the presence of gold at the El Capitan project. In this work, <10-micron grains of Au were imaged, either as individual solitary grains or as inclusions within magnetite; detections were confirmed by energy-dispersive spectrophotometry (EDS) analysis.

Hydrometallurgical extractions by Auric Metallurgical in 2005 and 2019 using sodium cyanide and sodium thiosulfate leaches on Au head ore grades of 0.017-0.089 opt Au (ounces per tonne Au) and non-magnetic concentrates of 0.189-0.266 opt Au have produced impressive recoveries in the range 72.6-98.3%. Extractions on Pt head grades of 0.015-0.44 opt Pt have also resulted in recoveries in the range 63.4-78%. To date, hydrometallurgy appears to hold the best promise for potential commercial production of precious metals. In addition, although requiring verification, pyrometallurgical and hydrometallurgical procedures developed by AuraSource Inc. in a laboratory in Chian show ore-grade Au and Pt values on an El Capitan concentrate sample as well as on samples from another deposit of similar geologic character to El Capitan. El Capitan personnel should encourage AuraSource Inc. to establish a laboratory in the U.S.

A resource calculation based on Auric's caustic fusion drill hole assays was completed by Gemcom Software International in their Vancouver, B.C., Canada, offices, supervised by the author and two other consultants. Using a 0.01 opt Au cut-off grade, the study showed a measured resource of 141,444,000 short tons grading 0.020 opt Au, 0.011 opt Pt, with a contained 2,769,106 ounces Au and 1,517,868 ounces Pt. The deposit is apparently closed on the north, east, and south sides but open to the west. It should be noted that this resource calculation relies entirely on Auric Metallurgical Labs analyses using a non-standard analytical method.

The El Capitan project comes with the following three risks and uncertainties: 1) El Capitan samples have not consistently responded to standard fire assays and reliance has been placed on the caustic fusion assay method of Auric Metallurgical labs. Although independently verified, the method is nonstandard and results will be questioned by the mining industry. In order to meet assay standards commonly required by the industry, the company should continue to seek a laboratory that can consistently produce verification assays on duplicate samples assayed by Auric. 2) Although hydrometallurgical extraction results produced by Auric Metallurgical are impressive, the company should continue to seek a laboratory that can consistently produce verification extractions on duplicate samples treated by Auric. It is possible that the AuraSouce Inc. pyromettalurgical and hydrometallurgical methods may provide this verification. 3) All mining projects come with some level of permitting risk. Local opposition is likely the biggest permitting risk on this project. This could be most effectively mitigated by contracting with credible and professional permitting consultants who can guide the company through the permitting and community relations processes.

The author makes the following recommendations for the project that include a budget of US$97,000.

- The 12 mi.^{2} band of Permian limestone and quartz sandstone that is the host rock for the El Capitan deposit should be explored with a detailed ground magnetic survey conducted by a reputable geophysical survey company with results interpreted by an experienced consultant. Hyperspectral anomalies and ore-grade assays from anomalies show potential for additional El Capitan deposits. Magnetic anomalies should be geologically mapped and sampled followed by recommendations by the geologist for drilling.
- A nearly identical magnetite-precious metal deposit (Iron Duke) is located 115 mi. by highway south of El Capitan. El Capitan Precious Metals should pursue an aggressive approach to production that is coordinated with production from Iron Duke at a site located between the deposits. This would involve test work to determine the optimum method of magnetic concentration to produce a commercially viable magnetite iron

ore product suitable for consumption by domestic or foreign markets. In addition, hydrometallurgical study should be continued to develop an optimum method for extracting Au, Pt, and possibly additional precious metals. Auric Metallurgical has made a proposal for a three-phase laboratory study to be followed by pilot plants and production. It is recommended that El Capitan Precious Metals consider engaging Auric to conduct this study at the same time as it works to support AuraSource Inc. to establish a pyrometallurgical or hydrometallurgical extraction facility in the U.S.

2 Introduction

This report has been prepared at the request of Mr. Douglas Sanders, Director of El Capitan Precious Metals, Inc. The purpose of the report is to provide an explanation of the work conducted on the El Capitan project, located in Lincoln County, New Mexico, and to summarize the results of geologic investigations, including mapping, drilling, assaying, metallurgical extractions, and calculation of a resource that could be used in determining the potential economic viability of the El Capitan deposit as a producing iron ore and precious metals mine.

In 2001, the Canadian government published National Instrument 43-101 in an attempt to establish rigorous high-quality standards for professional reports written on exploration and mining properties. As a result, NI 43-101 guidelines have been universally adopted by North American exploration and mining companies. This report complies with all aspects of the NI 43-101 guidelines. In particular, because the U.S. Securities and Exchange Commission does not recognize "resource" categories for deposits, this report uses the NI 43-101 resource category definitions.

2.1 Sources of Information

The sources of information used in this report include published and unpublished reports on the project, published reports and maps on the regional geology, and project data generated by or under the direction of the author. The author has also reviewed and reported on selected test results that have not been generated under his direction nor independently verified, but that are included in this report because they are part of the project history. A detailed list of references and information sources is included at the end of the report.

2.2 Independence

The author provided geological consulting services under an agreement with El Capitan Precious Metals, Inc. between January 2005 and January 2014 when he was responsible for directing all aspects of the geological exploration program described in this report. This work included reviewing and interpreting published materials on regional geologic studies, geologic mapping, designing and administering drill programs, geologic logging of all drill holes, maintaining chain of custody of samples, working intermittently with assayers and metallurgists, overseeing resource calculations, and making recommendations for continuing work on the project The author was retained, again, in March 2011 as a geological consultant providing independent consulting services to the company, specifically to evaluate and direct metallurgical studies focused on achieving production of commercially viable iron ore and precious metals products, and to complete this updated NI 43-101 technical report. He currently holds no stock nor any incentive in El Capitan Precious Metals, Inc.

2.3 Current Personal Inspection

The author's most recent personal inspection of the project occurred on March 7, 2022, during which he toured the project and obtained additional samples of magnetic concentrates. The author has made numerous visits to the project during field work, sampling, and drilling beginning in December 2004.

3 Reliance on Other Experts

The author has relied on reports and opinions prepared by metallurgical engineer Mr. Richard Danielle, principally his report, "Summary Report of Evaluation and Validation of Auric Alkali Fusion Analytical Procedure at Wendell & Company," dated September 1, 2005, as discussed in the Data Verification section of this report. The author also relies on reports and opinions prepared by analytical chemist Noel Palmer, PhD, in this report's section on Sample

Preparation, Analysis, and Security, which is based in part on Dr. Palmer's report "Results of El Capitan Analytical Testing Stages 1, 2, 4, and 5," dated February 27, 2012. In both cases, the author relies on the conclusions of these independent experts in support of analytical work on the project.

Portions of the section Property Description and Location were based on information provided by the project owner, El Capitan Precious Metals Inc.

The sections on Environmental Liabilities and Permitting have been summarized from verbal and email communications during February 2012, with Ms. Vickie Maranville, Project Manager for environmental consultants AMEC, which provided permitting and environmental services to the company.

The section on Mineral Resource Estimates is based on resource modeling performed by Mr. Manuel Arre of Gemcom Software International in February 2007. Mr. Arre performed the calculations under the direction of the author and then-President of El Capitan, Mr. Kenneth Pavlich.

Except in the case of reports by Noel Palmer and David Smith, and resource modeling by Mr. Manuel Arre, the author has not been able to fully verify the information in the above reports and communications but is of the opinion that they are generally accurate and reliable.

4 Property Description and Location

4.1 Property Description and Location

The El Capitan project is located approximately five miles NNE of the town of Capitan, in Lincoln County, south-central New Mexico (Figure 1). The property is in Sections 9 through 16, Township 8 South, Range 14 East, New Mexico Principal Meridian, on the Capitan and Jacob Spring U.S. Geological Survey 1:24,000 topographic quadrangle maps. The center of the project is at approximate GPS coordinates 448450E, 3719950N, using datum NAD27 Continental U.S.

The El Capitan property consists of three blocks of claims (Fig. 2):

- Four patented claims located in 1902 and patented in 1911 with Mineral Survey Numbers 1440, 1441, 1442, and 1443. No property payments or royalties are due on these claims.
- Twelve Bureau of Land Management (BLM) unpatented lode claims that were staked between 1996 and 2011. These claims are Smokey #1-5, 7, and 10-14. These claims have reportedly been maintained in good standing by payment of annual maintenance fees since 2012.
- One hundred Bureau of Land Management (BLM) unpatented lode claims that were staked on March 9, 2022, recorded in the Lincoln County BLM office on March 11, 2022, and payment of a total of $22,500 acknowledged by the Santa Fe, NM, BLM office on March 15, 2022. These claims are Smokey #6, 16-18, 20-24, 26, 28, 30-53, 228-237, 254-264, 281-285, 298-302, 314-316, 328-331, 354-360, 381-391, 420-428. Recording and fee-payment documents for these claims are in Appendix 1.

All of the above claims are reportedly in good standing with the BLM as of the effective date of this report. Surface lands in the property area are administered by the U.S. Forest Service.

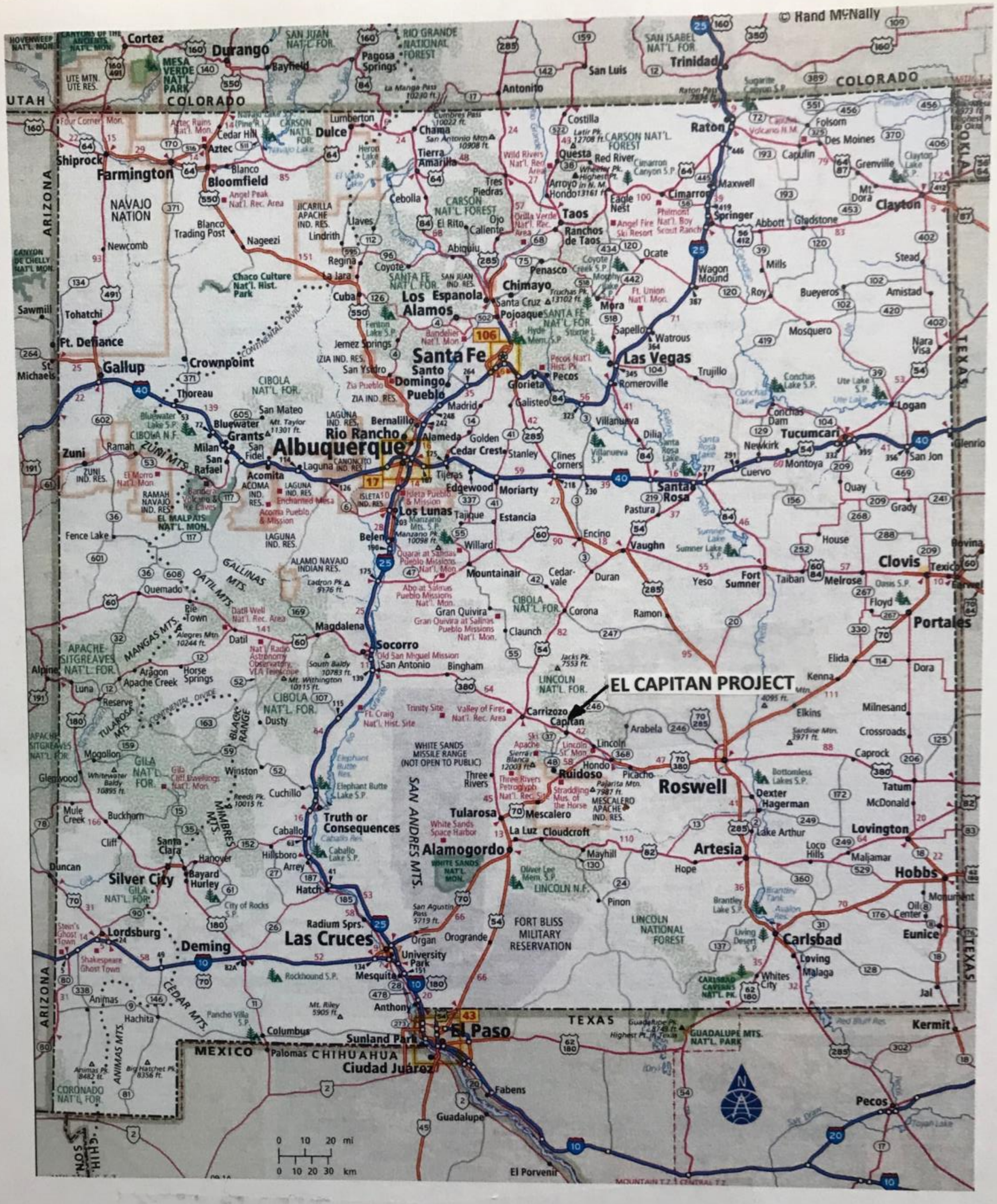

Figure 1. Location El Capitan Project in New Mexico.

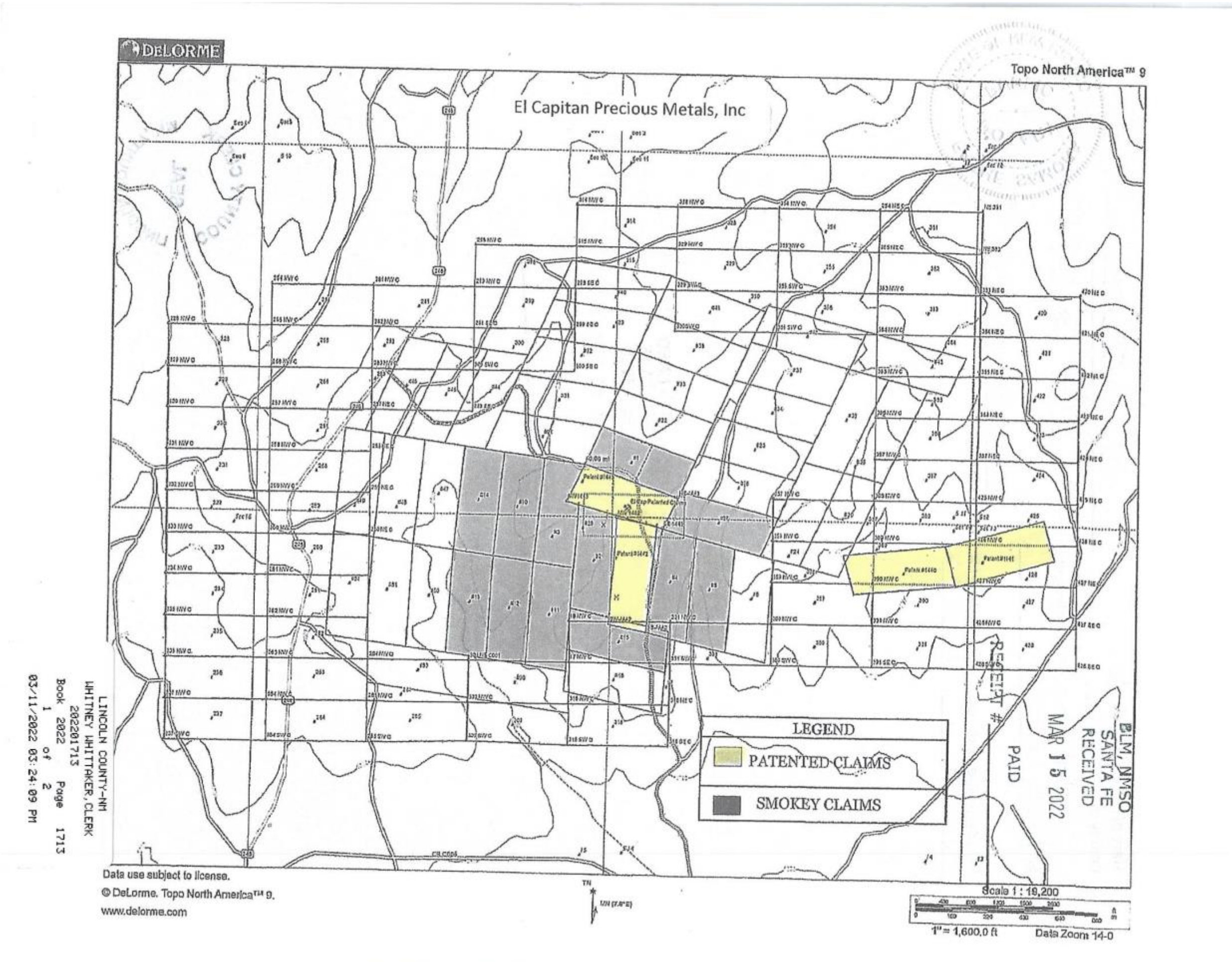

Figure 2. Map of El Capitan Precious Metals Inc. claim block. Four patented claims shown in yellow; 12 unpatented claims held since 1996-2011 in gray, and 100 uncolored unpatented claims staked and recorded in March 2022.

