

GOLDEN QUEEN MINING COMPANY, INC.

SOLEDAD MOUNTAIN PROJECT

MOJAVE, KERN COUNTY, CALIFORNIA

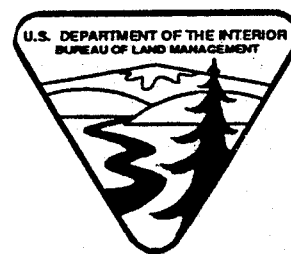
DRAFT
ENVIRONMENTAL IMPACT REPORT /
ENVIRONMENTAL IMPACT STATEMENT

VOLUME 4
(Appendices IV through VII)

MAY 1997



COUNTY OF KERN
PLANNING DEPARTMENT
BAKERSFIELD, CALIFORNIA



BUREAU OF LAND MANAGEMENT
RIDGECREST RESOURCE AREA
RIDGECREST, CALIFORNIA

VOLUME 4 OF 6



GOLDEN QUEEN MINING COMPANY, INC.

**MINERAL RESOURCE EVALUATION
OF ALTERNATIVE PROJECT SITES
SOLEDAD MOUNTAIN PROJECT
MOJAVE, CALIFORNIA**

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March, 1997

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07330010.285



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1.0 EXECUTIVE SUMMARY

WZI Inc. (WZI) conducted a Mineral Resource Evaluation of Alternative Project Sites for the Golden Queen Mining Company, Inc. (Golden Queen) Soledad Mountain Project in eastern Kern County, California. The principal objective of this investigation was to determine if viable alternative project sites were present within a distance of 100 miles of the proposed Soledad Mountain Project.

A review of the geology, gold mineralization, and proposed mine development of the Soledad Mountain Project was conducted. Alternative project siting criteria developed from review of the Soledad Mountain Project geological and mineralization conditions included the following: (1) proximity to known past gold producing districts; (2) presence of potential ore-body host rock that consists of fractured Cretaceous granitic or Tertiary volcanic rock; (3) proximity to area(s) where a potential ore reserve or resource base of 40 to 50 million tons of gold bearing ore can be developed with grades of 0.01 to 0.05 oz/ton with stripping ratios of overburden to ore below 8:1 and gold recoverable with heap-leaching production methods; and (4) proximity to established utility and infrastructure support.

Database review of the regional geology was accomplished by review of existing surface geologic and geophysical maps from both published and unpublished sources. Mining districts with past gold production were reviewed from published literature and the individual districts described with respect to known geologic and gold mineralization trends that are similar to those at the proposed Soledad Mountain Project. Favorable areas where potential gold deposits similar to that of the Soledad Mountain Project were identified. A review of known exploration activities by private companies that have occurred during the past 10 years within the favorable areas was conducted by interviewing active and past active operators. Land status of the area of investigation was identified using existing federal and state maps that depict restricted areas where mineral development is prohibited. In addition, recent legislation by the U.S. Congress established

the California Desert Protection Act, by which a large portion of the California desert area has been withdrawn from mineral exploration and/or production.

The investigation concluded:

- Forty mining districts were found to exist within the area of investigation of the alternative project sites where gold mineralization in commercial quantities was determined to have existed;
- A total of 14 of the alternate project site mining districts evaluated are located either within or immediately adjacent to state of California or federal lands that have been designated as Primitive or Wilderness Areas and are not available for mineral exploration or development;
- An additional three sites are located within or immediately adjacent to federal military lands and are not available for mineral exploration or development;
- Alternate project sites that represent the best potential alternative sites are: (1) the operating Yellow Aster Mine owned by Glamis Gold Ltd. located in Kern and San Bernardino Counties and within the Randsburg District; (2) the Zenda Mine Project owned by Claim Staker Resources, Inc. located in Kern County and within the Loraine District; and (3) the Big Horn Mine Project, owned by Siskon Gold, Inc., located in Los Angeles County and within the Mount Baldy District.

The three alternate sites represent the best potential alternate project site options available to the Soledad Mountain Project within the area of investigation. These three sites have reported potential ore reserves of less than 25 percent of the projected ore resources of the Golden Queen Soledad Mountain Project (2.3 million ounces of gold equivalent). In addition, in each of these sites, a mining company has already established controlling interest in the identified mining properties.

2.0 INTRODUCTION

2.1 Project Background

Golden Queen Mining Company, Inc., has proposed the development of the Soledad Mountain Project. The proposed project consists of an open pit precious metals (gold and silver) mining and heap leach processing facility to be developed at Soledad Mountain, approximately five miles southwest of the unincorporated town of Mojave in Kern County, California (Exhibit 1).

The project area consists of approximately 1,600 acres, of which 1,165 acres are privately owned land and 435 acres are unpatented mining claims on public lands administered by the U.S. Bureau of Land Management, Ridgecrest Resource Area Office of the California Desert District (BLM). The Kern County Planning Department is the lead agency for compliance with the California Environmental Quality Act (CEQA) and will oversee Golden Queen's implementation of and compliance with the Surface Mining and Reclamation Act of 1975 (SMARA), which is applicable to all mining operations within the State of California. BLM is the lead agency for compliance with the National Environmental Policy Act (NEPA) and will oversee compliance with the standards and procedures in the BLM regulations for surface mining of public land under the general mining law.

The project is located within an unincorporated area of eastern Kern County and is on and around Soledad Mountain, west of State Route 14 and south of Silver Queen Road. The project area includes portions of Sections 5, 6, 7 and 8 in Township 10 North, Range 12 West and Sections 1 and 12 in Township 10 North, Range 13 West, San Bernardino Base and Meridian (Exhibit 1).

The objective of the Soledad Mountain Project is to develop an open pit precious metals (gold and silver) mine and heap leach processing operation with the potential for the production of aggregate and construction materials. Up to 60 million tons of ore and 230 million tons of overburden materials will be mined. The anticipated life of the project is up

to 15 years with employment expected for approximately 230 people. Processing operations will continue for approximately two years after the cessation of mining, at which time the project will begin closure and reclamation.

The closest electrical power lines that are capable of providing power requirements to the Soledad Mountain Project are located at the northeast corner of the project site. A new substation will be constructed on the project site with overhead and underground distribution network to serve the various operations on the project site.

The Soledad Mountain Project is estimated to require water at the average rate of 750 gallons per minute. This water will be supplied from groundwater that will be pumped from three water supply wells. This water will be used for mining and leaching operations and dust control.

Project operations will be followed by closure and reclamation of the site. The objectives of reclamation are: (1) to assure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a level consistent with current use; (2) to encourage the production and conservation of minerals while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and (3) to assure that residual hazards to the public health and safety are eliminated.

A total of 930 acres will be disturbed by the project, approximately 215 of which have been disturbed as a result of prior activities on the site. Except for the open pit mine, which covers 265 acres, and 20 acres of process area highwall and side slope, all disturbed acreage will be subject to reclamation and/or stabilization processes.

As part of the CEQA requirements for alternative locations, WZI conducted an Alternative Site Location Investigation. As a consequence, WZI staff reviewed regional geological and mining data to determine the possible locations for an alternative project site.

2.2 Area of Investigation

The area of investigation for data collection of the alternative project site is depicted on Exhibit 2. All geological and mining data publicly available was reviewed to a distance of 75 or 100 miles from the proposed Soledad Project location near Mojave. The investigation also included evaluation of alternative sites in mining districts located in portions of Los Angeles, Ventura, Inyo, San Bernardino, Riverside and Kern Counties.

2.3 Database Utilized

The database utilized to conduct the investigation included:

- All publicly accessible and pertinent geological and geophysical data for this portion of California. U.S. Geological Survey, U.S. Bureau of Land Management, U.S. Forest Service, U.S. Bureau of Mines and California Division of Mines and Geology reports and maps were reviewed;
- Proprietary geological and geophysical data owned by individuals and companies that was made available to WZI staff to conduct the investigation; and
- Discussions with active and previously active mineral exploration company personnel familiar with the geology and gold deposits of the area of investigation was also conducted.

2.4 Limitations

WZI has prepared this investigation in accordance with the accepted standard of care which exists in California at the time the investigation was conducted. It should be recognized that the evaluation of published and unpublished technical reports and data from which conclusions of this investigation were based, were accepted as being technically correct.

3.0 INVESTIGATION PROCEDURES

3.1 Geology and Gold Mineralization at the Soledad Mountain Project

Regional Geological Background

The tectonic history of the western United States is complex, with subduction-related orogenic events occurring from the Late Cretaceous Period (74.5 million years ago) to the middle Miocene time (16 million years ago) (Mabey and others, 1978). Principal magmatic arcs present in the area of investigation include the Sierra Nevada Mountain Range and the San Gabriel- San Bernardino Mountain Ranges (Exhibit 2). These ranges are relatively narrow, with well-defined zones of calc-alkaline volcanic and plutonic activity that was inferred to have occurred above subduction zones. The deposits of base and precious metals within the area of investigation appear to be closely associated with these orogenic events.

A possible source of the Tertiary-age calc-alkaline volcanic rocks at Soledad Mountain is the partial melting of oceanic and crustal material as it descended into the subduction zone (Coney, 1978). The fracture pattern within the deep crystalline basement rock is inferred by regional magnetic and gravity data (Mabey and others, 1978). These fractures may have developed in response to easterly-directed compressional forces related to subduction of the oceanic plate and may have acted as preferred pathways above which subsequent volcanic vents or centers occurred.

Miocene volcanic flows and volcanoclastic sediments at Soledad Mountain rest unconformably on Late Cretaceous quartz monzonite of the Sierra Nevada batholith (Jennings, 1977).

Geology of the Soledad Mountain Project

Soledad Mountain is a moderately eroded, complex-shaped silicic volcanic center that is postulated to have formed during middle to late Miocene time (16.9 to 21.5 million years) (Troxel and Morton, 1962; Perez, 1978). Soledad Mountain can be interpreted as being the remnant portion of a caldera or irregular-shaped volcanic center. Volcanic rock composed of felsic flows, tuffs, and breccias with rock types ranging in composition from quartz latite to rhyolite are present in the Soledad Mountain Project area (Dibblee, 1967).

The oldest rocks at Soledad Mountain are the Late Cretaceous quartz monzonite. Overlying the quartz monzonite are the Tertiary volcanics. The oldest Tertiary volcanic unit is the early Miocene age quartz latite flows which represent the oldest eruptive sequence. These flows are postulated to have originated from at least three separate vent centers and form a broad platform that underlies a large portion of the Soledad Mountain and immediate surrounding area (Perez, 1978).

Overlying the quartz latite flows is a middle unit comprised of pyroclastic units. This middle pyroclastic flow unit is a thick, near-vent accumulation of coarse pyroclastic debris, thin bedded distal airfall tuff, and pyroclastic flows that rests on both the underlying quartz latite flows and quartz monzonite.

Overlying the quartz latite flows and the middle pyroclastic units is a sequence of flow-banded rhyolite. This flow-banded rhyolite is inferred to have had a single vent source. The rhyolite is restricted mainly to outcrops along the northern edge of the complex.

Rocks of the upper pyroclastic unit (middle Miocene) lie unconformably on the flow-banded rhyolite. This unit represents a near-vent accumulation of interbedded sequences of poorly sorted chaotic breccias and moderately sorted layers of coarse ash and lapilli tuffs.

The youngest and most widespread of the volcanic units is the porphyritic rhyolite. The largest exposure of this unit is present west and southeast of the Soledad Mountain

summit, where it forms three moderately eroded and coalescing lava domes. This unit was emplaced through, and locally overlies, all other volcanic units of the complex.

The other gold-producing mines located in the district have similar lithologic and volcanogenic characteristics to those of Soledad Mountain (Clark, 1970). Common features include: epithermal hot spring-style of mineralization; host rocks consisting of calc-alkaline volcanics; and structurally controlled alteration and mineralization.

The Standard Hill Mine is located northeast of Soledad Mountain. The geology at Standard Hill Mine consists of high-angle faults that contain quartz veins that cross-cut quartz monzonite and quartz latite volcanics (Gardner, 1954). The veins strike north to northwest with shallow dip angles to the east and northeast, respectively.

The Tropico Mine is located approximately seven miles to the south of Soledad Mountain. The geology at the Tropico Mine has quartz monzonite that is overlain by quartz latite, flow-banded rhyolites and rhyolite porphyry similar to the volcanics of the Soledad Mountain (Gardner, 1954). The gold-bearing veins at the Tropico Mine strike east-west and dip 65 to 70 degrees to the south. Quartz veins fill pre-mineral faults, with movement continuing during and after mineralization (Clark, 1970; Clark, 1980).

The Cactus Mine, located approximately five miles west of Soledad Mountain consists of quartz latite to rhyolite flows resting unconformably on quartz monzonite. The strike pattern of the veins varies from southeast to northeast. Mineralization is associated with quartz-filled faults, fault breccia and zones of solidification and argillization of the wall rock (Clark, 1970).

Gold Mineralization

The gold mines within the Mojave-Rosamond mining district appear to line the rim of a collapsed volcanic center. The center of the volcanic center is postulated to have been located southeast of Soledad Mountain, north of the Tropico Mine, and southeast of the

Cactus Mine. Volcanism waned approximately 16 million years ago at Soledad Mountain and allowed meteoric waters to flow back into the volcanic complex and mix with upward migrating magmatic fluids. Magma chamber(s) at depth are inferred to have supplied a continuing heat source and migrating fluids at depth formed geothermal convection cells with cooler, near-surface meteoric water. Precious metal-bearing solutions probably migrated upward along the pre-existing fault and fracture surfaces until physical and chemical changes encountered near the ground surface caused precipitation of metals into the host rocks (Berger and Eimon, 1981; Buchanan, 1981).

Gold mineralization has occurred at the Soledad Mountain area as a series of epithermal veins, filling faults and shear zones (Perez, 1978). A series of these veins are present at Soledad Mountain and are exposed at the surface within a northwest-trending belt approximately 4,000 feet wide and 6,500 feet long. Vein widths vary from three feet to 50 feet and are consistent along strike and down dip. Some of the veins have been mined to a vertical depth of 1,000 feet below ground surface.

The lateral extent of mineralization of the volcanic units at Soledad Mountain is variable (Perez, 1978). Mineralization of the volcanic flow units of quartz latite, flow-banded rhyolite and porphyritic rhyolite is reported to be generally confined to faults and fault breccias and shows a weak potential for mineralization into the wall rock. Where mineralized faults and veins cross-cut the middle and upper pyroclastic units, a wider halo of mineralization into the host rock occurs. This halo indicates a possible leaking of hydrothermal solution into the more permeable and porous tuffaceous units of the Soledad Mountain volcanic complex.

Published mining production records indicate the Mojave-Rosamond District has produced approximately 1,046,000 ounces of gold or gold equivalent from over two dozen mines (Clark, 1970).

The largest known producers in the Mojave-Rosamond District included:

<u>Mine</u>	<u>Gold Produced</u>
Golden Queen:	483,792 ounces
Cactus Gold:	241,896 ounces
Standard Group:	169,327 ounces
Tropico:	114,000 ounces

Much of the past gold produced at the Mojave-Rosamond District was from underground mines that typically had gold ore concentrations that ranged from 0.25 to 0.5 oz/ton (Clark, 1970). During the 1980's, heap leach projects were started by several mining companies to rework old mine tailings or to conduct open-pit mining operations. These operations were conducted over some of the older underground mines and are similar to many projects across the western United States (Bonham, 1981; Silberman, 1982). These projects included the Standard Hill Project conducted by Billiton Minerals, USA and the Cactus Gold Project conducted by Cactus Gold Mining Company.

Numerous geological and geochemical data were utilized by Golden Queen staff to construct cross-section diagrams of the Soledad Mountain Project. These data included geochemical analysis of drill hole, subsurface workings, and surface rock samples. These data indicate that approximately 60 to 70 million tons of ore with a gold-equivalent concentration of 0.030 oz/ton and a cut-off grade of 0.008 oz/ton remain as a proven reserve and resource base for gold at the Soledad Mountain Project. With a heap leach recovery of 80 percent of mined ore placed on the heap leach pad, a total of approximately 1.45 million ounces of gold are estimated to be recoverable at the Soledad Mountain Project.

3.2 Gold Mining Districts in Area of Investigation

Published reports and publicly available literature describing the known gold districts that are present within the Area of Investigation were reviewed. The geology, mineralization

systems, known past producing mines and their gold production, and land status were evaluated for each of the districts investigated. A discussion of each district was made that outlined known recent exploration activity.

Each gold mining district is plotted on Exhibit 2. There are four distinct geomorphic provinces within the area of investigation: Sierra Nevada Province; Basin and Range Province; Mojave Desert Province; and Transverse Range Province. Each of these provinces has different geologic structure elements and stratigraphy. Each of the provinces has mineralized areas within it where base and precious metals have been produced. A tabulation of significant historical events of gold mining in California is presented as Table 1.

Production records for the mining districts are generally incomplete or nonexistent. Many of the older references would record only the dollar amount of gold produced and not volume, which would have been reported in ounces. WZI staff utilized the old price standard for an ounce of gold of \$20.67/ounce to convert the reported dollar amount of production to ounces for production reported until 1932. Between 1932 and 1968, the conversion price of gold was estimated to be \$35.00/ounce. No price conversion was required after 1968 for reported gold production because most production was reported in ounces.

Many of the mining districts within the area of investigation were indicated to have produced gold from lode or placer mines but had no dollar amounts or volumes of gold reported. Where no specific gold production was identified, WZI staff assigned an inferred production base for volume of gold produced in ounces. This inference of gold produced from these districts is based on geological similarities and known gold production from other districts with similar geology and mineralization. WZI staff also estimated remaining reserve or resource potential available for several of the mining districts where past exploratory drilling data was made available for review.

A brief summary of each mining district is presented within Table 2. The mines within the four provinces are described below:

3.2.1 Sierra Nevada Geomorphic Province

The Sierra Nevada mountain range is the main source of the state of California past gold production and contains the greatest number of small-size mining districts of all the provinces. The main rock type of the Sierra Nevada is a large batholith of Mesozoic granodiorite and related rocks that have intruded into metamorphic rocks of Paleozoic and Mesozoic age (Jennings, 1977). The large batholith is approximately 400 miles long in the north-south dimension and 85 miles wide in the east-west dimension. The Mariposa Formation (Upper Jurassic) and the Kernville Series (Jurassic or older) of the southern Sierra Nevada contain slates, schists, phyllites, and quartzites which are present in many of the mining districts (Clark, 1970).

In addition to the main Sierra Nevada granodiorite batholith, there are numerous smaller intrusions of basic and ultra-basic rocks, many of which are serpentinized (Jennings, 1977). The serpentine bodies apparently have been structurally important in the localization of gold bearing deposits in some of the mining districts and often are parallel to or occur within the belts of gold mineralization (Clark, 1970). Also, there are numerous dioritic and aplitic dikes that are closely associated with gold bearing veins.

3.2.1.1 Clear Creek Mining District (Kern County, Exhibit 2, Location #1)

Location and History

The Clear Creek or Havilah District is located in east-central Kern County, about 26 miles east-northeast of Bakersfield and five miles south of Bodfish. It is located in an large area that includes Red Mountain and Walker Basin. This district is also considered a tungsten district (Dibblee and Chesterman, 1958).

Gold was discovered in Clear Creek in 1863 or 1864 and by 1865 the town of Havilah was established (Brown, 1916). Mining activity in the area declined during the 1880's, but has been reported to have been intermittently active for many years (Tucker and Sampson, 1933).

Geology

The Clear Creek District and surrounding area is underlain by Mesozoic age quartz diorite with roof pendants of Paleozoic metasediments present in the north and south portions of the district (Jennings, 1977). An intrusive body of gabbro is present to the northeast. The gold deposits are reported to be mostly confined to the quartz diorite intrusive body located west of Havilah and in the Walker Basin (Troxel and Morton, 1962). These ore bodies reportedly consist of quartz veins up to six feet thick and contain free gold and varying amounts of sulfides (Tucker and Sampson, 1933).

Mines and Gold Production

Mines located in the Clear Creek District include: Friday; Jackpot; Joe Walker (\$600,000 or more of gold produced); Porter; Rand group (\$125,000 of reported gold production); Rochfort; Southern Cross; Washington. It is estimated that approximately 35,000 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred. This area is within lands administered by the U.S. Forest Service and may have significant mineral exploration and/or development restrictions.

3.2.1.2 Cove Mining District (Kern County, Exhibit 2, Location #2)

Location and History

The Cove District is located in the northeastern portion of Kern County, between the towns of Kernville and Isabella, on the west side of the Lake Isabella Reservoir. The upper Kern River here was reportedly mined for gold in placer occurrences during the 1850's (Miller and Webb, 1940). The Big Blue vein was discovered in 1860 (Crawford, 1893), and a significant period of mining activity followed during the 1870's and early 1880's. The mines were worked intermittently from the 1880's through the 1930's with the Big Blue group reported as having been operated on a large scale from 1934 until 1943 (Troxel and Morton, 1962). Since 1943 there has been only minor activity reported in the district.

Geology

The Cove Mining District is underlain primarily by Mesozoic granodiorite (Jennings, 1977). East and south of the district outcrops of schist, phyllite, quartzite and marble of the pre-Cretaceous Kernville Series are present. Aplite dikes are reportedly often associated with the gold-bearing veins (Clark, 1970).

The ore deposits consist of extensive vein systems, with some being reported as much as 150 feet wide. These vein systems are reported to occur within shear zones in the granodiorite (Prout, 1940). The ore reportedly consists of quartz with finely disseminated free gold, arsenopyrite, pyrite, chalcopyrite and galena. The milling ore grade was reported as averaging 0.1 to 0.33 oz/ton of gold with some localized higher grade streaks (Troxel and Morton, 1962). The veins have been reportedly mined to depths of about 500 feet. There are two main vein systems: the Big Blue-Sumner and the Lady Belle groups.

Mines and Gold Production

The mines in the Cove Mining District included the Big Blue Group, the Big Blue-Sumner Group and the Lady Belle Group. The district has an estimated past gold production valued at \$8 million. It is estimated that approximately 387,034 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred. This area is within lands administered by the U.S. Forest Service and may have significant mineral exploration and/or development restrictions.

3.2.1.3 Erskine Creek District (Kern County, Exhibit 2, Location #3)

Location and History

The Erskine Creek District is located in Kern County, approximately 38 miles northeast of Bakersfield and south of Lake Isabella Reservoir. The district forms an area approximately five miles long and two miles wide and also includes the mining area known as the Pioneer District. Antimony and gold deposits were productive in the early 1890's and intermittently afterward (Tucker and Sampson, 1933).

Geology

Two northwest-trending roof pendants of pre-Cretaceous metamorphic rocks are surrounded by Mesozoic granitic rock in this district (Jennings, 1977). The ore deposits reportedly consist of quartz veins containing free gold and varying amounts of sulfides. Gold and varying amounts of silver, antimony, tungsten, copper and uranium have been produced from the Erskine Creek District (Troxel and Morton, 1962).

Mines and Gold Production

The principal sources of gold in the district has been reported to have been the Glen Olive Mine, which reportedly yielded \$500,000 of gold and the Iconoclast Mine (Tucker and Sampson, 1933). Other properties include the Golden Bell, Laurel, Valley View, Faust and King Solomon Mines (Clark, 1970). It is estimated this district has produced 24,189 ounces of gold.

Recent Exploration Activity

No recent exploration activity is known to have occurred. This area is adjacent to lands administered by the U.S. Forest Service and may have significant mineral exploration and/or development restrictions.

3.2.1.4 Greenhorn Mountains District (Kern County, Exhibit 2, Location #4)

Location and History

The Greenhorn Mountains District is located in Kern County about 28 miles northeast of Bakersfield. The initial reported discovery of gold was made in Greenhorn Creek in 1851 by a member of the John Fremont expedition (Brown, 1916). A gold rush soon followed and the town of Petersburg was established. Gold mining activity declined before 1890. Since 1890 there has been minor prospecting reported in the district. Most of the gold output has been from lode deposits (Brown, 1916).

Geology

The Greenhorn Mountains District is underlain by quartz diorite (Troxel and Morton, 1962). Several roof pendants that are comprised of Mesozoic or Paleozoic age metamorphic rocks and pegmatite dikes are also present (Jennings, 1977).

Mines and Gold Production

The chief placer gold deposits were in Greenhorn, Fremont, Bradshaw, and Black Gulch Creeks (Brown, 1916). Numerous small, poorly-mineralized quartz veins are present in the district. Most of these quartz veins are located a few miles east of David Guard Station (Troxel and Morton, 1962). The gold is reported to be present in a free state and there is very little sulfide mineralization. An unknown volume of gold was produced from this district. Based on similar geological environments, it is estimated that approximately 1,000 to 5,000 ounces of gold was produced from the district.

Recent Exploration Activity

No recent exploration activity is known to have occurred. This area is adjacent to lands administered by the U.S. Forest Service and may have significant mineral exploration and/or development restrictions.

3.2.1.5 Jawbone Canyon District (Kern County, Exhibit 2, Location #5)

Location and History

The Jawbone Canyon district encompasses an area between Emerald Mountain and the El Paso Mountains, north of the Garlock Fault. The district is centered about 14 miles north of the town of Mojave. Placer gold deposits were reportedly discovered in this district in approximately 1900 (Troxel and Morton, 1962). Lode gold deposits were reportedly developed at several mines including the Skyline and San Antonio during the late 1930's (Tucker and Sampson, 1940).

Geology

The Jawbone Canyon-Butterbread Peak area is underlain by Cretaceous granitic rocks containing minor roof pendants of Mesozoic metasediments (Jennings, 1977). Tertiary

sediments and interbedded volcanic rocks unconformably overlie the granitic rocks in places. These sediments, as well as the granitic rocks, are intruded by Tertiary age rhyolite dikes and plugs that are believed to be of the same age as those in the nearby Mojave District (Miocene) (Troxel and Morton, 1962). A variety of mineral deposits occur in the district, including gold, antimony, clay and mercury. Most of the gold occurrences worked in the past consisted of west- to northwest-trending narrow, gold-bearing quartz stringers cutting the Cretaceous quartz monzonite. Many of the quartz stringers are often associated with rhyolite dikes. At the Hub Mine, however, a gold-bearing quartz vein cuts altered rhyolite on the west side of the district. In addition, some of the rhyolite bodies are widely altered to clay minerals, and cinnabar has reportedly been recognized in at least one rhyolite body (Troxel and Norton, 1962).

Mines and Gold Produced

The mines that were reported to be in this district included: Hub, Skyline, and San Antonio. No published gold production value or volume was reported for this district. It is estimated that the total volume of gold produced from this district was 1,000 to 5,000 ounces based on similar geological environments and known past production from other mining districts.

Recent Exploration Activity

It appears that some limited exploration for precious metals has occurred in this district in the past ten years. No announced discovery of an ore body has been made within this district.

3.2.1.6 Kern River District (Kern County, Exhibit 2, Location #6)

Location and History

The Kern River District is located in the upper Kern River, between Bakersfield and Bodfish. This district was the scene of a rush soon after the discovery of gold at

Greenhorn Creek in 1851 (Tucker and Sampson, 1993). Not much is known about the early deposits but the majority are believed to have been worked out in a short time. Many lode-gold prospects are in the area, but the only one of any consequence is the Gem Mine near Democrat Springs.

Geology

The Kern River District is underlain by Mesozoic quartz diorite and associated aplitic and pegmatitic dikes, most of which trend north (Miller and Webb, 1940). Small roof pendants of pre-Cretaceous metasediments are present within the granitic rocks. Moderate foliation is common in the granitic rocks, especially near contacts with the roof pendants (Troxel and Morton, 1962).

Mines and Gold Produced

The most important placer mine in the Kern River Canyon District was the Greenhorn Caves Mine in Greenhorn Creek. This mine reported gold placer production valued at \$60,000 (Tucker and Sampson, 1933). The Gem Mine was a lode gold mine that was located approximately one mile southwest of Democrat Springs. Reported production from the Gem Mine was valued at \$30,000 (Tucker and Sampson, 1933).

Past gold production in the district is estimated at approximately 1,000 to 5,000 ounces, based on similar geological environments and known past production from other mining districts.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.1.7 Keyesville District (Kern County, Exhibit 2, Location #7)

Location and History

This district is in the southern Sierra Nevada in Kern County, about 32 miles northeast of Bakersfield and two miles southwest of Isabella Dam. Gold was discovered here in 1852 and for a time this was the largest community in Kern County. The chief periods of mining were the 1850's, 1860's, 1890's and 1909-15 (Tucker and Sampson, 1933). The area was reportedly prospected during the 1930's, but little has been done here since, and Keyesville has become a ghost town (Troxel and Morton, 1962).

Geology

The Keyesville District is underlain by Mesozoic age quartz diorite (Jennings, 1977). The gold deposits occur in a northeast-trending belt about three miles long (Tucker, 1933). The veins consist of narrow quartz stringers with fault gouge that contain free gold and small amounts of pyrite, arsenopyrite and pyrrhotite (Tucker and Sampson, 1933). There are some placer deposits, including one of possible Pleistocene age (Troxel and Morton, 1962).

Mines and Gold Production

The mines that have reported gold production in the district include: Bright Spot; High Grade; Homestake; Keyes (\$450,000); Keyesville; Keyesville Placer; Mammoth, (\$500,000); Mooncastle; Nephi; Nob Hill; Opportunity; Sunrise; Virginia; Will Jean. Approximately 45,960 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.1.8 Long Tom District (Kern County, Exhibit 2, Location #8)

Location and History

The Long Tom District is located in the southern Sierra Nevada in central Kern County. The district is approximately 23 miles northeast of Bakersfield and 10 miles south of Woody. The lode occurrences of gold in the district were discovered in 1860 by prospectors looking for the source of placer gold in nearby creeks (Brown, 1916; Tucker, 1923).

Geology

The Long Tom District is underlain by quartz diorite with small gabbroic inclusions (Jennings, 1977). A number of fracture zones contain small, gold-bearing quartz stringers with minor amounts of sulfides (Brown, 1916). The deposits reportedly do not extend to depths of more than a few hundred feet (Troxel and Morton, 1962).

Mines and Gold Production

The principal mine in the District was the Long Tom Mine. This mine was reported as having considerable activity during the 1880's and again from 1925 to 1939 (Troxel and Morton, 1962). The Long Tom Mine had an estimated total output of gold valued at \$800,000 to \$900,000 (Clark, 1970). Approximately 43,541 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.1.9 Loraine District (Kern County, Exhibit 2, Location #9)

Location and History

The Loraine District, also known as the Amalie District, is located in the southern Sierra Nevada in central Kern County near the vicinity of the town of Paris-Loraine. The district is about 35 miles east of Bakersfield and 12 miles north of Tehachapi and was first prospected in the 1850's (Crawford, 1894; Brown, 1916). The principal period of mining activity was from 1894 until around 1912 (Tucker and Sampson, 1933). The district was active again in the 1920's and 1930's, and there has been intermittent prospecting since.

Geology

The Loraine District is underlain by a large roof pendant of slate and mica schist of the Paleozoic age Kernville Series within the rock of the Sierra Nevada batholith comprised of quartz diorite and granodiorite (Jennings, 1977). There are a number of quartz veins, ranging from one to 10 feet in thickness, which reportedly contain free gold and abundant sulfides (Tucker and Sampson, 1933). The veins reportedly occur in both the metamorphic and granitic rocks.

Milling-grade ore reportedly commonly averaged more than 0.5 oz/ton of gold and 2.0 oz/ton of silver per ton (Troxel and Morton, 1962). Several ore shoots reportedly had stope lengths of up to 300 feet, and several veins were mined to depths of 600 feet or more.

Mines and Gold Produced

The mines located in the Loraine District included: Amalie, (\$600,000); Barbarossa; Cowboy (\$600,000); Deerhunter; Ella; Ferris; Golden Cross; Golden Peak; New Deal; Zenda, (34,000 ounces of gold or more). Approximately 92,055 ounces of gold were produced from this district.

Recent Exploration Activity

Exploration for precious metals has occurred in this district during the past ten years. Companies reported to have been active in the Loraine District have included: Billlinton Minerals USA, Equinox Exploration and Claim Staker Resources. The Zenda Mine Project has been reportedly evaluated by Claim Staker Resources and gold ore reserve /resource estimates of approximately 920,000 tons of ore at an average grade of 0.057 oz/ton are present. This volume of ore would represent approximately 100,000 ounces of recoverable gold.

3.2.1.10 Piute Mountains District (Kern County, Exhibit 2, Location #10)

Location and History

The Piute Mountains are located in the southern Sierra Nevada mountain range and in the east-central portion of Kern County near Claraville, about 14 miles southeast of Bodfish. Gold was probably discovered here during the 1850's, but the principal periods of mining were 1870 to 1900 and during the early 1930's and early 1940's (Tucker and Sampson, 1933).

Geology

The Piute Mountains District is underlain primarily by Mesozoic granitic rocks (Jennings, 1977). In the northwest portion of the district, a roof pendant of Mesozoic metasediments crop out. Most of the gold deposits are confined to a two-mile-wide belt that extends northwest through the Claraville area in granitic rock and then north in the metamorphic rocks (Troxel and Morton, 1962). The deposits consist primarily of gold-quartz veins in shear zones. Some sulfides, in places, are reportedly present. Milling ore reportedly averaged about 0.5 oz/ton of gold (Clark, 1970).

Mines and Gold Production

The mines that produced gold in the Piute Mountains District included: Amy, Blue Jay, Bright Star (\$600,000), Dearborn, Donnie, French, Gold Standard, Gwynne (\$770,000), Henry Ford, Hilltop, Jeannette, Jeanette-Grant, Jerry, Little Joe, Lone Star, Mary Ellen, Retreat, Shellenberger, Simon, Surprise (Troxel and Morton, 1962). Approximately 66,279 ounces of gold have been produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.1.11 Tehachapi District (Kern County, Exhibit 2, Location #11)

Location and History

The Tehachapi District is located in the Tehachapi Mountains, about four miles south of Tehachapi within the east-central portion of Kern County. Most of the gold production in this district came from the Pine Tree Mine which was a lode mine. This mine was reportedly active from 1876 to 1907.

Geology

The Tehachapi District is largely underlain by Cretaceous granitic rocks that are part of the southern end of the Sierra Nevada batholith. Preserved within these plutonic rocks are large roof pendants of probable Mesozoic age metasediments that are composed largely of limestones and quartzites (Jennings, 1977; Dibblee and Louke, 1970). Irregular bodies of Late Tertiary rhyolite locally intrude the granitic rocks (Troxel and Morton, 1962). The district is largely known for its production of lime and portland cement from the Paleozoic age roof pendants containing limestone. Some gold has also been produced in the district from shallow dipping, gold-bearing quartz veins cutting the granitic rocks (Clark, 1970).

Mines and Gold Produced

The largest gold-producing mine in the district was the Pine Tree Mine. Clark (1970) reported that over \$250,000 in gold was mined from shallow dipping (20° to 40°) quartz veins in granitic rocks from the Pine Tree Mine. Maximum width of quartz veins is reported to be about three feet, however, hanging wall and footwall of most veins are also brecciated. Before 1910, mine workings consisted of at least five adits ranging in length from 80 to about 800 feet. Several thousand feet of drifts and stoops extended from these adits. Lower adit portals have been covered by dumps from upper portals. Gold was reportedly free milling (Troxel and Morton, 1962). Approximately 12,094 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.1.12 White River Mining District (Kern County, Exhibit 2, Location #12)

Location and History

The White River District is located in both southern Tulare and northern Kern Counties, approximately 25 miles southeast of Porterville. Gold was discovered here in 1853. The town was originally known as Tailholt, but the name was changed to White River in 1870 (Laizure, 1923). Mining continued until around 1906, and there has been minor activity since. The district was estimated to have yielded a total of \$750,000 worth of gold by 1914 (Tucker, 1919).

Geology

The White River District is underlain by Mesozoic granodiorite and small intrusive bodies of gabbro and other basic rocks (Troxel and Morton, 1962). Small amounts of Paleozoic

and/or Mesozoic schist and slate along with a few limestone roof pendants are present the west (Jennings, 1977). A series of west-northwest-trending parallel quartz veins occur in shear zones in the granodiorite. The ore reportedly contained free gold and small amounts of pyrite (Troxel and Morton, 1962).

Mines and Gold Production

The mines located in the White River District include Bald Mountain (\$200,000 to \$300,000); Eclipse No. 2; Josephine; Last Chance; and Stencil. Approximately 36,284 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.3.2 Basin and Range Province Mining Districts

The Basin and Range Province of the Area of Investigation occupies Inyo, San Bernardino, and portions of Kern Counties. The mountain ranges in this province lie east of the Sierra Nevada Mountain Range and north of the Garlock Fault (Exhibit 2). The Basin and Range Province is a region of roughly parallel mountain ranges alternating with basins or low-areas that are controlled by fault block structures. The province is underlain by granitic, sedimentary rocks of Precambrian, Paleozoic and Mesozoic ages and in places by Cenozoic sediments and volcanic rocks (Jennings, 1977). Gold is present as epithermal deposits in silicified and brecciated zones in volcanic rocks or as mesothermal gold-quartz veins in older metamorphic or granitic rocks (Clark, 1970).

3.2.2.1 Argus District (Inyo County, Exhibit 2, Location #13)

Location and History

The Argus District is located in southern Inyo County within the Argus Range about 10 miles north of Trona. This district has also been known as the Kelley or Sherman Mining District. The mines here apparently were first worked in the 1890's, although gold may have been discovered earlier (Norman and Stewart, 1951). Considerable mining activity occurred during the early 1900's and again in the 1930's, followed by intermittent prospecting and development work until the present time (Clark, 1970).

Geology

The Argus District is underlain by crystalline rocks that range in composition from quartz monzonite to gabbro (Jennings, 1977; Norman and Stewart, 1951). The ore deposits reportedly occur either in quartz veins or in zones consisting of cemented, silicified breccia containing jasper, quartz veinlets, calcite, and abundant iron oxide (Tucker, 1938). The gold is reportedly usually in a very fine state and sulfides are present only in some of the deposits.

Mines and Gold Production

Mines in the Argus District include Arondo (\$200,000); Davenport; Mohawk; Ruth (\$700,000 or more); Star of the West; and Stockwell. Approximately 43,541 ounces of gold were produced from this district.

Recent Exploration Activity

Recent exploration activity has occurred in the Argus District in the form of drilling by Anaconda Mining Company and Queenstake Resources, Inc. to evaluate a disseminated

ore body during the mid 1980's. No announced discovery of a commercial ore body has been made.

3.2.2.2 El Paso Mountains District (Kern County, Exhibit 2, Location #14)

Location and History

The El Paso Mountain District is located in northeastern Kern County, approximately 10 miles northwest and north of Randsburg. A series of dry placer workings are present between the Redrock Canyon area on the southwest and the Summit area on the northeast. The district also includes the areas known as the Goler, Garlock and Searles Districts. Gold was reportedly discovered in Goler Canyon in 1893, and dry washing camps soon sprang up at Last Chance, Red Rock, Jawbone Canyon and Summit Diggings (Hulin, 1934). Mining activity reportedly declined by 1900, but a number of operations were reactivated during the depression years of the 1930's, and since World War II, there has been minor prospecting. In these dry placer deposits, the easily recoverable gold was mined at one locality for a few months to up to a year or two (Tucker and others, 1949).

Geology

Auriferous sands and gravels occur in benches above the present canyons and on bedrock in the washes and canyons themselves (Haley, 1923). Much of the gold appears to have been derived from the erosion and reworking of the basal conglomerate of the Ricardo formation (lower Pliocene), which is extensive in this region (Hulin, 1934). The gold particles are round and show evidence of considerable abrasion. The gold is mostly fine, although nuggets of up to several ounces have reportedly been recovered (Clark, 1970). Some narrow gold-quartz veins reportedly occur in granite and schist as lode occurrences (Troxel and Morton, 1962).

Mines and Gold Production

Mines in this district included the placer camps known as Last Chance; Red Rock; Jawbone Canyon; and Summit Diggings. Lode gold mines with reported production included the Garlock Mine (Troxel and Morton, 1962). No production records for gold value or volumes were reported into the public record for this district. It is estimated that approximately 1,000 to 10,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

Recent exploration/development activity in this district has been reportedly limited to dry placer occurrences. No announced discovery of a commercial ore body has been made.

3.2.2.4 Rademacher District (Kern County, Exhibit 2, Location #15)

Location

The Rademacher District is located in northeastern Kern County, approximately 15 miles north of Randsburg and five miles south of Ridgecrest. The district was organized in the 1890's, and the most active period was in the early 1900's (Tucker and Sampson, 1933).

Geology

The Rademacher District is underlain by Mesozoic granitic rocks containing small roof pendants of Paleozoic and/or Mesozoic metamorphic rock and is reportedly cut by numerous dikes (Jennings, 1977; Troxel and Morton, 1962). Acidic dikes are most common within the eastern portion of the district but become more basic in composition to the west (Tucker and Sampson, 1933). A number of narrow, north-trending quartz veins reportedly often cut the dikes. The ore reportedly contains free gold with varying amounts

of sulfides and manganese oxide. Milling-ore has been reported to usually average 0.5 oz/ton of gold, and the ore shoots usually are narrow with short stope lengths (Troxel and Morton, 1962).

Mines and Gold Production

Mines in the Rademacher District include: Apple Green; Bellflower; Broken Axle; Butte; Crown Cons.; Gold Bug; Gold Pass; Hillside; Huntington; Indian Wells Valley; Jerry; Lehigh Valley; Lost Keys; Northern View; Prize; Rademacher; Red Wing; Stardust; Star Lode; Steller group; Townsend; Vera Queens; White Star; Wildcat; and Yellow Treasure. No production records for gold value or volumes were reported in the public data reviewed for this district. Approximately 1,000 to 10,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.2.5 Slate Range District (Kern County, Exhibit 2, Location #16)

Location and History

The Slate Range District is located in northwestern San Bernardino and southern Inyo Counties. This district has also been known as the Arondo District. Gold occurs in several places in the Slate Mountains, the principal source apparently having been the Hafford Mine (Degroot, 1890).

Geology

The Slate Range District is underlain by Cretaceous granite and Mesozoic schist (Smith and others, 1968). The gold deposits reportedly consist of narrow quartz veins that contain small but rich gold- and silver-bearing pockets (Tucker and Sampson, 1943). In places, sulfides have been reportedly quite abundant.

Mines and Gold Production

The principal mine in the Slate Range District was reported to have been the Hafford Mine (Tucker and Sampson, 1943). No production records for gold value or volumes were reported in the public data reviewed for this district. Approximately 1,000 to 5,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.2.6 Spangler District (Kern County, Exhibit 2, Location #17)

Location and History

The Spangler District is located within the Spangler Hills of northwestern San Bernardino County, about 10 miles northeast of Johannesburg. Most of the reported gold production has been from the Spangler Mine, which has been intermittently prospected and developed since the 1890's (Wright and others, 1953).

Geology

The Spangler District is underlain by Mesozoic granitic rocks (Jennings and others, 1962). A number of narrow, west-striking gold-quartz veins traverse the granitic rock. Some of the ore reportedly contained more than 1.0 oz/ton of gold (Wright and others, 1953)

Mines and Gold Production

The mines in the Spangler District include Spangler Mine; Stephens Holding Mine; and Saint Elmo Mine. No production records for gold value or volumes were reported in the public record for this district. Approximately 1,000 to 5,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3 Mojave Desert Province Mining Districts

Gold deposits are widely distributed throughout the Mojave Desert Province of southern California. The Mojave Desert is a broad interior region of mountain ranges separated by expanses of desert plains. The western portion of the province is triangular-shaped and bounded on the north by the extreme southern portion of the Sierra Nevada Mountain Range and on the south by the Transverse Range. The primary gold deposits of this province consist of mesothermal gold-quartz veins that occur in metamorphic and granitic rocks of Precambrian, Paleozoic, and Mesozoic ages or epithermal deposits in zones of solidification and brecciation in volcanic rocks of Tertiary age.

The largest sources of gold in this province have been the Randsburg and Mojave-Rosamond Districts located in Kern County. Placer gold has been recovered in quantity

in many of the districts, considerable amounts having come from dry placers. The most productive dry placers known to have produced gold within the area of investigation have been in the Randsburg District.

3.2.3.1 Alvord District (San Bernardino County, Exhibit 2, Location # 18)

Location and History

The Alvord District is located in central San Bernardino County about 35 miles northeast of Daggett and is named for the Alvord Mine, the chief producer in the district. Gold was reportedly discovered here in 1885, and the Alvord Mine has been intermittently worked ever since (Clark, 1970).

Geology

The Alvord District is underlain by Mesozoic granite and Paleozoic carbonate rocks (Byers, 1960). Late Tertiary volcanic rocks are also present (Wright and others, 1953). Siliceous veins at the Alvord Mine contains jasper, calcite, hematite, pyrite, limonite, and free gold. Minor copper mineralization is reportedly present. Ore mined in the past reportedly yielded 0.5 oz/ton of gold (Clark, 1970).

Mines and Gold Production

The mine which produced gold in the Alvord District was known as the Alvord Mine. No production records for gold value or volumes were reported into the public record for this district. Approximately 5,000 to 20,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3.2 Coolgardie District (San Bernardino County, Exhibit 2, Location #19)

Location and History

The Coolgardie District is a dry-placer mining district located in western San Bernardino County, about 15 miles northwest of Barstow. The area was reportedly mined intermittently from around 1900 to 1915 (Cloudman and others, 1919), with a total output valued at about \$100,000 (Wright and others, 1953).

Geology

The Coolgardie District is underlain primarily by Mesozoic granitic rock with localized basic intrusives (Jennings, 1977). The placer deposits are contained within Quaternary alluvium that is in the axis of a broad valley. The gold apparently was derived from veins in granitic rocks that are located to the east and northeast of the district (Laizure, 1934).

Mines and Gold Production

The principal mining operator in the Coolgardie District was the Cool Gardie Mining Company, which operated a battery of gasoline-powered dry washers (Clark, 1970). Several two-man operations reportedly employed single dry washers or rockers. Minor prospecting was reportedly done in the district during the 1920's and 1930's (Hulin, 1934). A total of 4,837 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3.3 Emerson Lake District (San Bernardino County, Exhibit 2, Location #20)

Location and History

The Emerson Lake District is located in southern San Bernardino County, approximately 25 miles northwest of Twentynine Palms.

Geology

The Emerson Lake District is underlain by Mesozoic quartz monzonitic rocks that have been intruded by basic (gabbro) bodies (Jennings, 1977; Dibblee, 1967b). The gold has reportedly been found in parallel veins in small pendants of gneiss and granitic rock as high-grade pockets near the surface (Tucker and Sampson, 1940). Several high-grade pockets of wire-gold have reportedly been found in this district.

Mines and Gold Production

The mines in the Emerson Lake District include Emerson and Los Padre. No confirmed amount of gold production was reported for these mines. No production records for gold value or volumes were reported in the public record for this district. Approximately 1,000 to 10,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3.4 Fremont Peak District (San Bernardino County, Exhibit 2, Location #21)

Location and History

The Fremont Peak District is located about 18 miles southeast of the Randsburg District within San Bernardino County.

Geology

The Fremont Peak District is underlain by Precambrian gneiss that has been intruded by Cretaceous granitic rocks (Jennings, 1977; Dibblee, 1968). Rhyolitic dikes probably related to the Opal Mountain Volcanics intrude the older rocks and are associated with many of the gold occurrences in the district. Gold reportedly occurs along with pyrite and arsenopyrite in a series of parallel quartz veins (one to four feet wide) and also along the contacts of rhyolite dikes and the granitic basement rocks (Wright and others, 1953). Placer gold also occurs in this district but has not been worked because of the lack of water (Dibblee, 1968).

Mines and Gold Production

Among the several prospects, only one mine has any recorded production in the district, the Fremont Peak Mine, also known as the Gateway Mine. The Fremont Peak Mine contained over 3,200 feet of underground workings and has had an unknown amount of gold production. Gold mineralization is also reported to occur along fractured, iron-stained rhyolite dikes containing quartz stringers at some of the prospects with no reported past production (Wright and others, 1953; Dibblee, 1968). No confirmed amount of gold production was reported for these mines. No production records for gold value or volumes were reported into the public record for this district. Approximately 10,000 to 25,000 ounces or more of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3.5 Goldstone District (San Bernardino County, Exhibit 2, Location #22)

Location and History

The Goldstone District is located in northwestern San Bernardino County, approximately 35 miles north of Barstow, in what is now part of the U.S. Naval Ordnance Test Station, Mojave Range. The Goldstone District was active in 1915 to 1918, in the 1920's, and again just before World War II (Cloudman and others, 1919; Wright and others, 1953).

Geology

The Goldstone District is underlain by Mesozoic granitic rock and large pendants of Paleozoic carbonates and siliceous shales (Jennings, 1977; Miller and Sutter, 1982). Numerous diorite dikes cut these rocks and several shallow, gold-bearing quartz veins have been discovered (Koschmann and Bergendahl, 1968). Copper and silver occurrences have also been reported to be present (Cloudman and others, 1919).

Mines and Gold Production

Although several mines are reported to have been present in this district no names could be found. No confirmed amount of gold production was reported for these mines. No production records for gold value or volumes were reported into the public record for this district. Approximately 10,000 to 20,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

Recent exploration activity has occurred in the Goldstone District in the form of drilling by Goldfields Mining Corporation to evaluate a disseminated ore body. No announced discovery of a commercial ore body has been made. Since then, the U.S. Government has removed this mining district from public entry and it is now part of the Fort Irwin military reservation.

3.2.3.6 Grapevine District (San Bernardino County, Exhibit 2, Location #23)

Location and History

The Grapevine District is located within the Paradise Mountains of San Bernardino County approximately 15 miles north of Barstow. There are several small lode-gold mines, prospects and dry placer deposits in this area (Clark, 1970).

Geology

The Grapevine District is underlain by Mesozoic granitic rock that has been intruded by Miocene andesitic volcanics and Tertiary hypabyssal intrusive bodies (Jennings, 1977). Gold has reportedly been produced from quartz veins that contained free gold. A number of the quartz veins also reportedly contained copper and manganese minerals. The veins are narrow and the deposits are shallow.

Mines and Gold Production

The Olympus Mine was the only property that has had much development work. An unknown volume of gold was produced from this mine (Wright and others, 1953). No production records for gold value or volumes were reported into the public record for this district. Approximately 1,000 to 5,000 ounces of gold were produced in this district based

on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity is known to have occurred in this district.

3.2.3.7 Kramer Hills District (San Bernardino County, Exhibit 2, Location #24)

Location and History

The Kramer Hills District is located about eight miles southeast of Kramer Junction in western San Bernardino County.

Geology

The Kramer Hills consists of a group of rolling hills that are pedimented surfaces that contain a variety of exposed rock types. Cretaceous granitic rocks, which have intruded Mesozoic metamorphic rocks of probable Sidewinder Series equivalent, are the most common rocks cropping out in the district (Wright and others, 1953). Dikes and irregular bodies of rhyodacite to rhyolite intrude these older rocks. Tertiary tuffaceous sediments that were deposited in the Kramer Basin are exposed in the northern and southern portions of the Kramer Hills (Siefke, 1980).

Mines and Gold Production

No known gold production had occurred from the Kramer Hills District until the 1980's when a small heap leach gold recovery operation was placed online by Beaver Resources. Numerous small pits and adits are present in this district that are typically a maximum of only several tens of feet deep and are largely caved at present. Rocks exposed on dumps

and at several portals appear to consist of highly pyritized and iron oxide-stained metamorphic rocks that are probably Sidewinder Series equivalent.

No production records for gold value or volumes were reported into the public record for this district prior to the 1980's. Pre-1980 gold production is estimated to have been approximately 1,000 to 5,000 ounces based on geology and gold occurrences similar to other mining districts with established gold production. In 1987, Beaver Resources placed a small heap-leach gold recovery pad into operation. This operation remained in place until about 1989 and appears to have produced approximately 5,000 to 20,000 ounces of gold. Based on these estimates, it is concluded that approximately 6,000 to 25,000 ounces of gold have been produced from this district.

Recent Exploration Activity

Recent exploration activity has occurred in the Kramer Hills District in the form of drilling. Amselco Minerals and Phillips 66 Mining Company evaluated a disseminated gold ore body within this district. No announced discovery of a commercial ore body has been made. Approximately 20,000 ounces of gold resource base is present in this district based on known geology and established gold production from mining districts with similar conditions.

3.2.3.8 Mojave-Rosamond District (Kern County, Exhibit 2, Location #25)

Location and History

The Mojave-Rosamond District is located in southeastern Kern County, between the towns of Mojave and Rosamond. The gold deposits are associated with the five prominent buttes south of the town of Mojave and west and north of the town of Rosamond. Gold was discovered in the Yellow Rover vein on Standard Hill in 1894, and soon afterward, other discoveries were made (Bateson, 1907; Brown, 1916). Activity continued until about 1910, but waned over the next 20 years (Troxel and Morton, 1962). The Cactus Gold Mine was

discovered in 1934, and from 1931 until 1941, mining was done in the district on a major scale. The mines were shut down during World War II. The district is estimated to have had a total gold and silver output valued at \$23 million (Troxel and Morton, 1962).

Geology

The principal rocks within the Mojave-Rosamond District are Tertiary rhyolite, rhyolite porphyry and quartz latite, which are underlain by Mesozoic quartz monzonite (Jennings, 1977; Dibblee, 1963, 1967a, 1980). All of the gold deposits are associated with the five topographic prominences, the most important of which, both in productivity and in the number of deposits, is Soledad Mountain (Perez, 1978). The gold ore reportedly occurs in epithermal fissure veins that occupy brecciated and sheared zones in the volcanic rocks. The ore contains finely divided gold, with appreciable amounts of silver minerals, including cerargyrite, argentite, and smaller amounts of pyrargyrite and electrum. Pyrite, arsenopyrite, galena and chalcopyrite also are present. The ore shoots range from a few feet to 40 feet in thickness, and are up to 200 feet long (Tucker and others, 1949a). The veins have reportedly been developed to depths of 1,000 feet. Milling ore is reported to have usually averaged about 0.3 oz/ton of gold, but some very rich ore shoots were worked in the earlier mining operations (Troxel and Morton, 1962; Brown, 1916; Tucker, 1935).

Mines and Gold Production

Mines in this district include: Burton-Brite-Blank; Cactus Gold (\$5 million+); Double Eagle; Crescent; Elephant (\$200,000 to \$400,000); Excelsior; Golden Queen (includes Echo and Gray Edge, Queen Ester and Silver Queen) (\$10 million+); Middle Butte (\$150,000+); Milwaukee; Pride of Mojave; Quien Sabe; Standard group (Desert Queen, Exposed Treasure and Yellow Rover) (\$3.5 million); Tropico (114,000 ounces); Wegman group (Eureka, Karma and Monarch) (100,000 ounces or more); Western; Whitmore; Winkler; and Yellow Dog (5,800+ ounces).

Based on published gold volume and price data, it is estimated that approximately 1.046 million ounces of gold was produced prior to 1970. During the 1980's two of the previous gold mines the Standard Hill Mine and the Cactus Gold Mine were reactivated as large tonnage, disseminated gold projects. The Standard Hill Mine was reactivated by Billiton Minerals USA and reportedly produced 115,000 ounces of gold from an open pit that mined the former underground workings from 1987 to 1994. The Cactus Gold Mine was reactivated during the late 1980's in a similar fashion and reportedly recovered approximately 200,000 ounces of gold from 1986 to 1994.

Golden Queen Mining Company, Inc. has announced gold reserves and resources of approximately 2.3 million ounces for the Soledad Mountain Project. It is estimated that the remaining potential for the Mojave-Rosamond District, except for the Soledad Mountain Project, is approximately 25,000 ounces. Total recorded production and estimated reserves for the Mojave-Rosamond District amount to 2.486 million ounces of gold.

Recent Exploration Activity

Exploration activity is underway at Cactus Gold and no announcements have been made.

3.2.3.9 Ord District (San Bernardino County, Exhibit 2, Location #26)

Location and History

The Ord district is located in the Ord and Newberry Mountains, approximately 20 miles southeast of the city of Barstow. The district was organized around 1870, and intermittent development work continued for many years after (Clark, 1970; Cloudman and others, 1919). There was some intermittent activity in the district during the 1930's. Although the district is reported to have been a small gold producer, there are many mines and prospects.

Geology

The region is underlain by granite and quartz monzonite and a variety of Tertiary volcanic rocks that include basalt, andesite and rhyolite (Weber, 1963; Dibblee, 1964b). The gold-quartz veins are reportedly confined to the granitic rocks and often are associated with dikes. The ore bodies contain abundant sulfides and iron oxide (Wright and others, 1953). Appreciable amounts of copper and silver minerals are reportedly present in places. There are reportedly a few gold-bearing placer deposits located in this district (Tucker, 1940).

Mines and Gold Production

The mines reported in this district include: Alarm; Azucar; Black Butte; Camp Rock (placer); Cumberland; Elsie; Gold Banner; Gold Belt; Gold Brick; Gold Peak; Grandview; Haney and Lee; Hoover; Johnson; Lucky Strike; New Deal; Old; Ord Belt; Red Hill; and Riley. An unknown volume of gold was produced from these mines (Wright and others, 1953). No production records for gold value or volumes were reported into the public record for this district. Approximately 1,000 to 10,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

Recent precious metals exploration has reportedly occurred in this district to evaluate a possible porphyry copper occurrence that may be gold-bearing. Bear Creek Mining, Duvall Corporation, and Cypress Mining Company have each conducted exploration drilling campaigns in the Ord District over the last 25 years. No announced ore reserves or discovery have been announced by any of these companies.

No recent development activity within the last 10 years is known to have occurred in this district.

3.2.3.10 Oro Grande District (San Bernardino County, Exhibit 2, Location #27)

Location

The Oro Grande District is located in the vicinity of the town of Oro Grande approximately five miles north of Victorville. The gold mines in this district were active during the 1880's, early 1900's and again in the 1930's (Clark, 1970). Large amounts of cement are produced here now.

Geology

The Oro Grande District is underlain by schist, quartzite and limestone of the Oro Grande series (Carboniferous); dacite, rhyolite and latite of the Sidewinder volcanic series (Triassic); and Cretaceous quartz monzonite (Jennings, 1977; Bowen and VerPlanck, 1965). The quartz veins are narrow, and the ore bodies usually are generally small and irregular shaped. Most of the ore has come from the oxidized zone near the surface, but a few high-grade pockets have been found in the veins. The ore contains free gold and often abundant sulfides, including pyrite, chalcopyrite, sphalerite and bornite. The Carbonate Mine has yielded appreciable amounts of gold- and silver-bearing lead carbonate (Wright and others, 1953).

Mines and Gold Production

The mines in this district include: Apex; Branch; Carbonate; Dents Grandview Lode; Gold Bullion; Gold King; Oro Grande I and II; Sidewinder; and Western. An unknown volume of gold was produced from these mines (Wright and others, 1953). Approximately 1,000 to 5,000 ounces of gold were produced in this district based on geology and gold occurrences similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration or development activity within the last 10 years is known to have occurred in this district.

3.2.3.11 Randsburg District (Kern and San Bernardino County, Exhibit 2, Location #28)

Location and History

The Rand or Randsburg District straddles the Kern-San Bernardino County line in the immediate vicinity of the town of Randsburg, about 40 miles northeast of Mojave. The western part of the district is located in Kern County and has been chiefly a source of gold (Troxel and Morton, 1962). The eastern part of the district is located in San Bernardino County and, has been largely a source of silver (Wright and others, 1953).

Although this region was prospected as early as the 1860's, it was not until placer gold was discovered in 1893 in Goler Wash, in the El Paso Mountains 15 miles to the west, that there was any mineral production (Newman, 1923). Numerous short-lived dry-washing camps soon sprang up over the entire region. The Yellow Aster Mine, originally known as the Olympus, was located in 1895 (Cooper, 1936). Other gold discoveries were made in the district, and the rich ore recovered in these early operations led to a gold rush (Hess, 1909). The district was named for the Rand District in South Africa.

Large-scale gold mining continued until 1918. The famous and highly productive Kelly or California Rand Silver Mine was discovered in 1919 and was operated on a major scale through the 1930's (Troxel and Morton, 1962). Gold production from the district was substantial in the 1930's and early 1940's. Since that time there has been ongoing prospecting development work.

Geology

The principal rocks underlying the Randsburg District are the Precambrian Rand Schist and the Atolia Quartz Monzonite of Mesozoic age (Hulin, 1925; Jennings, 1977). The Rand Schist is chiefly biotite schist with smaller amounts of amphibolite and quartzite. To the east are poorly consolidated clays, sandstones and conglomerates of continental origin, which are overlain by andesite at Red Mountain. Rhyolite and latite intrusives are present in the east-central part of the district.

Most of the lode-gold deposits are in veins that occur along faults, except at the Yellow Aster Mine, where the gold is in a series of closely spaced veinlets in small fractures (Troxel and Morton, 1962). The majority of the gold deposits are in the schist, which is more widespread than the quartz monzonite (Jennings, 1977). The veins are unoriented, but usually have a well-defined hanging wall.

The ore bodies most commonly occur in the vein footwalls, usually at or near vein intersections or in sheared and brecciated zones. The ore reportedly consists of iron oxide-stained brecciated and silicified rock containing native gold in fine grains and varying amounts of sulfides. The sulfides increase with depth, but the gold values decrease. Most mining has stopped where unoxidized sulfides were found in the veins, and the maximum depth of development is 600 feet.

Milling ore reportedly contained from 0.15 to 0.25 oz/ton of gold (Troxel and Morton, 1962). The high-grade ore nearly always occurred in pockets near the surface. Most of the placer gold has been recovered from dry placers at Stringer or in the Rand Mountains north of Randsburg.

Mines and Gold Production

The mines in the Randsburg District included: Arizona; Baltic, (\$50,000); Barnett; Beehive; Big Dike (\$200,000); Big Gold (\$500,000); Black Hawk (\$700,000); Buckboard (\$500,000);

Bully Boy (\$120,000); Butte (\$2 million); California; Consolidate (\$50,000); Culbert; Gold Crown; Granton; Gunderson; Hawkeye; Hercules; King Solomon (\$500,000); Little Butte (\$400,000); Lucky Boy (\$120,000); Merced; Minnehaha (\$100,000); Mizpah Montana; Monarch Rand; New Deal; Operator Divide (\$600,000); Pestle; Pinemore; Red Bird; Santa Ana group (\$400,000); Sidney (\$250,000); Snowbird; Sunshine (\$1.06 million); Windy; Winnie; and Yellow Aster (\$12 million).

Glamis Gold Ltd. continues to operate a large heap-leach mine as the Rand Mining Company at the Yellow Aster heap leach which reportedly processes gold ore at the rate of approximately 7 million tons of ore a year with an average gold concentration of about 0.018 oz/ton. This production level is capable of producing approximately 100,000 oz/year of gold according to industry sources. It is estimated that approximately 300,000 to 400,000 ounces more of gold will be produced before Glamis Gold completes its operations in Randsburg.

Based on published gold volume and price data, it is estimated that approximately 967,565 ounces of gold was produced in the Randsburg District prior to 1970 (Troxel and Morton, 1962). During the 1980's the mining of low-grade, disseminated gold deposits with the heap-leach cyanide recovery operations contributed another 500,000 ounces of gold production. Total recorded gold production and estimated reserve and resource base for the Randsburg District amounts to 1.767 to 1.867 million ounces of gold.

Recent Exploration Activity

No additional recent precious metals exploration has reportedly occurred in the Randsburg District other than to support the ongoing Glamis Gold Ltd. operations.

3.2.4 Transverse Range Province Mining Districts

The Transverse Range province is comprised of a series of complex-shaped, nearly east-west trending mountain ranges and valleys. The province includes the San Gabriel, San

Bernardino, and Santa Ynez Mountains. The most productive gold-quartz mines have been in the Frazier Mountain, Acton, and Baldwin Lake Districts where the deposits occur in metamorphic and granitic rocks. The most common and most typical primary gold deposits are steeply dipping gold-bearing quartz veins. These veins usually range from 1 to 10 or more feet in thickness. A number of gold ore bodies consist of several parallel quartz veins or they may consist of a zone of numerous narrow quartz stringers (Clark, 1982).

3.2.4.1 Acton District (Los Angeles County, Exhibit 2, Location #29)

Location and History

The Acton District is located in north-central Los Angeles County, in the general vicinity of the town of Acton, 20 miles north of Los Angeles. This district also includes the area known as the Cedar district. Placer gold was mined in the San Gabriel Mountains here as early as 1834 (Clark, 1970). Lode mining apparently began here in the 1870's or 1880's. The district was reportedly quite productive until about 1900. A number of mines, including the Red Rover, Governor and Monte Cristo, were active again during the 1930's and early 1940's (Gay and Hoffman, 1954). The district has been intermittently prospected since, but there has been very little recorded production.

Geology

The Acton District is underlain by Mesozoic quartz diorite, diorite, and Precambrian schist. (Jennings, 1977; Oxyacid, 1958). The gold deposits are reported to consist of gold-quartz veins in quartz diorite, diorite, gabbro and schist. The quartz veins are in faulted and fractured zones and the gold ore is free milling and contains varying amounts of pyrite. The ore bodies commonly consist of small parallel veins rather than a single large vein. The Governor Mine has been developed to an incline depth of 1,000 feet.

Mines and Gold Production

The mines in the Acton District include: Buena Esperanza; Governor (New York) (\$1.5 million+); Helene; Hi-Grade; Red Rover (\$550,000); and Puritan. Based on published gold volume and price data, it is estimated that approximately 99,177 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred.

3.2.4.2 Azusa-Tujunga District (Los Angeles County, Exhibit 2, Location #30)

Location and History

The Azusa-Tujunga District is located along the south flank of the San Gabriel Mountains north and east of Los Angeles. Placer gold has been recovered from a number of canyons and washes within this area. Two of the most important sources of gold have been the San Gabriel Canyon, near Azusa, and Tujunga Canyon, located to the west.

Geology

The Azusa-Tujunga District is underlain by Precambrian gneiss and granitic rock on which Quaternary alluvial deposits rest (Gay and Hoffman, 1954). The gold placers are produced from the alluvial deposits. The gold is reportedly fine-grained and has been produced mostly from sand and gravel operations as a byproduct in the 1930's and 1950's (Clark, 1982).

Mines and Gold Production

No confirmed amount of gold production was reported into the public record for the placer deposits from this district. Approximately 1,000 to 10,000 ounces or more of gold were produced in this district based on geology and gold occurrences in placer deposits similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.3 Baldwin Lake District (San Bernardino County, Exhibit 2, Location #31)

Location and History

The Baldwin Lake District is located in the general vicinity of and east of Baldwin Lake, which is in the northern portion of the San Bernardino Mountains. Placer gold was reportedly mined here by Mexicans possibly as early as 1800 (Cloudman and others, 1919). The Rose Mine was active in 1860, and there was considerable activity in the district in the 1890's and early 1900's. The Doble Mine was active again in the 1930's and 1940's (Clark, 1970).

Geology

The Baldwin Lake District is underlain by Mesozoic age mica schist and quartzite, Paleozoic carbonate rocks, and Cretaceous granite rocks (Wright and others, 1953). The lode gold ore deposits consist of systems of irregular shaped quartz-calcite veins containing free-gold, scheelite, and sulfides. The greatest depth of reported development is about 400 feet (Clark, 1970). Placer deposits are also reported to have been worked in this district.

Mines and Gold Production

Lode mines that are reported to have been worked in the Baldwin Lake District include the Christie; Doble (\$250,000 to \$300,000); Erwin; Gem; Gold Hill; Hollie Ann; Lester; Log Cabin; Rose (\$450,000 to \$600,000); and Stewart. Placer deposits include the McClure-Bess, Parker, Rattlesnake Canyon, Vaughn and Weaver. Based on published gold volume and price data, it is estimated that approximately 43,541 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.4 Black Hawk District (San Bernardino County, Exhibit 2, Location #32)

Location and History

The Black Hawk District is located in southwestern San Bernardino County approximately 30 miles northeast of the city of San Bernardino on the north flank of the San Bernardino Mountains. This district has also been known as the Silver Reef District. The district was reportedly organized in 1870 (Tucker, 1921). An English concern organized the Santa Fe claim group in 1890 to work the district on a large-scale basis but work stopped soon afterward and prospecting was minor during the early 1900's. The Santa Fe group was reopened in 1921 and operated continuously until 1940. During this last operation the gold production was reported to amount to \$300,000.

Geology

The area of the Black Hawk District is underlain by Cretaceous granitic rock, Mesozoic schist, gneiss, and a Paleozoic limestone belt (Woodford and Harris, 1928; Dibblee, 1964a). A mineralized zone known as the Arlington-Santa Fe lode occurs along thrust-

fault plane that strikes west and dips north. The gold ore reportedly consists of hematite-bearing gouge and a limestone breccia (Tucker and Sampson, 1930). Several ore bodies reportedly yielded up to 1 oz/ton (Wright and others, 1953). The ore zones in this district are up to 75 feet thick and approximately 1,000 feet long.

Mines and Gold Production

The principal mines in the Black Hawk District that produced most of the gold was referred to as the Santa Fe Group and the Lester (Clark, 1982). Based on published gold volume and price data, it is estimated that approximately 145,000 ounces of gold were produced from this district.

Recent Exploration Activity

Recent precious metals exploration has reportedly occurred in this district to evaluate potential low-grade disseminated gold deposits. Amselco Minerals and Santa Fe Gold have each reportedly conducted exploration drilling campaigns in the Black Hawk District over the last 15 years. No ore reserves or discovery has been announced by any of these companies.

3.2.4.5 Frazier Mountain District (Los Angeles County, Exhibit 2, Location #33)

Location and History

The Frazier Mountain District is located in the extreme northeast corner of Ventura County, in the general vicinity of Frazier Mountain. The Piru district is just to the south, and the towns of Gorman and Fort Tejon are located to the east. The region was first placer-mined in the 1840's, and the Frazier Mountain Mine was opened in 1865. This and other lode-gold mines were worked fairly steadily until around 1895. Minor prospecting and development work has been done in the district since; a small production was recorded in 1952.

Geology

The Frazier Mountain District is underlain by granite, granodiorite, gneiss and schist, and smaller amounts of quartzite and hornfels (Jennings, 1977; Carman, 1964). The gold-quartz veins reportedly strike north, range from a few inches to five feet in thickness, and occur in shear zones that are principally in gneiss and schist (Tucker and Sampson, 1932). The ore is free milling and reportedly contains pyrite and small amounts of other sulfides. Milling-grade ore commonly averaged 0.5 oz/ton of gold. Several of the ore bodies had stope lengths of up to 300 feet. Some placer gold was recovered in the district from the streams and older terrace gravels (Carman, 1964).

Mines and Gold Production

The mines located in the Frazier Mountain District included Bunker Hill; Esperanza; Fairview; Frazier (\$1 million); Gold Dust; Harris; Hess; Maule; Sibert; and White Mule. Based on published gold volume and price data, it is estimated that approximately 48,379 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration or development activity within the last 10 years is known to have occurred in this district.

3.2.4.6 Holcomb Valley District (San Bernardino County, Exhibit 2, Location #34)

Location and History

The Holcomb Valley District is located on the north side of the San Bernardino Mountains just north of Big Bear Lake. Placer gold deposits were discovered here in 1860 and extensively worked for a few years (Clark, 1970). The area has been intermittently prospected ever since.

Geology

The Holcomb Valley District is underlain by Cretaceous quartz monzonite that is surrounded by Paleozoic carbonates and metasediments (Dibblee, 1964; Richmond, 1960). The placer gold occurrences are in alluvium that is Recent to Late Tertiary in age. In addition to the placers, lode-gold occurrences are present in the form of thin-shear and fracture zones within the Cretaceous granitic rocks and/or in contacts between Paleozoic carbonate and Tertiary intrusive rocks (Cloudman and others, 1920).

Mines and Gold Production

Gold deposits in the Holcomb district consist of both placers and lodes. The placers were the earliest worked and have been reportedly the most productive. The placers were extensively worked in the 1860's. Lode mine production from the district is estimated to be about 54,500 ounces of gold (Koschmann and Bergendahl, 1968).

Mines of interest in the district include:

Ozier Mine. One of the extensive lode workings in Holcomb Valley area. First worked by Mexicans in the 1850's, most active between 1860-90 (Clark, 1982). Mine output unknown but presumed significant. Mine area underlain by quartz monzonite. Workings consisted of numerous shallow shafts and adits that followed numerous closely-spaced, steeply dipping west-northwest-trending fractures that occur along a zone that is over 200 feet wide. The gold-bearing material in this zone is reported to consist of highly hematitic-stained, fractured and decomposed quartz monzonite that contained little actual quartz vein material (Wright and others, 1953).

Green Lead. Gold and silver bearing copper-stained quartz zone at contact between limestones of Furnace Formation and biotite quartz monzonite. Quartz-bearing zone reported to be two to four feet wide. Reported to contain free milling gold ore (Wright and others, 1953).

Gold Button. Granite cataclasite associated with thrust faulting said to contain gold and silver-bearing material along shear zones. Extent of mineralization uncertain but cataclasite zone is over ½ mile in width (Wright and others, 1953).

From 1933 to 1941 about 200,000 cubic yards of Recent and Late Tertiary alluvium were mined by power shovel that reportedly contained about 0.38/dollars per yard of recoverable gold (Clark, 1970). Based on published gold volume and price data, it is estimated that approximately 102,171 ounces of gold was produced from this district.

Recent Exploration Activity

No recent exploration or development activity within the last 10 years is known to have occurred in this district.

3.2.4.7 Lytle Creek District (San Bernardino County, Exhibit 2, Location #35)

Location and History

The Lytle Creek District is located in southwestern San Bernardino County in the eastern San Gabriel Mountains. During the 1890's there was reportedly an appreciable amount of placer gold mining activity in this district (Clark, 1970). Operations extended from near the mouth of Lytle Creek to near its headwaters on the east slope of Mount San Antonio (Mount Baldy). Placer mining was reportedly accomplished by both hydraulic and hand methods (Clark, 1970).

Geology

The Lytle Creek District is underlain by the Cretaceous age Pelona Schist Formation and has been locally intruded by Later Tertiary granodiorite (Jennings, 1977). The San Andreas Fault is located approximately two miles north of the district. Numerous faults that are probably related to the San Andreas Fault system are present within the district.

Mines and Gold Production

No confirmed amount of gold production was reported into the public record for the placer deposits from this district. Approximately 1,000 to 10,000 ounces or more of gold were produced in this district based on geology and gold occurrences in placer deposits similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.8 Mount Baldy District (San Bernardino County, Exhibit 2, Location #36)

Location and History

The Mount Baldy District is located within the San Gabriel Mountains of eastern Los Angeles County. The district is just west of Mount San Antonio, which is also known as Mount Baldy or Old Baldy. The district contains both lode- and placer-mining operations (Clark, 1970). Placer mining was originally done here in the San Gabriel River in the 1840's, and for several periods following that time (Gay and Hoffman, 1954). The Mount Baldy District was quite productive (Clark, 1982). Production was obtained from both the stream beds and from terrace gravels, which were mined by hydraulic methods. In 1874 it was reported that more than \$2 million had been produced in the previous 18 years (Clark, 1982). The principal period of lode-gold mining was 1903-1908, but there was some activity again in the 1930's.

Geology

The Mount Baldy District is underlain by the Mesozoic age Pelona Schist and Mylonite of Vincent Thrust that has been intruded by Late Tertiary granodiorite (Youngs, 1988). The gold-quartz veins reportedly occur in the schist and gneiss immediately adjacent to the

fault plane of the Vincent Thrust Fault. The ore bodies usually are three feet or less in thickness and do not extend to any great depth. The oxidized zones near the surface yielded the richest ore (Gay and Hoffman, 1954).

Mines and Gold Production

Mines located in the Mount Baldy District include: Allison (\$50,000); Baldora; Big Horn (\$40,000+); Eagle; Gold Dollar; Holly; Heaton; Native Son; Stanley; and Zanteson. An estimated 96,758 ounces of gold was produced from the placer accumulations in this district (Clark, 1982). An additional 50,000 ounces of gold was produced from the lode mines in this district (Clark, 1982).

The Big Horn Mine is currently owned by Siskon Gold, Inc. which has reportedly drilled out a proven and probable reserve base of 300,000 ounces of gold at a grade of 0.144 oz/ton. Additional production may be obtained from a gold resource base of approximately 540,000 ounces. Siskon is attempting to place this property into production and has obtained a number of its required governmental operating permits.

Based on known and extrapolated past production from placer and lode gold mines of 146,758 ounces and the identified proven and resource base of gold at the Big Horn Mine, the total gold resource that can ultimately be produced from the Mount Baldy District is approximately 986,758 ounces.

Recent Exploration Activity

Other than the activity related to the Big Horn Mine no recent exploration activity is known to have occurred in this district.

3.2.4.9 Mount Gleason District (Los Angeles County, Exhibit 2, Location #37)

Location and History

The Mount Gleason District is located in northern Los Angeles County in the general vicinity of Mount Gleason, about 15 miles due north of Pasadena.

Geology

The Mount Gleason District is underlain by Mesozoic age granitic rock that surrounds small pendants of schist (Jennings, 1977). A number of small, lode-gold deposits have been reported to have occurred in granite and metamorphic rocks (Sampson, 1937; Clark, 1982).

Mines and Gold Production

The principal mines that are known to have been worked in this district are the Los Padre and Mount Gleason Mines. None of these mines have been worked in many years (Tucker, 1927). No confirmed amount of gold production was reported into the public record for the placer deposits from this district. Approximately 1,000 to 10,000 ounces or more of gold were produced in this district based on geology and gold occurrences in placer deposits similar to other mining districts with established gold production.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.10 Neenach District (Los Angeles County, Exhibit 2, Location #38)

Location and History

The Neenach District is located in the northern portion of Los Angeles County, about 20 miles west-northwest of Lancaster. Gold was discovered here in 1899, but the bulk of the production of about \$200,000 was reportedly obtained in 1935-38 (Clark, 1970; 1982). There reportedly has been intermittent mining and development work here since the 1930's (Clark, 1970).

Geology

The Neenach District is underlain by Mesozoic quartz monzonite rock that is overlain by Tertiary sediments and volcanoclastic sediments (Wiese, 1950). Small roof pendants of Paleozoic metasediments are present in the district (Simpson, 1934). The gold deposits occur in a contact zone between metasediments and quartz monzonite. The ore bodies consist of zones of narrow quartz veins and stringers containing free gold and varying amounts of pyrite. The oxidized zone yielded material valued as high as \$60 of gold per ton. Most of the production has been from the Rivera or Rogers-Gentry group of mines (Sampson, 1937).

Mines and Gold Production

The mines in the Neenach District reportedly consisted of the Rivera or Rogers-Gentry group of mines (Clark, 1970). No confirmed amount of gold production was reported into the public record for the placer deposits from this district. Based on published gold volume and price data, it is estimated that approximately 9,675 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.11 Piru District (Ventura County, Exhibit 2, Location #39)

Location and History

The Piru District is located in northeastern Ventura County in the vicinity of Piru Creek. Placer mining was begun here in 1841 and gold from the district was shipped to the U.S. Mint in Philadelphia in 1842 (Clark, 1970; Bowers, 1888). Small-scale placer mining continued intermittently through the 1890's, and there was some work again in the 1920's and 1930's (Huguenin, 1919; Clark, 1970).

Geology

The Piru District is underlain by Precambrian gneiss (Jennings, 1977). The placer gold deposits are in and adjacent to the upper part of Piru Creek, chiefly in the vicinity of its junction with Lockwood Creek, and to the east in the Gold Hill area (Clark, 1970). The placer gold has been recovered both from Recent stream gravels and older terrace deposits on the hills north of Lockwood Creek. The placer gold often is coarse-grained. There are a number of north-striking gold-quartz veins that range from a few inches to about four feet in thickness. The veins occur in shear zones, and usually in granitic gneiss or hornblended schist. The ore contains free gold and varying amounts of pyrite. Milling ore sometimes averaged 0.5 oz/ton of gold.

Mines and Gold Production

The placer mines in the Piru District were not named. Among lode-gold mines, the principal operation was the Castaic Mine, which has an estimated total output valued at about \$160,000 (Tucker, 1925). No confirmed amount of gold production was reported

into the public record for the placer deposits from this district (Tucker, 1932). Based on published gold volume and price data, it is estimated that approximately 7,740 ounces of gold was produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.2.4.12 Saugus District (Los Angeles County, Exhibit 2, Location #40)

Location and History

The Saugus District is located in the western San Gabriel Mountains in Los Angeles County near the towns of Newhall and Saugus. This area is an extensive placer gold district and includes the upper Santa Clara River, Sand Canyon, Pacoima Canyon, and Arrastre Canyon areas as well as a number of small canyons (Clark, 1970). This area is also known as the Newhall or San Gabriel Districts (Sampson, 1937). Gold was discovered in the district in the early 1800's and the placers have been worked intermittently since then. Production estimates of \$100,000 have been reported to have occurred during the first few years of development (Oakshott, 1958).

Geology

The Saugus District is underlain by Recent and older Quaternary alluvium deposits which contain gold-bearing placer deposits (Jennings, 1977).

Mines and Gold Production

The placer mines in the Piru District were not named. No confirmed amount of gold production was reported into the public record for the placer deposits from this district.

Based on published gold volume and price data, it is estimated that approximately 4,837 ounces of gold were produced from this district.

Recent Exploration Activity

No recent exploration activity is known to have occurred in this district.

3.3 Land Status Review of Area of Investigation

The land status of the area of investigation is shown in generalities on Exhibit 2. Numerous military bases are located within the area of investigation that have restricted or precluded future mineral exploration and/or development. In addition, Exhibit 2 depicts the approximate boundaries of the U.S. Forest Service and U.S. Bureau of Land Management Roadless and Primitive areas and California state park lands.

3.4 Alternative Project Site Economic Viability Criteria

Review of the Soledad Mountain Project geology and mineralization suggests that an alternative site for the project should have the following minimum criteria:

- Ore reserves of 60,000,000 tons or more at a grade of 0.030 oz/ton gold-equivalent.
- Stripping ratio of overburden to ore of less than 4:1.
- Sufficient groundwater resources to support a heap-leach cyanide recovery process.
- Infrastructure such as electrical power access within five miles of the proposed alternative site.

4.0 CONCLUSIONS

The conclusions of the WZI investigation were as follows:

1. Forty mining districts were evaluated within the area of investigation for feasibility of alternate project site where gold mineralization in commercial quantities may exist.
2. A total of fourteen of the alternate project site mining districts evaluated are located either within or immediately adjacent to state of California or Federal lands that have been designated as Primitive or Wilderness Areas.
3. A total of three of the alternate project site mining districts evaluated are located within or immediately adjacent to federal military lands.
4. Alternate project sites that are not excluded by the above factors are:
 - The Yellow Aster Mine owned by Glamis Gold Ltd. in the Randsburg District
 - The Zenda Mine project owned by Claim Staker Resources, Inc. in the Loraine District
 - The Big Horn Mining project owned by Siskon Gold, Inc. located in Los Angeles County in the Mount Baldy District
5. None of the alternate sites have potential ore reserves that amount to 25 percent of the projected ore reserves of the Golden Queen Soledad Mountain Project.
6. In each of these alternative project locations a mining company has already established controlling interest in the identified mining properties.

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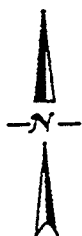
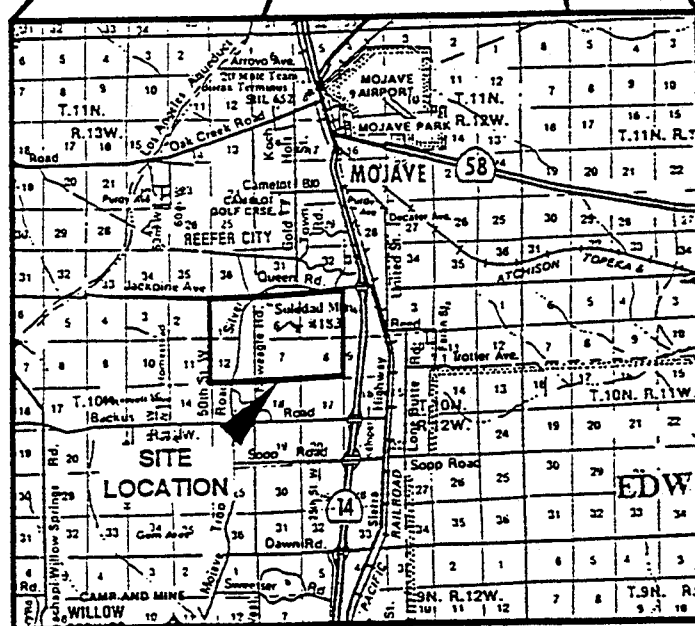
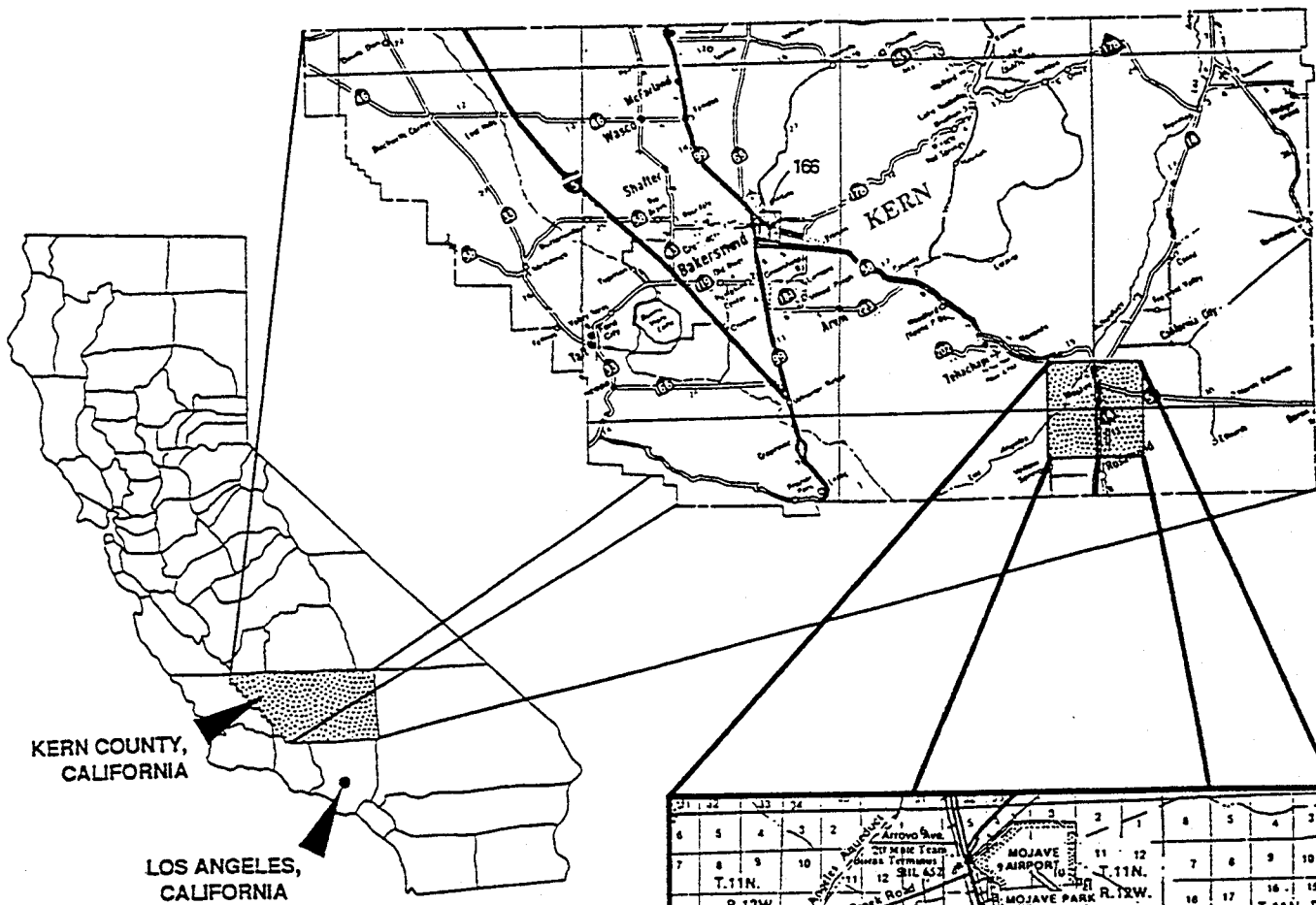
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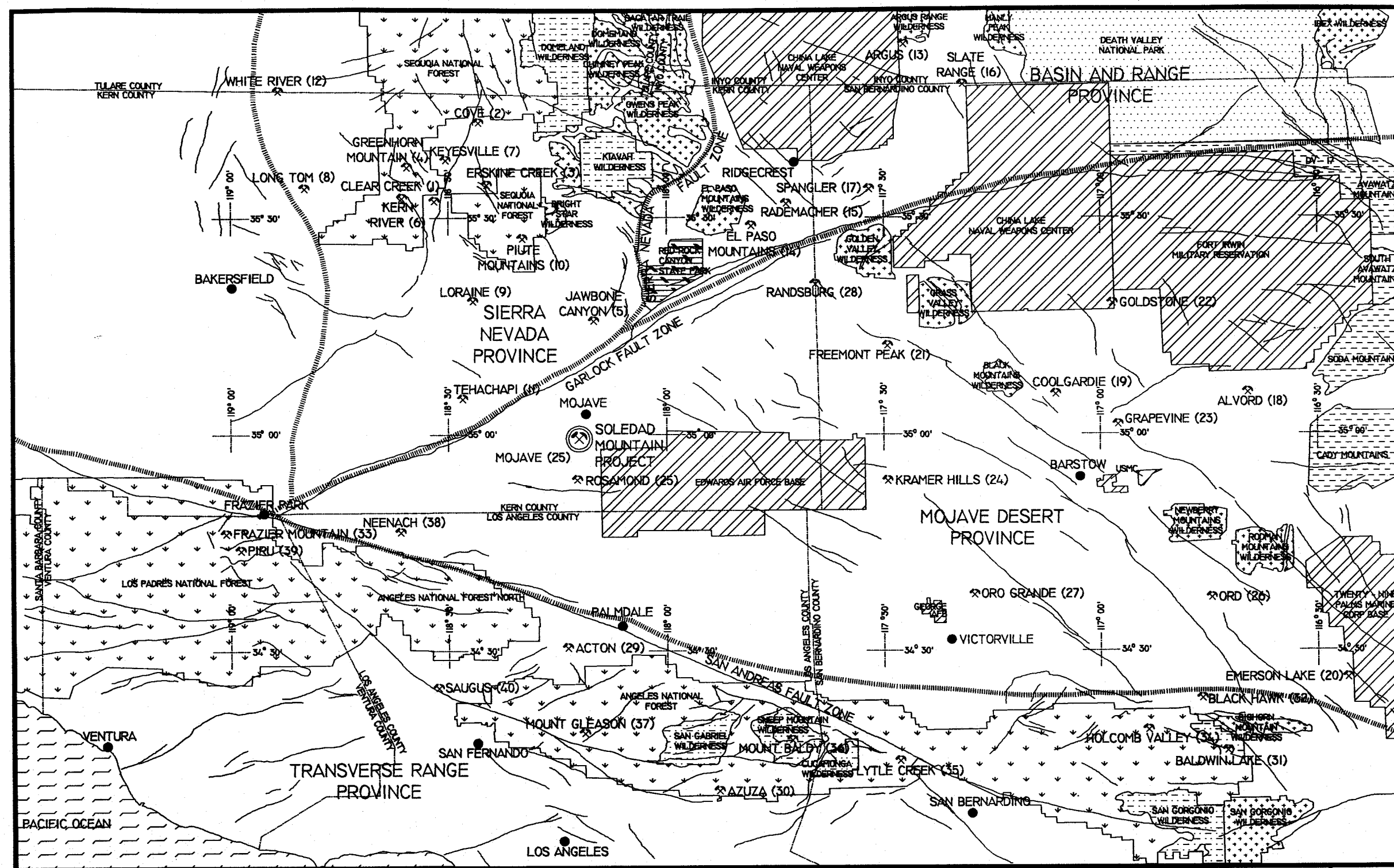
EXHIBITS





WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC.		
REGIONAL LOCATION MAP		
DATE 11/95	0733.0010A	EXHIBIT 1





MINING DISTRICTS

SIERRA NEVADA PROVINCE

- 1- CLEAR CREEK
- 2- COVE
- 3- ERSKINE CREEK
- 4- GREENHORNE MOUNTAIN
- 5- JAWBONE CANYON
- 6- KERN RIVER
- 7- KEYESVILLE
- 8- LONG TOM
- 9- LORAIN
- 10- PIUTE MOUNTAINS
- 11- TEHACHAPI
- 12- WHITE RIVER

BASIN AND RANGE PROVINCE

- 13- ARGUS
- 14- EL PASO MOUNTAINS
- 15- RADEMACHER
- 16- SLATE RANGE
- 17- SPANGLER

MOJAVE DESERT PROVINCE

- 18- ALVORD
- 19- COOLGARDIE
- 20- EMERSON LAKE
- 21- FREEMONT PEAK
- 22- GOLDSTONE
- 23- GRAPEVINE
- 24- KRAMER HILLS
- 25- MOJAVE-ROSAMOND
- 26- ORD
- 27- ORO GRANDE
- 28- RANDSBURG

TRANSVERSE AND PENINSULAR RANGES PROVINCES

- 29- ACTON
- 30- AZUZA
- 31- BALDWIN LAKE
- 32- BLACK HAWK
- 33- FRAZIER MOUNTAIN
- 34- HOLCOMB VALLEY
- 35- LYTLE CREEK
- 36- MOUNT BALDY
- 37- MOUNT GLEASON
- 38- NEENACH
- 39- PIRU
- 40- SAUGUS

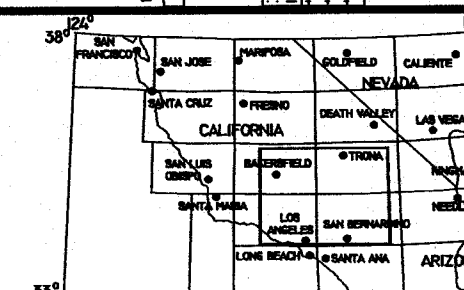
LEGEND

- CITY
- ✱ MINING DISTRICT AND NUMBER
- ✱ SOLEDAD MOUNTAIN PROJECT LOCATION
- COUNTY LINE
- PROVINCE BOUNDARIES
- SURFACE FAULT TRACE

- US BUREAU OF LAND MANAGEMENT WILDERNESS STUDY LANDS
- US BUREAU OF LAND MANAGEMENT WILDERNESS LANDS
- FEDERAL MILITARY LANDS
- NATIONAL PARK SERVICE LANDS
- CALIFORNIA STATE PARK LANDS
- US FOREST SERVICE ADMINISTRATED LANDS
- US FOREST SERVICE WILDERNESS LANDS



0 10 20 MILES



WZI INC.
BAKERSFIELD, CALIFORNIA

GOLDEN QUEEN MINING COMPANY, INC
SOLEDAD MOUNTAIN PROJECT
MAP OF GEOLOGIC STRUCTURAL ELEMENTS,
GOLD PRODUCING DISTRICTS,
AND PUBLIC LANDS

DATE 3/97 0733.0010 EXHIBIT 2

TABLES



TABLE 1
**Tabulation of Significant Dates in the
History of Gold Mining in California**

1775-80	The first known discovery of gold in California was made in the Potholes district, Imperial County. Mining extended into the Cargo Muchacho and Picacho districts.
1835	The placer deposits in San Francisquito Canyon, Los Angeles County were discovered.
1842	Gold was discovered in Placerita Canyon, Los Angeles County. Some sources give the date of this discovery as 1841.
1851	Gold was discovered in Greenhorn Creek, Kern County. This discovery led to the rush to the upper Kern River Region.
1852	California's annual gold production reached an all time high of \$81 million.
1853	The Fraser River rush in British Columbia caused a partial exodus of miners from the state.
1855	The rich surface placers were largely exhausted by this date, and river mining in the northern Sierra Nevada accounted for much of the state's output until the early 1860's. All of the rivers in the gold regions were mined.
1859	The Comstock silver rush began in Nevada. This development caused a large exodus of gold miners from California. However, it stimulated gold and silver prospecting in eastern and southeastern California, within the area of investigation.
1864	By this time California's gold rush had ended. The rich surface and river placers were largely exhausted; hydraulic mines were the chief sources of gold for the next 20 years.
1868	The first air drills were introduced. However, widespread use of air drills in mining did not come for another 30 years.
1883	Gold production figures began to be collected for the calendar year instead of the fiscal year.
1893	Gold was discovered in Goler Gulch in the El Paso Mountains in eastern Kern County. This led to other discoveries in the area and the influx to the Randsburg district, which began in 1895.
1916	The general prosperity that began during World War I and continued to 1929, with accompanying high costs, caused a decrease in gold output.

TABLE 1
Tabulation of Significant Dates in the
History of Gold Mining in California

1929	Peak of post World War I boom. Lowest point in gold production since 1849.
1930	Gold production started to rise because of the depression and resulting low operating costs.
1933-35	The price of gold increased from \$20.67 to \$35 per fine ounce. This rise ultimately resulted in a large increase in gold output and in much greater exploration activities.
1940	Gold output totaled nearly \$51 million. This was the most valuable annual output since 1856. Thousands of miners were employed in the quartz mines at Grass Valley, Alleghany, Nevada City, Jackson, Sutter Creek, Jamestown, Mojave, and French Gulch districts. There were many active bucket-line dredges, and dragline dredges became important producers of placer gold.
1942	World War II caused a precipitous drop in gold output. War Production Board Limitation Order L-208, issued on October 8, caused the gold mines to be shut down.
1944	Gold production touched the lowest point since 1848.
1945	Order L-208 was lifted, effective July 1. Some of the bucket-line dredges resumed operations, but only a few important lode mines at Grass Valley, Alleghany, and Sutter Creek were reopened. Production increased slightly for 4 years.
1950	Gold output resumed its decline because of rising costs and depletion of dredging ground. Lode belt, was shut down.
1960	Gold output fell below \$5 million as the dredges continued to curtail operations.
1968	The U.S. Treasury suspended purchases of newly-mined gold. The free market price rose to \$44 an ounce early in 1969, falling by November to \$38.50, because of greater stability in international currencies.

Source: Clark, W. B., 1970, Gold Districts of California: California Division of Mines and Geology, Bulletin 193, p. 5-7.

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
Sierra Nevada Province Mining Districts								
1	Clear Creek	Kern	East-central Kern County; 28 miles east-northeast of Bakersfield; 5 miles south of Bodfish.	Gold deposits are mostly confined to a quartz diorite intrusive body. Ore bodies consist of quartz veins up to 6 feet thick, and contain free gold and some sulfides.	Friday, Jackpot; Joe Walker, \$600,000; Porter, Rand group, \$125,000; Rochfort; Southern Cross; Washington. Estimated 35,000 oz. produced.	Discovered in 1863; declined during the 1880's; intermittently active for many years afterward.	Adjacent to U.S. Forest Service administrated lands	Inactive
2	Cove	Kern	Northeastern Kern County, between Kernville and Isabella, on the west side of Lake Isabella.	Ore within extensive vein systems consisting of quartz with finely disseminated free gold, arsenopyrite, pyrite, chalcopyrite and galena.	The Big Blue Group; the Big Blue-Summer Group; Lady Belle Group. Estimated 387,034 oz. produced.	Discovered in 1860; active until 1880's; intermittently active through 1930's; active 1934 through 1943.	Adjacent to U.S. Forest Service administrated lands	Inactive
3	Erskine Creek	Kern	38 miles northeast of Bakersfield, and south of Lake Isabella.	Ore deposits consist of quartz veins containing free gold and varying amounts of sulfides.	Glen Olive, \$500,000; Iconoclast; Golden Belt, Laurel; Valley View; Faust; King Solomon. Estimated 24,189 oz. produced.	Gold deposits were productive in the early 1890's and intermittently afterward.	Adjacent to U.S. Forest Service administrated lands	Inactive
4	Greenhorn Mountain	Kern	28 miles northeast of Bakersfield.	Underlain by quartz diorite with several roof pendants comprised of Mesozoic or Paleozoic metamorphic rocks.	Greenhorn; Fremont; Bradshaw; Black Gulch. Estimated 1,000 to 5,000 oz. produced.	Discovered in Greenhorn Creek in 1851; activity declined before 1890, since then minor prospecting.	Within U.S. Forest Service administrated lands	Inactive
5	Jawbone Canyon	Kern	Encompasses area between Emerald Mountain and the El Paso Mountains.	Most gold occurrences are in gold-bearing quartz stringers culling Cretaceous quartz monzonite.	Hub; Skyline; San Antonio. Estimated 1,000 to 5,000 oz. produced.	Placer gold discovered in 1900. Lode gold developed in the 1930's.	Within or adjacent to U.S. Bureau of Land Management lands	Recent exploration
6	Kern River	Kern	On the Upper Kern River, between Bakersfield and Bodfish.	Underlain by Mesozoic quartz diorite and associated aplite and pegmatitic dikes.	Greenhorn Caves Mine, \$60,000; Gem Mine, \$30,000. Estimated 1,000 to 5,000 oz. produced.	Discovered at Greenhorn Creek in 1851. Early deposits worked in a short time.	In U.S. Forest Service administrated lands	Inactive
7	Keyesville	Kern	32 miles northeast of Bakersfield, and 2 miles southwest of Isabella Dam.	Gold deposits occur in a northeast trending belt 3 miles long that consists of narrow quartz stringers with fault gouge that contains free gold.	Bright Spot; High Grade; Homestake; Keyes, \$450,000; Keyesville; Mooncastle; Placer; Mammoth. \$500,000; Mooncastle; Nob Hill; Opportunity; Sunrise; Virginia; Will Jean. Estimated 45,960 oz. produced.	Discovered in 1852; chief periods of mining were the 1850's, 1860's, 1890's and 1909-1915. Some prospecting in 1930's, but little since.	Adjacent to U.S. Forest Service administrated lands	Inactive
8	Long Tom	Kern	Central Kern County, 23 miles northeast of Bakersfield and 10 miles south of Woody.	Underlain by quartz diorite with fracture zones containing small, gold-bearing quartz stringers with minor amounts of sulfides.	Long Tom Mine, \$800,000-\$900,000. Estimated 43,541 oz. produced.	Lode gold discovered in 1860.	Adjacent to U.S. Forest Service administrated lands	Inactive
9	Loraine	Kern	Central Kern County, near the town of Paris-Loraine.	Underlain by a roof pendant of slate and mica schist within quartz diorite and granodiorite. There are numerous quartz veins containing free gold and sulfides.	Amalie, \$600,000; Barbarosa; Cowboy, \$600,000; Deerhunter; Ella; Feris; Golden Cross; Golden Peak; New Deal; Zenda, 34,000 oz. Estimated 92,055 oz. produced.	First prospected in 1850's; principal activity 1894 to 1912; active again in the 1920's and 1930's; intermittent prospecting since.	Adjacent to U.S. Forest Service administrated lands	Zenda Mine permitted, but inactive. Possible 100,000 oz. of gold reserve

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
10	Plute Mountains	Kern	East-central Kern County, near Claraville, 14 miles southeast of Bodfish.	Underlain by Mesozoic granitic rocks with most gold deposits confined to a 2 mile wide belt consisting of gold-quartz veins in shear zones.	Amy; Blue Jay; Bright Star; \$600,000; Dearborn; Donnie; French; Gold Standard; Gwynne; \$770,000; Henry Ford; Hilltop; Jeanette-Grant; Jerry; Little Joe; Lone Star; Mary Ellen; Retreat; Shellenberger; Simon; Surprise. Estimated 66,279 oz. produced.	Discovered in 1850's; principal periods of mining during 1870 to 1900, and early 1930's and 1940's.	In U.S. Forest Service administrated lands	Inactive
11	Tehachapi	Kern	East-central Kern County, 4 miles south of Tehachapi.	Largely underlain by Cretaceous granites. Some gold in the district has been produced from shallow dipping, gold-bearing quartz veins cutting the granites.	Pine Tree Mine, \$250,000. Estimated 12,094 oz. produced.	Most gold in the area is from Pine Tree Mine, active from 1876 to 1907.	Adjacent to U.S. Forest Service administrated lands	Inactive
12	White River	Kern	25 miles southeast of Porterville, in both southern Tulare and northern Kern Counties.	Underlain by Mesozoic granodiorite and small intrusive bodies of gabbro. A series of west-northwest trending quartz veins contain free gold and some pyrite.	Bald Mountain, \$200,000 to \$300,000; Eclipse No. 2; Josephine; Last Chance; Stencil. Estimated 36,284 oz. produced.	Discovered in 1853; mining continued until 1906 and there has been minor activity since.	Adjacent to U.S. Forest Service administrated lands	Inactive
BASIN AND RANGE PROVINCE MINING DISTRICTS								
13	Argus	Inyo	Southern Inyo County, 10 miles north of Tirona.	Gold-quartz veins and silicified breccia in quartz monsonite and granodiorite.	Arondo, \$200,000; Davenport; Mohawk Ruth, \$700,000+. Estimated 43,541 oz. produced.	First mined in 1880's, much activity early 1900's and 1930's, some work up until present time	Near U.S. Bureau of Land Management Wilderness lands and China Lake Naval Weapons Center	Recent drilling has been conducted to evaluate a possible disseminated ore body
14	El Paso Mountains	Kern	Northeastern Kern County, 10 miles northwest Randsburg.	Placer-mining district. Auriferous sand and gravel in washes and canyons. Gold is mostly fine.	Last Chance; Red Rock; Jawbone Canyon; Summit Diggings. Estimated 1,000 to 10,000 oz. produced.	Gold discovered in Goler Wash in 1893, numerous dry wash camps established soon afterward, minor prospecting continues.	Near U.S. Bureau of Land Management Wilderness lands	Limited primarily to dry placer occurrences
15	Radamacher	Kern	Northeastern Kern County, 5 miles south of Ridgecrest.	Numerous thin gold-quartz veins in granite and schist. Veins often cut by dikes.	Beilflower; Crown Cons.; Gold Bug; Lost Keys; Pitze; Rademacher; Yellow Treasure. Estimated 1,000 to 10,000 oz. produced.	Much activity 1890's, 1900's and 1930's, some activity since	Near U.S. Bureau of Land Management Wilderness lands	Inactive

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
16	State Range	San Bernardino and Inyo	Northwestern San Bernardino and southern Inyo Counties.	Underlain by Cretaceous granite and Mesozoic schist. Quartz veins contain small, but rich gold- and silver bearing pockets, with abundant sulfides in areas.	Halford Mine. Estimated 1,000 to 5,000 oz. produced.		Near China Lake Naval Weapons Center	Inactive
17	Spangler	San Bernardino	Northwestern San Bernardino County, 10 miles northeast of Johannesburg.	Underlain by Mesozoic granitic rocks with west- striking gold-quartz veins.	Spangler; Stephens holding Mines; Saint Elmo Mine. Estimated 1,000 to 5,000 oz. produced.	Intermittently prospected since the 1890's.	Within or near U.S. Bureau of Land Management Wilderness lands	Inactive
MOJAVE DESERT PROVINCE MINING DISTRICTS								
18	Alvord	San Bernardino	Central San Bernardino County, 35 miles northeast of Daguerre.	Underlain by Mesozoic granite and Paleozoic carbonates. Siliceous veins contain some sulfides, oxides, and gold.	Alvord Mine. Estimated 5,000 to 20,000 oz. produced.	Discovered in 1855, and has been intermittently worked since.	Within or near U.S. Bureau of Land Management Wilderness lands	Inactive
19	Coolgardie	San Bernardino	Western San Bernardino County, 15 miles northwest of Barstow.	Underlain by Mesozoic granites with localized basic intrusives. Placer deposits are contained within Quaternary alluvium that is in the axis of a broad valley.	Cool Gardie Mining Company. Estimated 4,837 oz. produced.	Intermittently mined from 1900 to 1915.	Within or near U.S. Bureau of Land Management Wilderness lands and/or U.S. military reservation	Inactive
20	Emerson Lake	San Bernardino	Southern San Bernardino County, 25 miles northwest of Twentynine Palms.	Underlain by Mesozoic quartz monzonite intruded by basic bodies. Gold found in veins in small pendants of gneiss and granites near surface.	Emerson; Los Padre. Estimated 1,000 to 10,000 oz. produced.		Near Twentynine Palms Marine Corps Base and U.S. Bureau of Land Management Wilderness lands	Inactive
21	Fremont Peak	San Bernardino	18 miles southeast of the Randsburg district within San Bernardino County.	Underlain by Precambrian gneiss intruded by Cretaceous granites. Rhyolitic dikes are associated with the gold occurrences. Gold in quartz veins with pyrite and arsenopyrite.	Fremont Peak Mine (Gateway Mine). Estimated 10,000 to 25,000 oz. produced.		Within or near U.S. Bureau of Land Management Wilderness lands	Inactive

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
22	Goldstone	San Bernardino	Northwestern San Bernardino County 35 miles north of Barstow.	Underlain by Mesozoic granites and large Paleozoic carbonates and siliceous shales. Gold in shallow quartz veins.	No named mines. Estimated 16,000 to 20,000 oz. produced.	Active in 1915 to 1918, in the 1920's and again just before World War II.	Part of Fort Irwin military reservation	Recent drilling has occurred. Since then, the U.S. government has removed it from public entry, and it is part of Fort Irwin military reservation
23	Grapevine	San Bernardino	Within the Paradise Mountains, 15 miles north of Barstow.	Underlain by Mesozoic granites intruded by Miocene andesitic volcanics and Tertiary hypabyssal intrusives. Quartz veins contain free gold.	Olympus Mine. Estimated 1,000 to 5,000 oz. produced.		Within or near U.S. Bureau of Land Management Wilderness lands	Inactive
24	Kramer Hills	San Bernardino	8 miles southeast of Kramer Junction in western San Bernardino County.	Cretaceous granites intrude Mesozoic metamorphic rocks. Dikes and irregular bodies of rhyodacite to rhyolite intrude these older rocks.	No named mines. Estimated 6,000 to 25,000 oz. produced.		Within or near U.S. Bureau of Land Management Wilderness lands	There has been recent drilling
25	Mojave-Rosamond	Kern	Southeastern Kern County, south of Mojave.	Ore deposits associated with five prominences, Soledad Mountain being most important. Extensive gold- and silver-bearing zones occur in breccia in rhyolite. Pyrite, galena, cerargyrite and argenteite present. Some of the ore was rich.	Burton-Bille-Blank; Cactus Gold, \$5,000,000+; Elephant, \$200,000+; Excelsior; Golden Queen, \$10,000,000+; Middle Butte, \$150,000; Standard group, \$3,500,000; Tropico, 114,000 ounces; Wegman; Yellow Dog, 5,800+ oz. Estimated 2,486 million oz. of ultimate production.	Gold discovered on Standard Hill in 1894, considerable activity until 1910, major activity 1931-1941, some activity since, Tropico mine is an historical museum.	Private and U.S. Bureau of Land Management administered lands	None other than the Soledad Mountain Project with 1.44 million oz.
26	Ord	San Bernardino	West-central San Bernardino County, 20 miles southeast of Barstow.	Numerous gold-quartz veins with copper and silver are found in granitic rocks that are associated with dikes.	Azucar; Black Butte; Cumberland; Elsie; Gold Banner; Gold Peak; Grandview; Lucky Strike; Ord. Estimated 1,000 to 10,000 oz. produced.	Named for Major General Ord of the U.S. Army, mining began in 1870 and continued through the 1930's, there has been prospecting since.	Within or near U.S. Bureau of Land Management Wilderness lands	Recent exploration to evaluate a possible gold-bearing porphyry copper

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
27	Oro Grande	San Bernardino	Near the town of Oro Grande, 5 miles north of Victorville.	Underlain by schist, quartzite, limestone, dacite, rhyolite, tuffite, and quartz monzonite. Most gold is from narrow quartz veins and oxidized zones near the surface.	Apex; Branch; Carbonate; Dents Grandview Lode; Gold Bullion; Gold King; Oro Grande I and II; Silvervader; Western. Estimated 1,000 to 5,000 oz. produced.	Active during 1880's, early 1900's, and again in 1930's.	Within or near U.S. Bureau of Land Management Wilderness lands	Inactive
28	Randsburg	Kern and San Bernardino	On Kern-San Bernardino County line at Randsburg.	Gold-silver-tungsten district. Also a placer district. Silicified breccia and veins occur in iron-stained mica schist. Tungsten veins occur in quartz monzonite.	Baltic; Big Dike; \$200,000; Big Gold; \$500,000; Black Hawk; \$700,000; Buckboard; \$500,000; Butte; \$2,000,000; King Solomon; \$500,000; Little Butte; \$400,000; Sunshine; \$1,060,000; Yellow Aster; \$12,000,000; Kelly Silver Mine. Estimated 1,767 to 1,867 million oz. of ultimate recoverable gold.	Discovered at Goler Wash in 1883 led to "rush" in El Paso Mountains and here, large-scale gold mining 1895-1919, much silver mining after 1919, much activity 1930's, Tungsten mined during the wars, present prospecting and development work.	Within or near U.S. Bureau of Land Management Wilderness lands	None other than to support the ongoing Glamis Gold Ltd. operations
TRANSVERSE RANGE PROVINCE MINING DISTRICTS								
29	Acton	Los Angeles	North-central Los Angeles County, 20 miles north of Los Angeles.	Underlain by Mesozoic quartz diorite, diorite and Precambrian schist. Gold deposits are in gold-quartz veins in faulted and fractured zones.	Buena Esperanza; Governor (New York); \$1.5 million; Helene; Ft-Grade; Red Rover; \$550,000; Puritan. Estimated 99,177 oz. produced.	Placer gold mined as early as 1834. Lode mining began in 1870's; productive until 1900; some mines active in 1930's and early 1940's. Intermittent prospecting since.	Adjacent to U.S. Forest Service administrated lands	Inactive
30	Azusa-Tujunga	Los Angeles	On the south flank of the San Gabriel Mountains, northeast of Los Angeles.	Underlain by Precambrian gneiss and granites upon which Quaternary alluvial deposits rest. Gold placers are produced from the alluvial deposits.	No named mines. Estimated 1,000 to 10,000 oz. produced.	Old placer district; recent sand/gravel operations.	Within U.S. Forest Service administrated lands	Inactive
31	Baldwin Lake	San Bernardino	Northern portion of San Bernardino Mountains, east of Baldwin Lake.	Underlain by Mesozoic mica schist and quartzite Paleozoic carbonates, and Cretaceous granites. Lode gold within irregular shapes quartz-calcite veins with free gold, scheelite, and sulfides.	Chiviste; Doble; \$250,000 to \$300,000; Erwin; Gem; Gold Hill; Hollie Ann; Lester; Log Cabin; Rose; \$450,000 to \$600,000; and Stewart. Estimated 43,511 oz. produced.	Placer gold found as early as 1800. Rose Mine active in 1860 and considerable activity in the 1890's and early 1900's. Doble Mine was active again in the 1930's and 1940's.	Within U.S. Forest Service administrated lands	Inactive

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
32	Black Hawk	San Bernardino	Southwestern San Bernardino County, 30 miles northeast of the city of San Bernardino.	Underlain by Cretaceous granite, Mesozoic schist and gneiss, and Paleozoic limestone. A gold ore, hematite-bearing gouge occurs along a mineralized zone along a thrust-fault plane.	Santa Fe Group; Lester. Estimated 145,000 oz. produced.	The district was organized in 1870; the Santa Fe group was active in the 1890's, but activity was minor in the early 1900's. Santa Fe was reopened and operated from 1921 to 1940.	Within or near U.S. Bureau of Land Management Wilderness lands	Some recent exploration to evaluate potential low-grade disseminated gold deposits has occurred. No announced discovery.
33	Frazier Mountain	Ventura	Northeast corner of Ventura County.	Underlain by granite, granodiorite, gneiss, and schist. Gold-quartz veins strike north and occur in shear zones within gneiss and schist.	Bunker Hill; Esperanza; Fairview; Frazier, \$1 million; Gold Dust; Harris; Hess; Maule; Sibert; Willie Mule. Estimated 48,379 oz. produced.	First placer mined in the 1840's, the Frazier Mountain Mine was opened in 1865. Minor work has been done since.	Within U.S. Forest Service administrated lands	Inactive
34	Holcomb Valley	San Bernardino	North side of San Bernardino Mountains, just north of Big Bear Lake.	Underlain by Cretaceous quartz monzonite, surrounded by Paleozoic carbonates and melasediments. There is placer gold within the alluvium and lode gold in thin shear and fracture zones within the granitic rocks.	Wright; Harvey K; Osborne; Gold Buton; Ozier; Green Lead. Estimated 102,171 oz. produced.	Placer gold discovered in 1860. It was extensively worked for a few years, with intermittent work since.	Within U.S. Forest Service administrated land	Inactive
35	Lyle Creek	San Bernardino	Southwestern San Bernardino County in the eastern San Gabriel Mountains.	Underlain by Cretaceous Pelona Schist and locally intruded by Tertiary granodiorite.	Estimated 1,000 to 10,000 oz. produced.	Placer mining started in the 1890's.	Within U.S. Forest Service administrated lands	Inactive
36	Mount Baldy	San Bernardino	Within the San Gabriel Mountains of eastern Los Angeles County.	Underlain by Mesozoic Pelona Schist and Mylonite of the Vincent Thrust that has been intruded by Tertiary granodiorite. Gold quartz veins occur in the schist and gneiss adjacent to the Vincent Thrust Fault.	Allison, \$50,000; Baldora; Big Horn, \$40,000; Eagle; Gold Dollar; Holly; Heaton; Naive Son; Stanley; Zenteson. Estimated total gold resource of 986,758 oz. produced.	Placer mining started in the 1840's. Lode gold mining occurred from 1903 to 1908 and then again in the 1930's.	Within U.S. Forest Service Wilderness lands	Siskon Gold has proven and probable reserves of 300,000 oz. and resource base of 540,000 oz.
37	Mount Gleason	Los Angeles	Northern Los Angeles County, 15 miles north of Pasadena.	Underlain by mesozoic granite that surrounds small pendants of schist. Lode gold within granite and some metamorphic rocks.	Los Padre; Mount Gleason. Estimated 1,000 to 10,000 oz. produced.	Lode and placer occurrences.	Within U.S. Forest Service administrated lands	Inactive

TABLE 2
Principal Gold-Producing Districts within the Investigation Area

Map Number	Mining District	County	Location	Geology and Mineralization Summary	Principal Mines and Estimated Gold Production	Historical Operations	Land Status	Recent Exploration Activity
38	Neenach	Los Angeles	Northern Los Angeles County, 20 miles west-northwest of Lancaster.	Underlain by Mesozoic quartz monzonite that is overlain by Tertiary sediments. Gold deposits occur in a contact zone between melaschists and quartz monzonite.	Riviera or Rogers-Gentry group. Estimated 9675 oz. produced.	Discovered in 1899 with bulk of production in 1935-1938. Intermittent mining since.	Private and U.S. Forest Service administered lands	Inactive
39	Piru	Ventura	Northeastern Ventura County in the vicinity of Piru Creek.	Underlain by Precambrian gneiss. Placer gold deposits are in and adjacent to the upper part of Piru Creek.	Castaic, \$160,000. Estimated 7,740 oz. produced.	Placer mining began in 1841. Small scale placer mining continued through the 1890's and again in the 1920's and 1930's.	Within U.S. Forest Service administered lands	Inactive
40	Saugus	Los Angeles	Western San Gabriel Mountains in Los Angeles County near the towns of Newhall and Saugus.	Underlain by Recent and older Quaternary alluvium deposits which contain gold-bearing placer deposits.	No named mines. Estimated 4,837 oz. produced.	Discovered in the early 1800's, intermittently worked since.	Within U.S. Forest Service administered lands	Inactive





GROUNDWATER SUPPLY EVALUATION
SOLEDAD MOUNTAIN PROJECT

December 1996

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EXHIBITS

Exhibit 1	Summary of Existing Well Data
Exhibit 2	Water Well Location Map
Exhibit 3	Groundwater Elevation - 1990
Exhibit 4	Hydrograph Well #12K1, T10N, R12W
Exhibit 5	Hydrograph Well #13H1, T10N, R12W
Exhibit 6	Hydrograph Well #20C1, T10N, R12W
Exhibit 7	Rainfall at Mojave
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Exhibit 9	Groundwater Elevation - 1972
Exhibit 10	Actual Groundwater Level vs Projected Level Well #26J1
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Exhibit 15	Drawdown vs Time Golden Queen Well(s) - 750 gpm
Exhibit 16	Drawdown vs Time Golden Queen Well(s) - 825 gpm
Exhibit 17	Drawdown vs Time Golden Queen Well(s) - 675 gpm

APPENDIX

Appendix A	Definition of Terms
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I. INTRODUCTION

This report is a summary of an evaluation of the groundwater supply potential of the water well(s) drilled and proposed to be utilized by Golden Queen Mining Company for supplying up to 750 gallons per minute (gpm) of water during the open pit mining and heap leach gold processing operation proposed on Soledad Mountain, in eastern Kern County, near the town of Mojave. It is anticipated that an estimated maximum mining rate of 6 million tons per year will require the maximum water use rate of 750 gpm for ten years. The evaluation includes review of several available reports, data previously prepared for Golden Queen, and test data gathered from the first water supply well drilled and completed in October, 1996.

