ATTACHMENT A-2

GROUNDWATER MODELING REPORT

EXECUTIVE SUMMARY

The Gunnison Copper Project (Project), a copper skarn deposit, is hosted primarily in Paleozoic sedimentary formations adjacent to a quartz monzonite intrusive of Laramide age. The location of the Project is west of Willcox, Arizona (Figure 1), in a half-graben flanked by the Gunnison Hills (the up-thrown block) on the east and the Little Dragoon Mountains on the west. Figure 4 illustrates the regional geology, which includes a portion of the O-O' cross-section from *The Geology and Ore Deposits of the Dragoon Quadrangle, Cochise County, Arizona – USGS Professional Paper 416* (Cooper and Silver, 1964). As indicated in the figure, the Paleozoic section is uplifted and tilted downward to the east. The ore deposit has been extensively faulted and fractured by Laramide to Basin and Range age faults that provide locally high permeability. Excelsior Mining Arizona, Inc. (Excelsior) proposes to mine the copper by injecting acidic solutions to dissolve the copper ore, creating a pregnant leach solution (PLS) that can be processed in a solution extraction/electrowinning (SX/EW) plant. Excelsior has collected extensive subsurface information on both the geology and the hydrogeology of the area. These field data are the basis for the conceptual hydrogeologic model used in constructing the groundwater flow model described in this appendix.

Each injection well used to inject raffinate into the ore deposit will be surrounded by four (4) recovery wells creating a "5-spot" pattern of wells. In addition, the injection/recovery well field will be bounded in downgradient areas by a series of hydraulic control (also referred to as hydraulic containment) wells that will provide net positive pumping for the project. Hydraulic control will be maintained throughout the life off the project.

The details of the Project are documented as part of *Gunnison Copper Project: NI 43-101 Technical Report Feasibility Study, Cochise County, Arizona, USA* (M3, 2016). The groundwater model was constructed to simulate the groundwater conditions in the Project area and to evaluate whether hydraulic control is maintained.

GROUNDWATER MODEL

A groundwater model was constructed for the domain area shown in Figure 30. The model uses the finite difference model code "MODFLOW-NWT" (Niswonger, 2011) as implemented in the graphical user interface known as "Groundwater Vistas" (v. 6.78; Environmental Simulations Inc., 2011). The finite difference grid, shown in Figure 30, consists of 209 rows, 209 columns, and 7 layers for a total of 305,767 calculation cells. Of those, 173,523 cells are active. Cells range from 300 feet square to 75 feet square in the area of the ore reserve. The model domain covers an area of 87.8 square miles and encompasses the major hydrologic drainages in the vicinity of the Project (Figure 30).

Boundary conditions were established for each boundary of the active portion of the model domain (Figure 30). No flow boundaries were used for the western, northern, and southern boundaries to represent the locations of hydraulic divides in those areas. The bottom of the model is also a no-flow boundary. On the eastern boundary, constant head cells were used to represent the Walnut Wash Gap and the Big Draw Gap that cut through the Gunnison Hills. A fault in the area of the Project north of Interstate 10 (I-10) is represented by barrier cells that limit the conductance of the fault in the horizontal direction (Figure 30). In all other cases, faults are represented by permeability contrasts using material properties assigned hydraulic conductivity values appropriate to the fault.

Recharge has been applied to the model along major drainages and in upland areas where orographic effects increase annual precipitation and therefore infiltration to groundwater, as shown in Figure 32. A broad area of recharge occurs to the northwest on the flanks of the Dragoon Mountains, which is underlain by Precambrian units and the Texas Canyon quartz monzonite. The highest rates of recharge occur along Walnut Wash near the ore deposit.

The distribution of hydraulic properties was based on a geologic block model developed by Excelsior for the ore deposit. This geologic block model was created from examination and review of numerous core samples and downhole logging techniques (see Appendix H). Fracture intensity was assigned to block model cells in the ore deposit based on the interpretation of the downhole samples and logs. A relationship between hydraulic conductivity and fracture intensity was compiled from evaluation of the aquifer tests completed for the project (see Appendix G). The fracture intensity was used as the primary source for model hydraulic conductivity. From numerous exploration core holes, Excelsior assigned geologic units and a level of fracturing with a range of 1 (least fractured) to 5 (most fractured) to blocks that are 100 feet by 50 feet by 25 feet thick. The block model assigns both a geologic unit designation and the fracture intensity. Pumping tests and geophysical information provided data that allowed correlation of fracture intensity and hydraulic conductivity. The geologic model was then incorporated into the finite difference cells of the groundwater model. Model zonation of hydraulic properties was done for each combination of geologic unit and fracture intensity. The fracture intensity was related to hydraulic conductivity using a power law relationship, which was used to set hydraulic conductivity values in the model area. Hydraulic conductivity zones were assigned based on the hydraulic conductivity and fracture intensity correlation. Outside of the Project block model, material property zones were assigned based on geologic units mapped by Cooper and Silver (1964); these zones were assigned hydraulic conductivity values appropriate for each geologic unit. Values of aquifer storage were assigned uniformly as specific storage at 1×10^{-5} per foot. Porosity was assigned using a similar relationship between measured porosity and fracture intensity, and specific yield was set as 0.8 times porosity. These values range from approximately 1 to 3 percent in the bedrock portion of the model domain.

The basin fill values of specific yield are set to 0.15 for the upper basin fill, and 0.08 for the lower basin fill.

Model Calibration

Figure 33 illustrates the comparison between measured water levels and model simulated values. This figure also includes the statistical results for this simulation. The overall statistical match is good, with a root mean square error (RMSE) of 4.3%[1]. The mean error is -1.3 feet, and the absolute residual mean is 28.7 feet.

Hydraulic Control

Particle tracking was used to evaluate containment. Containment of mining fluids is achieved through a hydraulic control system, with hydraulic control wells placed at the periphery of the wellfield. These wells were initially sited approximately 300 feet apart, then adjusted to assure complete containment. Several wells were added in more permeable fault zones to maintain containment. Figure 46 illustrates the locations of 30 wells simulated for the containment system.

Particle Tracking

Figure 47 illustrates the particles and the time each was released. Due to the slow movement of particles across the area of mining, particles were released following the sixth year of mining. Additional particles are released after years 10, 13 and 17, depending upon the active mining area at each of those times. Particles were placed at the periphery of each block, assuming that fluids could escape the mining area immediately after injection. Particles were concurrently released in the centers of model layers 3 through 5, which represent the active mining area vertically.

Hydraulic Control Simulation

One of the key goals of the modeling simulations was to demonstrate that the hydraulic control wells maintain capture of potential releases from the wellfield. Figure 58 illustrates the particle tracking for Layer 4, through Year 23. Based upon the simulation results, the particles remain within the area of the wellfield, or are captured at hydraulic capture wells. Some particles exit the

[1] In general, a 10% RMSE is considered an adequate calibration, while better than 5% RMSE is considered well calibrated (Anderson and Woessner, 1992).

wellfield area on the west side, but based on the flow direction, their travel direction will remain within the area of the wellfield.

Based on the results of the hydraulic control simulations, the wellfield area is fully contained, and injected fluids can be confined to the area of the wellfield throughout the life of the project.

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1 INTRODUCTION

1.1 Purpose and Scope

Clear Creek Associates, PLC ("Clear Creek") has prepared this report at the request of Excelsior Mining Arizona, Inc. ("Excelsior") in support of applications for an Aquifer Protection Permit (APP) to be submitted to the Arizona Department of Environmental Quality and an Underground Injection (UIC) Permit to be submitted to the United States Environmental Protection Agency.

1.2 Investigation and Site Survey

The Gunnison Copper Project ("Project") is a proposed copper mine that will be located in Cochise County, Arizona, approximately 62 miles east of Tucson and 17 miles west of Willcox (Figure 1). The location is along Interstate 10 on the southeastern flank of the Little Dragoon Mountains, in the vicinity of the Johnson and Golden Rule mining districts (Wilson et al., 1961). It was previously known as "the I-10 Deposit" (Kantor, 1977) and the "North Star deposit".

The Project is located in a district where copper, zinc, silver and tungsten mining has intermittently been active since the 1880's. The deposit was discovered in the 1960's, when exploratory drilling was conducted following detection of a magnetic anomaly. Several million tons of low-grade acid-soluble copper mineralization were identified by early 1974. Since that time, extensive exploration has occurred, including 55 diamond holes drilled between 2010 and 2014 (M3, 2016). With the exception of mineral exploration and related investigations, past use of the site has been limited to livestock grazing. Interstate 10 crosses the project from southwest to northeast; an unoccupied house is located on the property. Otherwise the land is vacant, as shown on a recent aerial image of the site (Figure 2). Although no mining has occurred at the Project site, the Johnson Camp mine is located only 1.5 miles to the north.

Clear Creek was contracted by Excelsior to assist with permitting tasks for the proposed in situ copper leaching project, which includes preparation of a groundwater flow model for the evaluation of the hydraulic control (also referred to as hydraulic containment) of fluids in the in situ mining operations.

1.3 Report Structure

This report provides a description of the construction of the groundwater flow model for the Project. The groundwater flow model was used to evaluate hydraulic control and containment for the Project. The following describes the structure and contents of this report.

- Section 2 presents the geologic and hydrogeologic data for the Project area, and includes a discussion of the conceptual hydrologic model for the area;
- Section 3 describes the numerical model code used in the computer simulations of groundwater flow; in this case, MODFLOW-NWT (Niswonger et al, 2011);
- Section 4 presents the implementation and construction of the groundwater flow model;
- Section 5 presents the Hydraulic Control demonstration; and,
- Section 6 presents the summary and conclusions.

2 CONCEPTUAL MODEL AND HYDROGEOLOGIC SETTING

2.1 Project Area Overview

A number of studies and analyses of the Project and surrounding area have been conducted, including:

- *Gunnison Project – NI 43-101 Technical Report Feasibility Study, Cochise County, Arizona* (M3, 2016);
- *Geology and Ore Deposition at the I-10 Prospect, Cochise County, Arizona* (Weitz, 1976)
- *Geology and Ore Deposits of the Dragoon Quadrangle, Cochise County, Arizona - USGS Professional Paper 416* (Cooper and Silver, 1964).

In addition to these reports, Excelsior has generated and compiled a large volume of geologic and hydrogeologic data for the area of the ore deposit. Another important source of information was the aquifer testing analysis presented in Appendix G. Appendix G summarizes the aquifer testing results for 27 wells on the Project property.

This report provides a brief overview of these analyses, but it is recommended that these original sources be consulted for specific details. This report focuses on the nature of the conceptual groundwater flow system, and how the groundwater flow model was developed from the available information. The final portion addresses the use of the model to develop a containment system for the project.

One of the primary sources for the geology of the Project area is *Geology and Ore Deposits of the Dragoon Quadrangle, Cochise County, Arizona - USGS Professional Paper 416* (Cooper and Silver, 1964). This report outlines and discusses the geology and hydrogeology of the area, including summary discussions for each of the mines in the area. This section of the report borrows extensively from this study, summarizing the findings.

2.2 Topography and Climate

2.2.1 Topography

The Project area covers the Walnut Wash and Big Draw drainage basins on the western side of the Willcox Basin. Figure 3 illustrates elevations in the model domain, which range from 4,450 feet above mean sea level (amsl) along Big Draw on the southeast to 6,700 feet amsl at Mae West Peak in the Little Dragoon Mountains on the west side.

2.2.2 Climate

Climatic data are used to estimate runoff, recharge, and evaporation. The climate in the project area is typical of the higher elevations of southeastern Arizona. Mean annual precipitation is approximately 12.5 inches per year (in/yr) from the nearby NOAA (National Oceanic and Atmospheric Administration) Pearce-Sunsites weather station, with a period of record from February 1893 to current (NOAA, 2015, data were analyzed through 2014). Table 1 presents the annual precipitation data for 1893 to 2014.

No station is located near the Study area where pan evaporation rates are directly measured. The University of Arizona maintains the Safford Agricultural Center in Safford, which is the closest official station measuring pan evaporation rates. Table 2 lists rates for this station which totals 97 inches per year. The elevation of this station is 2,950 feet, or approximately 1,900 feet lower than the Project location. Table 2 summarizes monthly average precipitation and evaporation data.

Table 2 Average Monthly Precipitation and Evaporation

Month	Precipitation - Pearce-Sunsites NOAA weather station 1893-2014 (Average inch/month)	Pan Evaporation from Safford Agricultural Station (1948-2005) (Average inch/month)
Jan	0.68	2.63
Feb	0.59	3.83
Mar	0.48	7.14
Apr	0.23	10.54
May	0.20	13.81
Jun	0.49	15.38
Jul	3.17	13.13
Aug	3.02	10.68
Sep	1.38	8.73
Oct	0.81	5.90
Nov	0.60	3.28
Dec	0.82	2.52
Total	12.49	97.57

100-year, 24-hour storm event has been estimated to be approximately 3.8 inches (http://hdsc.nws.noaa.gov/hdsc/pfds/ NOAA, 2012) for the Pearce-Sunsites rainfall gage, which is the closest site with a significant dataset (1893-present). Other storm magnitudes and recurrence intervals are presented in Table 3.

Table 3 Precipitation Frequency Estimates

Storm Duration	Occurrence Interval (years)				
	25	50	100	200	500
1-hour (inches)	2.05	2.30	2.54	2.79	3.11
24-hour (inches)	3.11	3.46	3.81	4.16	4.62
10-day (inches)	5.04	5.56	6.08	6.59	7.24
30-day (inches)	7.80	8.44	9.06	9.64	10.33
60-day (inches)	10.53	11.29	11.99	12.62	13.34

2.3 Geology

2.3.1 Regional Geologic Setting

The Project area is situated in the Basin and Range province, characterized by northwest-southeast trending mountain ranges with intervening basins. Igneous, metamorphic and sedimentary rocks of Precambrian age are overlain by sediments of Paleozoic age. Intrusive rocks penetrate the Paleozoic rocks and are themselves overlain by sedimentary basin fill and alluvium. Locally the Texas Canyon Quartz Monzonite intrusion has faulted and uplifted the Paleozoic rocks, and has penetrated the unit with copper-bearing fluids creating the Project ore body.

2.3.2 Lithologic Units

Geology and Structure

Figure 4 shows the generalized geologic basemap and cross section of the Project area, while Figure 5 shows the geologic column[2]. There are ten main geologic units defined in the Project area, which represent the period from the Precambrian to Quaternary:

1. Basin fill sediments (Qal and QTal);
2. Texas Canyon Quartz Monzonite (Ttm and Ttam);
3. Naco Group;
    a. Concha Limestone (Pcn);
    b. Scherrer Formation (Ps);
    c. Epitaph Dolomite (Pe);
    d. Colina Limestone (Pc);
    e. Earp Formation (Pe);
    f. Horquilla Limestone ([Ph);
4. Black Prince Limestone ([PMb);
5. Escabrosa Limestone (Me);
6. Martin Formation (Dm);
7. Abrigo Formation (Ca with upper, middle and lower units);
8. Bolsa Sandstone (Cb);
9. Apache Group;
    a. Dripping Springs Quartzite (pCd);
    b. Pioneer Shale (pCp);
10. Precambrian Crystalline rocks (Xg, Xmv).

Units important to the hydrogeologic conceptual model and therefore the numerical model are described below. The Naco Group formations above the Horquilla Limestone are not important in the area of the Project, and are not discussed further. This section is adapted from the *Geology and Ore Deposits of the Dragoon Quadrangle, Cochise County, Arizona - USGS Professional Paper 416* (Cooper and Silver, 1964), and more detailed discussion of the individual units can be found there. Quoted sentences in the following paragraphs were derived from Cooper and Silver (1964).

[2] The Precambrian Apache Group is not included in the column and should be included between the Pinal Schist and the Bolsa Sandstone.

Basin Fill (Qal and QTal - named by Cooper and Silver (1964) as "Quaternary-Tertiary alluvium")

"Conglomerate, sand, and fine-grained lake deposits; unconsolidated to semiconsolidated. Older part equivalent to Gila conglomerate" lies unconformably on all the other formations and is made up of at least three parts:

Older deposits equivalent to the Gila conglomerate: "underlies the intermountain valleys and consists of a thick faulted and gently folded sequence of fanglomerates and lake beds . . . ranges from coarse poorly sorted and poorly bedded fanglomerate to fine well-sorted and well-bedded lake deposits. Some parts of the rock are cemented by calcium carbonate, but most of it is poorly consolidated. The sediments are generally coarsest near the present mountains and finest in the centers of the intervening basins"

Pediment gravels: "form a thin unconformable mantle which was spread out on erosional surfaces"

Recent stream deposits: "are along present stream channels cut into all the older rocks."

Basin fill deposits occur parallel to the Gunnison Fault, in the deeper portion of the basin and overlie each of the major rock units in the area. Along the major drainages, recent alluvial deposits of sands and gravels are present (Qal), but due to the great depth to water, these rocks do not comprise a significant aquifer in the study area. The older basin fill (QTal) sediments are a significant aquifer in the eastern portion of the Study area, and are composed of poorly sorted fanglomerates, grading to better sorted lake bed deposits in the deeper portion of the basin. Cooper and Silver (1964) noted two sources for the clasts, including the Little Dragoon Mountains to the west, and the Galiuro Mountains to the north.

Figure 6 illustrates the depth to bedrock, or thickness of basin fill in the Project area. The basin fill is thickest in the eastern portion of the area, with a maximum thickness of over 1,500 feet in the area northeast and southeast of the Project site. At the project site, the basin fill thickness varies from 200 to 600 feet, however, the depth to water in this area is also 400 to 600 feet, leaving minimal saturated thickness.

Tertiary Texas Canyon quartz monzonite (Ttm and Ttma)

"Biotite-quartz monzonite, medium-grained; commonly contains phenocrysts of potassic feldspar an inch or two in length . . . 30 to 35 percent quartz, 30 to 40 percent plagioclase, 25 to 30 percent potassium feldspar, and about 5 percent mica . . . Steep joints that strike northeast are conspicuous throughout . . . forms much of the southeastern half of the Little Dragoon Mountains . . . The most probable time of intrusion is early Tertiary, at the close of the Laramide revolution."

Pennsylvanian Horquilla limestone (Ph)

"Limestone, characteristically blue-gray, medium-bedded, and fossiliferous; thin interbeds of shale throughout; a few sandstone beds in upper part; 30 to 65 feet of red shale at base." This unit is part of the Naco Group.

Mississippian or Pennsylvanian Black Prince limestone (PMb)

"Limestone, pinkish-gray, thin- to thick-bedded: 10 to 30 feet of shale and chert conglomerate at base."

Mississippian Escabrosa limestone (Me)

"Limestone, gray, thick-bedded, common]y crinoidal; about 150 feet of dolomite at base and a few beds of dolomite in middle and upper parts. Chert nodules common." This unit comprises the uppermost portion of the Gunnison ore body.

Devonian Martin formation (Dm)

"Dolomite, gray to tan, fine- to medium-grained, thin-bedded; contains sandy and silty beds in lower half and 15 to 30 feet of reddish-brown shale at top."

Cambrian Abrigo formation (Ꞓb)

Upper member: "Sandy dolomite and dolomitic sandstone; contains few thin quartzite beds. Grades to limestone facies in northwestern part of quadrangle. Total thickness 85 to 155 feet."

Middle member: "Limestone, gray, thin-bedded; contains abundant mostly irregular partings of silt and sand, some limy sandstone beds, and numerous intra-formational limestone conglomerate beds. Total thickness 175 to 255 feet."

Lower member: "Shale, olive, fissile; contains a few thin beds of sandstone and dolomite in lower part, and common gray limestone units in upper part; capped by a tongue of crossbedded quartzite in northwestern part of quadrangle. Total thickness 300 to 475 feet."

Cambrian Bolsa quartzite (Ꞓb)

"Quartzite, white to purple or brown, medium- to coarse-grained, in part pebbly; commonly contains conglomerate at base." Total thickness 480 feet.

Precambrian Apache Group[3]

Dripping Spring quartzite (p~~C~~d): "Quartzite, white to brown; contains reddish- to deep purplish-brown shaly beds, 2 to 24 inches thick, irregularly spaced" and "Arkosic quartzite; banded in shades of pink." Total thickness 193 feet.

Precambrian Apache Group - Pioneer shale (p~~C~~p): "purple shale or siltstone, which contains scarce interbeds of gray quartzite as much as 2 feet thick, and a basal member of medium- to coarse-grained sandstone or quartzite." Total thickness 304 feet.

Precambrian Pinal schist (p~~C~~ps)

"Schists and slates derived from graywacke, shale, siltstone, and minor small lenses of conglomerate. Contains at least one rhyolite flow, lenses of amphibolite and chlorite schist probably derived from basic volcanic rock, and scarce other rock types of undetermined origin."

2.3.3 Metamorphism

Kantor (1977) noted that the Gunnison deposit (previously known as the I-10 deposit) was located in "Escabrosa, Martin, Abrigo, Bolsa, and Precambrian sediments intruded and metamorphosed by the Texas Canyon Quartz Monzonite. Metamorphism is intense and the calc-silicate assemblages that formed reflect both the original composition of the sediments and distance from the stock. Impure limestones were converted to garnet tactite. Impure dolomites were converted to wollastonite, diopside, tremolite, and actinolite tactites. Shales were converted to biotite hornfels. Clean limestones and dolomites, in general, were marbleized."

2.3.4 Regional Geologic Structure

Cooper and Silver (1964) described two major orogenies that deformed rocks in the area. The first occurred during early Precambrian time, when the Pinal schist was isoclinally folded, with the general structural trend oriented toward the northeast. Major intrusive bodies ranging in age from early Precambrian to Tertiary are elongated parallel to this structural trend. The second major

[3] The Apache Group also includes the Scanlon Conglomerate and Barnes Conglomerate members, which are not prominent in this area and are not included in this discussion.

orogeny, likely the Laramide, occurred in Late Cretaceous or Early Tertiary time, when rocks older than the Texas Canyon quartz monzonite were folded and thrust faulted. The general trend of the structures that formed during that time is toward the northwest, or nearly perpendicular to the structures that formed during the early Precambrian time.

Cooper and Silver (1964) identified two Laramide-aged structural blocks in the project area, with the contact between the two blocks oriented northwest-southeast across the Little Dragoon Mountains. The southwest block consists of thrust sheets of Precambrian, Paleozoic and Mesozoic rocks which have overridden the northeast block. The Texas Canyon quartz monzonite intruded the southwest block near the end of the Laramide orogeny. The northeast block is tilted to the northeast and is modified by folds and faults. It includes the concealed Antelope Tank fault, which is located in an area between contrasting fold types. Southwest of this fault, folds are broad and open; northeast of the fault they are closed and locally overturned.

Subsequent to the two orogenies described above, additional faulting and folding occurred during the Tertiary period, leading to the Basin-and-Range topography observed at present. The northwest-trending Gunnison Hills fault, located approximately two miles east of the project site along the west edge of the Gunnison Hills, was active during this time (Cooper and Silver, 1964).

2.4 General Hydrology and Hydrogeology

The Project area (Figure 1) is characterized by Precambrian and Paleozoic sedimentary rocks, intruded by a Laramide age (late Cretaceous/early Tertiary) quartz-monzonite stock, known as the Texas Canyon Monzonite. The intrusion created a skarn type ore body in the lower portion of the Paleozoic section. Skarn deposits are generally formed from intrusion of magmas into sedimentary rocks, (particularly limestones), resulting in a halo of altered and metamorphosed rocks around the intrusion contact. Commonly skarn deposits have zones of different mineralization depending on the distance from the intrusive contact zone, and pathways for fluid movement in the altered rocks.

Figure 5 illustrates a stratigraphic column section of the overall geologic formations adapted from *Section near Bisbee in Southeast Arizona* (http://jan.ucc.nau.edu/~rcb7/seaz.jpg), Dr. Ron Blakely, Professor Emeritus, Northern Arizona University Department of Geology.

2.4.1 Surface Water

Based on the available information, no perennial surface water occurs in the Project Area, with the exception of a spring noted on the topographic basemap in the headwaters area of Walnut Wash (Figure 7). No flow information is available for this spring. The surface drainages in the Project

area are presented on Figure 7, and are ephemeral, flowing in response to precipitation events. Two watersheds are noted, the Walnut Wash and Big Draw drainages, which include approximately 10,600 and 14,800 acres, respectively, within the Project area. Each of these drainages ultimately discharges to Willcox Playa to the east of the Gunnison Hills (Figure 8). No surface water gaging data were identified for the Study Area.

2.4.2 Groundwater

There are two principal groundwater bearing units within the Gunnison Project area, (Figure 4):

- Basin fill (QTal); and,
- Paleozoic and Precambrian bedrock.

The basin fill aquifer is generally saturated in the thicker portion on the eastern side of the basin near the Gunnison Fault (see cross section in Figure 4). In the area of the Gunnison ore body, the basin fill is saturated in isolated low spots on the bedrock surfaces. The saturated thickness of basin fill in these areas is thin, less than 50 feet in most areas. Based on the available test data, the bedrock is adequately fractured to produce water in the area of the ore body.

2.5 Conceptual Groundwater Flow

One of the key steps in creating a groundwater flow model is the development of a hydrogeologic conceptual model. A conceptual hydrogeologic model describes the mechanisms and pathways for water to flow through the hydrologic system, including groundwater and surface water. In the Project area, precipitation falls on the watershed and collects in the two drainages, ultimately discharging to the Wilcox Playa as shown in Figure 8. Water also recharges the groundwater system in the higher elevation areas, and flows towards the two exit points from the Gunnison Project area: at Walnut Gap and Big Draw. Groundwater flow is assumed to be parallel with surface flows, and the groundwater divide generally follows the surface water divide.

2.5.1 Aquifer Systems

Hydrogeologic units

As previously described, the geologic units in the study area are subdivided into two aquifer systems. These hydrogeologic units are defined as follows:

- Basin Fill aquifer (QTal and others); and,
- Bedrock aquifer.

The basin fill aquifer is used for water supply in the Dragoon area, and also historically as a source of water for the Johnson Camp Mine, north of the Site. Figure 9 illustrates the approximate extent of saturated basin fill based on the depth to bedrock and water levels in the area.

The groundwater flow model simulates the basin fill, where present, using the hydraulic conductivity zones 2 and 3 (Figure 10). Based on the available well data and bedrock elevations, the area noted in blue may have saturated basin fill. Using the steady-state model, the approximate flow was estimated using the mass-balance information for model layer 2 in the area noted on Figure 10. This value was 576 cubic-feet per day, or 3.0 gallons per minute, as noted in Table 4 below. This estimate uses the steady-state groundwater flow model and calculates the total simulated flux through the area noted in Figure 10. The groundwater model simulates 8 to 30 feet of saturated material in this area, which is consistent with the cross-section data presented in Figure A-3B.

Table 4 – Mass Balance Summary

Boundary	Inflows (ft^3/day)	Outflows (ft^3/day)
X_{min}	87.78	3.65
X_{max}	0	139.37
Y_{min}	0	237.24
Y_{max}	485.32	0.015
Top	0.25	0
Bottom	2.66	195.74
Total	576.01	576.01

Figure 11 illustrates the location of the Johnson Camp Mine, the water supply wells for the mine and the location of the Gunnison Copper Project. As evident, the water supply wells for the JCM are located in an area of saturated basin fill, approximately 300 feet thick. These wells are approximately 2.5 miles north of the project site in saturated basin fill that is separate and distinct from the very limited and isolated saturated fill at the project site. Figure 11 illustrates wells with available drillers logs. Reviewing these logs indicates that only the 2 wells used for the JCM water supply (55-909280 and 55-611610) have any measurable saturated thickness based upon the logs. Several of the other wells located outside of the mapped bedrock outcrop area had some logged basin fill, but it was not saturated.

2.5.2 Groundwater Movement and Boundary Conditions

As noted, groundwater flow is generally from the higher elevations of the Little Dragoon and Dragoon Mountains to the two exit points at Walnut Gap and along Big Draw. The conceptual model is that groundwater is recharged from precipitation in the higher elevation areas, and also recharges in the washes and drainages which carry surface flows eastward out of the basin. The recharged water enters either the bedrock in the upland areas, or the basin fill aquifer. Groundwater then flows eastward to the basin exit points of Walnut Wash (4614 feet amsl surface elevation) and Big Draw (4523 feet amsl surface elevation).

To estimate the overall recharge volumes, the area of the surface drainage basins was measured using ArcGIS. A study by the USGS (Robson and Banta, 1995[4]) suggested that on average, 5% of precipitation is recharged to alluvial basins in the Arizona, Colorado, New Mexico, and Utah areas. More recently, Blasch, et al (USGS, 2005[5]) estimated that 1.3 to 4.4 % of precipitation is recharged to the upper and middle Verde River Watersheds. The Blasch et al report was used as the basis for developing input assumptions for the Northern Arizona Regional Groundwater Flow Model (NARGFM[6]). The recharge values used for the Gunnison project model were adjusted through

[4] Robson, S. G. and Banta, E. R., 1995, Ground water Atlas of the United States; Arizona, Colorado, New Mexico, Utah; USGS HA 730-C

[5] Blasch, et al, 2005, Hydrogeology of the Upper and Middle Verde River Watersheds, Central Arizona; USGS Scientific Investigations Report 2005-5198; Table 23.

[6] Pool, D.R., Blasch, K.W., Callegary, J.B., Leake, S.A., and Graser, L.F., 2011, Regional groundwater-flow model of the Redwall-Muav, Coconino, and alluvial basin aquifer systems of northern and central Arizona: U.S. Geological Survey Scientific Investigations Report 2010-5180, v. 1.1, 101 p.

calibration, and ranged from 0.02 in/year to 6.6 in/yr. Assuming an average value of 12.5 inches of precipitation per year (Sunsites, Arizona station), a total volume of precipitation was calculated as listed in Table 5. The total recharge applied to the model area is approximately 2.8% of the average rainfall in the surface watershed area. The Sunsites station is 15 miles southeast of the Excelsior site. GIS was used to calculate the area of the 2 subwatersheds in the model domain, and total precipitation volume estimated from that area. This is summarized below:

Table 5 Estimated Recharge Volumes

Basin	Area (acres)	Annual Precipitation (inches)	Total Precipitation Volume (acre-feet)	Percentage	Recharge (acre-feet per year)
Walnut Wash	10605.3	12.5	11047.2	2.8%	307.8
Big Draw	14834.0	12.5	15452.1	2.8%	430.5
Total	**25439.4**		**26499.3**		**738.2**

2.5.3 Regional Groundwater Levels and Flow Directions

Because of limited pumping in this area, it is assumed that the basins are in a steady-state condition, meaning that inflow and outflow are in long-term balance. In 2014, Dragoon Water Company pumped 22.2 acre-feet[7] (AF/yr) (ACC, 2015), which is 3% of the estimated recharge. Figure 12 illustrates the wells in the area, including exempt wells (less than 35 gpm - small users). The well information collected for these wells was compiled from Arizona Department of Water Resources (ADWR) records, including an evaluation of the actual location based on survey information or Assessor Parcel information. These data are summarized in Table 6, and include other locations for which data are available but are not registered with ADWR.

Based on the wells registered in the area database compiled for the project, there are 96 wells registered as "exempt", which would be for domestic or other limited water uses. Of those 96 wells, 15 have been cancelled, and only 55 wells have listed completion dates, meaning they were

[7] Based on Arizona Corporation Commission Annual Reports, in 2013, Dragoon Water Company pumped 24.7 acre-feet, and in 2012 they pumped 26.3 acre-feet.

likely drilled. Based on these numbers, the total water use is likely less than 50 AF/yr, assuming the average water use is less than 1 AF/yr for each well.

The other major water user is the Johnson Camp mine (Figure 1), which has several water supply wells in addition to unused mine shafts and the open pit, to provide operating water supply. This mine was purchased by Excelsior in 2015, and is not currently planned for operation. Prior to this purchase, the mine was operated on a limited basis. No data regarding water use are available, so the overall historical use can only be approximately estimated. Based on available information, the designed pumping rate for normal operations is 600 gallons per minute (gpm), as documented in *Feasibility Study, Johnson Camp Copper Project, Cochise County, AZ, prepared by The Winters Company (TWC) for Nord Corporation, March 2000, Tucson Arizona.*(TWC, 2000). This represents a continuous flow rate of approximately 970 AF/yr. Operations at the facility have been very limited since 2010, and currently maintenance activities require only a minimal amount of pumping. It should be noted that the production wells for the mine are located more than 2 miles to the northeast of the mine, and are thus far from the Project site.

2.5.4 Water Level Data and Groundwater Conditions

Exhibit 1 includes available water level data for the area, including ADWR Ground Water Site Inventory (GWSI) data, water levels reported on the well completion reports filed with ADWR and measured water levels at the Project and Johnson Camp sites. Figure 13 illustrates water level data from these sources, using the latest available data for wells off the Project site, coupled with the earliest measurements from the Project site. Because the Project site had no data prior to 2010, the earliest data were used, since the water levels for the remainder of the study area are mostly from prior to this period. Table 7 lists the data used to construct the figure.

An evaluation of the groundwater contours in Figure 13 shows that groundwater flows eastward to the basin exit points, following the surface drainage channels. Figure 13 illustrates an estimate of the location of the groundwater divide based upon the groundwater contours. The surface water divide appears to be somewhat north of the groundwater divide, with groundwater flow in the Project ore body to the northeast toward the Walnut Wash gap.

Figure 14 illustrates a hydrograph for the Dragoon Water Company Well No. 1, which is the only well in the area with an adequate dataset to construct a long-term hydrograph. The water level data are compared to the precipitation from Sunsites, and clearly show that the water levels rose during periods of increasing rainfall (1950 to 1990), and fell during periods of drought (1990 to 2015). This indicates that the assumption of steady-state conditions in the aquifer is reasonable.

Historically, the Johnson Camp mine (JCM) has pumped water for operations from wells noted on Figure 11. Because the mine is now owned by Excelsior, operations at JCM will not be restarted, therefore the production wells used to supply water for the JCM operations will not be operated unless makeup water is needed for the Gunnison Mine. Make-up water needs for Gunnison will not be as great as the water supply needed for the JCM operations (200 gpm for Gunnison versus 600 gpm for JCM). In addition, the supply wells for JCM are approximately 2.5 miles from the Gunnison Mine and situated in saturated basin fill that is isolated from the Gunnison operations. Hydraulic control pumping for Gunnison is expected to provide a significant portion of the makeup water needs, therefore the amount that could be pumped from the JCM production wells is small. The small water needs and the distance between the production wells and the Gunnison Mine make interference from pumping the JCM wells negligible. For this reason, production from the JCM wells was not simulated in the groundwater model, and is not expected to influence future groundwater conditions.

2.5.5 Hydraulic Properties

Regional Information

Limited data are available for evaluating the hydraulic properties of the basin fill or bedrock aquifers in the area. In 1973, Harshbarger and Associates (Harshbarger, 1973) conducted aquifer testing at two mine shafts on the JCM site, for the purpose of evaluating the suitability of using these shafts as water supply for the mine. The tests were analyzed and a value for transmissivity was derived, (850 and 2,000 gallons per day per foot), but the pumping from a vertical shaft with large in-well storage is difficult to correlate to aquifer conditions. In addition, one of the shafts was believed to tap a perched aquifer system. For this reason, the test analysis for these mine shafts is of limited value for the construction of the groundwater model.

In 1973, Water Development Corporation (WDC, 1973) conducted a pump test of a windmill (55-611612) owned by Dezonia Ranch in the area south of the Project ore body. This test was essentially a step drawdown test for this well, and the specific capacity was estimated at 1.1 gpm/ft. Using this value, the estimated transmissivity is 1,700 gpm/ft, and the hydraulic conductivity is estimated as 10.1 feet per day (ft/d). This well appears to be completed in rocks of the Martin Formation, based upon the depth of the well and geology information from the site[8].

[8] A complete geologic model of the Gunnison Project Site was compiled for the evaluation of ore reserves, and will be further discussed in Section 2.5.6.

Additional specific capacity data were gathered from the ADWR Well 55 database, which reports tested pumping rates and measured drawdown, allowing calculation of specific capacity. The calculation of transmissivity is based upon the relationship of T = SC * 1500, for an unconfined aquifer (Driscoll, 1986). These data are presented in Table 8 and Figure 15. Hydraulic conductivity estimates assume that either the screen interval or the saturated portion of the screen interval represents the aquifer thickness. The majority of the test data are from the basin fill, and the average value for hydraulic conductivity is 1.5 ft/d. The estimates for wells completed in the Texas Canyon Quartz Monzonite averaged 0.052 ft/d.

Tests at the Gunnison Copper Project

Excelsior has conducted a number of aquifer tests for wells completed at the site, which are shown on Figure 16. These tests and the results are summarized in Appendix G. Hydraulic testing of 27 wells was performed and includes water level responses from 75 monitoring wells. For the purpose of monitoring, all available accessible boreholes were considered, including the designated hydrology wells (NSH), diamond core holes (NSD), metallurgical exploration bores (NSM), as well as accessible boreholes from previous exploration drilling programs: pre-MCC (Magma), CS (Cyprus Superior), T and S wells (Quintana). The tested locations cover the range of typical hydrogeologic conditions observed at the site and include tests in basin fill, typical fractured zones within the different geologic bedrock units, fault intersects, rock masses with limited faulting and highly mineralized zones as well as un-mineralized rock formations. Locations of the wells tested under this program are shown in Figure 16. Table 9 summarizes the results of the testing, which indicate significant variation in hydraulic conductivity values depending upon the fracture density and faulting. A review of Table 9 indicates that the only well completed in basin fill which had a usable aquifer test analysis was well NSH-011, with an estimated hydraulic conductivity of 0.12 ft/d. Based upon the estimated values in Tables 8 and 9, the hydraulic conductivity of the basin fill varies from 0.09 to 4.2 ft/d for wells completed in basin fill.

Geologic Model

Excelsior's geologic model of the area of the ore body focuses on type of geologic unit and degree of fracturing. It was constructed as an aid for understanding the geology of the deposit and the feasibility of in situ mining methods; the model also provides useful input data for the hydraulic properties implemented in the model. Excelsior provided a version of the data gridded to a 50 by 50 foot grid, separated by 100 vertical feet. Figure 17 illustrates a sample of the data from the 3,750 foot elevation, which is within Model Layer 4, in the bedrock. Figure 17 shows both the geologic unit and an estimate of fracture intensity on a scale from 1 to 5. The construction and details of the method for building the geologic model are presented in Section 3 of the APP application, and the data presented in Figure 17 were provided by Excelsior, and are derived from

the FS (M3, 2016). Fracture intensity was estimated from core samples from numerous boreholes, including direct inspection of core and borehole televiewer logs. These data were used for establishing the model hydraulic properties using a correlation relationship between hydraulic conductivity and fracture intensity from the geology block model. Figure 18 illustrates a comparison of hydraulic conductivity estimates from aquifer testing with average fracture intensity for each tested zone. The dots represent individual test data, and the fracture intensity interpretation was provided by Excelsior. A power law fit was estimated, and is presented on Figure 18.

2.5.6 Faults and Fractures

Faults play a key role in groundwater flow at the Project site, acting as conduits to groundwater flow and in some instances, as barriers to flow. Figure 19 illustrates the mapped faults and their orientations for the Project site. Figure 19 also shows the fracture intensity for the 4,050 elevation. It is evident that the fault zones are significant facilitators for flow. These data were integrated into the groundwater model using the fracture intensity information (M3, 2016).

3 NUMERICAL GROUNDWATER CODES

3.1 Groundwater Flow Model Code

MODFLOW-NWT (*A Newton Formulation of MODFLOW 2005*, Niswonger, 2011), was the numerical code selected to simulate groundwater flow in the Project area. The MODFLOW NWT code (Newton Raphson formulation), includes the upstream weighting package, which simulates a continuous hydraulic conductivity field from saturated to unsaturated model cells allowing for smoother representation of wet and dry model cells. This is done by implementing a continuous pseudo-soil function representation for head from dry to wet cell conditions, as opposed to the discrete dry/wet approach used in previous versions of MODFLOW. This approach allows for a smoother representation of saturation conditions, more accurately reflecting the aquifer rewetting and drying conditions. This code was selected for the following principal reasons:

- Compatible with traditional MODFLOW software;
- Improved simulation of variable saturation conditions, and dry model cells;
- Better representation of particle tracks and capture zones, because of improved flow simulation; and,
- General wide acceptance of MODFLOW based model codes.

MODFLOW-NWT an updated version of the 3D finite-difference code based on the widely used United States Geological Survey (USGS) model program MODFLOW (McDonald and Harbaugh, 1988).

4 MODEL CONSTRUCTION

A combination of manual and automated calibration techniques were used to calibrate the groundwater flow model. PEST (Doherty, 2010, version 12.1.0) was used in limited cases to evaluate some recharge and hydraulic conductivity zones, but manual calibration was used to produce the final simulations. An automated sensitivity analysis was completed using the Groundwater Vistas version 6.78 (Environmental Simulation, Inc., 2011) software. This software was used as the pre- and post-processor for MODFLOW-NWT and PEST.model simulations.

4.1 Overview Groundwater Model Construction

The groundwater flow model was constructed as a regional model with a refined area for evaluation of local flow conditions at the Project site. For this reason, the model incorporated available data from the area of interest with more detailed geology and water level data from the Project area.

4.1.1 Modeling objectives

The objectives of the model are to integrate available hydrologic and geologic data to evaluate the nature of groundwater flow near the Project Area. The model was used to evaluate groundwater flow conditions, including direction and rates of groundwater flow. The model was also used to identify groundwater recharge and discharge zones, and to quantify the total volume of groundwater in the system. The model was then used to assist in designing hydraulic control, and to provide estimates of travel times and flow directions. The modeling evaluation is subject to the assumptions made regarding the regional and local flow system. These objectives were assessed through a calibration process and sensitivity analysis.

4.1.2 Model Assumptions

Because the bedrock in the area of the Project is significantly fractured, it was assumed that an equivalent porous media approximation could be used to represent the aquifer system in bedrock. Fracture orientation analysis (see Figure 3-9 in the APP Application) indicates a north-northwest/south-southeast orientation of fractures. Relatively high hydraulic conductivity values noted in Section 2.5 measured in wells screened in bedrock are also typical of porous media. The detailed information from the geologic model allows for the simulation of the higher conductivity areas and zones. The model simulates an unconfined aquifer system, with confined conditions in the deeper areas. The model does not address perched conditions, which may be present.

MODFLOW simulates flow using Darcy's law assumptions, and fluid density is assumed to be equivalent to water.

4.2 Model Domain and Model Grid/Layering

The Project Groundwater Model (GCPGM) is a seven layer model, representing the hydrologic layers outlined in Section 2. As illustrated in the cross section presented in Figure 4, the area of the GCPGM is characterized by Precambrian and Paleozoic bedrock, with a cover of basin fill material. The basin fill is thickest in the structural trough paralleling the Gunnison Hill Fault to the east of the Project site. Figures 20, 21 and 22 illustrate cross sections for the Project site area, showing the water table level (locations of the sections are noted on Figure 19). The cross sections also illustrate the model layers in the area presented. The basin fill is not saturated over most of the Project site, but saturated alluvium is present east of the site, and the thickness increases towards the east as top-of-bedrock elevations decrease. These layers are listed by number below:

1. Basin Fill/Bedrock – In the western portion of the model this layer represents bedrock, which is predominantly Texas Canyon Quartz Monzonite (Ttm), while in the east the layer is primarily basin fill (but the basin fill is unsaturated in this layer);
2. Basin Fill/Bedrock – In the western portion of the model this layer represents bedrock, including most of the geologic units, while in the east the layer is primarily basin fill, which is mostly saturated;
3. Basin Fill/Bedrock – Except for the eastern basin portion of the model this layer represents bedrock, including most of the geologic units, while in the east the layer is primarily saturated basin fill;
4. Bedrock/Basin Fill – Other than small pockets of saturated basin fill, this layer is primarily bedrock;
5. Bedrock Aquifer;
6. Bedrock Aquifer; and,
7. Bedrock Aquifer.

Each of the seven model layers has 43,681 cells, for a total of 305,761 model cells, based on a 209 by 209 cell grid. The model has a total of 173,523 active calculation cells, and active cells are the same for each layer. The base model is a steady-state model based on current groundwater conditions. Figure 23 illustrates the active cells for the model domain, which are the same for each model layer and comprise an area of 42 square miles. Cells shown in black are inactive cells, set as no flow cells. The model grid is refined to 75 foot square cells in the area of the Project site, while the outlying portions are 300 foot square cells.

Since groundwater flow appears to be generally west to east across the site, the model grid was oriented in a north-south fashion. Although there is evidence of a preferential north-northwest/south-southeast fracture orientation in the area of the Project, it was decided to leave the grid orientation as north-south. Paleozoic sedimentary units dip steeply to the east as indicated in the cross section shown in Figures 20, 21 and 22. Other units such as the intrusive Texas Canyon Quartz Monzonite are adjacent to the dipping Paleozoic units and occur from shallow to great depths. The geologic model used in developing the Gunnison groundwater model was subdivided first based on fracture intensity, the primary basis of permeability in the fractured rock and, second, on the formations that were encountered. The geologic model (see Section 4.4) was input directly to the groundwater model. Because the geologic model follows fixed elevations, the groundwater model has flat layers across the area of the geologic model. Outside of this, the layers follow topography and are generally mostly uniform in thickness. Stratigraphic units were also incorporated into the material property array simply to allow visual distinctions between the various units. The initially assigned hydraulic conductivity values are only a function of the fracture intensity.

With this in mind, the layering was setup primarily to allow simulation of insitu mining at the depths expected. Two layers (layers 1 and 2) were assigned to represent the basin fill and shallow rock units where basin fill is absent; three layers (layers 3, 4, and 5) represent the oxide mining zone; layer 6 represents the sulfide ore zone; and layer 7 represents un-mineralized rock below the sulfide zone. Layers 3, 4, and 5 are each 300 feet thick, a sufficient thickness to represent vertical variability in the hydrostratigraphy as defined using Excelsior's geologic block model.

Model layer 1 varies in thickness to compensate for surface elevation changes, while the remaining layers are constant thickness. Layer 1 varies from 85 near Dragoon to 1,648 feet in the Little Dragoon Mountains west of the Project site. Layers 2 through 5 are 300 feet thick, while layers 6 and 7 are 400 feet thick. These layers are flat lying in the area of the geologic model, tying into the data from this source, while sloping with topography in the other areas.

Model layer 1 is unconfined, Layers 2 and 3 are unconfined/confined (convertible depending upon whether the overlying layer is saturated), and Layers 4 through 6 are confined.

4.3 Temporal Layout

The base model is a steady-state model representing current conditions, and was calibrated using water levels noted on Figure 13. Figure 24 illustrates the water level targets selected for calibration, indicating the model layer for each target value. These values were selected to represent the regional groundwater system, since previous analyses (Harshbarger [1973] and WDC

[1973]) noted the presence of perched conditions. The groundwater flow model was designed to simulate the regional flow system, and does not address perched conditions.

Ultimately, the groundwater model was used to estimate the impacts of the mining operation, and a transient simulation was created to simulate the proposed 23 year period of active mining. These analyses added 23, one-year stress periods for the simulation. These simulations incorporate a steady-state starting point for the model, then include 23 transient stress periods of simulated mining activity. A separate model run was also constructed to evaluate long-term post-mining flow conditions, which is documented in Section 5.2.4.

4.4 Hydraulic Parameters

4.4.1 Hydraulic Conductivity

In general, hydraulic conductivity values were set using the relationship between hydraulic conductivity and fracture intensity outlined in section 2.5.6 of this document. Each geologic unit was broken into six hydraulic conductivity zones, representing five fracture intensity value ranges from 1.0 to 5.0 (e.g. 1.0 to 1.5, 1.5 to 2.5…etc.). The sixth zone was used for areas outside of the geologic model area, where no fracture intensity mapping was completed. Because fracture intensity appears to be strongest in the area of the ore body (due to the thrust faulting and other strains mapped), the hydraulic conductivity value for this outer zone was near the lower end of the range. Table 10 displays the hydraulic conductivity zones and associated geologic unit, for the initial model runs and the final calibrated values.

Four zones were set up to represent fault zones, particularly the Black Rock Fault, since faults are key flow corridors in the model. Because the geologic model fracture intensity estimates captured these faults as high conductivity zones adequately, no discrete fault zones were used in the model ultimately.

The vertical to horizontal hydraulic conductivity ratio was initially set to1:10, but these were generally changed to 1:1 throughout the model reflecting the fractured nature of the system. The vertical to horizontal ratio was adjusted to 1:50 for the basin fill. Figures 25 through 31 illustrate hydraulic conductivity for each model layer.

4.4.2 Storage Values

Confined specific storage values in the model were assigned based on the results of the aquifer testing and transient model calibration, and were fixed at 5.0×10^{-5}, throughout the model domain.

Where unconfined conditions were simulated, specific yield values were based on commonly used values for basin fill materials: 0.15 for the majority of the basin fill and 0.08 for deeper portions of the basin fill. Specific yield for bedrock areas was set in accordance with a relationship between fracture intensity and porosity, as with hydraulic conductivity. The correlation was established using gamma-gamma geophysical logs which measure porosity from available well logs, and then by comparing the results to interpreted fracture intensity values for the logged core. Figure 32 illustrates the relationship between fracture intensity and porosity, with the average values indicated with red diamonds. One value of 31% was removed which was measured in a section of core that apparently had washout conditions (large void area). The average value was used for each fracture intensity level, as shown on Figure 32. The value of average porosity for fracture intensity of 5 is lower than it is for a value of 4, which may result from the formation of more fine grained material in the intensely fractured and faulted areas. It should be noted that no values of fracture intensity 5 were assigned to any model cells. Some values in the geologic model exceed the threshold for level 5, but due to averaging of properties to the model cells, the highest value used is fracture intensity of 4. This applies to both the hydraulic conductivity and storage values.

Figure 33 illustrates the specific yield values used in the model. Specific yield was assumed to be 80% of the porosity. Table 11 lists the storage zones used in the groundwater model.

4.5 Boundary Conditions

The GCPGM utilized constant head boundaries to simulate boundary flows out of the model domain during the model calibration phase. Constant heads were used to simulate outflow at the Big Draw and Walnut Gap in layer 2 through 7. Figure 34 illustrates the constant head boundary cells in layers 2 through 7. The values for head are the same for each layer, and are set as 4,150 for the Walnut Gap outflow in the northeast, and 4,050 for the Big Draw outflow boundary. These values were used for both transient and steady-state simulations.

A horizontal flow barrier was used to address a large head difference noted in the water levels in the northern portion of the wellfield area. The cause of this water level difference is unclear, but it may be related to faulting. Figure 35 illustrates the location of this feature, and includes water levels from April 2015. The major faults that have been mapped in the Project area are also presented.

4.6 Recharge

The only significant source of recharge in the model area is from precipitation, as there are no significant agricultural activities. Figure 36 illustrates the recharge rates used in the model.

Recharge has been applied to the model along major drainages and in upland areas where orographic affects increase annual precipitation and therefore infiltration to groundwater, as shown in Figure 36. A broad area of recharge occurs to the northwest on the flanks of the Dragoon Mountains, which is underlain by Precambrian units and the Texas Canyon quartz monzonite. The highest rates of recharge occur along Walnut Wash near the ore deposit.

4.7 Steady-State Model Calibration

To facilitate model calibration, the steady-state model was calibrated using both trial and error and Parameter Estimation (PEST) methods. Generally, PEST values were superseded by trial and error calibration, since the model ran very quickly. Target values previously discussed (see Figure 24) were used in the calibration process.

Figure 37 illustrates the comparison of simulated heads and estimated water levels for the steady-state period. The simulated heads represent the "water table" values from the model, which is the head from the shallowest saturated layer. The overall match is good, with the sense of flow direction and gradient matching the results fairly closely. Residual values are posted for the 77 targets used in the calibration.

Figure 38 illustrates the comparison between measured water levels and model simulated values. This figure also includes the statistical results for this simulation. The overall statistical match is good, with a root mean square error (RMSE) of 4.3%[9]. The mean error is -1.3 feet, and the absolute residual mean is 28.7 feet. Table 12 also presents the calibration results. Residual values are listed for the targets included. The steady-state model was used as the first stress period for the transient model, and formed the basis for the transient simulation.

4.8 Transient Model Calibration

Because the groundwater basin is considered to be in a steady-state condition, no regional transient calibration of the model was completed. There is only one well (Dragoon Water Company) with an adequate record of water level measurements (Figure 14) to prepare a hydrograph, and too

[9] In general, a 10% RMSE is considered an adequate calibration, while better than 5% RMSE is considered well calibrated (Anderson and Woessner, 1992).

limited temporal spread of water level data. Additionally, there are no large pumping or other aquifer stresses within the basin, particularly since the pumping for Johnson Camp was limited after 2010. For this reason, the transient calibration focused on matching an aquifer test conducted at well NSH-015.

4.8.1 Test at NSH-015

Pumping tests of the NSH wells were comprised of step-drawdown tests, followed by a constant rate pump tests. For NSH-015, 4 step-pumping rates were completed: 35, 50, 75 and 85 gpm, with the final step (85 gpm) maintained for the duration of the constant rate test. The steps were completed over a 12-hour period, followed by 4.5 days at 85 gpm. The maximum drawdown observed in the pumping well was 76 feet at 5 days. After termination of pumping, recovery was monitored for a period of 2.1 days. During the tests, drawdown was monitored in the pumping well itself, and in available observation wells surrounding the test site to a distance of 2000 feet. Figure 39 illustrates the wells monitored during the testing, which varied in distance from approximately 150 to 2,700 feet from NSH-015. These data were analyzed using AQTESOLV, as summarized in the Appendix G.

Figure 40 illustrates the model simulated aquifer test drawdown compared to measured drawdowns at the surrounding wells. Drawdown at the distant wells (NSD-005 and NSD-010) was not significant, and the GCPGM does not simulate significant drawdown at these wells. Drawdown was predicted to be approximately 4.89 feet at well NSH-019, but the model simulated only 0.01 feet of drawdown. This is a result of the fracture dominated flow system, which results in drawdown variations depending upon whether the observation well intersects the same fracture network from which the pumping well draws.

Drawdown at the pumping well was corrected for well efficiency and block center correction as follows:

Predicted drawdown corrected for block dimensions using equation:

$$hw = L + \sqrt{((h - L)2 \ - (\frac{Q}{\pi} * K \ * LN \ \left(\frac{re}{rw}\right)))}$$

Where:
h_w = head in well (feet)
L = bottom elevation of layer 3 (feet amsl) = 3900 feet
h = predicted head (feet)
Q = pumping rate (ft^3/day)
r_e = effective radius = $0.208 * \Delta x$
r_w = radius of well (assumed 0.5 feet)

Drawdown was then recomputed using a well efficiency of 60 %. The drawdown displayed on Figure 40 at NSH-015 is adjusted to reflect these effects. Figure 41 through 44 illustrate hydrographs comparing drawdown simulated at NSH-015, NSH-016, NSH-017 and NSD-002 (respectively), to measured drawdown values.

Ultimately, the conclusion from this analysis (and the aquifer testing program in general) was that the confined specific storage value was calibrated to 5 X 10^{-5}, from the original value of 3 X 10^{-6}, and the hydraulic conductivity of the Black Rock Fault zone was set as 0.8 feet/day. These data were subsequently integrated into the model.

4.9 Model Sensitivity

Sensitivity runs were completed using the steady-state model for hydraulic conductivity and recharge, using the automated sensitivity process in the Groundwater Vistas™ software. For Horizontal Hydraulic Conductivity (Kx), each zone was varied using factors of 0.1, 0.2, 0.5, 1.0, 2.0, 5.0 and 10.0. Based on the sum of squares for the resulting model runs, the most sensitive six Kx zones are presented in Figure 45. The most sensitive zone is Kx10, which represents undivided Paleozoic units in the area north and east of Johnson Camp mine. The second most sensitive zone is Kx4, which represents the Texas Canyon Quartz Monzonite in the western portion of the model domain. The model is sensitive to the basin fill hydraulic conductivity (Zones Kx2 and Kx3), and to Precambrian rocks near Johnson Camp (Kx59).

For Vertical Hydraulic Conductivity (Kz), each zone was varied using factors of 0.1, 0.2, 0.5, 1.0, .0, 5.0 and 10.0. Based on the sum of squares for the resulting model runs, the most sensitive six Kz zones are presented in Figure 46. The most sensitive zone is Kz10, and the second most sensitive zone is Kz4, which represents the Johnson Camp area. Other sensitive zones are generally the same as Kx, with the exception of Zone Kz42, which is a zone in the Project ore

body (Middle Abrigo). The model is much less sensitive to Kz variations, as the overall range of sum of squares is much less than for Kx. This means that focus of the calibration effort on horizontal hydraulic conductivity is reasonable, and that the vertical hydraulic conductivity values may be a more limited factor in accurately simulating groundwater flow.

Figure 47 illustrates the model sensitivity to changes in the recharge rates. The rates for recharge were varied over the range of observed precipitation rates relative to the average precipitation. The highest observed precipitation was 1.9 times the average and the lowest was 0.38 times the average rate (see Table 1 and Figure 36). The model is very sensitive to recharge zone 2, representing the higher elevation recharge in the Little Dragoon Mountains (see Figure 36). This is the only recharge zone for which the model exhibits significant sensitivity.

The main result of the sensitivity analysis is that the model is most sensitive to horizontal hydraulic conductivity and recharge zones that are not part of the ore body, and thus errors in these estimated values would have a limited impact upon the conclusions regarding the groundwater flow conditions at the Project site.

4.9.1 Hydraulic Control Sensitivity

One of the concerns addressed by the groundwater model is whether the hydraulic control scheme can be maintained in the event of accelerated fluid movement caused by unforeseen conditions. To evaluate this possibility, the hydraulic capture model was modified to test: 1) higher hydraulic conductivity in fault zones, and 2) lower porosity. These input assumption changes would be the most likely changes to result in the loss of hydraulic control.

As discussed, the hydraulic conductivity was set based upon the fracture intensity. Faulted zones have high hydraulic conductivity, and represent the most logical possible route for preferential flow. To test this, the model hydraulic conductivity zones representing FI of 4 (K = 10 ft/d) were reset to 50 ft/d. This is slightly less than the value of a hydraulic conductivity for an FI value of 5 (65 ft/d). Figure 48 illustrates the results of this simulation, indicating that hydraulic control was maintained.

In order to assess the sensitivity of the predicted capture to changes in porosity, two simulations were conducted using porosity lowered by 20 percent (%) and 50%. Either of these values represent values of porosity lower than values observed at the site. Lower porosity increases the speed of particles thereby allowing for the potential of excursions out of the wellfield area. Figure 49 illustrates the results of the simulation with porosity reduced by 20%. Because specific yield was based upon porosity (80% of porosity), the specific yield was also reduced by 20%. The particle tracking indicates that capture was maintained.

Figure 50 illustrates a 50% reduction in porosity and specific yield. A review of these results indicates that capture was also maintained. Based on these results, the estimate of hydraulic containment is viable for an assumed overall porosity of 50% of simulated values.

5 MODEL PREDICTIONS

5.1 Hydraulic Control Simulations

The groundwater model was used to assess how hydraulic control can be maintained during future mining operations at the Gunnison Project site. The model simulated a 23-year period of mining and rinsing, (18 years of active mining and 5 years of rinsing). Hydraulic control was assessed using particle tracking.

5.1.1 Model Design

The basic process of mining at the Project site involves injection and recovery of acidic solutions to recover the copper in the ore body. To achieve this, groups of wells will be installed, including groups of associated injection and recovery wells. Following active acid injection and recovery, each block will undergo rinsing to flush out remaining acid solutions. The spacing of these wells will be approximately within a 100 foot square, with an injection well in the center and 4 recovery wells surrounding it on the corners of the square. The well clusters will be arranged in a grid pattern, with adjacent clusters sharing recovery wells. The injection and recovery rates will be in approximate balance, with hydraulic control pumping around the perimeter of the mining resource boundary. An idealized "5-Spot" layout, with an injection well surrounded by four extraction wells in a grid pattern, is illustrated in Figure 51. Injection rates will be dependent upon the number and degree of fractures encountered in drilling each well, with total recovery rates in the four surrounding wells in an approximate balance. Injection/recovery rates will vary, and may exceed 100 gpm, if feasible. Figure 52 shows the progression of the mining area, with each active block illustrated for each of the 23 mining years. The blocks overlap, such that the active area migrates through the deposit, with areas where mining is completed moving to rinsing phase and then inactive.

5.1.2 Hydraulic Control Wells

The active blocks are shown on Figure *52*, which shows the progression of active mining from 1 to 23 years. The groundwater model was set up with a steady state starting period, and then 23 one year stress periods, each broken into 2-month time steps. The model used particle tracking to evaluate containment. Because the project is a balanced injection and recovery system, containment of the fluids is achieved through a pumping containment system, with hydraulic control wells placed at the periphery of the *wellfield*. These wells were initially sited at a spacing of approximately 300 feet apart, but well spacing was adjusted or wells were added in zones of

high hydraulic conductivity to maintain containment as indicated by particle capture. Figure *53* illustrates location of the 30 wells simulated for the containment system.

As described in Attachment A-1, during operation of the wellfield, the IMW network will be used to detect excursions from active mine blocks. The IMW system includes an inner and an outer ring of monitoring wells that expand as mining operations expand. IMW's will be monitored for specific conductance and water elevation.

The inner ring is primarily for operational use, allowing operators to observe the immediate effects of changes in operational conditions like injection or recovery rates. Some mining solutions are expected to be observed in these wells due to the sweep of solutions in and out of the margins of the active mining blocks. This is considered normal.

The outer ring is designed as an early warning system to ensure the appropriate hydraulic control wells are installed and operating. Appropriate alert levels for specific conductance will be set in the outer ring of IMW's. Increasing trends above alert levels in outer wells would illicit the following response(s):

- Adjust operations to reverse the trend (pull back solutions) and/or
- Install interceptor HC wells (if not already installed)
- Adjust pumping in HC wells if needed

5.1.3 Particle Tracking

To evaluate hydraulic containment effectiveness, over the period of mining/rinsing, a particle tracking simulation was constructed. Particles were placed around each active group of mining blocks at the end of each year. Figure *54* illustrates an example of the placement of particles for mining year 5, where blocks for years 2-5 were either being actively mined or rinsed. Particles were placed for each mining year until the end of the simulation, and the simulation was run until active mining ends. Particles were placed in Model Layers 3, 4, and 5 which represents the area of active mining.

The groundwater model and particle tracking simulation are based upon an equivalent porous media (EPM) assumption about the nature of the hydraulic conditions at the site. Due to the degree of fracturing and interconnectedness of the system as demonstrated by the aquifer testing, this is a reasonable assumption. Because the model simulates the interconnected high conductivity fracture zones as a series of connected higher conductivity model cells, the simulation of the potential

fracture conduits has been addressed. Additional sensitivity testing of lower porosity (higher flow velocity simulations) has also addressed this concern, evaluating the control scheme under higher velocity of flow conditions.

5.2 Results of Simulations

5.2.1 Drawdown and Water Level Changes

Ultimately, pumping rates for the hydraulic control wells were established which vary over the course of the simulation, as shown in Table 13. These rates were set to achieve capture, and minimize drawdown in the ore body area. It is assumed that the water produced can be used as make-up water for mining operations, and for this reason, capture focuses on the area immediately down gradient of the mined area initially. Total pumping rises from 15 gpm in the first year to a peak of 190.5 gpm in mining years 18 through 21.

Figure 55 illustrates drawdown in Model Layer 4 after 1 year of active pumping. Hydraulic control wells HC-15, HC-17 and HC-18 are active and are collectively pumping 15 gpm. The maximum simulated drawdown is approximately 4 feet, near well HC-17.

Figure 56 illustrates drawdown in Model Layer 4 after 6 years of active pumping. Hydraulic control wells HC-02 through HC-04, and HC-15 through HC-22 are active, and are collectively pumping 81.5 gpm. The maximum simulated drawdown is approximately 16 feet, near well HC-21.

Figure 57 illustrates drawdown in Model Layer 4 after 10 years of active pumping. Hydraulic control wells HC-01 through HC-06, and HC-10 through HC-22 are active, and are collectively pumping 124.5 gpm. The maximum simulated drawdown is approximately 26 feet, near well HC-12.

Figure 58 illustrates drawdown in Model Layer 4 after 14 years of active pumping. Hydraulic control wells HC-01 through HC-06, and HC-10 through HC-28 are active, and are collectively pumping 154.5 gpm. The maximum simulated drawdown is approximately 31 feet, near well HC-12.

Figure 59 illustrates drawdown in Model Layer 4 after 18 years of active pumping. All of the hydraulic control wells are active, and are collectively pumping 190.5 gpm. The maximum simulated drawdown is approximately 39 feet, near well HC-21.

Figure 60 illustrates drawdown in Model Layer 4 after 21 years of active pumping. All of the hydraulic control wells are active, and are collectively pumping 190.5 gpm. The maximum simulated drawdown is approximately 44 feet, near well HC-21.

Figure 61 illustrates drawdown in Model Layer 3 after 23 years of active pumping . Seventeen of the thirty hydraulic control wells are active, and are collectively pumping 123 gpm. The maximum simulated drawdown is approximately 42 feet, near well HC-02.

Figure 62 illustrates drawdown in Model Layer 4 after 23 years of active pumping. Seventeen of the thirty hydraulic control wells are active, and are collectively pumping 123 gpm. The maximum simulated drawdown is approximately 42 feet, near well HC-30.

Figure 63 illustrates drawdown in Model Layer 5 after 23 years of active pumping. Seventeen of the thirty hydraulic control wells are active, and are collectively pumping 123 gpm. The maximum simulated drawdown is approximately 45 feet, near well HC-30.

Based on the results of the simulations, drawdown generally remains less than 40 feet throughout the simulation[10], which results in a minimal potential impact upon the available resource. This is beneficial from the standpoint of mining the resource.

5.2.2 Capture Analysis

One of the key goals of the modeling simulations was demonstrate that the hydraulic control wells maintain capture of potential releases from the wellfield. The particles were released as outlined in Figure 54, (in Layers 3 through 5), and tracked through the end of the simulation. Figure 64 illustrates particles in Layer 3, which remain within the area of the wellfield through the course of the simulation. Based on this simulation, particles in Layer 3 a contained within the wellfield area. No particles entered layers 6 or 7, the deeper reaches of the model domain representing the transition zone and the underlying sulfide ore.

Figure 65 illustrates the particle tracking for Layer 4, through Year 23. Based upon the simulation results, the particles remain within the area of the wellfield, or are captured at the hydraulic capture wells. Some particles exit the wellfield area on the west side, but based on the flow direction, their travel direction will remain within the area of the wellfield.

[10] The maximum drawdown simulated was approximately 46 feet, in pumping Year 21 (Stress Period 22) at well HC-30.

Figure 66 illustrates the particle tracking for Layer 5, through Year 23. As with Layer 4, the particles remain within the area of the wellfield, or are captured at the hydraulic capture wells. Some particles exit the wellfield area on the west side, but based on the flow direction, their travel direction will remain within the area of the wellfield.

Based upon these results, the hydraulic control wells achieve capture of the area of mining.

5.2.3 Head and Velocity Vectors

Figures 67 through 69 illustrate velocity vectors and simulated heads for each layer simulated at the end of mining year 21. Upward flow directions are colored red, and downward flow is colored blue. Based upon the pumping simulated, gradients vary from upward to downward locally across the wellfield area. Velocity vectors also indicate containment pumping is achieving capture for the wellfield area.

The hydraulic capture zone of the wellfield to the east of the wellfield was estimated for each model layer using the flow arrows as a guide. The estimated capture zone is presented in Figures 67 through 69, for Year 21 of mining, which represents the maximum hydraulic control pumping rate. Generally, the capture zone is approximately the same for each model layer.

5.2.4 Evaluation of Particle Velocities

To estimate the velocities within the AOR and beyond the wellfield perimeter, a *100-year* simulation was conducted following the end of active mining to determine the particle velocities and time to reach the AOR boundary. The simulation starts out with the head flow field after the 23 year mining period and termination of pumping. Water levels slowly recover during the simulation because no pumping is included in the simulation. Figure *70* illustrates the result of this simulation, with particles moving south and east from their initial locations near the perimeter of the wellfield. Table *14* below lists the average and maximum particle velocities over the simulation for particles within the AOR.

Table 14 – Simulated Particle Velocities in AOR by Layer

Layer	Average Velocity (ft/d)	Maximum Velocity (ft/d)	Count
3	0.098	8.869	38319
4	0.120	3.893	42346
5	0.120	1.468	46321
6	0.157	0.765	12263
7	0.179	0.488	203

The count shown in Table *14* represents the number of particles evaluated within the AOR by the end of the simulation. Particles that moved beyond the AOR were excluded.

Figure *71* illustrates a histogram of the velocity distribution, showing particle velocities prior to leaving the AOR. As expected, particle velocities drop as drawdown conditions rebound to static conditions after mining ends. Average velocities drop from around 0.18 feet per day (ft/d) in the first decade to less than 0.10 within 20 years. Maximum velocities also decline over that period from 8 ft/d to less than 1 ft/d.

Figure *72* illustrates the time for particles to reach the AOR boundary, listing the number of particles which cross the AOR by decade. As evident in Figures *70* and *72*, the initial surge in numbers is from particles crossing the southern boundary, while the later surge after 60 years is due to particles reaching the eastern boundary. This indicates that the timeframe to reach the eastern POC wells is quite long, and the simulation does not account for the geochemical changes over that timeframe, which have been shown to quickly neutralize the mining solutions.

5.2.5 Pollutant Management Area

Figures 67, 68, and 69 define the areas of capture by the hydraulic control wells along the northern and eastern boundary of the ISR wellfield. According to with ARS §49-244.1, "the pollutant management area (PMA) includes horizontal space taken up by any liner, dike or other barrier designed to contain pollutants in the facility." The hydraulic control wells serve as a barrier to contain pollutants, and the hydraulic control wells' areas of influence are an important element of pollutant containment. Therefore, PMA, as defined in the APP Application document includes the areas of capture as shown in Figure 73, which illustrates the maximum limit of capture based on the capture zones estimated for each model layer 3 through 5.

5.2.6 Discharge Impact Area

The Discharge Impact Area (DIA) includes the area of the PMA and the area of the ponds, as shown in Figure 73.

5.3 Future Use of Groundwater Model

As the wellfield is developed, installed and operated, significant new data will be available to evaluate the performance of the model predictions regarding capture and control. Wells will be tested and evaluated for injection and recovery performance and these data can be integrated into the groundwater model over time. This will allow for further evaluation of the effectiveness of the hydraulic control system. Model updates will be provided as part of performance review updates, based upon the compliance schedule.

5.3.1 Performance Reporting after Year 1

During the first year of in-situ mining, considerable data and operational experience will be gathered and compiled. All wells designated as intermediate monitor wells (IMWs) will be fitted with a transducer that will measure both water levels and specific conductance at least once daily. The specific conductance/water level probe will be lowered to a depth that is less than the maximum pressure rating of the probe. One probe in a well is considered sufficiently representative for the following reasons:

- Due to the high degree of connection within the fractured ore body, as demonstrated by aquifer testing, and the vertical mixing that will occur in the mining area, there will not be a high degree of stratification of water quality within the ore zone. The groundwater/PLS mixture will be well-mixed. Table A-1 demonstrates the high degree of connection of fractures within the ore body.
- If there are any differences in water quality within the borehole, mixing within the borehole through diffusion will occur, resulting in a homogenous water chemistry within the borehole.
-

Recovery and injection rates for all Class III wells will be recorded on a daily basis. Water levels at observation wells will be monitored to show an inward gradient at the hydraulic control wells. A summary report will be provided to EPA. Model updates and adjustment will be completed, as needed. This will include updated hydraulic parameters, comparison with IMW results, and simulation(s) to demonstrate hydraulic control. If changes are needed to improve control,

Excelsior will propose them as part of this report. This may include changing the sequence of HC well installation or pumping rates. Excelsior will continue operations during the EPA review and comment period.

Excelsior will demonstrate the effectiveness of wellfield operations using the approaches listed below:.

- Gather operational performance data including injection and recover flow rates, water level data from all HC and observation wells, IMWs, and POC wells, and specific conductance data from IMW's and observation wells.
- Update the Excelsior groundwater model with the constructed locations of all operational wells, POC wells, and monitor wells.
- Develop model simulation of the first year's operations by inputting the average monthly pumping and injection rates.
- Compare the model predictions of water levels with field measured water levels. Determine if the model predictions match field measurements and make local adjustments to the model input assumptions such as hydraulic conductivity if necessary and re-run the model.
- Prepare a report describing the model validation. The report will detail the assumptions input to the model, all changes made to the model, the model results, and an assessment of the model performance.

6 SUMMARY AND CONCLUSIONS

The Project groundwater model was constructed using a number of detailed datasets for the Project area, including a detailed mapping of fracture intensity, which is a critical component of groundwater flow in the Project area. The model is acceptably calibrated and adequately represents the groundwater flow conditions in the project area. The model demonstrates that containment of mining solutions can be maintained with hydraulic control wells around the downgradient perimeter of the facility. The total pumping rate for hydraulic control increases from 15 gpm in Year 1 to a maximum of 190.5 gpm at the end of Year 21. Hydraulic control extends to the east by approximately 800 feet from the hydraulic control wells at maximum pumping in Year 21. The total drawdown created by the hydraulic control wells never exceeds about 50 feet.