4.2 Nature of El Capitan's Interest

The El Capitan claims are owned by El Capitan Precious Metals Inc., a Nevada corporation in good standing as of the effective date of this report, and its subsidiary, ECPN Technologies Inc. The company has staked the unpatented lode claims in 1996, 2000, 2003, 2005, 2011, and 2022, and purchased a 100% equity interest in the four patented claims in January 2006.

4.3 Environmental Liabilities

The author is not aware of any current environmental liabilities on the project.

4.4 Permitting

Permitting for the El Capitan project is required for two functions: 1) exploration drilling on areas outside of the central mine area; 2) mining operations.

Permitting for the exploration program is at an advanced stage but currently on hold. Two principal government agencies oversee exploration permitting for the project: the U.S. Forest Service (USFS) and the New Mexico Mining and Minerals Division (MMD). Through its permitting consultant, AMEC, El Capitan has submitted documents to both agencies. USFS requires approval of a Plan of Operations that has been submitted, revised, and re-submitted. A

National Environmental Policy Act (NEPA) scope of work was also submitted to the USFS, comments received, and incorporated into a revised NEPA scope of work. MMD requires approval of a Subpart 4 Exploration Permit, which has been submitted and administrative comments received; a MMD site visit has been conducted.

Permitting for small-scale mining operations is reportedly in place. The company holds a Minimal Impact Existing Mine Operation Permit (number LI00 ME) issued in June 1999 covering mining on the property. According to El Capitan's permitting consultant AMEC, the mining permit is valid and remains in effect.

Both exploration and mining permitting could potentially be affected by the Mining Ordinance passed by Lincoln County in 2009. This requires a proposed mining operation to comply with all State and Federal permitting requirements and adds to these a Mining Operations Permit issued by the county. It is AMEC's opinion that this statute may apply to the exploration permitting, but should not affect the mining permit, since the mining permit was issued and in effect long before the Mining Ordinance was passed.

5 Accessibility, Climate, Local Resources, Infrastructure, Physiography

The project is located approximately six miles by road north of the town of Capitan, New Mexico. It may be reached by driving 5.5 miles north from Capitan on paved State Highway 48 to a dirt road turn-off to the east. This road leads to the deposit located 0.8 mile from the highway.

The claim block covers gently rolling to moderately rugged topography ranging in elevation from 6700-7100 feet above sea level. Elevations in the area of the main El Capitan deposit are 6780-6900 feet. Vegetation is sparse, consisting of scattered juniper trees with grass and rare small cactus ground cover. The climate of the area is amenable to year-round operations. Summer temperatures reach 95 degrees and winter temperatures may drop below freezing with brief periods of snow.

Surface rights for mining are administered by the U.S. Forest Service and are generally awarded in the southwestern U.S., subject to the permitting and environmental issues outlined above.

The property is currently supplied with power and telephone service. Water for a mining operation will probably only be available from wells drilled on the property. The gently rolling terrain of the main deposit should provide acceptable locations for plant sites and waste and tailings disposal.

The southwestern U.S. has ample skilled mining labor available from large population centers such as Phoenix and Tucson, Arizona. Local labor is also available from such nearby towns as Capitan, Ruidoso, and Roswell, New Mexico.

6 History

The El Capitan deposit has been known as a potential iron ore resource for several decades. The U.S. Bureau of Mines drilled approximately 140 shallow holes through the outcropping, shallowly dipping magnetite skarn deposit in 1944 and 1948. The outcropping deposit was mapped at a scale of 1:3600 in 1952 (Kelley, 1952). Small-scale iron ore production totaled approximately 250,000 tons in the years 1961-1988. El Capitan Precious Metals Inc. conducted a ground magnetic survey and a drill program of six shallow holes in 2002.

Although only low precious metals values had been obtained from the deposit by fire assay over the years, and no significant exploration had been conducted on the property, in May 2004 El Capitan Precious Metals submitted a few samples of magnetite skarn to Auric Metallurgical Labs in Salt Lake City, Utah. Auric separated the samples into magnetic and non-magnetic fractions and reported significant gold and platinum results on the non-magnetic fractions using their proprietary caustic fusion assay method.

The encouraging 2004 Auric assay results prompted a 32-sample surface sampling and assay program conducted by the author in January 2005. Auric reported potential ore-grade gold and platinum results on all 32 samples; this caused El Capitan Precious Metals Inc. to undertake three stages (Stage 1, Stage 2, Stage 3) of core, open-hole rotary, and reverse circulation drilling, under the direction of the author, which took place between April 2005 and May 2006.

Following the drilling campaigns, the company commissioned a study to verify the Auric proprietary caustic fusion assay method (Danielle, 2005). Based on the positive results of this report, the company undertook an initial resource calculation (Smith, 2005), followed by NI 43-101 Technical Reports (Smith 2012, 2014). In 2007, Mr. Ken Pavlich became President and CEO of the company and served in this role until 2009. During this time a significant amount of testing work was undertaken in order to verify the presence of precious metals. Most of this work was done on four composite samples prepared from drill samples A wide variety of tests were performed at numerous labs.

7 Geologic Setting and Mineralization

7.1 Regional Geology

The El Capitan project is located at the most prominent structural intersection in New Mexico (Scholte, 2003), within perhaps the greatest exposed concentration of Tertiary intrusions in New Mexico (Cather et al, 1991; Figure 3). Air magnetic and gravity surveys suggest that the project is underlain by a large mafic or ultramafic intrusion (Figures 4, 5). The structural intersection is formed by the north-south-trending axis of the Pedernal uplift-Mescalero arch and the east-west-trending Capitan lineament. In the south, the Pedernal-Mescalero axis closely parallels the Sacramento uplift, an east-tilted fault block with evidence of at least three periods of deformation (Precambrian(?) to late Tertiary), and in the north it closely parallels a series of faults and folds in the Picuris-Pecos trend (Figure 3). The Pedernal-Mescalero structural zone coincides generally with a belt of crustal thickening and alkalic intrusions (Bird, 1984) that marks the boundary between the tectonically active Rio Grande Rift (a branch of the Basin and Range) and Rocky Mountains on the west and the tectonically stable Great Plains on the east. The Pedernal-Mescalero axis appears to be offset approximately 8.5 miles across the Capitan lineament (Cather et al, 1991). The Capitan lineament is a well-defined basement fracture and magmatic zone that can be traced for over 270 miles from Socorro, New Mexico into western Texas; in the area of the El Capitan deposit the lineament is reflected by the Capitan pluton (Figure 3).

The Tertiary intrusions in the area form the Lincoln County porphyry belt that includes at least 11 stocks and laccoliths (Figure 3). The east-west elongate, 35 km-long Capitan pluton is a Miocene (26.5 Ma) aplite (granitic) laccolith that plunges westerly and underlies the El Capitan deposit. Thompson (1991) concluded that magmas in the porphyry belt were generated from both lower crustal and upper mantle sources, and McLemore (1991) concluded that a diversity of mineral deposit types in the El Capitan region resulted from several different complex magmatic fractionation and differentiation events. Figures 4 and 5, from Roberts, et al (1991), show a coincident steep-gradient aeromagnetic anomaly and gravity anomaly. These anomalies cover an area of over 270 square miles, show northerly and easterly structural trends, and are interpreted as reflecting a large mafic or ultramafic intrusion that underlies the Lincoln County porphyry belt and the El Capitan deposit. It is possible that precious-metals-bearing hydrothermal fluids that formed the El Capitan deposit were differentiates from this buried mafic or ultramafic intrusion.

The El Capitan deposit is one of 16 Au-Ag-bearing occurrences in a 270-mile-long, north-south trending belt that traverses New Mexico within the Rio Grande Rift (Figure 6). McLemore (2001) has termed these occurrences Great Plains Margin deposits, has described the similarities between them, and has classified them as a distinct hydrothermal type located near Oligocene-Miocene (38-23 Ma) intrusions.

7.2 Property Geology

The El Capitan deposit is located within a 10-square-mile north-south-trending belt approximately 2 miles wide underlain by Permian limestone and lesser quartz sandstone. These sedimentary rocks crop out intermittently between the bold outcrops of the Miocene Capitan aplite intrusion to the east and rhyolitic volcanics and lesser interbedded basaltic volcanics and conglomerate to the west. The rhyolites are dominantly ash flows and appear to be the extrusive equivalents of the aplite intrusion. Both the aplite and the rhyolites are unusually iron-rich; disseminations of limonite/goethite (original hematite) occur to some extent in most outcrops of these rocks. It is possible that the iron-rich composition of these rocks reflects crystallization from magmas that originated by differentiation from mafic/ultramafic magmas at depth; as noted above, coincident aeromagnetic and gravity anomalies in the region suggest deep mafic/ultramafic compositions.

7.3 Mineralization

The El Capitan deposit is exposed in a shallow open pit and outcrops within a nearly circular area 1300 feet in diameter (Figure 7). Kelly (1952) attributed the circular shape of the main El Capitan deposit to a solution collapse structure in the host San Andres limestone of Permian age. Drill results indicate, however, that the deposit extends in all directions beyond the area of surface exposure and that the circular shape is simply an erosional expression of a shallowly dipping skarn deposit.

Six east-west and seven north-south geologic cross-sections (Appendix 2) show the general geology of the deposit based on drill holes. These cross-sections show that the overall form of the El Capitan deposit is that of a flat-lying to shallow west-dipping body of skarn surrounded by crystalline limestone lying on the aplite intrusive contact. Interbeds of quartz sandstone interrupt the continuity of the skarn and crystalline limestone. The mineralized body is at least 3000 feet long in an east-west direction, at least 2000 feet wide north-south, and ranges in thickness up to 400 feet. Although potentially economic gold assays are concentrated in the skarn and crystalline limestone, potentially economic grades occur in all rock types, including fractured, stockwork, or brecciated quartz sandstone, limestone, and aplite.

The El Capitan skarn includes two magnetite-dominant zones (upper and lower magnetite bodies). The upper magnetite zone lies below a limestone cap that is bleached, fractured, and contains hematite-calcite fracture filling. This bleached, fractured, and veined limestone cap is nowhere more than a few tens of feet thick and it passes up-section into fresh limestone. Below the limestone cap rock and upper magnetite zone lie a variety of skarn assemblages including magnetite, hematite, calcite, phlogopite, diopside, quartz, tremolite, as well as crystalline limestone. These all lie above aplite of the Capitan pluton. At this stage, no zonal pattern has emerged among skarn facies. The aplite contact has a shallow westerly dip, ranging in depth, where drilled, from 100 feet in holes to the east to 450 feet in holes to the west (Appendix 2).

All of the above-described rocks are cut by ubiquitous and commonly abundant hematite, oxidized to limonite or goethite on surface and in the upper parts of drill holes. Hematite occurs as a primary constituent in all skarn assemblages and as post-skarn fracture fillings, stockworks, breccia fillings, and replacements with calcite in skarn, limestone, sandstone, and aplite. Hematite commonly exceeds 12% and ranges as high as 80% in some drill intervals. Fracture-filling and replacement hematite-calcite clearly represent a later-stage hydrothermal event that was superimposed on earlier rock types. An assumption that these fluids were derived exclusively from the aplite is questionable because fracture-filling hematite-calcite occurs in aplite in the deeper parts of some drill holes. It is therefore apparent that at least some portion of the hematite-calcite hydrothermal fluids were derived from a deeper source underlying the aplite intersected in drill holes.

Geologic evidence indicates that gold was introduced both during magnetite skarn formation and during hematite-calcite veining. Precious metals in the deposit appear to correlate with the presence of hematite-calcite: higher gold values (as assayed by Auric Labs) generally occur in both surface and drill samples with higher percentages of hematite. Two hematite-dominant samples from the El Capitan deposit studied at the Missouri Bureau of Mines in 1996 (Appendix 3) contained 2- to 35-micron crystals of electrum (Au-Ag alloy), native gold, and an unidentified possible Pt mineral as shown by reflected-light microscopy and scanning-electron microscopy with energy dispersive spectroscopy (SEM-EDS). SEM-EDS work conducted under the author’s direction has revealed 1-micron crystals of Au with possibly small amounts of Pd as inclusions in magnetite crystals (see Analytical Testing, 2011-Present, below)

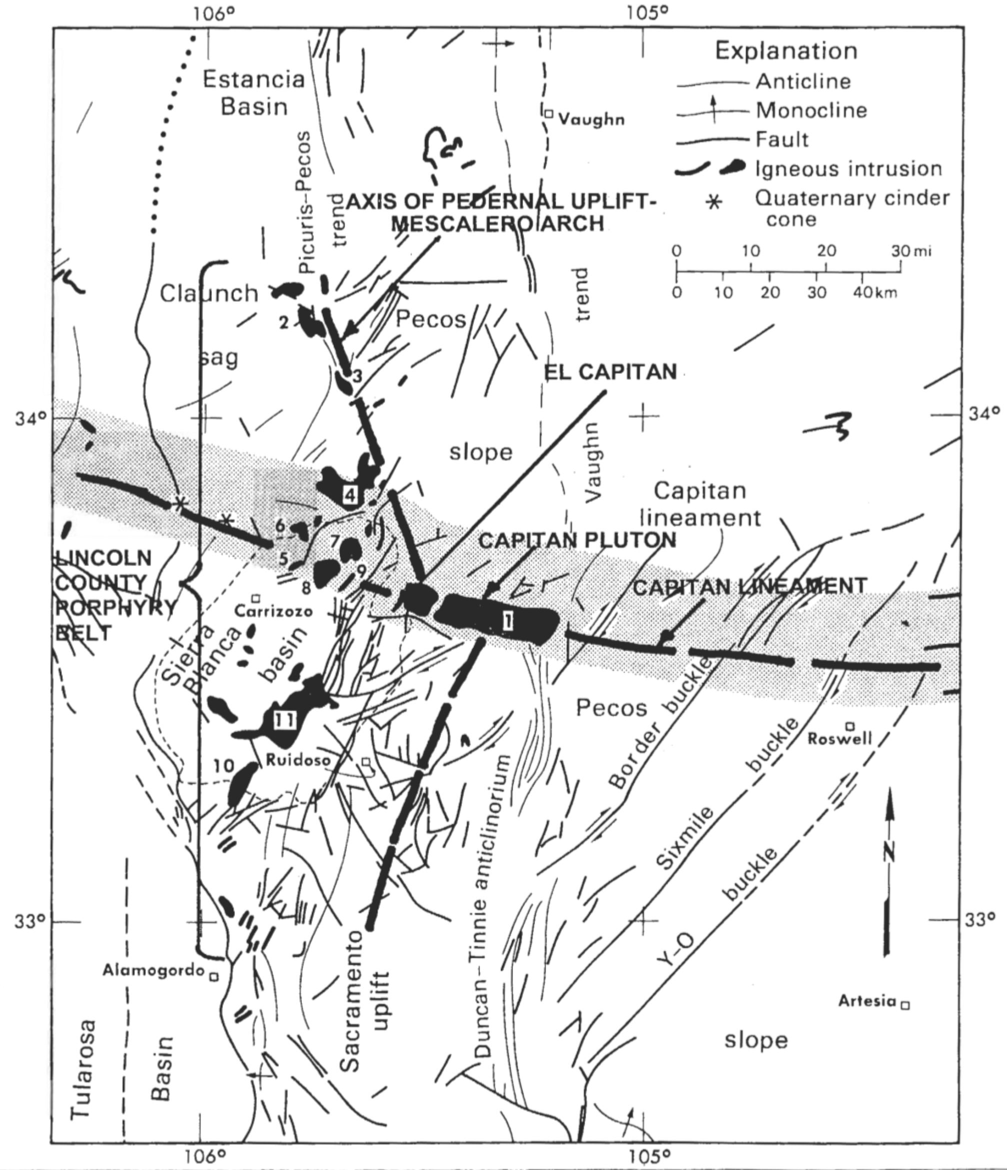

Figure 3. Tectonic map of El Capitan region (after Cather and others, 1991). Pedernal uplift-Mescalero Arch coincides with crestal area of Sacramento uplift, belt of igneous intrusions and Picuris-Pecos trend to north of Capitan pluton. Arch steps west 16 km to north of pluton.