II. EXISTING WELLS

Wells in the immediate area of interest just north of Soledad Mountain generally have been drilled for the purpose of supplying residential water and thus are completed with small pumps necessary to supply only 20 to 40 gallons per minute. Nearby wells have been reviewed for aquifer characteristics based on available well log information and reported groundwater levels. A summary of existing water well data is included as Exhibit 1, and well locations are shown in Exhibit 2.

A well, known as the Gillis well, located 1 to 1.5 miles west of the proposed water wells project in Section 36, Township 11 North, Range 13 West, reportedly tested at rates of 750 to 900 gpm. This well is shown as well #25 on the well location map, and is located in an area where the alluvium is greater than 630 feet thick with thickness of the unconfined aquifer between 250 and 350 feet. Other wells a few miles north and west of Soledad Mountain reportedly tested at rates of 300 gpm or more. Mojave Public Utility District wells (wells #31 and #32) in Section 22, Township 11 North, Range 12 West tested at rates from 250 to 1,000 gpm.

The groundwater elevation map constructed from 1990 groundwater data, Exhibit 3, shows a gradient generally from west to east, with a southeast gradient on the north side of the project site. Hydrographs were prepared on a number of wells to show the change in groundwater elevation over time (Exhibits 4 - 6). The groundwater table has dropped one-quarter to one-half a foot per year over the last 18 years. The groundwater table appears to be slightly impacted by the rainfall with periods of higher rainfall showing minimal drawdown and drought periods exhibiting higher drawdown. Exhibit 7 shows rainfall totals by year at Mojave.

Water wells in the Jameson Ranch area, located approximately 4 miles northeast of Soledad Mountain, were used to provide water for alfalfa farming from approximately 1959 through 1971. Information on the Jameson Ranch wells was obtained from "Perennial Yield Assessment of Chaffee Subunit in the Fremont Valley Groundwater Basin"¹. The wells are reported to have had average withdrawal rates of approximately 2500 gallons per minute during the time they were in operation. Groundwater elevations for well #26J1 (ref. 34 on Exhibit 1) located in Section 26, Township 11 North, Range 12 West in the Jameson Ranch Area from 1955 through 1987 are plotted versus time in a hydrograph on Exhibit 8.

III. AQUIFER CHARACTERISTICS

Actual groundwater elevations over time can be used along with known parameters to determine aquifer characteristics for evaluation of a projected well performance. The Jameson Ranch well was used as representative of the aquifer because it had similar reservoir thickness and because it had good records with both drawdown and recovery periods.

The Jameson Ranch well #26J1 is located approximately 6200 feet from the center of the area affected by the pumping as shown in Exhibit 9 prepared by Slade (1994) using 1970 groundwater levels. General aquifer characteristics were calculated based on

¹ Slade, R.C., 1994, Perennial Yield Assessment of Chaffee Subunit in the Fremont Valley Groundwater Basin, Richard C. Slade & Associates, Report.

analysis of the drawdown and recovery of the groundwater table from 1959 to 1987. Starting assumptions used in this analysis include porosity of the formation equal to 30 percent, permeability 5.0 darcies, water viscosity 0.9 centipoise, formation compressibility 5.0×10^{-5} , aquifer thickness 190 feet. These values were used in the following equations relating to producing rate, porosity, permeability, thickness, and compressibility to estimate drawdown and rebound at points in time equivalent to the known measurements. By using an iterative process (changing one variable to see the effect then changing another), it is possible to determine a set of parameters which approximate the aquifer characteristics. The parameters used in this analysis are listed after the equations. A list of terms used in the equation is attached as Appendix A. Using the two equations²,

$$r_e = \sqrt{\frac{kt}{0.04\mu c\phi}}$$

and

$$p_e - p = \frac{q\mu B_o \ln \frac{r_e}{r}}{7.08kh}$$

Known and derived parameters:

k = permeability, 5.4 darcies
 t = time, years
 μ = viscosity, 0.9 cp
 c = compressibility, 5.0×10^{-5}
 ϕ = porosity, 0.32
 q = flow rate, 1500 gpm net pumping rate
 B_o = formation volume factor, 1.0
 r = radial distance at the time step analyzed
 h = aquifer thickness, 175 feet
 p = pressure, psi (aquifer pressure at the pump depth)

² Craft, B.C., and Hawkins, M.F., 1959, "Applied Petroleum Reservoir Engineering," pp. 284 & 289, Prentice-Hall Inc., Englewood Cliffs, NJ.

it is possible to compare the actual depth to groundwater information against the calculated depth over time and thereby determine the combination of aquifer parameters which best match the historical data. The known and derived parameters shown above were used in the final analysis. Exhibit 10 shows the groundwater level versus time for the actual data as well as a plot for the projected data.

IV. WATER PRODUCTION WELL PW #1

In October, 1996, Golden Queen drilled a water well, PW #1, in Section 31, Township 11 North, Range 12 West to a depth of 300 feet. The water level just prior to a pump test was measured at 176.6 feet below the ground surface. On October 11, 1996 a step rate test was performed. The well was pumped at specified rates from 510 gpm to 700 gpm in four 20 minute intervals. Water level readings were taken at regular intervals and each step was allowed to stabilize prior to changing to the next rate. These data were input into the groundwater modeling program AQUIX-4S to determine aquifer characteristics. Using the Neuman equations³ for calculating aquifer characteristics of an unconfined homogenous aquifer, a transmissivity of 2000 ft²/day was established by an iterative process. Based on a saturated aquifer thickness of 140 feet, the permeability was calculated to be 5.87 darcies which compares reasonably well with the Jameson Ranch derived permeability of 5.4 darcies. Exhibit 11 shows the actual versus the expected drawdown over time for this test.

Analysis of the pump test was also performed using a general multiple rate test analytical technique⁴ which compares the pressure (equivalent to water depth) at a given time to the corresponding production rate to obtain a straight line whose slope is used to determine the reservoir permeability and reservoir height variables. The following terms are plotted:

³ Neuman, S.P., 1975, Analysis of pumping test data from anisotropic unconfined aquifers considering delayed gravity response: Water Resources Research, v. 11, N. 2, pp 329-342.

⁴ Robert C. Earllougher, Jr., 1977, "Advances in Well Test Analysis," pp. 31+, Millet the Printer, Inc., Dallas, Texas.

$$\frac{p_i - p_{wf}}{q_N} \text{ vs } \sum \left[\frac{(q_j - q_{j-1})}{q_N} \log(t - t_{j-1}) \right]$$

A list of terms used in the equation is attached as Appendix A. The slope of a line drawn through the points generated at the various times and flow rates can be used in the following equation to determine the permeability of the formation.

$$k = \frac{162.6 B \mu}{m' h}$$

Exhibit 12 shows this plot, where two different slopes are apparent. The early time data results in a lower permeability (1.7 darcies) compared to the later data which calculates an estimate of 5.2 darcies. This difference may be explained by near wellbore cleanup which may have occurred in the early time at the lower flow rates.

Applying the same equations used for analysis of the Jameson Ranch aquifer drawdown and recovery data to the pump test data and allowing for the multiple production rates, a plot was made showing the actual water level from the test as well as the projected level resulting from various combinations of input parameters. The best fit evaluated used 5.4 darcies of permeability and 135 feet of interval. Since the screened interval of PW #1 is approximately 115 feet, the correlation is good. Exhibit 13 shows the results of this analysis.

V. PROJECTED WATER AVAILABILITY

Golden Queen projects needing water for operations for up to 10 years at an approximate average rate of 750 gpm. Long term aquifer response was evaluated using the aquifer characteristics obtained above and applying them to well PW #1. Drawdown at the well was projected for either one, two, or three wells separated by 1,000 feet with each well providing an equal proportion of the 750 gpm total. Exhibit 14 shows the drawdown at different distances from the well at different points in time assuming the

aquifer is infinite. This is a conservative calculation which assumes a recharge and perennial yield of zero.

Assuming the thickness of the aquifer approximates the well penetration of the saturated zone of 135 feet at the location of PW #1, a single well producing 750 gallons per minute would have a drawdown of 121 feet in only 90 days. This rate could not be sustained because the fluid level would be at the bottom of the well. If all three wells are operated at 250 gallons per minute each, the drawdown is 64 feet in 90 days and reaches 83 feet in 10 years. Exhibit 15 shows the drawdown versus time at a center well for one, two, or three wells. Thus, it appears likely that three wells will be required, which are sufficient to provide enough water throughout the entire project life.

VI. IMPACT ON NEARBY WELLS

The nearest active well (Well #11) is located in Section 12, Township 11 North, Range 12 West and is approximately 3,700 feet west of the water supply well PW #1. It is a domestic supply well and tested 40 gpm, the capacity of the installed pump. At Well #11, the depth to water is 215 feet and total depth is 350 feet, making the effective thickness of the water bearing formation 135 feet. Drawdown based on analysis of the Jameson Ranch area as well as the results from the Golden Queen well (PW #1) can be calculated at this well. Conservatively, the impact on Well #11 of producing 750 gpm from the Golden Queen wells would be to increase its drawdown by 20 feet initially, increasing to 39 feet after 10 years. The greatest drawdown will occur initially but will decrease to approximately 1.5 feet per year after the first year. While this may require lowering the pump, the withdrawal rate should not be impacted. Increased pumping costs associated with a worst case groundwater elevation could be approximately \$0.025 per 1000 gallons. It is anticipated that drawdown may actually be less than calculated if aquifer recharge is taken into account.

By project design, water levels in Golden Queen's water production wells and existing monitoring wells will be monitored annually to determine impacts from the pumping and/or water table fluctuations. Although total annual withdrawal and recharge rates from the basin are unavailable, it is considered unlikely that an additional 750 gpm withdrawal will have a significant impact on the water balance in the basin. Even if this represented a 50% increase in basin withdrawals, the indicated trend of the water table would only increase from one-half foot per year to three-quarters foot per year, or 15 feet in 20 years.

VII. GROUNDWATER/WATER SUPPLY UNDER ALTERNATIVE SCENARIOS

The groundwater usage requirements for Golden Queen and impacts upon the aquifer and surrounding wells will vary depending upon the ore mining and processing rate. Water requirements for the agglomeration and leaching processes vary in direct proportion to the quantity of ore processed. Water used for dust control on the roads and within the crushing process is more closely related to the number of operating hours.

Increased Mining & Processing Rates - Under this scenario, mining and processing rates would increase by 20%. This alternative would require water to be pumped from wells at higher rates, but for a shorter time period than the Proposed Action. The cumulative project requirements for water over the life of the project would be approximately 8% less than the Proposed Action.

The estimated well pumping rate for this alternative is 825 gallons per minute with a project life of 8.33 years to mine and process the ore. Exhibit 16 shows the drawdown versus time at the central well for one, two, or three wells pumping a combined total of 825 gallons per minute. The maximum projected drawdown at the producing wells would be 90 feet which is about 9% greater than the maximum projected under the Proposed Action which is a negative short term impact. The long term impact would be slightly positive as a result of the lower cumulative water requirement.

Decreased Mining and Processing Rates - Under this scenario, mining and processing rates would decrease by 20%. This alternative would require water to be pumped from wells at lower rates, but for a longer time period than the Proposed Action. The cumulative project requirements for water over the life of the project would be approximately 12% more than the Proposed Action.

The estimated well pumping rate for this alternative is 675 gallons per minute with a project life of 12.5 years to mine and process the ore. Exhibit 17 shows the drawdown versus time at the central well for one, two, or three wells pumping a combined total of 675 gallons per minute. The maximum projected drawdown at the water supply wells would be 76 feet which is about 9% less than the maximum projected under the Proposed Action which is a positive short term impact. The long term impact would be slightly negative as a result of the higher cumulative water requirement, but still **less than significant**.

Reduced Project Size - This alternative is a reduction of 70% from the Proposed Action in the amount of ore mined from 60 million tons to 17 million tons. This alternative would require water to be pumped from wells at the same rates as the Proposed Action, but for a shorter time period. The cumulative project requirements for water over the life of the project under this scenario are 70 percent less than the Proposed Action because of the much shorter project life.

The estimated well pumping rate for this alternative is 750 gallons per minute with a project life of 3 years to mine and process the ore. The drawdown versus time will be the same as under the Proposed Action with a much shorter life and therefore a lower cumulative drawdown. The long term impact would be positive as a result of the much lower cumulative water requirement.

VIII. REFERENCES

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Slade, R.C., 1994, Perennial Yield Assessment of Chaffee Subunit in the Fremont Valley Groundwater Basin, Richard C. Slade & Associates, Report.



EXHIBITS



SUMMARY OF EXISTING WATER WELL DATA

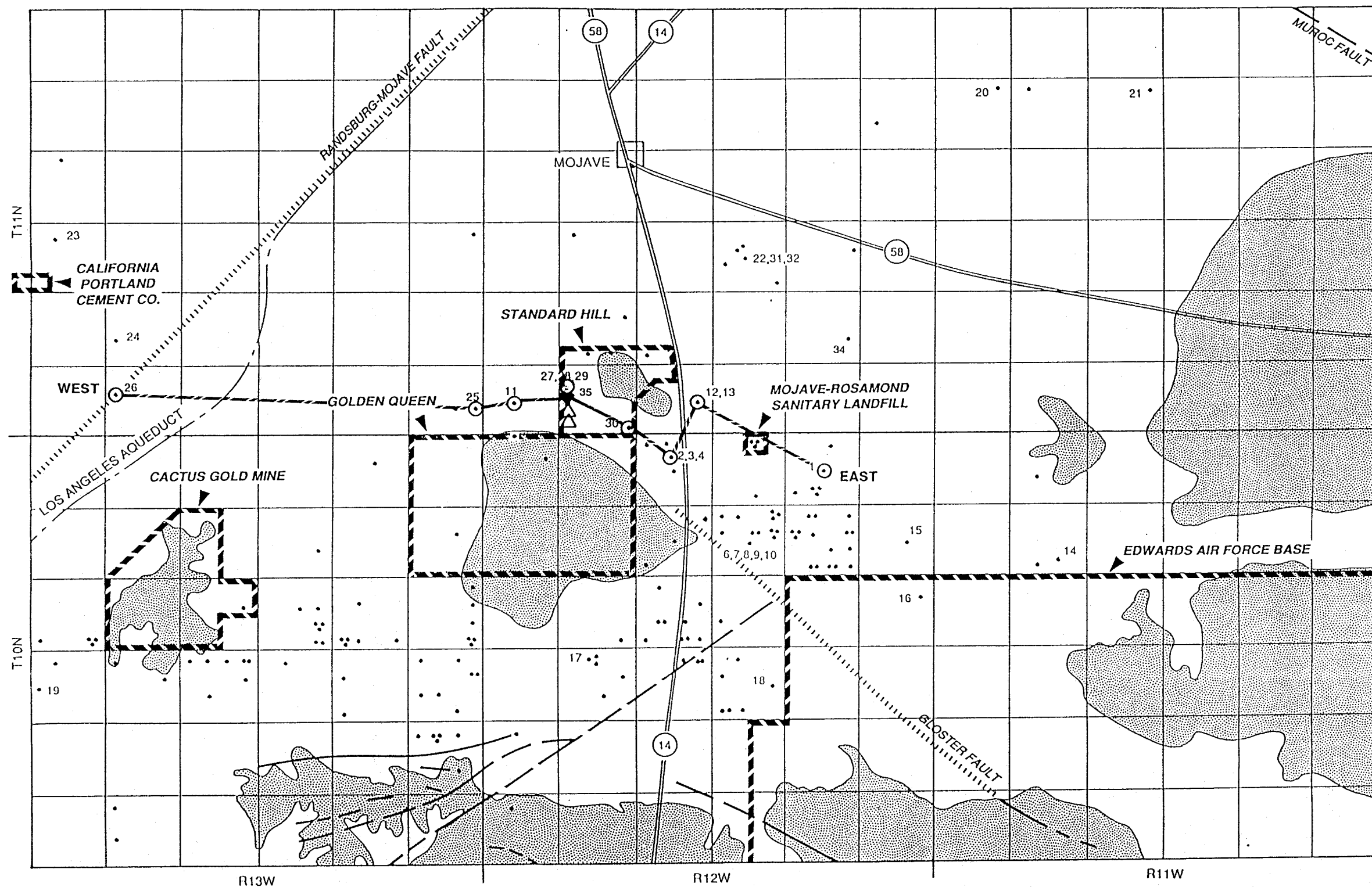
REF NO.	LOCATION	TOTAL DEPTH (FT)	DEPTH TO WATER (FT)	REPORTED YIELD (GPM)	COMMENTS
1	T10N, R12W, SEC 2	257	187		TERMINATED ON "GRANITE"
2	T10N, R12W, SEC 4	340	135		TERMINATED ON "HARD ROCK"
3	T10N, R12W, SEC 4	275	175	3	
4	T10N, R12W, SEC 4	222	186	1	TERMINATED ON "HARD ROCK"
5	T10N, R12W, SEC 9	238	163	6	ALLUVIUM TOTAL DEPTH
6	T10N, R12W, SEC 10	200	87	30	ALLUVIUM TOTAL DEPTH
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8	T10N, R12W, SEC 10	202	93	35	
9	T10N, R12W, SEC 10	200	92	30	
10	T10N, R12W, SEC 10	200	85	25	
11	T11N, R12W, SEC 31	350	215	40	PUMP LIMITATION
12	T11N, R12W, SEC 33	240	175	FAIR	YIELD REPORTED AS "FAIR"
13	T11N, R12W, SEC 33	252	190		TERMINATED IN "BEDROCK"
14	T10N, R11W, SEC 8	280	58		
15	T10N, R12W, SEC 12	224	84		
16	T10N, R12W, SEC 13	185	60		
17	T10N, R12W, SEC 20		107		
18	T10N, R12W, SEC 22	242	43		
19	T10N, R13W, SEC 19	770	317		
20	T11N, R11W, SEC 7	414	209		
21	T11N, R11W, SEC 9	422	131		IN ALLUVIUM
22	T11N, R12W, SEC 22	350	247		
23	T11N, R13W, SEC 19	430	311		
24	T11N, R13W, SEC 29	749	307		IN ALLUVIUM
25	T11N, R13W, SEC 36	630	280 - 380	750	ALLUVIUM TOTAL DEPTH
26	T11N, R13W, SEC 32	300	180		TOP 50 FEET ALLUVIUM
27	T11N, R12W, SEC 32	300		40	
28	T11N, R12W, SEC 32	265	180	40	
29	T11N, R12W, SEC 32		176		
30	T11N, R12W, SEC 32	245	188		
31	T11N, R12W, SEC 22	350	260	250	MOJAVE P.U.D. WELL
32	T11N, R12W, SEC 22	348	270		"ROCK" AT TOTAL DEPTH
33	T11N, R12W, SEC 22	395	223	1000	MOJAVE P.U.D. WELL
34	T11N, R12W, SEC 26	230		200	FORMER JAMESON RANCH IRRIGATION WELL
35	T11N, R12W, SEC 32	300	177	700	NEW GOLDEN QUEEN WATER WELL

REVISED FROM WATER WASTE AND LAND, INC., 1990, HYDROLOGY STUDY SUMMARY FOR THE SOLEDAD MOUNTAIN PROJECT.

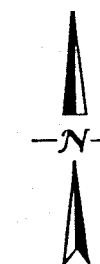
F:\CLIENTS\GOLDQUEEN\WELLINFO.WQ2

BCJ 11/20/98



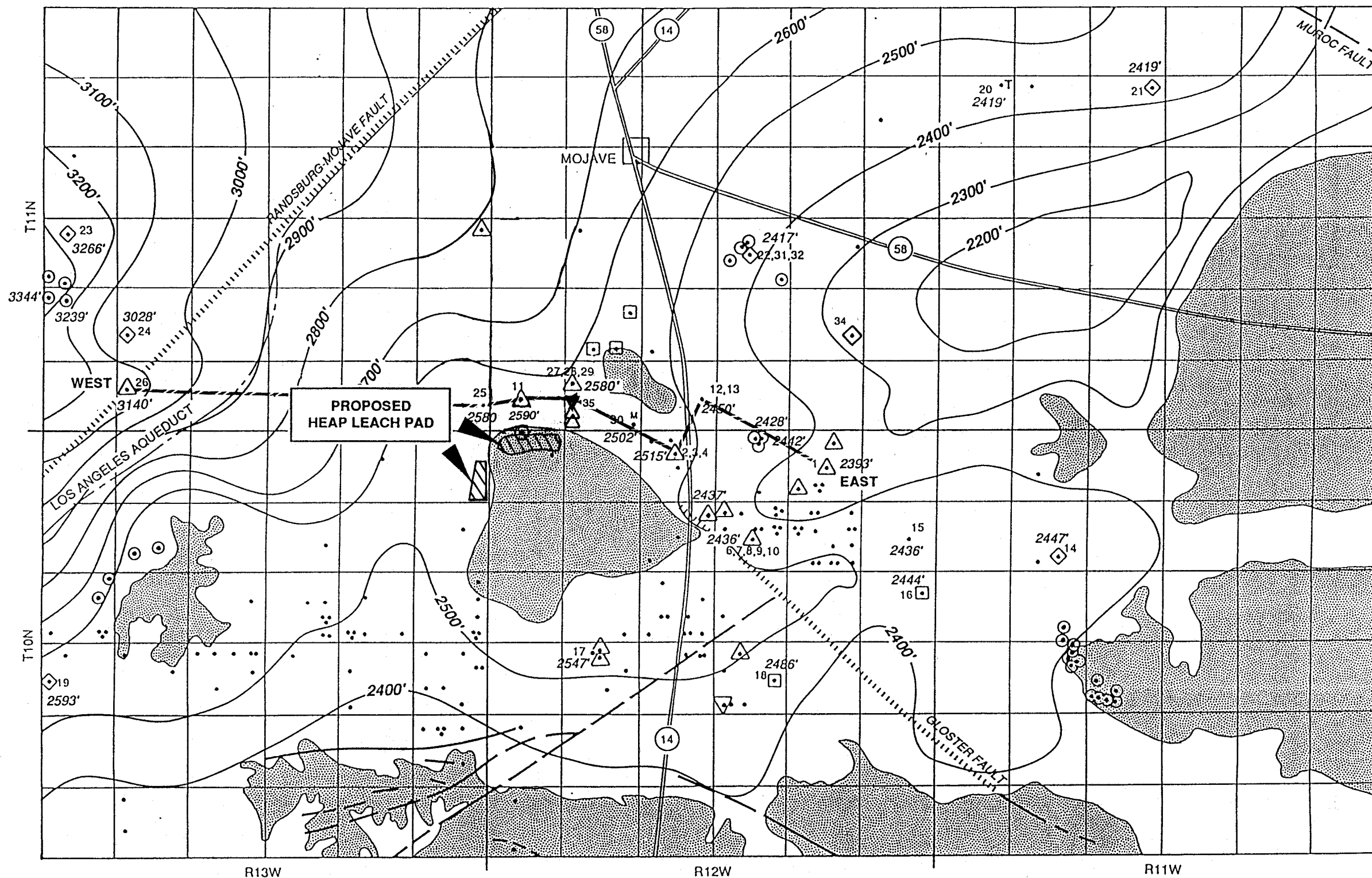


- LEGEND**
- GOLDEN QUEEN WATER WELL
 - PROPOSED WATER WELL LOCATION
 - WELL LOCATION
 - CONSOLIDATED / BASEMENT ROCK
 - FAULT - Dashed where approximate; dotted where concealed
 - FACILITY BOUNDARY
 - LINE OF CROSS-SECTION

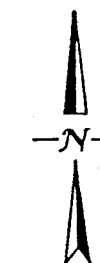


0 1 2
Scale in Miles

WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC. Soledad Mountain Project		
WELL LOCATION MAP		
DATE	11/96	0733.0010
EXHIBIT	2	



- LEGEND**
- ▼ GOLDEN QUEEN WATER WELL
 - △ PROPOSED WATER WELL LOCATION
 - ▲ WATER WELL
 - ⊙ MONITOR WELL
 - DOMESTIC WELL
 - ◻ DRILLED OBSERVATION WELL
 - ◊ DRILLED UNUSED WATER TABLE WELL
 - ▼ INDUSTRIAL WELL
 - T TEST WELL
 - M MUNICIPAL WELL
 - 2200' — CONTOUR LINE
 - ◻ CONSOLIDATED / BASEMENT ROCK
 - FAULT - Dashed where approximate; dotted where concealed
 - LINE OF CROSS-SECTION

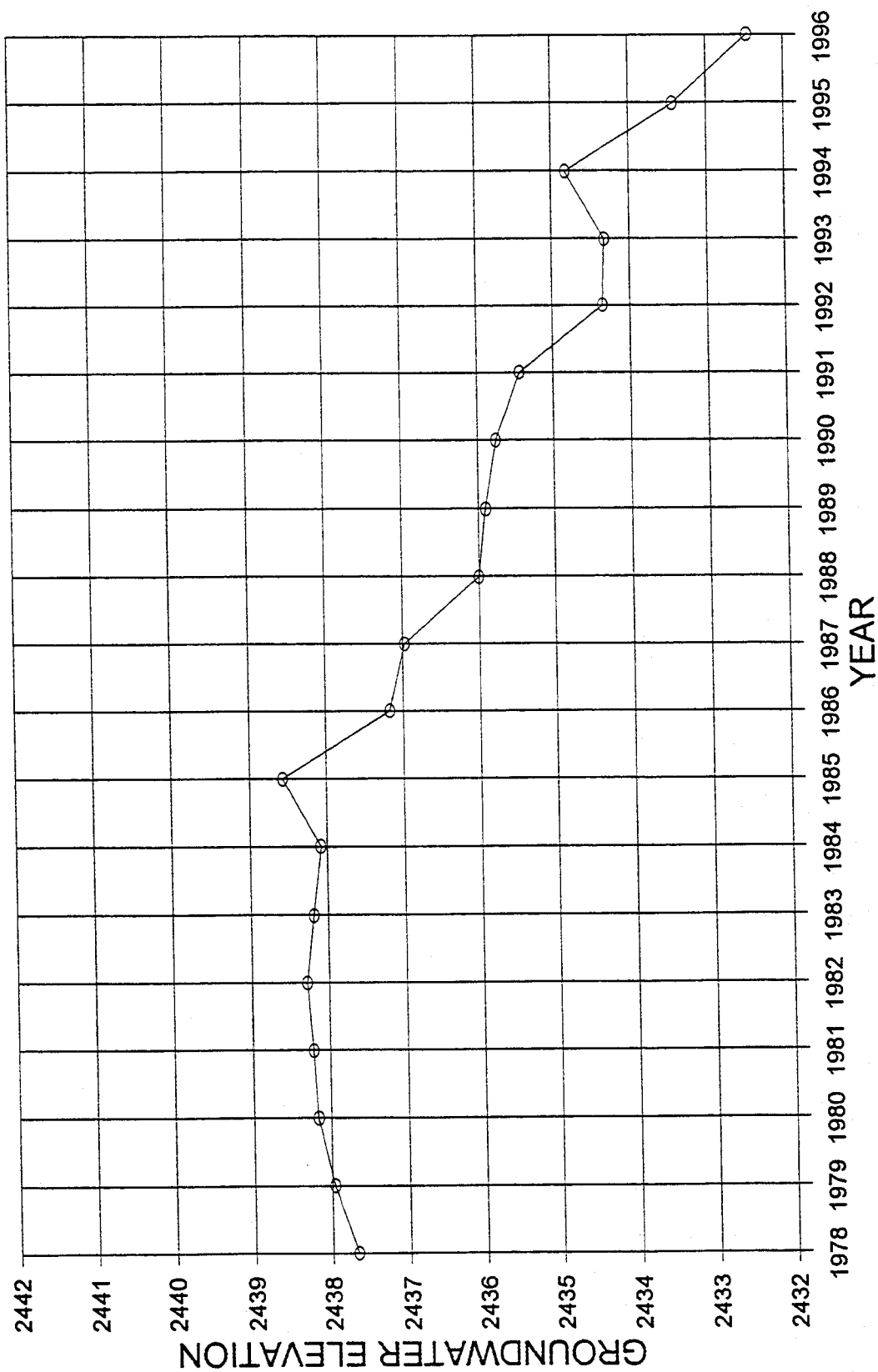


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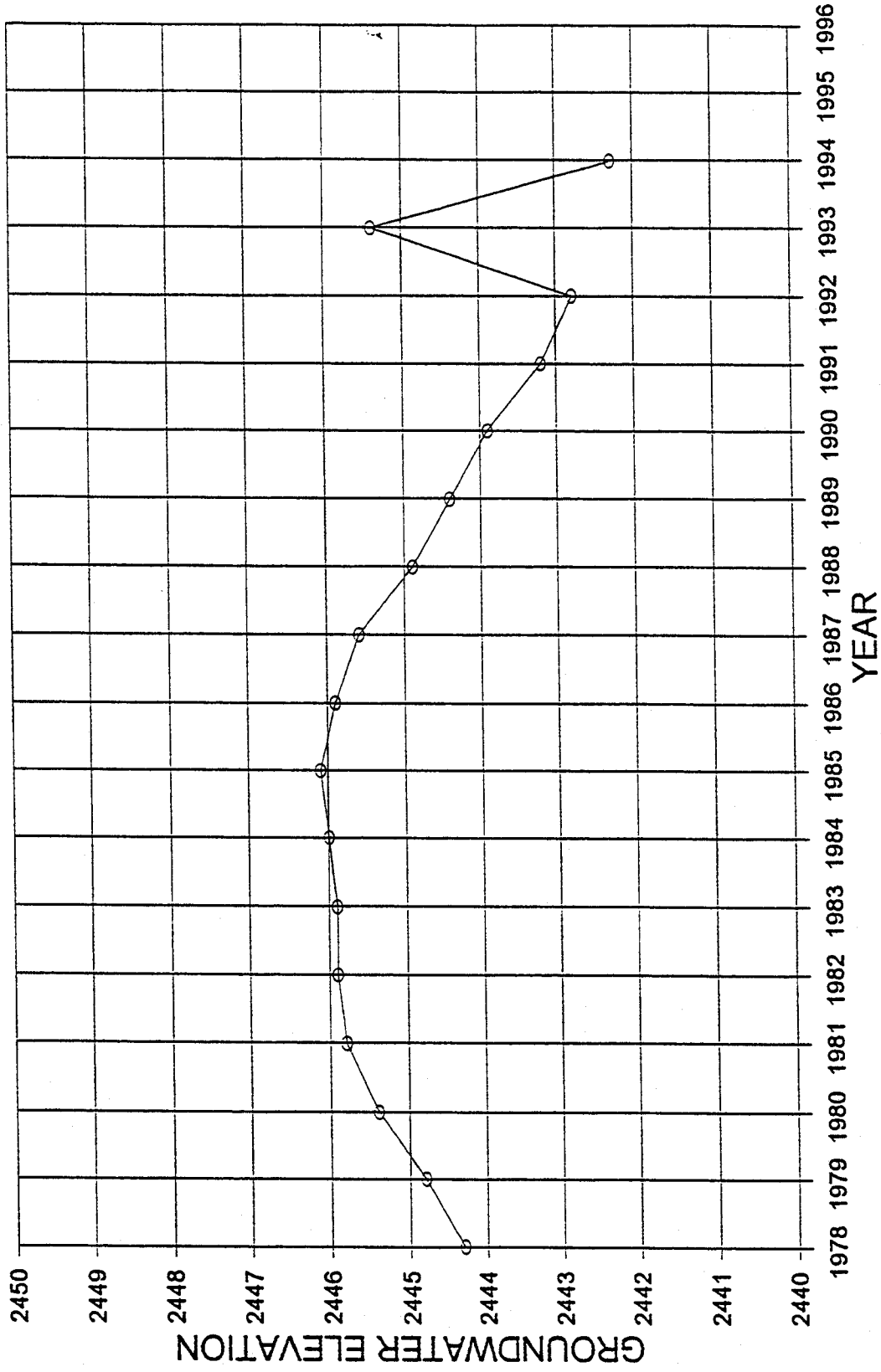
WZ I INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC. Soledad Mountain Project		
GROUNDWATER ELEVATION - 1990		
DATE 11/96	0733.0010	EXHIBIT 3

HYDROGRAPH

10N/12W-12K1

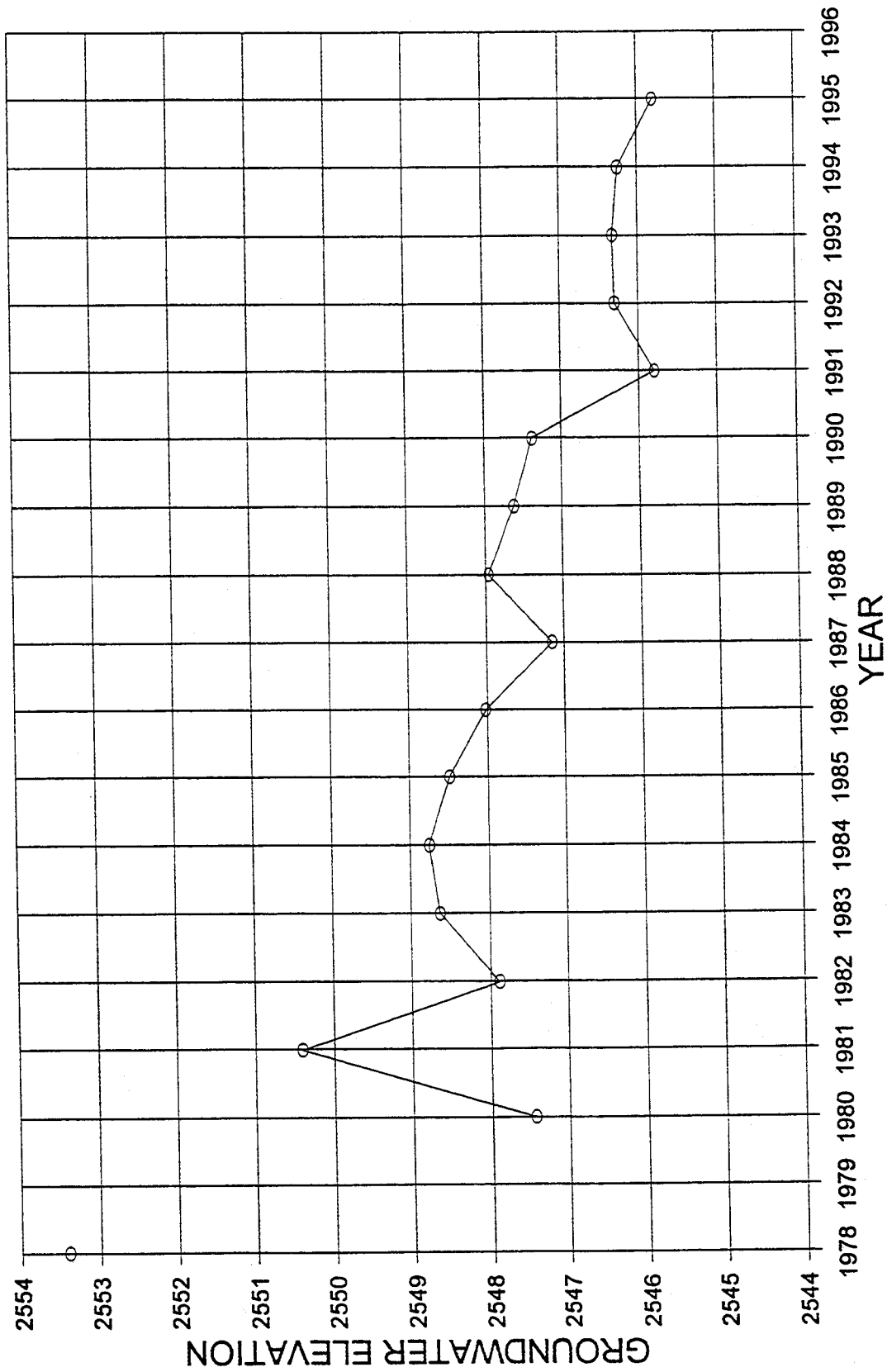


HYDROGRAPH 10N/12W-13H1

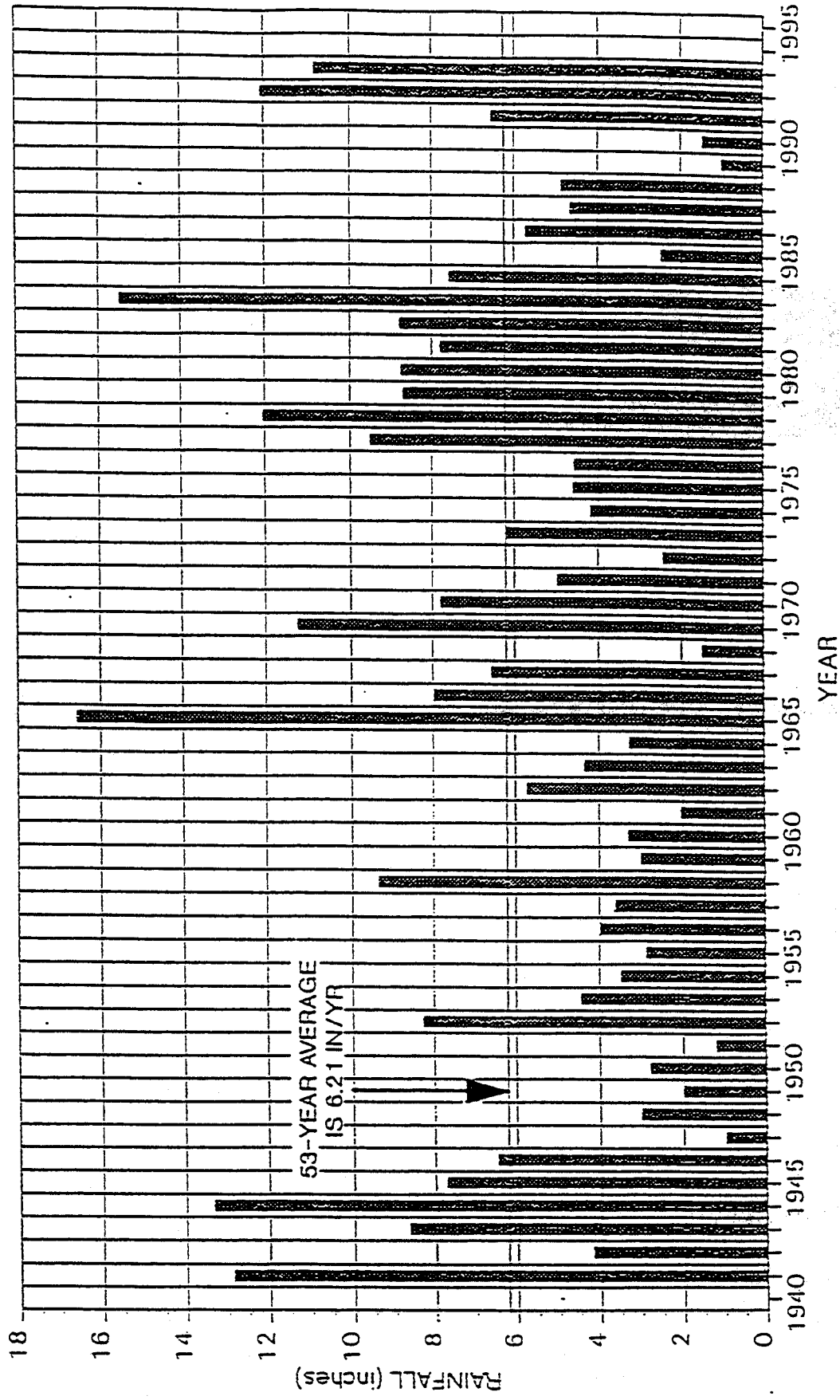


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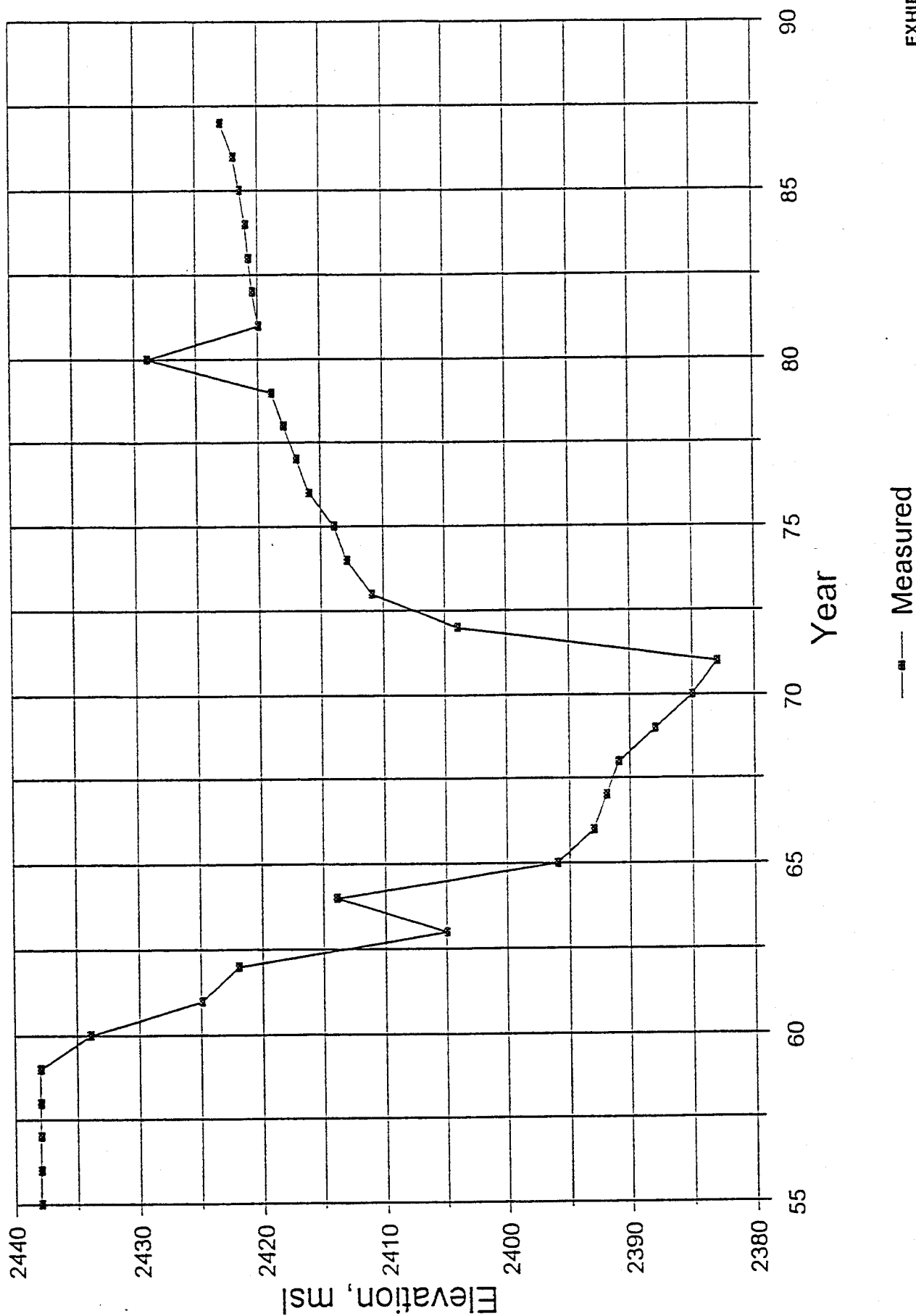
10N/12W-20C1



RAINFALL DATA, MOJAVE STATION NO. 45756

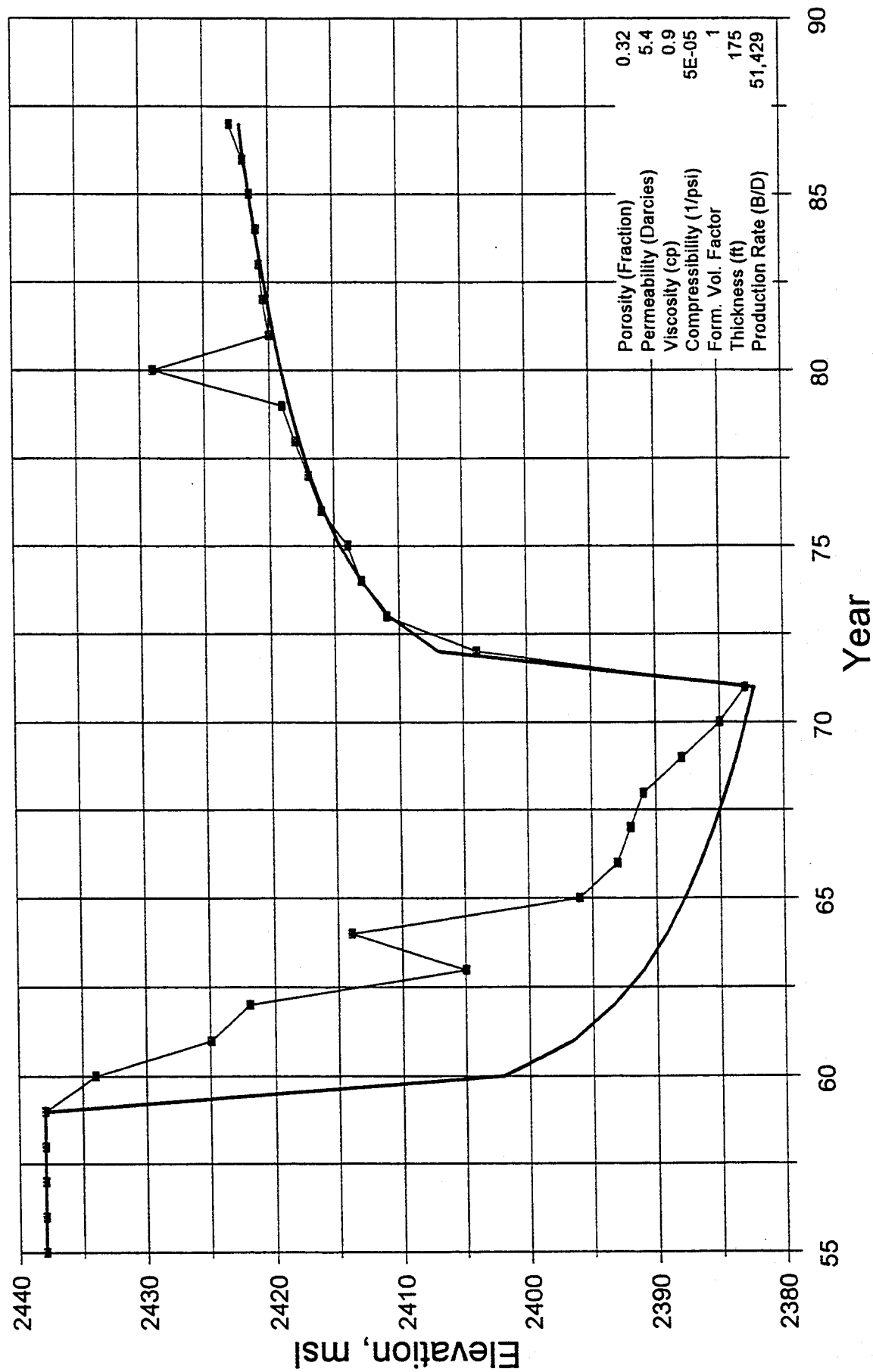


Groundwater - Jameson Ranch #26J1





Projected Level - 11N/12W - 26J1



—■— Measured — Projected

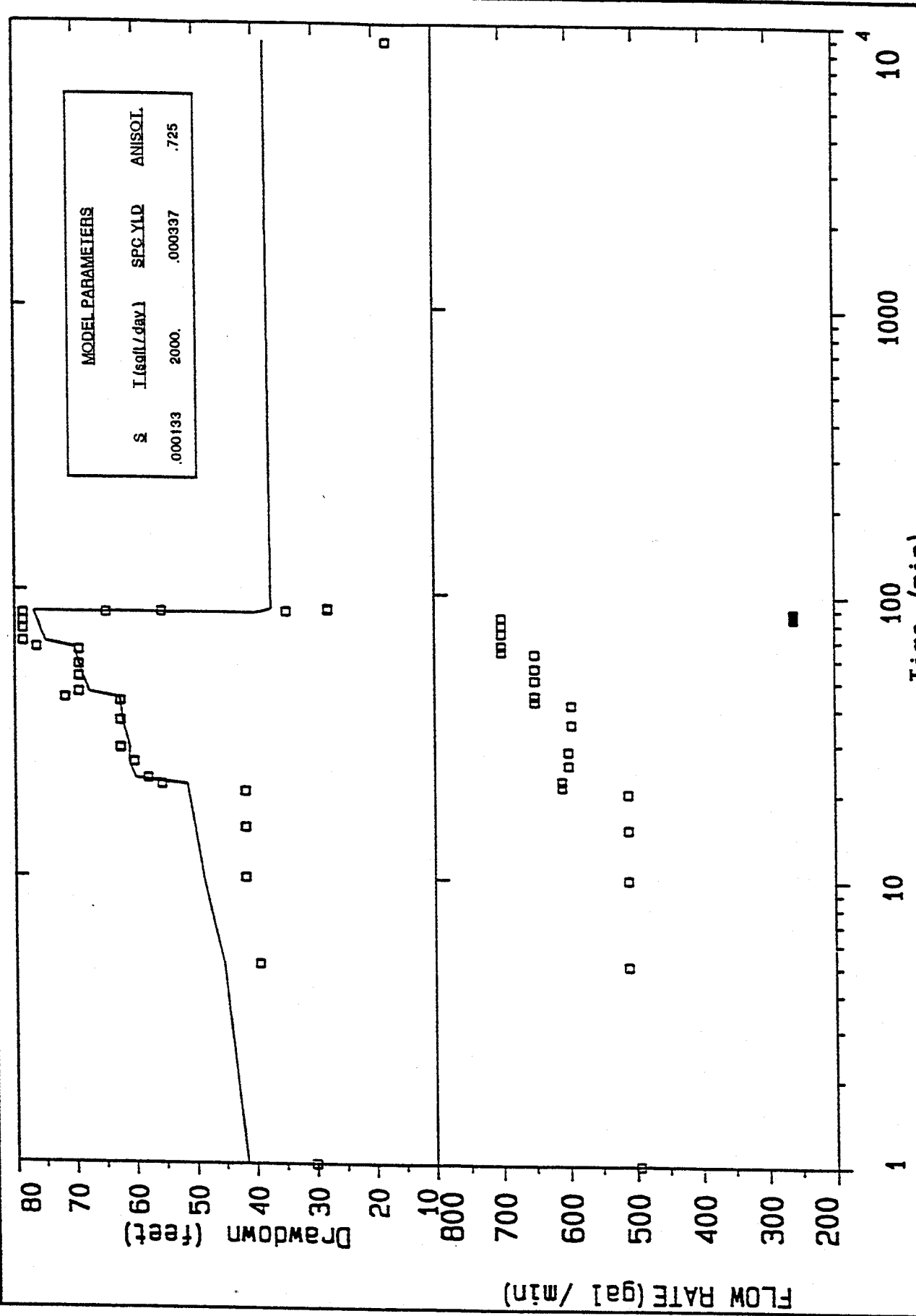
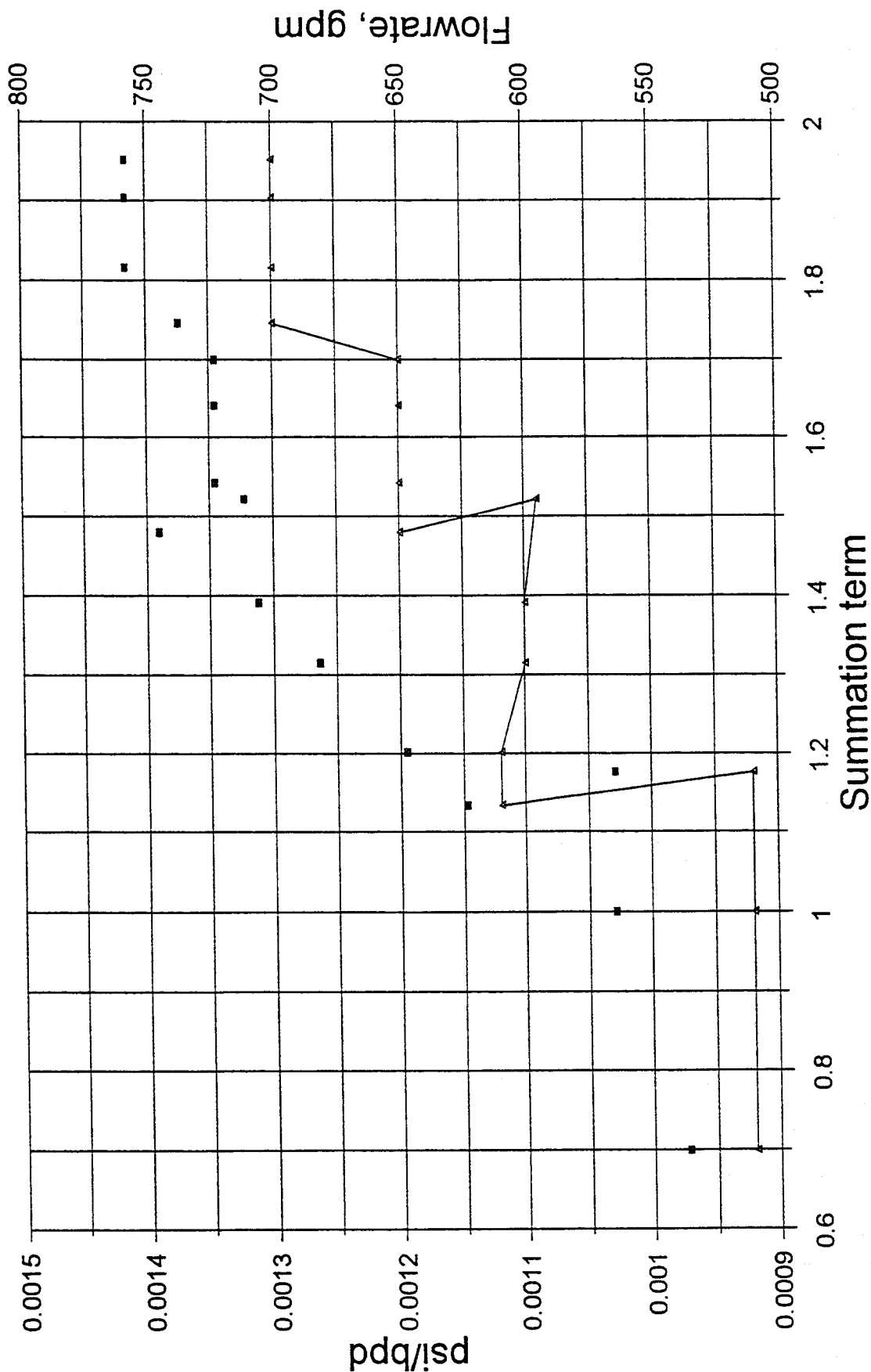


EXHIBIT 11 0733.0010		Well Pumping Test Data	
for: Golden Queen Mining Company		Soledad Mountain Project	
by: WZL Inc.		Kern County	
Aquifer: Chafee		Date: 11-007-95	
Thickness: 140. Depth: 300. feet		Well No.: PM #1	
Screen: Base: 138. Top: 23.2 feet			
Casing Radius: 6.00 in			

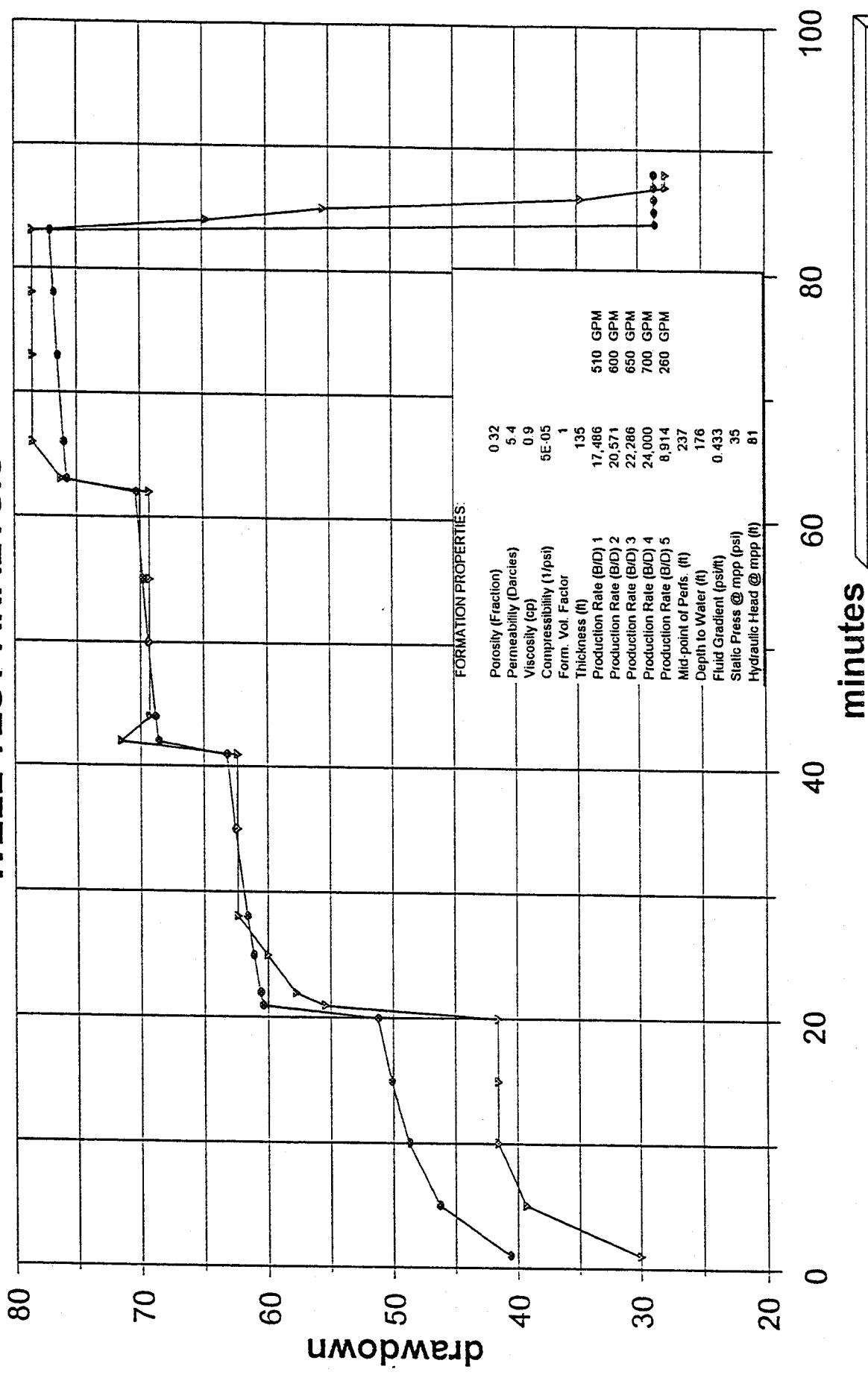
Multiple-Rate Testing Analysis



■ summation term —▲— Flowrate

PRODUCTION WELL #1

WELL TEST ANALYSIS



FORMATION PROPERTIES:

Porosity (Fraction)	0.32
Permeability (Darcies)	5.4
Viscosity (cp)	0.9
Compressibility (1/psi)	5E-05
Form. Vol. Factor	1
Thickness (ft)	135
Production Rate (B/D) 1	17,486
Production Rate (B/D) 2	20,571
Production Rate (B/D) 3	22,286
Production Rate (B/D) 4	24,000
Production Rate (B/D) 5	8,914
Mid-point of Perfs. (ft)	237
Depth to Water (ft)	176
Fluid Gradient (psi/ft)	0.433
Static Press @ mpp (psi)	35
Hydraulic Head @ mpp (ft)	81

Estimated — Actual

GOLDEN QUEEN PRESSURE WAVE CALCULATION

FORMATION PROPERTIES:				
o	Porosity (Fraction)	0.32		
k	Permeability (Darcies)	5.4		
u	Viscosity (cp)	0.9		
c	Compressibility (1/psi)	5E-05		
B	Form. Vol. Factor	1		
h	Thickness (ft)	135		
q	Production Rate (B/D)	25,714	750 GPM	
	Two Wells each at	12,857	375 GPM	
	Three Wells each at	8,571	250 GPM	
	Distance between wells, ft	1,000		
mpp	Mid-point of Perfs. (ft)	238		
d	Depth to Water (ft)	176		
g	Fluid Gradient (psi/ft)	0.433		
pe	Static Press @ mpp (psi)	27		
H	Hydraulic Head @ mpp (ft)	61.5		

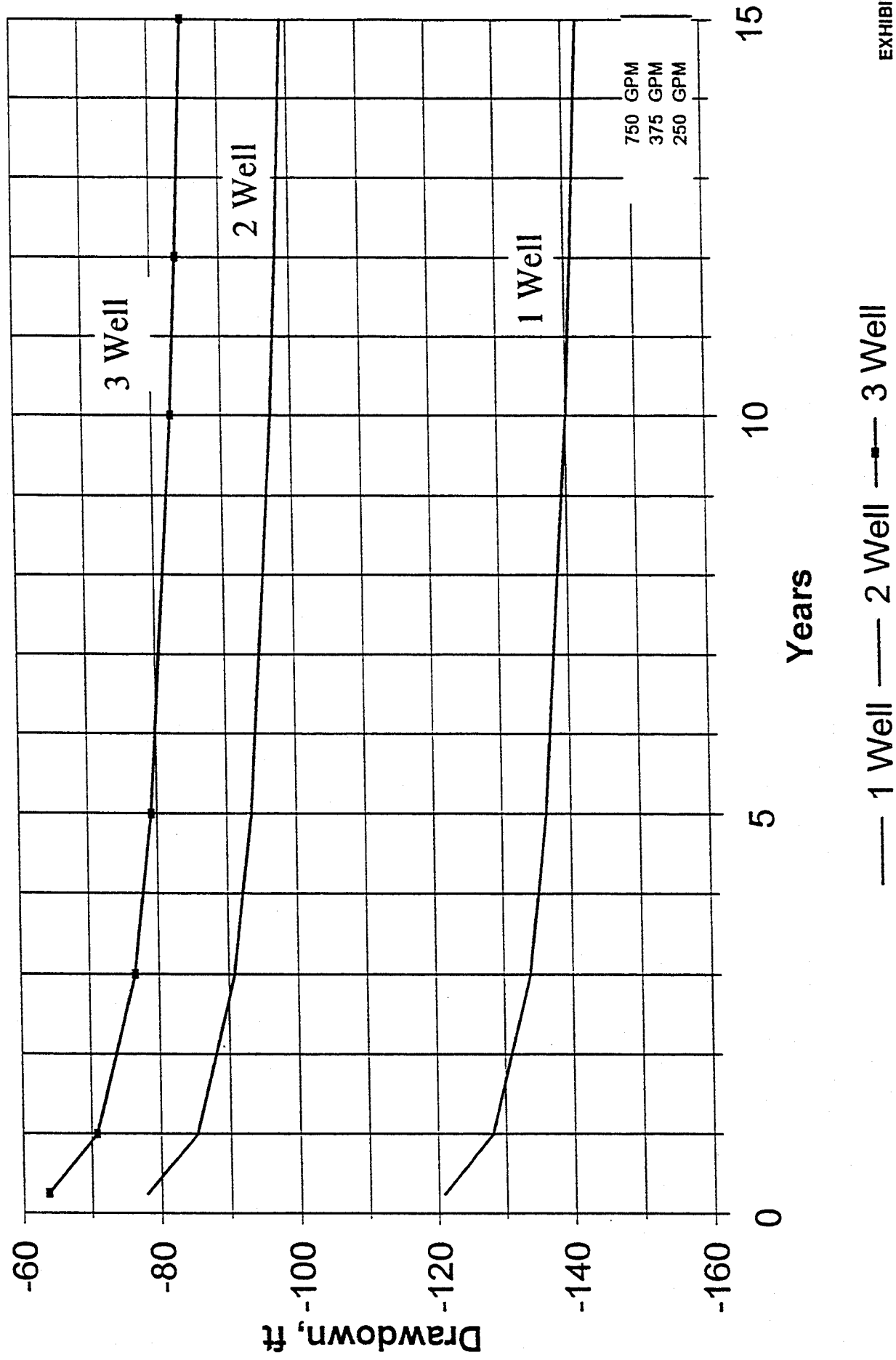
FORMULAE:	(Craft and Hawkins, p.314)
$re = [kt / (0.04uc0)]^{1/2}$	
$pe - p = quB \ln(re/r) / (7.08kh)$	

dH PRESSURE WAVE (ft):							
Time (yrs)	Radius (ft)						
	0.25	500	1000	2000	3700	5300	10000
750 GPM (RATE PER WELL)							
0.25	121	42	35				
1	128	49	42	35	29	25	18
3	134	55	48	41	34	31	24
5	136	58	50	43	37	33	27
10	140	61	54	47	41	37	30
12	141	62	55	48	41	38	31
15	142	63	56	49	43	39	32
375 GPM (Each) 2 wells 1000 ft apart - Combined Effect							
0.25	78	36	31	26	20	17	11
1	85	44	39	33	27	24	18
3	91	49	44	39	33	30	23
5	93	52	47	41	36	32	26
10	97	56	50	45	39	36	30
12	98	56	51	46	40	37	31
15	99	58	53	47	41	38	32
250 GPM (Each) 3 wells 1000 ft apart - Combined Effect							
0.25	64	35	30	25	20	16	10
1	71	42	37	32	27	24	18
3	76	47	43	38	33	29	23
5	79	50	46	40	35	32	26
10	83	54	49	44	39	36	30
12	84	55	50	45	40	37	30
15	85	56	51	46	41	38	32

GOLDQUEN\PWAVEGQ

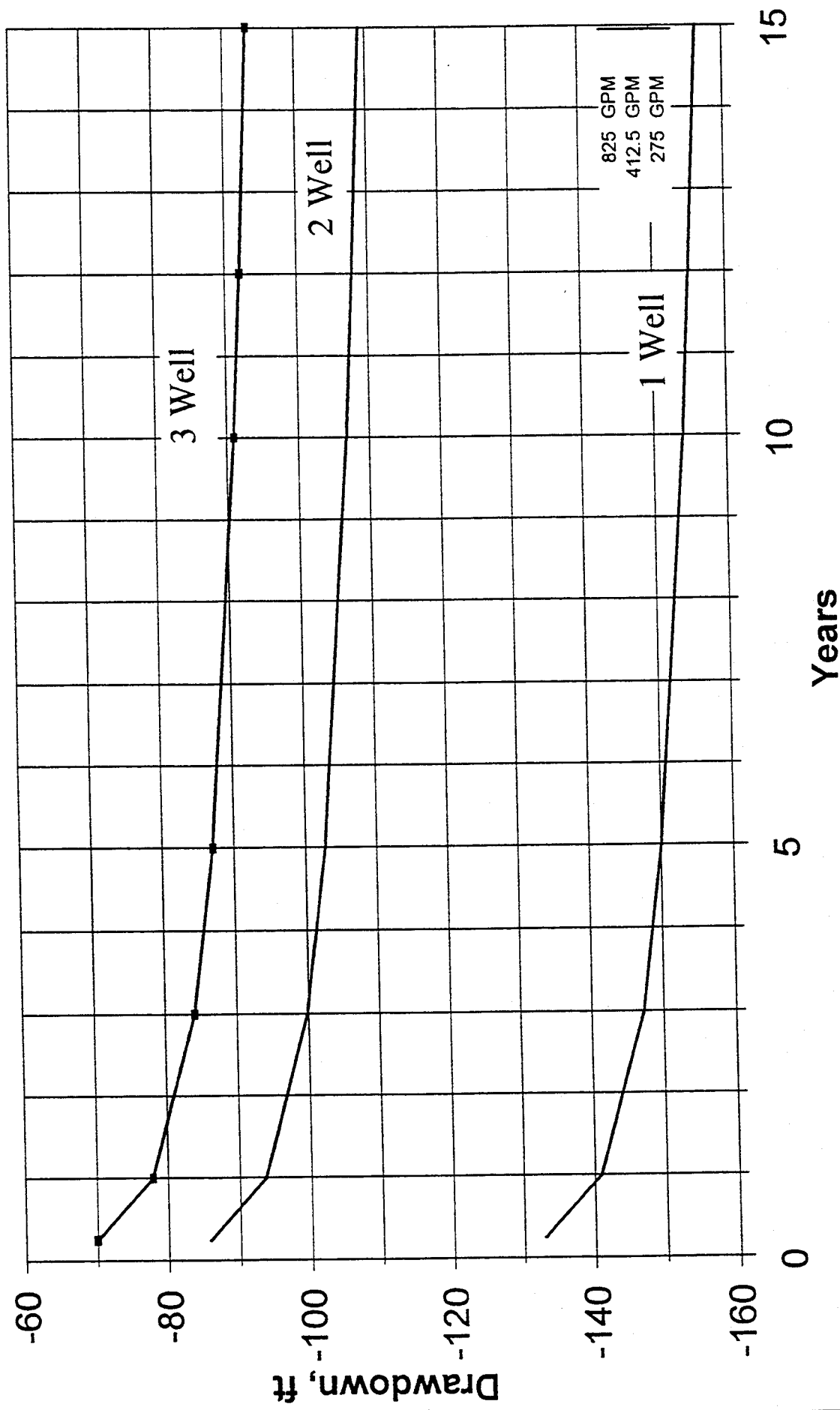
Water Well Analysis

Golden Queen Well PW #1



Water Well Analysis

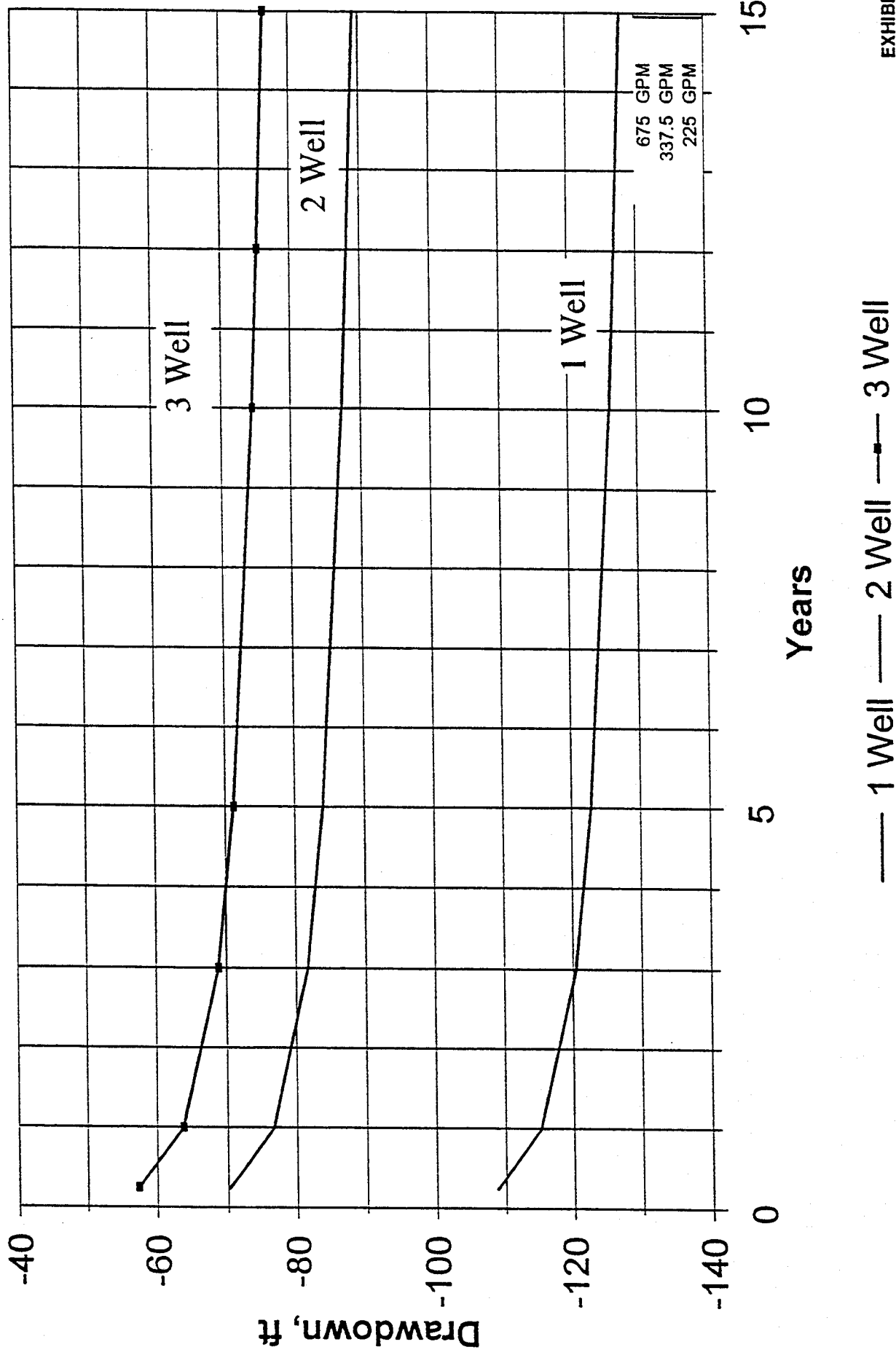
Golden Queen Well PW #1



— 1 Well — 2 Well — 3 Well

Water Well Analysis

Golden Queen Well PW #1



APPENDIX A



Nomenclature for Permeability calculations

r_e	= external boundary radius
k	= permeability
t	= time
μ	= viscosity
c	= compressibility
ϕ	= porosity
p_e	= external boundary pressure
p	= pressure
q	= volumetric flow rate
B_o	= formation volume factor
r	= radial distance
h	= height of aquifer
p_i	= initial pressure
p_{wf}	= flowing well pressure
q_N	= flow rate at time N
q_j	= flow rate at time j
q_{j-1}	= flow rate at time j-1
m'	= slope of line







HYDROLOGY STUDY SUMMARY
FOR THE SOLEDAD MOUNTAIN PROJECT

Prepared For:

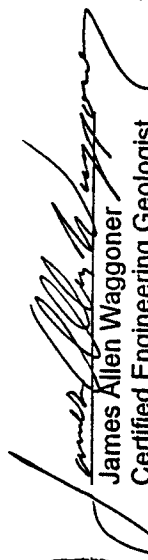
P.M. DeDYCKER AND ASSOCIATES
12596 West Bayaud Avenue Suite 380
Lakewood, Colorado 80227

Prepared by:

WATER, WASTE & LAND, INC.
2629 Redwing Road, Suite 200
Fort Collins, Colorado 80526

July 1990

This document reviewed by WZL Inc. in support of the final Environmental Impact Report/Environmental
Impact Statement for the Soledad Mountain Project, Mojave, Kern County, California.


James Allen Waggoner
Certified Engineering Geologist
State of California No. 1818
Expiration: 3/31/99

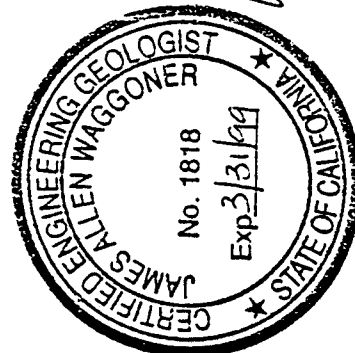




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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF REPORT

This report summarizes the results and conclusions from initial hydrologic studies for Noranda's Soledad Mountain Project in Kern County, California. This report was prepared upon your request, and is based on data collected by Water, Waste & Land, Inc. (WWL). This work consisted of data collection and review, and was conducted initially for Golden Queen Mining Company, Inc. (Golden Queen) and later for Noranda Inc. (Noranda), as outlined in the following section.

1.2 STUDIES CONDUCTED TO DATE

Initial work, consisting of data review, was conducted for Golden Queen according to the Phase I study outline prepared for Envirocon in September 1989. Phase I work, originally envisioned as the first of a three-phase study, consisted of review of available data, identification of water supply sources in the area, and preliminary characterization of the hydrology of the area.

A report describing the results of this study was prepared for Golden Queen Mining Company in October 1989. An important part of the planned data review could not be conducted because drillers logs and production information from over 30 wells in the site area were (by California regulations) confidential, and could not be obtained without written consent of the property owners.

Following Noranda's acquiring rights to assess the Soledad Mountain property in late 1989, WWL prepared a work scope for completion of Phase I studies and initiation of subsequent phases of hydrologic data collection for project water supply and waste disposal site monitoring. This work scope was prepared for Envirocon in December 1989, and was revised in March 1990 to include WWL personnel collecting private well information. A key task in this revised phase of work was assessing an existing well on land controlled by Golden Queen in Section 36, northwest of the project site.

In April 1990, WWL conducted a survey of wells in the project area to collect drillers logs and other pertinent well information through permission from landowners. Guidance on who to contact about well information was provided by Noranda site personnel. The results of this task were documented in a letter to Noranda dated April 26, 1990. This task provided very little published well information, although information from conversations with local residents provided some insight into the area geohydrology and water supply. The well in Section 36 was not found, and was believed to be destroyed during previous land development construction work.

Upon your request, WWL prepared a revised work scope for the next steps to be taken for mine development hydrology, based on the information collected in April. This work scope was prepared for P.M. DeDycker and Associates in May 1990.

2.0 SUMMARY OF EXISTING INFORMATION

2.1 EXISTING WELLS AND DRILLING INFORMATION

Available information about the geology and geohydrology of the Soledad Mountain area, and wells and water supplies used in the area was obtained from the following sources:

1. Reports and data collected by WWL during the site visits on August 8-9, 1989 and April 17-20, 1990, as well as communication with local residents.
2. Conversations with California state agency and Kern Water Agency personnel concerning well records and other public well data.
3. Conversations with Antelope Valley-East Kern Water Agency (AVEK), Kern County Water Agency, and Mojave Public Utilities District personnel concerning water supply information.
4. Conversation with CoCa Mines personnel about water supply information at the Middle Buttes and Shumake Mines (which are located west of the site).

The references and information obtained from these sources are listed in the references section of this report. Much of the published data was referenced in the geohydrology report prepared for the Shell Standard Hill Project (Rector, 1986).

AVEK provided information on wells monitored by the United States Geologic Survey (USGS) for AVEK. In addition, AVEK provided preliminary information on the location of facilities, water service agreements, water rates, and rules and regulations for distribution of water. The Kern Water Agency provided limited information on a number of private wells in the area.

Table 1 is a summary of available information on existing water wells in the area from WWL's October 1989 report. The approximate locations of wells included in Table 1 are shown on Figure 1. This information was limited to published data or that obtained by personal communication. Collection of actual drilling logs of these wells was attempted in April 1990 through requests made to local landowners. This task yielded no published information, but conversations with landowners provided general information about geohydrologic conditions and water supply.

TABLE 1
SUMMARY OF EXISTING WATER WELL DATA

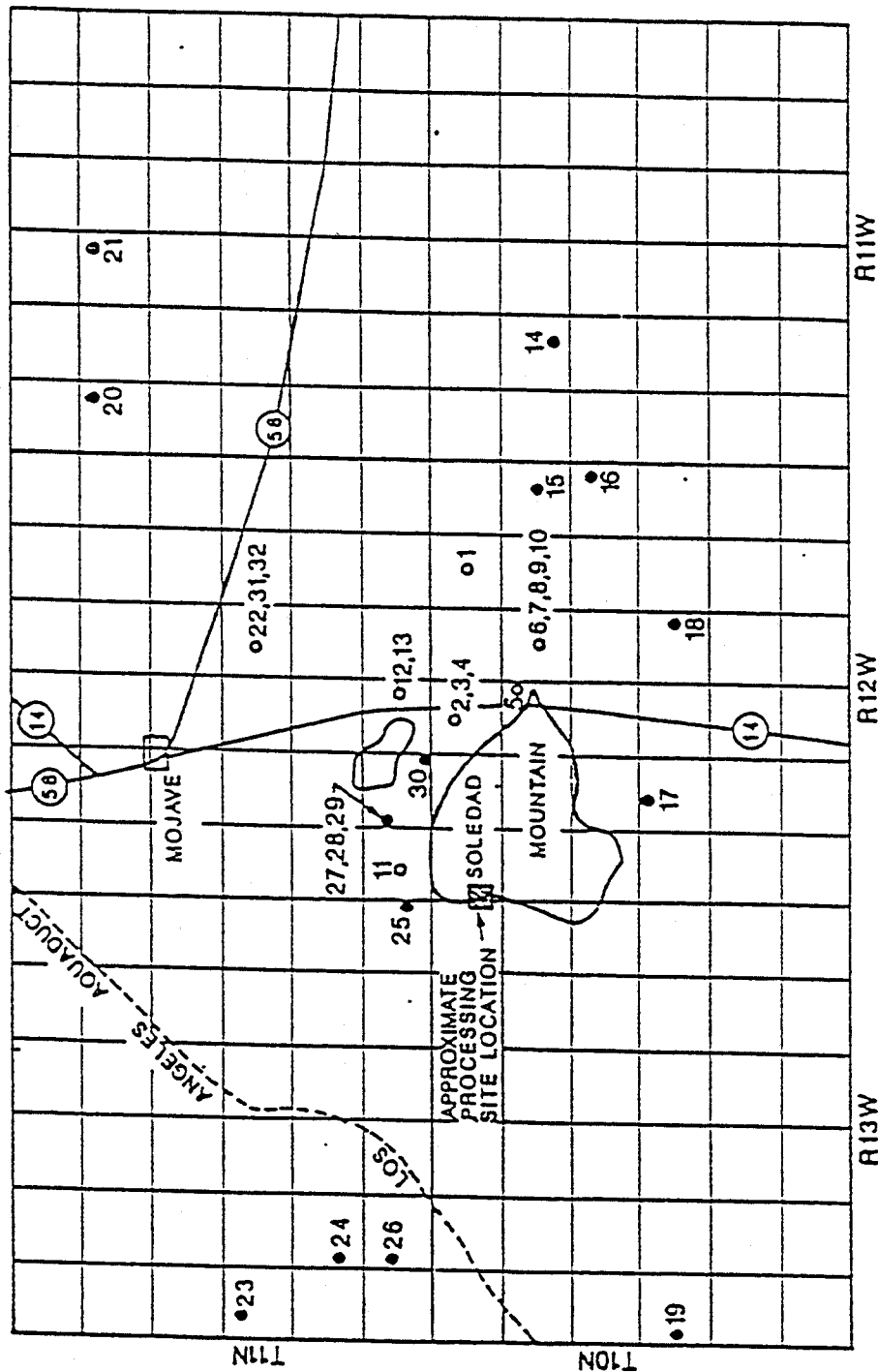
REF NO.	LOCATION	TOTAL DEPTH (ft)	DEPTH TO WATER (ft)	REPORTED YIELD (gpm)	INFORMATION SOURCE ¹	COMMENTS
1.	T10N, R12W, Sec. 2	257	187	-	B	Terminated on "Granite"
2.	T10N, R12W, Sec. 4	340	135	-	B	Terminated on "Hard Rock"
3.	T10N, R12W, Sec. 4	275	175	3	B	
4.	T10N, R12W, Sec. 4	222	186	1	B	Terminated on "Hard Rock"
5.	T10N, R12W, Sec. 9	238	163	6	B	Alluvium Total Depth
6.	T10N, R12W, Sec. 10	200	87	30	B	Alluvium Total Depth
7.	T10N, R12W, Sec. 10	204	93	35	B	Alluvium Total Depth
8.	T10N, R12W, Sec. 10	202	93	35	B	
9.	T10N, R12W, Sec. 10	200	92	30	B	
10.	T10N, R12W, Sec. 10	200	85	25	B	
11.	T11N, R12W, Sec. 31	350	95	30	B	
12.	T11N, R12W, Sec. 33	240	175	Fair	B	Yield Reported as "Fair"
13.	T11N, R12W, Sec. 33	252	190	-	B	Terminated in "Bedrock" owned by California Portland Cement Co.
14.	T10N, R11W, Sec. 8	280	58	-	A	
15.	T10N, R12W, Sec. 12	224	84	-	A	
16.	T10N, R12W, Sec. 13	185	60	-	A	
17.	T10N, R12W, Sec. 20	-	107	-	A	
18.	T10N, R12W, Sec. 22	242	43	-	A	
19.	T10N, R13W, Sec. 19	770	317	-	A	
20.	T11N, R11W, Sec. 7	414	209	-	A	
21.	T11N, R11W, Sec. 9	422	131	-	A	In Alluvium
22.	T11N, R12W, Sec. 22	350	247	-	A	
23.	T11N, R13W, Sec. 19	430	311	-	A	
24.	T11N, R13W, Sec. 29	749	307	-	A	In Alluvium
25.	T11N, R13W, Sec. 36	630	280-380	-	C	Alluvium Total Depth
26.	T11N, R13W, Sec. 32	300	180	-	C	Top 50 Feet Alluvium
27.	T11N, R12W, Sec. 32	300	-	40	C	
28.	T11N, R12W, Sec. 32	265	180	40	C	
29.	T11N, R12W, Sec. 32	-	176	-	C	
30.	T11N, R12W, Sec. 32	245	188	-	C	
31.	T11N, R12W, Sec. 22	381	255	-	C	Mojave P.U.D. Well
32.	T11N, R12W, Sec. 22	348	270	-	C	

¹Information Source

A. U.S.G.S.

B. Kern Water Agency

C. Rector (1986)



- WELL LOCATED BY SECTION ONLY
 - WELL LOCATED BY 40 ACRE SECTION SUBDIVISION
- WELL NUMBERS CORRESPOND TO
REFERENCE NO. IN TABLE 1



Water, Waste & Land, Inc.

FIGURE 1
EXISTING WELL LOCATIONS

Date: OCT 1989

Project: 151

2.2 REGULATORY REQUIREMENTS

Groundwater monitoring requirements for Mining Waste Management Units are governed by the California Water Resources Control Board (1984). The regulations require that all monitoring wells be logged during drilling under the direct supervision of a registered geologist. The monitoring system must be designed and certified by a registered geologist or civil engineer and must define background water quality as well as monitored water quality at the point of compliance.

Wells must be constructed using annular filter material around the screened interval (sand or gravel pack) and the annular space above the screened interval sealed to prevent surface pollution and cross-contamination of saturated zones. The minimum depth of upper annular space seal is 20 feet below ground surface for observation and monitoring wells, with other provisions for shallow wells (California Department of Water Resources, 1981). The well must be adequately developed to prevent sediment from entering the casing. Other well construction standards for specific subsurface conditions are required by the State of California (California Department of Water Resources, 1981).

Based on these regulations and expected subsurface conditions, the mine water supply well will require a borehole diameter at least 4 inches greater than the production casing. A surface seal must extend to a minimum depth of 50 feet with a nominal thickness of at least 2 inches. The sealing material can consist of grout, bentonite, or concrete. The top of the well must extend above ground surface or known flood levels and prevent the entrance of foreign material.

2.3 ALTERNATIVE WATER SOURCES

Based on a generalized map provided by AVEK, a 36-inch north-south feeder line lies a few miles east of Soledad Mountain. The Mojave pump station is located on that feeder just east of Standard Hill. Mr. Russ Fuller of AVEK also indicated that they maintain a 32 million gallon reservoir in Section 5, T10N, R12W, which appears to be approximately 1-1/2 miles east of the project site. The Los Angeles Aqueduct passes through the area approximately 5 miles northwest of the site.

If required, water could be purchased from AVEK subject to rules and regulations concerning supply and connections. For the Golden Queen facility water rates are estimated at \$165.00/acre-ft in 1990, \$180.00/acre-ft in 1991, and \$190.00/acre-ft in 1992 (Fuller, 1989). These figures do not include connection costs or other capital costs associated with delivery of water to the mine.

3.0 HYDROLOGICAL SETTING

3.1 SURFACE HYDROLOGY

The Antelope Valley is a closed basin, with surface water eventually reaching the dry lake beds of Rosamond and Rogers Lakes located southeast of the site. Due to the low precipitation received in the area, no rivers, streams, or other signs of significant or regular surface water flow are seen. The ground surface of the valley floor in the Soledad Mountain area generally slopes from west to east. Soledad Mountain and Standard Hill protrude from the valley floor, and form a local variation in surface water flow.

3.2 REGIONAL GEOHYDROLOGY

Water bearing rocks in the region can be divided into two broad classes: consolidated rocks and alluvium. The consolidated rocks comprise bedrock in the region and underlie the valley fill alluvium. The bedrock consists of a basement complex of pre-Tertiary sedimentary, metamorphic, and igneous rock units along with Tertiary-age volcanic and sedimentary rocks (Kunkel and Dutcher, 1960). As is typical of predominantly crystalline rocks, groundwater generally occurs in fractures and is limited in quantity; however, sufficient supplies for domestic use may be present.

Alluvial deposits fill the valleys between mountain ranges and bedrock outcrops in the region. The alluvium can be divided into a younger and an older unit. Playa lake deposits occur locally within both the older and younger alluvial units.

The older alluvium is the principal aquifer in the region. It is generally poorly consolidated to unconsolidated and is composed of silt, sand, gravel and boulders. Feldspars may locally be altered to clay due to weathering. Thickness of the older alluvium may range to as much as 2,000 feet in basin centers (Kunkel, 1962). Between Soledad mountain and the town of Mojave, alluvium may reach 700 feet or more in thickness (Rector, 1986). The younger alluvium is composed of lenses of fine to coarse sediment and unconformably overlies the older alluvium and consolidated rocks. It was deposited by intermittent streams of Pleistocene to recent age and may range up to 100 feet thick (Kunkel, 1962). The alluvial deposits are treated as one hydrogeologic unit, the alluvial aquifer, in this report.

Groundwater in the alluvial aquifer may locally be confined by low permeability, fine grained layers (Rector, 1986). The low permeability layers are likely the result of lacustrine and playa lake deposits or interbedded clays in the alluvium. Although it appears surface recharge to the alluvial aquifer

can occur throughout the basin, limited annual precipitation and the presence of low permeability layers which inhibit downward flow probably restrict widespread areal recharge. Basin margins and areas of thin alluvial cover are probable recharge areas.

Soledad Mountain is in the Gloster groundwater subunit near the boundary with the Chaffee subunit (Kunkel and Dutcher, 1960). Regional groundwater flow is predominantly eastward across these areas, then northeast across the Muroc Fault and down the Fremont Valley toward an evaporative sink at Koehn Lake (Kunkel, 1962). Historic water well data for these units do not show any long-term downward trends in water levels (Fuller, 1989 and Rector, 1986). Therefore, it is assumed that the alluvial aquifer is not being overdrawn and could support additional withdrawal in the area surrounding Soledad Mountain.

Water in the Chaffee and Gloster subunits is moderately mineralized. Available data indicates that total dissolved solids in groundwater of the area ranges from approximately 200 to 500 mg/l. The dominant anions appear to be sulfate and bicarbonate with concentrations on the order of 100 to 200 mg/l. Chloride concentrations are in the range of 10 to 40 mg/l. Calcium is the predominant cation with concentrations generally ranging from 50 to 100 mg/l followed by sodium with concentrations on the order of 40 to 50 mg/l. Groundwater in the Gloster subunit can be classified as sodium-calcium bicarbonate-sulfate water (Rector, 1986).

3.3 LOCAL GEOHYDROLOGY

Based on available data for the wells closest to Soledad Mountain, depth to water ranges from approximately 90 feet to 190 feet. With the exclusion of what are thought to be five residential wells in the Goldtown Subdivision (Section 10, T10N, R12W) east of Soledad Mountain and one well north of Soledad Mountain (Section 31, T11N, R12W) depth to water is predominantly on the order of 175 to 185 feet. Well depths generally range from 200 to 350 feet.

When reported, well yields on the order of 30 to 40 gpm are common. Most of the reported yields are in the wells located east of Soledad Mountain, probably in the Goldtown Subdivision. However, two wells north of Soledad Mountain have reported production rates of 40 gpm. Near the town of Mojave, the Mojave Public Utilities District owns wells that have produced 500 gpm. Wells on the western edge of Standard Hill were reported to produce 150 to 200 gpm in the early 1960's (Rector, 1986).

The local flow system in the immediate vicinity of the site tentatively selected for mineral processing (mill/leach pad area) is poorly defined due to the influence of the bedrock outcrop and the absence of existing well information on the west side of the mountain. As stated in Section 3.2, the

dominant regional flow takes place in the alluvium in an easterly direction. The consolidated bedrock comprising Soledad Mountain is relatively impermeable compared to the alluvium and probably acts as a barrier to flow in the alluvial aquifer. Therefore, the easterly groundwater flow paths in the alluvium are disrupted on the west side of Soledad Mountain and take a more northerly or southerly direction as groundwater flows around the bedrock barrier. This complicates delineation of flow in the vicinity of the mine site and the placement of monitoring wells.

A few miles north and west of Soledad Mountain, well depths and depth to groundwater generally increase. Depths to water on the order of 200 to 300 feet are common along with well depths of 350 to over 700 feet. Production rates for these wells are 300 gpm or more.

4.0 WATER SUPPLY

4.1 WATER SUPPLY

Water supply for mining operations in the area comes from wells completed in the alluvial aquifer or from AVEK. Based on conversations with AVEK personnel, the Standard Hill Mine obtains its water from AVEK. Shell originally tried to obtain water from wells, but apparently could not achieve the required production rates. It is believed that the wells were most likely completed too close to Standard Hill to penetrate enough of the alluvial aquifer to produce an adequate supply of water. Water for the Middle Buttes and Shumake Mines (west of the site) comes from nearby wells (within a mile of each mine). One of the wells is five hundred feet deep, completed in the alluvial aquifer (Hufford, 1990).

Alfalfa farms are located several miles south of the site. The source of irrigation water for these farms appears to be exclusively wells completed in the alluvial aquifer. Several wells have been identified in the immediate Soledad Mountain area, which appear to be for domestic use and of relatively low capacity.

4.2 SOLEDAD MOUNTAIN PROJECT SOURCES

The required water production rate for the project is expected to be on the order of 1000 gpm. As stated above, the consolidated rocks outcropping and underlying the alluvial fill are generally a poor source of water for all but domestic use. The valley fill alluvial aquifer appears to have the best potential for substantial water production.

In order to achieve adequate storage and production rates for mine use, a well or wells in the alluvial aquifer would need to be located a sufficient distance from bedrock outcrops to provide adequate thickness of saturated alluvium. Due to limited existing well information, it is uncertain where there is sufficient alluvial fill in the immediate vicinity of Soledad Mountain.

Well #25 (Table 1) and several other areas were located 1 to 1-1/2 miles northwest of the project site in Section 36, T11N, R13W. These wells (known as the Gillis Wells) were drilled to depths of over 600 feet, had initial groundwater levels of roughly 300 feet, and were pump tested at rates up to 750 gpm (Gaines, 1990).

4.3 WATER SUPPLY COSTS

Preliminary estimates were made to compare costs associated with the two most likely water supply alternatives -- purchasing water from AVEK and pumping from a well. It was assumed that costs associated with water delivery from each source to the mine site would be comparable within the framework of current expectations. The evaluation consisted mainly of the cost of well installation and yearly pumping for groundwater development compared with AVEK connection cost and yearly pumping and water purchase costs.

This evaluation showed that water supply costs are roughly \$0.12 to \$0.19 per 1000 gallons for a well approximately one mile from the mill/heap leach site compared with roughly \$0.32 to \$0.46 per 1000 gallons for a water line tied into the AVEK system. Furthermore, a well would have to be located 10 to 20 miles from the project to raise water supply costs up to those of AVEK. This implies that a groundwater source could extend as far as ten miles from the mine site and still result in a cheaper water supply than that provided by AVEK.

5.0 GROUNDWATER MONITORING

5.1 MONITORING REQUIREMENTS

Groundwater monitoring in the area of the tailings impoundment or heap leach area is likely to be conducted using three to four wells completed in the alluvial aquifer. According to the guidelines discussed in Section 2.2, a minimum of one upgradient and two downgradient wells completed in the top of the uppermost aquifer are required. The point of compliance would be immediately inside the nearest downgradient property line.

5.2 MONITORING WELLS

As mentioned in Section 3.3, groundwater flow on the west side of Soledad Mountain is likely to be changing direction from the regional west-to-east direction to a northerly or southerly direction (in order to flow around the lower conductivity rocks that comprise Soledad Mountain). Due to the absence of existing wells on the west side of Soledad Mountain, and the likely variations in flow directions in this area, directions of flow (and upgradient and downgradient wells) may not be established until three of the monitoring wells are drilled.

To compensate for this, three monitoring wells should be drilled around the tailings/heap leach area at locations expected to meet monitoring requirements. By evaluating the static water level in these wells, upgradient and downgradient directions can be established and designation of background and point of compliance monitoring wells made at that time. It is possible that a fourth well would be required if it is found that two wells were not downgradient of the mill leach pad when actual flow directions are defined.

Based on information from wells on the east side of Soledad Mountain, depth to water is estimated to be 100 to 180 feet. Depth to bedrock on the west side of Soledad Mountain is not clearly known. Therefore, it is possible that monitoring wells located on the property boundaries may extend into bedrock before reaching the top of the alluvial aquifer.

6.0 CONCLUSIONS

Conclusions from the data collection work conducted by WWL in 1989 and early 1990 are summarized below.

1. Suitable water supply for the project is likely from one or two wells completed in the basin alluvium west of Soledad Mountain.
2. Monitoring of a tailings impoundment or leach pad adjacent to the processing site is likely to require three to four monitoring wells along the Golden Queen property boundaries.
3. Logs of existing wells in the project area are generally not available due to California Division of Water Resources restrictions, and due to the difficulty of getting a well log request from the current well owners.
4. The wells in Section 36 (northwest of Soledad Mountain) that were potential sources for water were destroyed during earlier subdivision development.
5. Wells in the area are reported to have measurable concentrations of arsenic, and one well on the south side of Standard Hill is reported to have measurable concentrations of cyanide.
6. Additional information about the geohydrology of the site, water supply, and waste disposal site monitoring will require installation and sampling of new wells.

7.0 REFERENCES

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May 12, 1997

Richard W. Graeme
Golden Queen Mining Company, Inc.
P. O. Box 820
Mojave, CA 93502-0820

Dear Mr. Graeme:

The Antelope Valley-East Kern Water Agency is a wholesale supplier of imported State Water Project water for the Antelope Valley area. The Agency operates (4) nine million gallon reservoirs containing potable treated water for Municipal and Industrial uses. The reservoirs are in the Mojave area southwest of the intersection of Silver Queen Road and Freeway 14. The Golden Queen Mining Company, Inc., located west of AVEK's reservoir site on the north side of Soledad Mountain, is within Agency boundaries. The Agency currently supplies water to Billiton Corporation for their mining operation on Standard Hill to the north.

Subject to proper application and payment of appropriate fees, AVEK would provide water for use by the Golden Queen Mining Company per established terms and conditions. The cost of conveyance facilities from AVEK's reservoir site to the point of use would be Golden Queen Mining Company's responsibility.

Please call if there are further questions or comments.

Sincerely,

Russell E. Fuller
Assistant General Manager



METEOROLOGICAL DATA SUMMARY
APRIL - JUNE 1990
SOLEDAD MOUNTAIN PROJECT

Prepared for
Noranda Mining Corporation
Lakewood, CO

Prepared by
Jeffrey N. Herring
Air Sciences Inc.
Lakewood, CO

Project No. 58-07
August 1990



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1.0 INTRODUCTION

This report summarizes 3 months of meteorological data collected near Soledad Mountain in the Mojave Desert of Kern County, California for Noranda Mining Corporation near a proposed open-pit mining project known as Soledad Mountain Project. Data for this report was collected from April 1, through June 30, 1990. This report summarizes the third quarter of the monitoring program which began on September 29, 1989. Monitoring was performed in accordance with "Sampling Protocol, Golden Queen Mine Project, Mojave, California," (Air Sciences Inc., October, 1989). The purpose of the monitoring was to collect dispersion meteorological data to be used in dispersion modeling and to collect climatological values.

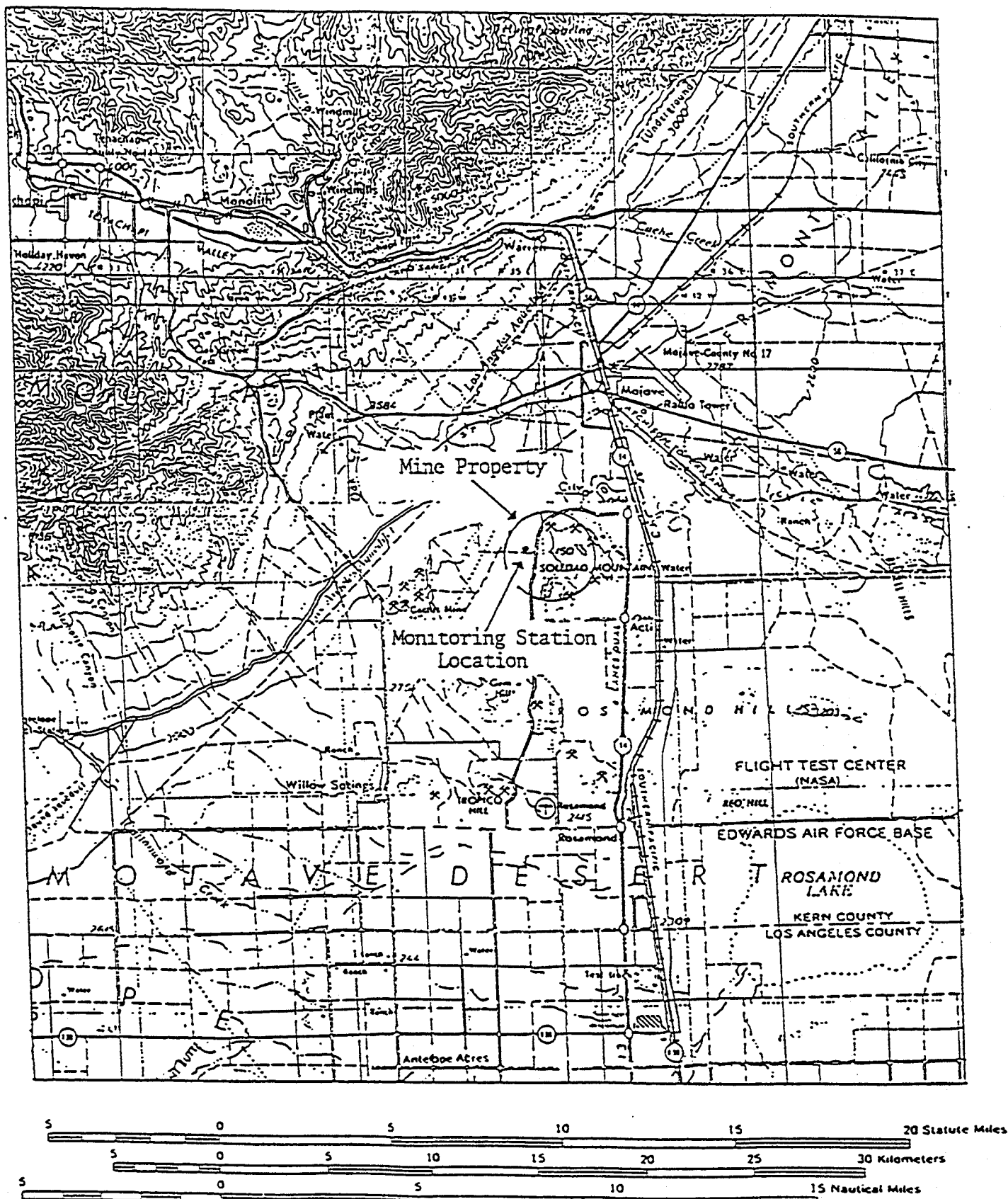
1.1 Location

The Soledad Mountain monitoring station is located on the plains west of Soledad Mountain in the Mojave Desert of southeastern Kern County, California. The site is approximately 12 miles northwest of Rosamond Lake and 5 miles south southwest of the town of Mojave. The mine pit and waste dumps will be located on the western side of Soledad Mountain, just east of the Mojave-Tropico Road. The monitoring station will be located approximately one-quarter mile west of Mojave-Tropico Road and west of the proposed pits and tailings dumps. The station will be located on the desert plain at a lower elevation than the proposed pits and dumps in an area where the meteorological data should define the wind patterns that will carry pollutants toward residential areas. The station will be at an approximate elevation of 2,850 feet MSL at UTM coordinates 3,871 km north and 389 km east (the southwest quarter of Section 1, T 10 N, R 13 W). Vegetation is sparse in this part of the Mojave Desert Basin and consists of sagebrush and widely scattered Joshua trees. The monitoring location is shown on Figure 1.

1.2 Program Description

The parameters of wind speed, wind direction, direction deviation (sigma theta) and temperature are measured and recorded at the single monitoring location. The wind parameters

FIGURE 1
GENERAL PROJECT LOCATION



CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

were measured by sensors mounted atop a 10-meter meteorological tower. Temperature was measured by a sensor located in an aspirated shield at the 2-meter level on the tower.

The meteorological data are sampled every 10 seconds by a digital Data Acquisition System (DAS) and processed and stored in 15-minute average format and as 8-hour wind speed maximum and frequency distribution data. The DAS digitally stores sine and cosine of wind direction, wind speed, and temperature on a time-averaged basis. The 15-minute and 8-hour data are regularly transferred by mail to Air Sciences Inc. (Air Sciences) for processing and archiving. Environmental Protection Agency (EPA) methods are used to process the 15-minute data into hourly averages of wind speed, wind direction, wind direction deviation (sigma theta), and temperature as suggested in "On-Site Meteorological Program Guidance for Regulatory Modeling Applications," (EPA-450/4-87-013, Sections 6.0-6.4). Processing of the 8-hour data is performed by the DAS prior to the recording of the data onto the solid-state memory module.

Calibrations of the monitoring equipment are performed in accordance with the sampling protocol. Equipment calibration and audit procedures, as well as procedures used for data quality assurance, are based on EPA guideline documentation and are fully described in the monitoring plan. Calibrations were performed during the second quarter of 1990 on May 15, 1990 and records of these calibrations are presented in Appendix A.