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TABLES

TABLE 1
Annual Precipitation Data for Sunsites, Arizona
Gunnison Copper Project

YEAR	Annual Precipitation (inches)	YEAR	Annual Precipitation (inches)	YEAR	Annual Precipitation (inches)	YEAR	Annual Precipitation (inches)
1893	8.03	1924	5.12	1955	12.01	1986	19.53
1894	9.82	1925	9.89	1956	5.81	1987	14.33
1895	8.84	1926	18.88	1957	10.34	1988	18.97
1896	12.03	1927	12.43	1958	15.07	1989	10.61
1897	9.85	1928	12.65	1959	14.28	1990	16.69
1898	12.07	1929	15.70	1960	12.05	1991	19.60
1899	7.68	1930	14.21	1961	12.18	1992	14.91
1900	5.94	1931	17.16	1962	8.44	1993	14.57
1901	10.59	1932	13.88	1963	9.34	1994	12.47
1902	7.72	1933	12.62	1964	9.93	1995	11.54
1903	7.62	1934	12.97	1965	13.74	1996	13.87
1904	8.98	1935	9.48	1966	16.42	1997	13.76
1905	20.71	1936	4.76	1967	18.75	1998	11.63
1906	13.12	1937	11.67	1968	13.07	1999	11.51
1907	14.76	1938	10.39	1969	13.00	2000	17.23
1908	10.45	1939	11.41	1970	10.43	2001	9.26
1909	10.97	1940	13.42	1971	17.32	2002	7.35
1910	10.32	1941	14.72	1972	16.88	2003	6.65
1911	15.64	1942	11.72	1973	11.59	2004	13.50
1912	12.70	1943	11.97	1974	14.57	2005	11.59
1913	16.64	1944	14.03	1975	12.30	2006	11.72
1914	23.76	1945	10.97	1976	10.28	2007	13.88
1915	11.09	1946	12.92	1977	20.87	2008	11.23
1916	12.48	1947	8.45	1978	16.04	2009	9.75
1917	11.59	1948	10.03	1979	11.58	2010	12.33
1918	9.04	1949	15.00	1980	10.42	2011	12.00
1919	23.58	1950	13.18	1981	12.36	2012	7.63
1920	7.03	1951	8.58	1982	12.88	2013	8.74
1921	9.30	1952	8.89	1983	19.25	2014	15.33
1922	11.57	1953	6.76	1984	22.11		
1923	11.99	1954	11.76	1985	16.74		

Average	12.49	
Minimum	4.76	38.1%
Maximum	23.76	190.2%

http://cdiac.ornl.gov/epubs/ndp/ushcn/ushcn_map_interface.html#

Source: MJ Menne CN Williams Jr. RS Vose NOAA National Climatic Data Center Asheville NC

CLEAR CREEK ASSOCIATES

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
536431	D(15-22) 14ADD		SMITH,,B J	731764.61	411479.92	4875	SPCL - EXPLORATION	0	0	0	0	0
521962	D(15-22) 14DDD		DURHAM, ROBERT C	731833.61	408775.34	4925	SPCL - EXPLORATION	423	0	0	0	0
521849	D(15-22) 23		NORD RESOURCES CORP	729542.68	405800.23	5091	SPCL - EXPLORATION	150	0	0	0	0
611607	D(15-22) 23CD	Moore Shaft	NORD RESOURCES CORP	728793.93	403967.64	5107.4	NON-EXEMPT	680	680	8	680	800
611609	D(15-22) 23DB0	Black Prince Mine	NORD RESOURCES CORP	730402.88	405395.8	5012.95	NON-EXEMPT	945	945	8	0	945
223162	D(15-22) 24BDB	CW-3A	NORD RESOURCES CORP	733835.89	406804.02	4867	ENV - MONITOR				0	0
912817	D(15-22) 24CBD	CW-3	NORD RESOURCES CORP	733371.14	404876.41	4867	EXEMPT				0	0
216067	D(15-22) 25		NORD RESOURCES CORP	734865.65	400564.3	4790	SPCL - MINERAL EXPLORATION				0	0
912984	D(15-22) 25		NORD RESOURCES CORP	734865.65	400564.3	4798	SPCL - MINERAL EXPLORATION			11	0	0
223486	D(15-22) 25	CW-2A	NORD RESOURCES CORP	734865.65	400564.3	4798	ENV - MONITOR				0	0
578984	D(15-22) 25ADC	Dragoon	NORD RESOURCES CORP	734292.75	398888.79	4867.41	ENV - MONITOR OR PIEZOMETER	495	495	5	440	490
646841	D(15-22) 25B		DOBSON JR,C H	733534.64	401880.67	4912	EXEMPT	0	0	0	0	0
611608	D(15-22) 25BC	Republic Well	NORD RESOURCES CORP	732439.46	401628.75	4973.38	NON-EXEMPT	862	862	8	0	862
563956	D(15-22) 25BCB	Twin	NORD RESOURCES CORP	732779.23	401419.23	4954.2	ENV - MONITOR OR PIEZOMETER	624	624	5	564	624
912815	D(15-22) 25BDB	CW-6	NORD RESOURCES CORP	733865.84	401553.23	4878	EXEMPT				0	0
223164	D(15-22) 25BDB	CW-6A	NORD RESOURCES CORP	733865.84	401553.23	4878	ENV - MONITOR				0	0
563953	D(15-22) 25CAB	Cochise	NORD RESOURCES CORP	734060.73	400121.15	4865.44	ENV - MONITOR OR PIEZOMETER	605	585	5	545	605
644769	D(15-22) 25CC0		BYARS,R	732881.39	398584.43	4968	EXEMPT	200	200	6	0	0
561564	D(15-22) 25CCD	Southern	NORD RESOURCES CORP	733248.61	398080.08	4895.9	ENV - MONITOR OR PIEZOMETER	425	425	5	365	425
912816	D(15-22) 25CDD	CW-1	NORD RESOURCES CORP	734490.05	398128.3	4816.75	EXEMPT				0	0
223161	D(15-22) 25CDD	CW-1A	NORD RESOURCES CORP	734538.66	398253.3	4816	ENV - MONITOR				0	0
912814	D(15-22) 25DBB	CW-2	DURHAM, ROBERT C	735193.91	400236.89	4799.66	EXEMPT				0	0
912818	D(15-22) 25DBB	CW-4	NORD RESOURCES CORP	735193.91	400236.89	4871	EXEMPT				0	0
223163	D(15-22) 25DBC	CW-4A	NORD RESOURCES CORP	735196	399573.99	4870	ENV - MONITOR				0	0
595924	D(15-22) 25DDD	Donkey MW-8B	NORD RESOURCES CORP	732205.2	398341.44	4918.71	ENV - MONITOR OR PIEZOMETER	500	500	5	425	475
912652	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - MINERAL EXPLORATION				0	0
536175	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - EXPLORATION	0	0	0	0	0
546058	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - EXPLORATION	0	0	0	0	0
216068	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - MINERAL EXPLORATION				0	0
526189	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - EXPLORATION	0	0	0	0	0
531741	D(15-22) 26		NORD RESOURCES CORP	729558.45	400539.69	5130	SPCL - EXPLORATION	0	0	0	0	0
561565	D(15-22) 26ACA	Cross	NORD RESOURCES CORP	730644.27	401795.05	5027.96	ENV - MONITOR OR PIEZOMETER	502	502	5	442	502
563954	D(15-22) 26BCB	Pioneer	NORD RESOURCES CORP	726957.27	401512.6	5220.95	ENV - MONITOR OR PIEZOMETER	365	365	5	305	365
570713	D(15-22) 26BD0		NORD RESOURCES CORP	728894.39	401194.59	5189	SPCL - MINERAL EXPLORATION	500		5	0	0
561563	D(15-22) 26CCA	Saddle	NORD RESOURCES CORP	727974.28	399220.68	5068.8	ENV - MONITOR OR PIEZOMETER	123	123	5	63	123
561562	D(15-22) 26DBB	EPB-1 core	NORD RESOURCES CORP	729931.85	400120.53	5052.2	ENV - MONITOR OR PIEZOMETER	398	12	3	0	398.3
578988	D(15-22) 26DBD		NORD RESOURCES CORP	730556.7	399560.62	5052	ENV - MONITOR				0	0
526733	D(15-22) 26DBD		NORD RESOURCES CORP	730556.7	399560.62	5052	ENV - MONITOR OR PIEZOMETER	0	0	0	0	0
578987	D(15-22) 26DBD		NORD RESOURCES CORP	730556.7	399560.62	5052	ENV - MONITOR				0	0
563955	D(15-22) 26DCC	Hill	NORD RESOURCES CORP	729401.41	398554.3	5096.5	ENV - MONITOR OR PIEZOMETER	180	180	5	168	268
578989	D(15-22) 26DCD		NORD RESOURCES CORP	730559.65	398244.67	5034	ENV - MONITOR				0	0
578985	D(15-22) 26DDD		NORD RESOURCES CORP	731886.48	398254.11	4953	ENV - MONITOR				0	0
578986	D(15-22) 26DDD		NORD RESOURCES CORP	731886.48	398254.11	4953	ENV - MONITOR				0	0
595923	D(15-22) 26DDD	Burro MW-8A	NORD RESOURCES CORP	731886.48	398254.11	4917	ENV - MONITOR	350	350	4	290	350
912653	D(15-22) 27		NORD RESOURCES CORP	724288.57	400504.95	5434	SPCL - MINERAL EXPLORATION				0	0
633427	D(15-22) 34AAD		SMITH & DURHAM,	726361.48	397004.31	5009	EXEMPT	125	40	6	0	125
633426	D(15-22) 34BCD		SMITH & DURHAM,	722766.87	395516.41	5122	EXEMPT	263	60	6	0	263
595927	D(15-22) 35ABA	Durham	NORD RESOURCES CORP	730371.17	397830.79	5013.35	ENV - MONITOR OR PIEZOMETER	273	273	5	168	268
565198	D(15-22) 35ADA	Tungsten	NORD RESOURCES CORP	731403.63	396152.38	4917.78	ENV - MONITOR OR PIEZOMETER	280	220	4	220	280
633424	D(15-22) 35BA	Smith	DURHAM, ROBERT C	728586.31	397678.2	4990.96	EXEMPT	500	3	6	0	500
599297	D(15-22) 35BAA		C-BAR RANCH	728590.0767	397676.4967	5006	EXEMPT				0	0
631782	D(15-22) 35CC0		SMITH,B J	727588.16	393276.31	4949	EXEMPT	30	0	0	0	0
212286	D(15-22) 35CCC		ROBERT C DURHAM	727257.43	392944.14	4965	EXEMPT				0	0
633439	D(15-22) 35CCD		DURHAM, ROBERT C	727904.34	393093.99	4950	EXEMPT	125	40	6	40	125
221366	D(15-22) 36		EXCELSIOR MINING CORP	734870.1	395280.89	4811	SPCL - MINERAL EXPLORATION				0	0

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
526559	D(15-22) 36		SULLIVAN, JAMES,	734870.1	395280.89	4811	SPCL - EXPLORATION	0	0	0	0	0
223487	D(15-22) 36	CW-5A	NORD RESOURCES CORP	734870.1	395280.89	4811	ENV - MONITOR OR PIEZOMETER				0	0
912819	D(15-22) 36ABB	CW-5	DURHAM, ROBERT C	735201.33	397588.58	4807.8	EXEMPT				0	0
1031	D(15-22) 36ACA	K-09	EXCELSIOR MINING CORP	735566.6	396156.34	4812	ENV - MONITOR OR PIEZOMETER				0	0
1030	D(15-22) 36ACD	K-08	EXCELSIOR MINING CORP	735571.81	395648.54	4781	ENV - MONITOR OR PIEZOMETER				0	0
225087	D(15-22) 36ADA	CS-03	EXCELSIOR MINING CORP	738647.21	393212.04	4794	ENV - MONITOR OR PIEZOMETER	2038	600	4	600	2038
1027	D(15-22) 36ADA	K-05	EXCELSIOR MINING CORP	737062.06	396625.03	4787	ENV - MONITOR OR PIEZOMETER				0	0
1028	D(15-22) 36ADA	K-06	EXCELSIOR MINING CORP	735567.84	394717.52	4803	ENV - MONITOR OR PIEZOMETER				0	0
1026	D(15-22) 36ADB	K-04	EXCELSIOR MINING CORP	736560.02	396162.76	4790	ENV - MONITOR OR PIEZOMETER				0	0
225096	D(15-22) 36ADC	CS-15	EXCELSIOR MINING CORP	737561.5	396153.55	4757	ENV - MONITOR OR PIEZOMETER	492	492	5	492	492
225077	D(15-22) 36ADC	S-03	EXCELSIOR MINING CORP	736599.02	395756.74	4777	ENV - MONITOR OR PIEZOMETER				0	1223
224155	D(15-22) 36ADD	NSD-031	EXCELSIOR MINING CORP	737024.7	395487.5	4770	ENV - MONITOR OR PIEZOMETER	1008	416	4.5	416	1008
578009	D(15-22) 36BBD		NORD RESOURCES CORP	733214.85	396934.48	4900	SPCL - MINERAL EXPLORATION				0	0
1042	D(15-22) 36BBD	NK-01	EXCELSIOR MINING CORP	733031.37	396922.76	4900	ENV - MONITOR OR PIEZOMETER				0	0
1043	D(15-22) 36BBD	NK-02	EXCELSIOR MINING CORP	733017.37	396849.76	4898	ENV - MONITOR OR PIEZOMETER				0	0
1044	D(15-22) 36BBD	NK-03	EXCELSIOR MINING CORP	732988.37	396754.76	4893	ENV - MONITOR OR PIEZOMETER				0	0
1045	D(15-22) 36BBD	NK-04	EXCELSIOR MINING CORP	733227.37	396807.75	4878	ENV - MONITOR OR PIEZOMETER				0	0
1046	D(15-22) 36BBD	NK-05	EXCELSIOR MINING CORP	733237.37	396734.75	4884	ENV - MONITOR OR PIEZOMETER				0	0
1047	D(15-22) 36BBD	NK-06	EXCELSIOR MINING CORP	733176.37	396648.76	4887	ENV - MONITOR OR PIEZOMETER				0	0
1048	D(15-22) 36BBD	NK-07	EXCELSIOR MINING CORP	733121.37	396828.76	4894	ENV - MONITOR OR PIEZOMETER				0	0
1049	D(15-22) 36BBD	NK-08	EXCELSIOR MINING CORP	733097.37	396739.76	4896	ENV - MONITOR OR PIEZOMETER				0	0
1050	D(15-22) 36BBD	NK-09	EXCELSIOR MINING CORP	733085.37	396654.76	4890	ENV - MONITOR OR PIEZOMETER				0	0
1051	D(15-22) 36BBD	NK-10	EXCELSIOR MINING CORP	732920.37	396937.76	4892	ENV - MONITOR OR PIEZOMETER				0	0
1052	D(15-22) 36BBD	NK-11	EXCELSIOR MINING CORP	732899.37	396846.76	4887	ENV - MONITOR OR PIEZOMETER				0	0
1053	D(15-22) 36BBD	NK-12	EXCELSIOR MINING CORP	732844.37	396921.76	4880	ENV - MONITOR OR PIEZOMETER				0	0
1054	D(15-22) 36BBD	NK-13	EXCELSIOR MINING CORP	733335.37	396798.75	4864	ENV - MONITOR OR PIEZOMETER				0	0
1055	D(15-22) 36BBD	NK-14	EXCELSIOR MINING CORP	733430.37	396798.75	4858	ENV - MONITOR OR PIEZOMETER				0	0
1056	D(15-22) 36BBD	NK-15	EXCELSIOR MINING CORP	733456.37	396868.75	4860	ENV - MONITOR OR PIEZOMETER				0	0
1057	D(15-22) 36BBD	NK-17	EXCELSIOR MINING CORP	733313.37	396700.75	4865	ENV - MONITOR OR PIEZOMETER				0	0
1032	D(15-22) 36BCA	K-10	EXCELSIOR MINING CORP	733046.66	396683.5	4923	ENV - MONITOR OR PIEZOMETER				0	0
1033	D(15-22) 36BCA	K-11	EXCELSIOR MINING CORP	733541.88	396174.16	4875	ENV - MONITOR OR PIEZOMETER				0	0
1036	D(15-22) 36BDA	K-15	EXCELSIOR MINING CORP	734583.54	396193.24	4848	ENV - MONITOR OR PIEZOMETER				0	0
1034	D(15-22) 36BDB	K-13	EXCELSIOR MINING CORP	734057.51	396170.68	4859	ENV - MONITOR OR PIEZOMETER				0	0
1035	D(15-22) 36BDB	K-14	EXCELSIOR MINING CORP	734559.23	396663.73	4853	ENV - MONITOR OR PIEZOMETER				0	0
1037	D(15-22) 36BDD	K-16	EXCELSIOR MINING CORP	734564.44	395675.88	4826	ENV - MONITOR OR PIEZOMETER				0	0
1038	D(15-22) 36CAA	K-18	EXCELSIOR MINING CORP	734569.22	395169.38	4819	ENV - MONITOR OR PIEZOMETER				0	0
223939	D(15-22) 36D		EXCELSIOR MINING CORP	736195.52	393961.3	4885	SPCL - MINERAL EXPLORATION				0	0
917431	D(15-22) 36DAA		EXCELSIOR MINING CORP	736904.35	395041.73	4770	ENV - MONITOR				0	0
225089	D(15-22) 36DAA	CS-05	EXCELSIOR MINING CORP	738608.92	393694.89	4818	ENV - MONITOR OR PIEZOMETER	2034	645	4	645	2034
225090	D(15-22) 36DAA	CS-06	EXCELSIOR MINING CORP	738576.3	394194.54	4831	ENV - MONITOR OR PIEZOMETER	2160	717	4	717	2160
225091	D(15-22) 36DAA	CS-07	EXCELSIOR MINING CORP	738071.33	394162.26	4850	ENV - MONITOR OR PIEZOMETER	1796	596	4.5	596	1796
225095	D(15-22) 36DAA	CS-11	EXCELSIOR MINING CORP	737554.82	394166.14	4863	ENV - MONITOR OR PIEZOMETER	2084	480	3.5	480	2084
224154	D(15-22) 36DAA	NSD-026	EXCELSIOR MINING CORP	737356.24	394752.25	4847	ENV - MONITOR OR PIEZOMETER	1168	466	4.5	466	1168
917429	D(15-22) 36DAA	NSH-008	EXCELSIOR MINING CORP	736856.77	395088.59	4772	ENV - MONITOR OR PIEZOMETER	900	840	4.5	720	840
225076	D(15-22) 36DAA	S-01	EXCELSIOR MINING CORP	737274.78	395034.29	4769	ENV - MONITOR OR PIEZOMETER				0	12110
225097	D(15-22) 36DAB	CS-19	EXCELSIOR MINING CORP	738065.04	395870.87	4757	ENV - MONITOR OR PIEZOMETER	580	576	3.5	576	580
224938	D(15-22) 36DAB	NSD-029	EXCELSIOR MINING CORP	736101.29	395247.79	4785	ENV - MONITOR OR PIEZOMETER	279	279	4.5	279	279
224939	D(15-22) 36DAB	NSD-032	EXCELSIOR MINING CORP	736626.53	395306.53	4772	ENV - MONITOR OR PIEZOMETER	905		2	0	905
917430	D(15-22) 36DAB	NSH-007	EXCELSIOR MINING CORP	736757.42	394889.08	4773	ENV - MONITOR OR PIEZOMETER	640	616	8.625	469	620
225078	D(15-22) 36DAB	S-04	EXCELSIOR MINING CORP	736497.89	394892.23	4776	ENV - MONITOR OR PIEZOMETER				0	966
224937	D(15-22) 36DAC	NSD-028	EXCELSIOR MINING CORP	736291.67	394433.4	4881	ENV - MONITOR OR PIEZOMETER	755	400	4.5	400	755
224847	D(15-22) 36DAC	NSM-013	EXCELSIOR MINING CORP	736785.02	394382.74	4881	ENV - MONITOR OR PIEZOMETER	953	404	5.5	404	953
224936	D(15-22) 36DAD	NSD-027	EXCELSIOR MINING CORP	736806.45	394419.15	4883	ENV - MONITOR OR PIEZOMETER	1004.5	404	4.5	404	1004.5
562255	D(15-22) 36DAD	SULLY 97-7	EXCELSIOR MINING CORP	736854.35	394663.73	4800	ENV - MONITOR OR PIEZOMETER	0	0	0	0	0
224848	D(15-22) 36DBA	NSD-030	EXCELSIOR MINING CORP	736012.13	394822.54	4785	ENV - MONITOR OR PIEZOMETER	767	259	4.5	259	767

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
1029	D(15-22) 36DBD	K-07	EXCELSIOR MINING CORP	735574.42	395156.35	4797	ENV - MONITOR OR PIEZOMETER				0	0
224854	D(15-22) 36DBD	NSD-036	EXCELSIOR MINING CORP	735758.93	394267.19	4888	ENV - MONITOR OR PIEZOMETER	793.3	504	4.5	504	1000
911489	D(15-23) 19BAA		C-BAR RANCH	739902.3641	407718.0782	4719	NON-EXEMPT				0	0
909281	D(15-23) 19BBB		C-BAR RANCH	738016.93	408200.75	4773	NON-EXEMPT				0	0
909280	D(15-23) 19BBB	New Section 19 Well	C-BAR RANCH	738015.71	408227.77	4773	NON-EXEMPT	1140	1140	9	700	1140
611610	D(15-23) 19BBB	Section 19 Well	NORD RESOURCES CORP	737604	408296.24	4776	NON-EXEMPT	1155	958	8	706	956
911560	D(15-23) 19BCA		C-BAR RANCH	738202.3605	406882.2536	4753	NON-EXEMPT				0	0
605729	D(15-23) 20CA		ELIZABETH F HUSBAND TRUST	744499.78	405152.96	4750	EXEMPT	450	0	0	706	956
625314	D(15-23) 20CB		LAMB,J A	743176.67	405156.62	4650	EXEMPT	500	450	8	0	0
903562	D(15-23) 21CBC		JANET CONAWAY	748138.38	404813.07	4585	EXEMPT				0	0
1097	D(15-23) 26DAA	Burro Pit	NORD RESOURCES CORP	731647.8288	399836.866	4561	OTHER				0	0
605730	D(15-23) 29ABD		ASLD	746443.38	401863.02	4598	EXEMPT	600	0	10	400	600
1073	D(15-23) 29CCA	SD-87	EXCELSIOR MINING CORP	743779.78	399239.06	4650	ENV - MONITOR OR PIEZOMETER				0	0
622852	D(15-23) 30AAD		BENSON 1550 LLC	741962.11	402660.4	4668	EXEMPT	638	0	0	500	638
221367	D(15-23) 31		EXCELSIOR MINING CORP	740063.25	395283.43	4767	SPCL - GEOTECHNICAL				0	0
223835	D(15-23) 31		EXCELSIOR MINING CORP	740063.25	395283.43	4771	SPCL - MINERAL EXPLORATION				0	0
223835	D(15-23) 31000	NSM-007	EXCELSIOR MINING CORP	737986.92	394488.9	4844	ENV - MONITOR OR PIEZOMETER	1167.9	604	4.5	604	1167.9
1021	D(15-23) 31ACC	J-02	EXCELSIOR MINING CORP	740219.32	395638.69	4780	ENV - MONITOR OR PIEZOMETER				0	0
1022	D(15-23) 31ACC	J-03	EXCELSIOR MINING CORP	739882.99	395995.15	4760	ENV - MONITOR OR PIEZOMETER				0	0
225110	D(15-23) 31BCB	MCC-1	EXCELSIOR MINING CORP	738115.44	393891.8	4836	ENV - MONITOR OR PIEZOMETER				0	0
917782	D(15-23) 31BCB	NSH-031	EXCELSIOR MINING CORP	737236.87	395991.56	4763	ENV - MONITOR OR PIEZOMETER	820	805	2.375	721	805
224159	D(15-23) 31BCC	CS-13	EXCELSIOR MINING CORP	737558.77	395152.18	4768	ENV - MONITOR OR PIEZOMETER	1251	595	3.5	595	1251
224160	D(15-23) 31BCC	CS-14	EXCELSIOR MINING CORP	737557.34	395698.82	4757.78	ENV - MONITOR OR PIEZOMETER	1375	486	4	486	1375
224059	D(15-23) 31BCC	NSD-037	EXCELSIOR MINING CORP	737845.93	395606.72	4751	ENV - MONITOR OR PIEZOMETER	1284.4	524	4.5	524	1200
917433	D(15-23) 31BCC	NSH-009	EXCELSIOR MINING CORP	737455.53	395561.03	4754	ENV - MONITOR OR PIEZOMETER	1060	995	4.5	813	995
917434	D(15-23) 31BCC	NSH-010	EXCELSIOR MINING CORP	737605.1	395490.01	4750	ENV - MONITOR OR PIEZOMETER	720	546	8.625	546	720
917435	D(15-23) 31BCC	NSH-012	EXCELSIOR MINING CORP	737755.85	395538.41	4750	ENV - MONITOR OR PIEZOMETER	504	490	4.5	430	490
917432	D(15-23) 31BCC	NSH-014B	EXCELSIOR MINING CORP	737667.63	395577	4749	ENV - MONITOR OR PIEZOMETER	1277	1260	4.5	1180	1274
225111	D(15-23) 31BCD	MCC-2	EXCELSIOR MINING CORP	738341.25	393919.23	4834	ENV - MONITOR OR PIEZOMETER				0	0
1023	D(15-23) 31BDA	JD-01	EXCELSIOR MINING CORP	738804.34	390483.72	4730	ENV - MONITOR OR PIEZOMETER				0	0
225093	D(15-23) 31CAB	JS-05	EXCELSIOR MINING CORP	736922.48	394882.63	4765	ENV - MONITOR OR PIEZOMETER	588	334	4.5	334	588
225107	D(15-23) 31CAC	J-08	EXCELSIOR MINING CORP	738233.34	394829.84	4810	ENV - MONITOR OR PIEZOMETER	1350	660	4.5	660	1350
225109	D(15-23) 31CAC	J-10	EXCELSIOR MINING CORP	738111.75	394409.48	4855	ENV - MONITOR OR PIEZOMETER	1062	630	4.5	630	1062
224931	D(15-23) 31CAC	NSD-024	EXCELSIOR MINING CORP	738799.08	394051.36	4823	ENV - MONITOR OR PIEZOMETER	1972	672	4.5	672	1972
224101	D(15-23) 31CAD		EXCELSIOR MINING CORP	739604.33	394341.7	4790	ENV - MONITOR				0	0
224100	D(15-23) 31CAD	NSH-018	EXCELSIOR MINING CORP	739687.04	394387.46	4780	ENV - MONITOR OR PIEZOMETER	997	992	4.5	610	992
224035	D(15-23) 31CAD	NSH-020	EXCELSIOR MINING CORP	739685.67	394225.67	4791	ENV - MONITOR OR PIEZOMETER	1600	1582	4.5	1060	1582
917775	D(15-23) 31CAD	NSH-030	EXCELSIOR MINING CORP	739691.19	394683.79	4792	ENV - MONITOR OR PIEZOMETER	740	706	2.375	605	706
622849	D(15-23) 31CBA	HIGGINBOTHOAM	RONALD B & VENICE J HIGGINBOTHAM FAMILY TRUST	738756.28	394926.73	4830	NON-EXEMPT	1350	660	6	0	0
225108	D(15-23) 31CBC	J-09	EXCELSIOR MINING CORP	737859.91	394645.39	4824	ENV - MONITOR OR PIEZOMETER	1158	590	4.5	590	1158
225095	D(15-23) 31CBC	JS-07	EXCELSIOR MINING CORP	736922.17	394976	4768	ENV - MONITOR OR PIEZOMETER	478.5	369	4.5	369	478.5
224930	D(15-23) 31CBC	NSD-023	EXCELSIOR MINING CORP	737808.48	394173.78	4857	ENV - MONITOR OR PIEZOMETER	1546	557	4.5	557	1546
917436	D(15-23) 31CBC	NSH-013	EXCELSIOR MINING CORP	738056.78	394338.52	4850	ENV - MONITOR OR PIEZOMETER	1070	650	8.625	646	1070
224840	D(15-23) 31CBC	NSM-006	EXCELSIOR MINING CORP	737927.87	394038.78	4847	ENV - MONITOR OR PIEZOMETER	1217	529	4.5	529	1217
225094	D(15-23) 31CBD	JS-06	EXCELSIOR MINING CORP	736941.08	394790.93	4773	ENV - MONITOR OR PIEZOMETER	599	340	4.5	340	599
225112	D(15-23) 31CBD	MCC-3	EXCELSIOR MINING CORP	738377.4	393414.04	4812	ENV - MONITOR OR PIEZOMETER	1340	1340	4	0	0
221520	D(15-23) 31CBD	NSH-003	EXCELSIOR MINING CORP	738201.82	394344.15	4846	ENV - MONITOR OR PIEZOMETER	1432	1400	4.5	1231	1400
	D(15-23) 31CBD	NSH-004	EXCELSIOR MINING CORP	738403.34	393938.71	4833	ENV - MONITOR OR PIEZOMETER	880	645	4	645	880
221604	D(15-23) 31CBD	NSH-005	EXCELSIOR MINING CORP	738525.68	394033.38	4830	ENV - MONITOR OR PIEZOMETER	1040	1019	4.5	747	1019
221519	D(15-23) 31CBD	NSH-006	EXCELSIOR MINING CORP	738463.33	394237.3	4833	ENV - MONITOR OR PIEZOMETER	684	680	4.5	640	680
224933	D(15-23) 31CBD	NSM-001	EXCELSIOR MINING CORP	738051.78	394181.02	4851	ENV - MONITOR OR PIEZOMETER	1150	950	2	950	1150
224842	D(15-23) 31CBD	NSM-004	EXCELSIOR MINING CORP	738506.71	393990.27	4829	ENV - MONITOR OR PIEZOMETER	1114.5	596	4.5	596	880
1002	D(15-23) 31CCA	CS-02	EXCELSIOR MINING CORP	738122.13	393675.99	4821	ENV - MONITOR OR PIEZOMETER	1770	550	4.5	550	1770
549073	D(15-23) 31CCA	MCC-8	EXCELSIOR MINING CORP	738499.34	393416.72	4808	SPCL - EXPLORATION	0	0	0	0	0
224944	D(15-23) 31CCA	NSD-011	EXCELSIOR MINING CORP	738326.23	393923.43	4834	ENV - MONITOR OR PIEZOMETER	1438	650	4.5	650	1438

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
221521	D(15-23) 31CCA	NSH-001	EXCELSIOR MINING CORP	738265.2	393874.58	4834	ENV - MONITOR OR PIEZOMETER	1114	702	10.75	702	1096
221603	D(15-23) 31CCA	NSH-004B	EXCELSIOR MINING CORP	738406.35	393880.07	4834	ENV - MONITOR OR PIEZOMETER	1031	1009	4.5	705	998
1090	D(15-23) 31CCA	NSH-004P	EXCELSIOR MINING CORP	738387.34	393906.72	4834	ENV - MONITOR OR PIEZOMETER	1060	765	4	765	1060
1089	D(15-23) 31CCA	NSH-005P	EXCELSIOR MINING CORP	738555.33	394023.71	4828	ENV - MONITOR OR PIEZOMETER	1046	776	4	776	1040
224032A	D(15-23) 31CCA	NSH-021B	EXCELSIOR MINING CORP	738204.34	393491.72	4815	ENV - MONITOR OR PIEZOMETER	1260	620	8.625	0	0
224032	D(15-23) 31CCA	NSH-021C	EXCELSIOR MINING CORP	738178.3	393503.73	4815	ENV - MONITOR OR PIEZOMETER	1400	624	8.625	624	1372
224034	D(15-23) 31CCA	NSH-023	EXCELSIOR MINING CORP	738405.09	393587.65	4820	ENV - MONITOR OR PIEZOMETER	1446	645	8.625	645	1442
224033	D(15-23) 31CCA	NSH-024	EXCELSIOR MINING CORP	738342.91	393552.51	4819	ENV - MONITOR OR PIEZOMETER	1145	625	8.625	625	1440
224940	D(15-23) 31CCB	NSD-001	EXCELSIOR MINING CORP	737801.3	393537.11	4827	SPCL - MINERAL EXPLORATION	1505.5	460	4.5	460	1505.5
224945	D(15-23) 31CCB	NSD-019	EXCELSIOR MINING CORP	737674.27	393873.59	4848	ENV - MONITOR OR PIEZOMETER	1454	620	4.5	620	1454
224031	D(15-23) 31CCB	NSH-019	EXCELSIOR MINING CORP	738155.23	393436.53	4814	ENV - MONITOR OR PIEZOMETER	1410	638	8.625	638	1300
224844	D(15-23) 31CCB	NSM-008	EXCELSIOR MINING CORP	738095.92	393386.62	4816	ENV - MONITOR OR PIEZOMETER	1275	548	5.5	548	1275
224941	D(15-23) 31CCC	NSD-002	EXCELSIOR MINING CORP	737726.8	392950.87	4810	ENV - MONITOR OR PIEZOMETER	1907	580	4.5	580	1907
224846	D(15-23) 31CCC	NSD-033	EXCELSIOR MINING CORP	737855.83	392788.24	4809	ENV - MONITOR OR PIEZOMETER	1579	500	4.5	500	1579
224029	D(15-23) 31CCC	NSH-015	EXCELSIOR MINING CORP	737606.14	393140.05	4808	ENV - MONITOR OR PIEZOMETER	820	585	8.625	585	820
224030	D(15-23) 31CCC	NSH-016	EXCELSIOR MINING CORP	737458.64	393175.02	4812	ENV - MONITOR OR PIEZOMETER	820	579	8.625	579	820
224099	D(15-23) 31CCC	NSH-017	EXCELSIOR MINING CORP	737758.07	393157.78	4807	ENV - MONITOR OR PIEZOMETER	1200	1181	6.625	940	1181
224935	D(15-23) 31CCC	NSM-003	EXCELSIOR MINING CORP	737701.35	392934.29	4810	ENV - MONITOR OR PIEZOMETER	1028	609	4.5	609	1028
225102	D(15-23) 31CCD	CS-52	EXCELSIOR MINING CORP	738455.56	392667.84	4806	ENV - MONITOR OR PIEZOMETER	1551	586	4.5	586	1551
225104	D(15-23) 31CCD	J-05	EXCELSIOR MINING CORP	737444.95	393699.86	4837	ENV - MONITOR OR PIEZOMETER	1475	416	4	416	1475
224942	D(15-23) 31CCD	NSD-003	EXCELSIOR MINING CORP	738449.28	392692.12	4805	ENV - MONITOR OR PIEZOMETER	2008	565	4.5	565	2000
224934	D(15-23) 31CCD	NSM-002	EXCELSIOR MINING CORP	738195.42	392736.92	4809	ENV - MONITOR OR PIEZOMETER	1000	507	4.5	507	1000
224841	D(15-23) 31CCD	NSM-005A	EXCELSIOR MINING CORP	738781.26	393106.74	4787	ENV - MONITOR OR PIEZOMETER	1171.5	593	5.5	593	1171.5
917777	D(15-23) 31CDA	NSH-029	EXCELSIOR MINING CORP	739681.74	393940.42	4797	ENV - MONITOR OR PIEZOMETER	710	709	2.375	604	709
917783	D(15-23) 31CDA	NSH-032	EXCELSIOR MINING CORP	737550.79	395796.75	4759	ENV - MONITOR OR PIEZOMETER	820	804	2.375	720	804
225105	D(15-23) 31CDB	J-06	EXCELSIOR MINING CORP	737434.29	392728.1	4824	ENV - MONITOR OR PIEZOMETER	937	342	4	342	937
224946	D(15-23) 31CDB	NSD-020	EXCELSIOR MINING CORP	738950.33	393545.51	4800	ENV - MONITOR OR PIEZOMETER	660	660	4.5	660	660
224860	D(15-23) 31CDB	NSD-043	EXCELSIOR MINING CORP	739255.99	393741	4802	ENV - MONITOR OR PIEZOMETER	1736	628	4.5	628	1736
562256	D(15-23) 31CDC		PHELPS DODGE EXPLORATION	739122.72	392987.02	4790	SPCL - EXPLORATION	0	0	0	0	0
224098	D(15-23) 31CDC		EXCELSIOR MINING CORP	739374.33	393116.71	4788	ENV - MONITOR				0	0
225106	D(15-23) 31CDC	J-07	EXCELSIOR MINING CORP	737878.08	394483.65	4846	ENV - MONITOR OR PIEZOMETER	938	565	3.5	565	938
224932	D(15-23) 31CDC	NSD-025	EXCELSIOR MINING CORP	738697.88	393061.4	4790	ENV - MONITOR OR PIEZOMETER	1643.5	640	4.5	640	1643.5
224097	D(15-23) 31CDC	NSH-022	EXCELSIOR MINING CORP	739140.53	393037.93	4784	ENV - MONITOR OR PIEZOMETER	1170	1131	6.625	1110	1131
224158	D(15-23) 31CDC	NSH-025	EXCELSIOR MINING CORP	738294.61	393685.78	4825	ENV - MONITOR OR PIEZOMETER	1596	1551	4.5	1480	1551
224036	D(15-23) 31CDC	NSH-026	EXCELSIOR MINING CORP	739146.28	392899.09	4794	ENV - MONITOR OR PIEZOMETER	905	625	8.625	625	900
224845	D(15-23) 31CDC	NSM-009	EXCELSIOR MINING CORP	738954.82	392689.54	4794	ENV - MONITOR OR PIEZOMETER	1349.1	593	5.5	593	1349.1
224943	D(15-23) 31CDD	NSD-009	EXCELSIOR MINING CORP	739417.77	393047.95	4788	ENV - MONITOR OR PIEZOMETER	1793	620	4.5	620	1793
1020	D(15-23) 31DBC	J-01	EXCELSIOR MINING CORP	740078.54	394723.65	4786	ENV - MONITOR OR PIEZOMETER				0	0
1003	D(15-23) 31DDD	CS-05-32	EXCELSIOR MINING CORP	742523.62	392664.69	4733	ENV - MONITOR OR PIEZOMETER				0	0
1019	D(15-23) 32CCC	CYS-1	EXCELSIOR MINING CORP	742584.31	392743.68	4725	ENV - MONITOR OR PIEZOMETER				0	0
1070	D(15-23) 32DAA	SD-84	EXCELSIOR MINING CORP	747187.76	395311.43	4840	ENV - MONITOR OR PIEZOMETER				0	0
1072	D(15-23) 32DBA	SD-86	EXCELSIOR MINING CORP	745761.97	395257.25	4755	ENV - MONITOR OR PIEZOMETER				0	0
1004	D(15-23) 32DCC	CS-05-32B	EXCELSIOR MINING CORP	745399.29	392693.66	4690	ENV - MONITOR OR PIEZOMETER				0	0
1071	D(15-23) 32DDB	SD-85	EXCELSIOR MINING CORP	746782.77	393786.34	4810	ENV - MONITOR OR PIEZOMETER				0	0
087293	D(15-23) 33ABB		ASLD	750434.81	397896.63	4536	EXEMPT	600	600	8	500	600
1096	D(15-23) 36BBA	Keystone Shaft	NORD RESOURCES CORP	733180.8635	397543.9834	4901.76	SPCL - MINERAL EXPLORATION				0	680
1001	D(16-22) 01AAA	CS-01	EXCELSIOR MINING CORP	738113.76	392637.26	4814	ENV - MONITOR OR PIEZOMETER				0	0
1009	D(16-22) 01AAD	CS-26	EXCELSIOR MINING CORP	738069.95	391670.92	4776	ENV - MONITOR OR PIEZOMETER				0	0
1008	D(16-22) 01ADA	CS-25	EXCELSIOR MINING CORP	738084.06	391169.81	4758	ENV - MONITOR OR PIEZOMETER				0	0
1010	D(16-22) 01ADA	CS-27	EXCELSIOR MINING CORP	738070.05	390673.93	4750	ENV - MONITOR OR PIEZOMETER				0	0
1011	D(16-22) 01ADD	CS-28	EXCELSIOR MINING CORP	738069.05	390174.83	4669	ENV - MONITOR OR PIEZOMETER				0	0
622850	D(16-22) 01BAD		CYPRUS COPPER CO	734240.93	391681.17	4794	EXEMPT	0	0	6	20	100
622853	D(16-22) 01BAD		CYPRUS COPPER CO	734884.07	391625.05	4779	EXEMPT	70	15	8	15	100
561123	D(16-22) 02ABD		BINGHAM TED MCRAE	731170.96	391957.04	4875	EXEMPT	730	30	6	30	730
805594	D(16-22) 02BAD		ASLD	730017.04	391789.44	4875	EXEMPT	0	0	60	0	0

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
515539	D(16-22) 02BBB		GEORGANA R. HIATT	727610.08	393032.31	4955	EXEMPT	495	26	6	0	495
528611	D(16-22) 02BBB		GEORGANA R. HIATT	727987.42	392285.46	4950	EXEMPT	495	26	6	0	0
620397	D(16-22) 03AD0		MCGOFFIN,R	727102.17	389974.29	4975	EXEMPT	65	65	6	20	65
602036	D(16-22) 03BC0		MCKINNEY,R W	726804.66	392534.88	4984	EXEMPT	85	85	6	20	85
620398	D(16-22) 10DC0		MCGOFFIN,R	725672.45	382707.9	4788	EXEMPT	95	20	8	0	0
616964	D(16-22) 11AC0		FULTON ET AL,W D	730993.85	384798.41	4841	NON-EXEMPT	0	0	0	2	100
641183	D(16-22) 11CAC		AMERINDIAN FOUNDATIO,	729486.14	383647.29	4855	EXEMPT	18	18	36	10	18
220392	D(16-22) 12		EXCELSIOR MINING CORP	735585.5	384744.72	4759	SPCL - MINERAL EXPLORATION				0	0
802786	D(16-22) 12		RIMSZA,A V	736875.19	382472.75	4750	EXEMPT	700	700	2	600	700
1039	D(16-22) 12CCC	K-20-X	EXCELSIOR MINING CORP	733444.4	382223.78	4865	ENV - MONITOR OR PIEZOMETER				0	0
643402	D(16-22) 12DAA		BLM-SAFFORD DISTRICT,	737969.71	384549.38	4714	EXEMPT	0	0	0	300	400
1012	D(16-22) 12DAA	CS-33	EXCELSIOR MINING CORP	737904.37	384283.74	4688	ENV - MONITOR OR PIEZOMETER				0	0
625316	D(16-22) 12DC0	Well location bad	LAMB,J A	736038.63	382740.75	4758	EXEMPT	250	200	8	200	250
1092	D(16-22) 12DCC		UNKNOWN	736057.35	382348.12	4714	ENV - MONITOR OR PIEZOMETER				500	554
1014	D(16-22) 12DDA	CS-36	EXCELSIOR MINING CORP	737974.37	382953.74	4688	ENV - MONITOR OR PIEZOMETER				0	0
224960	D(16-22) 12DDA	NSD-018	EXCELSIOR MINING CORP	738058.61	382790.27	4688	ENV - MONITOR OR PIEZOMETER	1200	1398	4.5	138	1398
562832	D(16-22) 12DDD		SULLIVAN, JAMES,	737902.25	382442.85	4698	SPCL - EXPLORATION	0	0	0	0	0
1076	D(16-22) 12DDD	SULLYI97-3	EXCELSIOR MINING CORP	737654.37	382263.75	4707	ENV - MONITOR OR PIEZOMETER				0	0
536381	D(16-22) 13AAA		SULLIVAN, J,	737904.03	381779.95	4697	SPCL - EXPLORATION	0	0	0	0	0
1065	D(16-22) 13AAC	SD-118	EXCELSIOR MINING CORP	737173.08	380930.55	4690	ENV - MONITOR OR PIEZOMETER				0	0
625315	D(16-22) 13AD0		LAMB,J A	737067.96	380266.25	4684	EXEMPT	250	50	5	50	250
567591	D(16-22) 13BBB		WILLIAM E THOMAS	737759.16	380603.01	4684	EXEMPT	600	600	8	560	600
578044	D(16-22) 13BBD		CLIVE AND SHIRLEY BAILEY	733776.37	381424.02	4743	EXEMPT	220	20	8	20	220
1060	D(16-22) 13CDB	SD-113	EXCELSIOR MINING CORP	734381.51	377701.39	4710	ENV - MONITOR OR PIEZOMETER				0	0
1063	D(16-22) 13CDB	SD-116	EXCELSIOR MINING CORP	734589.81	378144.88	4710	ENV - MONITOR OR PIEZOMETER				0	0
1067	D(16-22) 13CDB	SD-81	EXCELSIOR MINING CORP	734381.51	377701.39	4710	ENV - MONITOR OR PIEZOMETER				0	0
1064	D(16-22) 13CDD	SD-117	EXCELSIOR MINING CORP	735402.3	376909.68	4680	ENV - MONITOR OR PIEZOMETER				0	0
1068	D(16-22) 13CDD	SD-82	EXCELSIOR MINING CORP	735518.6	377181.38	4675	ENV - MONITOR OR PIEZOMETER				0	0
1066	D(16-22) 13DAB	SD-80	EXCELSIOR MINING CORP	737150.58	379143.16	4675	ENV - MONITOR OR PIEZOMETER				0	0
1058	D(16-22) 13DAC	SD-111	EXCELSIOR MINING CORP	737306.78	378795.96	4660	ENV - MONITOR OR PIEZOMETER				0	0
1059	D(16-22) 13DCD	SD-112	EXCELSIOR MINING CORP	736351.9	377164.07	4670	ENV - MONITOR OR PIEZOMETER				0	0
216142	D(16-22) 13DDA		CHARLES & LEWIS KETCHUM	738665.62	377187.29	4653	EXEMPT	618	618	7	578	618
208791	D(16-22) 13DDC		MARY JANE FORD	736996.79	376899.36	4672	EXEMPT	570	570	7	530	570
560131	D(16-22) 24		PHELPS DODGE EXPLORATION	735610.83	374164.66	4667	SPCL - EXPLORATION	0	0	0	0	0
536382	D(16-22) 24		SULLIVAN, J.,	735610.83	374164.66	4667	SPCL - EXPLORATION	0	0	0	0	0
912483	D(16-22) 24AAB		CHRIS & DEBI CONYER	737659.39	375377.47	4657	EXEMPT	0	20	6	20	685
578266	D(16-22) 24AAD		SAMUEL R LEE	737925.84	375804	4650	EXEMPT	570	570	8	0	0
914575	D(16-22) 24BDD		ROBERT W & KYLE ANNE ALLGOOD	737345.7	374702.73	4669	EXEMPT	763	763	7	719	763
224058	D(16-23) 05BCA	NSH-011	EXCELSIOR MINING CORP	743019.77	391244.73	4679	ENV - MONITOR OR PIEZOMETER	602	540	2.38	500	540
1006	D(16-23) 05BCC	CS-05-32D	EXCELSIOR MINING CORP	742559.31	389993.69	4695	ENV - MONITOR OR PIEZOMETER				0	0
1074	D(16-23) 05BCC	SULLYI97-1	EXCELSIOR MINING CORP	742154.1	390080.58	4680	ENV - MONITOR OR PIEZOMETER				0	0
562254	D(16-23) 05CBB		PHELPS DODGE EXPLORATION	742441.97	389706.05	4685	SPCL - EXPLORATION	0	0	0	0	0
1007	D(16-23) 05CDC	CS-05-32E	EXCELSIOR MINING CORP	743709.31	388043.68	4650	ENV - MONITOR OR PIEZOMETER				0	0
220255	D(16-23) 06		EXCELSIOR MINING CORP	740159.5	390028.86	4722	SPCL - MINERAL EXPLORATION				0	0
223968	D(16-23) 06		EXCELSIOR MINING CORP	740159.5	390028.86	4722	SPCL - MINERAL EXPLORATION				0	0
512111	D(16-23) 06		SULLIVAN,J	740159.5	390028.86	4722	SPCL - EXPLORATION	0	0	0	0	0
223834	D(16-23) 06		EXCELSIOR MINING CORP	740159.5	390028.86	4723	SPCL - MINERAL EXPLORATION				0	0
225103	D(16-23) 06AAA	J-04	EXCELSIOR MINING CORP	737987.71	393154.24	4804	ENV - MONITOR OR PIEZOMETER	1509	505	4	505	1509
225086	D(16-23) 06AAA	T-10	EXCELSIOR MINING CORP	740145.33	392206.7	4758	ENV - MONITOR OR PIEZOMETER	2085			0	2085
1085	D(16-23) 06AAB	USBM-18	EXCELSIOR MINING CORP	741270.64	392193.23	4718	ENV - MONITOR OR PIEZOMETER				0	0
1086	D(16-23) 06AAB	USBM-19	EXCELSIOR MINING CORP	741064.51	392076.93	4727	ENV - MONITOR OR PIEZOMETER				0	0
225101	D(16-23) 06ABC	CS-51	EXCELSIOR MINING CORP	739035.96	392707.85	4792	ENV - MONITOR OR PIEZOMETER	1838	623	4	623	1838
225083	D(16-23) 06ABC	T-07	EXCELSIOR MINING CORP	739507.1	392026.77	4771	ENV - MONITOR OR PIEZOMETER				0	0
225084	D(16-23) 06ACC	T-08	EXCELSIOR MINING CORP	739579.26	390719.9	4737	ENV - MONITOR OR PIEZOMETER				0	0
225085	D(16-23) 06ADA	DC-09	EXCELSIOR MINING CORP	737203.44	396082.94	4765	ENV - MONITOR OR PIEZOMETER	1500	522	4	522	1500

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
225085	D(16-23) 06ADA	T-09	EXCELSIOR MINING CORP	740193.91	391074.49	4721	ENV - MONITOR OR PIEZOMETER				0	0
611612	D(16-23) 06B		CYPRUS COPPER CO	738636.09	390868.06	4752	EXEMPT	535	0	4	0	0
225094	D(16-23) 06BAA	CS-10	EXCELSIOR MINING CORP	738060.5	394653.38	4829	ENV - MONITOR OR PIEZOMETER	1656	720	3.5	720	1656
225075	D(16-23) 06BAA	MCC-7	EXCELSIOR MINING CORP	738756.38	392046.83	4762	ENV - MONITOR OR PIEZOMETER				0	0
224156	D(16-23) 06BAA	NSH-028	EXCELSIOR MINING CORP	738869.72	392021.67	4761	ENV - MONITOR OR PIEZOMETER	800	544	8.625	544	800
224850	D(16-23) 06BAA	NSM-011	EXCELSIOR MINING CORP	739056.69	392037.78	4775	ENV - MONITOR OR PIEZOMETER	1340	540		540	1340
224859	D(16-23) 06BAB	NSD-042	EXCELSIOR MINING CORP	738269.08	392040.53	4793	ENV - MONITOR OR PIEZOMETER	1700	440		440	1513
224951	D(16-23) 06BAC	NSD-007	EXCELSIOR MINING CORP	739662.03	391510.94	4737	ENV - MONITOR OR PIEZOMETER	1800	430	4.5	430	1800
225092	D(16-23) 06BAD	CS-08	EXCELSIOR MINING CORP	739077.57	394231.13	4809	ENV - MONITOR OR PIEZOMETER	2304	656	4	656	2304
225093	D(16-23) 06BAD	CS-09	EXCELSIOR MINING CORP	738551.02	395144.23	4833	ENV - MONITOR OR PIEZOMETER	2337	685	3.5	685	2337
225073	D(16-23) 06BAD	MCC-5	EXCELSIOR MINING CORP	738754.84	392013.98	4760	ENV - MONITOR OR PIEZOMETER				0	0
225074	D(16-23) 06BAD	MCC-6	EXCELSIOR MINING CORP	739155.82	391443.74	4760	ENV - MONITOR OR PIEZOMETER				0	0
224157	D(16-23) 06BAD	NSH-027	EXCELSIOR MINING CORP	738815.79	391870.38	4757	ENV - MONITOR OR PIEZOMETER	1022	1100	6.625	865	1100
224851	D(16-23) 06BAD	NSM-012	EXCELSIOR MINING CORP	739006.79	391439.05	4765	ENV - MONITOR OR PIEZOMETER		584		584	882
542932	D(16-23) 06BB0		BHP COPPER INC	738697.39	392005.83	4760	SPCL - EXPLORATION	1347	1347	4	0	0
224952	D(16-23) 06BBA	NSD-008	EXCELSIOR MINING CORP	739201.98	392332.14	4783	ENV - MONITOR OR PIEZOMETER	1772.5	550	4.5	550	2000
549072	D(16-23) 06BBB		BHP COPPER INC	738453.82	392335.87	4773	SPCL - EXPLORATION	0	0	0	0	0
225098	D(16-23) 06BBB	CS-21	EXCELSIOR MINING CORP	738532.95	394655.34	4810	ENV - MONITOR OR PIEZOMETER	2171	687	3.5	687	2171
224953	D(16-23) 06BBB	NSD-010	EXCELSIOR MINING CORP	738613.65	392024.22	4768	ENV - MONITOR OR PIEZOMETER	1509	543	4.5	543	1509
225079	D(16-23) 06BBB	T-01	EXCELSIOR MINING CORP	738515.39	392383.75	4773	ENV - MONITOR OR PIEZOMETER				0	0
224950	D(16-23) 06BBC	NSD-004	EXCELSIOR MINING CORP	738343.84	391660.14	4782	ENV - MONITOR OR PIEZOMETER	1309	510	4.5	510	1500
562257	D(16-23) 06BBD		PHELPS DODGE EXPLORATION	738940.96	391675.79	4760	SPCL - EXPLORATION	0	0	0	0	0
225099	D(16-23) 06BBD	CS-23	EXCELSIOR MINING CORP	738556.65	396154.06	4792	ENV - MONITOR OR PIEZOMETER	622			0	622
1040	D(16-23) 06BBD	MCC-4	EXCELSIOR MINING CORP	738801.68	391756.12	4759	ENV - MONITOR OR PIEZOMETER				0	0
224947	D(16-23) 06BBD	NSD-022	EXCELSIOR MINING CORP	738811.18	391741.29	4759	ENV - MONITOR OR PIEZOMETER	1339	499	4.5	499	1339
225080	D(16-23) 06BBD	T-02	EXCELSIOR MINING CORP	739041.35	391527.12	4760	ENV - MONITOR OR PIEZOMETER				0	0
224948	D(16-23) 06BCA	NSD-006	EXCELSIOR MINING CORP	739302.44	391150.74	4754	ENV - MONITOR OR PIEZOMETER	2000	470	4.5	470	2000
224954	D(16-23) 06BCA	NSD-012	EXCELSIOR MINING CORP	738896.21	391039.29	4749	ENV - MONITOR OR PIEZOMETER	1732	422	4.5	422	1732
224955	D(16-23) 06BCA	NSD-013	EXCELSIOR MINING CORP	739390.45	391051.03	4749	ENV - MONITOR OR PIEZOMETER	2007	485	4.5	485	2007
1091	D(16-23) 06BCC	JD-07	EXCELSIOR MINING CORP	738564.34	390493.72	4733	ENV - MONITOR OR PIEZOMETER				0	0
224949	D(16-23) 06BCC	NSD-005	EXCELSIOR MINING CORP	738514.66	390551.58	4740	ENV - MONITOR OR PIEZOMETER	1908	420	4.5	420	1908
224956	D(16-23) 06BCD	NSD-014	EXCELSIOR MINING CORP	739006.16	390547.97	4734	ENV - MONITOR OR PIEZOMETER	1913	402	4.5	402	1913
1080	D(16-23) 06BCD	T-04	EXCELSIOR MINING CORP	738897.59	390336.18	4730	ENV - MONITOR OR PIEZOMETER				0	0
1095	D(16-23) 06BDA	NSH-002	EXCELSIOR MINING CORP	739092.38	390927.9	4749	ENV - MONITOR OR PIEZOMETER	1140	1140	2	608	1264
224849	D(16-23) 06BDD	NSM-010A	EXCELSIOR MINING CORP	739040.96	390550.17	4733	ENV - MONITOR OR PIEZOMETER	839	425		425	839
225100	D(16-23) 06CAA	CS-41	EXCELSIOR MINING CORP	739537.3	394653.69	4793	ENV - MONITOR OR PIEZOMETER				0	0
225082	D(16-23) 06CAA	T-05	EXCELSIOR MINING CORP	739142.8	389662.46	4743	ENV - MONITOR OR PIEZOMETER				0	0
224958	D(16-23) 06CAC	NSD-016	EXCELSIOR MINING CORP	739516.26	389066.94	4731	ENV - MONITOR OR PIEZOMETER	1689	420	4.5	420	1689
224853	D(16-23) 06CAD	NSD-035A	EXCELSIOR MINING CORP	738969.49	389027.58	4713	ENV - MONITOR OR PIEZOMETER		321		321	1180
224957	D(16-23) 06CBA	NSD-015	EXCELSIOR MINING CORP	739152.81	390012.43	4731	ENV - MONITOR OR PIEZOMETER	1956	400	4.5	400	1956
1081	D(16-23) 06CBC	T-06	EXCELSIOR MINING CORP	738594.35	389423.72	4723	ENV - MONITOR OR PIEZOMETER				0	0
536380	D(16-23) 06CCA		SULLIVAN, J.,	738949.01	388384.29	4709	SPCL - EXPLORATION	0	0	0	0	0
1088	D(16-23) 06CCA	USBM-21	EXCELSIOR MINING CORP	738835.58	387832.81	4712	ENV - MONITOR OR PIEZOMETER				0	0
1087	D(16-23) 06CCD	USBM-20	EXCELSIOR MINING CORP	738998.28	387685.53	4700	ENV - MONITOR OR PIEZOMETER				0	0
224852	D(16-23) 06CDA	NSD-034	EXCELSIOR MINING CORP	739255.66	388536.35	4709	ENV - MONITOR OR PIEZOMETER		343		343	997
224959	D(16-23) 06CDC	NSD-017	EXCELSIOR MINING CORP	739703.96	387977.44	4695	ENV - MONITOR OR PIEZOMETER	1349	400	4.5	400	1349
225081	D(16-23) 06DAC	T-03	EXCELSIOR MINING CORP	738560.37	391104.29	4755	ENV - MONITOR OR PIEZOMETER				0	0
224856	D(16-23) 06DBB	NSD-039	EXCELSIOR MINING CORP	739552.76	389535.73	4729	ENV - MONITOR OR PIEZOMETER		383		383	1515
224858	D(16-23) 06DBB	NSD-041	EXCELSIOR MINING CORP	739956.31	391838.22	4747	ENV - MONITOR OR PIEZOMETER	1600	410		383	1786
224855	D(16-23) 06DBC	NSD-038	EXCELSIOR MINING CORP	739848.83	388711.57	4719	ENV - MONITOR OR PIEZOMETER		400		400	2250
224857	D(16-23) 06DBC	NSD-040	EXCELSIOR MINING CORP	739854.88	390291.1	4723	ENV - MONITOR OR PIEZOMETER		222		222	1880
1084	D(16-23) 06DCA	T-12	EXCELSIOR MINING CORP	740763.9	388349.55	4689	ENV - MONITOR OR PIEZOMETER				0	0
221365	D(16-23) 07		EXCELSIOR MINING CORP	740183.77	384758.44	4675	SPCL - MINERAL EXPLORATION				0	0
562253	D(16-23) 07		PHELPS DODGE EXPLORATION	740183.77	384758.44	4675	SPCL - EXPLORATION	0	0	0	0	0
225088	D(16-23) 07BAA	CS-04	EXCELSIOR MINING CORP	739134.38	393245.21	4780	ENV - MONITOR OR PIEZOMETER	2209	632	4	600	2209

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
225069	D(16-23) 07BAA	CS-31	EXCELSIOR MINING CORP	740152.63	387206.99	4683	ENV - MONITOR OR PIEZOMETER	1317			0	1317
223938	D(16-23) 07BAA	NSD-044	EXCELSIOR MINING CORP	739707.02	387338.17	4685	SPCL - MINERAL EXPLORATION		320		320	767
1075	D(16-23) 07BAD	SULLYI97-2	EXCELSIOR MINING CORP	739754.35	386663.72	4680	ENV - MONITOR OR PIEZOMETER				0	0
1015	D(16-23) 07BBD	CS-37	EXCELSIOR MINING CORP	738984.35	386443.73	4695	ENV - MONITOR OR PIEZOMETER				0	0
1016	D(16-23) 07BDD	CS-38	EXCELSIOR MINING CORP	739769.35	385243.72	4676	ENV - MONITOR OR PIEZOMETER				0	0
1013	D(16-23) 07CDC	CS-35	EXCELSIOR MINING CORP	739479.36	382343.73	4662	ENV - MONITOR OR PIEZOMETER				0	0
1083	D(16-23) 07DBB	T-11	EXCELSIOR MINING CORP	740162.68	389593.45	4703	ENV - MONITOR OR PIEZOMETER				0	0
904016	D(16-23) 08		BHP COPPER INC	744787.96	384775.4	4622	SPCL - MINERAL EXPLORATION				0	0
1024	D(16-23) 08BCA	JD-03	EXCELSIOR MINING CORP	739104.34	390568.72	4733	ENV - MONITOR OR PIEZOMETER				0	0
1025	D(16-23) 08BCC	JD-06	EXCELSIOR MINING CORP	738397.45	390263.92	4747	ENV - MONITOR OR PIEZOMETER				0	0
1017	D(16-23) 08CAD	CS-39	EXCELSIOR MINING CORP	744634.32	384093.68	4622	ENV - MONITOR OR PIEZOMETER				0	0
907414	D(16-23) 09CCA		RINKER MATERIALS WEST DIVISION	748426.01	383129.5	4600	SPCL - MINERAL EXPLORATION				0	0
907713	D(16-23) 09CCB			747770.37	383131.28	4600	ENV - MONITOR				0	0
591643	D(16-23) 10ADB		SHANNON KIZER	756963.8	385784	4462	EXEMPT	696	696	7	596	696
907576	D(16-23) 14CAD		DAVID SHIFLETT	760289.87	378542.19	4450	EXEMPT				0	0
547473	D(16-23) 14CCD		BEAULIEU, DEAN,	758984.87	377233.08	4468	EXEMPT	0	0	0	0	0
221772	D(16-23) 14CDC		ERLENE & MICHAEL PAUL SUHR	759641.21	377237.86	4464	EXEMPT	525	525	5	390	525
524980	D(16-23) 14CDC		PURCELL, LEO,	759641.21	377237.86	4465	EXEMPT	540	540	8	480	540
916568	D(16-23) 14DAD		FRANK RHEA	763009.44	378193.42	4424	EXEMPT	506	506	7	386	506
913724	D(16-23) 14DBA		JOE & LYNDA SMOTHERS	761993.35	379298.92	4435	EXEMPT	545	545	7	465	545
906149	D(16-23) 14DBC		DAVID SHIFLETT	761259.37	378626.83	4438	EXEMPT	525	525	7	425	525
562302	D(16-23) 14DDA		IRVIN & LINDA VAN ENWYCK	762503.89	378139.63	4426	EXEMPT	442	442	8	402	442
805357	D(16-23) 15DBC		ASLD	755694.25	378525.15	4630	EXEMPT	0	0	0	0	0
626713	D(16-23) 16DDC		ASLD	750695.18	377213.59	4550	EXEMPT	554	554	12	350	554
904015	D(16-23) 17		BHP COPPER INC	744813.85	379498.42	4596	SPCL - MINERAL EXPLORATION	1500		4	0	0
1062	D(16-23) 17CAA	SD-115	EXCELSIOR MINING CORP	744685.23	379055.59	4580	ENV - MONITOR OR PIEZOMETER				0	0
616095	D(16-23) 17CCC		ASLD	742063.39	377359.4	4605	NON-EXEMPT	700	700	8	0	0
1069	D(16-23) 17CCC	SD-83	EXCELSIOR MINING CORP	742532.45	377268.11	4610	ENV - MONITOR OR PIEZOMETER				0	0
562252	D(16-23) 18		PHELPS DODGE EXPLORATION	740206.95	379471.63	4646	SPCL - EXPLORATION	0	0	0	0	0
915269	D(16-23) 18ABC		FISTIKI FARMS	740448.46	381126.97	4656	NON-EXEMPT				0	0
209018	D(16-23) 18ACA		BOB & SUE SELFF	739693.91	380222.88	4657	EXEMPT	620	620	7	580	620
1061	D(16-23) 18ADC	SD-114	EXCELSIOR MINING CORP	741560.35	378917.72	4615	ENV - MONITOR OR PIEZOMETER				0	0
1077	D(16-23) 18BBB	SULLYI97-4	EXCELSIOR MINING CORP	738562.59	381819.02	4680	ENV - MONITOR OR PIEZOMETER				0	0
1078	D(16-23) 18BBC	SULLYI97-5	EXCELSIOR MINING CORP	738554.37	381363.74	4684	ENV - MONITOR OR PIEZOMETER				0	0
219408	D(16-23) 18BDD		ROBERT CAPUANO	739293.58	378508.85	4644	EXEMPT	580	580	7	500	580
1018	D(16-23) 18CBD	CS-40	EXCELSIOR MINING CORP	738909.17	378958.24	4640	ENV - MONITOR OR PIEZOMETER				0	0
580043	D(16-23) 18CCA		BONNIE L WHITE	738899.43	377588.16	4644	EXEMPT	525	525	5	440	480
628132	D(16-23) 18DDD	ADOT - Texas Canyon	ADOT	740118.12	375095.69	4615	EXEMPT	700	700	8	480	680
631738	D(16-23) 19ACC	Dragoon Water 2	DRAGOON WATER CO INC	739786.43	375315.08	4624	NON-EXEMPT	760	760	12	450	928
631739	D(16-23) 19BAC	Dragoon Water 1	DRAGOON WATER CO INC	740361.24	373766.67	4633	NON-EXEMPT	987	985	12	400	760
220592	D(16-23) 19BCC		JOHN REICHLE	738340.03	374326.47	4648	EXEMPT	620	620	5	520	620
218431	D(16-23) 19BCD		WILLIAM BAKER	738744.43	374405.96	4641	EXEMPT	600	592	6	560	600
576579	D(16-23) 19CCA		DALE & LORRAINE HEWIN	739617.58	372544.26	4642	EXEMPT	520	520	4	460	520
594256	D(16-23) 19CDD		PAUL A BURBECK	739226.95	372000.74	4635	EXEMPT	570	570	7	530	570
569725	D(16-23) 19DCA		WENDY H JEFFCOCK	740648.11	372240.74	4664	EXEMPT	586	586	8	520	580
576329	D(16-23) 19DCB		DALE & LORRAINE HEWIN	740025.67	372276.01	4650	EXEMPT	560	560	4	500	560
216962	D(16-23) 20CAB		ROBERT D. JENSEN	743886.63	374035.18	4644	EXEMPT	605	605	6	525	605
218347	D(16-23) 20CBB		JUDY HOILINGER	742687.64	373935.9	4647	EXEMPT	600	600	7	480	600
564616	D(16-23) 20CBC		GEORGE THORNBURGH SR	742450.5	372897.95	4665	EXEMPT	620	620	5	580	620
564915	D(16-23) 20CCA		VALERIE LYNN TRUST	743341.88	372363.15	4682	EXEMPT	660	650	6	591	651
907461	D(16-23) 20CCB		BILL J & GLORIA M WOOD	742549.1	372485.07	4673	EXEMPT	665	665	7	19	665
540874	D(16-23) 20CCB		LYNN, VALERIE TRUST,	742619.23	372506.41	4675	EXEMPT	0	0	0	0	0
907248	D(16-23) 20CCC		JAMES & PATTY DAVIS	742720.55	372099.63	4683	EXEMPT				0	0
592427	D(16-23) 20CCD		CLINTON KEITH & EDYTHE K. JACOBS	743199.56	371857.25	4692	EXEMPT	680	680	5	600	680
580164	D(16-23) 20CDB		WAYNE SPEER	743851.89	372548.9	4687	EXEMPT				0	0

Well ID	Cadastral	Well Name	Owner Name	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Well Type	Well Depth (ft bls)	Depth of Casing (ft bls)	Casing Diameter (inches)	Top of Well Screen (ft bls)	Bottom of Well Screen (ft bls)
803864	D(16-23) 20DAD		TAVA M. FITZGERALD	747351.09	373219.61	4700	EXEMPT	650	650	4	550	650
507963	D(16-23) 20DBD		WILLIAMS,I	745800.96	373022.12	4695	EXEMPT	625	625	8	400	625
651231	D(16-23) 20DDA		WILLIAMMEE,L O	746862.73	372697.36	4713	EXEMPT	675	675	6	655	675
207589	D(16-23) 20DDB		CHERYL & RICHARD GLENN SR	746668.44	374461.47	4640	EXEMPT	624	616	5	536	616
208253	D(16-23) 20DDC		DEBORAH A MECHIGIAN	746412.17	372156.23	4720	EXEMPT				600	700
640865	D(16-23) 20DDD		ANDREWS,I	747249.69	372043.17	4747	EXEMPT	700	700	6	680	700
220472	D(16-23) 21ABA		EPNG	751099.86	376542.44	4562	SPCL - CATHODIC PROTECTION	500	120	10	0	0
572349	D(16-23) 21CAD		WILLIAM F MENTZER	749916.43	373474.37	4683	EXEMPT	643	643	6	603	643
573551	D(16-23) 21CBD		AGNES I KOSKI	748469.19	373419.93	4696	EXEMPT	645	645	6	605	645
571358	D(16-23) 21CCC		BRYAN AND LYNN HAWKINS	747811.64	372089.62	4751	EXEMPT	700	700	5	640	700
518838	D(16-23) 21CCC		LONG, PAMELA,J	747481.77	372113.93	4742	EXEMPT	660	660	8	620	660
550080	D(16-23) 21CDC		PAUL & SUZANNE JORDAN	749347.08	372501.55	4739	EXEMPT	650	650	8	580	640
562209	D(16-23) 21DCC		KEPHART, WRAY,	750239.64	372389.15	4735	EXEMPT	640	640	8	560	640
540631	D(16-23) 21DDA		EPNG	752394.32	372614.27	4718	SPCL - EXPLORATION	430	160	8	0	0
567714	D(16-23) 21DDD		WAYNE & BONNIE SCHEIBE	752350.08	371721.89	4783	NON-EXEMPT	620	620	8	560	620
218967	D(16-23) 22AAA		KINDER MORGAN ENERGY, SFPP	757680.26	376570.43	4601	SPCL - CATHODIC PROTECTION				0	0
505586	D(16-23) 23BAB		ROBERTSON III, JOHN,	759711.8	376348.66	4484	EXEMPT	515	515	8	455	515
577993	D(16-23) 23BAB		MARK FOLINO	759714.41	376397.27	4481	EXEMPT	485	485		420	465
527167	D(16-23) 23BAB		FOLINO, MARK,	759422.74	376449.35	4487	EXEMPT	0	0	0	455	515
650526	D(16-23) 23BB		SCOTT, WILLIAM,C	759032.14	376575.35	4492	EXEMPT	565	565	4	580	600
904017	D(16-23) 29		BHP COPPER INC	744823.74	368911.98	4745	SPCL - MINERAL EXPLORATION	1698		4	0	0
208279	D(16-23) 29AAC		ROBERT HOPP TRUST	746207.04	370766.66	4769	EXEMPT	260	260	6	0	0
211579	D(16-23) 29AAC		ROBERT HOPP TRUST	746111.56	370873.79	4765	EXEMPT	755	750	5	650	750
627693	D(16-23) 29CCC		COMSTOCK,C	743114.84	366833.97	4785	EXEMPT	600	600	8	460	600
911939	D(16-23) 29CDD		ALBERT C. & MILDRED M. REV. TR COMSTOCK	742839.94	367173.96	4777	EXEMPT	670	670	5	510	670
912639	D(16-23) 29CDD		ALBERT C. & MILDRED M. REV. TR COMSTOCK	742683.69	366878.82	4777	EXEMPT				0	0
904195	D(16-23) 30		BHP COPPER INC	740245.19	368901.34	4699	SPCL - MINERAL EXPLORATION				0	0
556670	D(16-23) 30AAB		EPNG	741487.77	371221.68	4685	SPCL - EXPLORATION	500	100	8	0	0
207383	D(16-23) 30ABB		JAMES A SCHMIDT II	740123.33	370573.83	4683	EXEMPT	665	660	5	560	660
553571	D(16-23) 32AAA		KENNECOTT EXPLOR CO,	747082.51	365941.14	4980	SPCL - EXPLORATION	0	0	0	0	0
562340	D(16-23) 32ADD		USFS CORONADO NF	747010.49	363920.25	4985	EXEMPT	400	400	7	0	0
1005	D(16-23) 32BCD	CS-05-32C	EXCELSIOR MINING CORP	743544.29	395683.66	4700	ENV - MONITOR OR PIEZOMETER				0	0
210217	D(16-23) 33		ALPHA CALCITE ARIZONA	750011.83	363582.08	5400	SPCL - MINERAL EXPLORATION				0	0
553570	D(16-23) 33BCC		KENNECOTT EXPLOR CO,	747687.91	363934.71	4956	SPCL - EXPLORATION	770	0	0	0	0
574536	D(16-23) 33CAA		ALPHA CALCITE ARIZONA	749651.99	363302.64	5321	SPCL - MINERAL EXPLORATION				0	0

Notes:
[1]East and Northing are in NAD 83 State Plane Arizona East Zone
ft amsl = feet above mean sea level
ft bls = feet below land surface

TABLE 7
Selected Water Levels
Gunnison Copper Project

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)
1092		D16022012DCC	UNKNOWN		736057.4	382348.1	500.0	554	4714	11/1/1959	519.00	4195.00
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8	399836.9	0.0	0	0	10/28/2015	0.00	4561.00
207383		D16023030ABB	JAMES A SCHMIDT II	665	740123.3	370573.8	560.0	660	4683	5/2/2005	483.00	4200.00
207589		D16023020DDB	CHERYL & RICHARD GLENN SR	624	746668.4	374461.5	536.0	616	4640	5/13/2005	440.00	4200.00
208791		D16022013DDC	MARY JANE FORD	570	736996.8	376899.4	530.0	570	4672	10/19/2005	470.00	4202.00
209018		D16023018ACA	BOB & SUE SELFF	620	739693.9	380222.9	580.0	620	4657	10/21/2005	470.00	4187.00
211579		D16023029AAC	ROBERT HOPP TRUST	755	746111.6	370873.8	650.0	750	4765	5/5/2006	590.00	4175.00
216142		D16022013DDA	CHARLES & LEWIS KETCHUM	618	738665.6	377187.3	578.0	618	4653	7/20/2007	485.00	4168.00
216962		D16023020CAB	ROBERT D. JENSEN	605	743886.6	374035.2	525.0	605	4644	1/12/2008	396.00	4248.00
218347		D16023020CBB	JUDY HOILINGER	600	742687.6	373935.9	480.0	600	4647	12/1/2010	274.00	4373.00
218431		D16023019BCD	WILLIAM BAKER	600	738744.4	374406.0	560.0	600	4641	12/9/2008	420.00	4221.00
220592		D16023019BCC	JOHN REICHLE	620	738340.0	374326.5	520.0	620	4648	2/15/2012	442.00	4206.00
221772		D16023014CDC	ERLENE & MICHAEL PAUL SUHR	525	759641.2	377237.9	390.0	525	4464	12/18/2012	397.00	4067.00
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.9	406804.0	0.0	0	4867	4/2/2014	696.00	4171.00
223163	CW-4A	D15022025DBC	NORD RESOURCES CORP		735196.0	399574.0	0.0	0	4870	4/2/2014	699.00	4171.00
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.7	400564.3	0.0	0	4798	5/9/2014	651.00	4147.00
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.6	393175.0	579.0	820	4812	6/3/2015	606.60	4205.40
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.7	394225.7	1060.0	1582	4791	6/4/2015	606.19	4184.81
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.8	391244.7	500.0	540	4679	6/3/2015	495.63	4183.37
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.9	395606.7	524.0	1200	4751	6/4/2015	460.69	4290.31
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.5	393037.9	1110.0	1131	4784	6/3/2015	597.85	4186.15
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.2	394752.3	466.0	1168	4847	6/4/2015	424.50	4422.50
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.6	393685.8	1480.0	1551	4825	6/4/2015	630.40	4194.60
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.3	395698.8	486.0	1375	4758	1/1/2015	409.10	4348.68
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.1	394822.5	259.0	767	4785	6/4/2015	246.79	4538.21
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739041.0	390550.2	425.0	839	4733	6/2/2015	546.03	4186.97
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.9	394267.2	504.0	1000	4888	6/4/2015	349.31	4538.69
224855	NSD-038	D16023006DBC	EXCELSIOR MINING CORP		739848.8	388711.6	400.0	2250	4719	6/2/2015	496.60	4222.40
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.3	391838.2	383.0	1786	4747	6/2/2015	558.20	4188.80
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.4	392736.9	507.0	1000	4809	6/3/2015	603.20	4205.80
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.5	394419.2	404.0	1005	4883	6/4/2015	497.12	4385.88
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.5	395306.5	0.0	905	4772	6/4/2015	335.79	4436.21
224950	NSD-004	D16023006BBC	EXCELSIOR MINING CORP	1309	738343.8	391660.1	510.0	1500	4782	10/7/2013	564.90	4217.10
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.7	392024.2	543.0	1509	4768	6/2/2015	566.10	4201.90
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739704.0	387977.4	400.0	1349	4695	6/2/2015	506.70	4188.30
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.6	382790.3	138.0	1398	4688	6/2/2015	522.80	4165.20
225098	CS-21	D15023031CBD	EXCELSIOR MINING CORP	2171	738533.0	394655.3	687.0	2171	4810	6/4/2015	622.05	4187.95
225069	CS-31	D16023007BAA	EXCELSIOR MINING CORP	1317	740152.6	387207.0	0.0	1317	4683	6/2/2015	493.17	4189.83
225104	J-05	D15023031CCB	EXCELSIOR MINING CORP	1475	737445.0	393699.9	416.0	1475	4837	6/3/2015	637.83	4199.17
507963		D16023020DBD	WILLIAMS,I	625	745801.0	373022.1	400.0	625	4695	5/9/1984	318.00	4377.00
518838		D16023021CCC	LONG, PAMELA,J	660	747481.8	372113.9	620.0	660	4742	9/30/1987	610.00	4132.00
524980		D16023014CDC	PURCELL, LEO,	540	759641.2	377237.9	480.0	540	4465	8/5/1989	345.00	4120.00
550080		D16023021CDC	PAUL & SUZANNE JORDAN	650	749347.1	372501.6	580.0	640	4739	6/14/1995	525.00	4214.00
561562	EPB-1 core	D15022026DBB	NORD RESOURCES CORP	398	729931.9	400120.5	0.0	398	5052	8/11/1998	397.40	4654.80
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.3	399220.7	63.0	123	5067	10/27/2015	49.62	5017.58

CLEAR CREEK ASSOCIATES

TABLE 7
Selected Water Levels
Gunnison Copper Project

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.3	401795.1	442.0	502	5026	10/28/2015	497.00	4529.30
562209		D16023021DCC	KEPHART, WRAY,	640	750239.6	372389.2	560.0	640	4735	4/17/1997	365.00	4370.00
562302		D16023014DDA	IRVIN & LINDA VAN ENWYCK	442	762503.9	378139.6	402.0	442	4426	6/3/1997	360.00	4066.00
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.7	400121.2	545.0	605	4864	10/28/2015	569.80	4294.50
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.3	401512.6	305.0	365	5220	10/28/2015	307.80	4912.50
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.4	398554.3	168.0	268	5096	10/27/2015	98.80	4996.70
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.2	401419.2	564.0	624	4954	6/11/2009	587.30	4366.90
564616		D16023020CBC	GEORGE THORNBURGH SR	620	742450.5	372898.0	580.0	620	4665	10/4/1997	445.00	4220.00
564915		D16023020CCA	VALERIE LYNN TRUST	660	743341.9	372363.2	591.0	651	4682	3/11/1998	470.00	4212.00
567591		D16022013BBB	WILLIAM E THOMAS	600	737759.2	380603.0	560.0	600	4684	4/20/1998	525.00	4159.00
567714		D16023021DDD	WAYNE & BONNIE SCHEIBE	620	752350.1	371721.9	560.0	620	4783	5/20/1998	510.00	4273.00
569725		D16023019DCA	WENDY H JEFFCOCK	586	740648.1	372240.7	520.0	580	4664	8/11/1998	457.00	4207.00
571358		D16023021CCC	BRYAN AND LYNN HAWKINS	700	747811.6	372089.6	640.0	700	4751	9/3/1999	580.00	4171.00
572349		D16023021CAD	WILLIAM F MENTZER	643	749916.4	373474.4	603.0	643	4683	3/24/1999	570.00	4113.00
573551		D16023021CBD	AGNES I KOSKI	645	748469.2	373419.9	605.0	645	4696	4/17/1999	570.00	4126.00
576329		D16023019DCB	DALE & LORRAINE HEWIN	560	740025.7	372276.0	500.0	560	4650	9/16/1999	530.00	4120.00
576579		D16023019CCA	DALE & LORRAINE HEWIN	520	739617.6	372544.3	460.0	520	4642	9/17/1999	480.00	4162.00
577993		D16023023BAB	MARK FOLINO	485	759714.4	376397.3	420.0	465	4481	12/15/1999	390.00	4091.00
578044		D16022013BBD	CLIVE AND SHIRLEY BAILEY	220	733776.4	381424.0	20.0	220	4743	10/22/2000	30.00	4713.00
580043		D16023018CCA	BONNIE L WHITE	525	738899.4	377588.2	440.0	480	4644	5/8/2000	436.00	4208.00
592427		D16023020CCD	CLINTON KEITH & EDYTHE K. JACOBS	680	743199.6	371857.3	600.0	680	4692	7/11/2002	405.00	4287.00
594256		D16023019CDD	PAUL A BURBECK	570	739227.0	372000.7	530.0	570	4635	9/3/2002	440.00	4195.00
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.4	425.0	475	4917	10/28/2015	308.40	4608.66
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.2	397830.8	168.0	268	5012	10/27/2015	45.05	4966.63
602036		D16022003BC0	MCKINNEY,R W	85	726804.7	392534.9	20.0	85	4984	1/1/1950	12.00	4972.00
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.9	403967.6	680.0	800	5107	9/15/2015	698.00	4409.40
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.5	401628.8	0.0	862	4971	10/28/2015	416.70	4554.08
616964		D16022011AC0	FULTON ET AL,W D	0	730993.9	384798.4	2.0	100	4841	9/1/1977	2.00	4839.00
620397		D16022003AD0	MCGOFFIN,R	65	727102.2	389974.3	20.0	65	4975	1/1/1967	32.00	4943.00
622850		D16022001BAD	CYPRUS COPPER CO	0	734240.9	391681.2	20.0	100	4794	6/8/1982	75.00	4719.00
622852		D15023030AAD	BENSON 1550 LLC	638	741962.1	402660.4	500.0	638	4668	12/13/2001	510.20	4157.80
622853		D16022001BAD	CYPRUS COPPER CO	70	734884.1	391625.1	15.0	100	4779	6/8/1982	70.00	4709.00
626713		D16023016DDC	ASLD	554	750695.2	377213.6	350.0	554	4550	10/10/1956	395.00	4155.00
626713		D16023016DDC	ASLD	554	750695.2	377213.6	350.0	554	4550	6/10/1980	347.00	4203.00
627693		D16023029CCC	COMSTOCK,C	600	743114.8	366834.0	460.0	600	4785	1/1/1943	460.00	4325.00
628132	ADOT - Texas Canyon	D16023018DDD	ADOT	700	740118.1	375095.7	480.0	680	4615	12/2/1994	399.60	4215.40
631738	Dragoon Water 2	D16023019ACC	DRAGOON WATER CO INC	760	739786.4	375315.1	450.0	928	4624	9/8/1966	407.00	4217.00
633424	Smith	D15022035BA0	DURHAM, ROBERT C	500	728586.3	397678.2	0.0	500	4991	5/12/2003	59.20	4931.76
640865		D16023020DDD	ANDREWS,I	700	747249.7	372043.2	680.0	700	4747	11/1/1978	625.00	4122.00
641183		D16022011CAC	AMERINDIAN FOUNDATIO,	18	729486.1	383647.3	10.0	18	4855	9/1/1977	8.00	4847.00
643402		D16022012DAA	BLM-SAFFORD DISTRICT,	0	737969.7	384549.4	300.0	400	4714	12/12/2014	331.20	4382.80
650526		D16023023BB0	SCOTT, WILLIAM,C	565	759032.1	376575.4	580.0	600	4492	12/1/1980	390.00	4102.00
651231		D16023020DDA	WILLIAMMEE,L O	675	746862.7	372697.4	655.0	675	4713	11/21/1978	610.00	4103.00
802786		D16022012000	RIMSZA,A V	700	736875.2	382472.8	600.0	700	4744	6/1/1975	600.00	4144.00
803864		D16023020DAD	TAVA M. FITZGERALD	650	747351.1	373219.6	550.0	650	4700	3/9/1980	550.00	4150.00

CLEAR CREEK ASSOCIATES

TABLE 7
Selected Water Levels
Gunnison Copper Project

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	Measuring Point Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)
906149		D16023014DBC	DAVID SHIFLETT	525	761259.4	378626.8	425.0	525	4438	7/27/2007	425.00	4013.00
909280	New Section 19 Well	D15023019BBB	C-BAR RANCH	1140	738015.7	408227.8	700.0	1140	4773	11/26/2008	656.00	4117.00
912814	CW-2	D15022025DBB	DURHAM, ROBERT C		735193.9	400236.9	0.0	0	4800	1/13/2011	644.13	4155.54
912814	CW-2	D15022025DBB	DURHAM, ROBERT C		735193.9	400236.9	0.0	0	4798	10/28/2015	650.20	4147.80
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.8	401553.2	0.0	0	4878	10/28/2015	716.10	4161.90
912816	CW-1	D15022025CDD	NORD RESOURCES CORP		734490.1	398128.3	0.0	0	4817	1/13/2011	603.30	4213.45
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.1	404876.4	0.0	0	4866	10/28/2015	694.95	4171.05
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.9	400236.9	0.0	0	4871	1/13/2011	690.00	4181.00
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.9	400236.9	0.0	0	4870	10/28/2015	699.15	4170.85
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.3	397588.6	0.0	0	4807	10/28/2015	375.50	4431.50
913724		D16023014DBA	JOE & LYNDA SMOTHERS	545	761993.4	379298.9	465.0	545	4435	12/2/2011	374.00	4061.00
914575		D16022024BDD	ROBERT W & KYLE ANNE ALLGOOD	763	737345.7	374702.7	719.0	763	4669	10/3/2012	510.00	4159.00
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.8	394338.5	646.0	1070	4850	6/3/2015	658.03	4191.97
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.2	394683.8	605.0	706	4792	6/4/2015	607.56	4184.44
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.2	373766.7	400.0	760	4633	4/1/2015	442.45	4190.55

Notes:
[1]East and Northing are in NAD 83 State Plane Arizona East Zone
ft amsl = feet above mean sea level
ft bls = feet below land surface
ft bmp = feet below measuring point