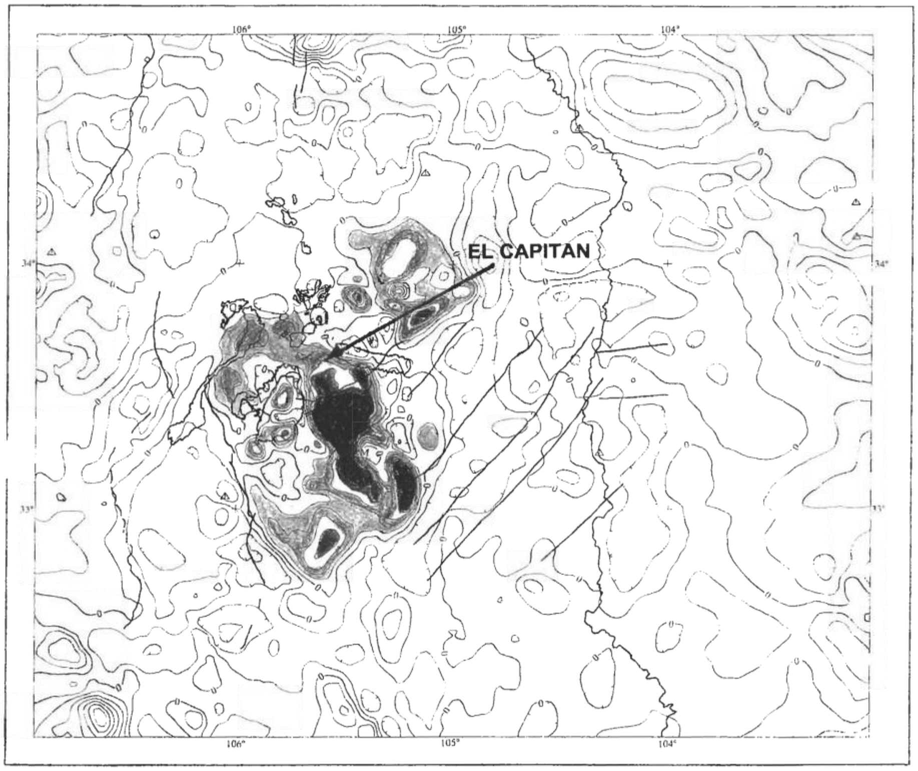

Figure 4. Aeromagnetic intensity map, El Capitan region (after Roberts and others, 1991). Contour interval 50 gammas except where steep gradient shows 500 gamma and higher contours.

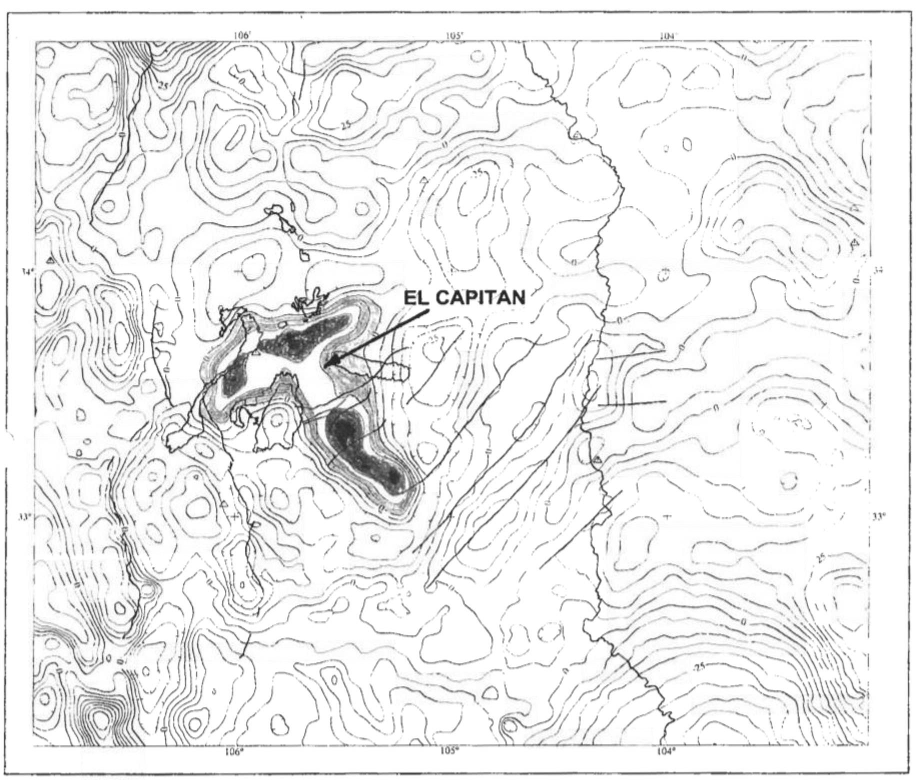

Figure 5. Residual gravity map, El Capitan region (after Roberts and others, 1991). Contour interval 5 milligals.

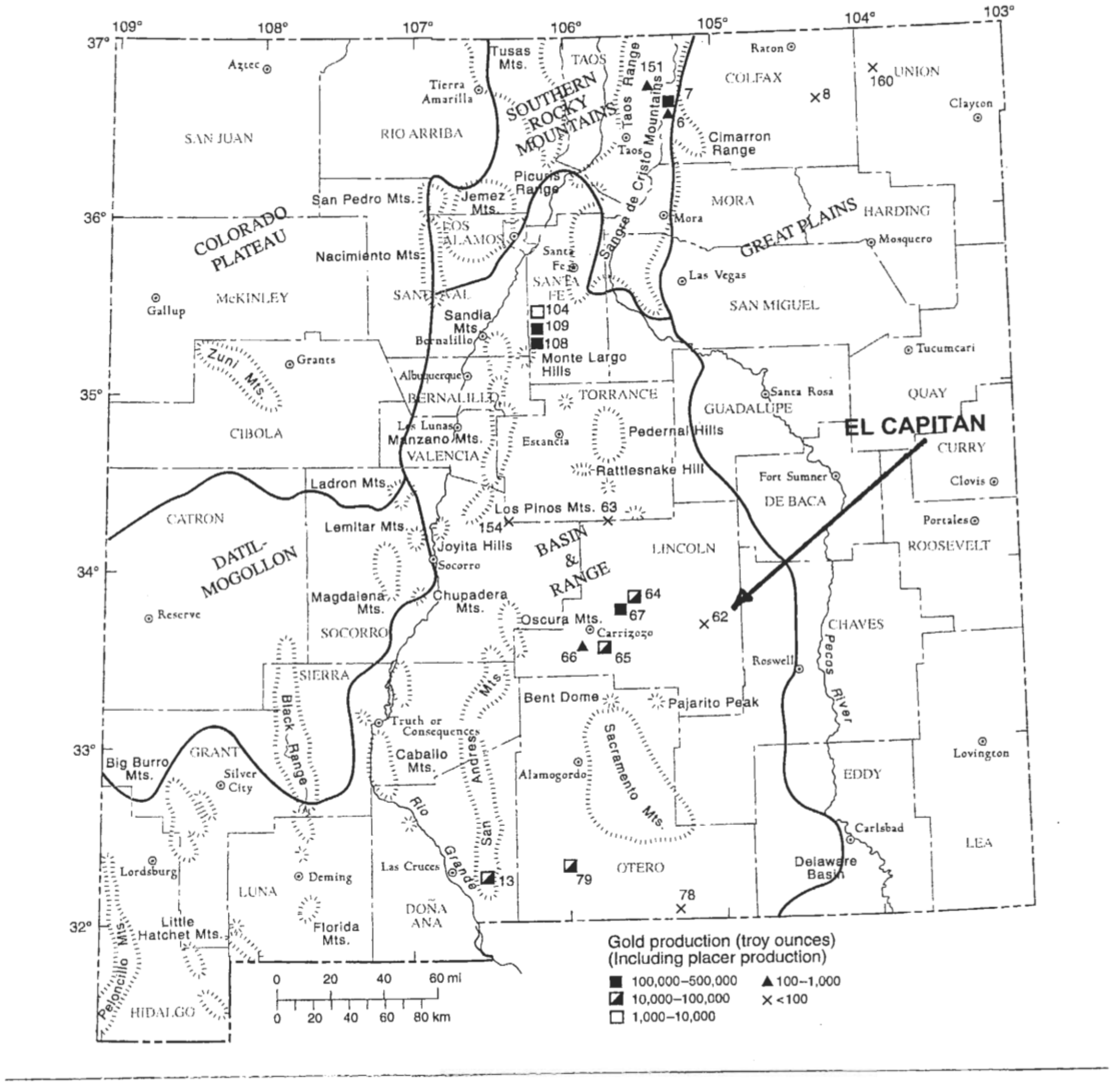

Figure 6. Great Plains Margin deposits in New Mexico (after McLemore, 2001).

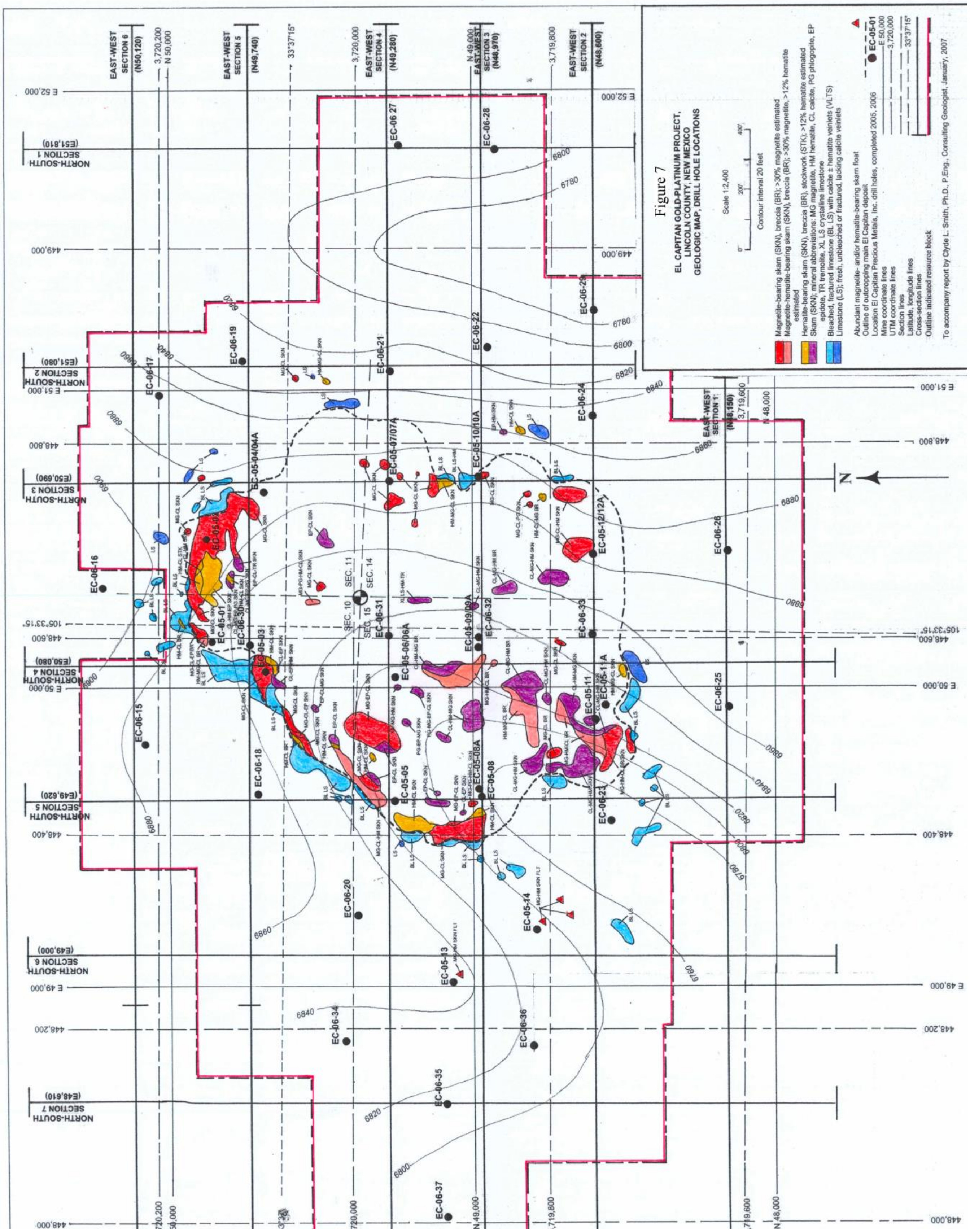
EL CAPITAN GOLD-PLATINUM PROJECT,
LINCOLN COUNTY, NEW MEXICO
GEOLOGIC MAP, DRILL HOLE LOCATIONS
Scale 1:2,400
Contour interval 20 feet

Figure 7

8 Deposit Types

The El Capitan deposit is principally a skarn deposit. It can also be classified as a Great Plains Margin deposit according to McLemore (2001), and the presence of platinum as reported by Auric Metallurgical Labs indicates that it may also be a hydrothermal gold-platinum group elements deposit. These deposit types are described below.

8.1 Skarn Deposits

The mineralization at El Capitan clearly falls into the category of skarn deposits. Skarns are a widely variable class of deposit formed by magmatic hydrothermal activity resulting from the interaction between dioritic to granitic intrusives and host rocks, typically Ca- or Mg-rich sedimentary rocks. Skarns are distinguished by coarse-grained, generally Fe-rich mixtures of Ca-Mg-Fe-Al-Mn silicate minerals formed by fluid metasomatism at relatively high temperature (Einaudi and Burt, 1982). The most economically important skarn deposits are formed in Ca-rich host rocks, dominantly limestone. Mineralogy of individual skarn deposits is highly variable, but generally includes varieties of garnet, pyroxene, and wollastonite; Fe-rich skarn deposits, such as El Capitan, also display magnetite, epidote, amphibole, and mica minerals.

Skarns are a major source of the world's tungsten, iron, copper, lead, zinc, and tin; in their iron-rich form, they typically form 5- to 200-million-ton deposits averaging about 40% Fe with accompanying Cu, Co, and Au (Einaudi et al, 1981). Skarn deposits in the southwestern U.S. include those in the Iron Mountain and Central mining districts, New Mexico; Christmas, Morenci, and Twin Buttes districts, Arizona; Bingham Canyon, Utah; and Yerington, Nevada (Einaudi et al, 1981).

Skarn deposits typically follow a three-stage progression from 1) contact metamorphism during intrusion of the mineralizing magma; to 2) formation of skarn mineralization as fluid is released during the magma's crystallization; and finally, to 3) retrograde alteration as the magma cools. During the main stage of skarn formation, fluids infiltrate along available structures, including intrusive contacts, fractures, dikes and sills, sedimentary contacts, or other zones of permeability (Einaudi et al, 1981). As the result of multi-stage formation and appropriation of this wide variety of pre-existing fluid pathways, skarn deposits often form complex and irregular bodies.

Einaudi et al (1981) note that sulfide minerals, and in some cases Fe-oxide minerals, typically precipitate during retrograde phases of skarn systems and cut across the earlier skarn formations. These are generally accompanied by hydrous, Ca-depleted silicates and carbonates, among them epidote, chlorite, and calcite, which are evident at El Capitan. Thus, these minerals at El Capitan are likely retrograde. More importantly, the retrograde nature of Fe oxides in late-stage, cross-cutting events matches the observation in the El Capitan deposit of hematite-calcite veins (retrograde) cutting across magnetite (main-stage skarn).

The limestone host rock, irregular form, association with nearby intrusives, and varied assemblage of Ca-rich silicate minerals, all place the El Capitan mineralization in the skarn category.

8.2 Great Plains Margin Gold-Silver Deposits

The El Capitan deposit is one of 16 Au-Ag-bearing occurrences in a 270-mile-long, north-south trending belt that traverses New Mexico within the Rio Grande Rift (Figure 6). McLemore (2001) has termed these occurrences Great Plains Margin deposits, has described the similarities between them, and has classified them as a hydrothermal deposit type located near alkaline Oligocene-Miocene (38-23 Ma) intrusions. They constitute a broad group of deposits containing both precious and base metals. The Au-rich subtype may also be classified as alkaline Au or alkaline-igneous-related Au deposits; Great Plains Margin Au deposits typically have high Au relative to other Au occurrences in New Mexico and contain generally low levels of Ag, less than 1 opt Ag.

Great Plains Margin deposits include Cu, Fe, Pb-Zn, and Au skarns or carbonate replacements. Fe skarns are hosted in Paleozoic or Cretaceous limestone or calcareous shale and contain predominantly magnetite and hematite, along with garnet, epidote, diopside, and other calc-silicate minerals; El Capitan contains all of these characteristics. McLemore (2001) notes anomalous precious-metals assays (>0.6 ppm Au, >15 ppm Ag) from Fe skarns in the Capitan Mountains (presumably the El Capitan occurrence) and states that fluid inclusions suggest a link between this Fe skarn and veins in the Capitan Mountains.

The origin of Great Plains Margin deposits is not fully clear, but McLemore (2001) notes that they correspond with a belt of alkaline igneous rocks occurring along the boundary between the Great Plains to the east and the southern

Rocky Mountains and Basin Range province to the west, and that there is evidence of their origin in these alkaline igneous rocks.