1.3 Data Recovery

Data recovery rates for all parameters during this quarter are presented in Table 1. Recovery was 81 percent for all meteorological parameters except for temperature which had a recovery rate of 100 percent. Data recovery rates for this quarter of data collection were affected by an act of vandalism that occurred on April 28, 1990 resulting in about 17 days (409 hours) of invalid wind speed, wind direction, and wind direction deviation data. Temperature data was unaffected. The monitoring station was repaired and wind parameter data collection resumed on May 15, 1990. The EPA recommended average rate of recovery for meteorological sampling, stated as an annual average, is 90 percent. For the 9 months of monitoring since station installation overall data recovery is 94 percent for all parameters except temperature which is 100 percent.

TABLE 1
DATA RECOVERY RATES
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
APRIL - JUNE 1990

<u>Parameter</u>	<u>Quarterly</u> <u>(%)</u>	<u>Overall</u> <u>(%)</u>
Wind Speed	81	94
Wind Direction	81	94
Sigma Theta	81	94
Temperature	100	100

2.0 METEOROLOGICAL DATA SUMMARY

The meteorological parameters were sampled every 10 seconds and digitally processed into 15-minute averages. The 15-minute averages were transmitted to Air Sciences for quality assurance checks and to be used as input for the calculation of 1-hour averages. All summary data presented in this section was produced by the processing of hourly averaged data into tables of summary statistics and AIRS format tables. The meteorological values of wind speed, wind direction, and temperature, collected during the quarter are presented as hourly averages in AIRS format by month for each parameter in Appendix B.

2.1 Winds

The wind frequency distribution by direction and speed for all atmospheric stability classes shown as Table 2 and Figure 2 (wind rose diagram) shows that the highest frequency of winds was from the northwest accounting for over 41 percent of the total winds. The highest wind speeds were also from the northwest at an average of 17.6 knots (20.2 mph). These northwesterly winds are much higher in speed than the speeds of the other directions. The overall mean wind speed for the quarter was a moderate 13.1 knots (15.1 mph). There were no calm (less than 1 knot) winds recorded. The frequency distributions by direction and speed for each stability class, A through F, are included in Appendix C.

Appendix D contains one table for each month of data collection and displays daily wind speed frequency distributions (histograms). Each table contains the average daily percentages of winds in each wind speed category for each day of the month with a maximum wind gust for the day and a record of the time period in which the maximum wind gust occurred. Time period 1 is defined as the hours of midnight to 8 a.m., period 2 is the hours of 8 a.m. to 4 p.m., and period 3 equals the hours of 4 p.m. to midnight. Frequency distributions were recorded for each 8-hour time period from 10-second wind speed data. These 8-hour histograms were processed by Air Sciences into daily average histograms. The maximum wind gust for the quarter occurred on April 23, 1990 during time period 3 and was 62.7 mph. There were two days with high percentages of average wind speeds greater than or equal to 31 mph; April 24, 1990 with nearly 46 percent and June 6, 1990 with nearly 39 percent.

Table 3 shows the frequency distribution of direction by atmospheric stability categories A through F. Categories A through C (unstable winds) occur in the daytime and categories E and F

(stable winds) occur at night. Category D (neutral stability) winds are transitional between daytime and nighttime conditions. Stability class was calculated by the method of Irwin (1980) which uses wind speed, standard deviation of wind direction, and local sunrise and sunset times for determining daytime and nighttime periods. A nighttime correction is applied to the stability class determination. The assumed terrain mixing height was 15 centimeters. Table 3 shows that the daytime winds blew predominately out of the south southwest to southwest with a secondary peak out of the northwest. The transitional class D winds represented over 71 percent of the total winds recorded at the site and the majority, 40 percent, of these winds were out of one direction, northwest. Table 3 also shows that the nighttime winds had a peak out of the south to south southwest.

TABLE 2
FREQUENCY OF WINDS BY DIRECTION AND SPEED
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
APRIL - JUNE 1990

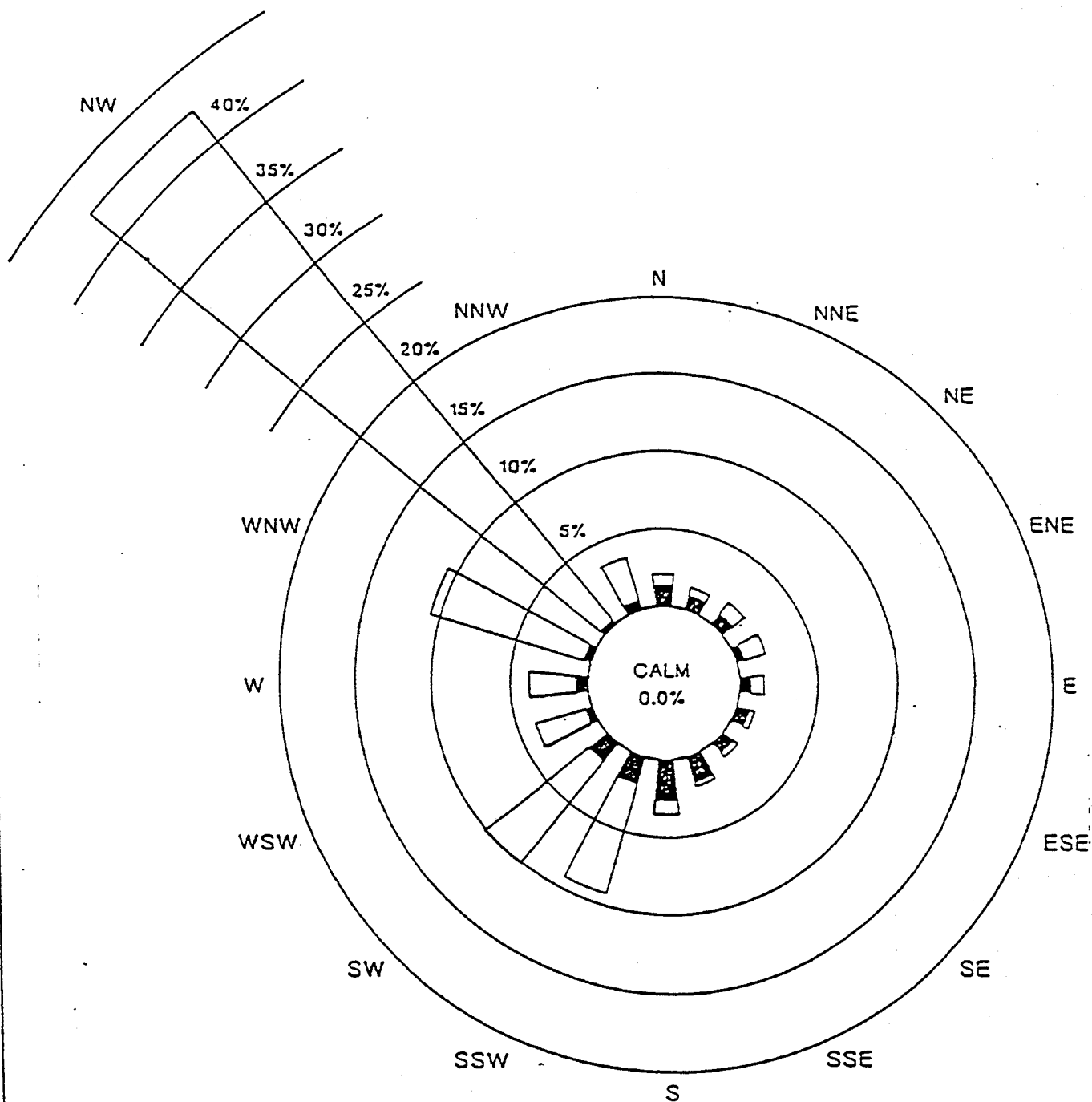
Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.2	1.2	0.5	0.2	0.0	0.0	2.1	5.8
NNE	0.2	0.8	0.5	0.1	0.0	0.0	1.5	5.1
NE	0.2	0.7	0.8	0.0	0.0	0.0	1.8	5.4
ENE	0.3	0.2	1.2	0.2	0.0	0.0	1.9	7.1
E	0.4	0.3	0.5	0.2	0.0	0.0	1.5	6.0
ESE	0.2	0.6	0.3	0.1	0.0	0.0	1.1	5.3
SE	0.1	0.7	0.2	0.0	0.0	0.0	1.1	4.9
SSE	0.2	1.5	0.2	0.1	0.0	0.0	1.9	4.7
S	0.3	2.3	0.7	0.2	0.0	0.0	3.5	5.2
SSW	0.3	1.5	2.8	3.0	1.4	0.3	9.2	10.9
SW	0.1	1.4	2.5	4.6	1.1	0.3	10.1	11.4
WSW	0.0	0.6	1.9	1.1	0.2	0.0	3.8	9.3
W	0.1	0.8	1.6	1.1	0.2	0.0	3.8	9.0
WNW	0.0	0.5	1.9	5.0	2.4	0.9	10.6	13.9
NW	0.1	0.3	2.5	12.8	16.5	10.3	42.5	17.6
NNW	0.2	0.5	1.2	1.3	0.2	0.2	3.5	10.4
All	2.9	14.0	19.3	29.9	21.9	12.0	100.0	13.1

Calm (less than one knot) = 0.0%
Period mean wind speed = 13.1 knots

TABLE 3
FREQUENCY OF WINDS BY DIRECTION AND STABILITY
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
APRIL - JUNE 1990

Direction	A	B	C	D	E	F	All
N	0.4	0.1	0.1	0.5	0.2	0.8	2.1
NNE	0.2	0.2	0.1	0.3	0.2	0.5	1.5
NE	0.6	0.6	0.2	0.1	0.0	0.3	1.8
ENE	0.3	0.5	0.8	0.1	0.0	0.2	1.9
E	0.3	0.4	0.2	0.2	0.0	0.4	1.5
ESE	0.6	0.2	0.1	0.1	0.1	0.2	1.1
SE	0.7	0.3	0.0	0.0	0.0	0.1	1.1
SSE	0.5	0.1	0.1	0.3	0.2	0.7	1.9
S	0.5	0.5	0.3	0.4	0.5	1.5	3.5
SSW	0.2	0.6	1.2	5.9	0.2	1.1	9.2
SW	0.7	0.4	0.8	7.3	0.4	0.5	10.1
WSW	0.3	0.2	0.4	2.3	0.3	0.2	3.8
W	0.3	0.1	0.5	2.2	0.2	0.6	3.8
WNW	0.2	0.1	0.4	9.5	0.2	0.2	10.6
NW	0.1	0.3	1.5	40.3	0.1	0.2	42.5
NNW	0.1	0.3	0.6	2.2	0.0	0.4	3.6
All	6.0	4.7	7.2	71.6	2.6	7.9	100.0

Calm (less than one knot) = 0.0%



LEGEND

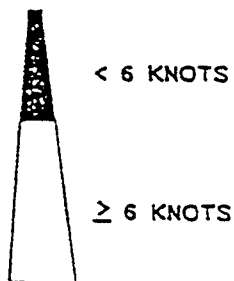


FIGURE 2
WIND FREQUENCY DISTRIBUTION
 SOLEDAD MOUNTAIN PROJECT
 MOJAVE, CALIFORNIA
 APRIL - JUNE 1990

AIR SCIENCES INC.
 LAKEWOOD, COLORADO

2.2 Temperature

Temperature data summaries are presented in Table 4. Average temperature for the data collection period was 19.9 °C (67.8 °F). The coldest month of the period was April and the warmest was June. The minimum temperature recorded was 6.9 °C (44.4 °F) and the maximum was 37.9 °C (100.2 °F).

TABLE 4
MONTHLY TEMPERATURE MEANS AND EXTREMES
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
APRIL - JUNE 1990
(°C)

<u>Month</u>	<u>Average Daily Maximum</u>	<u>Average Daily Minimum</u>	<u>Daily Average</u>	<u>Monthly Maximum</u>	<u>Monthly Minimum</u>
APR	22.6	11.3	16.8	30.8	6.9
MAY	24.6	11.8	18.4	33.5	7.0
JUN	31.5	17.7	24.5	37.9	7.7
QTR	26.2	13.6	19.9	37.9	6.9

APPENDIX A
Calibration Records

WIND SPEED CALIBRATION
CAMPBELL SCIENTIFIC LOGGER

Sensor Model No: 014 Client: Golden Queen Mining
 Sensor Serial No: _____ Job No: 58-7-1
 Sensor Height: 10 m Site: Soledad
 Logger Ser. No.: 5392 Date: 5-15-90
 Name: Jim King Time: 13:00

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	<u>New</u>	_____
Cable	<u>New</u>	_____
Cups	<u>New</u>	_____

II. SYSTEM LINEARITY CHECK

Input Frequency (Hz)	Target (mph)	21X Reading (mph)
1. <u>0</u>	<u>1.0</u>	<u>1.0</u>
2. <u>3.01</u>	<u>6.4</u>	<u>6.4</u>
3. <u>4.63</u>	<u>9.3</u>	<u>9.3</u>
4. <u>7.37</u>	<u>14.2</u>	<u>14.2</u>
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____

$$\text{Target (mph)} = (\text{Hz} \times 1.789) + 1.0$$

$$\text{Target (m/s)} = (\text{Hz} \times 0.798) + 0.447$$

Comments: _____

Signature Jim King
 AIR SCIENCES INC. 2/87

WIND DIRECTION CALIBRATION CAMPBELL SCIENTIFIC LOGGER

Sensor Model No: 024 Client: Golden Queen Mining
 Sensor Serial No: _____ Job No: 58-7-1
 Sensor Height: 10 m Site: Selodad
 Logger Ser. No.: 5392 Date: 5-15-90
 Time: 12:15 Name: Jim King

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	<u>New</u>	_____
Cable	<u>New</u>	_____
Vane	<u>New</u>	_____

II. SYSTEM LINEARITY CHECK

	Orientation	Target (degrees)	21X Reading (degrees)
1.	Vane	<u>58.0</u>	<u>58.0</u>
	Tail	<u>238.0</u>	<u>239.6</u>
2.	Vane	<u>308.0</u>	<u>309.0</u>
	Tail	<u>128.0</u>	<u>127.4</u>
3.	Vane	<u>282.5</u>	<u>283.8</u>
	Tail	_____	_____
4.	Vane	<u>45.5</u>	<u>44.8</u>
	Tail	_____	_____
5.	Vane	_____	_____
	Tail	_____	_____
6.	Vane	_____	_____
	Tail	_____	_____

Comments: Declination 15.5 Deg East
Sensor Slope = 0.71878
Set Screw = 179.8

Signature Jim King

TEMPERATURE CALIBRATION
CAMPBELL SCIENTIFIC CR10 LOGGER

Sensor Model No :	<u>107</u>	Client :	<u>Golden Quena Mining</u>
Sensor Serial No :	<u>N/A</u>	Job No :	<u>58-7-1</u>
Sensor Height :	<u>2m</u>	Site :	<u>Solobdad.</u>
Logger Ser. No. :	<u>5392</u>	Date :	<u>5-15-90</u>
Name :	<u>Jim King</u>	Time :	<u>11:00 - 13:00</u>

I. SYSTEM INSPECTION

	PASS	FAIL
Radiation Shield	✓	
Cable	New	

II. SYSTEM PSYCHROMETER CHECK

Psychrometer ()		CR10 Reading
<u>Measured</u>	<u>Corrected</u>	<u>(degrees)</u>
1. <u>16.9</u>	<u> </u>	<u>16.9</u>
2. <u>17.5</u>	<u> </u>	<u>17.4</u>
3. <u>19.3</u>	<u> </u>	<u>19.3</u>
4. <u>20.8</u>	<u> </u>	<u>20.8</u>
5. <u>21.4</u>	<u> </u>	<u>21.3</u>
6. <u>22.6</u>	<u> </u>	<u>22.6</u>
7. <u>23.1</u>	<u> </u>	<u>23.1</u>
8. <u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>
Average <u> </u>		<u> </u>

Comments: _____

Signature

APPENDIX B
AIRS Tables

HOURLY AVERAGED WIND SPEED
 APRIL 1990
 SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
 UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	92	94	93	91	93	80	53	67	41	25	22	33	27	37	32	38	82	87	69	45	35	20	13	46	55
2	54	58	29	14	27	31	26	35	31	31	35	37	36	30	32	35	36	34	31	21	21	17	23	17	31
3	7	8	36	35	39	26	45	49	46	49	62	71	72	62	49	52	51	42	44	50	41	34	27	17	42
4	24	17	25	9	11	14	14	15	25	23	29	51	22	32	29	25	17	25	37	20	15	20	21	20	23
5	18	32	58	52	39	33	17	37	44	30	26	44	51	68	72	84	86	76	64	67	62	47	47	45	50
6	35	21	28	31	24	44	60	58	45	35	34	32	27	41	64	80	69	57	20	40	38	38	46	26	41
7	17	60	61	59	32	34	23	22	44	68	80	89	82	90	75	79	51	69	59	63	59	40	31	22	55
8	22	24	28	21	30	46	45	106	68	74	105	111	122	120	118	120	158	158	140	68	67	107	94	93	85
9	85	86	85	77	52	37	15	16	20	25	34	33	31	25	29	27	20	29	42	36	21	10	14	12	36
10	11	11	13	16	9	8	7	17	16	25	28	28	29	27	23	28	25	53	57	59	72	66	69	76	32
11	79	85	90	82	76	76	93	84	77	79	83	86	99	110	121	127	117	126	128	115	116	118	117	112	100
12	105	108	103	100	91	79	59	36	17	24	31	34	30	23	27	29	81	89	93	86	56	88	85	82	65
13	76	44	33	37	24	25	14	12	12	19	38	37	28	27	39	35	55	67	42	42	50	47	26	32	36
14	21	20	13	18	18	17	8	11	25	33	35	30	34	52	66	80	86	74	64	62	34	40	50	52	39
15	42	32	51	39	33	30	44	48	53	59	77	73	71	87	77	93	93	75	49	58	46	59	57	56	58
16	72	63	69	84	68	72	65	65	77	96	79	84	84	79	83	79	74	76	65	54	60	36	30	33	69
17	41	46	50	26	22	28	54	80	88	89	93	88	86	96	98	94	99	82	66	35	50	44	57	54	65
18	54	62	76	79	80	79	72	86	96	84	65	44	39	39	50	84	90	97	87	80	69	60	50	60	70
19	40	22	14	27	46	51	37	25	19	27	30	33	38	54	71	65	58	58	65	67	68	70	70	72	47
20	74	74	94	91	73	84	83	80	65	65	62	52	50	66	89	93	91	83	72	61	46	33	46	47	70
21	57	57	56	59	55	51	49	48	28	27	38	37	43	60	64	59	61	79	72	67	60	59	36	52	53
22	66	67	65	70	53	53	69	91	106	112	105	112	111	104	99	111	120	110	103	89	74	75	89	59	88
23	66	72	102	39	39	51	59	62	52	68	58	60	61	78	86	62	67	89	81	94	68	126	197	112	77
24	34	42	74	119	125	52	59	122	143	156	152	163	158	160	170	164	172	166	158	140	131	126	118	105	125
25	102	91	84	77	74	73	53	28	33	35	24	28	42	53	58	94	112	111	114	114	113	135	127	135	80
26	141	55	140	79	82	116	112	112	105	98	70	49	67	87	109	114	128	118	85	84	76	96	123	122	99
27	112	85	73	75	42	40	29	34	19	24	30	23	24	30	46	80	88	83	53	60	27	48	36	25	49
28	35	80	89	97	72	73	57	63	79	108	**	**	**	**	**	**	**	**	**	**	**	**	**	**	75
29	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
30	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
AVERAGE	57	54	62	57	51	50	47	54	53	57	56	58	58	64	69	75	81	82	73	66	58	61	63	59	61

AIR SCIENCES INC.
 SAROAD(V6.0) 08/01/90

* Indicates calibration of sensors
 ** Indicates Invalid data

HOURLY AVERAGED WIND DIRECTION
 APRIL 1990
 SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
 UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	316	317	316	315	319	323	336	321	341	41	82	75	119	124	69	25	321	317	316	243	215	196	110	316
2	310	314	360	344	14	26	7	23	30	52	53	50	98	107	87	87	74	104	115	347	48	318	341	356
3	10	3	14	8	353	339	27	45	68	75	94	102	91	94	89	81	105	211	210	236	209	175	164	182
4	147	144	161	179	193	213	50	174	27	171	257	191	113	98	135	164	121	219	225	169	163	156	162	161
5	180	283	317	319	338	225	178	326	335	296	280	200	200	191	270	311	311	308	301	304	300	295	260	282
6	283	179	179	183	175	298	320	340	322	275	214	221	228	213	212	215	291	312	176	225	240	266	279	334
7	219	310	298	298	240	282	198	191	197	202	211	210	204	215	305	306	309	310	308	284	218	232	193	163
8	163	193	280	155	259	245	251	297	315	318	323	324	315	318	310	305	308	312	312	166	278	301	310	316
9	314	317	317	322	357	357	344	167	132	87	56	67	42	101	117	62	359	323	312	328	1	100	82	40
10	350	272	341	27	15	319	28	156	128	49	59	164	153	173	42	141	217	290	308	313	307	311	311	312
11	310	311	308	312	312	315	320	316	320	316	315	314	316	314	312	310	306	311	310	307	306	313	316	313
12	314	315	318	315	314	314	320	345	34	66	75	78	137	183	138	271	315	314	301	302	289	310	309	309
13	306	277	213	322	338	337	65	157	126	88	65	63	31	180	178	187	215	225	271	302	298	295	271	253
14	164	195	164	172	157	189	269	103	172	202	202	199	167	197	219	212	223	226	226	234	212	215	231	235
15	242	253	248	205	169	210	224	203	186	203	208	208	204	208	207	212	211	211	211	230	214	232	235	217
16	213	198	206	218	215	227	228	223	220	219	219	226	223	219	215	221	211	215	216	222	217	218	201	206
17	226	232	231	226	206	214	289	310	317	311	315	307	310	313	307	316	310	306	305	271	290	297	293	298
18	296	304	313	313	311	313	302	312	313	312	319	303	305	320	317	316	315	316	313	305	309	307	293	303
19	247	203	166	333	335	326	307	283	216	154	180	155	198	200	204	228	247	297	299	296	296	301	300	305
20	311	309	314	310	301	315	312	315	324	321	323	321	314	315	319	326	321	311	313	305	275	281	301	313
21	298	305	309	311	309	318	331	318	322	284	181	215	191	203	218	256	312	311	305	294	292	291	281	308
22	313	321	313	302	329	307	311	315	317	316	308	311	300	304	305	304	296	288	294	284	255	294	275	301
23	289	290	317	268	260	253	215	182	1	322	338	322	278	290	299	284	274	291	284	253	249	301	317	310
24	311	304	311	297	303	20	354	325	316	313	315	311	312	307	312	321	315	312	310	310	312	316	313	312
25	318	315	319	322	319	316	322	359	15	44	3	9	312	314	311	316	318	309	317	325	318	316	320	317
26	312	340	321	309	340	318	317	317	320	323	322	326	319	315	314	312	316	312	297	292	288	296	310	317
27	318	317	317	316	339	343	29	25	355	107	56	145	219	205	223	304	310	315	265	259	229	269	192	237
28	251	290	295	307	306	304	300	295	300	319	**	**	**	**	**	**	**	**	**	**	**	**	**	**
29	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
30	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**

* Indicates calibration of sensors

** Indicates Invalid data

HOURLY AVERAGED TEMPERATURE
APRIL 1990
SOLEDAD MOUNTAIN PROJECT - NOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	142	141	138	134	133	132	137	160	182	199	210	220	228	232	234	227	213	189	178	162	145	129	132	143	173
2	145	144	135	131	127	116	124	137	163	184	195	209	218	219	221	224	220	213	192	162	159	132	103	98	165
3	89	82	92	114	104	108	125	155	178	196	211	220	227	231	229	229	222	192	172	168	155	133	125	116	161
4	116	121	117	104	103	107	118	138	144	154	157	159	173	178	177	177	176	173	145	120	113	102	105	100	137
5	95	115	133	132	124	119	123	160	181	193	204	216	224	232	224	217	207	191	175	168	164	158	155	154	169
6	146	108	110	99	101	123	148	171	191	203	216	224	234	240	241	232	217	195	171	157	155	154	152	144	172
7	128	140	136	132	121	124	103	114	157	172	191	196	203	205	173	142	141	128	113	117	105	91	84	82	137
8	86	98	100	94	91	92	102	114	123	132	148	150	153	159	160	157	148	137	126	123	122	118	114	114	123
9	112	110	108	109	107	100	94	136	164	189	202	215	224	234	239	243	241	231	187	168	156	145	145	141	167
10	137	116	97	109	91	77	88	169	202	223	238	251	255	263	268	268	266	242	218	207	201	197	193	193	190
11	191	184	171	164	164	168	174	197	220	234	240	247	249	246	238	227	216	202	186	181	177	173	168	170	199
12	171	167	164	164	164	162	177	208	228	245	260	271	280	287	295	296	266	226	203	194	191	191	185	183	216
13	185	175	172	169	149	132	151	202	233	258	269	283	293	304	304	307	299	280	253	226	219	213	203	199	228
14	164	173	172	167	161	157	161	207	221	247	259	271	287	288	284	262	251	234	209	198	179	178	174	174	212
15	159	141	148	134	110	126	161	179	183	199	188	186	205	219	218	197	176	157	143	139	135	139	138	130	163
16	122	105	99	96	95	97	104	105	126	129	130	130	135	125	123	123	124	115	100	92	88	81	69	71	108
17	86	84	89	82	74	80	103	126	138	141	143	162	163	155	163	165	153	142	124	119	118	118	117	121	124
18	119	116	116	116	117	119	126	141	157	171	188	193	204	213	214	205	195	179	164	157	153	147	145	142	158
19	129	113	118	124	130	131	148	169	188	199	211	226	235	245	240	226	228	205	179	169	166	162	158	156	177
20	152	143	133	132	131	128	134	150	159	159	191	206	204	206	201	193	191	175	159	152	148	143	140	133	161
21	131	129	125	125	121	120	134	154	172	187	195	208	222	230	230	224	210	187	166	159	155	148	138	135	167
22	139	133	133	132	125	123	142	158	170	183	192	199	200	208	200	197	185	174	164	158	156	153	157	156	164
23	151	150	136	133	128	129	127	132	158	179	184	188	203	197	184	184	186	160	144	140	130	125	119	110	153
24	102	96	88	81	82	84	86	89	105	117	129	139	146	150	147	147	146	138	126	126	127	125	123	123	118
25	121	116	113	111	108	109	136	167	183	199	213	224	234	238	241	231	211	198	182	175	176	170	164	158	174
26	156	159	163	159	156	154	164	180	193	218	243	259	269	267	254	240	228	217	200	191	188	185	179	180	200
27	177	173	172	169	164	167	191	202	228	249	261	274	288	299	308	297	280	259	234	226	205	218	203	198	227
28	196	206	202	200	199	202	214	228	240	240	253	256	256	262	262	251	245	239	223	208	198	189	178	164	221
29	146	135	127	125	127	121	136	144	156	161	165	170	176	185	189	190	183	171	150	139	132	121	115	112	149
30	103	91	80	82	80	75	90	102	95	82	73	104	133	151	166	171	162	153	138	128	123	121	120	120	114
AVERAGE	137	132	130	127	123	123	134	156	175	188	199	209	217	222	221	215	206	190	171	161	155	149	143	141	168

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED WIND SPEED
MAY 1990
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
2	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
3	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
4	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
5	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
6	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
7	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
8	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
9	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
10	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
11	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
12	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
13	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
14	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
15	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
16	75	86	71	42	15	29	22	25	35	49	47	97	104	116	117	108	105	105	101	54	30	66	83	70	89
17	16	31	38	18	14	14	23	42	63	74	80	66	75	25	28	36	63	66	59	42	34	29	23	14	41
18	48	47	57	68	76	50	71	74	72	39	36	58	79	78	84	73	71	83	76	67	74	76	84	47	57
19	24	28	62	62	28	38	93	105	93	97	111	105	104	75	74	96	59	83	71	68	63	71	47	20	63
20	101	114	70	64	66	76	92	105	101	105	98	80	80	100	90	101	84	80	71	66	88	110	64	66	78
21	70	80	102	101	87	93	88	71	34	21	28	35	74	63	63	73	70	56	48	58	62	47	35	45	63
22	50	41	25	23	20	27	18	28	49	50	69	58	63	64	51	46	49	61	76	57	28	26	14	17	42
23	20	21	16	17	19	45	38	38	52	67	72	93	107	118	129	129	113	80	89	89	90	109	115	88	73
24	86	81	108	105	90	75	120	109	104	113	102	95	103	111	89	96	80	68	54	67	70	70	67	64	75
25	89	89	96	93	90	84	92	105	87	49	43	42	45	77	89	96	80	84	72	42	38	30	32	46	58
26	69	62	37	26	34	20	61	46	29	61	72	81	91	92	92	89	90	89	74	67	60	79	56	57	69
27	34	63	76	93	74	35	42	44	49	62	63	69	87	96	93	97	96	89	76	63	107	108	92	96	78
28	50	42	51	50	44	27	48	64	65	93	76	88	102	114	111	110	107	99	109	99	89	90	95	69	97
29	98	99	74	78	97	93	103	106	107	108	107	95	82	104	109	105	106	99	83	70	77	74	63	53	84
30	89	84	98	58	49	57	66	90	103	105	109	108	103	103	105	99	93	83	78	92	103	61	93	93	83
31	24	30	41	49	76	51	45	67	78	98	100	108	112	124	108	99	99	117	115	92	103	61	93	93	83
AVERAGE	59	62	64	59	55	51	64	70	70	74	76	78	85	92	91	93	89	86	81	71	70	73	67	60	73

* Indicates calibration of sensors
** Indicates invalid data

HOURLY AVERAGED WIND DIRECTION
MAY 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
2	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
3	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
4	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
5	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
6	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
7	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
8	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
9	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
10	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
11	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
12	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
13	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
14	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
15	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
16	301	321	321	356	94	7	30	33	47	65	77	319	321	319	317	290	274	255	228	275	180	336	300	304
17	174	194	218	208	211	187	176	208	214	208	204	81	132	141	220	213	234	240	239	247	243	236	183	18
18	306	333	345	312	303	303	308	327	310	289	186	203	213	326	317	314	281	301	296	277	288	298	307	270
19	163	166	299	317	317	318	323	324	316	311	317	319	313	309	311	316	313	301	298	284	304	314	278	308
20	310	321	339	318	335	351	341	328	318	319	319	321	318	315	312	315	313	316	312	312	307	325	317	315
21	295	308	312	298	298	299	309	315	2	94	265	212	215	247	304	320	318	314	315	318	312	303	304	323
22	315	321	275	190	187	9	216	219	278	224	215	259	234	253	278	306	292	228	228	236	204	177	145	173
23	156	169	167	192	224	300	269	205	214	213	213	204	213	211	212	212	204	290	315	309	305	313	314	316
24	313	317	330	325	320	331	329	336	326	309	310	312	314	318	318	317	314	315	315	311	299	308	317	316
25	316	315	319	317	311	300	304	308	310	260	248	227	215	329	327	315	311	304	294	294	298	302	293	296
26	317	320	301	186	286	298	286	258	203	302	317	325	321	318	320	314	311	302	292	248	201	225	235	236
27	258	305	315	309	292	186	205	202	216	211	303	258	215	211	210	212	213	216	212	215	218	220	220	213
28	216	211	207	208	212	210	215	207	225	314	311	324	320	319	315	314	310	285	285	288	300	306	312	308
29	313	323	322	315	306	301	309	310	320	323	322	320	313	319	319	315	311	314	311	298	289	296	299	293
30	295	313	326	325	272	299	303	315	316	317	323	316	317	320	316	313	311	307	307	304	305	312	308	249
31	178	199	315	294	307	297	278	295	304	315	316	312	315	313	300	288	291	306	302	299	296	299	316	308

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
 MAY 1990
 SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
 UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	118	112	102	83	71	70	123	151	169	179	193	200	207	212	209	215	210	196	176	165	159	156	155	155	158
2	154	152	148	146	145	151	177	195	211	222	233	238	251	258	253	249	239	228	211	193	192	195	192	188	201
3	183	178	176	159	133	140	176	214	236	248	258	265	271	279	278	285	277	262	243	229	225	218	216	208	223
4	186	186	154	143	142	147	211	236	252	261	275	286	297	304	307	306	297	283	262	248	241	234	231	235	239
5	234	228	226	214	200	179	212	234	267	276	289	297	308	317	319	322	320	305	282	267	259	254	247	247	263
6	240	237	236	232	225	227	249	273	295	307	316	323	330	335	332	318	305	291	274	258	240	249	239	229	273
7	225	213	202	207	182	160	204	238	267	280	294	302	307	307	301	298	283	252	242	208	188	183	173	166	237
8	161	156	149	138	115	112	165	197	229	248	262	276	279	269	271	279	268	230	192	173	165	157	150	138	199
9	133	131	132	132	102	81	158	190	207	226	241	248	252	249	243	238	228	208	174	152	139	129	142	132	178
10	110	90	79	80	75	78	92	110	122	138	153	154	162	170	171	171	157	148	128	123	127	129	123	120	125
11	118	115	112	112	113	116	127	143	162	181	196	207	212	219	223	219	209	198	180	170	161	154	154	151	165
12	151	148	144	141	142	143	160	187	207	218	232	249	257	264	257	246	229	213	195	183	178	178	176	176	195
13	170	166	154	153	163	167	185	201	223	247	260	270	279	283	283	270	250	228	205	193	171	144	136	131	206
14	126	116	114	107	94	98	141	180	197	222	235	241	245	245	240	233	221	206	187	176	166	156	155	150	177
15	130	123	127	125	117	131	150	165	**	**	**	228	230	227	222	216	208	194	178	164	155	154	152	152	169
16	154	152	149	138	129	107	146	176	200	227	245	250	255	266	272	272	261	246	235	221	212	193	180	160	202
17	147	119	129	108	104	103	160	186	208	223	233	256	260	261	258	249	238	220	201	182	169	157	157	150	187
18	148	137	126	140	137	141	163	187	205	224	235	249	253	253	249	233	225	201	183	167	160	152	142	123	185
19	106	100	107	109	106	108	114	120	129	143	163	169	174	177	178	171	167	159	145	135	135	132	132	131	138
20	130	124	108	112	114	117	134	152	165	178	193	214	226	227	220	209	206	195	180	174	167	162	159	157	168
21	156	153	147	145	148	158	178	199	218	242	259	273	270	268	269	261	244	236	217	199	195	189	180	169	207
22	167	161	151	134	122	145	157	183	218	235	255	273	281	281	281	274	271	251	217	195	181	169	150	137	204
23	136	129	119	132	125	154	176	183	208	230	244	252	253	251	241	227	213	187	157	141	127	117	105	100	175
24	99	96	94	95	88	94	104	118	132	153	177	188	192	194	193	186	181	170	153	139	134	128	122	120	140
25	119	119	119	117	117	126	141	157	180	210	230	248	260	263	257	246	234	219	198	181	173	171	167	163	184
26	160	166	150	136	126	117	145	167	189	211	224	232	237	235	236	231	220	205	188	173	158	147	145	153	181
27	146	145	143	145	143	122	134	162	178	194	191	201	178	186	182	172	152	136	125	125	114	109	99	96	149
28	102	101	95	96	93	91	117	118	141	130	136	161	167	166	171	166	152	140	130	125	124	123	121	117	128
29	115	113	107	110	111	118	131	145	155	163	171	183	200	199	198	196	186	175	160	149	146	148	148	149	153
30	143	140	139	135	136	137	150	165	178	191	200	208	215	219	221	220	212	196	177	162	150	136	130	120	170
31	107	105	108	110	107	105	118	131	137	142	157	161	168	166	172	170	165	156	144	134	128	121	119	116	135
AVERAGE	148	142	137	133	127	127	155	176	196	212	225	236	241	244	242	237	227	211	192	178	169	163	158	153	184

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED WIND SPEED
JUNE 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	132	126	91	94	98	93	99	97	88	45	30	27	25	32	46	78	89	89	94	102	97	100	98	92	82
2	58	77	81	72	23	38	51	25	32	23	23	19	18	22	22	28	52	63	63	67	68	72	81	76	48
3	61	13	21	20	15	29	28	32	24	30	35	37	45	50	81	104	112	120	125	117	122	109	122	128	66
4	132	129	119	78	61	41	33	68	47	50	51	73	98	107	108	110	111	109	115	114	116	116	117	116	92
5	118	118	109	110	105	77	97	90	110	111	108	102	104	110	119	122	121	110	107	107	104	105	111	103	107
6	97	116	101	101	118	112	136	147	151	134	119	131	130	119	123	134	142	152	157	155	148	140	136	135	131
7	130	141	126	130	128	112	88	63	24	25	31	31	30	28	24	52	78	89	90	114	118	121	119	105	83
8	91	87	84	44	62	31	42	34	18	29	29	34	39	44	51	49	72	77	79	97	97	67	34	22	55
9	28	28	24	39	46	72	48	52	48	44	86	99	92	79	69	76	63	71	80	54	72	65	67	60	61
10	52	23	34	32	36	48	56	65	81	82	78	93	93	100	103	101	97	90	62	52	33	25	42	84	65
11	63	66	54	38	17	24	67	81	88	88	89	89	88	101	101	110	112	114	77	75	99	77	45	47	75
12	34	70	84	71	106	91	78	96	103	102	104	114	114	118	130	129	105	96	100	72	89	104	88	66	94
13	56	45	25	11	16	30	41	66	86	103	114	120	127	121	115	122	124	103	90	80	71	52	50	42	75
14	18	27	21	31	48	45	63	72	76	80	79	84	88	89	81	84	92	84	77	52	51	33	30	47	61
15	33	30	59	31	46	45	38	82	99	110	110	121	114	120	122	116	113	117	103	89	108	105	105	102	88
16	97	108	107	93	90	94	82	60	35	31	34	36	36	25	33	29	27	61	71	67	73	81	79	55	63
17	61	61	51	23	29	19	20	26	26	34	46	66	74	84	75	87	92	85	72	51	31	25	36	69	52
18	55	38	55	24	24	29	14	19	29	44	30	38	29	70	93	88	104	104	85	78	84	89	94	81	58
19	100	99	80	46	17	15	15	37	46	60	51	47	58	55	51	47	42	34	56	72	70	51	18	13	49
20	11	13	15	27	10	11	10	32	43	47	43	39	33	38	23	24	24	52	59	62	74	68	66	55	37
21	22	15	20	25	26	15	20	25	28	24	25	35	39	67	73	80	82	76	55	35	59	49	21	20	39
22	19	57	42	54	55	44	47	51	42	42	42	57	73	93	97	94	91	82	63	46	40	41	26	24	55
23	18	17	19	16	12	24	34	59	56	59	62	75	76	81	84	78	72	79	73	56	40	40	25	13	49
24	16	11	20	28	12	16	42	58	66	68	63	63	72	74	71	63	83	85	77	64	69	67	64	61	55
25	65	84	86	78	67	76	81	66	52	33	26	28	52	77	90	97	102	105	110	106	112	104	113	111	80
26	108	111	116	106	111	80	86	92	93	78	108	122	133	133	124	137	134	119	84	70	98	112	106	102	107
27	108	55	33	35	31	39	49	54	62	82	83	93	116	112	124	110	109	105	109	103	111	113	130	126	87
28	119	101	102	98	91	92	108	98	94	81	73	59	49	54	75	96	99	94	89	87	87	84	77	68	86
29	69	70	52	33	29	14	34	51	64	63	64	64	64	67	72	75	70	75	60	30	34	36	22	42	52
30	56	59	59	55	53	36	30	28	40	51	52	56	74	70	83	74	77	65	47	41	39	32	31	23	51
AVERAGE	68	67	63	55	53	50	55	61	62	62	63	68	73	78	82	86	90	90	84	77	80	76	72	70	70

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED WIND DIRECTION
JUNE 1990
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	325	327	258	269	310	315	310	316	314	1	124	28	145	354	315	320	321	314	307	299	307	317	316	316
2	321	316	313	323	6	345	316	44	34	37	86	124	120	239	171	147	342	314	309	307	306	309	309	
3	306	80	19	35	47	351	342	338	280	216	209	207	209	262	323	321	321	314	307	309	310	316	316	
4	313	311	308	334	345	4	322	315	313	314	318	321	321	325	321	324	318	314	316	316	319	316	314	
5	310	308	306	307	309	331	312	310	309	312	320	319	318	320	316	312	310	302	297	293	296	292	291	
6	290	291	292	305	309	311	314	316	319	306	296	311	316	308	302	300	315	318	313	315	315	315	319	
7	322	318	321	317	317	323	322	319	7	2	81	82	42	346	13	333	316	311	308	311	314	313	314	
8	307	310	307	345	318	356	309	333	126	218	211	228	208	194	205	219	303	318	314	316	307	287	199	
9	230	194	205	200	252	284	336	192	206	214	217	232	230	215	239	246	272	317	308	309	315	308	313	
10	274	256	322	302	332	332	322	326	313	313	318	316	322	319	320	317	308	300	284	256	237	232	300	
11	300	303	300	326	349	271	299	308	311	317	317	322	323	320	319	315	303	301	281	275	293	259	227	
12	279	310	314	340	317	308	305	317	319	318	324	320	320	320	317	319	316	316	313	303	314	325	321	
13	304	265	260	158	234	189	165	204	203	204	212	222	222	220	220	222	222	221	222	223	228	226	226	
14	283	201	192	208	240	228	228	225	219	210	206	205	203	207	218	211	216	215	213	214	290	235	188	
15	233	240	286	243	257	248	243	309	316	313	314	311	316	316	313	308	314	316	315	313	315	321	318	
16	322	316	316	319	318	316	315	317	333	35	56	53	121	107	113	228	186	294	309	302	306	309	302	
17	308	312	317	8	12	22	22	290	215	191	212	214	212	221	212	212	213	213	217	225	204	161	265	
18	306	297	309	317	360	351	224	197	258	307	252	241	249	314	319	321	319	316	317	324	318	316	311	
19	318	317	318	340	39	21	42	50	73	67	66	68	58	62	58	70	74	67	333	314	313	321	26	
20	83	91	68	354	60	61	78	44	50	58	63	96	131	145	123	123	231	239	292	309	307	311	313	
21	10	176	356	295	238	116	41	67	43	156	169	191	209	228	215	221	226	227	221	235	304	303	187	
22	208	304	224	280	300	287	301	304	223	209	201	218	208	205	211	207	213	218	222	233	221	211	187	
23	202	178	176	153	229	237	241	227	219	209	206	212	206	214	218	217	220	216	220	227	259	281	270	
24	188	198	186	160	201	320	237	240	220	222	212	223	212	209	203	311	318	310	306	313	314	314	314	
25	322	317	315	312	322	312	303	320	314	316	279	269	316	332	323	320	324	321	316	320	318	314	312	
26	309	310	308	304	309	300	311	316	320	309	315	320	323	321	319	325	326	324	311	294	309	314	310	
27	305	274	249	297	269	314	348	338	285	313	305	314	319	316	309	315	315	316	316	310	314	318	313	
28	318	308	308	315	313	308	319	314	316	309	311	321	327	314	323	323	314	311	306	308	309	311	310	
29	308	308	304	296	280	184	240	243	228	226	221	207	205	202	200	212	218	215	234	257	240	245	262	
30	308	307	306	306	308	308	287	232	208	216	211	224	217	210	212	212	213	220	271	283	226	202	190	

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
JUNE 1990
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	111	108	113	111	108	101	114	141	165	194	209	221	233	248	249	237	222	202	178	159	153	150	154	156	168
2	150	147	146	144	140	153	175	199	213	233	255	270	286	302	311	316	314	293	260	233	222	221	217	221	226
3	218	205	200	195	192	210	238	262	289	307	322	339	355	363	354	332	308	277	249	231	225	220	210	209	263
4	206	202	198	195	187	193	220	247	283	311	328	344	341	334	325	308	292	271	243	225	218	215	212	207	254
5	206	203	199	198	196	203	223	239	249	260	275	290	296	294	286	279	266	255	240	229	229	228	221	214	241
6	203	194	191	187	183	190	207	221	230	243	257	264	268	271	270	261	256	248	235	226	223	221	216	207	228
7	201	194	188	181	179	185	204	238	267	285	303	314	328	336	349	344	314	278	251	226	217	213	211	208	251
8	207	210	206	201	201	211	237	267	285	309	326	343	354	359	364	363	343	316	284	264	261	262	239	215	276
9	232	226	218	212	208	237	257	252	260	277	258	247	249	239	239	240	242	226	210	210	208	205	201	202	231
10	202	191	192	189	193	201	214	215	221	244	258	270	278	278	276	271	263	252	239	227	209	186	203	205	228
11	197	196	186	184	182	194	219	230	241	257	268	276	286	284	286	274	262	247	232	220	206	208	205	200	231
12	203	201	193	183	184	197	209	218	230	244	253	262	269	275	270	263	261	251	228	214	213	209	205	194	226
13	195	179	160	153	118	132	172	188	193	193	201	202	200	200	201	199	185	168	147	130	121	114	108	101	165
14	95	83	77	82	93	102	121	137	153	166	179	189	195	199	206	202	194	181	161	145	146	134	120	113	145
15	101	97	110	98	104	112	132	152	167	180	194	201	212	214	211	208	202	194	184	174	171	168	166	165	163
16	161	157	154	152	151	160	178	204	223	240	252	266	275	282	287	290	290	267	233	211	200	195	193	191	217
17	188	184	179	172	170	182	210	232	243	256	271	283	286	291	289	282	268	254	234	206	190	182	195	193	227
18	185	172	181	167	160	174	185	218	241	255	266	282	295	302	293	286	273	256	238	219	209	199	191	189	227
19	191	187	184	178	172	181	216	241	259	281	294	305	325	336	343	344	343	338	302	266	255	245	234	220	260
20	219	213	219	197	169	193	252	295	310	329	346	353	358	363	368	371	370	359	327	301	289	283	279	274	293
21	263	251	255	242	243	253	293	308	320	335	356	369	375	379	375	371	364	355	335	293	285	275	238	222	306
22	228	254	230	235	235	247	275	298	300	315	330	345	353	352	348	335	325	307	277	245	228	221	208	201	279
23	185	177	169	162	148	198	245	270	287	302	317	330	336	337	338	338	333	316	293	267	249	234	221	204	261
24	202	194	186	183	193	210	260	281	293	304	318	333	346	353	355	345	330	313	292	274	264	259	251	244	274
25	237	233	226	222	218	228	249	274	297	315	333	348	361	364	363	352	336	313	284	263	252	244	239	236	283
26	237	233	229	225	224	231	253	272	292	319	340	351	351	351	346	339	330	318	297	279	273	269	267	263	287
27	254	250	249	260	242	256	274	290	305	320	329	338	340	341	339	336	323	306	285	263	251	244	239	231	286
28	223	217	209	204	205	210	227	252	276	297	314	331	342	354	355	339	321	300	275	250	240	233	231	230	268
29	230	229	223	216	206	209	258	291	306	323	337	349	357	364	361	357	356	338	310	287	271	258	250	264	290
30	262	255	253	251	245	251	285	304	306	340	356	370	376	376	374	354	339	330	328	301	280	259	249	232	303
AVERAGE	200	195	191	186	182	193	220	241	257	274	288	300	308	311	311	305	294	278	255	235	225	218	212	207	245

* Indicates calibration of sensors

** Indicates invalid data

AIR SCIENCES INC.
SAROAD(V6.0) 08/01/90

APPENDIX C
Frequency Distributions by Direction and Speed
For Each Stability Class

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'A'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	6.6	0.0	0.0	0.0	0.0	6.6	4.7
NNE	0.0	3.8	0.0	0.0	0.0	0.0	3.8	4.8
NE	0.9	9.4	0.0	0.0	0.0	0.0	10.4	4.6
ENE	0.9	3.8	0.0	0.0	0.0	0.0	4.7	4.4
E	0.0	5.7	0.0	0.0	0.0	0.0	5.7	4.4
ESE	0.9	8.5	0.0	0.0	0.0	0.0	9.4	4.3
SE	0.9	10.4	0.0	0.0	0.0	0.0	11.3	4.4
SSE	0.9	7.5	0.0	0.0	0.0	0.0	8.5	4.4
S	0.9	6.6	0.0	0.0	0.0	0.0	7.5	4.6
SSW	0.0	3.8	0.0	0.0	0.0	0.0	3.8	5.2
SW	0.9	10.4	0.0	0.0	0.0	0.0	11.3	4.7
WSW	0.0	4.7	0.0	0.0	0.0	0.0	4.7	5.4
W	0.0	5.7	0.0	0.0	0.0	0.0	5.7	5.2
WNW	0.0	3.8	0.0	0.0	0.0	0.0	3.8	5.2
NW	0.0	1.9	0.0	0.0	0.0	0.0	1.9	5.5
NNW	0.0	0.9	0.0	0.0	0.0	0.0	0.9	5.4
All	6.6	93.4	0.0	0.0	0.0	0.0	100.0	4.7

Calm (less than one knot) = 0.0%

Period mean wind speed = 4.7 knots

Percent occurrence for 'A' stability class(es) 6.0%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'B'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	0.0	2.4	0.0	0.0	0.0	2.4	6.4
NNE	0.0	2.4	2.4	0.0	0.0	0.0	4.8	5.9
NE	0.0	0.0	11.9	0.0	0.0	0.0	11.9	6.5
ENE	0.0	0.0	10.7	0.0	0.0	0.0	10.7	6.7
E	0.0	0.0	8.3	0.0	0.0	0.0	8.3	6.6
ESE	0.0	1.2	2.4	0.0	0.0	0.0	3.6	6.4
SE	0.0	1.2	4.8	0.0	0.0	0.0	6.0	6.8
SSE	0.0	0.0	2.4	0.0	0.0	0.0	2.4	6.5
S	0.0	2.4	7.1	0.0	0.0	0.0	9.5	6.6
SSW	0.0	1.2	10.7	0.0	0.0	0.0	11.9	6.9
SW	0.0	3.6	4.8	0.0	0.0	0.0	8.3	6.2
WSW	0.0	0.0	4.8	0.0	0.0	0.0	4.8	7.0
W	0.0	0.0	2.4	0.0	0.0	0.0	2.4	7.1
WNW	0.0	0.0	1.2	0.0	0.0	0.0	1.2	7.6
NW	0.0	0.0	6.0	0.0	0.0	0.0	6.0	7.0
NNW	0.0	1.2	4.8	0.0	0.0	0.0	6.0	6.4
All	0.0	13.1	86.9	0.0	0.0	0.0	100.0	6.6

Calm (less than one knot) = 0.0%

Period mean wind speed = 6.6 knots

Percent occurrence for 'B' stability class(es) 4.7%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'C'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	0.0	0.8	0.8	0.0	0.0	1.6	9.4
NNE	0.0	0.8	0.8	0.0	0.0	0.0	1.6	5.2
NE	0.0	0.0	2.4	0.0	0.0	0.0	2.4	7.5
ENE	0.0	0.0	9.4	1.6	0.0	0.0	11.0	9.4
E	0.0	0.0	1.6	0.8	0.0	0.0	2.4	9.3
ESE	0.0	0.0	1.6	0.0	0.0	0.0	1.6	8.3
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.8	0.0	0.0	0.0	0.8	8.0
S	0.0	1.6	1.6	0.8	0.0	0.0	3.9	7.5
SSW	0.0	0.0	11.0	6.3	0.0	0.0	17.3	9.5
SW	0.0	0.0	7.1	3.9	0.0	0.0	11.0	9.6
WSW	0.0	0.0	3.1	2.4	0.0	0.0	5.5	9.7
W	0.0	0.0	4.7	1.6	0.0	0.0	6.3	9.9
WNW	0.0	0.8	2.4	2.4	0.0	0.0	5.5	8.4
NW	0.0	0.0	12.6	7.9	0.0	0.0	20.5	9.8
NNW	0.0	0.0	3.9	4.7	0.0	0.0	8.7	9.9
All	0.0	3.1	63.8	33.1	0.0	0.0	100.0	9.4

Calm (less than one knot) = 0.0%

Period mean wind speed = 9.4 knots

Percent occurrence for 'C' stability class(es) 7.2%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'D'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	0.2	0.3	0.2	0.0	0.0	0.7	8.5
NNE	0.0	0.0	0.3	0.1	0.0	0.0	0.4	7.7
NE	0.0	0.0	0.2	0.0	0.0	0.0	0.2	7.9
ENE	0.0	0.0	0.0	0.1	0.0	0.0	0.1	11.7
E	0.0	0.0	0.0	0.2	0.0	0.0	0.2	12.7
ESE	0.0	0.0	0.0	0.1	0.0	0.0	0.1	13.8
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.3	0.0	0.1	0.0	0.0	0.4	6.5
S	0.0	0.2	0.2	0.2	0.0	0.0	0.6	7.5
SSW	0.0	0.3	2.0	3.6	1.9	0.4	8.2	13.5
SW	0.0	0.1	2.1	6.1	1.5	0.5	10.2	13.2
WSW	0.0	0.2	1.5	1.3	0.3	0.0	3.2	10.9
W	0.0	0.0	1.5	1.3	0.2	0.0	3.1	10.8
WNW	0.0	0.0	2.0	6.7	3.4	1.3	13.3	14.7
NW	0.1	0.0	1.7	17.2	23.0	14.4	56.3	18.1
NNW	0.0	0.2	0.9	1.3	0.3	0.2	3.1	12.4
All	0.1	1.4	12.7	38.4	30.6	16.8	100.0	15.9

Calm (less than one knot) = 0.0%

Period mean wind speed = 15.9 knots

Percent occurrence for 'D' stability class(es) 71.6%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'E'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	4.3	4.3	0.0	0.0	0.0	8.7	6.2
NNE	2.2	2.2	2.2	0.0	0.0	0.0	6.5	5.2
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	2.2	0.0	0.0	0.0	2.2	6.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	8.7	0.0	0.0	0.0	0.0	8.7	3.9
S	0.0	13.0	4.3	0.0	0.0	0.0	17.4	5.4
SSW	0.0	6.5	2.2	0.0	0.0	0.0	8.7	5.5
SW	0.0	4.3	10.9	0.0	0.0	0.0	15.2	6.3
WSW	0.0	0.0	13.0	0.0	0.0	0.0	13.0	6.4
W	0.0	2.2	4.3	0.0	0.0	0.0	6.5	6.2
WNW	0.0	0.0	8.7	0.0	0.0	0.0	8.7	6.6
NW	0.0	0.0	4.3	0.0	0.0	0.0	4.3	6.6
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	2.2	41.3	56.5	0.0	0.0	0.0	100.0	5.8

Calm (less than one knot) = 0.0%

Period mean wind speed = 5.8 knots

Percent occurrence for 'E' stability class(es) 2.6%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'F'

SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	2.1	7.8	0.0	0.0	0.0	0.0	9.9	3.9
NNE	2.1	4.3	0.0	0.0	0.0	0.0	6.4	3.5
NE	2.1	2.1	0.0	0.0	0.0	0.0	4.3	3.2
ENE	2.8	0.0	0.0	0.0	0.0	0.0	2.8	2.4
E	5.0	0.0	0.0	0.0	0.0	0.0	5.0	2.5
ESE	2.1	0.0	0.0	0.0	0.0	0.0	2.1	2.7
SE	0.7	0.7	0.0	0.0	0.0	0.0	1.4	3.0
SSE	2.1	7.1	0.0	0.0	0.0	0.0	9.2	3.8
S	2.8	15.6	0.0	0.0	0.0	0.0	18.4	3.7
SSW	4.3	9.9	0.0	0.0	0.0	0.0	14.2	3.6
SW	0.7	5.7	0.0	0.0	0.0	0.0	6.4	4.1
WSW	0.0	2.8	0.0	0.0	0.0	0.0	2.8	4.8
W	1.4	5.7	0.0	0.0	0.0	0.0	7.1	4.3
WNW	0.0	2.1	0.0	0.0	0.0	0.0	2.1	4.1
NW	0.0	2.8	0.0	0.0	0.0	0.0	2.8	4.1
NNW	2.1	2.8	0.0	0.0	0.0	0.0	5.0	3.8
All	30.5	69.5	0.0	0.0	0.0	0.0	100.0	3.7

Calm (less than one knot) = 0.0%

Period mean wind speed = 3.7 knots

Percent occurrence for 'F' stability class(es) 7.9%

AIR SCIENCES INC.
SBWIND(1.2) 08/01/90



APPENDIX D

Wind Speed Frequency Distributions

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
APRIL 1990
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	44.3	11.7	10.6	12.4	11.8	6.4	2.3	0.4	0.0	32.3	1
2	83.8	11.6	4.0	0.6	0.0	0.0	0.0	0.0	0.0	19.1	1
3	58.9	23.8	9.3	5.2	2.1	0.6	0.1	0.0	0.0	28.0	2
4	95.3	3.2	1.3	0.2	0.0	0.0	0.0	0.0	0.0	18.4	2
5	42.1	21.2	17.6	11.1	6.1	1.7	0.2	0.0	0.0	28.6	2
6	61.6	19.3	9.7	6.2	2.8	0.5	0.0	0.0	0.0	26.6	3
7	38.3	15.7	16.8	15.8	9.7	3.3	0.4	0.0	0.0	30.0	2
8	27.4	8.2	4.8	6.7	9.7	10.7	9.9	9.2	13.4	49.1	3
9	72.3	9.0	5.2	6.3	5.0	1.9	0.4	0.0	0.0	30.3	1
10	72.5	7.6	10.2	7.5	2.1	0.2	0.0	0.0	0.0	25.5	3
11	0.2	2.5	9.1	19.2	20.7	16.8	13.9	10.1	7.5	40.9	3
12	34.8	7.2	7.9	15.3	17.9	10.8	4.1	1.6	0.3	33.4	1
13	69.8	17.5	6.4	5.2	1.1	0.1	0.0	0.0	0.0	23.7	1
14	62.3	13.8	10.9	8.4	3.9	0.8	0.0	0.0	0.0	25.7	3
15	28.0	26.8	16.9	14.5	9.8	3.7	0.3	0.0	0.0	27.5	2
16	12.4	15.0	25.7	26.9	14.1	4.8	1.1	0.1	0.0	29.8	2
17	29.4	14.3	10.3	15.3	17.4	10.1	2.9	0.4	0.0	32.0	2
18	13.5	17.7	21.1	20.4	16.0	8.8	2.1	0.4	0.0	32.7	2
19	47.7	18.6	17.6	11.4	4.0	0.7	0.1	0.0	0.0	27.7	3
20	14.5	17.6	19.9	21.8	16.6	7.8	1.6	0.2	0.0	34.6	3
21	31.4	30.4	22.6	11.2	3.7	0.6	0.1	0.0	0.0	29.6	3
22	5.5	11.1	14.5	14.7	15.3	16.4	12.9	7.1	2.4	38.2	3
23	18.9	17.0	15.9	15.2	11.8	7.7	3.7	2.0	7.9	62.7	3
24	9.2	4.8	3.2	3.2	5.5	7.6	9.0	11.6	45.9	53.6	2
25	23.7	8.7	9.6	13.0	11.6	10.5	8.7	7.4	6.7	44.5	3
26	7.6	6.6	7.2	11.3	13.7	15.9	15.4	11.1	11.3	47.9	1
27	53.9	10.9	10.8	9.8	7.3	4.3	1.8	0.8	0.3	39.3	1
28	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
29	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
30	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
All*	39.5	13.5	11.7	11.4	9.0	5.7	3.4	2.3	3.4	62.7	3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

** Invalid or missing data

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
MAY 1990
(%)

Day	Wind Speed Intervals (mph)								Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31	
1	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
2	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
3	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
4	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
5	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
6	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
7	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
8	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
9	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
10	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
11	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
12	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
13	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
14	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
15	41.7	2.8	3.6	6.6	11.1	13.7	11.2	7.1	2.1	37.9 3
16	62.9	14.8	11.0	7.8	2.9	1.1	0.2	0.0	0.0	28.0 1
17	34.7	10.9	17.0	20.1	12.5	4.0	0.7	0.1	0.0	33.0 3
18	21.7	18.8	23.2	20.4	10.8	3.7	1.1	0.3	0.0	32.0 2
19	18.1	7.9	11.5	15.6	17.5	15.6	9.3	3.7	0.8	36.6 1
20	2.6	6.4	14.1	20.0	22.4	19.0	10.6	3.9	1.1	39.6 1
21	29.6	15.0	15.9	17.5	12.7	5.9	2.3	0.8	0.3	33.0 1
22	57.3	16.9	14.5	8.7	2.4	0.2	0.0	0.0	0.0	27.3 3
23	31.6	7.7	7.8	10.1	11.5	11.2	8.7	6.9	4.5	48.2 3
24	0.4	1.4	3.8	10.9	20.0	25.1	20.5	12.7	5.1	38.6 1
25	12.1	13.1	16.6	21.1	19.4	12.8	4.0	0.8	0.1	33.0 1
26	37.9	13.2	13.7	14.1	12.1	6.8	1.8	0.2	0.0	33.0 2
27	17.4	18.0	18.0	18.2	15.8	10.3	2.2	0.2	0.0	29.8 2
28	15.5	16.4	12.0	13.0	15.5	13.0	8.3	4.4	1.9	39.8 2
29	0.8	3.1	8.4	16.3	22.9	24.0	15.9	6.5	2.0	37.0 3
30	8.1	7.8	13.8	20.5	19.3	16.5	9.3	4.0	0.8	36.2 3
31	20.3	7.0	7.4	11.7	15.6	15.0	11.8	7.4	3.8	39.6 2
All*	24.3	10.7	12.5	14.8	14.4	11.7	6.9	3.5	1.3	48.2 3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

** Invalid or missing data

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JUNE 1990
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	19.6	6.0	5.8	14.1	21.2	16.6	8.2	4.5	4.0	44.8	1
2	49.8	9.2	15.9	15.7	7.2	1.9	0.3	0.0	0.0	27.7	1
3	47.4	6.8	4.0	3.9	5.9	8.9	9.8	8.2	5.1	39.5	3
4	12.2	9.2	8.5	8.2	10.3	16.3	16.4	11.7	7.1	41.3	3
5	0.2	1.0	2.8	9.4	19.0	26.0	21.7	13.1	6.6	40.2	2
6	0.1	0.5	1.3	4.6	9.2	14.1	15.5	16.0	38.8	55.7	3
7	29.9	2.9	4.3	9.4	10.9	11.7	11.3	9.4	10.2	47.3	1
8	43.0	14.2	11.7	12.8	11.0	5.2	1.9	0.3	0.0	33.0	3
9	27.8	18.2	19.9	17.5	10.4	4.5	1.5	0.2	0.0	30.5	3
10	30.9	12.6	11.3	14.7	15.1	10.2	4.3	0.9	0.0	32.1	3
11	17.9	10.7	12.9	16.6	18.2	13.0	7.0	2.6	1.1	38.9	3
12	5.1	5.6	8.4	15.0	19.1	20.2	13.6	8.2	4.7	39.1	2
13	27.3	11.3	8.6	9.2	9.0	11.1	10.8	8.9	3.7	36.4	3
14	32.3	12.9	13.0	20.5	15.6	5.0	0.6	0.1	0.0	30.2	3
15	18.5	7.3	6.7	8.2	11.5	16.2	14.9	11.0	5.7	42.0	3
16	34.3	11.9	12.7	15.3	12.1	8.4	3.6	1.4	0.3	35.2	1
17	44.5	13.2	13.8	14.7	10.5	3.1	0.2	0.0	0.0	26.9	2
18	42.9	11.0	9.4	10.3	11.0	8.5	4.4	1.9	0.5	38.7	3
19	45.9	17.5	15.7	11.2	4.9	3.2	1.3	0.2	0.0	33.7	1
20	64.4	14.8	12.3	6.8	1.6	0.1	0.0	0.0	0.0	23.7	3
21	65.3	10.6	9.5	9.1	4.6	0.8	0.1	0.0	0.0	26.8	2
22	38.6	23.8	12.3	9.6	9.6	5.4	0.7	0.0	0.0	28.7	3
23	44.5	13.7	16.6	16.6	7.4	1.0	0.0	0.0	0.0	25.9	2
24	31.4	15.9	21.9	19.3	8.5	2.5	0.4	0.0	0.0	29.4	3
25	14.3	9.6	12.3	16.3	17.5	14.7	9.8	4.5	1.1	35.9	3
26	0.7	2.7	6.2	12.1	17.3	18.9	16.3	13.0	12.7	44.1	2
27	19.1	7.4	6.5	9.3	13.2	15.4	12.6	9.5	6.9	40.9	2
28	3.1	6.6	14.0	22.2	24.6	18.2	8.3	2.4	0.6	35.5	1
29	37.2	18.0	24.1	17.3	3.3	0.1	0.0	0.0	0.0	24.1	1
30	40.0	24.1	19.6	11.8	3.8	0.7	0.0	0.0	0.0	26.6	2
All*	29.6	11.0	11.4	12.7	11.4	9.4	6.5	4.3	3.6	55.7	3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.





**METEOROLOGICAL DATA SUMMARY
JANUARY - MARCH 1990
SOLEDAD MOUNTAIN PROJECT**

Prepared for
Noranda Mining Corporation
Lakewood, CO

Prepared by
Air Sciences Inc.
Lakewood, CO

Project No. 58-07
May 1990



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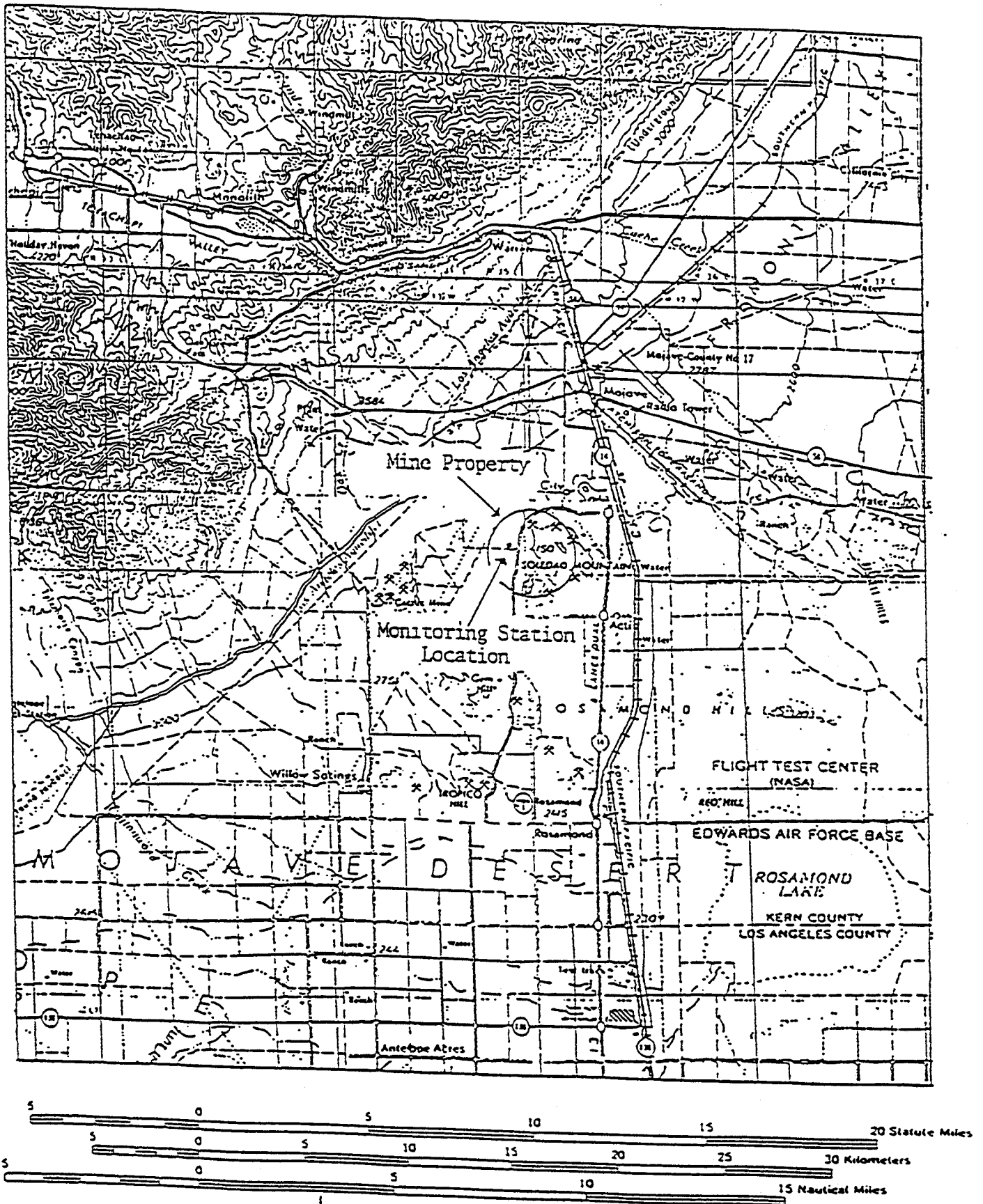
1.0 INTRODUCTION

This report summarizes three months of meteorological data collected near Soledad Mountain in the Mojave Desert of Kern County, California for Noranda Mining Corporation. The monitoring station is near a proposed open-pit mining project known as the Soledad Mountain Project. Data for this report were collected from October 1, 1989 through December 31, 1989. This report summarizes the first quarter of the monitoring program which began on September 29, 1989. Monitoring was performed in accordance with "Sampling Protocol, Golden Queen Mine Project, Mojave, California," (Air Sciences Inc., October, 1989). The purpose of the monitoring was to collect dispersion meteorological data to be used in dispersion modeling and to collect climatological data.

1.1 Location

The Soledad Mountain monitoring station is located on the plains west of Soledad Mountain in the Mojave Desert of southeastern Kern County, California. The site is approximately 12 miles NW of Rosamond Lake and 5 miles SSW of the town of Mojave. The mine pit, waste dumps and processing are expected to be located on the western side of Soledad Mountain, just east of the Mojave-Tropico Road. The monitoring station is located approximately one-quarter mile west of Mojave-Tropico Road on the desert plain in an area where the meteorological data should define the wind patterns that will carry pollutants toward residential areas. The station will be at an approximate elevation of 2,850' MSL at UTM coordinates 3,871 km north and 389 km east (the southwest quarter of Section 1, T 10 N, R 13 W). Vegetation is sparse in this part of the Mojave Desert Basin and consists of sagebrush and widely scattered Joshua trees. The monitoring location is shown on Figure 1.

FIGURE 1
GENERAL PROJECT LOCATION



CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1.2 Program Description

The parameters of wind speed, wind direction, direction deviation (sigma theta) and temperature are measured and recorded at the monitoring station. The wind parameters are measured by sensors mounted on top a 10-meter meteorological tower. Temperature is measured by a sensor located in an aspirated shield at the 2-meter level on the tower.

The meteorological data are sampled every 10 seconds by a digital Data Acquisition System (DAS) and processed and stored in 15-minute average format and as 8-hour wind speed maximum and frequency distribution data. The DAS digitally stores sine and cosine of wind direction, wind speed and temperature on a time-averaged basis. The 15-minute and 8-hour data, recorded on a solid-state memory module, are regularly transferred by mail to Air Sciences Inc. (Air Sciences) for processing and archiving. EPA methods are used to process the 15-minute data into hourly averages of wind speed, wind direction, wind direction deviation (sigma theta), and temperature as suggested in "On-Site Meteorological Program Guidance for Regulatory Modeling Applications," (EPA-450/4-87-013, Sections 6.0-6.4). Processing of the 8-hour data is performed by the DAS prior to the recording of the data onto the solid-state memory module.

Calibrations of the monitoring equipment were performed in accordance with the sampling protocol. Equipment calibration, audit and data quality assurance procedures are based on EPA guideline documentation and are fully described in the monitoring plan. Copies of the calibrations performed subsequent to the installation are located in Appendix A.

1.3 Data Recovery

Data recovery rates for all parameters are presented in Table 1. Recovery was 100 percent for all meteorological parameters. Data recovery rates for this first quarter of data collection exceeded the minimum EPA recommended annual average rate of recovery for meteorological sampling of 90 percent.

TABLE 1
DATA RECOVERY

<u>Parameter</u>	<u>Percent</u>
Wind Speed	100
Wind Direction	100
Sigma Theta	100
Temperature	100

2.0 METEOROLOGICAL DATA SUMMARY

The meteorological parameters were sampled on site every 10 seconds and digitally processed into 15-minute averages. The 15-minute averages were transmitted to Air Sciences for quality assurance checks and to be used as input for the calculation of 1-hour averages. All summary data presented in this section was produced by the processing of hourly averaged data into tables of summary statistics and SAROAD formatted tables. The meteorological values of wind speed, wind direction and temperature, collected during the quarter, are presented as hourly averages in SAROAD format by month for each parameter in Appendix B.

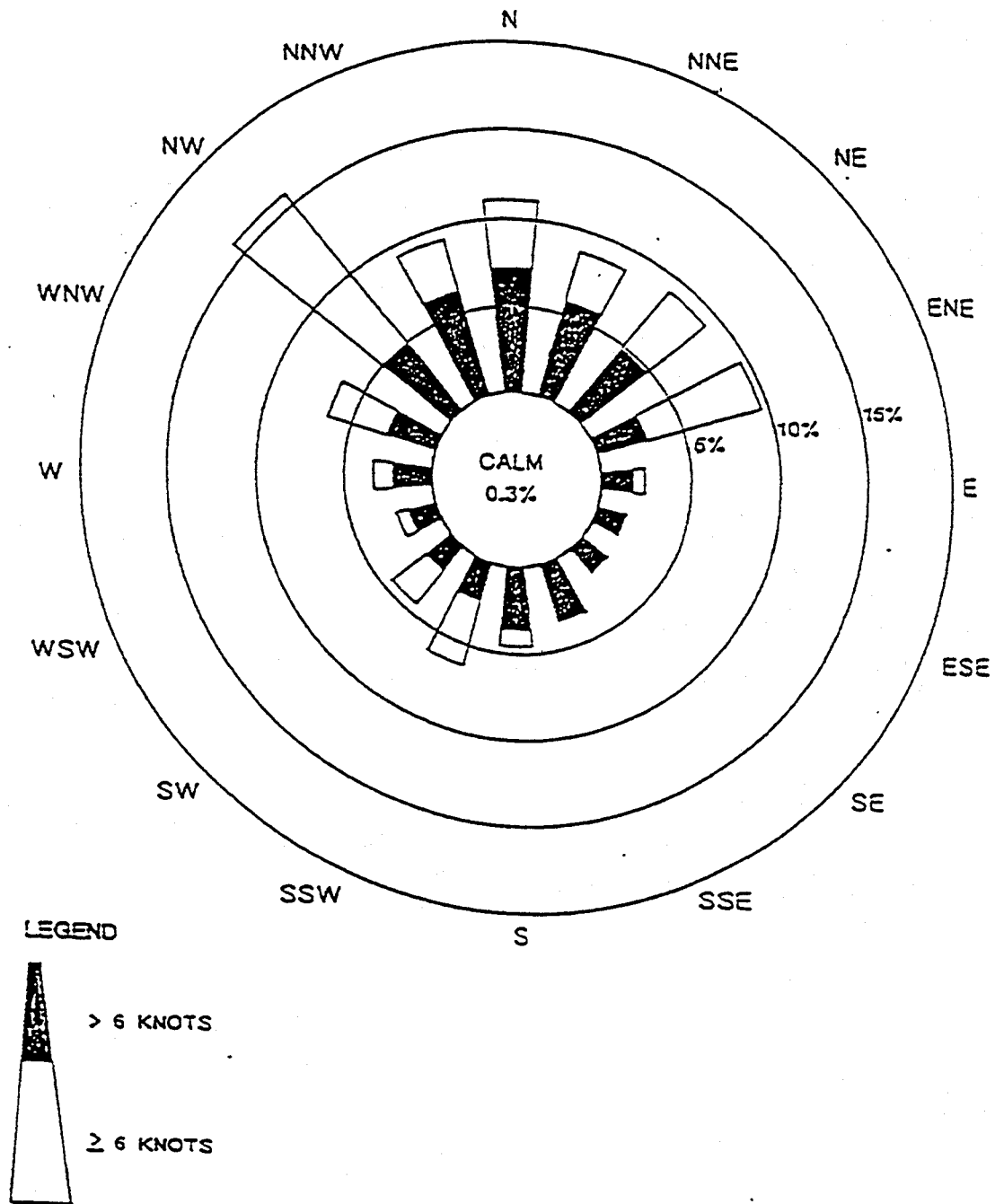
2.1 Winds

The wind frequency distribution by direction and speed for all atmospheric stability classes shown as Figure 2 and Table 2, shows that the highest frequency of winds were from the north (NW through ENE). These northerly winds accounted for over 63 percent of the total winds. The highest wind speed was from the northwest at an average of 12.2 knots (14.0 mph). All other winds were much lower in speed as shown by the overall wind speed for all directions of 6.8 knots (7.8 mph). The frequency distributions by direction and speed for stability classes A through F are included in Appendix C.

Appendix D contains one table for each month of data collection and displays wind speed frequency distributions (histograms). Each table contains the average daily percentages of winds in each wind speed category for each day of the month with a maximum wind gust for the day and a record of the time period in which the maximum wind gust occurred. Time period 1 is defined as the hours of midnight to 8 a.m., period 2 is the hours of 8 a.m. to 4 p.m., and period 3 equals the hours of 4 p.m. to midnight. Frequency distributions were recorded for each 8-hour time period from 10-second wind speed data. These 8-hour histograms were processed by Air Sciences into daily average histograms. The maximum wind gust for the quarter occurred on October 25 during time period 3 and was 50.6 mph.

FIGURE 2

WIND FREQUENCY DISTRIBUTION



SOLEDAD MOUNTAIN PROJECT
MOJAVE, CALIFORNIA
OCTOBER-DECEMBER 1989

AIR SCIENCES INC.
LAKEWOOD, COLORADO

TABLE 2
FREQUENCY OF WINDS BY DIRECTION AND SPEED
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

<u>Direction</u>	<u>Speed Class Intervals(kts)</u>						<u>All</u>	<u>Mean Speed</u>
	<u>1,<3</u>	<u>3,<6</u>	<u>6,<10</u>	<u>10,<16</u>	<u>16,<21</u>	<u>>21</u>		
N	3.3	3.9	3.6	0.1	0.0	0.0	11.0	4.8
NNE	2.4	3.4	2.7	0.1	0.0	0.0	8.7	4.9
NE	1.9	2.9	3.7	0.5	0.1	0.0	9.1	5.9
ENE	1.0	1.9	5.1	1.6	0.0	0.0	9.6	7.2
E	1.0	0.8	0.3	0.3	0.0	0.0	2.4	4.8
ESE	0.9	0.6	0.1	0.0	0.0	0.0	1.6	3.0
SE	1.1	0.7	0.0	0.0	0.0	0.0	1.8	3.0
SSE	1.2	2.3	0.0	0.0	0.0	0.0	3.5	3.3
S	1.2	2.5	0.8	0.0	0.0	0.0	4.6	4.3
SSW	1.1	1.3	1.8	1.4	0.5	0.1	6.2	8.3
SW	0.8	1.1	1.0	1.1	0.4	0.0	4.4	8.4
WSW	0.8	0.8	0.7	0.1	0.0	0.0	2.3	4.7
W	1.4	0.8	0.9	0.3	0.0	0.0	3.3	4.9
WNW	1.8	1.0	1.0	1.6	0.6	0.2	6.3	8.4
NW	3.4	1.5	1.1	4.1	3.9	1.7	15.7	12.2
NNW	3.2	3.1	1.8	0.7	0.3	0.1	9.3	5.4
All	26.4	28.6	24.6	12.0	5.9	2.2	99.7	6.8

Calm (less than one knot) = 0.3%
Period mean wind speed = 6.8 knots

TABLE 3
FREQUENCY OF WINDS BY DIRECTION AND STABILITY
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

<u>Direction</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>All</u>
N	0.4	0.2	0.2	2.4	3.6	4.2	11.0
NNE	0.7	0.2	0.8	2.7	1.1	3.2	8.7
NE	1.9	1.2	1.2	2.5	0.4	1.9	9.2
ENE	1.6	2.3	2.5	2.0	0.1	1.2	9.7
E	1.0	0.0	0.1	0.4	0.1	0.7	2.4
ESE	0.7	0.0	0.0	0.0	0.0	0.8	1.6
SE	0.8	0.1	0.0	0.0	0.1	0.7	1.8
SSE	1.2	0.3	0.1	0.3	0.2	1.4	3.5
S	1.1	0.3	0.5	0.6	0.6	1.4	4.6
SSW	0.9	0.3	0.5	2.9	0.3	1.3	6.2
SW	0.4	0.0	0.0	2.5	0.0	1.4	4.4
WSW	0.1	0.0	0.0	0.5	0.4	1.3	2.3
W	0.2	0.0	0.0	0.9	0.3	1.8	3.3
WNW	0.1	0.0	0.0	3.2	0.5	2.3	6.2
NW	0.5	0.0	0.1	10.8	0.4	3.8	15.7
NNW	0.3	0.0	0.0	2.9	1.4	4.7	9.3
All	12.1	5.1	6.2	34.8	9.4	32.1	99.7

Table 3 shows the frequency distribution by atmospheric stability categories A through F. Categories A through D occur in the daytime and categories D through F occur at night. Stability class was calculated by the method of Irwin (1980) which uses wind speed, standard deviation of wind direction and local sunrise and sunset times for determining daytime and nighttime periods. A nighttime correction is applied to the stability class determination. The assumed terrain mixing height was 15 centimeters. Table 3 shows that both daytime and nighttime winds were predominately out of the north (NW through ENE).

2.2 Temperature

Temperature data summaries are presented in Table 4. Average temperature for the data collection period was 8.9 °C (48.0 °F). The coldest month of the period was January and the warmest was March. The minimum temperature recorded was -7.6 °C (18.3 °F) and the maximum was 28.4 °C (83.1 °F).

TABLE 4
MONTHLY TEMPERATURE MEANS AND EXTREMES (°C)
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1990

<u>Month</u>	<u>Average Daily Maximum</u>	<u>Average Daily Minimum</u>	<u>Daily Average</u>	<u>Monthly Maximum</u>	<u>Monthly Minimum</u>
JAN	13.1	0.2	6.3	20.8	-7.6
FEB	13.6	0.7	7.1	23.1	-5.0
MAR	19.5	7.4	12.9	28.4	-0.2
QTR	15.4	2.8	8.9	28.4	-7.6



APPENDIX A

AIRSTABLES

HOURLY AVERAGED WIND SPEED
JANUARY 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	12	16	10	13	14	13	17	17	19	47	76	93	97	93	100	95	72	37	32	29	43	43	38	34	44
2	34	34	19	17	22	25	23	31	58	54	88	89	99	104	108	103	129	114	118	98	98	97	81	64	71
3	29	35	19	17	11	10	11	12	16	20	28	30	22	23	25	22	25	20	19	7	9	10	12	13	19
4	12	11	15	14	11	11	7	7	6	11	21	26	30	31	16	14	12	25	13	21	8	9	14	21	15
5	24	30	23	11	15	16	14	14	12	25	36	29	17	23	17	19	22	18	11	10	12	15	10	11	18
6	16	13	13	13	10	17	12	15	13	20	11	16	21	25	28	24	16	15	18	13	28	44	73	67	23
7	37	44	44	47	42	44	27	16	51	94	76	50	85	96	122	105	88	109	122	115	106	55	121	106	75
8	66	72	102	89	59	67	85	74	71	64	80	73	112	110	110	124	139	72	46	55	53	55	36	27	77
9	11	13	11	15	10	11	13	34	35	33	29	25	19	18	17	26	24	22	16	6	9	15	9	13	18
10	9	8	5	6	10	5	8	13	15	13	30	21	17	13	13	16	19	17	14	8	10	18	9	8	13
11	11	9	6	10	12	10	7	13	12	30	23	32	36	37	40	34	28	18	15	12	12	17	20	18	19
12	11	9	8	10	19	16	15	17	12	18	21	23	58	76	80	77	70	74	66	52	55	60	59	40	48
13	42	32	38	24	30	16	19	31	50	84	60	72	74	47	62	70	84	84	61	45	48	65	55	54	52
14	34	23	30	17	35	15	11	11	24	46	57	58	58	66	67	54	44	38	26	18	23	17	23	23	34
15	19	18	15	17	15	16	25	32	52	52	43	17	17	22	48	50	57	57	56	53	51	32	46	57	36
16	51	26	8	32	28	16	11	22	29	30	45	54	58	72	70	81	76	73	75	42	19	25	30	17	41
17	20	14	18	32	34	21	39	49	52	44	73	89	81	82	89	87	72	78	76	75	45	29	27	17	52
18	9	9	11	12	14	12	12	16	18	20	24	21	20	23	21	32	18	15	19	12	9	14	11	12	16
19	10	9	21	19	14	10	8	9	13	13	13	23	33	27	21	22	22	13	12	7	8	14	21	31	16
20	9	8	8	22	38	31	26	32	39	39	39	36	39	41	39	40	38	26	20	26	25	34	33	38	30
21	34	27	30	29	33	34	39	42	39	45	55	48	54	44	41	35	38	30	25	31	12	15	14	11	34
22	14	11	12	12	10	15	13	6	7	20	12	16	14	15	21	21	27	17	25	9	10	11	14	8	14
23	10	10	15	11	9	13	13	9	9	14	17	13	18	23	35	54	81	61	64	73	48	31	15	13	27
24	12	15	30	45	46	33	18	37	31	37	39	43	41	48	41	52	44	58	51	37	45	45	52	40	40
25	28	7	9	8	11	9	15	23	18	23	30	34	33	28	25	22	15	10	15	6	8	8	14	10	17
26	14	22	18	25	16	22	19	17	24	26	78	93	98	109	97	114	109	101	131	123	125	159	168	114	76
27	62	68	59	63	46	29	31	48	46	56	63	56	52	36	33	26	22	18	25	20	21	22	26	30	40
28	26	21	12	16	15	11	10	8	8	15	25	20	23	25	19	15	24	29	21	16	19	52	26	27	20
29	32	26	40	17	34	21	37	38	45	56	105	115	118	123	98	89	101	38	60	57	59	58	25	45	60
30	34	14	28	13	18	67	39	42	33	27	25	78	96	72	87	95	67	43	17	63	75	77	85	67	53
31	63	57	95	114	120	101	88	96	105	96	89	81	90	85	88	98	77	76	74	82	100	93	83	76	89
AVERAGE	26	23	25	25	26	24	23	27	31	38	46	48	53	53	54	55	54	45	43	39	38	40	40	37	38

* Indicates calibration of sensors
** Indicates invalid data

AIR SCIENCES INC.
04/12/90

HOURLY AVERAGED WIND DIRECTION
JANUARY 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	27	321	191	284	257	199	232	180	179	206	207	211	207	210	210	211	217	272	246	282	216	217	208	206
2	206	192	141	144	91	50	357	291	297	308	313	312	312	310	309	317	314	315	312	322	312	315	319	316
3	2	294	37	300	121	353	86	9	27	91	146	136	120	51	50	48	88	106	341	39	333	340	282	298
4	320	7	337	2	351	354	41	295	140	90	78	68	78	98	51	81	125	275	252	216	169	191	344	350
5	353	358	357	125	205	206	339	355	11	17	37	35	51	129	202	155	161	180	289	27	360	350	34	226
6	317	21	313	360	296	353	265	280	169	177	123	152	158	172	172	166	185	199	245	246	161	291	328	333
7	304	300	306	315	342	9	350	260	338	327	348	2	323	324	313	321	307	312	310	308	307	315	309	306
8	336	318	326	326	329	317	317	289	303	299	315	323	325	322	322	320	316	26	35	32	39	19	9	11
9	291	264	246	332	17	328	309	360	16	33	34	25	37	156	174	173	178	204	328	355	314	303	7	351
10	339	311	252	307	342	327	329	8	40	84	46	36	42	149	165	144	158	208	307	343	321	358	13	279
11	325	347	109	295	308	184	267	11	15	18	21	31	28	40	49	52	50	297	241	260	193	167	178	175
12	173	250	216	324	12	56	171	173	138	148	157	212	222	221	221	216	208	216	225	230	241	215	212	205
13	216	208	215	214	204	199	175	172	195	208	210	212	214	215	214	210	209	209	218	246	213	201	199	214
14	202	221	239	216	274	166	76	284	184	215	217	220	217	219	218	207	221	233	219	162	198	147	174	191
15	173	216	178	162	205	178	277	292	305	298	311	36	181	231	274	333	311	302	314	311	306	288	298	307
16	302	219	297	275	254	204	182	210	215	190	236	231	232	213	209	216	212	212	215	241	124	344	288	210
17	28	144	13	332	299	232	287	313	305	330	305	316	319	322	317	312	314	315	316	316	339	333	330	344
18	311	181	247	351	353	240	172	168	146	143	190	185	77	55	53	77	27	184	245	289	228	222	246	302
19	334	332	8	13	349	341	5	38	38	212	170	36	39	46	142	166	194	186	251	274	348	320	350	356
20	13	334	308	352	17	5	344	351	36	38	48	56	56	62	38	53	36	14	16	32	12	16	7	355
21	354	9	358	352	348	348	356	2	22	41	48	59	67	62	74	71	94	83	17	359	321	320	15	9
22	8	2	328	9	315	303	328	10	52	151	161	40	54	67	96	119	62	104	334	8	360	250	303	346
23	319	318	290	20	8	8	251	208	152	169	163	110	153	192	164	273	303	291	331	347	340	354	230	326
24	289	247	355	6	345	348	305	360	20	51	67	70	65	71	64	70	77	91	85	11	15	24	34	31
25	334	31	343	324	334	356	321	334	354	39	40	60	68	64	42	42	24	237	294	357	319	238	263	242
26	255	203	246	248	110	252	5	144	168	199	303	308	316	316	302	323	331	339	332	334	332	318	309	312
27	300	313	324	330	336	7	360	34	42	54	51	56	53	49	65	69	41	36	1	355	356	348	348	343
28	343	354	358	6	8	338	330	256	36	148	191	186	157	190	187	178	180	195	237	189	288	345	357	335
29	28	231	291	206	351	153	273	261	247	275	296	299	303	300	313	318	320	180	316	291	335	314	23	300
30	295	95	328	99	282	307	287	300	246	276	211	245	239	245	215	208	241	282	94	312	293	302	309	301
31	310	307	307	311	314	304	310	313	317	318	319	320	315	310	310	314	312	308	307	310	310	311	314	309

* Indicates calibration of sensors

** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
JANUARY 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	68	66	44	35	1	15	-2	11	95	134	150	151	152	150	143	126	102	85	85	80	73	54	38	33	79
2	46	43	37	32	24	27	24	16	38	50	44	46	50	57	56	46	42	30	33	31	29	26	25	21	36
3	14	14	7	-11	-23	-32	-42	-22	17	47	55	65	76	80	84	82	67	41	-10	-31	-30	-31	-58	-57	13
4	-60	-61	-64	-68	-57	-61	-76	-70	8	54	74	88	96	103	105	107	93	38	41	28	32	20	9	-1	16
5	17	-4	0	-26	-36	-35	-50	-32	42	85	103	113	129	136	141	140	122	75	35	24	45	32	2	-4	44
6	-2	6	-12	-12	-28	-33	-37	-31	47	84	112	127	138	143	141	140	129	89	47	37	83	100	110	109	62
7	105	116	113	116	107	108	103	100	117	117	128	136	154	159	155	148	141	122	117	116	128	129	120	124	124
8	118	120	120	121	120	124	131	126	150	161	165	182	185	180	178	187	175	164	151	122	120	108	96	82	141
9	51	37	25	15	19	12	-7	29	93	123	142	161	176	189	198	189	169	115	87	78	56	41	40	36	86
10	29	27	23	7	4	3	10	18	95	136	154	169	187	200	208	208	189	136	93	73	63	67	72	45	92
11	39	35	39	25	19	10	18	31	86	121	149	164	175	186	188	187	174	119	97	75	70	85	93	97	95
12	91	65	57	58	51	63	78	77	115	144	148	160	165	163	146	138	130	120	113	110	106	104	103	96	108
13	88	88	87	85	84	81	81	85	91	99	102	107	93	87	95	94	92	90	80	74	75	77	76	70	87
14	66	55	51	41	64	53	37	32	62	77	90	100	108	111	100	89	77	70	64	59	51	43	36	34	65
15	16	23	21	31	24	15	20	42	72	87	96	103	110	106	89	93	82	63	58	56	51	44	46	44	58
16	46	28	9	30	40	22	17	21	39	55	73	74	79	80	78	71	61	51	44	33	16	21	16	13	42
17	11	10	4	15	10	11	12	14	20	30	34	41	37	34	36	26	23	18	17	19	7	1	3	-4	18
18	-17	-13	-7	-5	-1	-16	-14	-14	0	7	24	47	70	81	84	84	74	46	21	11	3	8	-1	-5	19
19	-9	-9	-14	-20	-29	-31	-39	-24	13	41	58	68	74	83	91	91	80	50	20	18	20	6	-12	3	22
20	-10	-17	-26	-20	-4	-8	-23	-13	35	52	68	78	85	90	92	91	84	49	39	33	26	16	7	3	30
21	-7	-6	-4	-8	-20	-22	-11	0	35	57	77	87	99	111	119	124	115	86	57	30	4	-4	3	17	39
22	19	17	-9	-20	-21	-23	-41	-24	37	80	101	112	126	138	142	132	118	82	51	49	44	25	11	-13	47
23	-6	-13	-16	-21	-22	-31	-39	-19	46	98	109	133	141	152	154	153	133	115	126	112	90	81	68	23	65
24	6	2	11	29	19	17	-5	28	79	110	126	137	144	147	152	154	146	131	118	70	58	48	57	55	77
25	32	10	7	-9	-16	-26	-13	18	82	103	119	127	133	139	143	141	135	103	37	27	26	15	14	14	57
26	16	30	54	67	69	51	35	60	109	146	160	153	134	130	127	114	94	74	67	56	57	60	59	55	82
27	53	53	45	39	32	6	3	35	46	68	82	97	107	112	115	115	110	77	22	31	31	24	4	-5	54
28	-7	-16	-28	-7	-11	-22	-41	-37	41	87	87	107	127	132	139	144	136	92	46	60	60	94	103	65	56
29	69	64	76	67	70	74	88	84	101	127	145	149	139	155	155	139	126	119	115	103	102	97	88	88	106
30	81	70	47	41	74	85	74	86	110	120	135	144	154	148	135	117	99	73	61	58	48	47	46	40	87
31	42	37	36	37	36	35	35	39	51	67	81	92	92	96	92	77	65	46	43	41	42	45	48	57	56
AVERAGE	32	28	24	21	19	15	11	21	64	89	103	113	120	125	125	121	109	83	64	54	51	48	43	37	63

* Indicates calibration of sensors
** Indicates invalid data

AIR SCIENCES INC.
01/17/90

HOURLY AVERAGED WIND SPEED
FEBRUARY 1990
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	61	55	44	37	60	76	66	94	141	178	144	128	170	155	131	132	136	125	135	139	151	140	96	80	111
2	122	76	77	107	107	94	87	80	67	44	38	46	48	39	35	27	16	14	14	10	9	12	11	13	50
3	9	13	15	13	12	15	6	7	9	10	14	20	17	15	29	34	31	22	40	32	27	29	41	67	22
4	48	36	43	50	45	46	23	24	25	31	86	100	94	93	139	129	120	106	102	93	94	97	96	106	76
5	106	86	42	19	13	11	14	14	15	21	13	27	26	30	30	28	27	28	48	27	25	35	48	23	32
6	11	21	13	8	12	13	13	11	11	14	23	21	32	36	65	83	80	72	66	52	46	62	70	74	38
7	70	83	82	76	84	101	93	103	109	121	128	129	119	117	105	110	104	105	96	88	74	66	47	54	94
8	46	45	17	18	19	16	13	20	15	20	20	21	21	24	21	55	67	62	85	75	84	88	86	42	41
9	31	31	25	29	31	22	12	13	14	11	14	18	21	21	18	24	28	24	20	17	12	8	9	11	19
10	10	13	8	8	6	5	11	17	13	15	34	37	27	18	20	29	23	17	12	11	7	11	11	21	16
11	9	11	7	9	29	32	18	14	29	34	27	22	22	22	17	23	25	18	13	16	9	18	25	30	20
12	39	35	38	30	21	19	16	16	31	35	63	92	99	97	93	88	71	40	28	69	46	43	75	104	54
13	99	74	90	105	55	34	45	38	37	47	97	93	104	113	137	137	118	104	99	70	89	83	92	63	84
14	63	53	57	96	103	99	101	93	88	98	97	87	98	98	105	99	88	86	65	69	69	76	66	57	84
15	27	26	36	38	36	25	17	15	23	42	30	31	33	31	32	22	61	59	55	46	31	29	13	30	33
16	33	48	53	53	28	26	26	24	56	81	86	109	115	110	92	75	92	93	98	72	84	92	84	69	71
17	59	63	32	31	25	21	17	25	35	55	69	74	80	89	91	89	84	76	59	54	51	48	59	47	56
18	40	42	51	36	31	41	31	52	57	49	54	77	52	97	94	110	118	110	116	89	90	94	101	104	72
19	96	101	107	114	102	93	105	64	59	70	76	76	82	88	72	62	48	30	38	32	19	14	13	21	66
20	18	14	8	11	12	13	8	11	12	14	13	19	23	24	27	25	25	21	34	33	34	57	47	38	23
21	27	18	11	14	7	12	14	10	15	21	21	28	38	43	40	31	24	14	25	14	12	8	9	14	20
22	22	15	14	15	26	24	31	32	30	32	38	41	41	28	29	28	27	24	19	14	17	22	17	13	25
23	18	15	11	11	13	13	10	6	17	45	43	35	38	35	31	28	25	17	14	8	13	18	17	13	21
24	18	23	27	21	10	11	9	8	12	30	40	35	41	29	19	21	16	10	15	9	6	8	7	9	18
25	20	12	9	13	16	20	10	17	16	16	33	35	22	34	32	34	30	29	11	15	21	25	36	21	22
26	15	21	35	30	11	30	22	19	20	26	28	32	30	23	22	36	50	33	40	42	29	37	23	15	28
27	31	22	14	22	34	21	15	8	11	15	24	35	32	26	23	30	34	45	21	11	12	11	13	7	22
28	8	8	18	14	21	43	27	14	11	18	37	30	28	22	30	38	51	49	25	10	9	8	9	9	22
AVERAGE	41	38	35	37	35	35	31	30	35	43	50	54	55	56	56	58	58	51	50	43	42	44	44	41	44

* Indicates calibration of sensors
** Indicates invalid data

HOURLY AVERAGED WIND DIRECTION
FEBRUARY 1990
SOLEOARD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	284	266	249	164	234	230	296	306	307	310	309	307	310	310	313	315	305	307	317	319	313	308	306	310
2	310	355	349	329	323	318	312	322	330	346	40	42	72	95	112	141	163	197	253	356	354	301	317	304
3	343	331	328	348	321	5	149	122	139	164	144	148	152	149	152	181	176	210	216	204	199	190	220	214
4	217	178	199	216	211	273	226	206	201	237	302	292	293	308	315	318	318	325	326	319	314	310	313	311
5	319	314	351	303	12	40	26	20	105	122	145	168	169	168	167	175	168	232	304	355	30	342	308	357
6	38	2	344	354	293	211	238	290	145	189	176	186	208	257	312	317	318	315	312	298	306	310	313	316
7	312	311	312	314	310	311	307	306	306	308	311	313	308	310	308	308	305	312	316	313	317	320	324	319
8	321	318	39	7	37	25	22	21	49	36	83	82	189	205	208	302	300	295	306	300	308	312	352	
9	340	354	357	338	338	18	310	11	138	165	168	68	79	160	51	156	187	201	17	9	25	337	322	285
10	269	315	313	355	6	192	269	345	113	207	34	61	113	130	163	184	175	208	335	21	36	9	295	313
11	340	337	18	3	344	341	306	333	358	21	52	46	29	112	326	174	179	211	205	303	266	186	187	187
12	213	193	214	229	199	157	160	157	216	213	308	310	313	318	316	313	306	254	113	326	310	236	292	312
13	312	315	300	310	292	240	314	281	249	333	308	311	312	310	308	310	308	307	308	293	288	291	297	314
14	308	304	315	309	312	318	312	319	329	316	317	317	315	317	319	318	317	314	322	315	324	321	323	323
15	23	25	353	354	353	287	208	331	52	306	206	178	181	215	313	358	318	313	300	260	273	240	294	213
16	226	239	245	238	185	205	180	176	217	215	217	212	207	210	212	206	203	202	211	218	203	207	202	200
17	190	203	197	191	154	164	213	215	219	211	205	208	209	203	203	201	200	210	211	211	221	210	225	219
18	211	200	228	242	211	193	217	223	259	295	280	306	248	314	318	314	313	315	316	327	322	315	316	312
19	319	317	321	320	315	24	324	338	320	337	341	339	321	319	314	314	297	283	297	288	275	31	36	15
20	15	222	136	316	298	257	38	303	17	184	149	177	142	180	183	185	199	261	299	294	327	342	332	346
21	354	287	34	281	282	339	359	334	64	66	72	59	63	60	69	70	106	201	343	20	349	328	1	321
22	353	358	28	17	351	356	15	32	45	50	63	59	62	71	56	84	133	134	294	25	350	349	13	342
23	355	309	18	23	316	91	339	318	12	46	47	71	63	64	67	59	50	342	335	27	27	11	263	9
24	337	336	336	359	311	264	316	184	23	28	39	50	70	60	30	57	71	161	270	312	67	51	8	338
25	14	342	5	341	350	351	168	15	188	77	39	45	72	134	142	178	192	194	104	222	262	267	282	230
26	214	271	295	300	295	358	351	3	15	35	27	42	64	131	228	188	203	245	302	303	315	297	238	291
27	303	239	163	13	360	13	114	11	146	161	69	66	117	185	178	197	219	173	209	220	183	203	301	
28	161	63	332	335	2	7	13	33	69	43	42	47	58	157	180	227	216	212	204	207	213	164	166	176

* Indicates calibration of sensors

** Indicates invalid data

ATR SCIENCES INC.
4/12/90

HOURLY AVERAGED TEMPERATURE
FEBRUARY 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	58	48	39	41	52	54	37	35	38	33	37	46	51	52	55	48	44	35	34	36	35	38	34	32	42
2	34	30	31	33	37	41	36	40	57	78	91	103	109	112	115	113	111	83	34	24	10	2	-6	-13	54
3	-20	-12	-23	-22	-25	-35	-39	-25	28	63	96	108	109	116	123	122	110	87	80	62	50	55	77	79	49
4	74	57	54	53	47	37	21	11	12	16	34	48	52	40	35	38	32	25	23	22	23	22	20	19	34
5	21	22	16	4	-2	1	1	16	46	64	83	87	99	106	110	111	108	83	60	55	52	59	51	35	54
6	29	13	0	-13	-15	-12	-6	10	59	83	98	121	134	143	131	98	75	61	54	60	75	53	45	44	56
7	45	42	41	39	37	33	36	32	34	34	36	46	62	62	57	45	33	25	21	18	17	13	16	11	35
8	5	3	-3	-16	-17	-21	-23	-10	29	47	60	72	82	92	101	95	70	42	34	32	38	42	39	32	34
9	29	24	28	23	18	-2	-14	0	50	81	100	116	126	138	141	142	134	99	66	61	53	42	16	1	61
10	-7	-15	-12	-21	-17	-28	-36	7	74	104	132	153	169	180	186	183	174	127	89	86	80	78	59	47	75
11	45	44	46	42	47	49	40	60	128	149	166	179	186	192	197	197	188	146	116	98	90	95	125	131	115
12	133	123	123	115	103	83	73	88	128	149	169	163	162	163	154	142	133	116	94	94	94	90	92	92	120
13	92	84	77	70	62	42	38	50	61	71	71	74	68	61	50	39	27	13	9	8	6	2	-1	-8	44
14	-17	-25	-30	-29	-29	-30	-32	-32	-23	-12	1	12	11	14	13	14	6	-9	-15	-15	-17	-21	-25	-13	-13
15	-27	-30	-40	-39	-41	-50	-49	-19	3	22	31	38	48	65	74	75	56	31	19	20	14	6	-19	-17	7
16	5	3	-2	2	-20	-18	-25	-15	23	37	48	58	56	53	47	43	40	34	29	21	22	22	23	30	22
17	34	33	33	38	40	43	46	48	58	71	85	83	91	103	105	98	84	68	54	47	40	37	35	31	59
18	32	35	31	25	27	27	29	39	49	36	45	39	45	36	38	34	8	-2	0	1	-1	-1	-3	-2	24
19	-1	0	2	2	4	10	6	14	35	47	60	75	81	80	83	86	83	62	47	39	31	26	33	28	39
20	6	-30	-26	-42	-38	-33	-42	7	61	87	111	125	133	141	147	144	133	116	104	101	100	100	90	90	66
21	87	72	64	30	23	8	6	36	102	127	146	151	158	162	155	155	151	120	77	77	67	51	51	31	88
22	44	32	20	27	37	35	57	96	128	147	163	173	181	190	194	198	194	171	108	83	89	82	81	67	108
23	70	57	56	36	32	20	16	70	148	168	182	201	206	214	218	219	212	178	118	122	129	128	93	68	123
24	72	71	75	69	61	36	37	58	140	167	178	191	205	211	211	208	202	180	125	123	96	109	110	96	126
25	101	91	87	72	72	79	62	96	131	182	188	204	215	214	219	220	213	191	163	134	134	134	136	133	145
26	118	112	134	128	106	81	62	61	109	145	177	194	211	221	226	223	208	174	158	156	147	146	130	124	148
27	116	114	101	87	67	64	55	93	148	176	192	203	214	222	227	226	219	188	153	136	130	122	107	99	144
28	79	74	61	53	57	76	69	101	145	177	190	205	218	226	231	229	220	195	146	130	113	110	108	113	139
AVERAGE	45	38	35	29	26	21	16	35	71	91	106	117	124	129	130	127	117	94	71	65	61	59	54	49	71

* Indicates calibration of sensors
** Indicates invalid data

AIR SCIENCES INC.
4/12/90

HOURLY AVERAGED WIND SPEED

MARCH 1990

SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA

UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	12	9	8	13	7	7	14	11	9	12	12	41	52	55	58	77	62	48	28	30	42	38	42	49	31
2	27	40	44	36	57	71	72	63	55	41	52	29	36	59	100	94	89	79	86	85	77	74	80	69	63
3	79	73	43	25	84	70	53	78	87	94	101	97	106	101	82	59	84	122	84	87	98	100	107	96	84
4	75	72	70	65	43	63	76	69	77	89	88	85	82	80	89	78	101	84	80	49	30	19	64	48	70
5	57	56	49	63	78	78	46	98	135	147	156	141	134	126	155	137	126	138	135	138	137	140	124	116	113
6	66	24	25	53	54	55	43	33	45	26	30	22	21	22	17	23	32	51	61	58	37	14	13	9	35
7	6	8	11	16	8	8	12	6	17	35	31	25	26	34	50	54	67	63	50	20	27	24	12	11	26
8	16	26	42	43	38	22	17	23	36	42	37	42	42	50	61	68	75	67	43	40	27	22	19	21	38
9	20	16	34	11	16	16	11	12	18	16	16	21	29	33	36	28	30	47	38	24	16	12	19	16	22
10	20	23	21	58	76	45	19	22	14	25	55	65	30	66	86	68	85	71	40	73	91	93	77	65	54
11	67	74	68	63	59	49	60	42	74	69	52	74	82	84	94	97	84	74	54	45	37	49	44	38	64
12	36	55	59	93	95	110	80	104	103	90	102	115	122	129	127	127	129	107	107	89	105	113	111	105	101
13	101	94	82	58	90	87	55	50	52	92	69	56	48	72	94	105	110	104	94	91	82	80	79	89	81
14	80	89	86	90	58	85	80	86	88	80	72	72	89	90	100	115	125	122	110	138	94	95	99	107	94
15	95	56	17	12	16	30	23	11	22	36	49	49	49	42	34	34	29	21	11	22	17	20	11	18	30
16	25	21	30	17	33	50	47	43	44	41	53	44	43	36	36	32	25	21	7	19	13	16	14	12	30
17	14	13	8	8	10	8	6	8	10	23	25	23	23	26	39	74	82	91	83	63	78	88	86	85	41
18	99	99	95	89	80	38	27	16	24	23	31	33	37	38	34	34	23	24	18	19	10	13	13	13	39
19	14	15	11	6	10	12	8	9	12	24	36	31	24	38	38	42	46	64	68	76	80	82	75	77	37
20	75	45	34	36	33	23	18	18	8	14	16	21	21	30	22	21	21	24	42	65	66	73	77	84	37
21	77	66	36	24	40	52	32	36	25	33	26	48	48	54	77	93	92	104	115	107	110	94	48	47	62
22	38	46	46	69	63	66	88	81	76	55	27	35	33	51	97	97	85	108	113	107	105	102	98	78	74
23	87	105	105	86	66	75	80	73	78	59	35	23	29	23	28	60	80	86	90	100	101	110	114	104	75
24	98	47	43	37	46	18	21	18	20	21	20	21	20	37	52	71	81	79	90	86	93	104	95	69	54
25	63	72	72	90	94	66	31	26	89	110	102	99	106	112	115	110	108	103	88	80	95	102	75	95	88
26	91	87	77	75	67	62	68	80	95	84	82	66	34	38	41	59	57	63	70	82	67	31	60	75	67
27	68	44	57	28	42	33	38	44	84	83	78	09	73	72	79	85	103	97	48	46	69	57	41	83	64
28	72	68	60	70	91	93	90	93	90	82	87	90	99	83	80	101	68	94	111	108	107	99	105	97	89
29	79	83	86	75	47	59	57	66	67	39	39	67	70	85	93	95	91	75	55	56	35	34	33	36	63
30	28	26	17	21	19	35	29	38	38	45	53	51	51	44	51	32	49	48	37	28	56	58	58	65	41
31	73	76	81	83	78	77	75	76	81	76	59	39	39	47	72	95	105	102	97	101	105	101	95	91	80
AVERAGE	57	53	49	49	52	50	44	46	54	55	55	55	55	60	69	73	76	77	69	69	68	66	64	63	59

* Indicates calibration of sensors

** Indicates invalid data

ATR SCIENCES INC.
04/12/90

HOURLY AVERAGED WIND DIRECTION
MARCH 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	188	221	277	245	341	184	205	345	41	64	146	216	217	211	220	231	226	224	209	253	272	277	248	243
2	266	300	290	283	294	300	299	299	301	291	271	210	207	312	320	315	314	319	314	311	308	312	314	308
3	313	306	260	50	347	319	270	308	316	321	329	320	318	311	300	277	278	303	305	315	314	300	306	308
4	314	309	306	316	272	328	306	323	288	306	306	318	315	264	245	246	220	216	216	229	263	87	250	309
5	298	300	297	281	290	289	204	276	313	314	311	314	316	310	318	309	308	311	307	308	308	311	312	311
6	318	349	20	327	325	321	330	360	311	4	43	21	168	130	81	209	294	310	305	307	314	30	11	13
7	40	169	31	291	331	11	314	34	71	28	30	49	165	199	211	213	209	288	222	175	316	257	201	347
8	164	239	254	260	254	247	240	216	224	223	213	205	215	214	227	228	227	227	250	238	191	204	161	172
9	150	270	301	74	159	193	312	133	145	215	101	146	181	190	176	192	237	299	280	298	53	95	117	180
10	252	345	223	335	311	348	8	21	115	188	291	309	208	312	315	282	301	289	248	213	218	222	223	235
11	264	288	285	264	276	275	294	273	279	297	306	297	287	286	295	297	283	301	301	304	310	321	330	225
12	217	291	290	311	314	308	305	307	304	307	307	308	307	312	315	317	311	314	316	321	310	316	315	314
13	315	312	299	275	314	306	2	70	12	323	354	32	21	320	311	312	312	317	316	312	314	313	315	320
14	308	306	316	317	312	322	312	312	314	316	312	316	310	312	311	313	316	317	316	308	336	323	322	319
15	320	345	74	190	13	357	6	49	30	46	71	68	72	52	38	76	64	91	328	339	324	316	357	360
16	320	331	350	318	3	44	26	34	43	54	61	81	62	80	60	79	77	135	184	265	79	34	341	301
17	358	357	357	7	10	11	219	102	141	29	33	116	151	193	336	322	319	314	309	306	315	314	314	312
18	316	313	315	313	316	10	23	42	30	41	47	63	55	60	67	59	125	96	69	39	116	140	37	19
19	4	9	22	5	312	292	342	348	60	60	39	33	32	207	208	227	305	301	298	306	302	306	309	308
20	308	329	7	336	315	333	312	1	257	165	142	137	117	73	137	99	184	197	311	313	308	309	309	310
21	308	306	13	308	359	316	315	314	6	322	183	317	327	327	322	313	317	321	312	312	311	302	341	3
22	340	306	307	327	358	328	305	323	319	296	205	233	237	301	318	314	314	311	309	308	307	303	300	295
23	297	307	308	302	311	312	305	310	317	317	11	40	92	142	294	321	309	303	309	306	306	310	312	311
24	311	2	336	325	321	14	9	17	75	107	118	152	170	221	208	250	311	308	308	307	309	312	306	285
25	300	299	293	307	306	327	28	16	296	298	303	298	305	306	310	308	306	305	313	309	311	311	304	305
26	303	308	313	313	313	313	308	307	314	313	318	323	251	319	305	295	290	303	307	305	292	265	287	299
27	295	277	287	231	207	179	191	225	297	305	310	313	290	217	211	287	300	298	251	246	249	279	305	309
28	324	320	319	319	313	313	317	313	314	309	306	305	311	309	286	308	310	299	313	315	316	320	314	316
29	312	312	313	312	307	313	316	318	317	309	304	320	297	303	312	310	306	299	258	219	233	193	202	220
30	155	156	233	173	161	34	25	25	29	50	64	60	96	81	302	315	326	254	230	276	309	314	315	316
31	317	321	319	314	315	316	313	318	317	318	326	6	351	304	313	311	316	312	311	311	311	313	316	314

* Indicates calibration of sensors
** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
MARCH 1990
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	110	102	73	89	67	76	76	87	119	149	171	190	206	215	210	197	188	177	159	145	138	136	139	144	140
2	135	130	124	115	119	120	127	132	145	156	177	185	198	194	181	170	155	139	129	123	124	119	114	109	143
3	108	108	106	104	105	110	113	122	130	143	143	148	148	138	138	136	135	127	117	114	111	107	109	108	122
4	106	103	101	98	95	96	100	110	126	136	150	161	167	171	159	146	105	92	88	90	87	82	69	55	112
5	46	28	17	21	29	22	25	25	36	41	48	53	58	62	58	55	55	45	39	38	38	38	38	43	40
6	43	39	39	42	40	41	43	71	97	115	128	143	154	162	169	174	167	132	106	100	93	85	79	66	97
7	47	42	20	14	-2	10	15	72	118	130	148	170	181	193	197	197	181	162	140	121	119	100	93	94	107
8	83	100	123	125	120	104	93	117	146	159	167	174	182	189	185	172	162	147	134	122	118	119	105	103	135
9	92	81	77	70	59	30	30	82	116	129	150	163	170	174	173	166	158	123	100	88	86	79	86	53	106
10	38	50	35	62	68	66	53	65	110	131	161	186	194	193	171	165	132	111	98	89	72	74	70	65	102
11	63	54	43	39	35	32	20	34	42	42	43	54	57	69	75	66	49	22	15	27	27	19	14	18	40
12	23	23	14	12	10	11	14	28	40	44	57	66	70	74	69	64	48	34	23	17	16	19	19	19	34
13	18	15	12	11	13	10	13	32	48	59	78	94	105	101	92	80	69	57	46	43	41	37	36	36	48
14	36	38	39	39	40	39	38	49	72	95	110	125	124	125	125	109	98	90	78	74	77	81	80	79	78
15	78	72	46	25	57	29	25	75	115	135	155	167	177	188	196	200	197	175	117	90	100	73	66	78	110
16	65	60	57	50	49	90	83	114	138	155	166	169	182	181	186	189	188	165	123	106	110	109	97	84	122
17	93	88	75	61	55	42	39	119	150	171	180	204	213	223	232	224	206	185	167	160	159	155	152	151	146
18	153	147	144	143	141	134	131	160	175	196	208	224	233	241	247	247	243	231	183	135	144	155	142	135	179
19	124	99	81	44	48	52	58	139	183	208	221	235	245	256	260	259	237	201	181	172	167	168	167	164	165
20	160	161	157	152	141	142	142	163	182	199	210	216	245	253	260	263	259	241	197	181	175	167	164	158	192
21	155	157	158	148	152	150	155	194	213	237	253	273	280	284	279	259	239	200	184	178	172	163	161	167	200
22	159	150	148	154	149	143	149	183	200	225	247	264	271	279	252	231	218	195	176	170	167	168	168	162	193
23	156	153	150	144	141	145	153	181	197	220	240	251	263	271	276	270	233	198	176	168	161	158	154	153	192
24	154	146	141	127	132	112	117	156	184	204	224	244	256	266	273	259	222	191	174	167	163	158	154	154	182
25	156	147	139	141	141	139	141	162	179	189	203	216	220	221	218	208	197	178	161	156	151	146	148	146	171
26	142	136	130	128	130	127	133	145	155	174	197	212	225	233	242	237	223	182	146	138	133	131	127	121	164
27	117	112	117	104	86	76	86	119	152	165	178	189	190	181	168	177	170	156	131	126	131	123	115	112	137
28	117	110	110	107	102	96	104	122	138	153	160	168	168	166	158	154	144	129	118	117	112	109	106	104	128
29	100	100	97	96	91	103	128	147	164	175	184	187	188	189	181	169	155	133	104	110	110	107	115	115	135
30	94	89	84	77	71	92	81	97	120	150	171	181	192	183	168	173	178	157	134	120	125	123	122	121	129
31	120	120	119	118	115	116	123	142	163	182	197	208	215	218	225	207	191	174	161	155	151	146	143	142	160
AVERAGE	100	95	90	86	84	82	83	110	133	150	165	178	186	190	188	182	168	147	127	117	115	111	108	105	129

* Indicates calibration of sensors
** Indicates invalid data

AIR SCIENCES INC.
04/12/90

APPENDIX B

FREQUENCY DISTRIBUTIONS BY DIRECTION AND SPEED

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'A'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1990

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	1.0	0.0	0.0	0.0	0.0	1.0	4.7
NNE	1.5	6.0	0.0	0.0	0.0	0.0	7.5	4.0
NE	1.5	12.4	0.0	0.0	0.0	0.0	13.9	4.0
ENE	2.5	10.0	0.0	0.0	0.0	0.0	12.4	4.1
E	1.5	5.0	0.0	0.0	0.0	0.0	6.5	3.8
ESE	2.5	5.0	0.0	0.0	0.0	0.0	7.5	3.8
SE	3.5	6.5	0.0	0.0	0.0	0.0	10.0	3.5
SSE	5.5	11.9	0.0	0.0	0.0	0.0	17.4	3.6
S	2.0	10.4	0.0	0.0	0.0	0.0	12.4	4.1
SSW	1.0	7.0	0.0	0.0	0.0	0.0	8.0	4.6
SW	0.0	1.5	0.0	0.0	0.0	0.0	1.5	4.0
WSW	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.6
W	0.0	0.5	0.0	0.0	0.0	0.0	0.5	5.2
WNW	0.0	0.5	0.0	0.0	0.0	0.0	0.5	5.4
NW	0.0	0.5	0.0	0.0	0.0	0.0	0.5	3.3
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	21.9	78.1	0.0	0.0	0.0	0.0	100.0	3.9

Calm (less than one knot) = 0.0%

Period mean wind speed = 3.9 knots

Percent occurrence for 'A' stability class(es) 9.3%

AIR SCIENCES INC.
SBWIND(1.2) 04/12/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'B'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1990

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	1.1	3.3	0.0	0.0	0.0	4.3	6.7
NNE	0.0	0.0	2.2	0.0	0.0	0.0	2.2	6.1
NE	1.1	6.5	5.4	0.0	0.0	0.0	13.0	5.5
ENE	0.0	6.5	15.2	0.0	0.0	0.0	21.7	6.2
E	0.0	0.0	4.3	0.0	0.0	0.0	4.3	6.7
ESE	0.0	0.0	1.1	0.0	0.0	0.0	1.1	6.8
SE	1.1	4.3	2.2	0.0	0.0	0.0	7.6	4.9
SSE	0.0	2.2	0.0	0.0	0.0	0.0	2.2	4.9
S	1.1	5.4	6.5	0.0	0.0	0.0	13.0	5.7
SSW	0.0	2.2	8.7	0.0	0.0	0.0	10.9	6.7
SW	0.0	0.0	4.3	0.0	0.0	0.0	4.3	6.9
WSW	0.0	1.1	6.5	0.0	0.0	0.0	7.6	6.5
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	6.5	0.0	0.0	0.0	6.5	6.9
NNW	0.0	0.0	1.1	0.0	0.0	0.0	1.1	7.6
All	3.3	29.3	67.4	0.0	0.0	0.0	100.0	6.1

Calm (less than one knot) = 0.0%

Period mean wind speed = 6.1 knots

Percent occurrence for 'B' stability class(es) 4.3%

AIR SCIENCES INC.
SBWIND(1.2) 04/12/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'C'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1998

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	0.0	0.7	0.0	0.0	0.0	0.7	9.7
NNE	0.0	3.4	1.4	1.4	0.0	0.0	6.1	6.6
NE	0.0	3.4	15.0	2.0	0.0	0.0	20.4	7.3
ENE	0.0	0.0	19.0	2.7	0.0	0.0	21.8	8.4
E	0.0	0.0	2.7	0.0	0.0	0.0	2.7	8.6
ESE	0.0	0.7	0.0	0.0	0.0	0.0	0.7	4.1
SE	0.0	0.7	0.0	0.0	0.0	0.0	0.7	5.2
SSE	0.0	1.4	0.7	0.0	0.0	0.0	2.0	5.6
S	0.0	6.1	0.7	0.0	0.0	0.0	6.8	5.3
SSW	0.0	0.7	2.0	2.0	0.0	0.0	4.8	8.9
SW	0.0	0.0	5.4	2.0	0.0	0.0	7.5	8.9
WSW	0.0	0.0	1.4	0.7	0.0	0.0	2.0	9.4
W	0.0	0.0	0.0	4.1	0.0	0.0	4.1	10.8
WNW	0.0	0.0	3.4	4.1	0.0	0.0	7.5	9.9
NW	0.0	0.0	4.8	3.4	0.0	0.0	8.2	9.7
NNW	0.0	0.0	3.4	0.7	0.0	0.0	4.1	9.3
All	0.0	16.3	60.5	23.1	0.0	0.0	100.0	8.2

Calm (less than one knot) = 0.0%

Period mean wind speed = 8.2 knots

Percent occurrence for 'C' stability class(es) 6.8%

AIR SCIENCES INC.
SBWIND(1.2) 04/12/98

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'D'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1990

Direction	Speed Class Intervals(kts)							Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21	All	
N	0.1	0.8	1.8	0.5	0.0	0.0	3.2	7.5
NNE	0.0	0.5	1.0	0.4	0.1	0.0	2.0	7.8
NE	0.0	0.3	1.4	0.4	0.0	0.0	2.1	8.1
ENE	0.0	0.1	0.1	0.0	0.0	0.0	0.2	7.5
E	0.0	0.2	0.1	0.1	0.0	0.0	0.4	8.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.1	0.0	0.0	0.0	0.0	0.1	3.9
SSE	0.0	0.2	0.1	0.0	0.0	0.0	0.3	5.4
S	0.0	0.9	0.6	0.1	0.0	0.0	1.6	6.0
SSW	0.0	0.8	1.8	2.6	1.9	0.3	7.4	12.4
SW	0.0	0.4	2.7	3.8	0.6	0.0	7.4	11.2
WSW	0.0	0.2	1.5	1.0	0.2	0.0	2.9	10.2
W	0.0	0.3	1.6	0.9	0.2	0.0	3.0	9.7
WNW	0.0	0.2	2.6	6.1	2.9	0.5	12.3	13.4
NW	0.1	0.1	2.7	16.4	22.8	8.8	50.9	17.4
NNW	0.1	0.9	1.9	2.2	0.8	0.4	6.2	11.3
All	0.3	6.0	19.9	34.4	29.4	10.0	100.0	14.3

Calm (less than one knot) = 0.0%

Period mean wind speed = 14.3 knots

Percent occurrence for 'D' stability class(es) 49.2%

AIR SCIENCES INC.
SBWIND(1.2) 04/12/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'E'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
JANUARY - MARCH 1998

Direction	Speed Class Intervals(kts)							Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21	All	
N	6.1	9.9	10.7	0.0	0.0	0.0	26.7	5.1
NNE	0.8	6.9	6.1	0.0	0.0	0.0	13.7	5.8
NE	0.0	0.8	0.8	0.0	0.0	0.0	1.5	5.7
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.8	0.0	0.0	0.0	0.0	0.8	4.1
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	1.5	0.0	0.0	0.0	0.0	1.5	4.1
SSE	0.8	4.6	0.0	0.0	0.0	0.0	5.3	3.6
S	1.5	3.8	0.8	0.0	0.0	0.0	6.1	3.6
SSW	0.0	3.8	4.6	0.0	0.0	0.0	8.4	5.9
SR	0.0	3.1	1.5	0.0	0.0	0.0	4.6	6.0
WSW	0.8	2.3	1.5	0.0	0.0	0.0	4.6	5.4
W	0.0	2.3	2.3	0.0	0.0	0.0	4.6	5.4
WNW	0.8	1.5	3.8	0.0	0.0	0.0	6.1	5.8
NW	3.1	0.8	0.8	0.0	0.0	0.0	4.6	3.8
NNW	2.3	5.3	3.8	0.0	0.0	0.0	11.5	5.0
All	16.0	47.3	36.6	0.0	0.0	0.0	100.0	5.1

Calm (less than one knot) = 0.0%

Period mean wind speed = 5.1 knots

Percent occurrence for 'E' stability class(es) 6.1%

AIR SCIENCES INC.
SBQIND(1.2) 04/12/98

APPENDIX C

WIND SPEED FREQUENCY DISTRIBUTIONS

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - NOJAVE, CALIFORNIA
JANUARY 1990
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	64.2	6.0	4.4	6.7	9.7	6.6	2.1	0.2	0.0	31.1	2
2	35.3	5.6	7.2	9.5	12.2	12.3	8.3	5.4	4.1	40.2	3
3	97.3	2.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	16.9	1
4	99.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	2
5	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	1
6	89.4	1.4	4.3	4.7	0.3	0.0	0.0	0.0	0.0	20.9	3
7	26.7	12.4	8.2	8.5	10.6	13.4	11.1	7.1	2.0	38.0	3
8	16.3	16.5	15.0	13.3	11.8	10.8	7.9	5.1	3.3	39.1	3
9	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	2
10	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	2
11	97.9	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	2
12	53.7	13.1	16.1	11.7	4.6	0.7	0.0	0.0	0.0	25.7	2
13	40.7	23.1	14.9	12.1	6.6	2.2	0.4	0.0	0.0	27.8	3
14	70.6	15.1	10.8	3.0	0.5	0.0	0.0	0.0	0.0	21.4	2
15	59.8	27.8	11.3	1.1	0.0	0.0	0.0	0.0	0.0	22.8	3
16	59.6	12.4	12.1	11.1	4.1	0.6	0.1	0.0	0.0	27.7	3
17	48.3	8.8	12.1	13.9	11.5	4.5	0.8	0.1	0.0	30.3	2
18	99.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	2
19	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	2
20	92.5	7.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	13.5	2
21	82.6	13.5	3.4	0.4	0.0	0.0	0.0	0.0	0.0	18.2	2
22	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	3
23	79.4	5.4	6.0	5.1	3.0	1.0	0.1	0.0	0.0	26.6	3
24	62.9	30.4	5.4	1.2	0.1	0.0	0.0	0.0	0.0	20.5	3
25	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	2
26	42.0	3.8	3.6	6.3	7.7	9.0	7.9	6.5	13.3	53.1	3
27*	71.3	16.1	9.1	3.3	0.3	0.0	0.0	0.0	0.0	23.2	1
28*	95.3	3.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	16.9	3
29*	42.9	15.7	7.9	7.0	6.5	7.6	5.8	4.4	2.2	38.0	2
30*	38.9	11.4	13.6	15.1	12.4	6.1	1.9	0.4	0.2	37.3	3
31*	4.1	5.5	12.8	22.9	24.4	17.2	7.3	3.6	2.3	49.1	1
All**	70.0	8.4	5.8	5.1	4.1	3.0	1.7	1.1	0.9	53.1	3

* The time periods for these days are incorrect by about 2.5 hours.