CLEAR CREEK ASSOCIATES

TABLE 8
Regional Hydraulic Conductivity

Owner	Registry	Easting[1] (feet)	Northing[1] (feet)	Well Elevation (ft amsl)	Well Type	Water Level (feet)	Pump Rate (gpm)	Test Rate (gpm)	Drawdown (feet)	Well Depth (ft bls)	Top Screen (feet)	Top Screen or Water Level	Bottom Screen (ft bls)	Estimated Thickness (feet)	Specific Capacity (gpm/ft)	Transmissivity (feet^2/day)	Hydraulic Conductivity (feet/day)	Hydrogeologic Unit
ERLENE & MICHAEL PAUL SUHR	221772	759641.2	377237.9	4464	EXEMPT	397	10	10	20	525	390	397	525	128	0.50	100.3	0.78	Pz
ROBERTSON III, JOHN,	505586	759711.8	376348.7	4484	EXEMPT	380	12	12	4	515	455	455	515	60	3.00	601.6	10.03	Pz
JAMES A SCHMIDT II	207383	740123.3	370573.8	4683	EXEMPT	483	15	7	17	665	560	560	660	100	0.41	82.6	0.83	Qbf
CHERYL & RICHARD GLENN SR	207589	746668.4	374461.5	4640	EXEMPT	440	15	8	15	624	536	536	616	80	0.53	107.0	1.34	Qbf
ROBERT D. JENSEN	216962	743886.6	374035.2	4644	EXEMPT	396	20	15	9	605	525	525	605	80	1.67	334.2	4.18	Qbf
ROBERT CAPUANO	219408	739293.6	378508.9	4644	EXEMPT	440	20	12	10	580	500	500	580	80	1.20	240.6	3.01	Qbf
WILLIAMS,I	507963	745801.0	373022.1	4695	EXEMPT	318	25	25	25	625	400	400	625	225	1.00	200.5	0.89	Qbf
LONG, PAMELA,J	518838	747481.8	372113.9	4742	EXEMPT	610	7	20	75	660	620	620	660	40	0.27	53.5	1.34	Qbf
PURCELL, LEO,	524980	759641.2	377237.9	4465	EXEMPT	345	10	10	355	540	480	480	540	60	0.03	5.6	0.09	Qbf
PAUL & SUZANNE JORDAN	550080	749347.1	372501.6	4739	EXEMPT	525	13	13	40	650	580	580	640	60	0.33	65.2	1.09	Qbf
WENDY H JEFFCOCK	569725	740648.1	372240.7	4664	EXEMPT	457	8	8	12	586	520	520	580	60	0.67	133.7	2.23	Qbf
CLINTON KEITH & EDYTHE K. JACOBS	592427	743199.6	371857.3	4692	EXEMPT	405	25	16	22	680	600	600	680	80	0.73	145.8	1.82	Qbf
CYPRUS COPPER CO	611610	737604.0	408296.2	4750	EXEMPT	680	100	105	62	1155	706	706	956	250	1.69	339.6	1.36	Qbf
C-BAR RANCH	909281	738016.9	408200.8	4773	EXEMPT	654	230	169	91	-	500	654	1100	446	1.86	372.4	0.84	Qbf
C-BAR RANCH	911489	739902.4	407718.1	4719	EXEMPT	606	200	190	450	-	500	606	1100	494	0.42	84.7	0.17	Qbf
GEORGANA R. HIATT	515539	727610.1	393032.3	4955	EXEMPT	370	7	1	442	495	370	370	495	125	0.00226	0.5	0.00	Ttm
GEORGANA R. HIATT	528611	727987.4	392285.5	4950	EXEMPT	370	7	1	442	495	370	370	495	125	0.00226	0.5	0.00	Ttm
CLIVE AND SHIRLEY BAILEY	578044	733776.4	381424.0	4743	EXEMPT	30	13	12	65	220	30	30	220	190	0.18	37.0	0.19	Ttm
C-BAR RANCH	599297	728590.1	397676.5	5006	EXEMPT	47	25	15	644	-	500	500	1100	600	0.02	4.7	0.01	Ttm

Notes:

[1]East and Northing are in NAD 83 State Plane Arizona East Zone

ft amsl = feet above mean sea level

gpm = gallons per minute

ft bls = feet below land surface

gpm/ft = gallons per minute per foot

Numbers in red are estimated

Transmissivity based on specific capacity times 1500

CLEAR CREEK ASSOCIATES

TABLE 9
Summary of Aquifer Testing Analysis
Gunnison Copper Project

Pumped Well	Observation Wells	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity (1/ft)	Analysis Method	Lithology
NSH-001		31.5			Theis recovery	Martin/Abrigo
			0.17		Moench-slab	
NSH-002		2000			Theis recovery	Martin/Abrigo
	NSH-006		0.13	6.70E-04	Moench-slab	
	NSD-014		1.6	1.00E-03	Moench-slab	
NSH-003		48.1			Theis recovery	Abrigo
			0.05	4.00E-07	Moench-slab	
NSH-004B		210			Theis recovery	Martin/Abrigo
	NSD-011		0.05	4.00E-04	Moench-slab	
	CS-05		0.32	8.10E-06	Moench-slab	
NSH-005		1245			Theis recovery	Martin/Abrigo
	NSH-006		4.07	2.30E-05	Moench-slab	
	NSM-001		1.3	2.10E-06	Moench-slab	
NSH-006		1985			Theis recovery	Basin Fill
NSH-007		64.5			Theis recovery	Abrigo
	NSH-008		0.07	1.00E-12	Moench-slab	
	NSD-028		0.07	3.50E-07	Moench-slab	
	NSD-032		0.07	1.33E-05	Moench-slab	
NSH-008		5			Theis recovery	Abrigo
			0.01	1.20E-02	Moench-slab	
	NSH-007		0.04	3.50E-10	Moench-slab	
	NSD-032		0.03	1.96E-06	Moench-slab	
NSH-009		2.4			Theis recovery	Abrigo
			0.005	5.20E-10	Gringarten	
	NSD-037		0.007	3.80E-06	Moench-slab	
NSH-010		9			Theis recovery	Martin
			0.023	8.74E-03	Moench-slab	
	NSH-032		0.034	3.06E-07	Moench-slab	
NSH-011			0.12		Hvorslev	Basin Fill/Naco
NSH-013		17.1			Theis recovery	Martin
	NSM-007		0.04	1.00E-08	Moench-slab	
NSH-014B		10.7			Theis recovery	Abrigo
			0.01	3.27E-05	Theis confined	
NSH-015		1009.7			Theis recovery	
	NSH-019		0.67	7.00E-06	Gringarten	Quartz Monzonite/
	NSD-019		0.45	7.14E-06	Gringarten	Abrigo
	NSH-016		0.40	9.00E-05	Gringarten	
	J-05		0.53	1.60E-05	Moench-slab	
NSH-016		709.5			Theis recovery	
			0.41	3.66E-03	Moench-slab	Quartz Monzonite
	NSD-019		1.25		Theis recovery	
	NSH-017		0.95		Theis recovery	

CLEAR CREEK ASSOCIATES

TABLE 9
Summary of Aquifer Testing Analysis
Gunnison Copper Project

Pumped Well	Observation Wells	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity (1/ft)	Analysis Method	Lithology
NSH-017		913.2			Theis recovery	Abrigo
	J-05		1.3	4.00E-04	Moench-slab	
	NSH-015		1.0	3.40E-06	Moench-slab	
	NSH-016		0.77	1.00E-10	Moench-slab	
NSH-018		1995.2			Theis recovery	Naco
			7.0	2.46E-10	Theis confined	
	NSH-020		7.5	8.06E-07	Dougherty	
NSH-019		699.1			Theis recovery	Martin/Abrigo
			0.42	1.29E-07	Moench-cube	
	MSN-008		0.77	1.00E-05	Moench-cube	
	NSH-024		1.0	1.00E-07	Moench-cube	
	NSH-017		1.12	1.00E-10	Moench-cube	
NSH-020		3715.4			Theis recovery	
	NSH-018		9.8	2.87E-07	Theis confined	Naco/ Escabrosa/
	NSH-029		2.94	2.02E-08	Dougherty	Martin
NSH-021C		197.5			Theis recovery	Abrigo
			0.13	1.00E-02	Moench-slab	
	NSH-024		1.0	1.00E-07	Moench-cube	
	NSH-024		0.63		Theis recovery	
NSH-022		1.8			Theis recovery	Martin/Abrigo
		0.4		8.50E-06	Cooper	
NSH-023		39			Theis recovery	Martin/Abrigo
			0.072	1.00E-03	Moench-slab	
	NSH-004B		0.25	9.40E-02	Moench-slab	
	NSH-025		0.3	1.00E-07	Moench-slab	
	NSH-001		0.37	1.80E-09	Moench-slab	
NSH-024		72.8			Theis recovery	Martin/Abrigo
			0.062	1.00E-10	Moench-slab	
	NSH-025		0.033	2.00E-06	Moench-slab	
	NSH-004B		0.9	8.73E-08	Moench-slab	
	NSM-008		1.1		Theis recovery	
NSH-025		2.3			Theis recovery	Abrigo
			0.07	1.00E-14	Cooper	
NSH-026		400			Theis recovery	
	NSH-022		0.08	1.00E-10	Moench-slab	Escabrosa/ Martin
	NSH-004B		12.5	1.00E-06	Moench-slab	
NSH-027		82.5			Theis recovery	Abrigo
	NSM-005		0.1	4.00E-04	Moench-slab	
	NSM-009		0.05	1.00E-05	Moench-slab	
	NSD-022		0.11	1.00E-03	Moench-slab	
	NSD-012		0.36	1.00E-04	Moench-slab	
NSH-028		2.5			Theis recovery	Martin/Abrigo
		0.75		3.37E-04	Cooper	
	NSH-027		0.22		Theis recovery	

Notes:
ft^2/d = feet squared per day
ft/d = feet per day

CLEAR CREEK ASSOCIATES

TABLE 10
Hydraulic Conductivity Zones
Gunnison Copper Project

Zone	Geology	Geology	Fracture Intensity	Kx	Ky	Kz
1	No Flow/Unused			1	1	1
2	Basin Fill	Qal		2	2	0.04
3	Basin Fill	Qal		1	1	0.02
4	Texas Canyon	Tqm	0	0.0053	0.0053	0.0053
5	Texas Canyon	Tqm	1	0.008	0.008	0.008
6	Texas Canyon	Tqm	2	0.001	0.001	0.001
7	Texas Canyon	Tqm	3	0.1	0.1	0.1
8	Texas Canyon	Tqm	4	1	1	1
9	Texas Canyon	Tqm	5	0.47	0.47	0.47
10	Paleozoic Rocks	Pu	0	0.014	0.014	0.014
11	Paleozoic Rocks	Pu	1	0.001	0.001	0.001
12	Paleozoic Rocks	Pu	2	0.1	0.1	0.1
13	Paleozoic Rocks	Pu	3	0.004	0.004	0.004
14	Paleozoic Rocks	Pu	4	0.67	0.67	0.67
15	Paleozoic Rocks	Pu	5	0.1	0.1	0.1
16	Naco Fm	Pn	0	0.4	0.4	0.4
17	Naco Fm	Pn	1	0.03	0.03	0.03
18	Naco Fm	Pn	2	0.1	0.1	0.1
19	Naco Fm	Pn	3	0.3	0.3	0.3
20	Naco Fm	Pn	4	1	1	1
21	Naco Fm	Pn	5	65	65	65
22	Escabrosa	Me	0	0.1	0.1	0.1
23	Escabrosa	Me	1	0.005	0.005	0.0005
24	Escabrosa	Me	2	0.1	0.1	0.1
25	Escabrosa	Me	3	0.8	0.8	0.8
26	Escabrosa	Me	4	10	10	10
27	Escabrosa	Me	5	65	65	65
28	Martin Fm	Dm	0	0.1	0.1	0.1
29	Martin Fm	Dm	1	0.005	0.005	0.005
30	Martin Fm	Dm	2	0.07	0.07	0.07
31	Martin Fm	Dm	3	1	1	1
32	Martin Fm	Dm	4	10	10	10
33	Martin Fm	Dm	5	65	65	65
34	Upper Abrigo	Cau	0	0.1	0.1	0.1
35	Upper Abrigo	Cau	1	0.005	0.005	0.005
36	Upper Abrigo	Cau	2	0.07	0.07	0.07
37	Upper Abrigo	Cau	3	1	1	1
38	Upper Abrigo	Cau	4	10	10	10
39	Upper Abrigo	Cau	5	65	65	65
40	Middle Abrigo	Cam	0	0.1	0.1	0.1
41	Middle Abrigo	Cam	1	0.005	0.005	0.005
42	Middle Abrigo	Cam	2	0.09	0.09	0.09
43	Middle Abrigo	Cam	3	1	1	1
44	Middle Abrigo	Cam	4	10	10	10
45	Middle Abrigo	Cam	5	65	65	65

TABLE 10
Hydraulic Conductivity Zones
Gunnison Copper Project

Zone	Geology	Geology	Fracture Intensity	Kx	Ky	Kz
46	Lower Abrigo	Cal	0	0.1	0.1	0.1
47	Lower Abrigo	Cal	1	0.005	0.005	0.005
48	Lower Abrigo	Cal	2	0.09	0.09	0.09
49	Lower Abrigo	Cal	3	1	1	1
50	Lower Abrigo	Cal	4	10	10	10
51	Lower Abrigo	Cal	5	65	65	65
52	Bolsa Quartzite	Cb	0	0.1	0.1	0.1
53	Bolsa Quartzite	Cb	1	0.005	0.005	0.005
54	Bolsa Quartzite	Cb	2	0.09	0.09	0.09
55	Bolsa Quartzite	Cb	3	1	1	1
56	Bolsa Quartzite	Cb	4	10	10	10
57	Bolsa Quartzite	Cb	5	65	65	65
58	Precambrian Rocks	Pcu	0	0.95	0.95	0.95
59	Precambrian Rocks	Pcu	1	0.17	0.17	0.17
60	Precambrian Rocks	Pcu	2	0.022	0.022	0.022
61	Precambrian Rocks	Pcu	3	0.005	0.005	0.005
62	Precambrian Rocks	Pcu	4	10	10	10
63	Precambrian Rocks	Pcu	5	65	65	65
64	Fault			0.8	0.8	0.8
65	Fault			0.1	0.1	0.1
66	Fault			0.2	0.2	0.2
67	Fault			0.1	0.1	0.1

Note:
Values are in feet per day (ft/day).

TABLE 11
Storage Zones
Gunnison Copper Project

Zone	Geology	Geology	Fracture Intensity	Ss	Sy	Porosity
1	No Flow/Unused			0.00005	0.03	0.03
2	Basin Fill	Qal		0.00005	0.15	0.2
3	Basin Fill	Qal		0.00005	0.08	0.1
4	Texas Canyon	Tqm	0	0.00005	0.016	0.02
5	Texas Canyon	Tqm	1	0.00005	0.0055	0.007
6	Texas Canyon	Tqm	2	0.00005	0.0131	0.016
7	Texas Canyon	Tqm	3	0.00005	0.0204	0.025
8	Texas Canyon	Tqm	4	0.00005	0.0359	0.045
9	Texas Canyon	Tqm	5	0.00005	0.025	0.031
10	Paleozoic Rocks	Pu	0	0.00005	0.016	0.02
11	Paleozoic Rocks	Pu	1	0.00005	0.0055	0.007
12	Paleozoic Rocks	Pu	2	0.00005	0.0131	0.016
13	Paleozoic Rocks	Pu	3	0.00005	0.0204	0.025
14	Paleozoic Rocks	Pu	4	0.00005	0.0359	0.045
15	Paleozoic Rocks	Pu	5	0.00005	0.025	0.031
16	Naco Fm	Pn	0	0.00005	0.016	0.02
17	Naco Fm	Pn	1	0.00005	0.0055	0.007
18	Naco Fm	Pn	2	0.00005	0.0131	0.016
19	Naco Fm	Pn	3	0.00005	0.0204	0.025
20	Naco Fm	Pn	4	0.00005	0.0359	0.045
21	Naco Fm	Pn	5	0.00005	0.025	0.031
22	Escabrosa	Me	0	0.00005	0.016	0.02
23	Escabrosa	Me	1	0.00005	0.0055	0.007
24	Escabrosa	Me	2	0.00005	0.0131	0.016
25	Escabrosa	Me	3	0.00005	0.0204	0.025
26	Escabrosa	Me	4	0.00005	0.0359	0.045
27	Escabrosa	Me	5	0.00005	0.025	0.031
28	Martin Fm	Dm	0	0.00005	0.016	0.02
29	Martin Fm	Dm	1	0.00005	0.0055	0.007
30	Martin Fm	Dm	2	0.00005	0.0131	0.016
31	Martin Fm	Dm	3	0.00005	0.0204	0.025
32	Martin Fm	Dm	4	0.00005	0.0359	0.045
33	Martin Fm	Dm	5	0.00005	0.025	0.031
34	Upper Abrigo	Cau	0	0.00005	0.016	0.02
35	Upper Abrigo	Cau	1	0.00005	0.0055	0.007
36	Upper Abrigo	Cau	2	0.00005	0.0131	0.016
37	Upper Abrigo	Cau	3	0.00005	0.0204	0.025
38	Upper Abrigo	Cau	4	0.00005	0.0359	0.045
39	Upper Abrigo	Cau	5	0.00005	0.025	0.031
40	Middle Abrigo	Cam	0	0.00005	0.016	0.02
41	Middle Abrigo	Cam	1	0.00005	0.0055	0.007
42	Middle Abrigo	Cam	2	0.00005	0.0131	0.016
43	Middle Abrigo	Cam	3	0.00005	0.0204	0.025
44	Middle Abrigo	Cam	4	0.00005	0.0359	0.045
45	Middle Abrigo	Cam	5	0.00005	0.025	0.031

TABLE 11
Storage Zones
Gunnison Copper Project

Zone	Geology	Geology	Fracture Intensity	Ss	Sy	Porosity
46	Lower Abrigo	Cal	0	0.00005	0.016	0.02
47	Lower Abrigo	Cal	1	0.00005	0.0055	0.007
48	Lower Abrigo	Cal	2	0.00005	0.0131	0.016
49	Lower Abrigo	Cal	3	0.00005	0.0204	0.025
50	Lower Abrigo	Cal	4	0.00005	0.0359	0.045
51	Lower Abrigo	Cal	5	0.00005	0.025	0.031
52	Bolsa Quartzite	Cb	0	0.00005	0.016	0.02
53	Bolsa Quartzite	Cb	1	0.00005	0.0055	0.007
54	Bolsa Quartzite	Cb	2	0.00005	0.0131	0.016
55	Bolsa Quartzite	Cb	3	0.00005	0.0204	0.025
56	Bolsa Quartzite	Cb	4	0.00005	0.0359	0.045
57	Bolsa Quartzite	Cb	5	0.00005	0.025	0.031
58	Precambrian Rocks	Pcu	0	0.00005	0.016	0.02
59	Precambrian Rocks	Pcu	1	0.00005	0.0055	0.007
60	Precambrian Rocks	Pcu	2	0.00005	0.0131	0.016
61	Precambrian Rocks	Pcu	3	0.00005	0.0204	0.025
62	Precambrian Rocks	Pcu	4	0.00005	0.0359	0.045
63	Precambrian Rocks	Pcu	5	0.00005	0.025	0.031
64	Fault			0.00005	0.032	0.04
65	Fault			0.00005	0.032	0.04
66	Fault			0.00005	0.032	0.04
67	Fault			0.00005	0.032	0.04

Note:
Values are dimensionless

TABLE 12
Groundwater Model Calibration Results
Gunnison Copper Project

Owner Name	Well Name	Target Name	Easting[1]	Northing[1]	Layer	Observed	Computed	Residual
UNKNOWN		1092	736057.35	382348.12	3	4195.00	4204.19	-9.19
EXCELSIOR MINING CORP	NSH-001	221521	738265.2	393874.58	3	4205.05	4217.45	-12.40
CHERYL & RICHARD GLENN SR		207589	746668.44	374461.47	3	4200.00	4169.78	30.22
MARY JANE FORD		208791	736996.79	376899.36	3	4202.00	4200.86	1.14
BOB & SUE SELFF		209018	739693.91	380222.88	3	4187.00	4186.37	0.63
ROBERT HOPP TRUST		211579	746111.56	370873.79	3	4175.00	4169.67	5.33
CHARLES & LEWIS KETCHUM		216142	738665.62	377187.29	3	4168.00	4191.27	-23.27
ROBERT D. JENSEN		216962	743886.63	374035.18	3	4248.00	4173.22	74.78
WILLIAM BAKER		218431	738744.43	374405.96	3	4221.00	4186.33	34.67
JOHN REICHLE		220592	738340.03	374326.47	3	4206.00	4187.74	18.26
EXCELSIOR MINING CORP	NSH-003	221520	738201.82	394344.15	5	4193.98	4220.22	-26.24
EXCELSIOR MINING CORP	NSH-011	224058	743019.77	391244.73	3	4183.24	4178.89	4.35
EXCELSIOR MINING CORP	NSD-037	224059	737845.93	395606.72	2	4293.12	4284.59	8.53
EXCELSIOR MINING CORP	NSH-018	224100	739687.04	394387.46	3	4184.73	4211.12	-26.39
EXCELSIOR MINING CORP	NSD-031	224155	737024.7	395487.5	2	4304.57	4310.39	-5.82
EXCELSIOR MINING CORP	CS-13	224159	737558.77	395152.18	2	4233.50	4229.29	4.21
EXCELSIOR MINING CORP	CS-14	224160	737557.34	395698.82	2	4363.50	4295.80	67.70
EXCELSIOR MINING CORP	NSM-005A	224841	738781.26	393106.74	3	4196.53	4211.34	-14.81
EXCELSIOR MINING CORP	NSD-035A	224853	738969.49	389027.58	3	4187.67	4194.57	-6.90
EXCELSIOR MINING CORP	NSD-038	224855	739848.83	388711.57	2	4222.40	4192.14	30.26
EXCELSIOR MINING CORP	NSD-039	224856	739552.76	389535.73	3	4186.64	4195.18	-8.54
EXCELSIOR MINING CORP	NSD-041	224858	739956.31	391838.22	3	4188.77	4200.74	-11.97
EXCELSIOR MINING CORP	NSD-043	224860	739255.99	393741	3	4187.20	4211.58	-24.38
EXCELSIOR MINING CORP	NSD-024	224931	738799.08	394051.36	3	4197.00	4216.51	-19.51
EXCELSIOR MINING CORP	NSD-032	224939	736626.53	395306.53	2	4451.82	4320.23	131.60
EXCELSIOR MINING CORP	NSD-001	224940	737801.3	393537.11	2	4218.04	4216.52	1.52
EXCELSIOR MINING CORP	NSD-002	224941	737726.8	392950.87	2	4228.62	4212.59	16.03
EXCELSIOR MINING CORP	NSD-022	224947	738811.18	391741.29	2	4210.20	4205.66	4.54
EXCELSIOR MINING CORP	NSD-005	224949	738514.66	390551.58	2	4245.65	4200.98	44.67
EXCELSIOR MINING CORP	NSD-007	224951	739662.03	391510.94	3	4188.24	4201.32	-13.08
EXCELSIOR MINING CORP	NSD-010	224953	738613.65	392024.22	2	4203.72	4207.20	-3.48
EXCELSIOR MINING CORP	NSD-012	224954	738896.21	391039.29	2	4213.40	4201.58	11.81
EXCELSIOR MINING CORP	NSD-014	224956	739006.16	390547.97	3	4192.67	4200.25	-7.59
EXCELSIOR MINING CORP	NSD-015	224957	739152.81	390012.43	3	4191.46	4198.79	-7.34
EXCELSIOR MINING CORP	NSD-017	224959	739703.96	387977.44	3	4188.96	4191.27	-2.31
EXCELSIOR MINING CORP	NSD-018	224960	738058.61	382790.27	3	4171.44	4195.76	-24.33
EXCELSIOR MINING CORP	CS-05	225089	738608.92	393694.89	3	4176.44	4215.23	-38.79
EXCELSIOR MINING CORP	CS-06	225090	738576.3	394194.54	3	4185.74	4217.97	-32.24
EXCELSIOR MINING CORP	CS-09	225093	738551.02	395144.23	3	4190.07	4228.81	-38.74
EXCELSIOR MINING CORP	CS-10	225094	738060.5	394653.38	2	4210.00	4226.52	-16.52
EXCELSIOR MINING CORP	CS-31	225069	740152.63	387206.99	3	4190.82	4189.25	1.58
EXCELSIOR MINING CORP	J-05	225104	737444.95	393699.86	2	4253.73	4220.73	33.00
LONG, PAMELA,J		518838	747481.77	372113.93	3	4132.00	4167.22	-35.22

CLEAR CREEK ASSOCIATES

TABLE 12
Groundwater Model Calibration Results
Gunnison Copper Project

Owner Name	Well Name	Target Name	Easting[1]	Northing[1]	Layer	Observed	Computed	Residual
PAUL & SUZANNE JORDAN		550080	749347.08	372501.55	3	4214.00	4162.29	51.71
NORD RESOURCES CORP	Southern	561564	733248.61	398080.08	1	4577.10	4462.21	114.89
NORD RESOURCES CORP	Cross	561565	730644.27	401795.05	1	4631.30	4695.67	-64.37
NORD RESOURCES CORP	Cochise	563953	734060.73	400121.15	2	4339.30	4385.75	-46.45
NORD RESOURCES CORP	Pioneer	563954	726957.27	401512.6	1	4931.30	4911.11	20.19
NORD RESOURCES CORP	Twin	563956	732779.23	401419.23	2	4383.10	4414.66	-31.56
GEORGE THORNBURGH SR		564616	742450.5	372897.95	3	4220.00	4173.78	46.22
VALERIE LYNN TRUST		564915	743341.88	372363.15	3	4212.00	4172.83	39.17
NORD RESOURCES CORP	Tungsten	565198	731403.63	396152.38	1	4691.40	4782.70	-91.30
WILLIAM E THOMAS		567591	737759.16	380603.01	3	4159.00	4195.71	-36.71
WENDY H JEFFCOCK		569725	740648.11	372240.74	3	4207.00	4174.48	32.52
BRYAN AND LYNN HAWKINS		571358	747811.64	372089.62	3	4171.00	4166.51	4.49
WILLIAM F MENTZER		572349	749916.43	373474.37	3	4113.00	4160.04	-47.04
AGNES I KOSKI		573551	748469.19	373419.93	3	4126.00	4164.86	-38.86
DALE & LORRAINE HEWIN		576329	740025.67	372276.01	3	4120.00	4174.76	-54.76
DALE & LORRAINE HEWIN		576579	739617.58	372544.26	3	4162.00	4174.92	-12.92
BONNIE L WHITE		580043	738899.43	377588.16	2	4208.00	4190.28	17.72
MCKINNEY,R W		602036	726804.66	392534.88	1	4972.00	4949.72	22.28
MCGOFFIN,R		620397	727102.17	389974.29	1	4943.00	4992.05	-49.05
BENSON 1550 LLC		622852	741962.11	402660.4	2	4162.90	4161.77	1.13
ASLD		626713	750695.18	377213.59	2	4179.00	4166.83	12.17
ADOT	ADOT - Texas Canyon	628132	740118.12	375095.69	3	4216.20	4180.84	35.36
DRAGOON WATER CO INC	Dragoon Water 2	631738	739786.43	375315.08	2	4217.00	4183.45	33.55
DRAGOON WATER CO INC	Dragoon Water 1	631739	740361.24	373766.67	2	4212.54	4188.21	24.33
DURHAM, ROBERT C	Smith	633424	728586.31	397678.2	1	4926.00	4906.15	19.85
SMITH & DURHAM,		633426	722766.87	395516.41	1	4997.00	4998.91	-1.91
SMITH & DURHAM,		633427	726361.48	397004.31	1	4949.00	4964.66	-15.66
DURHAM, ROBERT C		633439	727904.34	393093.99	1	4920.00	4909.83	10.17
ANDREWS,I		640865	747249.69	372043.17	3	4122.00	4167.69	-45.69
WILLIAMMEE,L O		651231	746862.73	372697.36	3	4103.00	4168.51	-65.51
RIMSZA,A V		802786	736875.19	382472.75	3	4144.00	4200.18	-56.18
TAVA M. FITZGERALD		803864	747351.09	373219.61	3	4150.00	4167.65	-17.65
C-BAR RANCH	New Section 19 Well	909280	738015.71	408227.77	2	4117.00	4187.67	-70.67
EXCELSIOR MINING CORP	NSH-009	917433	737455.53	395561.03	3	4342.34	4298.71	43.63

Notes:

[1]East and Northing are in NAD 83 State Plane Arizona East Zone

Values are in feet

CLEAR CREEK ASSOCIATES

TABLE 13
Simulated Pumping Rates for Hydraulic Containment Wells
Gunnison Copper Project

Well Name	Easting[1]	Northing[1]	Top Layer	Bottom Layer	Default Rate	Reach	Steady-State	Year_1	Year_2	Year_3	Year_4	Year_5	Year_6	Year_7	Year_8	Year_9	Year_10	Year_11	Year_12	Year_13	Year_14	Year_15	Year_16	Year_17	Year_18	Year_19	Year_20	Year_21	Year_22	Year_23
HC-01	737741	392801	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
HC-02	738042	392803	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
HC-03	738353	392818	3	5	0	202	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
HC-04	738656	392861	3	5	0	202	0.0	0.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
HC-05	738938	392818	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-06	739256	392861	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-07	739454	392858	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-08	739654	392942	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-09	739754	393142	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-10	739654	393342	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-11	739654	393542	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-12	739654	393742	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-13	739554	393942	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-14	739454	394142	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-15	739254	394242	3	5	0	202	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-16	739241	394413	3	5	0	202	0.0	0.0	0.0	0.0	0.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	0.0	0.0
HC-17	739126	394488	3	5	0	202	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-18	738975	394564	3	5	0	202	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-19	738854	394742	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-20	738654	394842	3	5	0	202	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-21	738554	395042	3	5	0	202	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-22	738354	395042	3	5	0	202	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
HC-23	738154	395542	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-24	738154	395742	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HC-25	738054	395942	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HC-26	737954	396042	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-27	737742	396104	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
HC-28	737518	396255	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
HC-29	737142	394302	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
HC-30	737471	394349	3	5	0	202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	16.0	16.0	16.0	16.0	16.0
P-1	743574	397342	2	3	0	301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P-2	743004	391272	2	3	0	301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P-3	743904	385412	2	3	0	301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Rate							**0.0**	**15.0**	**45.0**	**45.0**	**50.0**	**67.5**	**81.5**	**124.5**	**124.5**	**124.5**	**124.5**	**124.5**	**124.5**	**124.5**	**154.5**	**159.5**	**174.5**	**174.5**	**190.5**	**190.5**	**190.5**	**190.5**	**123.0**	**123.0**
Days of Model Simulation							1	366	731	1096	1461	1826	2191	2556	2921	3286	3651	4016	4381	4746	5111	5476	5841	6206	6571	6936	7301	7666	8031	8396
Number Wells Active							**0**	**3**	**5**	**5**	**6**	**9**	**11**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**25**	**26**	**29**	**29**	**30**	**30**	**30**	**30**	**17**	**17**

NOTES:
[1]East and Northing are in NAD 83 State Plane Arizona East Zone
Pumping rates are in gallons per minute (gpm)

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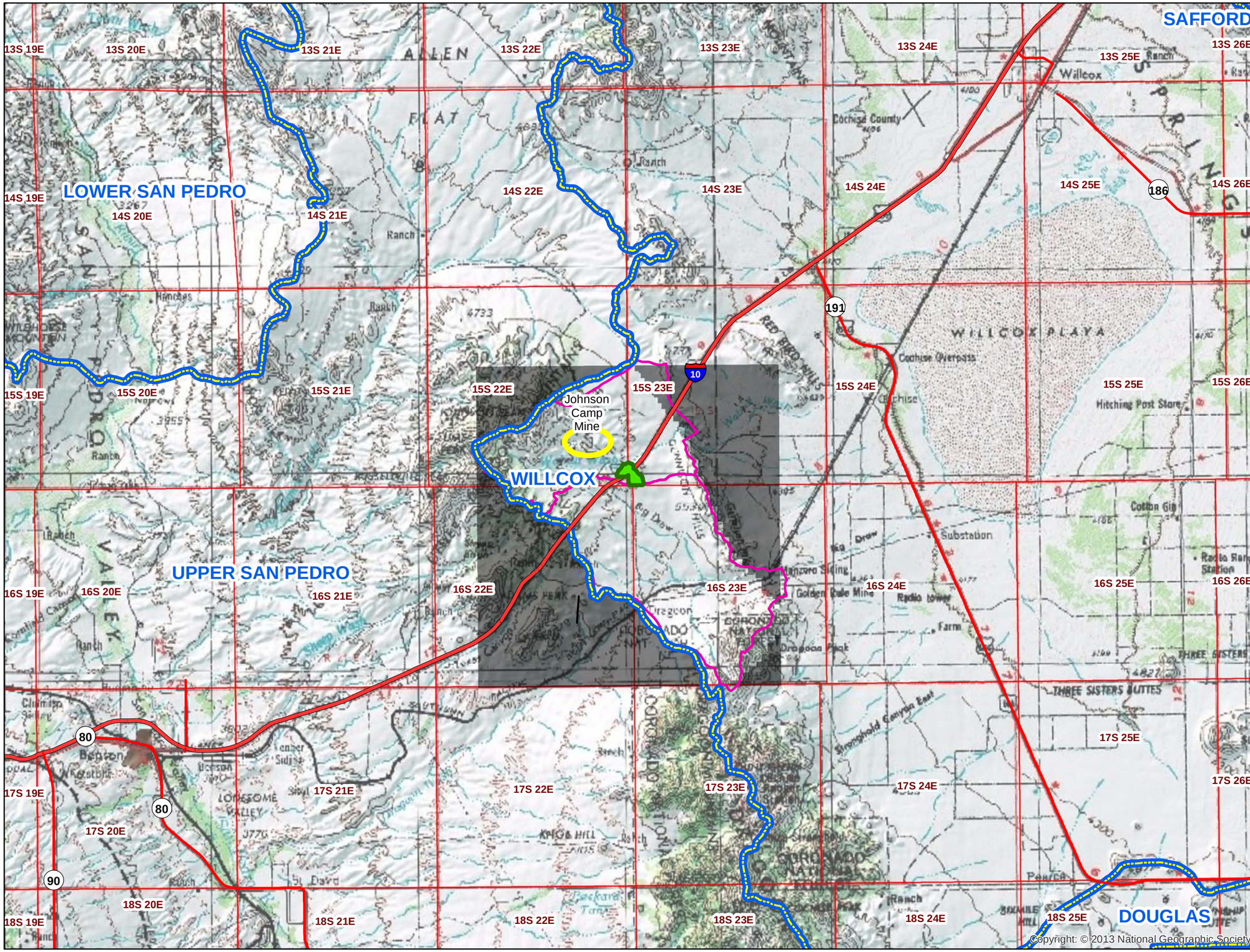
FIGURES



Explanation

- Wellfield

Roads and Highways

- Interstates
- US,State,County Hwys
- Major
- Groundwater Basins
- Model Area Surface Watersheds
- Groundwater Model Domain
- Township

0 1 2 4 6
Miles

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/24/17	373002

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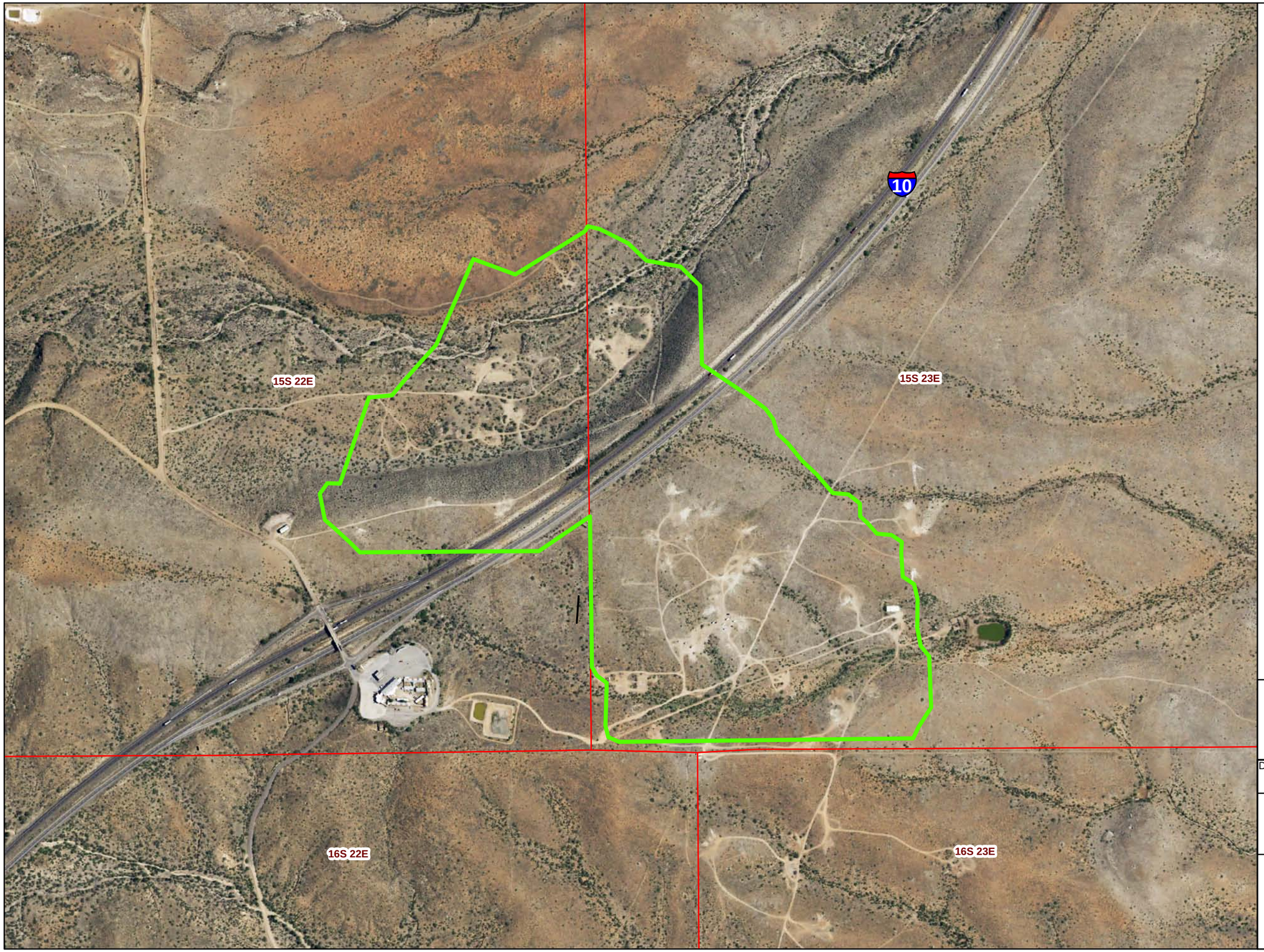
FIGURE 1
Model Domain Area



Explanation

Wellfield

Township

0 250 500 1,000 1,500
Feet

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Groundwater Flow Model
Gunnison Copper Project
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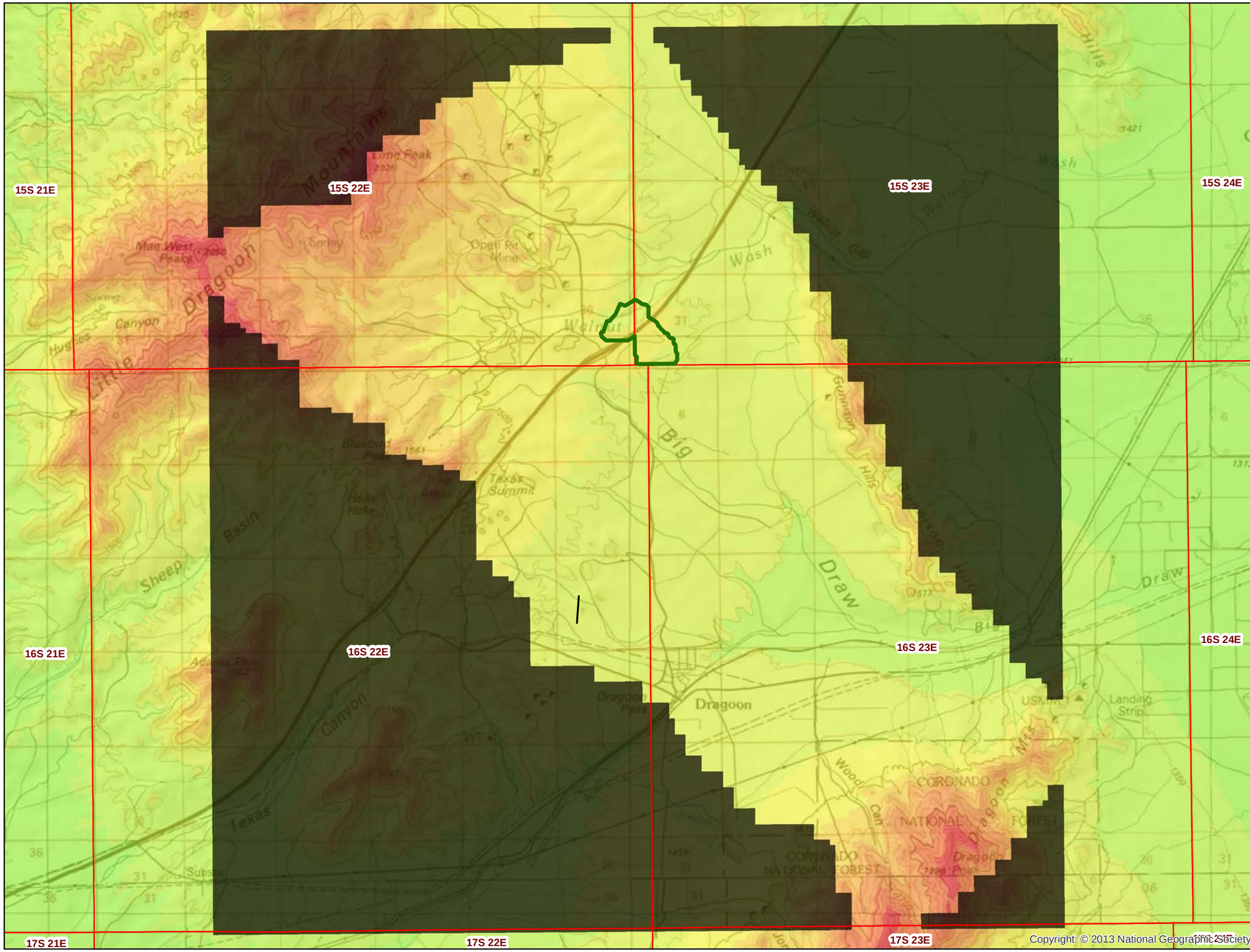
FIGURE 2
Project Area
Aerial Photograph



Explanation

- Wellfield
- Township
- Groundwater Model Domain

Surface Elevation (Feet-MSL)

- 3734 - 4000
- 4001 - 4200
- 4201 - 4400
- 4401 - 4600
- 4601 - 4800
- 4801 - 5000
- 5001 - 5200
- 5201 - 5400
- 5401 - 5800
- 5801 - 6200
- 6201 - 7600

0 2,000 4,000 8,000
Feet

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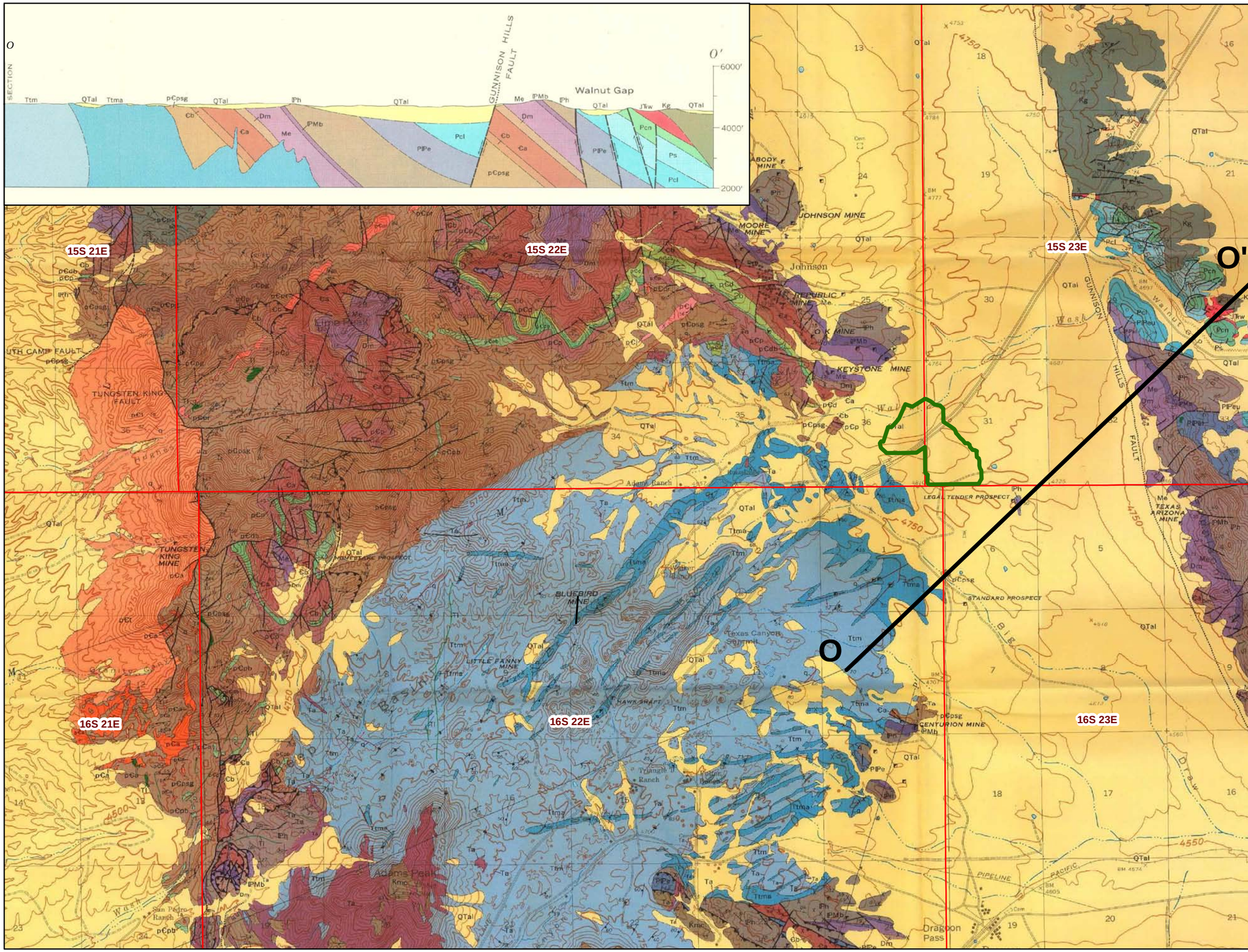
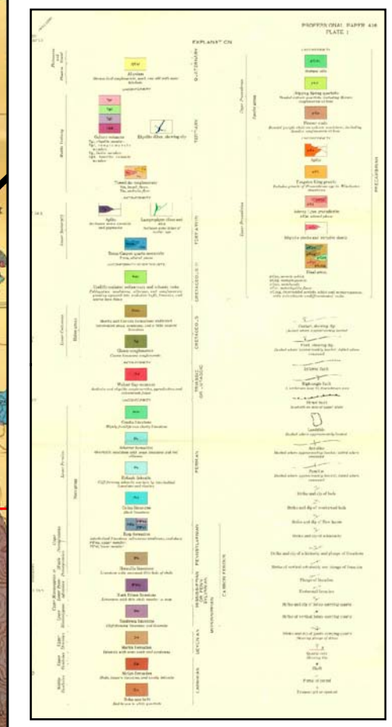
FIGURE 3
Land Surface Elevation



Explanation

- Wellfield
- Township



0 2,000 4,000 8,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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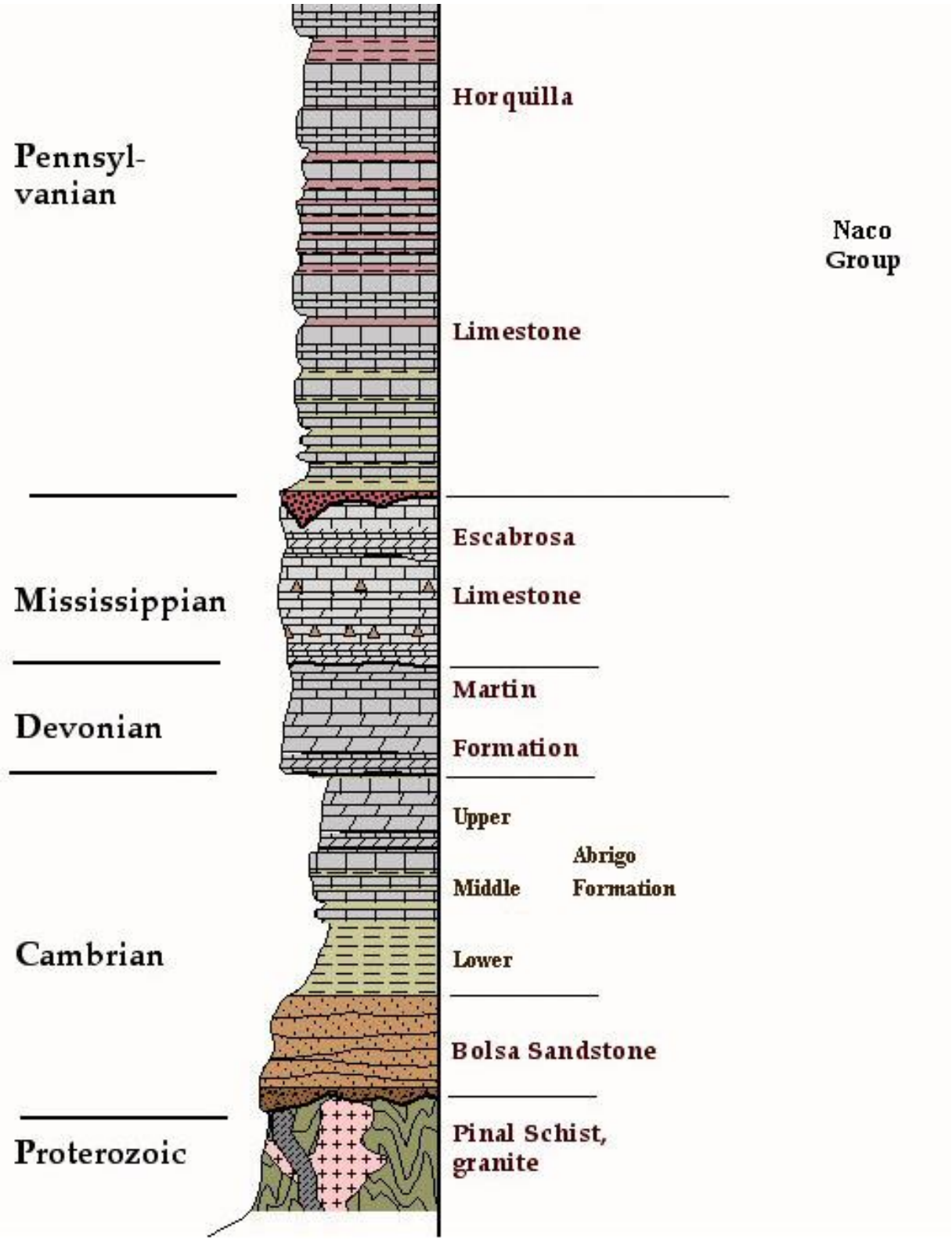
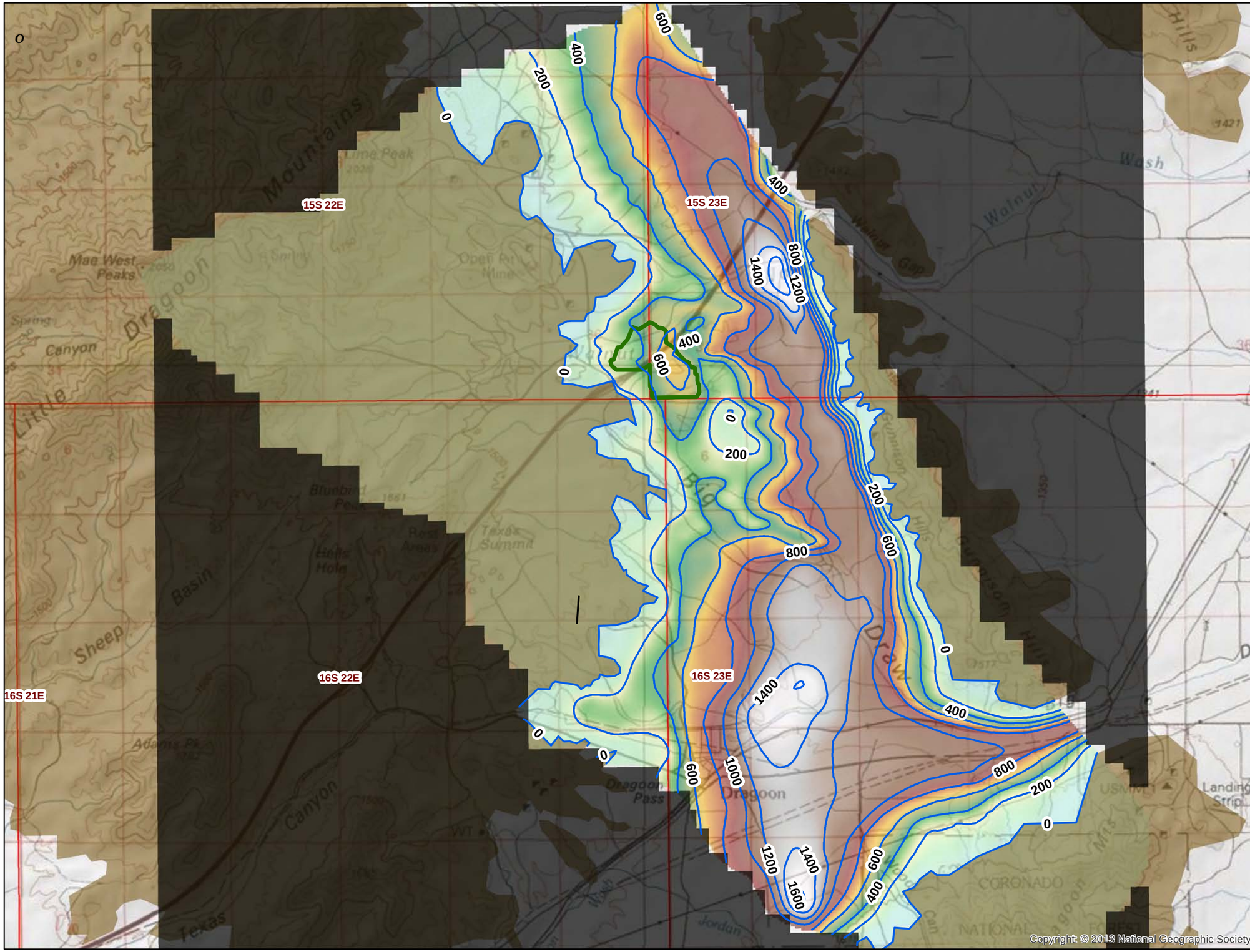
FIGURE 4
Regional Geologic Map



NOTES: Geologic Section adapted from *Section near Bisbee in Southeast Arizona* (http://jan.ucc.nau.edu/~rcb7/seaz.jpg), Dr. Ron Blakely, Professor Emeritus, Northern Arizona University Department of Geology. The Apache Group (Precambrian) is not included in this figure, and it should be inserted between the Pinal Schist and Bolsa Sandstone.

Excelsior Mining Arizona, Inc. Groundwater Flow Model Gunnison Copper Project April 2017	CLEAR CREEK ASSOCIATES	File ID Date April 2017
	FIGURE 5 Geologic Column	



Explanation

- Depth to Bedrock
- Exposed Bedrock
- Wellfield
- Township
- Groundwater Model Domain

Depth to Bedrock/Thickness of Basin Fill
(feet)

High : 1690.82

Low : -18.6196

NOTE:
The thickness of basin fill was estimated using a regional bedrock elevation datset provided by Excelsior. These data were based on exploration drilling data, drilling logs and gravity survey data.

0 2,000 4,000 8,000
Feet

Excelsior Mining Arizona, Inc.
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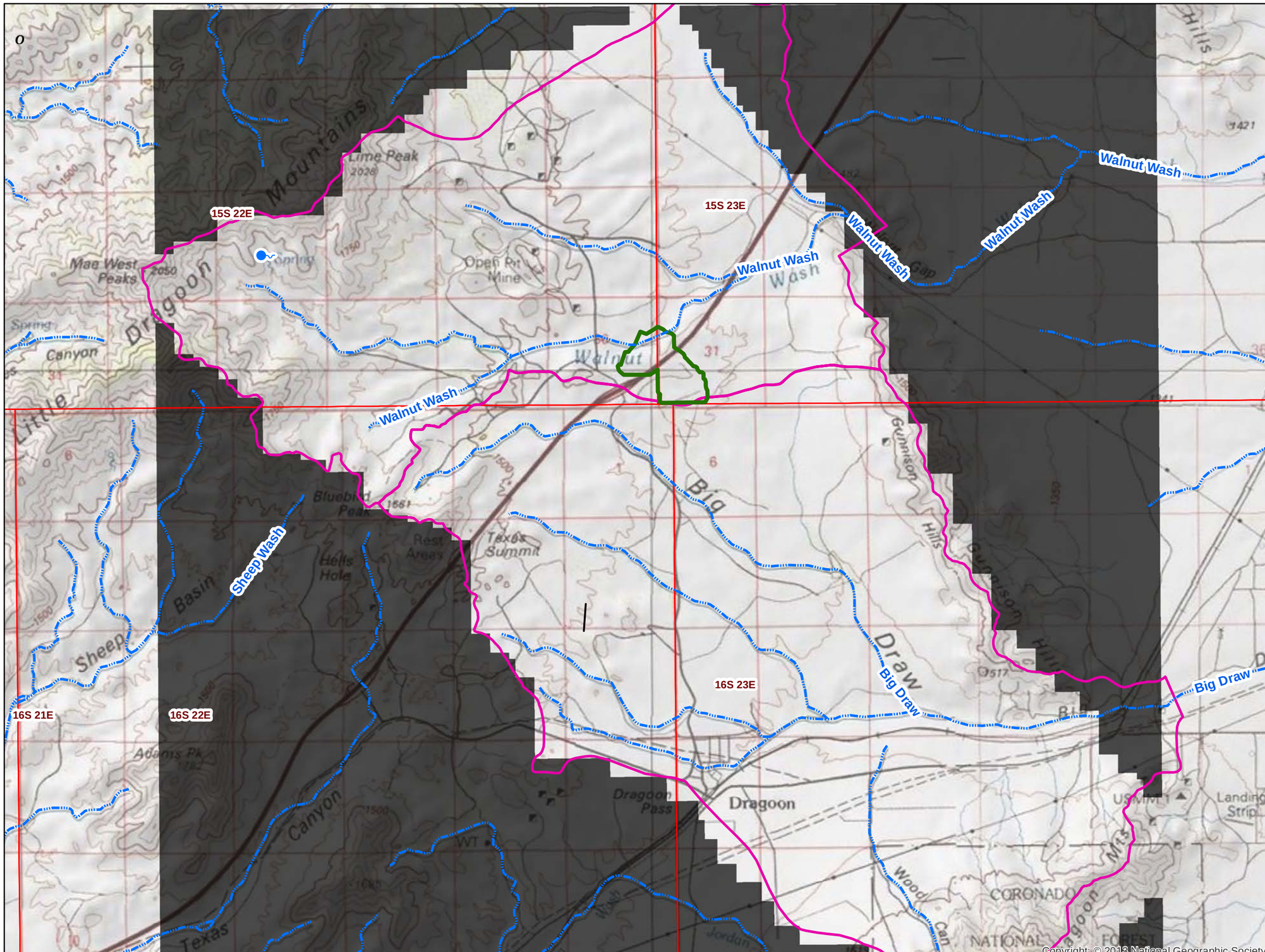
FIGURE 6
Thickness of Basin Fill/
Depth to Bedrock



Explanation

- Wellfield
- Model Area Surface Watersheds
- Township
- Groundwater Model Domain

0 2,000 4,000 8,000
Feet

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Gunnison Copper Project
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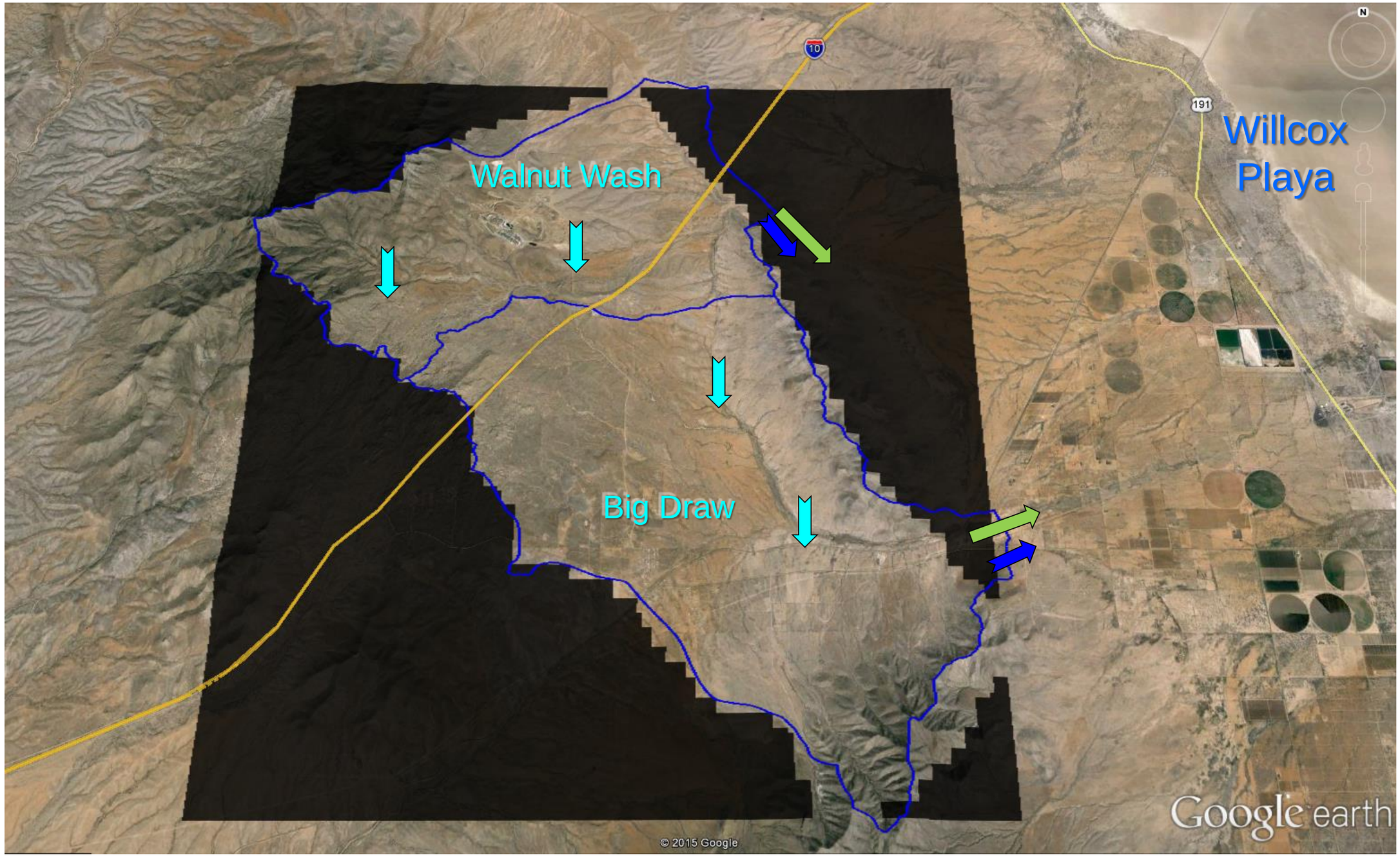
FIGURE 7
Surface Drainage Map and
Local Watershed Boundaries

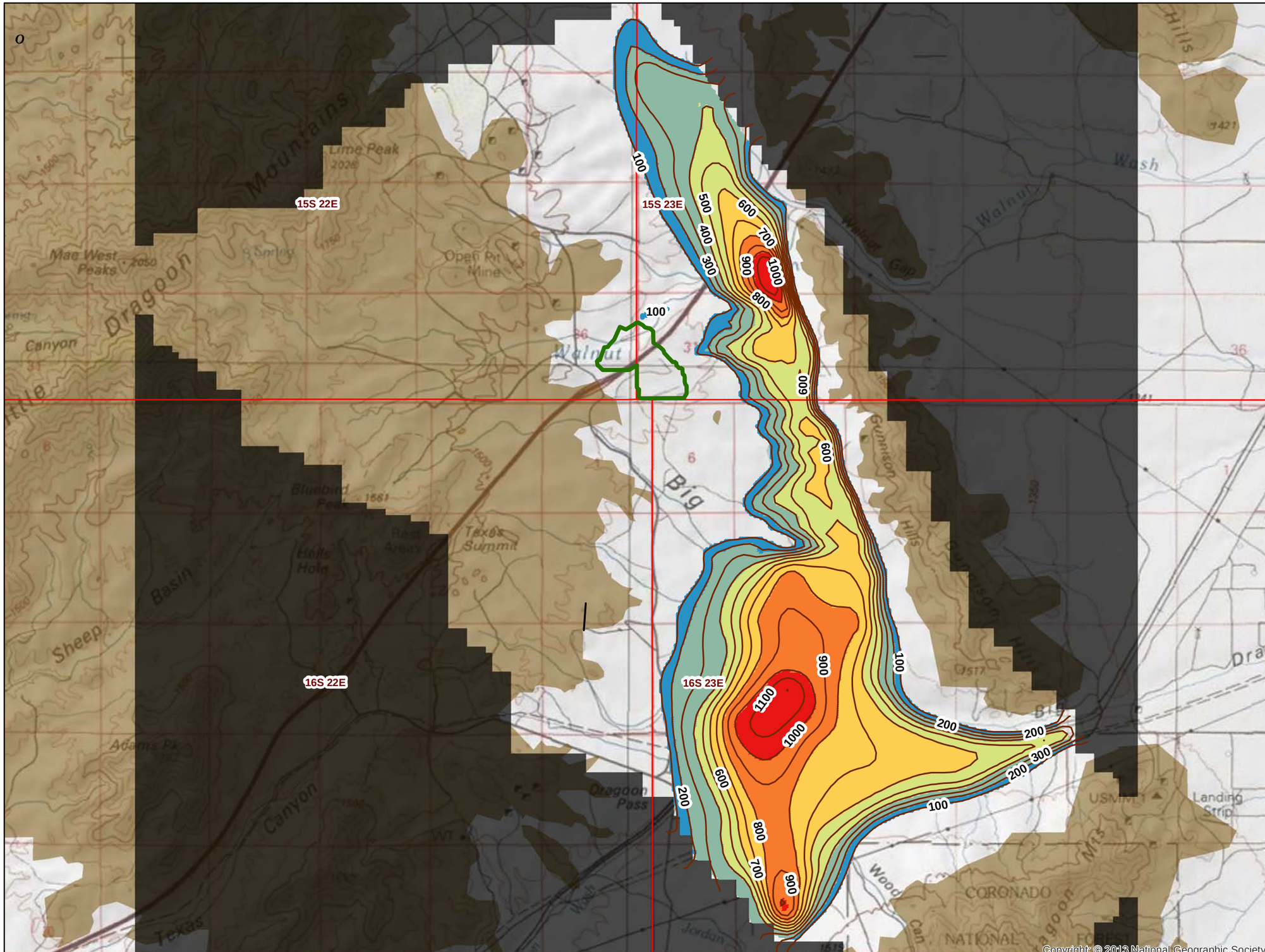


Recharge to aquifer from surface flows/recharge

Ephemeral surface flow out of Study Area

Groundwater underflow out of model domain

Excelsior Mining Arizona, Inc. Groundwater Flow Model Gunnison Copper Project April 2017	CLEAR CREEK ASSOCIATES	File ID Date April 2017
	FIGURE 8 Conceptual Hydrologic Flow	



Explanation

Wellfield

Basin Fill Saturated Thickness (feet)

- 100 - 200
- 201 - 400
- 401 - 600
- 601 - 800
- 801 - 1000
- 1001 - 1204

Contours of Saturated Thickness

(feet)

Township

Groundwater Model Domain

Exposed Bedrock

NOTE:
The thickness of basin fill was estimated using a regional bedrock elevation datset provided by Excelsior. These data were based on exploration drilling data, drilling logs and gravity survey data. The saturated thickness was calculated using model generated steady-state water levels, and thus is an approximate value. Perched water levels are not addressed for this map.

0 2,000 4,000 8,000
Feet

Excelsior Mining Arizona, Inc.
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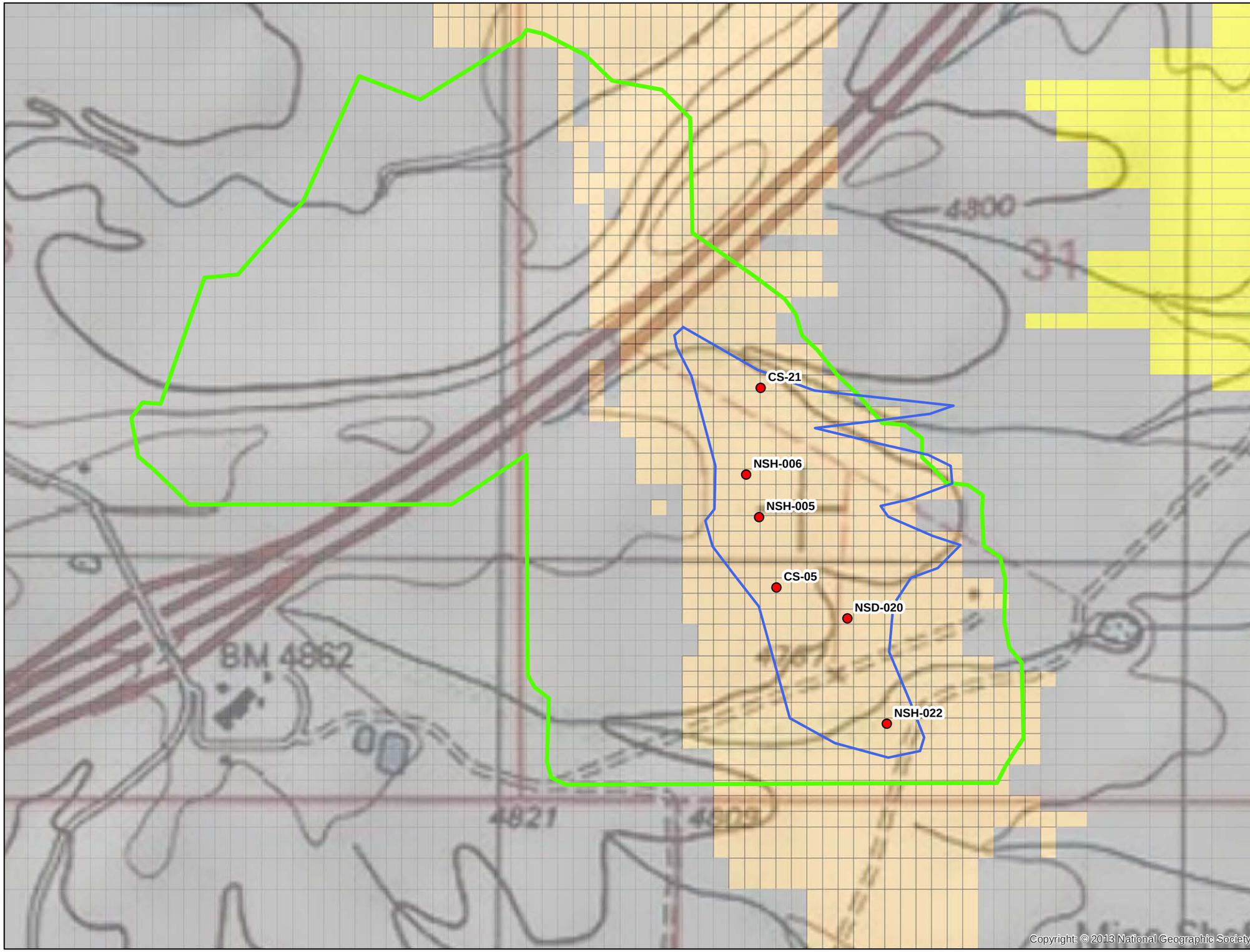
FIGURE 9
Saturated Thickness of Basin Fill



Explanation

- Wells with Saturated Basin Fill
- Estimated Saturated Basin Fill
- Wellfield

Layer 2 Hydraulic Conductivity

- Bedrock

K Zone

- 2
- 3

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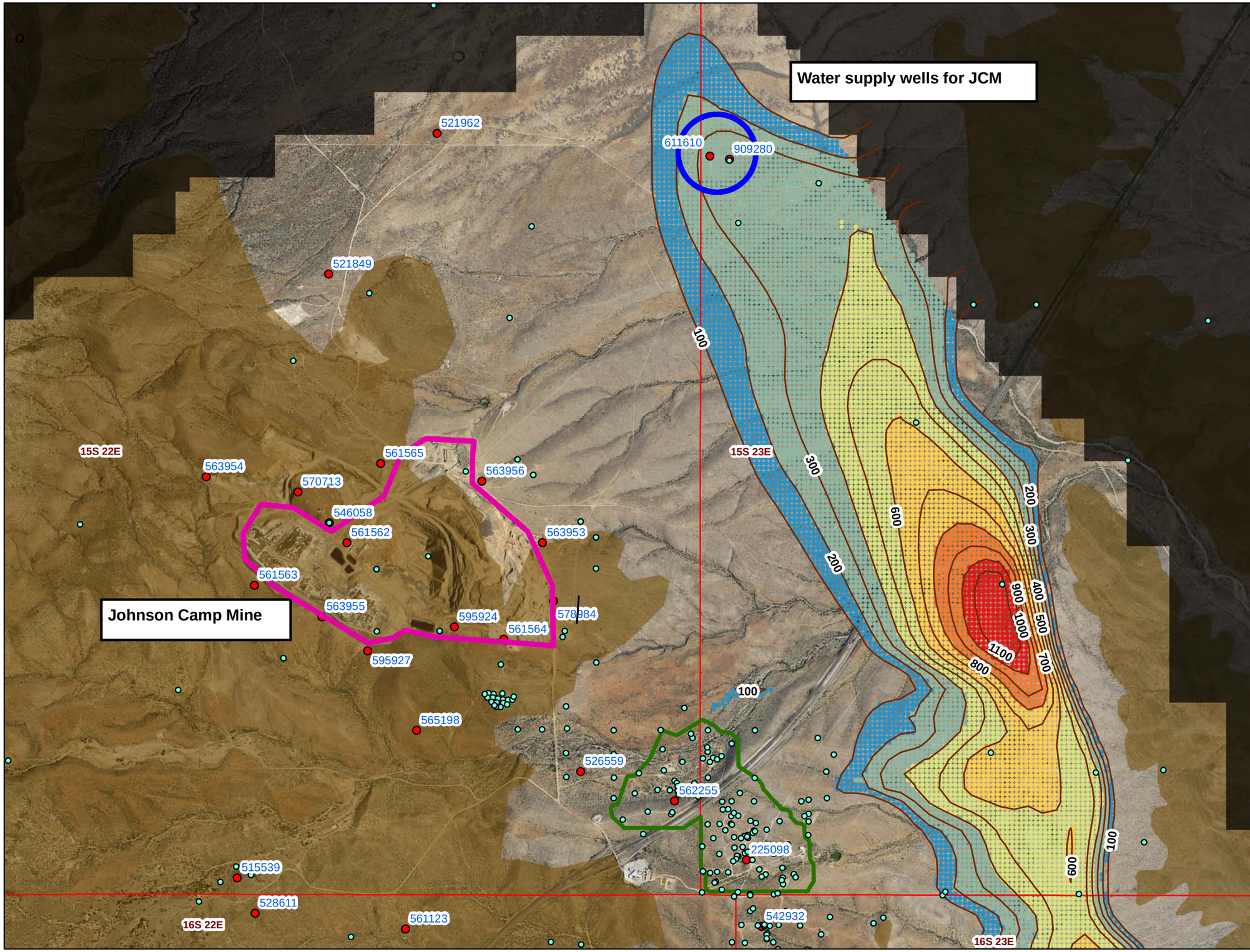
FIGURE 10
Area of Saturated Basin Fill and Layer 2 Hydraulic Conductivity Map



Explanation

Wells with Drillers Logs

- No log reported
- Has Drillers Log

Wellfield

Basin Fill Saturated Thickness (feet)

- 100 - 200
- 201 - 400
- 401 - 600
- 601 - 800
- 801 - 1000
- 1001 - 1204

Contours of Saturated Thickness

(feet)

Township

Groundwater Model Domain

Exposed Bedrock

NOTE:
The thickness of basin fill was estimated using a regional bedrock elevation datset provided by Excelsior. These data were based on exploration drilling data, drilling logs and gravity survey data. The saturated thickness was calculated using model generated steady-state water levels, and thus is an approximate value. Perched water levels are not addressed for this map.