8.3 Hydrothermal Gold-Platinum Group Metals Deposits

Because assays from Auric Metallurgical Labs indicated the presence of potentially ore-grade platinum, the author investigated gold-platinum deposits formed as the result of hydrothermal processes. Gold occurs with platinum group metals (PGM) in several classes of mineral deposits, many of which are hydrothermal in origin. Because the production of PGM has come almost exclusively from large Precambrian ultramafic layered intrusions, such as the Bushveld or Stillwater complexes of South Africa and Montana, respectively, the majority of geologists are of the opinion that PGM are restricted to these high-temperature magmatic segregation environments. Beginning in the early 1970's, however, a few detailed studies confirmed that PGM could be mobilized with Au in relatively lower-temperature hydrothermal fluids (Stumpfl and Tarkian, 1976). Numerous studies of Au-PGM deposits and laboratory research on the thermochemistry of PGM solubility, transport, and deposition since that time have shown that Au-PGM occur in a variety of hydrothermal deposit classes, including porphyry copper, fracture-shear-zone-hosted, and sediment-hosted deposits (Appendix 4).

The Lincoln Country porphyry belt, which includes the Capitan pluton, is dominated by intrusions of alkaline composition (Cather et al, 1991) and is included in a belt of alkaline intrusive rocks that stretches through the eastern Rocky Mountains from British Columbia to New Mexico. Alkaline intrusions commonly occur in continental rifts, such as the Rio Grande Rift. Hydrothermal Au-PGM occur as minor constituents in porphyry copper mineralization in alkaline plutons within this belt, the best example being the Allard stock in the Colorado Mineral Belt. The 70-65 Ma Allard syenite stock had a copper resource that included 0.02 opt Au, 0.05 opt Pt, and 0.03 opt Pd (Werle et al, 1984). Although the El Capitan Au-PGM-Fe mineralization is hosted primarily in skarn, close proximity to the Capitan pluton and its possible genetic association with the pluton indicates that the El Capitan deposit is a member of the Au-PGM mineralized alkaline porphyry belt of the eastern Rocky Mountains.

Similarly, the Coronation Hill Au-PGM deposit in Australia exhibits a strong hematite-precious metals association that bears a resemblance to El Capitan. At Coronation Hill, hematite-calcite veinlets, breccias, disseminations, and alteration in a 2500-1600 Ma sedimentary section intruded by quartz feldspar porphyry and quartz diorite host a deposit grading 0.20 opt Au, 0.008 opt Pt, 0.028 opt Pd (Carville et al, 1990). Mernagh et al (1994) concluded that a calcium-rich, highly oxidized, acidic, moderately saline brine transported Au-PGM in chloride complexes. This conclusion corresponds with the results of numerous thermochemical studies showing that significant Au-Pt-Pd can only be transported in chloride complexes in acidic, moderately to extremely oxidized (hematite stable) hydrothermal fluids (Appendix 4).

9 Exploration

The 32-sample surface sampling program conducted in January 2005 consisted of 28 samples in the main El Capitan deposit and four in a mineralized trend to the east. Near-vertical (slope corrections were made for non-vertical samples) continuous chip samples of approximately 10 pounds in weight were collected from outcropping mineralization over vertical lengths ranging from 4 to 45 feet at stations located with a GPS instrument and plotted as UTM coordinates. Samples were submitted to Auric Metallurgical Labs for caustic fusion assays.

Following encouraging assay results from a Stage 1 drill program (see below), the area of outcrop of the main El Capitan deposit was mapped at a scale of 1:2400. Figure 7 shows the distribution of various skarn assemblages consisting of magnetite, hematite, calcite, phlogopite, epidote (now identified petrographically as diopside), and tremolite; crystalline limestone; bleached and fractured limestone; and limestone.

An airborne hyperspectral survey was conducted over a 35-square mile area surrounding the El Capitan property by Earth Search Sciences, Inc. in February 2006. The data was interpreted by Joe Zamudio, Ph.D., who distinguished calc-silicate and hematite-goethite spectral signatures. A total of 38 samples were collected from outcropping mineralization or alteration at 24 anomaly locations and submitted for caustic fusion assay to Auric Metallurgical Labs. Auric reported significant gold and platinum results for several samples. These areas should be more fully explored.

10 Drilling

A Stage 1 diamond drill program, consisting of 12 vertical HQ-size holes (EC-05-1 through EC-05-12; Table 1) totaling 1,027 feet, was conducted in April-May 2005. Because several Stage 1 drill holes terminated in favorable geology and/or assay intervals, the company conducted a Stage 2 drill program in June-August 2005. Stage 2 consisted of 10 vertical HQ core and open-hole rotary holes (EC-05-04A through EC-05-14; Table 1) totaling 2,091.5 feet. Eight Stage 2 holes were located adjacent to Stage 1 holes and are labeled with the designation "A"; for these holes, assays and geologic logs are available only for footages below the adjacent twin holes (Table 1). Favorable assay results from Stages 1 and 2 prompted the company to undertake a 23-hole Stage 3 reverse-circulation drill program (EC-06-15 through EC-06-37) totaling 9,645 feet in February-May 2006 (Table 1).

Drill core was logged in 1-foot intervals and rotary and reverse-circulation drill cuttings in 5-foot intervals with the aid of a binocular microscope (Appendix 5). Mineral percentages were estimated for each interval and lithologic divisions were designated. Although most core sampled and assayed was in five-foot intervals, in some cases core intervals were selected based on lithologic boundaries. Most rotary and reverse-circulation drill cuttings were sampled in 5-foot intervals; in cases where geology was uniform over significant lengths, such as in aplite with low hematite content deep in several holes, sample intervals were increased to 10 feet.

Drill-hole spacing is irregular, ranging from 150 to 700 feet and averaging approximately 400 feet. The holes are located over an area of 3600 feet east-west by 2100 feet north-south and were drilled to variable depths ranging from 98 feet to 710 feet (Table 1).

Table 1. Drill-Hole Information

	UTM Coordinates[1]		Mine coordinates, ft[2]			
Hole ID	**E**	**N**	**E**	**N**	**Elevation, ft**	**Depth, ft**
EC-05-01	448,596	3,720,145	50153.23	49861.08	6866.90	99
EC-05-02	448,702	3,720,149	50499.12	49877.16	6890.79	118
EC-05-03	448,566	3,720,091	50052.17	49684.19	6852.89	133
EC-05-04	448,749	3,720,092	50652.50	49688.93	6894.18	38
EC-05-4A	448,750	3,720,092	50656.42	49688.03	6895.09	**136**
EC-05-05	448,433	3,719,961	49617.09	49259.62	6817.08	103.5
EC-05-06	448,558	3,719,961	50028.57	49257.91	6815.33	81
EC-05-6A	448,561	3,719,960	50037.37	49255.48	6816.30	**206**
EC-05-07	448,757	3,719,966	50681.64	49276.03	6889.03	118
EC-05-7A	448,760	3,719,966	50689.92	49275.95	6889.17	**260**
EC-05-08	448,437	3,719,873	49630.60	48970.42	6780.25	89
EC-05-8A	448,445	3,719,876	49656.26	48979.05	6779.62	**280**
EC-05-09	448,589	3,719,878	50129.81	48985.87	6834.44	66
EC-05-9A	448,589	3,719,877	50130.62	48982.14	6834.22	**90.5**
EC-05-10	448,764	3,719,876	50702.95	48980.33	6881.23	62
EC-05-10A	448,765	3,719,876	50706.86	48979.04	6881.39	**210**
EC-05-11	448,516	3,719,758	49889.93	48593.51	6830.58	59
EC-05-11A	448,531	3,719,749	49937.27	48562.52	6838.89	**340**
EC-05-12	448,686	3,719,761	50448.02	48602.26	6882.99	60.5
EC-05-12A	448,682	3,719,762	50435.35	48604.69	6881.79	**405**
EC-05-13	448,247	3,719,903	49008.55	49070.36	6842.41	82
EC-05-14	448,302	3,719,818	49186.12	48790.32	6803.17	82
EC-06-15	448,491	3,720,211	49808.70	50078.64	6875.39	400
EC-06-16	448,652	3,720,254	50334.67	50219.52	6905.79	355
EC-06-17	448,849	3,720,197	50981.04	50033.56	6863.52	450
EC-06-18	448,440	3,720,098	49640.12	49709.08	6866.49	450
EC-06-19	448,883	3,720,112	51094.23	49755.31	6825.41	250
EC-06-20	448,315	3,719,999	49230.40	49382.09	6854.57	450
EC-06-21	448,873	3,719,964	51060.87	49269.61	6839.01	350
EC-06-22	448,897	3,719,867	51138.32	48949.98	6806.07	450
EC-06-23	448,413	3,719,743	49552.48	48543.06	6768.36	400
EC-06-24	448,826	3,719,762	50908.13	48605.89	6848.67	400
EC-06-25	448,528	3,719,624	49930.45	48152.85	6869.39	500
EC-06-26	448,688	3,719,625	50453.06	48158.12	6882.62	360
EC-06-27	449,103	3,719,956	51816.87	49241.64	6812.25	270
EC-06-28	449,098	3,719,859	51799.91	48924.14	6814.30	300
EC-06-29	448,934	3,719,759	51261.03	48596.53	6777.26	420
EC-06-30	448,593	3,720,106	50143.02	49734.70	6849.07	600
EC-06-31	448,602	3,719,967	50171.25	49278.13	6838.80	710
EC-06-32	448,601	3,719,877	50168.89	48982.15	6836.45	530
EC-06-33	448,603	3,719,762	50174.38	48607.18	6848.99	600
EC-06-34	448,190	3,720,010	48812.86	49419.41	6835.99	400
EC-06-35	448,125	3,719,910	48602.40	49085.57	6818.21	400
EC-06-36	448,180	3,719,823	48799.60	48797.94	6819.34	300
EC-06-37	448,010	3,719,910	48223.68	49088.47	6779.43	300
					Total	12,763.5

[1]UTM coordinates are in meters, using 1927 North American Datum (NAD 27)
[2]Mine coordinates surveyed in feet by Ruidoso Land Surveying, Ruidoso, NM
Numbers in bold type - Assays and geologic logs available only for footages below adjacent twin holes

11 Sample Preparation, Analyses, and Security

Sample preparation, analyses, and security are reported below for the various phases of the project. For convenience, all testing is summarized in this section, some of which includes metallurgical testing.

11.1 Surface Sampling, 2004-2005

In December 2004, the author first visited the El Capitan project and collected three samples. He submitted these to American Assay Labs of Sparks, Nevada. Because Auric Metallurgical Labs had been reporting positive precious-metals results in the non-magnetic fraction of El Capitan samples, American Assay was instructed to do a magnetic separation and assay both the magnetic and non-magnetic fraction. Assays of the non-magnetic fraction returned <0.003, 0.016, and 0.024 opt Au. The lab did not weigh the magnetic and non-magnetic fractions, so calculation back to head grade could not be done, but the results indicated to the author the presence of Au at the El Capitan project. To date, this is one of the few reliable testing results without pre-treatment on a chain-of-custody sample that have reproduced ore-grade numbers similar to Auric's caustic fusion assays (see below).

Based on these positive results, the author returned to the project in January 2005 for additional work. During this visit, he collected 32 samples, including 28 from the main pit area and four from a mineralized showing to the east. These samples were submitted under chain of custody to Auric Metallurgical Labs without prior preparation. Auric returned encouraging results in Au and Pt, with values up to 0.089 opt Au and 0.053 opt Pt. These results prompted El Capitan Precious Metals to undertake a Stage 1 drilling program, later expanded to include Stages 2 and 3 drilling.

11.2 Drill Sampling, 2005-2006

11.2.1 Drill Sample Preparation and Security

The author has paid close attention to chain of custody for all drill samples and has maintained the drill samples under secure storage since they were generated during all three phases of drilling. Drill core and cuttings were removed from the drill site by the independent consultant in charge at the time and transported to and stored in secure locked storage units in the town of Capitan, New Mexico, near the property. No personnel of El Capitan Precious Metals had access to or handled any drill core or cuttings. Core and drill cuttings recovery on the job ranged from good to excellent and samples are excellent representations of the deposit.

Sample preparation onsite consisted of cutting drill core lengthwise with an electric diamond saw. One half of the core was returned to the core box and retained as a geologic sample. The other half was quartered; one quarter was sent for assay and the other bagged in anticipation of future testing and retained in secure storage. Rotary and reverse-circulation drill cuttings were split at the drill discharge and bagged into two equivalent samples in 5-foot intervals by the drilling contractor under the supervision of an independent consultant. The one-quarter sawed core and one 5-foot sample bag of drill cuttings were sent under chain of custody by a certified shipping company to Auric Metallurgical for caustic fusion assays. One shipment of reverse-circulation drill samples sealed in buckets with tamper-evident tape was transported by El Capitan personnel to Auric Metallurgical in October 2006; Auric confirmed upon delivery that these samples arrived with all seals intact.

Drill core and cuttings were stored in a secure, locked storage facility in the town of Capitan, New Mexico with access by only the author, his associate, consulting geologist David S. Smith, and independent consultant George Stephens IV. In order to facilitate testing research, all drill samples were moved to secure storage in Denver, Colorado in December 2011. The status of drill samples that were stored in Capitan and in Denver cannot be confirmed by the author as of the effective date of thisreport.

11.2.2 Drill Sample Analytical Testing

All drill samples were analyzed by Auric Metallurgical Labs who reported caustic fusion assay results for Au, Ag, Pt, and Pd in ounces per ton (opt; Appendix 6). Auric is located at 3260 West Directors Row, Salt Lake City, Utah, USA, 84104. The lab is independent of El Capitan Precious Metals. Auric has been a duly registered mineral assay and analysis laboratory since 1996. The lab is a participating member in the Proficiency Testing Program for Mineral Laboratories operated by the Canadian Certified Reference Materials Project for the Task Group Mineral Analysis Laboratories Working Group for the elements analyzed on El Capitan samples. In addition, Auric participated in an evaluation of accuracy of U.S. analytical laboratories administered by the Bureau of Land Management in 2002. Auric's results on blind standards selected by the BLM were excellent for all four elements tested: Au, Ag, Pt, Pd. Auric employs quality controls in its laboratory, including running blanks and standards for each 10 samples analyzed. Auric reported that during analyses of El Capitan samples, they used Nevada Bureau of Mines blank NBM-2a, standards NBM-5b, and CDN PGMS-6, -7, and -9.

Sample preparation methods employed by Auric were as follows (Appendix 7). The one-quarter core samples were passed through a Denver 4x6-inch jaw crusher to reduce to -0.25 inch. Both crushed core and rotary and reverse circulation materials were passed through a Jones riffle splitter several times to reduce sample size to approximately 150 grams. Samples were then passed through a 6-inch Bico-Braun pulverizer until samples passed an 80-mesh screen. Pulverized samples were placed in 3x5-inch yellow kraft paper sample envelopes and appropriately labeled.

Stage 1 drill samples were visually separated into magnetic and non-magnetic categories based on apparent magnetite contents, and 100-gram aliquots of high-magnetite samples were subjected to wet magnetic separation. Initial separate analyses of the magnetic and the non-magnetic fractions indicated significantly higher values in the non-magnetic fractions. Thereafter, Stage 1 assay results were provided only for non-magnetic fractions. (For these samples, the Au, Ag, and Pt results for non-magnetic fractions were recalculated back to whole-rock grades using the magnetic/non-magnetic percentages.) This practice was abandoned in Stages 2 and 3.

Auric reports that it uses high-quality equipment in its laboratory (see equipment list in Appendix 7) and that it maintains service contracts with certified calibration companies. According to Auric, only reagent grade chemicals from reputable chemical suppliers are used, and each batch of incoming reagents is subjected to analysis to ensure its purity.

Auric has developed a proprietary caustic fusion assay method. Although the fundamental principles of fusion assays have been known for many years and are available in metallurgy textbooks, Auric is reluctant to release details of its method. For this reason, samples analyzed by Auric were subjected to an independent evaluation and verification study (see Data Verification, below).

Splits from 79 core intervals prepared at Auric that contained significant magnetite were submitted to Lerch Bros., Hibbing, Minnesota for determinations of magnetite percentage and Fe content of the magnetite.

11.3 Analytical Testing, 2007-2009

During the period of 2007-2009, while the company was led by Ken Pavlich, a significant amount of testing work was undertaken in order to verify the presence of precious metals on the project. Most of this work was done on four composite samples prepared from drill samples. A wide variety of tests were performed at numerous labs.

Test work performed by Mr. Michael Thomas at MHS Research near Denver, Colorado, during 2006-2007 appeared to provide promising results, similar to Auric's, with assays returning potentially ore-grade values. The methods and sample origins are not clearly known to the author, but procedures appear to include a nickel-sulfide assay and a carbonate pre-roast. Results from this testing deserve scrutiny and possible follow-up.

