

## Table of Contents

3	Topography.....	3-1
3.1	Introduction and Background.....	3-1
3.2	Sampling Objectives.....	3-1
3.3	List of Data to be Collected.....	3-1
3.4	Methods of Collection .....	3-1
3.5	Parameters to be Analyzed.....	3-2
3.6	Maps Providing Sampling Locations .....	3-2
3.7	Sampling Frequency.....	3-2
3.8	Laboratory and Field Quality Assurance Plan .....	3-2

## List of Figures

- Figure 3-1 Topographic Map of the Site and Surrounding Area
- Figure 3-2 Aerial Photograph of the Site
- Figure 3-3 Topographical Map with Boundary



## 3 Topography

### 3.1 Introduction and Background

A topographic map of the Copper Flat Mine Permit Area (Site) and the surrounding area at a scale of 1:24,000 (where 1 inch equals 2,000 feet) is shown in Figures 3-1, 3-2, and 3-3. Off-site sampling locations are shown in the respective sections of this SAP at the appropriate scale. In addition to topography, these figures show:

- The boundaries of the Site.
- Various manmade features not enumerated herein.
- Proposed sampling locations for soil characterization analysis.
- Surface water features.
- Groundwater wells.
- Air monitoring stations.
- Weather stations.
- Wildlife and vegetation transects.
- Paved and dirt roads.
- A conceptual mine layout showing the basics of the proposed mining operation, including the proposed locations of all surface features such as structures, stockpiles, tailings, pits, adits, shafts, etc.

An aerial photograph covering the same area as Figure 3-1 is presented in Figure 3-2, illustrating the site boundary, disturbances from previous mining and mineral development activities, including roads, pit, waste dumps, tailings, diversion channel, scraped and developed plant facilities areas, and other disturbed lands.

### 3.2 Sampling Objectives

The objective of the proposed data collection is to verify the existence, condition, and use of features within and immediately around the Site in advance of mining in order to supplement existing topographic data. This baseline data will assist in the design of the facility and the reclamation and replacement of features.

### 3.3 List of Data to be Collected

No topographic data other than the global positioning system (GPS) data collected for sampling locations, as described in each individual resources section of this SAP, will be collected. Existing USGS topographic maps and publicly available aerial photography will be used to display the sampling points collected in the field within the context of the Site or project area.

### 3.4 Methods of Collection

Field surveys will be conducted across the Site and samples will be collected at locations up to 9.2 miles from the Site to establish the existence and location of the features enumerated in Section 3.1 by means of a Global Positioning System (GPS) unit. The surveys will be conducted concurrently with other field work.

Site topography is considered to be well established by U.S. Geological Survey (USGS) topographic maps, and will be verified by comparison between topographic maps and current aerial photographs.

### **3.5 Parameters to be Analyzed**

The parameters to be analyzed are the Site baseline topography and locations of existing manmade features.

### **3.6 Maps Providing Sampling Locations**

See Figure 3-1, 3-3, and 3-4 for a topographic map and manmade features up to 9.2 miles from the Site. See Figure 3-2 for an aerial photographic perspective. Off-site sampling locations are shown in figures included in the respective sections of this SAP.