0 1,000 2,000 4,000
Feet

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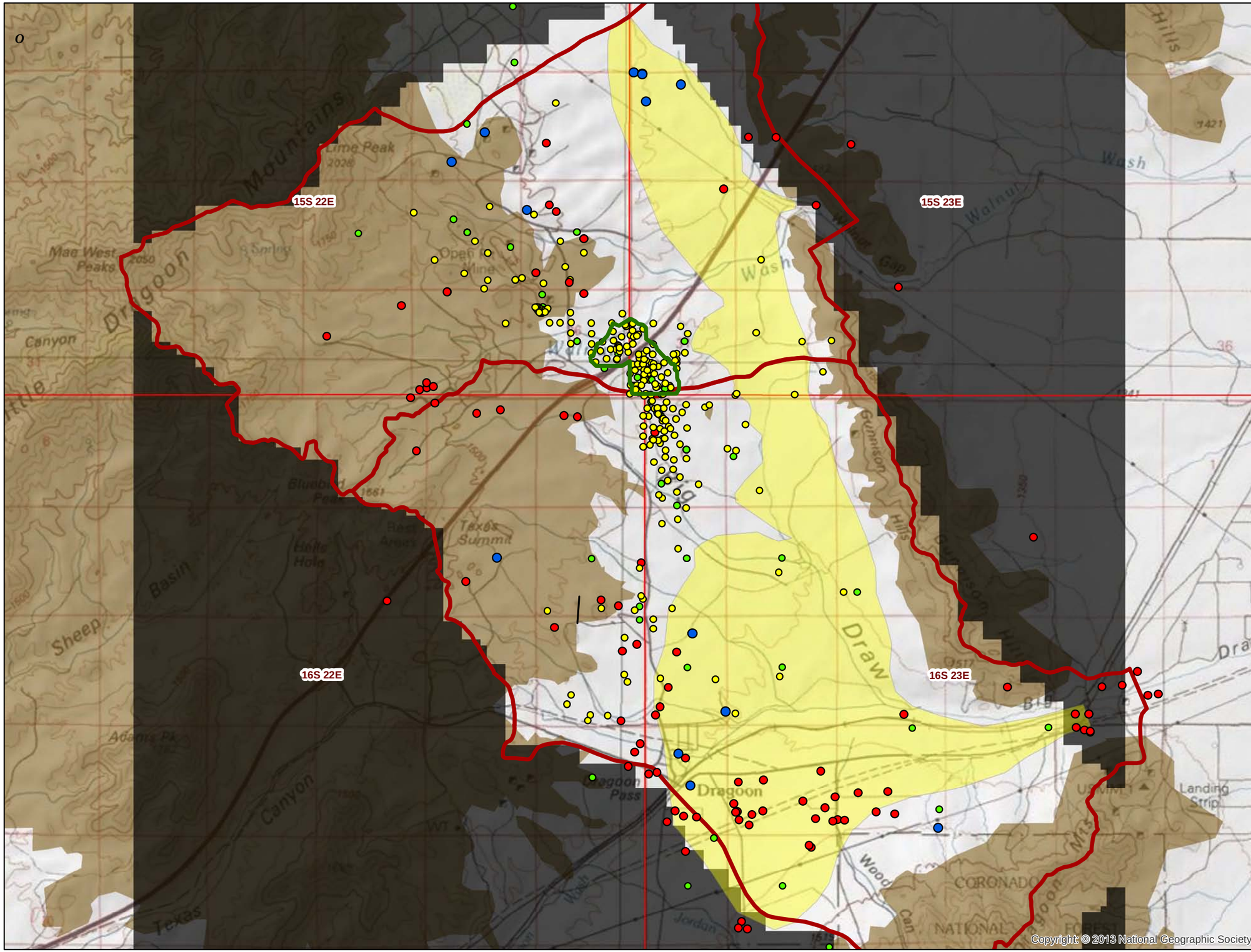
FIGURE 11
Saturated Thickness of Basin Fill and JCM Supply Wells



Explanation

Wellfield

ADWR Registered and Other Wells

- OTHER NON-PRODUCING
- NON-EXEMPT (>35gpm)
- EXEMPT (<35 gpm)
- MONITOR
- OTHER

Model Area Surface Watersheds

Saturated Basin Fill > 100 Feet

Township

Groundwater Model Domain

Exposed Bedrock

0 2,000 4,000 8,000
Feet

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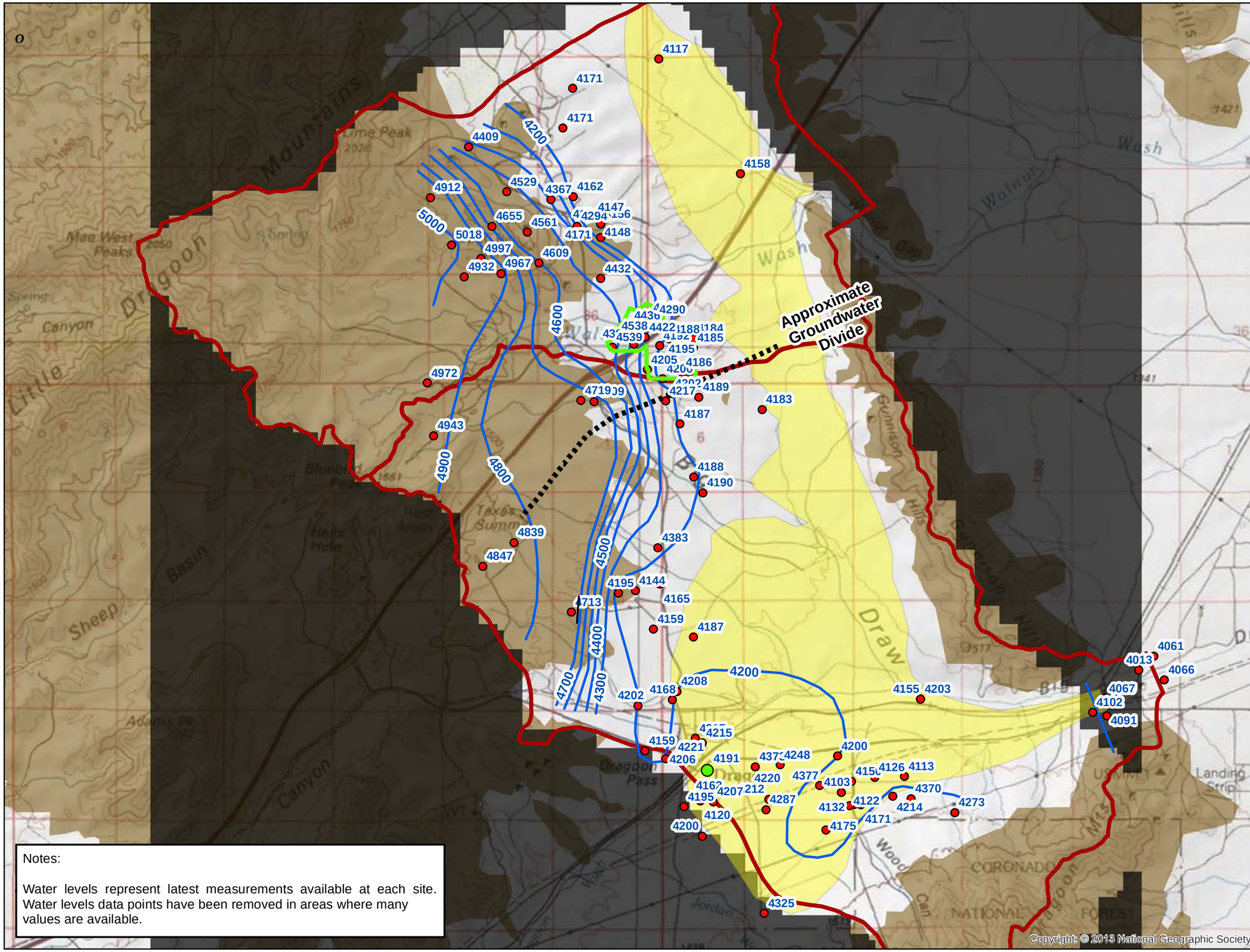
FIGURE 12
Well Location Map



Notes:

Water levels represent latest measurements available at each site. Water levels data points have been removed in areas where many values are available.

Explanation

Water Level Data

- Water Level
- Hydrograph Well
- Water Level Contours
- Wellfield
- Model Area Surface
- Saturated Basin Fill > 100 Feet
- Groundwater Model Domain
- Exposed Bedrock

0 2,000 4,000 8,000
Feet

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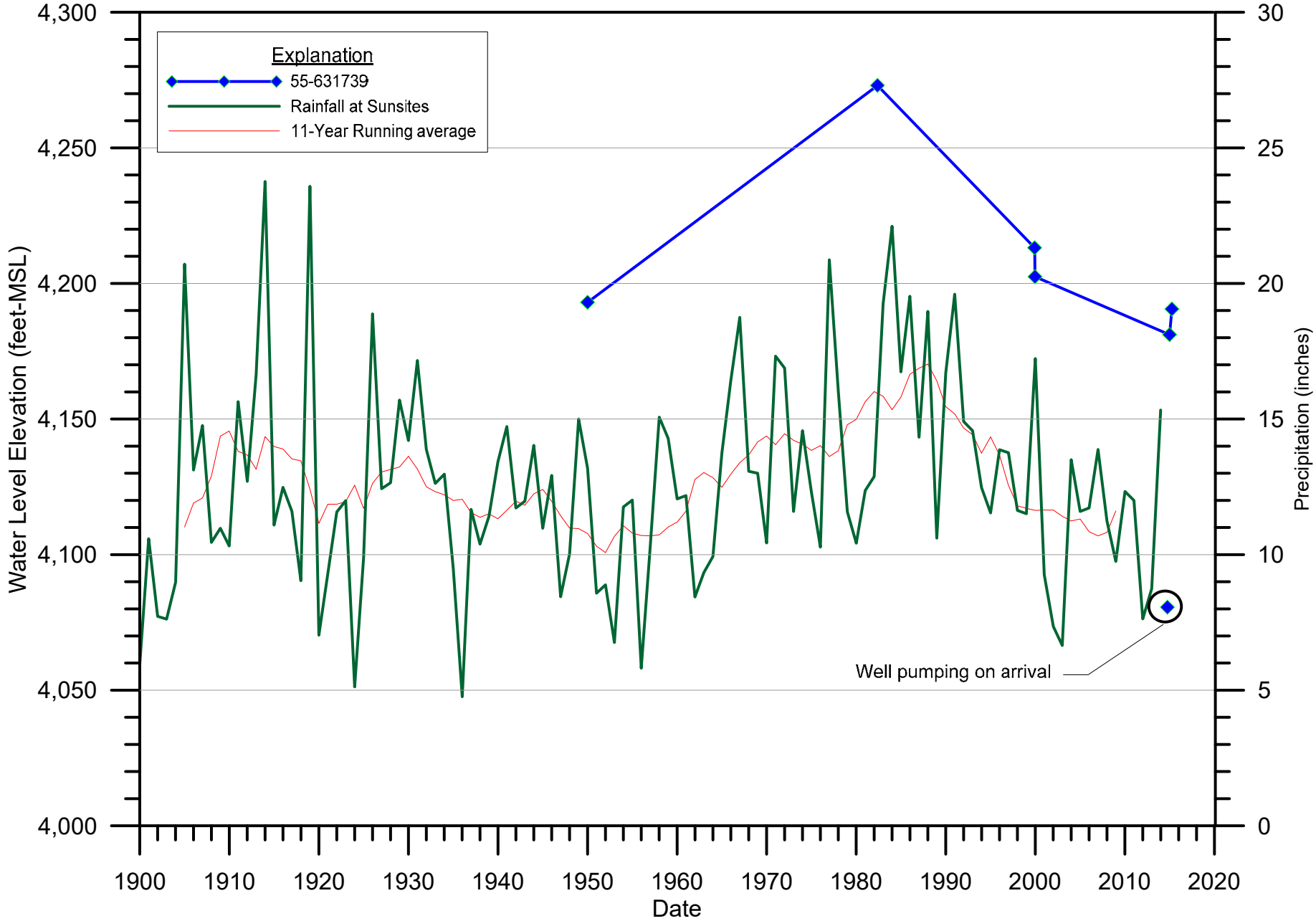
FIGURE 13
Water Level Map



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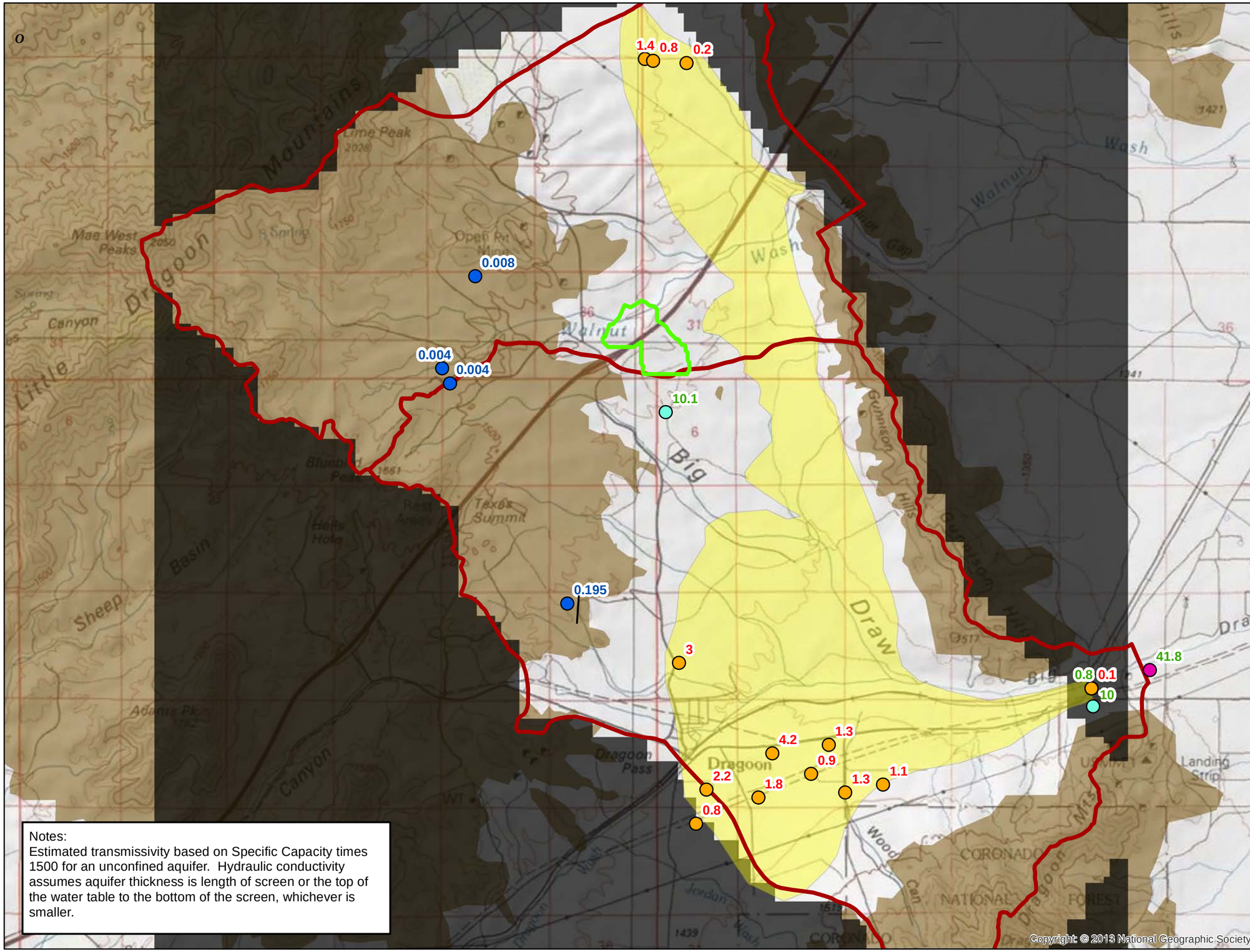
Precipitation at Sunsites compared to Hydrograph for 55-631739 Dragoon Water Company Well

FIGURE 14



Notes:
Estimated transmissivity based on Specific Capacity times 1500 for an unconfined aquifer. Hydraulic conductivity assumes aquifer thickness is length of screen or the top of the water table to the bottom of the screen, whichever is smaller.

Explanation

Estimated Hydraulic Conductivity

Geology

- Pz - Paleozoic Rocks
- Qbf - Basin Fill
- Ttm - Texas Canyon Quartz Monzonite
- Volcanic Conglomerate
- Wellfield
- Model Area Surface Watersheds
- Saturated Basin Fill > 100 Feet
- Groundwater Model Domain
- Exposed Bedrock

0 2,000 4,000 8,000
Feet

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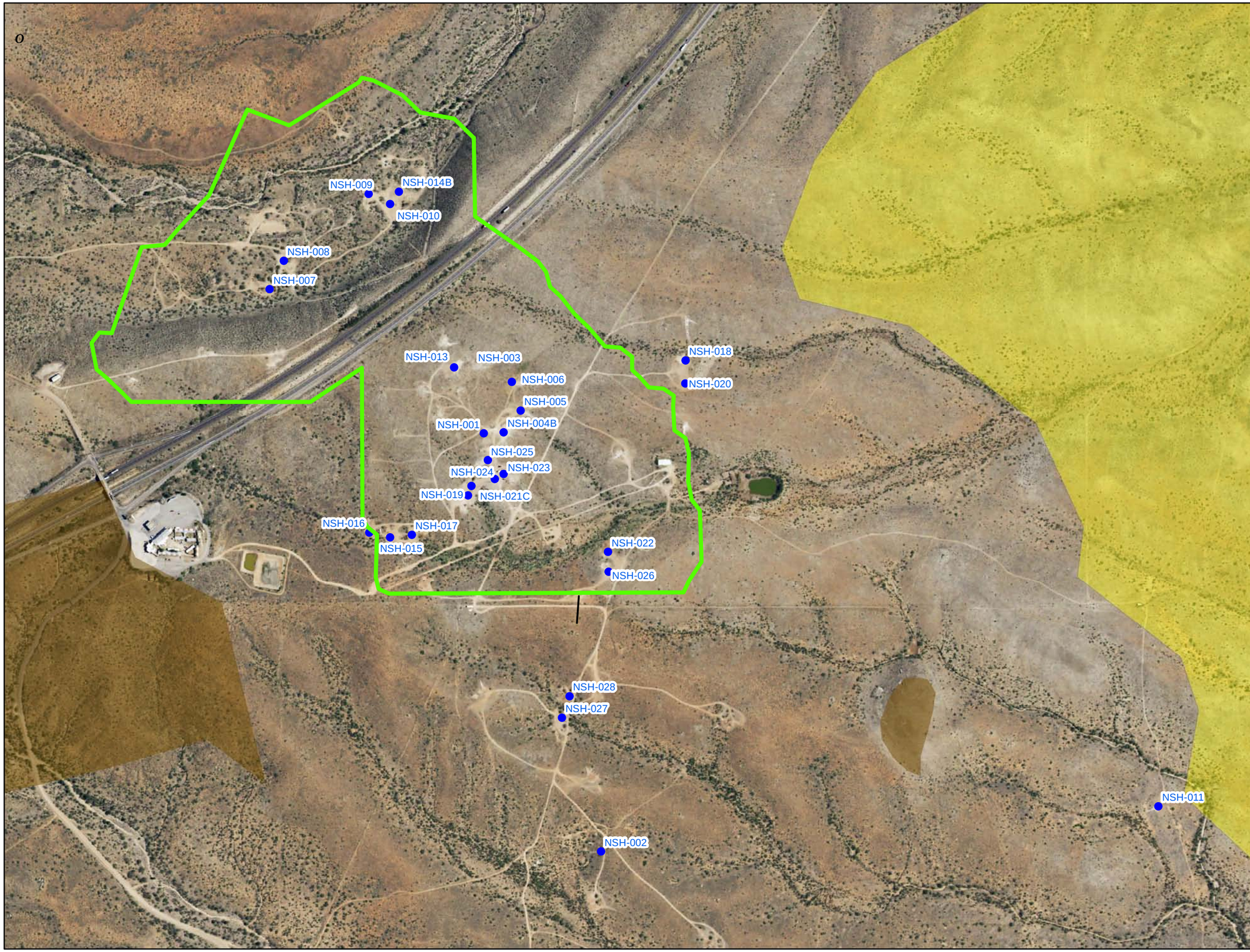
FIGURE 15
Hydraulic Conductivity
based on Specific Capacity



Explanation

Wellfield

Wells with Hydraulic Testing

- Wells with Hydraulic Testing
- Saturated Basin Fill > 100 Feet
- Regional Model Domain
- Exposed Bedrock

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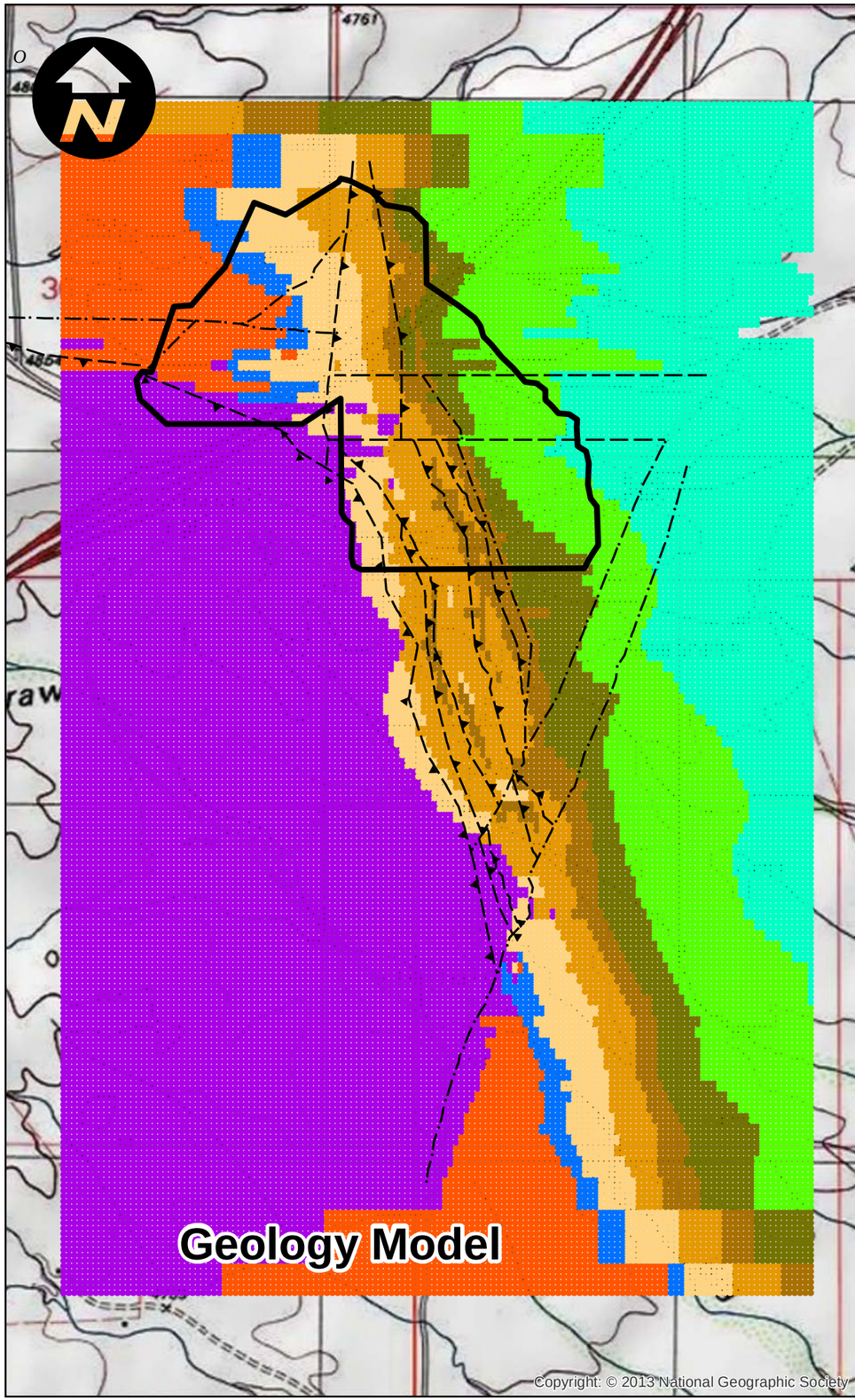
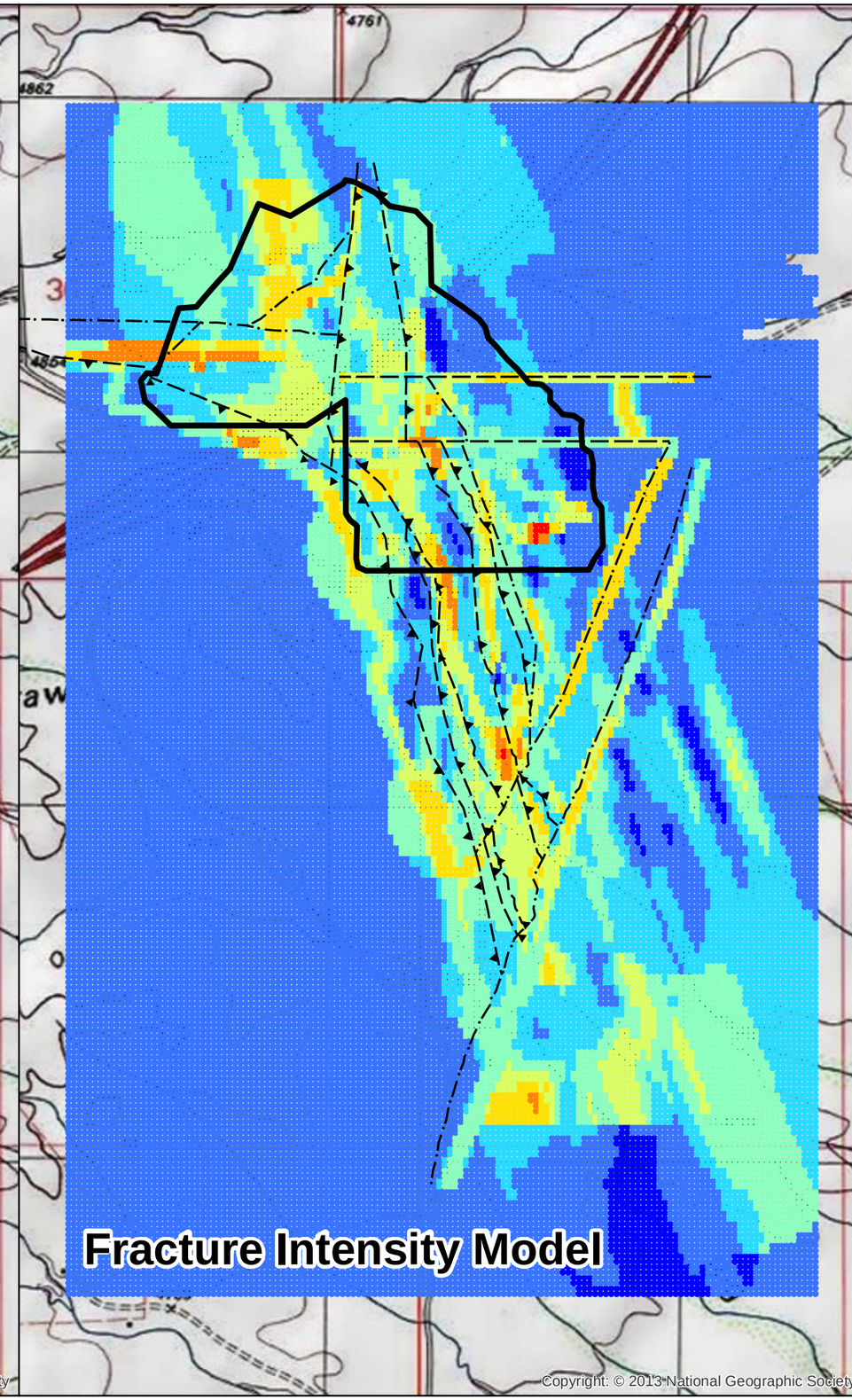
FIGURE 16
Hydraulic Testing
Location Map





Explanation

Wellfield

Gunnison Faults

Fault_Type, Dip Direction

- Normal Fault East
- Normal Fault South
- Normal Fault West
- Reverse Fault East
- Reverse Fault West
- Vertical Fault

Fracture Intensity

- 1.0 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1 - 4.5
- 4.6 - 5.0

Geology Model

- PCu - Precambrian Undivided
- Cb - Bolsa Quartzite
- Cal - Lower Abrigo Fm
- Cam - Middle Abrigo Fm
- Cau - Upper Abrigo Fm
- Dm - Martin Fm
- Me - Escabrosa Limestone
- PPu - Naco Formation and Later
- Tqm - Texas Canyon Quartz Monzonite

0 0.1 0.2 0.3 0.4 0.5

Miles

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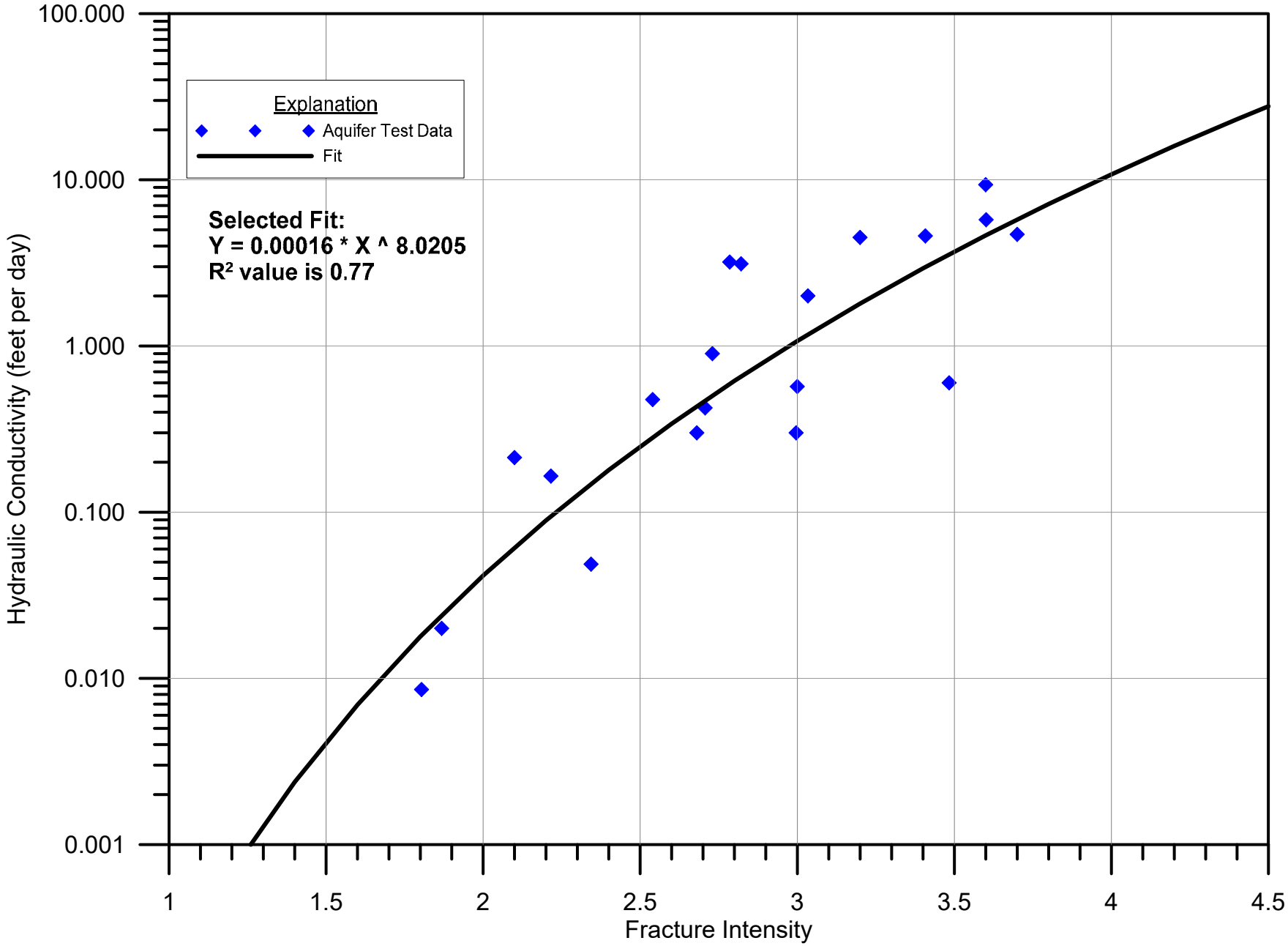
FIGURE 17
Geologic Model and
Fracture Intensity



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Groundwater Flow Model
Gunnison Copper Project
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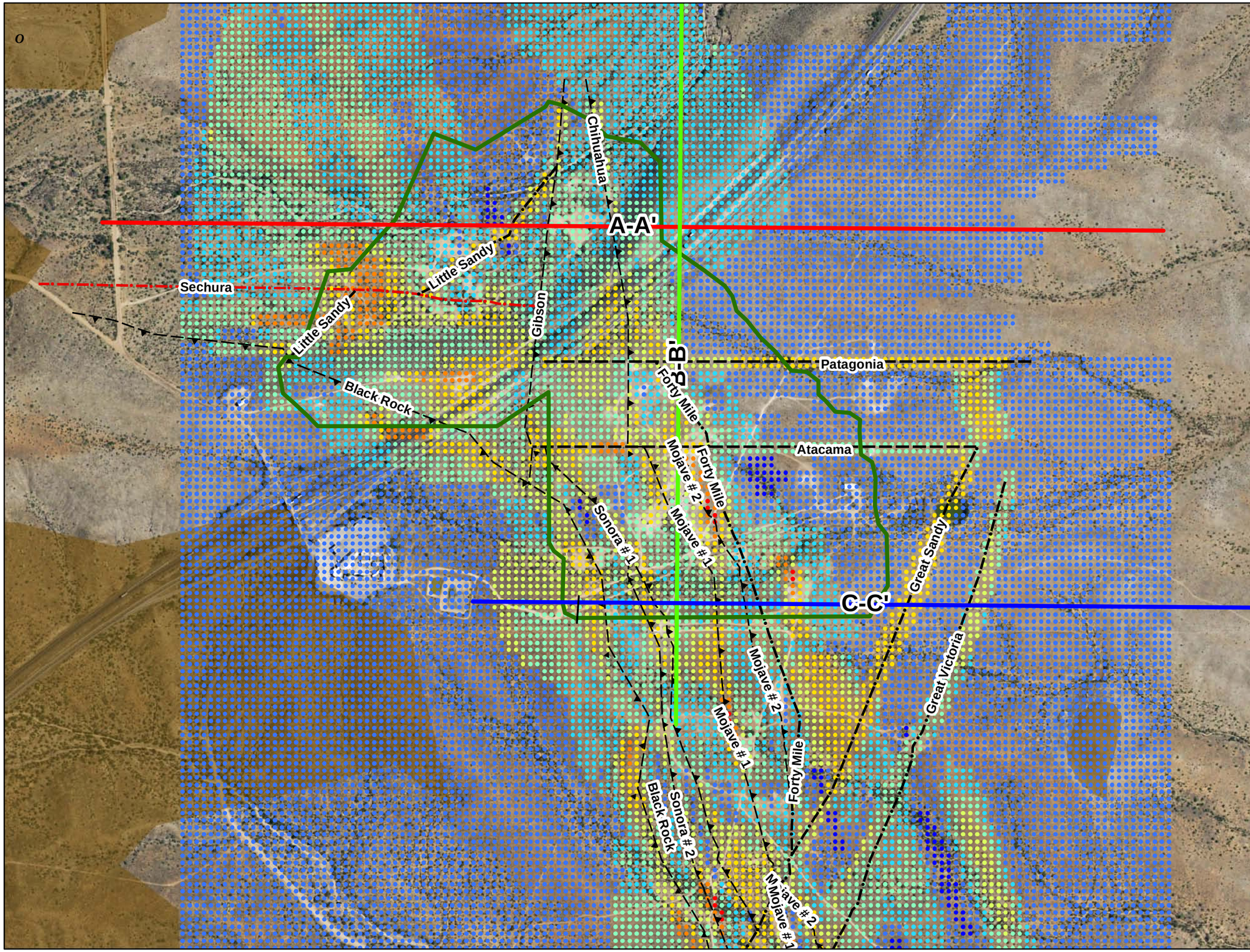
Comparison of Fracture Intensity to Hydraulic Conductivity Data Regional Groundwater Model Gunnison Project

FIGURE 18



Explanation

Cross-Section Locations

Section

- A-A'
- B-B'
- C-C'

Gunnison Faults

- Normal Fault East
- Normal Fault South
- Normal Fault West
- Reverse Fault East
- Reverse Fault West
- Vertical Fault

Fracture Intensity at 4050 Elevation

- 1.0 - 1.5
- 1.6 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- 4.1 - 4.5
- 4.6 - 5.0

- Wellfield
- Exposed Bedrock

0 500 1,000
Feet

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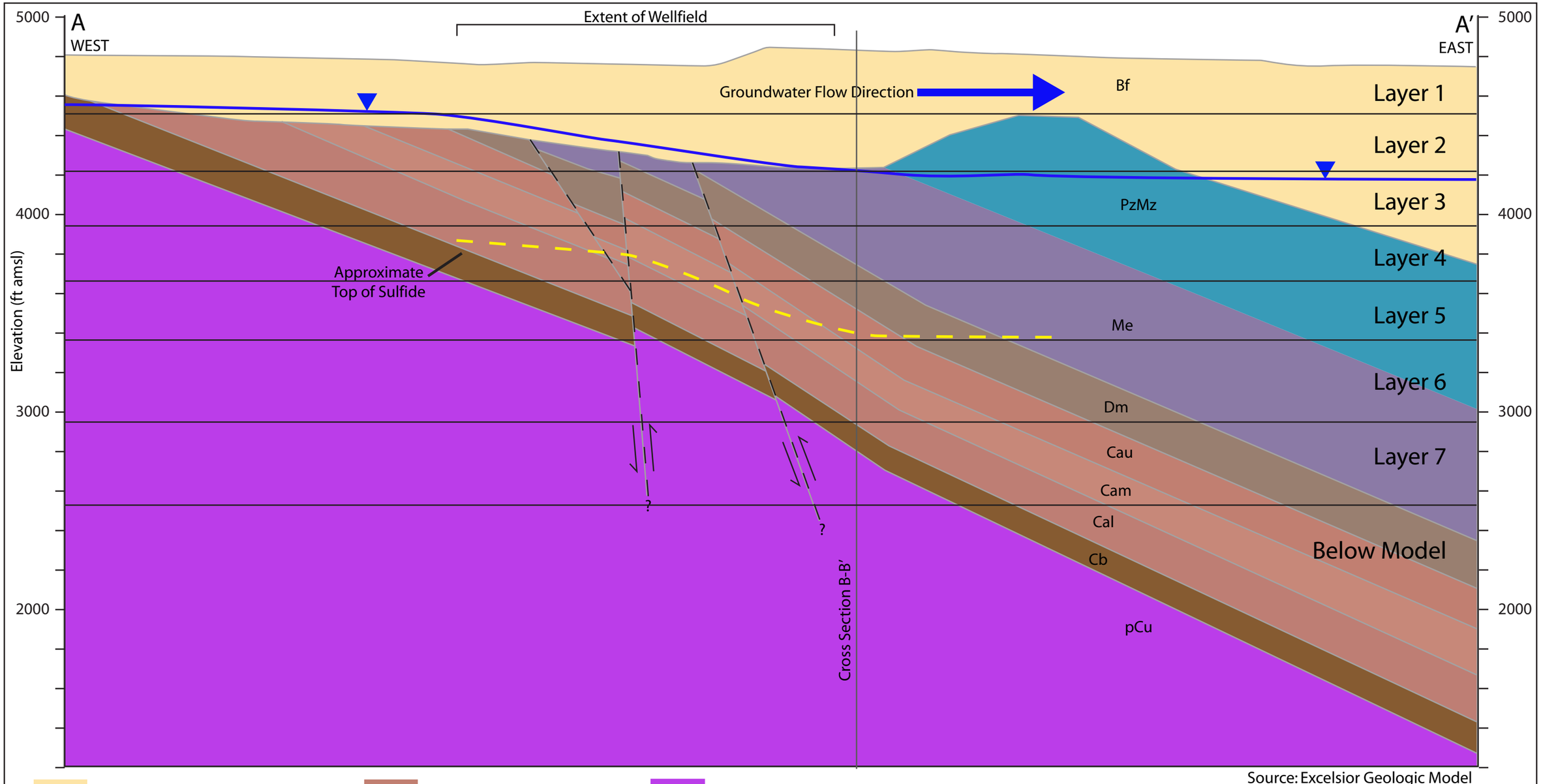
FIGURE 19
Faults and Fracture Intensity Map



Source: Excelsior Geologic Model

Bf - Basin Fill

PzMz - Paleozoic/ Mesozoic Undivided

Me - Escabrosa Limestone

Dm - Martin Formation

Cau - Upper Abrigo Formation

Cam - Middle Abrigo Formation

Cal - Lower Abrigo Formation

Cb - Bolsa Quartzite

pCu - PreCambrian Undivided

Fault

Potentiometric Surface

0 500 1,000
Feet

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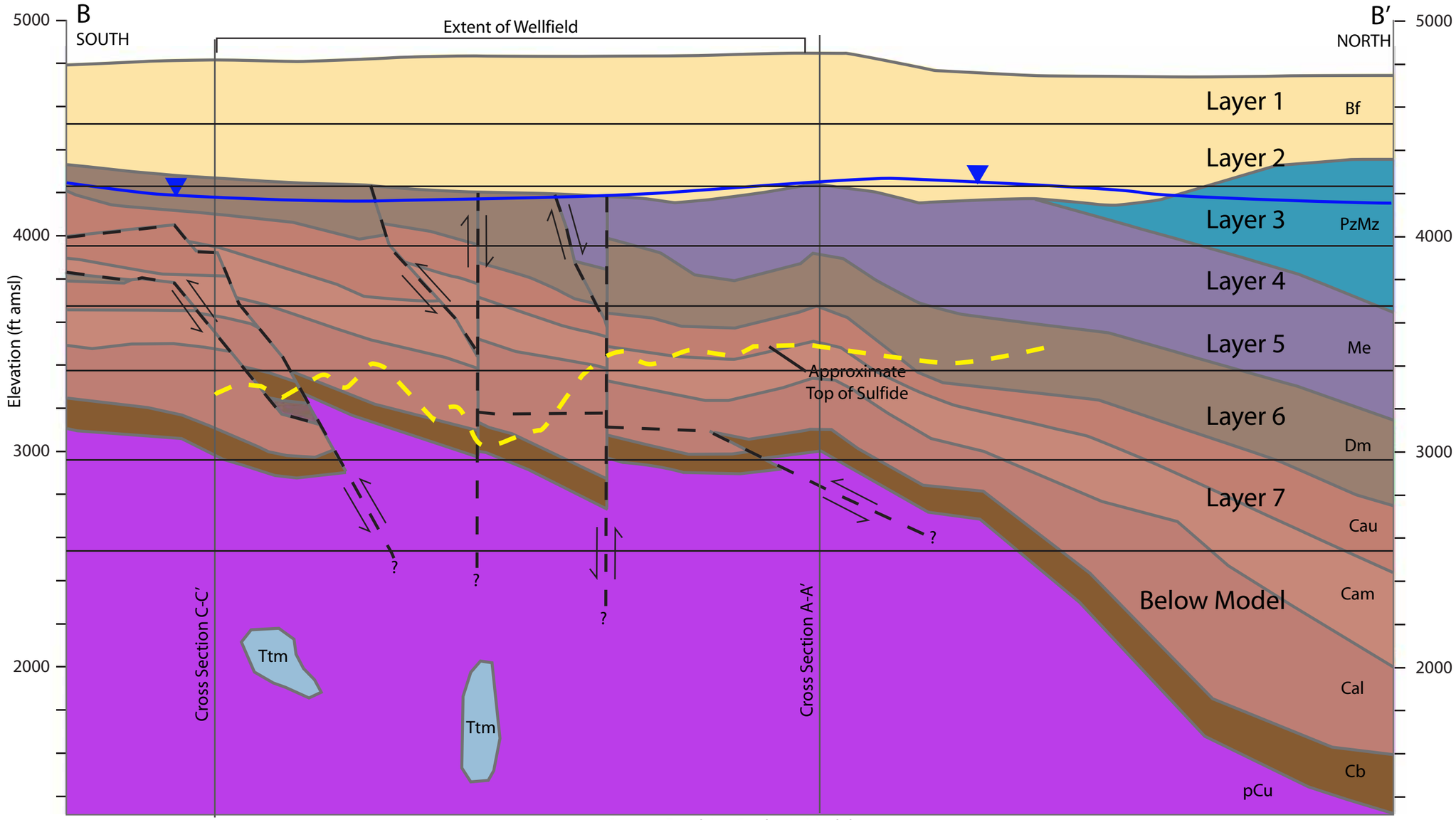
FIGURE 20
Geologic Cross Section A - A'
Regional Groundwater Model



Source: Excelsior Geologic Model

Bf - Basin Fill
Tqm - Texas Canyon Quartz Monzonite
PzMz - Paleozoic/ Mesozoic Undivided
Me - Escabrosa Limestone
Dm - Martin Formation
Cau - Upper Abrigo Formation
Cam - Middle Abrigo Formation
Cal - Lower Abrigo Formation
Cb - Bolsa Quartzite
pCu - PreCambrian Undivided
Fault
Potentiometric Surface

0 500 1,000
Feet

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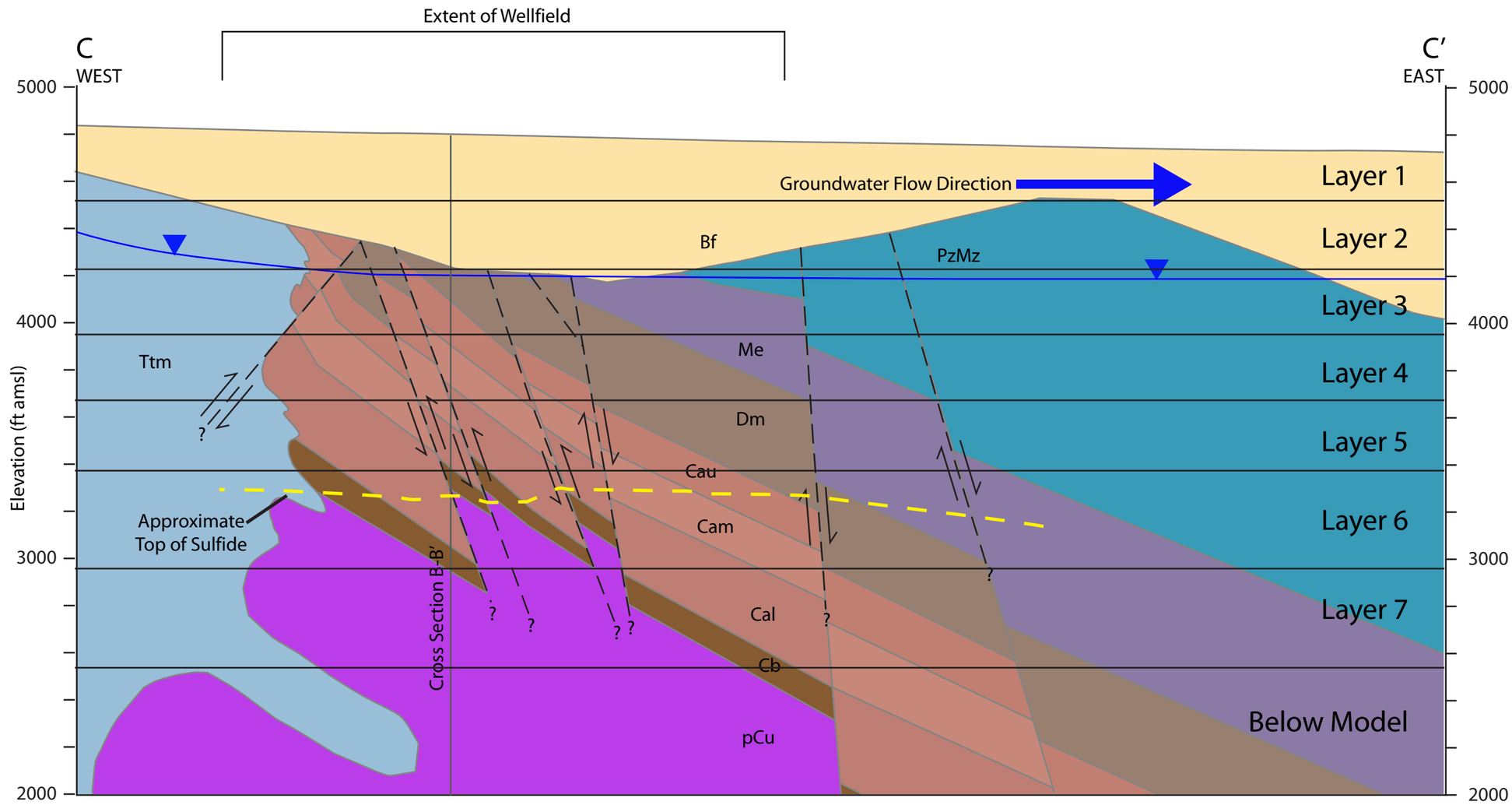
FIGURE 21
Geologic Cross Section B-B'
Regional Groundwater Model



Source: Excelsior Geologic Model

Bf - Basin Fill
Ttm - Texas Canyon Quartz Monzonite
PzMz - Paleozoic/ Mesozoic Undivided
Me - Escabrosa Limestone
Dm - Martin Formation
Cau - Upper Abrigo Formation
Cam - Middle Abrigo Formation
Cal - Lower Abrigo Formation
Cb - Bolsa Quartzite
pCu - PreCambrian Undivided
Fault
Potentiometric Surface

0 500 1,000
Feet

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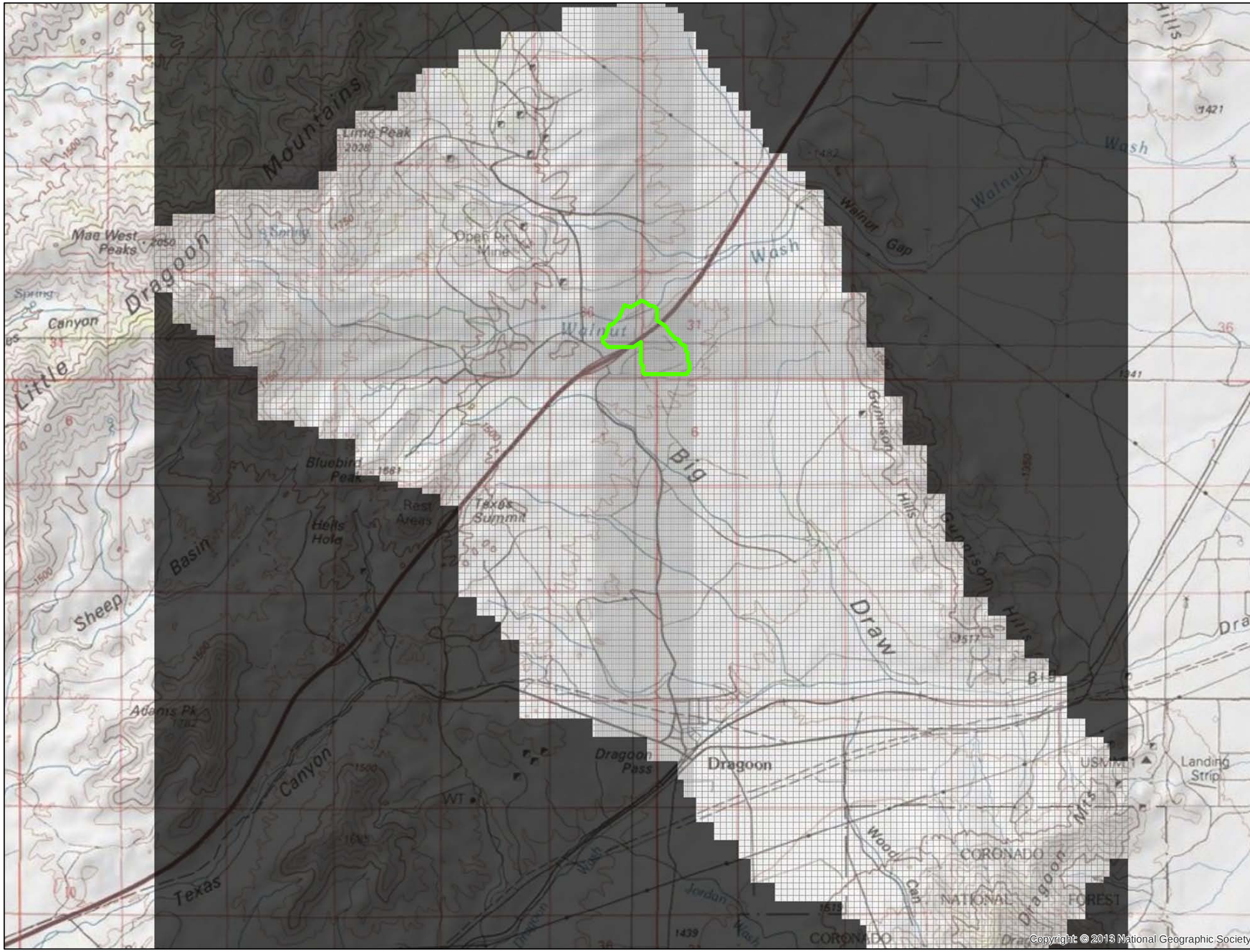
FIGURE 22
Geologic Cross Section C - C'
Regional Groundwater Model



Explanation

Wellfield

Model Grid Layout

Active

Non Flow

0 2,000 4,000 8,000

Feet

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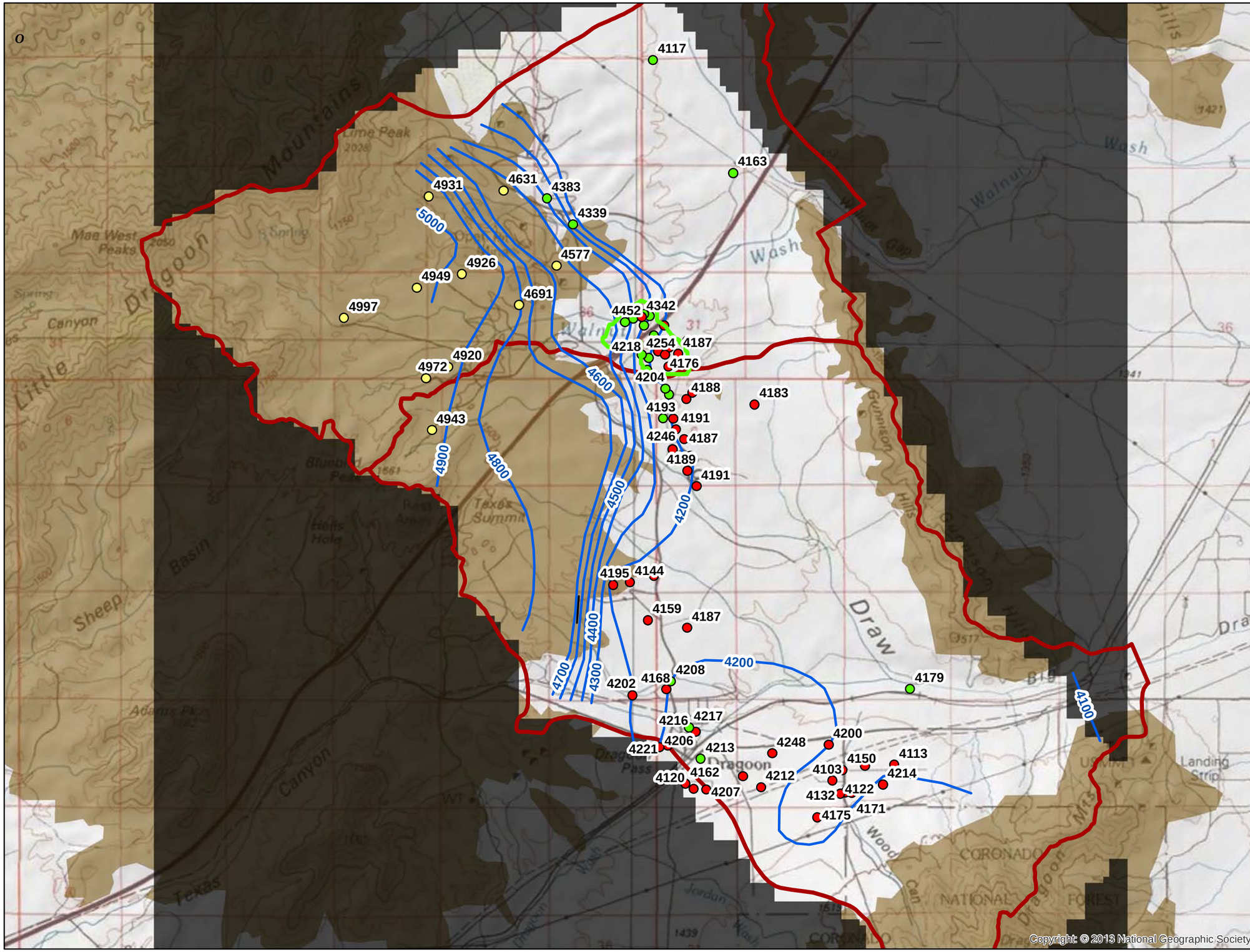
FIGURE 23
Model Grid Map



Explanation

Selected Calibration Targets

Layer

- 1
- 2
- 3
- 5

- Water Level Contours
- Wellfield
- Model Area Surface Watersheds
- Groundwater Model Domain
- Exposed Bedrock

0 2,000 4,000 8,000
Feet

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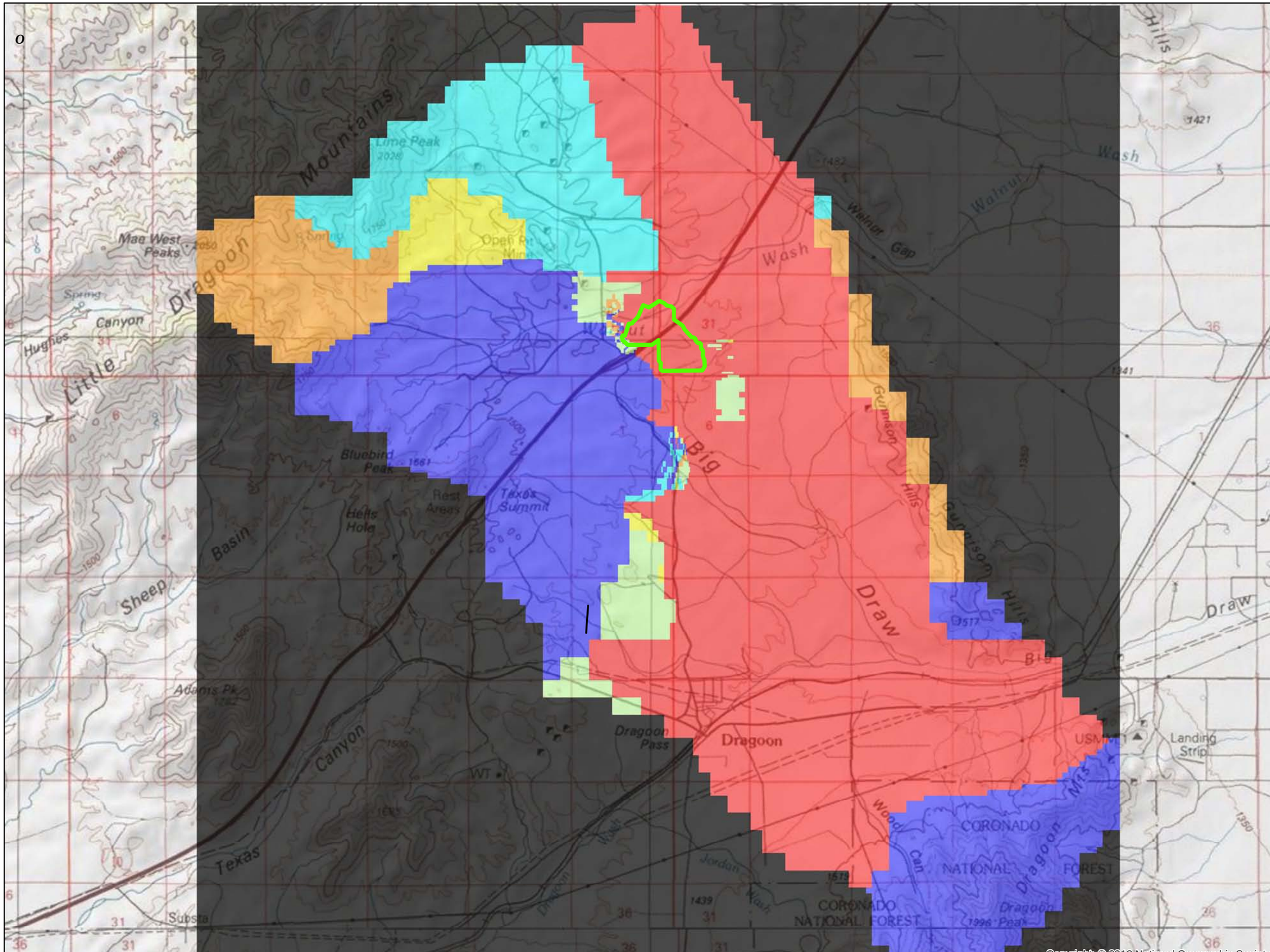
FIGURE 24
Model Water
Level Target Map



Explanation

Wellfield

Layer 1 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000
- No Flow Cells

0 2,000 4,000 8,000
Feet

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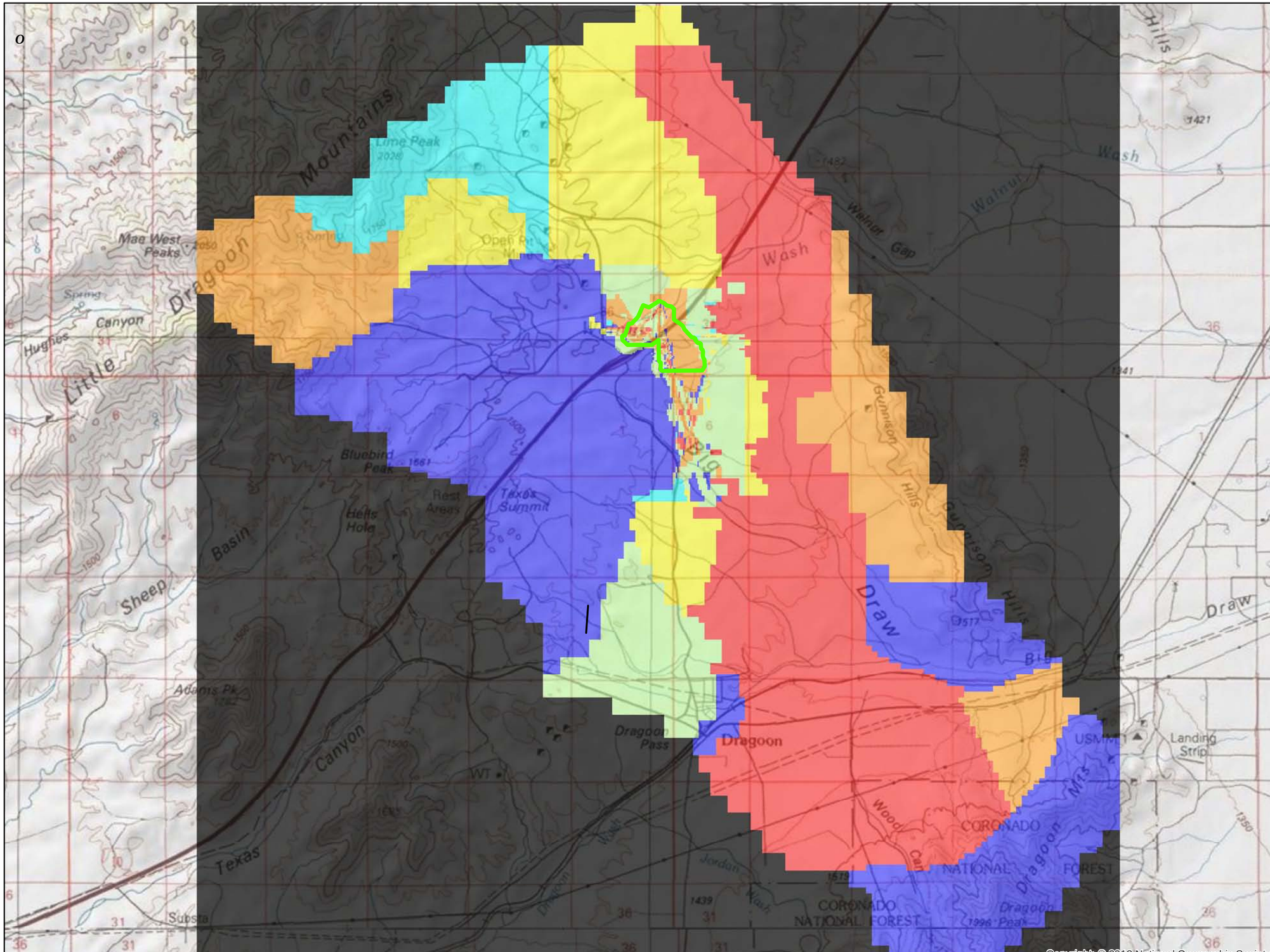
FIGURE 25
Layer 1 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 2 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000
- No Flow Cells

0 2,000 4,000 8,000
Feet

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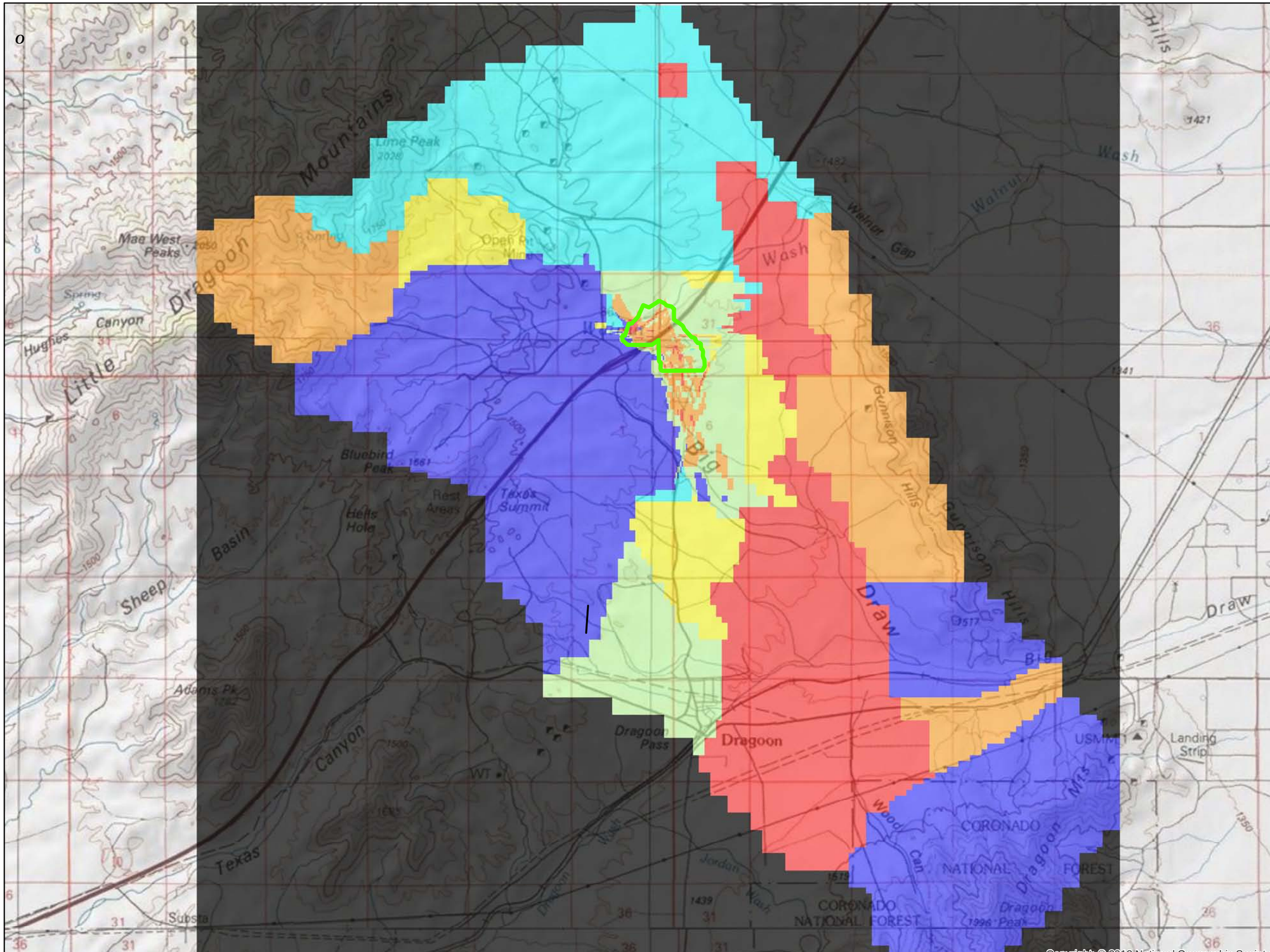
FIGURE 26
Layer 2 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 3 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000
- No Flow Cells

0 2,000 4,000 8,000
Feet

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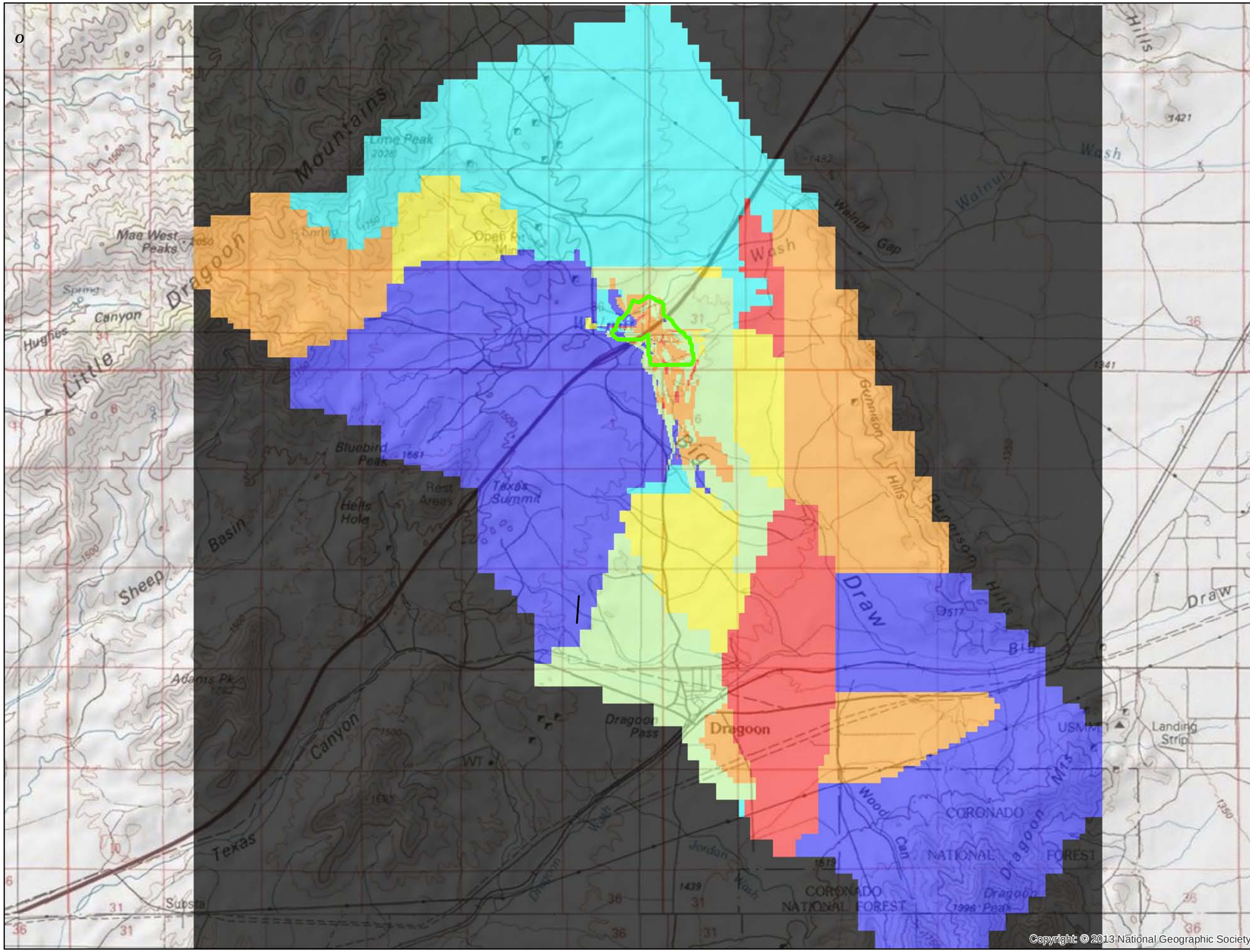
FIGURE 27
Layer 3 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 4 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000
- No Flow Cells

0 2,000 4,000 8,000
Feet

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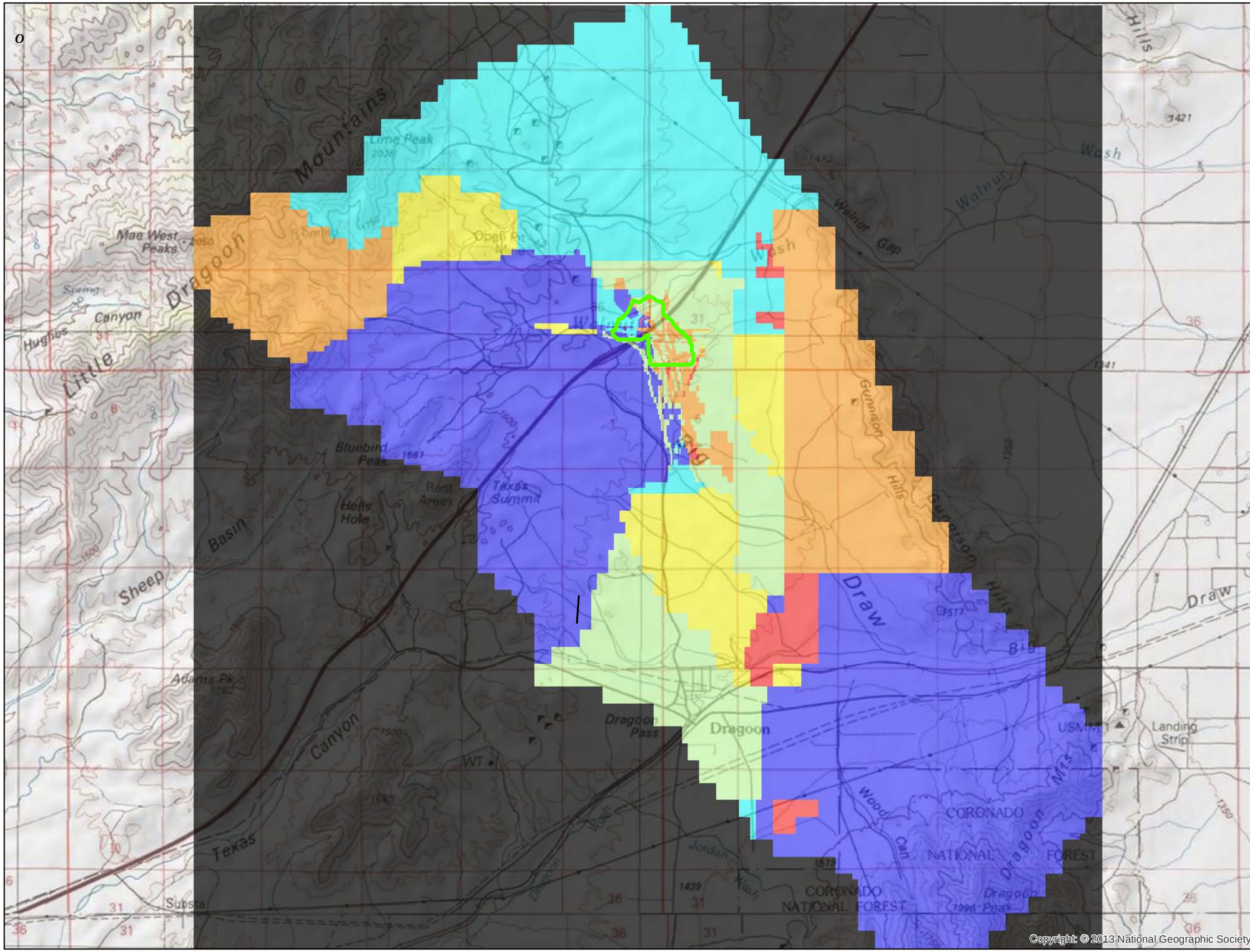
FIGURE 28
Layer 4 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 5 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000

No Flow Cells

0 2,000 4,000 8,000
Feet

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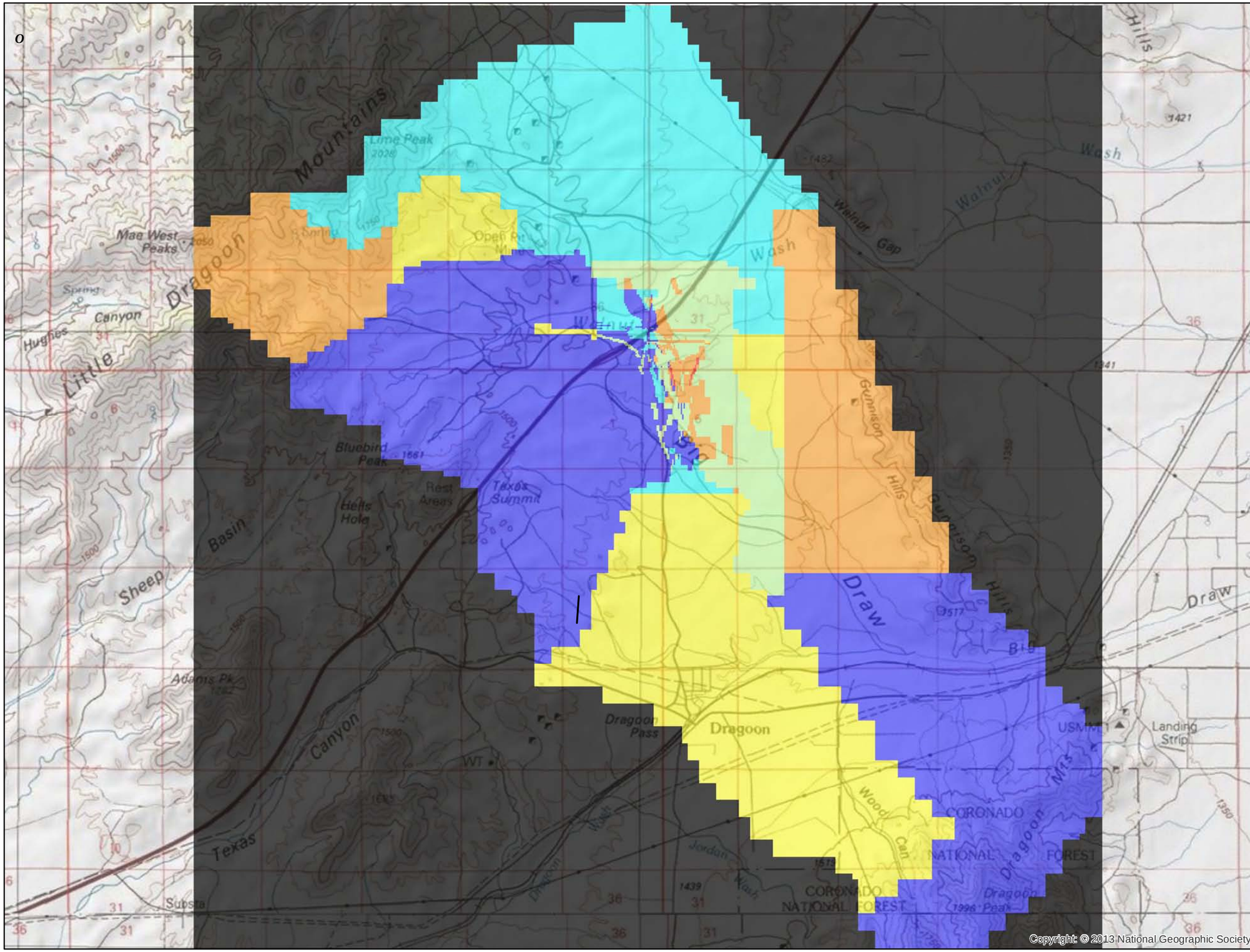
FIGURE 29
Layer 5 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 6 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000
- No Flow Cells

0 2,000 4,000 8,000
Feet

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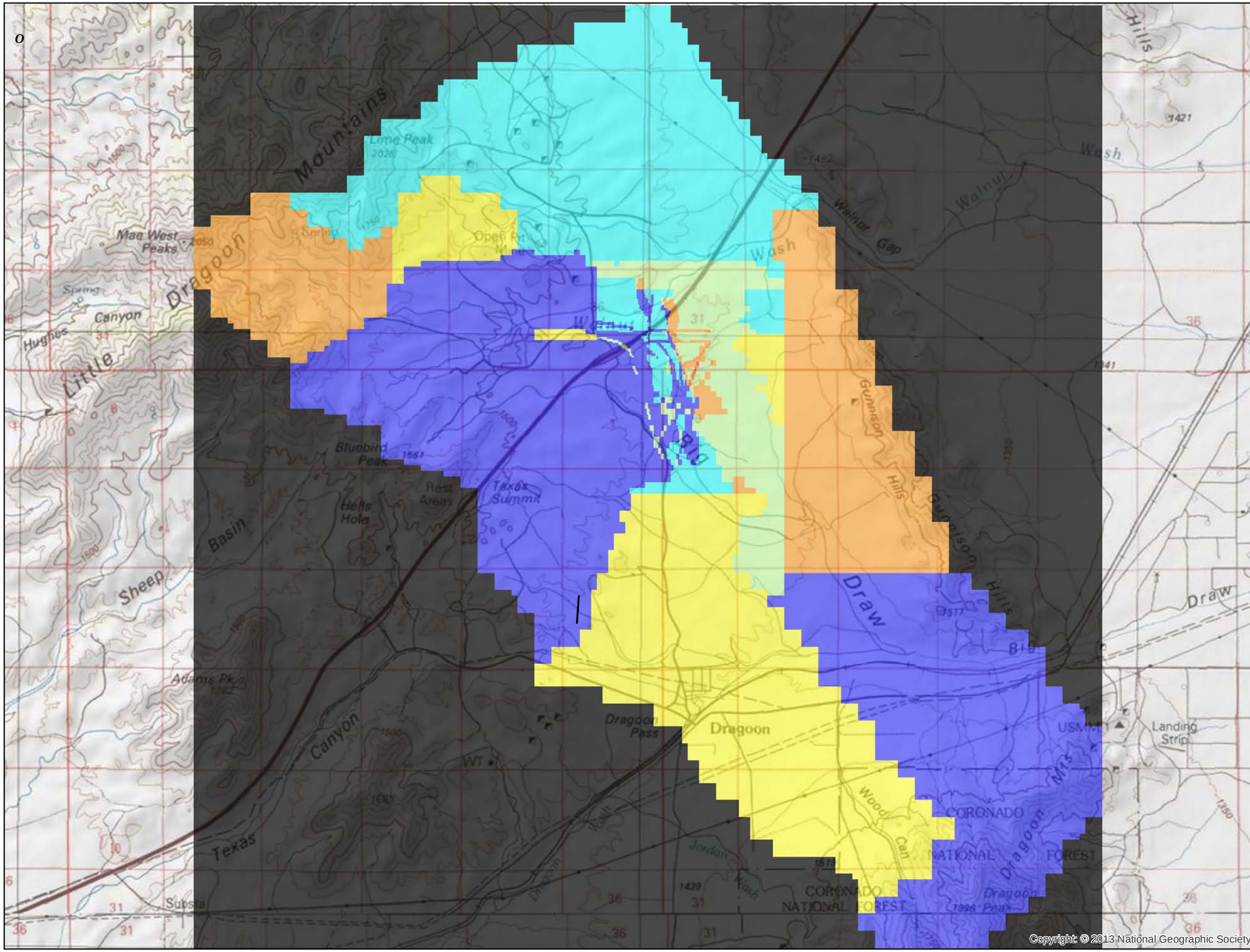
FIGURE 30
Layer 6 Hydraulic Conductivity Map