A careful review done by consulting geochemist Mr. Ken Bright in 2008 (Bright, 2008; Appendix 9) evaluated the following work:

- The Mineral Lab, Inc.: XRF for major and trace elements.
- Acme Analytical Labs: trace elements, Au Ag and Pt by wet analysis.
- Becquerel Labs: Neutron activation analysis.
- ALS Chemex: 24-hour cyanide leach using extra strength (2%) cyanide, a catalyst called Leachwell (a Pb nitrate), and continuous rolling.
- Acme Lab and ALS Chemex: fire assay with ICP finish of various sample sizes, re-testing of fire-assay slag, and use of a carbonate-flour roast and a Na-peroxide sinter prior to fire assaying.
- MHS Research (Mike Thomas): flour and potassium carbonate pre-treatment, with the resulting beads analyzed by Acme Lab by ICP-ES after parting and leaching.

The highest result was 84 ppb Au (0.0025 opt Au), detected by neutron activation at Beqcuerel Labs. Bright concluded that the four composite samples tested “do not evidence economically significant amounts of any noble metal” (Bright, 2008). He did allow that this could be due to a sampling anomaly, and recommended a thorough testing of about 75 samples from the project at various labs for various methods, including repeating the initial caustic fusion and cyanide leach tests at Auric Metallurgical Labs (See Mineral Processing and Metallurgical Testing, below).

In 2008-2009, Copper State Analytical Labs (CSAL) of Prescott, Arizona, was contracted to analyze the composite samples using a 3-acid /MIBK extraction, with 20-hour digestion in a Parr bomb pressurized vessel. If the results from this test are valid, they indicate potentially ore-grade levels of Au in the composite samples tested. CSAL’s methods and procedures should be thoroughly evaluated, and a new suite of samples tested. In addition, CSAL performed hot cyanide-leach tests during the same period, again achieving potentially ore-grade results in the El Capitan composite samples. These results deserve follow-up.

The author was not involved in the analytical work during 2007-2009 and cannot comment directly on sample preparation and security, although it is his opinion that the work was handled in a generally professional and reliable manner.

11.4 Analytical Testing, 2009-2011

Following the departure of Ken Pavlich, the company undertook further research on assay and extraction techniques. The author was largely uninvolved during this period and until a thorough review of this work can be done, he cannot verify sample preparation, security, or results, except for the June 2009 sampling and analysis managed by David Smith, described below.

11.4.1 June 2009 Surface Sampling and Testing

In June 2009, independent consulting geologist David Smith collected a suite of 10 surface samples from within the El Capitan pit area (Smith, 2009). Two quality-control samples—a field blank and a field duplicate—brought the total number of samples to 12. Approximately 25 pounds of each sample was collected, to provide sufficient material for repeated testing. The intent of this sampling was to return to the sites originally sampled by the author in January 2005, in order to re-test those samples that had initially generated interest for the drilling program when analyzed by Auric Metallurgical Labs. The 12 samples collected by David Smith were sent under chain of custody to RDI in Denver, Colorado, for sample preparation. Splits of these samples were then sent to four different labs: American Assay Lab in Sparks, Nevada; Hazen Research in Golden, Colorado; Auric Metallurgical Labs in Salt Lake City, Utah; and Copper State Analytical Labs (CSAL) in Prescott, Arizona.

American Assay ran a 60-gram fire assays for Au and Ag and a multi-element ICP package; all precious-metals results were below or near the method detection limits. Hazen Research performed both a 60-gram fire assay and a 5-gram atomic absorption analysis for Au and Ag; all results were below or near the method detection limits. Auric declined to analyze the samples.

11.4.2 Testing Review Report

In October 2009, consulting analytical chemist Dr. Noel Palmer performed a review of the test work done up to that time on the project (Palmer and Smith, 2009; Appendix 10). Palmer noted the positive results from American Assay in 2005. He reviewed Richard Daniele’s verification of the Auric caustic fusion assay method, concluding that “it shows the caustic fusion technique successfully being applied to El Capitan samples at two different labs and returning ore-grade numbers,” and raising a number of questions for follow-up. This report also made a thorough review of the work done during 2007-2009 and recommended that the recommendations in Bright (2008) be followed, and it noted the positive results from Parr-bomb tests and hot cyanide leaching done at CSAL.

11.4.3 Orlando Villa and Sundancer Resources

Mr. Orlando Villa performed analytical services for El Capitan Precious Metals for several years, through his company Sundancer Resources Inc. (SRI), now based in Phoenix, Arizona.

Splits from the 10 surface samples taken by David Smith in June 2009 (see above) were sent to Copper State Analytical Labs, where they were apparently analyzed by Villa using a custom fire assay method and submitted to CSAL for analysis. CSAL split the beads, analyzed one half, and sent the other half to IPL Labs of Vancouver, B.C., for duplicate analysis. IPL returned assays as high as 0.364 opt Au, and CSAL reported assays as high as 0.408 opt Au. The average grade of the El Capitan samples was 0.063 opt Au and 3.99 opt Ag. However, in the opinion of the author the results are not reliable and remain unverified for two reasons: 1) recent testing directed by the author has pointed out serious quality-control issues with SRI's analytical work; and 2) SRI's work was not supervised by an independent observer and was therefore not under chain of custody. Results of SRI's custom assay methods deserve further evaluation but have so far not proven to be sufficiently accurate, precise, nor repeatable (see below).

In addition to custom assay methods of various sorts, SRI apparently has performed smelting tests; one such test is reported by El Capitan to have resulted in a net sale of approximately 40 ounces Ag to refinery Gannon & Scott in 2011 (see Mineral Processing and Metallurgical Testing, below). As well, SRI is reported to have treated a sample with a high-temperature roast in a plasma furnace, returning potentially ore-grade results; this sample was obtained by ECPN staff from its bulk stockpile of El Capitan mineralized rock and is therefore not a chain-of-custody sample. The author cannot comment on sample preparation and security for these tests, since he was not involved in the testing, but is of the opinion that they deserve evaluation and follow-up.

11.5 Analytical Testing, 2011-Present

In October 2011, El Capitan Precious Metals approached the author to assist with further analytical testing on the project. The author and his associate David Smith have been continuously responsible for maintaining the drill samples under secure storage since drilling, but until late 2011 were only intermittently involved in analytical testing work. Since that time, the author, David Smith, and consulting geochemist Noel Palmer have begun conducting systematic analytical testing on the project at numerous labs, including some work at SRI as described below. El Capitan has commissioned additional analytical and extraction testing at Sundancer Resources; the author has not evaluated nor verified this additional SRI work.

11.5.1 Analytical Testing Stages 1-5

This work began in October 2011, with an attempt to validate one of SRI's custom fire assay methods, a large-sample (227 grams) assay with a pre-roast treatment and specialized flux. Named analytical testing Stages 1 through 5, this work was performed on two sets of samples: 1) 11 samples collected from the project by the author in October 2011, at the same sites and with the same sample numbers as those collected by David Smith in June 2009; and 2) 19 drill samples from the project, selected to be roughly representative of the different host rocks, skarn assemblages, magnetite and hematite content, and Auric assay results encountered in the drill holes. All samples were in storage at RDI in Denver, Colorado; RDI prepared splits and sent them to CSAL, SRI in care of CSAL, and Inspectorate Labs in Vancouver, B.C. This work is discussed in Palmer, et al, 2012b.

Stage 1 consisted of the author and/or Noel Palmer personally observing all analytical steps taken by Orlando Villa of SRI while performing his 227-gram custom fire assay method on the surface samples. Villa produced beads that were then analyzed by CSAL. All samples were under chain of custody, and the author can verify that the results are free from tampering. Stages 2 and 4 consisted of Orlando Villa running the same 227-gram method with improvements recommended by Noel Palmer on the surface samples (Stage 2) and on the drill samples (Stage 4) described above. These stages were not observed by independent observers. Stage 3 was intended to be screen fire assays of different screen-size fractions but was postponed until further information can be gathered. Stage 5 consisted of standard fire assay, multi-element ICP, and whole-rock major-oxide analyses to fully characterize the bulk chemistry of the samples. These tests generated potentially ore-grade values in Au; however, the experiment uncovered serious quality-control issues with SRI's work, and the author was unable to verify the SRI method in its current form as a viable test for precious metals on the project. Full details are available in Palmer et al (2012).

During this phase of testing, SRI analyzed material remaining from six of the Stage 1-5 samples and submitted the beads under another name to CSAL for analysis. The resulting assays showed excellent values in Au and Ag, averaging 0.105 opt Au with a high of 0.147 opt Au, and averaging 56.5 opt Ag, with a high of 206.5 opt Ag. However, the author cannot verify the results of these assays, for the following seven reasons: 1) the samples contain no mineralogic evidence to support such extremely high Ag values (206.5 opt Ag is equivalent to 0.65% Ag, which would be immediately obvious in the sample as native Ag or Ag sulfide minerals); 2) although the samples were under intact chain of custody to CSAL, this chain of custody was broken once Orlando Villa worked on this material without the direct observation of the author or Noel Palmer; 3) except for one sample, the Au assays are consistently higher (by a factor of 2 to 23) than results for the same samples tested under direct observation and intact chain of custody during Stage 1, as well as during the unobserved and therefore broken chain of custody during Stage 4; 4) the assays included 5.4 opt Ag in a certified pulp blank (CDN-BL-9 from CDN Resource Labs of Vancouver, B.C.) consisting of a blank granitic material, indicating continued quality-control problems with the method and/or SRI's work; 5) the method included a very large Ag inquart, which, if not measured extremely accurately, can lead to erroneous results for both Au and Ag; 6) the method used by CSAL for determination of Ag content in the beads is not optimum for a large Ag inquart and is subject to errors; and 7) the results of Stage 1, 2, and 4 testing revealed serious quality-control issues with SRI's work on the method reportedly used for these assays, rendering unreliable any SRI results from this method produced without independent observation.

11.5.2 Analytical Testing Stage 6—SEM and Microprobe Work

Stage 6 analytical testing consisted of gravity-separation tests followed by scanning electron microscope (SEM) work and electron microprobe (EPMA) analyses on the concentrates, and neutron activation analysis (NAA) on the concentrates, tails, and quality-control samples (Smith et al, 2012). Two 10-kg composite samples were each made from two sets of 20 drill samples: one set with high hematite content, the other with high Au assays according to Auric's drill-sample assay results. The two composites were ground and put through wet gravity-separation tests at RDI, using a Diester gravity-separation table and then upgraded on a Gemeni gravity table. Concentrates from both samples were sent to Noel Palmer, and the tails retained in secure storage at RDI. All samples were maintained under intact chain of custody.

SEM work was undertaken at two facilities: CAMCOR at the University of Oregon in Eugene, Oregon; and ICAL at Montana State University in Bozeman, Montana. This work located and verified the presence of Au on the project. At both CAMCOR and ICAL, <10-micron grains of Au were imaged, either as individual solitary grains or as inclusions within magnetite (Figures 8, 9) At both CAMCOR and ICAL, the presence of Au was confirmed by energy-dispersive spectrophotometry (EDS) analysis. Although this gives no indication of bulk precious-metals grades on the project, it is one of the few unequivocal and verifiable pieces of evidence that proves the presence of Au at the El Capitan project. In the author's opinion, this work sets the foundation for continued investigation of the geochemistry of precious-metals on the project.

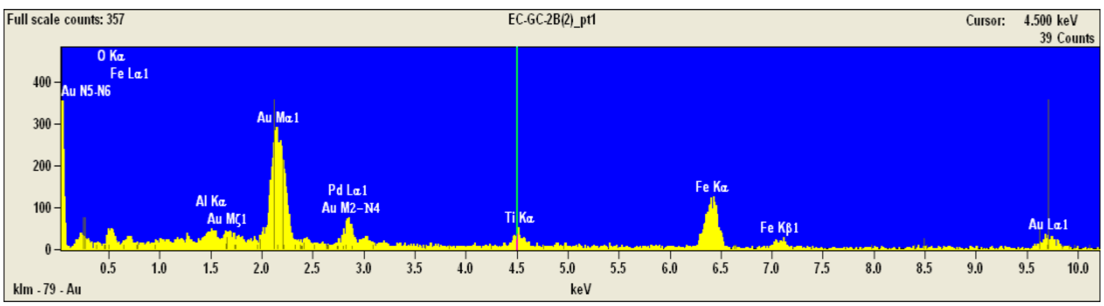

Figure 8. Au crystal in magnetite with accompanying EDS spectrum, sample EC-GC-2.
From CAMCOR, University of Oregon.

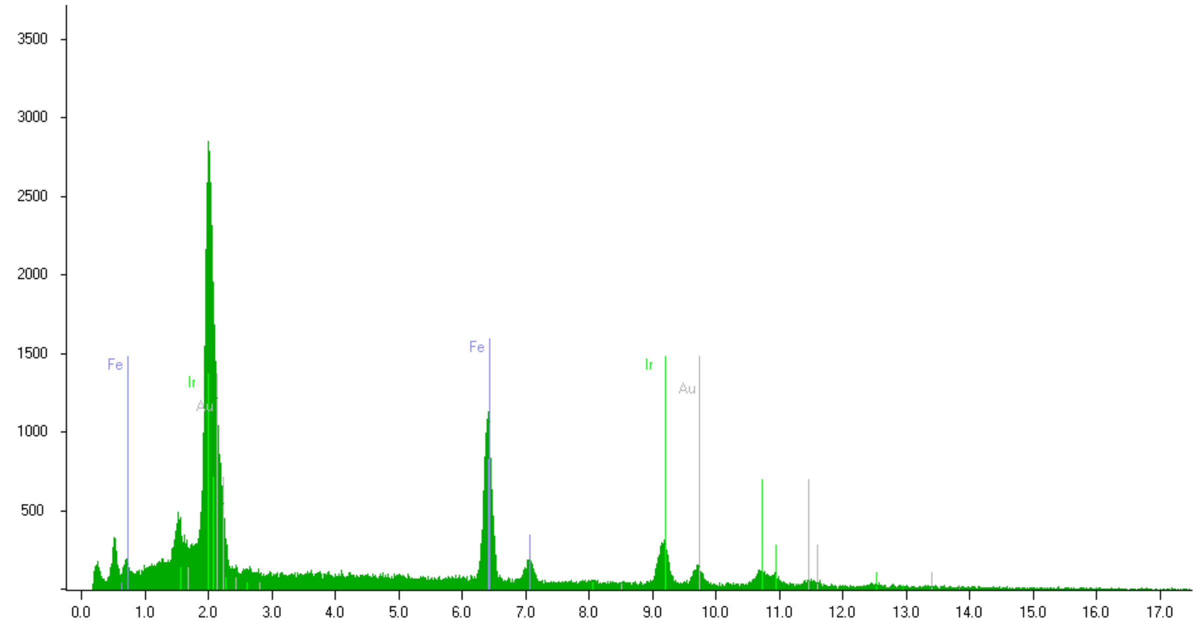

Figure 9. Au crystal on magnetite with accompanying EDS spectrum, EC-GC-1.
From ICAL, Montana State University.

11.5.3 Analytical Testing Stage 7—SRI Custom Fire Assay

Stage 7 testing consisted of an attempt to verify the smaller (30-gram) version of SRI's custom fire assay method investigated in Stages 1-5 (Palmer, et al, 2012 a). For this work, 39 samples were tested: 21 drill samples and 18 quality-control samples, including two standards, one pulp blank, one field blank, and four replicates. All samples were prepared by RDI and sent under chain of custody to the lab of Chris Christofferson in Smelterville, Idaho, where Noel Palmer visited and supervised the beginning of verification testing. Christofferson's was the only independent lab found willing to run such a custom fire assay. Splits of the same 39 samples were also sent to Orlando Villa of SRI for analysis by the same method, with Christofferson's lab providing analysis of SRI's beads. Although not under chain of custody (SRI's work was not observed), it was thought advantageous to have SRI analyses to compare with Christofferson's using the same method.

Results of this testing were inconclusive and did not verify the SRI custom fire assay as a viable testing method. This was due to poor quality control results: both labs failed to return acceptable results on the QAQC standards, with results far out of control limits; and both labs were unable to acceptably replicate the two sets of triplicate samples.

11.5.4 Analytical Testing Stage 8—SRI 450-g Extraction

The initial intent of Stage 8 testing was to validate a custom 450-gram custom extraction method on samples from the project (Palmer and Smith, 2012). The method was developed by Orlando Villa of Sundancer Resources, a non-independent lab that does testing and research for El Capitan Precious Metals. Because of poor previous results by Villa, Stage 8 was not completed.

Sample material for Stage 8 was collected from the project by David Smith on May 11, 2012 and consisted of a bulk sample of approximately 4.5 tons of magnetite-dominant material and 1.5 tons of hematite-dominant material. The material was collected with a backhoe, placed in four large supersacks, and shipped to Hazen Research in Denver, Colorado under chain of custody. Bags 1, 3, and 4 were magnetite-rich, and bag 2 was hematite-rich; in subsequent communications, Hazen Research referred to the latter as the "Bag 2" sample. Hazen performed crushing, blending, and gravity separation testing.