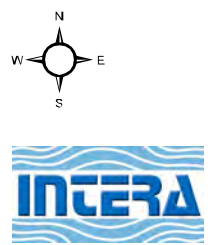
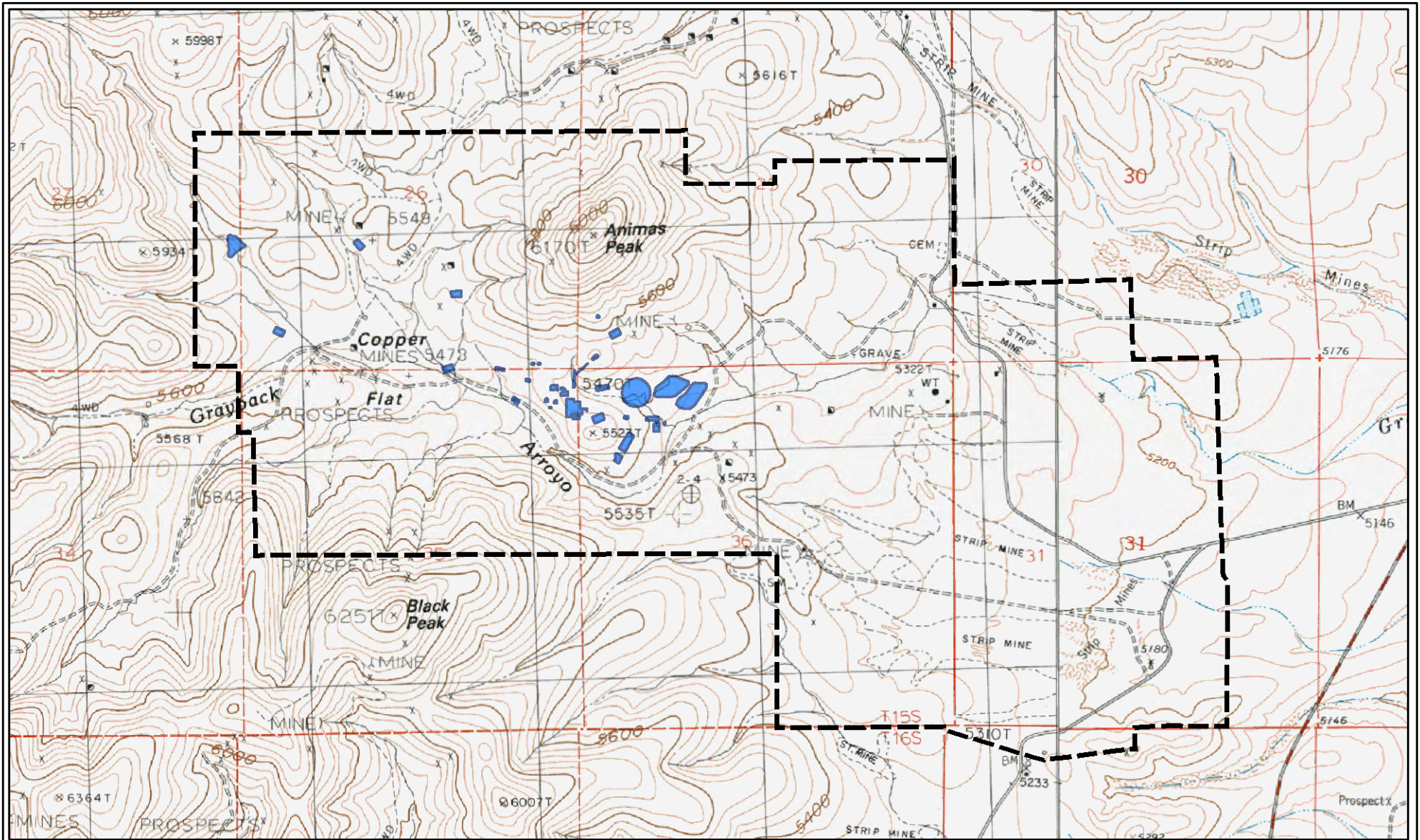
### **3.7 Sampling Frequency**

Field surveys to verify manmade features will be performed concurrent with other field activities during 2010 and 2011.

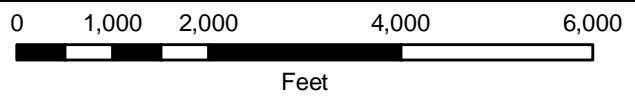
### **3.8 Laboratory and Field Quality Assurance Plan**

There are no analytical laboratory requirements for topographical field work. New Mexico Copper Corporation (NMCC) may utilize subcontractors to assist with gathering updated information about the baseline topographic condition of the Site. Licensed field surveyors and aerial photographers will be selected based on their qualifications and certifications. Subcontractors and in-house personnel will follow quality assurance/quality control procedures as described in the Quality Assurance Project Plan. The NMCC Task Manager or designee will select a coordinate system consistent with state requirements in order to relate all base maps and surface features to the same system. Field Leaders will verify the existence and location of manmade features as they walk the Site for other data collection activities. If necessary, the features or objects will be tied to the nearest benchmark. Digitized aerial photographs and derived contours will be used for design, baseline data presentation, and baseline conditions for reclamation and re-vegetation.