Explanation

Wellfield

Layer 7 Hydraulic Conductivity

(feet/day)

- 0.001 - 0.006
- 0.007 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.500
- 0.501 - 1.000
- 1.001 - 10.000

No Flow Cells

0 2,000 4,000 8,000
Feet

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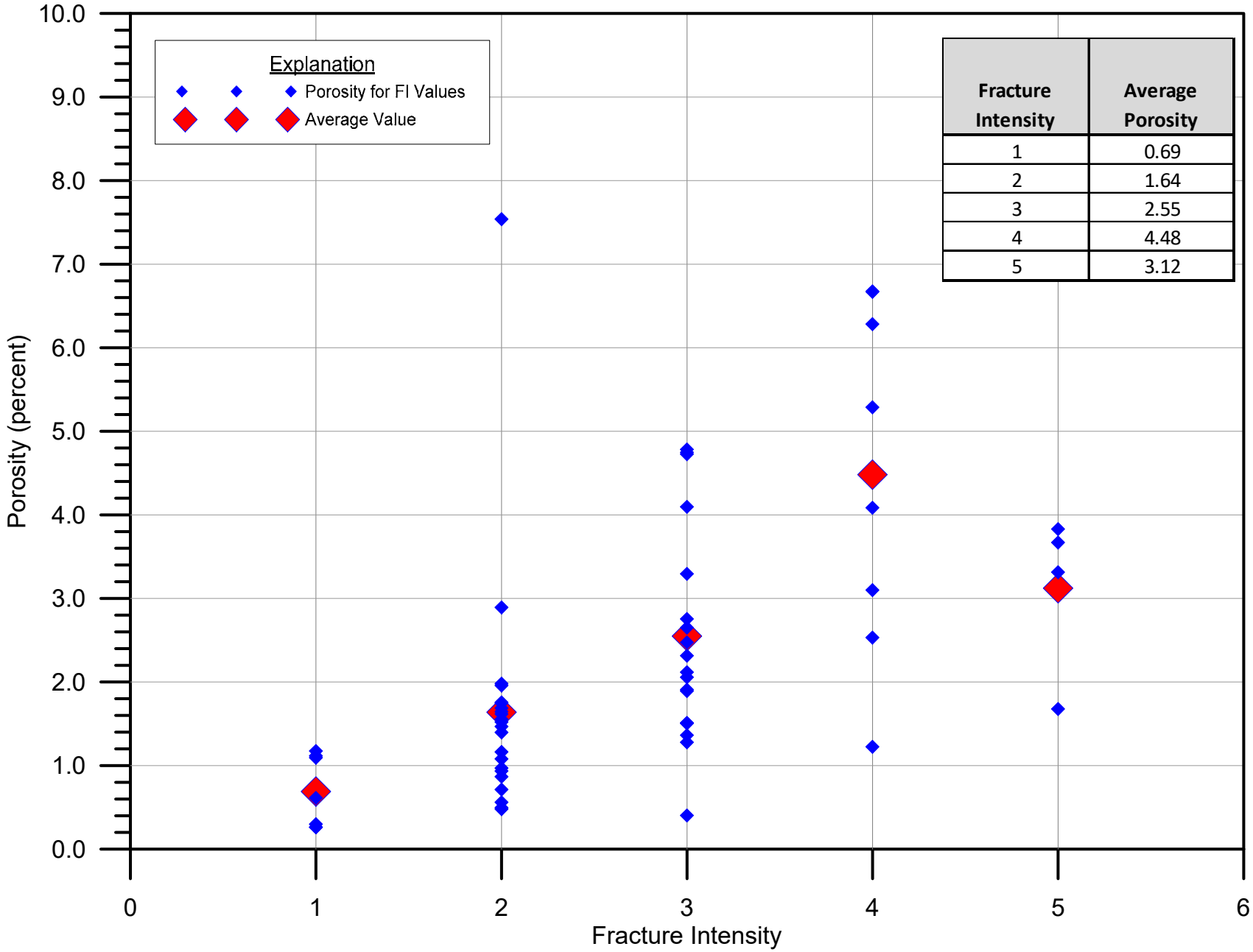
FIGURE 31
Layer 7 Hydraulic Conductivity Map



Fracture Intensity	Average Porosity
1	0.69
2	1.64
3	2.55
4	4.48
5	3.12

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Comparison of Fracture Intensity to Porosity Data from Gamma/Gamma Logs Gunnison Copper Project

FIGURE
32

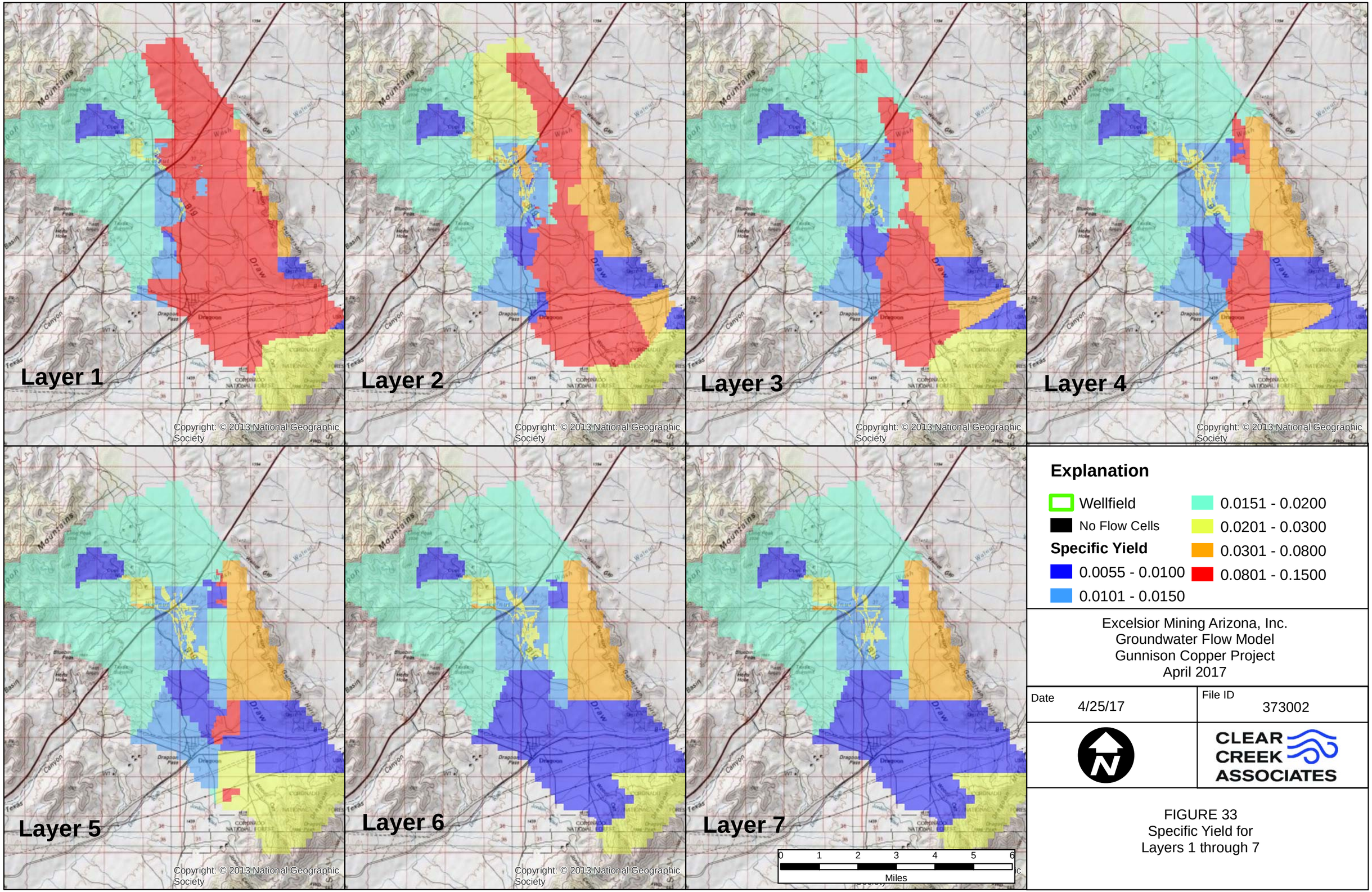

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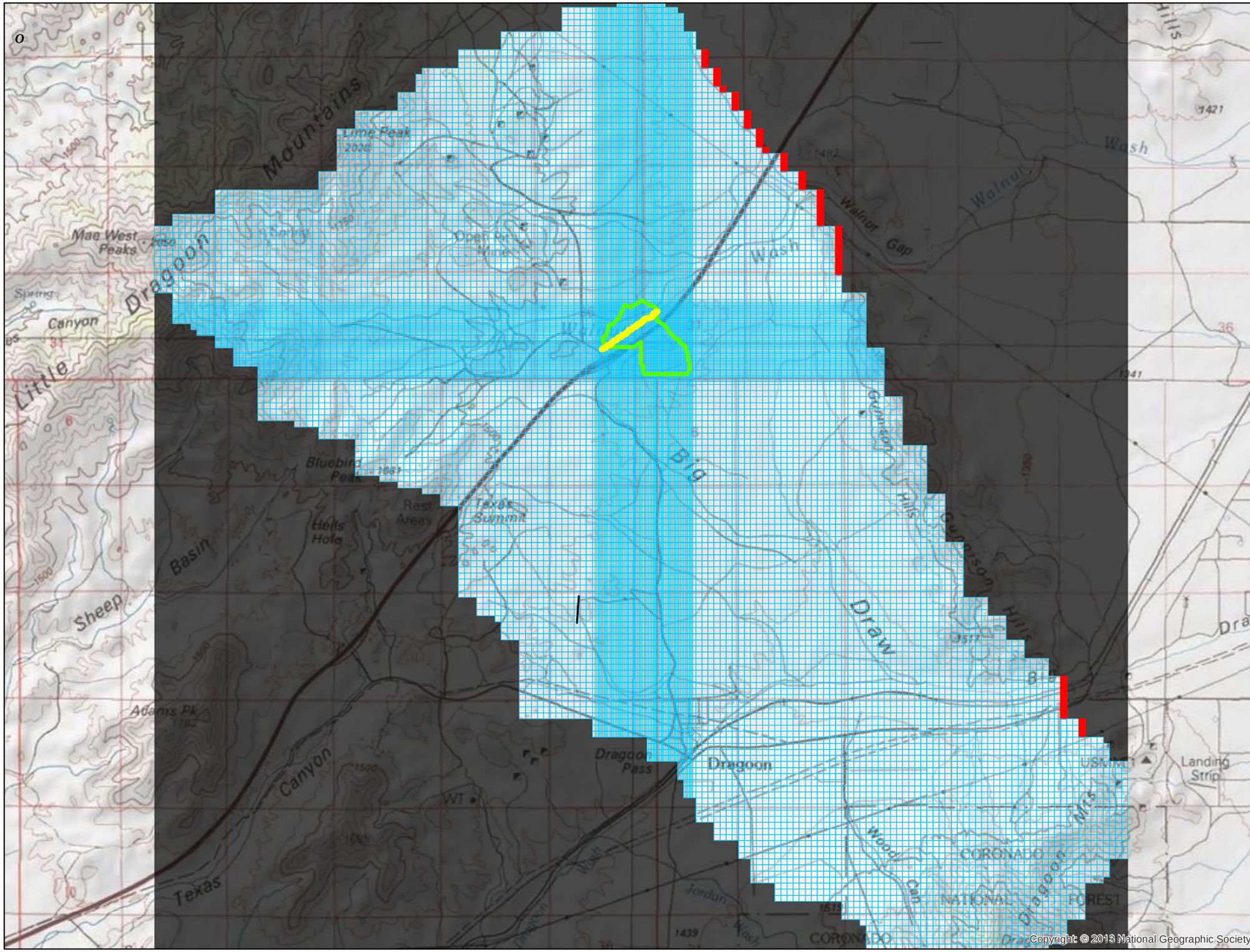
FIGURE 33
Specific Yield for
Layers 1 through 7



Explanation

Horizontal Flow Barrier

Active Cells

Constant Heads

Wellfield

No Flow

0 2,000 4,000 8,000

Feet

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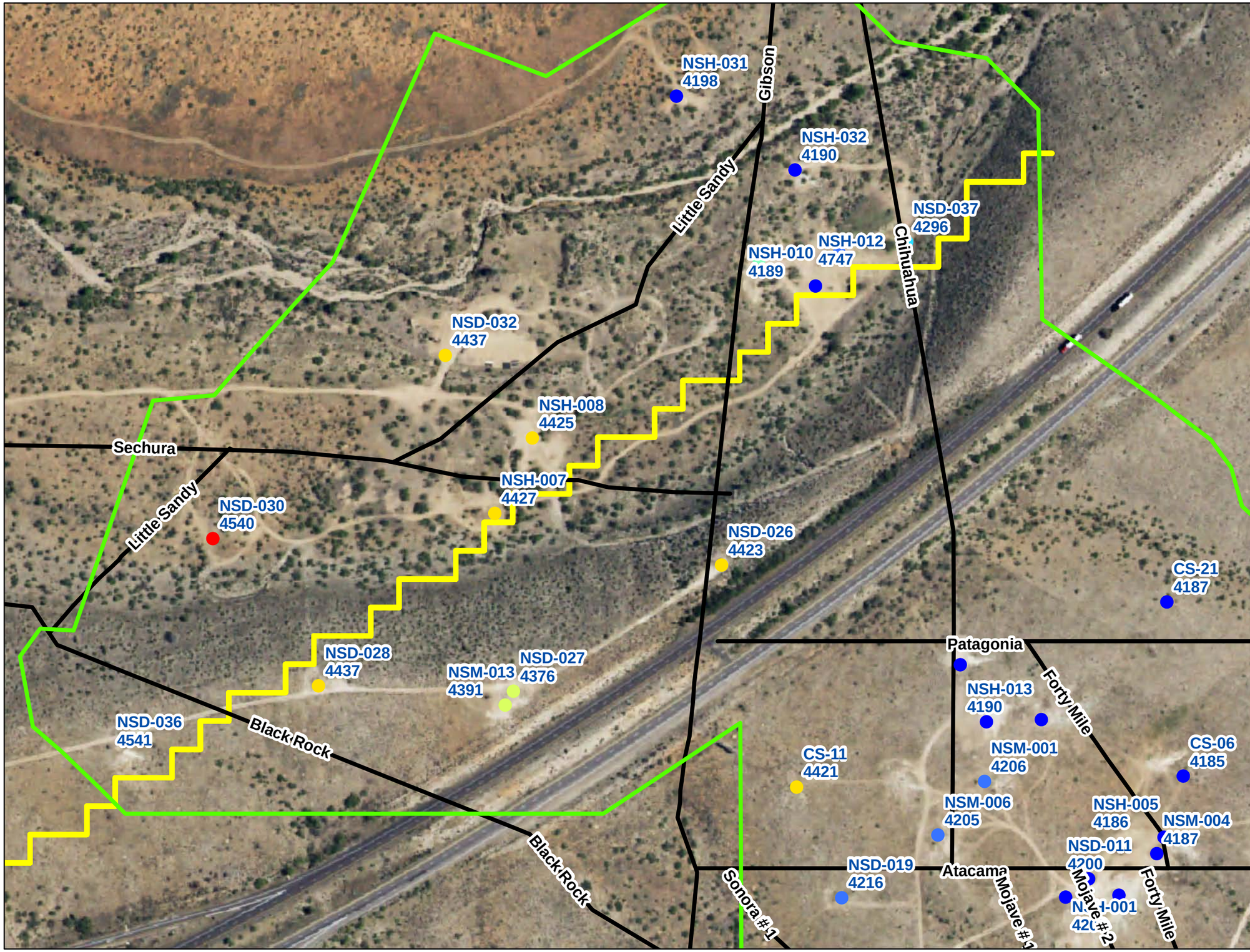
FIGURE 34
Model Boundary
Conditions Map



Explanation

April 2015 Water Levels
(feet-MSL)

- 4165 - 4200
- 4201 - 4250
- 4251 - 4300
- 4301 - 4350
- 4351 - 4400
- 4401 - 4450
- 4451 - 4500
- 4501 - 4540

- Wellfield
- Mapped Faults
- Horizontal Flow Barrier
- No Flow

0 100 200 400 600
Feet

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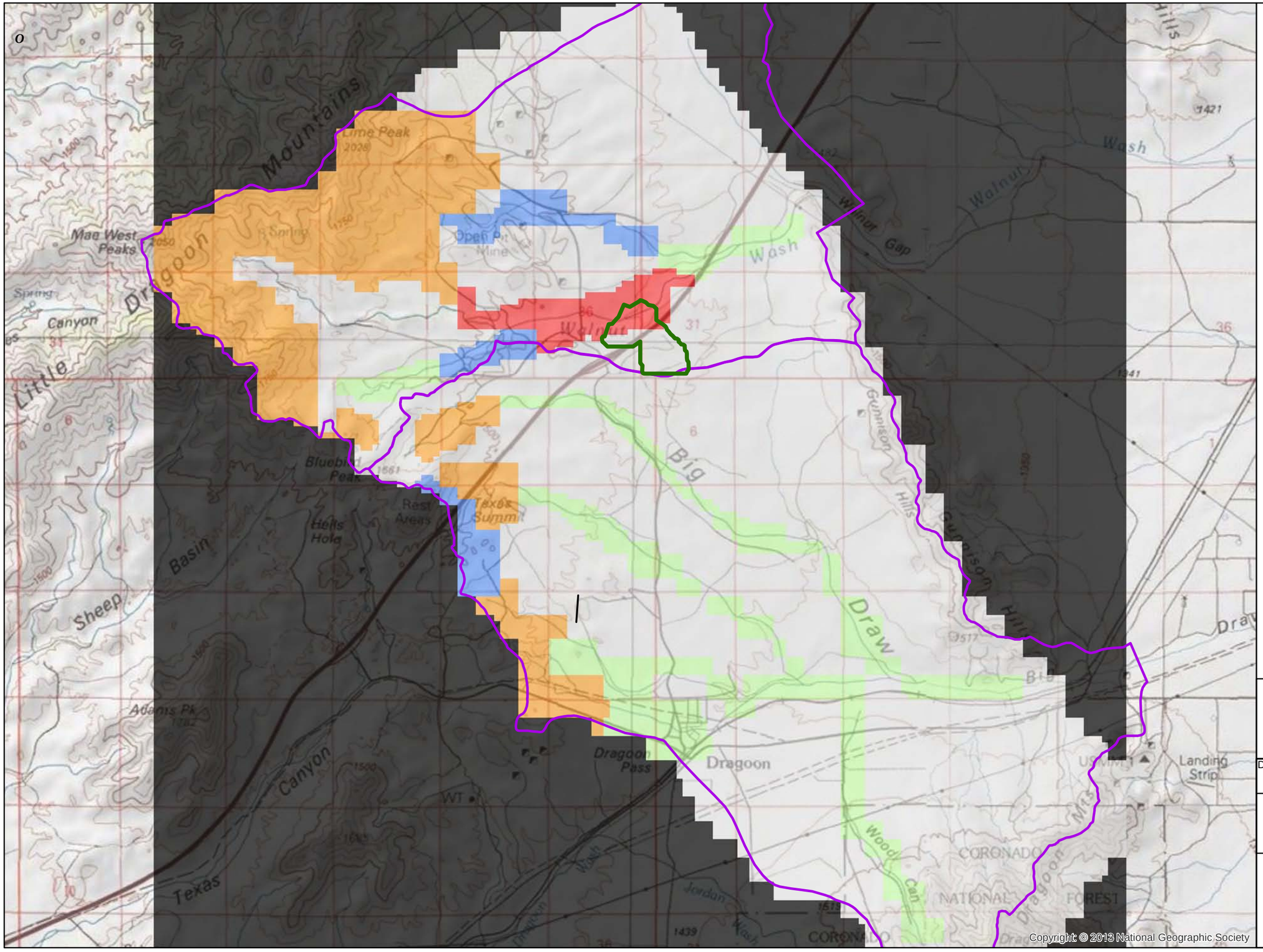
FIGURE 35
April 2015 Water Levels
in the North Area



Explanation

Recharge Rates

(feet/year)

- 0.000 - 0.001
- 0.002 - 0.005
- 0.006 - 0.010
- 0.011 - 0.050
- 0.051 - 0.100
- 0.101 - 0.200
- 0.201 - 0.550
- Wellfield
- Model Watersheds
- No Flow

0 2,000 4,000 8,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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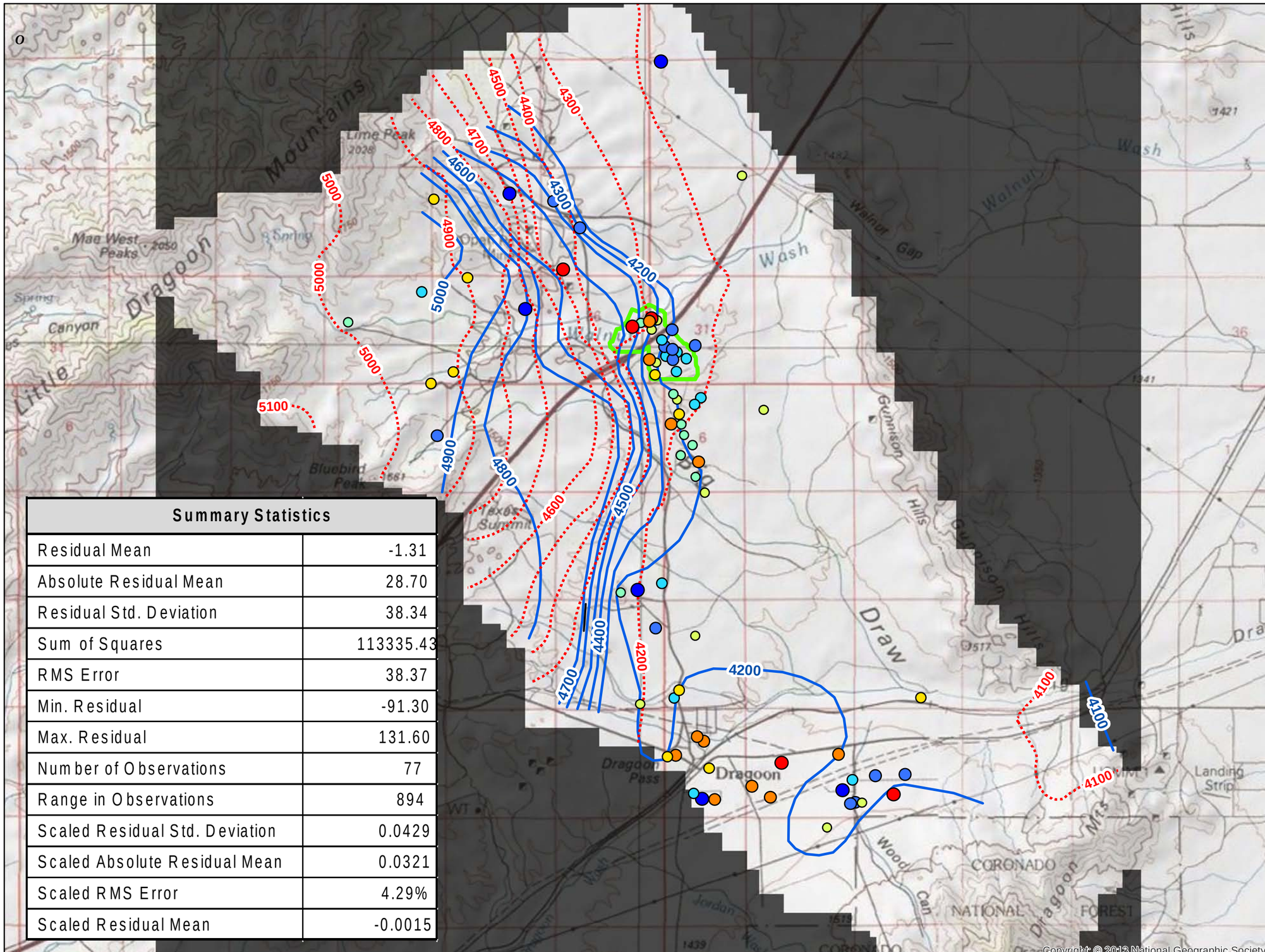
FIGURE 36
Model Recharge
Rates Simulated



Summary Statistics	
Residual Mean	-1.31
Absolute Residual Mean	28.70
Residual Std. Deviation	38.34
Sum of Squares	113335.43
RMS Error	38.37
Min. Residual	-91.30
Max. Residual	131.60
Number of Observations	77
Range in Observations	894
Scaled Residual Std. Deviation	0.0429
Scaled Absolute Residual Mean	0.0321
Scaled RMS Error	4.29%
Scaled Residual Mean	-0.0015

Explanation

Residual Values
(feet)

- -115.5 - -50.0
- -49.9 - -25.0
- -24.9 - -10.0
- -9.9 - 0.0
- 0.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- 50.1 - 137.9

Calibrated Head Contours

Observed Water Level Contours

Wellfield

No Flow

0 2,000 4,000 8,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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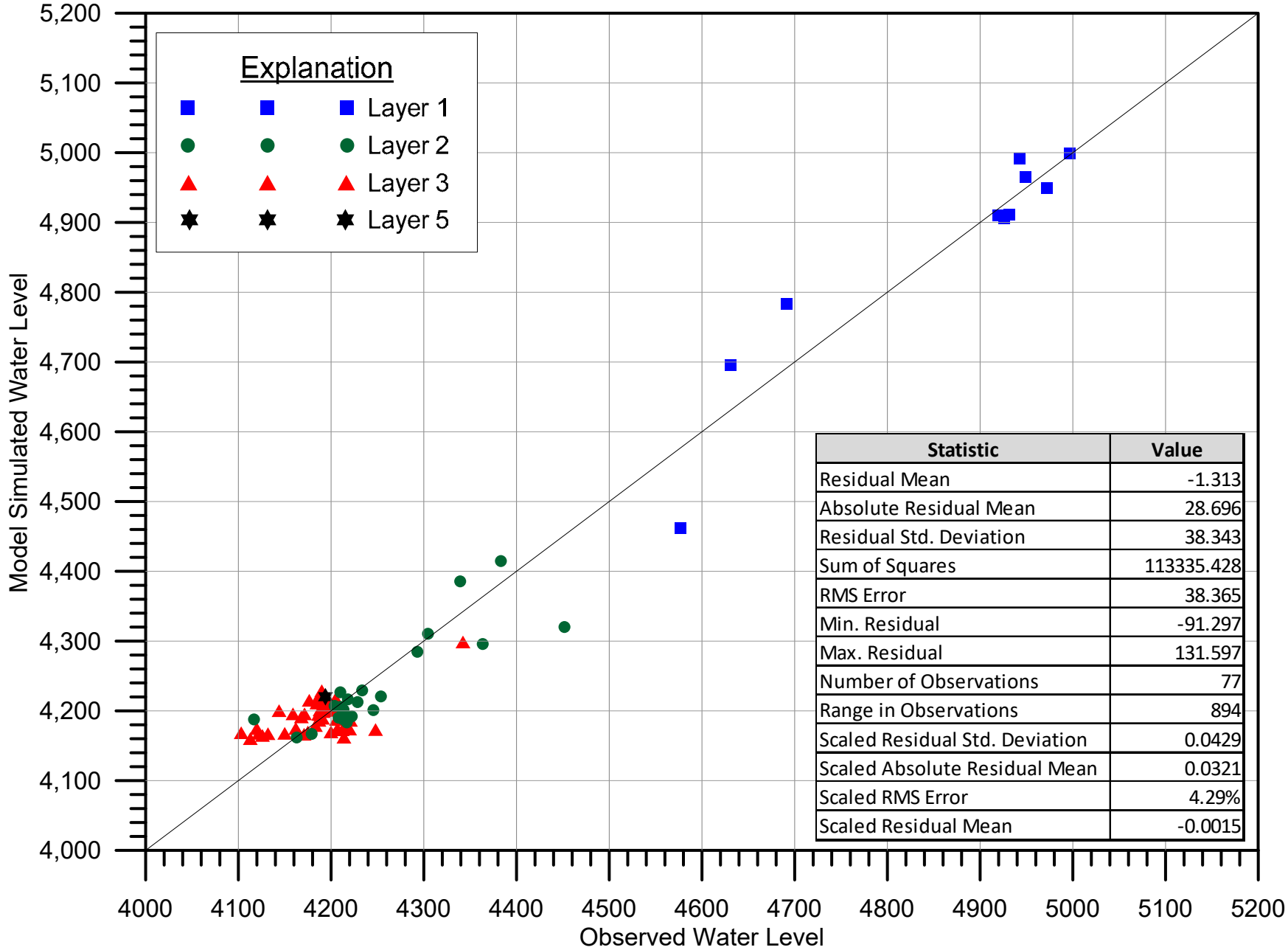
FIGURE 37
Steady-State Model
Calibration Results Map



Statistic	Value
Residual Mean	-1.313
Absolute Residual Mean	28.696
Residual Std. Deviation	38.343
Sum of Squares	113335.428
RMS Error	38.365
Min. Residual	-91.297
Max. Residual	131.597
Number of Observations	77
Range in Observations	894
Scaled Residual Std. Deviation	0.0429
Scaled Absolute Residual Mean	0.0321
Scaled RMS Error	4.29%
Scaled Residual Mean	-0.0015

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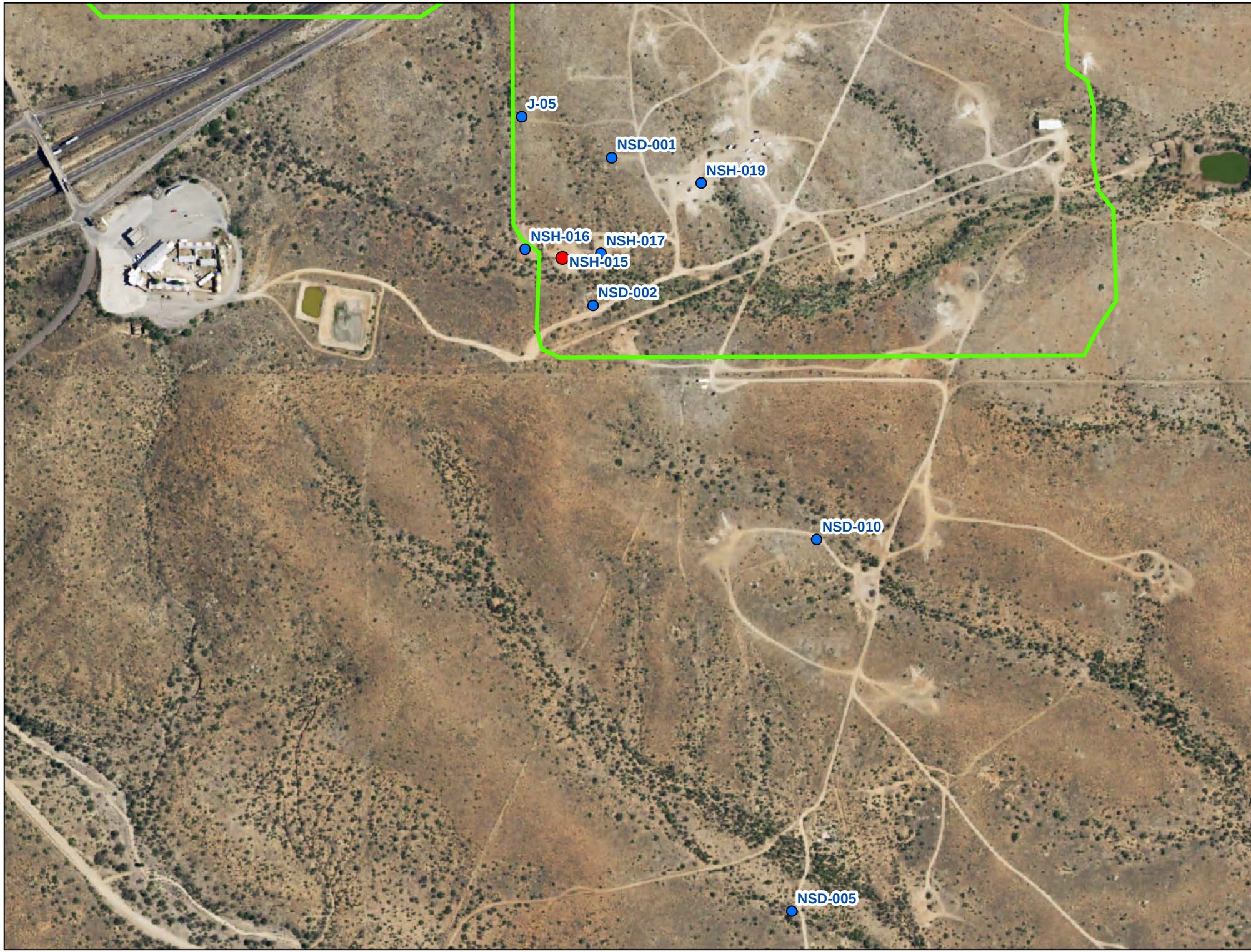
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Steady-State Model Calibration Comparison of Measured and Computed Target Values Gunnison Copper Project

FIGURE 38



Explanation

Wells Measured during NSH-015 Test

- Observation Well
- Pumping Well
- Wellfield

0 100 200 400 600
Feet

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Groundwater Flow Model
Gunnison Copper Project
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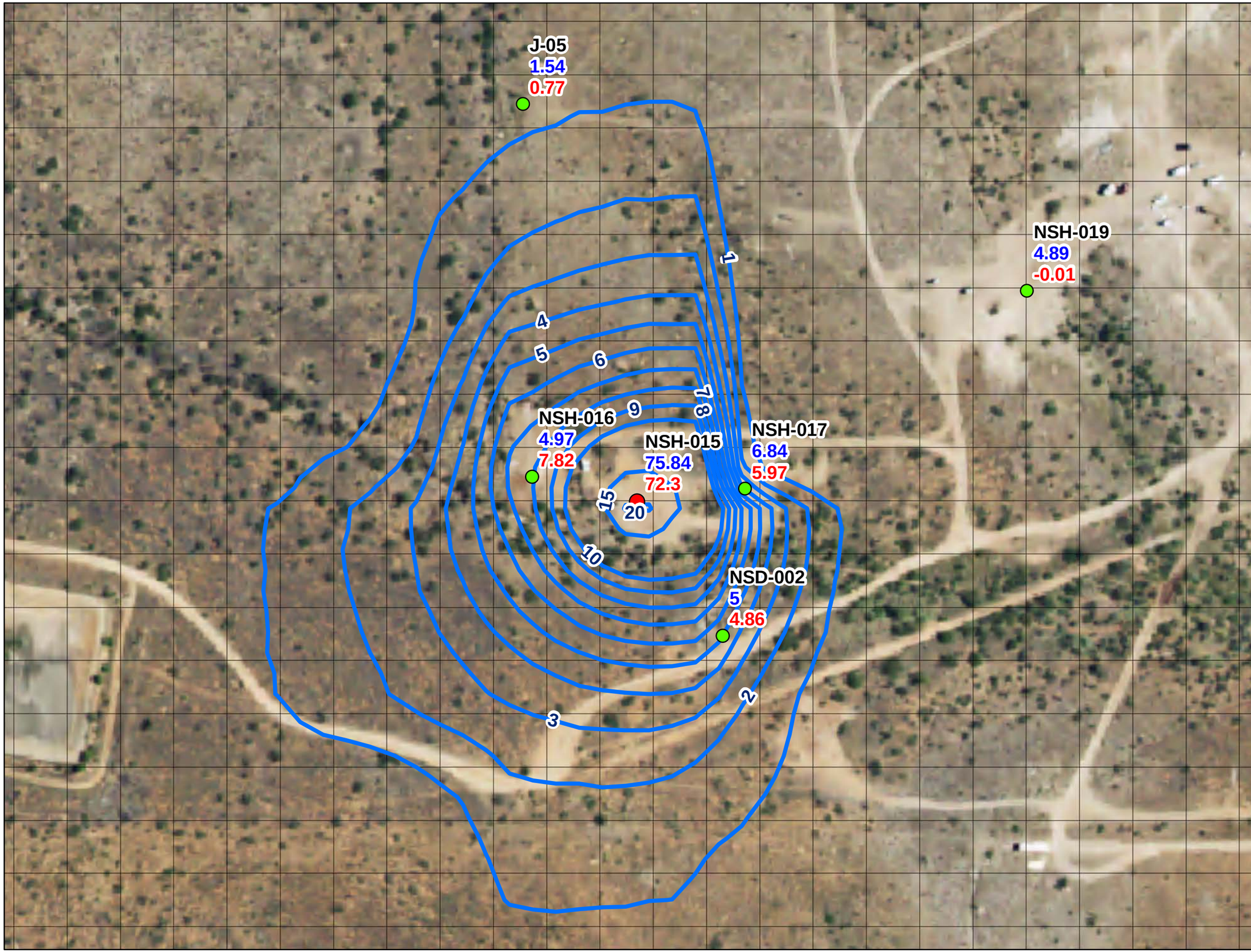
FIGURE 39
NSH-015 Aquifer Test
Observation Wells Map



Explanation

Observed and Computed Drawdown

- Observation Well
- Pumping Well
- 5-Day Drawdown Contours
- Model Grid

0 100 200
Feet

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Groundwater Flow Model
Gunnison Copper Project
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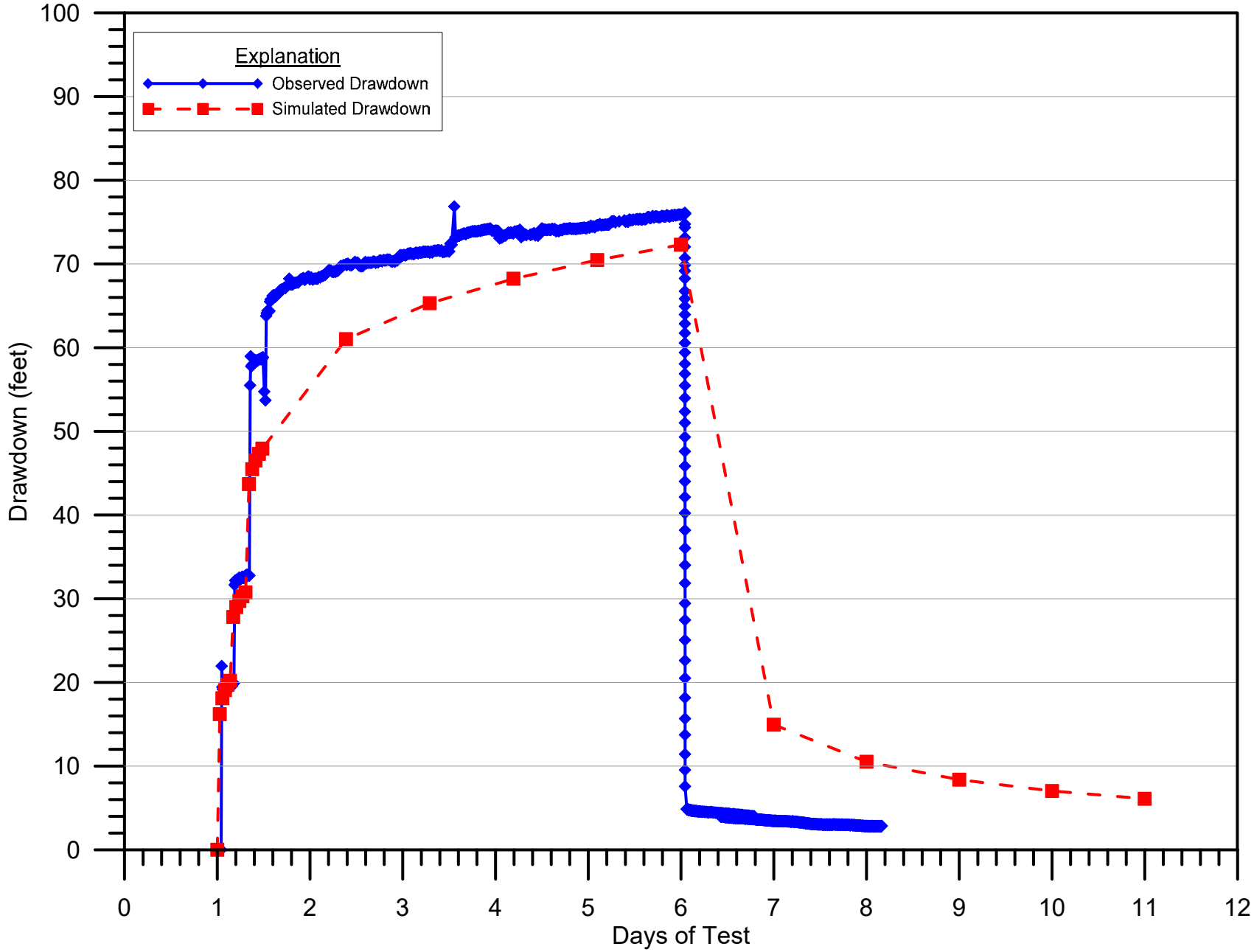
FIGURE 40
NSH-015 Aquifer Test
Simulation Results



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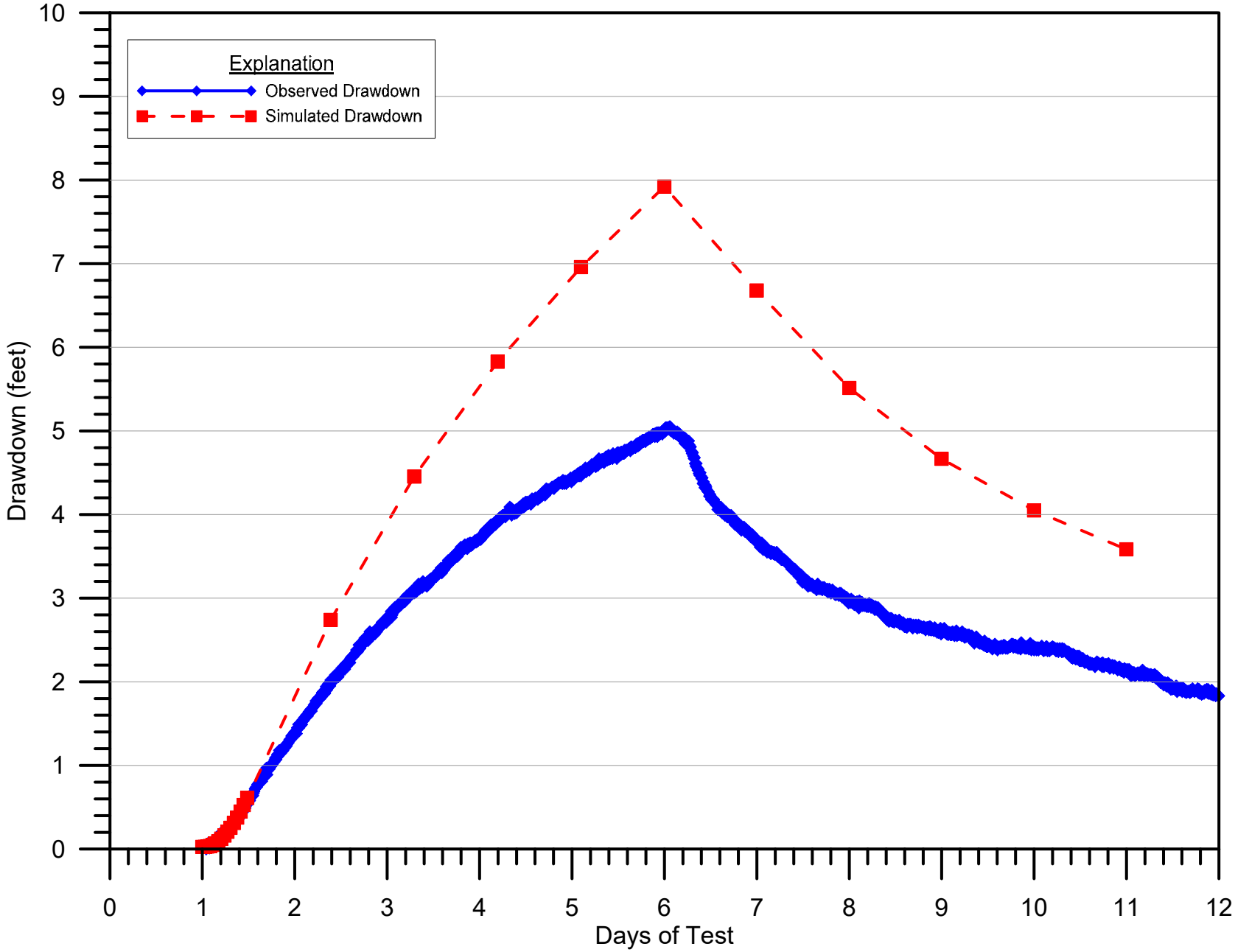
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Drawdown at NSH-015
NSH-015 Aquifer Test Analysis
Gunnison Copper Project

FIGURE
41



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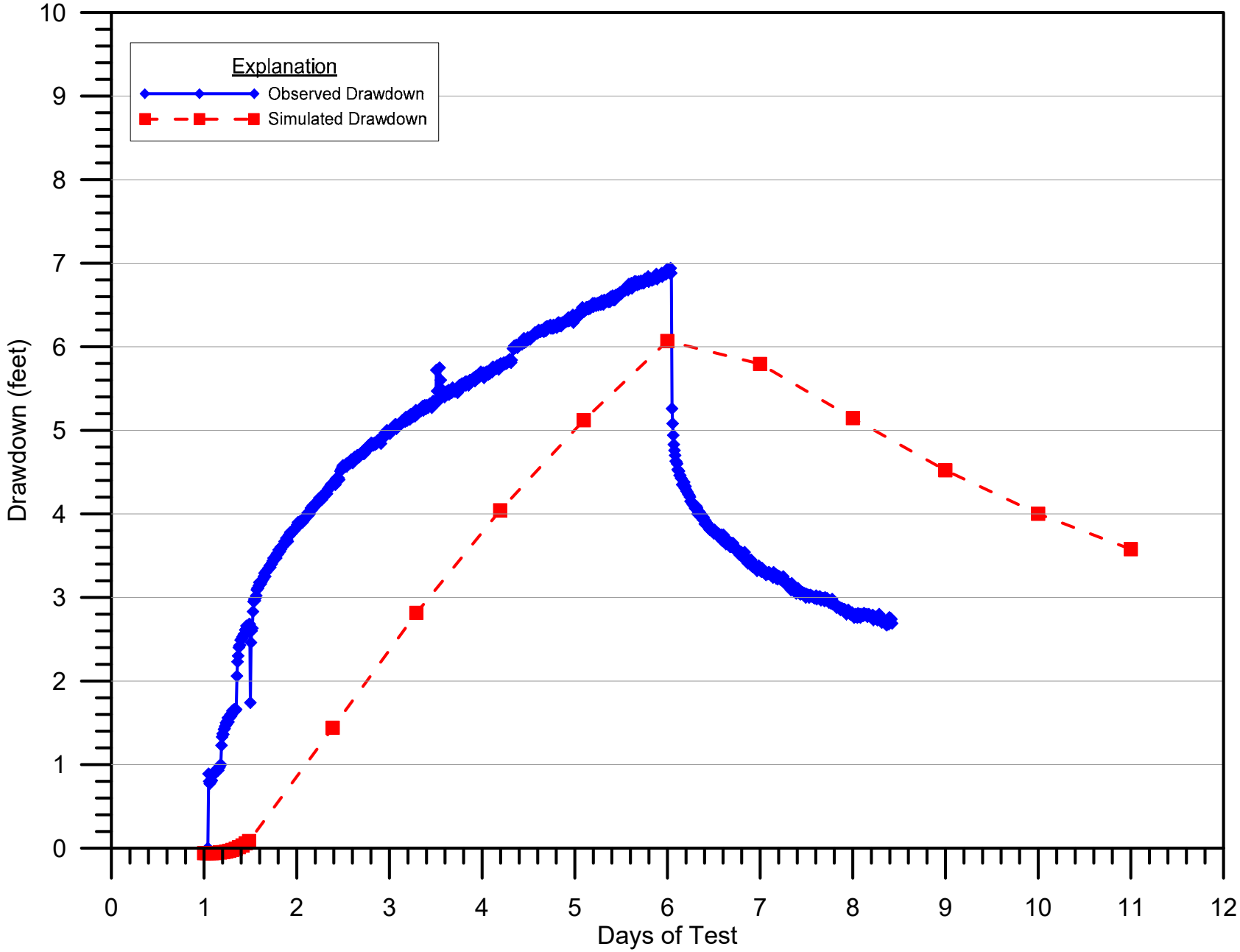
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Drawdown at NSH-016
NSH-015 Aquifer Test Analysis
Gunnison Copper Project

FIGURE
42



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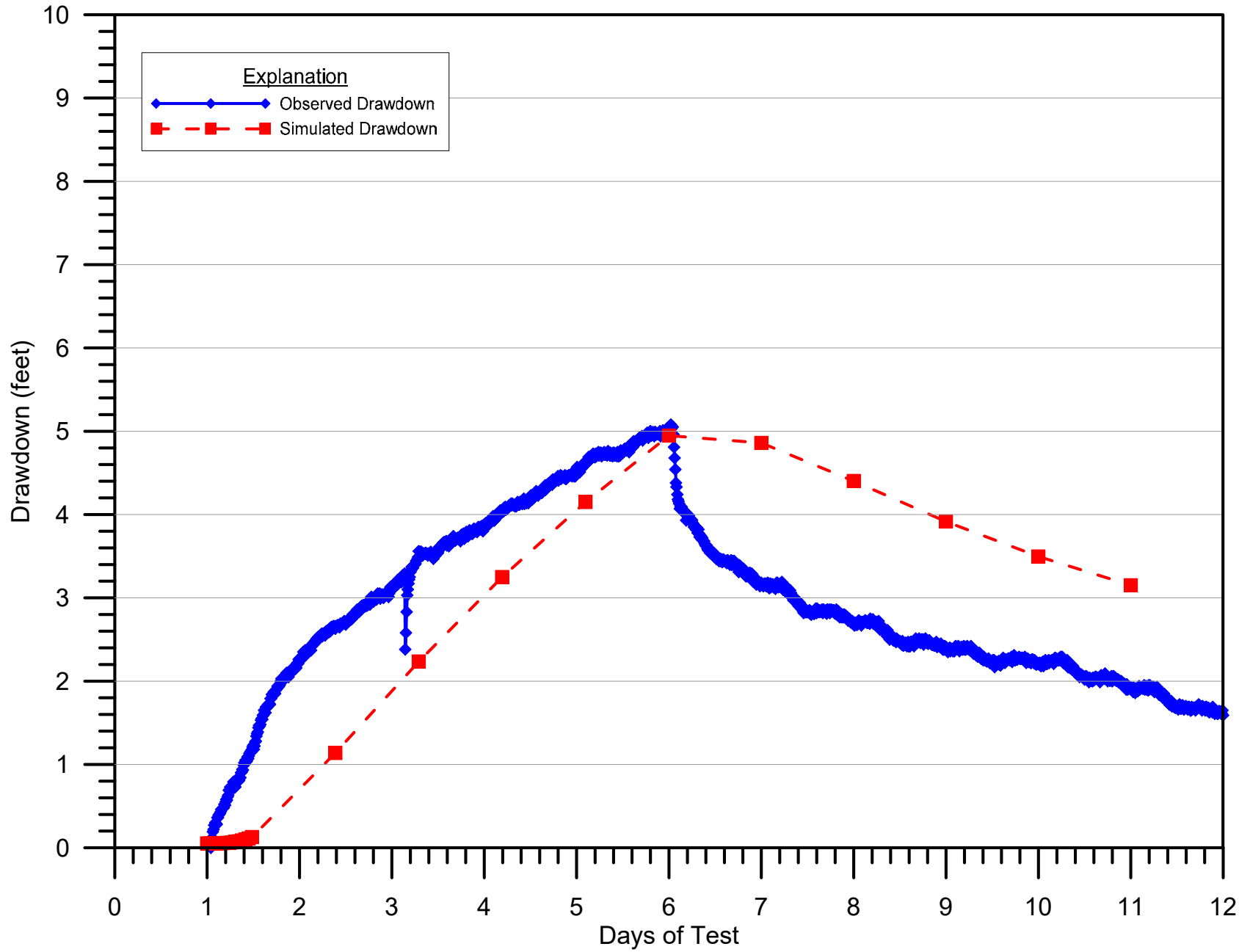
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Drawdown at NSH-017
NSH-015 Aquifer Test Analysis
Gunnison Copper Project

FIGURE
43



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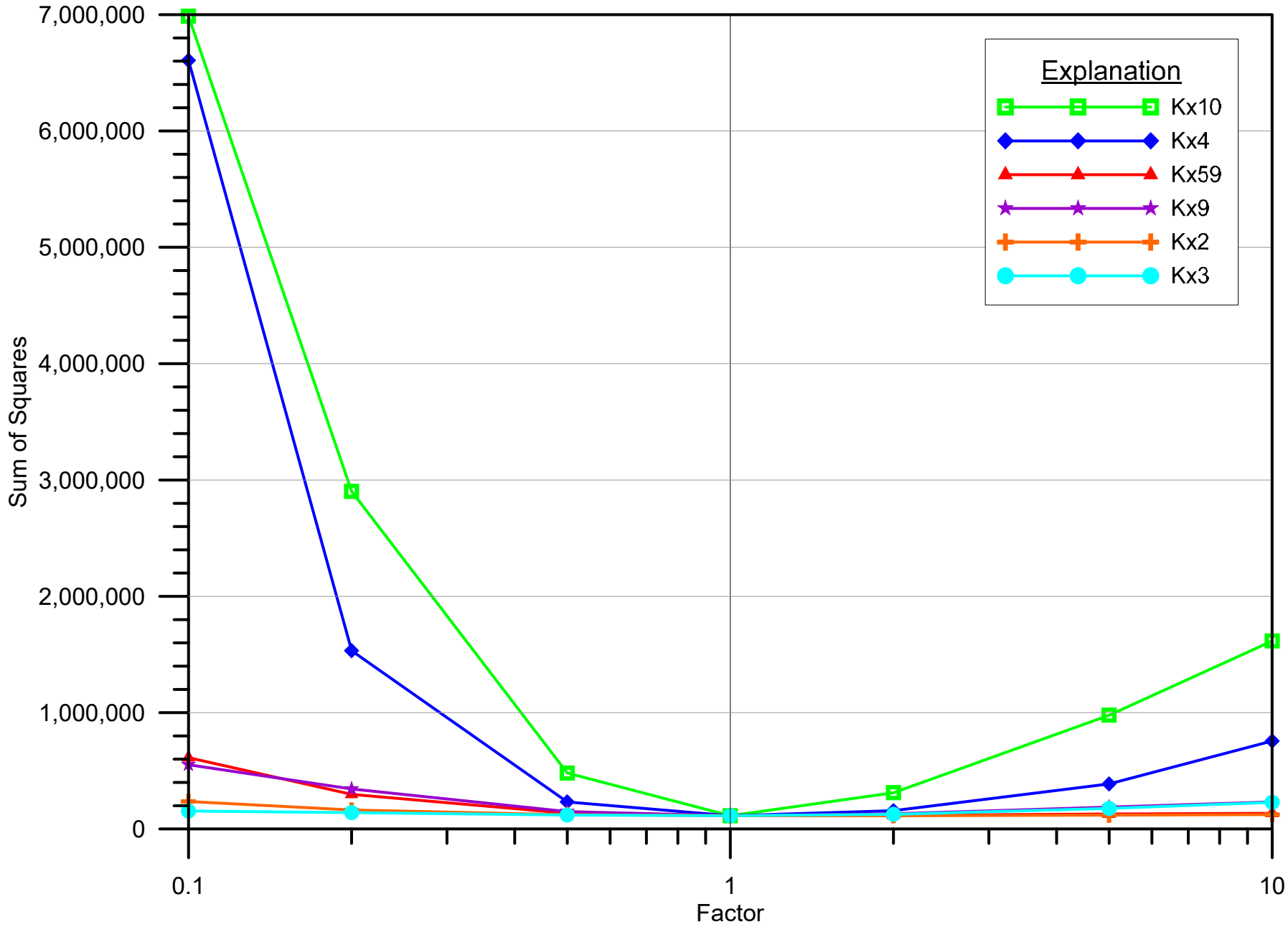
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Drawdown at NSD-002
NSH-015 Aquifer Test Analysis
Gunnison Copper Project

FIGURE
44



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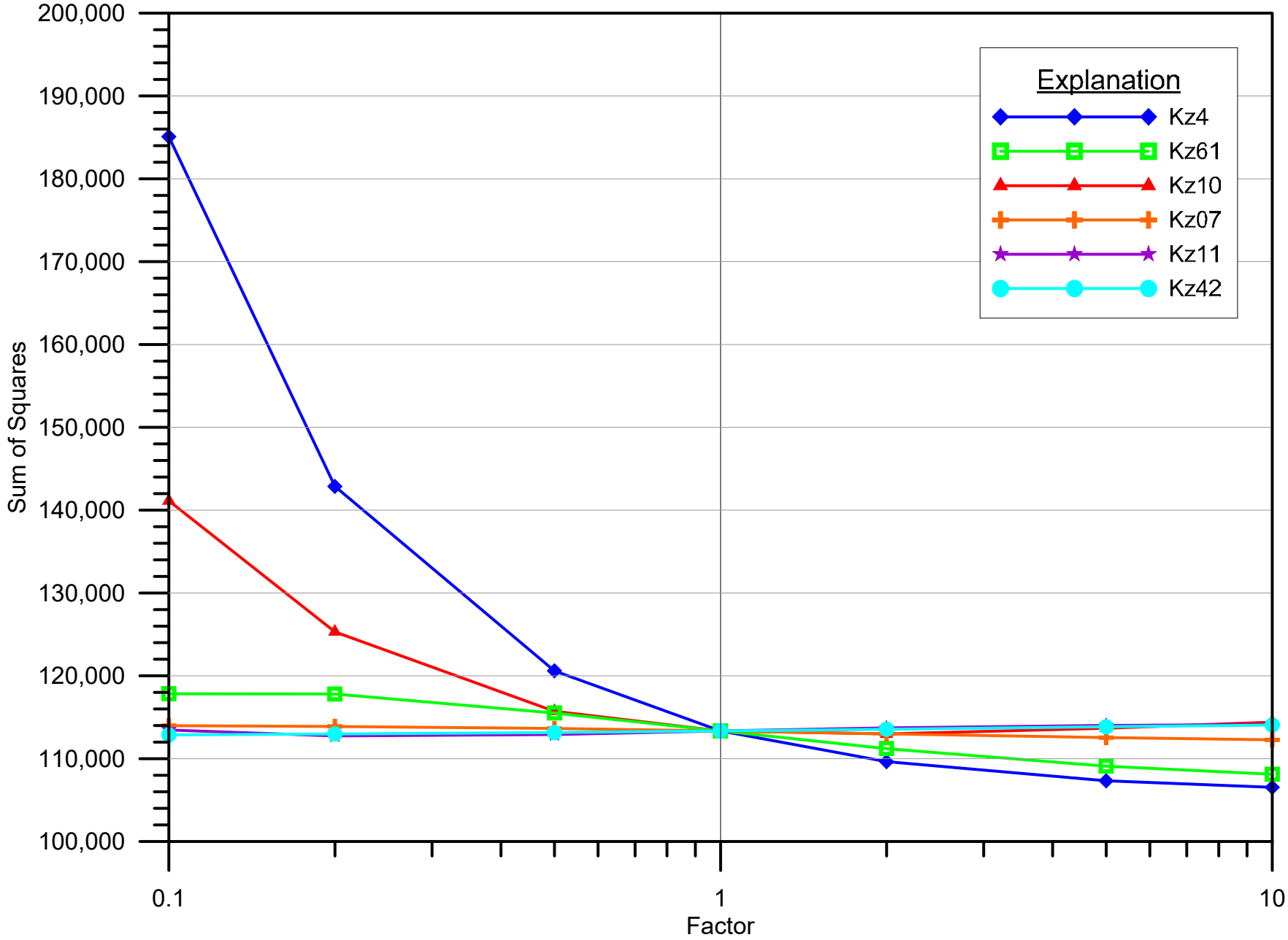
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Horizontal Hydraulic Conductivity (Kx) Sensitivity Analysis
Gunnison Copper Project

FIGURE
45



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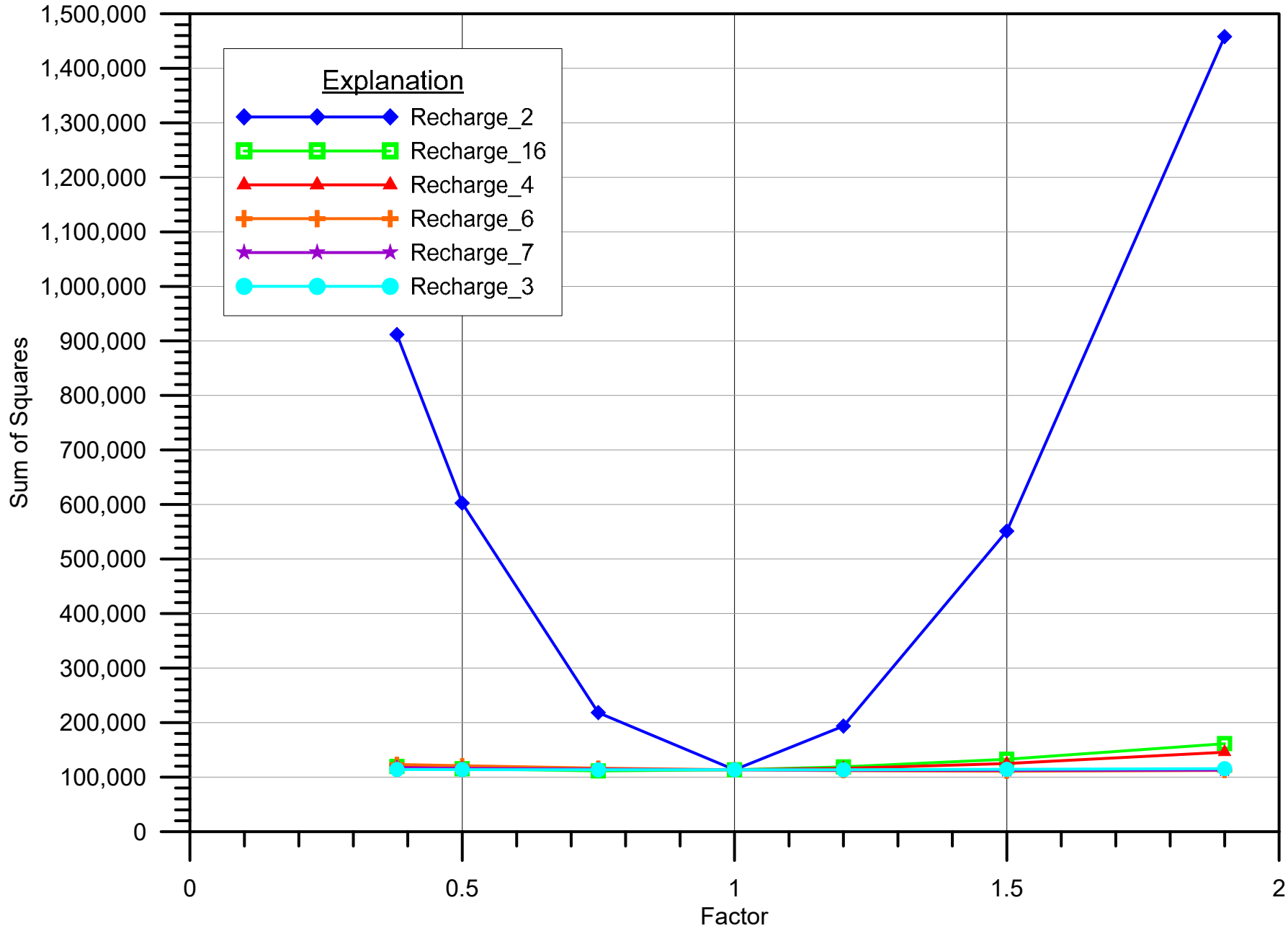
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Vertical Hydraulic Conductivity (Kz) Sensitivity Analysis
Gunnison Copper Project

FIGURE
46



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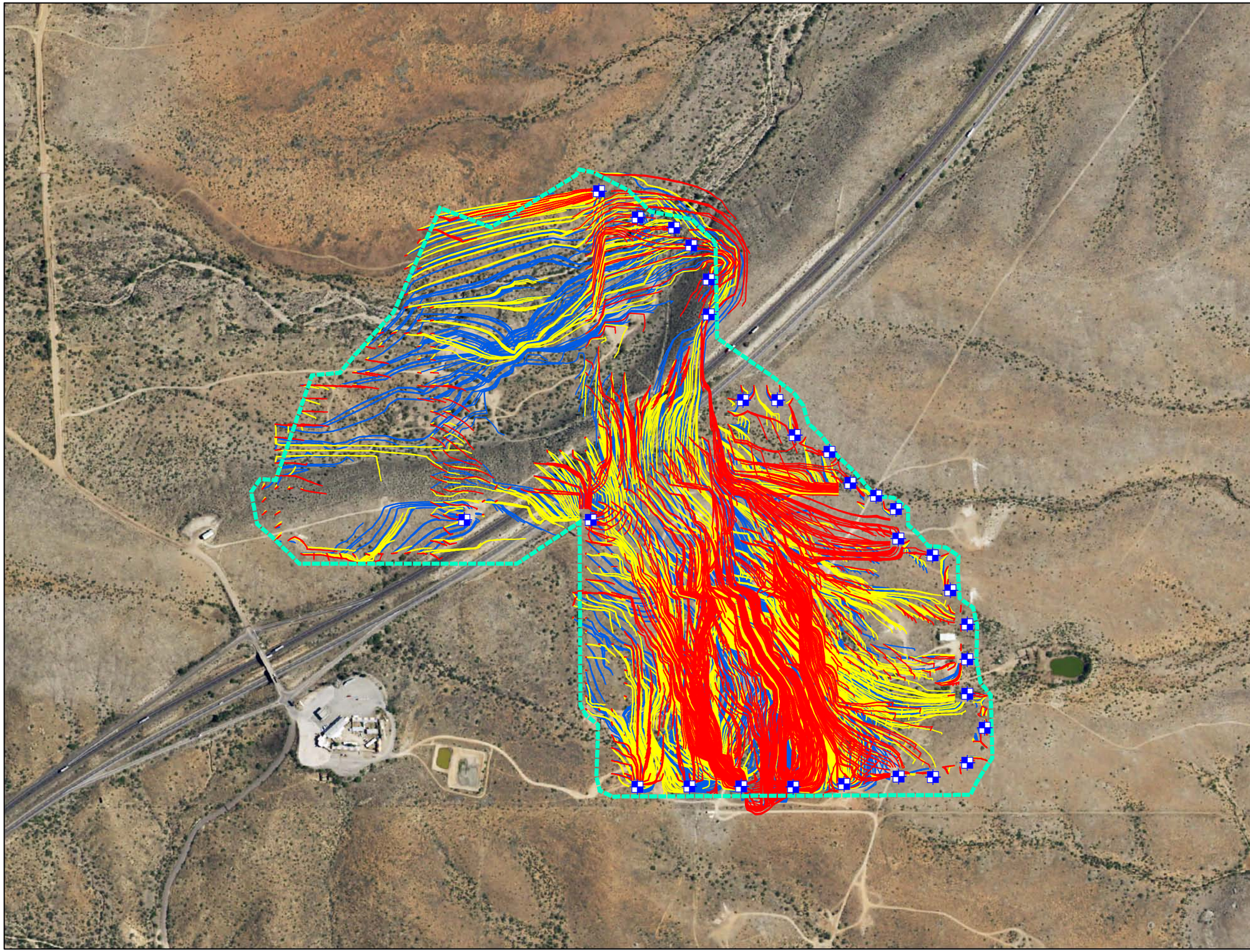
Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Recharge Zones
Sensitivity Analysis
Gunnison Copper Project

FIGURE

47



Explanation

Hydraulic Control Wells

Higher Hydraulic Conductivity
Model Layer

- 3
- 4
- 5
- 6

Wellfield

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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FIGURE 48
Particle Tracking: Years 1-23
Increased Hydraulic Conducivity
Zones where FI=4

Explanation

Hydraulic Control Wells

80% Porosity Simulation
Model Layer

- 3
- 4
- 5
- 6

Wellfield

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
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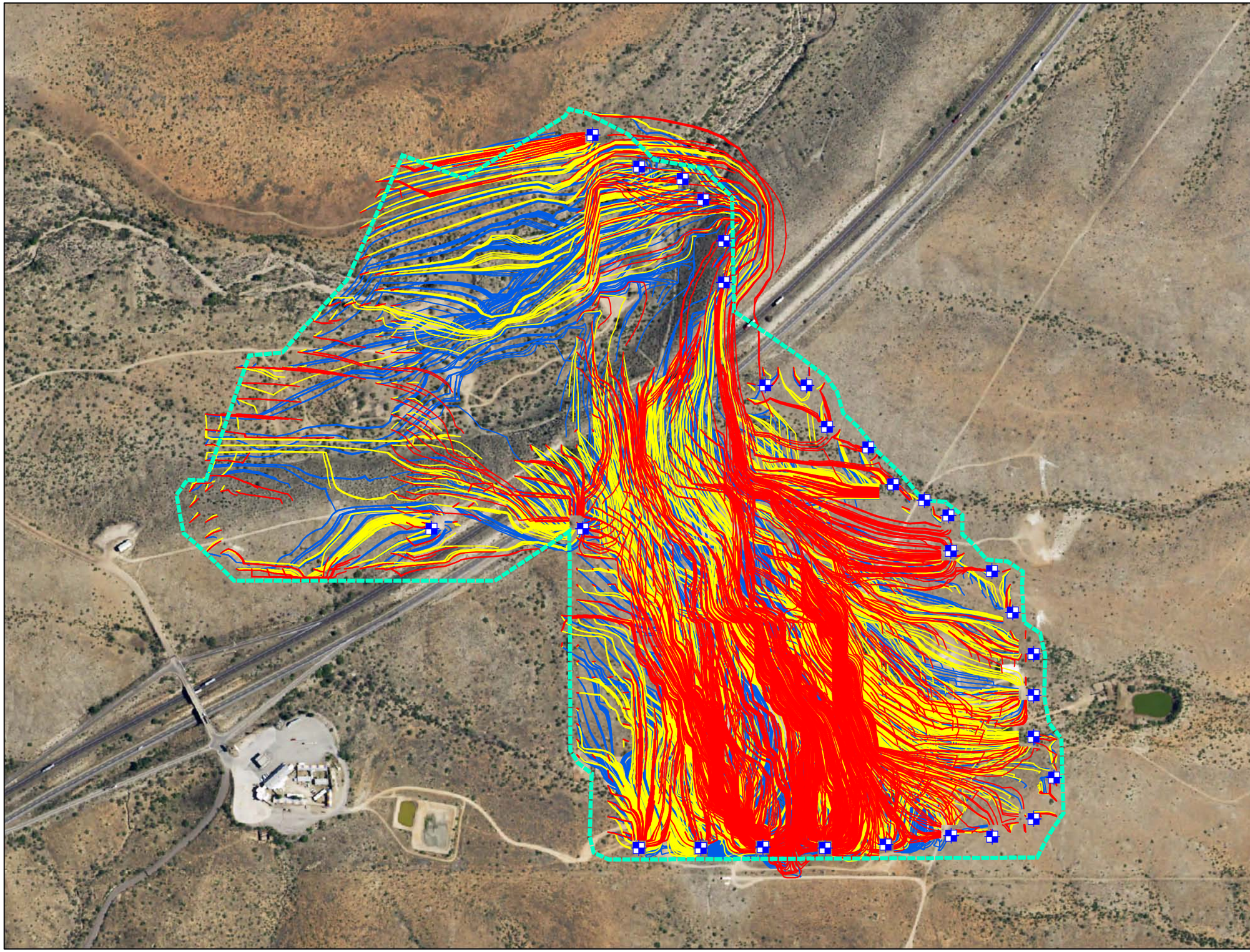
FIGURE 49
Particle Tracking: Years 1-23
Porosity and Specific Yield
Reduced by 20 Percent



Explanation

Hydraulic Control Wells

50% Porosity Simulation
Model Layer

- 3
- 4
- 5
- 6

Wellfield

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
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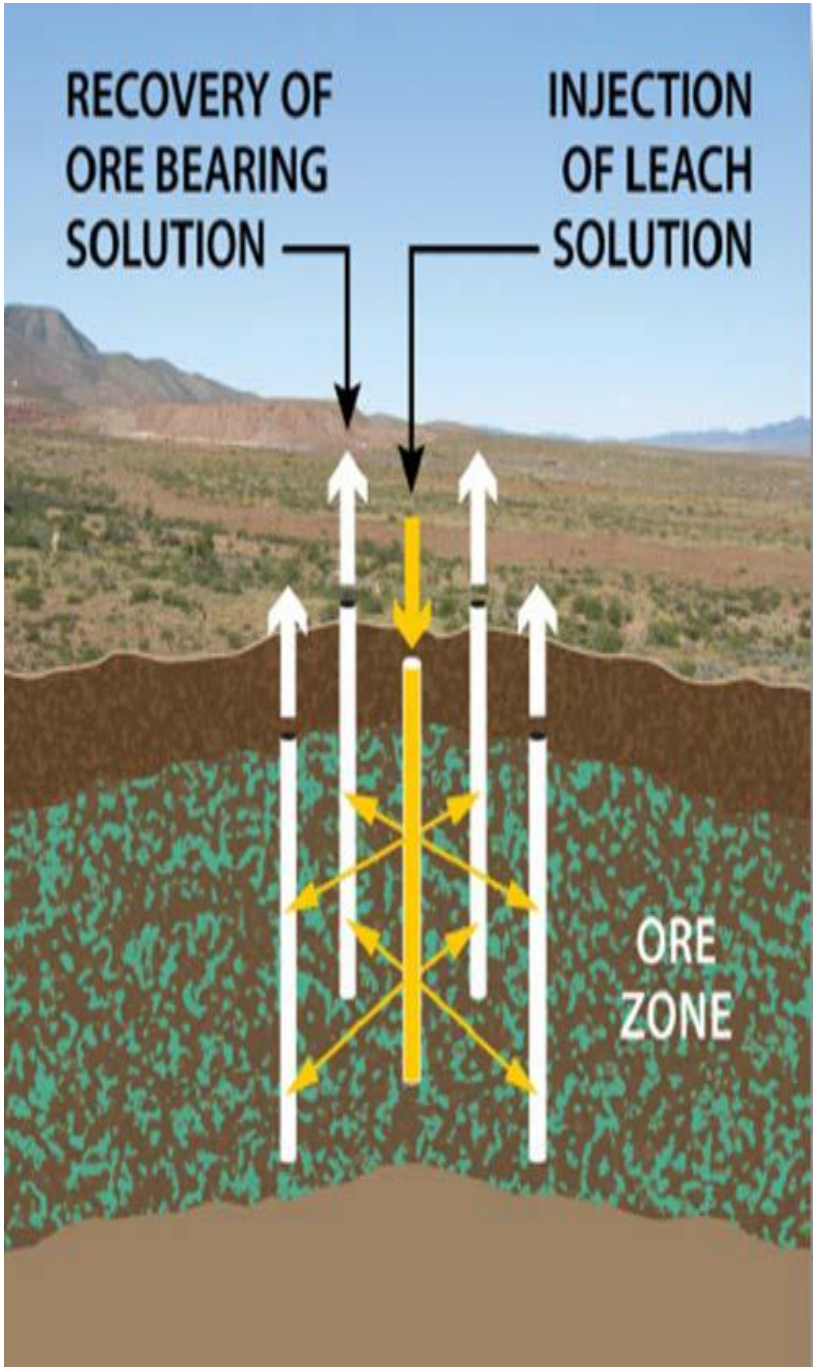
FIGURE 50
Particle Tracking: Years 1-23
Porosity and Specific Yield
Reduced by 50 Percent



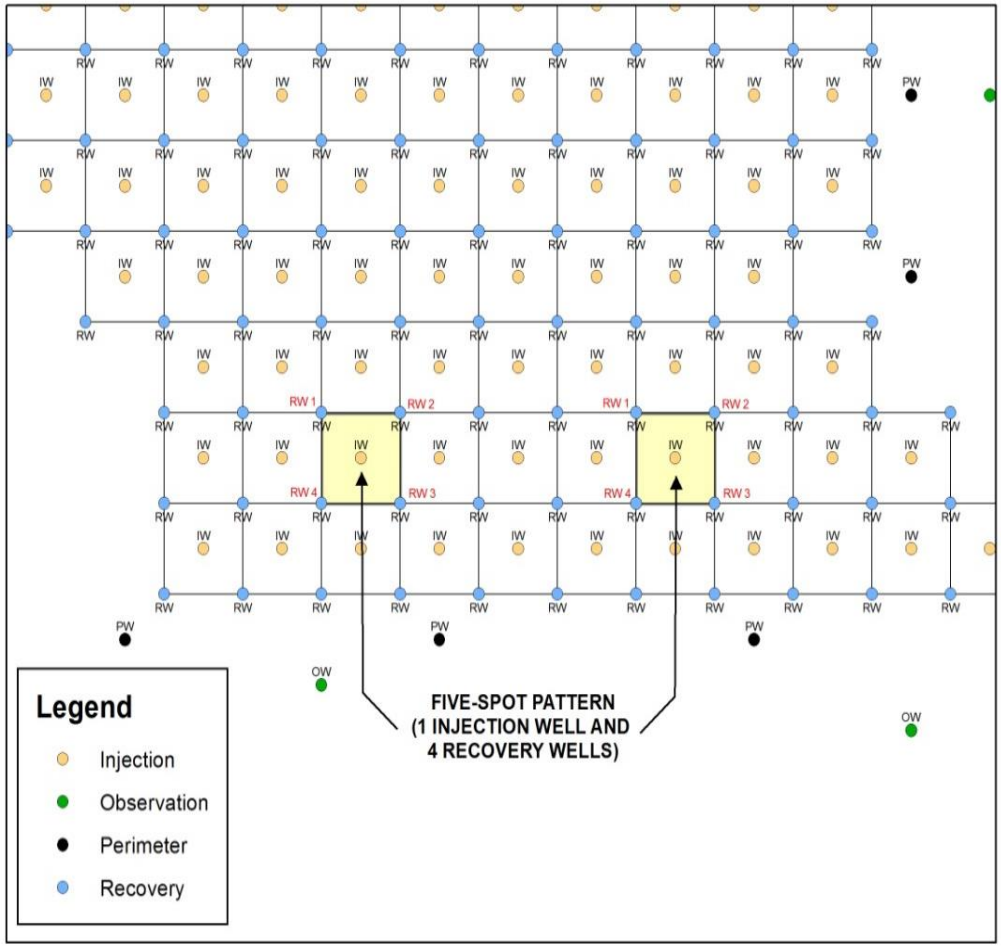


Figure taken from *NI 43-101 Technical Report Prefeasibility Study - Cochise County, Arizona, USA* (M3, 2014)

SCHEMATIC VIEW OF WELLFIELD LAYOUT	**FIGURE**
CLEAR CREEK ASSOCIATES Excelsior Mining Arizona, Inc. Groundwater Flow Model Gunnison Copper Project April 2017	**51**