On June 26-28, 2012, the author and Noel Palmer observed Orlando Villa perform his 450-gram custom extraction method on interim samples of Stage 8 material from the El Capitan project. This was an interim demonstration of the method for investment banking firm Houlihan-Lokey's benefit. In attendance were El Capitan officers John Stapleton and Chuck Mottley, a technician videotaping the event, Villa's lab technician, and observers from Houlihan-Lokey.

Samples analyzed were gravity concentrates produced by Hazen Research from hematite-rich Bag 2 material from the El Capitan project. No QAQC samples were included in the sample suite, as this was intended to simply be a demonstration.

Using his extraction method, Villa produced two beads, which were sent to Inspectorate Labs in Sparks, Nevada for analysis. When calculated back to head grade of the starting sample, these results are not economic grades for Au: 0.0027 opt Au Sample 12 head grade; and 0.0013 opt Au Sample 34 head grade. As a result of these poor results, El Capitan decided to terminate Stage 8 testing.

11.5.5 Analytical Testing Stage 9—MSRDI Cyanide Bottle Rolls

Stage 9 testing consisted of cyanide bottle roll tests at Mountain States Research and Development during May and June 2013 (MSRDI, 2013). Testing was done on a suite of six samples that included three samples from the project collected by the author from El Capitan's drill-sample archive in Denver, Colorado, and three QAQC samples. The focus of the testing was to duplicate cyanide bottle-roll tests previously done at CSAL. Two samples are reported by MSRDI to contain Au and Ag, but both were QAQC standards. Results showed no extraction of precious metals from the El Capitan samples.

11.5.6 Analytical Testing Stage 10—CSAL Pressure Digestion

Stage 10 consisted of pressure-digestion-vessel testing done at CSAL in June 2013 (Smith, et al, 2012). This testing was done on a suite of 20 samples from El Capitan Precious Metals, including drill cuttings from the El Capitan project, surface material from the project, and quality-control samples. All samples were under chain of custody, assembled by the author from samples in storage at El Capitan's sample archive in Denver, Colorado, and from previously processed material in storage at Hazen Research in Denver. Blanks, standards, and duplicates were included in the sample suite as quality-control measures.

CSAL performed pressure digestion tests using Parr bomb pressure vessels under a proprietary method. The complete procedure is unknown to the author, but in general involves digesting a small sample under high pressure at elevated temperature.

The results initially appeared favorable. Although not high grade, results for Au indicated potentially ore-grade material in six of the 11 samples that originated from the El Capitan project. Although very high in some samples, Pt values were unreliable due to quality control problems. QAQC results for this testing were acceptable. However, subsequent testing during Stages 11 and 12 (see below) showed serious quality-control issues at CSAL, compromising the Stage 10 results. The author does not recommend further work with CSAL.

11.5.7 Analytical Testing Stage 11—CSAL Cyanide Bottle Rolls

Stage 11 testing consisted of cyanide bottle-roll testing done at Copper State Analytical Labs (Smith and Smith, 2013). During July and August 2013, CSAL tested 20 samples from El Capitan Precious Metals. These samples included drill cuttings from the El Capitan project, surface material from the project, and quality-control samples, all under chain of custody and assembled by the author from samples in storage at El Capitan's sample archive in Denver, Colorado, and from previously processed material in storage at Hazen Research in Denver. Blanks, standards, and duplicates were included in the sample suite as quality-control measures.

CSAL performed cyanide bottle-roll tests in two batches according to the protocol set out by Ken Pavlich in 2009 (Appendix 1), with the two variations: 1) sample size was 100 g instead of 1 kg due to consumption of sample by Mountain States Lab; and 2) tests were stopped at 14 days because previous testing indicated no increase in gold during days 15-21. The cyanide bottle-roll tests ran for 14 days, with readings of Au, Ag, Pt, and Pd at days 3, 7, and 14. Carbon was added as an aid to gold recovery; at the end of the test, the carbon was filtered and fire assayed. The final value for precious metals is the sum of the direct ICP reading of the solutions and the fire assay of the carbon.

Results of the testing were mixed, but showed the presence of potentially ore-grade Au in Batch 1. This group of samples returned values of Au ranging up to 0.093 opt Au, in sample 169720 from drill hole EC-05-05, 15-41 feet. The other samples in this batch showed similar levels of Au. Although not high in grade, five of the six samples were over 0.01 opt Au, a typical cutoff grade for large open-pit gold mines in the U.S. QAQC samples were acceptable for Batch 1.

However, QAQC sample results for Batch 2 were far out of control limits, invalidating these results, compromising Stage 11 Batch 1 results, and indicating serious quality-control issues at CSAL. Blank sample results showed no contamination, but standards for Au were far out of control limits and duplicate results were wildly different. As a result, the author recommended no further work at CSAL. Instead, it was recommended that cyanide bottle-roll tests be conducted at a separate, reputable metallurgical laboratory (see Stage 13 testing, below).

11.5.8 Analytical Testing Stage 12—Weaver Creek Gravity Concentration

Stage 12 testing consisted of processing two samples from the project at a gravity processing plant near Phoenix, Arizona, as requested by El Capitan Precious Metals (Smith and Smith, 2014a).

During July 30-31, 2013, David Smith observed the processing of two samples of material from the El Capitan project at a processing plant near Weaver Creek, Arizona, about 80 miles northwest of Phoenix. The plant is owned by Larry Lozensky, a shareholder of El Capitan Precious Metals, and is used to produce placer gold from alluvial gravels onsite. David Smith observed the plant operating and reported results from chain-of-custody samples from the project.

Two samples were analyzed. These were taken from the bulk samples collected by David Smith from the El Capitan project in May 2012 for Stage 8, and processed at Hazen Research in Denver, Colorado. Both samples were head grade and were not previously concentrated at Hazen Research. On July 30, 600 pounds of the hematite-rich material was processed through the Weaver Creek plant. The following day, 1,440 lbs of magnetite-rich material was processed. Processing generated six samples (two concentrate, two magnetic fraction, and two tails), to which three quality-control samples were added to make a total of nine samples sent to Copper State Analytical Labs (CSAL) and to Sundancer Research (SRI). Samples were maintained under chain of custody until delivered to the labs.

Results of the testing indicated that the processing plant was not effective at upgrading precious metals values of the head-grade material tested. Testing at CSAL consisted of cyanide bottle-rolls and pressure digestion tests. (Results from Stages 10 and 11 were pending during this time and the resulting QAQC problems at CSAL were not yet apparent.) Results for the cyanide bottle roll tests were all below detection limit for Au. Results for Pt were more positive, returning up to 0.029 opt Pt (calculated head grade), in the tails from the hematite sample. However, these results should be treated with caution since the QAQC result for Pt for the standard was substantially lower than the accepted value, because Pt is generally known for its low amenability to cyanide leach, and because of CSAL's history of poor quality control. Pressure-digestion results from CSAL were far out of control limits on blanks and standards and are not reliable.

Testing at SRI consisted of fire assay and a custom Ag-Pb collection assay. Results from SRI's fire assay showed contamination in the blank for Au, Ag, and Pt, and for the standard returned results far out of control limits for Au, Pt, and Pd. Results from SRI's Ag-Pb collection method were similar, showing high-grade Au and Ag in the blanks, and returning results far out of control limits for Au in the standard. The results for Au and Ag in the blanks, particularly in the Ag-Pb collection tests, indicate massive lab contamination for both elements. These values are up to 0.281 opt Au and 9.22 opt Ag in materials certified from a reputable supplier (CDN Resource Labs of Vancouver, B.C.) to be barren of gold and silver. Based on these and past results and on the fact that SRI is not an independent lab, it is the author's opinion that all SRI test results should be treated with great care: results should not be released to the public nor form the basis for corporate decisions without independent verification.

11.5.9 Analytical Testing Stage 13—McLelland Labs Cyanide Bottle Rolls

Stage 13 testing consisted of cyanide bottle-roll tests conducted at McLelland Labs of Reno, Nevada, during October 2013 (Smith and Smith, 2014b). The intent of this testing was to replicate the apparently positive cyanide bottle-roll results achieved by CSAL in Stage 11 but compromised by poor quality-control results at CSAL.

The Stage 13 samples included drill cuttings from the El Capitan project, surface material from the project, and quality-control samples. All samples were under chain of custody. Independent contractor Mr. Court Brewster assembled the sample suite from samples in storage at El Capitan's sample archive in Denver, Colorado, and from previously processed material in storage at Hazen Research in Denver. This sample suite was essentially the same as that used in Stage 11 (CSAL cyanide bottle rolls) with minor modifications as necessary to accommodate sample shortages in some drill intervals. Blanks, standards, and duplicates were included in the sample suite as quality-control measures.

McLelland Labs performed cyanide bottle-roll tests according to the protocol set out by Ken Pavlich in 2009 (Appendix 1), with two variations: 1) tests were stopped at 14 days because previous testing at Copper State Analytical Labs (CSAL) indicated no increase in gold during days 15-21; and 2) test were run at ambient room temperature due to the absence of heating equipment. A sample size of 1 kg was used. The cyanide bottle-roll tests ran for 14 days, with readings of Au, Ag, Pt, and Pd at 6 hours and at days 1, 2, 3, 7, 10, and 14. Based on advice from McLelland, carbon was not added as an aid to gold recovery. All QAQC results were acceptable, indicating excellent quality control at McLelland Labs.

The results showed no presence of Au, Ag, Pt, or Pd in the samples analyzed. It appears that the initially positive results from CSAL were spurious. As a cautionary measure, the author has recommended that the company have the two labs compare methods to try to identify and potentially repeat at McLelland any variation that may have aided CSAL's results.

11.5.10 Analytical Testing at SRI

As discussed below, El Capitan Precious Metals has reported numerous results based on the work of Orlando Villa at Sundancer Resources (SRI). The author has observed and reported on some of SRI's work in Stages 1-4, 8, and 12 (Palmer et al, 2012b; Palmer and Smith, 2012; Smith and Smith, 2014a) but otherwise has not been involved in this work. Based on poor SRI results reported by the author, serious quality-control issues with the lab's results, and on the fact that SRI is not an independent lab, it is the author's opinion that all SRI test results should be treated with great care: results should not be released to the public nor form the basis for corporate decisions without independent verification.

12 Data Verification

12.1 Independent Evaluation and Verification of Auric Caustic Fusion Assay Results

Because Auric's caustic fusion method is not a standard method used in the mining industry, El Capitan Precious Metals retained the services of a qualified person (QP), Mr. Richard Daniele, Metallurgical Engineer, of Daniele Metal-Mineral Services, Lakewood, Colorado, to undertake an independent third-party verification of the Auric results. Daniele was provided with geologic drill logs for the 12 Stage 1 drill holes; from these holes he selected 15 core intervals that he considered representative of the deposit. Following his introduction to the caustic fusion method in the Auric laboratory, one-quarter of the sawed core from the 15 core intervals was sent by the onsite consulting geologist to Daniele under chain of custody directly from the secure storage location. Daniele selected an independent laboratory run by Mr. Michael J. Wendell, Wendell and Company, Centennial, Colorado, at which the independent verification assays were performed. The 15 core interval samples were crushed, ground to approximately 80% minus 200 mesh, and split into two 100-gram samples. Fifteen duplicate 100-gram samples in random-numbered bags (DD-1 through DD-15) with no reference to core intervals were provided to Auric and Wendell in order to achieve blind analyses from both laboratories.

In his review of this work, Noel Palmer raised several questions about this work, such as the difference in magnetic separation procedures between Auric and Wendell, analytical issues with lanthanum, and the lack of reported quality-control sample results. These issues should be addressed in any repetition of the Auric caustic fusion assay method.

Nevertheless, it appears that the Daniele and Wendell results, although somewhat lower than the Auric results, provide an independent verification of the Auric results. Daniele concluded in his September 1, 2005 report (Danielle, 2005; Appendix 11) that the caustic fusion assay results performed at Wendell and Company demonstrated that the Auric procedure is a valid analytical procedure for difficult-to-analyze materials. Although the Wendell results averaged lower than the Auric results (30% lower for Au, 35% lower for Pt), Daniele concluded that Wendell's lack of familiarity with the use of lanthanum in solutions for atomic absorption spectrophotometer analyses, as employed by Auric in their caustic fusion procedure, resulted in the lower values. It is Daniele's opinion that greater familiarity with the lanthanum procedure would show improved results and a closer fit with the Auric results.

It is the author's opinion, subject to the uncertainties raised by Noel Palmer (Palmer and Smith, 2009), that the Auric caustic fusion assays on drill samples may be considered adequate for the current state of the project.

12.2 Data Verification, 2007-2009

The author has not attempted to verify the data produced during Ken Pavlich's leadership of the company, from 2007 to 2009. It is his opinion that the data contained in Bright (2008) is sound and verifiable, but the author has not undertaken to verify that data.

12.3 Data Verification, 2009-2011

The author has not attempted to verify the data produced from 2009-2011, with the exception of results from American Assay and Hazen research done on the 12 surface samples collected by David Smith in June 2009, as described above. Other results deserve attention, verification (if possible), and replication, as noted above and in Recommendations, below.

12.4 Data Verification, 2011-Present

Except for some sets of analyses done under broken chain of custody as noted above (Analytical Testing, 2011-Present) all work done under the author's supervision has been verified by the author, David Smith, or Noel Palmer by virtue of intact sample chain of custody combined with either physical presence at the site of analysis or analysis by trusted commercial laboratories. It is the author's opinion that the data generated under his direction is adequate for this technical report.

13 Mineral Processing and Metallurgical Testing

13.1 Auric Metallurgical Labs Hydrometallurgical Extractions, 2005

Auric Metallurgical Labs submitted a report to El Capitan dated May 15, 2005 which summarized the results of five hydrometallurgical extraction protocols on six surface samples collected from outcrop in the shallow open pit of the main El Capitan deposit. Auric concluded that the samples were particularly amenable to sodium cyanide, sodium cyanide followed by chlorination, and sodium thiosulfate leaches. The Au recoveries ranged from 66.7-92.5% of the calculated caustic fusion head grades and averaged 79.6%. The Pt recoveries ranged from 58.7-78.0% and averaged 67.4%. Table 2 is a summary of the test results on these three protocols, and Appendix 8 is the Auric report.

Table 2. Auric Metallurgical Labs hydrometallurgical extraction results, ounces per ton

	Au (opt)					Pt (opt)			
Sample	Calc. Head	Na Cyanide	Na Cyan + Cl	Na Thiosulfate	Avg. % Recov.	Calc. Head	Na Cyanide	Na Thiosulfate	Avg. % Recov.
EC-1	0.017	0.011	0.014	0.012	72.6	0.023	0.019	0.011	65.2
EC-10	0.086	0.079	0.08	0.081	98.3	0.05	0.046	0.032	78
EC-11	0.089	0.081	0.084	0.082	92.5	0.023	0.016	0.011	58.7
EC-16	0.015	0.009	0.011	0.01	66.7	0.044	0.03	0.03	68.2
EC-22	0.018	0.011	0.014	0.011	66.7	0.015	0.009	0.01	63.4
EC-24	0.029	0.023	0.025	0.022	80.5	0.019	0.016	0.011	71.1

13.2 SRI Smelting and Extraction Tests, 2011

El Capitan Precious Metals has reported on two occasions (press releases of April 6, 2011 and July 14, 2011) the successful direct smelting of concentrates from the El Capitan project. Documents provided by the company state that the April 2011results were generated from 200 pounds of 10:1 concentrate (apparently a sample from several tons of gravity concentrates produced by the company at the project in years past) and the July 2011 results from 20 pounds of the same concentrates. The April 2011 press release reported recovery of 1.2 opt Au equivalent calculated back to head grade, and the July 2011 press release reported "significant values that are consistent with those reported earlier this year." The author was not involved in this work and cannot comment on its results. These results deserve scrutiny and replication; El Capitan Precious Metals initially requested that the author undertake an independent verification of SRI's smelting methods, to be conducted as Stage 8 testing, but subsequently terminated this work after initial poor results (Palmer and Smith, 2012).

Since then, the company has reported additional results based on SRI's work (press releases of November 7, 2013; December 20, 2013; January 5, 2014). These press releases include mention of a viable precious-metals extraction method but the author is unaware of independent third-party verification of the method. Apart from results reported for Stages 8 and 12 testing (above), the author has not been involved in this work and cannot comment on its results.

Based on results from SRI during Stages 1-4, 8, and 12 (Palmer et al, 2012b; Palmer and Smith, 2012; Smith and Smith, 2014a), on serious quality-control issues with the lab's results, and on the fact that SRI is not an independent lab, it is the author's opinion that all SRI test results should be treated with great care: results should not be released to the public nor form the basis for corporate decisions without independent verification.