** All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
FEBRUARY 1990
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1*	6.1	4.2	7.1	9.5	8.3	9.4	10.6	12.4	32.4	52.5	2
2*	64.5	9.2	5.9	6.3	5.7	4.0	2.3	1.2	0.8	39.1	1
3*	86.9	7.0	4.5	1.3	0.2	0.0	0.0	0.0	0.0	22.8	3
4*	23.8	5.6	7.4	11.7	16.4	15.1	9.2	5.2	5.6	49.5	2
5*	91.1	7.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	16.0	3
6*	50.9	9.8	14.8	14.8	7.6	2.0	0.1	0.0	0.0	26.6	3
7*	9.5	9.2	10.7	13.3	15.4	15.3	11.8	7.9	6.8	44.8	1
8	65.0	6.6	9.1	8.5	6.6	3.3	0.8	0.1	0.0	30.5	3
9	98.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	1
10	99.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	2
11	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	2
12	51.8	7.4	7.3	10.7	10.6	8.1	3.0	0.8	0.2	35.0	3
13	17.0	9.1	9.5	12.9	15.2	13.5	9.6	6.6	6.6	44.3	2
14	4.6	10.9	14.9	19.8	21.8	16.9	7.8	2.5	0.8	37.7	1
15	76.7	14.2	6.6	2.3	0.2	0.0	0.0	0.0	0.0	21.8	3
16	23.2	12.4	11.5	16.3	17.3	11.0	5.3	2.4	0.5	35.9	2
17	32.7	23.5	16.2	14.3	9.4	3.3	0.6	0.0	0.0	28.4	2
18	28.2	14.5	10.0	10.2	11.2	10.3	6.8	5.1	3.6	39.8	3
19	29.6	11.2	14.3	15.0	11.6	7.3	5.1	3.4	2.4	42.1	1
20	92.6	4.5	2.0	0.8	0.1	0.0	0.0	0.0	0.0	20.5	3
21	95.6	4.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.8	2
22	96.0	3.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	15.1	2
23	93.1	6.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	14.8	2
24	97.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	2
25	98.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	3
26	90.3	8.5	1.1	0.1	0.0	0.0	0.0	0.0	0.0	16.6	3
27	96.7	2.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	16.2	3
28	89.2	9.3	1.4	0.1	0.0	0.0	0.0	0.0	0.0	17.1	3
All**	64.6	7.5	5.6	6.0	5.6	4.3	2.6	1.7	2.1	52.5	2

* The time periods for these days are incorrect by about 2.5 hours.

** All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
MARCH 1990
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	70.5	17.1	7.9	3.3	1.1	0.0	0.0	0.0	0.0	23.9	2
2	29.8	15.1	14.6	17.3	13.8	6.6	2.4	0.4	0.0	30.9	2
3	9.8	6.5	12.2	19.2	21.2	16.8	9.7	3.4	1.2	39.3	3
4	16.6	13.9	17.8	21.7	18.2	8.9	2.2	0.6	0.0	32.3	2
5	7.8	6.5	7.3	7.1	7.2	8.7	10.5	13.1	31.8	56.3	2
6	68.3	17.3	10.8	2.8	0.6	0.2	0.0	0.0	0.0	24.1	1
7	82.1	8.2	6.8	2.6	0.2	0.0	0.0	0.0	0.0	20.9	3
8	68.0	17.7	7.5	5.2	1.5	0.1	0.0	0.0	0.0	24.3	3
9	93.8	5.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	16.2	3
10	43.0	9.8	13.5	16.1	10.8	5.2	1.2	0.4	0.0	32.5	3
11	23.3	22.0	17.7	16.1	12.0	6.2	2.1	0.5	0.0	32.8	2
12	6.9	4.0	4.7	10.3	16.3	20.1	16.7	12.1	9.0	40.7	2
13	10.2	8.5	13.0	21.4	22.3	15.4	6.6	2.3	0.3	36.2	1
14	1.7	4.3	11.6	22.3	23.6	15.8	8.2	5.9	6.7	50.4	3
15	80.8	9.5	3.9	2.0	1.7	1.3	0.5	0.1	0.1	34.3	1
16	80.3	16.3	2.9	0.4	0.1	0.0	0.0	0.0	0.0	21.9	1
17	61.7	2.9	6.2	13.4	11.3	3.8	0.6	0.0	0.0	28.2	3
18	74.0	4.6	1.9	5.3	7.7	4.5	1.6	0.3	0.0	36.4	1
19	63.2	9.3	9.4	12.6	4.9	0.5	0.0	0.0	0.0	28.4	3
20	67.8	7.6	10.3	10.3	3.5	0.5	0.0	0.0	0.0	24.1	3
21	39.5	12.6	9.7	10.8	9.4	9.2	5.9	2.2	0.6	35.2	3
22	23.0	8.2	11.4	17.3	17.0	13.1	7.0	2.5	0.6	35.5	3
23	20.3	7.9	12.6	17.0	17.7	13.6	7.3	3.0	0.7	35.2	3
24	48.5	8.1	8.1	12.3	11.7	7.5	3.1	0.7	0.1	33.9	3
25	8.2	5.3	10.5	17.2	20.3	19.2	12.5	5.6	1.1	35.5	2
26	17.0	16.1	21.7	22.3	14.9	6.2	1.6	0.2	0.0	32.5	3
27	28.5	16.2	14.9	14.9	13.8	7.5	2.6	1.2	0.3	37.5	3
28	2.6	6.2	11.3	21.1	25.4	19.1	9.5	3.8	1.1	37.5	3
29	24.0	18.4	19.8	17.0	13.2	6.0	1.4	0.1	0.0	28.9	2
30	60.8	22.0	12.7	3.9	0.4	0.1	0.1	0.0	0.0	29.6	2
31	8.2	8.0	15.6	24.1	22.5	14.2	5.8	1.5	0.1	33.4	3
All*	40.0	10.8	10.6	12.5	11.1	7.4	3.9	1.9	1.7	56.3	2

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.





METEOROLOGICAL DATA SUMMARY
OCTOBER - DECEMBER 1989
SOLEDAD MOUNTAIN PROJECT

for
Noranda Mining Corporation
Lakewood, CO

by
Air Sciences Inc.
Lakewood, CO

Project No. 58-07
January 1990



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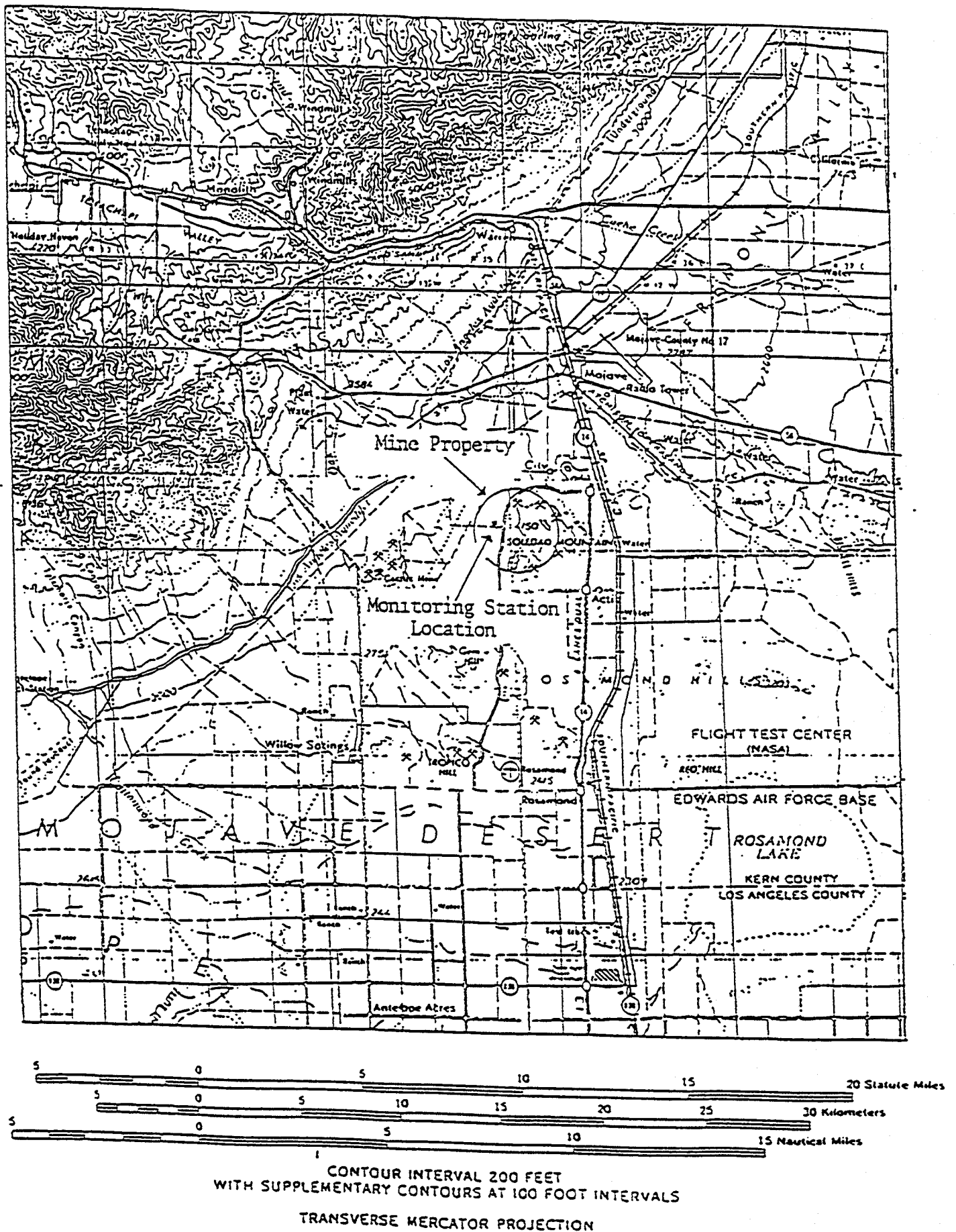
1.0 INTRODUCTION

This report summarizes three months of meteorological data collected near Soledad Mountain in the Mojave Desert of Kern County, California for Noranda Mining Corporation. The monitoring station is near a proposed open-pit mining project known as the Soledad Mountain Project. Data for this report were collected from October 1, 1989 through December 31, 1989. This report summarizes the first quarter of the monitoring program which began on September 29, 1989. Monitoring was performed in accordance with "Sampling Protocol, Golden Queen Mine Project, Mojave, California," (Air Sciences Inc., October, 1989). The purpose of the monitoring was to collect dispersion meteorological data to be used in dispersion modeling and to collect climatological data.

1.1 Location

The Soledad Mountain monitoring station is located on the plains west of Soledad Mountain in the Mojave Desert of southeastern Kern County, California. The site is approximately 12 miles NW of Rosamond Lake and 5 miles SSW of the town of Mojave. The mine pit, waste dumps and processing are expected to be located on the western side of Soledad Mountain, just east of the Mojave-Tropico Road. The monitoring station is located approximately one-quarter mile west of Mojave-Tropico Road on the desert plain in an area where the meteorological data should define the wind patterns that will carry pollutants toward residential areas. The station will be at an approximate elevation of 2,850' MSL at UTM coordinates 3,871 km north and 389 km east (the southwest quarter of Section 1, T 10 N, R 13 W). Vegetation is sparse in this part of the Mojave Desert Basin and consists of sagebrush and widely scattered Joshua trees. The monitoring location is shown on Figure 1.

FIGURE 1
GENERAL PROJECT LOCATION



1.2 Program Description

The parameters of wind speed, wind direction, direction deviation (sigma theta) and temperature are measured and recorded at the monitoring station. The wind parameters are measured by sensors mounted on top a 10-meter meteorological tower. Temperature is measured by a sensor located in an aspirated shield at the 2-meter level on the tower.

The meteorological data are sampled every 10 seconds by a digital Data Acquisition System (DAS) and processed and stored in 15-minute average format and as 8-hour wind speed maximum and frequency distribution data. The DAS digitally stores sine and cosine of wind direction, wind speed and temperature on a time-averaged basis. The 15-minute and 8-hour data, recorded on a solid-state memory module, are regularly transferred by mail to Air Sciences Inc. (Air Sciences) for processing and archiving. EPA methods are used to process the 15-minute data into hourly averages of wind speed, wind direction, wind direction deviation (sigma theta), and temperature as suggested in "On-Site Meteorological Program Guidance for Regulatory Modeling Applications," (EPA-450/4-87-013, Sections 6.0-6.4). Processing of the 8-hour data is performed by the DAS prior to the recording of the data onto the solid-state memory module.

Calibrations of the monitoring equipment were performed in accordance with the sampling protocol. Equipment calibration, audit and data quality assurance procedures are based on EPA guideline documentation and are fully described in the monitoring plan. Copies of the calibrations performed subsequent to the installation are located in Appendix A.

1.3 Data Recovery

Data recovery rates for all parameters are presented in Table 1. Recovery was 100 percent for all meteorological parameters. Data recovery rates for this first quarter of data collection exceeded the minimum EPA recommended annual average rate of recovery for meteorological sampling of 90 percent.

TABLE 1
DATA RECOVERY

<u>Parameter</u>	<u>Percent</u>
Wind Speed	100
Wind Direction	100
Sigma Theta	100
Temperature	100

2.0 METEOROLOGICAL DATA SUMMARY

The meteorological parameters were sampled on site every 10 seconds and digitally processed into 15-minute averages. The 15-minute averages were transmitted to Air Sciences for quality assurance checks and to be used as input for the calculation of 1-hour averages. All summary data presented in this section was produced by the processing of hourly averaged data into tables of summary statistics and SAROAD formatted tables. The meteorological values of wind speed, wind direction and temperature, collected during the quarter, are presented as hourly averages in SAROAD format by month for each parameter in Appendix B.

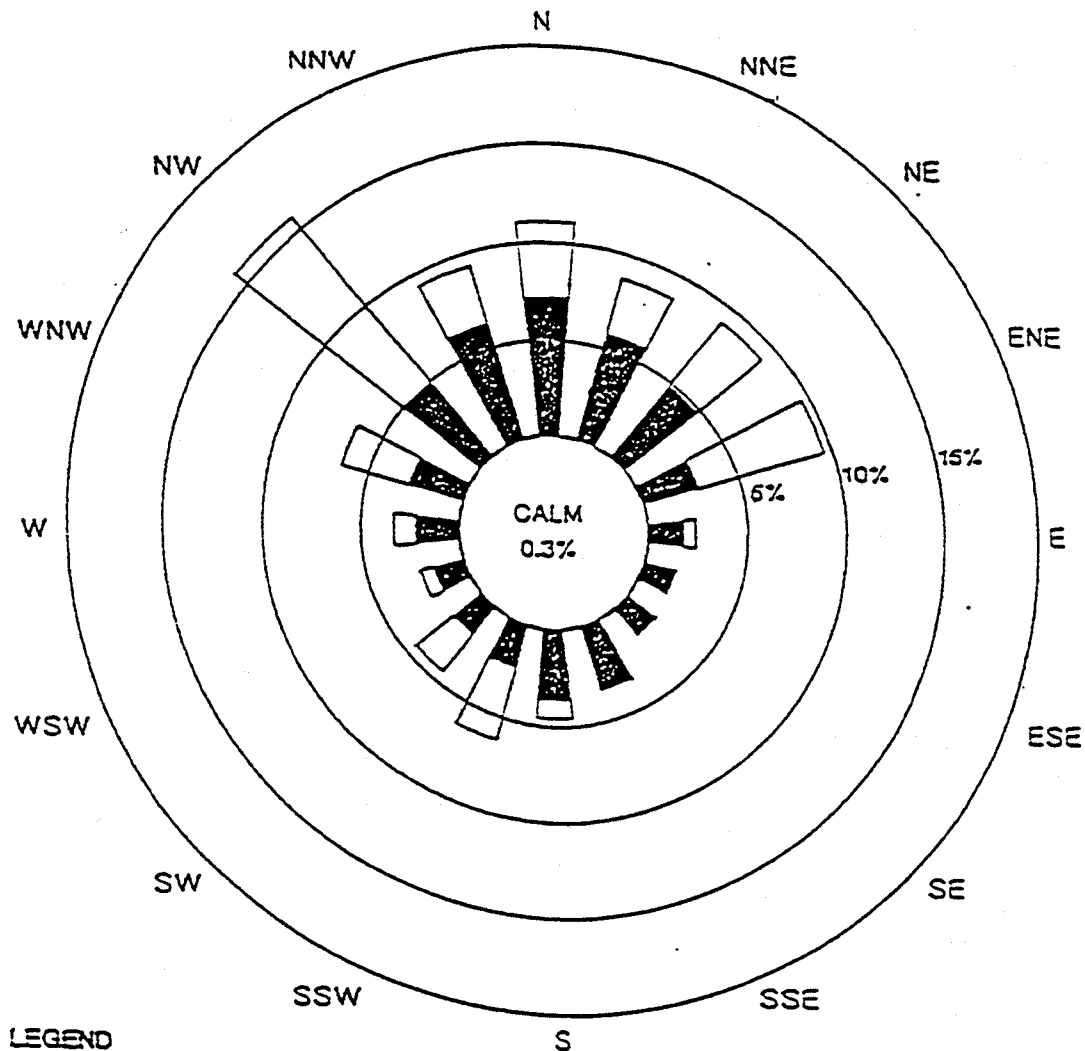
2.1 Winds

The wind frequency distribution by direction and speed for all atmospheric stability classes shown as Figure 2 and Table 2, shows that the highest frequency of winds were from the north (NW through ENE). These northerly winds accounted for over 63 percent of the total winds. The highest wind speed was from the northwest at an average of 12.2 knots (14.0 mph). All other winds were much lower in speed as shown by the overall wind speed for all directions of 6.8 knots (7.8 mph). The frequency distributions by direction and speed for stability classes A through F are included in Appendix C.

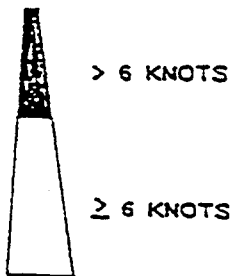
Appendix D contains one table for each month of data collection and displays wind speed frequency distributions (histograms). Each table contains the average daily percentages of winds in each wind speed category for each day of the month with a maximum wind gust for the day and a record of the time period in which the maximum wind gust occurred. Time period 1 is defined as the hours of midnight to 8 a.m., period 2 is the hours of 8 a.m. to 4 p.m., and period 3 equals the hours of 4 p.m. to midnight. Frequency distributions were recorded for each 8-hour time period from 10-second wind speed data. These 8-hour histograms were processed by Air Sciences into daily average histograms. The maximum wind gust for the quarter occurred on October 25 during time period 3 and was 50.6 mph.

FIGURE 2

WIND FREQUENCY DISTRIBUTION



LEGEND



SOLEDAD MOUNTAIN PROJECT
MOJAVE, CALIFORNIA
OCTOBER-DECEMBER 1989

AIR SCIENCES INC.
LAKEWOOD, COLORADO

TABLE 2
FREQUENCY OF WINDS BY DIRECTION AND SPEED
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

<u>Direction</u>	<u>Speed Class Intervals(kts)</u>						<u>All</u>	<u>Mean Speed</u>
	<u>1,<3</u>	<u>3,<6</u>	<u>6,<10</u>	<u>10,<16</u>	<u>16,<21</u>	<u>>21</u>		
N	3.3	3.9	3.6	0.1	0.0	0.0	11.0	4.8
NNE	2.4	3.4	2.7	0.1	0.0	0.0	8.7	4.9
NE	1.9	2.9	3.7	0.5	0.1	0.0	9.1	5.9
ENE	1.0	1.9	5.1	1.6	0.0	0.0	9.6	7.2
E	1.0	0.8	0.3	0.3	0.0	0.0	2.4	4.8
ESE	0.9	0.6	0.1	0.0	0.0	0.0	1.6	3.0
SE	1.1	0.7	0.0	0.0	0.0	0.0	1.8	3.0
SSE	1.2	2.3	0.0	0.0	0.0	0.0	3.5	3.3
S	1.2	2.5	0.8	0.0	0.0	0.0	4.6	4.3
SSW	1.1	1.3	1.8	1.4	0.5	0.1	6.2	8.3
SW	0.8	1.1	1.0	1.1	0.4	0.0	4.4	8.4
WSW	0.8	0.8	0.7	0.1	0.0	0.0	2.3	4.7
W	1.4	0.8	0.9	0.3	0.0	0.0	3.3	4.9
WNW	1.8	1.0	1.0	1.6	0.6	0.2	6.3	8.4
NW	3.4	1.5	1.1	4.1	3.9	1.7	15.7	12.2
NNW	3.2	3.1	1.8	0.7	0.3	0.1	9.3	5.4
All	26.4	28.6	24.6	12.0	5.9	2.2	99.7	6.8

Calm (less than one knot) = 0.3%

Period mean wind speed = 6.8 knots

TABLE 3
FREQUENCY OF WINDS BY DIRECTION AND STABILITY
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

<u>Direction</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>All</u>
N	0.4	0.2	0.2	2.4	3.6	4.2	11.0
NNE	0.7	0.2	0.8	2.7	1.1	3.2	8.7
NE	1.9	1.2	1.2	2.5	0.4	1.9	9.2
ENE	1.6	2.3	2.5	2.0	0.1	1.2	9.7
E	1.0	0.0	0.1	0.4	0.1	0.7	2.4
ESE	0.7	0.0	0.0	0.0	0.0	0.8	1.6
SE	0.8	0.1	0.0	0.0	0.1	0.7	1.8
SSE	1.2	0.3	0.1	0.3	0.2	1.4	3.5
S	1.1	0.3	0.5	0.6	0.6	1.4	4.6
SSW	0.9	0.3	0.5	2.9	0.3	1.3	6.2
SW	0.4	0.0	0.0	2.5	0.0	1.4	4.4
WSW	0.1	0.0	0.0	0.5	0.4	1.3	2.3
W	0.2	0.0	0.0	0.9	0.3	1.8	3.3
WNW	0.1	0.0	0.0	3.2	0.5	2.3	6.2
NW	0.5	0.0	0.1	10.8	0.4	3.8	15.7
NNW	0.3	0.0	0.0	2.9	1.4	4.7	9.3
All	12.1	5.1	6.2	34.8	9.4	32.1	99.7

Table 3 shows the frequency distribution by atmospheric stability categories A through F. Categories A through D occur in the daytime and categories D through F occur at night. Stability class was calculated by the method of Irwin (1980) which uses wind speed, standard deviation of wind direction and local sunrise and sunset times for determining daytime and nighttime periods. A nighttime correction is applied to the stability class determination. The assumed terrain mixing height was 15 centimeters. Table 3 shows that both daytime and nighttime winds were predominately out of the north (NW through ENE).

2.2 Temperature

Temperature data summaries are presented in Table 4. Average temperature for the data collection period was 12.0 °C (53.6 °F). The coldest month of the period was December and the warmest was October. The minimum temperature recorded was -6.8 °C (19.8 °F) and the maximum was 31.7 °C (89.0 °F).

TABLE 4
MONTHLY TEMPERATURE MEANS AND EXTREMES
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989
(°C)

<u>Month</u>	<u>Average Daily Maximum</u>	<u>Average Daily Minimum</u>	<u>Daily Average</u>	<u>Monthly Maximum</u>	<u>Monthly Minimum</u>
Oct	23.2	9.0	16.2	31.7	-2.3
Nov	20.6	4.8	12.4	27.3	-4.8
Dec	16.5	-0.9	7.4	22.7	-6.8
Qtr	20.1	4.3	12.0	31.7	-6.8



APPENDIX A

Calibration Records

WIND SPEED CALIBRATION
CAMPBELL SCIENTIFIC ^{CR10} LOGGER

Sensor Model No: 014 Client: Golden Queen / Solid
 Sensor Serial No: C1136 Job No: 58-7
 Sensor Height: 1.5m Site: In House
 Logger Ser. No.: 4813 Date: 9-28-89
 Name: Don King Time: 5:30 mst

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	<u>New</u>	_____
Cable	<u>✓</u>	_____
Cups	<u>✓</u>	_____

II. SYSTEM LINEARITY CHECK

Input Frequency (Hz)	Target (mph)	CR10 Reading (mph)
1. <u>1.0</u>	<u>2.789</u>	<u>2.789</u>
2. <u>10.0</u>	<u>18.890</u>	<u>18.890</u>
3. <u>0.0</u>	<u>1.0</u>	<u>1.0</u>
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____

Target (mph) = (Hz x 1.789) + 1.0

Target (m/s) = (Hz x 0.798) + 0.447

Comments: used 30 + 300 RPM Synchronous
AC Motors

Signature [Signature]
 AIR SCIENCES INC. 2/87

WIND DIRECTION CALIBRATION
CAMPBELL SCIENTIFIC · · · · · LOGGER
CR10

Sensor Model No: <u>02.4</u>	Client: <u>Golden Queen/Solid</u>
Sensor Serial No: <u>062-81</u>	Job No: <u>58-7</u>
Sensor Height: <u>10m</u>	Site: <u>met tower</u>
Logger Ser. No.: <u>5392</u>	Date: <u>9-29-89</u>
Time: <u>9:00 PST</u>	Name: <u>Jim King</u>

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	<u>✓</u>	<u> </u>
Cable	<u>✓</u>	<u> </u>
Vane	<u>✓</u>	<u> </u>

II. SYSTEM LINEARITY CHECK

	Target (degrees)	CR10 Reading (degrees)	Difference
1. Vane	<u>180.5</u>	<u>180</u>	<u>0.5°</u>
Tail	<u>360.5</u>	<u>360</u>	<u>0.5</u>
2. Vane	<u>306.5</u>	<u>305</u>	<u>1.5</u>
Tail	<u>126.5</u>	<u>127</u>	<u>-0.5</u>
3. Vane	<u>221.5</u>	<u>222</u>	<u>-0.5</u>
Tail	<u>41.5</u>	<u>40</u>	<u>1.5</u>
4. Vane	<u> </u>	<u> </u>	<u> </u>
Tail	<u> </u>	<u> </u>	<u> </u>
5. Vane	<u> </u>	<u> </u>	<u> </u>
Tail	<u> </u>	<u> </u>	<u> </u>
6. Vane	<u> </u>	<u> </u>	<u> </u>
Tail	<u> </u>	<u> </u>	<u> </u>

Comments: Declination 15.50 deg. East

sensor slope .71498

set screw = 180.03

Tolerance = ±5°

Signature

TEMPERATURE CALIBRATION
CAMPBELL SCIENTIFIC LOGGER
CR10

Sensor Model No : 107
Sensor Serial No : NA
Sensor Height : 2m
Logger Ser. No. : 5392
Name : Jim King

Client : Golden Queen / Sobdai
Job No : 58-7
Site : met Tower
Date : 9-29
Time : 830 PST

SYSTEM INSPECTION

	PASS	FAIL
Radiation Shield	<u>✓</u>	<u> </u>
Cable	<u>✓</u>	<u> </u>

I. SYSTEM PSYCHROMETER CHECK

Psychrometer ()		CR10 Reading
Measured	Corrected	(degrees)
1. <u>23.6</u>	<u> </u>	<u>23.6</u>
2. <u>24.2</u>	<u> </u>	<u>24.2</u>
3. <u>24.7</u>	<u> </u>	<u>24.7</u>
4. <u>25.7</u>	<u> </u>	<u>25.6</u>
5. <u>26.3</u>	<u> </u>	<u>26.3</u>
6. <u>26.8</u>	<u> </u>	<u>26.8</u>
7. <u>27.4</u>	<u> </u>	<u>27.8</u>
8. <u>28.4</u>	<u> </u>	<u>28.4</u>
9. <u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>
Average <u> </u>		<u> </u>

Comments:

Signature

Jim King

APPENDIX B

SAROAD Tables

HOURLY AVERAGED WIND SPEED
OCTOBER 1989
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	72	64	51	29	17	18	0	11	15	16	32	20	19	32	54	65	68	40	36	36	42	42	32	30	36
2	34	35	42	43	39	45	42	69	81	93	94	105	109	109	105	101	99	90	77	76	43	14	44	47	68
3	36	46	47	44	29	31	64	68	51	33	22	23	22	24	32	59	81	85	83	89	94	63	38	32	50
4	31	38	14	12	10	10	18	23	24	42	46	46	42	40	42	41	42	30	15	22	28	39	32	27	30
5	32	36	29	11	13	11	10	18	38	42	44	34	23	23	21	18	21	24	27	10	16	32	43	44	26
6	19	22	34	21	16	25	13	9	20	16	34	38	33	44	51	64	71	66	72	62	59	60	64	62	41
7	59	70	75	67	37	30	25	13	22	39	49	51	47	42	52	46	45	33	36	37	37	20	19	25	41
8	23	26	21	11	17	32	35	35	38	33	39	42	30	36	30	33	33	48	70	60	18	15	16	8	32
9	12	16	12	14	6	9	9	12	16	15	31	29	29	35	38	29	21	11	21	24	33	14	16	12	19
10	21	25	13	13	22	25	19	14	13	17	14	16	26	30	33	43	46	40	63	73	68	69	60	41	34
11	13	13	14	23	20	31	29	20	34	24	22	25	27	31	39	56	54	42	44	26	36	12	11	0	28
12	9	11	13	10	12	8	0	10	11	17	18	25	43	43	54	58	52	36	24	32	37	30	12	15	25
13	11	8	8	8	7	18	12	10	12	17	17	31	42	45	49	58	54	31	18	23	20	17	19	12	23
14	15	22	17	13	16	22	40	42	56	51	77	90	106	117	127	115	110	118	129	112	111	75	94	74	74
15	116	128	112	116	92	33	34	88	93	98	110	116	114	116	105	118	124	130	127	107	97	81	62	38	98
16	29	17	16	13	13	12	26	10	17	18	24	30	34	29	27	25	23	21	13	14	13	14	25	12	20
17	11	16	11	9	35	45	46	45	45	53	54	50	53	52	50	49	40	31	25	19	21	23	19	24	34
18	7	11	13	21	39	42	13	30	34	46	42	32	32	34	33	27	25	19	17	21	18	30	27	16	26
19	13	8	12	7	15	24	10	18	33	34	53	45	37	29	26	20	12	14	12	12	34	37	40	38	24
20	38	13	12	12	14	11	10	29	62	79	77	75	87	99	99	105	101	75	36	31	49	49	51	34	52
21	71	59	58	49	47	56	40	55	80	63	75	86	86	94	93	88	77	51	38	38	40	38	34	21	60
22	16	24	16	16	20	20	20	19	22	23	27	22	16	22	13	8	13	10	9	11	21	22	25	42	19
23	40	21	37	54	46	40	32	51	67	70	77	81	83	84	76	75	58	40	30	36	34	30	20	19	50
24	30	34	24	23	15	11	20	16	21	43	86	89	66	63	58	65	69	52	19	23	27	30	30	37	40
25	27	36	76	76	09	02	71	80	93	105	96	72	86	100	114	69	56	118	138	136	130	101	88	98	89
26	92	94	84	34	17	9	13	11	14	14	28	22	22	19	23	20	38	56	72	67	65	44	24	21	38
27	21	42	90	98	76	49	51	70	79	71	62	74	85	103	120	111	115	85	67	108	89	131	137	139	86
28	120	100	61	50	51	37	20	28	31	40	45	42	37	36	35	38	40	34	35	47	38	34	24	30	44
29	38	46	55	56	55	56	52	55	56	68	72	72	67	62	58	56	50	45	56	47	15	29	13	12	50
30	10	21	28	15	9	15	10	13	32	37	47	44	45	40	32	25	14	10	17	9	13	19	13	8	22
31	8	9	7	6	6	11	8	9	17	32	31	30	37	33	32	25	13	10	14	7	11	8	8	9	16
AVERAGE	35	36	36	31	29	28	27	32	40	44	50	50	51	54	56	55	54	48	46	46	44	41	36	34	42

* Indicates calibration of sensors
** Indicates invalid data

ATR SCIENCES INC.
SAROAD(V6.0) 1/16/90

HOURLY AVERAGED WIND DIRECTION
OCTOBER 1989
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	305	303	324	10	24	5	21	37	148	118	29	89	221	231	207	207	231	282	299	260	273	259	245	224
2	205	195	194	187	186	178	189	215	218	210	219	217	211	211	211	212	211	216	217	208	209	135	309	298
3	290	303	272	255	259	294	312	316	316	314	42	44	17	180	206	295	317	312	310	307	312	315	334	357
4	343	332	54	64	122	344	1	23	21	47	57	56	61	47	54	56	50	37	24	351	13	350	348	6
5	6	346	329	304	255	342	351	37	43	56	62	61	134	148	342	50	129	155	257	169	336	304	299	296
6	319	334	329	30	332	346	348	117	150	166	153	184	194	204	296	315	316	300	304	298	301	303	306	307
7	307	310	310	312	342	6	16	67	22	42	56	64	68	64	61	63	53	71	360	352	352	14	8	7
8	19	1	7	308	311	7	13	19	34	79	73	73	57	69	52	33	49	330	314	311	19	57	22	113
9	328	340	30	49	292	325	321	157	195	160	45	53	58	70	56	46	61	280	26	325	314	50	30	103
10	27	347	359	37	338	346	15	38	275	161	134	135	141	188	218	211	231	280	302	301	302	302	304	314
11	137	110	52	26	339	335	34	351	355	17	154	193	188	182	199	200	255	308	302	287	252	181	201	207
12	218	297	199	201	35	348	351	74	179	202	150	167	204	205	194	212	223	220	351	278	290	291	59	24
13	302	118	61	54	116	350	9	124	164	158	157	182	186	196	210	209	215	207	210	210	231	225	206	175
14	205	205	190	193	196	190	258	269	236	256	312	307	307	304	309	307	303	310	310	306	307	306	293	303
15	301	307	304	303	294	186	296	280	298	307	312	314	318	316	315	317	313	311	311	312	313	316	317	327
16	21	43	76	358	201	114	7	136	151	166	80	50	54	40	79	78	63	31	88	7	5	33	350	331
17	306	328	306	290	2	21	32	37	40	45	67	70	59	49	53	58	56	72	35	325	318	303	301	305
18	48	9	344	328	350	5	255	19	43	55	65	82	62	63	59	98	55	109	309	335	319	323	301	8
19	317	21	270	87	329	356	11	233	18	39	60	62	44	40	48	44	130	168	46	36	4	358	356	2
20	343	43	15	32	7	10	299	193	207	224	227	223	233	224	224	230	227	218	237	202	202	184	210	247
21	219	222	222	225	235	205	225	210	206	217	204	211	207	205	203	209	213	214	217	225	213	210	207	100
22	155	188	167	160	236	207	175	166	210	129	138	220	70	8	43	320	328	132	178	163	183	166	190	226
23	238	207	206	211	211	217	208	211	206	210	208	208	211	219	219	213	206	189	181	194	197	198	169	134
24	166	192	175	163	154	173	164	168	171	227	306	311	281	276	256	206	309	299	273	201	239	217	236	276
25	243	282	312	304	309	302	300	301	302	316	315	309	303	300	313	305	294	283	303	307	308	315	317	313
26	310	312	315	345	18	210	14	88	53	98	59	69	118	150	192	183	311	314	312	310	316	317	285	26
27	53	313	312	311	323	321	297	326	309	316	302	295	305	313	312	312	320	310	330	321	347	337	328	315
28	313	336	345	337	321	346	351	14	20	46	63	58	72	55	62	63	67	42	22	41	44	29	10	16
29	50	41	54	50	50	53	53	58	69	67	63	70	69	69	71	74	71	83	94	55	353	358	284	360
30	18	14	340	329	246	331	304	51	39	64	64	63	54	60	53	30	22	59	15	8	356	318	322	354
31	80	324	84	26	333	350	351	30	30	34	41	58	63	62	68	59	95	168	44	21	327	334	339	346

* Indicates calibration of sensors
** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
OCTOBER 1989
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	147	145	141	140	136	120	103	153	186	206	224	240	254	266	270	261	239	201	187	179	172	164	150	138	184
2	133	128	121	121	112	107	116	144	164	176	189	195	199	200	194	181	160	142	129	125	115	99	102	100	144
3	90	87	95	100	87	78	99	121	145	161	178	188	202	208	214	204	178	150	137	131	127	123	116	112	139
4	108	107	103	97	87	71	66	120	151	175	199	213	221	229	235	238	233	208	172	163	155	144	132	139	157
5	131	117	98	85	74	66	86	176	200	219	232	243	247	253	256	257	251	221	192	158	170	174	175	171	177
6	160	165	168	160	128	101	122	177	207	230	247	258	265	270	272	263	246	220	208	203	196	190	188	188	201
7	187	187	182	176	169	162	161	197	221	237	254	264	271	280	285	282	274	257	211	194	180	163	162	166	213
8	171	174	166	116	100	107	150	198	226	252	265	277	282	289	291	290	282	245	227	217	201	193	190	176	212
9	156	135	136	138	132	113	108	191	224	247	268	283	295	300	302	302	295	251	202	213	218	204	204	193	213
10	196	174	147	175	172	154	149	193	231	250	271	294	303	310	311	307	287	248	228	222	216	213	210	204	228
11	194	187	183	182	179	180	185	225	244	251	274	293	305	313	317	313	287	247	234	218	210	185	176	160	231
12	147	160	170	161	165	158	141	188	220	242	263	288	303	308	310	304	292	259	235	219	215	209	198	206	223
13	207	191	181	172	166	144	127	190	228	249	272	291	302	309	310	296	273	235	209	196	194	176	173	164	219
14	150	152	140	140	107	128	154	186	205	215	221	227	229	225	221	211	199	184	178	176	170	163	160	159	179
15	157	155	154	152	150	149	155	165	188	201	211	215	222	222	218	203	186	167	160	159	160	159	157	151	176
16	148	140	137	137	111	98	94	153	193	208	228	239	252	259	263	263	255	211	183	176	174	168	158	125	182
17	122	112	108	103	122	135	145	191	214	237	252	263	272	278	279	277	267	248	207	176	167	161	143	139	192
18	111	133	111	113	113	122	119	174	222	235	252	263	270	275	277	276	267	227	161	150	159	164	154	132	187
19	112	95	89	78	83	92	92	162	201	220	240	245	251	258	260	257	247	203	160	155	166	167	155	151	172
20	134	117	109	104	93	97	92	142	173	181	170	191	196	187	181	159	147	139	134	128	125	124	126	126	141
21	128	126	126	126	126	123	120	131	139	147	158	169	173	172	169	165	146	135	134	130	122	120	125	102	138
22	105	105	105	95	84	86	95	129	151	157	157	149	150	142	142	138	136	131	123	131	134	126	123	134	126
23	131	122	133	137	134	132	131	143	156	168	176	185	194	197	197	193	179	153	132	124	116	116	110	100	148
24	88	89	81	96	88	71	86	122	158	177	183	186	191	193	195	183	163	149	132	125	130	116	122	118	135
25	107	115	109	105	93	84	82	93	108	113	126	138	125	126	123	113	104	97	90	87	80	78	78	76	102
26	73	70	60	60	36	12	19	78	113	133	143	153	163	174	177	174	154	115	102	99	99	91	83	81	103
27	86	85	82	79	75	73	80	105	120	140	163	185	184	174	161	147	124	108	105	101	97	98	97	92	115
28	89	92	89	88	85	80	56	70	103	127	149	157	164	172	175	175	164	139	112	115	95	86	69	62	113
29	85	67	78	71	68	67	64	75	90	108	124	134	141	147	151	151	142	131	120	99	55	49	32	20	95
30	15	30	17	-2	-20	-23	-11	55	112	131	140	154	161	167	160	166	156	116	70	59	62	44	29	28	76
31	22	21	19	25	36	28	18	64	131	146	164	171	179	181	186	185	174	112	77	70	88	59	44	38	93
AVERAGE	125	122	118	114	106	100	103	146	175	192	206	218	225	229	229	224	210	182	160	152	147	140	134	127	162

* Indicates calibration of sensors

** Indicates invalid data

AIR SCIENCES INC.
SAROAD(96.0) 1/16/90

HOURLY AVERAGED WIND SPEED
NOVEMBER 1989
SOLEDAO MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	14	12	12	17	17	25	26	42	34	30	48	59	50	46	42	30	30	33	23	19	32	39	33	25	31
2	10	12	13	11	8	11	17	25	40	37	35	37	38	36	32	25	16	13	16	12	17	15	6	7	20
3	9	7	7	10	8	12	16	22	28	33	33	32	25	28	21	19	17	18	9	9	8	10	14	15	17
4	9	9	11	12	8	20	14	15	14	9	17	30	41	37	58	69	62	65	32	25	16	23	19	21	27
5	34	25	21	14	25	17	18	18	20	34	71	67	79	96	92	67	41	45	34	29	32	26	21	19	39
6	28	28	35	44	34	02	05	89	99	69	34	42	29	22	42	76	85	97	100	98	95	64	102	132	67
7	94	70	62	98	65	49	67	85	93	89	80	75	83	94	91	91	81	86	105	79	36	15	13	16	72
8	13	6	11	21	42	31	40	36	33	39	42	43	46	46	40	39	38	34	42	35	17	39	32	11	32
9	9	9	6	10	11	15	30	26	33	31	37	40	38	38	30	25	12	19	13	10	26	30	17	18	22
10	25	11	8	27	30	22	10	11	29	27	33	31	29	30	34	25	16	16	10	12	12	15	7	8	20
11	12	11	6	13	12	14	0	10	8	13	21	32	25	25	24	25	15	13	7	8	8	7	8	10	14
12	10	14	10	12	9	19	17	10	20	30	29	28	46	73	73	74	80	57	35	25	18	21	26	51	33
13	42	56	66	57	75	98	83	78	79	64	72	97	87	88	95	92	91	92	84	54	60	57	59	80	75
14	84	90	77	38	78	73	64	38	31	28	21	33	35	39	34	25	14	15	9	11	33	43	32	38	41
15	33	29	39	34	30	40	23	38	30	36	45	44	37	34	33	24	17	20	14	19	33	25	22	9	30
16	13	10	11	10	13	9	15	7	8	34	42	38	31	33	22	18	8	18	9	8	10	11	12	11	17
17	14	26	19	17	9	16	17	21	10	16	29	21	40	44	41	34	24	35	36	38	33	42	34	25	27
18	23	32	25	19	21	26	32	38	44	38	44	46	46	53	52	46	40	32	18	17	43	36	35	31	35
19	30	34	35	23	30	33	24	7	16	42	38	34	41	38	37	28	24	31	26	33	37	41	21	12	30
20	12	15	22	23	12	18	7	8	15	13	22	12	15	13	26	38	28	28	29	18	17	16	16	14	18
21	46	54	47	63	25	26	30	44	67	83	90	97	102	96	87	95	105	108	94	85	78	70	26	31	69
22	15	16	10	13	22	13	11	9	8	17	28	18	17	17	19	10	5	16	9	8	18	15	15	12	13
23	10	13	8	15	14	15	17	11	8	17	28	23	59	92	78	66	66	65	66	30	51	46	14	17	35
24	24	37	27	64	99	46	52	72	46	39	58	68	85	81	86	102	73	59	33	21	16	22	43	69	55
25	67	76	54	39	34	45	20	37	44	46	59	76	84	100	79	73	72	60	71	68	57	74	80	76	62
26	68	70	72	54	63	59	102	49	62	80	103	106	101	103	82	68	77	102	134	106	96	79	82	33	81
27	26	36	40	35	32	32	30	28	37	46	58	57	76	76	72	60	62	68	38	25	28	14	17	16	42
28	30	20	33	25	23	29	24	29	31	50	55	56	63	65	60	57	63	61	26	20	9	9	12	13	36
29	10	36	30	51	50	40	41	43	41	46	43	38	30	46	45	40	34	25	24	32	35	42	36	17	37
30	11	7	10	8	10	8	7	19	20	40	38	29	28	26	25	18	19	15	8	7	10	17	16	14	17
AVERAGE	28	29	28	29	31	31	32	32	35	39	45	47	50	54	52	49	44	45	38	32	32	32	29	28	37

* Indicates calibration of sensors
** Indicates invalid data
ATR SCIENCES INC.
SAROAD(V6.0) 1/16/90

HOURLY AVERAGED WIND DIRECTION
 NOVEMBER 1909
 SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
 UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	336	265	254	293	6	315	327	19	38	65	66	70	68	63	61	83	89	111	35	319	12	19	18	340
2	307	323	296	304	306	275	328	15	37	45	61	65	60	70	53	61	69	201	10	6	327	354	33	62
3	358	332	347	13	30	27	342	9	31	25	42	70	59	65	106	31	2	358	350	56	41	305	306	245
4	279	87	284	296	297	7	356	14	127	19	120	169	174	287	308	321	319	303	255	291	15	166	194	231
5	290	306	25	171	223	239	161	178	219	260	307	306	305	314	309	300	261	247	239	175	266	177	125	135
6	294	305	335	42	356	356	334	326	309	326	71	67	83	99	321	323	319	316	317	315	311	299	309	312
7	329	337	320	306	323	335	320	314	312	312	312	307	315	313	310	318	321	315	316	312	332	81	145	325
8	64	33	275	326	11	9	7	14	26	44	64	67	57	63	66	72	68	19	350	355	301	354	350	13
9	292	135	67	125	330	350	356	5	23	32	41	58	72	76	80	75	119	302	358	346	337	350	331	328
10	344	246	341	344	350	333	71	15	21	59	48	61	65	64	56	56	30	329	36	41	15	331	52	190
11	352	360	352	230	301	326	267	140	121	149	198	26	49	46	51	65	66	302	79	170	65	19	155	293
12	308	288	200	28	219	165	333	193	170	174	177	212	313	309	311	316	321	308	271	276	220	157	130	311
13	310	324	343	313	327	322	309	324	326	356	328	329	324	327	326	316	310	304	302	298	289	280	283	296
14	298	301	305	318	312	327	335	1	25	24	41	72	69	76	71	70	62	240	15	358	6	31	10	356
15	1	343	348	354	8	2	329	3	15	43	63	64	68	70	60	51	8	354	329	319	337	308	297	290
16	333	285	325	61	326	310	12	142	99	36	44	73	58	59	69	130	323	220	63	14	261	220	98	42
17	5	359	5	37	128	26	315	20	201	119	37	41	60	66	70	49	31	43	20	22	47	349	360	27
18	4	46	3	276	338	5	7	33	55	60	65	65	64	65	72	84	83	112	350	329	354	338	342	339
19	354	4	359	356	9	6	302	344	80	31	47	51	62	74	74	54	39	5	346	358	23	6	269	321
20	337	342	358	277	278	251	86	199	219	329	36	161	178	202	175	172	167	146	171	253	189	297	32	111
21	320	313	313	323	320	348	312	311	298	316	313	310	316	313	323	328	318	319	319	316	316	323	360	4
22	356	351	42	350	346	5	20	324	135	146	117	28	109	147	146	141	215	240	238	217	208	254	270	159
23	205	190	188	292	184	151	13	97	167	183	187	218	325	316	313	309	313	324	348	243	305	271	106	225
24	204	248	274	305	319	277	273	317	204	205	269	314	305	297	303	309	301	207	205	175	176	246	303	318
25	326	317	290	277	350	270	191	209	205	222	219	214	211	212	224	218	215	210	212	209	212	220	215	202
26	204	212	206	216	297	277	319	275	295	318	314	311	297	306	305	312	328	318	310	313	315	316	322	354
27	355	355	355	353	357	350	351	6	43	59	63	68	69	71	76	77	87	96	61	34	10	343	7	9
28	21	12	11	36	20	19	10	6	24	63	70	62	62	58	66	70	73	86	16	300	342	7	348	355
29	25	3	35	15	1	358	1	18	31	53	54	65	63	63	69	72	71	31	5	338	353	351	342	328
30	32	1	277	357	21	5	275	50	10	30	32	35	41	55	26	32	45	343	204	326	293	27	9	5

* Indicates calibration of sensors
 ** Indicates invalid data

AIR SCIENCES INC.
 SAROAD(V6.0) 1/16/90

HOURLY AVERAGED TEMPERATURE
NOVEMBER 1989
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	35	10	9	3	6	38	34	94	129	151	162	174	183	192	194	192	179	150	117	87	87	88	82	50	182
2	26	32	22	2	2	-1	-2	82	131	146	160	172	179	187	189	189	179	122	79	83	58	60	43	29	90
3	39	36	31	34	20	21	24	106	149	162	182	195	206	214	213	218	202	136	106	92	122	114	106	78	117
4	64	74	74	48	41	57	62	101	149	185	215	229	242	254	257	240	216	109	172	160	145	135	125	133	149
5	156	129	114	124	105	119	111	141	190	218	226	236	239	228	219	210	191	168	153	146	145	137	114	104	163
6	127	125	127	125	124	121	120	137	158	184	199	205	212	217	213	190	158	130	122	118	121	123	116	123	150
7	112	107	113	119	114	109	107	110	126	148	171	187	188	190	183	173	151	133	125	124	117	107	98	67	132
8	57	44	32	36	49	63	59	100	134	157	175	190	201	210	213	211	197	152	109	114	91	89	85	59	118
9	40	30	57	48	29	35	57	105	161	180	192	213	223	229	231	230	215	135	116	103	105	119	85	77	126
10	74	57	55	71	90	69	63	130	191	213	224	235	244	250	254	250	233	160	138	145	141	139	113	97	152
11	89	88	88	71	81	75	66	130	194	221	230	235	240	253	257	254	235	167	140	122	105	116	117	112	155
12	87	74	87	93	106	138	150	175	206	228	249	265	273	268	259	244	209	184	167	145	133	143	150	157	175
13	161	161	161	157	146	143	146	159	170	187	212	209	227	232	223	210	193	184	171	167	162	153	141	141	176
14	137	132	128	129	120	121	124	131	163	177	194	206	216	223	224	221	203	142	118	116	108	131	105	94	153
15	87	75	71	62	73	67	30	113	138	169	188	191	198	205	205	197	169	117	105	100	117	122	101	70	124
16	54	36	31	19	38	22	17	65	147	165	178	193	202	209	213	209	191	114	90	94	80	56	72	122	109
17	124	104	56	53	30	31	42	89	135	169	181	202	212	216	215	214	192	172	153	140	150	106	98	113	134
18	119	133	92	73	62	67	76	128	160	174	186	196	207	216	219	215	199	167	131	107	107	108	93	84	138
19	83	95	97	91	70	73	62	91	155	170	191	205	216	219	224	220	199	151	121	117	142	107	94	74	136
20	84	70	84	70	52	42	58	70	70	126	151	184	219	229	233	216	193	174	157	133	124	125	111	141	130
21	159	164	160	163	152	147	155	178	198	210	219	223	224	223	217	207	182	171	165	162	155	159	146	140	178
22	101	63	74	61	43	41	41	73	131	159	190	202	216	213	210	206	172	131	112	103	94	108	126	132	125
23	122	104	95	112	92	79	114	135	172	201	214	233	239	232	223	210	182	159	143	138	141	131	116	106	154
24	127	137	141	126	134	133	128	134	142	161	181	181	187	176	160	146	126	113	108	110	100	91	113	117	136
25	114	116	101	99	97	91	80	107	119	143	161	173	178	157	153	136	121	110	112	110	103	104	104	101	121
26	101	101	95	93	93	93	79	89	98	102	106	109	107	103	99	93	78	70	62	57	55	53	52	42	84
27	8	-3	-2	-18	-17	-10	-13	19	58	79	91	104	117	122	124	122	113	106	77	54	38	23	15	1	50
28	12	10	11	6	3	-5	-1	22	47	67	80	96	110	119	122	118	105	97	59	9	-14	-23	-25	-35	41
29	-48	-21	-11	-11	-4	-7	-11	26	62	92	107	118	130	137	138	136	121	68	25	21	19	17	14	0	47
30	-19	-10	-33	-26	-36	-20	-40	-6	68	97	110	128	138	143	146	145	125	47	39	35	13	26	64	31	48
AVERAGE	81	76	72	68	64	64	66	101	130	161	178	190	199	202	201	194	174	137	116	107	102	99	92	85	124

* Indicates calibration of sensors
** Indicates invalid data

HOURLY AVERAGED WIND SPEED
DECEMBER 1969
SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
UNITS ARE TENTHS OF A METERS PER SECOND

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	8	8	9	5	14	0	14	6	11	25	41	37	30	33	30	26	18	25	18	31	16	23	11	9	19
2	17	26	33	26	9	11	30	34	30	35	34	30	34	36	32	29	18	14	10	20	38	41	34	30	27
3	32	35	33	39	42	46	51	50	51	52	40	45	41	37	35	29	15	13	10	19	22	32	11	7	33
4	6	12	11	8	9	8	12	11	9	13	11	12	17	19	23	21	19	17	9	7	12	19	13	14	13
5	13	17	14	10	22	23	12	11	11	21	34	27	17	61	75	97	98	77	76	134	145	155	152	157	61
6	127	61	127	99	55	31	50	28	30	30	38	35	30	27	19	14	12	21	10	16	10	15	10	10	38
7	12	8	8	11	6	15	13	9	8	22	23	41	38	26	25	25	21	28	12	16	15	9	9	9	17
8	15	13	10	13	11	8	13	8	9	8	24	20	16	16	19	24	21	19	14	16	18	17	19	16	15
9	17	12	13	15	9	12	20	12	13	15	20	22	30	28	60	71	77	47	30	32	34	56	34	26	29
10	49	29	28	21	51	47	66	70	90	56	53	52	46	33	26	27	26	32	42	40	41	20	27	21	41
11	40	37	39	42	41	39	50	41	37	63	82	76	69	72	67	61	58	59	28	35	21	28	39	28	48
12	30	23	33	30	6	24	25	13	6	33	33	32	31	34	29	21	14	9	12	12	11	16	19	7	21
13	9	9	13	14	7	14	8	17	27	30	29	32	29	25	29	20	18	20	21	23	16	5	21	18	19
14	15	13	17	7	12	16	16	24	31	27	16	31	30	16	16	12	8	13	8	12	14	12	11	10	16
15	6	16	13	14	9	16	17	16	13	11	15	23	23	17	23	19	26	21	14	17	11	33	16	24	17
16	34	16	17	18	18	10	13	13	12	28	34	30	36	34	24	23	9	14	6	12	10	10	17	25	19
17	11	8	8	10	10	10	8	0	14	27	29	46	49	38	75	78	68	34	26	19	24	14	18	20	27
18	19	16	19	16	17	13	19	13	13	33	41	41	46	54	67	59	43	22	21	24	22	17	16	13	28
19	15	19	11	13	8	5	28	37	34	14	21	19	28	26	20	25	12	10	12	7	14	22	21	8	18
20	9	7	12	13	14	8	10	13	7	9	16	15	18	18	22	16	25	17	13	12	8	8	11	23	14
21	37	34	17	10	5	16	12	7	7	8	15	20	34	27	18	13	12	14	8	8	10	10	10	8	15
22	8	7	11	13	14	8	7	20	28	43	39	38	31	28	31	34	28	22	26	24	31	36	32	19	24
23	13	13	15	8	7	8	7	19	36	41	38	32	34	34	32	27	12	19	15	12	10	12	7	11	19
24	17	11	6	8	8	13	12	8	10	15	20	33	37	28	24	20	19	16	12	9	11	18	11	10	16
25	14	9	14	18	8	10	23	42	42	38	39	34	37	34	33	20	7	12	7	17	13	29	34	13	23
26	12	13	6	11	13	13	20	11	9	10	16	30	33	30	30	20	18	7	17	7	12	14	12	13	16
27	9	17	19	10	19	10	6	9	6	12	21	34	51	42	58	66	45	42	48	40	39	43	32	44	30
28	32	42	21	28	42	49	51	62	44	66	60	85	99	91	116	110	103	91	89	94	97	91	55	32	69
29	13	16	11	12	26	44	60	68	55	46	35	73	112	122	107	96	51	26	17	19	45	14	44	37	48
30	14	14	27	24	17	15	16	9	10	11	17	25	21	24	23	12	16	20	19	13	7	11	15	13	16
31	13	5	8	6	6	11	9	8	13	13	21	29	25	30	32	31	16	16	16	15	23	28	15	31	18
AVERAGE	21	18	20	18	17	18	23	22	23	28	31	35	38	37	40	37	30	26	21	25	26	28	25	23	26

* Indicates calibration of sensors
** Indicates invalid data

AIR SCIENCES INC.
SAROAD(V6.0) 1/16/90

HOURLY AVERAGED WIND DIRECTION
 DECEMBER 1989
 SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
 UNITS ARE DEGREES AZIMUTH

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	10	301	40	20	353	317	337	6	21	30	37	58	73	79	72	70	34	340	341	354	344	343	42	125
2	341	6	354	352	315	20	12	11	15	49	66	55	46	46	57	76	65	250	22	343	14	5	353	334
3	334	346	353	358	6	10	33	42	29	39	46	57	64	58	68	55	47	1	38	354	299	297	314	16
4	354	321	347	62	339	346	207	243	179	173	110	132	152	169	143	115	169	267	82	65	154	349	10	305
5	325	215	51	32	15	340	7	1	55	322	183	183	185	301	329	326	322	310	286	321	318	316	316	316
6	318	346	308	317	346	32	18	6	11	24	59	70	106	64	85	21	26	301	156	286	349	317	312	235
7	345	20	357	312	34	277	265	283	156	163	71	35	32	42	65	54	29	338	161	290	353	360	261	258
8	295	312	306	321	282	323	320	317	33	104	28	39	158	150	182	184	187	203	236	259	274	240	279	238
9	281	303	233	266	174	135	356	21	170	144	168	177	111	100	306	307	319	327	12	11	29	359	346	316
10	327	360	344	22	17	337	332	329	314	32	54	54	52	61	83	65	46	11	15	23	339	308	342	304
11	350	5	25	35	24	21	58	36	41	67	68	68	67	70	71	67	89	98	31	348	354	337	8	4
12	348	352	343	332	254	337	294	312	101	45	38	71	64	69	74	28	353	48	304	316	4	342	316	155
13	335	298	309	39	254	338	161	337	332	3	7	25	29	49	46	40	335	328	353	321	312	18	351	9
14	188	299	339	180	320	232	345	23	10	88	172	32	44	152	150	92	183	275	101	323	312	321	323	11
15	319	225	150	273	248	277	333	360	81	146	174	180	193	187	180	170	174	204	221	235	141	298	268	18
16	360	35	6	18	5	350	323	307	51	27	34	40	64	79	77	70	2	323	65	1	338	317	340	336
17	316	229	353	6	259	325	224	232	147	173	206	216	218	247	313	316	320	245	182	115	256	172	167	150
18	158	155	167	191	212	299	320	168	193	198	198	213	209	204	212	211	219	170	174	167	150	159	161	236
19	199	280	309	325	360	12	6	7	10	80	40	104	41	54	70	63	122	242	48	339	352	2	342	80
20	347	344	14	320	341	261	294	272	182	143	90	193	136	139	159	167	186	218	283	291	170	201	313	359
21	24	23	2	258	186	339	228	219	44	148	186	59	19	39	154	188	183	311	18	16	331	343	299	282
22	342	348	282	350	354	55	305	13	12	34	31	43	60	52	59	53	41	360	326	339	348	337	325	340
23	40	339	315	342	39	46	354	336	21	33	32	44	65	73	65	71	310	339	337	329	21	345	1	325
24	307	275	308	334	345	299	346	112	30	141	89	49	68	65	75	73	91	281	358	334	12	347	154	356
25	313	297	307	351	111	348	344	4	11	12	28	50	61	55	62	53	279	327	348	6	12	354	348	350
26	297	291	231	348	309	51	350	211	8	150	211	30	31	57	51	49	217	122	253	11	310	204	340	339
27	342	230	352	283	314	13	42	245	65	192	171	173	193	193	193	220	218	223	228	192	191	204	216	242
28	235	271	324	280	286	305	298	293	201	305	303	314	300	308	317	318	314	312	311	311	313	309	318	353
29	353	50	57	59	350	324	317	315	322	327	320	12	22	30	46	48	358	259	301	249	6	338	42	12
30	327	9	26	28	24	200	325	204	47	200	105	191	112	47	42	158	183	230	256	264	339	335	313	309
31	336	31	282	355	345	297	265	264	110	197	187	165	160	173	180	170	162	235	195	94	31	303	26	348

* Indicates calibration of sensors
 ** Indicates invalid data

HOURLY AVERAGED TEMPERATURE
 DECEMBER 1989
 SOLEDAD MOUNTAIN PROJECT - HOJAVE, CALIFORNIA
 UNITS ARE TENTHS OF A DEGREE CELSIUS

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	AVG
1	10	3	-2	-25	-22	-23	-37	13	78	113	120	147	159	166	169	167	143	82	61	72	47	31	12	16	63
2	28	42	33	23	0	6	12	68	118	139	151	161	170	178	181	178	156	75	67	43	60	61	62	34	85
3	33	38	31	42	35	32	53	95	101	126	146	162	170	177	179	174	148	72	59	70	61	44	19	8	86
4	19	15	5	0	-7	-5	-28	19	93	128	154	175	189	196	197	192	156	97	73	76	55	86	101	51	85
5	26	33	56	36	29	35	16	51	117	149	163	185	200	216	206	185	165	151	134	133	133	123	117	118	116
6	125	123	117	107	102	100	106	97	114	134	160	174	181	187	192	188	160	100	85	63	75	51	46	14	117
7	29	37	33	38	22	17	9	37	86	132	159	163	178	188	193	190	161	114	74	52	72	49	35	27	87
8	19	12	22	11	9	-1	3	15	80	133	147	161	180	188	189	183	152	98	76	64	41	38	29	38	79
9	40	35	27	20	37	38	25	40	106	154	180	211	223	227	221	202	174	149	125	122	117	124	116	120	118
10	141	125	119	112	105	99	110	116	144	144	150	157	165	170	170	163	137	93	76	79	48	25	20	3	111
11	6	-1	20	29	23	4	32	28	38	61	75	84	92	96	94	90	76	65	35	1	-14	-22	-10	-14	37
12	-14	-39	-34	-40	-61	-53	-68	-51	34	61	64	81	92	102	105	104	89	10	-19	-30	-32	-15	-18	-31	10
13	-37	-53	-57	-47	-29	-9	-17	-17	29	58	67	89	107	119	116	111	82	57	47	27	12	2	19	6	28
14	-5	-7	-30	-17	-25	-30	-38	-3	62	90	117	130	140	156	159	159	132	46	25	11	22	3	4	6	46
15	0	-3	10	15	14	1	-3	6	53	89	111	116	123	139	143	148	123	89	77	61	68	114	79	73	69
16	57	33	27	29	10	-6	-13	-0	75	114	132	148	157	161	163	159	140	63	41	39	27	20	20	22	67
17	13	0	-21	-6	-22	-23	-10	-3	82	123	143	165	179	188	180	166	142	120	87	82	93	75	67	56	78
18	34	39	49	38	10	-1	9	0	76	96	121	135	146	147	139	126	98	66	47	39	40	13	15	-3	62
19	-18	-23	-28	-41	-35	-33	-25	1	34	69	99	108	118	130	134	131	113	56	24	18	22	38	20	-2	38
20	-10	-23	-13	1	-19	-44	-46	-29	50	104	116	127	135	145	149	148	118	69	40	18	32	30	24	13	47
21	48	65	35	0	-6	-15	-29	2	60	111	123	134	147	156	156	150	120	64	44	42	43	43	42	9	64
22	-3	14	-10	-15	-0	-12	-10	3	84	121	130	145	154	159	164	162	141	93	61	60	49	48	48	24	67
23	14	-1	-3	2	-8	-9	0	13	82	117	136	155	167	175	174	170	150	96	82	51	48	50	47	37	73
24	34	32	25	25	25	12	16	19	90	128	154	166	183	185	185	180	165	108	83	65	45	37	37	51	85
25	34	18	9	15	12	1	16	54	93	120	144	160	167	169	168	161	138	91	81	78	74	77	81	68	85
26	55	64	55	58	45	35	27	26	68	131	150	162	172	183	181	179	142	113	84	67	70	73	78	79	96
27	70	66	57	45	36	20	17	19	90	117	139	168	183	195	199	172	156	129	108	93	90	83	72	73	100
28	61	61	47	40	37	44	45	53	69	80	95	97	95	97	87	70	65	56	54	51	50	47	46	44	62
29	32	19	26	17	22	27	34	41	52	88	109	127	138	146	142	137	110	69	56	51	90	68	82	57	73
30	13	19	25	33	47	-2	-25	-14	65	108	126	135	148	151	154	159	142	79	49	40	26	31	20	8	64
31	8	14	1	-9	3	-8	-7	14	80	121	137	146	160	171	175	169	151	111	108	118	115	106	96	93	86
AVERAGE	28	24	20	17	13	6	6	23	78	112	130	144	155	163	163	157	134	86	66	57	54	50	46	35	74

* Indicates calibration of sensors
 ** Indica Invalid data

APPENDIX C

Frequency Distribution by Direction and Speed

FREQUENCY OF WINDS BY DIRECTION AND SPEED
 FOR STABILITY CLASS 'A'
 SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
 OCTOBER - DECEMBER 1989

Speed Class Intervals(kts)

Direction	1,<3	3,<6	6,<10	10,<16	16,<21	>21	All	Mean Speed
N	2.3	0.8	0.0	0.0	0.0	0.0	3.0	2.6
NNE	2.3	3.0	0.8	0.0	0.0	0.0	6.0	3.6
NE	3.0	10.5	2.3	0.0	0.0	0.0	15.8	4.6
ENE	1.1	6.0	6.0	0.0	0.0	0.0	13.2	5.6
E	2.6	4.9	0.8	0.0	0.0	0.0	8.3	4.0
ESE	2.3	3.8	0.0	0.0	0.0	0.0	6.0	3.3
SE	4.1	2.6	0.0	0.0	0.0	0.0	6.8	2.9
SSE	3.0	6.8	0.4	0.0	0.0	0.0	10.2	3.3
S	2.3	6.0	1.1	0.0	0.0	0.0	9.4	4.0
SSW	2.6	2.6	2.6	0.0	0.0	0.0	7.9	4.7
SW	0.8	1.5	1.1	0.0	0.0	0.0	3.4	4.6
WSW	0.0	0.0	0.8	0.0	0.0	0.0	0.8	8.7
W	0.8	0.0	0.8	0.4	0.0	0.0	1.9	6.4
WNW	0.4	0.0	0.4	0.4	0.0	0.0	1.1	7.4
NW	1.9	0.4	1.1	0.8	0.0	0.0	4.1	5.5
NNW	1.1	0.8	0.4	0.0	0.0	0.0	2.3	3.4
All	30.5	49.6	18.4	1.5	0.0	0.0	100.0	4.3

Calm (less than one knot) = 0.0%

Period mean wind speed = 4.3 knots

Percent occurrence for 'A' stability class(es) 12.0%

AIR SCIENCES INC.
 SBWIND(1.2) 1/10/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'C'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.0	2.9	0.7	0.0	0.0	0.0	3.7	5.0
NNE	0.0	7.4	4.4	0.7	0.0	0.0	12.5	5.9
NE	0.7	2.2	15.4	1.5	0.0	0.0	19.9	7.3
ENE	0.0	0.7	32.4	6.6	0.0	0.0	39.7	8.2
E	0.0	0.7	1.5	0.0	0.0	0.0	2.2	6.3
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.7	0.0	0.0	0.0	0.0	0.0	0.7	1.9
SSE	0.7	0.7	0.0	0.0	0.0	0.0	1.5	4.2
S	0.0	3.7	3.7	0.0	0.0	0.0	7.4	5.9
SSW	0.0	2.9	2.9	2.2	0.0	0.0	8.1	7.8
SW	0.0	0.0	0.7	0.0	0.0	0.0	0.7	9.5
WSW	0.7	0.0	0.0	0.0	0.0	0.0	0.7	2.1
W	0.0	0.0	0.7	0.0	0.0	0.0	0.7	8.6
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.7	0.0	1.5	0.0	0.0	0.0	2.2	6.7
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	3.7	21.3	64.0	11.0	0.0	0.0	100.0	7.2

Calm (less than one knot) = 0.0%

Period mean wind speed = 7.2 knots

Percent occurrence for 'C' stability class(es) 6.2%

AIR SCIENCES INC.
SBWIND(1.2) 1/10/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'D'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	0.1	3.7	2.7	0.4	0.0	0.0	6.9	6.3
NNE	0.0	2.3	5.1	0.1	0.0	0.1	7.7	7.1
NE	0.0	1.2	4.8	0.9	0.3	0.1	7.3	8.4
ENE	0.0	1.0	1.7	3.1	0.0	0.0	5.9	9.9
E	0.0	0.0	0.4	0.8	0.0	0.0	1.2	10.7
ESE	0.0	0.0	0.1	0.0	0.0	0.0	0.1	6.2
SE	0.0	0.1	0.0	0.0	0.0	0.0	0.1	5.4
SSE	0.0	0.8	0.0	0.0	0.0	0.0	0.8	4.0
S	0.0	0.8	1.0	0.0	0.0	0.0	1.8	6.7
SSW	0.1	0.1	2.6	3.7	1.6	0.3	8.4	12.3
SW	0.0	0.4	2.3	3.3	1.2	0.0	7.2	12.2
WSW	0.0	0.1	1.0	0.1	0.0	0.0	1.3	7.7
W	0.0	0.1	2.0	0.7	0.0	0.0	2.7	8.6
WNW	0.0	0.4	1.8	4.6	1.8	0.7	9.3	13.2
NW	0.5	0.4	2.5	11.5	11.4	4.8	31.1	16.3
NNW	0.1	1.8	3.0	2.1	0.9	0.3	8.2	10.0
All	0.9	13.3	31.2	31.2	17.1	6.3	100.0	11.8

Calm (less than one knot) = 0.0%

Period mean wind speed = 11.8 knots

Percent occurrence for 'D' stability class(es) 34.7%

AIR SCIENCES INC.
SBWIND(1.2) 1/10/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'E'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	2.9	7.7	27.4	0.0	0.0	0.0	38.0	6.3
NNE	1.9	3.4	5.8	0.0	0.0	0.0	11.1	5.7
NE	0.5	2.9	0.5	0.0	0.0	0.0	3.8	4.2
ENE	0.0	1.0	0.0	0.0	0.0	0.0	1.0	5.0
E	0.0	1.0	0.0	0.0	0.0	0.0	1.0	5.8
ESE	0.0	0.0	0.5	0.0	0.0	0.0	0.5	6.4
SE	0.5	0.5	0.0	0.0	0.0	0.0	1.0	2.8
SSE	0.0	1.9	0.0	0.0	0.0	0.0	1.9	4.4
S	1.0	5.3	0.5	0.0	0.0	0.0	6.7	4.2
SSW	0.0	1.4	1.4	0.0	0.0	0.0	2.9	5.2
SW	0.0	0.0	0.5	0.0	0.0	0.0	0.5	6.2
WSW	0.5	1.0	2.4	0.0	0.0	0.0	3.8	6.0
W	0.5	2.4	0.5	0.0	0.0	0.0	3.4	4.2
WNW	1.9	1.0	2.4	0.0	0.0	0.0	5.3	4.7
NW	2.4	1.9	0.0	0.0	0.0	0.0	4.3	3.5
NNW	1.4	5.8	7.7	0.0	0.0	0.0	14.9	5.4
All	13.5	37.0	49.5	0.0	0.0	0.0	100.0	5.5

Calm (less than one knot) = 0.0%

Period mean wind speed = 5.5 knots

Percent occurrence for 'E' stability class(es) 9.4%

AIR SCIENCES INC.
SBWIND(1.2) 1/10/90

FREQUENCY OF WINDS BY DIRECTION AND SPEED
FOR STABILITY CLASS 'F'
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER - DECEMBER 1989

Direction	Speed Class Intervals(kts)						All	Mean Speed
	1,<3	3,<6	6,<10	10,<16	16,<21	>21		
N	8.3	4.6	0.0	0.0	0.0	0.0	12.9	2.8
NNE	5.4	4.5	0.0	0.0	0.0	0.0	9.9	2.9
NE	4.6	1.4	0.0	0.0	0.0	0.0	6.0	2.6
ENE	2.6	1.1	0.0	0.0	0.0	0.0	3.8	2.6
E	2.1	0.1	0.0	0.0	0.0	0.0	2.2	2.1
ESE	1.9	0.4	0.0	0.0	0.0	0.0	2.4	2.3
SE	1.4	0.7	0.0	0.0	0.0	0.0	2.1	2.8
SSE	2.2	2.2	0.0	0.0	0.0	0.0	4.5	3.0
S	2.4	1.9	0.0	0.0	0.0	0.0	4.3	3.0
SSW	2.2	1.7	0.0	0.0	0.0	0.0	3.9	2.9
SW	2.1	2.2	0.0	0.0	0.0	0.0	4.3	2.8
WSW	2.1	1.9	0.0	0.0	0.0	0.0	4.0	2.8
W	3.9	1.5	0.0	0.0	0.0	0.0	5.4	2.7
WNW	4.9	2.4	0.0	0.0	0.0	0.0	7.2	2.7
NW	8.2	3.6	0.0	0.0	0.0	0.0	11.8	2.7
NNW	8.9	5.6	0.0	0.0	0.0	0.0	14.5	2.8
All	63.3	35.9	0.0	0.0	0.0	0.0	99.2	2.8

Calm (less than one knot) = 0.8%

Period mean wind speed = 2.7 knots

Percent occurrence for 'F' stability class(es) 32.6%

AIR SCIENCES INC.
SBWIND(1.2) 1/10/90

APPENDIX D

Wind Speed Frequency Distributions

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
OCTOBER 1989
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	71.1	10.7	11.4	6.0	0.9	0.0	0.0	0.0	0.0	22.3	1
2	33.1	10.7	7.9	12.3	14.6	12.5	6.9	1.9	0.2	32.7	2
3	48.6	16.3	12.5	10.6	7.7	3.6	0.7	0.1	0.0	29.1	3
4	82.8	14.2	2.8	0.2	0.0	0.0	0.0	0.0	0.0	17.8	2
5	90.2	9.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	15.1	3
6	55.9	16.4	17.1	8.6	1.9	0.1	0.0	0.0	0.0	23.9	3
7	61.5	19.2	12.5	5.8	0.9	0.1	0.0	0.0	0.0	23.2	2
8	81.7	10.3	5.5	2.3	0.2	0.0	0.0	0.0	0.0	20.9	3
9	97.3	2.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	14.2	2
10	71.1	10.3	11.8	5.8	1.0	0.0	0.0	0.0	0.0	22.3	3
11	83.6	11.8	4.1	0.5	0.0	0.0	0.0	0.0	0.0	20.0	2
12	84.5	10.6	4.4	0.5	0.0	0.0	0.0	0.0	0.0	18.7	2
13	85.8	9.2	4.4	0.5	0.0	0.0	0.0	0.0	0.0	18.0	2
14	34.0	6.9	6.0	6.9	9.5	11.2	10.3	8.2	7.0	47.0	3
15	10.7	3.4	5.7	9.3	13.9	18.0	17.5	12.7	8.8	41.1	1
16	97.7	1.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0	18.9	2
17	66.0	25.6	6.9	1.5	0.0	0.0	0.0	0.0	0.0	20.0	2
18	90.0	9.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.1	2
19	91.7	6.8	1.4	0.1	0.0	0.0	0.0	0.0	0.0	17.6	2
20	46.0	10.6	11.6	11.3	9.5	6.5	3.0	1.4	0.2	34.1	2
21	29.8	20.7	16.1	16.0	11.7	5.1	0.5	0.0	0.0	28.7	2
22	98.7	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	14.4	3
23	50.1	14.7	12.7	14.1	6.8	1.5	0.1	0.0	0.0	27.3	2
24	66.4	9.2	9.3	8.3	4.4	1.8	0.6	0.1	0.0	28.9	2
25	9.2	8.3	12.3	15.5	17.6	13.1	8.4	6.9	8.6	50.6	3
26	65.6	8.6	8.8	8.5	5.4	2.7	0.5	0.0	0.0	28.6	1
27	11.0	7.0	13.8	17.8	14.6	12.1	8.7	7.7	7.2	42.5	3
28	69.1	17.2	5.0	1.3	1.1	1.6	1.7	1.6	1.5	40.7	1
29	35.8	29.7	21.3	10.0	2.8	0.5	0.1	0.0	0.0	26.0	2
30	91.0	7.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	16.0	2
31	98.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	2
All*	64.8	11.0	7.4	5.6	4.0	2.9	1.9	1.3	1.1	50.6	3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
 SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
 NOVEMBER 1989
 (%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	82.2	12.8	4.5	0.5	0.0	0.0	0.0	0.0	0.0	18.4	2
2	96.0	3.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	13.9	2
3	99.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	2
4	82.2	6.8	5.3	4.1	1.4	0.2	0.0	0.0	0.0	24.8	3
5	68.7	10.2	5.3	5.9	5.0	3.6	1.0	0.3	0.0	32.3	2
6	32.8	9.6	7.6	14.2	16.5	11.3	4.5	1.8	1.8	40.9	3
7	19.3	6.8	13.4	21.6	21.6	13.1	3.6	0.7	0.0	33.7	1
8	84.3	13.8	1.7	0.2	0.0	0.0	0.0	0.0	0.0	18.0	2
9	96.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	2
10	99.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	2
11	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	2
12	74.0	6.5	7.3	7.8	3.8	0.6	0.0	0.0	0.0	26.0	3
13	9.3	13.5	17.9	23.9	21.3	11.2	2.7	0.2	0.0	30.2	1
14	68.4	9.1	7.1	7.1	4.7	2.5	0.8	0.2	0.0	31.1	1
15	93.3	6.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	15.8	2
16	97.5	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	15.7	2
17	92.0	7.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	16.6	3
18	78.2	17.0	4.1	0.6	0.0	0.0	0.0	0.0	0.0	20.0	2
19	92.7	7.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	14.2	2
20	99.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	3
21	27.4	9.7	11.9	15.0	16.6	13.1	5.1	1.2	0.1	32.3	3
22	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	3
23	67.6	7.9	9.9	8.1	3.9	1.8	0.6	0.1	0.0	30.7	2
24	44.9	9.4	11.2	13.0	10.8	6.9	2.7	1.0	0.2	33.2	2
25	24.0	14.8	24.1	22.1	9.6	3.9	1.3	0.3	0.0	33.6	2
26	10.1	9.9	16.0	19.8	17.0	12.8	7.6	4.1	2.7	39.8	3
27	62.6	13.7	11.9	7.6	3.3	0.8	0.2	0.0	0.0	27.7	2
28	65.7	15.5	12.8	5.1	0.9	0.0	0.0	0.0	0.0	23.5	2
29	76.0	22.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	17.3	2
30	98.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	2
All*	71.4	8.2	5.6	5.9	4.5	2.7	1.0	0.3	0.2	40.9	3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.

AVERAGE FREQUENCY DISTRIBUTION OF WIND SPEEDS
SOLEDAD MOUNTAIN PROJECT - MOJAVE, CALIFORNIA
DECEMBER 1989
(%)

Day	Wind Speed Intervals (mph)									Max Gust (mph)	Time Period
	< 10	>=10, < 13	>=13, < 16	>=16, < 19	>=19, < 22	>=22, < 25	>=25, < 28	>=28, < 31	>=31		
1	97.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	2
2	97.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	2
3	75.3	22.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	1
4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	2
5	55.1	2.9	4.1	5.8	6.1	4.1	3.2	4.1	14.6	48.9	3
6	77.3	5.4	2.8	2.7	2.1	2.2	2.3	2.1	3.0	45.5	1
7	98.1	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	2
8	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	2
9	78.7	7.9	6.7	4.6	1.8	0.2	0.0	0.0	0.0	28.0	3
10	64.0	18.7	8.1	5.8	2.4	0.8	0.2	0.0	0.0	28.7	2
11	54.8	17.1	12.3	9.9	4.6	1.1	0.2	0.0	0.0	27.7	2
12	98.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	2
13	99.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	2
14	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	2
15	99.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	3
16	98.0	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	13.7	1
17	79.7	7.3	5.8	4.4	2.2	0.5	0.0	0.0	0.0	26.4	2
18	81.5	11.0	5.8	1.7	0.0	0.0	0.0	0.0	0.0	20.0	2
19	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	2
20	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	2
21	99.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	2
22	96.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	2
23	98.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	2
24	98.9	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	14.6	2
25	97.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	2
26	99.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	2
27	74.2	17.4	6.1	1.8	0.5	0.0	0.0	0.0	0.0	21.9	2
28	26.4	15.1	10.7	12.2	15.3	12.3	5.4	2.2	0.4	34.8	2
29	55.3	13.5	9.1	5.4	4.5	3.9	3.4	2.7	2.3	41.8	2
30	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	2
31	99.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	3
All*	87.1	5.2	2.4	1.8	1.3	0.8	1.0	0.3	0.2	48.9	3

* All data on this line are monthly averages of the daily values except for maximum gust and time period which are the maximum gust recorded during the month and the time period of that gust.





**SAMPLING PROTOCOL
AIR MONITORING PROGRAM
GOLDEN QUEEN MINE PROJECT**

Prepared for
Envirocon, Inc.
Missoula, MT

Prepared by
Air Sciences Inc.
Lakewood, CO

Project 58-07
October 1989



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1.0 INTRODUCTION

Dispersion meteorological data are to be collected at the Golden Queen Mine Project site for Golden Queen Mining Company (GQMC). The purpose of the monitoring is primarily to define dispersion meteorology and secondarily to measure climatological values for the site.

This document presents information on the site selection for the meteorological monitoring station, equipment specifications, calibration and quality control procedures, record keeping and reporting procedures. All figures are located at the end of this report.

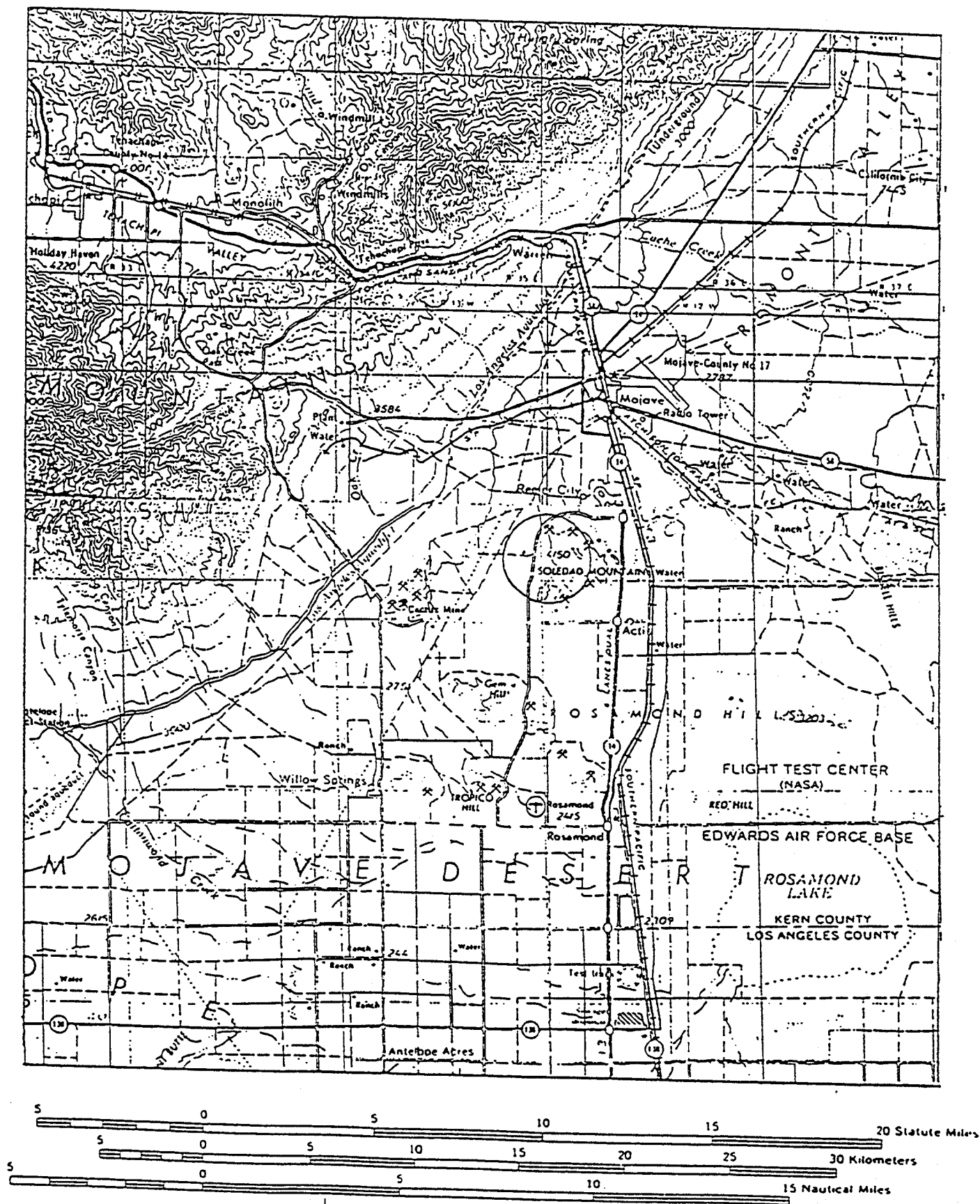
The parameters to be monitored are wind speed, wind direction, direction deviation (sigma theta) and temperature. There will be a 30-foot meteorological tower installed and operated near the project area. The parameters of wind speed, wind direction and direction deviation will be measured at 30 feet, and temperature will be measured at the two-meter level. All meteorological data will be recorded by a digital data acquisition system (DAS) equipped with a solid-state storage device for data recording.

Air Sciences will design and install the monitoring system. Site personnel trained by Air Sciences will be responsible for the routine changing of data recording modules and checks of the condition of the monitoring equipment. The meteorological data will be reported to GQMC on a quarterly schedule. The meteorological equipment will be calibrated on a semiannual schedule.

2.0 SITING OF THE MONITORING STATION

The Golden Queen Mine monitoring station will be located on the plains just west of Solidad Mountain in the Mojave Desert of Kern County, California. The site is approximately 12 miles northwest of Rosamond Lake and five miles south-southwest of the town of Mojave. The mine pit will be located on Solidad Mountain. Proposed heap leach pads or tailings piles and mill facilities are expected to be located west of the Mojave-Tropico Road. There are several locations where particulates will be emitted from the slopes of Solidad Mountain, from the pit which will be near the mountain top, down to the plain and the winds will be different at different elevations on the mountain. The station will be located on the plain and will define the wind patterns that will carry any pollutants toward residential areas. The station will be at an approximate elevation of 2,845' MSL about one quarter mile west of Mojave-Tropico Road and at UTM coordinates 3,871.5 km north and 389.2 km east (the southwest quarter of Section 1, T 10 N, R 13 W). Vegetation is sparse in this part of the Mojave Desert Basin and consists of sagebrush and widely scattered Joshua trees. The monitoring location is shown on Figure 1.

FIGURE 1
GENERAL PROJECT LOCATION



CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

3.0 SYSTEM DESIGN AND SPECIFICATIONS

This section describes the meteorological instrumentation that will be used for the Golden Queen monitoring program. The meteorological instrumentation has been selected to be compatible with the EPA standard reference methods and will provide high quality, reliable data.

3.1 Solar Power Supply System

Power to the meteorological instrumentation will be supplied by a Solarex Model MSX-10 solar power cell mounted on the meteorological tower. This system includes the solar power cell, a 6.5 amp-hour sealed gell-cell battery for power storage and a Bobier Model B-1 charging regulator. The system will provide, on a 24-hour basis, uninterrupted 12 Volt (nominal) output at 10 watts of power suitable for the current needs of the meteorological sensors and digital data acquisition system.

3.2 Data Acquisition System

The Campbell Scientific, Inc. Model 21X data logger will be used as the data acquisition system (DAS) on this project. The Model 21X will sample the analog data every 10 seconds, compute 15 minute averages of sine and cosine of wind direction, scalar wind speed and temperature and store the averages in its own internal memory. The following parameters are to be recorded by the logger every 15 minutes:

<u>Parameter</u>	<u>Units</u>
Output Table Flag	-
Julian Day	days
Time (PST)	hours:minutes
Scalar Wind Speed	mph
Temperature	deg C
Sine of Wind Direction	-
Cosine of Wind Direction	-

The data logger will also calculate the average battery voltage, wind speed distribution and maximum instantaneous (10 second) wind speed value over each 8-hour period of the day. The following parameters are recorded by the logger every 8-hours:

<u>Parameter</u>	<u>Units</u>
Output Table Flag	-
Julian Day	Days
Time (PST)	Hours:Minutes
Average Battery Voltage	VDC
Wind Speed Histogram (1 mph - < 10 mph)	%
Wind Speed Histogram (> = 10 mph - < 13 mph)	%
Wind Speed Histogram (> = 13 mph - < 16 mph)	%
Wind Speed Histogram (> = 16 mph - < 19 mph)	%
Wind Speed Histogram (> = 19 mph - < 22 mph)	%
Wind Speed Histogram (> = 22 mph - < 25 mph)	%
Wind Speed Histogram (> = 25 mph - < 28 mph)	%
Wind Speed Histogram (> = 28 mph - < 31 mph)	%
Wind Speed Histogram (> = 31 mph)	%
Maximum (instantaneous) Wind Speed	MPH

A solid-state storage device will be interfaced to the logger. The data values will be written to the logger's internal memory and to the external device. The external storage device will be changed on a three-week schedule to allow for data transfer and processing. The logger has the capability to store approximately four weeks of data in its internal memory before data write-over occurs.

3.3 Wind Speed

Wind speed will be measured continuously using a MetOne, Inc. Model 014 sensor interfaced directly to the DAS. The Model 014 is a three-cup anemometer which generates a square-wave frequency proportional to the wind speed by the use of a magnetic-read switch. Power for the sensor is supplied by the DAS. Starting threshold for the 014 sensor is less than 1.0 mph. The Model 014 has an accuracy of +/- 1.5 percent or 0.15 m/s, whichever is greater.

3.4 Wind Direction

Wind direction will be measured continuously using a MetOne, Inc Model 024 sensor interfaced directly to the DAS. The 024 sensor provides a 0-360 degree format through the use of a precision potentiometer powered by the DAS. The potentiometer outputs a varying voltage proportional to the wind direction. The sensor has an accuracy of ± 5 degrees with a distance constant of less than three meters. Sensor alignment is to true north with a magnetic declination of 15.5 degrees east. The damping ratio of the sensor is 0.25. As with the 014 sensor, the starting threshold of the 024 sensor is less than 1.0 mph. The wind direction is recorded in an intermediate form as average sine and cosine of wind direction on a 15 minute basis.

3.5 Sigma Theta

The variation in the wind direction, or sigma theta, will be calculated on Air Sciences' engineering computer using the four 15-minute average sine and cosine values of wind direction. The instantaneous (10-second) wind direction sensor values in degrees are converted to sine and cosine values and averaged every 15 minutes by the DAS. These scalar values are later used to calculate sigma theta based on the Yamartino algorithm as recommended in the EPA-450/4-87-013 Meteorological Monitoring Guidelines, (equation 6.1.7). The Yamartino approximation is more precise at high deviation angles than the previously widely employed single pass small-angle approximation.

3.6 Temperature

The Model 107 temperature probe will be exposed at a height of 2 meters above ground level. The probe, a linear thermistor system, will be housed inside an aspirated radiation shield to protect the sensor from the influence of direct sunlight. Temperature is measured by the DAS as a varying resistance proportional to the ambient temperature. Accuracy of the temperature sensor is ± 0.2 degree with a linearization error of less than 0.1°C over the temperature range of -33 to $+48^{\circ}\text{C}$.

3.7 Meteorological Tower

A Rohn 25G 30 foot Zone C meteorological tower will be installed at the monitoring location. The tower will be instrumented at the 10 meter level with the wind speed and direction sensors. The temperature sensor will be installed in a passive aspirated shield at the two-meter level. The tower will be grounded and lightning protection will be installed on all signal lines.

4.0 INSTALLATION, OPERATION, MAINTENANCE AND CALIBRATION

The meteorological monitoring systems will be installed by Air Sciences personnel. These personnel are experienced instrumentation technicians, trained in the operation of all of the monitoring system components. Routine operations such as data module changing will be carried out by a local resident. Calibrations will be performed by Air Sciences technicians.

4.1 Routine Operations and Maintenance

After the installation and initial calibration are complete, Air Sciences personnel will train local site personnel in the routine operation of the monitoring system.

Routine site checks of the meteorological monitoring system will be performed at least once per week. Results of the site check are documented on a standardized form, Figure 2. The person responsible for these duties will be the site technician. He will report directly to the Project Manager. Site check duties consists of the following activities:

- comparing instantaneous estimates of local weather conditions with the instantaneous data acquisition system measured values,
- changing and shipping data storage modules,
- maintaining checklist of operations,
- performing maintenance as specified,
- performing housekeeping of tower and grounds, and
- reporting problems to the Project Manager.

The site operator responsible for the above duties will be thoroughly trained and supervised prior to operation of the system. The site operator will have access to instrumentation and computer specialists at Air Sciences if their assistance should become necessary.

Every three weeks, the site operator will change the storage device at the meteorological station. The storage device, and all completed site documentation, will be forwarded to Air Sciences in Denver via certified or registered mail. Operational and maintenance activities will be documented on the site check form (see figure 2).

4.2 Calibration Procedures

4.2.1 Wind Speed

Calibrations of the wind speed system will be performed semiannually. Field calibrations consist of inputting known frequencies to the signal conditioning electronics, recording the outputs and comparing these to the calculated targets. The calibrations include an inspection of the cup and cable integrity and an evaluation of the sensor bearings by "experienced touch". Tolerance for the calibration is ± 1.0 mph. Exceedance of the tolerance will result in identification and repair of the defective component and recalibration until the tolerance is obtained. Calibration data will be recorded on form Figure 3.

4.2.2 Wind Direction

Calibrations of the wind direction system will be performed semiannually. The calibration consists of orienting the sensor vane to a series of compass located targets. The targets, nominally a total of six, are selected to cover the operating range of the system. A Suunto precision magnetic compass, accurate to within one degree is used to survey the targets. The target readings are adjusted for magnetic declination of 15.5 degrees east. Checking the vane at six compass points shows possible discrepancies in orientation and linearity. Tolerance for the wind direction calibrations will be ± 5 degrees for the calibration points. If this tolerance is not met, the sensor will be reoriented and recalibrated, or the potentiometer replaced. As with the wind speed calibration, the direction calibration will include a visual inspection of the vane, cable and bearings. Calibration data will be recorded on form Figure 4.

4.2.3 Temperature

The ambient temperature probe will be calibrated semiannually in place by comparison with a certified thermometer. The response of the probe is checked at a minimum of three distinct points. Tolerance for the temperature calibration is a ± 1 °C for all points. Exceedance of this tolerance will result in the reprogramming of the DAS slope and intercept so that the calculated linear regression of reference temperature versus probe temperature shows a correlation coefficient of 0.995 or greater. The calibration will include an inspection of the shield and cable integrity. Calibration data will be recorded on form Figure 5.

4.4 Standards Control Procedures

The thermal and electronic standards used on this project are traceable to NBS standards. The precision mercury in glass thermometer is provided with a certification. The electronic equipment used on the project is annually certified traceable to NBS standards.

4.5 Emergency Repair Procedures

Air Sciences maintains a stock of the most common failure items for the meteorological sensors, storage devices and data loggers. If a system should fail, the site operator may be able to identify the problem and repair the malfunction. If the repair is beyond the capabilities of the site operator, the Project Manager will dispatch the appropriate personnel to the field to make the necessary repairs.

5.0 DATA PROCESSING

Air Sciences will receive the meteorological data storage modules and site check forms every three weeks. These data and records are registered as they are received. A data receipt form or a transmission form, Figures 6 and 7, are filled out for all modules received from or transmitted to the site. Following registration, all received information or data are reviewed by the Project Manager or his assistant to identify any instrumentation problems or data corrections required.

5.1 Meteorological Data

Air Sciences will receive data from the digital data acquisition system every three weeks via certified or registered mail. Each storage device will be logged in with the date received, site and data period recorded on a form, Figure 7. After registration, the digital data will be transferred from the storage device to Air Sciences' engineering computer. The digital data is composed of 15-minute averaged data, 8-hour wind speed histograms and 8-hour maximum gust data. Data modules returned to the site will be logged on a Storage Module and Filter Transmission Form, Figure 6.

Processing of the meteorological data is performed as it is received. The raw data files containing the 15-minute averages recorded by the data logger will be processed into hourly averages. The processing programs employed for this project will calculate the following hourly averages:

Wind Speed	Arithmetic average of the four 15-minute averages of scalar wind speed.
Wind Direction	Unit vector average of the four 15-minute sine and cosine averages.
Sigma Theta	Root mean square average of four 15-minute unit vector average sigma thetas calculated by Yamartino algorithm (EPA-450/4-87-013, eq. 6.1.7) from sine and cosine of wind direction.
Temperature	Arithmetic average of the four 15-minute averages of temperature

The hourly sigma theta data are used to calculate an hourly stability class using the modified sigma theta method (EPA-450/4-87-013, section 6.4.4.3). A surface roughness length of 15 cm will be used.

The hourly average processing programs check for the correct number of 15-minute averages in the hour. Valid hourly averages will be comprised of a minimum of 30 minutes of consecutive valid data. The processing programs will check for wind speeds less than 0.5 or greater than 50 m/s, directions less than one or greater than 360 degrees and temperatures less than -45 °C or greater than 40 °C. Following the hourly averaging, the data are checked for unusual conditions such as extended periods of time (over three hours) with constant values. When the data quality assurance checking is complete, the data are ready to be summarized in data reports.

The raw data files containing the 8-hour wind speed histograms tabulated from instantaneous (10-second) data logger interrogations and the maximum wind gust in each 8-hour period from instantaneous data logger values will be separated from the raw 15-minute averaged data and stored in different files on Air Sciences' engineering computer.

The meteorological data files are written to magnetic tape on a twice weekly schedule to provide a back up file in the event of a computer hardware problem.

5.2 Battery Voltage Data

Every three weeks, the data storage modules are received by Air Sciences. Along with the meteorologic data contained on the storage module is an 8-hour average battery voltage. This voltage is the average voltage (Vdc) of the storage cell connected to the solar power system. This data is examined to determine existing or possible future problems with the power system which may affect the quality of the meteorologic data collected by the Data Acquisition System.