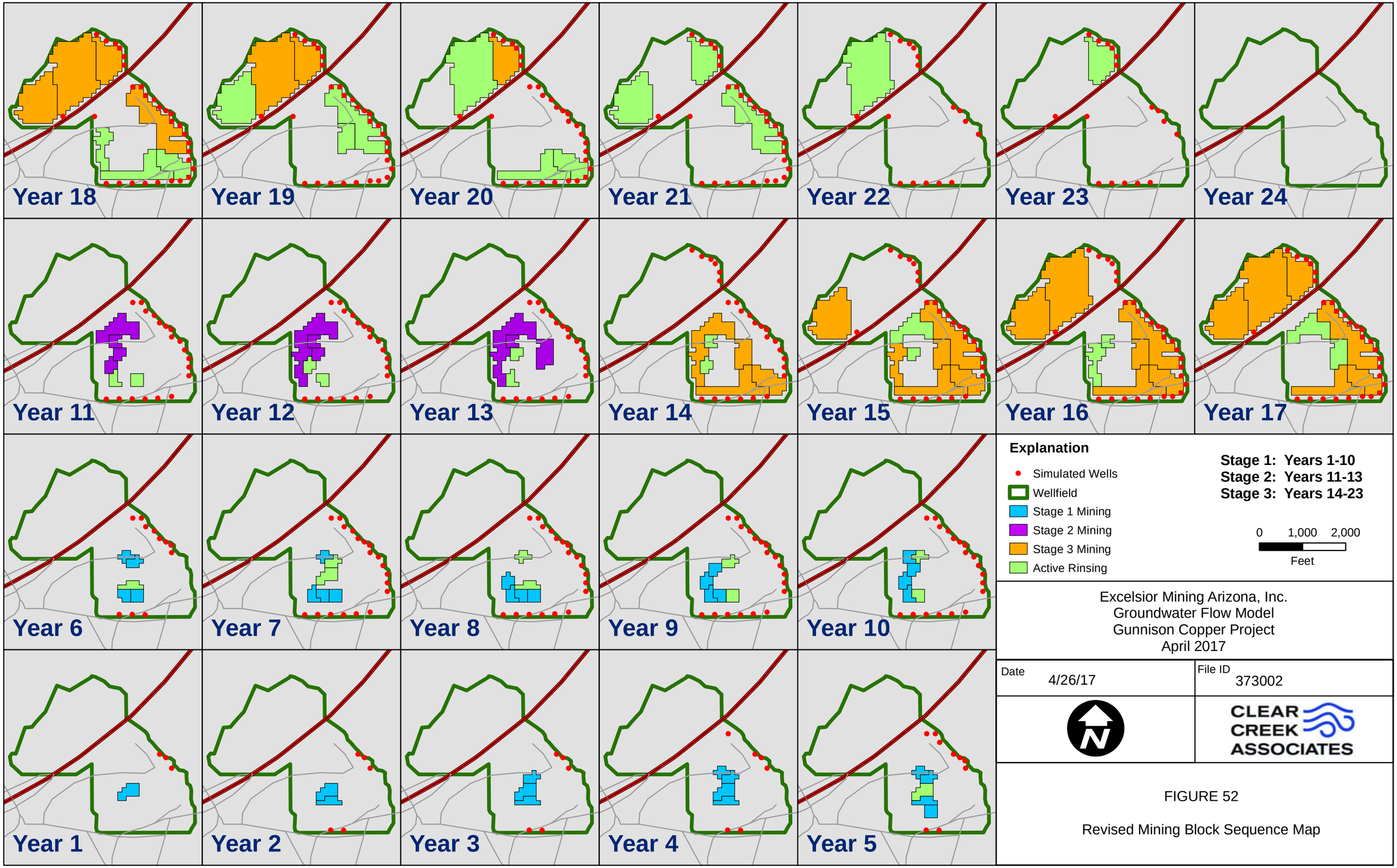
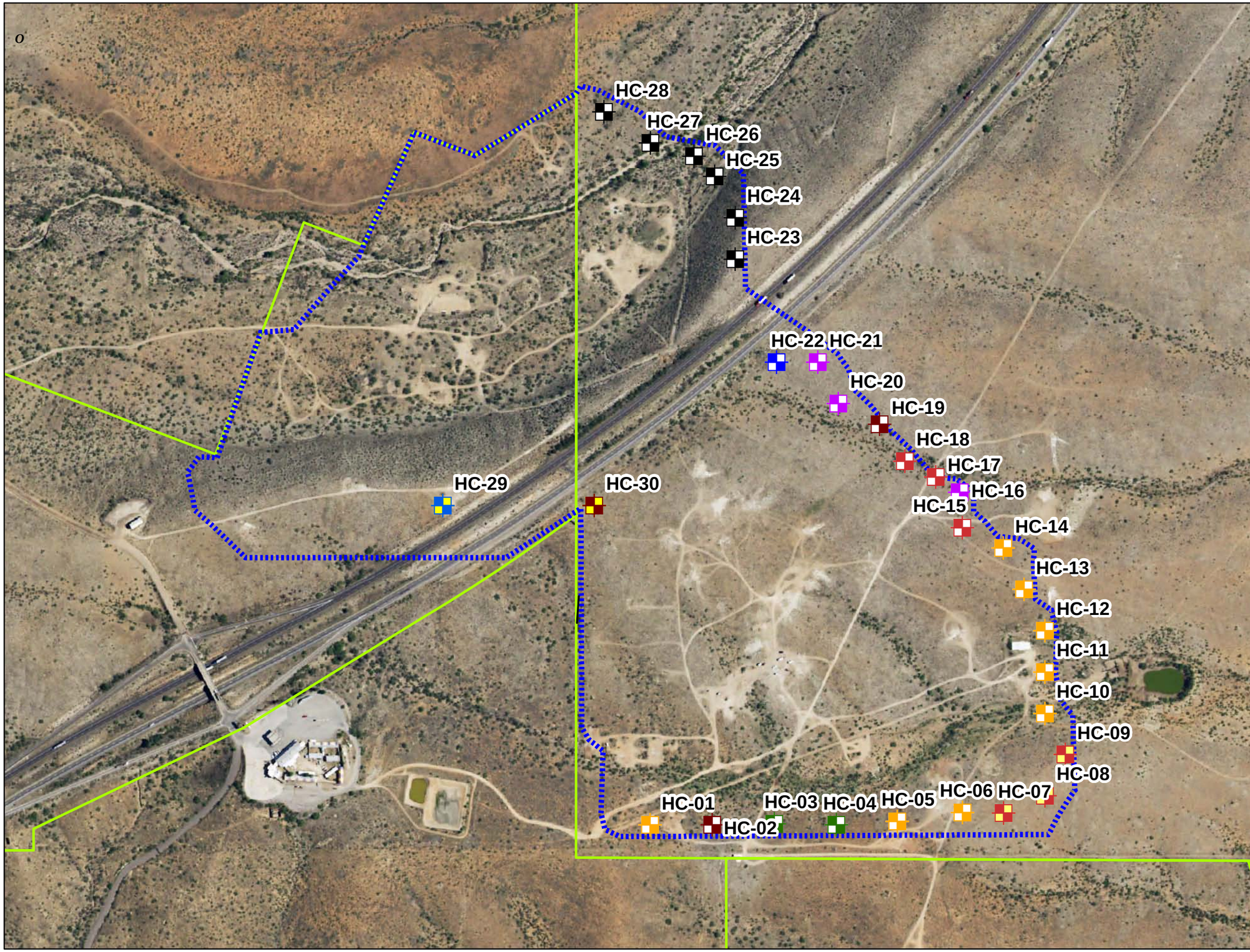


FIGURE 52

Revised Mining Block Sequence Map



Explanation

Simulated Wells

First Year

- Year 1
- Year 2
- Year 4
- Year 5
- Year 6
- Year 7
- Year 14
- Year 15
- Year 16
- Year 18
- Year 19

Wellfield

Surveyed Tenements

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

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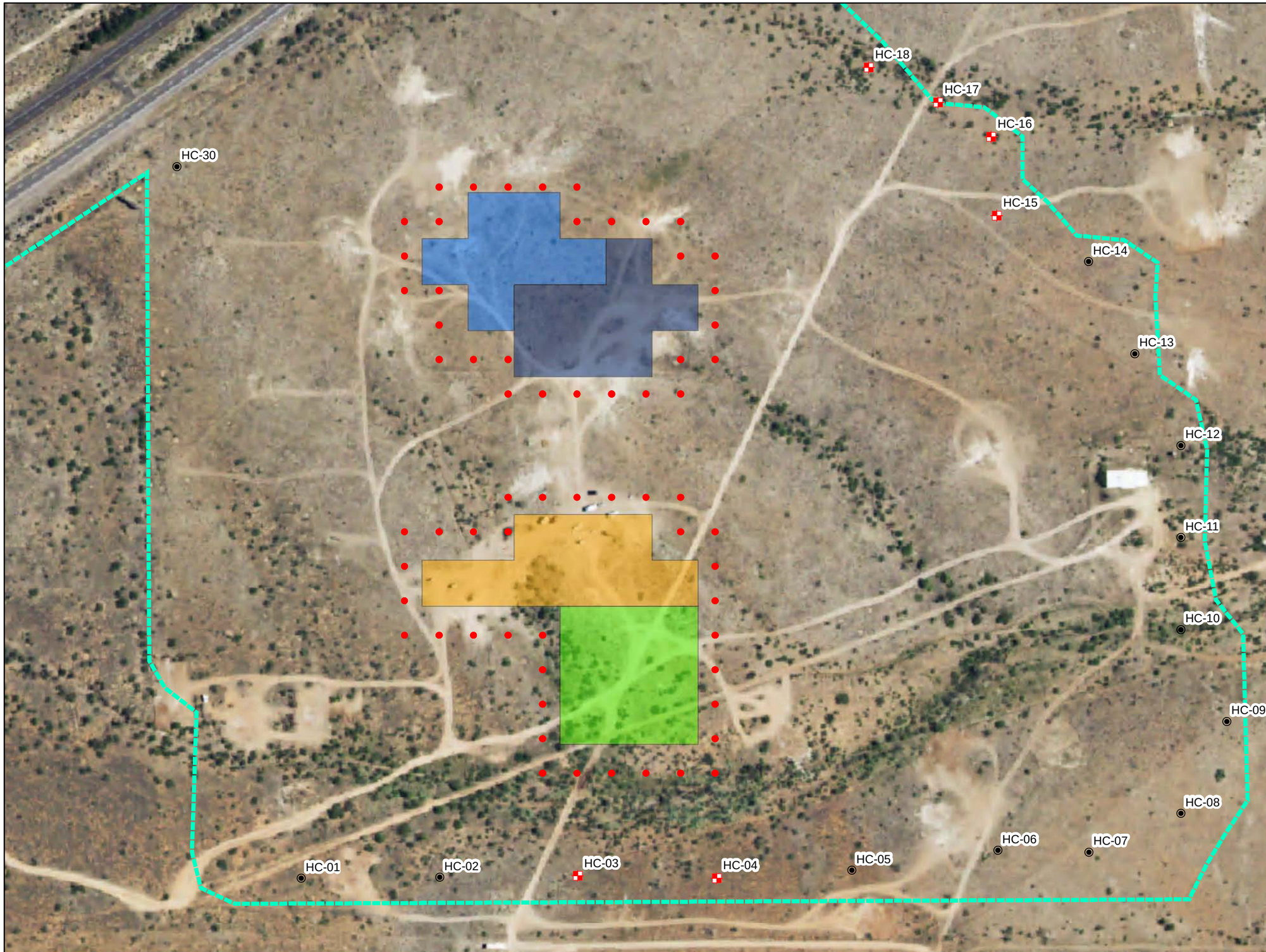
FIGURE 53
Simulated Hydraulic Containment Wells



Explanation

Hydraulic Control Wells

Pumping in Year 5

- Active this Period
- Not Active this Period
- Particle starting points after 5 Years
- Year 2
- Year 3
- Year 4
- Year 5
- Wellfield

0 100 200 400
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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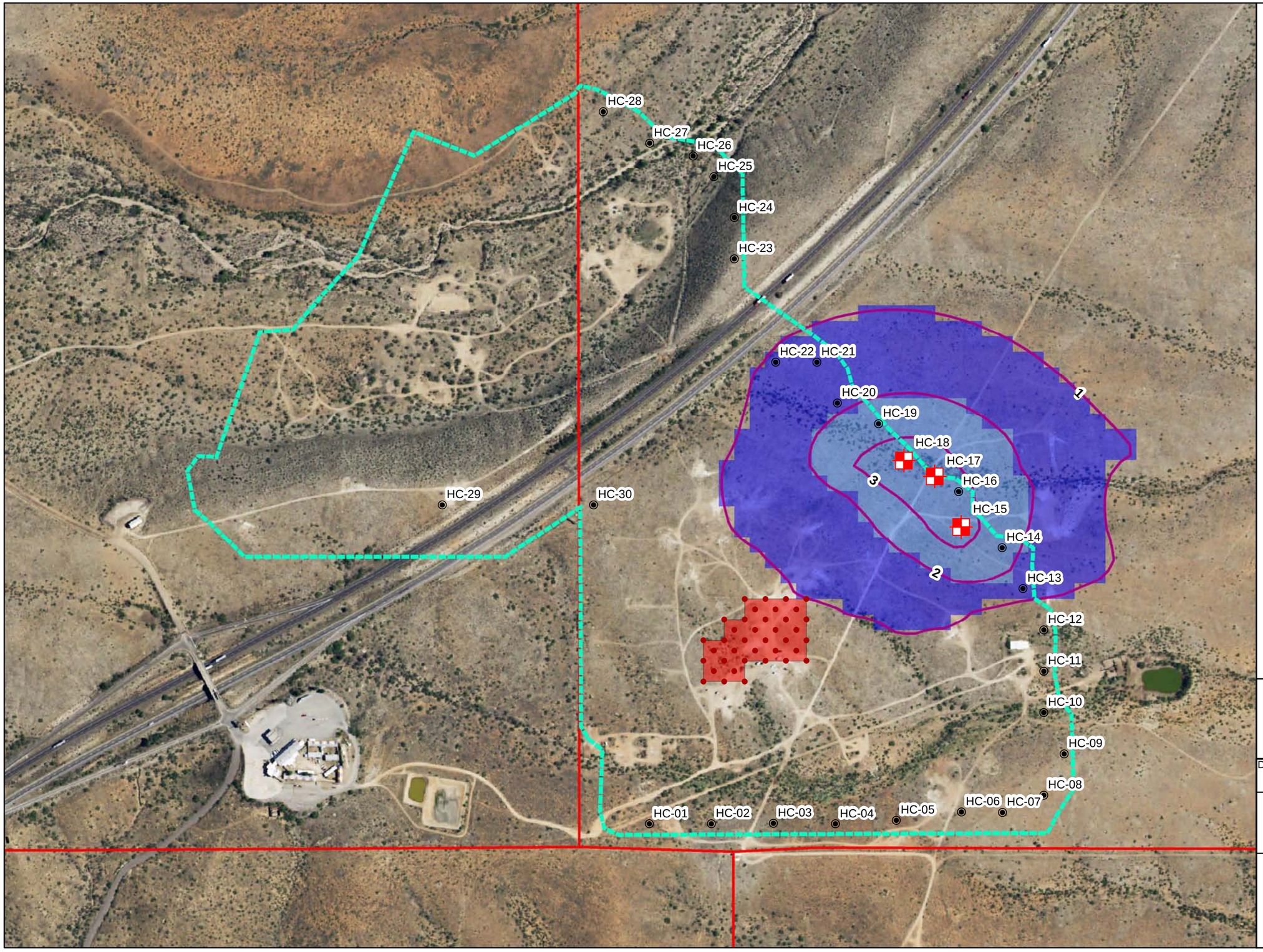
FIGURE 54
Particle Starting Location
for Mining Year 5



Explanation

Hydraulic Control Wells

- Active this Period
- Not Active this
- Stage 1 Mining Wells
- Year 1 of Mining Drawdown
- Year 1

Drawdown after 1 Year

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45
- Wellfield
- Township

0 250 500 1,000
Feet

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Gunnison Copper Project
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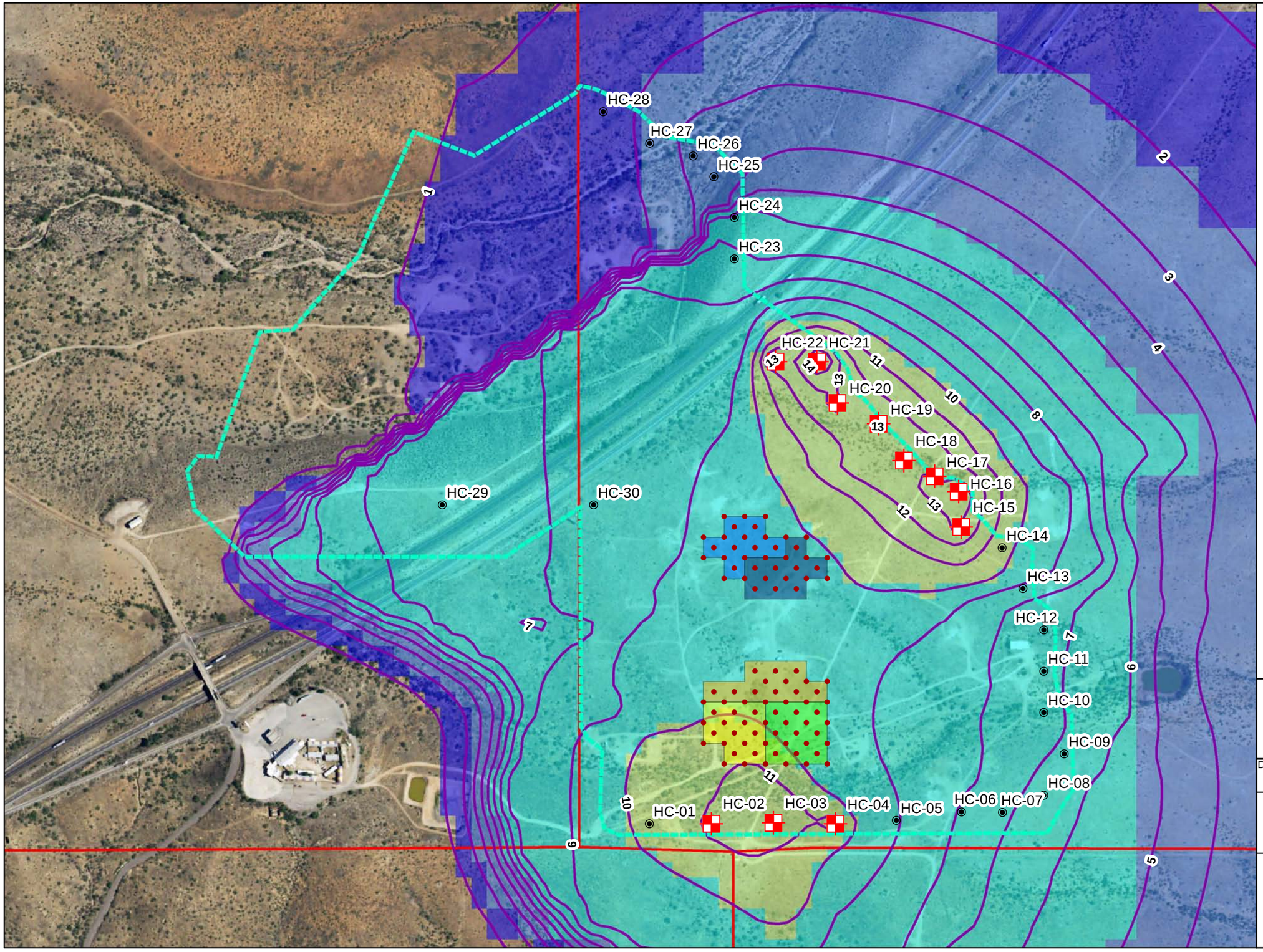
FIGURE 55
Drawdown after 1 Year
Model Layer 4



Explanation

Hydraulic Contol Wells

- Active this Period
- Not Active this Period
- Stage 1 Mining Wells
- Year 2
- Year 3
- Year 4
- Year 5
- Year 6
- Year 6 of Mining Drawdown

Drawdown for Layer 4

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45
- Wellfield
- Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
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Gunnison Copper Project
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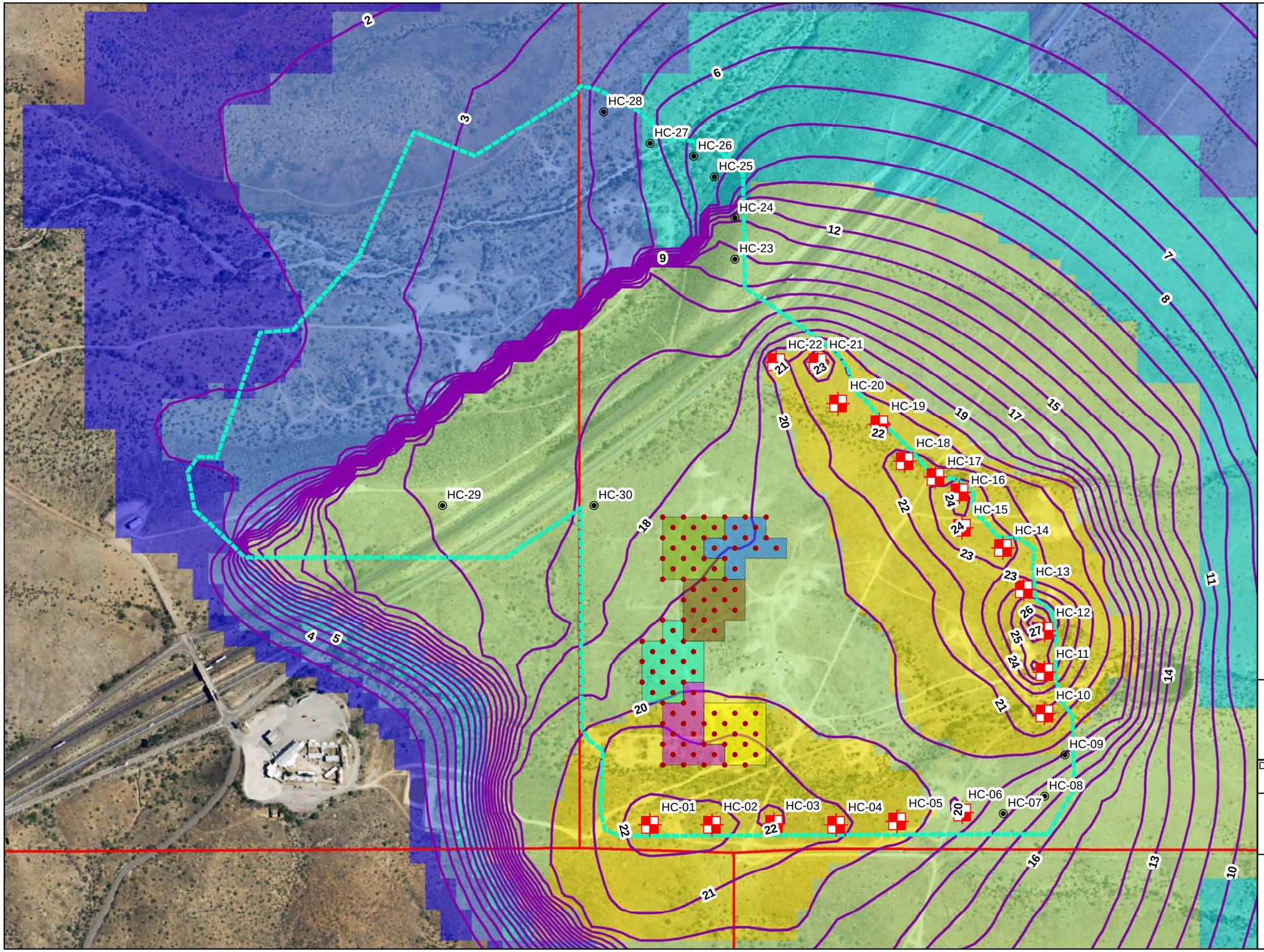
FIGURE 56
Drawdown after 6 Years
Model Layer 4



Explanation

Hydraulic Control Wells

- Active this Period
- Not Active this
- Stage 1 Mining Wells
- Year 4
- Year 6
- Year 7
- Year 8
- Year 9
- Year 10
- Year 10 of Mining Drawdown

Drawdown for Layer 4

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45
- Wellfield
- Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
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Gunnison Copper Project
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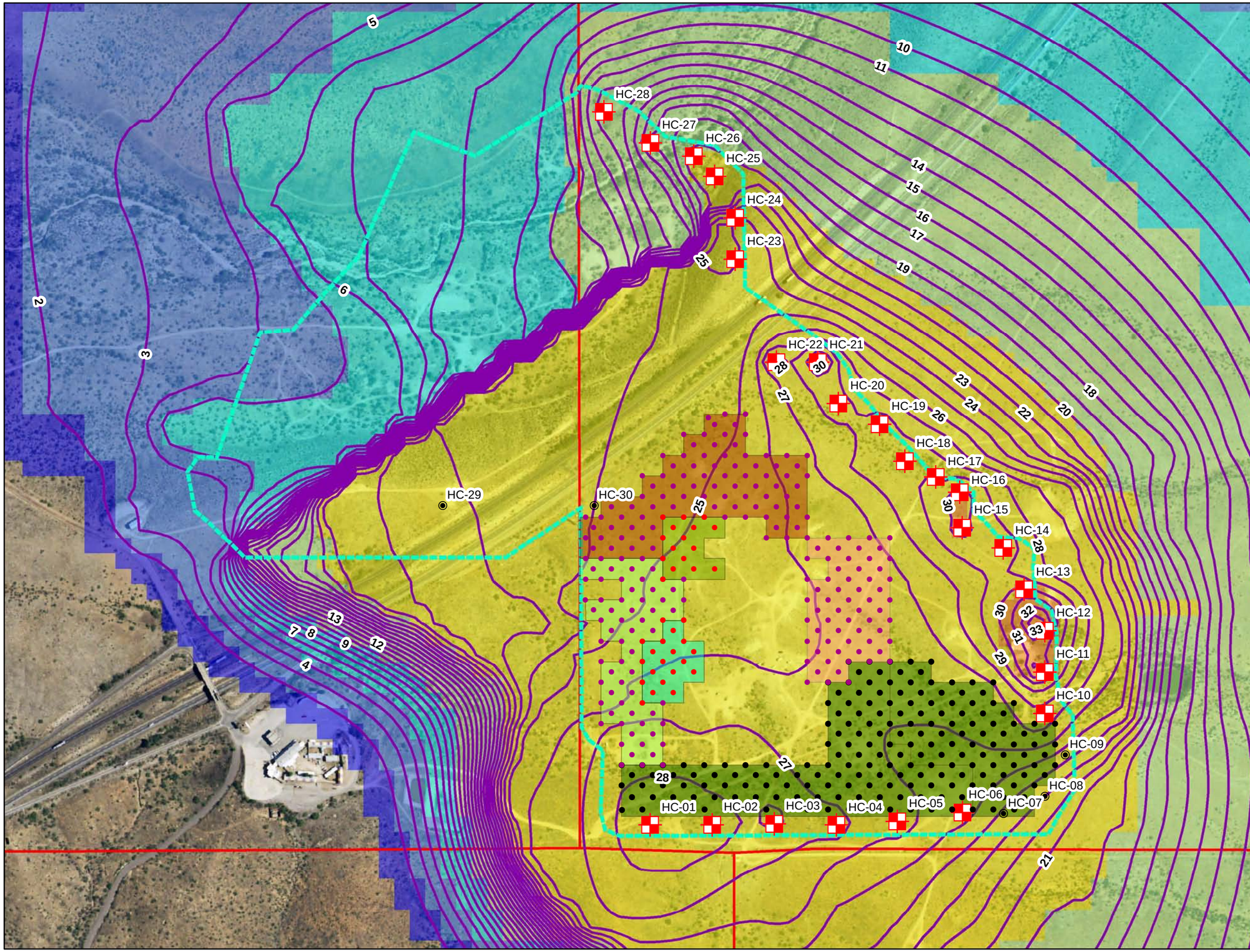
FIGURE 57
Drawdown after 10 Years
Model Layer 4



Explanation

- Stage 1 Mining Wells
- Stage 2 Mining Wells
- Stage 3 Mining Wells

Hydraulic Control Wells

- Active this Period
- Not Active this

- Year 8
- Year 10
- Year 11
- Year 12
- Year 13
- Year 14
- Year 14 of Mining Drawdown

Drawdown for Layer 4

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45

- Wellfield
- Township

0 250 500 1,000
Feet

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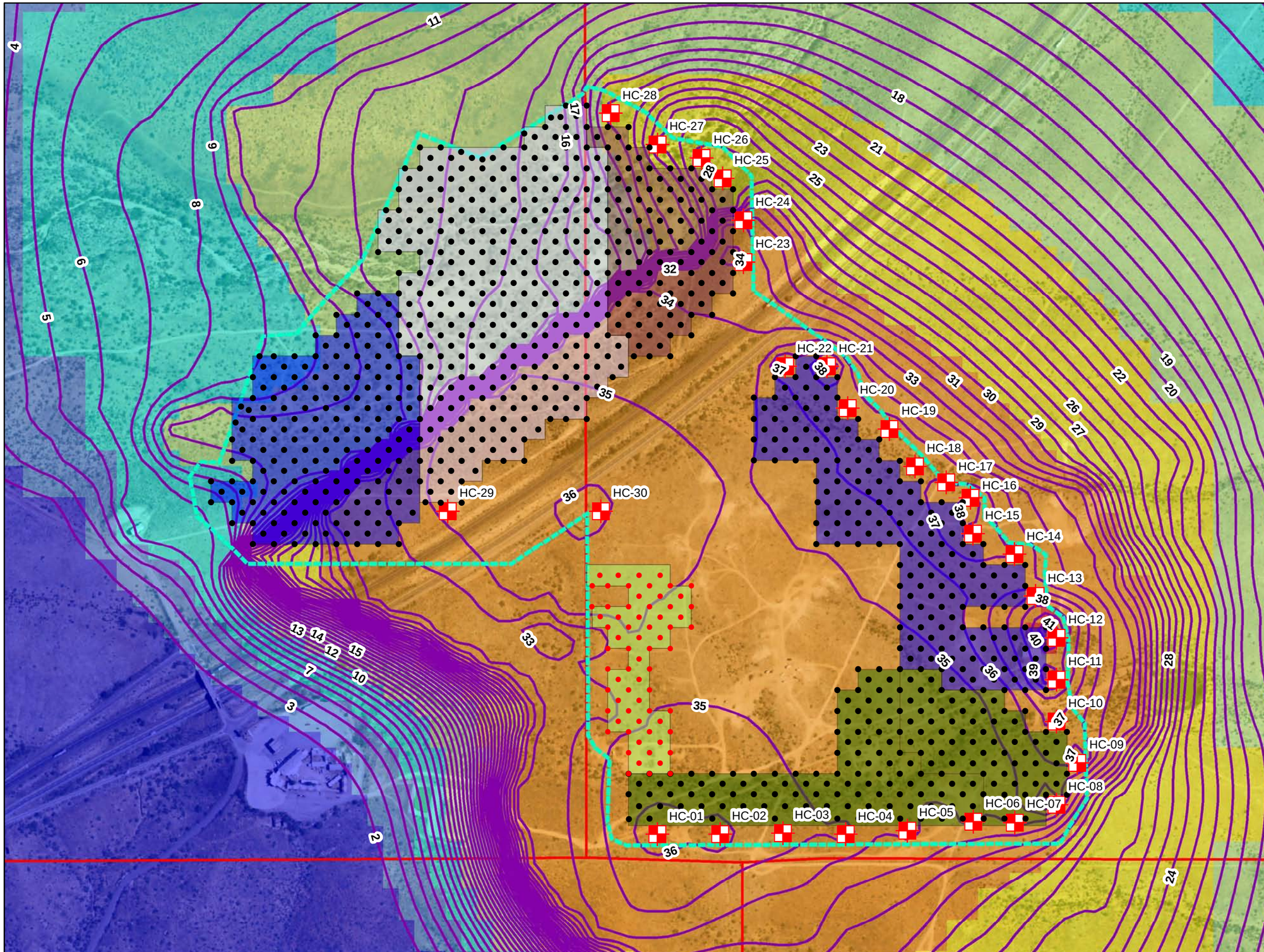
FIGURE 58
Drawdown after 14 Years
Model Layer 4



Explanation

Stage 2 Mining Wells

Stage 3 Mining Wells

Hydraulic Control Wells

Active this Period

Not Active this Period

Year 12

Year 14

Year 15

Year 16

Year 17

Year 18 of Mining Drawdown

Drawdown for Layer 4

0 - 2

3 - 5

6 - 10

11 - 20

21 - 30

31 - 40

41 - 45

Wellfield

Township

0 250 500 1,000

Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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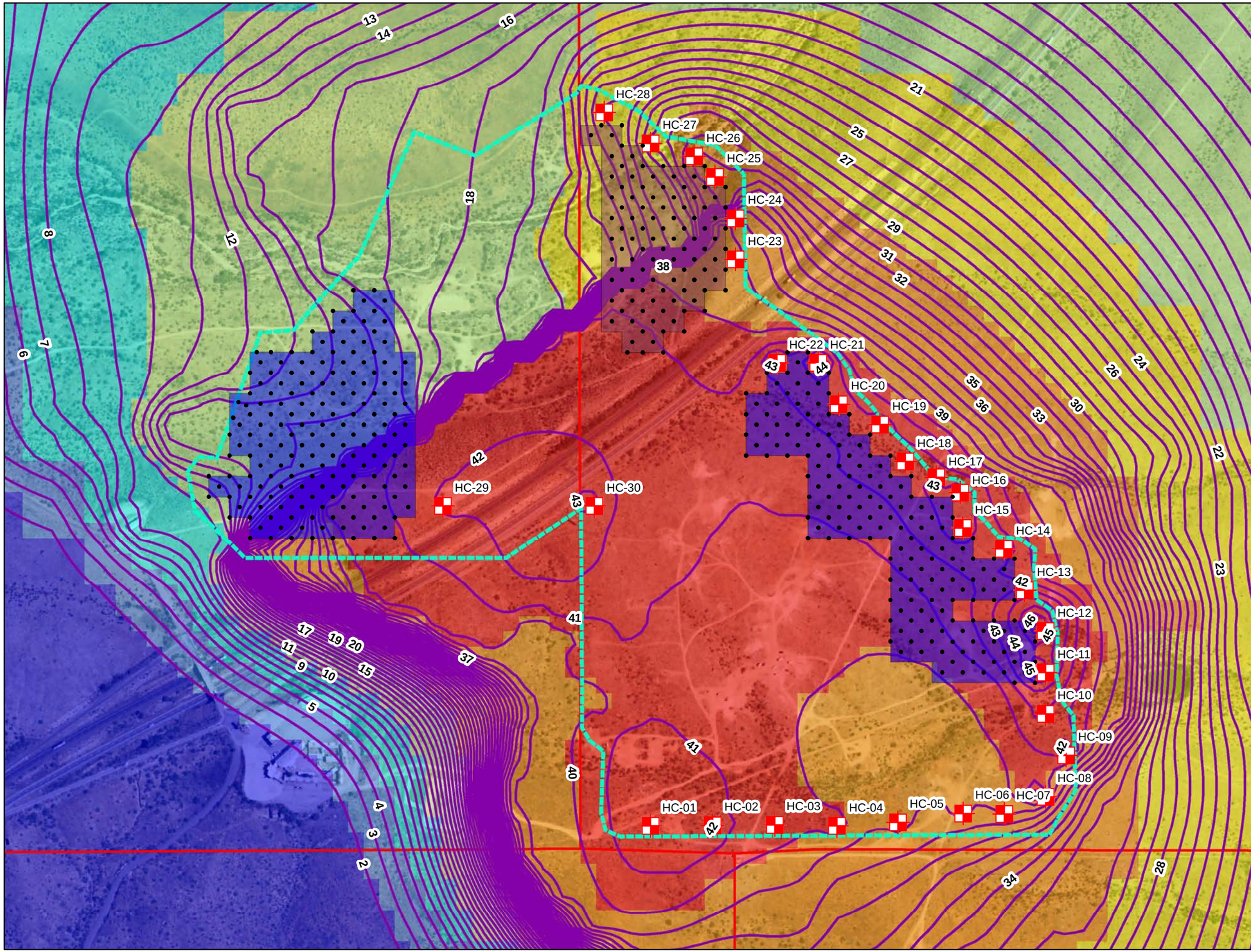
FIGURE 59
Drawdown after 18 Years
Model Layer 4



Explanation

- Stage 3 Mining Wells

Hydraulic Control Wells

- Active this Period
- Not Active this Period

- Year 15
- Year 17
- Year 21 of Mining Drawdown

Drawdown for Layer 4

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50

Wellfield

- Wellfield
- Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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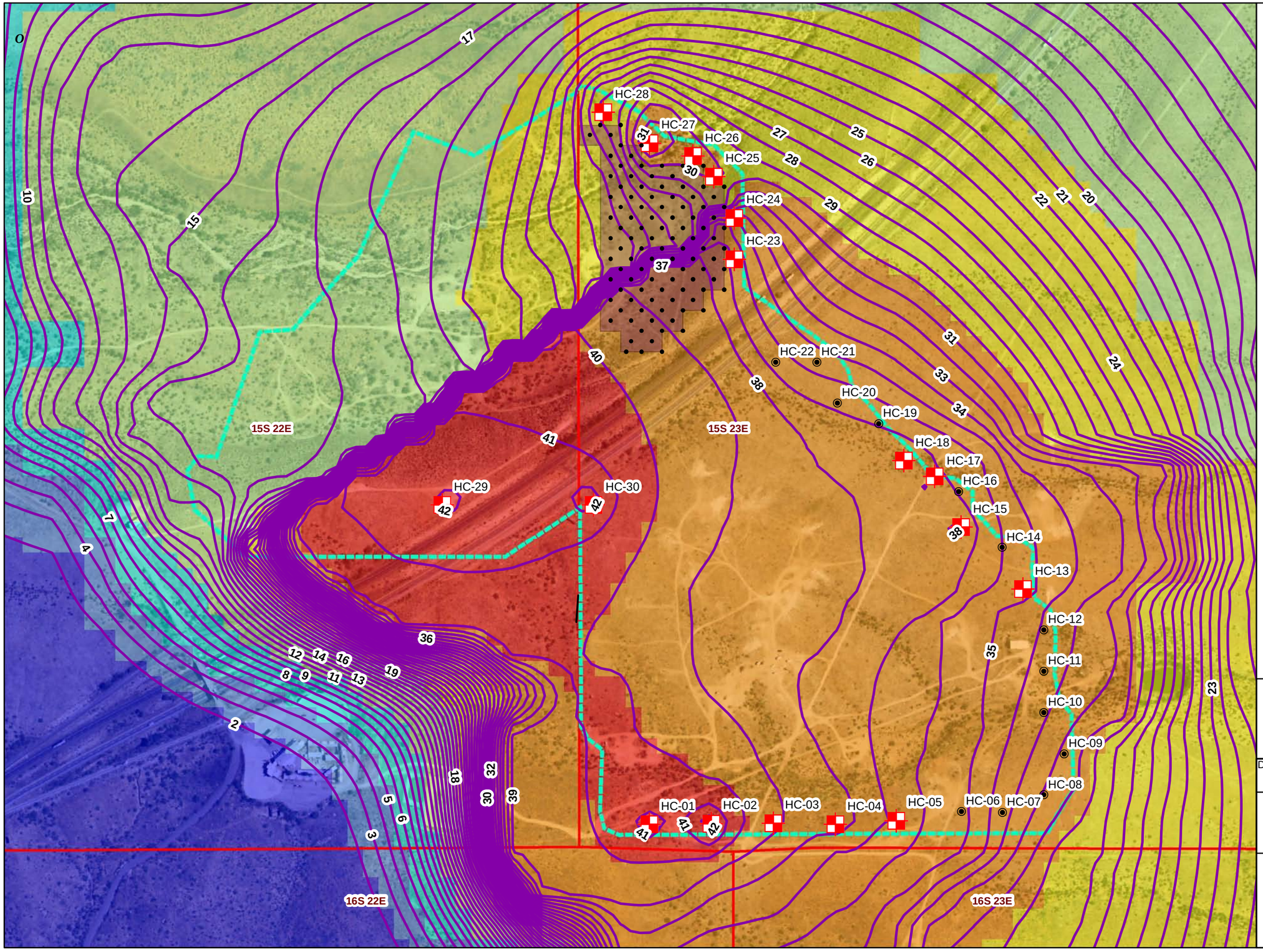
FIGURE 60
Drawdown after 21 Years
Model Layer 4



Explanation

- Stage 3 Mining Wells

Hydraulic Control Wells

- Active this Period
- Not Active this Period

- Year 23 of Mining Drawdown

Drawdown for Layer 3

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45

- Year 17
- Wellfield
- Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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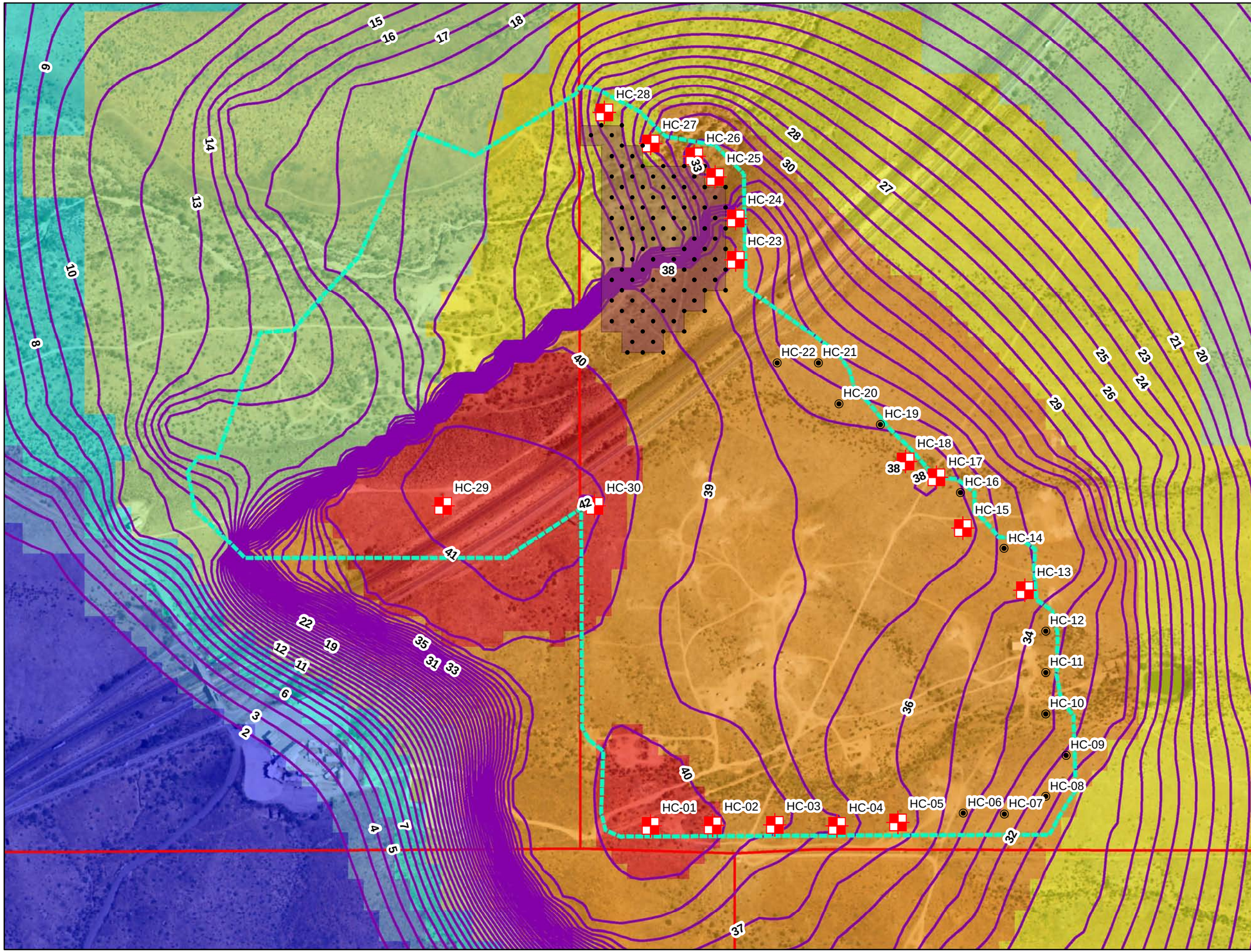
FIGURE 61
Drawdown after 23 Years
Model Layer 3



Explanation

- Stage 3 Mining Wells

Hydraulic Control Wells

- Active this Period
- Not Active this Period
- Year 17
- Year 23 of Mining Drawdown

Drawdown for Layer 4

- 0 - 2
- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 45
- Wellfield
- Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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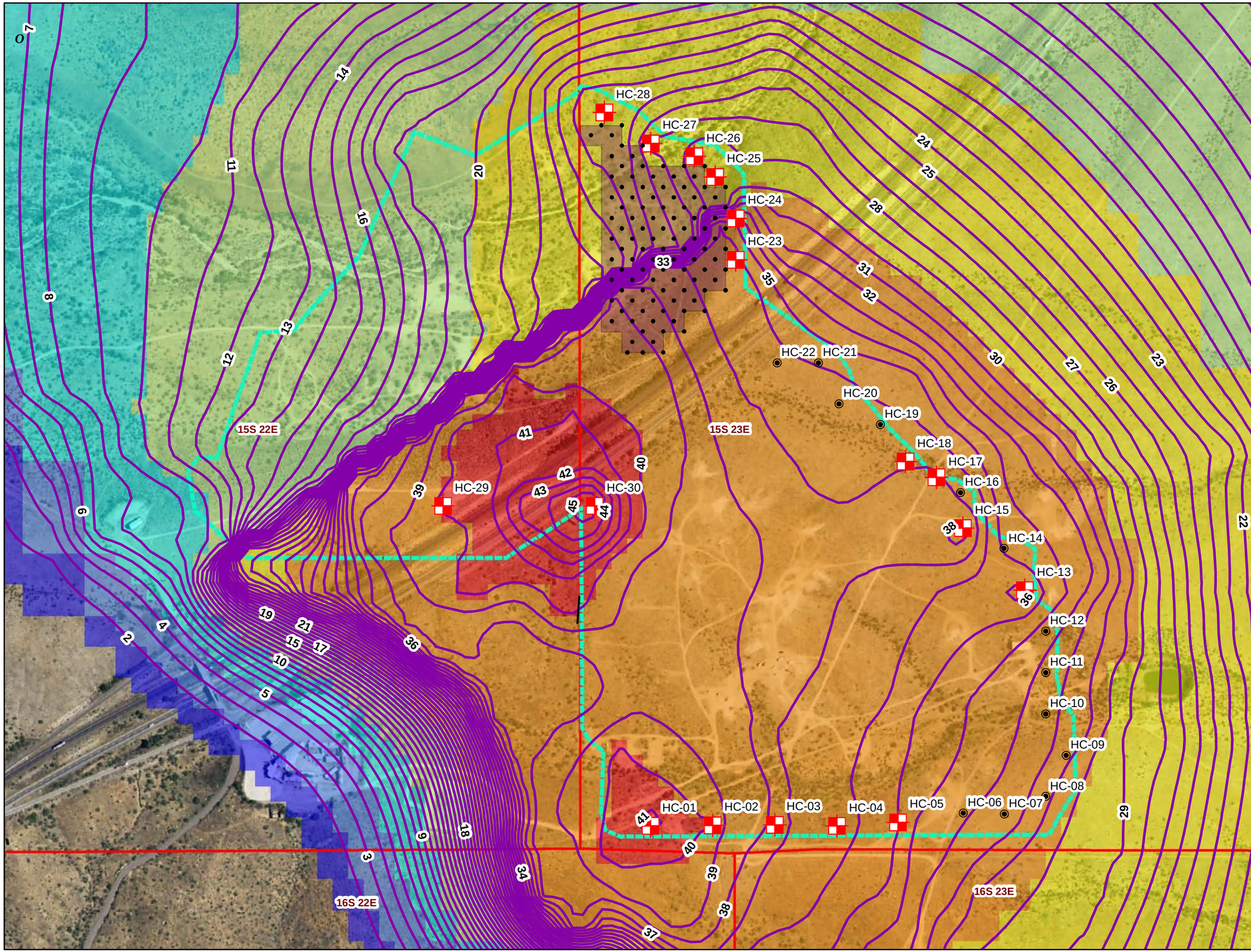
FIGURE 62
Drawdown after 23 Years
Model Layer 4



Explanation

Stage 3 Mining Wells

Hydraulic Control Wells

Well Active this Period

Well Not Active this Period

Year 23 of Mining Drawdown

Drawdown for Layer 5

0 - 2

3 - 5

6 - 10

11 - 20

21 - 30

31 - 40

41 - 50

Year 23 of Mining Drawdown

Wellfield

Township

0 250 500 1,000

Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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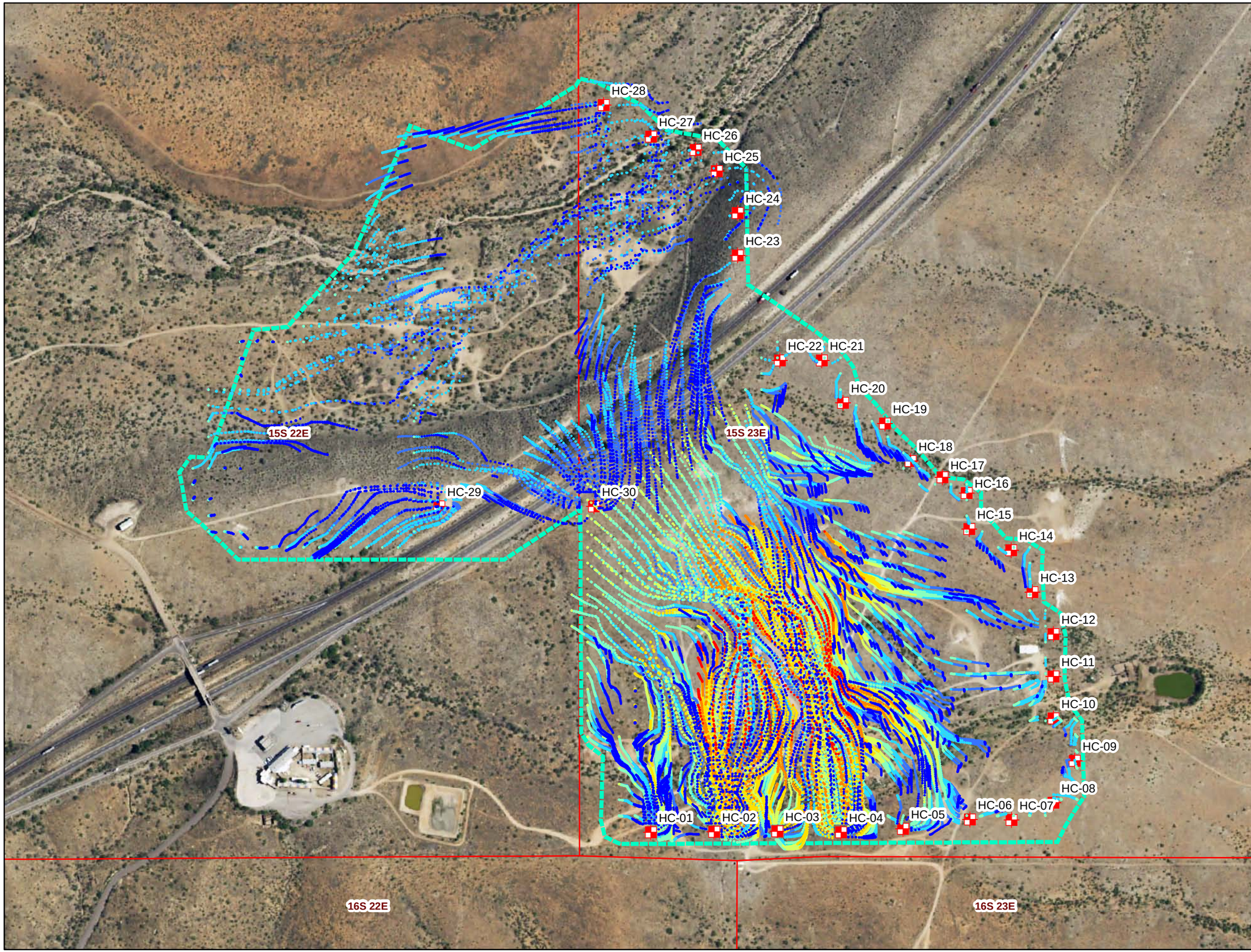
FIGURE 63
Drawdown after 23 Years
Model Layer 5



Explanation

Particle Tracks for Layer 3

Mining Year

- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15
- 16 - 18
- 19 - 21
- 22 - 23

Hydraulic Control Wells

Wellfield

Township

0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
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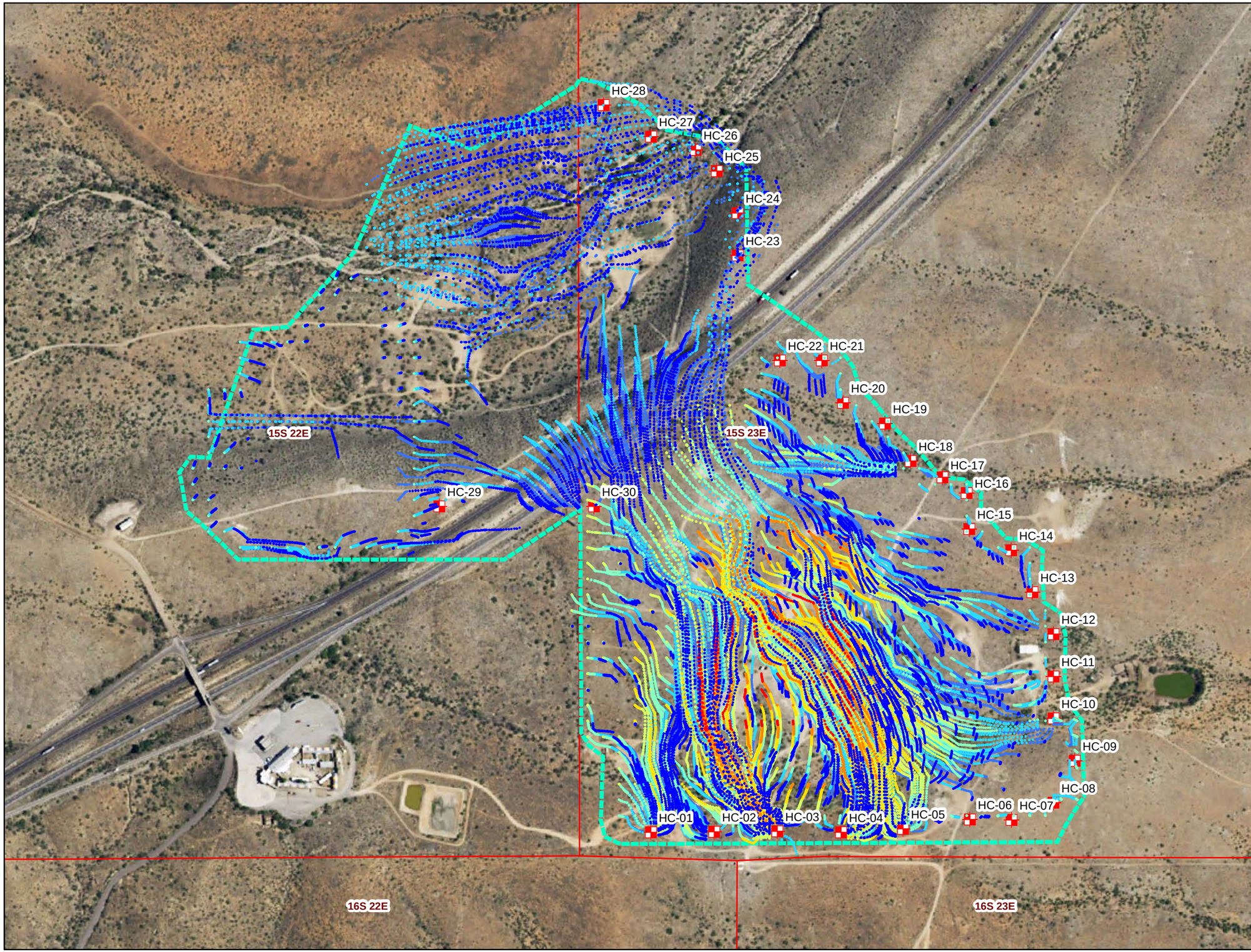
FIGURE 64
Updated Particle Tracks for Layer 3



Explanation

Particle Tracks for Layer 4

Mining Year

- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15
- 16 - 18
- 19 - 21
- 22 - 23

Hydraulic Control Wells

Wellfield

Township

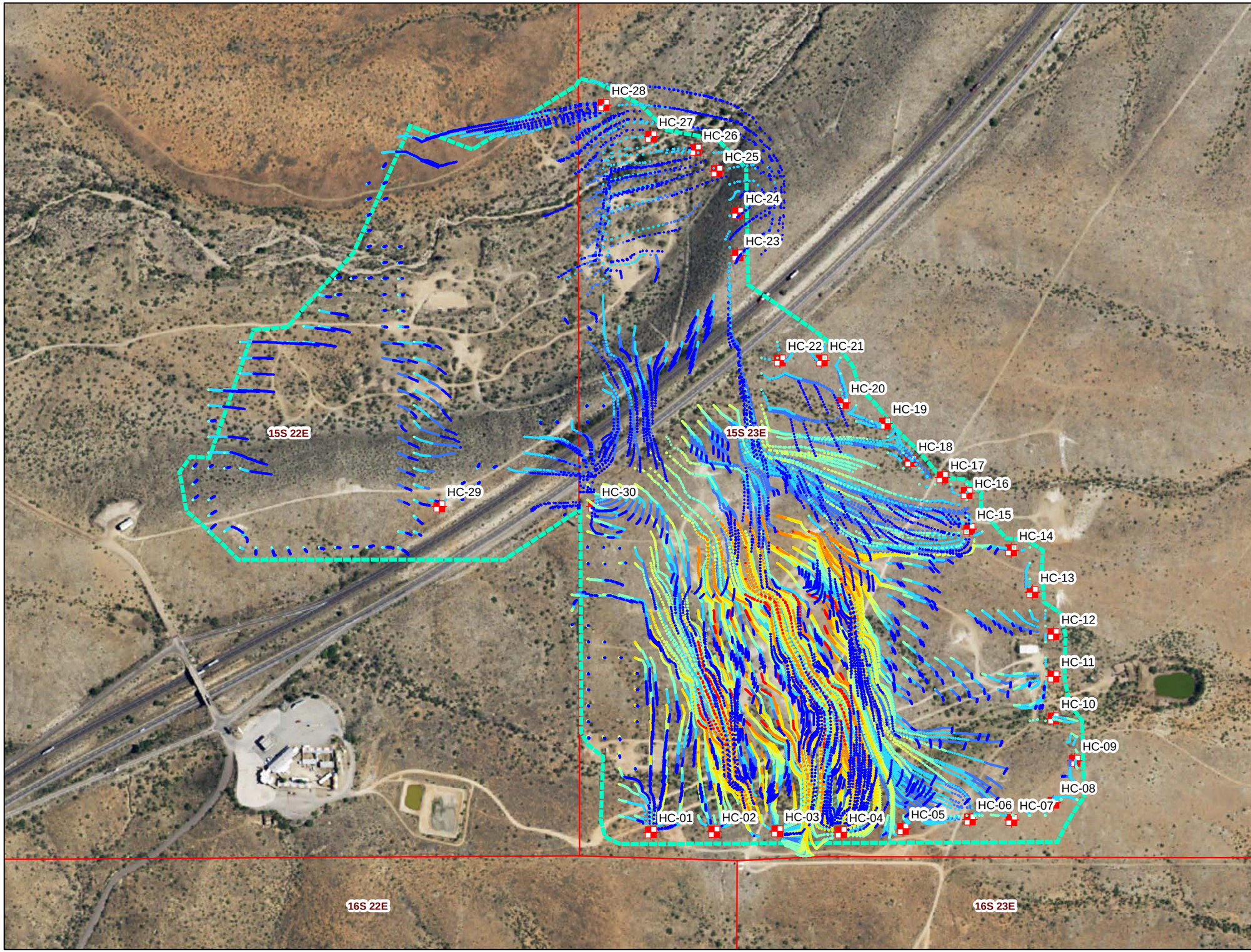
0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/27/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 65
Updated Particle Tracks for Layer 4



Explanation

Particle Tracks for Layer 5

Mining Year

- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15
- 16 - 18
- 19 - 21
- 22 - 23

Hydraulic Control Wells

Wellfield

Township

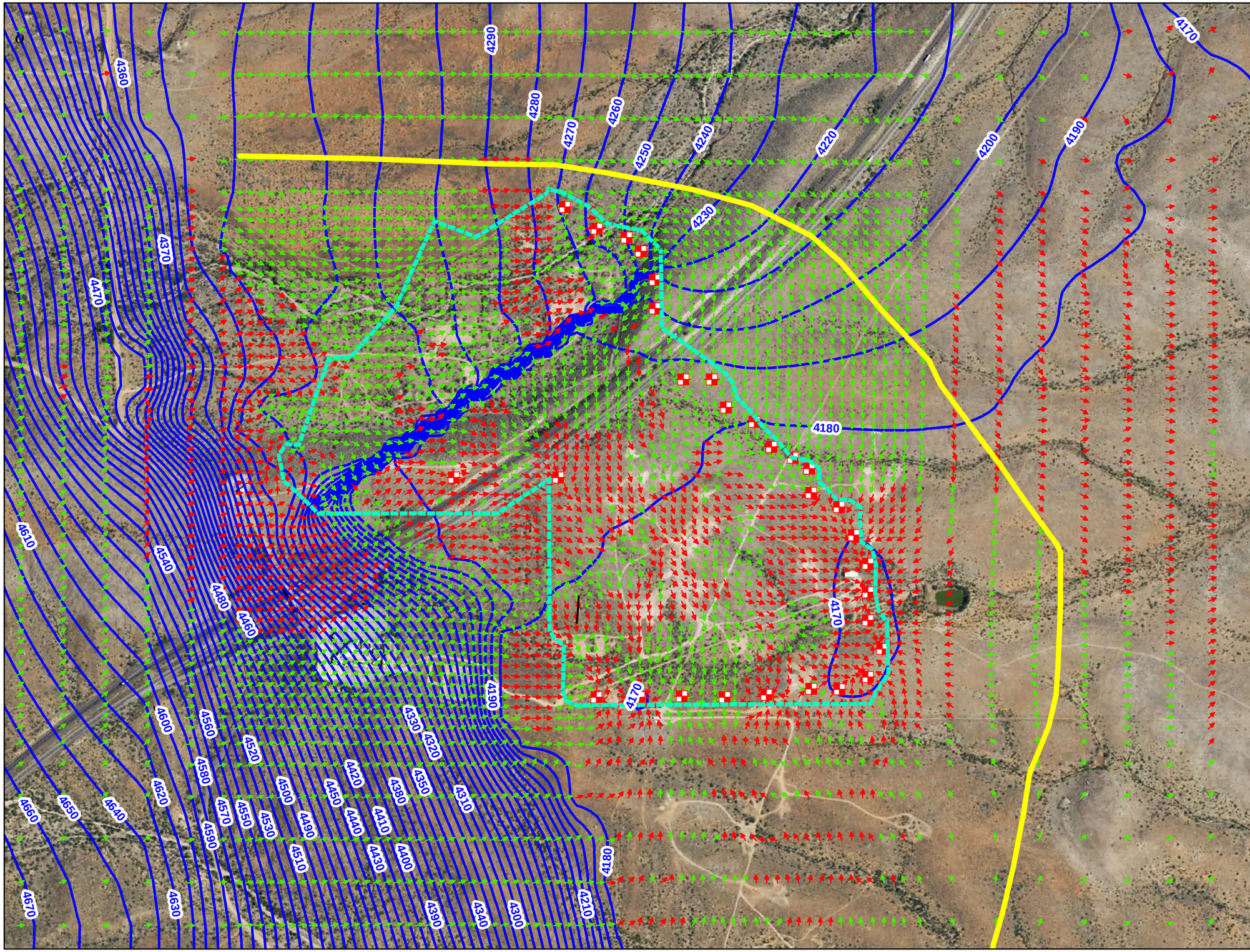
0 250 500 1,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/27/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 66
Updated Particle Tracks
for Layer 5



Explanation

Hydraulic Control Wells

Estimated Hydraulic Capture Zone

Year 21 Veocity Vectors for Layer 3

Down

Up

Water Level Contours

Wellfield

0 250 500 1,000 1,500

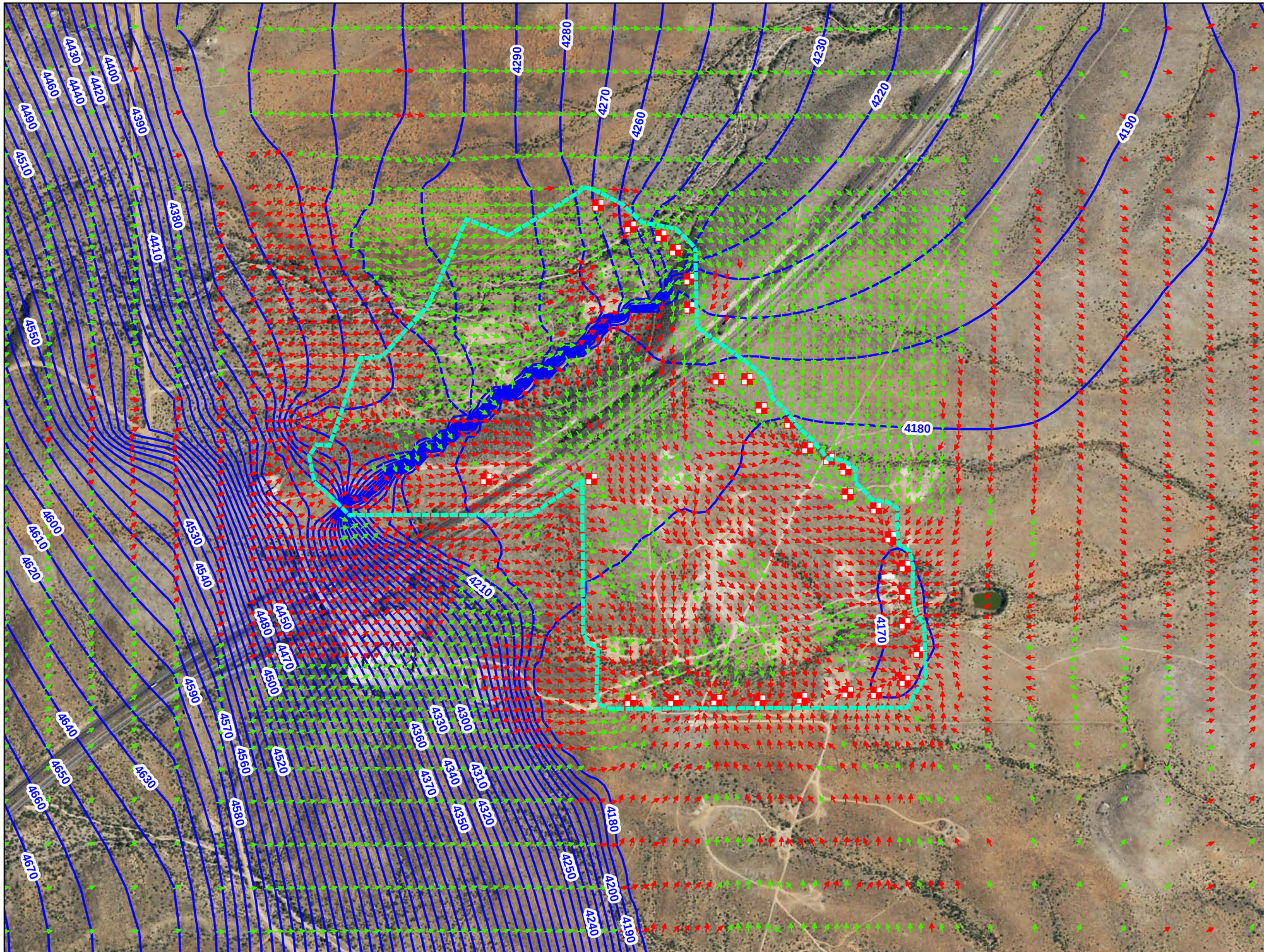
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/27/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 67
Mining Year 21 Head and Velocity Vectors for Layer 3



Explanation

Hydraulic Control Wells

Year 21 Veocity Vectors for Layer 4

Down

Up

Water Level Contours

Wellfield

0 250 500 1,000 1,500

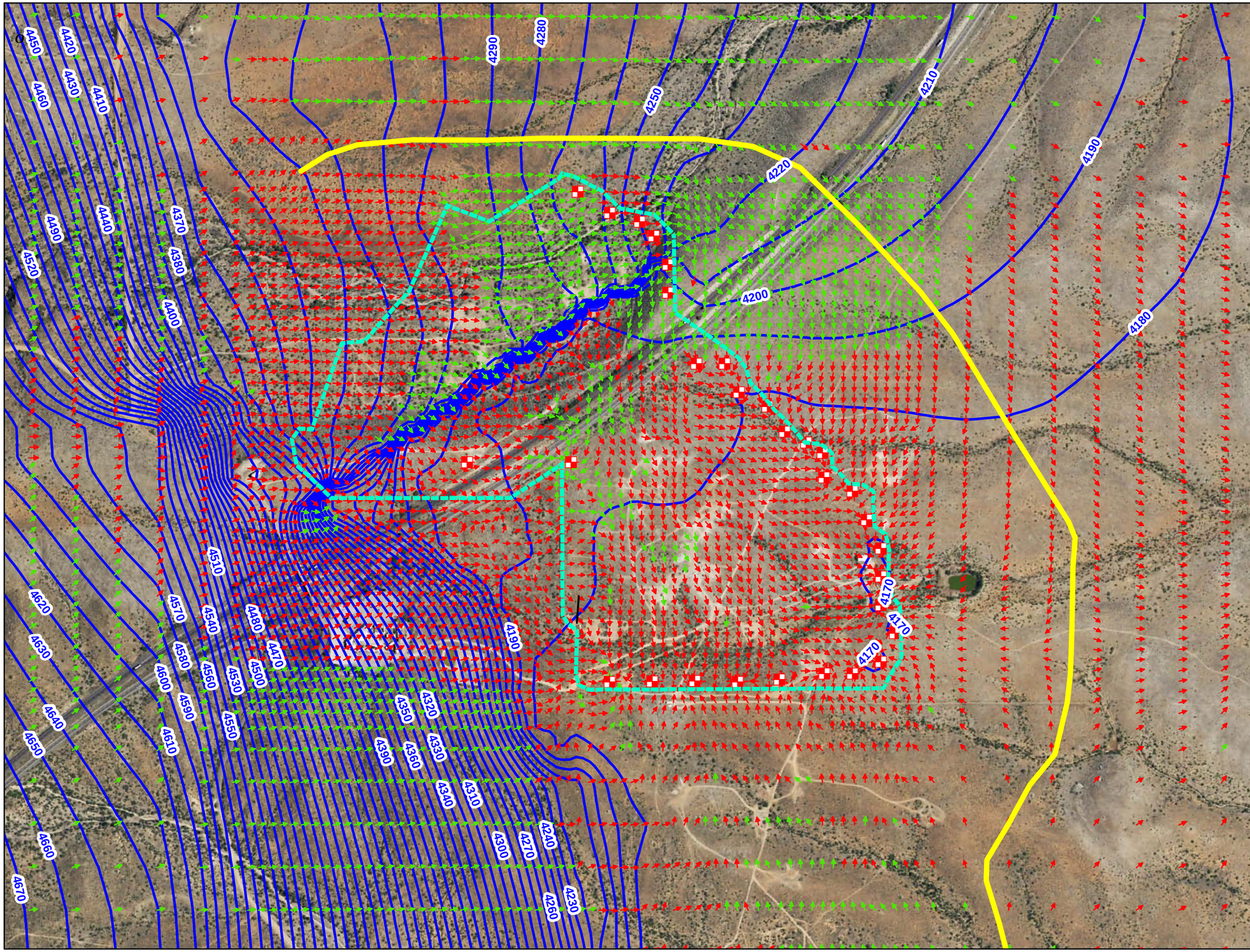
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/30/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 68
Mining Year 21 Head and Velocity Vectors for Layer 4



Explanation

Estimated Hydraulic Capture Zone

Hydraulic Control Wells

Year 21 Veocity Vectors for Layer 5

Down

Up

Water Level Contours

Wellfield

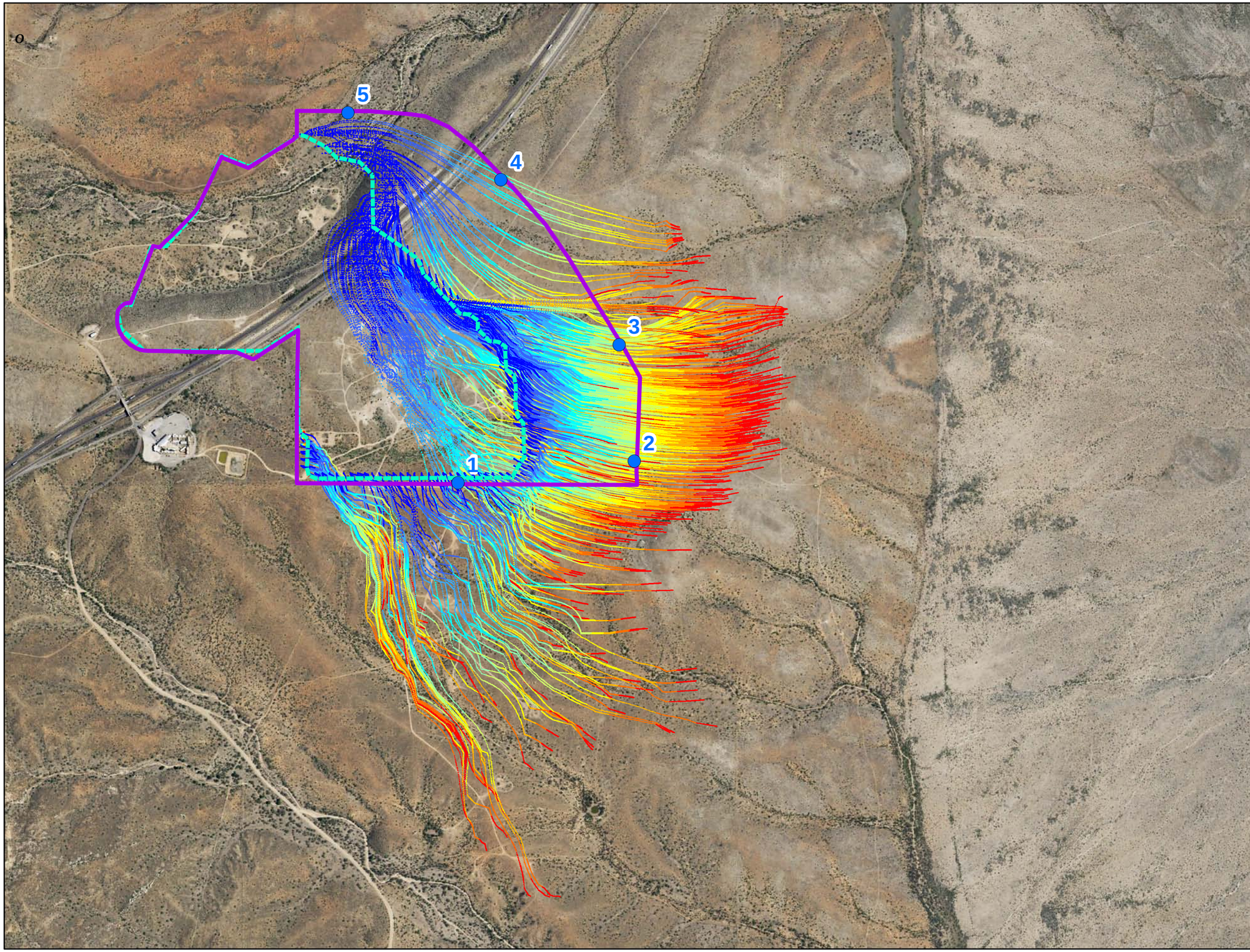
0 250 500 1,000 1,500
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/30/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 69
Mining Year 21 Head and Velocity Vectors for Layer 5



Explanation

YEARS

- 0 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- 91 - 100

POCs

AOR Boundary

Wellfield

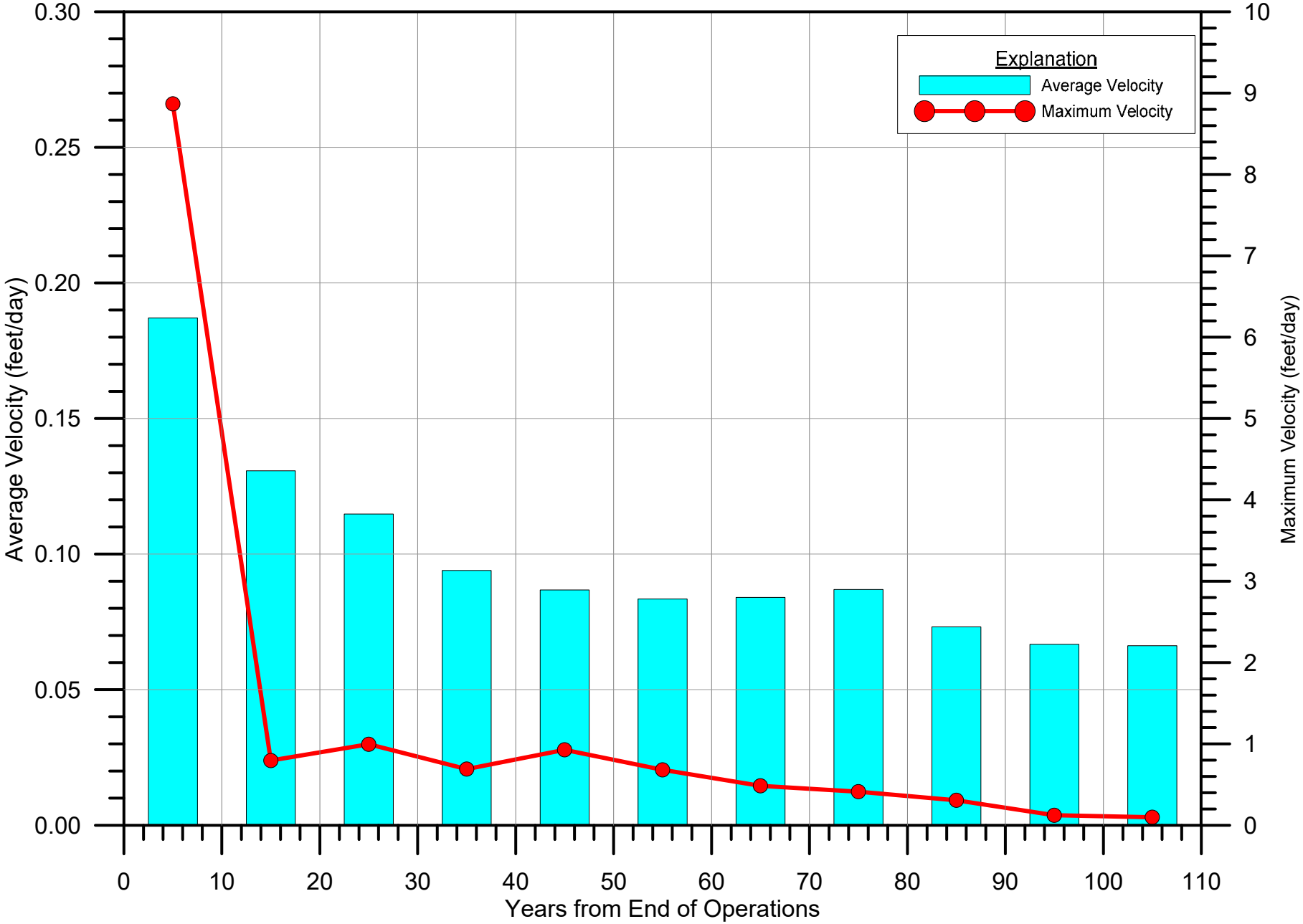
0 250 500 1,000 1,500 2,000
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
May 2017

Date	File ID
5/23/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 70
Particle Tracking for 100 Year Simulation after Mining