13.3 Auric Metallurgical Labs Hydrometallurgical Extractions, 2019

The author collected two bulk samples (EC-10, EC-11) from bedrock on the El Capitan deposit and delivered them under chain of custody to Auric Metallurgical Labs in May 2019. Auric performed bench-scale (2,500-gram) sodium cyanide and sodium thiosulfate vat leach extractions on head ore and non-magnetic (hematite-dominant) concentrate samples for 72 and 96 hours. Test conditions used 4,000 ml DI water yielding 38.0-38.5% solids slurry; 16-20 g NaOH to establish pH 12.5-13.5; 5.0 g NaCN (0.125%) and 99.2 g Na2S2O3.5H2O (0.1M); and temperature 20°C. The tests produced Au prills using activated carbon adsorption and Au recoveries ranged from 73.3% to 91.6% (Table 3). These extractions confirmed results reported by Auric on six samples collected from outcrop in 2005. The 2005 and 2019 hydrometallurgical leach extraction results from Auric represent the most positive analytical or extraction results obtained on El Capitan potential ores and support arguments for potential economic commercial production of Au, and potentially other precious metals.

Table 3

Bench-scale leach tests; 2,500 gram samples

Sample	Assay (opt Au)	Leach	Time (hours)	Recovery
EC-10 Head	0.083	NaCN*	72	88.30%
EC-11 Head	0.076	"	72	84.40%
EC-10 Non-mag	0.189	"	72	91.60%
EC-11 Non-mag	0.266	"	72	89.90%
EC-10-Non-mag	0.189	Na2S2O3.5H2O**	96	82.90%
EC-11 Non-mag	0.266	"	96	73.30%
*Sodium cyanide				
**Sodium thiosulfate				

13.4 AuraSource Inc.

The author met with Mr. Philip Liu, Chairman and CEO of AuraSource Inc., at his office in Phoenix, Arizona on March 3, 2021. Mr. Liu described the AuraSource proprietary technology and equipment that is housed in China and that has reportedly been used to extract Au and Pt from an El Capitan sample, as well as samples from the Iron Duke magnetite skarn deposit in New Mexico. (The author examined Iron Duke on March 5, 2022 and found that the geology of the deposit is extremely similar to El Capitan.) The AuraSource method involves shockwave ultrafine grinding, magnetic and gravity concentration, a vacuum continuous roasting pyrometallurgical process, and a pressure digestion with supercritical fluid extraction hydrometallurgocal process. Table 4 shows an analytical result on an El Capitan concentrate using ICP-AES detection of 476.2 g/t Au (13.8 opt Au) and 283.1 g/t Pt (8.2 opt Pt). These results are reported purely to indicate that the AuraSource technology should be subjected to independent third party verification. Until the AuraSource technology and equipment have been brought to an accessible location in North America with chain of custody samples processed at this site, witnessed by the author, and confirmed by an independent laboratory, the author is unable to render an opinion on the viability of the AuiraSource technology.

Table 4

Institute of New Materials Metallurgy*

Physical and Chemical Testing Center, Northwest Institute of Mining and Metallurgy

No. 19 Renmin Road, Baiyin City, Gansu Province, 730900, China

Contact number: 0943-8227662/8261765

Fax: 0943-8261765

Contact persons: Pang Zenye, Zhang Chenjie

Report Number: NW20210208001, February 8, 2021

Approved by: Zhang Zhuzao

Customer: Zhijin NewMaterial, Baiyin City Gansu, China

Sample	Material	Detection	g/t Au	g/t Pt
ZK001	El Capitan Concentrate	ICP-AES	476.2	283.1
ZK002	Iron Duke Concentrate	ICP-AES	232	2142

* The Institute guarantees the fairness, science, independence, and honesty of the test, is reponnsible for the results, and keeps samples confidential.

14 Mineral Resource Estimate

A resource calculation based on El Capitan drill hole assays was completed by Gemcom Software International in their Vancouver, B.C., Canada, offices using their GEMS version 6.0.3 software. The author and two other consultants supervised the Gemcom resource calculations. The data used were caustic fusion assay results from Auric Metallurgical Labs on diamond drill core, open hole rotary, and reverse circulation samples from 37 vertical drill holes spaced approximately 400 feet apart and totaling 12,763.5 feet of drilling (Table 1, Appendix 6).

The parameters used in the Gemcom computer model were as follows:

- The block model used blocks 100 feet square by 20 feet high
- Interpolation was by inverse distance squared
- Composites were based on 20-foot benches
- A 500-foot spherical search radius was used with no rock-type or directional limiting
- Interpolation used a minimum of two composites and a maximum of 12, with a maximum of four composites from any give drill hole

- The extent of the model in mine coordinates in feet (Table 1) was: E 47,000 – E 52,200; N 47,700 – N 50,600; vertical elevations 6,100-6,960 feet.

It is believed most reasonable to use a 0.01 ounces per ton (opt) Au cut-off grade. At this cut-off the calculation results are: 141,444,000 short tons grading 0.020 opt Au, 0.205 opt Ag, 0.011 opt Pt, with a contained 2,769,106 ounces Au; 28,997,185 ounces Ag; and 1,517,868 ounces Pt (Table 5).

Using a 0.02 opt Au cut-off, the calculation results are: 47,121,100 short tons grading 0.029 opt Au, 0.267 opt Ag, 0.013 opt Pt with a contained 1,344,452 ounces Au, 12,572,655 ounces Ag, 594,485 ounces Pt (Tables 5).

It should be noted that drill results show that the deposit is apparently closed on the north, east, and south sides but that significant values in drill hole EC-06-37 (Figure 7) indicate that the deposit is still open to the west. Additional drilling is recommended to close the deposit on the west side.

It is the author's opinion that the above calculation results allow the El Capitan deposit to be classified as a "measured resource" based on the Canadian National Instrument 43-101 definition: "…can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit…drill holes are spaced closely enough for geological and grade continuity to be reasonably assumed."

It should be emphasized that this resource calculation relies entirely on Auric Metallurgical Labs analyses using a non-standard testing method, and on the report by Mr. Richard Danielle (Danielle, 2005) presenting the independent verification of the Auric caustic-fusion assay method.

Table 5

El Capitan tonnage, Au, Pt grades, contained ounces, ounces/ton, at Au cut-off grades

Au cut-off (opt)	Tonnage	Au ounces	Pt ounces	Au (opt)	Pt (opt)
0.03	13,326,000	548,032	184,271	0.041	0.014
0.02	47,127,000	1,344,452	594,485	0.029	0.013
0.01	141,445,000	2,769,106	1,517,868	0.02	0.011

13 Adjacent Properties

The El Capitan project has no adjacent properties as defined by NI 43-101.

14 Other Relevant Data and Information

The company has generated significant data and information that has not been reviewed by the author. A thorough review of all past testing should be done to choose potentially promising assay and extraction methods for replication and verification, in addition to those listed in this report.

15 Interpretation and Conclusions

El Capitan Precious Metals Inc. has carried out a thorough exploration program, including 37 holes of exploration drilling totaling 12,763.5 feet, on the El Capitan project. Drill samples have been logged in detail and maintained under strict chain of custody, and caustic fusion assay results have been satisfactorily verified at an independent third-party laboratory under the supervision of a Qualified Person. Other than the independently verified caustic fusion analytical results from Auric Metallurgical Labs, no other method has proved consistently reliable or verifiable. Standard fire assays have generally produced low values.

El Capitan is a Au-Pt-bearing magnetite skarn deposit and, as such, holds potential for production of both a magnetite concentrate iron ore and extracted Au and Pt. Magnetite is a strongly magnetic mineral that should produce a >62% total iron concentate by simple magnetic separation; with Si, Al, P, S impurities within the range of commercial iron ores, El Capitan could produce a commercial iron ore product.

The presence of Au at El Capitan has been unequivocally proven by scanning electron microscope results, which have generated photographs and spectra identifying Au in chain of custody gravity concentrates from drill samples on the project.

Hydrometallurgical extractions by Auric Metallurgical in 2005 and 2019 using sodium cyanide and sodium thiosulfate leaches on Au head ore grades of 0.017-0.089 opt Au and non-magnetic concentrates of 0.189-0.266 opt Au have produced impressive recoveries in the range 72.6-98.3%. Extractions on Pt head grades of 0.015-0.44 opt Pt have also resulted in good recoveries in the range 63.4-78%. To date, hydrometallurgy appears to hold the best promise for potential commercial production of precious metals. In addition, although requiring verification, the AuraSouce Inc. pyromettalurgical and hydrometallurgical procedures may hold promise.

A resource calculation has been completed by a recognized mining software company. The El Capitan deposit qualifies as an "measured resource" under the NI 43-101 definition. At a 0.01 ounces per ton (opt) Au cut-off grade, the calculated results are: 141,444,000 short tons grading 0.020 opt Au, 0.011 opt Pt, with a contained 2,769,106 ounces Au and 1,517,868 ounces Pt (Table 5).

15.1 Exploration Potential

The El Capitan deposit represents a fortuitous exposure of mineralization that lies beneath a cap of barren limestone. Had the deposit not been exposed by erosion it may not have been discovered. Figure 10 is a general gologic map of the area surrounding the El Capitan deposit. The map shows a 12 $mi.^2$, north-south band of Permian limestone and quartz sandstone lying between a Miocene aplite intrusion to the east and rhyolitic volcanics to the west; the volcanics lie as cover rocks over the Permian limestone and quartz sandstone. The El Capitan deposit is a magnetite skarn that represents mineralization and replacement of Permian limestone host rocks by hydrothermal fluids probably derived from the aplite intrusion. This being the case, the entire 12 mi^2 area of Permian limestone and quartz sandstone must be considered prospective for additional El Capitan-type deposits.

An airborne hyperspectral survey over a 35-square mile area surrounding the El Capitan property by Earth Search Sciences, Inc. in February 2006 identified 24 anomalies of high iron content with hematite/goethite spectral signatures; hematite and goethite are oxidized equivalents of magnetite. A total of 38 samples were collected by the author from outcropping mineralization or alteration at the 24 anomaly locations and submitted for caustic fusion assay to Auric Metallurgical Labs. Of 38 samples collected, Auric reported potential ore-grade results on 16 samples that ranged 0.020-2.02 opt Au and 36 that ranged 0.033-0.074 opt Pt.

Two areas have been designated by the author as Priority #1 Exploration Areas:

- A 3.4 $mi.^2$ area stretching to the east and west from the El Capitan deposit (Fig. 10), that includes sample locations AN 6 and AN 8. At AN 6, one mile southeast of El Capitan, abundant magnetite/hematite float covers a wide area; three samples here assayed 0.022-2.071 opt Au. At AN 8, one mile to the southwest of El Capitan, in an area of abundant float, a 10-foot-wide hematite-calcite zone is exposed in a trench; one sample here assayed 0.165 opt Au. One hundred unpatented claims covering this area were staked and recorded by El Capitan Precious Metals Inc. on March 9-11, 2022.
- A 2.2 $mi.^2$ area surrounding the Weddige Prospect, 2.8 mi to the north of El Capitan (Fig. 10), that includes an outcrop of El Capitan-type magnetite skarn and abundant float with four samples that assayed 0.021-0.025 opt Au.

In adddition, 16 hyperspectral anomalies located over a north-south, 2-mile-lomg belt along the base of the overlying volcanics are commonly characterized by hematite-bearing fractures cutting the volcanics. This mineralization could reflect underlying magnetite skarn mineralization.

A pre-2005 ground magnetic survey over the El Capitan deposit area showed magnetic anomalies over the deposit as well as others to the east and west. This survey is considered preliminary but it demonstrated the effectiveness of magnetic surveying in the area. The author recommends that El Capitan Precious Metals conduct a detailed magnetic survey over the entire 12 $mi.^2$ area of Permian limestone and quartz sandstone.

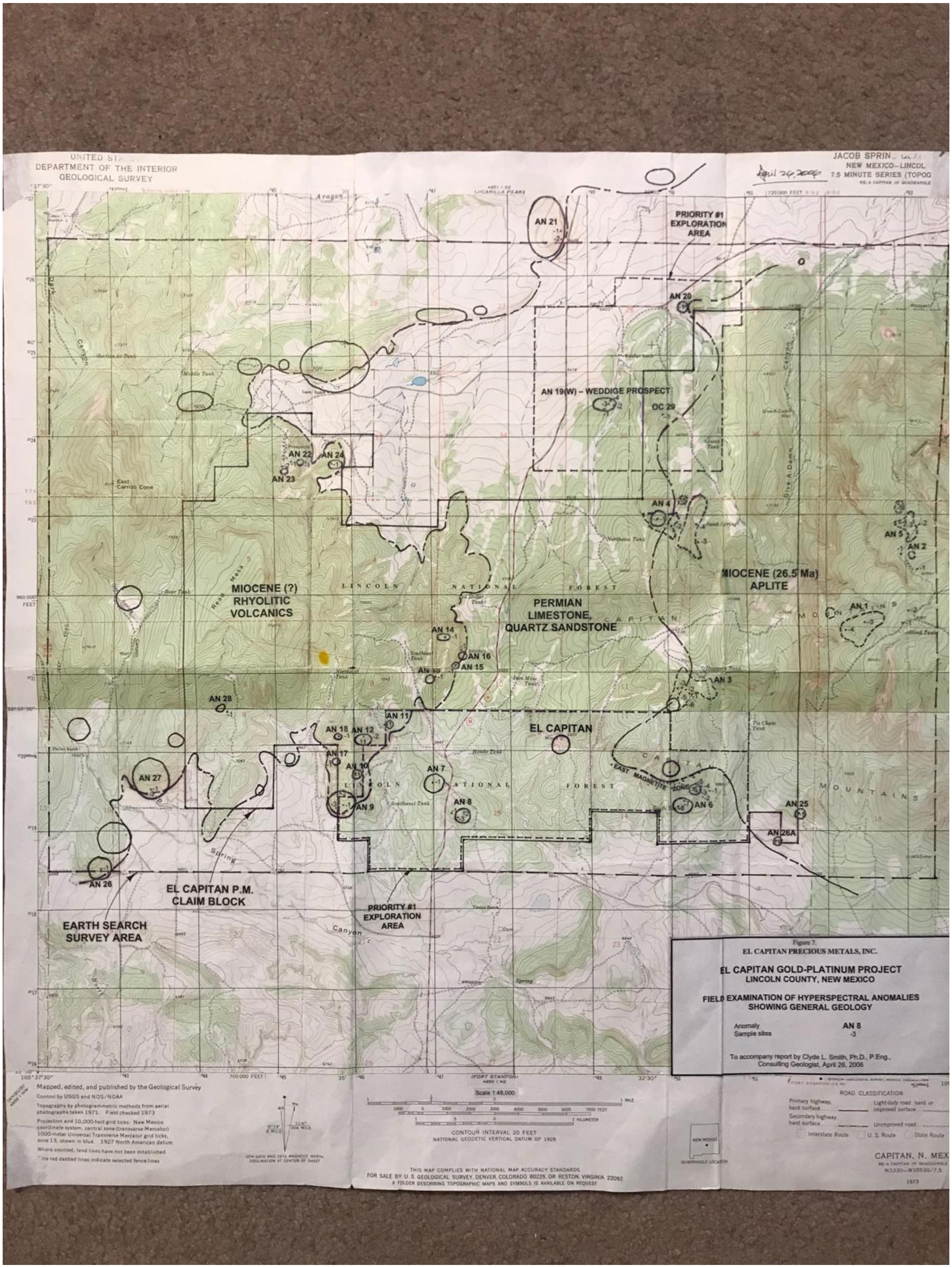
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
NEW MEXICO–LINCOL
7.5 MINUTE SERIES (TOPOG
PRIORITY #1
EXPLORATION
AREA
AN 21
AN 20
AN 19(W) – WEDDIGE PROSPECT
OC 29
AN 22
AN 24
AN 23
AN 4
AN 5
AN 2
MIOCENE (?)
RHYOLITIC
VOLCANICS
PERMIAN
LIMESTONE,
QUARTZ SANDSTONE
MIOCENE (26.5 Ma)
APLITE
AN 1
AN 14
AN 16
AN 15
AN 3
AN 28
AN 11
AN 18
AN 12
EL CAPITAN
AN 17
AN 10
AN 7
AN 27
EAST MAGNETITE ZONE
AN 6
AN 8
AN 9
AN 25
AN 26A
AN 26
EL CAPITAN P.M.
CLAIM BLOCK
EARTH SEARCH
SURVEY AREA
PRIORITY #1
EXPLORATION
AREA
Figure 7
EL CAPITAN PRECIOUS METALS, INC.
EL CAPITAN GOLD-PLATINUM PROJECT
LINCOLN COUNTY, NEW MEXICO
FIELD EXAMINATION OF HYPERSPECTRAL ANOMALIES
SHOWING GENERAL GEOLOGY
Anomaly
Sample sites
AN 8
-3
To accompany report by Clyde L. Smith, Ph.D., P.Eng.,
Consulting Geologist, April 26, 2006
Scale 1:48 000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CAPITAN, N. MEX

Figure 10. General geologic map of of 35-square-mile area surrounding the El Capitan deposit showing hyperspectral anomalies of high iron (hematite-goethite) content (black circles) and location of samples collected for Au and Pt caustic fusion assays (AN 1-29).