6.0 DATA REPORTING

Air Sciences will submit quarterly summary data reports to GQMC at the conclusion of each quarter of the monitoring program. This report will contain:

- all valid meteorological data collected during period in a standard SAROAD format,
- joint frequency distributions of wind speed and direction by stability class for the period,
- tabulation by 8-hour periods, the high wind frequency distribution and maximum gust,
- a calculation of the percentage of valid data collected, with an explanation of any instrument malfunction for each parameter, and
- a copy of any calibrations performed during the period.

Figure 2
GOLDEN QUEEN MINE PROJECT
PROJECT NO. 58-07
SITE CHECK FORM

Date: _____ Time: _____ Operator: _____

Yes No **

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

1. The tower is intact and upright. Guy wires secure.
2. The anemometer cups and wind direction vane are turning freely.
3. The sensor crossarm is oriented properly.
4. The temperature shield is intact.
5. The data logger is reading the correct time and day.
6. The storage module is connected to the 21X Serial I/O port.
7. Each day, estimate the wind speed, wind direction and temperature. Document these readings below.
8. Record the corresponding logger readings below (*6 Mode) and include battery voltage reading.
9. The solar panel appears to be clean.
10. The meteorological system storage module has been changed according to the schedule (every third week).
11. Site check forms and storage modules have been sent to Air Sciences in Denver via certified mail.

Parameter	Estimated	Logger	Audit
Speed (mph)			
Direction *(deg)			
Temperature (°F/°C)			
Battery Voltage (V)			
Time (MST)			
Date			

*Direction wind is from

Audit Date _____
Audit Initials _____

Comments/Unusual Occurences or Weather: _____

Signature: _____

Figure 3
WIND SPEED CALIBRATION
CAMPBELL SCIENTIFIC 21X LOGGER

Sensor Model No : _____	Client : _____
Sensor Serial No : _____	Job No : _____
Sensor Height : _____	Site : _____
Logger Ser. No. : _____	Date : _____
Name : _____	Time : _____

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	_____	_____
Cable	_____	_____
Cups	_____	_____

II. SYSTEM LINEARITY CHECK

Input Frequency (Hz)	Target ()	21X Reading (.)
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____

Target (mph) = (Hz × 1.789) + 1.0

Target (m/s) = (Hz × 0.798) + 0.447

Comments: _____

Signature _____

Figure 4
WIND DIRECTION CALIBRATION
CAMPBELL SCIENTIFIC 21X LOGGER

Sensor Model No : _____	Client : _____
Sensor Serial No : _____	Job No : _____
Sensor Height : _____	Site : _____
Logger Ser. No. : _____	Date : _____
Time : _____	Name : _____

I. SYSTEM INSPECTION

	PASS	FAIL
Bearings	_____	_____
Cable	_____	_____
Vane	_____	_____

II. SYSTEM LINEARITY CHECK

	<u>Orientation</u>	<u>Compass (degrees)</u>	<u>Declination* (degrees)</u>	<u>True Direction (degrees)</u>	<u>21X Reading (degrees)</u>
1.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____
2.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____
3.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____
4.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____
5.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____
6.	Vane	_____	_____	_____	_____
	Tail	_____	_____	_____	_____

* If site has an east declination, add declination to compass reading.
If site has a west declination, subtract declination from compass reading.

Comments: _____

Signature _____

Figure 5
TEMPERATURE CALIBRATION
CAMPBELL SCIENTIFIC 21X LOGGER

Sensor Model No : _____	Client : _____
Sensor Serial No : _____	Job No : _____
Sensor Height : _____	Site : _____
Logger Ser. No. : _____	Date : _____
Name : _____	Time : _____

I. SYSTEM INSPECTION

	PASS	FAIL
Radiation Shield	_____	_____
Cable	_____	_____

II. SYSTEM LINEARITY CHECK

	<u>Measured</u>	<u>Corrected</u>	<u>21X Reading</u> <u>(degrees)</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
Average	_____	_____	_____

Comments: _____

Signature _____

JOB NO: _____

CLIENT : _____ PAGE _____ OF _____

[illegible]

Figure 7

CLIENT : _____ PAGE : _____ OF _____

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GOLDEN QUEEN MINING COMPANY
SOLEDAD MOUNTAIN PROJECT
ESTIMATED PM₁₀ AND
AIR TOXICS EMISSIONS
AND IMPACTS ASSESSMENT

December 1996
Revised: February 1997

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TABLE OF ABBREVIATIONS

AAQS	Ambient Air Quality Standard
ADA	Applicable Degree of Accuracy
AEL	Acceptable Exposure Level
BLM	Bureau of Land Management
BTEIR	Biennial Toxic Emission Inventory Report
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CUP	Conditional Use Permit
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
HRA	Health Risk Assessment
KCAPCD	Kern County Air Pollution Control District
MECR	Maximum Excess Cancer Risk
NEPA	National Environmental Policy Act
OEHHA	California State Office of Environmental Health Hazard Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PM ₁₀	Particulate Matter Less than 10 Microns
POM	Polycyclic Organic Matter
PSD	Prevention of Significant Deterioration
SMARA	Surface Mining and Reclamation Act
URF	Unit Risk Factor
UTM	Universal Transverse Mercator

EXECUTIVE SUMMARY

Golden Queen Mining Company (Golden Queen) proposes to install an open pit mine and heap leach gold processing operation on Soledad Mountain, in the Southeast Desert portion of Kern County, near the town of Mojave (Exhibit 1). This mining and processing facility's principal products will be gold and silver. This document presents an estimation of air toxics emissions, an analysis of ambient air quality impacts, a visibility analysis for neighboring Class I areas, and an analysis of the associated health-related impacts of the proposed project. Golden Queen will apply for a Conditional Use Permit (CUP) with Kern County to allow a Surface Mining and Reclamation Plan in accordance with the Surface Mining Reclamation Act (SMARA) of 1975. Application for a CUP will require compliance with the California Environmental Quality Act (CEQA). Golden Queen will also apply to the Bureau of Land Management (BLM) for a Plan of Operations in compliance with the National Environmental Policy Act (NEPA).

The California Air Resources Board document "*Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants*" was used as the primary guidance for this assessment of air toxics and impacts. Golden Queen emission estimates use the methodologies of development previously utilized for quantification of air toxics from similar mining operations. Estimated particulate matter emissions were used in an air dispersion model to estimate project-associated impacts on ambient air quality. Estimated emissions of toxic air contaminants were used in an air dispersion model and post processor to calculate ambient air concentrations. These calculated concentrations were used to arrive at health conservative estimates of increased individual carcinogenic risk that might occur as a result of continuous exposure over a 15 year project lifetime. In a similar fashion, calculated concentrations of compounds with non-carcinogenic adverse health effects were used to calculate hazard indices (ratio of expected ambient air concentrations to acceptable exposure levels). The multi-pathway air toxic analysis includes determination of the effects of toxins entering the body through six pathways in addition to the inhalation pathway.

To assess whether the proposed project emissions of particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}) would cause or contribute to an exceedance of the national or California ambient air quality standards (NAAQS or CAAQS), results of a dispersion model were added to actual background concentrations derived from approximately one year of onsite PM_{10} monitoring data. When added to the average background PM_{10} concentration of $18.8 \mu\text{g}/\text{m}^3$, the maximum estimated 24-hour average PM_{10} concentration during normal operations is $45.62 \mu\text{g}/\text{m}^3$. The NAAQS and CAAQS are $150 \mu\text{g}/\text{m}^3$ and $50 \mu\text{g}/\text{m}^3$, respectively. Therefore, the proposed project will not cause or contribute to an exceedance of the NAAQS or CAAQS.

Although this project is not subject to federal Prevention of Significant Deterioration (PSD) regulations, two analyses were performed to determine whether the proposed project would adversely impact the ambient air quality or visibility of any Class I wilderness areas located within 100 kilometers (km) of the project site. First, a dispersion model was run to ensure that the project would not cause an increase equal to or greater than the PSD Class I increment for PM_{10} of $5 \mu\text{g}/\text{m}^3$ (annual average). Results of that modeling indicate that the proposed project will only contribute about $0.21 \mu\text{g}/\text{m}^3$ of PM_{10} to the ambient air quality of a Class I area within 100 km of the project site. Secondly, a visibility analysis was conducted. The proposed project did not exceed the screening criteria, so visibility is not expected to degrade in any of the Class I areas within 100 km of the project.

Carcinogenic risk and hazard indices for the proposed project were calculated at certain specific locations near the property in addition to a grid of locations surrounding the property. The maximum estimated excess cancer risk (MECR) from project emissions at any point off the property is 4.989×10^{-6} , located at UTM coordinates 391,445 E by 3,870,519 N. Estimated risk values are based on the ground level concentration of emissions at the specific locations. The health conservative nature of the assumptions inherent in the risk assessment procedures imply that the risk to actual residents living near the proposed facility will, in all likelihood, be less than the values indicated. Kern County Air Pollution Control District has established that a level of ten in one million excess cancer risk is considered significant.

The maximum estimated acute hazard index based on project emissions is 0.0137 located at UTM coordinates 390,904 E by 3,872,902 N. The maximum estimated chronic hazard index based on proposed project emissions is 0.0516 located at UTM coordinates 390,039 E by 3,871,272 N. The hazard index is a measure of the predicted concentration compared to the acceptable exposure level. Neither acute nor chronic exposure is significant because they are both below 1.0.

The methods of calculating carcinogenic risk, hazard indices and cancer burden are based on a "worst-plausible" situation and are health conservative in nature. They predict the upper limits of risk based upon the given emission rates. That is to say, the real risks are not likely to be higher than the predicted numbers and may well be significantly less. This health conservative approach to assessing risk is the one chosen by the United States Environmental Protection Agency (EPA), the California Office of Environmental Health Hazards Assessment (OEHHA), and the California Air Resources Board (CARB), and is used here for consistency with the concepts and basic assumptions utilized by the reviewing agencies.

This comparison of estimated toxic emissions assumes continuous exposure to the maximum concentration of emissions for the entire life of the project. This method ignores the reduction in exposure realized by periods of time spent away from the residence on vacation, at work, or indoors. Each phase of a risk assessment development contains some level of uncertainty as a result of bias, variability, or uncertain information. This air toxics and potential health impacts assessment is designed to estimate environmental impacts, human exposure, and the potential for adverse effects, which in many cases cannot be directly measured or have not yet occurred. When actual measurements cannot be made, conservative assumptions are required to complete the calculations.

I. INTRODUCTION

As part of the CUP and Plan of Operation applications for the proposed project, this document provides a calculation of PM₁₀ emissions and air toxics emissions, and presents the potential additional health risk resulting from the proposed project along the property boundary and at specific locations located near the Golden Queen property, in addition to a grid of locations extending out from the property. The specific locations were placed to represent existing residences or groups of residences.

A modeling protocol was submitted to the Kern County Air Pollution Control District (KCAPCD) on February 10, 1995. Subject to conditions contained in a letter from KCAPCD dated June 1, 1995 (Appendix A), the protocol was approved. These conditions have been incorporated into this analysis. Since the protocol was approved, the dispersion model ISC3 has been officially revised by EPA. The updated version of the model (ISC3) is used for the PM₁₀ analysis relative to the ambient air quality standard as well as providing input for the air toxics analysis.

The California Air Resources Board document "*Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants*" was used as the primary guidance for this assessment of air toxics and impacts assessment.

Approximately two years of pre-project onsite meteorological data was gathered and has been used in the dispersion modeling analysis and one year of PM₁₀ data was collected to determine background levels of fine particulate matter.

II. FACILITY DESCRIPTION

Golden Queen proposes to operate an open pit gold mining operation near the town of Mojave, California. Operations at this site, like all mining operations, will have a finite production life. Golden Queen anticipates that there will be a number of open pit mining areas within the ultimate mining limit on the property. When the operation begins, drilling and blasting in the pits will occur. After the material is blasted, it is loaded into large off-road mining trucks and transported to either an overburden pile or the ore processing area. The ore will be crushed to the proper size, agglomerated, and then conveyed to the heap leach pad. The heap leach pad will have dilute cyanide solution circulating through the ore to dissolve precious metals and carry them to the collection area which, in this project, will be in the toe of the heap to minimize the exposed surface area and evaporative losses of the solution.

The project is located in a rural setting having a low population density within the surrounding five kilometers. The project area occupies most of the higher elevations of Soledad Mountain, with only a limited area of the mountain at or above the release point of the mine operations not under control of Golden Queen. Exhibit 1 is a regional location map showing the facility relative to surrounding communities and Exhibit 2 shows the property outline on a topographic map of Soledad Mountain.

A review of estimated emissions from the property indicates this will not be considered a major source of air contaminant emissions as defined under the Prevention of Significant Deterioration (PSD) guidelines.

Sources of emissions relating to open pit mining include fugitive dust emissions from drilling, blasting, truck loading and unloading, hauling, dozing, and wind erosion. In addition, combustion sources, a baghouse, and process equipment are emission points relating to the processing area. Exhibit 3 shows the location of all point and area sources for the proposed project.

For risk analysis and risk management of toxic compounds, it is necessary to evaluate the known sources of toxic air emissions and their potential health impacts including fugitive sources which are not currently quantified for purposes of determining criteria pollutant emissions from a facility. Golden Queen has a number of sources which are considered fugitive sources, including blasting, loading and unloading, transport, and wind erosion. All emission sources have been quantified using EPA AP-42 factors.

III. MODEL SELECTION

The EPA approved model ISC3 has recently been approved for use in regulatory settings and replaces the older version ISC2. ISC3 has been used to quantify PM₁₀ concentrations at 367 of the receptor locations examined in the toxics analysis.

ISC3

ISC3 is the latest update to the Industrial Source Complex model and it now provides handling of different terrain elevations as well as rectangular and rotated area sources. Simple, intermediate, and complex terrain elevations relative to the sources are all supported by ISC3. This model has been used to evaluate the effects of the 24-hour average PM₁₀ concentrations at 367 of the locations analyzed in the air toxics analysis. ISC3 input data for the PM₁₀ analysis is contained in Appendix B.

The estimated ambient air concentrations of PM₁₀ and chemicals emitted during operations at the facility were modeled at selected locations using the EPA approved model ISC3 coupled with site-specific sequential, short-term meteorological data. ISC3 is a steady-state Gaussian plume dispersion model designed to assess pollutant concentrations from a wide variety of sources including point, area, and volume sources. ISC3 is appropriate for industrial source complexes, rural or urban areas, flat or rolling terrain, transport distances less than 50 kilometers, and 1-hour to annual averaging times. ISC3 is also appropriate for receptors located below the top of the stack. The model options that have been used for this assessment follow the guidelines specified by EPA and CARB. Specific model setup options that have been used to model the proposed project emissions are indicated in the model input in Appendix C.

The facility is located on Soledad Mountain at elevations ranging from 2900 feet to 4000 feet. Parts of the mountain itself are not under control of Golden Queen and are located at or above some of the proposed sources of emissions. The topography around the facility is generally located below the facility in all directions beyond the mountain. The majority of significant

sources at the Golden Queen facility are fugitives which occur at ground level. The fugitive sources are treated as area or volume sources. These types of sources are basically terrain following (i.e. low stack heights with low stack velocities).

ISC3 output yields total concentrations and source contributions of multiple sources at designated coordinates, using the coordinates, stack parameters, and emission rates associated with each source, combined with the meteorology. For purposes of this evaluation, ISC3 has been utilized with unit emission rates (1.0 gm/sec for point sources and 1.0 gm/sec/m² for area sources). Concentrations from ISC3 are scaled by a post processing program which relates emission rates of toxic constituents from each individual source to a total concentration and a maximum expected excess risk.

ISC3 output is passed to a post-processor (ACE2588) which analyzes each source contribution for each toxic compound to calculate the potential excess cancer risk and the potential acute and chronic hazard indices from each toxic compound at each receptor location.

For the evaluation of project concentration levels, 20 specific receptor locations were set at selected residences near the property. In addition, a grid was utilized for analysis of the estimated excess risk including 70 locations on the property boundary spaced 250 meters apart, and a grid of 100 meter, 250 meter, and 500 meter spaced locations. The property boundary is irregular in shape with "windows" of uncontrolled land surrounded by land under Golden Queen's control. After the peak offsite location was determined using the 250 and 500 meter spaced grid, a grid of 100 meter (100M) spaced locations was established around the peak. The peak offsite location is on the property boundary, and is topographically high up on the mountain. Exhibit 4 shows fence line and specific receptor locations and Exhibit 5 shows the gridded receptor locations used in ISC3 and ACE2588 relative to the property.

ACE2588

The post-processor (ACE2588) has been widely used in California for compliance with California Code of Regulations Title 17, 93300-93347. CCR17 requires facilities to quantify air toxic emissions and to prepare health risk assessments if certain thresholds are exceeded. Input to ACE2588 includes the concentrations calculated by the air dispersion model ISC3, air toxic emissions by source, unit risk factors of each toxic compound, and information relating to multiple pathway effects related to health risk.

The multi-pathway analysis is based on assumptions provided by the California Air Pollution Control Officers Association (CAPCOA) and listed in the Risk Assessment Guidelines dated January 1992. No modifications to these assumptions were made for this facility. The assumptions include a settling velocity of 2 cm/sec for controlled sources and 5 cm/sec for uncontrolled sources. Other assumptions are that only respirable particulate affects the inhalation pathway while concentrations of toxic compounds in total suspended particulate (TSP) are used for all other pathways.

Output from ACE2588 includes the concentration of each toxic compound in $\mu\text{g}/\text{m}^3$ for both maximum hourly and annual concentration, receptor estimated total excess cancer risk, source and pollutant contributions to total cancer risk at specified receptor locations, receptor maximum acute exposure, and receptor maximum chronic exposure. In addition, graphical representations of the excess risk and relationship to the acute and chronic exposure levels are possible using the output from ACE2588.

IV. MODEL PARAMETERS

Meteorological Data

Golden Queen contracted for the operation of a meteorological data gathering station on its property starting in 1989 with operations continuing for approximately two years. Exhibit 6 shows the location of the monitoring station in relationship to the Golden Queen property. Air Sciences, Inc. gathered and checked the data from this station. This meteorological data was collected in accordance with United States Environmental Protection Agency guidelines and has been verified for completeness. Upper air soundings from Winnemucca, Nevada were used with the surface data to create two annual datasets for model input. The first is for the period September 1, 1989 through August 31, 1990 (1990). Exhibit 7 is a windrose for 1990. The second is for the period August 20, 1990 through August 19, 1991 (1991). Exhibit 8 is a windrose for 1991. Table 1 shows the frequency distribution of the wind speed and wind direction for 1991 data.

The onsite meteorological data was processed using the EPA program PCRAMMET to include calculated urban and rural mixing heights based on Holzworth using the upper air data gathered from Winnemucca, Nevada. (The Winnemucca station is the nearest representative station with data processed and available to the public.) The calculation method results in some abnormally low morning mixing heights. The morning rural mixing heights were adjusted to be no lower than the lowest calculated value above 50 meters on any given day. Modification of the early morning mixing heights is reported to have been allowed by EPA on other occasions involving primarily fugitive dust sources.

Based on analysis using the peak receptor locations and the proposed sources, the 1991 meteorological data provides the highest estimated excess risk at the peak receptor location and is utilized in this evaluation.

Emission Points

Emission sources have been divided into 46 sources for analysis of the air toxics. For the PM_{10} analysis, only 40 sources were used (the remaining six do not contribute to PM_{10} emissions. Table 2 shows how the sources were separated for use as modeling input. This was necessary for more accurate representation of area sources. Exhibit 3 shows source locations for the proposed project.

Emission Summary

All toxic air contaminants from fugitive dust sources are quantified on the basis of their fraction in total suspended particulate (TSP). This is a new project and only limited analysis of onsite materials has been performed. Analysis of raw materials from nearby mines has been used to quantify the estimated concentrations of toxic contaminants in the various fugitive dust sources. The analysis results and a qualitative discussion of which sample may be more representative of the project are included in Appendix D.

PM_{10} quantification is based primarily on AP-42 emission factors and is used for the ambient air quality analysis as well as the toxics analysis.

For risk assessment purposes, two sets of modeled quantities are required. Risk associated with the inhalation pathway is based on particulate matter less than 10 microns (PM_{10}); all other pathways are analyzed based on the toxic fraction in TSP. These two analyses are combined to determine the estimated increase in maximum excess cancer risk from the facility. The AB2588 regulation specifies an applicable degree of accuracy (ADA) in pounds per year for each substance. The regulation does not require facilities to quantify emissions of substances if the calculated annual emissions of that substance are less than the ADA. The following substances are likely present but are estimated to be emitted at less than the ADA and are therefore not included in the analysis; acetaldehyde, acrolein, benzene, formaldehyde, naphthalene, PAH, propylene, selenium, toluene, and xylene.

Golden Queen has estimated that the activity level will be 6.0 million tons per year of ore and 24.0 million tons per year of overburden. The ACE2588 model has been run twice at this activity level, once with the PM₁₀ portion of emissions to determine excess cancer risk from inhalation pathways and once with TSP emissions to determine the excess cancer risk from all other pathways. Table 3 contains emissions estimates for the proposed project PM₁₀ emissions. Table 4 contains estimated emissions for the proposed project TSP case. Backup data and emissions estimates for the various emissions sources are contained in Appendix E.

Multipathway Analysis

There are only six chemicals in the Golden Queen inventory which are identified in the CAPCOA guidelines as having multipathway effects. They are arsenic, beryllium, cadmium, lead, mercury and polycyclic aromatic hydrocarbons. The impact of these chemicals on the alternate pathways has been analyzed using the ACE2588 post-processing program. The alternate pathways are dermal, soil, water, plants, animal, and mother's milk. For the Golden Queen project, water, animal and mother's milk pathways do not contribute to the total risk, because, there are no open water sources which can be affected, there is no commercial grazing land, and the multipathway chemicals in this project are not currently considered to affect the mother's milk pathway.

V. EMISSIONS CHARACTERIZATION

Estimates for the proposed project emissions have been based upon production plans provided by Golden Queen using emission factors approved by EPA, CARB, and KCAPCD and source tests. These methods can be conservative because of uncertainty surrounding site-specific input parameters.

The primary sources of toxic air contaminants are fugitive dust emissions resulting from the drilling, blasting, and materials handling of the ore and the overburden. Naturally contained in the fugitive dust are certain elements which are classified as toxic air contaminants. Golden Queen has analyzed samples of ore material and overburden from the property to determine toxic concentrations in the dust. These samples were analyzed by a third party laboratory to determine the quantity of each of the elements considered to be toxic air contaminants. In addition, samples from two nearby gold mining operations were also reviewed. Results of these samples were used in calculating the toxic fraction of PM_{10} estimated to be emitted into the air from each distinct operation. Raw material analyses are included in Appendix D. Emissions from the combustion sources were based on either relevant source tests or Ventura County Air Pollution Control District factors.

Other emission factors used are from EPA AP-42 or have been determined from actual source testing at similar facilities. Reference to the specific emission factors used is also contained in the backup calculations spreadsheets. Appendix E contains the calculation spreadsheets used in determining the quantity of proposed project emissions.

The unit risk factors which are the basis for carcinogenic risk calculations are based upon a 70-year exposure to the toxic chemicals. Golden Queen has not yet begun operating on the property except for exploratory analyses. The maximum estimated life of the project is approximately 15 years.

VI. DISCUSSION

Hazard Assessment

OEHHA evaluates chemical substances for cancer health effects, for chronic, non-cancer health effects that may appear years after exposure, and for acute, non-cancer health effects that appear almost immediately after exposure. In some cases, a substance causes more than one type of health effect, and is regulated accordingly. As an example of one of these substances, lead is regulated as a carcinogen, as causing chronic, non-cancer health effects, and as causing acute, non-cancer health effects.

For purposes of this analysis, Golden Queen has determined that the following toxic air contaminants, as identified by CAPCOA, are being emitted, or could be emitted in the future, from the facility:

Acetaldehyde	Lead
Acrolein	Manganese
Arsenic	Mercury
Arsine	Naphthalene
Benzene	Nickel
Beryllium	PAHs
Cadmium	Selenium
Copper	Toluene
Formaldehyde	Zinc
Hydrogen Cyanide	

Contaminants resulting from mining operations include arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and zinc.

Appendix E contains a listing of all regulated air toxics which are expected to be emitted and the emission source. The emission rates (lbs per year and lbs per hour) used for modeling each different production scenario are also included.

Exposure Assessment

The multi-pathway air toxic analysis includes determination of the effects of toxins entering the body through six pathways in addition to the inhalation pathway. They are dermal, soil, water, plants, animal, and mother's milk. For the proposed project, the water and animal pathways are not considered because there are no open sources of water and no commercial cattle or poultry is raised nearby. In addition, the mother's milk pathway is not considered because it is affected only by toxins not present in the Golden Queen emissions. The conservative assumptions made by CARB are used in the analysis of each of the remaining pathways. The soil pathway is the ingestion of dust which is deposited on food eaten by the individual. Assumptions in the soil pathway analysis include a mixing depth of only 1 centimeter in the soil and 110 mg/day of soil consumption. The plant pathway analyzes the effect of toxins taken into the plants grown in the backyard of the residences. In reality, it is unlikely that the residents of arid desert communities such as those near the Golden Queen property are consuming two-thirds of a pound per day of homegrown fruits and vegetables.

Human exposure was estimated for a hypothetical individual residing continuously at the point of maximum impact. This approach assumes that the individual is always in the same location, exposed to the calculated ambient concentration, which would seldom, if ever, occur. Periods spent away from the residence due to vacation or work would result in lower exposures and lower estimated excess cancer risk to the individual.

Exposure was estimated using the procedures and assumptions presented in the CAPCOA AB2588 guidelines. In several ingestion pathways, the CAPCOA guidelines give a mechanism for incorporating site-specific information. For purposes of this analysis, the defaults included in the guidelines were used.

Acceptable exposure levels (AELs) are used as indicators of potential adverse, non-carcinogenic, health effects. They are generally set by agencies based on the most sensitive adverse health effect reported in literature. AELs are designed with a margin of safety to protect the most sensitive individuals. A hazard index of 1 represents the acceptable

exposure for an individual substance. Different substances may affect different target organs and exposure to two or more substances which may affect the same target organ are assumed to be additive. However, exposures above the acceptable exposure levels (i.e. a total hazard index greater than one) do not necessarily equate to significant health risks because of the margin of safety included in the AEL. AELs have been established for various substances for both maximum short-term (one-hour) exposure levels and maximum long-term exposure levels.

Adjustments

Mixing Height - When the onsite meteorological data sets (1990 and 1991) were processed with Winnemucca upper air data to include mixing heights, they contained some early morning mixing heights which were extremely low. These low mixing heights resulted in area source emissions with low stacks and low exit velocities bouncing emissions between the ground and the mixing height for long distances. Early morning mixing heights below 50 meters were modified to set morning values to no lower than the lowest value above 50 meters as the lowest mixing height on any given day throughout the year.

Applicable Degree of Accuracy - After estimation of the total quantity of each toxic chemical emitted, a determination was made as to whether the total exceeded the applicable degree of accuracy (ADA) for reporting emissions for the particular chemical under AB2588. If the total was less than one-half the respective ADA, the chemical was not included in the impacts assessment. Estimated emissions of the following chemicals from the proposed project are below one-half the ADA; acetaldehyde, acrolein, benzene, formaldehyde, naphthalene, PAH, selenium, toluene, and xylenes.

Project Life - The unit risk factors (URF) assigned to each carcinogenic chemical are based in part on the assumption of a 70-year exposure to the chemical. The estimated excess risk associated with potential emissions from the Golden Queen facility should be based upon the facility life. Golden Queen has estimated that the Proposed Project will be completed in less than ten years.

This analysis assumes that the Proposed Project will be completed in fifteen years to allow for possible changes in operating rate or finding additional reserves. The estimated excess cancer risk from the facility based on project emissions has therefore been reduced using a factor of 15/70 to reflect potential excess risk based upon only fifteen years at the projected emissions rate. Table 5 shows the total estimated cancer risk at seventy (70) years and at fifteen (15) years for each of the evaluated locations. Golden Queen proposes to have a condition limiting operations to a maximum of fifteen (15) years on its permits. This will allow Golden Queen and reviewing agencies to review the operations at that time to determine if operations may continue. Factoring the estimated excess cancer risk was discussed with KCAPCD and verbally approved provided the estimated project life is realistic and conservative and is included as a permit condition.

Evaluation of Results

PM₁₀ Impacts - Based on analysis of the emission sources, the majority of emissions are not considered quantifiable for purposes of determining Prevention of Significant Deterioration (PSD) status. Golden Queen is not required to obtain a PSD permit. However, in accordance with KCAPCD requirements (as outlined in the letter dated June 1, 1995, Appendix A), an analysis of the maximum 24-hour average PM₁₀ concentration has been prepared for comparison with the State and National Ambient Air Quality Standards.

Golden Queen obtained results from PM₁₀ monitoring during 1990 and 1991 for the purposes of determining background levels of PM₁₀. Two samplers were set up to gather dual 24-hour samples approximately every three days. Exhibit 9 is a representation of the average of the 24-hour results over time. Table 6 shows the actual sampling results as well as the arithmetic and geometric mean for the year. The maximum 24-hour average concentration was 51 µg/m³. The annual geometric mean for PM₁₀ was 18.8 µg/m³. One day exceeded the California Ambient Air Quality Standard (CAAQS) of 50 µg/m³. No days exceeded the federal NAAQS of 150 µg/m³. The background exceedance of the CAAQS occurred on May 30, 1991. It should be noted that regionally PM₁₀ concentrations have been declining at the CARB station located in Mojave. Exhibit 10 shows the first and second high and the annual

geometric and arithmetic mean PM_{10} concentrations for the period 1988 through 1994. From 1990 to 1994, the annual geometric mean declined 34 percent from $24.4 \mu\text{g}/\text{m}^3$ to $16.1 \mu\text{g}/\text{m}^3$. An assessment of the potential PM_{10} impacts of the proposed project was prepared using ISC3 for multiple receptor locations including 20 certain nearby residential receptors, 70 locations along the proposed fenceline approximately 250 meters apart, and 277 receptors in 250 and 500 meter grid spacing.

The maximum estimated 24-hour average PM_{10} concentration from the proposed project is $26.82 \mu\text{g}/\text{m}^3$. When added to the annual average background concentration of $18.8 \mu\text{g}/\text{m}^3$, the total concentration is $45.62 \mu\text{g}/\text{m}^3$. This is less than the California AAQS of $50 \mu\text{g}/\text{m}^3$. Appendix F contains a summary of the results of the 24-hour PM_{10} concentration analysis.

Class I Area Impact Analysis - Telephone contact with EPA Region IX in San Francisco revealed that sources of fugitive emissions which are not covered by local permits and regulations are also not included in the total emissions used to classify a stationary source as a major source. Using this criteria, the Proposed Project is not considered a major source and is not subject to Prevention of Significant Deterioration (PSD) requirements.

Even though the Proposed Project is not considered a major source, an analysis of the effect of estimated PM_{10} emissions on Class I Wilderness areas within 100 kilometers was performed. This analysis is required of major sources to determine whether or not a PSD source increases pollutant concentrations by $1 \mu\text{g}/\text{m}^3$ or more (24-hour average) in a Class I area. The Class I areas within 100 kilometers of the Proposed Project are Dome Wilderness to the north, and San Gabriel Wilderness to the south. This analysis shows an estimated maximum increase in 24-hour average PM_{10} concentration of only $0.12 \mu\text{g}/\text{m}^3$ at Dome and $0.22 \mu\text{g}/\text{m}^3$ at San Gabriel. Appendix G contains the ISC3 output for the Class 1 wilderness areas.

An analysis of the impact on visibility at the Class I areas was also performed using the visual effects screening model VISCREEN. Using the conservative assumption that all emissions of particulate matter from the project come from the same source, the maximum visual impacts

screening criteria are not exceeded. Appendix H contains the results of the visibility screening analysis.

The significance levels for increases in PM_{10} concentrations at the Class I areas are not exceeded and the visibility screening criteria are not exceeded, therefore, no significant impact is expected to occur at the nearest Class I areas.

Carcinogens - The highest estimated maximum risk observed offsite is 4.989×10^{-6} and is located at UTM coordinates 391,445 E by 3,870,519 N which is on the southern fence line. KCAPCD has established that a level of ten in one million excess cancer risk is considered significant. Therefore, the excess carcinogenic risk from this project is not considered significant. Only one of the twenty specific receptor locations has an excess risk greater than one in one million (1.152×10^{-6}) and all are located at least 1 1/2 miles from the point of maximum impact.

Table 5 shows the risk by pathway for the proposed project for all receptors. Supporting data for these calculations is contained in Appendix E. Appendix I contains the ACE2588 output from the proposed project PM_{10} case and Appendix J contains the ACE2588 output from the proposed project TSP case. All input and output files have also been provided on disk. Emissions of arsenic and beryllium are the primary cause of the excess cancer risk associated with the proposed project. Table 7 shows the breakdown of the cancer risk by pollutant from the ACE2588 output for the proposed project TSP case. 88.1 percent of the estimated excess risk at the point of maximum impact comes from exposure to arsenic compounds which are contained in the fugitive dust emissions relating to the normal activities of the facility. 7.02 percent of the estimated excess risk comes from exposure to beryllium. While the proportions of risk by pollutant will change at different locations, arsenic and beryllium will be the predominant pollutants at all locations.

Arsenic is reported in the EPA Toxic Substances Control Act Inventory. Arsenic and its compounds are on the Community Right-To-Know List. For purposes of the impacts assessment, all arsenic (all sources and all forms) is reported as elemental arsenic. Arsenic

is classified as a human carcinogen based on evidence from lung cancer mortality rates in populations exposed primarily through inhalation (smelter workers) and increased skin cancer incidence in several populations consuming drinking water high in arsenic concentration (Taiwan, Chile, Argentina and Mexico). No excess skin cancer incidence has been observed in United States residents consuming relatively high levels of arsenic in drinking water. Additionally, there has not been consistent demonstration of arsenic carcinogenicity in test animals for various chemical forms of arsenic administered by different routes to several species.

Unloading (sources 26 through 30) accounts for 46.62 percent of the estimated excess risk at the location of the maximum excess cancer risk. Loading, (sources 13 through 18) hauling, (sources 19 through 24) and wind erosion (sources 36 through 40) account for 24.06 percent, 9.77 percent, and 9.47 percent, respectively. Table 8 shows the estimated 70-year lifetime cancer risk by source for proposed project emissions at the peak location from the TSP analysis.

Exhibit 11 shows the isopleth of the one in one million excess cancer risk from the proposed project.

Acute Health Effects - Analysis of the proposed project shows that exposure to air toxics which may have acute effects on the central nervous system (the maximally exposed toxicological endpoint) have estimated hazard indices less than 1.0. Copper, nickel and hydrogen cyanide are the only substances emitted in sufficient amounts to quantify and the maximum total acute hazard index is 0.0137 from exposure to hydrogen cyanide. Exposure from the proposed project is less than the AEL defined for each of the listed chemicals individually. Table 9 shows the acute hazard index by pollutant and by toxicological endpoint for the peak receptor from the proposed project. Thus, no significant health effects are anticipated to occur from acute exposure to any air toxics.

Chronic Health Effects - Analysis of the proposed project shows that exposure to air toxics which may have chronic effects on the central nervous system (the maximally exposed

toxicological endpoint) have estimated hazard indices less than 1.0. Arsenic, hydrogen cyanide, lead, and manganese all may have chronic effects on the central nervous system. Exposure from the proposed project is less than the AEL defined for each of these chemicals individually and presents an estimated hazard index of only 0.05163 combined. Table 10 shows the chronic hazard index by pollutant and toxicological endpoint for the peak receptor from the proposed project.

All estimated exposures are individually and collectively less than the AEL. No significant health effects are anticipated to occur from chronic exposure to any air toxics.

Worker Exposure - Toxic air contaminants projected to be emitted from the site were evaluated to determine the exposure to workers on the site. 136 discrete receptors were placed throughout the project area. Presumably, no worker would be exposed to the highest peak concentration on the project site due to the mobility of the working areas. Under worst case conditions, the maximum excess cancer risk at the 136 receptors was used with exposure of 2000 hours per year and a 15 year project life to determine maximum exposure to onsite workers. The highest estimated maximum risk to a worker is 1.83×10^{-6} (1.83 in one million).

Output Results - Model input and output is available on diskette and will be supplied to the Kern County Air Pollution Control District and will be available to others on request. Please contact Greg McNeish, WZI Inc., 4700 Stockdale Highway, Suite #120, Bakersfield, CA 93309.

NOTE: The intermediate file used for processing the toxics information is extremely large (~750 megabytes).

VII. ALTERNATIVES ASSESSMENT

Impacts on air quality vary with the rate of mining and processing of ore from the project area. For example, increasing the processing rate will result in an increase in maximum 24-hour PM_{10} concentration compared to the Proposed Action. Discussion of the various alternatives presented and the impact on air quality including ambient air concentrations of PM_{10} and the incremental excess cancer risk are presented below.

No Action Alternative

Air Quality

The project is located on a mountain in the Kern County portion of the southeast desert air basin. As such the weather conditions are hot and dry leading to potential for erosion emissions from existing disturbed surfaces. There are approximately 215 acres of existing disturbed areas relating to past underground mining operations including a large tailings pile on the northern flank of the mountain, which are subject to wind erosion emissions. The surface of the tailings pile consists of more finely textured soil than will be exposed at the heap leach pads or the overburden piles proposed for this project. The current sources of air pollution would continue to exist if the proposed project is not enacted.

Under the Proposed Action, previously disturbed areas located within the project area will be removed as potential sources of air pollution either through reclamation or elimination by mining activity. The tailings pile is located where heap leach pad #1 will be built and is proposed as base material for the heap. This tailings pile is a large emissions generator when the wind speed exceeds the threshold velocity. On the same basis used to calculate emissions from the proposed project, it is estimated that the disturbed acreage has annual emissions of 136,000 pounds of PM_{10} per year. If the project is not developed these emissions may continue because there are no required reclamation plans for these past disturbances.

The net long term effect (from the end of the project and beyond) is that annual emissions from the project area would be decreased by 126,100 pounds of PM₁₀ per year resulting in long term beneficial impact to the air basin. Thus the long term effect of the no action alternative is detrimental even though it may be considered **Less Than Significant**.

Health Hazards/Public Safety

Under the no action alternative, the toxic air contaminants projected to be released from the proposed project will not be emitted. However, the toxic portions of PM₁₀ which are in the tailings pile will still be emitted. In addition, open mine shafts on the mountain will also remain so some risk to public health and safety which was not quantified, will remain. Thus, the long term effect of the no action alternative may be detrimental even though it may be considered **Less Than Significant**.

Increased Mining and Processing Rates

Air Quality

Under this scenario, mining and processing rates would increase by 20% resulting in higher PM₁₀ emissions for a shorter time period than in the Proposed Action. A review of the PM₁₀ emissions sources was made to determine which sources would increase and which would remain the same as in the Proposed Action. For calculation of the 24-hour PM₁₀ concentration, the blasting and wind erosion sources will remain the same as in the Proposed Action. Blasting only occurs once per day but on more days than in the Proposed Action. Wind erosion is based on the surface area of exposed overburden piles which would be similar to the Proposed Action. Emissions from all other sources would increase by approximately 20% from the increased activity.

For the dispersion model prepared for the Proposed Action, the individual sources are evaluated for their contribution to the maximum impact. A sensitivity analysis was conducted by scaling the appropriate variable sources by 20% and keeping the unaffected sources

unchanged to estimate the impact of the increase in production rate on the maximum calculated PM₁₀ concentration. The estimated 24-hour PM₁₀ concentration resulting from the increased processing is a maximum of 50.13 µg/m³. Table 11 shows expected changes from the higher processing rates.

The PM₁₀ emission calculations assume the use of Best Available Control Technology for all sources having BACT determinations including roads and equipment, similar to the Proposed Action. The increased rate alternative may be able to apply currently unknown controls or use other mitigation measures to limit the impact on PM₁₀ emissions resulting from the project to below the California 24-hour standard of 50 µg/m³.

As part of the Proposed Action, meteorological and PM₁₀ monitoring will be established to show compliance with ambient air quality standards. It may be possible, through onsite data collection, to show that the dispersion modeling overestimates the maximum concentration, thus allowing an increased rate. The environmental impact to existing air quality of this alternative may be **Significant** but could be either avoided or mitigated prior to full implementation.

Health Hazards/Public Safety

A sensitivity analysis was conducted on the incremental excess health risk from toxic air contaminants from the proposed action to evaluate any changes resulting from the increased mining and processing rate alternative. The increased mining and processing rate is not designed for a larger project, just a project completed in a shorter time period. The incremental health risk is based on the project life as well as the amount of emissions. For all sources except wind erosion, the total emissions from the project will not change in the accelerated rate scenario, thus the incremental risk from these sources will be the same as in the Proposed Action. Wind erosion emissions are based on the surface area of the overburden piles exposed for a certain time period. Since the increased processing rate alternative will have a 17% shorter life, wind erosion emissions and their contribution to the total risk will be reduced by approximately 17%. Wind erosion emissions represent

approximately 9.8% of the risk at the maximum exposed location. Reducing the project life by 17% will reduce the overall health risk from the project by about 1.7% to 4.9×10^{-6} from 5.0×10^{-6} for the Proposed Action. These results are essentially the same within the accuracy of the emissions estimates and the air dispersion model. Thus, the environmental impact to health hazards and public safety of this alternative is **Less Than Significant**.

Decreased Mining and Processing Rates

Air Quality

Under this scenario, mining and processing rates would decrease by 20% resulting in lower PM_{10} emissions for a longer time period than in the Proposed Action. A review of the PM_{10} emissions sources was made to determine which sources would decrease and which would remain the same as in the Proposed Action. For calculation of the 24-hour PM_{10} concentration, the blasting and wind erosion sources will remain the same as in the Proposed Action. Blasting only occurs once per day but on fewer days than in the Proposed Action. Wind erosion is based on the surface area of exposed overburden piles which would be similar to the Proposed Action. Emissions from all other sources would decrease by approximately 20% from the decreased activity.

For the dispersion model prepared for the Proposed Action, the individual sources are evaluated for their contribution to the maximum impact. A sensitivity analysis was conducted by scaling the appropriate variable sources by 20% and keeping the unaffected sources unchanged, to estimate the impact of the decrease in production rate on the maximum calculated PM_{10} concentration. The estimated 24-hour PM_{10} concentration resulting from the increased processing is a maximum of $41.12 \mu\text{g}/\text{m}^3$. Table 11 shows expected changes from the lower processing rates. This is below the California 24-hour standard of $50 \mu\text{g}/\text{m}^3$, and slightly less than the estimated PM_{10} concentration of $45.62 \mu\text{g}/\text{m}^3$ for the Proposed Action. Thus, the long term effect of the no action alternative is **Less Than Significant**.

Health Hazards/Public Safety

A sensitivity analysis was also conducted on the incremental excess health risk from toxic air contaminants from the proposed action to evaluate any changes resulting from the decreased mining and processing rate alternative. The decreased mining and processing rate is not designed for a smaller project, just a project completed in a longer period of time. The incremental risk is based on the project life as well as the amount of emissions. For all sources except wind erosion, the total emissions from the project will not change in an decreased rate scenario, thus the incremental risk from these sources will be the same as in the Proposed Action. Wind erosion emissions are based on the surface area of the overburden piles exposed for a certain time period. Since the decreased processing rate alternative will have a 20% longer life, wind erosion emissions and their contribution to the total risk will be increased by approximately 20%. Wind erosion emissions represent approximately 9.8% of the risk at the maximum exposed location. Increasing the project life by 20% will increase the overall risk from the project by about 2% to 5.1×10^{-6} from 5.0×10^{-6} for the Proposed Action. These results are essentially the same within the accuracy of the emissions estimates and the air dispersion model. Thus, the environmental impact to health hazards and public safety of this alternative is **Less Than Significant**.

Reduced Project Size

Air Quality

Under this scenario, the total size of the project will be reduced by approximately 70%, but the daily and annual processing rates would be approximately the same as the Proposed Action. For calculation of the 24-hour PM_{10} concentration, all emission sources will remain the same as in the Proposed Action. Therefore no change is expected in the maximum estimated 24-hour PM_{10} concentration of $45.62 \mu g/m^3$. Thus, the long term effect of the no action alternative is **Less Than Significant**.

Health Hazards/Public Safety

A sensitivity analysis was conducted on the incremental excess risk from the proposed action to evaluate any changes resulting from the reduced project size alternative. The incremental risk is based on the project life as well as the amount of emissions. A 70% reduction in project size and a 70% reduction in project life will result in a 70% reduction in maximum excess cancer risk compared to the Proposed Action. Therefore, the maximum expected excess cancer risk from this alternative is 1.5×10^{-6} compared to the risk of 5.0×10^{-6} from the Proposed Action. Thus, the environmental impact to health hazards and public safety of this alternative is **Less Than Significant**.

VIII. REFERENCES

- CARB, 1992. Amendments to the "Hot Spots" Emissions Inventory Criteria and Guidelines Regulation, California Air Resources Board, March.
- CARB, 1993. Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants, California Air Resources Board, July.
- CAPCOA, 1992. CAPCOA Air Toxics "Hot Spots" Program Risk Assessment Guidelines, Prepared by the AB2588 Risk Assessment Committee of the California Air Pollution Control Officers Association (CAPCOA), January.
- U.S. Environmental Protection Agency, 1986. Guidelines on Air Quality Models. EPA-450/2-78-027R. U.S. EPA, Research Triangle Park, NC.
- U.S. Environmental Protection Agency, 1995. Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources. AP-42 Fifth Edition, U.S. EPA, Research Triangle Park, NC.



TABLES



TABLE 1

STATION NUMBER: 98765 Soledad Mountain Onsite Met
YEAR 1991

FREQUENCY DISTRIBUTION (JAN-DEC)

DIRECTION *	WIND SPEED (METERS/SECOND)					TOTAL
	< 1.5	< 2.6	< 3.8	< 5.0	> OR = 5.0	
1	42	102	54	25	8	231
2	52	93	52	25	13	235
3	33	88	57	29	35	242
4	23	68	57	43	42	233
5	22	70	61	42	38	233
6	19	57	71	49	25	221
7	9	43	52	46	24	174
8	5	28	25	11	12	81
9	8	21	17	7	12	65
10	10	18	15	8	6	57
11	13	28	16	7	8	72
12	16	25	18	4	34	97
13	9	29	16	8	38	100
14	9	32	13	1	24	79
15	16	59	10	2	0	87
16	16	68	17	3	1	105
17	20	115	26	3	4	168
18	2	10	2	2	0	16
19	25	76	49	13	29	192
20	14	53	54	30	115	266
21	6	44	48	44	201	343
22	15	34	42	40	172	303
23	10	33	32	28	82	185
24	18	36	37	18	50	159
25	10	27	31	21	38	127
26	16	34	33	22	32	137
27	37	33	27	27	47	171
28	14	28	26	27	92	187
29	28	31	29	43	254	385
30	35	38	24	42	630	769
31	49	36	25	29	959	1098
32	39	60	29	39	694	861
33	52	69	26	23	136	306
34	42	88	41	13	43	227
35	38	77	45	19	18	197
36	52	77	40	19	9	197
TOTAL	840	1914	1248	820	3933	

TOTAL NUMBER OF OBSERVATIONS = 8760

TOTAL NUMBER OF CALMS = 5

* NOTE - DIRECTION FROM WHICH THE WIND IS BLOWING
STATION NUMBER: 98765 Soledad Mountain Onsite Met
YEAR 1991

FREQUENCY DISTRIBUTION (JAN-DEC)

DIRECTION *	WIND SPEED (METERS/SECOND)					TOTAL
	< 1.5	< 2.6	< 3.8	< 5.0	> OR = 5.0	
1	.004795	.011644	.006164	.002854	.000913	0.026370
2	.005936	.010616	.005936	.002854	.001484	0.026826
3	.003767	.010046	.006507	.003311	.003995	0.027626
4	.002626	.007763	.006507	.004909	.004795	0.026598
5	.002511	.007991	.006963	.004795	.004338	0.026598
6	.002169	.006507	.008105	.005594	.002854	0.025228
7	.001027	.004909	.005936	.005251	.002740	0.019863
8	.000571	.003196	.002854	.001256	.001370	0.009247
9	.000913	.002397	.001941	.000799	.001370	0.007420
10	.001142	.002055	.001712	.000913	.000685	0.006507
11	.001484	.003196	.001826	.000799	.000913	0.008219
12	.001826	.002854	.002055	.000457	.003881	0.011073
13	.001027	.003311	.001826	.000913	.004338	0.011416
14	.001027	.003653	.001484	.000114	.002740	0.009018
15	.001826	.006735	.001142	.000228	.000000	0.009932
16	.001826	.007763	.001941	.000342	.000114	0.011986
17	.002283	.013128	.002968	.000342	.000457	0.019178
18	.000228	.001142	.000228	.000228	.000000	0.001826
19	.002854	.008676	.005594	.001484	.003311	0.021918
20	.001598	.006050	.006164	.003425	.013128	0.030365
21	.000685	.005023	.005479	.005023	.022945	0.039155
22	.001712	.003881	.004795	.004566	.019635	0.034589
23	.001142	.003767	.003653	.003196	.009361	0.021119
24	.002055	.004110	.004224	.002055	.005708	0.018151
25	.001142	.003082	.003539	.002397	.004338	0.014498
26	.001826	.003881	.003767	.002511	.003653	0.015639
27	.004224	.003767	.003082	.003082	.005365	0.019521

TABLE 1 (continued)

28	.001598	.003196	.002968	.003082	.010502	0.021347
29	.003196	.003539	.003311	.004909	.028995	0.043950
30	.003995	.004338	.002740	.004795	.071918	0.087785
31	.005594	.004110	.002854	.003311	.109475	0.125342
32	.004452	.006849	.003311	.004452	.079224	0.098288
33	.005936	.007877	.002968	.002626	.015525	0.034932
34	.004795	.010046	.004680	.001484	.004909	0.025913
35	.004338	.008790	.005137	.002169	.002055	0.022489
36	.005936	.008790	.004566	.002169	.001027	0.022489

TOTAL	0.095890	0.218493	0.142466	0.093607	0.448973
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PERCENTAGE OF CALMS = 0.057078

PERCENTAGE OF MISSING = 0.000000

* NOTE - DIRECTION FROM WHICH THE WIND IS BLOWING
 1 INPUT SUMMARY

STATION NUMBER	YEAR	NUMBER OF RECORDS
98765	91	8760

STATION NUMBER: 98765 Soledad Mountain Onsite Met

WINDROSE

Direction	Frequency	Mean wind speed
N	5.92	2.7
NNE	6.27	3.5
NE	5.14	3.6
ENE	1.78	3.6
E	1.75	3.0
ESE	2.63	4.7
SE	2.26	2.2
SSE	2.24	2.2
S	8.54	4.1
SSW	7.29	5.2
SW	3.74	4.1
WSW	3.94	3.6
W	8.41	5.8
WNW	27.50	7.7
NW	7.23	4.3
NNW	5.31	2.6
Total	99.94	

Average wind speed: 5.0 m/s

Percent calms: 0.06

TABLE 2
Golden Queen Mining Company
Emission Sources & PM10 Emissions

PM10 emissions		Ore Production, MMTPY 6.0 Waste Removal, MMTPY 24.0		Blasting Sq Ft. 77400				
	Area Source	g/s hr	g/s/m2	g/s yr	g/s/m2	lb/hr	lb/yr	lb/yr/source
1	100000 DRILLING_PIT1	3.017E-03	3.017E-08	2.535E-03	2.535E-08	0.02	176.28	2400
2	100000 DRILLING_PIT2	3.017E-03	3.017E-08	2.535E-03	2.535E-08	0.02	176.28	
3	385000 DRILLING_PIT3	1.162E-02	3.017E-08	9.762E-03	2.535E-08	0.09	678.66	
4	472500 DRILLING_PIT4	1.426E-02	3.017E-08	1.198E-02	2.535E-08	0.11	832.90	
5	152000 DRILLING_PIT5	4.586E-03	3.017E-08	3.854E-03	2.535E-08	0.04	267.94	
6	152000 DRILLING_PIT6	4.586E-03	3.017E-08	3.854E-03	2.535E-08	0.04	267.94	
7	1 BLASTING_PIT1	1.978E+01	1.978E+01	4.356E-02	4.356E-02	157.00	3028.28	41230
8	1 BLASTING_PIT2	1.978E+01	1.978E+01	4.356E-02	4.356E-02	0.00	3028.28	
9	1 BLASTING_PIT3	1.978E+01	1.978E+01	1.677E-01	1.677E-01	0.00	11658.87	
10	1 BLASTING_PIT4	1.978E+01	1.978E+01	2.058E-01	2.058E-01	0.00	14308.61	
11	1 BLASTING_PIT5	1.978E+01	1.978E+01	6.621E-02	6.621E-02	0.00	4602.98	
12	1 BLASTING_PIT6	1.978E+01	1.978E+01	6.621E-02	6.621E-02	0.00	4602.98	
13	100000 TRKLOAD_PIT1	4.914E-02	4.914E-07	3.737E-02	3.737E-07	0.39	2598.16	35374
14	100000 TRKLOAD_PIT2	4.914E-02	4.914E-07	3.737E-02	3.737E-07	0.39	2598.16	
15	385000 TRKLOAD_PIT3	1.892E-01	4.914E-07	1.439E-01	3.737E-07	1.50	10002.93	
16	472500 TRKLOAD_PIT4	2.322E-01	4.914E-07	1.766E-01	3.737E-07	1.84	12276.32	
17	152000 TRKLOAD_PIT5	7.469E-02	4.914E-07	5.680E-02	3.737E-07	0.59	3949.21	
18	152000 TRKLOAD_PIT6	7.469E-02	4.914E-07	5.680E-02	3.737E-07	0.59	3949.21	
19	25000 HAUL_1	2.919E-02	1.168E-06	1.688E-02	6.751E-07	0.23	1173.34	15975
20	25000 HAUL_2	2.919E-02	1.168E-06	1.688E-02	6.751E-07	0.23	1173.34	
21	96250 HAUL_3	1.124E-01	1.168E-06	6.498E-02	6.751E-07	0.89	4517.35	
22	118125 HAUL_4	1.379E-01	1.168E-06	7.974E-02	6.751E-07	1.09	5544.02	
23	38000 HAUL_5	4.438E-02	1.168E-06	2.565E-02	6.751E-07	0.35	1783.47	
24	38000 HAUL_6	4.438E-02	1.168E-06	2.565E-02	6.751E-07	0.35	1783.47	
25	1 BAGHOUSE_1	1.805E-01	1.805E-01	1.374E-01	1.374E-01	1.43	9551.00	
26	215625 TRU-WST_1	5.181E-02	2.403E-07	5.674E-02	2.631E-07	0.41	3944.84	28299
27	433125 TRU-WST_2	1.041E-01	2.403E-07	1.140E-01	2.631E-07	0.83	7923.98	
28	137100 TRU-WST_3	3.294E-02	2.403E-07	3.608E-02	2.631E-07	0.26	2508.23	
29	256850 TRU-WST_4	6.172E-02	2.403E-07	6.759E-02	2.631E-07	0.49	4699.04	
30	504125 TRU-WST_5	1.211E-01	2.403E-07	1.327E-01	2.631E-07	0.96	9222.91	
31	215625 DOZING_WASTE_1	3.316E-02	1.538E-07	3.785E-03	1.755E-08	0.26	263.15	1888
32	433125 DOZING_WASTE_2	6.660E-02	1.538E-07	7.603E-03	1.755E-08	0.53	528.59	
33	137100 DOZING_WASTE_3	2.108E-02	1.538E-07	2.407E-03	1.755E-08	0.17	167.32	
34	256850 DOZING_WASTE_4	3.950E-02	1.538E-07	4.509E-03	1.755E-08	0.31	313.46	
35	504125 DOZING_WASTE_5	7.752E-02	1.538E-07	8.849E-03	1.755E-08	0.62	615.24	
36	215625 WIND_EROSION1	1.651E-02	7.657E-08	1.704E-02	7.904E-08	0.13	1184.89	8500
37	433125 WIND_EROSION2	3.316E-02	7.657E-08	3.423E-02	7.904E-08	0.26	2380.08	
38	137100 WIND_EROSION3	1.050E-02	7.657E-08	1.084E-02	7.904E-08	0.08	753.38	
39	256850 WIND_EROSION4	1.967E-02	7.657E-08	2.030E-02	7.904E-08	0.16	1411.42	
40	504125 WIND_EROSION5	3.860E-02	7.657E-08	3.985E-02	7.904E-08	0.31	2770.23	
41	599250 ORE_PAD1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
42	318750 ORE_PAD2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
43	1 MERCURY_RETORT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
44	1 ADSORPTION	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
45	1 FURNACE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
46	1 DIESEL_TANK	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.00	
		1.207E+02	1.189E+02	2.060E+00	7.304E-01	1.730E+02	1.432E+05	

TABLE 3
GOLDEN QUEEN MINING
PM₁₀ BASED AIR TOXICS EMISSION
Page 1 of 3

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

All Substances

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Acetaldehyde		Acrolein		Arsenic		Benzene	
0	0	0	0	1.846E-01	2.779E-05	0	0
0	0	0	0	4.166E-01	6.249E-05	0	0
0	0	0	0	3.169E+00	6.849E-03	0	0
0	0	0	0	2.455E-01	3.682E-05	0	0
0	0	0	0	2.721E+00	2.316E-04	0	0
0	0	0	0	0.000E+00	0.000E+00	0	0
0	0	0	0	1.362E+00	2.689E-04	0	0
0	0	0	0	0.000E+00	0.000E+00	0	0
0	0	0	0	2.412E+00	2.316E-04	0	0
0	0	0	0	1.609E-01	1.609E-04	0	0
0	0	0	0	7.246E-01	8.014E-05	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00
0	0	0	0	0	0	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.140E+01	7.949E-03	0.000E+00	0.000E+00

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Beryllium		Cadmium		Chromium VI		Copper	
2.528E-02	1.676E-05	6.636E-03	1.002E-06	1.200E-03	1.630E-07	1.554E-02	2.331E-06
4.911E-01	7.366E-05	1.457E-02	2.185E-06	4.776E-03	7.163E-07	3.598E-02	5.396E-06
4.376E-01	8.072E-03	1.139E-01	2.394E-04	2.062E-02	7.850E-05	2.667E-01	5.914E-04
2.893E-01	4.340E-05	8.582E-03	1.287E-06	2.814E-03	4.221E-07	2.120E-02	3.180E-06
3.726E-01	2.730E-04	9.781E-02	8.098E-06	1.769E-02	2.655E-06	2.290E-01	2.000E-05
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.000E-05
4.992E-03	9.858E-07	4.912E-02	9.701E-06	7.988E-03	1.577E-06	1.142E-01	2.256E-05
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8.843E-03	2.730E-04	8.702E-02	8.098E-06	1.415E-02	2.655E-06	2.023E-01	2.000E-05
5.899E-04	5.899E-07	5.805E-03	5.805E-06	9.439E-04	9.439E-07	1.350E-02	1.350E-05
2.656E-03	2.937E-07	2.614E-02	2.891E-06	4.250E-03	4.700E-07	6.078E-02	6.721E-06
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	3.632E-02	1.164E-04	3.440E-04	1.103E-06	0	0
0	0	0	0	0	0	0	0
1.633E+00	8.754E-03	4.459E-01	3.949E-04	7.477E-02	8.921E-05	9.592E-01	7.051E-04

TABLE 3
GOLDEN QUEEN MINING
PM₁₀ BASED AIR TOXICS EMISSION
Page 2 of 3

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Formaldehyde		HCN		Lead		Manganese	
0	0	0	0	3.928E-02	9.693E-06	1.879E-01	2.553E-05
0	0	0	0	2.840E-01	4.260E-05	7.478E-01	1.122E-04
0	0	0	0	6.759E-01	4.668E-03	3.228E+00	1.229E-02
0	0	0	0	1.673E-01	2.510E-05	4.406E-01	6.609E-05
0	0	0	0	5.790E-01	1.579E-04	2.770E+00	4.158E-04
0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0	0	0	0	2.081E-01	4.109E-05	1.251E+00	2.470E-04
0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0	0	0	0	3.686E-01	1.579E-04	2.216E+00	4.158E-04
0	0	0	0	2.459E-02	2.459E-05	1.478E-01	1.478E-04
0	0	0	0	1.107E-01	1.224E-05	6.656E-01	7.360E-05
0	0	2.173E+04	2.481E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	1.284E+02	9.000E-03	0	0	0	0
0.000E+00	0.000E+00	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0.000E+00	0.000E+00	2.186E+04	2.490E+00	2.457E+00	5.139E-03	1.165E+01	1.380E-02

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Mercury		Nickel		Naphthalene		PAHs	
6.789E-03	1.060E-06	5.616E-03	8.476E-07	0	0	0	0
1.092E-02	1.638E-06	2.483E-02	3.725E-06	0	0	0	0
1.165E-01	1.795E-04	9.650E-02	4.082E-04	0	0	0	0
6.434E-03	9.651E-07	1.463E-02	2.195E-06	0	0	0	0
1.001E-01	6.071E-06	8.278E-02	1.381E-05	0	0	0	0
0.000E+00	6.071E-06	0.000E+00	0.000E+00	0	0	0	0
5.192E-02	1.025E-05	3.634E-02	7.177E-06	0	0	0	0
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
9.197E-02	6.071E-06	6.438E-02	1.381E-05	0	0	0	0
6.135E-03	6.135E-06	4.295E-03	4.295E-06	0	0	0	0
2.763E-02	3.055E-06	1.934E-02	2.138E-06	0	0	0	0
0	0	0	0	0	0	0	0
1.249E-02	5.620E-05	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1.355E-04	4.344E-07	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0	0	0	0	0	0	0	0
4.310E-01	2.775E-04	3.487E-01	4.562E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TABLE 3
GOLDEN QUEEN MINING
PM₁₀ BASED AIR TOXICS EMISSION
Page 3 of 3

**ESTIMATED
EMISSIONS**

W/O ND & ADA
CHEMICALS

	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
	Propylene		Selenium		Toluene		Xylenes	
Drilling	0	0	0.000E+00	0.000E+00	0	0	0	0
Baghouses	0	0	0.000E+00	0.000E+00	0	0	0	0
Blasting	0	0	0.000E+00	0.000E+00	0	0	0	0
Conveyor	0	0	0.000E+00	0.000E+00	0	0	0	0
Truck Load	0	0	0.000E+00	0.000E+00	0	0	0	0
Truck Unload-Ore	0	0	0.000E+00	0.000E+00	0	0	0	0
Haulage	0	0	0.000E+00	0.000E+00	0	0	0	0
Dozing - Ore	0	0	0.000E+00	0.000E+00	0	0	0	0
Truck Unload-Waste	0	0	0.000E+00	0.000E+00	0	0	0	0
Dozing - Waste	0	0	0.000E+00	0.000E+00	0	0	0	0
Wind Erosion	0	0	0.000E+00	0.000E+00	0	0	0	0
Ore Heap	0	0	0	0	0	0	0	0
Mercury Retort	0	0	0	0	0	0	0	0
Adsorption	0	0	0	0	0	0	0	0
Furnace	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Diesel Tank	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

**ESTIMATED
EMISSIONS**

W/O ND & ADA
CHEMICALS

	lb/yr	lb/hr	lb/yr	lb/hr
	Zinc		PM ₁₀	
Drilling	2.373E-02	3.562E-06	2.400E+03	3.260E-01
Baghouses	5.476E-02	8.214E-06	9.551E+03	1.433E+00
Blasting	4.073E-01	9.001E-04	4.123E+04	1.570E+02
Conveyor	3.226E-02	4.840E-06	5.627E+03	8.441E-01
Truck Load	3.497E-01	3.044E-05	3.537E+04	5.310E+00
Truck Unload-Ore	0.000E+00	3.044E-05	0.000E+00	0.000E+00
Haulage	1.745E-01	3.446E-05	1.598E+04	3.155E+00
Dozing - Ore	0.000E+00	0.000E+00	0.000E+00	1.888E+00
Truck Unload-Waste	3.092E-01	3.044E-05	2.830E+04	2.950E+00
Dozing - Waste	2.062E-02	2.062E-05	1.888E+03	1.888E+00
Wind Erosion	9.286E-02	1.027E-05	8.500E+03	9.400E-01
Ore Heap	0	0	0	0
Mercury Retort	0	0	0	0
Adsorption	0	0	0	0
Furnace	0	0	0	0
Diesel Tank	0	0	0	0
TOTALS	1.465E+00	1.073E-03	148844	176

TABLE 4
GOLDEN QUEEN MINING
TSP BASED AIR TOXICS EMISSION
Page 1 of 3

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS
Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

All Substances

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Acetaldehyde		Acrolein		Arsenic		Benzene	
0	0	0	0	3.877E-01	5.836E-05	0	0
0	0	0	0	8.709E-01	1.306E-04	0	0
0	0	0	0	3.169E+00	6.849E-03	0	0
0	0	0	0	6.137E-01	9.206E-05	0	0
0	0	0	0	5.753E+00	4.895E-04	0	0
0	0	0	0	0.000E+00	0.000E+00	0	0
0	0	0	0	3.026E+00	5.976E-04	0	0
0	0	0	0	0.000E+00	0.000E+00	0	0
0	0	0	0	5.101E+00	4.895E-04	0	0
0	0	0	0	9.585E-01	9.585E-04	0	0
0	0	0	0	1.449E+00	1.611E-04	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00
0	0	0	0	0	0	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.133E+01	9.826E-03	0.000E+00	0.000E+00

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS
Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Beryllium		Cadmium		Chromium VI		Copper	
5.309E-02	3.520E-05	1.394E-02	2.105E-06	2.520E-03	3.423E-07	3.263E-02	4.895E-06
1.027E+00	1.540E-04	3.045E-02	4.567E-06	9.983E-03	1.497E-06	7.520E-02	1.128E-05
4.376E-01	8.072E-03	1.139E-01	2.394E-04	2.062E-02	7.850E-05	2.667E-01	5.914E-04
7.234E-01	1.085E-04	2.145E-02	3.218E-06	7.034E-03	1.055E-06	5.299E-02	7.949E-06
7.878E-01	5.769E-04	2.068E-01	1.711E-05	3.740E-02	5.610E-06	4.841E-01	4.226E-05
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.226E-05
1.109E-02	2.191E-06	1.092E-01	2.156E-05	1.775E-02	3.505E-06	2.538E-01	5.012E-05
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1.870E-02	5.769E-04	1.840E-01	1.711E-05	2.992E-02	5.610E-06	4.278E-01	4.226E-05
3.514E-03	3.514E-06	3.457E-02	3.457E-05	5.622E-03	5.622E-06	8.039E-02	8.039E-05
5.313E-03	5.906E-07	5.228E-02	5.812E-06	8.500E-03	9.450E-07	1.216E-01	1.351E-05
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	3.632E-02	1.164E-04	3.440E-04	1.103E-06	0	0
0	0	0	0	0	0	0	0
3.067E+00	9.530E-03	8.029E-01	4.619E-04	1.397E-01	1.038E-04	1.795E+00	8.863E-04

TABLE 4
GOLDEN QUEEN MINING
TSP BASED AIR TOXICS EMISSION
Page 2 of 3

ESTIMATED
EMISSIONS

W/O ND & ADA

CHEMICALS

	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
	Formaldehyde		HCN		Lead		Manganese	
Drilling	0	0	0	0	8.249E-02	2.036E-05	3.946E-01	5.360E-05
Baghouses	0	0	0	0	5.936E-01	8.904E-05	1.563E+00	2.345E-04
Blasting	0	0	0	0	6.759E-01	4.668E-03	3.228E+00	1.229E-02
Conveyor	0	0	0	0	4.183E-01	6.275E-05	1.102E+00	1.652E-04
Truck Load	0	0	0	0	1.224E+00	3.338E-04	5.856E+00	8.785E-04
Truck Unload-Ore	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Haulage	0	0	0	0	4.824E-01	9.131E-05	2.780E+00	5.489E-04
Dozing - Ore	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Truck Unload-Waste	0	0	0	0	7.793E-01	3.336E-04	4.685E+00	8.785E-04
Dozing - Waste	0	0	0	0	1.464E-01	1.464E-04	8.804E-01	8.804E-04
Wind Erosion	0	0	0	0	2.214E-01	2.462E-05	1.331E+00	1.480E-04
Ore Heap	0	0	2.173E+04	2.481E+00	0	0	0	0
Mercury Retort	0	0	0.000E+00	0.000E+00	0	0	0	0
Adsorption	0	0	1.284E+02	9.000E-03	0	0	0	0
Furnace	0.000E+00	0.000E+00	0	0	0	0	0	0
Diesel Tank	0	0	0	0	0	0	0	0
TOTALS	0.000E+00	0.000E+00	2.186E+04	2.490E+00	4.604E+00	5.770E-03	2.182E+01	1.608E-02

ESTIMATED
EMISSIONS

W/O ND & ADA

CHEMICALS

	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
	Mercury		Nickel		Naphthalene		PAHs	
Drilling	1.426E-02	2.225E-06	1.179E-02	1.780E-06	0	0	0	0
Baghouses	2.283E-02	3.424E-06	5.191E-02	7.786E-06	0	0	0	0
Blasting	1.165E-01	1.795E-04	9.650E-02	4.082E-04	0	0	0	0
Conveyor	1.609E-02	2.413E-06	3.658E-02	5.487E-06	0	0	0	0
Truck Load	2.116E-01	1.283E-05	1.750E-01	2.917E-05	0	0	0	0
Truck Unload-Ore	0.000E+00	1.283E-05	0.000E+00	0.000E+00	0	0	0	0
Haulage	1.154E-01	2.278E-05	8.076E-02	1.595E-05	0	0	0	0
Dozing - Ore	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
Truck Unload-Waste	1.945E-01	1.283E-05	1.361E-01	2.917E-05	0	0	0	0
Dozing - Waste	3.654E-02	3.654E-05	2.558E-02	2.558E-05	0	0	0	0
Wind Erosion	5.525E-02	6.143E-06	3.868E-02	4.300E-06	0	0	0	0
Ore Heap	0	0	0	0	0	0	0	0
Mercury Retort	1.249E-02	5.620E-05	0	0	0	0	0	0
Adsorption	0	0	0	0	0	0	0	0
Furnace	1.355E-04	4.344E-07	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Diesel Tank	0	0	0	0	0	0	0	0
TOTALS	7.955E-01	3.481E-04	6.529E-01	5.274E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TABLE 4
GOLDEN QUEEN MINING
TSP BASED AIR TOXICS EMISSION
Page 3 of 3

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr	lb/yr	lb/hr
Propylene		Selenium		Toluene		Xylenes	
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	0	0	0	0
0	0	0.000E+00	0.000E+00	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
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ESTIMATED
EMISSIONS
W/O ND & ADA
CHEMICALS

Drilling
Baghouses
Blasting
Conveyor
Truck Load
Truck Unload-Ore
Haulage
Dozing - Ore
Truck Unload-Waste
Dozing - Waste
Wind Erosion
Ore Heap
Mercury Retort
Adsorption
Furnace
Diesel Tank
TOTALS

lb/yr	lb/hr	lb/yr	lb/hr
Zinc		PM10	
4.983E-02	7.479E-06	5.040E+03	6.846E-01
1.145E-01	1.717E-05	1.997E+04	2.995E+00
4.073E-01	9.001E-04	4.123E+04	1.570E+02
8.066E-02	1.210E-05	1.407E+04	2.110E+00
7.394E-01	6.433E-05	7.479E+04	1.122E+01
0.000E+00	6.433E-05	0.000E+00	0.000E+00
3.878E-01	7.659E-05	3.550E+04	7.010E+00
0.000E+00	0.000E+00	0.000E+00	1.124E+01
6.537E-01	6.433E-05	5.983E+04	6.230E+00
1.228E-01	1.228E-04	1.124E+04	1.124E+01
1.857E-01	2.065E-05	1.700E+04	1.890E+00
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
2.742E+00	1.350E-03	278670	212

TABLE 5
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
1	389400	3868050	1.480E-07	1.939E-08	9.053E-07	0	3.745E-07	0	0	1.447E-06	3.101E-07
2	392550	3868000	2.205E-07	2.910E-08	1.359E-06	0	5.624E-07	0	0	2.171E-06	4.652E-07
3	392600	3868000	2.190E-07	2.888E-08	1.348E-06	0	5.581E-07	0	0	2.154E-06	4.616E-07
4	390250	3868800	2.852E-07	3.751E-08	1.751E-06	0	7.248E-07	0	0	2.799E-06	5.998E-07
5	390300	3868750	2.878E-07	3.787E-08	1.768E-06	0	7.317E-07	0	0	2.825E-06	6.054E-07
6	390300	3868500	2.615E-07	3.444E-08	1.608E-06	0	6.653E-07	0	0	2.569E-06	5.505E-07
7	393500	3868200	2.308E-07	3.037E-08	1.418E-06	0	5.870E-07	0	0	2.266E-06	4.856E-07
8	393750	3868300	2.330E-07	3.072E-08	1.434E-06	0	5.933E-07	0	0	2.291E-06	4.909E-07
9	393800	3868450	2.424E-07	3.201E-08	1.495E-06	0	6.181E-07	0	0	2.388E-06	5.117E-07
10	389750	3870450	3.065E-07	4.005E-08	1.870E-06	0	7.740E-07	0	0	2.991E-06	6.409E-07
11	395050	3870600	1.250E-07	1.651E-08	7.707E-07	0	3.189E-07	0	0	1.231E-06	2.638E-07
12	392200	3872600	5.438E-07	7.211E-08	3.367E-06	0	1.392E-06	0	0	5.375E-06	1.152E-06
13	390800	3873450	2.388E-07	3.161E-08	1.476E-06	0	6.096E-07	0	0	2.356E-06	5.049E-07
14	390750	3873400	2.408E-07	3.187E-08	1.488E-06	0	6.146E-07	0	0	2.375E-06	5.089E-07
15	390700	3873400	2.346E-07	3.102E-08	1.449E-06	0	5.983E-07	0	0	2.313E-06	4.956E-07
16	390650	3873200	2.664E-07	3.527E-08	1.647E-06	0	6.802E-07	0	0	2.629E-06	5.634E-07
17	393500	3873700	1.385E-07	1.830E-08	8.543E-07	0	3.534E-07	0	0	1.365E-06	2.925E-07
18	392450	3873750	2.097E-07	2.776E-08	1.296E-06	0	5.358E-07	0	0	2.069E-06	4.434E-07
19	391950	3873950	2.094E-07	2.766E-08	1.292E-06	0	5.337E-07	0	0	2.063E-06	4.421E-07
20	391900	3873400	2.934E-07	3.899E-08	1.821E-06	0	7.523E-07	0	0	2.906E-06	6.227E-07
21	389750	3871670	2.164E-07	2.820E-08	1.317E-06	0	5.441E-07	0	0	2.106E-06	4.513E-07
22	389759	3871788	2.027E-07	2.638E-08	1.232E-06	0	5.087E-07	0	0	1.970E-06	4.221E-07
23	389778	3871908	2.023E-07	2.633E-08	1.230E-06	0	5.077E-07	0	0	1.966E-06	4.213E-07
24	389803	3872019	2.007E-07	2.619E-08	1.223E-06	0	5.050E-07	0	0	1.955E-06	4.189E-07
25	389826	3872073	2.018E-07	2.639E-08	1.232E-06	0	5.088E-07	0	0	1.969E-06	4.219E-07
26	389928	3872271	2.114E-07	2.784E-08	1.300E-06	0	5.373E-07	0	0	2.077E-06	4.451E-07
27	390027	3872472	2.154E-07	2.834E-08	1.323E-06	0	5.472E-07	0	0	2.114E-06	4.530E-07
28	390083	3872582	2.298E-07	3.021E-08	1.411E-06	0	5.834E-07	0	0	2.254E-06	4.830E-07
29	390203	3872720	2.921E-07	3.858E-08	1.801E-06	0	7.446E-07	0	0	2.876E-06	6.163E-07
30	390252	3872758	3.098E-07	4.103E-08	1.916E-06	0	7.917E-07	0	0	3.059E-06	6.555E-07
31	390352	3872832	3.246E-07	4.307E-08	2.012E-06	0	8.310E-07	0	0	3.211E-06	6.881E-07
32	390434	3872889	3.261E-07	4.328E-08	2.022E-06	0	8.350E-07	0	0	3.226E-06	6.913E-07
33	390669	3872895	3.618E-07	4.813E-08	2.248E-06	0	9.282E-07	0	0	3.586E-06	7.684E-07
34	390904	3872902	3.999E-07	5.322E-08	2.485E-06	0	1.026E-06	0	0	3.964E-06	8.494E-07
35	391139	3872908	4.263E-07	5.683E-08	2.654E-06	0	1.096E-06	0	0	4.233E-06	9.071E-07
36	391374	3872915	4.443E-07	5.935E-08	2.772E-06	0	1.144E-06	0	0	4.420E-06	9.471E-07
37	391609	3872921	4.451E-07	5.952E-08	2.780E-06	0	1.148E-06	0	0	4.433E-06	9.499E-07
38	391844	3872928	4.312E-07	5.761E-08	2.691E-06	0	1.111E-06	0	0	4.291E-06	9.195E-07
39	391844	3872735	5.269E-07	7.045E-08	3.290E-06	0	1.359E-06	0	0	5.246E-06	1.124E-06
40	391845	3872543	6.682E-07	8.948E-08	4.179E-06	0	1.725E-06	0	0	6.662E-06	1.428E-06
41	391845	3872351	9.218E-07	1.224E-07	5.715E-06	0	2.358E-06	0	0	9.117E-06	1.954E-06
42	391846	3872159	1.408E-06	1.854E-07	8.662E-06	0	3.574E-06	0	0	1.383E-05	2.964E-06
43	392046	3872165	1.187E-06	1.553E-07	7.251E-06	0	2.996E-06	0	0	1.159E-05	2.484E-06
44	392246	3872172	1.066E-06	1.385E-07	6.465E-06	0	2.679E-06	0	0	1.035E-05	2.218E-06
45	392446	3872178	1.022E-06	1.317E-07	6.149E-06	0	2.552E-06	0	0	9.855E-06	2.112E-06
46	392647	3872185	6.478E-07	8.425E-08	3.932E-06	0	1.631E-06	0	0	6.295E-06	1.349E-06
47	392658	3871975	9.587E-07	1.227E-07	5.726E-06	0	2.374E-06	0	0	9.181E-06	1.967E-06
48	392670	3871765	1.238E-06	1.590E-07	7.419E-06	0	3.081E-06	0	0	1.190E-05	2.550E-06
49	392682	3871555	1.465E-06	1.876E-07	8.755E-06	0	3.636E-06	0	0	1.404E-05	3.009E-06
50	392694	3871346	1.573E-06	2.010E-07	9.380E-06	0	3.895E-06	0	0	1.505E-05	3.225E-06
51	392887	3871350	8.359E-07	1.078E-07	5.032E-06	0	2.086E-06	0	0	8.062E-06	1.728E-06
52	393080	3871355	5.559E-07	7.222E-08	3.371E-06	0	1.397E-06	0	0	5.396E-06	1.156E-06
53	393273	3871360	4.036E-07	5.276E-08	2.463E-06	0	1.020E-06	0	0	3.939E-06	8.441E-07
54	393467	3871365	3.332E-07	4.297E-08	2.007E-06	0	8.296E-07	0	0	3.213E-06	6.885E-07
55	393467	3871139	3.555E-07	4.612E-08	2.153E-06	0	8.911E-07	0	0	3.446E-06	7.384E-07
56	393467	3870914	3.868E-07	5.005E-08	2.337E-06	0	9.669E-07	0	0	3.741E-06	8.016E-07
57	393467	3870689	4.027E-07	5.280E-08	2.465E-06	0	1.021E-06	0	0	3.941E-06	8.445E-07
58	393252	3870689	5.053E-07	6.614E-08	3.088E-06	0	1.279E-06	0	0	4.938E-06	1.058E-06
59	393037	3870689	6.397E-07	8.266E-08	3.860E-06	0	1.596E-06	0	0	6.178E-06	1.324E-06
60	392822	3870689	7.656E-07	9.915E-08	4.630E-06	0	1.914E-06	0	0	7.409E-06	1.588E-06
61	392607	3870689	9.233E-07	1.191E-07	5.563E-06	0	2.300E-06	0	0	8.905E-06	1.908E-06
62	392392	3870689	1.089E-06	1.403E-07	6.551E-06	0	2.708E-06	0	0	1.049E-05	2.248E-06
63	392178	3870689	1.257E-06	1.637E-07	7.647E-06	0	3.160E-06	0	0	1.223E-05	2.621E-06
64	392178	3870521	1.158E-06	1.507E-07	7.038E-06	0	2.908E-06	0	0	1.125E-05	2.411E-06
65	392010	3870521	1.356E-06	1.765E-07	8.244E-06	0	3.408E-06	0	0	1.318E-05	2.824E-06

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
66	391842	3870521	1.675E-06	2.176E-07	1.016E-05	0	4.204E-06	0	0	1.626E-05	3.484E-06
67	391643	3870520	2.262E-06	2.918E-07	1.362E-05	0	5.644E-06	0	0	2.182E-05	4.676E-06
68	391445	3870519	2.415E-06	3.113E-07	1.453E-05	0	6.025E-06	0	0	2.328E-05	4.989E-06
69	391247	3870518	2.418E-06	3.111E-07	1.452E-05	0	6.019E-06	0	0	2.327E-05	4.986E-06
70	391049	3870518	2.363E-06	3.033E-07	1.416E-05	0	5.869E-06	0	0	2.270E-05	4.864E-06
71	391044	3870310	1.541E-06	1.987E-07	9.278E-06	0	3.843E-06	0	0	1.486E-05	3.184E-06
72	391040	3870103	1.130E-06	1.463E-07	6.829E-06	0	2.826E-06	0	0	1.093E-05	2.342E-06
73	391036	3869895	8.526E-07	1.113E-07	5.198E-06	0	2.152E-06	0	0	8.314E-06	1.782E-06
74	391032	3869688	7.184E-07	9.301E-08	4.343E-06	0	1.796E-06	0	0	6.950E-06	1.489E-06
75	390827	3869681	6.574E-07	8.539E-08	3.987E-06	0	1.650E-06	0	0	6.380E-06	1.367E-06
76	390623	3869674	5.855E-07	7.657E-08	3.575E-06	0	1.480E-06	0	0	5.717E-06	1.225E-06
77	390419	3869667	5.057E-07	6.604E-08	3.083E-06	0	1.277E-06	0	0	4.932E-06	1.057E-06
78	390215	3869661	4.403E-07	5.668E-08	2.647E-06	0	1.095E-06	0	0	4.239E-06	9.084E-07
79	390214	3869865	5.099E-07	6.518E-08	3.043E-06	0	1.258E-06	0	0	4.876E-06	1.045E-06
80	390213	3870070	5.525E-07	7.169E-08	3.347E-06	0	1.387E-06	0	0	5.358E-06	1.148E-06
81	390212	3870275	6.444E-07	8.355E-08	3.900E-06	0	1.617E-06	0	0	6.245E-06	1.338E-06
82	390212	3870480	7.537E-07	9.770E-08	4.560E-06	0	1.891E-06	0	0	7.302E-06	1.565E-06
83	390211	3870677	8.289E-07	1.074E-07	5.012E-06	0	2.079E-06	0	0	8.027E-06	1.720E-06
84	390210	3870875	8.987E-07	1.163E-07	5.429E-06	0	2.252E-06	0	0	8.696E-06	1.863E-06
85	390209	3871072	9.562E-07	1.235E-07	5.765E-06	0	2.391E-06	0	0	9.236E-06	1.979E-06
86	390209	3871270	9.287E-07	1.200E-07	5.600E-06	0	2.323E-06	0	0	8.972E-06	1.923E-06
87	390039	3871272	4.943E-07	6.460E-08	3.016E-06	0	1.249E-06	0	0	4.824E-06	1.034E-06
88	389869	3871274	3.314E-07	4.335E-08	2.024E-06	0	8.372E-07	0	0	3.236E-06	6.934E-07
89	389700	3871276	2.424E-07	3.166E-08	1.479E-06	0	6.113E-07	0	0	2.364E-06	5.066E-07
90	389725	3871473	2.282E-07	2.978E-08	1.391E-06	0	5.748E-07	0	0	2.224E-06	4.766E-07
91	391600	3870100	1.072E-06	1.406E-07	6.564E-06	0	2.719E-06	0	0	1.050E-05	2.250E-06
92	391700	3870100	1.039E-06	1.363E-07	6.363E-06	0	2.636E-06	0	0	1.017E-05	2.179E-06
93	391800	3870100	1.000E-06	1.313E-07	6.132E-06	0	2.540E-06	0	0	9.803E-06	2.101E-06
94	391900	3870100	9.608E-07	1.262E-07	5.890E-06	0	2.439E-06	0	0	9.416E-06	2.018E-06
95	392000	3870100	9.218E-07	1.211E-07	5.654E-06	0	2.341E-06	0	0	9.038E-06	1.937E-06
96	392100	3870100	8.856E-07	1.164E-07	5.437E-06	0	2.251E-06	0	0	8.690E-06	1.862E-06
97	392200	3870100	8.532E-07	1.121E-07	5.234E-06	0	2.166E-06	0	0	8.365E-06	1.793E-06
98	392300	3870100	8.020E-07	1.057E-07	4.935E-06	0	2.042E-06	0	0	7.885E-06	1.690E-06
99	392400	3870100	7.640E-07	1.003E-07	4.684E-06	0	1.938E-06	0	0	7.486E-06	1.604E-06
100	392500	3870100	7.163E-07	9.411E-08	4.394E-06	0	1.817E-06	0	0	7.021E-06	1.505E-06
101	392600	3870100	6.813E-07	8.903E-08	4.157E-06	0	1.718E-06	0	0	6.645E-06	1.424E-06
102	392700	3870100	6.541E-07	8.480E-08	3.960E-06	0	1.636E-06	0	0	6.335E-06	1.358E-06
103	391600	3870200	1.224E-06	1.604E-07	7.489E-06	0	3.103E-06	0	0	1.198E-05	2.567E-06
104	391700	3870200	1.177E-06	1.543E-07	7.203E-06	0	2.984E-06	0	0	1.152E-05	2.469E-06
105	391800	3870200	1.121E-06	1.471E-07	6.865E-06	0	2.843E-06	0	0	1.098E-05	2.353E-06
106	391900	3870200	1.067E-06	1.400E-07	6.535E-06	0	2.706E-06	0	0	1.045E-05	2.239E-06
107	392000	3870200	1.016E-06	1.335E-07	6.231E-06	0	2.579E-06	0	0	9.959E-06	2.134E-06
108	392100	3870200	9.677E-07	1.271E-07	5.935E-06	0	2.456E-06	0	0	9.486E-06	2.033E-06
109	392200	3870200	9.183E-07	1.206E-07	5.631E-06	0	2.330E-06	0	0	9.000E-06	1.929E-06
110	392300	3870200	8.629E-07	1.132E-07	5.284E-06	0	2.185E-06	0	0	8.445E-06	1.810E-06
111	392400	3870200	8.060E-07	1.057E-07	4.935E-06	0	2.041E-06	0	0	7.888E-06	1.690E-06
112	392500	3870200	7.560E-07	9.893E-08	4.620E-06	0	1.910E-06	0	0	7.385E-06	1.583E-06
113	392600	3870200	7.093E-07	9.262E-08	4.325E-06	0	1.788E-06	0	0	6.915E-06	1.482E-06
114	392700	3870200	6.767E-07	8.772E-08	4.097E-06	0	1.692E-06	0	0	6.553E-06	1.404E-06
115	391600	3870300	1.428E-06	1.869E-07	8.723E-06	0	3.614E-06	0	0	1.395E-05	2.989E-06
116	391700	3870300	1.356E-06	1.776E-07	8.291E-06	0	3.435E-06	0	0	1.326E-05	2.841E-06
117	391800	3870300	1.270E-06	1.664E-07	7.771E-06	0	3.218E-06	0	0	1.243E-05	2.684E-06
118	391900	3870300	1.194E-06	1.565E-07	7.307E-06	0	3.025E-06	0	0	1.168E-05	2.503E-06
119	392000	3870300	1.135E-06	1.482E-07	6.919E-06	0	2.863E-06	0	0	1.107E-05	2.372E-06
120	392100	3870300	1.054E-06	1.382E-07	6.452E-06	0	2.669E-06	0	0	1.031E-05	2.209E-06
121	392200	3870300	9.806E-07	1.287E-07	6.009E-06	0	2.486E-06	0	0	9.604E-06	2.058E-06
122	392300	3870300	9.166E-07	1.199E-07	5.599E-06	0	2.315E-06	0	0	8.951E-06	1.918E-06
123	392400	3870300	8.528E-07	1.115E-07	5.205E-06	0	2.151E-06	0	0	8.320E-06	1.783E-06
124	392500	3870300	8.130E-07	1.054E-07	4.923E-06	0	2.033E-06	0	0	7.874E-06	1.687E-06
125	392600	3870300	7.549E-07	9.789E-08	4.572E-06	0	1.888E-06	0	0	7.313E-06	1.567E-06
126	392700	3870300	7.018E-07	9.098E-08	4.249E-06	0	1.755E-06	0	0	6.797E-06	1.457E-06
127	391600	3870400	1.716E-06	2.239E-07	1.045E-05	0	4.332E-06	0	0	1.672E-05	3.583E-06
128	391700	3870400	1.605E-06	2.096E-07	9.783E-06	0	4.053E-06	0	0	1.565E-05	3.354E-06
129	391800	3870400	1.464E-06	1.913E-07	8.931E-06	0	3.699E-06	0	0	1.429E-05	3.062E-06
130	391900	3870400	1.370E-06	1.783E-07	8.325E-06	0	3.444E-06	0	0	1.332E-05	2.854E-06

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
131	392000	3870400	1.258E-06	1.637E-07	7.643E-06	0	3.160E-06	0	0	1.222E-05	2.619E-06
132	392100	3870400	1.155E-06	1.503E-07	7.021E-06	0	2.902E-06	0	0	1.123E-05	2.406E-06
133	392200	3870400	1.044E-06	1.367E-07	6.385E-06	0	2.640E-06	0	0	1.021E-05	2.188E-06
134	392300	3870400	9.812E-07	1.278E-07	5.966E-06	0	2.465E-06	0	0	9.540E-06	2.044E-06
135	392400	3870400	9.137E-07	1.187E-07	5.542E-06	0	2.290E-06	0	0	8.864E-06	1.899E-06
136	392500	3870400	8.518E-07	1.102E-07	5.146E-06	0	2.126E-06	0	0	8.234E-06	1.764E-06
137	392600	3870400	7.899E-07	1.022E-07	4.775E-06	0	1.972E-06	0	0	7.639E-06	1.637E-06
138	392700	3870400	7.338E-07	9.493E-08	4.433E-06	0	1.831E-06	0	0	7.093E-06	1.520E-06
139	391600	3870500	2.194E-06	2.835E-07	1.324E-05	0	5.486E-06	0	0	2.120E-05	4.543E-06
140	391700	3870500	2.023E-06	2.617E-07	1.222E-05	0	5.061E-06	0	0	1.957E-05	4.194E-06
141	391800	3870500	1.745E-06	2.265E-07	1.057E-05	0	4.378E-06	0	0	1.692E-05	3.626E-06
142	391900	3870500	1.514E-06	1.968E-07	9.187E-06	0	3.800E-06	0	0	1.470E-05	3.150E-06
143	392000	3870500	1.353E-06	1.760E-07	8.218E-06	0	3.398E-06	0	0	1.314E-05	2.816E-06
144	392100	3870500	1.224E-06	1.596E-07	7.454E-06	0	3.081E-06	0	0	1.192E-05	2.554E-06
145	392200	3870500	1.119E-06	1.459E-07	6.813E-06	0	2.815E-06	0	0	1.089E-05	2.334E-06
146	392300	3870500	1.036E-06	1.347E-07	6.289E-06	0	2.598E-06	0	0	1.006E-05	2.156E-06
147	392400	3870500	9.611E-07	1.246E-07	5.817E-06	0	2.403E-06	0	0	9.306E-06	1.994E-06
148	392500	3870500	8.918E-07	1.153E-07	5.386E-06	0	2.226E-06	0	0	8.619E-06	1.847E-06
149	392600	3870500	8.297E-07	1.071E-07	5.001E-06	0	2.066E-06	0	0	8.004E-06	1.715E-06
150	392700	3870500	7.688E-07	9.922E-08	4.634E-06	0	1.914E-06	0	0	7.416E-06	1.589E-06
151	392200	3870600	1.183E-06	1.540E-07	7.191E-06	0	2.971E-06	0	0	1.150E-05	2.464E-06
152	392300	3870600	1.097E-06	1.422E-07	6.641E-06	0	2.744E-06	0	0	1.062E-05	2.276E-06
153	392400	3870600	1.021E-06	1.318E-07	6.154E-06	0	2.543E-06	0	0	9.850E-06	2.111E-06
154	392500	3870600	9.371E-07	1.216E-07	5.679E-06	0	2.347E-06	0	0	9.085E-06	1.947E-06
155	392600	3870600	8.851E-07	1.136E-07	5.307E-06	0	2.193E-06	0	0	8.499E-06	1.821E-06
156	392700	3870600	8.114E-07	1.048E-07	4.892E-06	0	2.022E-06	0	0	7.830E-06	1.678E-06
157	391000	3869500	6.163E-07	7.971E-08	3.723E-06	0	1.538E-06	0	0	5.957E-06	1.277E-06
158	391250	3869500	6.298E-07	8.168E-08	3.814E-06	0	1.577E-06	0	0	6.102E-06	1.308E-06
159	391500	3869500	6.024E-07	7.927E-08	3.701E-06	0	1.532E-06	0	0	5.915E-06	1.268E-06
160	391750	3869500	5.843E-07	7.688E-08	3.589E-06	0	1.486E-06	0	0	5.736E-06	1.229E-06
161	392000	3869500	5.552E-07	7.302E-08	3.409E-06	0	1.412E-06	0	0	5.449E-06	1.168E-06
162	392250	3869500	5.288E-07	6.957E-08	3.248E-06	0	1.345E-06	0	0	5.191E-06	1.112E-06
163	392500	3869500	5.088E-07	6.697E-08	3.127E-06	0	1.294E-06	0	0	4.997E-06	1.071E-06
164	392750	3869500	4.750E-07	6.261E-08	2.923E-06	0	1.210E-06	0	0	4.671E-06	1.001E-06
165	393000	3869500	4.294E-07	5.669E-08	2.647E-06	0	1.095E-06	0	0	4.228E-06	9.060E-07
166	393250	3869500	3.801E-07	5.028E-08	2.348E-06	0	9.707E-07	0	0	3.749E-06	8.034E-07
167	393500	3869500	3.399E-07	4.501E-08	2.102E-06	0	8.689E-07	0	0	3.356E-06	7.191E-07
168	391250	3869750	7.538E-07	9.908E-08	4.626E-06	0	1.915E-06	0	0	7.394E-06	1.584E-06
169	391500	3869750	7.525E-07	9.900E-08	4.622E-06	0	1.914E-06	0	0	7.387E-06	1.583E-06
170	391750	3869750	7.192E-07	9.451E-08	4.412E-06	0	1.828E-06	0	0	7.054E-06	1.512E-06
171	392000	3869750	6.759E-07	8.887E-08	4.149E-06	0	1.718E-06	0	0	6.632E-06	1.421E-06
172	392250	3869750	6.365E-07	8.377E-08	3.911E-06	0	1.619E-06	0	0	6.250E-06	1.339E-06
173	392500	3869750	5.957E-07	7.843E-08	3.662E-06	0	1.516E-06	0	0	5.852E-06	1.254E-06
174	392750	3869750	5.338E-07	7.026E-08	3.281E-06	0	1.357E-06	0	0	5.242E-06	1.123E-06
175	393000	3869750	4.675E-07	6.148E-08	2.871E-06	0	1.187E-06	0	0	4.587E-06	9.829E-07
176	393250	3869750	4.037E-07	5.335E-08	2.492E-06	0	1.030E-06	0	0	3.979E-06	8.526E-07
177	393500	3869750	3.576E-07	4.726E-08	2.207E-06	0	9.123E-07	0	0	3.524E-06	7.551E-07
178	391250	3870000	1.023E-06	1.328E-07	6.202E-06	0	2.567E-06	0	0	9.925E-06	2.127E-06
179	391500	3870000	9.765E-07	1.281E-07	5.980E-06	0	2.477E-06	0	0	9.562E-06	2.049E-06
180	391750	3870000	9.148E-07	1.201E-07	5.609E-06	0	2.323E-06	0	0	8.967E-06	1.922E-06
181	392000	3870000	8.388E-07	1.103E-07	5.148E-06	0	2.132E-06	0	0	8.229E-06	1.763E-06
182	392250	3870000	7.797E-07	1.022E-07	4.771E-06	0	1.974E-06	0	0	7.627E-06	1.634E-06
183	392500	3870000	6.830E-07	8.982E-08	4.194E-06	0	1.735E-06	0	0	6.702E-06	1.436E-06
184	392750	3870000	6.108E-07	7.924E-08	3.701E-06	0	1.528E-06	0	0	5.919E-06	1.268E-06
185	393000	3870000	5.113E-07	6.668E-08	3.114E-06	0	1.286E-06	0	0	4.978E-06	1.067E-06
186	393250	3870000	4.331E-07	5.693E-08	2.659E-06	0	1.099E-06	0	0	4.248E-06	9.103E-07
187	393500	3870000	3.790E-07	4.991E-08	2.331E-06	0	9.637E-07	0	0	3.724E-06	7.980E-07
188	391250	3870250	1.432E-06	1.855E-07	8.662E-06	0	3.586E-06	0	0	1.387E-05	2.972E-06
189	391500	3870250	1.358E-06	1.776E-07	8.290E-06	0	3.435E-06	0	0	1.326E-05	2.841E-06
190	391750	3870250	1.227E-06	1.608E-07	7.508E-06	0	3.110E-06	0	0	1.201E-05	2.574E-06
191	392000	3870250	1.073E-06	1.406E-07	6.564E-06	0	2.717E-06	0	0	1.049E-05	2.248E-06
192	392250	3870250	9.183E-07	1.205E-07	5.625E-06	0	2.327E-06	0	0	8.991E-06	1.927E-06
193	392500	3870250	7.791E-07	1.017E-07	4.747E-06	0	1.962E-06	0	0	7.590E-06	1.626E-06
194	392750	3870250	6.656E-07	8.625E-08	4.028E-06	0	1.663E-06	0	0	6.443E-06	1.381E-06
195	393000	3870250	5.501E-07	7.177E-08	3.352E-06	0	1.385E-06	0	0	5.359E-06	1.148E-06

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
196	393250	3870250	4.773E-07	6.201E-08	2.896E-06	0	1.197E-06	0	0	4.632E-06	9.926E-07
197	393500	3870250	3.985E-07	5.222E-08	2.438E-06	0	1.009E-06	0	0	3.898E-06	8.353E-07
198	391250	3870500	2.308E-06	2.973E-07	1.388E-05	0	5.753E-06	0	0	2.224E-05	4.766E-06
199	391500	3870500	2.252E-06	2.914E-07	1.360E-05	0	5.639E-06	0	0	2.178E-05	4.667E-06
200	391750	3870500	1.882E-06	2.439E-07	1.139E-05	0	4.716E-06	0	0	1.823E-05	3.906E-06
201	392250	3870500	1.078E-06	1.403E-07	6.552E-06	0	2.707E-06	0	0	1.048E-05	2.246E-06
202	392750	3870500	7.411E-07	9.568E-08	4.468E-06	0	1.846E-06	0	0	7.151E-06	1.532E-06
203	393000	3870500	6.121E-07	7.925E-08	3.701E-06	0	1.529E-06	0	0	5.921E-06	1.269E-06
204	393250	3870500	4.926E-07	6.444E-08	3.009E-06	0	1.455E-06	0	0	4.811E-06	1.031E-06
205	393500	3870500	3.993E-07	5.230E-08	2.442E-06	0	1.011E-06	0	0	3.905E-06	8.368E-07
206	393500	3870750	3.847E-07	5.034E-08	2.350E-06	0	9.732E-07	0	0	3.758E-06	8.053E-07
207	393500	3871000	3.675E-07	4.740E-08	2.213E-06	0	9.152E-07	0	0	3.543E-06	7.592E-07
208	386000	3867500	3.684E-08	4.710E-09	2.200E-07	0	9.088E-08	0	0	3.524E-07	7.551E-08
209	386500	3867500	4.218E-08	5.408E-09	2.525E-07	0	1.044E-07	0	0	4.045E-07	8.668E-08
210	387000	3867500	4.954E-08	6.379E-09	2.979E-07	0	1.231E-07	0	0	4.769E-07	1.022E-07
211	387500	3867500	5.838E-08	7.536E-09	3.519E-07	0	1.455E-07	0	0	5.633E-07	1.207E-07
212	388000	3867500	6.996E-08	9.054E-09	4.228E-07	0	1.748E-07	0	0	6.766E-07	1.450E-07
213	388500	3867500	8.734E-08	1.136E-08	5.307E-07	0	2.194E-07	0	0	8.488E-07	1.819E-07
214	389000	3867500	1.112E-07	1.454E-08	6.789E-07	0	2.808E-07	0	0	1.085E-06	2.325E-07
215	389500	3867500	1.431E-07	1.878E-08	8.771E-07	0	3.629E-07	0	0	1.402E-06	3.004E-07
216	390000	3867500	1.706E-07	2.248E-08	1.049E-06	0	4.341E-07	0	0	1.676E-06	3.591E-07
217	390500	3867500	1.965E-07	2.590E-08	1.209E-06	0	5.004E-07	0	0	1.932E-06	4.140E-07
218	391000	3867500	2.103E-07	2.773E-08	1.295E-06	0	5.359E-07	0	0	2.069E-06	4.434E-07
219	391500	3867500	2.171E-07	2.867E-08	1.339E-06	0	5.540E-07	0	0	2.139E-06	4.584E-07
220	392000	3867500	2.037E-07	2.698E-08	1.260E-06	0	5.212E-07	0	0	2.012E-06	4.311E-07
221	392500	3867500	1.871E-07	2.476E-08	1.156E-06	0	4.784E-07	0	0	1.846E-06	3.956E-07
222	393000	3867500	1.732E-07	2.282E-08	1.065E-06	0	4.411E-07	0	0	1.702E-06	3.647E-07
223	393500	3867500	1.723E-07	2.266E-08	1.058E-06	0	4.381E-07	0	0	1.691E-06	3.624E-07
224	394000	3867500	1.723E-07	2.267E-08	1.058E-06	0	4.380E-07	0	0	1.691E-06	3.624E-07
225	394500	3867500	1.689E-07	2.226E-08	1.039E-06	0	4.298E-07	0	0	1.660E-06	3.557E-07
226	395000	3867500	1.601E-07	2.111E-08	9.858E-07	0	4.076E-07	0	0	1.575E-06	3.375E-07
227	386000	3868000	3.627E-08	4.633E-09	2.164E-07	0	8.934E-08	0	0	3.466E-07	7.427E-08
228	386500	3868000	4.278E-08	5.473E-09	2.556E-07	0	1.056E-07	0	0	4.095E-07	8.775E-08
229	387000	3868000	5.026E-08	6.449E-09	3.012E-07	0	1.245E-07	0	0	4.824E-07	1.034E-07
230	387500	3868000	6.002E-08	7.735E-09	3.612E-07	0	1.493E-07	0	0	5.783E-07	1.239E-07
231	388000	3868000	7.258E-08	9.385E-09	4.383E-07	0	1.812E-07	0	0	7.015E-07	1.503E-07
232	388500	3868000	9.022E-08	1.171E-08	5.469E-07	0	2.262E-07	0	0	8.750E-07	1.875E-07
233	389000	3868000	1.175E-07	1.533E-08	7.159E-07	0	2.961E-07	0	0	1.145E-06	2.454E-07
234	389500	3868000	1.555E-07	2.038E-08	9.516E-07	0	3.937E-07	0	0	1.521E-06	3.259E-07
235	390000	3868000	1.959E-07	2.577E-08	1.203E-06	0	4.979E-07	0	0	1.923E-06	4.121E-07
236	390500	3868000	2.333E-07	3.075E-08	1.436E-06	0	5.941E-07	0	0	2.294E-06	4.916E-07
237	391000	3868000	2.558E-07	3.373E-08	1.575E-06	0	6.518E-07	0	0	2.516E-06	5.391E-07
238	391500	3868000	2.603E-07	3.439E-08	1.606E-06	0	6.645E-07	0	0	2.565E-06	5.496E-07
239	392000	3868000	2.419E-07	3.203E-08	1.496E-06	0	6.188E-07	0	0	2.389E-06	5.119E-07
240	392500	3868000	2.224E-07	2.936E-08	1.371E-06	0	5.674E-07	0	0	2.190E-06	4.693E-07
241	393000	3868000	2.139E-07	2.813E-08	1.313E-06	0	5.439E-07	0	0	2.099E-06	4.498E-07
242	393500	3868000	2.130E-07	2.802E-08	1.308E-06	0	5.416E-07	0	0	2.091E-06	4.481E-07
243	394000	3868000	2.050E-07	2.703E-08	1.262E-06	0	5.220E-07	0	0	2.016E-06	4.320E-07
244	394500	3868000	1.916E-07	2.529E-08	1.181E-06	0	4.883E-07	0	0	1.886E-06	4.041E-07
245	395000	3868000	1.713E-07	2.259E-08	1.055E-06	0	4.362E-07	0	0	1.685E-06	3.611E-07
246	386000	3868500	3.348E-08	4.250E-09	1.985E-07	0	8.196E-08	0	0	3.182E-07	6.819E-08
247	386500	3868500	4.120E-08	5.256E-09	2.455E-07	0	1.014E-07	0	0	3.934E-07	8.430E-08
248	387000	3868500	5.003E-08	6.408E-09	2.993E-07	0	1.236E-07	0	0	4.793E-07	1.027E-07
249	387500	3868500	6.095E-08	7.843E-09	3.662E-07	0	1.514E-07	0	0	5.864E-07	1.257E-07
250	388000	3868500	7.503E-08	9.682E-09	4.521E-07	0	1.869E-07	0	0	7.237E-07	1.551E-07
251	388500	3868500	9.430E-08	1.223E-08	5.710E-07	0	2.361E-07	0	0	9.136E-07	1.958E-07
252	389000	3868500	1.234E-07	1.608E-08	7.508E-07	0	3.106E-07	0	0	1.201E-06	2.574E-07
253	389500	3868500	1.700E-07	2.226E-08	1.039E-06	0	4.300E-07	0	0	1.661E-06	3.559E-07
254	390000	3868500	2.272E-07	2.984E-08	1.393E-06	0	5.766E-07	0	0	2.227E-06	4.772E-07
255	390500	3868500	2.837E-07	3.737E-08	1.745E-06	0	7.222E-07	0	0	2.788E-06	5.974E-07
256	391000	3868500	3.198E-07	4.217E-08	1.969E-06	0	8.149E-07	0	0	3.146E-06	6.741E-07
257	391500	3868500	3.204E-07	4.234E-08	1.977E-06	0	8.181E-07	0	0	3.158E-06	6.767E-07
258	392000	3868500	3.006E-07	3.975E-08	1.856E-06	0	7.681E-07	0	0	2.964E-06	6.351E-07
259	392500	3868500	2.801E-07	3.688E-08	1.722E-06	0	7.129E-07	0	0	2.752E-06	5.897E-07
260	393000	3868500	2.745E-07	3.609E-08	1.685E-06	0	6.977E-07	0	0	2.693E-06	5.771E-07

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
261	393500	3868500	2.590E-07	3.413E-08	1.594E-06	0	6.594E-07	0	0	2.547E-06	5.458E-07
262	394000	3868500	2.356E-07	3.113E-08	1.454E-06	0	6.010E-07	0	0	2.322E-06	4.976E-07
263	394500	3868500	2.088E-07	2.757E-08	1.287E-06	0	5.323E-07	0	0	2.056E-06	4.406E-07
264	395000	3868500	1.764E-07	2.326E-08	1.086E-06	0	4.491E-07	0	0	1.735E-06	3.718E-07
265	386000	3869000	3.377E-08	4.247E-09	1.983E-07	0	8.190E-08	0	0	3.182E-07	6.819E-08
266	386500	3869000	3.914E-08	4.954E-09	2.314E-07	0	9.555E-08	0	0	3.710E-07	7.950E-08
267	387000	3869000	4.791E-08	6.107E-09	2.852E-07	0	1.178E-07	0	0	4.570E-07	9.793E-08
268	387500	3869000	5.964E-08	7.642E-09	3.569E-07	0	1.474E-07	0	0	5.716E-07	1.225E-07
269	388000	3869000	7.590E-08	9.791E-09	4.572E-07	0	1.890E-07	0	0	7.319E-07	1.568E-07
270	388500	3869000	9.760E-08	1.264E-08	5.901E-07	0	2.440E-07	0	0	9.443E-07	2.024E-07
271	389000	3869000	1.311E-07	1.705E-08	7.964E-07	0	3.294E-07	0	0	1.274E-06	2.730E-07
272	389500	3869000	1.847E-07	2.412E-08	1.126E-06	0	4.661E-07	0	0	1.801E-06	3.859E-07
273	390000	3869000	2.688E-07	3.521E-08	1.644E-06	0	6.805E-07	0	0	2.629E-06	5.634E-07
274	390500	3869000	3.647E-07	4.761E-08	2.223E-06	0	9.197E-07	0	0	3.555E-06	7.618E-07
275	391000	3869000	4.192E-07	5.512E-08	2.574E-06	0	1.065E-06	0	0	4.113E-06	8.814E-07
276	391500	3869000	4.169E-07	5.506E-08	2.571E-06	0	1.064E-06	0	0	4.107E-06	8.801E-07
277	392000	3869000	3.939E-07	5.193E-08	2.424E-06	0	1.004E-06	0	0	3.874E-06	8.301E-07
278	392500	3869000	3.705E-07	4.873E-08	2.275E-06	0	9.421E-07	0	0	3.636E-06	7.791E-07
279	393000	3869000	3.499E-07	4.608E-08	2.152E-06	0	8.906E-07	0	0	3.439E-06	7.369E-07
280	393500	3869000	3.050E-07	4.033E-08	1.883E-06	0	7.788E-07	0	0	3.007E-06	6.444E-07
281	394000	3869000	2.606E-07	3.446E-08	1.609E-06	0	6.654E-07	0	0	2.569E-06	5.505E-07
282	394500	3869000	2.169E-07	2.861E-08	1.336E-06	0	5.525E-07	0	0	2.134E-06	4.573E-07
283	395000	3869000	1.728E-07	2.277E-08	1.063E-06	0	4.399E-07	0	0	1.698E-06	3.639E-07
284	386000	3869500	3.448E-08	4.370E-09	2.041E-07	0	8.425E-08	0	0	3.272E-07	7.011E-08
285	386500	3869500	4.025E-08	5.082E-09	2.374E-07	0	9.799E-08	0	0	3.807E-07	8.158E-08
286	387000	3869500	4.757E-08	6.023E-09	2.813E-07	0	1.162E-07	0	0	4.511E-07	9.666E-08
287	387500	3869500	5.871E-08	7.488E-09	3.497E-07	0	1.445E-07	0	0	5.604E-07	1.201E-07
288	388000	3869500	7.432E-08	9.534E-09	4.452E-07	0	1.840E-07	0	0	7.131E-07	1.528E-07
289	388500	3869500	9.847E-08	1.274E-08	5.950E-07	0	2.459E-07	0	0	9.521E-07	2.040E-07
290	389000	3869500	1.364E-07	1.773E-08	8.279E-07	0	3.424E-07	0	0	1.324E-06	2.837E-07
291	389500	3869500	2.025E-07	2.644E-08	1.234E-06	0	5.108E-07	0	0	1.974E-06	4.230E-07
292	390000	3869500	3.540E-07	4.486E-08	2.095E-06	0	8.657E-07	0	0	3.360E-06	7.200E-07
293	390500	3869500	4.750E-07	6.229E-08	2.908E-06	0	1.204E-06	0	0	4.649E-06	9.962E-07
294	394000	3869500	2.761E-07	3.647E-08	1.703E-06	0	7.042E-07	0	0	2.720E-06	5.829E-07
295	394500	3869500	2.124E-07	2.800E-08	1.308E-06	0	5.409E-07	0	0	2.089E-06	4.476E-07
296	395000	3869500	1.588E-07	2.093E-08	9.775E-07	0	4.044E-07	0	0	1.562E-06	3.347E-07
297	386000	3870000	3.130E-08	3.984E-09	1.861E-07	0	7.677E-08	0	0	2.982E-07	6.390E-08
298	386500	3870000	3.790E-08	4.822E-09	2.252E-07	0	9.292E-08	0	0	3.608E-07	7.731E-08
299	387000	3870000	4.628E-08	5.881E-09	2.747E-07	0	1.133E-07	0	0	4.402E-07	9.433E-08
300	387500	3870000	5.621E-08	7.164E-09	3.346E-07	0	1.381E-07	0	0	5.361E-07	1.149E-07
301	388000	3870000	7.206E-08	9.235E-09	4.313E-07	0	1.782E-07	0	0	6.908E-07	1.480E-07
302	388500	3870000	9.755E-08	1.257E-08	5.869E-07	0	2.426E-07	0	0	9.396E-07	2.013E-07
303	389000	3870000	1.400E-07	1.818E-08	8.491E-07	0	3.511E-07	0	0	1.358E-06	2.910E-07
304	389500	3870000	2.187E-07	2.854E-08	1.333E-06	0	5.515E-07	0	0	2.132E-06	4.569E-07
305	390000	3870000	3.962E-07	5.155E-08	2.407E-06	0	9.967E-07	0	0	3.851E-06	8.252E-07
306	394000	3870000	2.767E-07	3.644E-08	1.701E-06	0	7.040E-07	0	0	2.718E-06	5.824E-07
307	394500	3870000	1.977E-07	2.604E-08	1.216E-06	0	5.032E-07	0	0	1.943E-06	4.164E-07
308	395000	3870000	1.464E-07	1.929E-08	9.005E-07	0	3.727E-07	0	0	1.439E-06	3.084E-07
309	386000	3870500	2.598E-08	3.249E-09	1.518E-07	0	6.256E-08	0	0	2.436E-07	5.220E-08
310	386500	3870500	3.199E-08	4.036E-09	1.885E-07	0	7.776E-08	0	0	3.023E-07	6.478E-08
311	387000	3870500	4.022E-08	5.106E-09	2.385E-07	0	9.840E-08	0	0	3.822E-07	8.190E-08
312	387500	3870500	5.128E-08	6.551E-09	3.060E-07	0	1.263E-07	0	0	4.901E-07	1.050E-07
313	388000	3870500	6.620E-08	8.489E-09	3.965E-07	0	1.637E-07	0	0	6.349E-07	1.361E-07
314	388500	3870500	9.074E-08	1.171E-08	5.468E-07	0	2.258E-07	0	0	8.750E-07	1.875E-07
315	389000	3870500	1.331E-07	1.728E-08	8.072E-07	0	3.336E-07	0	0	1.291E-06	2.766E-07
316	389500	3870500	2.193E-07	2.864E-08	1.338E-06	0	5.532E-07	0	0	2.139E-06	4.584E-07
317	390000	3870500	4.708E-07	6.138E-08	2.866E-06	0	1.187E-06	0	0	4.585E-06	9.825E-07
318	394000	3870500	2.530E-07	3.324E-08	1.552E-06	0	6.425E-07	0	0	2.481E-06	5.316E-07
319	394500	3870500	1.728E-07	2.276E-08	1.063E-06	0	4.397E-07	0	0	1.698E-06	3.639E-07
320	395000	3870500	1.291E-07	1.704E-08	7.957E-07	0	3.292E-07	0	0	1.271E-06	2.724E-07
321	386000	3871000	2.255E-08	2.807E-09	1.311E-07	0	5.403E-08	0	0	2.105E-07	4.511E-08
322	386500	3871000	2.718E-08	3.378E-09	1.578E-07	0	6.500E-08	0	0	2.534E-07	5.430E-08
323	387000	3871000	3.243E-08	4.063E-09	1.898E-07	0	7.822E-08	0	0	3.045E-07	6.525E-08
324	387500	3871000	4.055E-08	5.137E-09	2.400E-07	0	9.898E-08	0	0	3.847E-07	8.244E-08
325	388000	3871000	5.450E-08	6.964E-09	3.253E-07	0	1.342E-07	0	0	5.210E-07	1.116E-07