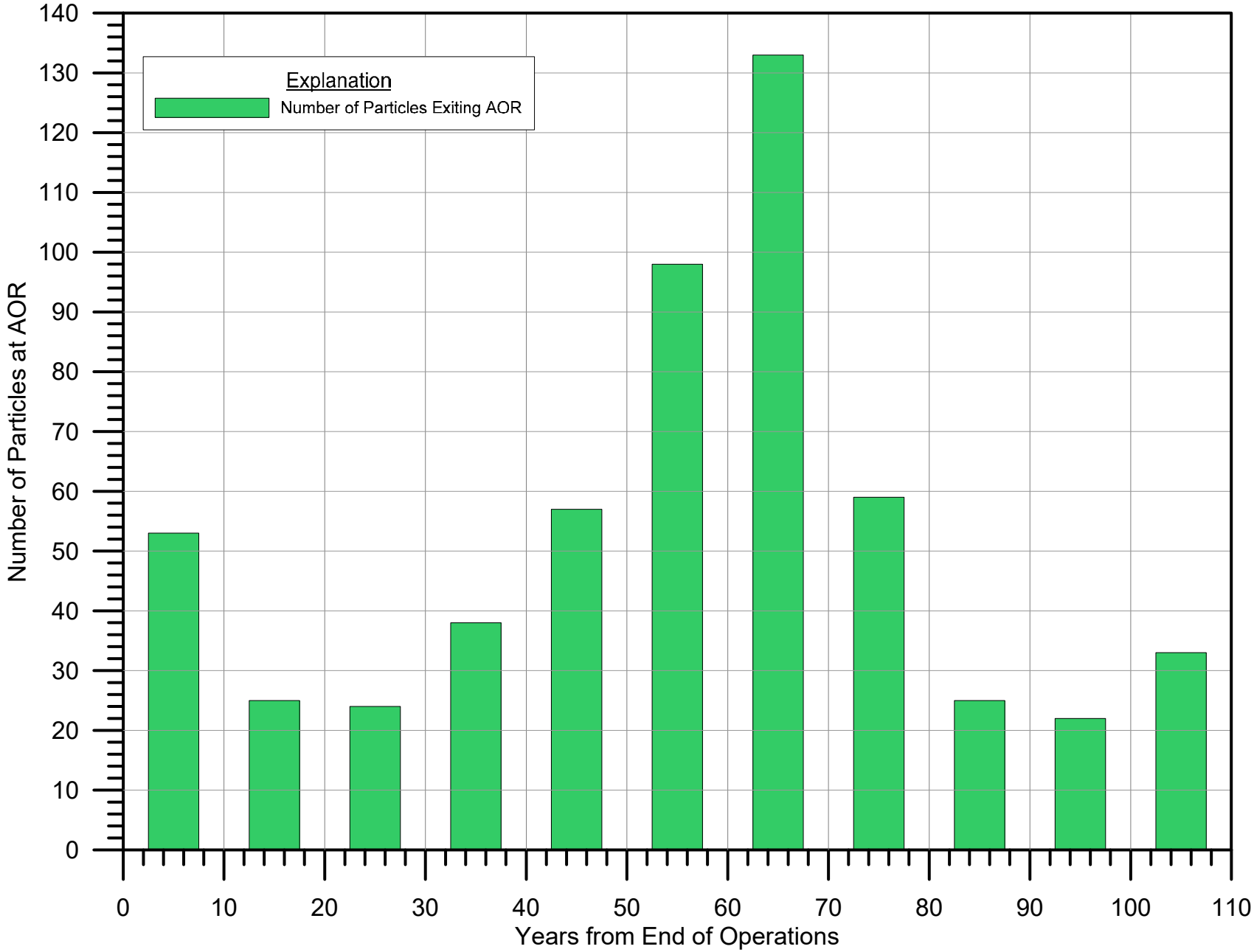


CLEAR CREEK ASSOCIATES

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Velocity Distribution within AOR
Particles Released at End of Mining
UIC Permit Submittal
Gunnison Copper Project

FIGURE
71

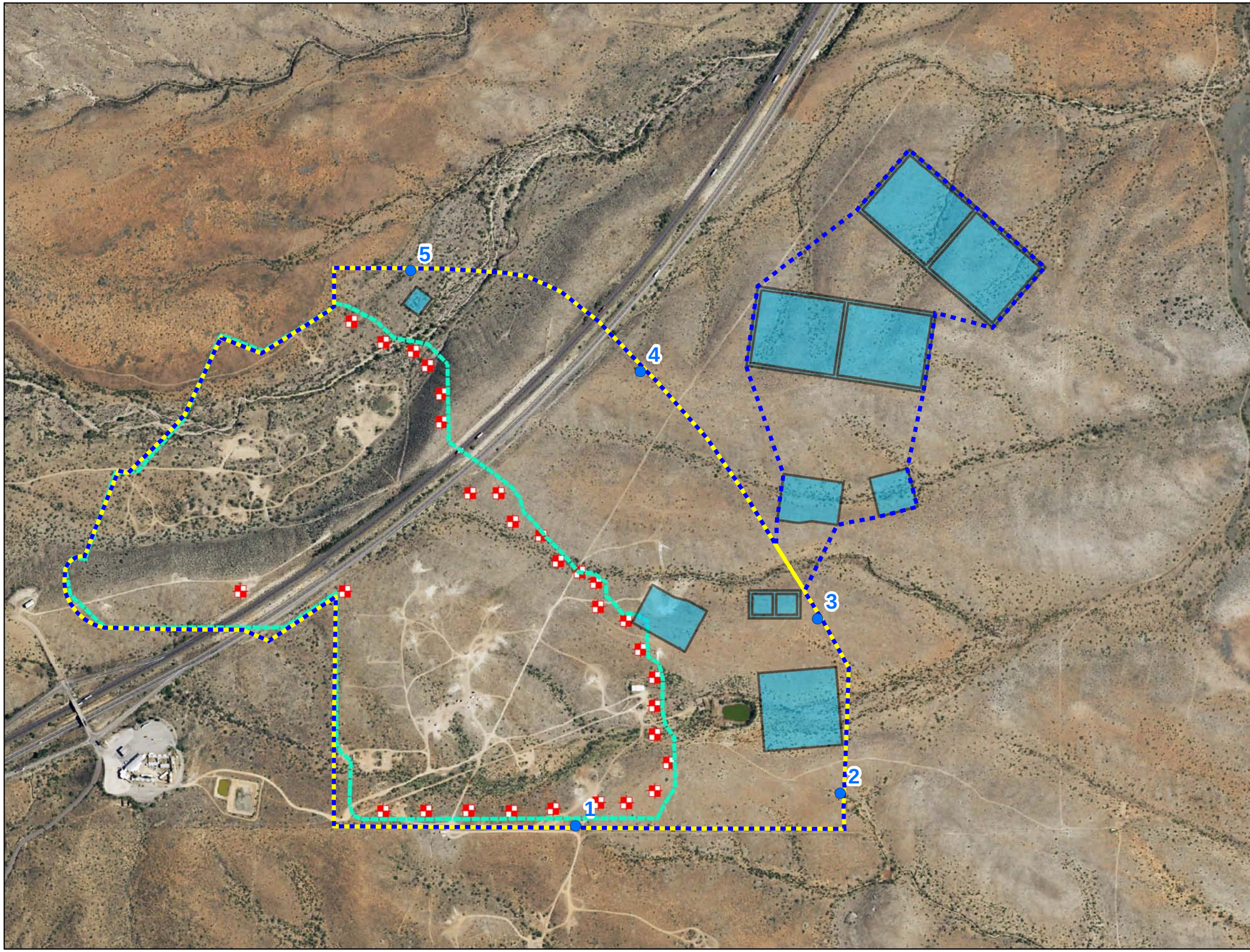


CLEAR CREEK ASSOCIATES

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Time to Exit AOR
Particles Released at End of Mining
UIC Permit Submittal
Gunnison Copper Project

FIGURE
72



Explanation

- Hydraulic Control Wells
- POCs
- Discharge Impact
- AOR
- Pond Locations
- Wellfield

0 250 500 1,000 1,500
Feet

Excelsior Mining Arizona, Inc.
Groundwater Flow Model
Gunnison Copper Project
April 2017

Date	File ID
4/30/17	373002

CLEAR CREEK ASSOCIATES

FIGURE 73
Discharge Impact Area
23 Year Simulation

EXHIBIT 1

WATER LEVEL DATA

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
087293		D15023033ABB	ASLD	600	750434.81	397896.63	4536.00	500	600	2/10/1982	480.00	4056.00	Well 55 Datbase	
1092		D16022012DCC	UNKNOWN		736057.35	382348.12	4714.00	500	554	11/1/1959	519.00	4195.00		
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	11/13/2012	625.00	4209.00	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	4/1/2013	625.40	4208.60	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	7/24/2013	625.90	4208.10	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	10/7/2013	626.40	4207.60	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	1/9/2014	626.80	4207.20	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	4/13/2014	627.30	4206.70	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	7/17/2014	627.40	4206.60	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	10/1/2014	627.60	4206.40	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	1/1/2015	630.20	4203.80	Water Level Sweeps_Gunnis	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	3/3/2015	632.48	4201.52	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	4/7/2015	634.44	4199.56	Water Level Sweeps_Gunnis	4/7/2015 12:24
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	5/6/2015	634.05	4199.95	Water Level Sweeps_Gunnis	5/6/2015 14:54
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	6/3/2015	633.40	4200.60	Water Level Sweeps_Gunnis	6/3/2015 16:44
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	7/2/2015	630.94	4203.06	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	8/4/2015	630.07	4203.93	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	2/15/2016	630.52	4203.48	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	7/7/2016	630.01	4203.99	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	10/7/2016	629.82	4204.18	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	1/10/2017	629.56	4204.44	WL_Sweeps_Gunnison_2017.x	
1094	NSH-001	D15023031CCA	EXCELSIOR MINING CORP	1114	738265.2	393874.58	4834.00	702	1096	2/15/2017	629.58	4204.42	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	11/13/2012	554.60	4194.40	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	4/1/2013	554.80	4194.20	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	7/24/2013	554.70	4194.30	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	10/7/2013	554.70	4194.30	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	1/9/2014	554.80	4194.20	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	4/13/2014	554.90	4194.10	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	7/17/2014	555.10	4193.90	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	10/1/2014	555.20	4193.80	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	1/1/2015	556.10	4192.90	Water Level Sweeps_Gunnis	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	4/9/2015	559.63	4189.37	Water Level Sweeps_Gunnis	4/9/2015 10:56
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	5/5/2015	556.35	4192.65	Water Level Sweeps_Gunnis	5/5/2015 16:07
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	6/2/2015	556.29	4192.71	Water Level Sweeps_Gunnis	6/2/2015 15:08
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	7/2/2015	554.24	4194.76	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	8/4/2015	554.22	4194.78	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	9/9/2015	556.06	4192.94	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	10/7/2015	556.12	4192.88	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	11/5/2015	556.29	4192.71	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	12/15/2015	556.27	4192.73	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	1/12/2016	556.25	4192.75	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	2/15/2016	556.45	4192.55	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	3/9/2016	556.40	4192.60	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	4/22/2016	556.36	4192.64	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	5/24/2016	556.55	4192.45	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	6/16/2016	556.52	4192.48	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	7/7/2016	556.59	4192.41	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	10/7/2016	556.63	4192.37	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	1/10/2017	556.59	4192.41	WL_Sweeps_Gunnison_2017.x	
1095	NSH-002	D16023006BDA	EXCELSIOR MINING CORP	1140	739092.38	390927.9	4749.00	608	1264	2/15/2017	556.89	4192.11	WL_Sweeps_Gunnison_2017.x	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	6/8/1990	430.00	4470.96	Appendix D	static water level
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	7/6/1990	440.00	4460.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	8/2/1990	430.00	4470.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	8/30/1990	450.00	4450.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	10/1/1990	410.00	4490.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	10/24/1990	410.00	4490.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	11/27/1990	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	12/27/1990	420.00	4480.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	1/16/1991	410.00	4490.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	3/22/1991	450.00	4450.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	4/18/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	5/24/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	6/24/1991	410.00	4490.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	7/30/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	8/29/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	9/18/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	10/23/1991	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	11/22/1991	395.00	4505.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	12/19/1991	395.00	4505.96	Appendix D	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	3/31/1992	340.00	4560.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	4/29/1992	400.00	4500.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4901.76	0	680	1/17/1996	320.80	4580.96	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4900.96	0	680	4/9/2003	363.70	4537.26	Appendix D	
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4901.98	0	680	3/9/2016	308.50	4593.48	Golder - Feb 2017	temporary transducer installed @402 ft
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4901.98	0	680	9/22/2016	310.78	4591.20	Golder - Feb 2017	temporary transducer installed @402 ft
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4901.98	0	680	11/16/2016	311.68	4590.30	Golder - Feb 2017	temporary transducer installed @402 ft
1096	Keystone Shaft	D15023036BBA	NORD RESOURCES CORP		733180.8635	397543.9834	4901.98	0	680	2/15/2017	312.60	4589.38	Golder - Feb 2017	temporary transducer installed @402 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	8/1/1998		4570.00	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	10/1/1998		4561.00	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	12/1/1999		4565.00	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	3/25/2003		4528.32	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	4/7/2003		4528.09	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	4/14/2003		4527.93	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	4/16/2003		4527.90	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	4/21/2003		4527.80	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	4/29/2003		4527.60	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	5/5/2003		4527.50	Appendix D	
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	5/19/2003		4527.20	Appendix D	historic high water level = 4573 (unknown date)
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	6/2/2003		4534.02	Appendix D	pit lake level rose following a PLS overflow
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866		0	0	10/28/2015		4561.00	Map data	APP map estimate
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	3/9/2016	8.80	4537.80	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	5/17/2016	2.00	4531.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	7/6/2016	7.00	4536.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	8/16/2016	20.00	4549.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	9/22/2016	27.00	4556.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	11/16/2016	33.00	4562.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
1097	Burro Pit	D15023026DAA	NORD RESOURCES CORP		731647.8288	399836.866	4529.00	0	0	2/15/2017	38.00	4567.00	Golder - Feb 2017	temporary transducer installed @ 1 ft
207383		D16023030ABB	JAMES A SCHMIDT II	665	740123.33	370573.83	4683.00	560	660	5/2/2005	483.00	4200.00	Well 55 Datbase	
207589		D16023020DDB	CHERYL & RICHARD GLENN SR	624	746668.44	374461.47	4640.00	536	616	5/13/2005	440.00	4200.00	Well 55 Datbase	
208791		D16022013DDC	MARY JANE FORD	570	736996.79	376899.36	4672.00	530	570	10/19/2005	470.00	4202.00	Well 55 Datbase	
209018		D16023018ACA	BOB & SUE SELFF	620	739693.91	380222.88	4657.00	580	620	10/21/2005	470.00	4187.00	Well 55 Datbase	
211579		D16023029AAC	ROBERT HOPP TRUST	755	746111.56	370873.79	4765.00	650	750	5/5/2006	590.00	4175.00	Well 55 Datbase	
216142		D16022013DDA	CHARLES & LEWIS KETCHUM	618	738665.62	377187.29	4653.00	578	618	7/20/2007	485.00	4168.00	Well 55 Datbase	
216962		D16023020CAB	ROBERT D. JENSEN	605	743886.63	374035.18	4644.00	525	605	1/12/2008	396.00	4248.00	Well 55 Datbase	
218347		D16023020CBB	JUDY HOILINGER	600	742687.64	373935.9	4647.00	480	600	12/1/2010	274.00	4373.00	Well 55 Datbase	
218431		D16023019BCD	WILLIAM BAKER	600	738744.43	374405.96	4641.00	560	600	12/9/2008	420.00	4221.00	Well 55 Datbase	
220592		D16023019BCC	JOHN REICHLE	620	738340.03	374326.47	4648.00	520	620	2/15/2012	442.00	4206.00	Well 55 Datbase	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	11/13/2012	647.80	4185.20	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	4/1/2013	648.30	4184.70	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	7/24/2013	648.80	4184.20	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	10/7/2013	648.80	4184.20	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	1/9/2014	649.20	4183.80	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	4/13/2014	649.50	4183.50	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	7/17/2014	649.70	4183.30	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	10/1/2014	649.90	4183.10	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	1/1/2015	650.00	4183.00	Water Level Sweeps_Gunnis	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	3/4/2015	650.10	4182.90	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 16:55
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.00	640	680	6/3/2015	649.30	4183.70	Water Level Sweeps_Gunnis	6/3/2015 16:06
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	7/2/2015	647.85	4185.42	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	8/4/2015	648.05	4185.22	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	12/15/2015	649.85	4183.42	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	1/12/2016	649.80	4183.47	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	2/15/2016	649.86	4183.41	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	3/9/2016	650.10	4183.17	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	4/22/2016	649.97	4183.30	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	5/24/2016	650.10	4183.17	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	6/16/2016	649.75	4183.52	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	7/7/2016	650.11	4183.16	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	8/1/2016	650.20	4183.07	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	9/1/2016	650.36	4182.91	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	10/7/2016	650.41	4182.86	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	12/7/2016	650.69	4182.58	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	1/10/2017	650.38	4182.89	WL_Sweeps_Gunnison_2017.x	
221519	NSH-006	D15023031CBD	EXCELSIOR MINING CORP	684	738463.33	394237.3	4833.27	640	680	2/15/2017	650.65	4182.62	WL_Sweeps_Gunnison_2017.x	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	11/13/2012	650.40	4195.60	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	4/1/2013	651.50	4194.50	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	7/24/2013	651.60	4194.40	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	10/7/2013	651.60	4194.40	Water Level Sweeps_Gunnis	

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	1/9/2014	651.80	4194.20	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	4/13/2014	651.80	4194.20	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	7/17/2014	652.20	4193.80	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	10/1/2014	652.10	4193.90	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	1/1/2015	652.90	4193.10	Water Level Sweeps_Gunnis	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	3/3/2015	678.00	4168.00	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 16:45
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	4/7/2015	653.65	4192.35	Water Level Sweeps_Gunnis	4/7/2015 17:31
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.00	1231	1400	6/3/2015	652.70	4193.30	Water Level Sweeps_Gunnis	6/3/2015 15:37
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.07	1231	1400	7/2/2015	651.34	4194.73	WL_Sweeps_Gunnison_2017.x	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.07	1231	1400	8/4/2015	651.16	4194.91	WL_Sweeps_Gunnison_2017.x	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.07	1231	1400	2/15/2016	652.23	4193.84	WL_Sweeps_Gunnison_2017.x	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.07	1231	1400	10/7/2016	652.44	4193.63	WL_Sweeps_Gunnison_2017.x	
221520	NSH-003	D15023031CBD	EXCELSIOR MINING CORP	1432	738201.82	394344.15	4846.07	1231	1400	1/10/2017	652.48	4193.59	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	11/13/2012	640.00	4194.00	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	4/1/2013	640.40	4193.60	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	7/24/2013	640.60	4193.40	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	10/7/2013	640.80	4193.20	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	1/9/2014	641.10	4192.90	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	4/13/2014	641.50	4192.50	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	7/17/2014	641.60	4192.40	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	10/1/2014	641.70	4192.30	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	1/1/2015	642.40	4191.60	Water Level Sweeps_Gunnis	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	3/3/2015	641.87	4192.13	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	4/7/2015	643.22	4190.78	Water Level Sweeps_Gunnis	4/7/2015 12:41
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	5/6/2015	642.35	4191.65	Water Level Sweeps_Gunnis	5/6/2015 14:41
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4834.00	705	998	6/3/2015	642.16	4191.84	Water Level Sweeps_Gunnis	6/3/2015 16:27
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	7/2/2015	640.45	4191.54	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	8/4/2015	640.26	4191.73	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	11/5/2015	641.85	4190.14	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	12/15/2015	642.10	4189.89	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	1/12/2016	641.90	4190.09	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	2/15/2016	642.01	4189.98	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	3/9/2016	640.00	4191.99	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	4/22/2016	642.18	4189.81	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	5/24/2016	642.25	4189.74	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	7/7/2016	642.32	4189.67	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	10/7/2016	642.55	4189.44	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	12/7/2016	642.60	4189.39	WL_Sweeps_Gunnison_2017.x	
221603	NSH-004B	D15023031CCA	EXCELSIOR MINING CORP	1031	738406.35	393880.07	4831.99	705	998	1/10/2017	642.67	4189.32	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	11/13/2012	641.60	4188.40	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	4/1/2013	642.00	4188.00	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	7/24/2013	642.40	4187.60	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	10/7/2013	642.50	4187.50	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	1/9/2014	642.90	4187.10	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	4/13/2014	643.20	4186.80	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	7/17/2014	643.40	4186.60	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	10/1/2014	643.50	4186.50	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	1/1/2015	643.70	4186.30	Water Level Sweeps_Gunnis	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	3/3/2015	643.90	4186.10	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 15:50
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	4/7/2015	644.08	4185.92	Water Level Sweeps_Gunnis	4/7/2015 13:11
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4830.00	747	1019	6/3/2015	643.02	4186.98	Water Level Sweeps_Gunnis	6/3/2015 16:19
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	7/2/2015	641.89	4187.94	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	8/4/2015	641.92	4187.91	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	2/15/2016	643.50	4186.33	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	4/22/2016	643.69	4186.14	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	5/24/2016	643.82	4186.01	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	10/7/2016	644.15	4185.68	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	1/10/2017	644.24	4185.59	WL_Sweeps_Gunnison_2017.x	
221604	NSH-005	D15023031CBD	EXCELSIOR MINING CORP	1040	738525.68	394033.38	4829.83	747	1019	2/15/2017	644.31	4185.52	WL_Sweeps_Gunnison_2017.x	
221772		D16023014CDC	ERLENE & MICHAEL PAUL SUHR	525	759641.21	377237.86	4464.00	390	525	12/18/2012	397.00	4067.00	Well 55 Datbase	
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4816.00	0	0	4/2/2014	646.00	4170.00	Imaged Record - approx WL	top 20 feet 4-inch steel, Farwest Drilling
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	3/9/2016	600.31	4246.33	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	5/17/2016	604.90	4241.74	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	7/6/2016	607.14	4239.50	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	8/16/2016	607.48	4239.16	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	9/22/2016	601.80	4244.84	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	11/16/2016	593.50	4253.14	Golder - Feb 2017	0
223161	CW-1A	D15022025CDD	NORD RESOURCES CORP		734538.66	398253.3	4846.64	0	0	2/15/2017	601.28	4245.36	Golder - Feb 2017	0
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4867.00	0	0	4/2/2014	696.00	4171.00	Imaged Record - approx WL	top 20 feet 4-inch steel, Farwest Drilling

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4892.57	0	0	3/9/2016	702.10	4190.47	Golder - Feb 2017	Padlock stuck, might need to torch it off
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4892.57	0	0	5/17/2016	702.14	4190.43	Golder - Feb 2017	Padlock stuck, might need to torch it off
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4892.57	0	0	7/6/2016	702.60	4189.97	Golder - Feb 2017	Padlock stuck, might need to torch it off
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4892.57	0	0	8/16/2016	702.80	4189.77	Golder - Feb 2017	Padlock stuck, might need to torch it off
223162	CW-3A	D15022024BDB	NORD RESOURCES CORP		733835.89	406804.02	4892.57	0	0	11/16/2016	700.42	4192.15	Golder - Feb 2017	Padlock stuck, might need to torch it off
223163	CW-4A	D15022025DBC	NORD RESOURCES CORP		735196	399573.99	4870.00	0	0	4/2/2014	699.00	4171.00	Imaged Record - approx WL	top 20 feet 4-inch steel, Farwest Drilling
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4878.00	0	0	4/2/2014	716.00	4162.00	Imaged Record - approx WL	top 20 feet 4-inch steel, Farwest Drilling
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	3/9/2016	718.18	4189.95	Golder - Feb 2017	no air blowing, 2/15/17
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	5/17/2016	718.48	4189.65	Golder - Feb 2017	no air blowing, 2/15/17
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	7/6/2016	718.72	4189.41	Golder - Feb 2017	no air blowing, 2/15/17
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	8/16/2016	718.59	4189.54	Golder - Feb 2017	no air blowing, 2/15/17
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	11/16/2016	718.65	4189.48	Golder - Feb 2017	no air blowing, 2/15/17
223164	CW-6A	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4908.13	0	0	2/15/2017	719.34	4188.79	Golder - Feb 2017	no air blowing, 2/15/17
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4798.00	0	0	5/9/2014	651.00	4147.00	Imaged Record - approx WL	top 20 feet 4-inch steel, Farwest Drilling
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	3/9/2016	654.00	4185.87	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	5/17/2016	654.18	4185.69	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	7/6/2016	654.50	4185.37	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	8/16/2016	654.45	4185.42	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	9/22/2016	654.70	4185.17	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	11/16/2016	653.90	4185.97	Golder - Feb 2017	0
223486	CW-2A	D15022025000	NORD RESOURCES CORP		734865.65	400564.3	4839.87	0	0	2/15/2017	653.52	4186.35	Golder - Feb 2017	0
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.00	585	820	1/1/2015	598.80	4209.20	Water Level Sweeps_Gunnis	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.00	585	820	3/4/2015	599.70	4208.30	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:17
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.00	585	820	4/6/2015	602.67	4205.33	Water Level Sweeps_Gunnis	transducer 4/6/2015
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.00	585	820	5/5/2015	602.72	4205.28	Water Level Sweeps_Gunnis	5/5/2015 11:37
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.00	585	820	6/3/2015	601.67	4206.33	Water Level Sweeps_Gunnis	6/3/2015 9:41
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	7/2/2015	598.63	4209.78	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	8/4/2015	597.46	4210.95	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	9/9/2015	598.25	4210.16	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	10/7/2015	597.89	4210.52	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	11/5/2015	597.47	4210.94	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	12/15/2015	597.27	4211.14	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	1/12/2016	597.10	4211.31	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	2/15/2016	597.20	4211.21	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	3/9/2016	597.10	4211.31	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	4/22/2016	596.85	4211.56	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	5/24/2016	596.85	4211.56	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	7/7/2016	596.78	4211.63	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	10/7/2016	596.50	4211.91	WL_Sweeps_Gunnison_2017.x	
224029	NSH-015	D15023031CCC	EXCELSIOR MINING CORP	820	737606.14	393140.05	4808.41	585	820	1/10/2017	596.12	4212.29	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.00	579	820	1/1/2015	602.70	4209.30	Water Level Sweeps_Gunnis	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.00	579	820	3/4/2015	591.40	4220.60	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:07
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.00	579	820	4/6/2015	607.24	4204.76	Water Level Sweeps_Gunnis	transducer 4/6/2015
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.00	579	820	5/5/2015	607.20	4204.80	Water Level Sweeps_Gunnis	5/5/2015 11:25
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.00	579	820	6/3/2015	606.60	4205.40	Water Level Sweeps_Gunnis	6/3/2015 9:54
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	7/2/2015	602.73	4209.50	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	8/4/2015	601.72	4210.51	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	2/15/2016	601.75	4210.48	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	10/7/2016	601.23	4211.00	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	12/7/2016	601.31	4210.92	WL_Sweeps_Gunnison_2017.x	
224030	NSH-016	D15023031CCC	EXCELSIOR MINING CORP	820	737458.64	393175.02	4812.23	579	820	1/10/2017	600.96	4211.27	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4814.00	638	1300	3/3/2015	601.77	4212.23	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4814.00	638	1300	4/6/2015	609.04	4204.96	Water Level Sweeps_Gunnis	transducer 4/6/2015
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4814.00	638	1300	5/5/2015	609.28	4204.72	Water Level Sweeps_Gunnis	5/5/2015 12:04
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4814.00	638	1300	6/4/2015	608.28	4205.72	Water Level Sweeps_Gunnis	6/4/2015 13:08
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	7/2/2015	604.73	4209.04	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	8/4/2015	603.75	4210.02	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	2/15/2016	604.30	4209.47	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	4/22/2016	604.04	4209.73	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	5/24/2016	604.00	4209.77	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	10/7/2016	603.64	4210.13	WL_Sweeps_Gunnison_2017.x	
224031	NSH-019	D15023031CCB	EXCELSIOR MINING CORP	1410	738155.23	393436.53	4813.77	638	1300	1/10/2017	603.22	4210.55	WL_Sweeps_Gunnison_2017.x	
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4815.00	624	1372	3/3/2015	602.34	4212.66	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4815.00	624	1372	4/7/2015	611.12	4203.88	Water Level Sweeps_Gunnis	4/7/2015 11:47
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4815.00	624	1372	5/7/2015	610.57	4204.43	Water Level Sweeps_Gunnis	5/7/2015 8:57
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4815.00	624	1372	6/4/2015	609.00	4206.00	Water Level Sweeps_Gunnis	6/4/2015 12:54
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4814.97	624	1372	7/2/2015	606.08	4208.89	WL_Sweeps_Gunnison_2017.x	
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4814.97	624	1372	8/4/2015	604.95	4210.02	WL_Sweeps_Gunnison_2017.x	
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4814.97	624	1372	2/15/2016	604.90	4210.07	WL_Sweeps_Gunnison_2017.x	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4814.97	624	1372	10/7/2016	604.19	4210.78	WL_Sweeps_Gunnison_2017.x	
224032	NSH-021C	D15023031CCA	EXCELSIOR MINING CORP	1400	738178.3	393503.73	4814.97	624	1372	1/10/2017	603.79	4211.18	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.00	625	1440	3/3/2015	617.15	4201.85	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.00	625	1440	4/7/2015	620.63	4198.37	Water Level Sweeps_Gunnis	4/7/2015 11:55
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.00	625	1440	5/7/2015	620.10	4198.90	Water Level Sweeps_Gunnis	5/7/2015 8:47
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.00	625	1440	6/4/2015	619.82	4199.18	Water Level Sweeps_Gunnis	6/4/2015 12:47
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	7/2/2015	616.16	4202.91	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	8/4/2015	615.50	4203.57	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	9/9/2015	617.35	4201.72	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	10/7/2015	617.15	4201.92	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	11/5/2015	617.80	4201.27	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	2/15/2016	616.62	4202.45	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	10/7/2016	616.09	4202.98	WL_Sweeps_Gunnison_2017.x	
224033	NSH-024	D15023031CCA	EXCELSIOR MINING CORP	1145	738342.91	393552.51	4819.07	625	1440	1/10/2017	615.89	4203.18	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4820.00	645	1442	3/3/2015	637.63	4182.37	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4820.00	645	1442	4/7/2015	627.13	4192.87	Water Level Sweeps_Gunnis	4/7/2015 12:08
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4820.00	645	1442	5/7/2015	626.41	4193.59	Water Level Sweeps_Gunnis	5/7/2015 8:41
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4820.00	645	1442	6/4/2015	626.35	4193.65	Water Level Sweeps_Gunnis	6/4/2015 12:38
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	7/2/2015	622.96	4196.86	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	8/4/2015	622.62	4197.20	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	2/15/2016	625.10	4194.72	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	10/7/2016	625.11	4194.71	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	1/10/2017	625.02	4194.80	WL_Sweeps_Gunnison_2017.x	
224034	NSH-023	D15023031CCA	EXCELSIOR MINING CORP	1446	738405.09	393587.65	4819.82	645	1442	2/15/2017	625.14	4194.68	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4791.00	1060	1582	1/1/2015	606.90	4184.10	Water Level Sweeps_Gunnis	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4791.00	1060	1582	3/3/2015	606.90	4184.10	Water Level Sweeps_Gunnis	pumping NSH-023
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4791.00	1060	1582	5/6/2015	606.12	4184.88	Water Level Sweeps_Gunnis	5/6/2015 15:30
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4791.00	1060	1582	6/4/2015	606.19	4184.81	Water Level Sweeps_Gunnis	6/4/2015 11:55
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	7/2/2015	603.18	4187.47	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	8/4/2015	603.31	4187.34	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	2/15/2016	606.90	4183.75	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	7/7/2016	607.07	4183.58	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	10/7/2016	607.39	4183.26	WL_Sweeps_Gunnison_2017.x	
224035	NSH-020	D15023031CAD	EXCELSIOR MINING CORP	1600	739685.67	394225.67	4790.65	1060	1582	1/10/2017	607.35	4183.30	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.00	625	900	3/4/2015	606.30	4187.70	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:46
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.00	625	900	4/8/2015	607.65	4186.35	Water Level Sweeps_Gunnis	4/8/2015 8:01
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.00	625	900	5/5/2015	607.29	4186.71	Water Level Sweeps_Gunnis	5/5/2015 12:50
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.00	625	900	6/3/2015	606.80	4187.20	Water Level Sweeps_Gunnis	6/3/2015 8:06
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	7/2/2015	605.50	4188.59	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	8/4/2015	605.44	4188.65	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	9/9/2015	606.80	4187.29	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	10/7/2015	606.95	4187.14	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	11/5/2015	607.00	4187.09	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	12/15/2015	607.15	4186.94	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	1/12/2016	607.12	4186.97	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	2/15/2016	607.30	4186.79	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	3/9/2016	607.20	4186.89	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	4/22/2016	607.22	4186.87	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	5/24/2016	607.40	4186.69	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	6/16/2016	607.32	4186.77	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	7/7/2016	607.40	4186.69	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	10/7/2016	608.65	4185.44	WL_Sweeps_Gunnison_2017.x	
224036	NSH-026	D15023031CDC	EXCELSIOR MINING CORP	905	739146.28	392899.09	4794.09	625	900	1/10/2017	607.67	4186.42	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4679.00	500	540	4/7/2015	495.94	4183.06	Water Level Sweeps_Gunnis	4/7/2015 16:37
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4679.00	500	540	5/5/2015	495.72	4183.28	Water Level Sweeps_Gunnis	5/5/2015 13:31
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4679.00	500	540	6/3/2015	495.63	4183.37	Water Level Sweeps_Gunnis	6/3/2015 12:30
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	7/2/2015	494.68	4184.30	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	8/4/2015	493.76	4185.22	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	9/9/2015	495.90	4183.08	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	10/7/2015	496.04	4182.94	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	11/5/2015	496.27	4182.71	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	12/15/2015	496.30	4182.68	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	1/12/2016	496.29	4182.69	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	2/15/2016	496.60	4182.38	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	3/9/2016	496.70	4182.28	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	4/22/2016	496.59	4182.39	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	5/24/2016	496.75	4182.23	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	7/7/2016	496.78	4182.20	WL_Sweeps_Gunnison_2017.x	
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	10/7/2016	497.04	4181.94	WL_Sweeps_Gunnison_2017.x	

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224058	NSH-011	D16023005BCA	EXCELSIOR MINING CORP	602	743019.77	391244.73	4678.98	500	540	1/10/2017	497.21	4181.77	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.00	524	1200	4/8/2015	454.73	4296.27	Water Level Sweeps_Gunnis	4/8/2015 8:59
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.00	524	1200	5/6/2015	458.21	4292.79	Water Level Sweeps_Gunnis	no pvc
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.00	524	1200	6/4/2015	460.69	4290.31	Water Level Sweeps_Gunnis	no pvc
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	7/2/2015	460.32	4291.05	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	8/4/2015	487.93	4263.44	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	9/9/2015	502.30	4249.07	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	10/7/2015	507.07	4244.30	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	11/5/2015	494.65	4256.72	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	12/15/2015	488.60	4262.77	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	1/12/2016	488.60	4262.77	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	2/15/2016	488.62	4262.75	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	3/9/2016	488.20	4263.17	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	4/22/2016	488.50	4262.87	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	5/24/2016	489.07	4262.30	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	6/16/2016	488.28	4263.09	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	10/7/2016	500.41	4250.96	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	12/7/2016	501.15	4250.22	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	1/10/2017	498.63	4252.74	WL_Sweeps_Gunnison_2017.x	
224059	NSD-037	D15023031BCC	EXCELSIOR MINING CORP	1284.4	737845.93	395606.72	4751.37	524	1200	2/15/2017	496.73	4254.64	WL_Sweeps_Gunnison_2017.x	
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4784.00	1110	1131	3/4/2015	599.60	4184.40	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:39
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4784.00	1110	1131	4/8/2015	600.64	4183.36	Water Level Sweeps_Gunnis	4/8/2015 8:10
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4784.00	1110	1131	5/5/2015	610.00	4174.00	Water Level Sweeps_Gunnis	5/5/2015 12:41
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4784.00	1110	1131	6/3/2015	597.85	4186.15	Water Level Sweeps_Gunnis	6/3/2015 8:13
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4783.86	1110	1131	7/2/2015	595.16	4188.70	WL_Sweeps_Gunnison_2017.x	
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4783.86	1110	1131	8/4/2015	595.08	4188.78	WL_Sweeps_Gunnison_2017.x	
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4783.86	1110	1131	2/15/2016	598.15	4185.71	WL_Sweeps_Gunnison_2017.x	
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4783.86	1110	1131	10/7/2016	598.45	4185.41	WL_Sweeps_Gunnison_2017.x	
224097	NSH-022	D15023031CDC	EXCELSIOR MINING CORP	1170	739140.53	393037.93	4783.86	1110	1131	1/10/2017	598.67	4185.19	WL_Sweeps_Gunnison_2017.x	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4807.00	940	1181	1/1/2015	595.00	4212.00	Water Level Sweeps_Gunnis	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4807.00	940	1181	3/4/2015	597.20	4209.80	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:27
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4807.00	940	1181	5/5/2015	601.40	4205.60	Water Level Sweeps_Gunnis	5/5/2015 11:45
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4807.00	940	1181	6/3/2015	600.40	4206.60	Water Level Sweeps_Gunnis	6/3/2015 9:33
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4806.81	940	1181	7/2/2015	596.10	4210.71	WL_Sweeps_Gunnison_2017.x	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4806.81	940	1181	8/4/2015	595.14	4211.67	WL_Sweeps_Gunnison_2017.x	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4806.81	940	1181	2/15/2016	596.14	4210.67	WL_Sweeps_Gunnison_2017.x	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4806.81	940	1181	10/7/2016	595.31	4211.50	WL_Sweeps_Gunnison_2017.x	
224099	NSH-017	D15023031CCC	EXCELSIOR MINING CORP	1200	737758.07	393157.78	4806.81	940	1181	1/10/2017	598.91	4207.90	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4780.00	610	992	1/1/2015	596.30	4183.70	Water Level Sweeps_Gunnis	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4780.00	610	992	3/3/2015	594.20	4185.80	Water Level Sweeps_Gunnis	pumping NSH-023
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4780.00	610	992	4/7/2015	594.40	4185.60	Water Level Sweeps_Gunnis	4/7/2015 16:02
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4780.00	610	992	5/6/2015	595.15	4184.85	Water Level Sweeps_Gunnis	5/6/2015 15:38
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4780.00	610	992	6/4/2015	595.22	4184.78	Water Level Sweeps_Gunnis	6/4/2015 12:08
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	7/2/2015	592.85	4186.78	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	8/4/2015	592.91	4186.72	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	9/9/2015	594.40	4185.23	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	10/7/2015	594.55	4185.08	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	11/5/2015	595.65	4183.98	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	12/15/2015	595.65	4183.98	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	1/12/2016	595.75	4183.88	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	2/15/2016	595.98	4183.65	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	3/9/2016	596.10	4183.53	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	4/22/2016	596.00	4183.63	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	5/24/2016	596.15	4183.48	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	6/16/2016	596.25	4183.38	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	10/7/2016	596.39	4183.24	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	1/10/2017	596.38	4183.25	WL_Sweeps_Gunnison_2017.x	
224100	NSH-018	D15023031CAD	EXCELSIOR MINING CORP	997	739687.04	394387.46	4779.63	610	992	2/15/2017	596.72	4182.91	WL_Sweeps_Gunnison_2017.x	
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	11/13/2012	397.70	4449.30	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	4/1/2013	398.70	4448.30	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	7/24/2013	400.30	4446.70	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	10/7/2013	401.40	4445.60	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	1/9/2014	402.40	4444.60	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	4/13/2014	403.70	4443.30	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	7/17/2014	405.00	4442.00	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	10/1/2014	406.20	4440.80	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	1/1/2015	420.70	4426.30	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	4/8/2015	423.51	4423.49	Water Level Sweeps_Gunnis	no pvc; developed
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	5/6/2015	423.97	4423.03	Water Level Sweeps_Gunnis	no pvc

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4847.00	466	1168	6/4/2015	424.50	4422.50	Water Level Sweeps_Gunnis	no pvc
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	7/2/2015	423.57	4349.60	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	8/4/2015	423.20	4349.97	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	9/9/2015	425.08	4348.09	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	10/7/2015	425.40	4347.77	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	11/5/2015	425.80	4347.37	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	12/15/2015	426.35	4346.82	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	1/12/2016	426.70	4346.47	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	2/15/2016	427.12	4346.05	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	3/9/2016	427.70	4345.47	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	4/22/2016	428.30	4344.87	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	5/24/2016	428.90	4344.27	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	6/16/2016	429.75	4343.42	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	7/7/2016	429.57	4343.60	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	10/7/2016	430.97	4342.20	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224154	NSD-026	D15022036DAA	EXCELSIOR MINING CORP	1168	737356.24	394752.25	4773.17	466	1168	1/10/2017	432.54	4340.63	WL_Sweeps_Gunnison_2017.x	no pvc; dev
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	11/13/2012	462.50	4307.50	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	4/1/2013	464.20	4305.80	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	7/24/2013	464.50	4305.50	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	10/7/2013	464.60	4305.40	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	1/9/2014	465.00	4305.00	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	4/13/2014	465.30	4304.70	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	7/17/2014	465.30	4304.70	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	10/1/2014	465.80	4304.20	Water Level Sweeps_Gunnis	
224155	NSD-031	D15022036ADD	EXCELSIOR MINING CORP	1008	737024.7	395487.5	4770.00	416	1008	1/1/2015	471.70	4298.30	Water Level Sweeps_Gunnis	change in stick-up height
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.00	544	800	4/9/2015	570.50	4190.50	Water Level Sweeps_Gunnis	4/9/2015 12:44
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.00	544	800	5/5/2015	570.80	4190.20	Water Level Sweeps_Gunnis	5/5/2015 15:17
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.00	544	800	6/2/2015	570.55	4190.45	Water Level Sweeps_Gunnis	6/2/2015 16:07
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	7/2/2015	568.07	4193.12	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	8/4/2015	568.12	4193.07	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	2/15/2016	571.07	4190.12	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	7/7/2016	571.12	4190.07	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	10/7/2016	571.33	4189.86	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	12/7/2016	571.41	4189.78	WL_Sweeps_Gunnison_2017.x	
224156	NSH-028	D16023006BAA	EXCELSIOR MINING CORP	800	738869.72	392021.67	4761.19	544	800	1/10/2017	571.32	4189.87	WL_Sweeps_Gunnison_2017.x	
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4757.00	865	1100	4/9/2015	558.10	4198.90	Water Level Sweeps_Gunnis	4/9/2015 12:02
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4757.00	865	1100	5/5/2015	557.62	4199.38	Water Level Sweeps_Gunnis	5/5/2015 15:25
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4757.00	865	1100	6/2/2015	557.50	4199.50	Water Level Sweeps_Gunnis	6/2/2015 15:50
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4756.86	865	1100	7/2/2015	554.86	4202.00	WL_Sweeps_Gunnison_2017.x	
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4756.86	865	1100	8/4/2015	554.42	4202.44	WL_Sweeps_Gunnison_2017.x	
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4756.86	865	1100	2/15/2016	557.25	4199.61	WL_Sweeps_Gunnison_2017.x	
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4756.86	865	1100	10/7/2016	557.63	4199.23	WL_Sweeps_Gunnison_2017.x	
224157	NSH-027	D16023006BAD	EXCELSIOR MINING CORP	1022	738815.79	391870.38	4756.86	865	1100	1/10/2017	557.72	4199.14	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4825.00	1480	1551	3/3/2015	642.14	4182.86	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4825.00	1480	1551	4/7/2015	632.95	4192.05	Water Level Sweeps_Gunnis	needs monument
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4825.00	1480	1551	6/4/2015	630.40	4194.60	Water Level Sweeps_Gunnis	6/4/2015 12:28
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	7/2/2015	627.80	4196.96	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	8/4/2015	627.82	4196.94	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	2/15/2016	628.96	4195.80	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	7/7/2016	628.34	4196.42	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	10/7/2016	628.23	4196.53	WL_Sweeps_Gunnison_2017.x	
224158	NSH-025	D15023031CDC	EXCELSIOR MINING CORP	1596	738294.61	393685.78	4824.76	1480	1551	1/10/2017	628.27	4196.49	WL_Sweeps_Gunnison_2017.x	
224159	CS-13	D15023031BCC	EXCELSIOR MINING CORP	1251	737558.77	395152.18	4768.00	595	1251	6/1/2010	541.00	4227.00	Water Level Sweeps_Gunnis	Exact date unknown
224159	CS-13	D15023031BCC	EXCELSIOR MINING CORP	1251	737558.77	395152.18	4768.00	595	1251	6/1/2011	528.00	4240.00	Water Level Sweeps_Gunnis	Exact date unknown
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	6/1/2010	364.00	4393.78	Water Level Sweeps_Gunnis	Exact date unknown
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	6/1/2011	475.00	4282.78	Water Level Sweeps_Gunnis	Exact date unknown
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	4/1/2013	374.20	4383.58	Water Level Sweeps_Gunnis	minor diesel smell on tape. No residue.
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	7/24/2013	376.60	4381.18	Water Level Sweeps_Gunnis	minor diesel smell on tape. No residue.
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	10/7/2013	377.90	4379.88	Water Level Sweeps_Gunnis	minor diesel smell on tape.
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	1/9/2014	379.20	4378.58	Water Level Sweeps_Gunnis	minor diesel smell
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	4/13/2014	380.30	4377.48	Water Level Sweeps_Gunnis	minor diesel smell
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	7/17/2014	382.50	4375.28	Water Level Sweeps_Gunnis	minor diesel smell
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	10/1/2014	424.00	4333.78	Water Level Sweeps_Gunnis	minor diesel smell
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.78	486	1375	1/1/2015	409.10	4348.68	Water Level Sweeps_Gunnis	Diesel smell more potent than the past
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.77	486	1375	10/7/2016	433.54	4324.23	WL_Sweeps_Gunnison_2017.x	Diesel smell more potent once h20 level dropped. 1
224160	CS-14	D15023031BCC	EXCELSIOR MINING CORP	1375	737557.34	395698.82	4757.77	486	1375	1/10/2017	426.59	4331.18	WL_Sweeps_Gunnison_2017.x	Diesel smell more potent once h20 level dropped. 1
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.00	529	1217	1/1/2015	631.20	4215.80	Water Level Sweeps_Gunnis	
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.00	529	1217	4/7/2015	642.05	4204.95	Water Level Sweeps_Gunnis	unsecure, need dog ear re-attached
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.00	529	1217	6/3/2015	637.82	4209.18	Water Level Sweeps_Gunnis	no pvc

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.48	529	1217	7/2/2015	634.90	4212.58	WL_Sweeps_Gunnison_2017.x	
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.48	529	1217	8/4/2015	633.75	4213.73	WL_Sweeps_Gunnison_2017.x	
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.48	529	1217	2/15/2016	634.99	4212.49	WL_Sweeps_Gunnison_2017.x	
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.48	529	1217	10/7/2016	632.42	4215.06	WL_Sweeps_Gunnison_2017.x	
224840	NSM-006	D15023031CBC	EXCELSIOR MINING CORP	1217	737927.87	394038.78	4847.48	529	1217	1/10/2017	632.10	4215.38	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4787.00	593	1171.5	1/1/2015	589.10	4197.90	Water Level Sweeps_Gunnis	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4787.00	593	1171.5	3/3/2015	594.59	4192.41	Water Level Sweeps_Gunnis	developed
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4787.00	593	1171.5	4/7/2015	589.90	4197.10	Water Level Sweeps_Gunnis	developed, unsecure 8 5/8 stick-up
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4787.00	593	1171.5	5/6/2015	589.31	4197.69	Water Level Sweeps_Gunnis	5/6/2015 3:11
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4787.00	593	1171.5	6/4/2015	589.46	4197.54	Water Level Sweeps_Gunnis	steel airline in hole
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	7/2/2015	586.99	4199.91	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	8/4/2015	586.77	4200.13	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	9/9/2015	587.65	4199.25	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	10/7/2015	588.70	4198.20	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	11/5/2015	588.20	4198.70	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	12/15/2015	588.65	4198.25	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	1/12/2016	588.20	4198.70	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	2/15/2016	588.65	4198.25	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	3/9/2016	588.60	4198.30	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	4/22/2016	588.77	4198.13	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	5/24/2016	588.80	4198.10	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	7/7/2016	588.92	4197.98	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	10/7/2016	588.92	4197.98	WL_Sweeps_Gunnison_2017.x	
224841	NSM-005A	D15023031CCD	EXCELSIOR MINING CORP	1171.5	738781.26	393106.74	4786.90	593	1171.5	1/10/2017	589.01	4197.89	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.00	596	880	3/3/2015	642.50	4186.50	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 16:00
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.00	596	880	4/7/2015	642.23	4186.77	Water Level Sweeps_Gunnis	4/7/2015 13:03
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.00	596	880	5/6/2015	641.28	4187.72	Water Level Sweeps_Gunnis	no pvc
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	7/2/2015	640.30	4188.75	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	8/4/2015	640.25	4188.80	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	9/9/2015	641.25	4187.80	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	10/7/2015	641.30	4187.75	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	11/5/2015	641.35	4187.70	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	12/15/2015	641.60	4187.45	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	1/12/2016	641.48	4187.57	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	2/15/2016	641.56	4187.49	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	3/9/2016	641.80	4187.25	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	4/22/2016	641.69	4187.36	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	5/24/2016	641.90	4187.15	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	7/7/2016	641.88	4187.17	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	10/7/2016	642.10	4186.95	WL_Sweeps_Gunnison_2017.x	
224842	NSM-004	D15023031CBD	EXCELSIOR MINING CORP	1114.5	738506.71	393990.27	4829.05	596	880	1/10/2017	642.20	4186.85	WL_Sweeps_Gunnison_2017.x	
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.00	604	1167.9	1/1/2015	651.80	4192.20	Water Level Sweeps_Gunnis	
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.00	604	1167.9	3/4/2015	651.80	4192.20	Water Level Sweeps_Gunnis	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.00	604	1167.9	4/7/2015	652.16	4191.84	Water Level Sweeps_Gunnis	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.00	604	1167.9	6/3/2015	651.95	4192.05	Water Level Sweeps_Gunnis	no pvc
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	7/2/2015	650.01	4194.18	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	8/4/2015	650.57	4193.62	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	1/12/2016	651.47	4192.72	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	2/15/2016	651.52	4192.67	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	3/9/2016	651.70	4192.49	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	4/22/2016	651.75	4192.44	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	5/24/2016	650.90	4193.29	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	6/16/2016	651.10	4193.09	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	7/7/2016	651.98	4192.21	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	10/7/2016	651.90	4192.29	WL_Sweeps_Gunnison_2017.x	developed
224843	NSM-007	D15023031CBC	EXCELSIOR MINING CORP	1167.9	737986.92	394488.9	4844.19	604	1167.9	1/10/2017	652.10	4192.09	WL_Sweeps_Gunnison_2017.x	developed
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4816.00	548	1275	3/3/2015	619.93	4196.07	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4816.00	548	1275	4/7/2015	609.40	4206.60	Water Level Sweeps_Gunnis	unsecure, need dog ear
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4816.00	548	1275	5/5/2015	609.38	4206.62	Water Level Sweeps_Gunnis	5/5/2015 11:55
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4816.00	548	1275	6/4/2015	608.40	4207.60	Water Level Sweeps_Gunnis	no pvc
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	7/2/2015	605.94	4209.66	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	8/4/2015	605.82	4209.78	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	2/15/2016	604.00	4211.60	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	10/7/2016	603.19	4212.41	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	1/10/2017	602.79	4212.81	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224844	NSM-008	D15023031CCB	EXCELSIOR MINING CORP	1275	738095.92	393386.62	4815.60	548	1275	2/15/2017	602.99	4212.61	WL_Sweeps_Gunnison_2017.x	developed post 1/2015
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.00	593	1349.1	1/1/2015	594.40	4199.60	Water Level Sweeps_Gunnis	
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.00	593	1349.1	3/4/2015	594.60	4199.40	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 16:56
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.00	593	1349.1	4/8/2015	594.06	4199.94	Water Level Sweeps_Gunnis	unsecure, cap needs better fit

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.00	593	1349.1	5/5/2015	593.50	4200.50	Water Level Sweeps_Gunnis	no pvc
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.00	593	1349.1	6/3/2015	593.26	4200.74	Water Level Sweeps_Gunnis	no pvc
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.06	593	1349.1	7/2/2015	592.66	4201.40	WL_Sweeps_Gunnison_2017.x	developed
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.06	593	1349.1	8/4/2015	592.66	4201.40	WL_Sweeps_Gunnison_2017.x	developed
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.06	593	1349.1	2/15/2016	593.45	4200.61	WL_Sweeps_Gunnison_2017.x	developed
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.06	593	1349.1	10/7/2016	593.99	4200.07	WL_Sweeps_Gunnison_2017.x	developed
224845	NSM-009	D15023031CDC	EXCELSIOR MINING CORP	1349.1	738954.82	392689.54	4794.06	593	1349.1	1/10/2017	594.12	4199.94	WL_Sweeps_Gunnison_2017.x	developed
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.00	500	1579	1/1/2015	596.00	4213.00	Water Level Sweeps_Gunnis	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.00	500	1579	3/4/2015	597.40	4211.60	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 17:05
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.00	500	1579	4/7/2015	600.61	4208.39	Water Level Sweeps_Gunnis	4/7/2015 10:37
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.00	500	1579	5/5/2015	599.40	4209.60	Water Level Sweeps_Gunnis	5/5/2015 14:33
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.00	500	1579	6/3/2015	598.59	4210.41	Water Level Sweeps_Gunnis	no pvc
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	7/2/2015	596.26	4212.80	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	8/4/2015	594.50	4214.56	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	9/9/2015	595.11	4213.95	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	10/7/2015	595.75	4213.31	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	11/5/2015	595.70	4213.36	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	12/15/2015	595.45	4213.61	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	1/12/2016	595.34	4213.72	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	2/15/2016	595.40	4213.66	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	3/9/2016	595.25	4213.81	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	4/22/2016	595.10	4213.96	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	5/24/2016	595.20	4213.86	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	7/7/2016	594.99	4214.07	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	10/7/2016	594.50	4214.56	WL_Sweeps_Gunnison_2017.x	
224846	NSD-033	D15023031CCC	EXCELSIOR MINING CORP	1579	737855.83	392788.24	4809.06	500	1579	1/10/2017	594.09	4214.97	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.00	404	953	3/4/2015	594.30	4286.70	Water Level Sweeps_Gunnis	recovery NSH-007
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.00	404	953	4/8/2015	490.25	4390.75	Water Level Sweeps_Gunnis	4/8/2015 16:54
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.00	404	953	5/6/2015	496.22	4384.78	Water Level Sweeps_Gunnis	no pvc
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.00	404	953	6/4/2015	494.55	4386.45	Water Level Sweeps_Gunnis	no pvc
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	7/2/2015	493.25	4387.89	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	8/4/2015	494.02	4387.12	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	9/9/2015	494.10	4387.04	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	10/7/2015	493.60	4387.54	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	11/5/2015	492.90	4388.24	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	12/15/2015	493.45	4387.69	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	1/12/2016	492.35	4388.79	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	2/15/2016	491.80	4389.34	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	3/9/2016	491.77	4389.37	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	4/22/2016	491.57	4389.57	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	5/24/2016	491.50	4389.64	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	7/7/2016	494.59	4386.55	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	10/7/2016	497.13	4384.01	WL_Sweeps_Gunnison_2017.x	
224847	NSM-013	D15022036DAC	EXCELSIOR MINING CORP	953	736785.02	394382.74	4881.14	404	953	1/10/2017	500.30	4380.84	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4785.00	259	767	4/8/2015	245.30	4539.70	Water Level Sweeps_Gunnis	developed
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4785.00	259	767	5/6/2015	246.10	4538.90	Water Level Sweeps_Gunnis	no pvc
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4785.00	259	767	6/4/2015	246.79	4538.21	Water Level Sweeps_Gunnis	no pvc
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	7/2/2015	246.13	4538.78	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	8/4/2015	247.24	4537.67	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	9/9/2015	249.60	4535.31	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	10/7/2015	250.60	4534.31	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	11/5/2015	251.20	4533.71	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	12/15/2015	251.95	4532.96	WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	10/7/2016	257.61		WL_Sweeps_Gunnison_2017.x	
224848	NSD-030	D15022036DBA	EXCELSIOR MINING CORP	767	736012.13	394822.54	4784.91	259	767	1/10/2017	258.82	4526.09	WL_Sweeps_Gunnison_2017.x	
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4733.00	425	839	4/9/2015	545.95	4187.05	Water Level Sweeps_Gunnis	4/9/2015 11:10
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4733.00	425	839	5/5/2015	545.96	4187.04	Water Level Sweeps_Gunnis	5/5/2015 15:25
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4733.00	425	839	6/2/2015	546.03	4186.97	Water Level Sweeps_Gunnis	no pvc
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4732.71	425	839	7/2/2015	545.80	4186.91	WL_Sweeps_Gunnison_2017.x	
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4732.71	425	839	8/4/2015	545.88	4186.83	WL_Sweeps_Gunnison_2017.x	
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4732.71	425	839	10/7/2016	547.07	4185.64	WL_Sweeps_Gunnison_2017.x	
224849	NSM-010A	D16023006BDD	EXCELSIOR MINING CORP	839	739040.96	390550.17	4732.71	425	839	12/7/2016	547.28	4185.43	WL_Sweeps_Gunnison_2017.x	
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4775.00	540	1340	1/1/2015	577.30	4197.70	Water Level Sweeps_Gunnis	
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4775.00	540	1340	4/9/2015	578.74	4196.26	Water Level Sweeps_Gunnis	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4775.00	540	1340	5/5/2015	577.90	4197.10	Water Level Sweeps_Gunnis	no pvc
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4775.00	540	1340	6/2/2015	578.07	4196.93	Water Level Sweeps_Gunnis	no pvc
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	7/2/2015	577.55	4197.39	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	8/4/2015	577.69	4197.25	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	9/9/2015	578.60	4196.34	WL_Sweeps_Gunnison_2017.x	developed

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	10/7/2015	578.90	4196.04	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	11/5/2015	578.90	4196.04	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	12/15/2015	579.10	4195.84	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	1/12/2016	579.10	4195.84	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	2/15/2016	579.30	4195.64	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	3/9/2016	579.20	4195.74	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	4/22/2016	579.30	4195.64	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	5/24/2016	579.55	4195.39	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	7/7/2016	579.65	4195.29	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	10/7/2016	579.82	4195.12	WL_Sweeps_Gunnison_2017.x	developed
224850	NSM-011	D16023006BAA	EXCELSIOR MINING CORP	1340	739056.69	392037.78	4774.94	540	1340	1/10/2017	579.90	4195.04	WL_Sweeps_Gunnison_2017.x	developed
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.00	321	1180	4/9/2015	525.33	4187.67	Water Level Sweeps_Gunnis	4/9/2015 9:16
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.00	321	1180	5/6/2015	525.30	4187.70	Water Level Sweeps_Gunnis	5/6/2015 10:11
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.00	321	1180	6/2/2015	525.36	4187.64	Water Level Sweeps_Gunnis	no pvc
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	7/2/2015	524.75	4188.63	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	8/4/2015	524.83	4188.55	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	9/9/2015	525.50	4187.88	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	10/7/2015	525.70	4187.68	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	11/5/2015	525.85	4187.53	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	12/15/2015	525.90	4187.48	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	1/12/2016	525.90	4187.48	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	2/15/2016	526.15	4187.23	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	3/9/2016	526.10	4187.28	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	4/22/2016	526.05	4187.33	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	5/24/2016	526.21	4187.17	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	7/7/2016	526.25	4187.13	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	10/7/2016	526.48	4186.90	WL_Sweeps_Gunnison_2017.x	
224853	NSD-035A	D16023006CAD	EXCELSIOR MINING CORP		738969.49	389027.58	4713.38	321	1180	1/10/2017	526.55	4186.83	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.00	504	1000	4/8/2015	347.15	4540.85	Water Level Sweeps_Gunnis	4/8/2015 17:10
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.00	504	1000	5/6/2015	348.20	4539.80	Water Level Sweeps_Gunnis	5/6/2015 14:21
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.00	504	1000	6/4/2015	349.31	4538.69	Water Level Sweeps_Gunnis	no pvc
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	7/2/2015	349.02	4539.20	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	8/4/2015	350.22	4538.00	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	9/9/2015	352.50	4535.72	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	10/7/2015	353.53	4534.69	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	11/5/2015	354.45	4533.77	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	12/15/2015	355.26	4532.96	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	1/12/2016	355.80	4532.42	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	2/15/2016	356.32	4531.90	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	3/9/2016	357.00	4531.22	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	4/22/2016	357.75	4530.47	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	5/24/2016	358.45	4529.77	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	7/7/2016	359.30	4528.92	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	10/7/2016	360.83	4527.39	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	11/30/2016	360.88		WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	12/7/2016	361.83	4526.39	WL_Sweeps_Gunnison_2017.x	
224854	NSD-036	D15022036DBD	EXCELSIOR MINING CORP	793.3	735758.93	394267.19	4888.22	504	1000	1/10/2017	362.19	4526.03	WL_Sweeps_Gunnison_2017.x	
224855	NSD-038	D16023006DBC	EXCELSIOR MINING CORP		739848.83	388711.57	4719.00	400	2250	6/2/2015	496.60	4222.40	Water Level Sweeps_Gunnis	no pvc
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.00	383	1515	4/9/2015	542.58	4186.42	Water Level Sweeps_Gunnis	greasy precollar
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.00	383	1515	5/6/2015	542.20	4186.80	Water Level Sweeps_Gunnis	greasy preco
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.00	383	1515	6/2/2015	542.30	4186.70	Water Level Sweeps_Gunnis	no pvc
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	7/2/2015	541.40	4187.91	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	8/4/2015	542.08	4187.23	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	9/9/2015	541.85	4187.46	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	10/7/2015	541.97	4187.34	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	11/5/2015	543.20	4186.11	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	12/15/2015	543.25	4186.06	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	1/12/2016	543.20	4186.11	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	2/15/2016	543.35	4185.96	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	3/9/2016	543.40	4185.91	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	4/22/2016	542.88	4186.43	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	5/24/2016	542.90	4186.41	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	7/7/2016	543.60	4185.71	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	10/7/2016	543.76	4185.55	WL_Sweeps_Gunnison_2017.x	
224856	NSD-039	D16023006DBB	EXCELSIOR MINING CORP		739552.76	389535.73	4729.31	383	1515	1/10/2017	543.83	4185.48	WL_Sweeps_Gunnison_2017.x	
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4747.00	383	1786	5/5/2015	558.26	4188.74	Water Level Sweeps_Gunnis	no
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4747.00	383	1786	6/2/2015	558.20	4188.80	Water Level Sweeps_Gunnis	no pvc
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	7/2/2015	557.42	4189.50	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	8/4/2015	557.52	4189.40	WL_Sweeps_Gunnison_2017.x	developed

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	9/9/2015	558.40	4188.52	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	10/7/2015	558.00	4188.92	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	11/5/2015	588.90	4158.02	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	12/15/2015	558.75	4188.17	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	1/12/2016	558.90	4188.02	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	2/15/2016	559.10	4187.82	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	3/9/2016	559.00	4187.92	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	4/22/2016	558.97	4187.95	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	5/24/2016	559.02	4187.90	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	7/7/2016	559.24	4187.68	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	10/7/2016	559.33	4187.59	WL_Sweeps_Gunnison_2017.x	developed
224858	NSD-041	D16023006DBB	EXCELSIOR MINING CORP	1600	739956.31	391838.22	4746.92	383	1786	1/10/2017	559.48	4187.44	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.00	628	1736	3/3/2015	613.66	4188.34	Water Level Sweeps_Gunnis	recovery NSH-023; data from transducer
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.00	628	1736	4/7/2015	615.75	4186.25	Water Level Sweeps_Gunnis	4/7/2015 14:15
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.00	628	1736	5/5/2015	615.00	4187.00	Water Level Sweeps_Gunnis	5/5/2015 12:32
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.00	628	1736	6/3/2015	614.81	4187.19	Water Level Sweeps_Gunnis	no pvc
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	7/2/2015	614.14	4188.23	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	8/4/2015	614.02	4188.35	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	9/9/2015	614.95	4187.42	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	10/7/2015	614.95	4187.42	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	11/5/2015	615.15	4187.22	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	12/15/2015	615.30	4187.07	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	1/12/2016	615.20	4187.17	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	2/15/2016	615.24	4187.13	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	3/9/2016	615.60	4186.77	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	4/22/2016	615.44	4186.93	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	5/24/2016	615.60	4186.77	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	7/7/2016	615.56	4186.81	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	10/7/2016	615.87	4186.50	WL_Sweeps_Gunnison_2017.x	developed
224860	NSD-043	D15023031CDB	EXCELSIOR MINING CORP	1736	739255.99	393741	4802.37	628	1736	1/10/2017	615.84	4186.53	WL_Sweeps_Gunnison_2017.x	developed
224930	NSD-023	D15023031CBC	EXCELSIOR MINING CORP	1546	737808.48	394173.78	4857.00	557	1546	11/13/2012	624.00	4233.00	Water Level Sweeps_Gunnis	angle hole corrected, [670.3]
224931	NSD-024	D15023031CAC	EXCELSIOR MINING CORP	1972	738799.08	394051.36	4823.00	672	1972	11/13/2012	626.00	4197.00	Water Level Sweeps_Gunnis	angle hole corrected, [659.5]
224932	NSD-025	D15023031CDC	EXCELSIOR MINING CORP	1643.5	738697.88	393061.4	4790.00	640	1643.5	11/13/2012	579.00	4211.00	Water Level Sweeps_Gunnis	angle hole corrected, [596.3]
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	11/13/2012	630.80	4220.20	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	4/1/2013	634.20	4216.80	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	7/24/2013	634.80	4216.20	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	10/7/2013	634.70	4216.30	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	1/9/2014	635.20	4215.80	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	4/13/2014	635.50	4215.50	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	7/17/2014	635.80	4215.20	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	10/1/2014	636.10	4214.90	Water Level Sweeps_Gunnis	
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	3/3/2015	640.90	4210.10	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 16:25
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	4/7/2015	645.10	4205.90	Water Level Sweeps_Gunnis	4/7/2015 14:53
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4851.00	950	1150	6/3/2015	643.60	4207.40	Water Level Sweeps_Gunnis	no pvc
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4844.14	950	1150	7/2/2015	640.50	4203.64	WL_Sweeps_Gunnison_2017.x	developed
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4844.14	950	1150	8/4/2015	639.50	4204.64	WL_Sweeps_Gunnison_2017.x	developed
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4844.14	950	1150	2/15/2016	639.34	4204.80	WL_Sweeps_Gunnison_2017.x	developed
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4844.14	950	1150	10/7/2016	638.80	4205.34	WL_Sweeps_Gunnison_2017.x	developed
224933	NSM-001	D15023031CBD	EXCELSIOR MINING CORP	1150	738051.78	394181.02	4844.14	950	1150	1/10/2017	638.52	4205.62	WL_Sweeps_Gunnison_2017.x	developed
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	10/7/2013	594.70	4214.30	Water Level Sweeps_Gunnis	cap is taped on pvc, need to drill out cap
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	1/9/2014	594.90	4214.10	Water Level Sweeps_Gunnis	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	4/13/2014	595.20	4213.80	Water Level Sweeps_Gunnis	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	7/17/2014	595.50	4213.50	Water Level Sweeps_Gunnis	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	10/1/2014	596.00	4213.00	Water Level Sweeps_Gunnis	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	1/1/2015	599.60	4209.40	Water Level Sweeps_Gunnis	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	3/4/2015	600.70	4208.30	Water Level Sweeps_Gunnis	recovery NSH-023; 3/4/15 17:15
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	4/7/2015	603.43	4205.57	Water Level Sweeps_Gunnis	4/7/2015 11:05
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	5/5/2015	603.64	4205.36	Water Level Sweeps_Gunnis	5/5/2015 14:42
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4809.00	507	1000	6/3/2015	603.20	4205.80	Water Level Sweeps_Gunnis	pvc
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	7/2/2015	601.27	4217.76	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	8/4/2015	600.40	4218.63	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	9/9/2015	600.72	4218.31	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	10/7/2015	600.37	4218.66	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	11/5/2015	600.40	4218.63	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	12/15/2015	600.12	4218.91	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	1/12/2016	600.00	4219.03	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	2/15/2016	600.00	4219.03	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	3/9/2016	599.90	4219.13	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	4/22/2016	599.66	4219.37	WL_Sweeps_Gunnison_2017.x	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	5/24/2016	599.80	4219.23	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	7/7/2016	599.77	4219.26	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	10/7/2016	599.70	4219.33	WL_Sweeps_Gunnison_2017.x	
224934	NSM-002	D15023031CCD	EXCELSIOR MINING CORP	1000	738195.42	392736.92	4819.03	507	1000	1/10/2017	599.44	4219.59	WL_Sweeps_Gunnison_2017.x	
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	11/13/2012	439.40	4443.60	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	4/1/2013	440.70	4442.30	Water Level Sweeps_Gunnis	no pvc; needs metal cap
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	7/24/2013	443.00	4440.00	Water Level Sweeps_Gunnis	no pvc; needs metal cap
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	10/7/2013	444.70	4438.30	Water Level Sweeps_Gunnis	no pvc; needs metal cap
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	1/9/2014	446.40	4436.60	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	4/13/2014	448.50	4434.50	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	7/17/2014	450.30	4432.70	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	10/1/2014	452.20	4430.80	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	1/1/2015	455.40	4427.60	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	4/8/2015	507.37	4375.63	Water Level Sweeps_Gunnis	no pvc; developed
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	5/6/2015	498.50	4384.50	Water Level Sweeps_Gunnis	no pvc
224936	NSD-027	D15022036DAD	EXCELSIOR MINING CORP	1004.5	736806.45	394419.15	4883.00	404	1004.5	6/4/2015	497.12	4385.88	Water Level Sweeps_Gunnis	no pvc
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	11/13/2012	425.50	4455.50	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	4/1/2013	427.10	4453.90	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	7/24/2013	428.50	4452.50	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	10/7/2013	425.60	4455.40	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	1/9/2014	430.90	4450.10	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	4/13/2014	431.70	4449.30	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	7/17/2014	433.20	4447.80	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	10/1/2014	434.30	4446.70	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	1/1/2015	438.30	4442.70	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	4/7/2015	444.38	4436.62	Water Level Sweeps_Gunnis	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	5/6/2015	444.59	4436.41	Water Level Sweeps_Gunnis	
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4881.00	400	755	6/4/2015	445.60	4435.40	Water Level Sweeps_Gunnis	no pvc
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	7/2/2015	444.59	4326.15	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	8/4/2015	444.64	4326.10	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	9/9/2015	446.20	4324.54	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	10/7/2015	447.00	4323.74	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	11/5/2015	447.25	4323.49	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	12/15/2015	477.60	4293.14	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	1/12/2016	448.00	4322.74	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	2/15/2016	448.40	4322.34	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	3/9/2016	448.97	4321.77	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	4/22/2016	449.57	4321.17	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	5/24/2016	450.20	4320.54	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	7/7/2016	451.08	4319.66	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	10/7/2016	452.93	4317.81	WL_Sweeps_Gunnison_2017.x	developed
224937	NSD-028	D15022036DAC	EXCELSIOR MINING CORP	755	736291.67	394433.4	4770.74	400	755	1/10/2017	454.84	4315.90	WL_Sweeps_Gunnison_2017.x	developed
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	11/13/2012	311.30	4460.70	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	4/1/2013	313.00	4459.00	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	7/24/2013	313.80	4458.20	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	10/7/2013	314.60	4457.40	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	1/9/2014	315.20	4456.80	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	4/13/2014	315.50	4456.50	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	7/17/2014	316.00	4456.00	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	10/1/2014	316.80	4455.20	Water Level Sweeps_Gunnis	
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	4/8/2015	334.95	4437.05	Water Level Sweeps_Gunnis	4/8/2015 16:24
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	5/6/2015	335.00	4437.00	Water Level Sweeps_Gunnis	5/6/2015 12:29
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4772.00	0	905	6/4/2015	335.79	4436.21	Water Level Sweeps_Gunnis	no pvc
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	7/2/2015	335.50	4450.91	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	8/4/2015	331.82	4454.59	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	9/9/2015	332.50	4453.91	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	10/7/2015	332.65	4453.76	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	11/5/2015	332.94	4453.47	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	12/15/2015	333.55	4452.86	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	1/12/2016	333.30	4453.11	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	2/15/2016	333.59	4452.82	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	3/9/2016	333.80	4452.61	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	4/22/2016	334.28	4452.13	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	5/24/2016	334.70	4451.71	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	7/7/2016	335.19	4451.22	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	10/7/2016	336.46	4449.95	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224939	NSD-032	D15022036DAB	EXCELSIOR MINING CORP	905	736626.53	395306.53	4786.41	0	905	1/10/2017	337.87	4448.54	WL_Sweeps_Gunnison_2017.x	water level change following clean out
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	11/13/2012	601.00	4226.00	Water Level Sweeps_Gunnis	
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	7/24/2013	606.10	4220.90	Water Level Sweeps_Gunnis	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	7/17/2014	607.50	4219.50	Water Level Sweeps_Gunnis	data from trasducer 10/9/13 12PM
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	10/1/2014	607.20	4219.80	Water Level Sweeps_Gunnis	data from trasducer 10/9/13 12PM
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	1/1/2015	614.10	4212.90	Water Level Sweeps_Gunnis	hole developed since last measurement
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.00	460	1505.5	4/6/2015	617.88	4209.12	Water Level Sweeps_Gunnis	developed
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.17	460	1505.5	10/7/2016	613.30	4213.87	WL_Sweeps_Gunnison_2017.x	developed; 4/13 & 10/13 from transducer
224940	NSD-001	D15023031CCB	EXCELSIOR MINING CORP	1505.5	737801.3	393537.11	4827.17	460	1505.5	1/10/2017	613.03	4214.14	WL_Sweeps_Gunnison_2017.x	developed; 4/13 & 10/13 from transducer
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	11/13/2012	576.00	4234.00	Water Level Sweeps_Gunnis	has pvc, but cap is taped on inside casing
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	4/1/2013	575.70	4234.30	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	7/24/2013	575.20	4234.80	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	10/7/2013	573.40	4236.60	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	1/9/2014	574.20	4235.80	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	4/13/2014	575.60	4234.40	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	7/17/2014	576.80	4233.20	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	10/1/2014	577.40	4232.60	Water Level Sweeps_Gunnis	
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	1/1/2015	593.20	4216.80	Water Level Sweeps_Gunnis	hole developed since last measurement
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	4/6/2015	599.03	4210.97	Water Level Sweeps_Gunnis	developed
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4810.00	580	1907	6/3/2015	598.70	4211.30	Water Level Sweeps_Gunnis	pvc broken off down hole
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4809.78	580	1907	7/2/2015	595.39	4214.39	WL_Sweeps_Gunnison_2017.x	developed;
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4809.78	580	1907	8/4/2015	594.23	4215.55	WL_Sweeps_Gunnison_2017.x	developed;
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4809.78	580	1907	2/15/2016	597.80	4211.98	WL_Sweeps_Gunnison_2017.x	developed;
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4809.78	580	1907	10/7/2016	593.62	4216.16	WL_Sweeps_Gunnison_2017.x	developed;
224941	NSD-002	D15023031CCC	EXCELSIOR MINING CORP	1907	737726.8	392950.87	4809.78	580	1907	1/10/2017	593.23	4216.55	WL_Sweeps_Gunnison_2017.x	developed;
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	11/13/2012	627.10	4206.90	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	4/1/2013	626.90	4207.10	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	7/24/2013	627.50	4206.50	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	10/7/2013	628.30	4205.70	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	1/9/2014	628.80	4205.20	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	4/13/2014	629.20	4204.80	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	7/17/2014	629.30	4204.70	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	10/1/2014	629.60	4204.40	Water Level Sweeps_Gunnis	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	3/3/2015	636.50	4197.50	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 16:10
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	4/7/2015	634.40	4199.60	Water Level Sweeps_Gunnis	unsecure, needs dog ear
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.00	650	1438	6/3/2015	633.31	4200.69	Water Level Sweeps_Gunnis	pvc, ~1 ft below TOC
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	7/2/2015	632.85	4201.50	WL_Sweeps_Gunnison_2017.x	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	8/4/2015	631.07	4203.28	WL_Sweeps_Gunnison_2017.x	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	9/9/2015	631.95	4202.40	WL_Sweeps_Gunnison_2017.x	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	2/15/2016	631.06	4203.29	WL_Sweeps_Gunnison_2017.x	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	10/7/2016	630.93	4203.42	WL_Sweeps_Gunnison_2017.x	
224944	NSD-011	D15023031CCA	EXCELSIOR MINING CORP	1438	738326.23	393923.43	4834.35	650	1438	1/10/2017	631.11	4203.24	WL_Sweeps_Gunnison_2017.x	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	4/1/2013	468.50	4379.50	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	7/24/2013	470.30	4377.70	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	10/7/2013	473.00	4375.00	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	1/9/2014	476.20	4371.80	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	4/13/2014	479.20	4368.80	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	7/17/2014	483.30	4364.70	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	10/1/2014	486.30	4361.70	Water Level Sweeps_Gunnis	
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.00	620	1454	4/6/2015	631.60	4216.40	Water Level Sweeps_Gunnis	developed
224945	NSD-019	D15023031CCB	EXCELSIOR MINING CORP	1454	737674.27	393873.59	4848.29	620	1454	1/10/2017	629.42	4218.87	WL_Sweeps_Gunnison_2017.x	developed, pvc broken down hole, don't use
224946	NSD-020	D15023031CDB	EXCELSIOR MINING CORP	660	738950.33	393545.51	4800.00	660	660	4/1/2013	614.00	4186.00	Water Level Sweeps_Gunnis	false positive, turn sensi
224946	NSD-020	D15023031CDB	EXCELSIOR MINING CORP	660	738950.33	393545.51	4800.00	660	660	7/24/2013	614.00	4186.00	Water Level Sweeps_Gunnis	false positive, turn sensi
224946	NSD-020	D15023031CDB	EXCELSIOR MINING CORP	660	738950.33	393545.51	4800.00	660	660	4/13/2014	613.90	4186.10	Water Level Sweeps_Gunnis	no reading
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	11/13/2012	544.10	4214.90	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	4/1/2013	545.40	4213.60	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	7/24/2013	545.90	4213.10	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	10/7/2013	546.30	4212.70	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	1/9/2014	546.80	4212.20	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	4/13/2014	547.40	4211.60	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	7/17/2014	547.80	4211.20	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	10/1/2014	548.00	4211.00	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	1/1/2015	548.90	4210.10	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	4/9/2015	555.05	4203.95	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	5/5/2015	554.90	4204.10	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.00	499	1339	6/2/2015	555.00	4204.00	Water Level Sweeps_Gunnis	no pvc
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	7/2/2015	554.80	4204.68	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	8/4/2015	554.68	4204.80	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	9/9/2015	555.35	4204.13	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	10/7/2015	555.50	4203.98	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	11/5/2015	555.60	4203.88	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	12/15/2015	555.60	4203.88	WL_Sweeps_Gunnison_2017.x	developed;