## Figures



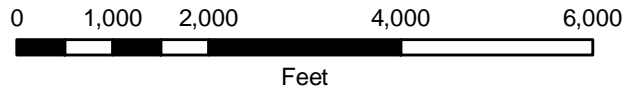
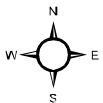
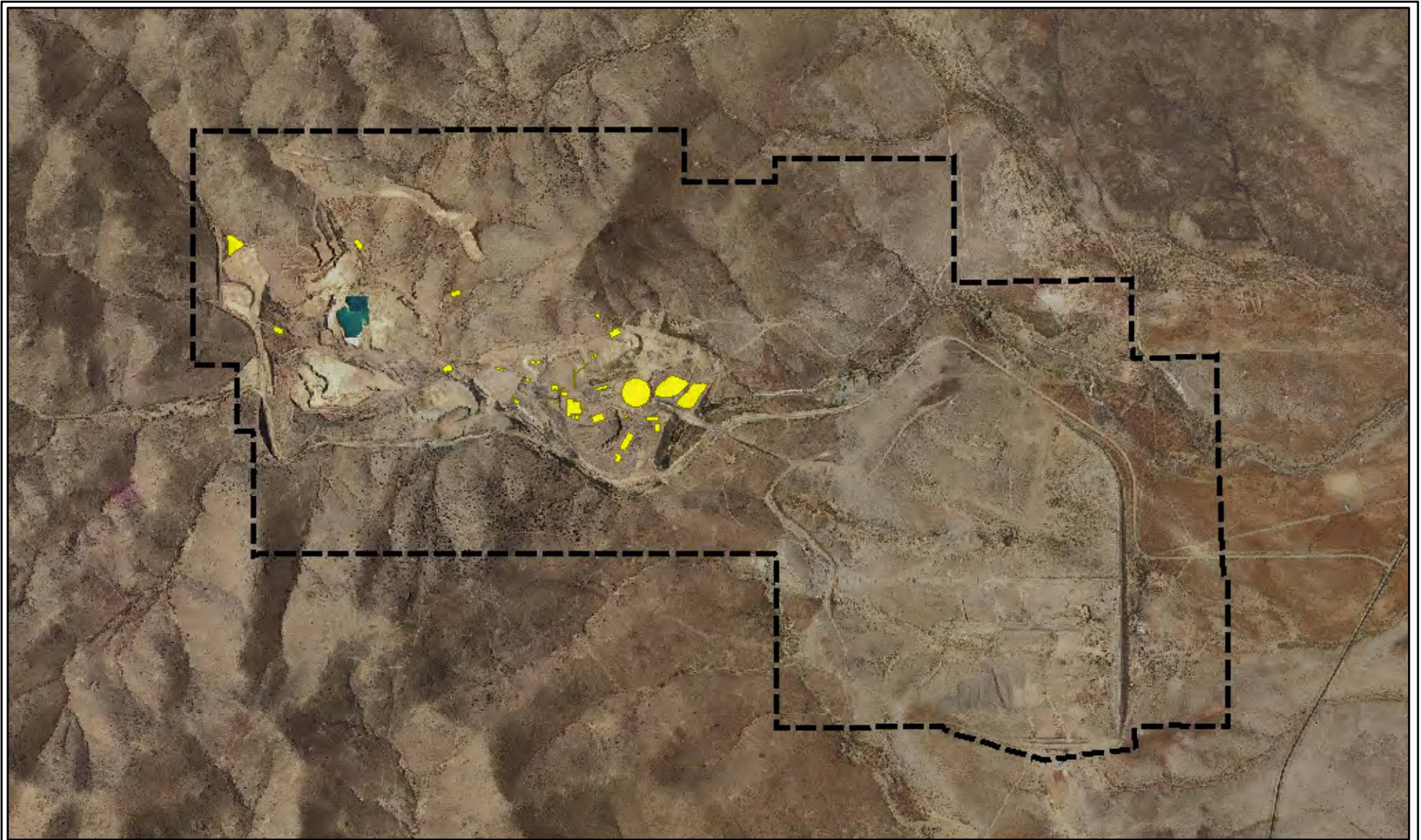
Mine Boundary:  
Tom Reynolds  
Facilities:  
SRK, 2010  
Imagery Information:  
-USGS 7.5-Minutes Quads; Skute  
Stone Arroyo & Hillsboro  
Projection Information:  
-New Mexico State Plane West, NAD 1927