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
326	388500	3871000	7.662E-08	9.858E-09	4.605E-07	0	1.901E-07	0	0	7.371E-07	1.580E-07
327	389000	3871000	1.137E-07	1.477E-08	6.899E-07	0	2.849E-07	0	0	1.103E-06	2.364E-07
328	389500	3871000	1.957E-07	2.555E-08	1.193E-06	0	4.932E-07	0	0	1.907E-06	4.086E-07
329	390000	3871000	4.742E-07	6.198E-08	2.894E-06	0	1.198E-06	0	0	4.628E-06	9.917E-07
330	394000	3871000	2.167E-07	2.856E-08	1.334E-06	0	5.520E-07	0	0	2.131E-06	4.566E-07
331	394500	3871000	1.580E-07	2.087E-08	9.744E-07	0	4.032E-07	0	0	1.556E-06	3.334E-07
332	395000	3871000	1.250E-07	1.652E-08	7.716E-07	0	3.192E-07	0	0	1.232E-06	2.640E-07
333	386000	3871500	2.049E-08	2.591E-09	1.210E-07	0	4.993E-08	0	0	1.940E-07	4.157E-08
334	386500	3871500	2.365E-08	3.004E-09	1.403E-07	0	5.790E-08	0	0	2.249E-07	4.819E-08
335	387000	3871500	2.817E-08	3.576E-09	1.670E-07	0	6.891E-08	0	0	2.677E-07	5.736E-08
336	387500	3871500	3.477E-08	4.414E-09	2.062E-07	0	8.504E-08	0	0	3.304E-07	7.080E-08
337	388000	3871500	4.471E-08	5.667E-09	2.647E-07	0	1.092E-07	0	0	4.243E-07	9.092E-08
338	388500	3871500	5.957E-08	7.592E-09	3.546E-07	0	1.463E-07	0	0	5.681E-07	1.217E-07
339	389000	3871500	9.113E-08	1.172E-08	5.475E-07	0	2.259E-07	0	0	8.762E-07	1.878E-07
340	389500	3871500	1.616E-07	2.099E-08	9.801E-07	0	4.048E-07	0	0	1.567E-06	3.358E-07
341	393000	3871500	5.852E-07	7.609E-08	3.552E-06	0	1.472E-06	0	0	5.685E-06	1.218E-06
342	393500	3871500	2.853E-07	3.759E-08	1.755E-06	0	7.265E-07	0	0	2.804E-06	6.009E-07
343	394000	3871500	1.929E-07	2.549E-08	1.190E-06	0	4.926E-07	0	0	1.901E-06	4.074E-07
344	394500	3871500	1.442E-07	1.907E-08	8.903E-07	0	3.683E-07	0	0	1.422E-06	3.047E-07
345	395000	3871500	1.123E-07	1.486E-08	6.939E-07	0	2.870E-07	0	0	1.108E-06	2.374E-07
346	386000	3872000	1.906E-08	2.375E-09	1.110E-07	0	4.569E-08	0	0	1.781E-07	3.816E-08
347	386500	3872000	2.112E-08	2.655E-09	1.240E-07	0	5.113E-08	0	0	1.989E-07	4.262E-08
348	387000	3872000	2.446E-08	3.101E-09	1.449E-07	0	5.975E-08	0	0	2.322E-07	4.976E-08
349	387500	3872000	2.926E-08	3.730E-09	1.742E-07	0	7.190E-08	0	0	2.791E-07	5.981E-08
350	388000	3872000	3.665E-08	4.688E-09	2.190E-07	0	9.042E-08	0	0	3.508E-07	7.517E-08
351	388500	3872000	4.875E-08	6.263E-09	2.925E-07	0	1.208E-07	0	0	4.683E-07	1.004E-07
352	389000	3872000	7.248E-08	9.355E-09	4.369E-07	0	1.804E-07	0	0	6.991E-07	1.498E-07
353	389500	3872000	1.215E-07	1.576E-08	7.359E-07	0	3.037E-07	0	0	1.177E-06	2.522E-07
354	393000	3872000	4.064E-07	5.320E-08	2.483E-06	0	1.029E-06	0	0	3.972E-06	8.511E-07
355	393500	3872000	2.277E-07	3.000E-08	1.401E-06	0	5.799E-07	0	0	2.239E-06	4.798E-07
356	394000	3872000	1.567E-07	2.070E-08	9.667E-07	0	4.000E-07	0	0	1.544E-06	3.309E-07
357	394500	3872000	1.190E-07	1.574E-08	7.349E-07	0	3.040E-07	0	0	1.174E-06	2.516E-07
358	395000	3872000	9.635E-08	1.274E-08	5.951E-07	0	2.462E-07	0	0	9.504E-07	2.037E-07
359	386000	3872500	1.680E-08	2.089E-09	9.762E-08	0	4.021E-08	0	0	1.567E-07	3.358E-08
360	386500	3872500	1.948E-08	2.421E-09	1.131E-07	0	4.660E-08	0	0	1.816E-07	3.891E-08
361	387000	3872500	2.174E-08	2.748E-09	1.284E-07	0	5.297E-08	0	0	2.059E-07	4.412E-08
362	387500	3872500	2.604E-08	3.319E-09	1.550E-07	0	6.400E-08	0	0	2.484E-07	5.323E-08
363	388000	3872500	3.227E-08	4.142E-09	1.934E-07	0	7.990E-08	0	0	3.097E-07	6.636E-08
364	388500	3872500	4.165E-08	5.388E-09	2.516E-07	0	1.040E-07	0	0	4.026E-07	8.627E-08
365	389000	3872500	5.612E-08	7.310E-09	3.414E-07	0	1.411E-07	0	0	5.459E-07	1.170E-07
366	389500	3872500	8.793E-08	1.151E-08	5.375E-07	0	2.221E-07	0	0	8.590E-07	1.841E-07
367	390000	3872500	1.961E-07	2.577E-08	1.203E-06	0	4.974E-07	0	0	1.922E-06	4.119E-07
368	392000	3872500	6.672E-07	8.892E-08	4.153E-06	0	1.716E-06	0	0	6.625E-06	1.420E-06
369	392500	3872500	5.109E-07	6.714E-08	3.134E-06	0	1.298E-06	0	0	5.010E-06	1.074E-06
370	393000	3872500	2.997E-07	3.942E-08	1.840E-06	0	7.622E-07	0	0	2.941E-06	6.302E-07
371	393500	3872500	1.903E-07	2.508E-08	1.171E-06	0	4.847E-07	0	0	1.871E-06	4.009E-07
372	394000	3872500	1.336E-07	1.763E-08	8.234E-07	0	3.408E-07	0	0	1.315E-06	2.818E-07
373	394500	3872500	1.010E-07	1.334E-08	6.231E-07	0	2.578E-07	0	0	9.952E-07	2.133E-07
374	395000	3872500	8.171E-08	1.080E-08	5.044E-07	0	2.087E-07	0	0	8.056E-07	1.726E-07
375	386000	3873000	1.601E-08	2.004E-09	9.363E-08	0	3.859E-08	0	0	1.502E-07	3.219E-08
376	386500	3873000	1.859E-08	2.332E-09	1.090E-07	0	4.491E-08	0	0	1.748E-07	3.746E-08
377	387000	3873000	2.189E-08	2.749E-09	1.284E-07	0	5.295E-08	0	0	2.060E-07	4.414E-08
378	387500	3873000	2.480E-08	3.180E-09	1.485E-07	0	6.135E-08	0	0	2.378E-07	5.096E-08
379	388000	3873000	3.098E-08	4.010E-09	1.873E-07	0	7.737E-08	0	0	2.997E-07	6.422E-08
380	388500	3873000	3.947E-08	5.138E-09	2.399E-07	0	9.911E-08	0	0	3.836E-07	8.220E-08
381	389000	3873000	5.295E-08	6.904E-09	3.224E-07	0	1.332E-07	0	0	5.155E-07	1.105E-07
382	389500	3873000	7.618E-08	9.933E-09	4.639E-07	0	1.917E-07	0	0	7.417E-07	1.589E-07
383	390000	3873000	1.477E-07	1.937E-08	9.044E-07	0	3.739E-07	0	0	1.445E-06	3.096E-07
384	390500	3873000	2.981E-07	3.947E-08	1.844E-06	0	7.614E-07	0	0	2.943E-06	6.306E-07
385	391000	3873000	3.769E-07	5.013E-08	2.342E-06	0	9.667E-07	0	0	3.736E-06	8.006E-07
386	391500	3873000	4.143E-07	5.533E-08	2.584E-06	0	1.067E-06	0	0	4.121E-06	8.831E-07
387	392000	3873000	3.904E-07	5.200E-08	2.429E-06	0	1.004E-06	0	0	3.875E-06	8.304E-07
388	392500	3873000	3.222E-07	4.261E-08	1.990E-06	0	8.231E-07	0	0	3.178E-06	6.810E-07
389	393000	3873000	2.377E-07	3.139E-08	1.465E-06	0	6.065E-07	0	0	2.341E-06	5.016E-07
390	393500	3873000	1.682E-07	2.222E-08	1.037E-06	0	4.293E-07	0	0	1.657E-06	3.551E-07

TABLE 5 (continued)
Golden Queen Mining

Receptor	X	Y	Inhale	Dermal	Soil	Water	Plants	Animal	Mother's Milk	70 Year Sum	15 Year Sum
391	394000	3873000	1.247E-07	1.646E-08	7.686E-07	0	3.181E-07	0	0	1.228E-06	2.631E-07
392	394500	3873000	9.542E-08	1.259E-08	5.878E-07	0	2.433E-07	0	0	9.391E-07	2.012E-07
393	395000	3873000	7.695E-08	1.016E-08	4.744E-07	0	1.963E-07	0	0	7.578E-07	1.624E-07
394	386000	3873500	1.594E-08	2.007E-09	9.376E-08	0	3.866E-08	0	0	1.504E-07	3.223E-08
395	386500	3873500	1.913E-08	2.424E-09	1.132E-07	0	4.669E-08	0	0	1.814E-07	3.887E-08
396	387000	3873500	2.331E-08	2.954E-09	1.380E-07	0	5.688E-08	0	0	2.211E-07	4.738E-08
397	387500	3873500	2.664E-08	3.408E-09	1.592E-07	0	6.568E-08	0	0	2.549E-07	5.462E-08
398	388000	3873500	3.029E-08	3.899E-09	1.821E-07	0	7.517E-08	0	0	2.915E-07	6.246E-08
399	388500	3873500	3.553E-08	4.602E-09	2.149E-07	0	8.875E-08	0	0	3.438E-07	7.367E-08
400	389000	3873500	4.511E-08	5.853E-09	2.733E-07	0	1.130E-07	0	0	4.373E-07	9.371E-08
401	389500	3873500	6.667E-08	8.672E-09	4.050E-07	0	1.675E-07	0	0	6.478E-07	1.388E-07
402	390000	3873500	1.189E-07	1.552E-08	7.247E-07	0	2.996E-07	0	0	1.159E-06	2.484E-07
403	390500	3873500	1.938E-07	2.551E-08	1.191E-06	0	4.921E-07	0	0	1.902E-06	4.076E-07
404	391000	3873500	2.522E-07	3.342E-08	1.561E-06	0	6.446E-07	0	0	2.491E-06	5.338E-07
405	391500	3873500	2.802E-07	3.715E-08	1.735E-06	0	7.164E-07	0	0	2.769E-06	5.934E-07
406	392000	3873500	2.707E-07	3.593E-08	1.678E-06	0	6.933E-07	0	0	2.678E-06	5.739E-07
407	392500	3873500	2.348E-07	3.109E-08	1.452E-06	0	6.002E-07	0	0	2.318E-06	4.967E-07
408	393000	3873500	1.878E-07	2.479E-08	1.157E-06	0	4.789E-07	0	0	1.848E-06	3.960E-07
409	393500	3873500	1.469E-07	1.942E-08	9.067E-07	0	3.751E-07	0	0	1.448E-06	3.103E-07
410	394000	3873500	1.166E-07	1.540E-08	7.192E-07	0	2.976E-07	0	0	1.149E-06	2.462E-07
411	394500	3873500	9.324E-08	1.231E-08	5.750E-07	0	2.379E-07	0	0	9.184E-07	1.968E-07
412	395000	3873500	7.434E-08	9.819E-09	4.585E-07	0	1.897E-07	0	0	7.324E-07	1.569E-07
413	388000	3874000	2.657E-08	3.401E-09	1.588E-07	0	6.553E-08	0	0	2.543E-07	5.449E-08
414	388000	3874500	2.301E-08	2.950E-09	1.378E-07	0	5.688E-08	0	0	2.206E-07	4.727E-08
415	388000	3875000	2.147E-08	2.726E-09	1.273E-07	0	5.259E-08	0	0	2.041E-07	4.374E-08
416	388500	3874000	3.098E-08	3.998E-09	1.867E-07	0	7.714E-08	0	0	2.988E-07	6.403E-08
417	388500	3874500	2.836E-08	3.629E-09	1.694E-07	0	7.005E-08	0	0	2.714E-07	5.816E-08
418	388500	3875000	2.938E-08	3.776E-09	1.763E-07	0	7.287E-08	0	0	2.823E-07	6.049E-08
419	389000	3874000	4.003E-08	5.166E-09	2.412E-07	0	9.976E-08	0	0	3.862E-07	8.276E-08
420	389000	3874500	4.123E-08	5.344E-09	2.495E-07	0	1.031E-07	0	0	3.992E-07	8.554E-08
421	389000	3875000	3.918E-08	5.051E-09	2.359E-07	0	9.742E-08	0	0	3.776E-07	8.091E-08
422	389500	3874000	6.186E-08	8.049E-09	3.759E-07	0	1.554E-07	0	0	6.012E-07	1.288E-07
423	389500	3874500	5.705E-08	7.387E-09	3.450E-07	0	1.426E-07	0	0	5.520E-07	1.183E-07
424	389500	3875000	5.367E-08	6.947E-09	3.244E-07	0	1.340E-07	0	0	5.190E-07	1.112E-07
425	390000	3874000	9.984E-08	1.302E-08	6.080E-07	0	2.513E-07	0	0	9.722E-07	2.083E-07
426	390000	3874500	8.729E-08	1.138E-08	5.313E-07	0	2.196E-07	0	0	8.496E-07	1.821E-07
427	390000	3875000	7.851E-08	1.020E-08	4.764E-07	0	1.968E-07	0	0	7.619E-07	1.633E-07
428	390500	3874000	1.485E-07	1.949E-08	9.103E-07	0	3.760E-07	0	0	1.454E-06	3.116E-07
429	390500	3874500	1.218E-07	1.593E-08	7.440E-07	0	3.074E-07	0	0	1.189E-06	2.548E-07
430	390500	3875000	1.027E-07	1.342E-08	6.267E-07	0	2.589E-07	0	0	1.002E-06	2.147E-07
431	391000	3874000	1.854E-07	2.449E-08	1.144E-06	0	4.724E-07	0	0	1.826E-06	3.913E-07
432	391000	3874500	1.433E-07	1.888E-08	8.820E-07	0	3.643E-07	0	0	1.408E-06	3.017E-07
433	391000	3875000	1.161E-07	1.528E-08	7.137E-07	0	2.948E-07	0	0	1.140E-06	2.443E-07
434	391500	3874000	2.030E-07	2.682E-08	1.253E-06	0	5.174E-07	0	0	2.000E-06	4.286E-07
435	391500	3874500	1.561E-07	2.060E-08	9.619E-07	0	3.974E-07	0	0	1.536E-06	3.291E-07
436	391500	3875000	1.246E-07	1.642E-08	7.668E-07	0	3.169E-07	0	0	1.225E-06	2.625E-07
437	392000	3874000	2.034E-07	2.683E-08	1.253E-06	0	5.178E-07	0	0	2.001E-06	4.288E-07
438	392000	3874500	1.578E-07	2.076E-08	9.694E-07	0	4.006E-07	0	0	1.549E-06	3.319E-07
439	392000	3875000	1.263E-07	1.659E-08	7.749E-07	0	3.203E-07	0	0	1.238E-06	2.653E-07
440	392500	3874000	1.823E-07	2.409E-08	1.125E-06	0	4.650E-07	0	0	1.796E-06	3.849E-07
441	392500	3874500	1.484E-07	1.953E-08	9.118E-07	0	3.768E-07	0	0	1.457E-06	3.122E-07
442	392500	3875000	1.228E-07	1.613E-08	7.533E-07	0	3.113E-07	0	0	1.204E-06	2.580E-07
443	393000	3874000	1.546E-07	2.026E-08	9.460E-07	0	3.911E-07	0	0	1.512E-06	3.240E-07
444	393000	3874500	1.312E-07	1.713E-08	8.000E-07	0	3.305E-07	0	0	1.279E-06	2.741E-07
445	393000	3875000	1.100E-07	1.446E-08	6.753E-07	0	2.791E-07	0	0	1.079E-06	2.312E-07
446	393500	3874000	1.269E-07	1.671E-08	7.804E-07	0	3.228E-07	0	0	1.247E-06	2.672E-07
447	393500	3874500	1.083E-07	1.426E-08	6.657E-07	0	2.754E-07	0	0	1.064E-06	2.280E-07
448	393500	3875000	9.445E-08	1.241E-08	5.795E-07	0	2.396E-07	0	0	9.260E-07	1.984E-07
449	394000	3874000	1.043E-07	1.380E-08	6.443E-07	0	2.665E-07	0	0	1.029E-06	2.205E-07
450	394000	3874500	9.166E-08	1.210E-08	5.649E-07	0	2.336E-07	0	0	9.023E-07	1.934E-07
451	394000	3875000	8.147E-08	1.071E-08	5.003E-07	0	2.069E-07	0	0	7.994E-07	1.713E-07

Table 6

Day	P1	P2	Average	% Diff
29-Sep-90	11.6	10.8	11.2	6.90%
02-Oct-90	31.1	27.7	29.4	10.93%
05-Oct-90	35.3	33.9	34.6	3.97%
08-Oct-90	12	9.9	11.0	17.50%
11-Oct-90	29.5	27.2	28.4	7.80%
14-Oct-90	29	26.4	27.7	8.97%
17-Oct-90	25.9	24.1	25.0	6.95%
20-Oct-90	14.9	13	14.0	12.75%
23-Oct-90	17.9	16	17.0	10.61%
26-Oct-90	25.4	23.1	24.3	9.06%
29-Oct-90	22.4	20.4	21.4	8.93%
01-Nov-90	26.4	23.1	24.8	12.50%
04-Nov-90	9.7	9	9.4	7.22%
07-Nov-90	19.7	18.4	19.1	6.60%
10-Nov-90	6	5.4	5.7	10.00%
13-Nov-90	15.1	13.7	14.4	9.27%
16-Nov-90	19.1	17.7	18.4	7.33%
19-Nov-90	26.8	23.8	25.3	11.19%
22-Nov-90	12.1	10.9	11.5	9.92%
25-Nov-90	26.8	24.7	25.8	7.84%
28-Nov-90	11.8	10.4	11.1	11.86%
01-Dec-90	18.6	16.9	17.8	9.14%
04-Dec-90	6.6	5.7	6.2	13.64%
07-Dec-90	8.4	8.1	8.3	3.57%
10-Dec-90	16.2	15.6	15.9	3.70%
13-Dec-90	16.4	14.3	15.4	12.80%
16-Dec-90	6.2	5.1	5.7	17.74%
19-Dec-90	32.8	31.1	32.0	5.18%
22-Dec-90	8	7.5	7.8	6.25%
25-Dec-90	5.1	4.2	4.7	17.65%
28-Dec-90				
31-Dec-90	11.1	10.1	10.6	9.01%
03-Jan-91	4.9	5	5.0	2.00%
06-Jan-91	9.8	8.3	9.1	15.31%
09-Jan-91	8.6	7.9	8.3	8.14%
12-Jan-91	10.4	8.5	9.5	18.27%
15-Jan-91	22.6	21.4	22.0	5.31%
18-Jan-91	7.5	7.1	7.3	5.33%
21-Jan-91	4.7	4.9	4.8	4.08%
24-Jan-91	16.1	15.4	15.8	4.35%
27-Jan-91	33	33	33.0	0.00%
30-Jan-91	38.3	35.6	37.0	7.05%
02-Feb-91	12.8	12.8	12.8	0.00%
05-Feb-91	12.8	12.2	12.5	4.69%
08-Feb-91	12.2	11.5	11.9	5.74%
11-Feb-91	14.7	13.7	14.2	6.80%
14-Feb-91	7.5	7.3	7.4	2.67%

Table 6 (continued)

Day	P1	P2	Average	% Diff
17-Feb-91	30.6	29.3	30.0	4.25%
20-Feb-91	11.8	13.1	12.5	9.92%
23-Feb-91	24.4	22.2	23.3	9.02%
26-Feb-91	18.6	17.7	18.2	4.84%
01-Mar-91	6.3	4.6	5.5	26.98%
04-Mar-91	7.5	6.8	7.2	9.33%
07-Mar-91	9.5	9.4	9.5	1.05%
10-Mar-91	45.8	46.8	46.3	2.14%
13-Mar-91	7.8	8.3	8.1	6.02%
16-Mar-91	11.5	12.9	12.2	10.85%
19-Mar-91		10.9		
22-Mar-91	9.7	8.8	9.3	9.28%
25-Mar-91	3.6	6.1	4.9	40.98%
28-Mar-91	9	8.6	8.8	4.44%
31-Mar-91	15.9	15.2	15.6	4.40%
03-Apr-91	19.5	18.3	18.9	6.15%
06-Apr-91	26.2	25.3	25.8	3.44%
09-Apr-91	25.5	24.6	25.1	3.53%
12-Apr-91	25.4	24	24.7	5.51%
15-Apr-91	25.4	25.2	25.3	0.79%
18-Apr-91	25.3	24.7	25.0	2.37%
21-Apr-91	10.2	9.5	9.9	6.86%
24-Apr-91	20.3	19.1	19.7	5.91%
27-Apr-91	21.5	20.6	21.1	4.19%
30-Apr-91	44.7	41.7	43.2	6.71%
03-May-91	19.6	18.9	19.3	3.57%
06-May-91				
09-May-91	30.1	27.1	28.6	9.97%
12-May-91	22.4	20.1	21.3	10.27%
15-May-91	19.3	18.3	18.8	5.18%
18-May-91	16.4	15.2	15.8	7.32%
21-May-91	20.5	19.9	20.2	2.93%
24-May-91	30.2	27.2	28.7	9.93%
27-May-91	24.8	23.2	24.0	6.45%
30-May-91	53	48.9	51.0	7.74%
02-Jun-91	41	37	39.0	9.76%
05-Jun-91	39	33.9	36.5	13.08%
08-Jun-91	37.8	35.2	36.5	6.88%
11-Jun-91	34.4	32	33.2	6.98%
14-Jun-91	48.3	43.1	45.7	10.77%
17-Jun-91	27.1	26.1	26.6	3.69%
20-Jun-91	30.6	29.4	30.0	3.92%
23-Jun-91	33.9	20.1	27.0	40.71%
26-Jun-91	27.8	28.4	28.1	2.11%
29-Jun-91	15.7	15.7	15.7	0.00%
02-Jul-91	31.1	53.9	42.5	42.30%
05-Jul-91	32.2	29.9	31.1	7.14%

Table 6 (continued)

Day	P1	P2	Average	% Diff
08-Jul-91	20.9	20.4	20.7	2.39%
11-Jul-91	26.5	26.7	26.6	0.75%
14-Jul-91	25.8	26.3	26.1	1.90%
17-Jul-91	25.4	25.4	25.4	0.00%
20-Jul-91	25.8	26.5	26.2	2.64%
23-Jul-91	30	28.4	29.2	5.33%
26-Jul-91	27.2	31.4	29.3	13.38%
29-Jul-91	29.9	30.7	30.3	2.61%
01-Aug-91	43.2	30.9	37.1	28.47%
04-Aug-91	26.3	28.7	27.5	8.36%
07-Aug-91	27.2	27.6	27.4	1.45%
10-Aug-91	30.6	29.8	30.2	2.61%
13-Aug-91	19.8	19.7	19.8	0.51%
16-Aug-91	26.4	19.8	23.1	25.00%
19-Aug-91	21.2	19.8	20.5	6.60%
22-Aug-91	30.5	28.2	29.4	7.54%
25-Aug-91	30.2	28.5	29.4	5.63%
28-Aug-91	28	27.2	27.6	2.86%
31-Aug-91	30.2	29	29.6	3.97%
03-Sep-91	32.3	32.9	32.6	1.82%
06-Sep-91	26.2	27.9	27.1	6.09%
09-Sep-91	40.9	44.6	42.8	8.30%
12-Sep-91	34.1	35.5	34.8	3.94%
15-Sep-91	25.8	29.6	27.7	12.84%
18-Sep-91	29.7	29	29.4	2.36%
Minimum	3.6	4.2	4.7	0.00%
Maximum	53.0	53.9	51.0	42.30%
Arithmetic Mean	22.2	21.1	21.7	
Geometric Mean	19.2	17.8	18.8	

TABLE 7

*** 70-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 68 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	3.986E-06	2.814E-07	1.330E-05	0.000E+00	5.541E-06	0.000E+00	0.000E+00	2.310E-05
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	1.204E-07	2.578E-08	1.218E-06	0.000E+00	4.761E-07	0.000E+00	0.000E+00	1.840E-06
Cd	1.863E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.863E-07
Cr	1.023E-06	4.187E-09	1.978E-08	0.000E+00	7.963E-09	0.000E+00	0.000E+00	1.055E-06
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	1.641E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.641E-08
Ni	8.714E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.714E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	5.341E-06	3.113E-07	1.453E-05	0.000E+00	6.025E-06	0.000E+00	0.000E+00	2.621E-05

RECEPTOR RISK OF 2.621E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.621E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

RECEPTOR POPULATION = 0
RECEPTOR BURDEN = 0.000E+00

TABLE 8

*** 70-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 68 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	2.125E-09	1.438E-10	6.721E-09	0.000E+00	2.756E-09	0.000E+00	0.000E+00	1.175E-08
2	2.590E-09	1.752E-10	8.189E-09	0.000E+00	3.358E-09	0.000E+00	0.000E+00	1.431E-08
3	1.499E-08	1.014E-09	4.741E-08	0.000E+00	1.944E-08	0.000E+00	0.000E+00	8.286E-08
4	2.686E-08	1.817E-09	8.493E-08	0.000E+00	3.483E-08	0.000E+00	0.000E+00	1.484E-07
5	2.047E-08	1.385E-09	6.473E-08	0.000E+00	2.655E-08	0.000E+00	0.000E+00	1.131E-07
6	1.598E-08	1.081E-09	5.052E-08	0.000E+00	2.072E-08	0.000E+00	0.000E+00	8.829E-08
7	1.150E-09	7.789E-11	3.642E-09	0.000E+00	1.493E-09	0.000E+00	0.000E+00	6.363E-09
8	7.426E-10	5.030E-11	2.351E-09	0.000E+00	9.641E-10	0.000E+00	0.000E+00	4.108E-09
9	1.023E-09	6.931E-11	3.240E-09	0.000E+00	1.329E-09	0.000E+00	0.000E+00	5.662E-09
10	5.386E-10	3.648E-11	1.705E-09	0.000E+00	6.993E-10	0.000E+00	0.000E+00	2.980E-09
11	5.310E-10	3.596E-11	1.681E-09	0.000E+00	6.894E-10	0.000E+00	0.000E+00	2.938E-09
12	4.079E-10	2.763E-11	1.292E-09	0.000E+00	5.296E-10	0.000E+00	0.000E+00	2.257E-09
13	3.070E-08	2.077E-09	9.708E-08	0.000E+00	3.981E-08	0.000E+00	0.000E+00	1.697E-07
14	3.706E-08	2.507E-09	1.172E-07	0.000E+00	4.805E-08	0.000E+00	0.000E+00	2.048E-07
15	2.126E-07	1.438E-08	6.722E-07	0.000E+00	2.756E-07	0.000E+00	0.000E+00	1.175E-06
16	3.747E-07	2.534E-08	1.185E-06	0.000E+00	4.858E-07	0.000E+00	0.000E+00	2.071E-06
17	2.679E-07	1.812E-08	8.470E-07	0.000E+00	3.473E-07	0.000E+00	0.000E+00	1.480E-06
18	2.183E-07	1.476E-08	6.902E-07	0.000E+00	2.830E-07	0.000E+00	0.000E+00	1.206E-06
19	1.756E-08	9.783E-10	4.564E-08	0.000E+00	1.901E-08	0.000E+00	0.000E+00	8.318E-08
20	2.137E-08	1.191E-09	5.554E-08	0.000E+00	2.313E-08	0.000E+00	0.000E+00	1.012E-07
21	1.014E-07	5.647E-09	2.634E-07	0.000E+00	1.097E-07	0.000E+00	0.000E+00	4.802E-07
22	1.777E-07	9.902E-09	4.619E-07	0.000E+00	1.924E-07	0.000E+00	0.000E+00	8.419E-07
23	1.256E-07	6.999E-09	3.265E-07	0.000E+00	1.360E-07	0.000E+00	0.000E+00	5.951E-07
24	9.703E-08	5.407E-09	2.522E-07	0.000E+00	1.050E-07	0.000E+00	0.000E+00	4.597E-07
25	7.461E-08	3.523E-09	1.654E-07	0.000E+00	6.573E-08	0.000E+00	0.000E+00	3.093E-07
26	1.107E-07	6.167E-09	2.877E-07	0.000E+00	1.198E-07	0.000E+00	0.000E+00	5.243E-07
27	2.688E-07	1.498E-08	6.986E-07	0.000E+00	2.910E-07	0.000E+00	0.000E+00	1.273E-06
28	3.467E-07	1.932E-08	9.013E-07	0.000E+00	3.754E-07	0.000E+00	0.000E+00	1.643E-06
29	1.746E-06	9.730E-08	4.539E-06	0.000E+00	1.890E-06	0.000E+00	0.000E+00	8.273E-06
30	1.070E-07	5.962E-09	2.781E-07	0.000E+00	1.158E-07	0.000E+00	0.000E+00	5.069E-07
31	2.055E-08	1.145E-09	5.342E-08	0.000E+00	2.225E-08	0.000E+00	0.000E+00	9.737E-08
32	4.929E-08	2.746E-09	1.281E-07	0.000E+00	5.336E-08	0.000E+00	0.000E+00	2.335E-07
33	6.105E-08	3.401E-09	1.587E-07	0.000E+00	6.609E-08	0.000E+00	0.000E+00	2.892E-07
34	2.386E-07	1.329E-08	6.201E-07	0.000E+00	2.583E-07	0.000E+00	0.000E+00	1.130E-06
35	1.982E-08	1.105E-09	5.152E-08	0.000E+00	2.146E-08	0.000E+00	0.000E+00	9.391E-08
36	3.081E-08	1.717E-09	8.008E-08	0.000E+00	3.335E-08	0.000E+00	0.000E+00	1.459E-07
37	7.320E-08	4.078E-09	1.903E-07	0.000E+00	7.924E-08	0.000E+00	0.000E+00	3.468E-07
38	8.804E-08	4.906E-09	2.288E-07	0.000E+00	9.531E-08	0.000E+00	0.000E+00	4.171E-07
39	3.021E-07	1.683E-08	7.851E-07	0.000E+00	3.270E-07	0.000E+00	0.000E+00	1.431E-06
40	2.966E-08	1.652E-09	7.709E-08	0.000E+00	3.211E-08	0.000E+00	0.000E+00	1.405E-07
41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	4.605E-09	1.825E-12	8.625E-12	0.000E+00	3.471E-12	0.000E+00	0.000E+00	4.619E-09
46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	5.341E-06	3.113E-07	1.453E-05	0.000E+00	6.025E-06	0.000E+00	0.000E+00	2.621E-05

RECEPTOR RISK OF 2.621E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.621E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

RECEPTOR POPULATION = 0

RECEPTOR BURDEN = 0.000E+00

TABLE 9

*** ACUTE HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 34 ***

POLLUTANT	CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
ACROL	0.000E+00	0.000E+00	2.500E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	4.593E-03	0.000E+00	1.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.593E-04	0.000E+00
ECNO	0.000E+00	0.000E+00	3.700E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	4.528E+01	0.000E+00	3.300E+03	0.000E+00	1.372E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	3.115E-03	0.000E+00	1.000E+00	0.000E+00	0.000E+00	3.115E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	4.400E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =				0.000E+00	1.372E-02	3.115E-03	0.000E+00	0.000E+00	0.000E+00	4.593E-04	0.000E+00

TABLE 10

*** CHRONIC HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 87 ***

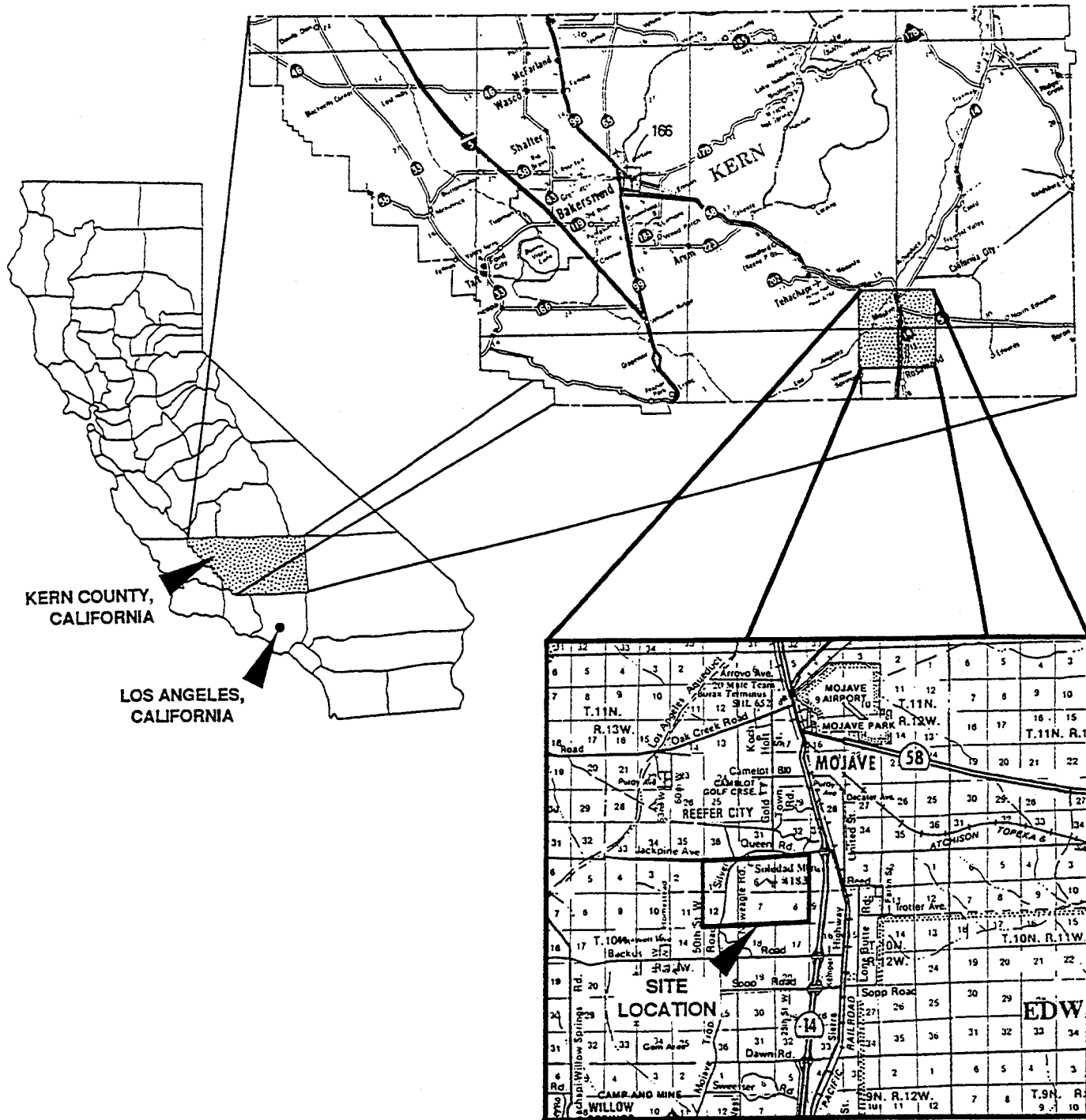
POLLUTANT	ORAL DOSE (mg/kg-d)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
ACETIA	0.000E+00	0.000E+00	9.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	0.000E+00	0.000E+00	2.000E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.000E-03	0.000E+00	5.000E-01	2.769E-03	2.769E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.892E-04	2.769E-03
BENZ	0.000E+00	0.000E+00	7.100E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	5.000E-03	0.000E+00	4.800E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.566E-03	0.000E+00
Ca	1.000E-03	0.000E+00	3.500E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.546E-06	0.000E+00
Cd	5.000E-03	0.000E+00	2.000E-03	0.000E+00	0.000E+00	0.000E+00	7.480E-04	7.480E-04	0.000E+00	7.449E-04	0.000E+00
Cu	0.000E+00	0.000E+00	2.400E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.557E-06	0.000E+00
HCBD	0.000E+00	0.000E+00	3.600E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCB	0.000E+00	0.000E+00	7.000E+01	0.000E+00	4.734E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	4.300E-04	0.000E+00	1.500E+00	9.425E-04	9.425E-04	9.425E-04	9.425E-04	0.000E+00	9.425E-04	0.000E+00	0.000E+00
Mn	0.000E+00	0.000E+00	4.000E-01	0.000E+00	5.829E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.829E-04	0.000E+00
Hg	3.000E-04	0.000E+00	3.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	0.000E+00	0.000E+00	2.400E-01	0.000E+00	0.000E+00	2.853E-05	2.853E-05	0.000E+00	0.000E+00	2.853E-05	0.000E+00
NAPTH	4.000E-03	0.000E+00	1.400E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	5.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	0.000E+00	0.000E+00	2.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	3.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	0.000E+00	0.000E+00	3.500E+01	8.965E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.965E-07	0.000E+00
SUM =				3.713E-03	5.163E-02	9.710E-04	1.843E-03	7.480E-04	9.425E-04	4.423E-03	2.769E-03

TABLE 11
ALTERNATIVES EVALUATION

Source	Max Conc	Date	X	Y	+20.00%	-20.00%
DRLPIT1	0.1944	91010424	390203	3872720		
DRLPIT2	0.0809	91030424	390669	3872895		
DRLPIT3	0.6113	91102924	391846	3872159		
DRLPIT4	0.2513	91102224	392694	3871346		
DRLPIT5	0.1678	91120924	391842	3870521		
DRLPIT6	0.1665	91120924	391445	3870519		
BLSPIT1	2.5751	91122724	391044	3870310		
BLSPIT2	2.8768	91112424	392607	3870689	2.88	2.88
BLSPIT3	2.6327	91111424	391846	3872159		
BLSPIT4	1.4874	91010624	390904	3872902		
BLSPIT5	1.5918	91121324	392010	3870521		
BLSPIT6	1.3898	91121324	391643	3870520		
TRLPIT1	2.2566	91010424	390203	3872720		
TRLPIT2	1.1981	91030424	390669	3872895		
TRLPIT3	4.7605	91102924	391846	3872159		
TRLPIT4	3.7256	91102224	392694	3871346		
TRLPIT5	2.4449	91120924	391842	3870521		
TRLPIT6	2.4289	91120924	391445	3870519		
HAUL_1	2.9507	91102724	390027	3872472		
HAUL_2	0.8520	91010424	390352	3872832		
HAUL_3	6.1348	91102924	391846	3872159		
HAUL_4	3.6335	91012224	392670	3871765		
HAUL_5	1.6690	91120924	391842	3870521		
HAUL_6	1.6660	91120924	391445	3870519		
BGHSE1	2.0032	91111124	391846	3872159	2.40	1.60
TRU_WST1	2.5193	91092924	390209	3871270		
TRU_WST2	3.6582	91112424	391049	3870518		
TRU_WST3	4.4429	91120924	391049	3870518		
TRU_WST4	6.1439	91120924	391643	3870520		
TRU_WST5	6.6818	91112424	392694	3871346		
DZG_W1	0.2389	91092924	390209	3871270		
DZG_W2	0.3701	91112424	391049	3870518		
DZG_W3	0.3186	91010124	391049	3870518		
DZG_W4	0.4772	91120924	391643	3870520		
DZG_W5	0.5342	91120924	392694	3871346		
ERSN_W1	0.9120	91092924	390209	3871270		
ERSN_W2	1.4721	91112424	391049	3870518		
ERSN_W3	1.0974	91122424	391247	3870518		
ERSN_W4	1.6694	91120924	391643	3870520		
ERSN_W5	1.9674	91120924	392694	3871346		
PIT_1	24.4784	91120924	391643	3870520		
PIT_2	24.3803	91120924	391643	3870520		
PIT_3	26.8219	91120924	391643	3870520		
PIT_4	26.8198	91120924	391643	3870520		
PIT_5	26.8198	91120924	391643	3870520		
PIT_6	26.0365	91120924	391643	3870520		
DRILLING	0.8648	91102924	391846	3872159	1.04	0.69
LOADING	9.0584	91120924	391842	3870521	10.87	7.25
HAULING	8.6330	91102924	391846	3872159	10.36	6.91
UNLOADG	8.5697	91120924	391049	3870518	10.28	6.86
DOZING	0.7473	91120924	391049	3870518	0.90	0.60
EROSION	2.8077	91120924	391049	3870518	2.81	2.81
Maximum	26.8219				31.33	22.32
					Background	18.8
					Total	50.13
						41.12

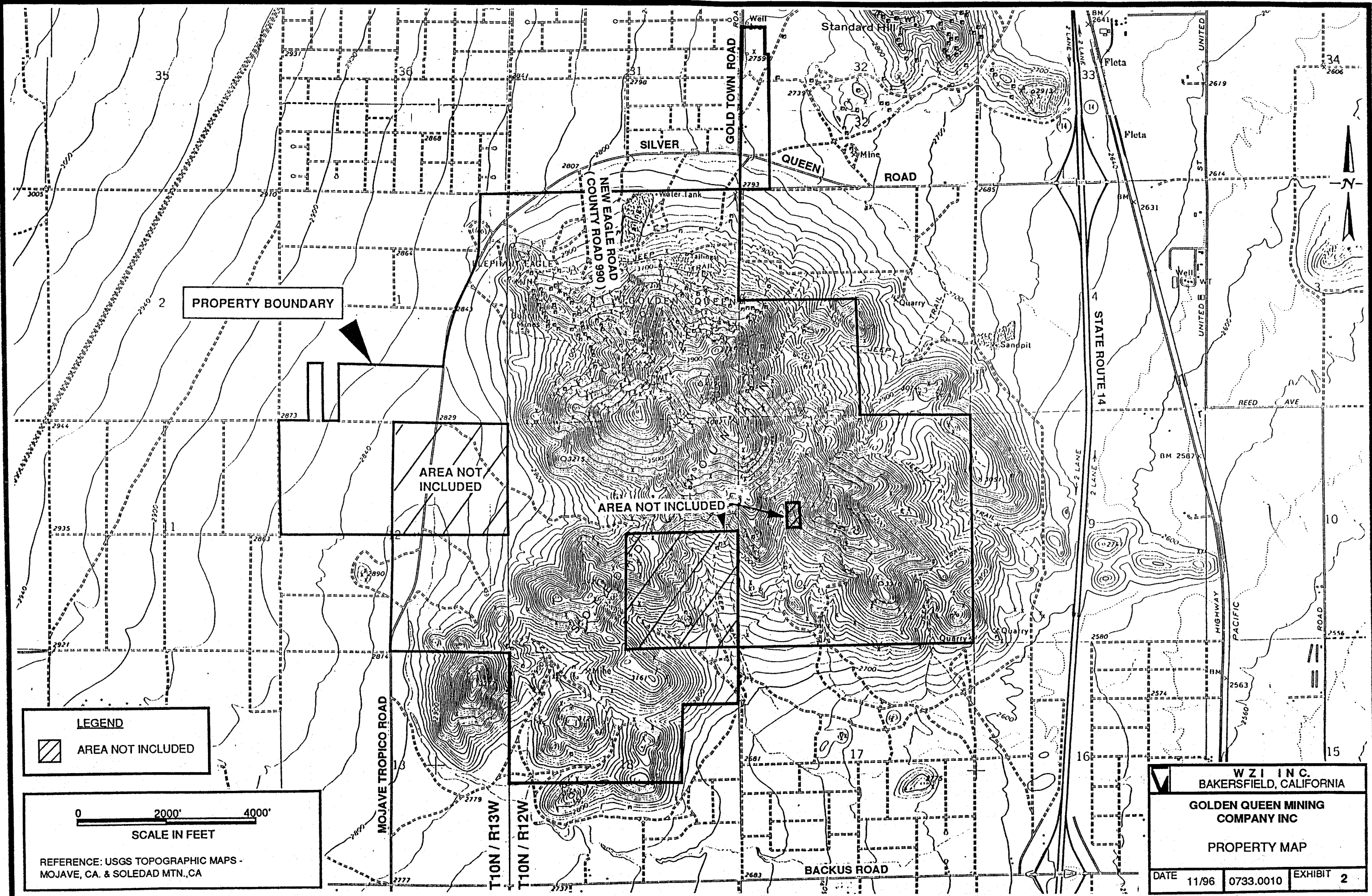
EXHIBITS





 WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC.		
REGIONAL LOCATION MAP		
DATE 11/95	0733.0010A	EXHIBIT 1






PROPERTY BOUNDARY

AREA NOT INCLUDED

AREA NOT INCLUDED

LEGEND

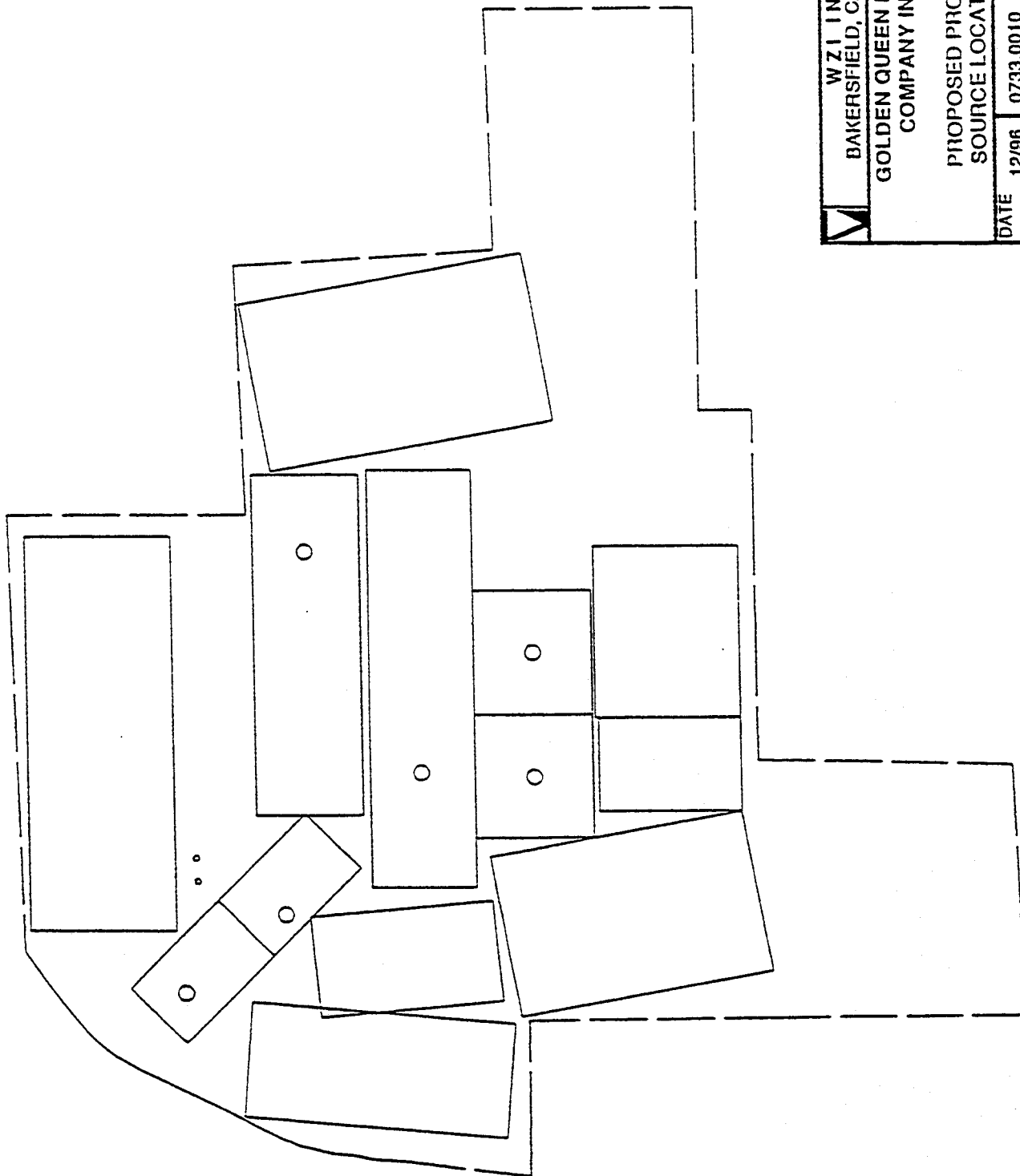
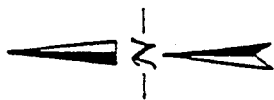
 AREA NOT INCLUDED

0 2000' 4000'

SCALE IN FEET

REFERENCE: USGS TOPOGRAPHIC MAPS -
MOJAVE, CA. & SOLEDAD MTN., CA

WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC		
PROPERTY MAP		
DATE	11/96	0733.0010
EXHIBIT	2	




	WZ I INC.	
	BAKERSFIELD, CALIFORNIA	
	GOLDEN QUEEN MINING COMPANY INC.	
PROPOSED PROJECT SOURCE LOCATIONS		
DATE	12/96	0733.0010
		EXHIBIT 3

EXHIBIT 4
Fence Line and Specific Receptor Locations

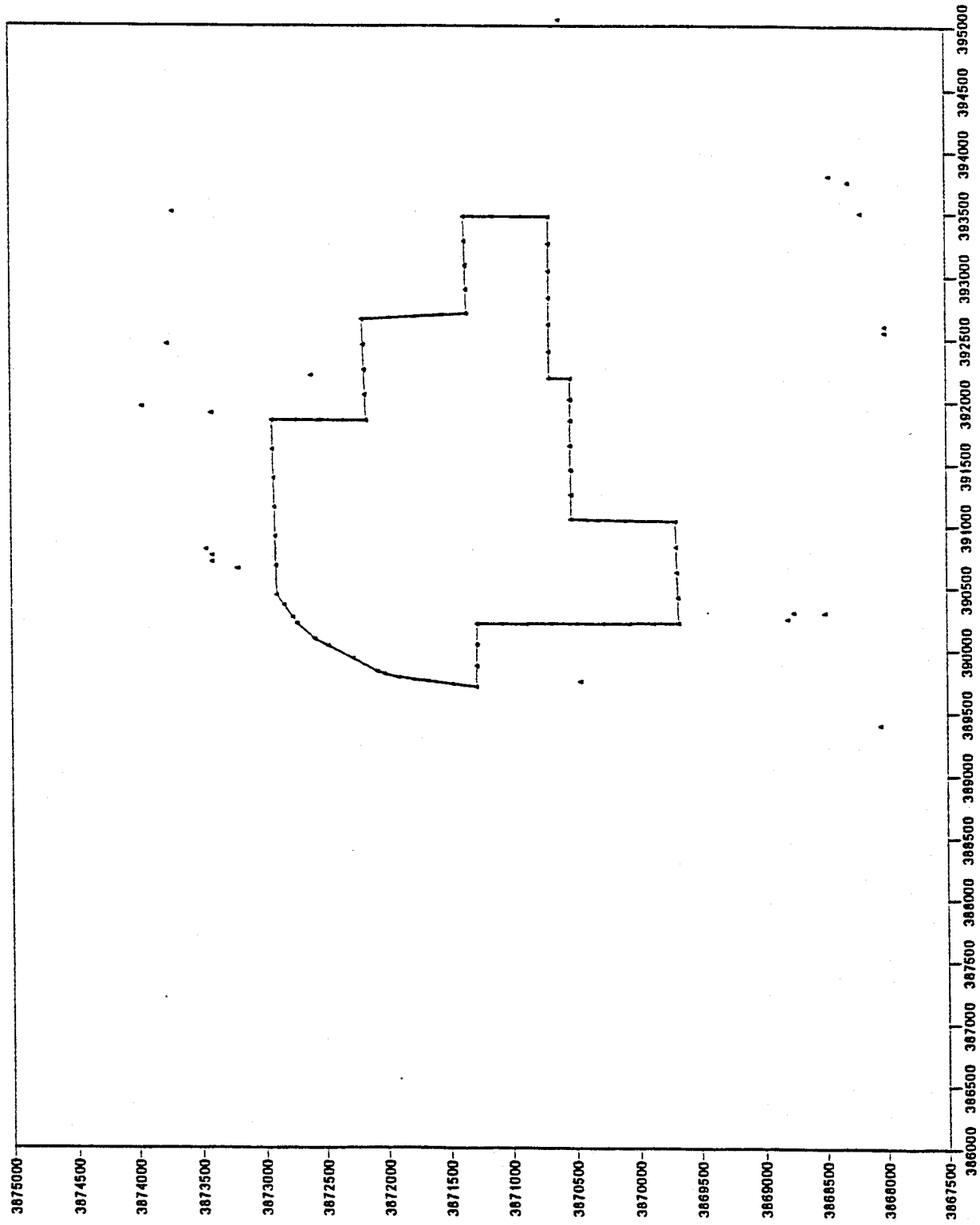
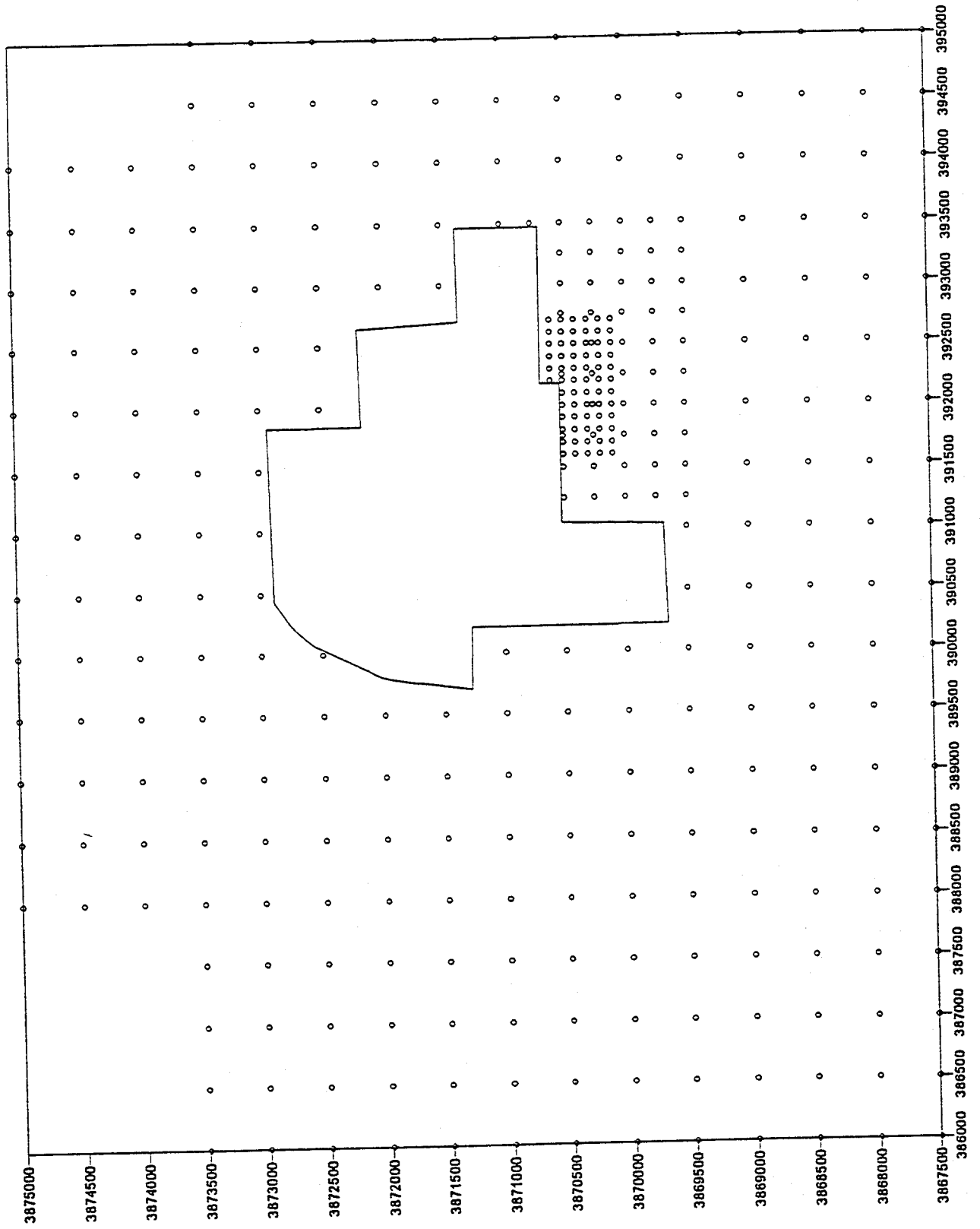
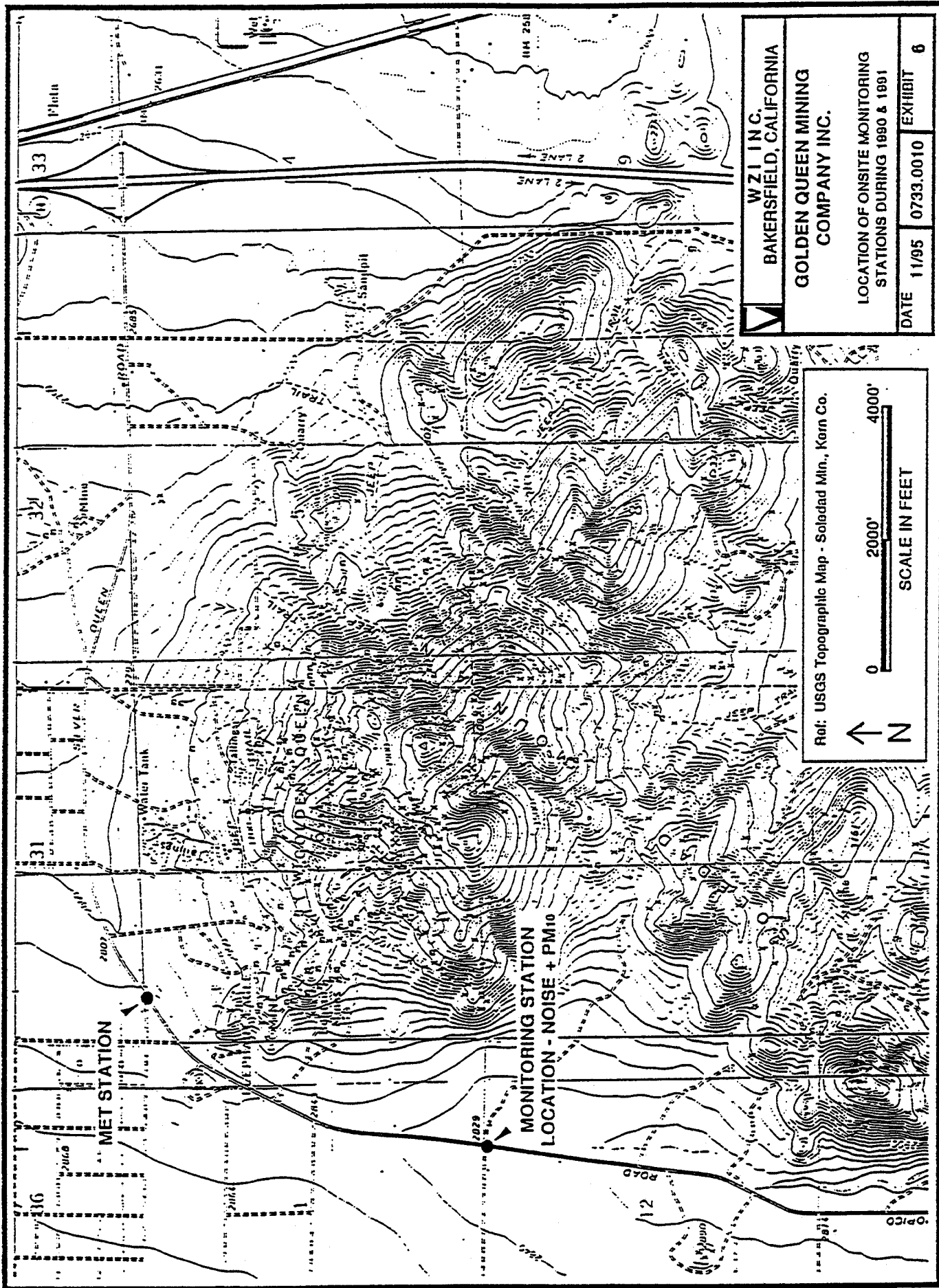


EXHIBIT 5 Gridded Receptor Locations



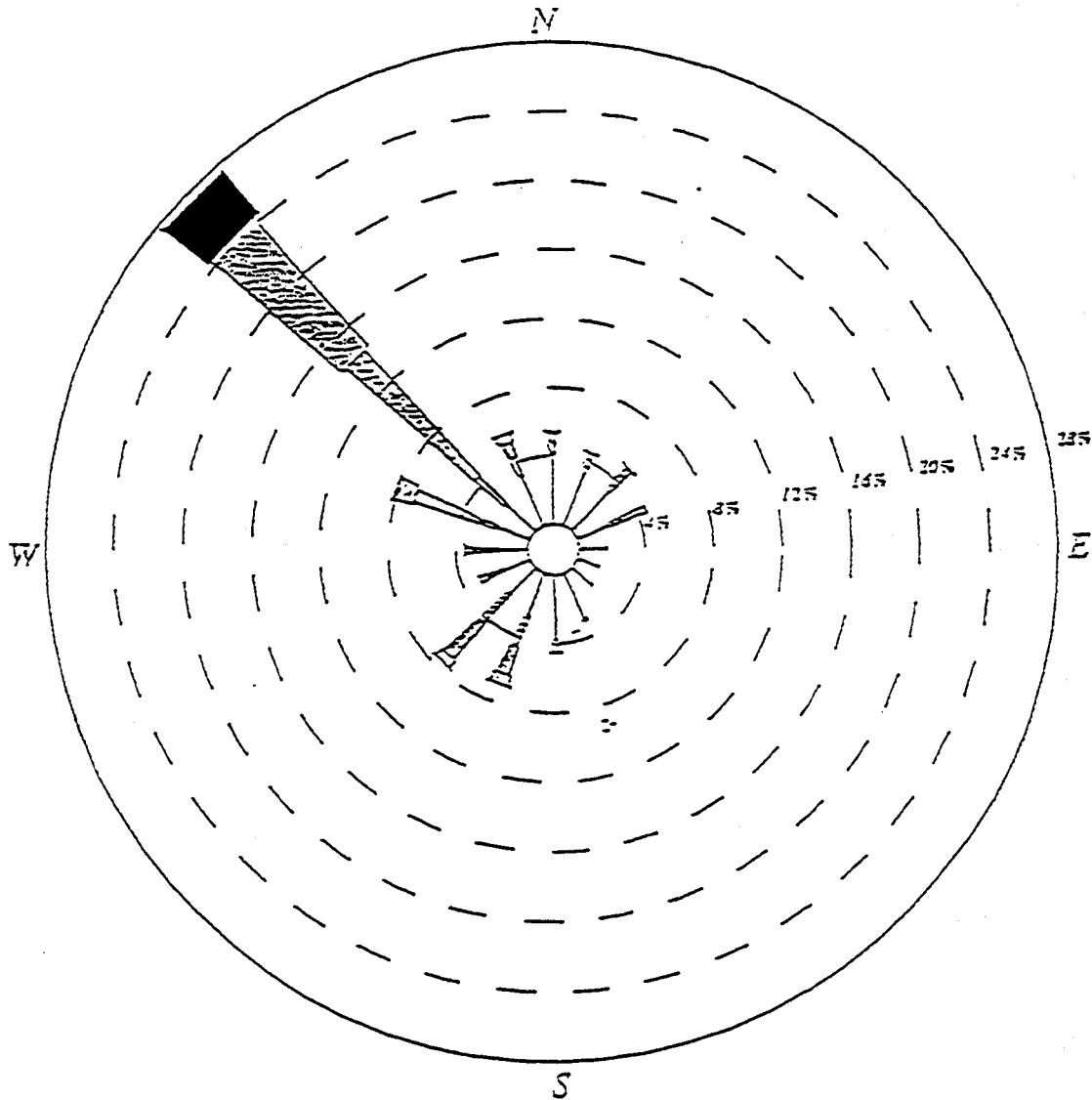


WZI INC.
BAKERSFIELD, CALIFORNIA
GOLDEN QUEEN MINING
COMPANY INC.
LOCATION OF ONSITE MONITORING
STATIONS DURING 1990 & 1991
DATE 11/95 0733.0010 EXHIBIT 6

Ref: USGS Topographic Map - Soledad Min., Kern Co.
0 2000' 4000'
SCALE IN FEET
N

Soledad

October 1989 to September 1990; Midnight - 11 PM



CALM WINDS 4.66%

WIND SPEED (KNOTS)

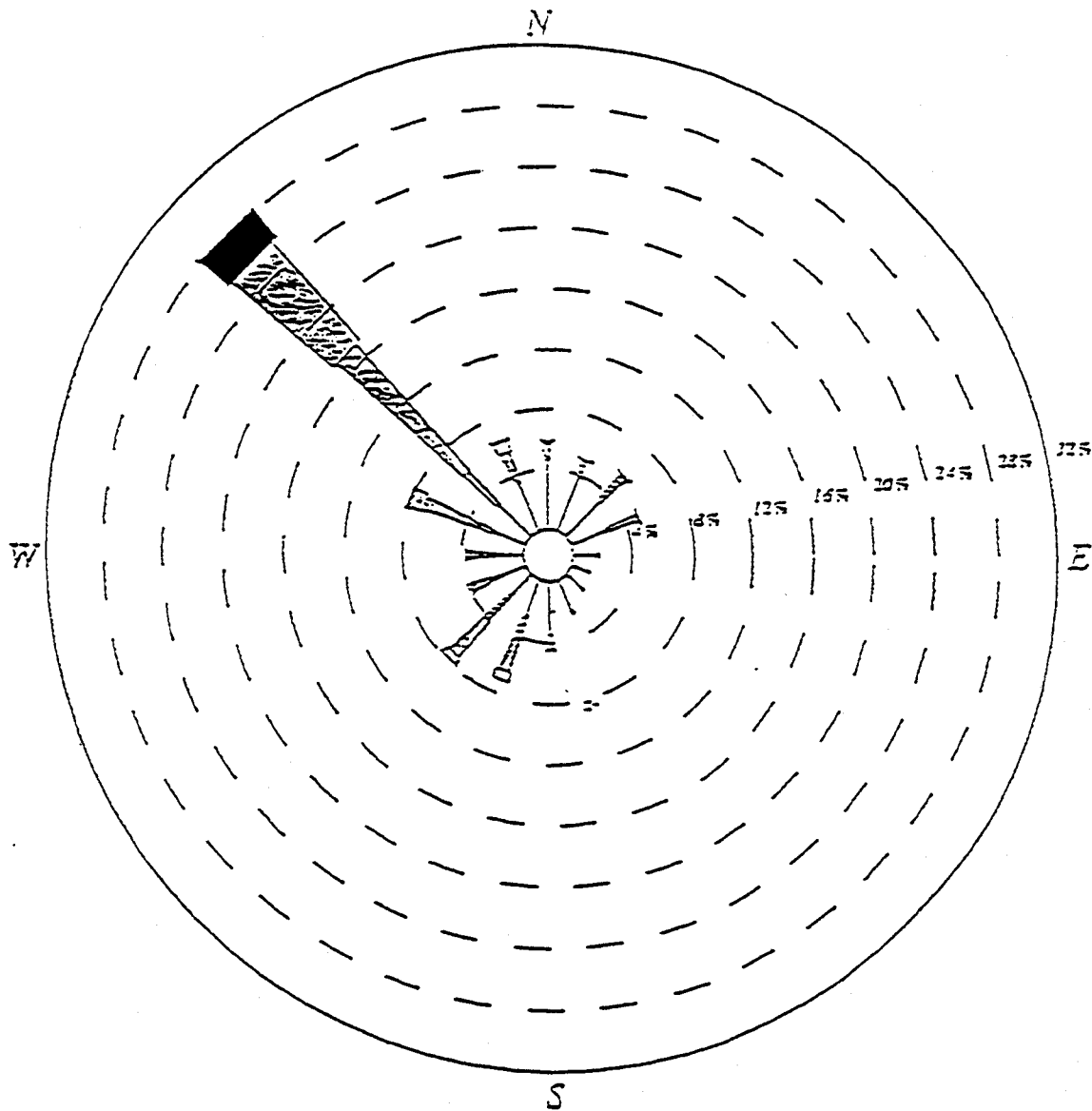
NOTE: Frequencies
indicate direction
from which the
wind is blowing.



WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC. Soledad Mountain Project		
WIND ROSE DIAGRAM ONSITE DATA 1989-1990		
DATE 11/95	0733.0010	EXHIBIT 7

Soledad

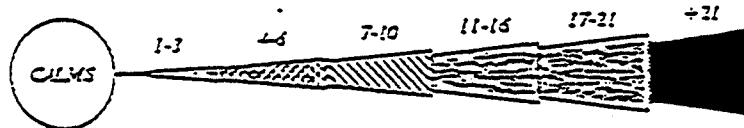
September 1990 to August 1991; Midnight - 11 PM



CALM WINDS 0.17%

WIND SPEED (KNOTS)

NOTE: Frequencies
indicate direction
from which the
wind is blowing.



WZI INC. BAKERSFIELD, CALIFORNIA		
GOLDEN QUEEN MINING COMPANY INC. Soledad Mountain Project		
WIND ROSE DIAGRAM ONSITE DATA 1990-1991		
DATE	11/96	0733.0010
EXHIBIT	8	

EXHIBIT 9

PM10 Sampling Results

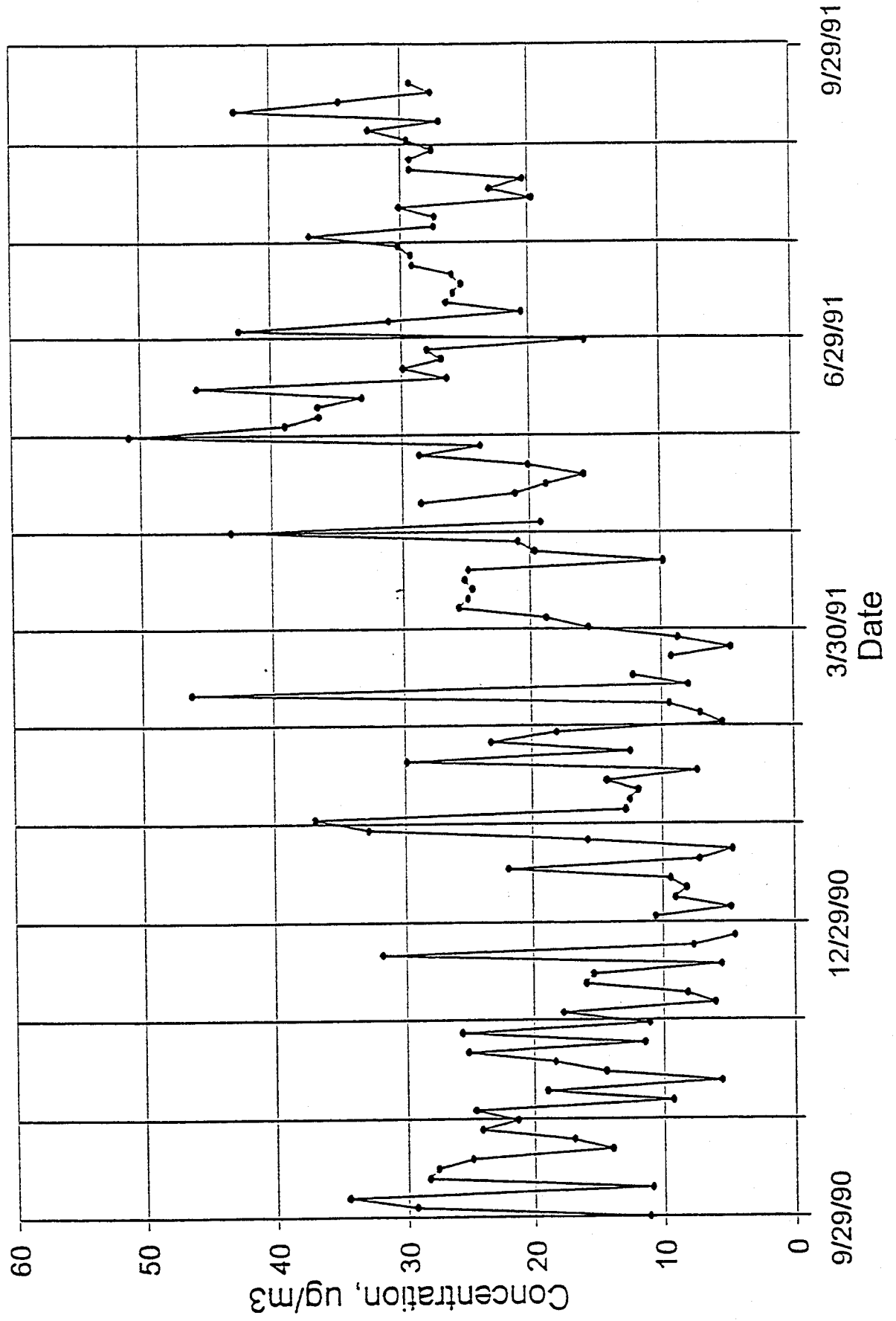


EXHIBIT 10

Mojave PM10 Monitoring Results

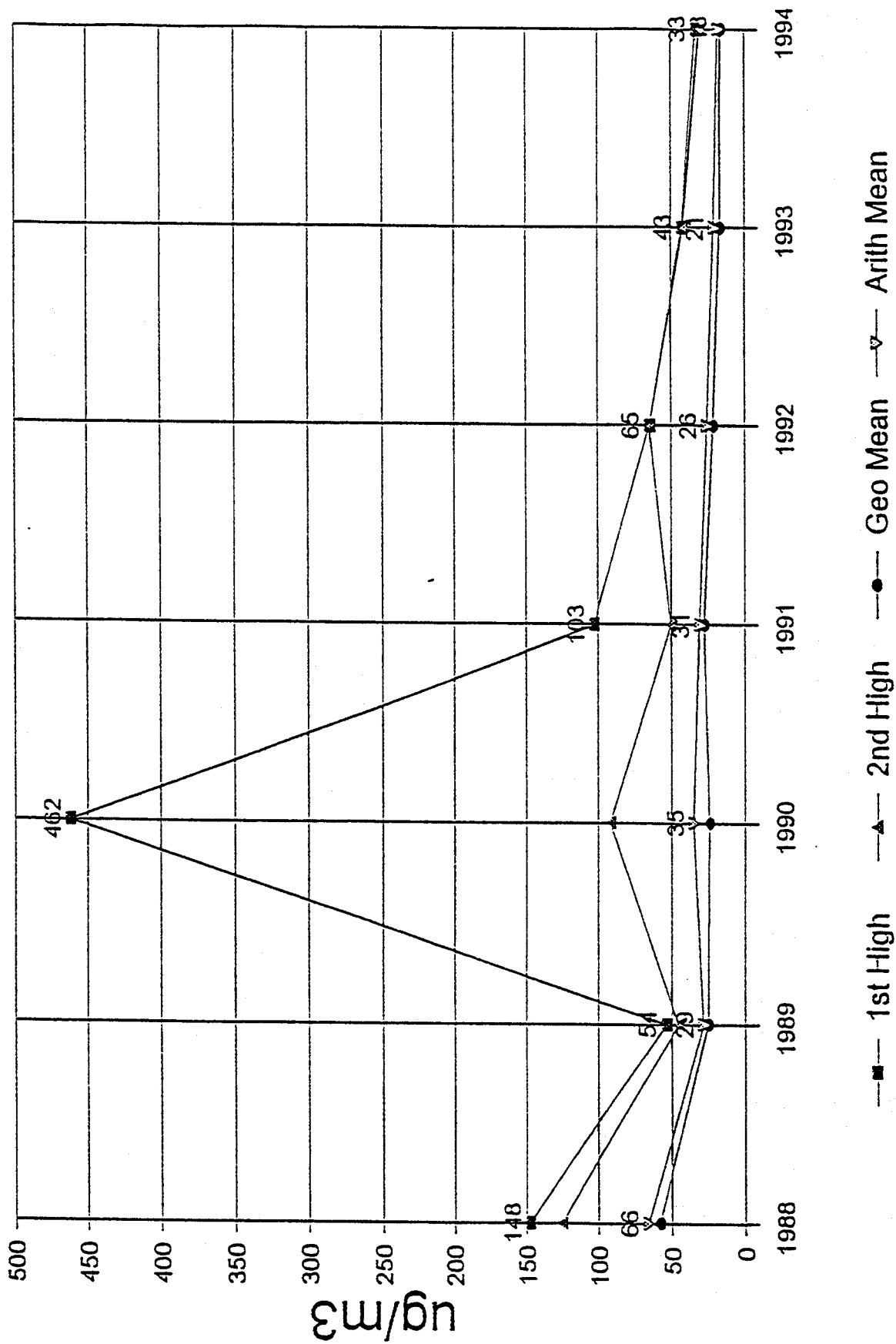
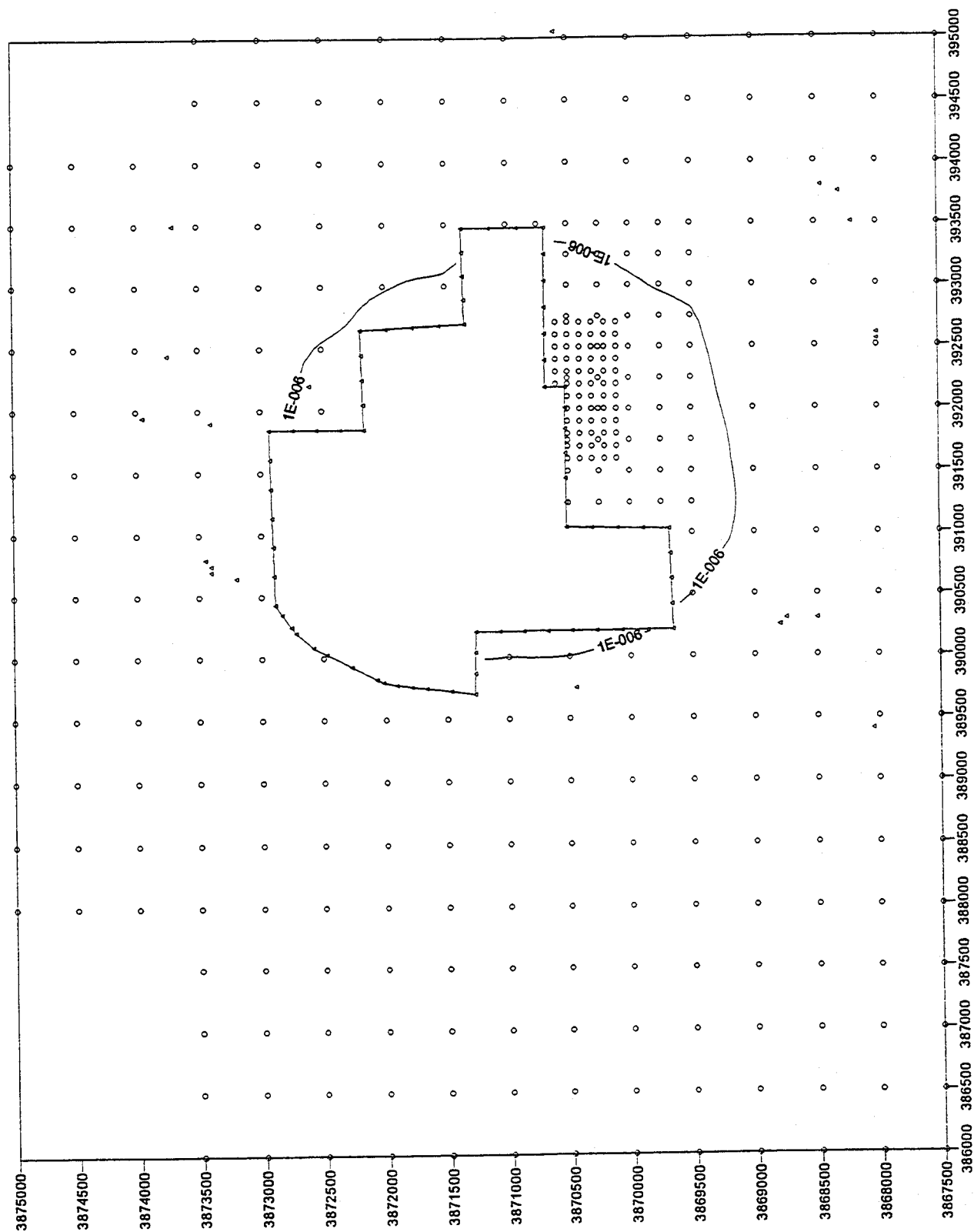


EXHIBIT 11
1E-06 Excess Cancer Risk Isopleth





APPENDIX A



KERN COUNTY AIR POLLUTION CONTROL DISTRICT

THOMAS PAXSON, P.E., APCO

BAKERSFIELD OFFICE

2700 "M" STREET, SUITE 290
BAKERSFIELD, CA 93301
PHONE: (805) 861-2593
FAX: (805) 861-2595



MOJAVE OFFICE

1775 HIGHWAY 58
MOJAVE, CA 93501
PHONE: (805) 824-4631
FAX: (805) 824-1140

June 1, 1995

Mr. Greg McNeish
WZI, Inc.
4700 Stockdale Hwy
Suite 120
P.O. BOX 9217
Bakersfield, CA 93389

SUBJECT: Golden Queen Mining-Review of Modelling Protocol

Dear Mr. McNeish:

We have reviewed your proposed modelling protocol to be used in estimating the air quality impact of the proposed Golden Queen Mining Company project. This protocol is acceptable provided you include the following revisions/clarifications:

- 1) Impact of project on State and National Ambient Air Quality Standards, (above background concentrations) must be determined and discussed in EIR/EIS document.
- 2) Model input and output results shall be submitted on 3-1/2" disk.
- 3) Federal and/or Cal-EPA adopted/approved Dispersion Modelling, Risk Assessment, and Risk Management Guideline shall be followed. Any variations from regulatory defaults shall be clearly identified and discussed in final report and any such variations shall receive prior approval.
- 4) Combustion emissions from all anticipated sources shall be included in modelling and in NSR permitting.
- 5) Emissions from gold recovery/refining operations shall be included in modelling and NSR permitting.
- 6) Calculation of emission rates showing all assumptions shall be submitted. Calculation of fugitive emissions shall utilize most recent AP-42 equations and on-site raw material data.

Mr. Greg McNeish
June 1, 1995
Page 2.

- 7) Copy of on-site raw material laboratory data used in calculations shall be submitted including description of how sample was obtained and test methods used in analysis.
- 8) Emissions occurring from unloading of ore and waste onto stockpile or leach pile shall be included in modelling.
- 9) Reflection coefficient may be adjusted for settling velocities if on-site data is previously approved for use in calculating the settling velocity as specified in ISC2 manual. Default values for deposition velocity may not be used in place of settling velocity in determining alternate reflection coefficient.
- 10) Reduce grid spacing to 100 meters around estimated peak off-site locations as opposed to 500 meter spacing proposed. Include map of area showing receptor locations.
- 11) Please indicate location of meteorological stations on a topographic map of area. Also include wind rose, plot or table of average hourly wind speeds, discussion of treatment of calms and discussion of averaging times used in modelling.
- 12) Discuss suitability of Nevada mixing height data as opposed to using mixing height data from nearby Edwards AFB. Unless data clearly indicates Nevada is more representative of conditions near Soledad Mountain, mixing height data from Edwards AFB should be used.
- 13) Impact analysis on Class I and Class II areas shall be performed pursuant to EPA requirements.

Thank you for your cooperation in this matter. Should you have any questions, please contact Ms. Mary J. Flynn at (805) 861-2593.

Sincerely,



Thomas Paxson, P.E.
Air Pollution Control Officer

APPENDIX B

**BEE-Line Software: BEEST for Windows data input file
 ** Date: 11/4/96 Time: 6:11:27 PM
 NO ECHO

CO STARTING
 CO TITLEONE GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 CO TITLETWO PM10 Analysis - 1991 Met - 6 MTPY Hourly Average
 CO MODELOPT CONC RURAL MSGPRO
 CO AVERTIME 24
 CO POLLUTID PM-10
 CO TERREHGS ELEV
 CO RUNORNOT RUN
 CO FINISHED

SO STARTING
 SO ELEVUNIT METERS
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 RE DISCCART 394000 3875000 2680
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 ME SURFDATA 98765 1991
 ME UAIRDATA 24128 1991 WINNEMUCCA,NV 40.900 117.800
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 ME WINDPROF B 0.07 0.07 0.07 0.07 0.07 0.07
 ME WINDPROF C 0.1 0.1 0.1 0.1 0.1 0.1
 ME WINDPROF D 0.15 0.15 0.15 0.15 0.15 0.15
 ME WINDPROF E 0.35 0.35 0.35 0.35 0.35 0.35
 ME WINDPROF F 0.55 0.55 0.55 0.55 0.55 0.55
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 ME DTHETADZ B 0 0 0 0 0 0
 ME DTHETADZ C 0 0 0 0 0 0
 ME DTHETADZ D 0 0 0 0 0 0
 ME DTHETADZ E 0.02 0.02 0.02 0.02 0.02 0.02
 ME DTHETADZ F 0.035 0.035 0.035 0.035 0.035 0.035
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 OU MAXTABLE 24 50
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 OU PLOTFILE 24 DRLPIT5 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 DRLPIT6 FIRST G:@BEEST@GQ@FENCE.GRF 30
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 OU PLOTFILE 24 BLSPIT2 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 BLSPIT3 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 BLSPIT4 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 BLSPIT5 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 BLSPIT6 FIRST G:@BEEST@GQ@FENCE.GRF 30
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 OU PLOTFILE 24 HAUL_5 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 HAUL_6 FIRST G:@BEEST@GQ@FENCE.GRF 30
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 OU PLOTFILE 24 DZG_W2 FIRST G:@BEEST@GQ@FENCE.GRF 30
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 OU PLOTFILE 24 PIT_2 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 PIT_3 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 PIT_4 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 PIT_5 FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 PIT_6 FIRST G:@BEEST@GQ@FENCE.GRF 30
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 OU PLOTFILE 24 DOZING FIRST G:@BEEST@GQ@FENCE.GRF 30
 OU PLOTFILE 24 EROSION FIRST G:@BEEST@GQ@FENCE.GRF 30
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APPENDIX C

**BEE-Line Software: BEEST for Windows data input file
** Date: 11/13/96 Time: 11:01:36 AM
NO ECHO

CO STARTING
CO TITLEONE GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
CO TITLETWO PM10 Analysis - 1991 Met - 6 MMTFY Hourly Average
CO MODELOPT CONC RURAL MSGPRO
CO AVERTIME 1 PERIOD
CO POLLUTID PM-10
CO TERREGTS ELEV
CO RUNORNOT RUN
CO FINISHED

SO STARTING
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SO LOCATION DRLPIT1 AREA 390138.00 3872375.00 960.1200
SO SRCPARAM DRLPIT1 1 2.0000 400.00 250.00 45.00 .00
SO LOCATION DRLPIT2 AREA 390421.00 3872091.00 975.3600
SO SRCPARAM DRLPIT2 1 2.0000 400.00 250.00 45.00 .00
SO LOCATION DRLPIT3 AREA 390876.00 3871798.00 1036.2000
SO SRCPARAM DRLPIT3 1 2.0000 1100.00 350.00 .00 .00
SO LOCATION DRLPIT4 AREA 390640.00 3871432.00 1097.2800
SO SRCPARAM DRLPIT4 1 2.0000 1350.00 350.00 .00 .00
SO LOCATION DRLPIT5 AREA 391200.00 3871050.00 1097.2800
SO SRCPARAM DRLPIT5 1 2.0000 400.00 380.00 .00 .00
SO LOCATION DRLPIT6 AREA 390800.00 3871050.00 1097.2800
SO SRCPARAM DRLPIT6 1 2.0000 400.00 380.00 .00 .00
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SO SRCPARAM BLSPLIT1 1.0 50.0000 93.0233 23.2558
SO LOCATION BLSPLIT2 VOLUME 390553 3872050 975.3600
SO SRCPARAM BLSPLIT2 1.0 50.0000 93.0233 23.2558
SO LOCATION BLSPLIT3 VOLUME 391726.00 3871973.00 1127.7600
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SO LOCATION BLSPLIT5 VOLUME 391400 3871240 1097.2800
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SO LOCATION BLSPLIT6 VOLUME 391000 3871240 1097.2800
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SO SRCPARAM TRU_WST1 1 2.0000 375 575 -5.00 .00
SO LOCATION TRU_WST2 AREA 390364 3870483 1066.8
SO SRCPARAM TRU_WST2 1 2.0000 525 825 -10 .00
SO LOCATION TRU_WST3 AREA 390885 3870573 1127.76
SO SRCPARAM TRU_WST3 1 2.0000 300.00 457 .00 .00
SO LOCATION TRU_WST4 AREA 391190 3870573 1127.76
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 SO LOCATION ORE_PAD2 AREA 389825 3871350 914.4
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 SO LOCATION HGRE TORT POINT 390810 3872320 908.30
 SO SRCPARAM HGRE TORT 1 5 400 2.1158 2.
 SO LOCATION ADSORPT POINT 390810 3872340 908.3
 SO SRCPARAM ADSORPT 1 5 298 2.12 2.
 SO LOCATION FURNACE POINT 390860 3872340 908.3
 SO SRCPARAM FURNACE 1.0 5 394 6.474 .18
 SO LOCATION DSLTNK POINT 390920 3872340 908.3
 SO SRCPARAM DSLTNK 1.0 2 298 1. .18
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 SO SRCGROUP DRLPIT2 DRLPIT2
 SO SRCGROUP DRLPIT3 DRLPIT3
 SO SRCGROUP DRLPIT4 DRLPIT4
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 SO SRCGROUP HAUL_3 HAUL_3
 SO SRCGROUP HAUL_4 HAUL_4
 SO SRCGROUP HAUL_5 HAUL_5
 SO SRCGROUP HAUL_6 HAUL_6
 SO SRCGROUP BGHSE1 BGHSE1
 SO SRCGROUP TRU_WST1 TRU_WST1
 SO SRCGROUP TRU_WST2 TRU_WST2
 SO SRCGROUP TRU_WST3 TRU_WST3
 SO SRCGROUP TRU_WST4 TRU_WST4
 SO SRCGROUP TRU_WST5 TRU_WST5
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 SO SRCGROUP DZG_W3 DZG_W3
 SO SRCGROUP DZG_W4 DZG_W4
 SO SRCGROUP DZG_W5 DZG_W5
 SO SRCGROUP ERSN_W1 ERSN_W1
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 SO SRCGROUP ERSN_W3 ERSN_W3
 SO SRCGROUP ERSN_W4 ERSN_W4
 SO SRCGROUP ERSN_W5 ERSN_W5
 SO SRCGROUP ORE_PAD1 ORE_PAD1
 SO SRCGROUP ORE_PAD2 ORE_PAD2
 SO SRCGROUP HGRE TORT HGRE TORT
 SO SRCGROUP ADSORPT ADSORPT
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 SO SRCGROUP DSLTNK DSLTNK
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ME STARTING

ME INPUTFIL g:METDATA\SOL\SOL91M.ASC
 ME ANEMHGT 10.0000
 ME SURFDATA 98765 1991
 ME UAIRDATA 24128 1991 WINNEMUCCA,NV 40.900 117.800
 ME STARTEND 91 1 1 91 12 31
 ME WDROTATE 180.0000
 ME WINDPROF A 0.07 0.07 0.07 0.07 0.07 0.07
 ME WINDPROF B 0.07 0.07 0.07 0.07 0.07 0.07
 ME WINDPROF C 0.1 0.1 0.1 0.1 0.1 0.1
 ME WINDPROF D 0.15 0.15 0.15 0.15 0.15 0.15
 ME WINDPROF E 0.35 0.35 0.35 0.35 0.35 0.35
 ME WINDPROF F 0.55 0.55 0.55 0.55 0.55 0.55
 ME DTHETADZ A 0 0 0 0 0
 ME DTHETADZ B 0 0 0 0 0
 ME DTHETADZ C 0 0 0 0 0
 ME DTHETADZ D 0 0 0 0 0
 ME DTHETADZ E 0.02 0.02 0.02 0.02 0.02 0.02
 ME DTHETADZ F 0.035 0.035 0.035 0.035 0.035 0.035
 ME FINISHED

OU STARTING

OU RECTABLE 1 FIRST
 OU POSTFILE 1 DRLPIT1 UNIFORM G:BEEST*GQ*GQHRA.PST 20
 OU POSTFILE 1 DRLPIT2 UNIFORM G:BEEST*GQ*GQHRA.PST 20
 OU POSTFILE 1 DRLPIT3 UNIFORM G:BEEST*GQ*GQHRA.PST 20
 OU POSTFILE 1 DRLPIT4 UNIFORM G:BEEST*GQ*GQHRA.PST 20
 OU POSTFILE 1 DRLPIT5 UNIFORM G:BEEST*GQ*GQHRA.PST 20

OU PLOTFILE PERIOD ERSN_W2 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ERSN_W3 FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ERSN_W3 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ERSN_W4 FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ERSN_W4 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ERSN_W5 FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ERSN_W5 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ORE_PAD1 FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ORE_PAD1 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ORE_PAD2 FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ORE_PAD2 G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 HGRETORT FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD HGRETORT G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 ADSORPT FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD ADSORPT G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 FURNACE FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD FURNACE G:BEESTGQGQHRA.GRF 30
OU PLOTFILE 1 DSLTNK FIRST G:BEESTGQGQHRA.GRF 30
OU PLOTFILE PERIOD DSLTNK G:BEESTGQGQHRA.GRF 30
OU FINISHED



APPENDIX D

Golden Queen Mining

Sample Collection and Analysis Summary

A total of four samples representing the types of overburden material at the site and three samples representing the types of ore material at the site were collected for chemical analysis. The ore material samples were collected from rock outcrops while the overburden material samples were collected from samples of retained drill cuttings which were stored on-site. All samples were collected in canvas bags and the bags labeled with a water proof marker. The samples were then delivered to either McClelland Laboratories, of Sparks, Nevada, or Sierra Environmental Monitoring of Reno, Nevada, for analysis. The samples were analyzed for both total (TTL) and soluble (STL) concentrations of CAM 17 Metals. The laboratory analytical results are summarized as follows:

Golden Queen Onsite Sampling Results										
Basis for										
	Golden Queen		Rhyolite	Siliceous	Pyroclastic	OT-3	RT-1	RT-2	RT-3	RT-4
	Ore	Waste								
18540299 Cr 6	5.00E-07	5.00E-07								
7439976 Hg	1.14E-06	3.25E-06	4.30E-07	2.10E-06		9.00E-07	6.90E-06	1.00E-06	9.00E-07	4.20E-06
7782492 Se	1.53E-07	1.88E-07	4.70E-08	1.25E-08		4.00E-07	5.00E-07	1.00E-07	5.00E-08	1.00E-07
7440382 As	4.36E-05	8.53E-05	3.50E-07	5.20E-07		1.30E-04	7.50E-05	1.40E-04	5.00E-05	7.60E-05
7440417 Be	5.14E-05	3.13E-07	7.40E-05	8.00E-05		2.50E-07	2.50E-07	2.50E-07	5.00E-07	2.50E-07
7440439 Cd	1.53E-06	3.08E-06	2.50E-07	1.25E-07		4.20E-06	2.80E-06	5.50E-06	1.50E-06	2.50E-06
7440508 Cu	3.77E-06	7.15E-06	3.20E-06	3.80E-06		4.30E-06	1.00E-05	6.00E-06	5.80E-06	6.80E-06
7439921 Pb	2.97E-05	1.30E-05	2.50E-05	3.20E-06		6.10E-05	8.30E-06	5.50E-06	3.30E-05	5.30E-06
7440020 Ni	2.60E-06	2.28E-06	3.20E-06	1.60E-06		3.00E-06	3.50E-06	1.00E-06	1.00E-06	3.60E-06
7439965 Mn	7.83E-05	7.83E-05								
7440666 Zn	5.73E-06	1.09E-05	6.20E-06	2.00E-06		9.00E-06	1.10E-05	8.20E-06	1.60E-05	8.50E-06
WASTE										
		Average	Maximum	Minimum						
18540299 Cr 6										
7439976 Hg	1.14E-06	2.10E-06	4.30E-07			3.25E-06	6.90E-06	9.00E-07		
7782492 Se	1.53E-07	4.00E-07	1.25E-08			1.88E-07	5.00E-07	5.00E-08		
7440382 As	4.36E-05	1.30E-04	3.50E-07			8.53E-05	1.40E-04	5.00E-05		
7440417 Be	5.14E-05	8.00E-05	2.50E-07			3.13E-07	5.00E-07	2.50E-07		
7440439 Cd	1.53E-06	4.20E-06	1.25E-07			3.08E-06	5.50E-06	1.50E-06		
7440508 Cu	3.77E-06	4.30E-06	3.20E-06			7.15E-06	1.00E-05	5.80E-06		
7439921 Pb	2.97E-05	6.10E-05	3.20E-06			1.30E-05	3.30E-05	5.30E-06		
7440020 Ni	2.60E-06	3.20E-06	1.60E-06			2.28E-06	3.60E-06	1.00E-06		
7439965 Mn	7.83E-05	7.83E-05								
7440666 Zn	5.73E-06	9.00E-06	2.00E-06			1.09E-05	1.60E-05	8.20E-06		

Golden Queen Mining

CONSTITUENT CONCENTRATIONS COMPARED

	RAND	CACTUS Blasthole	CACTUS Crusher	STD HILL
	LAB TEST			
18540299 Cr 6 *	2.50E-07 +	5.00E-07 +	5.00E-07	2.00E-08
7439976 Hg *	1.00E-08	1.38E-06	6.50E-06	2.10E-07
7782492 Se *	1.40E-07	9.00E-07 +	2.50E-07	5.00E-08
7440382 As	1.14E-03	1.65E-03	2.14E-03	1.20E-05
7440417 Be *	1.80E-07 +	2.50E-07	1.09E-06	4.00E-07
7440439 Cd	1.70E-07	4.10E-06	8.38E-06	2.10E-07
7440508 Cu	3.14E-05	9.90E-06	3.67E-05	2.20E-06
7439921 Pb	1.88E-05	3.96E-05	4.05E-05	1.20E-05
7440020 Ni	2.29E-05 +	1.25E-06	5.29E-06	2.00E-06
7439965 Mn	2.50E-04	1.02E-05	7.83E-05	5.95E-04
7440666 Zn	7.36E-05	1.95E-05	2.22E-05	8.50E-05
1175 SiO2	1.21E-01	1.04E-01	8.87E-02	8.60E-02

+ 50% detection limit

	Basis for Golden Queen		Golden Queen Onsite Sampling Results						
	Ore	Waste	Rhyolite	Siliceous Pyroclastic	OT-3	RT-1	RT-2	RT-3	RT-4
18540299 Cr 6	5.00E-07	5.00E-07							
7439976 Hg	1.14E-06	3.25E-06	4.30E-07	2.10E-06	9.00E-07	6.90E-06	1.00E-06	9.00E-07	4.20E-06
7782492 Se	1.53E-07	1.88E-07	4.70E-08	1.25E-08	4.00E-07	5.00E-07	1.00E-07	5.00E-08	1.00E-07
7440382 As	4.36E-05	8.53E-05	3.50E-07	5.20E-07	1.30E-04	7.50E-05	1.40E-04	5.00E-05	7.60E-05
7440417 Be	5.14E-05	3.13E-07	7.40E-05	8.00E-05	2.50E-07	2.50E-07	2.50E-07	5.00E-07	2.50E-07
7440439 Cd	1.53E-06	3.08E-06	2.50E-07	1.25E-07	4.20E-06	2.80E-06	5.50E-06	1.50E-06	2.50E-06
7440508 Cu	3.77E-06	7.15E-06	3.20E-06	3.80E-06	4.30E-06	1.00E-05	6.00E-06	5.80E-06	6.80E-06
7439921 Pb	2.97E-05	1.30E-05	2.50E-05	3.20E-06	6.10E-05	8.30E-06	5.50E-06	3.30E-05	5.30E-06
7440020 Ni	2.60E-06	2.28E-06	3.20E-06	1.60E-06	3.00E-06	3.50E-06	1.00E-06	1.00E-06	3.60E-06
7439965 Mn	7.83E-05	7.83E-05							
7440666 Zn	5.73E-06	1.09E-05	6.20E-06	2.00E-06	9.00E-06	1.10E-05	8.20E-06	1.60E-05	8.50E-06

	ORE			WASTE		
	Average	Maximum	Minimum	Average	Maximum	Minimum
18540299 Cr 6						
7439976 Hg	1.14E-06	2.10E-06	4.30E-07	3.25E-06	6.90E-06	9.00E-07
7782492 Se	1.53E-07	4.00E-07	1.25E-08	1.88E-07	5.00E-07	5.00E-08
7440382 As	4.36E-05	1.30E-04	3.50E-07	8.53E-05	1.40E-04	5.00E-05
7440417 Be	5.14E-05	8.00E-05	2.50E-07	3.13E-07	5.00E-07	2.50E-07
7440439 Cd	1.53E-06	4.20E-06	1.25E-07	3.08E-06	5.50E-06	1.50E-06
7440508 Cu	3.77E-06	4.30E-06	3.20E-06	7.15E-06	1.00E-05	5.80E-06
7439921 Pb	2.97E-05	6.10E-05	3.20E-06	1.30E-05	3.30E-05	5.30E-06
7440020 Ni	2.60E-06	3.20E-06	1.60E-06	2.28E-06	3.60E-06	1.00E-06
7439965 Mn						
7440666 Zn	5.73E-06	9.00E-06	2.00E-06	1.09E-05	1.60E-05	8.20E-06

GOLDEN QUEEN MINING CO., INC.

P.O. BOX 878, ROSAMOND, CA 93560-0878

0733.0010

FAX COPY

Date:

8/4/95

Number of pages including cover sheet:

17

To:

Dane Weiss &
Alan Wagner

Phone:

Fax phone:

CC:

From: LYNNE D. ROSINSKI, Admin.

Phone:

(805) 256-0120

Fax phone:

(805) 256-6526

REMARKS:

☐ Urgent☒ For your review☐ Reply ASAP☒ Please comment

This is the report on the test results per our conversation earlier today. Please give Ed or I a call & let us know if this work is sufficient

Thanked

Lynne

Laboratory
Analysis Report
PRELIMINARY REPORT



Sierra
Environmental
Monitoring, Inc.

Date : 8/24/95
Client : GQM-001
Taken by: A. WAGGONER-H21
Report : 13961
PO# : 257

GOLDEN QUEEN MINE
A. WAGGONER-H21
P.O. BOX 873
ROSEMUND, CA 93560

Page: 1

Sample	Collected Date	Time	ANTIMONY ICP MG/L	ARSENIC AA HYDRIDE MG/L	BARIUM ICP MG/L	BERYLLIUM ICP MG/L	CADMIUM ICP MG/L	CHROMIUM ICP MG/L
Q2-RT-1 - STLC	8/03/95	:	<0.1	0.41	2.3	<0.01	<0.01	0.25
Q2-RT-1 - TTLC	8/03/95	:	5.3 ug/g	75ug/g	67 ug/g	<0.5 ug/g	2.8 ug/g	110 ug/g
Q2-RT-2 - STLC	8/03/95	:	<0.1	3.7	3.1	0.02	0.14	3.1
Q2-RT-2 - TTLC	8/03/95	:	6.6 ug/g	140ug/g	140 ug/g	<0.5 ug/g	5.5 ug/g	120 ug/g
Q2-RT-3 - STLC	8/03/95	:	<0.1	0.23	2.4	<0.01	<0.01	0.34
Q2-RT-3 - TTLC	8/03/95	:	<5 ug/g	50ug/g	82 ug/g	0.5 ug/g	1.5 ug/g	72 ug/g
Q2-RT-4 - STLC	8/03/95	:	<0.1	0.60	4.3	0.02	0.02	3.6
Q2-RT-4 - TTLC	8/03/95	:	6.7 ug/g	76ug/g	180 ug/g	<0.5 ug/g	2.5 ug/g	130 ug/g
Q2-OT-3 - STLC	8/03/95	:	<0.1	2.4	2.4	<0.01	0.06	0.68
Q2-OT-3 - TTLC	8/03/95	:	7.8 ug/g	130ug/g	66 ug/g	<0.5 ug/g	4.2 ug/g	130 ug/g
Sample	Collected Date	Time	COBALT ICP MG/L	COPPER, ICP MG/L	LEAD ICP MG/L	MERCURY AA COLD VAPOR MG/L	MOLYBDENUM ICP MG/L	NICKEL ICP MG/L
Q2-RT-1 - STLC	8/03/95	:	0.03	0.23	0.17	<0.005	<0.1	0.20
Q2-RT-1 - TTLC	8/03/95	:	1.0 ug/g	10 ug/g	8.3 ug/g	6.9ug/g	<25 ug/g	3.5 ug/g
Q2-RT-2 - STLC	8/03/95	:	0.01	0.27	0.12	<0.005	<0.1	0.28
Q2-RT-2 - TTLC	8/03/95	:	<0.5 ug/g	6.0 ug/g	5.5 ug/g	1.0ug/g	<25 ug/g	<2 ug/g
Q2-RT-3 - STLC	8/03/95	:	0.01	0.26	0.12	<0.005	<0.1	0.10
Q2-RT-3 - TTLC	8/03/95	:	0.6 ug/g	5.8 ug/g	33 ug/g	0.9ug/g	<25 ug/g	<2 ug/g
Q2-RT-4 - STLC	8/03/95	:	0.03	0.27	0.11	<0.005	<0.1	0.32
Q2-RT-4 - TTLC	8/03/95	:	<0.5 ug/g	6.8 ug/g	5.3 ug/g	4.2ug/g	<25 ug/g	3.6 ug/g
Q2-OT-3 - STLC	8/03/95	:	<0.01	0.12	0.28	<0.005	<0.1	0.12
Q2-OT-3 - TTLC	8/03/95	:	<0.5 ug/g	4.3 ug/g	61 ug/g	8.9ug/g	<25 ug/g	3.0 ug/g
Sample	Collected Date	Time	SELENIUM AA HYDRIDE MG/L	SILVER ICP MG/L	THALLIUM ICP MG/L	THORIUM ICP MG/L	ZINC ICP MG/L	NEUTRALIZA TION POT. TOMS/100GT
Q2-RT-1 - STLC	8/03/95	:	<0.001	<0.02	<0.08	<0.1	1.1	
Q2-RT-1 - TTLC	8/03/95	:	0.5ug/g	2.6 ug/g	25 ug/g	<5 ug/g	11 ug/g	
Q2-RT-1 - ASP/NP	8/03/95	:						1.3
Q2-RT-2 - STLC	8/03/95	:	<0.001	<0.02	0.17	<0.1	1.1	
Q2-RT-2 - TTLC	8/03/95	:	0.1ug/g	2.3 ug/g	40 ug/g	<5 ug/g	3.2 ug/g	
Q2-RT-2 - ACP/NP	8/03/95	:						1.3

Continued on Next Page

Approved By:

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

William F. Pillsbury
President

1135 Financial Blvd.
Reno, NV 89502
Phone (702) 857-2400
FAX (702) 857-2404

John C. Seher
Manager

**Laboratory
Analysis Report
PRELIMINARY REPORT**



**Sierra
Environmental
Monitoring, Inc.**

Date : 8/24/95

Client : GQM-001

Taken by: A. WAGGONER-WSI

Report : 13961

PO# : 257

**GOLDEN QUEEN MINE
A. WAGGONER-WSI
P.O. BOX 878
ROSEMUND, CA 93560**

Page: 2

Sample	Collected Date	Time	SELENIUM AA HYDRIDE MG/L	SILVER ICP MG/L	THALLIUM ICP MG/L	VANADIUM ICP MG/L	ZINC ICP MG/L	NEUTRALIZA TION POT. TONS/1000T
GR-RT-3 - STLC	8/03/95	:	<0.001	<0.02	0.21	<0.1	1.4	
GR-RT-3 - TTLC	8/03/95	:	<0.1ug/g	1.2 ug/g	39 ug/g	<5 ug/g	16 ug/g	0.9
GR-RT-3 - AGP/NP	8/03/95	:						
GR-RT-4 - STLC	8/03/95	:	<0.001	<0.02	0.20	<0.1	1.2	
GR-RT-4 - TTLC	8/03/95	:	0.1ug/g	<1 ug/g	25 ug/g	<5 ug/g	8.5 ug/g	0.1
GR-RT-4 - AGP/NP	8/03/95	:						
GR-OT-3 - STLC	8/03/95	:	<0.001	<0.02	<0.08	<0.1	1.5	
GR-OT-3 - TTLC	8/03/95	:	0.4ug/g	21 ug/g	17 ug/g	<5 ug/g	9.0 ug/g	2.1
GR-OT-3 - AGP/NP	8/03/95	:						
Sample	Collected Date	Time	ACID GEN. POTENTIAL TONS/1000T	DIRESTION- TOTAL METALS	ACID GEN. & POTEN.SULFIDE TONS/1000T	STLC EXTRACT	PH-SATUR PASTE S.U.	
GR-RT-1 - STLC	8/03/95	:				YES		
GR-RT-1 - TTLC	8/03/95	:		YES			5.97	
GR-RT-1 - AGP/NP	8/03/95	:				YES		
GR-RT-2 - STLC	8/03/95	:		YES			7.16	
GR-RT-2 - TTLC	8/03/95	:				YES		
GR-RT-2 - AGP/NP	8/03/95	:						
GR-RT-3 - STLC	8/03/95	:		YES			5.04	
GR-RT-3 - TTLC	8/03/95	:				YES		
GR-RT-3 - AGP/NP	8/03/95	:						
GR-RT-4 - STLC	8/03/95	:		YES			6.12	
GR-RT-4 - TTLC	8/03/95	:				YES		
GR-RT-4 - AGP/NP	8/03/95	:						
GR-OT-3 - STLC	8/03/95	:		YES			7.11	
GR-OT-3 - TTLC	8/03/95	:						
GR-OT-3 - AGP/NP	8/03/95	:						

Approved By: _____
This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

William F. Pillsbury
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1135 Financial Blvd.
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John C. Seher
Manager



McCLELLAND LABORATORIES, INC.