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	1/12/2016	555.65	4203.83	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	2/15/2016	555.75	4203.73	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	3/9/2016	555.90	4203.58	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	4/22/2016	555.81	4203.67	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	5/24/2016	556.01	4203.47	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	7/7/2016	556.18	4203.30	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	10/7/2016	556.33	4203.15	WL_Sweeps_Gunnison_2017.x	developed;
224947	NSD-022	D16023006BBD	EXCELSIOR MINING CORP	1339	738811.18	391741.29	4759.48	499	1339	1/10/2017	556.64	4202.84	WL_Sweeps_Gunnison_2017.x	developed;
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	11/13/2012	557.70	4196.30	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	4/1/2013	557.90	4196.10	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	7/24/2013	558.00	4196.00	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	10/7/2013	558.20	4195.80	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	1/9/2014	558.30	4195.70	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	4/13/2014	558.50	4195.50	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	7/17/2014	558.60	4195.40	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	10/1/2014	558.70	4195.30	Water Level Sweeps_Gunnis	
224948	NSD-006	D16023006BCA	EXCELSIOR MINING CORP	2000	739302.44	391150.74	4754.00	470	2000	1/1/2015	560.00	4194.00	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	11/13/2012	473.00	4267.00	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	4/1/2013	480.10	4259.90	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	7/24/2013	481.20	4258.80	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	10/7/2013	482.80	4257.20	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	1/9/2014	485.30	4254.70	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	4/13/2014	487.50	4252.50	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	7/17/2014	489.70	4250.30	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	10/1/2014	491.20	4248.80	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	1/1/2015	493.90	4246.10	Water Level Sweeps_Gunnis	
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	4/6/2015	520.19	4219.81	Water Level Sweeps_Gunnis	transducer 4/6/2015
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	5/6/2015	522.90	4217.10	Water Level Sweeps_Gunnis	5/6/2015
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.00	420	1908	6/2/2015	524.36	4215.64	Water Level Sweeps_Gunnis	pvc
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	7/2/2015	524.82	4215.40	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	8/4/2015	524.63	4215.59	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	9/9/2015	526.04	4214.18	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	10/7/2015	522.80	4217.42	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	11/5/2015	527.40	4212.82	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	12/15/2015	527.80	4212.42	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	1/12/2016	511.80	4228.42	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	2/15/2016	511.62	4228.60	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	3/9/2016	527.45	4212.77	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	4/22/2016	528.68	4211.54	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	5/24/2016	528.95	4211.27	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	6/16/2016	528.90	4211.32	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	7/7/2016	529.25	4210.97	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	10/7/2016	529.58	4210.64	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	12/7/2016	529.70	4210.52	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	1/10/2017	529.84	4210.38	WL_Sweeps_Gunnison_2017.x	developed
224949	NSD-005	D16023006BCC	EXCELSIOR MINING CORP	1908	738514.66	390551.58	4740.22	420	1908	2/15/2017	530.08	4210.14	WL_Sweeps_Gunnison_2017.x	developed
224950	NSD-004	D16023006BBC	EXCELSIOR MINING CORP	1309	738343.84	391660.14	4782.00	510	1500	4/1/2013	563.50	4218.50	Water Level Sweeps_Gunnis	no pvc
224950	NSD-004	D16023006BBC	EXCELSIOR MINING CORP	1309	738343.84	391660.14	4782.00	510	1500	7/24/2013	564.50	4217.50	Water Level Sweeps_Gunnis	no pvc
224950	NSD-004	D16023006BBC	EXCELSIOR MINING CORP	1309	738343.84	391660.14	4782.00	510	1500	10/7/2013	564.90	4217.10	Water Level Sweeps_Gunnis	no pvc
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	11/13/2012	547.50	4189.50	Water Level Sweeps_Gunnis	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	4/1/2013	553.20	4183.80	Water Level Sweeps_Gunnis	no pvc
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	10/7/2013	543.20	4193.80	Water Level Sweeps_Gunnis	no pvc> blockage 7/2013
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	1/9/2014	548.50	4188.50	Water Level Sweeps_Gunnis	no pvc; blockage 7/2013
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	4/13/2014	548.70	4188.30	Water Level Sweeps_Gunnis	no pvc; blockage 7/2013
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	7/17/2014	549.00	4188.00	Water Level Sweeps_Gunnis	no pvc; blockage 7/2013
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	10/1/2014	549.00	4188.00	Water Level Sweeps_Gunnis	no pvc; blockage 7/2013
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	1/1/2015	549.60	4187.40	Water Level Sweeps_Gunnis	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	4/9/2015	549.40	4187.60	Water Level Sweeps_Gunnis	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	5/5/2015	548.87	4188.13	Water Level Sweeps_Gunnis	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.00	430	1800	6/2/2015	549.37	4187.63	Water Level Sweeps_Gunnis	no pvc
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.01	430	1800	7/2/2015	549.13	4187.88	WL_Sweeps_Gunnison_2017.x	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.01	430	1800	8/4/2015	548.94	4188.07	WL_Sweeps_Gunnison_2017.x	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.01	430	1800	2/15/2016	551.00	4186.01	WL_Sweeps_Gunnison_2017.x	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.01	430	1800	10/7/2016	550.51	4186.50	WL_Sweeps_Gunnison_2017.x	no PVC
224951	NSD-007	D16023006BAC	EXCELSIOR MINING CORP	1800	739662.03	391510.94	4737.01	430	1800	1/10/2017	550.70	4186.31	WL_Sweeps_Gunnison_2017.x	no PVC
224952	NSD-008	D16023006BBA	EXCELSIOR MINING CORP	1772.5	739201.98	392332.14	4783.00	550	2000	4/1/2013	585.70	4197.30	Water Level Sweeps_Gunnis	no pvc- blocked 491' bls, greasy precollar
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	11/13/2012	562.20	4205.80	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	4/1/2013	562.90	4205.10	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	7/24/2013	563.20	4204.80	Water Level Sweeps_Gunnis	no pvc

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	10/7/2013	563.50	4204.50	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	1/9/2014	563.80	4204.20	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	4/13/2014	564.00	4204.00	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	7/17/2014	564.30	4203.70	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	10/1/2014	564.30	4203.70	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	1/1/2015	565.30	4202.70	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	4/6/2015	565.55	4202.45	Water Level Sweeps_Gunnis	no pvc; developed
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	5/5/2015	566.20	4201.80	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.00	543	1509	6/2/2015	566.10	4201.90	Water Level Sweeps_Gunnis	no pvc
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.21	543	1509	7/2/2015	564.74	4203.47	WL_Sweeps_Gunnison_2017.x	no pvc; developed
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.21	543	1509	8/4/2015	564.50	4203.71	WL_Sweeps_Gunnison_2017.x	no pvc; developed
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.21	543	1509	2/15/2016	565.60	4202.61	WL_Sweeps_Gunnison_2017.x	no pvc; developed
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.21	543	1509	10/7/2016	566.10	4202.11	WL_Sweeps_Gunnison_2017.x	no pvc; developed
224953	NSD-010	D16023006BBB	EXCELSIOR MINING CORP	1509	738613.65	392024.22	4768.21	543	1509	1/10/2017	566.02	4202.19	WL_Sweeps_Gunnison_2017.x	no pvc; developed
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	4/1/2013	532.40	4216.60	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	7/24/2013	532.90	4216.10	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	10/7/2013	533.40	4215.60	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	1/9/2014	533.80	4215.20	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	4/13/2014	534.40	4214.60	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	7/17/2014	534.80	4214.20	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	10/1/2014	535.20	4213.80	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	1/1/2015	536.20	4212.80	Water Level Sweeps_Gunnis	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	4/9/2015	539.40	4209.60	Water Level Sweeps_Gunnis	4/9/2015 10:45
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	5/5/2015	539.39	4209.61	Water Level Sweeps_Gunnis	5/5/2015 16:36
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4749.00	422	1732	6/2/2015	539.75	4209.25	Water Level Sweeps_Gunnis	pvc
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4748.98	422	1732	8/4/2015	539.65	4209.33	WL_Sweeps_Gunnison_2017.x	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4748.98	422	1732	2/15/2016	541.45	4207.53	WL_Sweeps_Gunnison_2017.x	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4748.98	422	1732	10/7/2016	542.44	4206.54	WL_Sweeps_Gunnison_2017.x	
224954	NSD-012	D16023006BCA	EXCELSIOR MINING CORP	1732	738896.21	391039.29	4748.98	422	1732	1/10/2017	542.76	4206.22	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	4/1/2013	540.50	4193.50	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	7/24/2013	540.70	4193.30	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	10/7/2013	540.50	4193.50	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	1/9/2014	540.50	4193.50	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	4/13/2014	540.50	4193.50	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	7/17/2014	540.20	4193.80	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	10/1/2014	540.30	4193.70	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	1/1/2015	541.20	4192.80	Water Level Sweeps_Gunnis	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	4/9/2015	543.70	4190.30	Water Level Sweeps_Gunnis	4/9/2015 11:19
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	5/5/2015	543.30	4190.70	Water Level Sweeps_Gunnis	5/5/2015
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4734.00	402	1913	6/2/2015	543.27	4190.73	Water Level Sweeps_Gunnis	pvc
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	7/2/2015	541.80	4191.93	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	8/4/2015	541.90	4191.83	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	2/15/2016	543.55	4190.18	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	7/7/2016	543.14	4190.59	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	10/7/2016	543.06	4190.67	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	1/10/2017	542.88	4190.85	WL_Sweeps_Gunnison_2017.x	
224956	NSD-014	D16023006BCD	EXCELSIOR MINING CORP	1913	739006.16	390547.97	4733.73	402	1913	2/15/2017	543.65	4190.08	WL_Sweeps_Gunnison_2017.x	
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	11/13/2012	538.00	4193.00	Water Level Sweeps_Gunnis	No PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	4/1/2013	538.50	4192.50	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	7/24/2013	538.90	4192.10	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	10/7/2013	539.10	4191.90	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	1/9/2014	539.00	4192.00	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	4/13/2014	539.30	4191.70	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	7/17/2014	539.30	4191.70	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	10/1/2014	539.50	4191.50	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	1/1/2015	540.10	4190.90	Water Level Sweeps_Gunnis	No PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	4/9/2015	540.92	4190.08	Water Level Sweeps_Gunnis	4/9/2015 10:30No PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	5/6/2015	540.92	4190.08	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4731.00	400	1956	6/2/2015	541.00	4190.00	Water Level Sweeps_Gunnis	no pvc
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4730.61	400	1956	7/2/2015	539.32	4191.29	WL_Sweeps_Gunnison_2017.x	no PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4730.61	400	1956	8/4/2015	539.37	4191.24	WL_Sweeps_Gunnison_2017.x	no PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4730.61	400	1956	2/15/2016	542.50	4188.11	WL_Sweeps_Gunnison_2017.x	no PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4730.61	400	1956	10/7/2016	541.84	4188.77	WL_Sweeps_Gunnison_2017.x	no PVC
224957	NSD-015	D16023006CBA	EXCELSIOR MINING CORP	1956	739152.81	390012.43	4730.61	400	1956	1/10/2017	541.89	4188.72	WL_Sweeps_Gunnison_2017.x	no PVC
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	4/1/2013	540.30	4190.70	Water Level Sweeps_Gunnis	no pvc; blocked at 150' bls (11/2012)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	7/24/2013	540.70	4190.30	Water Level Sweeps_Gunnis	no pvc; (blocked at 150' bls,11/2012)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	10/7/2013	540.90	4190.10	Water Level Sweeps_Gunnis	no pvc; (blocked at 150' bls,11/2012)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	4/9/2015	541.50	4189.50	Water Level Sweeps_Gunnis	Developed 2015-open w/ airline in h
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	5/6/2015	541.45	4189.55	Water Level Sweeps_Gunnis	Developed 2015-open w/ airline in h

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.00	420	1689	6/2/2015	541.55	4189.45	Water Level Sweeps_Gunnis	steel airline in hole
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	7/2/2015	540.00	4191.37	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	8/4/2015	540.25	4191.12	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	1/12/2016	542.10	4189.27	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	2/15/2016	542.10	4189.27	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	3/9/2016	542.15	4189.22	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	4/22/2016	542.25	4189.12	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	5/24/2016	542.21	4189.16	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	7/7/2016	542.33	4189.04	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	10/7/2016	542.48	4188.89	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224958	NSD-016	D16023006CAC	EXCELSIOR MINING CORP	1689	739516.26	389066.94	4731.37	420	1689	1/10/2017	542.66	4188.71	WL_Sweeps_Gunnison_2017.x	no pvc; blocked at 150' bls (11/12 & 1/14)
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	11/13/2012	504.80	4190.20	Water Level Sweeps_Gunnis	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	4/1/2013	504.90	4190.10	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	7/24/2013	505.30	4189.70	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	10/7/2013	505.40	4189.60	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	1/9/2014	505.70	4189.30	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	4/13/2014	505.90	4189.10	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	7/17/2014	506.20	4188.80	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	10/1/2014	506.50	4188.50	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	1/1/2015	506.70	4188.30	Water Level Sweeps_Gunnis	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	4/9/2015	507.67	4187.33	Water Level Sweeps_Gunnis	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	5/6/2015	506.66	4188.34	Water Level Sweeps_Gunnis	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.00	400	1349	6/2/2015	506.70	4188.30	Water Level Sweeps_Gunnis	no pvc
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	7/2/2015	505.44	4190.00	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	8/4/2015	505.34	4190.10	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	9/9/2015	506.90	4188.54	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	10/7/2015	507.00	4188.44	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	11/5/2015	507.19	4188.25	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	12/15/2015	507.25	4188.19	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	1/12/2016	507.32	4188.12	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	2/15/2016	507.45	4187.99	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	3/9/2016	507.45	4187.99	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	4/22/2016	507.42	4188.02	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	5/24/2016	507.55	4187.89	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	6/16/2016	507.60	4187.84	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	7/7/2016	507.61	4187.83	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	10/7/2016	507.85	4187.59	WL_Sweeps_Gunnison_2017.x	No PVC
224959	NSD-017	D16023006CDC	EXCELSIOR MINING CORP	1349	739703.96	387977.44	4695.44	400	1349	1/10/2017	507.99	4187.45	WL_Sweeps_Gunnison_2017.x	No PVC
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	11/13/2012	520.20	4167.80	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	4/1/2013	489.60	4198.40	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected 519.7
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	7/24/2013	521.20	4166.80	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected 520
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	10/7/2013	521.30	4166.70	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected __520.1__
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	1/9/2014	521.50	4166.50	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected __520.3__
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	4/13/2014	521.80	4166.20	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected __520.6__
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	7/17/2014	521.90	4166.10	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected __520.7__
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	10/1/2014	522.20	4165.80	Water Level Sweeps_Gunnis	70", w/ pvc; uncorrected __521.0
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	1/2/2015	490.80	4197.20	Water Level Sweeps_Gunnis	70", w/ pvc; corrected from SWL 521.6
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	4/8/2015	522.70	4165.30	Water Level Sweeps_Gunnis	70" < hole, w/ pvc corrected from
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	5/7/2015	522.75	4165.25	Water Level Sweeps_Gunnis	70" < hole, w/ pvc corrected from SW
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.00	138	1398	6/2/2015	522.80	4165.20	Water Level Sweeps_Gunnis	70" < hole, w/ pvc; corrected from
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	7/2/2015	490.19	4198.02	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	8/4/2015	491.35	4196.86	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	9/9/2015	491.46	4196.75	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	10/7/2015	491.60	4196.61	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	11/5/2015	491.69	4196.52	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	12/15/2015	491.74	4196.47	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	1/12/2016	491.80	4196.41	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	2/15/2016	491.93	4196.28	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	3/9/2016	492.02	4196.19	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	4/22/2016	491.99	4196.22	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	5/24/2016	492.13	4196.09	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	10/7/2016	492.29	4195.93	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
224960	NSD-018	D16022012DDA	EXCELSIOR MINING CORP	1200	738058.61	382790.27	4688.21	138	1398	1/10/2017	492.45	4195.77	WL_Sweeps_Gunnison_2017.x	70", w/ pvc; corrected
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	6/1/2010	631.90	4186.10	Water Level Sweeps_Gunnis	Exact date unknown
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	6/1/2011	723.40	4094.60	Water Level Sweeps_Gunnis	Exact date unknown
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	11/13/2012	633.40	4184.60	Water Level Sweeps_Gunnis	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	4/1/2013	632.20	4185.80	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	7/24/2013	634.70	4183.30	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	10/7/2013	635.00	4183.00	Water Level Sweeps_Gunnis	oily casing

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	1/9/2014	635.10	4182.90	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	4/13/2014	635.30	4182.70	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	7/17/2014	635.60	4182.40	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	10/1/2014	635.80	4182.20	Water Level Sweeps_Gunnis	oily casing
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	4/7/2015	636.56	4181.44	Water Level Sweeps_Gunnis	4/7/2015 13:45
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	5/6/2015	635.80	4182.20	Water Level Sweeps_Gunnis	5/6/2015 12:23
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4818.00	645	2034	6/3/2015	635.55	4182.45	Water Level Sweeps_Gunnis	no pvc
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	7/2/2015	635.10	4179.40	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	8/4/2015	635.10	4179.40	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	9/9/2015	635.50	4179.00	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	10/7/2015	635.53	4178.97	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	11/5/2015	635.64	4178.86	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	12/15/2015	635.65	4178.85	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	2/15/2016	635.73	4178.77	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	7/7/2016	636.08	4178.42	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	10/7/2016	636.34	4178.16	WL_Sweeps_Gunnison_2017.x	
225070	CS-05	D15022036DAA	EXCELSIOR MINING CORP	2034	738608.92	393694.89	4814.50	645	2034	1/10/2017	636.42	4178.08	WL_Sweeps_Gunnison_2017.x	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	6/1/2010	648.00	4183.00	Water Level Sweeps_Gunnis	Exact date unknown
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	6/1/2011	643.00	4188.00	Water Level Sweeps_Gunnis	Exact date unknown
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	11/13/2012	643.97	4187.03	Water Level Sweeps_Gunnis	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	4/1/2013	644.30	4186.70	Water Level Sweeps_Gunnis	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	7/24/2013	644.90	4186.10	Water Level Sweeps_Gunnis	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	10/7/2013	645.00	4186.00	Water Level Sweeps_Gunnis	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	1/9/2014	645.20	4185.80	Water Level Sweeps_Gunnis	no pvc
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	4/13/2014	645.40	4185.60	Water Level Sweeps_Gunnis	no pvc
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	7/17/2014	645.80	4185.20	Water Level Sweeps_Gunnis	no pvc
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	10/1/2014	646.00	4185.00	Water Level Sweeps_Gunnis	no pvc
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	3/3/2015	646.20	4184.80	Water Level Sweeps_Gunnis	pumping NSH-023; 3/3/15 17:05
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4831.00	717	2160	4/7/2015	646.34	4184.66	Water Level Sweeps_Gunnis	unsecure, needs dog ear
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4827.70	717	2160	7/2/2015	645.22	4182.48	WL_Sweeps_Gunnison_2017.x	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4827.70	717	2160	8/4/2015	645.41	4182.29	WL_Sweeps_Gunnison_2017.x	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4827.70	717	2160	7/7/2016	646.21	4181.49	WL_Sweeps_Gunnison_2017.x	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4827.70	717	2160	10/7/2016	646.48	4181.22	WL_Sweeps_Gunnison_2017.x	
225071	CS-06	D15022036DAA	EXCELSIOR MINING CORP	2160	738576.3	394194.54	4827.70	717	2160	1/10/2017	646.40	4181.30	WL_Sweeps_Gunnison_2017.x	
225072	CS-07	D15022036DAA	EXCELSIOR MINING CORP	1796	738071.33	394162.26	4850.00	596	1796	6/1/2010	636.00	4214.00	Water Level Sweeps_Gunnis	Exact date unknown
225072	CS-07	D15022036DAA	EXCELSIOR MINING CORP	1796	738071.33	394162.26	4850.00	596	1796	6/1/2011	628.50	4221.50	Water Level Sweeps_Gunnis	Exact date unknown
225074	CS-09	D16023006BAD	EXCELSIOR MINING CORP	2337	738551.02	395144.23	4833.00	685	2337	6/1/2010	642.40	4190.60	Water Level Sweeps_Gunnis	Exact date unknown
225074	CS-09	D16023006BAD	EXCELSIOR MINING CORP	2337	738551.02	395144.23	4833.00	685	2337	6/1/2011	642.40	4190.60	Water Level Sweeps_Gunnis	Exact date unknown
225074	CS-09	D16023006BAD	EXCELSIOR MINING CORP	2337	738551.02	395144.23	4833.00	685	2337	4/1/2013	644.00	4189.00	Water Level Sweeps_Gunnis	Excessive Grease: REMOVE
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	6/1/2010	632.50	4196.50	Water Level Sweeps_Gunnis	Exact date unknown
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	6/1/2011	615.50	4213.50	Water Level Sweeps_Gunnis	Exact date unknown
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	4/1/2013	616.80	4212.20	Water Level Sweeps_Gunnis	some oil in hole
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	7/24/2013	617.30	4211.70	Water Level Sweeps_Gunnis	diesel smell on tape. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	10/7/2013	617.30	4211.70	Water Level Sweeps_Gunnis	diesel smell on tape. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	1/9/2014	617.60	4211.40	Water Level Sweeps_Gunnis	no pvc. diesel smell. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	4/13/2014	617.60	4211.40	Water Level Sweeps_Gunnis	no pvc. diesel smell. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	7/17/2014	618.20	4210.80	Water Level Sweeps_Gunnis	no pvc. diesel smell. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4829.00	720	1656	10/1/2014	618.20	4210.80	Water Level Sweeps_Gunnis	no pvc. diesel smell. No residue.
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4828.53	720	1656	10/7/2016	617.41	4211.12	WL_Sweeps_Gunnison_2017.x	slight diesel odor
225075	CS-10	D16023006BAA	EXCELSIOR MINING CORP	1656	738060.5	394653.38	4828.53	720	1656	1/10/2017	617.72	4210.81	WL_Sweeps_Gunnison_2017.x	slight diesel odor
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	6/1/2010	424.80	4438.20	Water Level Sweeps_Gunnis	Exact date unknown
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	6/1/2011	431.80	4431.20	Water Level Sweeps_Gunnis	Exact date unknown
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	4/1/2013	440.30	4422.70	Water Level Sweeps_Gunnis	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	7/24/2013	441.60	4421.40	Water Level Sweeps_Gunnis	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	10/7/2013	442.20	4420.80	Water Level Sweeps_Gunnis	minor diesel smell
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	1/9/2014	443.50	4419.50	Water Level Sweeps_Gunnis	minor diesel smell
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	4/13/2014	444.50	4418.50	Water Level Sweeps_Gunnis	minor diesel smell
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	7/17/2014	446.20	4416.80	Water Level Sweeps_Gunnis	minor diesel smell
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	10/1/2014	447.00	4416.00	Water Level Sweeps_Gunnis	minor diesel smell
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	4/7/2015	442.25	4420.75	Water Level Sweeps_Gunnis	4/7/2015 14:44
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4863.00	480	2084	6/3/2015	443.18	4419.82	Water Level Sweeps_Gunnis	no pvc
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	7/2/2015	443.03	4415.87	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	8/4/2015	443.58	4415.32	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	9/9/2015	444.75	4414.15	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	10/7/2015	444.68	4414.22	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	11/5/2015	445.45	4413.45	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	12/15/2015	446.10	4412.80	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	1/12/2016	446.45	4412.45	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	2/15/2016	447.05	4411.85	WL_Sweeps_Gunnison_2017.x	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	3/9/2016	447.60	4411.30	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	4/22/2016	448.22	4410.68	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	5/24/2016	448.70	4410.20	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	6/16/2016	448.58	4410.32	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	7/7/2016	449.32	4409.58	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	10/7/2016	450.73	4408.17	WL_Sweeps_Gunnison_2017.x	
225076	CS-11	D15022036DAA	EXCELSIOR MINING CORP	2084	737554.82	394166.14	4858.90	480	2084	1/10/2017	452.43	4406.47	WL_Sweeps_Gunnison_2017.x	
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	6/1/2010	104.00	4653.00	Water Level Sweeps_Gunnis	Exact date unknown
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	6/1/2011	86.00	4671.00	Water Level Sweeps_Gunnis	Exact date unknown
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	4/1/2013	86.50	4670.50	Water Level Sweeps_Gunnis	needs 3.5" cap. Questionable H2O level
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	7/24/2013	86.70	4670.30	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap.
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	10/7/2013	86.90	4670.10	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap. Muddy tap
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	1/9/2014	87.10	4669.90	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap. Muddy tap
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	4/13/2014	87.40	4669.60	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap. Muddy tap
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	7/17/2014	87.70	4669.30	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap. Muddy tap
225077	CS-15	D15022036ADC	EXCELSIOR MINING CORP	492	737561.5	396153.55	4757.00	492	492	10/1/2014	88.10	4668.90	Water Level Sweeps_Gunnis	Questionable H2O level; needs 3.5" cap. Muddy tap
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	6/1/2010	620.50	4189.50	Water Level Sweeps_Gunnis	Exact date unknown
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	6/1/2011	619.50	4190.50	Water Level Sweeps_Gunnis	Exact date unknown
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	11/13/2012	619.20	4190.80	Water Level Sweeps_Gunnis	
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	4/1/2013	619.90	4190.10	Water Level Sweeps_Gunnis	
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	7/24/2013	546.40	4263.60	Water Level Sweeps_Gunnis	runnoff entering casing through hole at surface; h
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	10/7/2013	616.90	4193.10	Water Level Sweeps_Gunnis	7/2013 value off
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	1/9/2014	620.60	4189.40	Water Level Sweeps_Gunnis	7/2013 value off
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	4/13/2014	616.50	4193.50	Water Level Sweeps_Gunnis	7/2013 value off
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	7/17/2014	612.10	4197.90	Water Level Sweeps_Gunnis	7/2013 value off
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	10/1/2014	619.90	4190.10	Water Level Sweeps_Gunnis	7/2013 value off
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	1/1/2015	621.90	4188.10	Water Level Sweeps_Gunnis	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	3/3/2015	621.10	4188.90	Water Level Sweeps_Gunnis	pumping NSH-023
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	4/7/2015	622.69	4187.31	Water Level Sweeps_Gunnis	4/7/2015 16:15
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	5/6/2015	621.85	4188.15	Water Level Sweeps_Gunnis	no pvc
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4810.00	687	2171	6/4/2015	622.05	4187.95	Water Level Sweeps_Gunnis	no pvc
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	7/2/2015	620.54	4186.26	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	8/4/2015	620.59	4186.21	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	9/9/2015	622.35	4184.45	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	10/7/2015	622.31	4184.49	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	11/5/2015	622.25	4184.55	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	12/15/2015	622.49	4184.31	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	1/12/2016	622.60	4184.20	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	2/15/2016	622.59	4184.21	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	3/9/2016	622.70	4184.10	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	4/22/2016	622.79	4184.01	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	5/24/2016	622.90	4183.90	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	7/7/2016	622.98	4183.82	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	10/7/2016	623.20	4183.60	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225079	CS-21	D16023006BBB	EXCELSIOR MINING CORP	2171	738532.95	394655.34	4806.80	687	2171	1/10/2017	623.41	4183.39	WL_Sweeps_Gunnison_2017.x	7/13 bad data, hole flooded prev. night
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	6/1/2010	489.40	4193.60	Water Level Sweeps_Gunnis	Exact date unknown
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	6/1/2011	490.40	4192.60	Water Level Sweeps_Gunnis	Exact date unknown
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	4/1/2013	491.50	4191.50	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	7/24/2013	491.80	4191.20	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	10/7/2013	492.00	4191.00	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	1/9/2014	492.20	4190.80	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	4/13/2014	492.40	4190.60	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	7/17/2014	492.70	4190.30	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	10/1/2014	493.10	4189.90	Water Level Sweeps_Gunnis	S. of fenceline, near Big Wash
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	1/1/2015	493.20	4189.80	Water Level Sweeps_Gunnis	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	4/9/2015	493.21	4189.79	Water Level Sweeps_Gunnis	4/9/2015 8:18
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	5/6/2015	493.20	4189.80	Water Level Sweeps_Gunnis	5/6/2015 9:20
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.00	0	1317	6/2/2015	493.17	4189.83	Water Level Sweeps_Gunnis	no pvc
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	7/2/2015	492.92	4190.24	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	8/4/2015	492.95	4190.21	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	9/9/2015	493.35	4189.81	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	10/7/2015	493.55	4189.61	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	11/5/2015	493.70	4189.46	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	12/15/2015	493.85	4189.31	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	1/12/2016	493.75	4189.41	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	2/15/2016	494.00	4189.16	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	3/9/2016	493.95	4189.21	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	4/22/2016	493.89	4189.27	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	5/24/2016	493.05	4190.11	WL_Sweeps_Gunnison_2017.x	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	7/7/2016	494.18	4188.98	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	10/7/2016	494.30	4188.86	WL_Sweeps_Gunnison_2017.x	
225081	CS-31	D16023006BAC	EXCELSIOR MINING CORP	1317	740152.63	387206.99	4683.16	0	1317	1/10/2017	494.43	4188.73	WL_Sweeps_Gunnison_2017.x	
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	6/1/2010	324.00	4441.00	Water Level Sweeps_Gunnis	Exact date unknown
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	6/1/2011	422.00	4343.00	Water Level Sweeps_Gunnis	Exact date unknown
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	4/1/2013	339.80	4425.20	Water Level Sweeps_Gunnis	
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	7/24/2013	341.00	4424.00	Water Level Sweeps_Gunnis	
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	10/7/2013	341.70	4423.30	Water Level Sweeps_Gunnis	minor diesel smell on tape.
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	1/9/2014	343.30	4421.70	Water Level Sweeps_Gunnis	minor diesel smell
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	4/13/2014	345.00	4420.00	Water Level Sweeps_Gunnis	minor diesel smell
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	7/17/2014	345.00	4420.00	Water Level Sweeps_Gunnis	minor diesel smell
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4765.00	522	1500	10/1/2014	345.50	4419.50	Water Level Sweeps_Gunnis	minor diesel smell
225085	DC-09	D16023006ADA	EXCELSIOR MINING CORP	1500	737203.44	396082.94	4764.72	522	1500	1/10/2017	360.63	4404.09	WL_Sweeps_Gunnison_2017.x	diesel/oil (?) down hole discovered from airlift d
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	6/1/2011	549.30	4287.70	Water Level Sweeps_Gunnis	Exact date unknown
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	4/1/2013	555.40	4281.60	Water Level Sweeps_Gunnis	
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	7/24/2013	556.80	4280.20	Water Level Sweeps_Gunnis	
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	10/7/2013	557.60	4279.40	Water Level Sweeps_Gunnis	
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	1/9/2014	558.20	4278.80	Water Level Sweeps_Gunnis	no pvc
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	4/13/2014	559.00	4278.00	Water Level Sweeps_Gunnis	no pvc
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	10/1/2014	560.90	4276.10	Water Level Sweeps_Gunnis	no pvc. 7/14, Stop 557' bls, no reading
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	3/4/2015	605.60	4231.40	Water Level Sweeps_Gunnis	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	4/6/2015	607.78	4229.22	Water Level Sweeps_Gunnis	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	4/7/2015	638.88	4198.12	Water Level Sweeps_Gunnis	4/7/2015 15.22
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	5/7/2015	608.60	4228.40	Water Level Sweeps_Gunnis	5/7/2015 9:10
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	6/3/2015	608.90	4228.10	Water Level Sweeps_Gunnis	no pvc
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4837.00	416	1475	6/3/2015	637.83	4199.17	Water Level Sweeps_Gunnis	no pvc
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	7/2/2015	608.55	4251.45	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	8/4/2015	608.53	4251.47	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	9/9/2015	608.70	4251.30	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	10/7/2015	608.66	4251.34	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	11/5/2015	608.75	4251.25	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	2/15/2016	608.75	4251.25	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	7/7/2016	607.74	4252.26	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	10/7/2016	606.28	4253.72	WL_Sweeps_Gunnison_2017.x	developed
225087	J-05	D15023031CCD	EXCELSIOR MINING CORP	1475	737444.95	393699.86	4860.00	416	1475	1/10/2017	605.74	4254.26	WL_Sweeps_Gunnison_2017.x	developed
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	7/2/2015	636.58	4187.82	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	8/4/2015	635.95	4188.45	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	9/9/2015	637.75	4186.65	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	10/7/2015	637.70	4186.70	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	11/5/2015	637.80	4186.60	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	12/15/2015	637.80	4186.60	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	1/12/2016	637.84	4186.56	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	2/15/2016	637.97	4186.43	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	3/9/2016	638.10	4186.30	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	4/22/2016	638.01	4186.39	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	5/24/2016	638.20	4186.20	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	7/7/2016	638.16	4186.24	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	10/7/2016	638.40	4186.00	WL_Sweeps_Gunnison_2017.x	
225091	J-09	D15023031CBC	EXCELSIOR MINING CORP	1158	737859.91	394645.39	4824.40	590	1158	1/10/2017	638.60	4185.80	WL_Sweeps_Gunnison_2017.x	
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	6/1/2010	291.80	4466.20	Water Level Sweeps_Gunnis	Exact date unknown
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	4/1/2013	297.40	4460.60	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	7/24/2013	297.60	4460.40	Water Level Sweeps_Gunnis	no pvc; new/need to locate
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	10/7/2013	297.70	4460.30	Water Level Sweeps_Gunnis	no pvc; new/need to locate
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	1/9/2014	297.80	4460.20	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	4/13/2014	297.80	4460.20	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	7/17/2014	297.90	4460.10	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	10/1/2014	297.80	4460.20	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4758.00	0	2085	6/2/2015	297.85	4460.15	Water Level Sweeps_Gunnis	no pvc
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4757.91	0	2085	7/2/2015	297.57	4460.34	WL_Sweeps_Gunnison_2017.x	
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4757.91	0	2085	8/4/2015	297.60	4460.31	WL_Sweeps_Gunnison_2017.x	
225112	T-10	D15023031CCA	EXCELSIOR MINING CORP	2085	740145.33	392206.7	4757.91	0	2085	2/15/2016	298.58	4459.33	WL_Sweeps_Gunnison_2017.x	
505586		D16023023BAB	ROBERTSON III, JOHN,	515	759711.8	376348.66	4484.00	455	515	6/16/1983	369.00	4115.00	Well 55 Datbase	
505586		D16023023BAB	ROBERTSON III, JOHN,	515	759711.8	376348.66	4484.00	455	515	12/9/2014	444.00	4040.00		
507963		D16023020DBD	WILLIAMS,I	625	745800.96	373022.12	4695.00	400	625	5/9/1984	318.00	4377.00	Well 55 Datbase	
515539		D16022002BBB	GEORGANA R. HIATT	495	727610.08	393032.31	4947.00	0	495	11/23/1990	370.00	4577.00	Well 55 Datbase	
518838		D16023021CCC	LONG, PAMELA,J	660	747481.77	372113.93	4742.00	620	660	9/30/1987	610.00	4132.00	Well 55 Datbase	
524980		D16023014CDC	PURCELL, LEO,	540	759641.21	377237.86	4465.00	480	540	8/5/1989	345.00	4120.00	Well 55 Datbase	
550080		D16023021CDC	PAUL & SUZANNE JORDAN	650	749347.08	372501.55	4739.00	580	640	6/14/1995	525.00	4214.00	Well 55 Datbase	
561562	EPB-1 core	D15022026DBB	NORD RESOURCES CORP	398	729931.85	400120.53	5052.20	0	398.3	12/10/1997	271.00	4781.20	Well 55 Datbase	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
561562	EPB-1 core	D15022026DBB	NORD RESOURCES CORP	398	729931.85	400120.53	5052.20	0	398.3	8/11/1998	397.40	4654.80	Appendix D	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	9/6/1997	60.00	5007.20	Well 55 Datbase	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	5/5/1998	49.00	5018.20	Regional Water Level map	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	2/24/2003	52.00	5015.20	Regional Water Level map	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	4/23/2003	51.98	5015.22	Regional Water Level map	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	5/5/2003	53.59	5015.21	As Built - 2003	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	5/16/2008	53.82	5015.22	Regional Water Level map	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	5/27/2008	53.82	5015.22	Regional Water Level map	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	12/19/2008	56.50	5012.30	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	1/8/2009	56.50	5012.30	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	2/20/2009	56.50	5012.30	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	4/23/2009	56.80	5012.00	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	6/11/2009	56.90	5011.90	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	8/6/2009	56.90	5011.90	JT - Oct 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5068.80	63	123	1/13/2011	54.20	5014.60	Matt & Rusty - Nov 2015	
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5067.20	63	123	10/27/2015	49.62	5017.58	Golder - Oct 2015	Rediflo3??, Owner: Arimetco
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	10/28/2015	51.32	5014.47		POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	3/9/2016	50.31	5015.48	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	5/17/2016	51.11	5014.68	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	7/6/2016	51.83	5013.96	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	8/16/2016	51.68	5014.11	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	9/22/2016	49.83	5015.96	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	11/16/2016	49.90	5015.89	Golder - Feb 2017	POC well
561563	Saddle	D15022026CCA	NORD RESOURCES CORP	123	727974.28	399220.68	5065.79	63	123	2/15/2017	50.05	5015.74	Golder - Feb 2017	POC well
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	9/6/1997	318.00	4577.10	Well 55 Datbase	
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	8/11/1998	314.55	4580.55	Regional Water Level map	
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	2/17/2003	322.00	4573.10	Regional Water Level map	
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.90	365	425	4/23/2003	327.00		Appendix D	dry
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	5/16/2008	293.20	4601.90	Regional Water Level map	
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	5/27/2008	293.20	4601.90	Regional Water Level map	
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.90	365	425	12/19/2008	327.00		JT - Oct 2015	dry - no pump currently installed
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4895.10	365	425	10/28/2015	327.70		Golder - Oct 2015	dry - collapsed well?, Arimetco
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	3/9/2016	329.26	4568.88	Golder - Feb 2017	temporary transducer installed @340 ft
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	7/6/2016	331.37	4566.77	Golder - Feb 2017	temporary transducer installed @340 ft
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	8/16/2016	331.12	4567.02	Golder - Feb 2017	temporary transducer installed @340 ft
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	9/22/2016	331.02	4567.12	Golder - Feb 2017	temporary transducer installed @340 ft
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	11/16/2016	326.33	4571.81	Golder - Feb 2017	temporary transducer installed @340 ft
561564	Southern	D15022025CCD	NORD RESOURCES CORP	425	733248.61	398080.08	4898.14	365	425	2/15/2017	323.01	4575.13	Golder - Feb 2017	temporary transducer installed @340 ft
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5026.30	442	502	9/6/1997	395.00	4631.30	Well 55 Datbase	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5026.30	442	502	5/6/1998	397.00	4629.30	Table D-3	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	5/1/2003	458.17	4569.79	Table D-3	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	6/4/2008	444.00	4583.96	Table 1 Rgeional Water Le	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	12/19/2008	464.80	4563.16	JT - Oct 2015	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	1/8/2009	464.70	4563.26	JT - Oct 2015	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	2/20/2009	466.00	4561.96	JT - Oct 2015	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	4/23/2009	469.00	4558.96	JT - Oct 2015	
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	6/11/2009	455.90	4572.06	JT - Oct 2015	old electric control box onsite
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5027.96	442	502	8/6/2009	455.60	4572.36	JT - Oct 2015	no pump currently installed
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5026.30	442	502	10/28/2015	497.00	4529.30	Golder - Oct 2015	Owner: Arimetco
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	3/9/2016	496.81	4532.90	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	5/17/2016	494.60	4535.11	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	7/6/2016	494.62	4535.09	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	8/16/2016	495.55	4534.16	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	9/22/2016	494.57	4535.14	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	11/16/2016	493.65	4536.06	Golder - Feb 2017	0
561565	Cross	D15022026ACA	NORD RESOURCES CORP	502	730644.27	401795.05	5029.71	442	502	2/15/2017	493.30	4536.41	Golder - Feb 2017	0
562209		D16023021DCC	KEPHART, WRAY,	640	750239.64	372389.15	4735.00	560	640	4/17/1997	365.00	4370.00	Well 55 Datbase	
562302		D16023014DDA	IRVIN & LINDA VAN ENWYCK	442	762503.89	378139.63	4426.00	402	442	6/3/1997	360.00	4066.00	Well 55 Datbase	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4864.30	545	605	9/6/1997	525.00	4339.30	Well 55 Datbase	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	9/22/1997	525.00	4340.44	Table D-2	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	5/6/1998	526.00	4339.44	Table D-2	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	3/26/2003	569.20	4296.24	Table D-2	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	5/2/2003	572.11	4293.33	Table D-2	
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	6/3/2008	579.00	4286.44	Regional Water Level Map	10/26/2015
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4865.44	545	605	12/19/2008	588.80	4276.64	JT - Oct 2015	electric control box broken
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4864.30	545	605	10/28/2015	569.80	4294.50	Golder - Oct 2015	Owner: Arimetco
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	3/9/2016	567.56	4301.09	Golder - Feb 2017	temporary transducer installed @592 ft
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	5/17/2016	570.94	4297.71	Golder - Feb 2017	temporary transducer installed @592 ft
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	7/6/2016	573.25	4295.40	Golder - Feb 2017	temporary transducer installed @592 ft

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	8/16/2016	536.62	4332.03	Golder - Feb 2017	temporary transducer installed @592 ft
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	9/22/2016	525.51	4343.14	Golder - Feb 2017	temporary transducer installed @592 ft
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	11/16/2016	547.75	4320.90	Golder - Feb 2017	temporary transducer installed @592 ft
563953	Cochise	D15022025CAB	NORD RESOURCES CORP	605	734060.73	400121.15	4868.65	545	605	2/15/2017	540.30	4328.35	Golder - Feb 2017	temporary transducer installed @592 ft
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	9/6/1997	289.00	4931.30	Well 55 Datbase	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	5/5/1998	280.00	4940.30	Regional Water Level Map	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	3/6/2003	290.12	4930.18	Regional Water Level Map	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	4/24/2003	289.76	4930.54	Regional Water Level Map	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	6/26/2003	290.45	4929.85	Regional Water Level Map	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	6/26/2006	291.10	4929.85	Appendix D	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	6/4/2008	289.35	4930.95	Regional Water Level Map	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	12/19/2008	299.00	4921.95	JT - Oct 2015	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	1/8/2009	299.10	4921.85	JT - Oct 2015	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	2/20/2009	299.30	4921.65	JT - Oct 2015	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	4/23/2009	299.80	4921.15	JT - Oct 2015	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	6/11/2009	299.70	4921.25	JT - Oct 2015	
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.95	305	365	8/6/2009	300.70	4920.25	JT - Oct 2015	no pump currently installed
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5220.30	305	365	10/28/2015	307.80	4912.50	Golder - Oct 2015	Owner: Arimetco
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	3/9/2016	309.70	4912.80	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	5/17/2016	308.85	4913.65	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	7/6/2016	309.30	4913.20	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	8/16/2016	309.35	4913.15	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	9/22/2016	309.45	4913.05	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	11/16/2016	308.20	4914.30	Golder - Feb 2017	0
563954	Pioneer	D15022026BCB	NORD RESOURCES CORP	365	726957.27	401512.6	5222.50	305	365	2/15/2017	307.74	4914.76	Golder - Feb 2017	0
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	9/6/1997	110.00	4985.50	Well 55 Datbase	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	5/5/1998	110.00	4985.50	Regional Water Level Map	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	2/27/2003	115.35	4980.15	Regional Water Level Map	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	5/1/2003	115.91	4979.59	Regional Water Level Map	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	5/16/2008	114.00	4981.50	Regional Water Level Map	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	5/27/2008	114.00	4981.50	Regional Water Level Map	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	12/19/2008	113.80	4982.70	JT - Oct 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	1/8/2009	113.20	4983.30	JT - Oct 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	2/20/2009	112.30	4984.20	JT - Oct 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	4/23/2009	112.10	4984.40	JT - Oct 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	6/11/2009	112.00	4984.50	JT - Oct 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	8/6/2009	110.20	4986.30	JT - Oct 2015	sounding tube detached
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5096.50	168	268	1/13/2011	107.20	4989.30	Matt & Rusty - Nov 2015	
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5095.50	168	268	10/27/2015	98.80	4996.70	Golder - Oct 2015	Rediflo3??, Owner: Arimetco
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	10/28/2015	99.60	4999.51		POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	3/9/2016	99.85	4999.26	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	5/17/2016	102.95	4996.16	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	7/6/2016	105.60	4993.51	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	8/16/2016	106.95	4992.16	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	9/22/2016	107.16	4991.95	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	11/16/2016	107.40	4991.71	Golder - Feb 2017	POC well
563955	Hill	D15022026DCC	NORD RESOURCES CORP	180	729401.41	398554.3	5099.11	168	268	2/15/2017	108.61	4990.50	Golder - Feb 2017	POC well
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4953.10	564	624	9/6/1997	570.00	4383.10	Well 55 Datbase	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4953.10	564	624	8/11/1998	485.00	4468.10	Appendix D	questionable WL
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.30	564	624	2/27/2003	587.50	4366.80	Regional Water Level map	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4953.10	564	624	5/20/2003	583.00	4370.10	Regional Water Level map	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4953.10	564	624	5/23/2003	583.00	4370.10	As Built - 2003/App D	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4953.10	564	624	6/4/2008	554.80	4398.30	Regional Water Level map	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	12/19/2008	570.00	4384.20	JT - Oct 2015	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	1/8/2009	570.80	4383.40	JT - Oct 2015	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	2/27/2009	574.60	4379.60	JT - Oct 2015	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	4/23/2009	578.90	4375.30	JT - Oct 2015	
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	6/11/2009	587.30	4366.90	JT - Oct 2015	electric control box broken
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4954.20	564	624	8/6/2009	587.40		JT - Oct 2015	dry
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	3/9/2016	575.15	4382.21	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	5/17/2016	575.89	4381.47	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	7/6/2016	576.40	4380.96	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	8/16/2016	576.45	4380.91	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	9/22/2016	575.80	4381.56	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	11/16/2016	574.40	4382.96	Golder - Feb 2017	0
563956	Twin	D15022025BCB	NORD RESOURCES CORP	624	732779.23	401419.23	4957.36	564	624	2/15/2017	573.06	4384.30	Golder - Feb 2017	0
564616		D16023020CBC	GEORGE THORNBURGH SR	620	742450.5	372897.95	4665.00	580	620	10/4/1997	445.00	4220.00	Well 55 Datbase	
564915		D16023020CCA	VALERIE LYNN TRUST	660	743341.88	372363.15	4682.00	591	651	3/11/1998	470.00	4212.00	Well 55 Datbase	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	12/5/1997	225.00	4691.40	Well 55 Datbase	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	5/6/1998	70.00	4846.40	Regional Water Level map	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	2/13/2003	74.47	4841.93	Regional Water Level map	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	4/28/2003	75.10	4841.30	Regional Water Level map	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	5/16/2008	80.62	4841.30	Regional Water Level map	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4916.40	220	280	5/27/2008	80.62	4841.30	Regional Water Level map	
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	3/9/2016	85.29	4836.04	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	5/17/2016	85.22	4836.11	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	7/6/2016	85.40	4835.93	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	8/16/2016	85.35	4835.98	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	9/22/2016	85.60	4835.73	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	11/16/2016	85.70	4835.63	Golder - Feb 2017	0
565198	Tungsten	D15022035ADA	NORD RESOURCES CORP	280	731403.63	396152.38	4921.33	220	280	2/15/2017	85.73	4835.60	Golder - Feb 2017	0
567591		D16022013BBB	WILLIAM E THOMAS	600	737759.16	380603.01	4684.00	560	600	4/20/1998	525.00	4159.00	Well 55 Datbase	
567714		D16023021DDD	WAYNE & BONNIE SCHEIBE	620	752350.08	371721.89	4783.00	560	620	5/20/1998	510.00	4273.00	Well 55 Datbase	
569725		D16023019DCA	WENDY H JEFFCOCK	586	740648.11	372240.74	4664.00	520	580	8/11/1998	457.00	4207.00	Well 55 Datbase	
571358		D16023021CCC	BRYAN AND LYNN HAWKINS	700	747811.64	372089.62	4751.00	640	700	9/3/1999	580.00	4171.00	Well 55 Datbase	
572349		D16023021CAD	WILLIAM F MENTZER	643	749916.43	373474.37	4683.00	603	643	3/24/1999	570.00	4113.00	Well 55 Datbase	
573551		D16023021CBD	AGNES I KOSKI	645	748469.19	373419.93	4696.00	605	645	4/17/1999	570.00	4126.00	Well 55 Datbase	
576329		D16023019DCB	DALE & LORRAINE HEWIN	560	740025.67	372276.01	4650.00	500	560	9/16/1999	530.00	4120.00	Well 55 Datbase	
576579		D16023019CCA	DALE & LORRAINE HEWIN	520	739617.58	372544.26	4642.00	460	520	9/17/1999	480.00	4162.00	Well 55 Datbase	
577993		D16023023BAB	MARK FOLINO	485	759714.41	376397.27	4481.00	420	465	12/15/1999	390.00	4091.00	Well 55 Datbase	
578044		D16022013BBD	CLIVE AND SHIRLEY BAILEY	220	733776.37	381424.02	4743.00	20	220	10/22/2000	30.00	4713.00	Well 55 Datbase	
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4867.00	440	490	2/15/2000	497.08		Appendix D	
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4867.00	440	490	1/7/2003	497.08		Appendix D	
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4865.33	440	490	1/13/2003	495.00		Imaged Record	
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4867.00	440	490	3/18/2003	497.08		Appendix D	
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4867.00	440	490	4/23/2003	497.08		Appendix D	no pump currently installed
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4867.00	440	490	12/19/2008	497.08		JT - Oct 2015	no water encountered initially, redrilled
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4865.33	440	490	10/28/2015	495.00		Golder - Oct 2015	dry
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4868.26	440	490	5/17/2016	492.77	4375.49	Golder - Feb 2017	water in well again on 2/15/17
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4868.26	440	490	7/6/2016	491.13	4377.13	Golder - Feb 2017	water in well again on 2/15/17
578984	Dragoon	D15022025ADC	NORD RESOURCES CORP	495	734292.75	398888.79	4868.26	440	490	2/15/2017	491.33	4376.93	Golder - Feb 2017	water in well again on 2/15/17
580043		D16023018CCA	BONNIE L WHITE	525	738899.43	377588.16	4644.00	440	480	5/8/2000	436.00	4208.00	Well 55 Datbase	
591643		D16023010ADB	SHANNON KIZER	696	756963.8	385784	4462.00	596	696	6/7/2002	500.00	3962.00	Well 55 Datbase	
592427		D16023020CCD	CLINTON KEITH & EDYTHE K. JACOBS	680	743199.56	371857.25	4692.00	600	680	7/11/2002	405.00	4287.00	Well 55 Datbase	
594256		D16023019CDD	PAUL A BURBECK	570	739226.95	372000.74	4635.00	530	570	9/3/2002	440.00	4195.00	Well 55 Datbase	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	1/9/2003	365.00	4553.71	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	1/10/2003	365.00	4553.71	Appendix D/Imaged Record	GWE do not calculate in App D
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	2/13/2003	365.95	4552.76	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	3/13/2003	367.60	4551.11	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	4/16/2003	366.20	4552.51	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	4/24/2003	368.52	4550.19	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	6/4/2003	366.72	4551.99	As Built - 2003	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	5/16/2008	315.00	4603.71	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	5/27/2008	315.00	4603.71	Regional Water Level Map	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	12/19/2008	293.70	4625.01	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	1/8/2009	293.80	4624.91	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	2/20/2009	291.50	4627.21	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	4/23/2009	291.50	4627.21	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	6/11/2009	302.80	4615.91	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4918.71	425	475	8/6/2009	302.50	4616.21	JT - Oct 2015	
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4917.06	425	475	10/28/2015	308.40	4608.66	Golder - Oct 2015	MW-8B, ADEQ #86
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	3/9/2016	318.72	4603.24	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	5/17/2016	318.60	4603.36	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	7/6/2016	322.09	4599.87	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	8/16/2016	320.80	4601.16	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	9/22/2016	318.31	4603.65	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	11/16/2016	318.70	4603.26	Golder - Feb 2017	temporary transducer installed @353 ft
595924	Donkey MW-8B	D15022025DDD	NORD RESOURCES CORP	500	732205.2	398341.44	4921.96	425	475	2/15/2017	321.85	4600.11	Golder - Feb 2017	temporary transducer installed @353 ft
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5011.68	168	268	1/7/2003	103.00	4908.68	Well 55 Datbase	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5011.68	168	268	1/8/2003	103.00	4908.68	Imaged Record	first water @ 167, 2nd @ 193
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	2/13/2003	58.07	4955.28	Regional Water Level Map	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	4/29/2003	58.05	4955.43	Regional Water Level Map	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	5/16/2008	65.00	4948.35	Regional Water Level Map	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	5/27/2008	65.00	4948.35	Regional Water Level Map	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	12/19/2008	63.00	4950.35	JT - Oct 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	1/8/2009	59.60	4953.75	JT - Oct 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	2/20/2009	58.10	4955.25	JT - Oct 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	4/23/2009	57.90	4955.45	JT - Oct 2015	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	6/11/2009	57.70	4955.65	JT - Oct 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	8/6/2009	57.80	4955.55	JT - Oct 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5013.35	168	268	1/13/2011	54.70	4958.65	Matt & Rusty - Nov 2015	
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5011.68	168	268	10/27/2015	45.05	4966.63	Golder - Oct 2015	ADEQ #13
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	10/28/2015	47.05	4968.77		POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	3/9/2016	46.49	4969.33	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	5/17/2016	48.00	4967.82	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	7/6/2016	48.70	4967.12	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	8/16/2016	48.75	4967.07	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	9/22/2016	48.43	4967.39	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	11/16/2016	49.35	4966.47	Golder - Feb 2017	POC well
595927	Durham	D15022035ABA	NORD RESOURCES CORP	273	730371.17	397830.79	5015.82	168	268	2/15/2017	50.12	4965.70	Golder - Feb 2017	POC well
602036		D16022003BC0	MCKINNEY,R W	85	726804.66	392534.88	4984.00	20	85	1/1/1950	12.00	4972.00	Well 55 Datbase	
605730		D15023029ABD	ASLD	600	746443.38	401863.02	4598.00	400	600	11/5/1959	50.00	4548.00		
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5100.00	680	800	9/29/1973	506.00	4594.00	Appendix D	
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5104.90	680	800	6/19/1995	473.50	4631.40	Appendix D	
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5104.90	680	800	1/17/1996	462.30	4642.60	Appendix D	
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5104.90	680	800	1/25/1996	462.11	4642.79	Appendix D	Supply Water
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5107.40	680	800	4/30/2003	556.46	4550.94	Appendix D	100 gpm yield
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5107.40	680	800	9/15/2015	698.00	4409.40	JT - Sep 2015	Owner: AMPAC Mining
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	3/9/2016	676.70	4434.38	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	5/17/2016	690.20	4420.88	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	7/6/2016	683.36	4427.72	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	8/16/2016	683.51	4427.57	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	9/22/2016	682.94	4428.14	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	11/16/2016	661.45	4449.63	Golder - Feb 2017	supply well
611607	Moore Shaft	D15022023CD0	NORD RESOURCES CORP	680	728793.93	403967.64	5111.08	680	800	2/15/2017	655.80	4455.28	Golder - Feb 2017	supply well
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4970.78	0	862	7/26/1990	425.00	4545.78	Appendix D	
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4970.78	0	862	8/2/1990	450.00	4520.78	Appendix D	
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4970.78	0	862	9/17/1993	417.50	4553.28	Appendix D	
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4973.38	0	862	4/9/2003	555.22	4418.16	Appendix D	
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4973.38	0	862	4/16/2003	553.08	4420.30	Appendix D	
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4970.98	0	862	9/15/2015	416.00	4554.98	JT - Sep 2015	Supply Water
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4970.78	0	862	10/28/2015	416.70	4554.08	Golder - Oct 2015	Owner: Arimetco; no pump
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	3/9/2016	422.30	4551.92	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	5/17/2016	423.41	4550.81	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	7/6/2016	424.75	4549.47	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	8/16/2016	415.30	4558.92	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	9/22/2016	410.05	4564.17	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	11/16/2016	408.40	4565.82	Golder - Feb 2017	temporary transducer installed @453 ft
611608	Republic Well	D15022025BC0	NORD RESOURCES CORP	862	732439.46	401628.75	4974.22	0	862	2/15/2017	405.11	4569.11	Golder - Feb 2017	temporary transducer installed @453 ft
611609	Black Prince Mine	D15022023DB0	NORD RESOURCES CORP	945	730402.88	405395.8	5013.00	0	945	9/14/1973	798.00	4315.00	Table D-1	
611609	Black Prince Mine	D15022023DB0	NORD RESOURCES CORP	945	730402.88	405395.8	5013.00	0	945	1/25/1996	790.60	4222.40	Table D-1	
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4776.00	706	956	10/5/1976	618.00	4158.00	Appendix D	mine water supply well, PWL 680
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4750.00	706	956	10/15/1976	680.00	4070.00	Well 55 Datbase	
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4776.00	706	956	5/27/2003	657.00	4119.00	Appendix D	airline, 68 psi; first water @ 727 ft
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	3/9/2016	695.90	4085.17	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	5/17/2016	697.70	4083.37	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	7/6/2016	695.25	4085.82	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	8/16/2016	695.02	4086.05	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	9/22/2016	694.95	4086.12	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	11/16/2016	696.56	4084.51	Golder - Feb 2017	no air blowing, 2/14/17
611610	Section 19 Well	D15023019BBB	NORD RESOURCES CORP	1155	737604	408296.24	4781.07	706	956	2/15/2017	696.05	4085.02	Golder - Feb 2017	no air blowing, 2/14/17
616964		D16022011AC0	FULTON ET AL,W D	0	730993.85	384798.41	4841.00	2	100	9/1/1977	2.00	4839.00		
620397		D16022003AD0	MCGOFFIN,R	65	727102.17	389974.29	4975.00	20	65	1/1/1967	32.00	4943.00	Well 55 Datbase	
622850		D16022001BAD	CYPRUS COPPER CO	0	734240.93	391681.17	4794.00	20	100	11/3/1959	38.42	4755.58		
622850		D16022001BAD	CYPRUS COPPER CO	0	734240.93	391681.17	4794.00	20	100	6/8/1982	75.00	4719.00	Well 55 Datbase	
622852		D15023030AAD	BENSON 1550 LLC	638	741962.11	402660.4	4668.00	500	638	1/1/1965	500.00	4168.00	Well 55 Datbase	
622852		D15023030AAD	BENSON 1550 LLC	638	741962.11	402660.4	4668.00	500	638	12/13/2001	510.20	4157.80		
622853		D16022001BAD	CYPRUS COPPER CO	70	734884.07	391625.05	4779.00	15	100	6/8/1982	70.00	4709.00	Well 55 Datbase	
625315		D16022013AD0	LAMB,J A	250	737067.96	380266.25	4684.00	50	250	6/10/1982	180.00	4504.00	Well 55 Datbase	
625316	Well location bad	D16022012DC0	LAMB,J A	250	736038.63	382740.75	4745.00	200	250	6/10/1982	200.00	4545.00	Well 55 Datbase	
626713		D16023016DDC	ASLD	554	750695.18	377213.59	4550.00	350	554	10/10/1956	395.00	4155.00		
626713		D16023016DDC	ASLD	554	750695.18	377213.59	4550.00	350	554	6/10/1980	347.00	4203.00	Well 55 Datbase	
627693		D16023029CCC	COMSTOCK,C	600	743114.84	366833.97	4785.00	460	600	1/1/1943	460.00	4325.00	Well 55 Datbase	
628132	ADOT - Texas Canyon	D16023018DDD	ADOT	700	740118.12	375095.69	4615.00	480	680	9/24/1980	398.00	4217.00	Well 55 Datbase	
628132	ADOT - Texas Canyon	D16023018DDD	ADOT	700	740118.12	375095.69	4615.00	480	680	12/2/1994	399.60	4215.40		
631738	Dragoon Water 2	D16023019ACC	DRAGOON WATER CO INC	760	739786.43	375315.08	4624.00	450	928	9/8/1966	407.00	4217.00		
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	1/1/1950	440.00	4193.00		

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	5/17/1982	360.00	4273.00	Well 55 Datbase	
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	12/9/1999	419.90	4213.10		
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	12/15/1999	430.50	4202.50		
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	10/1/2014	552.40	4080.60	Water Level Sweeps_Gunnis	pump on when arrived, recovering ~3'/min when meas
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	1/1/2015	451.90	4181.10	Water Level Sweeps_Gunnis	2011 SWL 558' bl
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4633.00	400	760	4/1/2015	442.45	4190.55	Water Level Sweeps_Gunnis	Exact date unknown
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	10/7/2015	444.05	4187.00	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	11/5/2015	444.00	4187.05	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	12/15/2015	443.95	4187.10	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	1/12/2016	444.00	4187.05	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	2/15/2016	444.77	4186.28	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	3/9/2016	444.87	4186.18	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	4/22/2016	444.58	4186.47	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	5/24/2016	445.95	4185.10	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	7/7/2016	444.34	4186.71	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	10/7/2016	445.63	4185.42	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
631739	Dragoon Water 1	D16023019BAC	DRAGOON WATER CO INC	987	740361.24	373766.67	4631.05	400	760	1/10/2017	446.02	4185.03	WL_Sweeps_Gunnison_2017.x	pump set 654' bls (K. Dojoquez p
633424	Smith	D15022035BA0	DURHAM, ROBERT C	500	728586.31	397678.2	5006.00	0	500	5/1/1977	80.00	4926.00	Well 55 Datbase	
633424	Smith	D15022035BA0	DURHAM, ROBERT C	500	728586.31	397678.2	4990.04	0	500	1/16/1996	53.90	4936.14	Appendix D	
633424	Smith	D15022035BA0	DURHAM, ROBERT C	500	728586.31	397678.2	4990.96	0	500	5/12/2003	59.20	4931.76	Appendix D	stock well, windmill
633426		D15022034BCD	SMITH & DURHAM,	263	722766.87	395516.41	5122.00	0	263	6/3/1947	125.00	4997.00	Well 55 Datbase	
633427		D15022034AAD	SMITH & DURHAM,	125	726361.48	397004.31	5009.00	0	125	11/3/1927	60.00	4949.00	Well 55 Datbase	
633439		D15022035CCD	DURHAM, ROBERT C	125	727904.34	393093.99	4950.00	40	125	1/21/1900	30.00	4920.00	Well 55 Datbase	
640865		D16023020DDD	ANDREWS,I	700	747249.69	372043.17	4747.00	680	700	11/1/1978	625.00	4122.00	Well 55 Datbase	
641183		D16022011CAC	AMERINDIAN FOUNDATIO,	18	729486.14	383647.29	4855.00	10	18	4/6/1918	15.00	4840.00	Well 55 Datbase	
641183		D16022011CAC	AMERINDIAN FOUNDATIO,	18	729486.14	383647.29	4855.00	10	18	9/1/1977	8.00	4847.00		
643402		D16022012DAA	BLM-SAFFORD DISTRICT,	0	737969.71	384549.38	4714.00	300	400	12/12/2014	331.20	4382.80		
650526		D16023023BB0	SCOTT, WILLIAM,C	565	759032.14	376575.35	4492.00	580	600	12/1/1980	390.00	4102.00	Well 55 Datbase	
651231		D16023020DDA	WILLIAMMEE,L O	675	746862.73	372697.36	4713.00	655	675	11/21/1978	610.00	4103.00	Well 55 Datbase	
802786		D16022012000	RIMSZA,A V	700	736875.19	382472.75	4744.00	600	700	6/1/1975	600.00	4144.00	Well 55 Datbase	
803864		D16023020DAD	TAVA M. FITZGERALD	650	747351.09	373219.61	4700.00	550	650	3/9/1980	550.00	4150.00	Well 55 Datbase	
906149		D16023014DBC	DAVID SHIFLETT	525	761259.37	378626.83	4438.00	425	525	7/27/2007	425.00	4013.00	Well 55 Datbase	
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4773.00	700	1140	11/26/2008	656.00	4117.00	Well 55 Datbase	
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	3/9/2016	684.15	4086.02	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	5/17/2016	683.27	4086.90	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	7/6/2016	683.24	4086.93	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	8/16/2016	682.50	4087.67	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	9/22/2016	682.76	4087.41	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	11/16/2016	683.30	4086.87	Golder - Feb 2017	supply well
909280	Smith 1	D15023019BBB	C-BAR RANCH	1140	738015.71	408227.77	4770.17	700	1140	2/15/2017	683.00	4087.17	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	3/9/2016	633.98	4083.83	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	5/17/2016	632.95	4084.86	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	7/6/2016	632.60	4085.21	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	8/16/2016	632.10	4085.71	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	9/22/2016	632.23	4085.58	Golder - Feb 2017	supply well
911489	Smith 2	D15023019BAA	C-BAR RANCH		739902.3641	407718.0782	4717.81	0	0	2/15/2017	632.25	4085.56	Golder - Feb 2017	supply well
912814	CW-2	D15022025DBB	DURHAM, ROBERT C		735193.91	400236.89	4799.66	0	0	1/13/2011	644.13	4155.54	Matt & Rusty - Nov 2015	
912814	CW-2	D15022025DBB	DURHAM, ROBERT C		735193.91	400236.89	4798.00	0	0	10/28/2015	650.20	4147.80	Golder - Oct 2015	BJ Drilling, no pump or control box, 6-inch Surfac
912814	CW-2	D15022025DBB	DURHAM, ROBERT C		735193.91	400236.89	4839.42	0	0	3/9/2016	652.45	4186.97	Golder - Feb 2017	welded shut
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4878.00	0	0	10/28/2015	716.10	4161.90	Golder - Oct 2015	BJ Drilling, 2HP pump control box, 6-inch Surface
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4906.60	0	0	3/9/2016	717.95	4188.65	Golder - Feb 2017	no air blowing, 2/15/17
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4906.60	0	0	7/6/2016	718.05	4188.55	Golder - Feb 2017	no air blowing, 2/15/17
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4906.60	0	0	8/16/2016	717.80	4188.80	Golder - Feb 2017	no air blowing, 2/15/17
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4906.60	0	0	11/16/2016	717.18	4189.42	Golder - Feb 2017	no air blowing, 2/15/17
912815	CW-6	D15022025BDB	NORD RESOURCES CORP		733865.84	401553.23	4906.60	0	0	2/15/2017	718.22	4188.38	Golder - Feb 2017	no air blowing, 2/15/17
912816	CW-1	D15022025CDD	NORD RESOURCES CORP		734490.05	398128.3	4816.75	0	0	1/13/2011	603.30	4213.45	Matt & Rusty - Nov 2015	
912816	CW-1	D15022025CDD	NORD RESOURCES CORP		734490.05	398128.3	4845.11	0	0	3/9/2016	598.68	4246.43	Golder - Feb 2017	welded shut
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.14	404876.41	4867.00	0	0	1/13/2011	679.00	4188.00	Matt & Rusty - Nov 2015	
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.14	404876.41	4866.00	0	0	10/28/2015	694.95	4171.05	Golder - Oct 2015	BJ Drilling, 2HP pump control box, 6-inch Surface
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.14	404876.41	4891.33	0	0	3/9/2016	697.14	4194.19	Golder - Feb 2017	no air blowing, 2/15/17
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.14	404876.41	4891.33	0	0	11/16/2016	692.25	4199.08	Golder - Feb 2017	no air blowing, 2/15/17
912817	CW-3	D15022024CBD	NORD RESOURCES CORP		733371.14	404876.41	4891.33	0	0	2/15/2017	695.48	4195.85	Golder - Feb 2017	no air blowing, 2/15/17
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4871.00	0	0	1/13/2011	690.00	4181.00	Matt & Rusty - Nov 2015	
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4870.00	0	0	10/28/2015	699.15	4170.85	Golder - Oct 2015	BJ Drilling, 2HP pump control box, 6-inch Surface
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4885.34	0	0	3/9/2016	700.90	4184.44	Golder - Feb 2017	no air blowing, 2/15/17
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4885.34	0	0	8/16/2016	701.00	4184.34	Golder - Feb 2017	no air blowing, 2/15/17
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4885.34	0	0	11/16/2016	699.05	4186.29	Golder - Feb 2017	no air blowing, 2/15/17
912818	CW-4	D15022025DBB	NORD RESOURCES CORP		735193.91	400236.89	4885.34	0	0	2/15/2017	701.50	4183.84	Golder - Feb 2017	no air blowing, 2/15/17
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4807.80	0	0	1/13/2011	385.25	4422.55	Matt & Rusty - Nov 2015	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4807.00	0	0	10/28/2015	375.50	4431.50	Golder - Oct 2015	BJ Drilling, 2HP pump control box, 6-inch Surface
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	3/9/2016	376.43	4462.29	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	5/17/2016	376.39	4462.33	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	7/6/2016	376.51	4462.21	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	8/16/2016	376.45	4462.27	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	9/22/2016	376.50	4462.22	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	11/16/2016	376.40	4462.32	Golder - Feb 2017	sulphur odor
912819	CW-5	D15022036ABB	DURHAM, ROBERT C		735201.33	397588.58	4838.72	0	0	2/15/2017	376.80	4461.92	Golder - Feb 2017	sulphur odor
913724		D16023014DBA	JOE & LYNDA SMOTHERS	545	761993.35	379298.92	4435.00	465	545	12/2/2011	374.00	4061.00	Well 55 Datbase	
914575		D16022024BDD	ROBERT W & KYLE ANNE ALLGOOD	763	737345.7	374702.73	4669.00	719	763	10/3/2012	510.00	4159.00	Well 55 Datbase	
916568		D16023014DAD	FRANK RHEA	506	763009.44	378193.42	4424.00	386	506	4/1/2014	374.00	4050.00	Well 55 Datbase	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.00	720	840	1/1/2015	337.10	4434.90	Water Level Sweeps_Gunnis	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.00	720	840	4/8/2015	346.56	4425.44	Water Level Sweeps_Gunnis	4/8/2015 9:40
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.00	720	840	5/6/2015	346.75	4425.25	Water Level Sweeps_Gunnis	5/6/2015 12:23
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.00	720	840	6/4/2015	347.26	4424.74	Water Level Sweeps_Gunnis	6/4/2015 9:03
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	7/2/2015	344.85	4427.38	WL_Sweeps_Gunnison_2017.x	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	8/4/2015	341.90	4430.33	WL_Sweeps_Gunnison_2017.x	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	2/15/2016	346.95	4425.28	WL_Sweeps_Gunnison_2017.x	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	10/7/2016	350.47	4421.76	WL_Sweeps_Gunnison_2017.x	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	1/10/2017	352.34	4419.89	WL_Sweeps_Gunnison_2017.x	
917429	NSH-008	D15022036DAA	EXCELSIOR MINING CORP	900	736856.77	395088.59	4772.23	720	840	2/15/2017	352.97	4419.26	WL_Sweeps_Gunnison_2017.x	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.00	469	620	1/1/2015	334.50	4438.50	Water Level Sweeps_Gunnis	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.00	469	620	4/8/2015	345.60	4427.40	Water Level Sweeps_Gunnis	4/8/2015 16:10
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.00	469	620	5/6/2015	345.54	4427.46	Water Level Sweeps_Gunnis	5/6/2015 12:15
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.00	469	620	6/4/2015	346.06	4426.94	Water Level Sweeps_Gunnis	6/4/2015 8:57
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.18	469	620	7/2/2015	344.06	4429.12	WL_Sweeps_Gunnison_2017.x	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.18	469	620	8/4/2015	342.10	4431.08	WL_Sweeps_Gunnison_2017.x	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.18	469	620	2/15/2016	346.65	4426.53	WL_Sweeps_Gunnison_2017.x	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.18	469	620	10/7/2016	350.43	4422.75	WL_Sweeps_Gunnison_2017.x	
917430	NSH-007	D15022036DAB	EXCELSIOR MINING CORP	640	736757.42	394889.08	4773.18	469	620	1/10/2017	352.31	4420.87	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4749.00	1180	1274	1/1/2015	402.00	4347.00	Water Level Sweeps_Gunnis	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4749.00	1180	1274	3/4/2015	664.90	4084.10	Water Level Sweeps_Gunnis	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4749.00	1180	1274	4/8/2015	531.60	4217.40	Water Level Sweeps_Gunnis	4/8/2015 9:07
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4749.00	1180	1274	5/6/2015	645.70	4103.30	Water Level Sweeps_Gunnis	5/6/2015 12:56
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4749.00	1180	1274	6/4/2015	530.71	4218.29	Water Level Sweeps_Gunnis	6/4/2015 10:13
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	7/2/2015	477.85	4270.78	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	8/4/2015	420.48	4328.15	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	9/9/2015	389.30	4359.33	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	10/7/2015	376.20	4372.43	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	11/5/2015	369.00	4379.63	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	12/15/2015	363.25	4385.38	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	1/12/2016	362.24	4386.39	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	2/15/2016	361.41	4387.22	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	3/9/2016	361.07	4387.56	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	4/22/2016	361.15	4387.48	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	5/24/2016	361.40	4387.23	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	7/7/2016	361.89	4386.74	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	10/7/2016	353.83	4394.80	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	11/30/2016	358.23	4390.40	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	12/7/2016	359.41	4389.22	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	1/10/2017	360.30	4388.33	WL_Sweeps_Gunnison_2017.x	
917432	NSH-014B	D15023031BCC	EXCELSIOR MINING CORP	1277	737667.63	395577	4748.63	1180	1274	2/15/2017	361.29	4387.34	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.00	813	995	1/1/2015	407.90	4346.10	Water Level Sweeps_Gunnis	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.00	813	995	4/8/2015	411.89	4342.11	Water Level Sweeps_Gunnis	4/8/2015 9:23
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.00	813	995	5/6/2015	412.80	4341.20	Water Level Sweeps_Gunnis	5/6/2015 12:48
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.00	813	995	6/4/2015	414.05	4339.95	Water Level Sweeps_Gunnis	6/4/2015 10:02
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	7/2/2015	412.42	4341.90	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	8/4/2015	363.20	4391.12	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	9/9/2015	363.80	4390.52	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	10/7/2015	363.80	4390.52	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	11/5/2015	363.30	4391.02	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	12/15/2015	364.65	4389.67	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	1/12/2016	365.15	4389.17	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	2/15/2016	369.92	4384.40	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	3/9/2016	366.42	4387.90	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	4/22/2016	367.14	4387.18	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	5/24/2016	367.75	4386.57	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	7/7/2016	368.31	4386.01	WL_Sweeps_Gunnison_2017.x	
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	10/7/2016	369.92	4384.40	WL_Sweeps_Gunnison_2017.x	

CLEAR CREEK ASSOCIATES

EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
917433	NSH-009	D15023031BCC	EXCELSIOR MINING CORP	1060	737455.53	395561.03	4754.32	813	995	1/10/2017	371.78	4382.54	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.00	546	720	1/1/2015	555.60	4194.40	Water Level Sweeps_Gunnis	transducer stuck in hole
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.00	546	720	4/8/2015	560.92	4189.08	Water Level Sweeps_Gunnis	4/8/2015 9:16
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.00	546	720	5/6/2015	560.78	4189.22	Water Level Sweeps_Gunnis	5/6/2015 12:40
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.00	546	720	6/4/2015	559.95	4190.05	Water Level Sweeps_Gunnis	6/4/2015 10:26
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	7/2/2015	557.90	4192.47	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	8/4/2015	557.66	4192.71	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	9/9/2015	559.20	4191.17	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	10/7/2015	559.70	4190.67	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	11/5/2015	559.75	4190.62	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	12/15/2015	559.70	4190.67	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	1/12/2016	562.00	4188.37	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	2/15/2016	560.15	4190.22	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	3/9/2016	559.00	4191.37	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	4/22/2016	559.96	4190.41	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	5/24/2016	559.10	4191.27	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	7/7/2016	560.05	4190.32	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	10/7/2016	560.05	4190.32	WL_Sweeps_Gunnison_2017.x	
917434	NSH-010	D15023031BCC	EXCELSIOR MINING CORP	720	737605.1	395490.01	4750.37	546	720	1/10/2017	560.29	4190.08	WL_Sweeps_Gunnison_2017.x	
917435	NSH-012	D15023031BCC	EXCELSIOR MINING CORP	504	737755.85	395538.41	4750.00	430	490	4/8/2015	2.90	4747.10	Water Level Sweeps_Gunnis	491' bls/bottom of well, bull-nose end cap, DRY
917435	NSH-012	D15023031BCC	EXCELSIOR MINING CORP	504	737755.85	395538.41	4749.67	430	490	7/2/2015	490.85	4258.82	WL_Sweeps_Gunnison_2017.x	
917435	NSH-012	D15023031BCC	EXCELSIOR MINING CORP	504	737755.85	395538.41	4749.67	430	490	2/15/2016	493.75	4255.92	WL_Sweeps_Gunnison_2017.x	
917435	NSH-012	D15023031BCC	EXCELSIOR MINING CORP	504	737755.85	395538.41	4749.67	430	490	10/7/2016	493.67	4256.00	WL_Sweeps_Gunnison_2017.x	
917435	NSH-012	D15023031BCC	EXCELSIOR MINING CORP	504	737755.85	395538.41	4749.67	430	490	1/10/2017	493.60	4256.07	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.00	646	1070	1/1/2015	658.40	4191.60	Water Level Sweeps_Gunnis	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.00	646	1070	3/4/2015	659.10	4190.90	Water Level Sweeps_Gunnis	recovery NSH-007 & -023; 3/4/15 9:25
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.00	646	1070	4/8/2015	659.82	4190.18	Water Level Sweeps_Gunnis	unsecure decapitated
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.00	646	1070	6/3/2015	658.03	4191.97	Water Level Sweeps_Gunnis	6/3/2015 15:27
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	7/2/2015	655.65	4194.77	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	8/4/2015	655.68	4194.74	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	12/15/2015	657.42	4193.00	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	1/12/2016	657.45	4192.97	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	2/15/2016	657.54	4192.88	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	3/9/2016	657.80	4192.62	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	4/22/2016	657.70	4192.72	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	5/24/2016	657.85	4192.57	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	7/7/2016	657.85	4192.57	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	10/7/2016	657.98	4192.44	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	1/10/2017	658.00	4192.42	WL_Sweeps_Gunnison_2017.x	
917436	NSH-013	D15023031CBC	EXCELSIOR MINING CORP	1070	738056.78	394338.52	4850.42	646	1070	2/15/2017	658.34	4192.08	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4792.00	605	706	3/3/2015	608.40	4183.60	Water Level Sweeps_Gunnis	pumping NSH-023
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4792.00	605	706	5/6/2015	607.48	4184.52	Water Level Sweeps_Gunnis	5/6/2015
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4792.00	605	706	6/4/2015	607.56	4184.44	Water Level Sweeps_Gunnis	6/4/2015 11:34
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	7/2/2015	605.20	4186.75	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	8/4/2015	605.29	4186.66	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	2/15/2016	608.24	4183.71	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	7/7/2016	608.41	4183.54	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	10/7/2016	608.74	4183.21	WL_Sweeps_Gunnison_2017.x	
917775	NSH-030	D15023031CAD	EXCELSIOR MINING CORP	740	739691.19	394683.79	4791.95	605	706	1/10/2017	608.74	4183.21	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4797.00	604	709	3/3/2015	614.00	4183.00	Water Level Sweeps_Gunnis	pumping NSH-023
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4797.00	604	709	5/6/2015	613.25	4183.75	Water Level Sweeps_Gunnis	5/6/2015 15:22
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4797.00	604	709	6/4/2015	613.35	4183.65	Water Level Sweeps_Gunnis	6/4/2015 11:45
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	7/2/2015	611.08	4185.56	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	8/4/2015	611.12	4185.52	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	9/9/2015	613.39	4183.25	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	10/7/2015	613.60	4183.04	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	11/5/2015	613.27	4183.37	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	12/15/2015	613.80	4182.84	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	1/12/2016	613.95	4182.69	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	2/15/2016	613.99	4182.65	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	3/9/2016	614.00	4182.64	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	4/22/2016	614.11	4182.53	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	5/24/2016	614.25	4182.39	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	7/7/2016	614.21	4182.43	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	10/7/2016	614.51	4182.13	WL_Sweeps_Gunnison_2017.x	
917777	NSH-029	D15023031CDA	EXCELSIOR MINING CORP	710	739681.74	393940.42	4796.64	604	709	1/10/2017	614.48	4182.16	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.00	721	805	4/8/2015	564.85	4198.15	Water Level Sweeps_Gunnis	4/8/2015 8:31
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.00	721	805	5/6/2015	564.86	4198.14	Water Level Sweeps_Gunnis	5/6/2015 14:03
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.00	721	805	6/3/2015	564.80	4198.20	Water Level Sweeps_Gunnis	6/3/2015 7:54

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EXHIBIT 1
Water Levels

Well ID	Well Name	Cadastral Location	Owner	Well Depth	Easting[1]	Northing[1]	MP Elevation (ft amsl)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Date Measured	Depth to Water (ft bmp)	Water Level Elevation (ft amsl)	Data Source	Notes
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	7/2/2015	562.78	4200.25	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	8/4/2015	562.76	4200.27	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	9/9/2015	558.00	4205.03	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	10/7/2015	564.90	4198.13	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	11/5/2015	564.85	4198.18	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	12/15/2015	564.65	4198.38	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	1/12/2016	565.00	4198.03	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	2/15/2016	565.08	4197.95	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	3/9/2016	565.70	4197.33	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	4/22/2016	564.87	4198.16	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	5/24/2016	564.80	4198.23	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	10/7/2016	564.77	4198.26	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	12/7/2016	564.95	4198.08	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	1/10/2017	565.01	4198.02	WL_Sweeps_Gunnison_2017.x	
917782	NSH-031	D15023031BCB	EXCELSIOR MINING CORP	820	737236.87	395991.56	4763.03	721	805	2/15/2017	565.16	4197.87	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4759.00	720	804	4/8/2015	569.20	4189.80	Water Level Sweeps_Gunnis	4/8/2015 8:50
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4759.00	720	804	5/6/2015	569.97	4189.03	Water Level Sweeps_Gunnis	5/6/2015 13:10
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4759.00	720	804	6/4/2015	569.25	4189.75	Water Level Sweeps_Gunnis	6/4/2015 10:39
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	7/2/2015	567.06	4191.87	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	8/4/2015	566.92	4192.01	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	2/15/2016	567.51	4191.42	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	7/7/2016	568.90	4190.03	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	10/7/2016	568.90	4190.03	WL_Sweeps_Gunnison_2017.x	
917783	NSH-032	D15023031CDA	EXCELSIOR MINING CORP	820	737550.79	395796.75	4758.93	720	804	1/10/2017	569.10	4189.83	WL_Sweeps_Gunnison_2017.x	

Notes:
[1]East and Northing are in NAD 83 State Plane Arizona East Zone
ft amsl = feet above mean sea level
ft bls = feet below land surface

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