**Legend**



- Proposed Mine Permit Boundary
- Proposed Mine Facilities

**Figure 3-1**  
**Topographic Map of the**  
**Site and Surrounding Area**  
**New Mexico Copper Corporation**

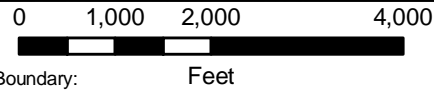
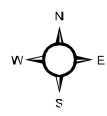
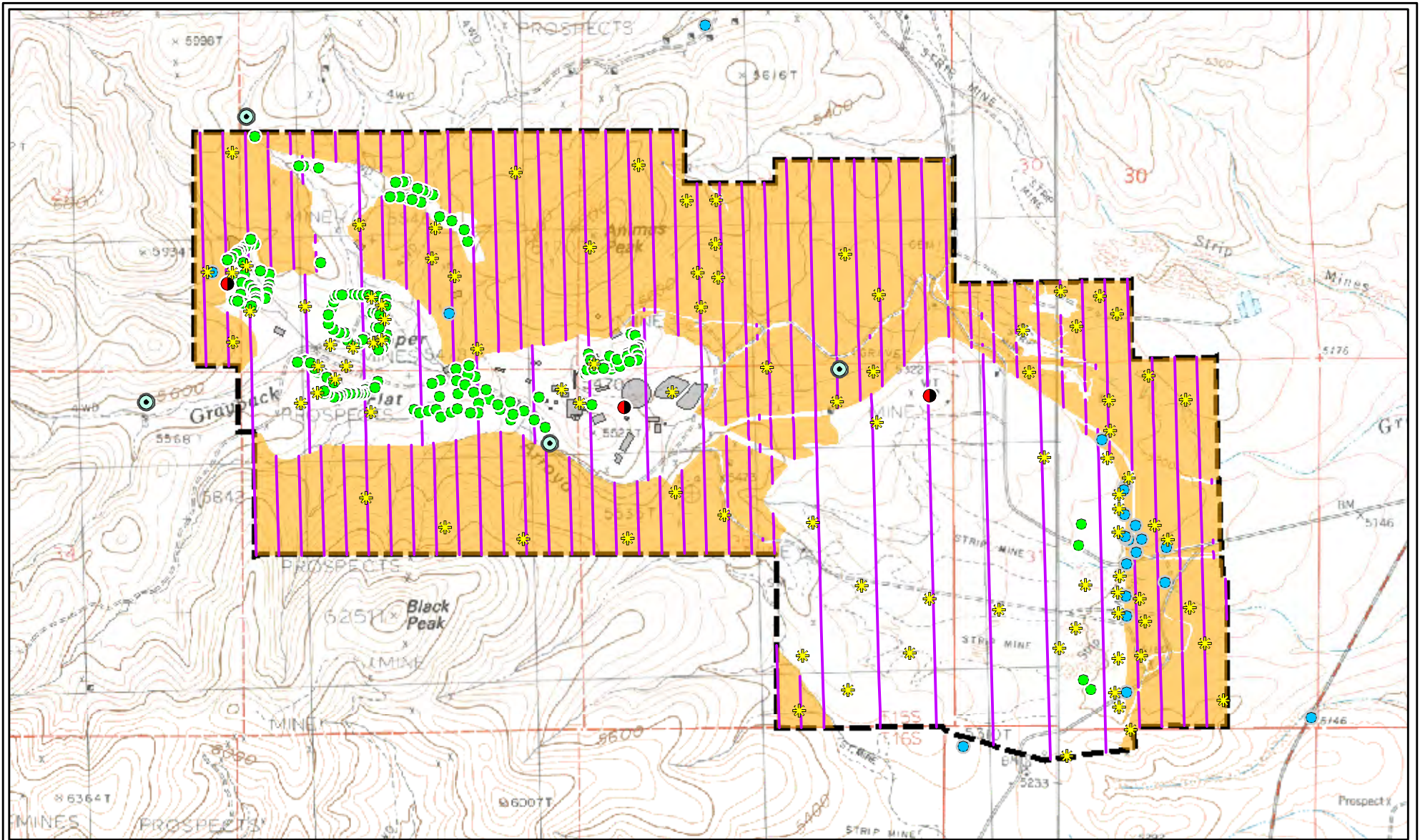


Mine Boundary:  
 Tom Reynolds  
 Facilities:  
 SRK, 2010  
 Imagery Information:  
 -USGS 7.5-Minutes County DOQQ  
 mosaic Sierra County, 2009  
 Projection Information:  
 -New Mexico State Plane West, NAD 1927

**Legend**

 Proposed Mine Permit Boundary  
 Proposed Mine Facilities

**Figure 3-2**  
**Aerial Photograph of the Site**  
**New Mexico Copper Corporation**



Mine Boundary:  
 Tom Reynolds  
 Sample Locations:  
 SRK, 2010  
 Imagery Information:  
 -USGS 7.5-Minutes Quads; Skute  
 Stone Arroyo & Hillsboro  
 Projection Information:  
 -New Mexico State Plane West, NAD 1927

Legend			
	Proposed Mine Permit Boundary		Climate & Air Quality Sample
	Proposed Mine Facility		Monitoring Well
	Proposed Sampling Locations		Surface Water Sample
	Vegetation Transect		Cultural Resources Survey
	Geologic Sample		Wildlife/Soil Transect

**Figure 3-3**  
**Topographical Map**  
**with Boundary**  
**New Mexico Copper Corporation**