1016 Greg Street, Sparks, Nevada 89431 702 / 356-1300

FAX 702 / 356-8917

December 19, 1990

RECEIVED
AUG 03 1995

Mr. Paul Chamberlin
Chamberlin & Associates, Inc.
7463 West Otero Place
Littleton, CO 80123

Dear Paul:

Enclosed is our report concerning environmental detoxification washing results for the Soledad Mountain bulk ore samples. This is an addendum to our final metallurgical report dated July 18, 1990.

I apologize for the delay in providing this report.

Sincerely,

Jack S. McPartland
Metallurgist

JSM:aah
Enclosure



McCLELLAND LABORATORIES, INC.

1016 Greg Street, Sparks, Nevada 89411 702 / 356-1300
FAX 702 / 356-8917

**Report
on
Detoxification Washing - Soledad Mountain Column Leached Residues
MLI Job No. 1389, C.O. #1
December 7, 1990**

for

**Mr. Paul Chamberlin
Chamberlin and Associates, Inc.
7463 West Otero Place
Littleton, CO 80123**

DETOXIFICATION PROCEDURES AND RESULTS

Detailed detoxification washing and sampling for environmental analyses were performed on select column leached residues from the cyanidation testing program described in the MLI report dated July 18, 1990. Column residues from the two Polycom grinding test composites were washed in the leaching columns with fresh Reno tap water (approximately pH 7) for 20 days to determine cyanide compound detoxification rates. Wash water was applied at the same rate used for leaching (0.005 gpm/ft²) for the first 19 days. Application rate was doubled (0.010 gpm/ft²) on the final day of washing. Each day's wash effluent volume was measured, and sampled for Au, Ag, pH, and free cyanide analysis (in-house). A 1 liter volume of each effluent was preserved by adjusting the pH to above 12.0 with NaOH, and was submitted to High Desert Laboratories (HDL) for total, WAD, and free cyanide analyses. HDL is an analytical laboratory, based in Sparks, Nevada, which participates in the Water Supply and Water Pollution Performance Evaluation Study Programs that are conducted by the Environmental Monitoring Systems Laboratory of the USEPA.

Immediately after each leached residue was removed from the column, a moist sample was taken for the CAM-WET analysis for Total Threshold Limit Concentration (TTLC) values, and Soluble Threshold Limit Concentration (STLC) values with citric acid extract. Moist samples were also taken for total, WAD, and free cyanide analyses, all performed by HDL. After each residue was air dried, an additional sample was taken and was submitted to HDL for acid generation potential/acid neutralization potential (AGP/ANP) analysis.

Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

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Wash effluent analytical results for total, WAD, and free cyanide are provided along with effluent pH data in Tables 1 and 2. Analytical results for CAM-WET tests performed on leached residues are shown in Tables 3 and 4.

Results from cyanide analyses of leached residues are presented in Table 5. Results from AGP/ANP tests and original analytical reports (HDL) are provided in the Appendix to this report.

**Table 1. - Cyanide Detoxification Data, Column Leach Test,
Polycom Grinding Test Product Rhyolite Composite**

Wash Time, Days	Effluent Analysis			
	pH	Cyanide, mg/l		
		Total	WAD	Free
1	11.6	114	111	127
2	11.5	30	22	31
3	11.4	8.9	8.0	9.8
4	11.0	4.7	4.1	4.8
5	11.6	2.2	1.7	2.5
6	11.4	1.1	1.1	0.92
7	11.2	0.63	0.56	0.51
8	11.3	0.37	0.35	0.36
9	11.1	0.26	0.27	0.33
10	11.0	0.22	0.21	0.29
11	10.9	0.56	0.51	0.77
12	10.6	2.9	2.6	3.2
13	10.2	3.7	3.1	3.5
14	10.3	1.3	1.1	1.4
15	10.3	0.68	0.65	0.78
16	10.8	0.37	0.37	0.46
17	10.5	3.6	3.9	4.1
18	10.6	9.1	9.0	11
19	10.5	1.4	1.3	1.5
20	10.4	1.2	1.2	1.3

Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

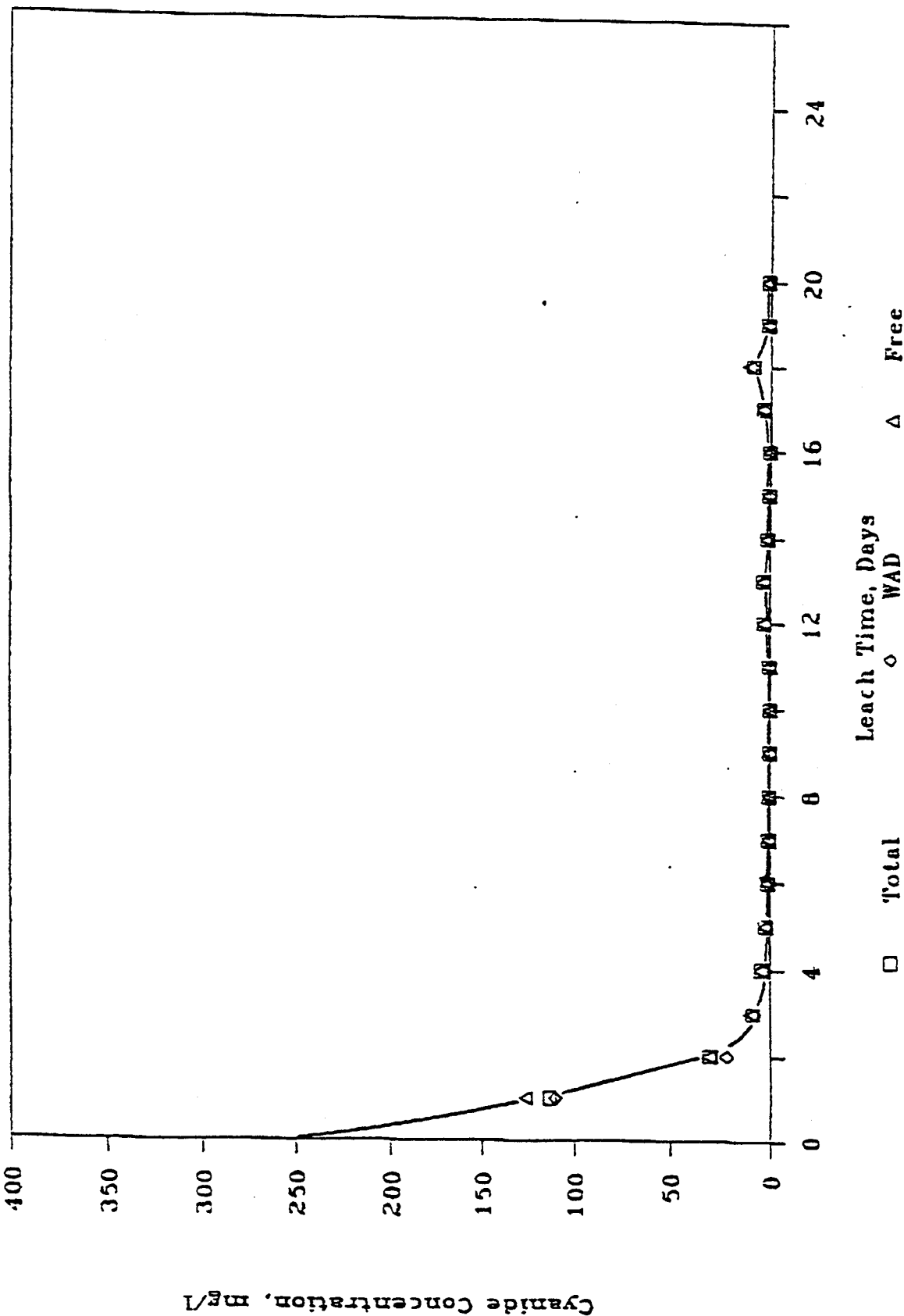
-3-

Table 2. - Cyanide Detoxification Data, Column Leach Test,
Polycom Grinding Test Product Siliceous Pyroclastic Composite

Wash Time, Days	Effluent Analysis			
	pH	Cyanide, mg/l		
		Total	WAD	Free
1	11.1	147	113	129
2	10.8	44	34	46
3	10.6	11	9.3	9.7
4	10.9	3.4	2.7	2.7
5	10.9	1.8	1.4	1.4
6	10.6	1.1	1.1	1.1
7	10.7	0.90	0.80	0.76
8	10.7	0.69	0.55	0.52
9	10.3	0.75	0.56	0.74
10	10.3	0.54	0.54	0.61
11	10.5	0.65	0.60	0.61
12	10.5	0.44	0.36	0.46
13	9.9	0.72	0.67	0.79
14	10.2	0.75	0.77	1.5
15	10.2	0.57	0.57	0.81
16	10.7	1.0	0.91	1.1
17	10.4	1.5	1.7	1.8
18	10.5	3.4	3.2	3.6
19	9.8	8.1	7.9	9.7
20	10.3	2.2	2.1	2.4

Figure 1. - Detoxification Profiles,

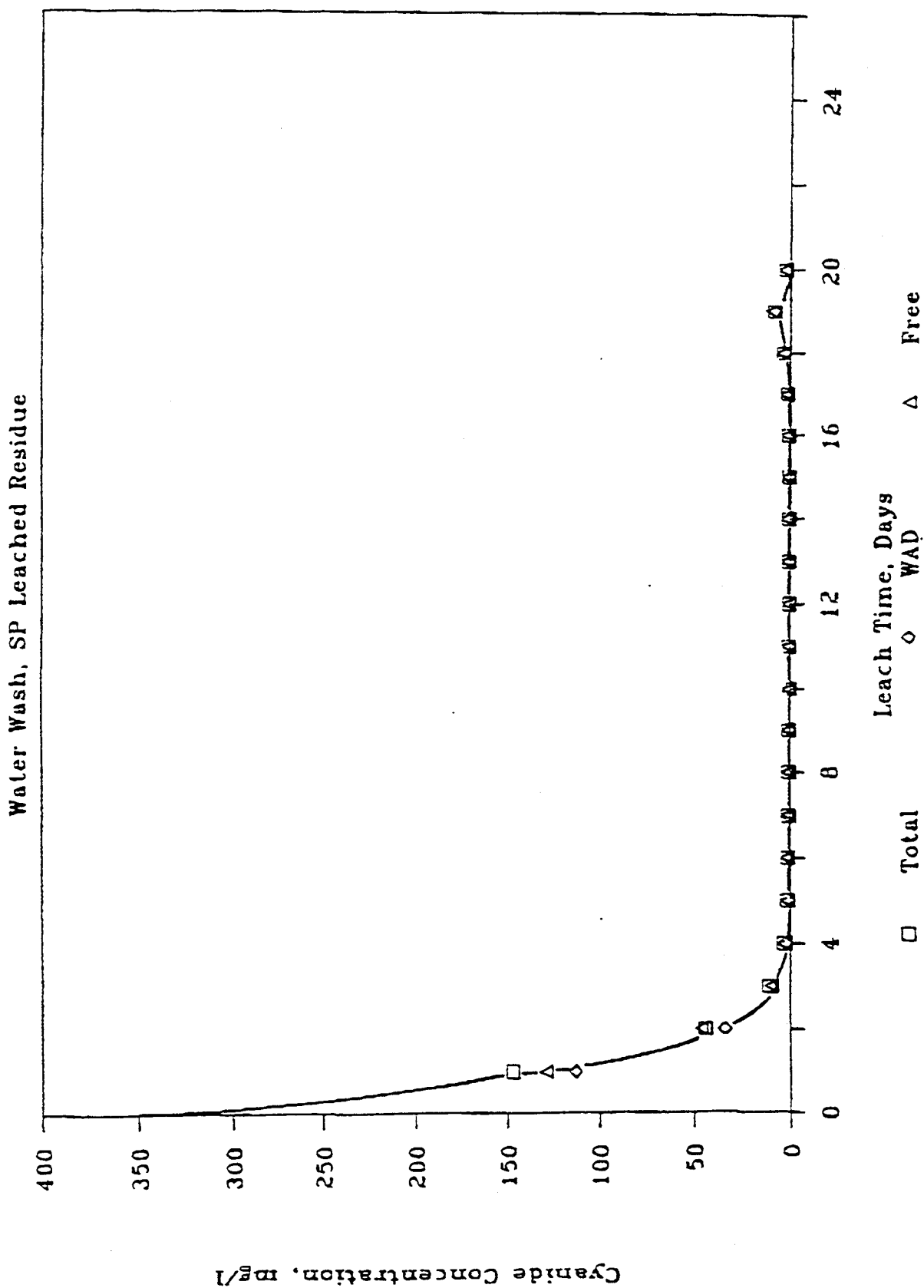
Water Wash, Rhyolite Leached Residue



Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

-5-

Figure 2. - Detoxification Profiles,



Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

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Table 3. - Analytical Results, CAM-WET Tests,
Polycom Grinding Test Product Rhyolite Composite

Results	TTLC mg/kg	Total Content mg/kg	STLC mg/l	Extract Content mg/l
Sb	500	<6.3	15	<1
As	500	0.35	5	0.11
Ba	10,000	250	100	32
Be	75	74	0.75	<0.5
Cd	100	<0.25	1.0	<0.02
Cr	2,500	2.7	560	0.15
Co	8,000	<6.3	80	<1.0
Cu	2,500	3.2	25	<0.1
Pb	1,000	25	5	<0.1
Hg	20	0.43	0.2	0.005
Mo	3,500	1,241	350	<1.0
Ni	2,000	<3.2	20	<0.5
Se	100	0.047	1.0	<0.005
Ag	500	4.0	5	<0.02
Tl	700	78	7.0	<0.5
V	2,400	147	24	<2.0
Zn	5,000	6.2	250	0.12
F	18,000	<2.5	180	0.72

Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

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Table 4. - Analytical Results, CAM-WET Tests,
Polycom Grinding Test Product Siliceous Pyroclastic Composite

Results	TILC mg/kg	Total Content mg/kg	STLC mg/l	Extract Content mg/l
Sb	500	<6.3	15	<1.0
As	500	0.52	5	0.088
Ba	10,000	234	100	48
Be	75	80	0.75	<0.5
Cd	100	<0.25	1.0	<0.02
Cr	2,500	1.1	560	0.15
Co	8,000	<3.2	80	<0.5
Cu	2,500	3.8	25	<0.1
Pb	1,000	3.2	5	0.16
Hg	20	2.1	0.2	0.006
Mo	3,500	2,022	350	<1.0
Ni	2,000	<3.2	20	<0.5
Se	100	<0.025	1.0	<0.005
Ag	500	3.2	5	<0.02
Tl	700	94	7.0	<0.5
V	2,400	167	24	<2.0
Zn	5,000	2.0	250	0.20
F	18,000	<2.5	180	1.4

Table 5. - Cyanide Content, Leached/Washed Residues,
Polycom Grinding Test Product Composites

Cyanide, mg/kg	Composite	
	Rhyolite	Siliceous Pyroclastic
Total	0.71	1.8
WAD	0.46	0.72
Free	0.16	0.25

Detoxification results show that water washing was effective in decreasing average total cyanide from approximately 300 mg/l to 1.7 mg/l in 20 days of washing. WAD cyanide analytical procedures are considered more reliable than those for total or free cyanide.

Mr. Paul Chamberlin/Chamberlin & Associates, Inc.
MLI Job No. 1389, C.O. #1 - December 7, 1990

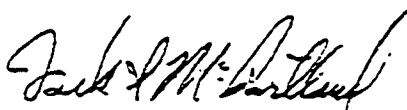
-8-

Free cyanide analysis is considered to be the most subject to matrix interferences of the three analyses. Consequently, WAD cyanide detoxification rates will be discussed in more detail. WAD cyanide concentrations for the Rhyolite residue decreased from about 250 mg/l to as low as 0.21 mg/l with 20 days of water washing. Although the final wash effluent WAD cyanide concentration was 1.2 mg/l, it is felt that, with a sufficiently long water wash cycle, effluent WAD cyanide concentrations would be below the allowable 0.20 mg/l limit.

WAD cyanide concentrations for the SP residue decreased from about 350 mg/l to as low as 0.36 mg/l with 20 days of water washing. Final wash effluent WAD cyanide concentration was higher at 2.1 mg/l. Again however, it is felt that, with a slightly longer water wash cycle, effluent WAD cyanide concentrations would be within acceptable limits.

Results from CAM-WET analyses show the extracts for both leached/washed residues met allowable limits for all elements evaluated, except for TTLC values for beryllium from the SP residue. Total beryllium concentration in the SP residue was 80 mg/kg, which is above the allowable TTLC limit of 75 mg/kg. Total beryllium concentration of 74 mg/kg in the Rhyolite leached residue was near the allowable limit. Citric acid extracts (STLC) for both residues contained no detectable beryllium (<0.50 mg/kg). Both leached/washed residues contained below 2 mg/kg total cyanide.

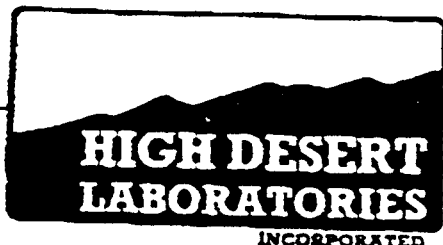
Both leached/washed residues displayed a net acid neutralization potential.



Jack S. McPartland
Metallurgist

APPENDIX

- A-1. Wash Effluent Cyanide Analyses, Rhyolite Column Test.
- A-2. Wash Effluent Cyanide Analyses, Siliceous Pyroclastic Column Test.
- A-3. CAM-WET Analyses, Rhyolite Column Leached Residue.
- A-4. Cyanide Analyses, Rhyolite Column Leached Residue.
- A-5. CAM-WET Analyses, Siliceous Pyroclastic Leached Residue.
- A-6. Cyanide Analyses, Siliceous Pyroclastic Leached Residue.
- A-7. AGP/ANP Analyses, Column Leached Residues



Client: McClelland Laboratories, Incorporated
Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Dates Sampled: Unknown

Dates Submitted: Various

Client Reference: Project 1389, Solution Samples as Below.

Laboratory Reference Number: Various.

Analysis Performed: Dissolved Oxygen.

Sample Identifier

Dissolved Oxygen, as mg O₂/L

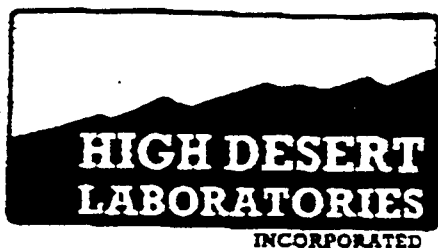
389-1403	16
389-1404	16
389-1405	21
389-1410	5.9
389-1411	7.9
389-1412	9.9
389-1401	5.9
389-1402	3.9
389-1403	3.9
389-1404	3.9
389-1405	27
389-1406	8.9
389-1418	7.9

Analysis By: Hlubucek/Sharp

Approved By: C.W. Sharp

Date: 6/13/80

Laboratory Report Number 580



Client: McClelland Laboratories, Incorporated

Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Dates Sampled: Various

Dates Submitted: Various

Client Reference: Project 1389, 700 Series Wash Solutions.

Laboratory Reference Numbers: Various.

Analysis Performed: Free Cyanide, Weak Acid Dissociable Cyanide,
and Total Cyanide.

<u>Sample Identifier</u>	<u>Free CN. mg/L</u>	<u>WAD CN. mg/L</u>	<u>Total CN. mg/L</u>
389-753, #1	127	111	114
389-754, #2	31	22	30
389-755, #3	9.8	8.0	8.9
389-756, #4	4.8	4.1	4.4
389-757, #5	2.5(2.3)	1.7	2.2
389-758, #6	0.92	1.1	1.1
389-759, #7	0.51	0.56	0.63
389-760, #8	0.36	0.35	0.37
389-761, #9	0.33	0.27	0.26
389-762, #10	0.29	0.21	0.22
389-764	3.2	2.6	2.9
389-765	3.5	3.1	3.7

Note:

Replicate analysis is shown in parenthesis.

Analysis By: Hlubucek/Sharp

Approved By: C.W. Sharp

Date: 6/26/90

Laboratory Report Number 599
Page 1 of 2.



Client: McClelland Laboratories, Incorporated
Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Dates Sampled: Various

Dates Submitted: Various

Client Reference: Project 1389, 800 Series Wash Solutions.

Laboratory Reference Numbers: Various.

Analysis Performed: Free Cyanide, Weak Acid Dissociable Cyanide,
and Total Cyanide.

<u>Sample Identifier</u>	<u>Free CN, mg/L</u>	<u>WAD CN, mg/L</u>	<u>Total CN, mg/L</u>
389-842, #1	129	113(113)	147(132)
389-843, #2	46	34	44
389-844, #3	9.7	9.3	11
389-845, #4	2.7	2.7	3.4
389-846, #5	1.4	1.4	1.8
389-847, #6	1.1	1.1	1.1
389-848, #7	0.76	0.80	0.90
389-849, #8	0.52	0.55	0.69
389-850, #9	0.74	0.56	0.75
389-851, #10	0.61	0.54	0.54
389-852	0.46	0.36	0.44
389-853	0.79	0.67	0.72

Note:

Replicate analysis are shown in parenthesis.

Analysis By: Hlubucek/Sharp

Approved By: C. W. Sharp

Date: 6/26/90

Laboratory Report Number 590
Page 2 of 2.

**HIGH Purity
LABORATORY**

INCORPORATED

Client: McClelland Laboratories, Incorporated

Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Date Sampled: Unknown

Date Submitted: 7/16/90

Client Reference: Project 1389-P7.

Laboratory Reference Number: 90-688.

Analysis Performed: CAM-WET Test as Soluble Threshold Limit
Concentrations (STLC) and Total Threshold
Limit Concentrations (TTLC).
Rhyolite

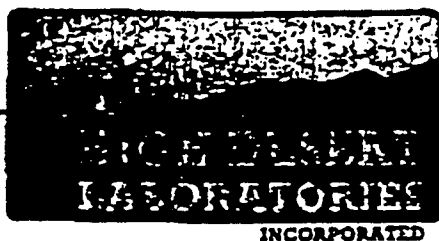
Analysis	STLC, mg/L	TTLC, mg/Kg
Antimony	<1.0	<6.3
Arsenic	0.11	0.35
Barium	32	250
Beryllium	<0.5	74
Cadmium	<0.02	<0.25
Chromium	0.15	2.7
Cobalt	<1.0	<6.3
Copper	<0.1	3.2
Fluoride	0.72	<2.5
Lead	<0.1	25
Mercury	0.005	0.43
Molybdenum	<1.0	1,241
Nickel	<0.5	<3.2
Selenium	<0.005	0.047
Silver	<0.02	4.0
Thallium	<0.5	78
Vanadium	<2.0	147
Zinc	0.12	6.2

Note:

- 1) Results reported on a wet weight basis.
- 2) STLC and TTLC extractions performed as described in Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Wastes, Title 22, Environmental Health, California Register 85, Number 2--1-12-85.

Analysis By: Hlubucek/Sharp

Approved By: C.W. SharpDate: 7/30/90Laboratory Report Number 635
Page 1 of 4.



Client: McClelland Laboratories, Incorporated

Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Date Sampled: Unknown

Date Submitted: 7/16/90

Client Reference: Project 1389-P7.

Laboratory Reference Numbers: 90-888.

Analysis Performed: Total Cyanide, Weak Acid Dissociable
Cyanide and Free Cyanide.
Rhyolite

Analysis

Result

Total Cyanide, mg/Kg

0.78(0.71)

WAD Cyanide, mg/Kg

0.46

Free Cyanide, mg/Kg

0.16

NOTE:

- 1) Results reported on a wet weight basis.
- 2) Free Cyanide analysis performed on a water soluble extract.
- 3) Replicate analysis is shown in parenthesis.

Analysis By: Hlubucek/Sharp

Approved By: C. W. Sharp

Date: 7/30/90

Laboratory Report Number 635

Page 2 of 4.



HIGHLAND
LABORATORIES

INCORPORATED

Client: McClelland Laboratories, Incorporated
Address: 1016 Greg Street
Sparks, Nevada 89431

Phone: 356-1300

Date Sampled: Unknown

Date Submitted: 7/16/90

Client Reference: Project 1389-P8.

Laboratory Reference Number: 90-889.

Analysis Performed: CAM-WET Test as Soluble Threshold Limit
Concentrations (STLC) and Total Threshold
Limit Concentrations (TTLC).
Siliceous Pyroclastic

Analysis	STLC, mg/L	TTLC, mg/Kg
Antimony	<1.0	<6.3
Arsenic	0.088	0.52
Barium	48	234
Beryllium	<0.5	80
Cadmium	<0.02	<0.25
Chromium	0.15	1.1
Cobalt	<0.5	<3.2
Copper	<0.1	3.8
Fluoride	1.4	<2.5
Lead	0.16	3.2
Mercury	0.006	2.1
Molybdenum	<1.0	2,022
Nickel	<0.5	<3.2
Selenium	<0.005	<0.025
Silver	<0.02	3.2
Thallium	<0.5	94
Vanadium	<2.0	167
Zinc	0.20	2.0

Note:

- 1) Results reported on a wet weight basis.
- 2) STLC and TTLC extractions performed as described in Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Wastes, Title 22, Environmental Health, California Register 85, Number 2--1-12-85.

Analysis By: Hlubucek/Sharp

Approved By: C. W. SharpDate: 7/30/90Laboratory Report Number 635
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APPENDIX E

Estimated Blasting Emissions

Calculated pursuant to AP-42, table 11.9-2 revised 9/88 as corrected per discussion w EPA.

Lbs (TSP) = 0.000014*A^{1.5}: where A = horizontal area of blast in ft²

Average Holes per Blast =	200
Sq Ft affected per hole =	387 (19.68 x 19.68 blast pattern)
Total Sq Ft per blast =	77,400
PM10 fraction =	0.52
Tons per hole =	572.8
Annual Ore Production, MMTPY	6
Annual Overburden, MMTPY	24

0.7 BLASTS PER DAY

Estimate number of holes and blasts	Ore	Overburden	Total
# Holes	10500	41900	52400
# Blasts per Year	53	210	263

PM10	Blasting per year	8310 Ore
		32920 Overburden
		41230 Total

PM10	Max Hourly assuming 1 blast per hour	157
------	--------------------------------------	-----

Emmitent	Ore	Overburden	Ore	Overburden	Total
ID	LAB TEST	LAB TEST	LB/HR	LB/YR	LB/YR
18540299 Cr 6	5.000E-07	5.000E-07	7.850E-05	4.155E-03	1.646E-02
7439976 Hg	1.143E-06	3.250E-06	1.795E-04	9.501E-03	1.070E-01
7782492 Se	1.532E-07	1.875E-07	2.405E-05	1.273E-03	6.173E-03
7440382 As	4.362E-05	8.525E-05	6.849E-03	3.625E-01	2.806E+00
7440417 Be	5.142E-05	3.125E-07	8.072E-03	4.273E-01	1.029E-02
7440439 Cd	1.525E-06	3.075E-06	2.394E-04	1.267E-02	1.012E-01
7440508 Cu	3.767E-06	7.150E-06	5.914E-04	3.130E-02	2.354E-01
7439921 Pb	2.973E-05	1.303E-05	4.668E-03	2.471E-01	4.288E-01
7440020 Ni	2.600E-06	2.275E-06	4.082E-04	2.161E-02	7.489E-02
7439965 Mn	7.830E-05	7.830E-05	1.229E-02	6.507E-01	2.578E+00
7440666 Zn	5.733E-06	1.093E-05	9.001E-04	4.764E-02	3.597E-01

ID#	SUBSTANCE	LB/HR	Ore LB/YR	Overburden LB/YR	Total LB/YR
18540299	Cr 6 *	7.850E-05	4.155E-03	1.646E-02	2.062E-02
7439976	Hg *	1.795E-04	9.501E-03	1.070E-01	1.165E-01
7782492	Se *	2.405E-05	1.273E-03	6.173E-03	7.445E-03
7440382	As	6.849E-03	3.625E-01	2.806E+00	3.169E+00
7440417	Be *	8.072E-03	4.273E-01	1.029E-02	4.376E-01
7440439	Cd	2.394E-04	1.267E-02	1.012E-01	1.139E-01
7440508	Cu	5.914E-04	3.130E-02	2.354E-01	2.667E-01
7439921	Pb *	4.668E-03	2.471E-01	4.288E-01	6.759E-01
7440020	Ni	4.082E-04	2.161E-02	7.489E-02	9.650E-02
7439965	Mn	0.01	6.507E-01	2.578E+00	3.228E+00
7440666	Zn	9.001E-04	4.764E-02	3.597E-01	4.073E-01

GOLDEN QUEEN MINING COMPANY

Estimated Conveyor Emissions

Emissions have been estimated for the conveyor system from the crusher to the agglomerator using an emission factor from AP-42 Table 11.24-2 (1/95). The PM10 emission factor for high moisture ore is 0.004 lb/ton/transfer point. Fugitive emissions from the conveyor will be controlled with baghouses. A control efficiency of 99% and 49 transfer points has been assumed. Based on the exhibit attached, the average transfer point will process 449 tph.

Emissions are calculated as follows:

$$\text{Lb/Yr} = \text{Ton/Yr} \times \text{EF(lb/ton)} \times (1-\text{CE})$$

$$\text{Lb/hr} = \text{Ton/hr} \times \text{EF(lb/ton)} \times (1-\text{CE})$$

PM10 EF 0.004

TSP EF 0.01

Tons Transferred		PM10 lb/ton	Transfer Points	Control	PM10 lb/hr	PM10 lb/yr
Ton/Hr	Ton/Yr					
449.00	2993333	0.004	49	99.00%	0.844	5627

Emmitent

WT. FRAC.

LB/HR

LB/YR

18540299	Cr 6	5.000E-07		4.22E-07	2.81E-03
7439976	Hg	1.143E-06		9.65E-07	6.43E-03
7782492	Se	1.532E-07		1.29E-07	8.62E-04
7440382	As	4.362E-05		3.68E-05	2.45E-01
7440417	Be	5.142E-05		4.34E-05	2.89E-01
7440439	Cd	1.525E-06		1.29E-06	8.58E-03
7440508	Cu	3.767E-06		3.18E-06	2.12E-02
7439921	Pb	2.973E-05		2.51E-05	1.67E-01
7440020	Ni	2.600E-06		2.19E-06	1.46E-02
7439965	Mn	7.830E-05		6.61E-05	4.41E-01
7440666	Zn	5.733E-06		4.84E-06	3.23E-02

Estimated Crushing Emissions

Emission factors for high moisture ore from AP-42, section 11.24. (Water is added at crushers)

From section 11.24 page 1:

The emission factors in Tables 11.24-1 and 11.24-2 are for the process operations as a whole.

At most metallic mineral processing plants, each process operation requires several types of equipment.

A single crushing operation likely includes a hopper or ore dump, screen(s), crusher, surge bin, apron feed conveyor belt transfer points. Emissions from these various pieces of equipment are often ducted to a single device. The emissions factors provided in Tables 11.24-1 and 11.24-2 for primary, secondary, and tertiary operations are for process units that are typical arrangements of the above equipment."

Therefore, all transfer points within the plant are assumed to be included in the crushing emission factors.

Primary crusher is controlled by water spray

Secondary and tertiary crushers are controlled by baghouses

Hours of operation per year	7100			
Emission Factor	PM10	TSP	tons/year	Tons/hour
Primary	0.009	0.02	6000000	900
Secondary	0.02	0.05	6000000	900
Tertiary (cone)	0.02	0.06	5035000	755
Tertiary (VSI)	0.02	0.06	9720000	1458

Water Spray Control Efficiency = 90%

Baghouse Control Efficiency = 99.0%

	Factor lb/ton	Uncontl PM10/Yr	Controlled PM10/Yr	Controlled PM10/Hr
CRUSHING				
Primary	0.009	54000	5400	0.810
Secondary *	0.02	120000	1200	0.180
Tertiary (cone)	0.02	100700	1007	0.151
Tertiary (VSI)	0.02	194400	1944	0.292
Total			9551	1.43

* Value determined from ratio of PM to PM10 from tertiary crusher.

Controlled Emissions/Yr = Ton/year X Factor X (1-CE)

Substance		Wt. Fraction		Lb/Hr	Lb/Yr
18510299	Cr 6	5.000E-07		7.16E-07	4.78E-03
7439976	Hg	1.143E-06		1.64E-06	1.09E-02
7782492	Se	1.532E-07		2.19E-07	1.46E-03
7440382	As	4.362E-05		6.25E-05	4.17E-01
7440417	Be	5.142E-05		7.37E-05	4.91E-01
7440439	Cd	1.525E-06		2.18E-06	1.46E-02
7440508	Cu	3.767E-06		5.40E-06	3.60E-02
7439921	Pb	2.973E-05		4.26E-05	2.84E-01
7440020	Ni	2.600E-06		3.72E-06	2.48E-02
7439965	Mn	7.830E-05		1.12E-04	7.48E-01
7440666	Zn	5.733E-06		8.21E-06	5.48E-02

Estimated Diesel tank emissions
PROGRAM FILE NAME: FIXTANK

FIXED ROOF TANKS, CALCULATIONS AND REPORTING DATA

COMPANY GOLDEN QUEEN MINING COMPANY

ID#	DEVICE#	TANK NAME	TANK CONTEN	TANK PERMIT#	TANK TEMP, F	TANK HEIGHT, ft	TANK DIA ft	TANK ST describe if	TANK LE OF	MOL. WT STOR	TANK CA barrels	VAPOR MW
el	---	DSL ENG DIESEL			65	16	0.25			170	476	130
Crude=.65 Organic=1 Organic=1 IF FIX LEVEL												
TVP	TANK DI	AVG VAP	AVG DIU	PAINT	SM TANK	BREATH	TANK TH	TURN OV	WORK P	EFFIC.	TANK, IN	
psia	FT	SPACE H	TEMP, F	factor, F	ADJ, C	KB	BBL/D	KN	KW	FACTOR	(no wk losses)	
0.009	10	3	25	1.33	0.519882	1	266.9	0.31	1	0	0	

LOSSES	LOSSES	TOTAL L	STACK EXHAUST	VALUES
br. LB/YR	wk. LB/YR	LB/YR	CFM	FPM
6.24	35.98984116	42.23	0.387	7.885

Toxic Component Columns

WK LOSS BR LOSS WK LOSS BR LOSS												
TOXIC #1 TX1	TX1	TX1 v.pre	mole fract.	mole fract of	wt fract of	wt fract T	wt fract T	EMISSION	EMISSION	EMISSION	EMISSION	
name	fract.	MW	at tank te	of TX1 in li	TX1 in vapor	liq in vapo	in vapor	in org. vap	TX1, LB/Y	TX1, LB/Y	TX1, LB/H	TX1, LB/H
benzene	0.00000	78	1.02187	0	0	0.00275	0.00000	2.02E-04	7.27E-03	1.26E-03	8.30E-07	1.44E-07

WK LOSS BR LOSS WK LOSS BR LOSS												
TOXIC #2 TX2	TX2	TX2 v.pre	mole fract.	mole fract of	wt fract of	wt fract T	wt fract T	EMISSION	EMISSION	EMISSION	EMISSION	
name	fract.	MW	at tank te	of TX2 in li	TX2 in vapor	liq in vapo	in vapor	in org. vap	TX2, LB/Y	TX2, LB/Y	TX2, LB/H	TX2, LB/H
toluene	0.00000	92	0.37117	0.00	0	0.00275	0.00000	1.35E-04	4.86E-03	8.42E-04	5.54E-07	9.61E-08

WK LOSS BR LOSS WK LOSS BR LOSS												
TOXIC #3 TX3	TX3	TX3 v.pre	mole fract.	mole fract of	wt fract of	wt fract T	wt fract T	EMISSION	EMISSION	EMISSION	EMISSION	
name	fract.	MW	at tank te	of TX3 in li	TX3 in vapor	liq in vapo	in vapor	in org. vap	TX3, LB/Y	TX3, LB/Y	TX3, LB/H	TX3, LB/H
ethylene	0.00000	106	0.08595	0.00	0	0.00275	0.00000	9.03E-05	3.25E-03	5.64E-04	3.71E-07	6.44E-08

Calculations are based on AP-42
AB2588 toxics programming is based on the
Technical Guidance Document to the
Criteria and Guidelines Regulation
for AB2588, August 1989
and physical properties of the individual
toxics selected for the program

Estimated Dozing Emissions

Emissions from dozing were calculated using AP-42, table 11.9-2, bulldozing overburden

$$PM_{10} (Lb/Hr) = 1.0(s)^{1.5}/M^{1.4} \cdot 0.75$$

$$TSP (Lb/Hr) = 5.7(s)^{1.2}/M^{1.3}$$

s=silt content 3.25% average per applicant

M=moisture content 3.00% average per applicant

Assume dozer operates 30 sec. per 100 tons of overburden.

Proposed # of dozers 2

PM10 Lb/Hr Ore 0

Max Lb/Hr Overburden 1.888

$$\text{Dozer hours} = \text{tons/year} \times 30 \text{ sec}/100 \text{ tons} \times 1/3600 \text{ sec/hour}$$

Dozer Hours - Overburden 2000 Hours/Year

PM10 Lb/Yr from Ore 0

PM10 Lb/Yr from Overburden 1887.8

		ORE	WASTE	ORE		WASTE	
	Dozing - Ore	LAB TEST	LAB TEST	LB/HR	LB/YR	LB/HR	LB/YR
1.9E+07 Cr 6		5.0000E-07	5.0000E-07	0.000E+00	0.000E+00	9.439E-07	9.439E-04
7439976 Hg		1.1433E-06	3.2500E-06	0.000E+00	0.000E+00	6.135E-06	6.135E-03
7782492 Se		1.5317E-07	1.8750E-07	0.000E+00	0.000E+00	3.540E-07	3.540E-04
7440382 As		4.3623E-05	8.5250E-05	0.000E+00	0.000E+00	1.609E-04	1.609E-01
7440417 Be		5.1417E-05	3.1250E-07	0.000E+00	0.000E+00	5.899E-07	5.899E-04
7440439 Cd		1.5250E-06	3.0750E-06	0.000E+00	0.000E+00	5.805E-06	5.805E-03
7440508 Cu		3.7667E-06	7.1500E-06	0.000E+00	0.000E+00	1.350E-05	1.350E-02
7439921 Pb		2.9733E-05	1.3025E-05	0.000E+00	0.000E+00	2.459E-05	2.459E-02
7440020 Ni		2.6000E-06	2.2750E-06	0.000E+00	0.000E+00	4.295E-06	4.295E-03
7439965 Mn		7.8300E-05	7.8300E-05	0.000E+00	0.000E+00	1.478E-04	1.478E-01
7440666 Zn		5.7333E-06	1.0925E-05	0.000E+00	0.000E+00	2.062E-05	2.062E-02

DOZING EMISSIONS - TOTAL (ORE + WASTE)

ID#	SUBSTANCE	LB/HR	LB/YR
18540299	Cr 6 *	9.439E-07	0.001
7439976	Hg *	6.135E-06	0.006
7782492	Se *	3.540E-07	0.000
7440382	As	1.609E-04	0.161
7440417	Be *	5.899E-07	0.001
7440439	Cd	5.805E-06	0.006
7440508	Cu	1.350E-05	0.013
7439921	Pb *	2.459E-05	0.025
7440020	Ni	4.295E-06	0.004
7439965	Mn	1.478E-04	0.148
7440666	Zn	2.062E-05	0.021

Estimated Drilling Emissions

Calculations based on AP-42 Table 11.19.2-2.

Drilling Operations occur 20 hours per day 7 days per week, 52 weeks per year

	Ore	Waste
MMPY	6	24
PM10 EF =		8E-05 lb/ton
TSP EF =		0.000168 lb/ton
Yearly Emissions - Drilling		
PM10	From Ore operations	480 LB/Yr
PM10	From Waste operations	1920 LB/Yr
Maximum hourly tons ore drilled =		1275
Maximum hourly tons waste drilled =		2800
Max hourly PM10 emissions		0.33 Lb/hr

	Ore	Waste	Ore	Waste
	LAB TEST	LAB TEST	LB/HR	Lb/Yr
18540299 Cr 6	5.000E-07	5.000E-07	1.630E-07	9.600E-04
7439976 Hg	1.143E-06	3.250E-06	3.727E-07	6.240E-03
7782492 Se	1.532E-07	1.875E-07	4.993E-08	3.600E-04
7440382 As	4.362E-05	8.525E-05	1.422E-05	1.637E-01
7440417 Be	5.142E-05	3.125E-07	1.676E-05	6.000E-04
7440439 Cd	1.525E-06	3.075E-06	4.972E-07	5.904E-03
7440508 Cu	3.767E-06	7.150E-06	1.228E-06	1.373E-02
7439921 Pb	2.973E-05	1.303E-05	9.693E-06	2.501E-02
7440020 Ni	2.600E-06	2.275E-06	8.476E-07	4.368E-03
7439965 Mn	7.830E-05	7.830E-05	2.553E-05	1.503E-01
7440666 Zn	5.733E-06	1.093E-05	1.869E-06	2.098E-02

DRILLING EMISSIONS - TOTAL

ID#	SUBSTANCE	Max LB/HR	ORE LB/YR	WASTE LB/YR	LB/YR
18540299	Cr 6	1.630E-07	2.400E-04	9.600E-04	1.200E-03
7439976	Hg	1.060E-06	5.488E-04	6.240E-03	6.789E-03
7782492	Se	6.113E-08	7.352E-05	3.600E-04	4.335E-04
7440382	As	2.779E-05	2.094E-02	1.637E-01	1.846E-01
7440417	Be	1.676E-05	2.468E-02	6.000E-04	2.528E-02
7440439	Cd	1.002E-06	7.320E-04	5.904E-03	6.636E-03
7440508	Cu	2.331E-06	1.808E-03	1.373E-02	1.554E-02
7439921	Pb	9.693E-06	1.427E-02	2.501E-02	3.928E-02
7440020	Ni	8.476E-07	1.248E-03	4.368E-03	5.616E-03
7439965	Mn	2.553E-05	3.758E-02	1.503E-01	1.879E-01
7440666	Zn	3.562E-06	2.752E-03	2.098E-02	2.373E-02

Estimated wind erosion emissions

Emissions from wind erosion of the overburden piles have been estimated using the equation found in AP-42 Section 13.2.5 "Industrial Wind Erosion. Peak wind information was obtained from Edwards Air Force base for the period January 1990 through July 1994. This information was used along with the threshold friction velocities found in Table 13.2.5-2 to determine the emissions per event and determine an average emissions per year per acre. Any one individual event occurs in a one hour period and only one event can occur during a 24-hour period. Only a certain area of the dump can be eroded by wind because the remainder of the overburden dumps will be watered or otherwise treated to form a nonerodible crust.

$$EF = k \times \{\text{Summation}\}(P_i)$$

$$P = 58(u^* - ut^*)^2 + 25(u^* - ut^*) \text{ for each event}$$

where: P = erosion potential corresponding to the observed fastest mile of wind

u^* = friction velocity

ut^* = threshold friction velocity 1.02 m/s

Number of events are all days with wind speed in excess of 43.05 mph				
	1990	1991	1992	1993
# Events	6	6	2	3
				1994(1)
				2

(1) through July 1994

PM10	Ann Average	1st Q	2nd Q	3rd Q	4th Q
EF tons/acre/year	0.028	0.008	0.016	0.000	0.004

	Sq Meters	Acres	Maximum Hourly
Dump 1	215,625	53.28	55.277 mph
Dump 2	433,125	107.03	6.054 g/m2
Dump 3	137,100	33.88	0.027 tons/acre
Dump 4	256,850	63.47	
Dump 5	504,125	124.57	
TOTAL	1,546,825	382.22	

Assume only 40 percent are active at any one time.

SURFACE AREA (ACRES) 152.89

PM10	Annual emissions (lb/yr)	8500
PM10	Hourly emissions (lb/hr)	0.94

ID#	SUBSTANCE	LAB TEST	LB/HR	LB/YR
18540299	Cr 6	5.000E-07	4.700E-07	4.250E-03
7439976	Hg	3.250E-06	3.055E-06	2.763E-02
7782492	Se	1.875E-07	1.763E-07	1.594E-03
7440382	As	8.525E-05	8.014E-05	7.246E-01
7440417	Be	3.125E-07	2.937E-07	2.656E-03
7440439	Cd	3.075E-06	2.891E-06	2.614E-02
7440508	Cu	7.150E-06	6.721E-06	6.078E-02
7439921	Pb	1.303E-05	1.224E-05	1.107E-01
7440020	Ni	2.275E-06	2.138E-06	1.934E-02
7439965	Mn	7.830E-05	7.360E-05	6.656E-01
7440666	Zn	1.093E-05	1.027E-05	9.286E-02

Estimated emissions from the furnace

METAL EMISSIONS

The method of calculating emissions of metals from the furnace was established in a 1990 TEIR for another mining co. The calculations use material balance from a pour which was witnessed by Kern Co. APCD. A sample of digest product, slag and dore' was analyzed. The difference in weight fraction between digest product and the sum of slag and dore' was assumed to be emitted to atmosphere. On this basis Cd, Cr VI, Se and Hg emissions were calculated. The number of pours was multiplied by the loss per pour to determine annual emissions

	Weight in grams			
	Cd	Cr VI	Se	Hg
Digest	0.075	0.00069	0.058	0.0003
Slag	0.017	0.00019	0.0062	7.6E-05
Dore'	0.0052	0	0.00068	2.7E-05
Loss per pour (grams)	0.0528	0.0005	0.05112	0.000197
Estimated pours in 1998	312			
Loss per year (grams)	16.4736	0.156	15.94944	0.061464
Loss per year (lbs)	3.632E-02	3.440E-04	3.517E-02	1.355E-04
Max loss per hr	1.164E-04	1.103E-06	1.127E-04	4.344E-07

Fuel Use - furnace

The furnace will burn approximately 12,760 gallons of propane per year. Since emission factors are based on MMSCF of natural gas the fuel use is converted to an MMSCF equivalent as follows:
 $12760 \text{ gal/yr} \times 90,500 \text{ btu/gal} \times 1/1050 \text{ scf/btu} \times 1/1,250,000 \text{ MMscf/scf} = 0.88 \text{ MMscf/yr}$

COMBUSTION EMISSION CALCULATIONS AND INVENTORY DATA

TYPE OF DEVICE	FUEL GAS type	RATING MMbtu/h	HEIGHT feet	DIAM. feet	GAS TEMP F	FUEL BTU/scf	EMISSION CALCULATION	
							MMscf/y	MMscf/hr
furnace	NAT.GAS	1.25	28.00	0.50	500.00	1050.00	1.10E+00	0.0012

TOXIC EMISSIONS, LB/YEAR

benz.	formal.	PAHs	acetald	acrol	propyl	tolu	xyle	naph
2.03E-02	4.50E-02	2.16E-01	3.88E-02	1.44E-02	3.01E-01	3.88E-02	2.42E-03	1.96E-01

TOXIC EMISSIONS, LB/HOUR

benz.	formal.	PAHs	acetald	acrol	propyl	tolu	xyle	naph
2.20E-05	4.87E-05	2.34E-04	4.20E-05	1.56E-05	3.26E-04	7.02E-06	2.62E-06	2.13E-04

Emission Factors for < 10 MMBtu/hr.

Benzene	0.0185	Acrolein	0.0131
Formaldehyde	0.0409	Propylene	0.2737
PAH's	0.1964	Toluene	0.0059
Naphthalene	0.1785	Xylenes	0.0022
Acetaldehyde	0.0353		

NOTE: Emission factors are "lb./MMcf."

Estimated emissions from Truck Hauling - Page 1

Particulate emissions from hauling the ore and waste are calculated using AP-42, section 13.2. (Unpaved Roads). The roads will be watered on all operating days to control particulate emissions. Magnesium chloride is also proposed as base control with water as additional control.

The formula found in AP-42 Section 13.2.2 is shown below:

$$E(\text{lb/vmt}) = k(5.9) (s/12) (S/30) (W/3)^{0.7} (w/4)^{0.5} (365-p/365)$$

k = particulate size multiplier (pm10=0.36) (TSP=0.8)

s = silt content (%) of road surface

W = mean vehicle weight (tons) 64 tons empty, 154 tons full

S = mean vehicle speed (MPH)

w = number of wheels per vehicle

p = precipitation days per year

Control efficiency factor is calculated on page 2 of truck hauling emissions.

		tpy	tons per truck	miles per trip
Constant	5.9	Ore	6,000,000	145
k	0.36	Overburden	24,000,000	145
silt content (%)	3.25	VMT = tpy/(tons/truck)*miles/trip		
Speed (MPH)	15.00	VMT, ore		
Vehicle wt. (ton)	115.60	VMT, Waste		
wheels, #/vehicle	6.00	TOTAL		
precipitation days	15.00			
CE for chemicals	90.00%			
Addtl CE for water	87.24%			
Total CE	98.72%			
LB/VMT	0.06			

ID#	SUBSTANCE	LAB TEST	LB/HR	LB/YR
18540299	Cr 6	5.000E-07	1.577E-06	7.988E-03
7439976	Hg	3.250E-06	1.025E-05	5.192E-02
7782492	Se	1.875E-07	5.915E-07	2.995E-03
7440382	As	8.525E-05	2.689E-04	1.362E+00
7440417	Be	3.125E-07	9.858E-07	4.992E-03
7440439	Cd	3.075E-06	9.701E-06	4.912E-02
7440508	Cu	7.150E-06	2.256E-05	1.142E-01
7439921	Pb	1.303E-05	4.109E-05	2.081E-01
7440020	Ni	2.275E-06	7.177E-06	3.634E-02
7439965	Mn	7.830E-05	2.470E-04	1.251E+00
7440666	Zn	1.093E-05	3.446E-05	1.745E-01

Estimated emissions from Truck Hauling - Page 2

Control efficiency for wet suppression on unpaved roads is from AP-40 page 141

$$C = 100 - (0.8 * p * d * \sqrt{i})$$

where

p = potential evaporation, mm/h

$$p = 0.0049 * 110 \text{ annual} = 0.539$$

$$p = 0.0065 * 110 \text{ summer} = 0.715$$

(110 is mean annual pan evaporation from chart page 142)

evaporation, inches per year

92.9457 annual

123.295 summer

d = average daytime traffic, (1/h) =

5.7 ore

22.7 waste

t = time between applications, hours

1.2 summer

1.5 Annual

i = application intensity, l/m²

1.22

1.22

Rainfall*, inches per application

0.048

0.048

Road width

75 ft

75

Total Water used per application

564 barrels

564

C, % =

87.24 summer waste

87.97 annual waste

87.2

88.0

C, % =

96.81 summer ore

96.99 annual ore

87.2

97.0

* Equivalent rainfall for amount of water applied by truck

Water Truck size

6000 gallons, initially

add'l truck

18000 gallons added after 1.5 years

Water usage for roads

260 gallons per minute

Haulage and water trucks

20 hours per day

Roundtrip road length, ore

15935 feet

Roundtrip road length, overburden

5190 feet

Estimated Emissions from Truck Loading and Unloading

Emission factor for drop operation, AP-42, Section 11.2.3-2, September 1988

$$E = K \cdot 0.0032 (U/5)^{1.3} (M/2)^{1.4}$$

k=Particle size fraction

0.35 PM10

U=Mean wind speed, mph

8.05 Average from Edwards AFB

M=Moisture content, %

3. from applicant

E =

0.00118

Annual

	Tons	EF	PM10
Load Ore	6,000,000	0.00118	7,075
Load Waste	24,000,000	0.00118	28,299
Unload Ore	0	0.00118	0
Unload Waste	24,000,000	0.00118	28,299
Max Hourly ore loaded	2000		
Max Hrly wste loaded or unlo	2500		
Max hourly emissions, ore	2.36 Lb/Hr		
Max hourly emissions, waste	2.95		

LOADING EMISSIONS

	ORE LAB TEST	WASTE LAB TEST	LB/HR	ORE LB/YR	WASTE LB/YR	TOTAL LB/YR
Cr 6	5.000E-07	5.000E-07	2.655E-06	3.538E-03	1.415E-02	1.769E-02
Hg	1.143E-06	3.250E-06	6.071E-06	8.089E-03	9.197E-02	1.001E-01
Se	1.532E-07	1.875E-07	8.133E-07	1.084E-03	5.306E-03	6.390E-03
As	4.362E-05	8.525E-05	2.316E-04	3.086E-01	2.412E+00	2.721E+00
Be	5.142E-05	3.125E-07	2.730E-04	3.638E-01	8.843E-03	3.726E-01
Cd	1.525E-06	3.075E-06	8.098E-06	1.079E-02	8.702E-02	9.781E-02
Cu	3.767E-06	7.150E-06	2.000E-05	2.665E-02	2.023E-01	2.290E-01
Pb	2.973E-05	1.303E-05	1.579E-04	2.104E-01	3.686E-01	5.790E-01
Ni	2.600E-06	2.275E-06	1.381E-05	1.840E-02	6.438E-02	8.278E-02
Mn	7.830E-05	7.830E-05	4.158E-04	5.540E-01	2.216E+00	2.770E+00
Zn	5.733E-06	1.093E-05	3.044E-05	4.056E-02	3.092E-01	3.497E-01

UNLOADING EMISSIONS

	ORE LAB TEST	WASTE LAB TEST	LB/HR	Ore LB/YR	Waste LB/YR	TOTAL LB/YR
Cr 6	5.0000E-07	5.0000E-07	2.655E-06	0.000E+00	1.415E-02	1.415E-02
Hg	1.1433E-06	3.2500E-06	6.071E-06	0.000E+00	9.197E-02	9.197E-02
Se	1.5317E-07	1.8750E-07	8.133E-07	0.000E+00	5.306E-03	5.306E-03
As	4.3623E-05	8.5250E-05	2.316E-04	0.000E+00	2.412E+00	2.412E+00
Be	5.1417E-05	3.1250E-07	2.730E-04	0.000E+00	8.843E-03	8.843E-03
Cd	1.5250E-06	3.0750E-06	8.098E-06	0.000E+00	8.702E-02	8.702E-02
Cu	3.7667E-06	7.1500E-06	2.000E-05	0.000E+00	2.023E-01	2.023E-01
Pb	2.9733E-05	1.3025E-05	1.579E-04	0.000E+00	3.686E-01	3.686E-01
Ni	2.6000E-06	2.2750E-06	1.381E-05	0.000E+00	6.438E-02	6.438E-02
Mn	7.8300E-05	7.8300E-05	4.158E-04	0.000E+00	2.216E+00	2.216E+00
Zn	5.7333E-06	1.0925E-05	3.044E-05	0.000E+00	3.092E-01	3.092E-01

SUM OF TRUCK LOADING AND UNLOADING

ID#	SUBSTANCE	LB/HR	ORE LB/YR	WASTE LB/YR	Total LB/YR
18540299	Cr 6	2.655E-06	3.538E-03	2.830E-02	3.184E-02
7439976	Hg	6.071E-06	8.089E-03	1.839E-01	1.920E-01
7782492	Se	8.133E-07	1.084E-03	1.061E-02	1.170E-02
7440382	As	2.316E-04	3.086E-01	4.825E+00	5.134E+00
7440417	Be	2.730E-04	3.638E-01	1.769E-02	3.815E-01
7440439	Cd	8.098E-06	1.079E-02	1.740E-01	1.848E-01
7440508	Cu	2.000E-05	2.665E-02	4.047E-01	4.313E-01
7439921	Pb	1.579E-04	2.104E-01	7.372E-01	9.476E-01
7440020	Ni	1.381E-05	1.840E-02	1.288E-01	1.472E-01
7439965	Mn	4.158E-04	5.540E-01	4.432E+00	4.986E+00
7440666	Zn	3.044E-05	4.056E-02	6.183E-01	6.589E-01

Estimated Emissions from Ponds & Pads

MINE 1

Barren Pond

Surface Area = 0 ft²
 Average pH = 11 pH
 NaCN Conc. = 225 ppm

Pregnant Pond

Surface Area = 0 ft²
 Average pH = 11 pH
 NaCN Conc. = 100 ppm

Leach Pad

Solution Usage = 1.89E+09 gal/yr

MINE 2

Barren Pond

Surface Area = 0 ft²
 Average pH = 9.7 pH
 NaCN Conc. = 5 ppm

Pregnant Pond

Surface Area = 0 ft²
 Average pH = 9 pH
 NaCN Conc. = 5 ppm

Leach Pad

Solution Usage = 1.60E+08 gal/yr

Temperature Adjustment Factor

Dome Mines temp 2 C
 Vapor Pressure 289 mm Hg
 Rand Temp 25 C
 Vapor Pressure 739 mm Hg
 Factor(t) = 2.557

Solution Concentration

Dome 65.3 ppm (as CN)
 MINE 1 BARREN 200 ppm (as CN)
 MINE 2 BARREN 75 ppm (as CN)
 MINE 1 PREGNANT 200 ppm (as CN)
 MINE 2 PREGNANT 75 ppm (as CN)

Factor(c)
 MINE 1 BARREN 3.063
 MINE 2 BARREN 1.149
 MINE 1 PREGNANT 3.063
 MINE 2 PREGNANT 1.149

pH Adjustment Factor

Dome 11.4 pH
 0.5% HCN Conce

Golden Queen
 MINE 1 (B & P) 10.5 pH
 6.0% HCN Conce
 MINE 2 BARREN 10.5 pH
 6.0% HCN Conce
 MINE 2 PREGNANT 10.5 pH
 6.0% HCN Conce

Factor(pH)
 MINE 1 BARREN 12
 MINE 2 BARREN 12
 MINE 1 PREGNANT 12
 MINE 2 PREGNANT 12

Pond Emission Factors for HCN

lb/ft²/day = 5.6E-05 x Factor(t) x factor(pH) x factor(c) x MW(HCN)/MW(CN)

lb/ft²/hr = 2.3E-06 x Factor(t) x factor(pH) x factor(c) x MW(HCN)/MW(CN)

MW(HCN) = 27

MW(CN) = 26

lb/ft²/day

MINE 1 BARREN 5.47E-03
 MINE 2 BARREN 2.05E-03
 MINE 1 PREGNANT 5.47E-03
 MINE 2 PREGNANT 2.05E-03

lb/ft²/hr

MINE 1 BARREN 2.24E-04
 MINE 2 BARREN 8.42E-05
 MINE 1 PREGNANT 2.24E-04
 MINE 2 PREGNANT 8.42E-05

Calculated Emissions from ponds

	lb/yr	lb/hr
MINE 1 BARREN	0	0
MINE 2 BARREN	0	0
MINE 1 PREGNANT	0	0
MINE 2 PREGNANT	0	0

Estimated Emissions from Ponds & Pads

Emissions from Leach Pads are based on Gold Fields Operating Company (GFOC) data. GFOC emissions rate was 1.29e-4 lbs HCN per gallon of leaching solution evaporated.

pH Adjustments		Concentration Adjustments	
GFOC	9.8 pH 20.0% HCN	GFOC	106 ppm
Golden Queen	10.5 pH 15.1% HCN	Golden Queen	250 ppm
Not used	10.5 pH 3.0% HCN	Not Used	0 ppm
Factor(pH)		Factor(c)	
Golden Queen	0.76	Golden Queen	2.358
Not used	0.15	Not used	0.000

Pad Emission Factors for HCN

$$\text{lb(HCN)/gal evaporated} = 1.29\text{E-}04 \times \text{factor(pH)} \times \text{factor(c)}$$

lb/gal evaporated

Golden Queen	2.30E-04
Not used	0.00E+00

Mine 1 evaporation factor	5%
Mine 2 evaporation factor	5%

Calculated Emissions from pads

	lb/yr	lb/hr
Golden Queen	21731.95	2.481E+00
Mine 2	0.00	0.000E+00

Estimated Emissions from Mercury Retort

Cactus Gold Mercury Retort Emission Limit = $7.07925 \text{ E-6 gm/sec}$
Cactus Gold 1993 TEIR used source test results of $5.81 \text{ E-6 lb Hg/Hr}$
Annual emissions were calculated at 9.1 E-3 lb Hg/yr
Amount of ore processed was reported at 4,370,000 tons/yr

Emission factor (Lb Hg/ton ore) = 2.082 E-09

Estimated annual emissions for Golden Queen:

$6,000,000 \text{ ton ore/yr} \times 2.08 \text{ E-9 Lb Hg/ton ore} = \underline{1.249 \text{ E-02 lb Hg/Yr}}$

Maximum hourly Hg emissions:

$7.07925 \text{ E-6 gm/sec} \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times 2.205 \text{ E-3 lb/gm} =$
 $5.620 \text{ E-05 lb Hg/Hr}$

CONSTITUENT CONCENTRATIONS COMPARED

	RAND	CACTUS	CACTUS	STD HILL	Old Basis for Golden Queen Calculations
	LAB TEST	Blasthole	Crusher		
18540299 Cr 6 *	2.50E-07 +	5.00E-07 +	5.00E-07	2.00E-08	5.00E-07
7439976 Hg *	1.00E-08	1.38E-06	6.50E-06	2.10E-07	6.50E-06
7782492 Se *	1.40E-07	9.00E-07 +	2.50E-07	5.00E-08	2.50E-07
7440382 As *	1.14E-03	1.65E-03	2.14E-03	1.20E-05	1.20E-05
7440417 Be *	1.80E-07 +	2.50E-07	1.00E-08	4.00E-07	1.09E-06
7440439 Cd	1.70E-07	4.10E-06	6.38E-06	2.10E-07	8.38E-06
7440508 Cu	3.14E-05	9.90E-06	3.67E-06	2.20E-06	3.67E-05
7439921 Pb	1.88E-05	3.96E-05	4.05E-05	1.20E-05	4.05E-05
7440020 Ni	2.29E-05 +	1.25E-06	5.29E-06	2.00E-06	5.29E-06
7439965 Mn	2.50E-04	1.02E-05	7.83E-06	5.95E-04	7.83E-05
7440666 Zn	7.36E-05	1.95E-05	2.22E-05	8.50E-05	2.22E-05
1175 SiO2	1.21E-01	1.04E-01	8.87E-02	8.60E-02	

+ 50% detection limit

	New Basis for Golden Queen Ore	Waste	Rhyolite	Siliceous Pyroclastic	OT-3	RT-1	RT-2	RT-3	RT-4
18540299 Cr 6	5.00E-07	5.00E-07	2.70E-06	1.10E-06	1.30E-04	1.10E-04	1.20E-04	7.20E-05	1.30E-04
7439976 Hg	1.14E-06	3.25E-06	4.30E-07	2.10E-06	9.00E-07	6.90E-06	1.00E-06	9.00E-07	4.20E-06
7782492 Se	1.53E-07	1.88E-07	4.70E-08	1.25E-08	4.00E-07	5.00E-07	1.00E-07	5.00E-08	1.00E-07
7440382 As	4.36E-05	8.53E-05	3.50E-07	5.20E-07	1.30E-04	7.50E-05	1.40E-04	5.00E-05	7.60E-05
7440417 Be	5.14E-05	3.13E-07	7.40E-05	8.00E-05	2.50E-07	2.50E-07	2.50E-07	5.00E-07	2.50E-07
7440439 Cd	1.53E-06	3.08E-06	2.50E-07	1.25E-07	4.20E-06	2.80E-06	5.50E-06	1.50E-06	2.50E-06
7440508 Cu	3.77E-06	7.15E-06	3.20E-06	3.80E-06	4.30E-06	1.00E-05	6.00E-06	5.80E-06	6.80E-06
7439921 Pb	2.97E-05	1.30E-05	2.50E-05	3.20E-06	6.10E-05	8.30E-06	5.50E-06	3.30E-05	5.30E-06
7440020 Ni	2.60E-06	2.28E-06	3.20E-06	1.60E-06	3.00E-06	3.50E-06	1.00E-06	1.00E-06	3.60E-06
7439965 Mn	7.83E-05	7.83E-05							
7440666 Zn	5.73E-06	1.09E-05	6.20E-06	2.00E-06	9.00E-06	1.10E-05	8.20E-06	1.60E-05	8.50E-06

	ORE			WASTE		
	Average	Maximum	Minimum	Average	Maximum	Minimum
18540299 Cr 6	4.46E-05	1.30E-04	1.10E-06	1.08E-04	1.30E-04	7.20E-05
7439976 Hg	1.14E-06	2.10E-06	4.30E-07	3.25E-06	6.90E-06	9.00E-07
7782492 Se	1.53E-07	4.00E-07	1.25E-08	1.88E-07	5.00E-07	5.00E-08
7440382 As	4.36E-05	1.30E-04	3.50E-07	8.53E-05	1.40E-04	5.00E-05
7440417 Be	5.14E-05	8.00E-05	2.50E-07	3.13E-07	5.00E-07	2.50E-07
7440439 Cd	1.53E-06	4.20E-06	1.25E-07	3.08E-06	5.50E-06	1.50E-06
7440508 Cu	3.77E-06	4.30E-06	3.20E-06	7.15E-06	1.00E-05	5.80E-06
7439921 Pb	2.97E-05	6.10E-05	3.20E-06	1.30E-05	3.30E-05	5.30E-06
7440020 Ni	2.60E-06	3.20E-06	1.60E-06	2.28E-06	3.60E-06	1.00E-06
7439965 Mn						
7440666 Zn	5.73E-06	9.00E-06	2.00E-06	1.09E-05	1.60E-05	8.20E-06
1175 SiO2						

Estimated Blasting Emissions

Calculated pursuant to AP-42, table 11.9-2 revised 9/88 as corrected per discussion w EPA.

Lbs (TSP) = 0.000014*A^{1.5}: where A = horizontal area of blast in ft²

Average Holes per Blast =	200
Sq Ft affected per hole =	387 (19.68 x 19.68 blast pattern)
Total Sq Ft per blast =	77,400
TSP fraction =	1
Tons per hole =	572.8
Annual Ore Production, MMTPY	6
Annual Overburden, MMTPY	24
0.7 BLASTS PER DAY	

Estimate number of holes and blasts	Ore	Overburden	Total
# Holes	10500	41900	52400
# Blasts per Year	53	210	263

TSP	Blasting per year	15980 Ore
		63310 Overburden
		79290 Total

TSP	Max Hourly assuming 1 blast per hour	301
-----	--------------------------------------	-----

Emmitent	Ore	Overburden		Ore	Overburden	Total
ID	LAB TEST	LAB TEST	LB/HR	LB/YR	LB/YR	LB/YR
18540299 Cr 6	5.000E-07	5.000E-07	1.505E-04	7.990E-03	3.166E-02	3.964E-02
7439976 Hg	1.143E-06	3.250E-06	3.441E-04	1.827E-02	2.058E-01	2.240E-01
7782492 Se	1.532E-07	1.875E-07	4.610E-05	2.448E-03	1.187E-02	1.432E-02
7440382 As	4.362E-05	8.525E-05	1.313E-02	6.971E-01	5.397E+00	6.094E+00
7440417 Be	5.142E-05	3.125E-07	1.548E-02	8.216E-01	1.978E-02	8.414E-01
7440439 Cd	1.525E-06	3.075E-06	4.590E-04	2.437E-02	1.947E-01	2.190E-01
7440508 Cu	3.767E-06	7.150E-06	1.134E-03	6.019E-02	4.527E-01	5.129E-01
7439921 Pb	2.973E-05	1.303E-05	8.950E-03	4.751E-01	8.246E-01	1.300E+00
7440020 Ni	2.600E-06	2.275E-06	7.826E-04	4.155E-02	1.440E-01	1.856E-01
7439965 Mn	7.830E-05	7.830E-05	2.357E-02	1.251E+00	4.957E+00	6.208E+00
7440666 Zn	5.733E-06	1.093E-05	1.726E-03	9.162E-02	6.917E-01	7.833E-01

ID#	SUBSTANCE	LB/HR	Ore LB/YR	Overburden LB/YR	Total LB/YR
18540299	Cr 6 *	1.505E-04	7.990E-03	3.166E-02	3.964E-02
7439976	Hg *	3.441E-04	1.827E-02	2.058E-01	2.240E-01
7782492	Se *	4.610E-05	2.448E-03	1.187E-02	1.432E-02
7440382	As	1.313E-02	6.971E-01	5.397E+00	6.094E+00
7440417	Be *	1.548E-02	8.216E-01	1.978E-02	8.414E-01
7440439	Cd	4.590E-04	2.437E-02	1.947E-01	2.190E-01
7440508	Cu	1.134E-03	6.019E-02	4.527E-01	5.129E-01
7439921	Pb *	8.950E-03	4.751E-01	8.246E-01	1.300E+00
7440020	Ni	7.826E-04	4.155E-02	1.440E-01	1.856E-01
7439965	Mn	0.02	1.251E+00	4.957E+00	6.208E+00
7440666	Zn	1.726E-03	9.162E-02	6.917E-01	7.833E-01

Estimated Conveyor Emissions

Emissions have been estimated for the conveyor system from the crusher to the agglomerator using an emission factor from AP-42 Table 11.24-2 (1/95). The PM10 emission factor for high moisture ore is 0.004 lb/ton/transfer point. Fugitive emissions from the conveyor will be controlled with baghouses. A control efficiency of 99% and 49 transfer points has been assumed. Based on the exhibit attached, the average transfer point will process 449 tph.

Emissions are calculated as follows:

$$\text{Lb/Yr} = \text{Ton/Yr} \times \text{EF}(\text{lb/ton}) \times (1-\text{CE})$$

$$\text{Lb/hr} = \text{Ton/hr} \times \text{EF}(\text{lb/ton}) \times (1-\text{CE})$$

PM10 EF 0.004

TSP EF 0.01

Tons Transferred		TSP lb/ton	Transfer Points	Control	TSP lb/hr	TSP lb/yr
Ton/Hr	Ton/Yr					
449.00	2993333	0.01	49	99.00%	2.110	14069

Emmitent

WT. FRAC.

LB/HR

LB/YR

18540299	Cr 6	5.000E-07		1.06E-06	7.03E-03
7439976	Hg	1.143E-06		2.41E-06	1.61E-02
7782492	Se	1.532E-07		3.23E-07	2.15E-03
7440382	As	4.362E-05		9.21E-05	6.14E-01
7440417	Be	5.142E-05		1.09E-04	7.23E-01
7440439	Cd	1.525E-06		3.22E-06	2.15E-02
7440508	Cu	3.767E-06		7.95E-06	5.30E-02
7439921	Pb	2.973E-05		6.27E-05	4.18E-01
7440020	Ni	2.600E-06		5.49E-06	3.66E-02
7439965	Mn	7.830E-05		1.65E-04	1.10E+00
7440666	Zn	5.733E-06		1.21E-05	8.07E-02

Estimated Crushing Emissions

Emission factors for high moisture ore from AP-42, section 11.24. (Water is added at crushers)

From section 11.24 page 1:

The emission factors in Tables 11.24-1 and 11.24-2 are for the process operations as a whole.

At most metallic mineral processing plants, each process operation requires several types of equipment.

A single crushing operation likely includes a hopper or ore dump, screen(s), crusher, surge bin, apron feeder conveyor belt transfer points. Emissions from these various pieces of equipment are often ducted to a single device. The emissions factors provided in Tables 11.24-1 and 11.24-2 for primary, secondary, and tertiary operations are for process units that are typical arrangements of the above equipment."

Therefore, all transfer points within the plant are assumed to be included in the crushing emission factors.

Primary crusher is controlled by water spray

Secondary and tertiary crushers are controlled by baghouses

Hours of operation per year	7100			
Emission Factor	PM10	TSP	tons/year	Tons/hour
Primary	0.009	0.02	6000000	900
Secondary	0.02	0.05	6000000	900
Tertiary (cone)	0.02	0.06	5035000	755
Tertiary (VSI)	0.02	0.06	9720000	1458

Water Spray Control Efficiency = 90%

Baghouse Control Efficiency = 99.0%

	Factor lb/ton	Uncontl TSP/Yr	Controlled TSP/Yr	Controlled TSP/Hr
CRUSHING				
Primary	0.02	120000	12000	1.800
Secondary *	0.05	300000	3000	0.450
Tertiary (cone)	0.06	302100	3021	0.453
Tertiary (VSI)	0.02	194400	1944	0.292
Total			19965	2.99

* Value determined from ratio of PM to PM10 from tertiary crusher.

Controlled Emissions/Yr = Ton/year X Factor X (1-CE)

Substance		Wt. Fraction		Lb/Hr	Lb/Yr
18540299	Cr 6	5.000E-07		1.50E-06	9.98E-03
7439976	Hg	1.143E-06		3.42E-06	2.28E-02
7782492	Se	1.532E-07		4.59E-07	3.06E-03
7440382	As	4.362E-05		1.31E-04	8.71E-01
7440417	Be	5.142E-05		1.54E-04	1.03E+00
7440439	Cd	1.525E-06		4.57E-06	3.04E-02
7440508	Cu	3.767E-06		1.13E-05	7.52E-02
7439921	Pb	2.973E-05		8.90E-05	5.94E-01
7440020	Ni	2.600E-06		7.79E-06	5.19E-02
7439965	Mn	7.830E-05		2.34E-04	1.56E+00
7440666	Zn	5.733E-06		1.72E-05	1.14E-01

Estimated Dozing Emissions

Emissions from dozing were calculated using AP-42, table 11.9-2, bulldozing overburden

$$PM_{10} (Lb/Hr) = 1.0(s)^{1.5}/M^{1.4} \cdot 0.75$$

$$TSP (Lb/Hr) = 5.7(s)^{1.2}/M^{1.3}$$

s=silt content 3.25% average per applicant

M=moisture content 3.00% average per applicant

Assume dozer operates 30 sec. per 100 tons of overburden.

Proposed # of dozers 2

TSP Lb/Hr Ore 0

Max Lb/Hr Overburden 11.244

$$\text{Dozer hours} = \text{tons/year} \times 30 \text{ sec}/100 \text{ tons} \times 1/3600 \text{ sec/hour}$$

Dozer Hours - Overburden 2000 Hours/Year

TSP Lb/Yr from Ore 0

TSP Lb/Yr from Overburden 11243.6

		ORE		WASTE		ORE		WASTE	
Dozing - Ore		LAB TEST	LAB TEST	LB/HR	LB/YR	LB/HR	LB/YR	LB/HR	LB/YR
1.9E+07	Cr 6	5.0000E-07	5.0000E-07	0.000E+00	0.000E+00	5.622E-06	5.622E-03		
7439976	Hg	1.1433E-06	3.2500E-06	0.000E+00	0.000E+00	3.654E-05	3.654E-02		
7782492	Se	1.5317E-07	1.8750E-07	0.000E+00	0.000E+00	2.108E-06	2.108E-03		
7440382	As	4.3623E-05	8.5250E-05	0.000E+00	0.000E+00	9.585E-04	9.585E-01		
7440417	Be	5.1417E-05	3.1250E-07	0.000E+00	0.000E+00	3.514E-06	3.514E-03		
7440439	Cd	1.5250E-06	3.0750E-06	0.000E+00	0.000E+00	3.457E-05	3.457E-02		
7440508	Cu	3.7667E-06	7.1500E-06	0.000E+00	0.000E+00	8.039E-05	8.039E-02		
7439921	Pb	2.9733E-05	1.3025E-05	0.000E+00	0.000E+00	1.464E-04	1.464E-01		
7440020	Ni	2.6000E-06	2.2750E-06	0.000E+00	0.000E+00	2.558E-05	2.558E-02		
7439965	Mn	7.8300E-05	7.8300E-05	0.000E+00	0.000E+00	8.804E-04	8.804E-01		
7440666	Zn	5.7333E-06	1.0925E-05	0.000E+00	0.000E+00	1.228E-04	1.228E-01		

DOZING EMISSIONS - TOTAL (ORE + WASTE)

ID#	SUBSTANCE	LB/HR	LB/YR
18540299	Cr 6 *	5.622E-06	0.006
7439976	Hg *	3.654E-05	0.037
7782492	Se *	2.108E-06	0.002
7440382	As	9.585E-04	0.959
7440417	Be *	3.514E-06	0.004
7440439	Cd	3.457E-05	0.035
7440508	Cu	8.039E-05	0.080
7439921	Pb *	1.464E-04	0.146
7440020	Ni	2.558E-05	0.026
7439965	Mn	8.804E-04	0.880
7440666	Zn	1.228E-04	0.123

Estimated Drilling Emissions

Calculations based on AP-42 Table 11.19.2-2.

Drilling Operations occur 20 hours per day 7 days per week, 52 weeks per year

	Ore	Waste
MMTPY	6	24
PM10 EF =		8E-05 lb/ton
TSP EF =		0.000168 lb/ton

Yearly Emissions - Drilling

TSP	From Ore operations	1008 LB/Yr
TSP	From Waste operations	4032 LB/Yr
Maximum hourly tons ore drilled =		1275
Maximum hourly tons waste drilled =		2800
Max hourly PM10 emissions		0.68 Lb/hr

	Ore	Waste	Ore		Waste	
	LAB TEST	LAB TEST	LB/HR	LB/YR	LB/HR	Lb/Yr
18540299 Cr 6	5.000E-07	5.000E-07	3.423E-07	5.040E-04	3.423E-07	2.016E-03
7439976 Hg	1.143E-06	3.250E-06	7.827E-07	1.152E-03	2.225E-06	1.310E-02
7782492 Se	1.532E-07	1.875E-07	1.049E-07	1.544E-04	1.284E-07	7.560E-04
7440382 As	4.362E-05	8.525E-05	2.986E-05	4.397E-02	5.836E-05	3.437E-01
7440417 Be	5.142E-05	3.125E-07	3.520E-05	5.183E-02	2.139E-07	1.260E-03
7440439 Cd	1.525E-06	3.075E-06	1.044E-06	1.537E-03	2.105E-06	1.240E-02
7440508 Cu	3.767E-06	7.150E-06	2.579E-06	3.797E-03	4.895E-06	2.883E-02
7439921 Pb	2.973E-05	1.303E-05	2.036E-05	2.997E-02	8.917E-06	5.252E-02
7440020 Ni	2.600E-06	2.275E-06	1.780E-06	2.621E-03	1.557E-06	9.173E-03
7439965 Mn	7.830E-05	7.830E-05	5.360E-05	7.893E-02	5.360E-05	3.157E-01
7440666 Zn	5.733E-06	1.093E-05	3.925E-06	5.779E-03	7.479E-06	4.405E-02

DRILLING EMISSIONS - TOTAL

ID#	SUBSTANCE	Max LB/HR	ORE LB/YR	WASTE LB/YR	LB/YR
18540299	Cr 6	3.423E-07	5.040E-04	2.016E-03	2.520E-03
7439976	Hg	2.225E-06	1.152E-03	1.310E-02	1.426E-02
7782492	Se	1.284E-07	1.544E-04	7.560E-04	9.104E-04
7440382	As	5.836E-05	4.397E-02	3.437E-01	3.877E-01
7440417	Be	3.520E-05	5.183E-02	1.260E-03	5.309E-02
7440439	Cd	2.105E-06	1.537E-03	1.240E-02	1.394E-02
7440508	Cu	4.895E-06	3.797E-03	2.883E-02	3.263E-02
7439921	Pb	2.036E-05	2.997E-02	5.252E-02	8.249E-02
7440020	Ni	1.780E-06	2.621E-03	9.173E-03	1.179E-02
7439965	Mn	5.360E-05	7.893E-02	3.157E-01	3.946E-01
7440666	Zn	7.479E-06	5.779E-03	4.405E-02	4.983E-02

Estimated wind erosion emissions

Emissions from wind erosion of the overburden piles have been estimated using the equation found in AP-42 Section 13.2.5 "Industrial Wind Erosion. Peak wind information was obtained from Edwards Air Force base for the period January 1990 through July 1994. This information was used along with the threshold friction velocities found in Table 13.2.5-2 to determine the emissions per event and determine an average emissions per year per acre. Any one individual event occurs in a one hour period and only one event can occur during a 24-hour period. Only a certain area of the dump can be eroded by wind because the remainder of the overburden dumps will be watered or otherwise treated to form a nonerodible crust.

$$EF = k \times \{\text{Summation}\}(P_i)$$

$$P = 58(u^* - u_t^*)^2 + 25(u^* - u_t^*) \text{ for each event}$$

where: P = erosion potential corresponding to the observed fastest mile of wind

u^* = friction velocity

u_t^* = threshold friction velocity 1.02 m/s

Number of events are all days with wind speed in excess of 43.05 mph

	1990	1991	1992	1993	1994(1)
# Events	6	6	2	3	2

(1) through July 1994

TSP	Ann Average	1st Q	2nd Q	3rd Q	4th Q
EF tons/acre/year	0.056	0.017	0.031	0.000	0.008

	Sq Meters	Acres
Dump 1	215,625	53.28
Dump 2	433,125	107.03
Dump 3	137,100	33.88
Dump 4	256,850	63.47
Dump 5	504,125	124.57
TOTAL	1,546,825	382.22

Maximum Hourly

55.277 mph

12.109 g/m²

0.054 tons/acre

Assume only 40 percent are active at any one time

SURFACE AREA (ACRES) 152.89

TSP	Annual emissions (lb/yr)	17000
TSP	Hourly emissions (lb/hr)	1.89

ID#	SUBSTANCE	LAB TEST	LB/HR	LB/YR
18540299	Cr 6	5.000E-07	9.450E-07	8.500E-03
7439976	Hg	3.250E-06	6.143E-06	5.525E-02
7782492	Se	1.875E-07	3.544E-07	3.188E-03
7440382	As	8.525E-05	1.611E-04	1.449E+00
7440417	Be	3.125E-07	5.906E-07	5.313E-03
7440439	Cd	3.075E-06	5.812E-06	5.228E-02
7440508	Cu	7.150E-06	1.351E-05	1.216E-01
7439921	Pb	1.303E-05	2.462E-05	2.214E-01
7440020	Ni	2.275E-06	4.300E-06	3.868E-02
7439965	Mn	7.830E-05	1.480E-04	1.331E+00
7440666	Zn	1.093E-05	2.065E-05	1.857E-01

Estimated emissions from Truck Hauling - Page 1

Particulate emissions from hauling the ore and waste are calculated using AP-42, section 13.2. (Unpaved Roads). The roads will be watered on all operating days to control particulate emiss. Magnesium chloride is also proposed as base control with water as additional control.

The formula found in AP-42 Section 13.2.2 is shown below:

$$E(\text{lb/vmt}) = k(5.9) (s/12) (S/30) (W/3)^{0.7} (w/4)^{0.5} (365-p/365)$$

k = particulate size multiplier (pm10=0.36) (TSP=0.8)

s = silt content (%) of road surface

W = mean vehicle weight (tons) 64 tons empty, 154 tons full

S = mean vehicle speed (MPH)

w = number of wheels per vehicle

p = precipitation days per year

Control efficiency factor is calculated on page 2 of truck hauling emissions.

		tpy	tons per truck	miles per trip
Constant	5.9	Ore	6,000,000	145
k	0.80	Overburden	24,000,000	145
silt content (%)	3.25	VMT = tpy/(tons/truck)*miles/trip		
Speed (MPH)	15.00	VMT, ore		
Vehicle wt. (ton)	115.60	VMT, Waste		
wheels, #/vehicle	6.00	TOTAL		
precipitation days	15.00			
CE for chemicals	90.00%	TSP		
Addtl CE for water	87.24%	Max VMT per hour		
Total CE	98.72%	TSP		
LB/VMT	0.12			

ID#	SUBSTANCE	LAB TEST	LB/HR	LB/YR
18540299	Cr 6	5.000E-07	3.505E-06	1.775E-02
7439976	Hg	3.250E-06	2.278E-05	1.154E-01
7782492	Se	1.875E-07	1.314E-06	6.656E-03
7440382	As	8.525E-05	5.976E-04	3.026E+00
7440417	Be	3.125E-07	2.191E-06	1.109E-02
7440439	Cd	3.075E-06	2.156E-05	1.092E-01
7440508	Cu	7.150E-06	5.012E-05	2.538E-01
7439921	Pb	1.303E-05	9.131E-05	4.624E-01
7440020	Ni	2.275E-06	1.595E-05	8.076E-02
7439965	Mn	7.830E-05	5.489E-04	2.780E+00
7440666	Zn	1.093E-05	7.659E-05	3.878E-01

Estimated emissions from Truck Hauling - Page 2

Control efficiency for wet suppression on unpaved roads is from AP-40 page 141

$$C = 100 - (0.8 * p * d * t / i)$$

where

p = potential evaporation, mm/h

$$p = 0.0049 * 110 \text{ annual} = 0.539$$

$$p = 0.0065 * 110 \text{ summer} = 0.715$$

(110 is mean annual pan evaporation from chart page 142)

evaporation, inches per year 92.9457 annual

123.295 summer

d = average daytime traffic, (1/h) =

5.7 ore

22.7 waste

t = time between applications, hours

1.2 summer

1.5 Annual

i = application intensity, l/m²

1.22

1.22

Rainfall*, inches per application

0.048

0.048

Road width

75 ft

75

Total Water used per application

564 barrels

564

C, % =

87.24 summer waste

87.97 annual waste

87.2

88.0

C, % =

96.81 summer ore

96.99 annual ore

87.2

97.0

* Equivalent rainfall for amount of water applied by truck

Water Truck size

6000 gallons, initially

add'l truck

18000 gallons added after 1.5 years

Water usage for roads

260 gallons per minute

Haulage and water trucks

20 hours per day

Roundtrip road length, ore

15935 feet

Roundtrip road length, overburden

5190 feet

Estimated Emissions from Truck Loading and Unloading

Emission factor for drop operation, AP-42, Section 11.2.3-2, September 1988

$$E = K \cdot 0.0032 (U/5)^{1.3} / (M/2)^{1.4}$$

k=Particle size fraction

0.74 TSP

U=Mean wind speed, mph

8.05 Average from Edwards AFB

M=Moisture content, %

3 from applicant

E =

0.00249

Annual

	Tons	EF	TSP
Load Ore	6,000,000	0.00249	14,958
Load Waste	24,000,000	0.00249	59,833
Unload Ore	0	0.00249	0
Unload Waste	24,000,000	0.00249	59,833
Max Hourly ore loaded	2000		
Max Hrly wste loaded or unlo	2500		
Max hourly emissions, ore	4.99 Lb/Hr		
Max hourly emissions, waste	6.23		

LOADING EMISSIONS

	ORE LAB TEST	WASTE LAB TEST	LB/HR	ORE LB/YR	WASTE LB/YR	TOTAL LB/YR
Cr 6	5.000E-07	5.000E-07	5.610E-06	7.479E-03	2.992E-02	3.740E-02
Hg	1.143E-06	3.250E-06	1.283E-05	1.710E-02	1.945E-01	2.116E-01
Se	1.532E-07	1.875E-07	1.719E-06	2.291E-03	1.122E-02	1.351E-02
As	4.362E-05	8.525E-05	4.895E-04	6.525E-01	5.101E+00	5.753E+00
Be	5.142E-05	3.125E-07	5.769E-04	7.691E-01	1.870E-02	7.878E-01
Cd	1.525E-06	3.075E-06	1.711E-05	2.281E-02	1.840E-01	2.068E-01
Cu	3.767E-06	7.150E-06	4.226E-05	5.634E-02	4.278E-01	4.841E-01
Pb	2.973E-05	1.303E-05	3.336E-04	4.448E-01	7.793E-01	1.224E+00
Ni	2.600E-06	2.275E-06	2.917E-05	3.889E-02	1.361E-01	1.750E-01
Mn	7.830E-05	7.830E-05	8.785E-04	1.171E+00	4.685E+00	5.856E+00
Zn	5.733E-06	1.093E-05	6.433E-05	8.576E-02	6.537E-01	7.394E-01

UNLOADING EMISSIONS

	ORE LAB TEST	WASTE LAB TEST	LB/HR	Ore LB/YR	Waste LB/YR	TOTAL LB/YR
Cr 6	5.0000E-07	5.0000E-07	5.610E-06	0.000E+00	2.992E-02	2.992E-02
Hg	1.1433E-06	3.2500E-06	1.283E-05	0.000E+00	1.945E-01	1.945E-01
Se	1.5317E-07	1.8750E-07	1.719E-06	0.000E+00	1.122E-02	1.122E-02
As	4.3623E-05	8.5250E-05	4.895E-04	0.000E+00	5.101E+00	5.101E+00
Be	5.1417E-05	3.1250E-07	5.769E-04	0.000E+00	1.870E-02	1.870E-02
Cd	1.5250E-06	3.0750E-06	1.711E-05	0.000E+00	1.840E-01	1.840E-01
Cu	3.7667E-06	7.1500E-06	4.226E-05	0.000E+00	4.278E-01	4.278E-01
Pb	2.9733E-05	1.3025E-05	3.336E-04	0.000E+00	7.793E-01	7.793E-01
Ni	2.6000E-06	2.2750E-06	2.917E-05	0.000E+00	1.361E-01	1.361E-01
Mn	7.8300E-05	7.8300E-05	8.785E-04	0.000E+00	4.685E+00	4.685E+00
Zn	5.7333E-06	1.0925E-05	6.433E-05	0.000E+00	6.537E-01	6.537E-01

SUM OF TRUCK LOADING AND UNLOADING

ID#	SUBSTANCE	LB/HR	ORE LB/YR	WASTE LB/YR	Total LB/YR
18540299	Cr 6	5.610E-06	7.479E-03	5.983E-02	6.731E-02
7439976	Hg	1.283E-05	1.710E-02	3.889E-01	4.060E-01
7782492	Se	1.719E-06	2.291E-03	2.244E-02	2.473E-02
7440382	As	4.895E-04	6.525E-01	1.020E+01	1.085E+01
7440417	Be	5.769E-04	7.691E-01	3.740E-02	8.065E-01
7440439	Cd	1.711E-05	2.281E-02	3.680E-01	3.908E-01
7440508	Cu	4.226E-05	5.634E-02	8.556E-01	9.120E-01
7439921	Pb	3.336E-04	4.448E-01	1.559E+00	2.003E+00
7440020	Ni	2.917E-05	3.889E-02	2.722E-01	3.111E-01
7439965	Mn	8.785E-04	1.171E+00	9.370E+00	1.054E+01
7440666	Zn	6.433E-05	8.576E-02	1.307E+00	1.393E+00

GOLDEN QUEEN MINING COMPANY

Estimated wind erosion emissions from existing disturbances

Emissions from wind erosion of the overburden piles have been estimated using the equation found in AP-42 Section 13.2.5 "Industrial Wind Erosion. Peak wind information was obtained from Edwards Air Force base for the period January 1990 through July 1994. This information was used along with the Threshold Friction velocities found in table 13.2.5-2 to determine the emissions per event and determine an average emissions per year per acre.

$$EF = k \times \{\text{Summation}\}(P_i)$$

$$P = 58(u^* - ut^*)^2 + 25(u^* - ut^*) \text{ for each event}$$

where: P = erosion potential corresponding to the observed fastest mile of wind

u^* = friction velocity

ut^* = threshold friction velocity 1.02 m/s

Number of events are all days with wind speed in excess of 43.05 mph

	1990	1991	1992	1993	1994(1)
# Events	6	6	2	3	2

(1) through July 1994

PM10	Ann Average	1st Q	2nd Q	3rd Q	4th Q
EF tons/acre/year	0.028	0.008	0.016	0.000	0.004

	Acres
Other Disturbances	188.00
TOTAL	188.00

SURFACE AREA (ACRES) 188.00

PM10 Annual emissions (lb/yr) 10,500

GOLDEN QUEEN MINING COMPANY

Estimated wind erosion emissions from existing disturbances

Emissions from wind erosion of the existing tailings pile have been estimated using the equation found in AP-42 Section 13.2.5 "Industrial Wind Erosion. Peak wind information was obtained from Edwards Air Force base for the period January 1990 through July 1994. This information was used along with the Threshold Friction velocities found in table 13.2.5-2 to determine the emissions per event and determine an average emissions per year per acre. The tailings pile is composed of fine material remaining after historical mining activity. The threshold friction velocity of this type of material is expected to resemble ground coal with a lower threshold than the normal overburden piles.

$$EF = k \times \{\text{Summation}\}(P_i)$$

$$P = 58(u^* - u_t^*)^2 + 25(u^* - u_t^*) \text{ for each event}$$

where: P = erosion potential corresponding to the observed fastest mile of wind

u^* = friction velocity

u_t^* = threshold friction velocity 0.55 m/s

Number of events are all days with wind speed in excess of 23.21 mph

	1990	1991	1992	1993	1994(1)
# Events	160	151	184	229	163

(1) through July 1994

PM10	Ann Average	1st Q	2nd Q	3rd Q	4th Q
EF tons/acre/year	2.866	0.597	1.227	0.534	0.509

	Acres
Tailings Pile	22.00
TOTAL	22.00

SURFACE AREA (ACRES) 22.00

PM10 Annual emissions (lb/yr) 126,100

APPENDIX F

BEE-Line ISCSST3 "BEEST" Version 4.0

Input File - G:\BEEST\GQ\FENCE.DTA
Output File - G:\BEEST\GQ\FENCE.LST
Met File - g:\METDATA\SOL\SOL91M.AS

Number of sources - 40
Number of source groups - 53
Number of receptors - 367

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
BGHESE1	0	0.18050E+00	390660.0	3872330.0	908.3	6.71	305.00	21.53	1.00	NO	

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SZ (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
BLSPIT1	0	0.19780E+02	390300.0	3872374.0	960.1	50.00	93.02	23.26	SEASON
BLSPIT2	0	0.19780E+02	390553.0	3872050.0	975.4	50.00	93.02	23.26	SEASON
BLSPIT3	0	0.19780E+02	391726.0	3871973.0	1127.8	50.00	93.02	23.26	SEASON
BLSPIT4	0	0.19780E+02	391015.0	3871607.0	1097.3	50.00	93.02	23.26	SEASON
BLSPIT5	0	0.19780E+02	391400.0	3871240.0	1097.3	50.00	93.02	23.26	SEASON
BLSPIT6	0	0.19780E+02	391000.0	3871240.0	1097.3	50.00	93.02	23.26	SEASON

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	COORD (SW CORNER) Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
DRLPIT1	0	0.30170E-07	390138.0	3872375.0	960.1	2.00	400.00	250.00	45.00	0.00	SEASON
DRLPIT2	0	0.30170E-07	390421.0	3872091.0	975.4	2.00	400.00	250.00	45.00	0.00	SEASON
DRLPIT3	0	0.30182E-07	390876.0	3871798.0	1036.2	2.00	1100.00	350.00	0.00	0.00	SEASON
DRLPIT4	0	0.30942E-07	390640.0	3871432.0	1097.3	2.00	1350.00	350.00	0.00	0.00	SEASON
DRLPIT5	0	0.30171E-07	391200.0	3871050.0	1097.3	2.00	400.00	380.00	0.00	0.00	SEASON
DRLPIT6	0	0.30171E-07	390800.0	3871050.0	1097.3	2.00	400.00	380.00	0.00	0.00	SEASON
TRLPIT1	0	0.49140E-06	390138.0	3872375.0	960.1	6.00	400.00	250.00	45.00	0.00	SEASON
TRLPIT2	0	0.49140E-06	390421.0	3872091.0	975.4	6.00	400.00	250.00	45.00	0.00	SEASON
TRLPIT3	0	0.49143E-06	390876.0	3871798.0	1036.2	6.00	1100.00	350.00	0.00	0.00	SEASON
TRLPIT4	0	0.49143E-06	390640.0	3871432.0	1097.3	6.00	1350.00	350.00	0.00	0.00	SEASON
TRLPIT5	0	0.49138E-06	391200.0	3871050.0	1097.3	6.00	400.00	380.00	0.00	0.00	SEASON
TRLPIT6	0	0.49138E-06	390800.0	3871050.0	1097.3	6.00	400.00	380.00	0.00	0.00	SEASON
HAUL_1	0	0.11676E-05	390138.0	3872375.0	960.1	2.00	400.00	62.50	45.00	0.00	SEASON
HAUL_2	0	0.11676E-05	390421.0	3872091.0	975.4	2.00	400.00	62.50	45.00	0.00	SEASON
HAUL_3	0	0.11678E-05	390876.0	3871973.0	1036.2	2.00	1100.00	87.50	0.00	0.00	SEASON
HAUL_4	0	0.11674E-05	390640.0	3871607.0	1097.3	2.00	1350.00	87.50	0.00	0.00	SEASON
HAUL_5	0	0.11679E-05	391200.0	3871240.0	1097.3	2.00	400.00	95.00	0.00	0.00	SEASON
HAUL_6	0	0.11679E-05	390800.0	3871240.0	1097.3	2.00	400.00	95.00	0.00	0.00	SEASON
TRU_WST1	0	0.24028E-06	390273.0	3871355.0	975.4	2.00	375.00	575.00	-5.00	0.00	SEASON
TRU_WST2	0	0.24035E-06	390364.0	3870483.0	1066.8	2.00	525.00	825.00	-10.00	0.00	SEASON
TRU_WST3	0	0.24026E-06	390885.0	3870573.0	1127.8	2.00	300.00	457.00	0.00	0.00	SEASON
TRU_WST4	0	0.24030E-06	391190.0	3870573.0	1127.8	2.00	550.00	467.00	0.00	0.00	SEASON
TRU_WST5	0	0.24022E-06	392143.0	3871161.0	1005.8	2.00	545.00	925.00	-10.00	0.00	SEASON
DZG_W1	0	0.15379E-06	390273.0	3871355.0	975.4	4.00	375.00	575.00	-5.00	0.00	SEASON
DZG_W2	0	0.15377E-06	390364.0	3870483.0	1066.8	4.00	525.00	825.00	-10.00	0.00	SEASON
DZG_W3	0	0.15376E-06	390885.0	3870573.0	1127.8	4.00	300.00	457.00	0.00	0.00	SEASON
DZG_W4	0	0.15379E-06	391190.0	3870573.0	1127.8	4.00	550.00	467.00	0.00	0.00	SEASON
DZG_W5	0	0.15377E-06	392143.0	3871161.0	1005.8	4.00	545.00	925.00	-10.00	0.00	SEASON
ERSN_W1	0	0.76568E-07	390273.0	3871355.0	975.4	5.00	375.00	575.00	-5.00	0.00	SEASON
ERSN_W2	0	0.76560E-07	390364.0	3870483.0	1066.8	5.00	525.00	825.00	-10.00	0.00	SEASON
ERSN_W3	0	0.76586E-07	390885.0	3870573.0	1127.8	5.00	300.00	457.00	0.00	0.00	SEASON
ERSN_W4	0	0.76582E-07	391190.0	3870573.0	1127.8	5.00	550.00	467.00	0.00	0.00	SEASON
ERSN_W5	0	0.76568E-07	392143.0	3871161.0	1005.8	5.00	545.00	925.00	-10.00	0.00	SEASON

*** SOURCE IDS: DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDS
ALL	DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSPIT1, BLSPIT2, BLSPIT3, BLSPIT4, BLSPIT5, BLSPIT6, TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6, BGHESE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, ERSN_W1, ERSN_W2, ERSN_W3, ERSN_W4, ERSN_W5
DRLPIT1	DRLPIT1
DRLPIT2	DRLPIT2
DRLPIT3	DRLPIT3

DRLPIT4 DRLPIT4 ,
 DRLPIT5 DRLPIT5 ,
 DRLPIT6 DRLPIT6 ,
 BLSFIT1 BLSFIT1 ,
 BLSFIT2 BLSFIT2 ,
 BLSFIT3 BLSFIT3 ,
 BLSFIT4 BLSFIT4 ,
 BLSFIT5 BLSFIT5 ,
 BLSFIT6 BLSFIT6 ,
 TRLPIT1 TRLPIT1 ,
 TRLPIT2 TRLPIT2 ,
 TRLPIT3 TRLPIT3 ,
 TRLPIT4 TRLPIT4 ,
 TRLPIT5 TRLPIT5 ,
 TRLPIT6 TRLPIT6 ,
 HAUL_1 HAUL_1 ,
 HAUL_2 HAUL_2 ,
 HAUL_3 HAUL_3 ,
 HAUL_4 HAUL_4 ,
 HAUL_5 HAUL_5 ,
 HAUL_6 HAUL_6 ,
 BGHSE1 BGHSE1 ,
 TRU_WST1 TRU_WST1 ,
 TRU_WST2 TRU_WST2 ,
 TRU_WST3 TRU_WST3 ,
 TRU_WST4 TRU_WST4 ,
 TRU_WST5 TRU_WST5 ,
 DZG_W1 DZG_W1 ,
 DZG_W2 DZG_W2 ,
 DZG_W3 DZG_W3 ,
 DZG_W4 DZG_W4 ,
 DZG_W5 DZG_W5 ,
 ERSN_W1 ERSN_W1 ,
 ERSN_W2 ERSN_W2 ,
 ERSN_W3 ERSN_W3 ,
 ERSN_W4 ERSN_W4 ,
 ERSN_W5 ERSN_W5 ,
 PIT_1 DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , BLSFIT1 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , HAUL_1 ,
 HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 ,
 DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,
 PIT_2 DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , BLSFIT2 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , HAUL_1 ,
 HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 ,
 DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,
 PIT_3 DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT3 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 ,
 TRLPIT6 , HAUL_1 , HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , HAUL_6 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 ,
 TRU_WST6 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,
 PIT_4 DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT4 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 ,
 TRLPIT6 , HAUL_1 , HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , HAUL_6 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 ,
 TRU_WST6 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,
 PIT_5 DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT5 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 ,
 TRLPIT6 , HAUL_1 , HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , HAUL_6 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 ,
 TRU_WST6 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,
 PIT_6 DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT6 , TRLPIT3 , TRLPIT4 , TRLPIT5 , TRLPIT6 , HAUL_1 , HAUL_2 , HAUL_3 ,
 HAUL_4 , HAUL_5 , HAUL_6 , BGHSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 , DZG_W3 ,
 DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,

DRILLING DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 ,
 LOADING TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , TRLPIT6 ,
 HAULING HAUL_1 , HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , HAUL_6 ,
 UNLOADG TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 ,
 DOZING DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 ,
 EROSION ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

CONC OF PM-10 IN MICROGRAMS/M**3

GROUP ID					AVERAGE CONC	DATE (YMMDDHH)		RECEPTOR	(CR. YR.	ELEV. ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH	1ST	HIGH	VALUE	IS	27.54688	ON	91113024: AT (	391247.00,	3870518.00,	969.26,	0.00) DC NA
DRLPIT1	HIGH	1ST	HIGH	VALUE	IS	0.19440	ON	91010424: AT (	390203.00,	3872720.00,	862.58,	0.00) DC NA
DRLPIT2	HIGH	1ST	HIGH	VALUE	IS	0.08088	ON	91030424: AT (	390669.00,	3872895.00,	859.54,	0.00) DC NA
DRLPIT3	HIGH	1ST	HIGH	VALUE	IS	0.61132	ON	91102924: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
DRLPIT4	HIGH	1ST	HIGH	VALUE	IS	0.25134	ON	91102224: AT (	392694.00,	3871346.00,	899.16,	0.00) DC NA
DRLPIT5	HIGH	1ST	HIGH	VALUE	IS	0.16775c	ON	91120924: AT (	391842.00,	3870521.00,	950.98,	0.00) DC NA
DRLPIT6	HIGH	1ST	HIGH	VALUE	IS	0.16652c	ON	91120924: AT (	391445.00,	3870519.00,	923.54,	0.00) DC NA
BLSPIT1	HIGH	1ST	HIGH	VALUE	IS	2.57505c	ON	91122724: AT (	391044.00,	3870310.00,	1005.84,	0.00) DC NA
BLSPIT2	HIGH	1ST	HIGH	VALUE	IS	2.87681	ON	91112424: AT (	392607.00,	3870689.00,	1048.51,	0.00) DC NA
BLSPIT3	HIGH	1ST	HIGH	VALUE	IS	2.63266	ON	91111424: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
BLSPIT4	HIGH	1ST	HIGH	VALUE	IS	1.48739	ON	91010624: AT (	390904.00,	3872902.00,	859.54,	0.00) DC NA
BLSPIT5	HIGH	1ST	HIGH	VALUE	IS	1.59179	ON	91121324: AT (	392010.00,	3870521.00,	969.26,	0.00) DC NA
BLSPIT6	HIGH	1ST	HIGH	VALUE	IS	1.38981	ON	91121324: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
TRLPIT1	HIGH	1ST	HIGH	VALUE	IS	2.25655	ON	91010424: AT (	390203.00,	3872720.00,	862.58,	0.00) DC NA
TRLPIT2	HIGH	1ST	HIGH	VALUE	IS	1.19805	ON	91030424: AT (	390669.00,	3872895.00,	859.54,	0.00) DC NA
TRLPIT3	HIGH	1ST	HIGH	VALUE	IS	4.76046	ON	91102924: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
TRLPIT4	HIGH	1ST	HIGH	VALUE	IS	3.72557	ON	91102224: AT (	392694.00,	3871346.00,	899.16,	0.00) DC NA
TRLPIT5	HIGH	1ST	HIGH	VALUE	IS	2.44488c	ON	91120924: AT (	391842.00,	3870521.00,	950.98,	0.00) DC NA
TRLPIT6	HIGH	1ST	HIGH	VALUE	IS	2.42386c	ON	91120924: AT (	391445.00,	3870519.00,	923.54,	0.00) DC NA
HAUL_1	HIGH	1ST	HIGH	VALUE	IS	2.95072c	ON	91102724: AT (	390027.00,	3872472.00,	868.68,	0.00) DC NA
HAUL_2	HIGH	1ST	HIGH	VALUE	IS	0.85201	ON	91010424: AT (	390352.00,	3872832.00,	859.54,	0.00) DC NA
HAUL_3	HIGH	1ST	HIGH	VALUE	IS	6.13475	ON	91102924: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
HAUL_4	HIGH	1ST	HIGH	VALUE	IS	3.63348	ON	91012224: AT (	392670.00,	3871765.00,	883.92,	0.00) DC NA
HAUL_5	HIGH	1ST	HIGH	VALUE	IS	1.56902c	ON	91120924: AT (	391842.00,	3870321.00,	950.98,	0.00) DC NA
HAUL_6	HIGH	1ST	HIGH	VALUE	IS	1.56599c	ON	91120924: AT (	391445.00,	3870519.00,	923.54,	0.00) DC NA
BGRSE1	HIGH	1ST	HIGH	VALUE	IS	2.00324	ON	91111124: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
TRU_WST1	HIGH	1ST	HIGH	VALUE	IS	2.51933	ON	91092924: AT (	390209.00,	3871270.00,	874.78,	0.00) DC NA
TRU_WST2	HIGH	1ST	HIGH	VALUE	IS	3.65816	ON	91112424: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
TRU_WST3	HIGH	1ST	HIGH	VALUE	IS	4.44286c	ON	91120924: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
TRU_WST4	HIGH	1ST	HIGH	VALUE	IS	6.14394c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
TRU_WST5	HIGH	1ST	HIGH	VALUE	IS	6.68180	ON	91112424: AT (	392694.00,	3871346.00,	899.16,	0.00) DC NA
DZG_W1	HIGH	1ST	HIGH	VALUE	IS	0.23891	ON	91092924: AT (	390209.00,	3871270.00,	874.78,	0.00) DC NA
DZG_W2	HIGH	1ST	HIGH	VALUE	IS	0.37006	ON	91112424: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
DZG_W3	HIGH	1ST	HIGH	VALUE	IS	0.31858	ON	91010124: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
DZG_W4	HIGH	1ST	HIGH	VALUE	IS	0.47724c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
DZG_W5	HIGH	1ST	HIGH	VALUE	IS	0.53416c	ON	91120924: AT (	392694.00,	3871346.00,	899.16,	0.00) DC NA
ERSN_W1	HIGH	1ST	HIGH	VALUE	IS	0.91196	ON	91092924: AT (	390209.00,	3871270.00,	874.78,	0.00) DC NA
ERSN_W2	HIGH	1ST	HIGH	VALUE	IS	1.47210	ON	91112424: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
ERSN_W3	HIGH	1ST	HIGH	VALUE	IS	1.09738	ON	91122424: AT (	391247.00,	3870518.00,	969.26,	0.00) DC NA
ERSN_W4	HIGH	1ST	HIGH	VALUE	IS	1.56937c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
ERSN_W5	HIGH	1ST	HIGH	VALUE	IS	1.96738c	ON	91120924: AT (	392694.00,	3871346.00,	899.16,	0.00) DC NA
PIT_1	HIGH	1ST	HIGH	VALUE	IS	24.47840c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
PIT_2	HIGH	1ST	HIGH	VALUE	IS	24.38030c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
PIT_3	HIGH	1ST	HIGH	VALUE	IS	26.82188c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
PIT_4	HIGH	1ST	HIGH	VALUE	IS	26.81984c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
PIT_5	HIGH	1ST	HIGH	VALUE	IS	26.81984c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
PIT_6	HIGH	1ST	HIGH	VALUE	IS	26.03649c	ON	91120924: AT (	391643.00,	3870520.00,	932.69,	0.00) DC NA
DRILLING	HIGH	1ST	HIGH	VALUE	IS	0.86478	ON	91102924: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
LOADING	HIGH	1ST	HIGH	VALUE	IS	9.05844c	ON	91120924: AT (	391842.00,	3870521.00,	950.98,	0.00) DC NA
HAULING	HIGH	1ST	HIGH	VALUE	IS	8.63301	ON	91102924: AT (	391846.00,	3872159.00,	967.74,	0.00) DC NA
UNLOADG	HIGH	1ST	HIGH	VALUE	IS	8.56973c	ON	91120924: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
DOZING	HIGH	1ST	HIGH	VALUE	IS	0.74727c	ON	91120924: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA
EROSION	HIGH	1ST	HIGH	VALUE	IS	2.80770c	ON	91120924: AT (	391049.00,	3870518.00,	950.98,	0.00) DC NA



APPENDIX G

**BEE-Line Software: BEEST for Windows data input file
** Date: 11/12/96 Time: 11:06:15 AM
NO ECHO

BEE-Line ISCST3 "BEEST" Version 4.0

Input File - G:\BEEST\GG\CLASS1.DTA
Output File - G:\BEEST\GG\CLASS1.LST
Met File - g:\METDATA\SOL\SOL91M.AS

*** Message Summary For ISC3 Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
SO W391 59 APARM :Aspect ratio (L/W) of area source greater than 10 HAUL_3
SO W391 61 APARM :Aspect ratio (L/W) of area source greater than 10 HAUL_4

*** SETUP Finishes Successfully ***

*** ISCST3 - VERSION 96113 ***	*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT	***	11/12/96
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**MODELOPTs: CONC RURAL ELEV MSGPRO

*** MODEL SETUP OPTIONS SUMMARY ***

**Intermediate Terrain Processing is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

-- SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION. DDPLETE = F
**Model Uses NO WET DEPLETION. WDPLETE = F
**NO WET SCAVENGING Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses RURAL Dispersion.

**Model Uses User-Specified Options:
1. Final Plume Rise.
2. Stack-tip Downwash.
3. Buoyancy-induced Dispersion.
4. Calms Processing Routine.
5. Missing Data Processing Routine.
6. User-Specified Wind Profile Exponents.
7. User-Specified Vertical Potential Temperature Gradients.