15.2 Project Risks and Uncertainties

The El Capitan project comes with the following three risks and uncertainties:

15.2.1 Assay Risk

To date, the only assay method on El Capitan mineralized samples that appears to be effective is the caustic fusion assay used by Auric Metallurgical Labs. As described above, independent verification of the method as a valid analytical procedure for difficult-to-analyze materials was achieved by Richard Daniele in the independent laboratory of Mike Wendell. The presence of Au in El Capitan samples has been confirmed by electron microscope. In addition, hydrometallurgical extractions have produced Au and Pt metal-in-hand. These results support the fact that Au occurs in El Capitan samples. However, in order to meet assay standards commonly required by the mining industry, the company should continue to seek a laboratory that can consistently produce verification assays on duplicate samples assayed by Auric.

15.2.2 Metallurgical Risk

Hydrometallurgical extractions by Auric Metallurgical in 2005 and 2019 using sodium cyanide and sodium thiosulfate leaches on Au head ore grades of 0.017-0.089 opt Au and non-magnetic concentrates of 0.189-0.266 opt Au have produced impressive recoveries in the range 72.6-98.3%. Extractions on Pt head grades of 0.015-0.44 opt Pt have also resulted in good recoveries in the range 63.4-78%. Although, to date, the Auric hydrometallurgical extractions appear to hold the best promise for potential commercial production of precious metals, independent verification of the Auric results has not yet been achieved and the company should continue to seek a laboratory that can consistently produce verification extractions on duplicate samples treated by Auric. It is possible that the AuraSouce Inc. pyromettalurgical and hydrometallurgical procedures may provide this verification.

15.2.3 Permitting Risk

All mining projects come with some level of permitting risk. At the El Capitan project, three factors amplify somewhat the usual permitting risk: the project's location on U.S. Forest Service land, the recent Lincoln County Mining Ordinance, and the local opposition group Friends of the Capitans.

The project is located on Forest Service land. Permits for exploration and mining are routinely issued on Forest Service land, but the agency is known to have a more stringent permit application and review process than the Bureau of Land Management. This is augmented by past relations with the Forest Service, which included certain operations without permits and an exploration permit denial in 2008. These factors will increase the time and expense for permitting both exploration and mining activities.

In 2009, Lincoln County passed a new Mining Ordinance, intended to provide a "regulatory framework" for permitting mining operations in the county. The expressed intent of the ordinance is to "protect the health, safety, and welfare of its citizens." It requires a proposed mining operation to comply with all State and Federal permitting requirements, and adds to these a Mining Operations Permit issued by the county. Although this does not appear to be a significant risk to permitting the project, it may increase the time and expense for permitting any mining operation on the project.

In recent years a local opposition group has been formed in the area, named Friends of the Capitans, concerned about mining in Lincoln County and specifically targeting El Capitan. In 2008, the company responded to what it felt were incorrect or misleading statements made by the group (El Capitan, 2008). The Friends of the Capitans activity combined with the Lincoln County Mining Ordinance indicates that the company should pay extra attention to community relations efforts.

Local opposition is likely the biggest permitting risk. This can most effectively be mitigated by contracting with highly credible and professional permitting consultants who can guide the company through the permitting and community relations processes.

16 Recommendations

The general geologic map of the area surrounding the El Capitan deposit (Fig. 10) shows a 12 $mi.^2$ band of Permian limestone and quartz sandstone. These rocks are the host rocks for the El Capitan deposit and should be considered prospective for additional El Capitan-type deposits. Magnetite is a highly magnetic mineral and responds to surveys conducted with magnetometers. It is recommended that the entire 12 $mi.^2$ band of potential host rocks be surveyed in detail by ground magnetometer conducted by a reputable geophysical survey company and interpreted by a geophysical consultant. The author has worked on previous projects with Magee Geophysics of Reno, Nevada and Thomas Weis, previously Chief Geophysicist of Newmont Mining, and recommends both for the El Capitan magnetic survey. Magnetic anomalies should be evaluated by geologic mapping and sampling with recommendations made for drilling. It is notable that the March 2022 staking of a 100-claim block now protects the author's Priority #1 Exploration Area that surrounds the El Capitan deposit.

The author recently examined the Iron Duke magnetite-precious metals skarn deposit located near Orogrande, New Mexico, 115 mi. by highway to the south of the El Capitan deposit. The geology of the Iron Duke deposit is almost identical to El Capitan. It is understood that discussions have ben held between El Capitan and Iron Duke personnel regarding establishing a production facility midway between the two deposits where ore trucked to the site would be treated in a common production facility.

During a recent meeting with Mr. Ahmet Altinay at Auric Metallurgical Labs in Salt Lake City, the author requested that he provide recommendations and a budget for creating a magnetite concentrate (>62% total iron with acceptable Si, Al, P, S values) and performing hydrometallurgical extractions of Au and Pt on El Capitan samples (and on Iron Duke samples) with the intent to scaling up to a production facility for production from both mines.

The following is a summary of Mr. Altinay's recommendations with some of the author's additions:

- First phase: collection of magnetic and non-magnetic (hematite-dominant) magnetic concentrates with analyses of magnetite and precious metals. Following potential commercial grade analytical results on a magnetite concentrate and precious metals, proceed to second phase.
- Second phase: amenability tests at 30- and 100-gram sample sizes using a variety of hydrometallurgical leaches. It is notable that in 2005 and 2019, Auric achieved high hydrometallurgical leach recoveries on Au and Pt in amenability tests on El Capitan samples.
- Third phase: bench-scale leach tests at 1.0 kg and 2.5 kg sample sizes to optimize leach recoveries.
- Pilot Plant phase: Auric has a complete pilot plant facility located in their laboratory capable of leaching batches of 0.5-2.0-tons. At this stage, the economic parameters and costs of production could be determined.
- Production site Pilot Plant phase: Auric is experienced in construction and operation of complete pilot plants at mine and processing sites.
- Successful operation at a production site Pilot Plant would allow scale-up to whatever production scale is required.

In addition, Mr. Philip Liu should be encouraged to bring the AuraSource extraction metallurgy technology and equipment now housed in China to the U.S. This is the only means by which independent third-party verification of the AuraSource procedures can be achieved. Should AuraSource produce a commercial grade magnetite concentrate and achieve extractions of Au and Pt then these results could be compared to those of Auric and a decision made as to which processes should be installed at a common production facility.

16.1 Budget

Table 6		
El Capitan Budget through third phase metallurgical		
Magnetic survey	Contractor: estimate 200 line km	US 25,000.00
	Consultant: estimate 5 days @ $1,000/day	4000.00
Geology	Mapping, sampling: estimate 10 days @ 1,000.day	10000.00
	Assays: estimate 50 @ $40/sample	2000.00
	Expenses, supplies	5000.00
Metallurgical (1/2 Auric	First phase	4000.00
estimate)	Second phase	4000.00
	Third phase	48000.00
Management	Minimum 5 days/mo x4 mo @ $5,000/mo.	20000.00
Total		US$ 97,000.

Budget estimates for Auric Pilot Plant, production site Pilot Plant, and production site Plant to be determined based on results through third phase.

17 References

Auric Metallurgical Labs, 2005, Gold & Minerals Company Inc. El Capitan property, Lincoln County, NM, analytical and extractive procedures development program, Phase II: El Capitan ore extractive procedures development program; Prepared for Gold and Minerals Company Inc., 15 p.

Auric Metallurgical labs, 2019, Bench scale hydrometallurgical recovery tests 4797C and 4798C peformed on head ore samples EC-10 and EC-11 from El Capitan property, Lincoln County, NM; prepared for El Capitan Precious Metals Inc., 18 p.

Bird, P., 1984, Laramide crustal thickening event in the Rocky Mountain foreland and Great Plains: Tectonics, v. 3, p. 741-758.

Bright, K., 2008, Analysis of two composite samples representing Phase 1 and Phase 2 / 3 drilling of the El Capitan iron skarn and associated rocks, Lincoln County, New Mexico, USA, with particular attention to Au Pt Pd and Ag content: prepared for El Capitan Precious Metals Inc., February, 2008, 19 p.

Carville, D.P., Leckie, J.F., Moorhead, C.F., Rayner, J.G., Durbin, A.A., 1990, Coronation Hill gold-platinum-palladium deposit: in Hughes, F.E., ed., Geology of the Mineral Deposits of Australia and Papua New Guinea: the Australian Institute of Mining and Metallurgy, Melbourne, p,759-762.

Cather, S.M., Lucas, S.G., McLemore, V.T., and Colpitts, R.M., Jr., 1991, Second-day road log from Inn of the Mountain Gods to Hondo, Lincoln, Capitan and return to Inn of Mountain Gods, Guidebook 42, New Mexico Geological Survey, New Mexico Bureau of Mines.

Danielle, R., 2005, Summary report of evaluation and validation of Auric alkali fusion analytical procedure at Wendell & Company: prepared for El Capitan Precious Metals Inc., September 1, 2005, 11 p.

El Capitan Precious Metals Inc., 2008, Correcting inaccurate or misleading statements made by Friends of the Capitans: http://www.elcapitanpmi.com/documents, accessed February 26, 2012.

Einaudi, M.T., and Burt, D.M., 1982, Introduction—terminology, classification, and composition of skarn deposits: Economic Geology, v. 77, p. 745-754.

Einaudi, M.T., Meinert, L.D., and Newberry, R.J., 1981, Skarn deposits, *in* Skinner, B.J., ed., Economic Geology 75th Anniversary Volume: Economic Geology Publishing Company, p. 317-291.

Hipwell, R.M., 2003, Geology, reserves and mineral review of the patented and unpatented lode claims held by El Capitan Ltd.: consulting report to El Capitan Precious Metals, Inc.

Kelley, V. C., 1952, Origin and pyrometasomatic zoning of the Capitan iron deposit, Lincoln County, New Mexico: Economic Geology, v. 47, p. 64-83.

Lincoln County, New Mexico, 2009, Lincoln County Mining Ordinance: http://lincolncountynm.net/ord.htm, accessed February 26, 2012.

McLemore, V. T., 2001, Silver and gold in New Mexico: New Mexico Bureau of Geology and Mineral Resources, Resources Map 21.

Mernagh, T.P., Heinrich, C.A., Leckie, J.F., Carville, D.P., Gilbert, D.J., Valenta, R.K., Wyborn, L.A.I., 1994, Chemistry of low-temperature hydrothermal gold, platinum, and palladium (uranium) mineralization at Coronation Hill, Northern Territory, Australia: Economic Geology, v. 89, p. 1053-1073.

MSRDI, 2013, Final Summary Report on Cyanidation Test: report prepared for El Capitan Precious Metals, July 1, 2013, 15 p. (Stage 9 testing report)

Palmer, N., and Smith, D.S., 2009, Review of Metallurgical Research El Capitan Project Capitan, New Mexico: prepared for El Capitan Precious Metals Inc., October 16, 2009, 16 p.

Palmer, N., Smith, D.S., and Smith, C.L., 2012a, Results of El Capitan Analytical Testing Stage 7: report for El Capitan Precious Metals, February 21, 2012, 7 p.

Palmer, N., Smith, D.S., and Smith, C.L., 2012b, Results of El Capitan Analytical Testing Stages 1, 2, 4, and 5: report for El Capitan Precious Metals, April 27, 2012, 10 p.

Palmer, N., and Smith, D.S., 2012, Results from Orlando Villa Preliminary Demonstration: report for El Capitan Precious Metals, July 12, 2012, 3 p. (Stage 8 testing report)

Roberts, D.G., Adams, D.C., and Keller, G.R., 1991, A geophysical analysis of the crustal structure in the Ruidoso area: Guidebook 42, New Mexico Geological Survey, New Mexico Bureau of Mines.

Scholle, P.A., 2003, Geologic map of New Mexico: New Mexico Bureau of Geology and Mineral Resources.

Smith, C.L., 2005, Report on surface samples collected Jan. 15-16, 2005, El Capitan Project, New Mexico: prepared for El Capitan Precious Metals Inc., January 21, 2005, 4 p.

Smith, C.L., 2005, El Capitan gold-platinum group-iron project, Lincoln County, New Mexico, resource calculation report: prepared for El Capitan Precious Metals Inc., November 7, 2005, 50 p.

Smith, C.L., 2007, Report on El Capitan gold-platinum project, including measured resource calculation, Lincoln County, New Mexico: prepared for El Capitan Precious Metals Inc., April 16, 2007, 291 p.

Smith, C.L. 2012, NI 43-101 Technical Report on the El Capitan project, Lincoln County, New Mexico; consulting report prepared for El Capitan Precious Metals Inc., Feb. 29, 2012, 31 p., plus appendices.

Smith, C.L., 2012c, Results of El Capitan Analytical Testing Stage 6: SEM and Microprobe Work: report for El Capitan Precious Metals Inc., July 21, 2012, 7 p.

Smith, C.L. 2014, NI 43-101 Technical Report on the El Capitan project, Lincoln County, New Mexico; consulting report prepared for El Capitan Precious Metals Inc., January 6, 2014, 37 p., plus appendices.

Smith, D.S., 2009, Report on surface sampling, El Capitan Project, New Mexico: prepared for El Capitan Precious Metals Inc., June 16, 2009, 1 p.

Smith, D.S., Palmer, N., and Smith, C.L., 2012, Results of El Capitan Analytical Testing Stage 10: Pressure Digestion Tests at CSAL: report for El Capitan Precious Metals, August 25, 2013, 2 p.

Smith, D.S., and Smith, C.L., 2012, Results of El Capitan Analytical Testing Stage 6: SEM and Microprobe Work: report for El Capitan Precious Metals, July 21, 2012, 7 p.

Smith, D.S., and Smith, C.L., 2013, Results of El Capitan Analytical Testing Stage 11: Cyanide Bottle Roll Tests at CSAL: report for El Capitan Precious Metals, August 25, 2013, 4 p.

Smith, D.S., and Smith, C.L., 2014a, Results of El Capitan Analytical Testing Stage 12: Weaver Creek Concentration: report for El Capitan Precious Metals, January 6, 2014, 5 p.

Smith, D.S., and Smith, C.L., 2014b, Results of El Capitan Analytical Testing Stage 13: Cyanide Bottle Roll Tests at McLelland: report for El Capitan Precious Metals, January 6, 2014, 4 p.

Stumpfl, E.F., and Tarkian, M., 1976, Platinum genesis: new mineralogical evidence: Economic Geoology, v.71, p.1451-1460.

Thompson, T. B., 1991, Genesis of gold associated with alkaline igneous rocks (abs.): Geological Society of America Abstracts with Programs, v. 23, p. 99-100.

Werle, J.L., Ikramuddin, M., and Mutschler, F.E., 1984, Allard stock, La Plata Mountains, Colorado – an alkaline rock-hosted copper-precious metal deposit: Canadian Journal of Earth Sciences, v. 21, n. 6, p. 630-641.

18 Certificate of Qualified Person

I, Clyde L. Smith, Ph.D., P.Eng., do hereby certify that:

1. I am a consulting exploration geologist located at 106-1680 56th Street, Delta, British Columbia, Canada, V4L 2L6.
2. This certificate applies to "NI 43-101 Technical Report on the El Capitan Project, Lincoln County, New Mexico," effective date March 31,2022.
3. I am a Qualified Person as defined by and for the purposes of National Instrument 43-101 by virtue of my education, experience, and certification as a Professional Engineer with the Association of Engineers and Geoscientists of British Columbia. I have a Ph.D. degree in geology and I have over 50 years of experience in minerals exploration, with over 40 years focused on gold and precious metals exploration in the southwestern United States.
4. My most recent personal inspection of the El Capitan property was March 7, 2022.
5. I am responsible for the entire report "NI 43-101 Technical Report on the El Capitan Project, Lincoln County, New Mexico."
6. I am independent of El Capitan Precious Metals Inc., and do not hold any interest in the project nor securities in any of the companies involved.
7. I have had no involvement with the El Capitan project prior to December 2004.
8. I have read National Instrument 43-101 and am responsible for the entire content of report "NI 43-101 Technical Report on the El Capitan Project, Lincoln County, New Mexico," which has been prepared in compliance with NI 43-101.
9. As of the effective date of the report, March 31, 2022, 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.

Dated March 31, 2022, Delta, British Columbia, Canada

Clyde L. Smith, Ph.D., P.Eng., Consulting Geologist