**Model Accepts Receptors on ELEV Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 40 Source(s); 7 Source Group(s); and 2 Receptor(s)

**The Model Assumes A Pollutant Type of: PM-10

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
 Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
 m for Missing Hours
 b for Both Calm and Missing Hours

Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.0000 ; Rot. Angle = 180.0
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
 Output Units = MICROGRAMS/M**3

Input Runstream File: G:\BEEST\GQ\CLASS1.DTA ; **Output Print File: G:\BEEST\GQ\CLASS1.LST

*** ISCS13 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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MODELOPTs: CONC RURAL ELEV MSGPRO

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
BGESE1	0	0.18050E+00	390660.0	3872330.0	908.3	6.71	305.00	21.53	1.00	NO	

*** ISCS13 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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MODELOPTs: CONC RURAL ELEV MSGPRO

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
BLSPIT1	0	0.19780E+02	390300.0	3872374.0	960.1	50.00	93.02	23.26	SEASON
BLSPIT2	0	0.19780E+02	390553.0	3872050.0	975.4	50.00	93.02	23.26	SEASON
BLSPIT3	0	0.19780E+02	391726.0	3871973.0	1127.8	50.00	93.02	23.26	SEASON
BLSPIT4	0	0.19780E+02	391015.0	3871607.0	1097.3	50.00	93.02	23.26	SEASON
BLSPIT5	0	0.19780E+02	391400.0	3871240.0	1097.3	50.00	93.02	23.26	SEASON
BLSPIT6	0	0.19780E+02	391000.0	3871240.0	1097.3	50.00	93.02	23.26	SEASON

*** ISCS13 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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MODELOPTs: CONC RURAL ELEV MSGPRO

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	COORD (SW CORNER) Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
DRLPIT1	0	0.30170E-07	390138.0	3872375.0	960.1	2.00	400.00	250.00	45.00	0.00	SEASON
DRLPIT2	0	0.30170E-07	390421.0	3872091.0	975.4	2.00	400.00	250.00	45.00	0.00	SEASON
DRLPIT3	0	0.30182E-07	390876.0	3871798.0	1036.2	2.00	1100.00	350.00	0.00	0.00	SEASON
DRLPIT4	0	0.30942E-07	390640.0	3871432.0	1097.3	2.00	1350.00	350.00	0.00	0.00	SEASON
DRLPIT5	0	0.30171E-07	391200.0	3871050.0	1097.3	2.00	400.00	380.00	0.00	0.00	SEASON
DRLPIT6	0	0.30171E-07	390800.0	3871050.0	1097.3	2.00	400.00	380.00	0.00	0.00	SEASON
TRLPIT1	0	0.49140E-06	390138.0	3872375.0	960.1	6.00	400.00	250.00	45.00	0.00	SEASON
TRLPIT2	0	0.49140E-06	390421.0	3872091.0	975.4	6.00	400.00	250.00	45.00	0.00	SEASON
TRLPIT3	0	0.49143E-06	390876.0	3871798.0	1036.2	6.00	1100.00	350.00	0.00	0.00	SEASON
TRLPIT4	0	0.49143E-06	390640.0	3871432.0	1097.3	6.00	1350.00	350.00	0.00	0.00	SEASON
TRLPIT5	0	0.49138E-06	391200.0	3871050.0	1097.3	6.00	400.00	380.00	0.00	0.00	SEASON
TRLPIT6	0	0.49138E-06	390800.0	3871050.0	1097.3	6.00	400.00	380.00	0.00	0.00	SEASON
HAUL_1	0	0.11676E-05	390138.0	3872375.0	960.1	2.00	400.00	62.50	45.00	0.00	SEASON

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*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
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MSGERO

GROUP ID:

SOURCE IDs:

ALL	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	DRLPIT6	BLSPIT1	BLSPIT2	BLSPIT3	BLSPIT4	BLSPIT5	BLSPIT6	
	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	TRLPIT6	HAUL_1	HAUL_2	HAUL_3	HAUL_4	HAUL_5	HAUL_6	
	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	TRU_WST5	DZG_W1	DZG_W2	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	
	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5									
PIT_1	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	BLSPIT1	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	HAUL_1	
	HAUL_2	HAUL_3	HAUL_4	HAUL_5	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	TRU_WST5	DZG_W1	DZG_W2	
	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5					
PIT_2	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	BLSPIT2	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	HAUL_1	
	HAUL_2	HAUL_3	HAUL_4	HAUL_5	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	TRU_WST5	DZG_W1	DZG_W2	
	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5					
PIT_3	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	DRLPIT6	BLSPIT3	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	
	TRLPIT6	HAUL_1	HAUL_2	HAUL_3	HAUL_4	HAUL_5	HAUL_6	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	
	TRU_WST5	DZG_W1	DZG_W2	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5		
PIT_4	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	DRLPIT6	BLSPIT4	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	
	TRLPIT6	HAUL_1	HAUL_2	HAUL_3	HAUL_4	HAUL_5	HAUL_6	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	
	TRU_WST5	DZG_W1	DZG_W2	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5		
PIT_5	DRLPIT1	DRLPIT2	DRLPIT3	DRLPIT4	DRLPIT5	DRLPIT6	BLSPIT5	TRLPIT1	TRLPIT2	TRLPIT3	TRLPIT4	TRLPIT5	
	TRLPIT6	HAUL_1	HAUL_2	HAUL_3	HAUL_4	HAUL_5	HAUL_6	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	
	TRU_WST5	DZG_W1	DZG_W2	DZG_W3	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5		
PIT_6	DRLPIT3	DRLPIT4	DRLPIT5	DRLPIT6	BLSPIT6	TRLPIT3	TRLPIT4	TRLPIT5	TRLPIT6	HAUL_1	HAUL_2	HAUL_3	
	HAUL_4	HAUL_5	HAUL_6	BGHESE1	TRU_WST1	TRU_WST2	TRU_WST3	TRU_WST4	TRU_WST5	DZG_W1	DZG_W2	DZG_W3	
	DZG_W4	DZG_W5	ERSN_W1	ERSN_W2	ERSN_W3	ERSN_W4	ERSN_W5						

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
*** Class 1 Analysis - 1991 Met - 6 MTPY Hourly Average

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RURAL ELEV

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* SOURCE EMISSION RATE SCALARS WHICH VARY SEASONALLY *

	WINTER	SPRING	SUMMER	FALL

SOURCE ID = DRLPIT1 ; SOURCE TYPE = AREA :	.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = DRLPIT2 ; SOURCE TYPE = AREA :				

		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = DRLPIT3 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = DRLPIT4 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = DRLPIT5 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = DRLPIT6 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = BLSPIIT1 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = BLSPIIT2 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = BLSPIIT3 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = BLSPIIT4 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = BLSPIIT5 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = BLSPIIT6 ;	SOURCE TYPE = VOLUME :				
		.41700E-01	.41700E-01	.41700E-01	.41700E-01
SOURCE ID = TRLPIT1 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRLPIT2 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRLPIT3 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRLPIT4 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRLPIT5 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRLPIT6 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_1 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_2 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_3 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_4 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_5 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = HAUL_6 ;	SOURCE TYPE = AREA :				
		.83330E+00	.83330E+00	.83330E+00	.83330E+00
SOURCE ID = TRU_WST1 ;	SOURCE TYPE = AREA :				
		.66670E+00	.66670E+00	.66670E+00	.66670E+00
SOURCE ID = TRU_WST2 ;	SOURCE TYPE = AREA :				
		.66670E+00	.66670E+00	.66670E+00	.66670E+00
SOURCE ID = TRU_WST3 ;	SOURCE TYPE = AREA :				
		.66670E+00	.66670E+00	.66670E+00	.66670E+00
SOURCE ID = TRU_WST4 ;	SOURCE TYPE = AREA :				
		.66670E+00	.66670E+00	.66670E+00	.66670E+00

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CATEGORY	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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***MODELPTS: CONC RURAL ELEV MSGPRO

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: g:\METDATA\SOL\SOL91M.ASC FORMAT: (412,2F9.4,F6.1,I2,2F7.1,2F9.4,I10.1,I3.4,I4,I7.2)
 SURFACE STATION NO.: 98765 UPPER AIR STATION NO.: 24128
 NAME: UNKNOWN NAME: WINHEMUCCA,NV
 YEAR: 1991 YEAR: 1991

YEAR	MONTH	DAY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-O (M)	IPCODE	PRATE (mm/HR)
91	1	1	1	339.6	2.57	270.4	6	340.5 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	2	341.2	2.57	271.5	6	337.1 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	3	346.3	2.57	273.1	6	333.8 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	4	357.3	1.03	272.6	7	330.4 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	5	11.4	1.03	269.3	7	327.1 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	6	300.7	1.00	267.6	7	323.7 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	7	12.6	1.54	268.7	7	320.4 23.0	0.0000	0.0	0.0000	0	0.00
91	1	1	8	343.7	2.06	273.7	6	73.6 49.6	0.0000	0.0	0.0000	0	0.00
91	1	1	9	7.9	3.09	277.0	5	73.6 90.9	0.0000	0.0	0.0000	0	0.00
91	1	1	10	17.0	2.57	278.2	4	118.3 132.1	0.0000	0.0	0.0000	0	0.00
91	1	1	11	13.4	3.09	280.4	3	162.9 173.3	0.0000	0.0	0.0000	0	0.00
91	1	1	12	28.0	2.57	281.5	3	207.6 214.5	0.0000	0.0	0.0000	0	0.00
91	1	1	13	17.5	3.60	283.2	3	252.3 255.8	0.0000	0.0	0.0000	0	0.00
91	1	1	14	34.3	3.09	283.2	3	297.0 297.0	0.0000	0.0	0.0000	0	0.00
91	1	1	15	40.1	2.06	283.2	4	297.0 297.0	0.0000	0.0	0.0000	0	0.00
91	1	1	16	41.5	1.54	282.0	3	297.0 297.0	0.0000	0.0	0.0000	0	0.00
91	1	1	17	25.5	1.54	276.5	4	296.0 296.0	0.0000	0.0	0.0000	0	0.00
91	1	1	18	347.2	1.03	272.6	5	294.2 243.7	0.0000	0.0	0.0000	0	0.00
91	1	1	19	305.0	1.03	271.5	6	292.3 208.9	0.0000	0.0	0.0000	0	0.00
91	1	1	20	337.2	1.00	270.9	7	290.4 174.1	0.0000	0.0	0.0000	0	0.00
91	1	1	21	25.4	1.03	269.8	7	288.6 139.3	0.0000	0.0	0.0000	0	0.00
91	1	1	22	319.1	1.03	269.3	7	286.7 104.6	0.0000	0.0	0.0000	0	0.00
91	1	1	23	318.6	1.00	269.8	7	284.9 69.8	0.0000	0.0	0.0000	0	0.00
91	1	1	24	131.1	1.00	270.4	7	283.0 35.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.

FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

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***MODELPTS: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSPT1,
 BLSPT2, BLSPT3, BLSPT4, BLSPT5, BLSPT6, TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1,
 HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6, BGSE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00814	420000.00	3802000.00	0.01232

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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***MODELPTS: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT_1 ***

INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, BLSPTIT1, TRLPIT1,
 TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, BGHSE1, TRU_WST1, TRU_WST2,
 TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, ERSN_W1, ERSN_W2, ERSN_W3, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF RM-10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00533	420000.00	3802000.00	0.01031

*** ISCST3 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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**MODELOPTs: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 2 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, BLSPTIT2, TRLPIT1,
 TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, BGHSE1, TRU_WST1, TRU_WST2,
 TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, ERSN_W1, ERSN_W2, ERSN_W3, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF RM-10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00528	420000.00	3802000.00	0.01018

*** ISCST3 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
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**MODELOPTs: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 3 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSPTIT3,
 TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
 BGHSE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF RM-10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00541	420000.00	3802000.00	0.01052

*** ISCST3 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
 *** Class 1 Analysis - 1991 Met - 6 MMTFY Hourly Average *** 11:06:29
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**MODELOPTs: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 4 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSPTIT4,
 TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
 BGHSE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF RM-10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00542	420000.00	3802000.00	0.01055

*** ISCST3 - VERSION 96113 *** ** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT *** 11/12/96
 *** Class 1 Analysis - 1991 Met - 6 MMTFY Hourly Average *** 11:06:29
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**MODELOPTs: CONC RURAL ELEV MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 5 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSPTIT5,
 TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
 BGHSE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF RM-10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00543	420000.00	3802000.00	0.01055

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT ***

*** Class 1 Analysis - 1991 Met - 6 MONTH Hourly Average ***

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*** MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE ANNUAL (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 6 ***

INCLUDING SOURCE(S): DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT6 , TRLPIT3 , TRLPIT4 ,

TRLPIT5 , TRLPIT6 , HAUL 1 , HAUL 2 , HAUL 3 , HAUL 4 , HAUL 5 , HAUL 6 , BGSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 ,

TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
394000.00	3953000.00	0.00513	420000.00	3802000.00	0.00993

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT ***

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*** MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSFIT1 , BLSFIT2 ,

BLSFIT3 , BLSFIT4 , BLSFIT5 , BLSFIT6 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , TRLPIT6 , HAUL 1 ,

HAUL 2 , HAUL 3 , HAUL 4 , HAUL 5 , HAUL 6 , BGSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)
394000.00	3953000.00	0.22066 (91010624)	420000.00	3802000.00	0.22910c (91120524)

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT ***

*** Class 1 Analysis - 1991 Met - 6 MONTH Hourly Average ***

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*** MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 1 ***

INCLUDING SOURCE(S): DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , BLSFIT1 , TRLPIT1 ,

TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , HAUL 1 , HAUL 2 , HAUL 3 , HAUL 4 , HAUL 5 , BGSE1 , TRU_WST1 , TRU_WST2 ,

TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)
394000.00	3953000.00	0.11441 (91010624)	420000.00	3802000.00	0.20528c (91120524)

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT ***

*** Class 1 Analysis - 1991 Met - 6 MONTH Hourly Average ***

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*** MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 2 ***

INCLUDING SOURCE(S): DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , BLSFIT2 , TRLPIT1 ,

TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , HAUL 1 , HAUL 2 , HAUL 3 , HAUL 4 , HAUL 5 , BGSE1 , TRU_WST1 , TRU_WST2 ,

TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YTMDDHH)
394000.00	3953000.00	0.11382 (91010624)	420000.00	3802000.00	0.20257c (91120524)

MSG290

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*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT_3 ***
      INCLUDING SOURCE(S):   DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, HLSPTT3,
TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
BGSEEL, TRU WST1, TRU WST2, TRU WST3, TRU WST4, TRU WST5, DZG W1, DZG W2, DZG W3, DZG W4, DZG W5,

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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM-10 IN MICROGRAMS/M³

X-COORD (M)	Y-COORD (M)	CONC	(YTM+DBHE)	X-COORD (M)	Y-COORD (M)	CONC	(YTM+DBHE)
394000.00	3953000.00	0.11835	(91010624)	420000.00	3862000.00	0.21109e	(91120524)

MSGT RD

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PTT 4 ***
 INCLUDING SOURCE(S): DRLP1TT1, DRLP1TT2, DRLP1TT3, DRLP1TT4, DRLP1TT5, DRLP1TT6, BLSPTT4,
 TRLP1TT1, TRLP1TT2, TRLP1TT3, TRLP1TT4, TRLP1TT5, TRLP1TT6, BAUL1, BAUL2, BAUL3, BAUL4, BAUL5, BAUL6,
 BGASL1, TRU WST1, TRU WST2, TRU WST3, TRU WST4, TRU WST5, DZG W1, DZG W2, DZG W3, DZG W4, DZG W5, .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF EM-10 IN MICROGRAMS/M³

X-COORD (M)	Y-COORD (M)	CONC	(YTMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YTMDDHH)
394000.00	3953000.00	0.11885	(91010624)	420000.00	3802000.00	0.21122c	(91120524)

MSGZ90

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PTT 5 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, ALSPTIS,
 TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HANL 1, HANL 2, HANL 3, HANL 4, HANL 5, HANL 6,
 EGSE1, TRU WST1, TRU WST2, TRU WST3, TRU WST4, TRU WST5, DZG W1, DZG W2, DZG W3, DZG W4, DZG W5

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM-10 IN MICROGRAMS/M³

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
394000.00	3953000.00	0.11850	(91010624)	420000.00	3802000.00	0.21122c	(91120524)

MSGZRO

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 6 ***
 INCLUDING SOURCE(S): DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, HLPIT6, TRLPIT3, TRLPIT4,
 TRLPIT5, TRLPIT6, HAUL 1, HAUL 2, HAUL 3, HAUL 4, HAUL 5, HAUL 6, BGASE1, TRU WST1, TRU WST2, TRU WST3,
 TRU WST4, TRU WST5, DZG W1, DZG W2, DZG W3, DZG W4, DZG W5, ERSN W1, ERSN W2, ERSN W3, ERSN W4, ERSN W5.

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF EM-10 IN MICROGRAMS/M³

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
394000.00	3953000.00	0.11307	(91010624)	420000.00	3802000.00	0.19815c	(91120524)

MSG280

*** THE MAXIMUM 50 YEAR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, HSLPIT1.

BLSPT2 , BLSPT3 , BLSPT4 , BLSPT5 , BLSPT6 , TRLPIT1 , TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , TRLPIT6 , BAUL_1 ,
 BAUL_2 , BAUL_3 , BAUL_4 , BAUL_5 , BAUL_6 , BGSE1 , TRU_WST1 , TRU_WST2 , TRU_WST3 , TRU_WST4 , TRU_WST5 , . . . ,

** CONC OF PM-10 IN MICROGRAMS/M**3 **

RANK	CONC	(YTMDDHH)	AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YTMDDHH)	AT	RECEPTOR (XR,YR) OF TYPE
1.	0.22910e	(91120524)	AT	(420000.00, 3802000.00) DC	26.	0.08635e	(91010924)	AT	(420000.00, 3802000.00) DC
2.	0.22066	(91010624)	AT	(394000.00, 3953000.00) DC	27.	0.08567e	(91122724)	AT	(420000.00, 3802000.00) DC
3.	0.18955e	(91120924)	AT	(420000.00, 3802000.00) DC	28.	0.08377	(91020124)	AT	(420000.00, 3802000.00) DC
4.	0.18858	(91121024)	AT	(420000.00, 3802000.00) DC	29.	0.07718	(91113024)	AT	(420000.00, 3802000.00) DC
5.	0.17487	(91011824)	AT	(420000.00, 3802000.00) DC	30.	0.07702	(91112324)	AT	(420000.00, 3802000.00) DC
6.	0.14846	(91010124)	AT	(420000.00, 3802000.00) DC	31.	0.07259	(91011824)	AT	(394000.00, 3953000.00) DC
7.	0.14399	(91123024)	AT	(420000.00, 3802000.00) DC	32.	0.07171	(91032624)	AT	(394000.00, 3953000.00) DC
8.	0.14046	(91022324)	AT	(420000.00, 3802000.00) DC	33.	0.06714	(91113024)	AT	(394000.00, 3953000.00) DC
9.	0.13895	(91122424)	AT	(420000.00, 3802000.00) DC	34.	0.06681	(91030424)	AT	(394000.00, 3953000.00) DC
10.	0.13656	(91022024)	AT	(420000.00, 3802000.00) DC	35.	0.06671	(91040524)	AT	(420000.00, 3802000.00) DC
11.	0.13528	(91110724)	AT	(420000.00, 3802000.00) DC	36.	0.06622	(91123124)	AT	(420000.00, 3802000.00) DC
12.	0.13257	(91121024)	AT	(394000.00, 3953000.00) DC	37.	0.06286	(91071424)	AT	(394000.00, 3953000.00) DC
13.	0.12228	(91112324)	AT	(394000.00, 3953000.00) DC	38.	0.06208	(91042824)	AT	(420000.00, 3802000.00) DC
14.	0.12163	(91030224)	AT	(394000.00, 3953000.00) DC	39.	0.06164	(91012224)	AT	(420000.00, 3802000.00) DC
15.	0.12105	(91121424)	AT	(420000.00, 3802000.00) DC	40.	0.05734	(91102324)	AT	(420000.00, 3802000.00) DC
16.	0.11996	(91012524)	AT	(420000.00, 3802000.00) DC	41.	0.05687	(91111924)	AT	(394000.00, 3953000.00) DC
17.	0.11907	(91010824)	AT	(420000.00, 3802000.00) DC	42.	0.05618	(91011424)	AT	(394000.00, 3953000.00) DC
18.	0.11716	(91100924)	AT	(420000.00, 3802000.00) DC	43.	0.05593	(91111624)	AT	(420000.00, 3802000.00) DC
19.	0.10692	(91110824)	AT	(394000.00, 3953000.00) DC	44.	0.05576	(91110424)	AT	(394000.00, 3953000.00) DC
20.	0.10496	(91102424)	AT	(420000.00, 3802000.00) DC	45.	0.05432	(91102424)	AT	(394000.00, 3953000.00) DC
21.	0.10207	(91022824)	AT	(394000.00, 3953000.00) DC	46.	0.05263	(91100424)	AT	(394000.00, 3953000.00) DC
22.	0.09509	(91090324)	AT	(394000.00, 3953000.00) DC	47.	0.05246	(91082424)	AT	(394000.00, 3953000.00) DC
23.	0.09053	(91091924)	AT	(420000.00, 3802000.00) DC	48.	0.05002	(91011224)	AT	(394000.00, 3953000.00) DC
24.	0.08896	(91012624)	AT	(420000.00, 3802000.00) DC	49.	0.04986	(91030324)	AT	(394000.00, 3953000.00) DC
25.	0.08731	(91111824)	AT	(420000.00, 3802000.00) DC	50.	0.04962	(91060524)	AT	(394000.00, 3953000.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GF = GRIDPOLR
 DC = DISCCART
 DF = DISCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MHPY Hourly Average

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**MODELOPTs: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FIT 1 ***
 INCLUDING SOURCE(S): DRLPIT1 , DRLPIT2 , DRLPIT3 , DRLPIT4 , DRLPIT5 , BLSPT1 , TRLPIT1 ,
 TRLPIT2 , TRLPIT3 , TRLPIT4 , TRLPIT5 , BAUL_1 , BAUL_2 , BAUL_3 , BAUL_4 , BAUL_5 , BGSE1 , TRU_WST1 , TRU_WST2 ,
 TRU_WST3 , TRU_WST4 , TRU_WST5 , DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , . . . ,

** CONC OF PM-10 IN MICROGRAMS/M**3 **

RANK	CONC	(YTMDDHH)	AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YTMDDHH)	AT	RECEPTOR (XR,YR) OF TYPE
1.	0.20528e	(91120524)	AT	(420000.00, 3802000.00) DC	26.	0.07058	(91113024)	AT	(420000.00, 3802000.00) DC
2.	0.17122e	(91120924)	AT	(420000.00, 3802000.00) DC	27.	0.06900	(91112324)	AT	(420000.00, 3802000.00) DC
3.	0.16595	(91121024)	AT	(420000.00, 3802000.00) DC	28.	0.06442e	(91122724)	AT	(420000.00, 3802000.00) DC
4.	0.15768	(91011824)	AT	(420000.00, 3802000.00) DC	29.	0.06396	(91032624)	AT	(394000.00, 3953000.00) DC
5.	0.13283	(91010124)	AT	(420000.00, 3802000.00) DC	30.	0.06289	(91121024)	AT	(394000.00, 3953000.00) DC
6.	0.12821	(91022324)	AT	(420000.00, 3802000.00) DC	31.	0.06065	(91040524)	AT	(420000.00, 3802000.00) DC
7.	0.12711	(91123024)	AT	(420000.00, 3802000.00) DC	32.	0.05898	(91011824)	AT	(394000.00, 3953000.00) DC
8.	0.12527	(91022024)	AT	(420000.00, 3802000.00) DC	33.	0.05888	(91123124)	AT	(420000.00, 3802000.00) DC
9.	0.12420	(91122424)	AT	(420000.00, 3802000.00) DC	34.	0.05623	(91071424)	AT	(394000.00, 3953000.00) DC
10.	0.12151	(91110724)	AT	(420000.00, 3802000.00) DC	35.	0.05613	(91042824)	AT	(420000.00, 3802000.00) DC
11.	0.11441	(91010624)	AT	(394000.00, 3953000.00) DC	36.	0.05390	(91012224)	AT	(420000.00, 3802000.00) DC
12.	0.10896	(91112324)	AT	(394000.00, 3953000.00) DC	37.	0.05387	(91030424)	AT	(394000.00, 3953000.00) DC
13.	0.10778	(91010824)	AT	(420000.00, 3802000.00) DC	38.	0.05255	(91102324)	AT	(420000.00, 3802000.00) DC
14.	0.10774	(91030224)	AT	(394000.00, 3953000.00) DC	39.	0.05059	(91022824)	AT	(394000.00, 3953000.00) DC
15.	0.10629	(91012524)	AT	(420000.00, 3802000.00) DC	40.	0.04947	(91111624)	AT	(420000.00, 3802000.00) DC
16.	0.10418	(91100924)	AT	(420000.00, 3802000.00) DC	41.	0.04880	(91111924)	AT	(394000.00, 3953000.00) DC
17.	0.09970	(91121424)	AT	(420000.00, 3802000.00) DC	42.	0.04831	(91011424)	AT	(394000.00, 3953000.00) DC
18.	0.09414	(91102424)	AT	(420000.00, 3802000.00) DC	43.	0.04796	(91102424)	AT	(394000.00, 3953000.00) DC
19.	0.08623	(91090324)	AT	(394000.00, 3953000.00) DC	44.	0.04710	(91100424)	AT	(394000.00, 3953000.00) DC
20.	0.08548	(91110824)	AT	(394000.00, 3953000.00) DC	45.	0.04466	(91030324)	AT	(394000.00, 3953000.00) DC
21.	0.07988	(91012624)	AT	(420000.00, 3802000.00) DC	46.	0.04446	(91060524)	AT	(394000.00, 3953000.00) DC
22.	0.07974	(91091924)	AT	(420000.00, 3802000.00) DC	47.	0.04395	(91081024)	AT	(394000.00, 3953000.00) DC
23.	0.07780	(91111824)	AT	(420000.00, 3802000.00) DC	48.	0.04126	(91011024)	AT	(420000.00, 3802000.00) DC
24.	0.07577e	(91010924)	AT	(420000.00, 3802000.00) DC	49.	0.04101	(91120824)	AT	(420000.00, 3802000.00) DC
25.	0.07542	(91020124)	AT	(420000.00, 3802000.00) DC	50.	0.03778	(91010524)	AT	(420000.00, 3802000.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GF = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** ISCS3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MTPY Hourly Average

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***MODELOPTS: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 2 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, BLSFIT2, TRLPIT1,
 TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, HAUL 1, HAUL 2, HAUL 3, HAUL 4, HAUL 5, BGSE1, TRU_WST1, TRU_WST2,
 TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, ERSN_W1, ERSN_W2, ERSN_W3, . . . ,

** CONC OF PM-10 IN MICROGRAMS/M**3

RANK	CONC (YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	0.20257e(91120524) AT (	420000.00, 3802000.00) DC	26.	0.06989 (91113024) AT (	420000.00, 3802000.00) DC
2.	0.16915e(91120924) AT (	420000.00, 3802000.00) DC	27.	0.06788 (91112324) AT (	420000.00, 3802000.00) DC
3.	0.16277 (91121024) AT (	420000.00, 3802000.00) DC	28.	0.06394e(91122724) AT (	420000.00, 3802000.00) DC
4.	0.15587 (91011824) AT (	420000.00, 3802000.00) DC	29.	0.06277 (91032624) AT (	394000.00, 3953000.00) DC
5.	0.13104 (91010124) AT (	420000.00, 3802000.00) DC	30.	0.06234 (91121024) AT (	394000.00, 3953000.00) DC
6.	0.12715 (91022324) AT (	420000.00, 3802000.00) DC	31.	0.06013 (91040524) AT (	420000.00, 3802000.00) DC
7.	0.12482 (91123024) AT (	420000.00, 3802000.00) DC	32.	0.05850 (91011824) AT (	394000.00, 3953000.00) DC
8.	0.12435 (91022024) AT (	420000.00, 3802000.00) DC	33.	0.05784 (91123124) AT (	420000.00, 3802000.00) DC
9.	0.12236 (91122424) AT (	420000.00, 3802000.00) DC	34.	0.05560 (91071424) AT (	394000.00, 3953000.00) DC
10.	0.12007 (91110724) AT (	420000.00, 3802000.00) DC	35.	0.05555 (91042824) AT (	420000.00, 3802000.00) DC
11.	0.11382 (91010624) AT (	394000.00, 3953000.00) DC	36.	0.05328 (91030424) AT (	394000.00, 3953000.00) DC
12.	0.10760 (91112324) AT (	394000.00, 3953000.00) DC	37.	0.05268 (91012224) AT (	420000.00, 3802000.00) DC
13.	0.10670 (91010824) AT (	420000.00, 3802000.00) DC	38.	0.05216 (91102324) AT (	420000.00, 3802000.00) DC
14.	0.10628 (91030224) AT (	394000.00, 3953000.00) DC	39.	0.05072 (91022824) AT (	394000.00, 3953000.00) DC
15.	0.10457 (91012524) AT (	420000.00, 3802000.00) DC	40.	0.04862 (91111624) AT (	420000.00, 3802000.00) DC
16.	0.10258 (91100924) AT (	420000.00, 3802000.00) DC	41.	0.04818 (91011424) AT (	394000.00, 3953000.00) DC
17.	0.09810 (91121424) AT (	420000.00, 3802000.00) DC	42.	0.04797 (91111924) AT (	394000.00, 3953000.00) DC
18.	0.09291 (91102424) AT (	420000.00, 3802000.00) DC	43.	0.04678 (91102424) AT (	394000.00, 3953000.00) DC
19.	0.08586 (91090324) AT (	394000.00, 3953000.00) DC	44.	0.04650 (91100424) AT (	394000.00, 3953000.00) DC
20.	0.08487 (91110824) AT (	394000.00, 3953000.00) DC	45.	0.04403 (91060524) AT (	394000.00, 3953000.00) DC
21.	0.07900 (91012624) AT (	420000.00, 3802000.00) DC	46.	0.04351 (91030324) AT (	394000.00, 3953000.00) DC
22.	0.07885 (91091924) AT (	420000.00, 3802000.00) DC	47.	0.04341 (91081024) AT (	394000.00, 3953000.00) DC
23.	0.07669 (91111824) AT (	420000.00, 3802000.00) DC	48.	0.04099 (91011024) AT (	420000.00, 3802000.00) DC
24.	0.07465 (91020124) AT (	420000.00, 3802000.00) DC	49.	0.03988 (91120824) AT (	420000.00, 3802000.00) DC
25.	0.07422e(91010924) AT (	420000.00, 3802000.00) DC	50.	0.03759 (91010524) AT (	420000.00, 3802000.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GF = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** ISCS3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MTPY Hourly Average

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***MODELOPTS: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 3 ***
 INCLUDING SOURCE(S): DRLPIT1, DRLPIT2, DRLPIT3, DRLPIT4, DRLPIT5, DRLPIT6, BLSFIT3,
 TRLPIT1, TRLPIT2, TRLPIT3, TRLPIT4, TRLPIT5, TRLPIT6, HAUL 1, HAUL 2, HAUL 3, HAUL 4, HAUL 5, HAUL 6,
 BGSE1, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . . ,

** CONC OF PM-10 IN MICROGRAMS/M**3

RANK	CONC (YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC (YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	0.21109e(91120524) AT (	420000.00, 3802000.00) DC	26.	0.07217 (91113024) AT (	420000.00, 3802000.00) DC
2.	0.17557e(91120924) AT (	420000.00, 3802000.00) DC	27.	0.07045 (91112324) AT (	420000.00, 3802000.00) DC
3.	0.17035 (91121024) AT (	420000.00, 3802000.00) DC	28.	0.06484 (91032624) AT (	394000.00, 3953000.00) DC
4.	0.16213 (91011824) AT (	420000.00, 3802000.00) DC	29.	0.06281e(91122724) AT (	420000.00, 3802000.00) DC
5.	0.13666 (91010124) AT (	420000.00, 3802000.00) DC	30.	0.06218 (91040524) AT (	420000.00, 3802000.00) DC
6.	0.13173 (91022324) AT (	420000.00, 3802000.00) DC	31.	0.06170 (91121024) AT (	394000.00, 3953000.00) DC
7.	0.13057 (91123024) AT (	420000.00, 3802000.00) DC	32.	0.06105 (91011824) AT (	394000.00, 3953000.00) DC
8.	0.12859 (91022024) AT (	420000.00, 3802000.00) DC	33.	0.06023 (91123124) AT (	420000.00, 3802000.00) DC
9.	0.12746 (91122424) AT (	420000.00, 3802000.00) DC	34.	0.05790 (91071424) AT (	394000.00, 3953000.00) DC
10.	0.12514 (91110724) AT (	420000.00, 3802000.00) DC	35.	0.05776 (91042824) AT (	420000.00, 3802000.00) DC
11.	0.11835 (91010624) AT (	394000.00, 3953000.00) DC	36.	0.05512 (91012224) AT (	420000.00, 3802000.00) DC
12.	0.11202 (91112324) AT (	394000.00, 3953000.00) DC	37.	0.05396 (91102324) AT (	420000.00, 3802000.00) DC
13.	0.11091 (91010824) AT (	420000.00, 3802000.00) DC	38.	0.05373 (91022824) AT (	394000.00, 3953000.00) DC

14.	0.11032 (91030224) AT (394000.00, 3953000.00) DC	39.	0.05365 (91030424) AT (394000.00, 3953000.00) DC
15.	0.10937 (91012524) AT (420000.00, 3802000.00) DC	40.	0.05085 (91111624) AT (420000.00, 3802000.00) DC
16.	0.10714 (91100924) AT (420000.00, 3802000.00) DC	41.	0.04985 (91011424) AT (394000.00, 3953000.00) DC
17.	0.10326 (91121424) AT (420000.00, 3802000.00) DC	42.	0.04982 (91111924) AT (394000.00, 3953000.00) DC
18.	0.09680 (91102424) AT (420000.00, 3802000.00) DC	43.	0.04833 (91100424) AT (394000.00, 3953000.00) DC
19.	0.08959 (91090324) AT (394000.00, 3953000.00) DC	44.	0.04813 (91102424) AT (394000.00, 3953000.00) DC
20.	0.08776 (91110824) AT (394000.00, 3953000.00) DC	45.	0.04589 (91060524) AT (394000.00, 3953000.00) DC
21.	0.08210 (91091924) AT (420000.00, 3802000.00) DC	46.	0.04505 (91081024) AT (394000.00, 3953000.00) DC
22.	0.08201 (91012624) AT (420000.00, 3802000.00) DC	47.	0.04457 (91030324) AT (394000.00, 3953000.00) DC
23.	0.08010 (91111824) AT (420000.00, 3802000.00) DC	48.	0.04229 (91011024) AT (420000.00, 3802000.00) DC
24.	0.07768 (91010924) AT (420000.00, 3802000.00) DC	49.	0.04161 (91120824) AT (420000.00, 3802000.00) DC
25.	0.07761 (91020124) AT (420000.00, 3802000.00) DC	50.	0.03885 (91073124) AT (394000.00, 3953000.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GF = GRIDPOLR
 DC = DISCCART
 DF = DISCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MMTFY Hourly Average

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***MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 4 ***
 INCLUDING SOURCE(S): DRLEPIT1, DRLEPIT2, DRLEPIT3, DRLEPIT4, DRLEPIT5, DRLEPIT6, BLSPIT4,
 TELPIT1, TELPIT2, TELPIT3, TELPIT4, TELPIT5, TELPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
 BGSEEL, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . .

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

RANK	CONC	(YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	0.21122c(91120524)	AT (420000.00, 3802000.00)	DC	26.	0.07220 (91113024)	AT (420000.00, 3802000.00)	DC
2.	0.17567c(91120924)	AT (420000.00, 3802000.00)	DC	27.	0.07050 (91112324)	AT (420000.00, 3802000.00)	DC
3.	0.17048 (91121024)	AT (420000.00, 3802000.00)	DC	28.	0.06489 (91032624)	AT (394000.00, 3953000.00)	DC
4.	0.16222 (91011824)	AT (420000.00, 3802000.00)	DC	29.	0.06318c(91122724)	AT (420000.00, 3802000.00)	DC
5.	0.13674 (91010124)	AT (420000.00, 3802000.00)	DC	30.	0.06235 (91121024)	AT (394000.00, 3953000.00)	DC
6.	0.13180 (91022324)	AT (420000.00, 3802000.00)	DC	31.	0.06224 (91040524)	AT (420000.00, 3802000.00)	DC
7.	0.13067 (91123024)	AT (420000.00, 3802000.00)	DC	32.	0.06108 (91011824)	AT (394000.00, 3953000.00)	DC
8.	0.12865 (91022024)	AT (420000.00, 3802000.00)	DC	33.	0.06028 (91123124)	AT (420000.00, 3802000.00)	DC
9.	0.12754 (91122424)	AT (420000.00, 3802000.00)	DC	34.	0.05794 (91071424)	AT (394000.00, 3953000.00)	DC
10.	0.12521 (91110724)	AT (420000.00, 3802000.00)	DC	35.	0.05780 (91042824)	AT (420000.00, 3802000.00)	DC
11.	0.11885 (91010624)	AT (394000.00, 3953000.00)	DC	36.	0.05517 (91012224)	AT (420000.00, 3802000.00)	DC
12.	0.11211 (91112324)	AT (394000.00, 3953000.00)	DC	37.	0.05398 (91102324)	AT (420000.00, 3802000.00)	DC
13.	0.11097 (91010824)	AT (420000.00, 3802000.00)	DC	38.	0.05388 (91030424)	AT (394000.00, 3953000.00)	DC
14.	0.11064 (91030224)	AT (394000.00, 3953000.00)	DC	39.	0.05334 (91022824)	AT (394000.00, 3953000.00)	DC
15.	0.10945 (91012524)	AT (420000.00, 3802000.00)	DC	40.	0.05088 (91111624)	AT (420000.00, 3802000.00)	DC
16.	0.10722 (91100924)	AT (420000.00, 3802000.00)	DC	41.	0.05001 (91011424)	AT (394000.00, 3953000.00)	DC
17.	0.10283 (91121424)	AT (420000.00, 3802000.00)	DC	42.	0.04960 (91111924)	AT (394000.00, 3953000.00)	DC
18.	0.09686 (91102424)	AT (420000.00, 3802000.00)	DC	43.	0.04836 (91100424)	AT (394000.00, 3953000.00)	DC
19.	0.08965 (91090324)	AT (394000.00, 3953000.00)	DC	44.	0.04823 (91102424)	AT (394000.00, 3953000.00)	DC
20.	0.08798 (91110824)	AT (394000.00, 3953000.00)	DC	45.	0.04592 (91060524)	AT (394000.00, 3953000.00)	DC
21.	0.08214 (91091924)	AT (420000.00, 3802000.00)	DC	46.	0.04508 (91081024)	AT (394000.00, 3953000.00)	DC
22.	0.08202 (91012624)	AT (420000.00, 3802000.00)	DC	47.	0.04461 (91030324)	AT (394000.00, 3953000.00)	DC
23.	0.08015 (91111824)	AT (420000.00, 3802000.00)	DC	48.	0.04231 (91011024)	AT (420000.00, 3802000.00)	DC
24.	0.07774c(91010924)	AT (420000.00, 3802000.00)	DC	49.	0.04165 (91120824)	AT (420000.00, 3802000.00)	DC
25.	0.07762 (91020124)	AT (420000.00, 3802000.00)	DC	50.	0.03889 (91073124)	AT (394000.00, 3953000.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
 GF = GRIDPOLR
 DC = DISCCART
 DF = DISCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MMTFY Hourly Average

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***MODELPTS: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT 5 ***
 INCLUDING SOURCE(S): DRLEPIT1, DRLEPIT2, DRLEPIT3, DRLEPIT4, DRLEPIT5, DRLEPIT6, BLSPIT5,
 TELPIT1, TELPIT2, TELPIT3, TELPIT4, TELPIT5, TELPIT6, HAUL_1, HAUL_2, HAUL_3, HAUL_4, HAUL_5, HAUL_6,
 BGSEEL, TRU_WST1, TRU_WST2, TRU_WST3, TRU_WST4, TRU_WST5, DZG_W1, DZG_W2, DZG_W3, DZG_W4, DZG_W5, . . .

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

RANK	CONC	(YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
------	------	--------------	--------------------------	------	------	--------------	--------------------------

1.	0.21122c(91120524)	AT (420000.00, 3802000.00)	DC	26.	0.07221 (91113024)	AT (420000.00, 3802000.00)	DC
2.	0.17367c(91120924)	AT (420000.00, 3802000.00)	DC	27.	0.07049 (91112324)	AT (420000.00, 3802000.00)	DC
3.	0.17046 (91121024)	AT (420000.00, 3802000.00)	DC	28.	0.06489 (91032624)	AT (394000.00, 3953000.00)	DC
4.	0.16223 (91011824)	AT (420000.00, 3802000.00)	DC	29.	0.06335c(91122724)	AT (420000.00, 3802000.00)	DC
5.	0.13674 (91010124)	AT (420000.00, 3802000.00)	DC	30.	0.06223 (91040524)	AT (420000.00, 3802000.00)	DC
6.	0.13181 (91022324)	AT (420000.00, 3802000.00)	DC	31.	0.06219 (91121024)	AT (394000.00, 3953000.00)	DC
7.	0.13066 (91123024)	AT (420000.00, 3802000.00)	DC	32.	0.06108 (91011824)	AT (394000.00, 3953000.00)	DC
8.	0.12866 (91022024)	AT (420000.00, 3802000.00)	DC	33.	0.06027 (91123124)	AT (420000.00, 3802000.00)	DC
9.	0.12753 (91122424)	AT (420000.00, 3802000.00)	DC	34.	0.05794 (91071424)	AT (394000.00, 3953000.00)	DC
10.	0.12522 (91110724)	AT (420000.00, 3802000.00)	DC	35.	0.05780 (91042824)	AT (420000.00, 3802000.00)	DC
11.	0.11850 (91010624)	AT (394000.00, 3953000.00)	DC	36.	0.05516 (91012224)	AT (420000.00, 3802000.00)	DC
12.	0.11211 (91112324)	AT (394000.00, 3953000.00)	DC	37.	0.05399 (91030424)	AT (394000.00, 3953000.00)	DC
13.	0.11098 (91010824)	AT (420000.00, 3802000.00)	DC	38.	0.05399 (91102324)	AT (420000.00, 3802000.00)	DC
14.	0.11061 (91030224)	AT (394000.00, 3953000.00)	DC	39.	0.05354 (91022824)	AT (394000.00, 3953000.00)	DC
15.	0.10944 (91012324)	AT (420000.00, 3802000.00)	DC	40.	0.05088 (91111624)	AT (420000.00, 3802000.00)	DC
16.	0.10721 (91100924)	AT (420000.00, 3802000.00)	DC	41.	0.04994 (91011424)	AT (394000.00, 3953000.00)	DC
17.	0.10297 (91121424)	AT (420000.00, 3802000.00)	DC	42.	0.04974 (91111924)	AT (394000.00, 3953000.00)	DC
18.	0.09686 (91102424)	AT (420000.00, 3802000.00)	DC	43.	0.04836 (91100424)	AT (394000.00, 3953000.00)	DC
19.	0.08966 (91090324)	AT (394000.00, 3953000.00)	DC	44.	0.04822 (91102424)	AT (394000.00, 3953000.00)	DC
20.	0.08800 (91110824)	AT (394000.00, 3953000.00)	DC	45.	0.04592 (91060524)	AT (394000.00, 3953000.00)	DC
21.	0.08215 (91091924)	AT (420000.00, 3802000.00)	DC	46.	0.04508 (91081024)	AT (394000.00, 3953000.00)	DC
22.	0.08204 (91012624)	AT (420000.00, 3802000.00)	DC	47.	0.04460 (91030324)	AT (394000.00, 3953000.00)	DC
23.	0.08015 (91111824)	AT (420000.00, 3802000.00)	DC	48.	0.04232 (91011024)	AT (420000.00, 3802000.00)	DC
24.	0.07773c(91010924)	AT (420000.00, 3802000.00)	DC	49.	0.04164 (91120824)	AT (420000.00, 3802000.00)	DC
25.	0.07764 (91020124)	AT (420000.00, 3802000.00)	DC	50.	0.03889 (91073124)	AT (394000.00, 3953000.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 HMTFY Hourly Average

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***MODELOPTs: CONC

RURAL ELEV

MSGPRO

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PIT_6 ***
 INCLUDING SOURCE(S): DRLPIT3 , DRLPIT4 , DRLPIT5 , DRLPIT6 , BLSPT6 , TRLPIT3 , TRLPIT4 ,
 TRLPIT5 , TRLPIT6 , HAUL_1 , HAUL_2 , HAUL_3 , HAUL_4 , HAUL_5 , HAUL_6 , BGSE1 , TRU_WST1, TRU_WST2, TRU_WST3,
 TRU_WST4, TRU_WST5, DZG_W1 , DZG_W2 , DZG_W3 , DZG_W4 , DZG_W5 , ERSN_W1 , ERSN_W2 , ERSN_W3 , ERSN_W4 , ERSN_W5 ,

*** CONC OF PM-10 IN MICROGRAMS/M**3 ***

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	0.19815c(91120524)	AT (420000.00, 3802000.00)	DC	26.	0.06875 (91113024)	AT (420000.00, 3802000.00)	DC
2.	0.16578c(91120924)	AT (420000.00, 3802000.00)	DC	27.	0.06610 (91112324)	AT (420000.00, 3802000.00)	DC
3.	0.15765 (91121024)	AT (420000.00, 3802000.00)	DC	28.	0.06029 (91032624)	AT (394000.00, 3953000.00)	DC
4.	0.15292 (91011824)	AT (420000.00, 3802000.00)	DC	29.	0.06017c(91122724)	AT (420000.00, 3802000.00)	DC
5.	0.12814 (91010124)	AT (420000.00, 3802000.00)	DC	30.	0.05927 (91121024)	AT (394000.00, 3953000.00)	DC
6.	0.12537 (91022324)	AT (420000.00, 3802000.00)	DC	31.	0.05920 (91040524)	AT (420000.00, 3802000.00)	DC
7.	0.12282 (91022024)	AT (420000.00, 3802000.00)	DC	32.	0.05774 (91011824)	AT (394000.00, 3953000.00)	DC
8.	0.12115 (91123024)	AT (420000.00, 3802000.00)	DC	33.	0.05618 (91123124)	AT (420000.00, 3802000.00)	DC
9.	0.11938 (91122424)	AT (420000.00, 3802000.00)	DC	34.	0.05460 (91042824)	AT (420000.00, 3802000.00)	DC
10.	0.11771 (91110724)	AT (420000.00, 3802000.00)	DC	35.	0.05447 (91071424)	AT (394000.00, 3953000.00)	DC
11.	0.11307 (91010624)	AT (394000.00, 3953000.00)	DC	36.	0.05150 (91102324)	AT (420000.00, 3802000.00)	DC
12.	0.10494 (91010824)	AT (420000.00, 3802000.00)	DC	37.	0.05129 (91022824)	AT (394000.00, 3953000.00)	DC
13.	0.10491 (91112324)	AT (394000.00, 3953000.00)	DC	38.	0.05090 (91030424)	AT (394000.00, 3953000.00)	DC
14.	0.10331 (91030224)	AT (394000.00, 3953000.00)	DC	39.	0.05074 (91012224)	AT (420000.00, 3802000.00)	DC
15.	0.10179 (91012524)	AT (420000.00, 3802000.00)	DC	40.	0.04842 (91011424)	AT (394000.00, 3953000.00)	DC
16.	0.09997 (91100924)	AT (420000.00, 3802000.00)	DC	41.	0.04725 (91111624)	AT (420000.00, 3802000.00)	DC
17.	0.09554 (91121424)	AT (420000.00, 3802000.00)	DC	42.	0.04638 (91111924)	AT (394000.00, 3953000.00)	DC
18.	0.09092 (91102424)	AT (420000.00, 3802000.00)	DC	43.	0.04541 (91100424)	AT (394000.00, 3953000.00)	DC
19.	0.08578 (91090324)	AT (394000.00, 3953000.00)	DC	44.	0.04412 (91102424)	AT (394000.00, 3953000.00)	DC
20.	0.08340 (91110824)	AT (394000.00, 3953000.00)	DC	45.	0.04328 (91060524)	AT (394000.00, 3953000.00)	DC
21.	0.07744 (91012624)	AT (420000.00, 3802000.00)	DC	46.	0.04258 (91081024)	AT (394000.00, 3953000.00)	DC
22.	0.07740 (91091924)	AT (420000.00, 3802000.00)	DC	47.	0.04133 (91030324)	AT (394000.00, 3953000.00)	DC
23.	0.07488 (91111824)	AT (420000.00, 3802000.00)	DC	48.	0.04053 (91011024)	AT (420000.00, 3802000.00)	DC
24.	0.07333 (91020124)	AT (420000.00, 3802000.00)	DC	49.	0.03812 (91120824)	AT (420000.00, 3802000.00)	DC
25.	0.07173c(91010924)	AT (420000.00, 3802000.00)	DC	50.	0.03726 (91010524)	AT (420000.00, 3802000.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT

*** 11/12/96

**MODELOPTs: CONC

RURAL ELEV

MSGPRO

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM-10 IN MICROGRAMS/M**3

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 0.01232 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00814 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_1	1ST HIGHEST VALUE IS 0.01031 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00533 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_2	1ST HIGHEST VALUE IS 0.01018 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00528 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_3	1ST HIGHEST VALUE IS 0.01052 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00541 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_4	1ST HIGHEST VALUE IS 0.01055 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00542 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_5	1ST HIGHEST VALUE IS 0.01055 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00543 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
PIT_6	1ST HIGHEST VALUE IS 0.00993 AT (420000.00, 3802000.00, 853.44, 0.00)	DC	NA	
	2ND HIGHEST VALUE IS 0.00513 AT (394000.00, 3953000.00, 853.44, 0.00)	DC	NA	
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00)			

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
BD = BOUNDARY

*** ISCST3 - VERSION 96113 ***

*** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
*** Class 1 Analysis - 1991 Met - 6 MMTFY Hourly Average

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**MODELOPTs: CONC

RURAL ELEV

MSGPRO

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM-10 IN MICROGRAMS/M**3

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	0.22910c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_1	HIGH 1ST HIGH VALUE IS	0.20528c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_2	HIGH 1ST HIGH VALUE IS	0.20257c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_3	HIGH 1ST HIGH VALUE IS	0.21109c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_4	HIGH 1ST HIGH VALUE IS	0.21122c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_5	HIGH 1ST HIGH VALUE IS	0.21122c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA
PIT_6	HIGH 1ST HIGH VALUE IS	0.19815c	ON 91120524: AT (	420000.00, 3802000.00, 853.44,	0.00) DC	NA

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCCPOLR
 BD = BOUNDARY

*** ISCST3 - VERSION 96113 *** *** GOLDEN QUEEN MINING COMPANY - SOLEDAD MOUNTAIN PROJECT
 *** Class 1 Analysis - 1991 Met - 6 MTFY Hourly Average

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**MODELOPTS: CONC RURAL ELEV MSGPRO

*** Message Summary : ISCST3 Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
 A Total of 5 Warning Message(s)
 A Total of 14 Informational Message(s)
 A Total of 14 Calm Hours Identified

***** FATAL ERROR MESSAGES *****
 *** NONE ***

***** WARNING MESSAGES *****
 SO W391 59 APARM :Aspect ratio (L/W) of area source greater than 10 HAUL_3
 SO W391 61 APARM :Aspect ratio (L/W) of area source greater than 10 HAUL_4
 MX W420 124 METQA :Wind Speed Out-of-Range. KURDAT= 91010604
 MX W420 125 METQA :Wind Speed Out-of-Range. KURDAT= 91010605
 MX W420 126 METQA :Wind Speed Out-of-Range. KURDAT= 91010606

 *** ISCST3 Finishes Successfully ***



APPENDIX H

Visual Effects Screening Analysis for
Source: Golden Queen Mining
Class I Area: Dome Land Wilderness

*** User-selected Screening Scenario Results ***
Input Emissions for

Particulates	21.80	G	/S
NOx (as NO2)	.00	G	/S
Primary NO2	.00	G	/S
Soot	.00	G	/S
Primary SO4	.00	G	/S

	PARTICLE CHARACTERISTICS	
	Density	Diameter
Primary Part.	2.5	6
Soot	2.0	1
Sulfate	1.5	4

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	50.00 km
Source-Observer Distance:	80.00 km
Min. Source-Class I Distance:	80.00 km
Max. Source-Class I Distance:	100.00 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	84.	80.0	84.	2.00	1.035	.05	.015
SKY	140.	84.	80.0	84.	2.00	.165	.05	-.008
TERRAIN	10.	84.	80.0	84.	2.00	.554	.05	.006
TERRAIN	140.	84.	80.0	84.	2.00	.115	.05	.004

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	30.	60.7	139.	2.00	1.271	.05	.017
SKY	140.	30.	60.7	139.	2.00	.198	.05	-.009
TERRAIN	10.	50.	69.9	119.	2.00	.702	.05	.007
TERRAIN	140.	50.	69.9	119.	2.00	.155	.05	.005

"Golden Queen Mining
"Dome Land Wilderness

1	21.800	.000	.000	.000	.000														
0	80.000	80.000	100.000	50.000															
0	1.500	3																	
0	2.500	8																	
0	2.500	6																	
0	2.000	1																	
0	1.500	4																	
0	.040	1.000	6																
0	11.250																		
34																			
1 0	5.0	163.8	24.9	55.8	66.3	.29	.050	2.00	.52	2.00	.08	2.00	.28	2.00	.08				
2 0	10.0	158.8	38.3	43.1	57.0	.42	.050	2.00	.91	2.00	.14	2.00	.40	2.00	.12				
3 0	15.0	153.8	46.8	35.3	50.3	.55	.050	2.00	1.15	2.00	.18	2.00	.49	2.00	.14				
4 0	20.0	148.8	52.7	30.1	45.3	.66	.050	2.00	1.23	2.00	.19	2.00	.55	2.00	.15				
5 0	25.0	143.8	57.2	26.4	41.5	.77	.050	2.00	1.26	2.00	.20	2.00	.59	2.00	.16				
6 0	30.0	138.8	60.7	23.7	38.6	.87	.050	2.00	1.27	2.00	.20	2.00	.63	2.00	.16				
7 0	35.0	133.8	63.5	21.6	36.3	.96	.050	2.00	1.26	2.00	.20	2.00	.66	2.00	.16				
8 0	40.0	128.8	65.9	20.0	34.5	1.04	.050	2.00	1.24	2.00	.19	2.00	.68	2.00	.16				
9 0	45.0	123.8	68.0	18.8	33.1	1.12	.050	2.00	1.22	2.00	.19	2.00	.70	2.00	.16				
10 0	50.0	118.8	69.9	17.8	32.1	1.19	.050	2.00	1.20	2.00	.19	2.00	.70	2.00	.16				
11 0	55.0	113.8	71.6	17.1	31.4	1.25	.050	2.00	1.17	2.00	.19	2.00	.70	2.00	.15				
12 0	60.0	108.8	73.2	16.5	30.9	1.30	.050	2.00	1.14	2.00	.18	2.00	.69	2.00	.15				
13 0	65.0	103.8	74.6	16.1	30.6	1.34	.050	2.00	1.12	2.00	.18	2.00	.67	2.00	.14				
14 0	70.0	98.8	76.1	15.8	30.6	1.37	.050	2.00	1.10	2.00	.17	2.00	.65	2.00	.14				
15 0	75.0	93.8	77.4	15.6	30.9	1.38	.050	2.00	1.07	2.00	.17	2.00	.62	2.00	.13				
16 0	80.0	88.8	78.8	15.6	31.4	1.39	.050	2.00	1.05	2.00	.17	2.00	.59	2.00	.12				
17 1	85.0	83.8	80.2	15.7	32.1	1.39	.050	2.00	1.03	2.00	.16	2.00	.55	2.00	.11				
18 1	90.0	78.8	81.6	15.9	33.1	1.37	.050	2.00	1.01	2.00	.16	2.00	.50	2.00	.11				
19 1	95.0	73.8	83.0	16.3	34.5	1.35	.050	2.00	.99	2.00	.16	2.00	.45	2.00	.10				
20 1	100.0	68.8	84.5	16.7	36.3	1.32	.050	2.00	.97	2.00	.15	2.00	.40	2.00	.09				
21 1	105.0	63.8	86.2	17.4	38.6	1.27	.050	2.00	.94	2.00	.15	2.00	.34	2.00	.07				
22 1	110.0	58.8	87.9	18.3	41.5	1.22	.050	2.00	.91	2.00	.14	2.00	.28	2.00	.06				
23 1	115.0	53.8	89.9	19.4	45.3	1.15	.050	2.00	.88	2.00	.14	2.00	.22	2.00	.05				
24 1	120.0	48.8	92.1	20.8	50.3	1.08	.050	2.00	.83	2.00	.13	2.00	.16	2.00	.04				
25 1	125.0	43.8	94.8	22.6	57.0	1.00	.050	2.00	.78	2.00	.12	2.00	.10	2.00	.02				
26 1	130.0	38.8	97.9	24.9	66.3	.91	.050	2.00	.71	2.00	.11	2.00	.05	2.00	.01				
27 0	135.0	33.8	101.8	28.1	80.0	.81	.050	2.00	.62	2.00	.10	2.00	.02	2.00	.01				
28 0	140.0	28.8	106.9	32.4	101.8	.71	.050	2.00	.51	2.00	.08	2.00	.01	2.00	.00				
29 0	145.0	23.8	113.9	38.8	141.4	.60	.050	2.00	.37	2.00	.06	2.00	.00	2.00	.00				
30 0	150.0	18.8	124.4	48.6	234.5	.49	.050	2.00	.21	2.00	.03	2.00	.00	2.00	.00				
31 0	155.0	13.8	142.2	65.7	701.9	.37	.050	2.00	.07	2.00	.01	2.00	.00	2.00	.00				
32 0	.1	168.6	1.0	79.0	79.5	.04	.109	6.51	.25	2.23	.04	6.50	.27	2.23	.08				
33 1	84.4	84.4	80.0	15.7	32.0	1.39	.050	2.00	1.03	2.00	.17	2.00	.55	2.00	.12				
34 1	132.8	35.9	100.0	26.6	73.3	.86	.050	2.00	.66	2.00	.10	2.00	.03	2.00	.01				
34																			
1 0	5.000	.050	.005	.002	-.002	.002	.001	.000	-.001	.000	.010	.007	-.005	.006					
2 0	10.000	.050	.010	.003	-.005	.003	.003	.001	-.002	.001	.016	.009	-.007	.008					
3 0	15.000	.050	.013	.004	-.007	.004	.005	.001	-.003	.001	.019	.010	-.009	.009					
4 0	20.000	.050	.015	.005	-.008	.005	.007	.001	-.004	.001	.020	.011	-.009	.009					
5 0	25.000	.050	.016	.006	-.008	.005	.008	.001	-.005	.001	.020	.011	-.010	.009					
6 0	30.000	.050	.017	.006	-.009	.005	.009	.002	-.005	.002	.020	.012	-.009	.009					
7 0	35.000	.050	.017	.007	-.009	.005	.010	.002	-.006	.002	.020	.012	-.009	.009					
8 0	40.000	.050	.018	.007	-.009	.005	.011	.002	-.006	.002	.020	.012	-.009	.009					
9 0	45.000	.050	.017	.007	-.009	.005	.011	.002	-.006	.002	.019	.012	-.009	.009					
10 0	50.000	.050	.017	.007	-.009	.005	.011	.002	-.006	.002	.019	.012	-.009	.009					
11 0	55.000	.050	.017	.007	-.009	.005	.012	.002	-.007	.002	.018	.012	-.009	.008					
12 0	60.000	.050	.017	.007	-.009	.005	.012	.002	-.007	.002	.018	.012	-.008	.008					
13 0	65.000	.050	.017	.007	-.008	.005	.012	.002	-.007	.002	.018	.011	-.008	.008					
14 0	70.000	.050	.016	.007	-.008	.005	.012	.002	-.006	.002	.017	.011	-.008	.007					
15 0	75.000	.050	.016	.006	-.008	.004	.011	.002	-.006	.002	.017	.011	-.008	.007					
16 0	80.000	.050	.016	.006	-.008	.004	.011	.002	-.006	.002	.016	.010	-.008	.007					
17 1	85.000	.050	.015	.006	-.008	.004	.011	.002	-.006	.001	.016	.009	-.008	.006					
18 1	90.000	.050	.015	.005	-.008	.003	.011	.002	-.006	.001	.016	.009	-.007	.006					
19 1	95.000	.050	.015	.005	-.007	.003	.010	.001	-.006	.001	.016	.008	-.007	.005					
20 1	100.000	.050	.014	.004	-.007	.003	.010	.001	-.005	.001	.015	.007	-.007	.005					
21 1	105.000	.050	.014	.003	-.007	.002	.009	.001	-.005	.001	.015	.006	-.007	.004					
22 1	110.000	.050	.013	.003	-.007	.002	.009	.001	-.005	.001	.014	.005	-.007	.004					
23 1	115.000	.050	.012	.002	-.006	.001	.008	.000	-.004	.000	.014	.004	-.006	.003					
24 1	120.000	.050	.012	.001	-.006	.001	.007	.000	-.004	.000	.013	.003	-.006	.002					
25 1	125.000	.050	.011	.001	-.005	.001	.006	.000	-.003	.000	.012	.002	-.006	.002					
26 1	130.000	.050	.009	.000	-.005	.000	.005	.000	-.003	.000	.011	.001	-.005	.001					
27 0	135.000	.050	.008	.000	-.004	.000	.004	.000	-.002	.000	.010	.001	-.005	.000					
28 0	140.000	.050	.006	.000	-.003	.000	.003	.000	-.001	.000	.008	.000	-.004	.000					
29 0	145.000	.050	.004																

Visual Effects Screening Analysis for
Source: Golden Queen Mining
Class I Area: San Gabriel Mountains

*** Level-1 Screening ***
Input Emissions for

Particulates	21.80	G	/S
NOx (as NO2)	.00	G	/S
Primary NO2	.00	G	/S
Soot	.00	G	/S
Primary SO4	.00	G	/S

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	50.00 km
Source-Observer Distance:	76.00 km
Min. Source-Class I Distance:	76.00 km
Max. Source-Class I Distance:	100.00 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	84.	76.0	84.	2.00	1.155	.05	.017
SKY	140.	84.	76.0	84.	2.00	.185	.05	-.009
TERRAIN	10.	84.	76.0	84.	2.00	.668	.05	.007
TERRAIN	140.	84.	76.0	84.	2.00	.136	.05	.005

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	25.	54.3	144.	2.00	1.459	.05	.019
SKY	140.	25.	54.3	144.	2.00	.227	.05	-.010
TERRAIN	10.	50.	66.4	119.	2.00	.847	.05	.009
TERRAIN	140.	50.	66.4	119.	2.00	.183	.05	.006

"Golden Queen Mining"
 "San Gabriel Mountains"

1	1						
21.800	.000	.000	.000	.000			
76.000	76.000	100.000	50.000				
1	1.500	3					
1	2.500	8					
1	2.500	6					
1	2.000	1					
1	1.500	4					
1	.040	1.000	6				
1	11.250						

34	1 0	5.0	163.8	23.7	53.0	63.0	.30	.050	2.00	.63	2.00	.10	2.00	.36	2.00	.11
	2 0	10.0	158.8	36.4	40.9	54.1	.44	.050	2.00	1.06	2.00	.17	2.00	.50	2.00	.15
	3 0	15.0	153.8	44.5	33.5	47.8	.57	.050	2.00	1.37	2.00	.21	2.00	.63	2.00	.18
	4 0	20.0	148.8	50.1	28.6	43.0	.69	.050	2.00	1.44	2.00	.22	2.00	.68	2.00	.19
	5 0	25.0	143.8	54.3	25.1	39.4	.80	.050	2.00	1.46	2.00	.23	2.00	.74	2.00	.19
	6 0	30.0	138.8	57.6	22.5	36.7	.90	.050	2.00	1.45	2.00	.23	2.00	.78	2.00	.19
	7 0	35.0	133.8	60.3	20.5	34.5	1.00	.050	2.00	1.43	2.00	.22	2.00	.81	2.00	.19
	8 0	40.0	128.8	62.6	19.0	32.8	1.09	.050	2.00	1.41	2.00	.22	2.00	.83	2.00	.19
	9 0	45.0	123.8	64.6	17.8	31.5	1.17	.050	2.00	1.37	2.00	.22	2.00	.84	2.00	.19
	10 0	50.0	118.8	66.4	16.9	30.5	1.24	.050	2.00	1.34	2.00	.21	2.00	.85	2.00	.18
	11 0	55.0	113.8	68.0	16.2	29.8	1.30	.050	2.00	1.31	2.00	.21	2.00	.84	2.00	.18
	12 0	60.0	108.8	69.5	15.7	29.3	1.35	.050	2.00	1.28	2.00	.20	2.00	.83	2.00	.17
	13 0	65.0	103.8	70.9	15.3	29.1	1.39	.050	2.00	1.25	2.00	.20	2.00	.81	2.00	.17
	14 0	70.0	98.8	72.3	15.0	29.1	1.42	.050	2.00	1.23	2.00	.20	2.00	.78	2.00	.16
	15 0	75.0	93.8	73.6	14.9	29.3	1.44	.050	2.00	1.20	2.00	.19	2.00	.75	2.00	.15
	16 0	80.0	88.8	74.9	14.8	29.8	1.45	.050	2.00	1.18	2.00	.19	2.00	.71	2.00	.14
	17 1	85.0	83.8	76.2	14.9	30.5	1.45	.050	2.00	1.15	2.00	.18	2.00	.66	2.00	.13
	18 1	90.0	78.8	77.5	15.1	31.5	1.43	.050	2.00	1.13	2.00	.18	2.00	.61	2.00	.12
	19 1	95.0	73.8	78.9	15.4	32.8	1.41	.050	2.00	1.11	2.00	.18	2.00	.55	2.00	.11
	20 1	100.0	68.8	80.3	15.9	34.5	1.37	.050	2.00	1.08	2.00	.17	2.00	.49	2.00	.10
	21 1	105.0	63.8	81.9	16.5	36.7	1.32	.050	2.00	1.05	2.00	.17	2.00	.42	2.00	.09
	22 1	110.0	58.8	83.5	17.3	39.4	1.27	.050	2.00	1.02	2.00	.16	2.00	.35	2.00	.08
	23 1	115.0	53.8	85.4	18.4	43.0	1.20	.050	2.00	.99	2.00	.16	2.00	.27	2.00	.06
	24 1	120.0	48.8	87.5	19.7	47.8	1.13	.050	2.00	.94	2.00	.15	2.00	.20	2.00	.05
	25 1	125.0	43.8	90.0	21.4	54.1	1.04	.050	2.00	.89	2.00	.14	2.00	.13	2.00	.03
	26 1	130.0	38.8	93.0	23.7	63.0	.95	.050	2.00	.82	2.00	.13	2.00	.07	2.00	.02
	27 1	135.0	33.8	96.7	26.7	76.0	.85	.050	2.00	.72	2.00	.11	2.00	.03	2.00	.01
	28 0	140.0	28.8	101.6	30.8	96.7	.74	.050	2.00	.60	2.00	.09	2.00	.01	2.00	.00
	29 0	145.0	23.8	108.2	36.8	134.4	.63	.050	2.00	.44	2.00	.07	2.00	.00	2.00	.00
	30 0	150.0	18.8	118.2	46.1	222.8	.51	.050	2.00	.26	2.00	.04	2.00	.00	2.00	.00
	31 0	155.0	13.8	135.1	62.4	666.8	.38	.050	2.00	.10	2.00	.02	2.00	.00	2.00	.00
	32 0	.1	168.6	1.0	75.0	75.5	.05	.093	5.54	.33	2.00	.05	5.54	.36	2.00	.11
	33 1	84.4	84.4	76.0	14.9	30.4	1.45	.050	2.00	1.16	2.00	.19	2.00	.67	2.00	.14
	34 1	138.5	30.2	100.0	29.5	89.5	.77	.050	2.00	.64	2.00	.10	2.00	.01	2.00	.00

34	1 0	5.000	.050	.006	.003	-.003	.003	.001	.000	-.001	.000	.012	.008	-.006	.008
	2 0	10.000	.050	.012	.004	-.006	.004	.004	.001	-.002	.001	.018	.011	-.009	.010
	3 0	15.000	.050	.016	.006	-.008	.005	.006	.001	-.004	.001	.023	.013	-.011	.011
	4 0	20.000	.050	.018	.006	-.009	.006	.008	.002	-.005	.001	.023	.013	-.011	.011
	5 0	25.000	.050	.019	.007	-.010	.006	.010	.002	-.006	.002	.023	.014	-.011	.011
	6 0	30.000	.050	.020	.008	-.010	.006	.011	.002	-.006	.002	.023	.014	-.011	.011
	7 0	35.000	.050	.020	.008	-.010	.006	.012	.003	-.007	.002	.023	.014	-.011	.011
	8 0	40.000	.050	.020	.008	-.010	.006	.013	.003	-.007	.002	.022	.014	-.010	.011
	9 0	45.000	.050	.020	.009	-.010	.006	.013	.003	-.007	.002	.022	.014	-.010	.010
	10 0	50.000	.050	.020	.009	-.010	.006	.013	.003	-.008	.002	.021	.014	-.010	.010
	11 0	55.000	.050	.020	.009	-.010	.006	.014	.003	-.008	.002	.021	.014	-.010	.010
	12 0	60.000	.050	.019	.009	-.010	.006	.014	.003	-.008	.002	.020	.014	-.009	.009
	13 0	65.000	.050	.019	.008	-.010	.006	.014	.003	-.008	.002	.020	.013	-.009	.009
	14 0	70.000	.050	.019	.008	-.009	.005	.013	.003	-.008	.002	.019	.013	-.009	.009
	15 0	75.000	.050	.018	.008	-.009	.005	.013	.003	-.007	.002	.019	.012	-.009	.008
	16 0	80.000	.050	.018	.007	-.009	.005	.013	.003	-.007	.002	.018	.012	-.009	.008
	17 1	85.000	.050	.017	.007	-.009	.004	.013	.002	-.007	.002	.018	.011	-.008	.007
	18 1	90.000	.050	.017	.006	-.009	.004	.012	.002	-.007	.002	.018	.010	-.008	.007
	19 1	95.000	.050	.017	.006	-.008	.004	.012	.002	-.007	.001	.017	.010	-.008	.006
	20 1	100.000	.050	.016	.005	-.008	.003	.011	.002	-.006	.001	.017	.009	-.008	.006
	21 1	105.000	.050	.016	.004	-.008	.003	.011	.001	-.006	.001	.017	.008	-.008	.005
	22 1	110.000	.050	.015	.003	-.008	.002	.010	.001	-.006	.001	.016	.006	-.008	.005
	23 1	115.000	.050	.014	.003	-.007	.002	.009	.001	-.005	.000	.016	.005	-.007	.004
	24 1	120.000	.050	.013	.002	-.007	.001	.008	.000	-.005	.000	.015	.004	-.007	.003
	25 1	125.000	.050	.012	.001	-.006	.001	.007	.000	-.004	.000	.014	.003	-.007	.002
	26 1	130.000	.050	.011	.001	-.006	.000	.006	.000	-.003	.000	.013	.002	-.006	.001
	27 1	135.000	.050	.009	.000	-.005	.000	.005	.000	-.003	.000	.012	.001	-.005	.001
	28 0	140.000	.050	.007	.000	-.004	.000	.003	.000	-.002	.000	.010	.000	-.005	.000
	29 0	145.000	.050	.005	.000	-.003	.000	.002	.000	-.001	.000	.007	.000	-.003	.000
	30 0	150.000	.050	.003	.000	-.001	.000	.001	.000	-.000	.000	.005	.000	-.002	.000
	31 0	155.000	.050	.001	.000	-.000	.000	.000	.000	-.000	.000	.002	.000	-.001	.000
	32 0	.149	.093	.003	.003	-.001	.003	.000	.000	-.000	.000	.007	.009	-.003	.009
	33 1	84.375	.050	.017	.007	-.009	.005	.013	.002	-.007	.002	.018	.011	-.008	.007
	34 1	138.536	.050	.008	.000	-.004	.000	.004	.000	-.002	.000	.010	.000	-.005	.000

APPENDIX I

***** A C E 2 5 8 8 --- ASSESSMENT OF CHEMICAL EXPOSURE FOR AB 2588 --- VERSION 93288 *****

*** A MULTI-SOURCE, MULTI-POLLUTANT, MULTI-PATHWAY RISK ASSESSMENT MODEL
DEVELOPED BY APPLIED MODELING INC. AND SANTA BARBARA COUNTY APCD ***

Distributed and Maintained by CAPCOA

*** INPUT MODELING PARAMETERS ***

DISPERSION MODELING OPTION = 1
 RISK ASSESSMENT OPTION = 0
 NONCANCER ACUTE OPTION = 1
 DIAGNOSTIC PRINT OUTPUT OPTION = 0
 NUMBER OF RECEPTORS = 451
 NUMBER OF SOURCES = 46
 NUMBER OF POLLUTANTS = 22
 NUMBER OF DISPERSION MODELING HOURS = 8760
 NUMBER OF DISPERSION MODELING DAYS = 365

IDODIS = 1 ==> ISCST DISPERSION MODELING WITH SEQUENTIAL METEOROLOGY
 ANNUAL CONCENTRATIONS COMPUTED AS AVERAGES OF 1-HOUR CONC.

IDORISK = 0 ==> FULL MODEL RUN FOR RISK ASSESSMENT FROM ALL SOURCES AT ALL RECEPTORS

IDOACU = 1 ==> NONCANCER ACUTE EXPOSURE PERFORMED

IDOPRI = 0 ==> DIAGNOSTIC PRINT OUTPUT NOT CREATED

IDENTIFICATION NUMBERS OF MODELED POLLUTANTS:

1 3 10 13 17 22 36 38 70 79 83 85 87 111 110
 130 134 137 145 151 152 998

*** POLLUTANT-SPECIFIC DATA ***

NAME	SYMBOL	NUM	UNIT	RISK (ug/m3)-1	POTENCY (mg/kg-d)-1	ACUTE AEL (ug/m3)	CHRONIC AEL (ug/m3)	ORAL DOSE (mg/kg-d)	CHRONIC TOX ENDPOINTS										ACUTE TOX ENDPOINTS											
									CV	CN	IM	KI	LI	RP	RE	SK	CV	CN	IM	KI	LI	RP	RE	EY						
Acetaldehyde	ACETA	1	2.70E-06	0.00E+00	0.00E+00	9.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Acrolein	ACROL	3	0.00E+00	0.00E+00	2.50E+00	2.00E-02	0.00E+00	0.00E+00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic	AS	10	3.30E-03	1.70E+00	0.00E+00	5.00E-01	1.00E-03	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benzene	BENZE	13	2.90E-05	0.00E+00	0.00E+00	7.10E+01	0.00E+00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beryllium	Be	17	2.40E-03	4.30E+00	0.00E+00	4.80E-03	5.00E-03	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium	Cd	22	4.20E-03	0.00E+00	0.00E+00	3.50E+00	1.00E-03	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium (hex.)	Cr	36	1.40E-01	4.20E-01	0.00E+00	2.00E-03	5.00E-03	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper	Cu	38	0.00E+00	0.00E+00	1.00E+01	2.40E+00	0.00E+00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Formaldehyde	HCHO	70	6.00E-06	0.00E+00	3.70E+02	3.60E+00	0.00E+00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrogen cyanide	HCN	79	0.00E+00	0.00E+00	3.30E+03	7.00E+01	0.00E+00	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Lead	Pb	83	8.00E-05	0.00E+00	0.00E+00	1.50E+00	4.30E-04	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese	Mn	85	0.00E+00	0.00E+00	0.00E+00	4.00E-01	0.00E+00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury	Hg	87	0.00E+00	0.00E+00	3.00E+01	3.00E-01	3.00E-04	1	1	0	1	1	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0
Nickel	Ni	111	2.60E-04	0.00E+00	1.00E+00	2.40E-01	0.00E+00	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Naphthalene	NAPTH	110	0.00E+00	0.00E+00	0.00E+00	1.40E+01	4.00E-03	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycyclic arom. HC	PAH	130	1.70E-03	1.15E+01	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Propylene	PROPL	134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium	Se	137	1.40E-04	0.00E+00	2.00E+00	5.00E-01	0.00E+00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Toluene	TOL	145	0.00E+00	0.00E+00	0.00E+00	2.00E+02	0.00E+00	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Xylene	XYLEN	151	0.00E+00	0.00E+00	4.40E+03	3.00E+02	0.00E+00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	Zn	152	0.00E+00	0.00E+00	0.00E+00	3.50E+01	0.00E+00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NonToxic PM10	NTXPM	998	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF MODELED POLLUTANTS = 22

NUMBER OF CARCINOGENIC POLLUTANTS = 11

1 10 13 17 22 36 70 83 111 130
 137

NUMBER OF MULTIPATHWAY POLLUTANTS = 8

10 17 22 36 83 87 110 130

NUMBER OF POLLUTANTS WITH ACUTE NON-CANCER RISK = 8

3 38 70 79 87 111 137 151

MAXIMUM NUMBER OF ACUTE TOXICOLOGICAL ENDPOINTS = 3

NUMBER OF POLLUTANTS WITH CHRONIC NON-CANCER RISK = 19

1 3 10 13 17 22 36 38 70 79
83 85 87 111 110 137 145 151 152

MAXIMUM NUMBER OF CHRONIC TOXICOLOGICAL ENDPOINTS = 5

REQUIRED TOTAL ARRAY SIZE = 947848 WORDS

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET. PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACZ.OUT 11/14/96 07:00:20 Page - 5

*** INPUT SOURCE EMISSION RATES ****

FOR SOURCE # 1 DRILLING PIT1
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.572E-07	2.041E-06	1.950E-07	1.356E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.551E-07	1.231E-06	2.671E-08	1.857E-03
Cd	22	9.277E-09	7.363E-08	7.011E-09	4.874E-04
C-	36	1.508E-09	1.197E-08	1.268E-09	8.816E-05
Cu	38	2.157E-08	1.712E-07	1.641E-08	1.141E-03
ECBO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ECN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.970E-08	7.119E-07	4.150E-08	2.885E-03
Mn	85	2.362E-07	1.875E-06	1.985E-07	1.380E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.844E-09	6.225E-08	5.933E-09	4.125E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.296E-08	2.616E-07	2.507E-08	1.743E-03
NTXPM	998	3.017E-03	2.394E-02	2.535E-03	1.762E+02

FOR SOURCE # 2 DRILLING PIT2
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.572E-07	2.041E-06	1.950E-07	1.356E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.551E-07	1.231E-06	2.671E-08	1.857E-03
Cd	22	9.277E-09	7.363E-08	7.011E-09	4.874E-04
C-	36	1.508E-09	1.197E-08	1.268E-09	8.816E-05
Cu	38	2.157E-08	1.712E-07	1.641E-08	1.141E-03
ECBO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ECN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.970E-08	7.119E-07	4.150E-08	2.885E-03
Mn	85	2.362E-07	1.875E-06	1.985E-07	1.380E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.844E-09	6.225E-08	5.933E-09	4.125E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.296E-08	2.616E-07	2.507E-08	1.743E-03
NTXPM	998	3.017E-03	2.394E-02	2.535E-03	1.762E+02

FOR SOURCE # 3 DRILLING PIT3
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.850E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	9.902E-07	7.859E-06	7.509E-07	5.221E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	5.972E-07	4.740E-06	1.028E-07	7.147E-03
Cd	22	3.572E-08	2.835E-07	2.699E-08	1.876E-03
C-	36	5.808E-09	4.610E-08	4.881E-09	3.393E-04
Cu	38	8.305E-08	6.591E-07	6.319E-08	4.393E-03
ECBO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ECN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.454E-07	2.741E-06	1.598E-07	1.111E-02
Mn	85	9.095E-07	7.218E-06	7.643E-07	5.314E-02

Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.020E-08	2.397E-07	2.284E-08	1.588E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.269E-07	1.007E-06	9.651E-08	6.710E-03
NIXPM	998	1.162E-02	9.222E-02	9.762E-03	6.787E+02

FOR SOURCE # 4 DRILLING PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.725E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.215E-06	9.643E-06	9.216E-07	6.407E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	7.330E-07	5.817E-06	1.262E-07	8.774E-03
Cd	22	4.383E-08	3.479E-07	3.313E-08	2.303E-03
Cr	36	7.128E-09	5.657E-08	5.990E-09	4.164E-04
Cu	38	1.019E-07	8.087E-07	7.755E-08	5.392E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.239E-07	3.364E-06	1.961E-07	1.363E-02
Mn	85	1.116E-06	8.857E-06	9.380E-07	6.521E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.706E-08	2.941E-07	2.803E-08	1.949E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.557E-07	1.236E-06	1.184E-07	8.232E-03
NIXPM	998	1.426E-02	1.132E-01	1.198E-02	8.329E+02

FOR SOURCE # 5 DRILLING PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.909E-07	3.102E-06	2.965E-07	2.061E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.358E-07	1.871E-06	4.059E-08	2.822E-03
Cd	22	1.410E-08	1.119E-07	1.066E-08	7.411E-04
Cr	36	2.293E-09	1.820E-08	1.927E-09	1.340E-04
Cu	38	3.279E-08	2.602E-07	2.495E-08	1.735E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.364E-07	1.083E-06	6.308E-08	4.386E-03
Mn	85	3.591E-07	2.850E-06	3.018E-07	2.098E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.192E-08	9.460E-08	9.018E-09	6.270E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.010E-08	3.976E-07	3.810E-08	2.649E-03
NIXPM	998	4.586E-03	3.640E-02	3.854E-03	2.679E+02

FOR SOURCE # 6 DRILLING PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.909E-07	3.102E-06	2.965E-07	2.061E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.358E-07	1.871E-06	4.059E-08	2.822E-03
Cd	22	1.410E-08	1.119E-07	1.066E-08	7.411E-04
Cr	36	2.293E-09	1.820E-08	1.927E-09	1.340E-04
Cu	38	3.279E-08	2.602E-07	2.495E-08	1.735E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.364E-07	1.083E-06	6.308E-08	4.386E-03
Mn	85	3.591E-07	2.850E-06	3.018E-07	2.098E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.192E-08	9.460E-08	9.018E-09	6.270E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.010E-08	3.976E-07	3.810E-08	2.649E-03
NTXPM	998	4.586E-03	3.640E-02	3.854E-03	2.679E+02

FOR SOURCE # 7 BLASTING PIT1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	3.348E-06	2.328E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	4.623E-07	3.214E-02
Cd	22	3.017E-05	2.394E-04	1.203E-07	8.364E-03
Cr	36	9.891E-06	7.850E-05	2.178E-08	1.514E-03
Cu	38	7.451E-05	5.913E-04	2.817E-07	1.958E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	7.140E-07	4.964E-02
Mn	85	1.549E-03	1.229E-02	3.411E-06	2.371E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.019E-07	7.084E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	4.303E-07	2.992E-02
NTXPM	998	1.978E+01	1.570E+02	4.356E-02	3.028E+03

FOR SOURCE # 8 BLASTING PIT2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	3.348E-06	2.328E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	4.623E-07	3.214E-02
Cd	22	3.017E-05	2.394E-04	1.203E-07	8.364E-03
Cr	36	9.891E-06	7.850E-05	2.178E-08	1.514E-03
Cu	38	7.451E-05	5.913E-04	2.817E-07	1.958E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	7.140E-07	4.964E-02
Mn	85	1.549E-03	1.229E-02	3.411E-06	2.371E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.019E-07	7.084E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	4.303E-07	2.992E-02
NTXPM	998	1.978E+01	1.570E+02	4.356E-02	3.028E+03

FOR SOURCE # 9 BLASTING PIT3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	1.289E-05	8.962E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	1.780E-06	1.238E-01
Cd	22	3.017E-05	2.394E-04	4.633E-07	3.221E-02
Cr	36	9.891E-06	7.850E-05	8.385E-08	5.830E-03
Cu	38	7.451E-05	5.913E-04	1.085E-06	7.543E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	2.749E-06	1.911E-01
Mn	85	1.549E-03	1.229E-02	1.313E-05	9.128E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	3.925E-07	2.729E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Zn	152	1.134E-04	9.000E-04	1.657E-06	1.152E-01
NTXPM	998	1.978E+01	1.570E+02	1.677E-01	1.166E+04

FOR SOURCE # 10 BLASTING PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	1.582E-05	1.100E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	2.184E-06	1.518E-01
Cd	22	3.017E-05	2.394E-04	5.686E-07	3.953E-02
Cr	36	9.891E-06	7.850E-05	1.029E-07	7.154E-03
Cu	38	7.451E-05	5.913E-04	1.331E-06	9.254E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	3.374E-06	2.346E-01
Mn	85	1.549E-03	1.229E-02	1.611E-05	1.120E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	4.817E-07	3.349E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	2.033E-06	1.413E-01
NTXPM	998	1.978E+01	1.570E+02	2.058E-01	1.431E+04

FOR SOURCE # 11 BLASTING PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	5.089E-06	3.538E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	7.026E-07	4.885E-02
Cd	22	3.017E-05	2.394E-04	1.829E-07	1.272E-02
Cr	36	9.891E-06	7.850E-05	3.310E-08	2.301E-03
Cu	38	7.451E-05	5.913E-04	4.282E-07	2.977E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	1.085E-06	7.543E-02
Mn	85	1.549E-03	1.229E-02	5.184E-06	3.604E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.550E-07	1.078E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	6.540E-07	4.547E-02
NTXPM	998	1.978E+01	1.570E+02	6.621E-02	4.603E+03

FOR SOURCE # 12 BLASTING PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	5.089E-06	3.538E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	7.026E-07	4.885E-02
Cd	22	3.017E-05	2.394E-04	1.829E-07	1.272E-02
Cr	36	9.891E-06	7.850E-05	3.310E-08	2.301E-03
Cu	38	7.451E-05	5.913E-04	4.282E-07	2.977E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	1.085E-06	7.543E-02
Mn	85	1.549E-03	1.229E-02	5.184E-06	3.604E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.550E-07	1.078E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	6.540E-07	4.547E-02
NTXPM	998	1.978E+01	1.570E+02	6.621E-02	4.603E+03

FOR SOURCE # 13 TRKLOAD PIT1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.144E-06	1.702E-05	2.875E-06	1.999E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.527E-06	2.006E-05	3.937E-07	2.737E-02
Cd	22	7.494E-08	5.948E-07	1.033E-07	7.182E-03
Cr	36	2.457E-08	1.950E-07	1.869E-08	1.299E-03
Cu	38	1.851E-07	1.469E-06	2.419E-07	1.682E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.461E-06	1.160E-05	6.116E-07	4.252E-02
Mn	85	3.848E-06	3.054E-05	2.926E-06	2.034E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.278E-07	1.014E-06	8.745E-08	6.080E-03
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.817E-07	2.236E-06	3.695E-07	2.569E-02
NTXPM	998	4.914E-02	3.900E-01	3.737E-02	2.598E+03

FOR SOURCE # 14 TRKLOAD PIT2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.144E-06	1.702E-05	2.875E-06	1.999E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.527E-06	2.006E-05	3.937E-07	2.737E-02
Cd	22	7.494E-08	5.948E-07	1.033E-07	7.182E-03
Cr	36	2.457E-08	1.950E-07	1.869E-08	1.299E-03
Cu	38	1.851E-07	1.469E-06	2.419E-07	1.682E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.461E-06	1.160E-05	6.116E-07	4.252E-02
Mn	85	3.848E-06	3.054E-05	2.926E-06	2.034E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.278E-07	1.014E-06	8.745E-08	6.080E-03
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.817E-07	2.236E-06	3.695E-07	2.569E-02
NTXPM	998	4.914E-02	3.900E-01	3.737E-02	2.598E+03

FOR SOURCE # 15 TRKLOAD PIT3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.850E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.253E-06	6.550E-05	1.107E-05	7.696E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.728E-06	7.721E-05	1.516E-06	1.054E-01
Cd	22	2.885E-07	2.290E-06	3.978E-07	2.766E-02
Cr	36	9.460E-08	7.508E-07	7.194E-08	5.002E-03
Cu	38	7.126E-07	5.656E-06	9.314E-07	6.475E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.625E-06	4.464E-05	2.355E-06	1.637E-01
Mn	85	1.481E-05	1.175E-04	1.127E-05	7.835E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.919E-07	3.904E-06	3.367E-07	2.341E-02
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.085E-06	8.611E-06	1.422E-06	9.886E-02
NTXPM	998	1.892E-01	1.502E+00	1.439E-01	1.000E+04

FOR SOURCE # 16 TRKLOAD PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.725E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.013E-05	8.040E-05	1.358E-05	9.441E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.194E-05	9.476E-05	1.860E-06	1.293E-01
Cd	22	3.541E-07	2.810E-06	4.882E-07	3.394E-02
Cr	36	1.161E-07	9.214E-07	8.829E-08	6.138E-03
Cu	38	8.746E-07	6.941E-06	1.143E-06	7.947E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	6.904E-06	5.479E-05	2.890E-06	2.009E-01
Mn	85	1.818E-05	1.443E-04	1.383E-05	9.615E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.037E-07	4.791E-06	4.132E-07	2.873E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.331E-06	1.056E-05	1.746E-06	1.214E-01
NTXPM	998	2.322E-01	1.843E+00	1.766E-01	1.228E+04

FOR SOURCE # 17 TRKLOAD PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.258E-06	2.586E-05	4.370E-06	3.038E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.841E-06	3.048E-05	5.983E-07	4.160E-02
Cd	22	1.139E-07	9.040E-07	1.571E-07	1.092E-02
Cr	36	3.735E-08	2.964E-07	2.840E-08	1.974E-03
Cu	38	2.814E-07	2.233E-06	3.677E-07	2.556E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.221E-06	1.763E-05	9.297E-07	6.464E-02
Mn	85	5.849E-06	4.642E-05	4.448E-06	3.092E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.942E-07	1.541E-06	1.329E-07	9.240E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.283E-07	3.399E-06	5.616E-07	3.904E-02
NTXPM	998	7.469E-02	5.928E-01	5.680E-02	3.949E+03

FOR SOURCE # 18 TRKLOAD PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.258E-06	2.586E-05	4.370E-06	3.038E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.841E-06	3.048E-05	5.983E-07	4.160E-02
Cd	22	1.139E-07	9.040E-07	1.571E-07	1.092E-02
Cr	36	3.735E-08	2.964E-07	2.840E-08	1.974E-03
Cu	38	2.814E-07	2.233E-06	3.677E-07	2.556E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.221E-06	1.763E-05	9.297E-07	6.464E-02
Mn	85	5.849E-06	4.642E-05	4.448E-06	3.092E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.942E-07	1.541E-06	1.329E-07	9.240E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.283E-07	3.399E-06	5.616E-07	3.904E-02
NTXPM	998	7.469E-02	5.928E-01	5.680E-02	3.949E+03

FOR SOURCE # 19 HAUL 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.500E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.489E-06	1.975E-05	1.439E-06	1.000E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.123E-09	7.240E-08	5.274E-09	3.667E-04
Cd	22	8.977E-08	7.125E-07	5.190E-08	3.608E-03
Cr	36	1.460E-08	1.159E-07	8.438E-09	5.866E-04
Cu	38	2.087E-07	1.656E-06	1.207E-07	8.392E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.803E-07	3.018E-06	2.198E-07	1.528E-02
Mn	85	2.286E-06	1.814E-05	1.321E-06	9.184E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.642E-08	5.271E-07	3.839E-08	2.669E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.190E-07	2.532E-06	1.844E-07	1.282E-02
NTXPM	998	2.919E-02	2.317E-01	1.688E-02	1.174E+03

FOR SOURCE # 20 HAUL 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.500E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.489E-06	1.975E-05	1.439E-06	1.000E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.123E-09	7.240E-08	5.274E-09	3.667E-04
Cd	22	8.977E-08	7.125E-07	5.190E-08	3.608E-03
Cr	36	1.460E-08	1.159E-07	8.438E-09	5.866E-04
Cu	38	2.087E-07	1.656E-06	1.207E-07	8.392E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.803E-07	3.018E-06	2.198E-07	1.528E-02
Mn	85	2.286E-06	1.814E-05	1.321E-06	9.184E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.642E-08	5.271E-07	3.839E-08	2.669E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.190E-07	2.532E-06	1.844E-07	1.282E-02
NTXPM	998	2.919E-02	2.317E-01	1.688E-02	1.174E+03

FOR SOURCE # 21 HAUL 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 9.625E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	9.582E-06	7.605E-05	5.539E-06	3.851E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.512E-08	2.787E-07	2.030E-08	1.411E-03
Cd	22	3.456E-07	2.743E-06	1.998E-07	1.389E-02
Cr	36	5.620E-08	4.460E-07	3.249E-08	2.259E-03
Cu	38	8.037E-07	6.379E-06	4.646E-07	3.230E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.464E-06	1.162E-05	8.463E-07	5.884E-02
Mn	85	8.801E-06	6.985E-05	5.088E-06	3.537E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.557E-07	2.029E-06	1.478E-07	1.028E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.228E-06	9.746E-06	7.099E-07	4.935E-02
NTXPM	998	1.124E-01	8.921E-01	6.498E-02	4.518E+03

FOR SOURCE # 22 HAUL 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.181E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.176E-05	9.333E-05	6.798E-06	4.726E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	4.311E-08	3.421E-07	2.492E-08	1.733E-03

Cd	22	4.242E-07	3.367E-06	2.452E-07	1.705E-02
Cr	36	6.897E-08	5.474E-07	3.987E-08	2.772E-03
Cu	38	9.863E-07	7.828E-06	5.702E-07	3.964E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.797E-06	1.426E-05	1.039E-06	7.224E-02
Mn	85	1.080E-05	8.571E-05	6.244E-06	4.341E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.138E-07	2.490E-06	1.814E-07	1.261E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.507E-06	1.196E-05	8.712E-07	6.057E-02
NTXPM	998	1.379E-01	1.094E+00	7.974E-02	5.544E+03

FOR SOURCE # 23 HAUL 5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.800E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.783E-06	3.002E-05	2.187E-06	1.520E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.387E-08	1.101E-07	8.016E-09	5.573E-04
Cd	22	1.365E-07	1.083E-06	7.888E-08	5.484E-03
Cr	36	2.219E-08	1.761E-07	1.283E-08	8.920E-04
Cu	38	3.173E-07	2.518E-06	1.834E-07	1.275E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.780E-07	4.587E-06	3.341E-07	2.323E-02
Mn	85	3.475E-06	2.758E-05	2.009E-06	1.397E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.010E-07	8.016E-07	5.836E-08	4.057E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.848E-07	3.848E-06	2.803E-07	1.949E-02
NTXPM	998	4.438E-02	3.522E-01	2.565E-02	1.783E+03

FOR SOURCE # 24 HAUL 6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.800E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.783E-06	3.002E-05	2.187E-06	1.520E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.387E-08	1.101E-07	8.016E-09	5.573E-04
Cd	22	1.365E-07	1.083E-06	7.888E-08	5.484E-03
Cr	36	2.219E-08	1.761E-07	1.283E-08	8.920E-04
Cu	38	3.173E-07	2.518E-06	1.834E-07	1.275E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.780E-07	4.587E-06	3.341E-07	2.323E-02
Mn	85	3.475E-06	2.758E-05	2.009E-06	1.397E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.010E-07	8.016E-07	5.836E-08	4.057E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.848E-07	3.848E-06	2.803E-07	1.949E-02
NTXPM	998	4.438E-02	3.522E-01	2.565E-02	1.783E+03

FOR SOURCE # 25 BAGHOUSE 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.937E-06	3.125E-05	5.993E-06	4.167E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	4.641E-06	3.683E-05	7.063E-06	4.910E-01
Cd	22	1.376E-07	1.092E-06	2.095E-07	1.457E-02
Cr	36	4.513E-08	3.582E-07	6.869E-08	4.776E-03
Cu	38	6.799E-07	5.396E-06	5.175E-07	3.598E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00

HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.684E-06	2.130E-05	4.085E-06	2.840E-01
Mn	85	7.067E-06	5.609E-05	1.076E-05	7.481E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.693E-07	3.725E-06	3.572E-07	2.483E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.175E-07	4.107E-06	7.876E-07	5.476E-02
NTXPM	998	1.805E-01	1.433E+00	1.374E-01	9.553E+03

FOR SOURCE # 26 TRU-WST 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	4.069E-06	3.229E-05	4.837E-06	3.363E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	4.795E-06	3.806E-05	1.773E-08	1.233E-03
Cd	22	1.422E-07	1.129E-06	1.745E-07	1.213E-02
Cr	36	4.663E-08	3.701E-07	2.837E-08	1.972E-03
Cu	38	3.513E-07	2.788E-06	4.057E-07	2.821E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.773E-06	2.201E-05	7.390E-07	5.138E-02
Mn	85	7.303E-06	5.796E-05	4.443E-06	3.089E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.425E-07	1.925E-06	1.291E-07	8.976E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.347E-07	4.244E-06	6.199E-07	4.310E-02
NTXPM	998	5.181E-02	4.112E-01	5.674E-02	3.945E+03

FOR SOURCE # 27 TRU-WST 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.173E-06	6.487E-05	9.716E-06	6.755E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.633E-06	7.645E-05	3.562E-08	2.476E-03
Cd	22	2.857E-07	2.267E-06	3.505E-07	2.437E-02
Cr	36	9.367E-08	7.434E-07	5.699E-08	3.962E-03
Cu	38	7.057E-07	5.601E-06	8.149E-07	5.665E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.570E-06	4.421E-05	1.485E-06	1.032E-01
Mn	85	1.467E-05	1.164E-04	8.924E-06	6.204E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.871E-07	3.866E-06	2.593E-07	1.803E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.074E-06	8.524E-06	1.245E-06	8.656E-02
NTXPM	998	1.041E-01	8.262E-01	1.140E-01	7.926E+03

FOR SOURCE # 28 TRU-WST 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.587E-06	2.053E-05	3.076E-06	2.139E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.049E-06	2.420E-05	1.127E-08	7.835E-04
Cd	22	9.043E-08	7.177E-07	1.109E-07	7.710E-03
Cr	36	2.965E-08	2.353E-07	1.804E-08	1.254E-03
Cu	38	2.234E-07	1.773E-06	2.580E-07	1.794E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.763E-06	1.399E-05	4.699E-07	3.267E-02
Mn	85	4.643E-06	3.685E-05	2.825E-06	1.964E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Ni	111	1.542E-07	1.224E-06	8.208E-08	5.707E-03
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.400E-07	2.698E-06	3.941E-07	2.740E-02
NTXPM	998	3.294E-02	2.614E-01	3.608E-02	2.508E+03

FOR SOURCE # 29 TRU-WST 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	4.846E-06	3.846E-05	5.762E-06	4.006E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	5.712E-06	4.533E-05	2.112E-08	1.468E-03
Cd	22	1.694E-07	1.344E-06	2.078E-07	1.445E-02
Cr	36	5.555E-08	4.409E-07	3.379E-08	2.349E-03
Cu	38	4.185E-07	3.321E-06	4.833E-07	3.360E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.303E-06	2.621E-05	8.803E-07	6.120E-02
Mn	85	8.699E-06	6.904E-05	5.292E-06	3.679E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.889E-07	2.293E-06	1.538E-07	1.069E-02
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	6.370E-07	5.056E-06	7.384E-07	5.134E-02
NTXPM	998	6.172E-02	4.898E-01	6.759E-02	4.699E+03

FOR SOURCE # 30 TRU-WST 5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	9.512E-06	7.549E-05	1.131E-05	7.863E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.121E-05	8.897E-05	4.146E-08	2.882E-03
Cd	22	3.325E-07	2.639E-06	4.079E-07	2.836E-02
Cr	36	1.090E-07	8.651E-07	6.633E-08	4.612E-03
Cu	38	8.213E-07	6.518E-06	9.485E-07	6.594E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	6.483E-06	5.145E-05	1.728E-06	1.201E-01
Mn	85	1.707E-05	1.355E-04	1.039E-05	7.224E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.669E-07	4.499E-06	3.018E-07	2.098E-02
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.250E-06	9.921E-06	1.449E-06	1.007E-01
NTXPM	998	1.211E-01	9.611E-01	1.327E-01	9.226E+03

FOR SOURCE # 31 DOZING WASTE 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.827E-06	2.244E-05	3.227E-07	2.244E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.036E-08	8.222E-08	1.183E-09	8.225E-05
Cd	22	1.020E-07	8.095E-07	1.164E-08	8.093E-04
Cr	36	1.658E-08	1.316E-07	1.893E-09	1.316E-04
Cu	38	2.371E-07	1.882E-06	2.706E-08	1.881E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.319E-07	3.428E-06	4.930E-08	3.428E-03
Mn	85	2.596E-06	2.060E-05	2.964E-07	2.061E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.543E-08	5.987E-07	8.611E-09	5.987E-04
NAPTE	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.622E-07	2.875E-06	4.135E-08	2.875E-03
NTXPM	998	3.316E-02	2.632E-01	3.785E-03	2.631E+02

FOR SOURCE # 32 DOZING WASTE 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.678E-06	4.506E-05	6.482E-07	4.507E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.081E-08	1.652E-07	2.376E-09	1.652E-04
Cd	22	2.048E-07	1.625E-06	2.338E-08	1.625E-03
Cr	36	3.330E-08	2.643E-07	3.802E-09	2.643E-04
Cu	38	4.762E-07	3.779E-06	5.436E-08	3.779E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.675E-07	6.885E-06	9.903E-08	6.885E-03
Mn	85	5.215E-06	4.139E-05	5.953E-07	4.139E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.515E-07	1.202E-06	1.730E-08	1.203E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.276E-07	5.775E-06	8.306E-08	5.775E-03
NTXPM	998	6.660E-02	5.286E-01	7.603E-03	5.286E+02

FOR SOURCE # 33 DOZING WASTE 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.797E-06	1.426E-05	2.052E-07	1.427E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.588E-09	5.229E-08	7.521E-10	5.229E-05
Cd	22	6.483E-08	5.145E-07	7.400E-09	5.145E-04
Cr	36	1.054E-08	8.365E-08	1.203E-09	8.364E-05
Cu	38	1.507E-07	1.196E-06	1.721E-08	1.197E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.746E-07	2.179E-06	3.135E-08	2.180E-03
Mn	85	1.651E-06	1.310E-05	1.884E-07	1.310E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.796E-08	3.806E-07	5.475E-09	3.806E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.303E-07	1.828E-06	2.629E-08	1.828E-03
NTXPM	998	2.108E-02	1.673E-01	2.407E-03	1.673E+02

FOR SOURCE # 34 DOZING WASTE 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.367E-06	2.672E-05	3.844E-07	2.672E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.234E-08	9.794E-08	1.409E-09	9.796E-05
Cd	22	1.215E-07	9.643E-07	1.386E-08	9.636E-04
Cr	36	1.975E-08	1.567E-07	2.254E-09	1.567E-04
Cu	38	2.824E-07	2.241E-06	3.224E-08	2.241E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.144E-07	4.083E-06	5.873E-08	4.083E-03
Mn	85	3.093E-06	2.455E-05	3.530E-07	2.454E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	8.985E-08	7.131E-07	1.026E-08	7.133E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.315E-07	3.425E-06	4.926E-08	3.425E-03

NTXPM 998 3.950E-02 3.135E-01 4.509E-03 3.135E+02

FOR SOURCE # 35 DOZING WASTE_5
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	6.609E-06	5.245E-05	7.544E-07	5.245E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.423E-08	1.923E-07	2.765E-09	1.922E-04
Cd	22	2.384E-07	1.892E-06	2.721E-08	1.892E-03
Cr	36	3.876E-08	3.076E-07	4.425E-09	3.076E-04
Cu	38	5.543E-07	4.399E-06	6.327E-08	4.399E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.010E-06	8.016E-06	1.153E-07	8.016E-03
Mn	85	6.070E-06	4.817E-05	6.929E-07	4.817E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.764E-07	1.400E-06	2.013E-08	1.400E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	8.469E-07	6.721E-06	9.668E-08	6.722E-03
NTXPM	998	7.752E-02	6.152E-01	8.849E-03	6.152E+02

FOR SOURCE # 36 WIND EROSION1
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.408E-06	1.117E-05	1.453E-06	1.010E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	5.159E-09	4.094E-08	5.324E-09	3.703E-04
Cd	22	5.077E-08	4.029E-07	5.241E-08	3.644E-03
Cr	36	8.255E-09	6.552E-08	8.521E-09	5.924E-04
Cu	38	1.180E-07	9.365E-07	1.219E-07	8.475E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.150E-07	1.706E-06	2.220E-07	1.543E-02
Mn	85	1.293E-06	1.026E-05	1.334E-06	9.274E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.756E-08	2.981E-07	3.877E-08	2.695E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.804E-07	1.432E-06	1.862E-07	1.295E-02
NTXPM	998	1.651E-02	1.310E-01	1.704E-02	1.185E+03

FOR SOURCE # 37 WIND EROSION2
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.827E-06	2.244E-05	2.918E-06	2.029E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.036E-08	8.222E-08	1.070E-08	7.439E-04
Cd	22	1.020E-07	8.095E-07	1.053E-07	7.321E-03
Cr	36	1.658E-08	1.316E-07	1.712E-08	1.190E-03
Cu	38	2.371E-07	1.882E-06	2.448E-07	1.702E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.320E-07	3.429E-06	4.459E-07	3.100E-02
Mn	85	2.597E-06	2.061E-05	2.681E-06	1.864E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.545E-08	5.988E-07	7.788E-08	5.415E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.623E-07	2.875E-06	3.740E-07	2.600E-02
NTXPM	998	3.316E-02	2.632E-01	3.423E-02	2.380E+03

FOR SOURCE # 38 WIND EROSION3

OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.949E-07	7.102E-06	9.238E-07	6.423E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.281E-09	2.604E-08	3.386E-09	2.354E-04
Cd	22	3.228E-08	2.562E-07	3.332E-08	2.317E-03
Cr	36	5.249E-09	4.166E-08	5.418E-09	3.767E-04
Cu	38	7.506E-08	5.957E-07	7.748E-08	5.387E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.367E-07	1.085E-06	1.411E-07	9.810E-03
Mn	85	8.220E-07	6.524E-06	8.485E-07	5.899E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.388E-08	1.895E-07	2.465E-08	1.714E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.147E-07	9.103E-07	1.184E-07	8.232E-03
NTXPM	998	1.050E-02	8.333E-02	1.084E-02	7.536E+02

FOR SOURCE # 39 WIND EROSION4
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.677E-06	1.331E-05	1.731E-06	1.203E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.146E-09	4.878E-08	6.344E-09	4.411E-04
Cd	22	6.048E-08	4.800E-07	6.243E-08	4.340E-03
Cr	36	9.833E-09	7.804E-08	1.015E-08	7.057E-04
Cu	38	1.406E-07	1.116E-06	1.452E-07	1.009E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.562E-07	2.033E-06	2.644E-07	1.838E-02
Mn	85	1.540E-06	1.222E-05	1.590E-06	1.105E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.474E-08	3.551E-07	4.619E-08	3.211E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.149E-07	1.706E-06	2.218E-07	1.542E-02
NTXPM	998	1.967E-02	1.561E-01	2.030E-02	1.411E+03

FOR SOURCE # 40 WIND EROSION5
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.291E-06	2.612E-05	3.397E-06	2.362E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.206E-08	9.571E-08	1.245E-08	8.656E-04
Cd	22	1.187E-07	9.421E-07	1.225E-07	8.517E-03
Cr	36	1.930E-08	1.532E-07	1.992E-08	1.385E-03
Cu	38	2.760E-07	2.190E-06	2.849E-07	1.981E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.028E-07	3.990E-06	5.190E-07	3.608E-02
Mn	85	3.022E-06	2.398E-05	3.120E-06	2.169E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	8.782E-08	6.970E-07	9.065E-08	6.302E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.217E-07	3.347E-06	4.353E-07	3.026E-02
NTXPM	998	3.860E-02	3.063E-01	3.985E-02	2.771E+03

FOR SOURCE # 41 ORE PAD1
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.993E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE	ANNUAL RATE
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		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	2.040E-01	1.619E+00	2.040E-01	1.418E+04
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 42 ORE PAD2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.188E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	1.085E-01	8.611E-01	1.085E-01	7.543E+03
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 43 MERCURY RETORT
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 44 ADSORPTION
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00

As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	1.134E-03	9.000E-03	1.847E-03	1.284E+02
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 45 FURNACE
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	1.467E-05	1.164E-04	5.225E-07	3.633E-02
Cr	36	1.389E-07	1.102E-06	4.948E-09	3.440E-04
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 46 DIESEL TANK
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

*** INPUT FACILITY-WIDE EMISSION RATES ***

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.308E-03	4.213E-02	1.604E-04	1.115E+01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.178E-03	4.903E-02	1.933E-05	1.344E+00
Cd	22	2.003E-04	1.590E-03	6.290E-06	4.373E-01
Cr	36	6.060E-05	4.809E-04	1.035E-06	7.195E-02

Cu	38	4.585E-04	3.639E-03	1.349E-05	9.380E-01
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	3.136E-01	2.489E+00	3.143E-01	2.185E+04
Pb	83	3.583E-03	2.843E-02	3.294E-05	2.290E+00
Mn	85	9.468E-03	7.514E-02	1.613E-04	1.121E+01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.144E-04	2.495E-03	4.805E-06	3.341E-01
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	6.973E-04	5.534E-03	2.061E-05	1.433E+00
NTXPM	998	1.207E+02	9.579E+02	2.060E+00	1.432E+05

*** INPUT POLLUTANT BACKGROUND CONCENTRATIONS (ug/m3) ****

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR BACKG.	ANNUAL BACKG.
ACETIA	1	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00

OLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, RM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 35

*** INPUT RECEPTOR DATA ***

RECEPTOR #	RECEPTOR NAME	X-COORD	Y-COORD	ELEVATION	POPULATION	GARDEN FRAC	SCREEN X/Q
1	RES 24-1	389400.00	3868050.00	2760.00	0	0.00000	0.000E+00
2	RES 20-1	392550.00	3868000.00	2650.00	0	0.00000	0.000E+00
3	RES 20-2	392600.00	3868000.00	2650.00	0	0.00000	0.000E+00
4	RES 13-1	390250.00	3868800.00	2760.00	0	0.00000	0.000E+00
5	RES 13-2	390300.00	3868750.00	2760.00	0	0.00000	0.000E+00
6	RES 13-3	390300.00	3868500.00	2760.00	0	0.00000	0.000E+00
7	RES 16-1	393500.00	3868200.00	2610.00	0	0.00000	0.000E+00
8	RES 16-2	393750.00	3868300.00	2600.00	0	0.00000	0.000E+00
9	RES 16-3	393800.00	3868450.00	2590.00	0	0.00000	0.000E+00
10	RES 12-1	389750.00	3870450.00	2820.00	0	0.00000	0.000E+00
11	RES 9-1	395050.00	3870600.00	2590.00	0	0.00000	0.000E+00
12	RES 5-1	392200.00	3872600.00	2840.00	0	0.00000	0.000E+00
13	RES 31-1	390800.00	3873450.00	2810.00	0	0.00000	0.000E+00
14	RES 31-2	390750.00	3873400.00	2810.00	0	0.00000	0.000E+00
15	RES 31-3	390700.00	3873400.00	2820.00	0	0.00000	0.000E+00
16	RES 31-4	390650.00	3873200.00	2820.00	0	0.00000	0.000E+00
17	RES 32-1	393500.00	3873700.00	2710.00	0	0.00000	0.000E+00
18	RES 32-2	392450.00	3873750.00	2740.00	0	0.00000	0.000E+00
19	RES 32-3	391950.00	3873950.00	2760.00	0	0.00000	0.000E+00
20	RES 32-4	391900.00	3873400.00	2780.00	0	0.00000	0.000E+00
21	PROP. 001	389750.00	3871670.00	2840.00	0	0.00000	0.000E+00
22	PROP. 002	389759.00	3871788.00	2850.00	0	0.00000	0.000E+00
23	PROP. 003	389778.00	3871908.00	2850.00	0	0.00000	0.000E+00
24	PROP. 004	389803.00	3872019.00	2850.00	0	0.00000	0.000E+00
25	PROP. 005	389826.00	3872073.00	2850.00	0	0.00000	0.000E+00
26	PROP. 006	389928.00	3872271.00	2850.00	0	0.00000	0.000E+00
27	PROP. 007	390027.00	3872472.00	2850.00	0	0.00000	0.000E+00
28	PROP. 008	390083.00	3872582.00	2835.00	0	0.00000	0.000E+00
29	PROP. 009	390203.00	3872720.00	2830.00	0	0.00000	0.000E+00
30	PROP. 010	390252.00	3872758.00	2830.00	0	0.00000	0.000E+00
31	PROP. 011	390352.00	3872832.00	2820.00	0	0.00000	0.000E+00
32	PROP. 012	390434.00	3872889.00	2820.00	0	0.00000	0.000E+00
33	PROP. 013	390669.00	3872895.00	2820.00	0	0.00000	0.000E+00
34	PROP. 014	390904.00	3872902.00	2820.00	0	0.00000	0.000E+00
35	PROP. 015	391139.00	3872908.00	2820.00	0	0.00000	0.000E+00
36	PROP. 016	391374.00	3872915.00	2820.00	0	0.00000	0.000E+00
37	PROP. 017	391609.00	3872921.00	2810.00	0	0.00000	0.000E+00
38	PROP. 018	391844.00	3872928.00	2790.00	0	0.00000	0.000E+00
39	PROP. 019	391844.00	3872735.00	2850.00	0	0.00000	0.000E+00
40	PROP. 020	391845.00	3872543.00	2900.00	0	0.00000	0.000E+00
41	PROP. 021	391845.00	3872351.00	3000.00	0	0.00000	0.000E+00
42	PROP. 022	391846.00	3872159.00	3175.00	0	0.00000	0.000E+00

43	PROP. 023	392046.00	3872165.00	3100.00	0	0.00000	0.000E+00
44	PROP. 024	392246.00	3872172.00	2975.00	0	0.00000	0.000E+00
45	PROP. 025	392446.00	3872178.00	2825.00	0	0.00000	0.000E+00
46	PROP. 026	392647.00	3872185.00	2860.00	0	0.00000	0.000E+00
47	PROP. 027	392658.00	3871975.00	3090.00	0	0.00000	0.000E+00
48	PROP. 028	392670.00	3871765.00	2900.00	0	0.00000	0.000E+00
49	PROP. 029	392682.00	3871555.00	2925.00	0	0.00000	0.000E+00
50	PROP. 030	392694.00	3871346.00	2950.00	0	0.00000	0.000E+00
51	PROP. 031	392887.00	3871350.00	3000.00	0	0.00000	0.000E+00
52	PROP. 032	393080.00	3871355.00	2950.00	0	0.00000	0.000E+00
53	PROP. 033	393273.00	3871360.00	2875.00	0	0.00000	0.000E+00
54	PROP. 034	393467.00	3871365.00	3025.00	0	0.00000	0.000E+00
55	PROP. 035	393467.00	3871139.00	3000.00	0	0.00000	0.000E+00
56	PROP. 036	393467.00	3870914.00	3000.00	0	0.00000	0.000E+00
57	PROP. 037	393467.00	3870689.00	2760.00	0	0.00000	0.000E+00
58	PROP. 038	393252.00	3870689.00	2830.00	0	0.00000	0.000E+00
59	PROP. 039	393037.00	3870689.00	3020.00	0	0.00000	0.000E+00
60	PROP. 040	392822.00	3870689.00	3110.00	0	0.00000	0.000E+00
61	PROP. 041	392607.00	3870689.00	3440.00	0	0.00000	0.000E+00
62	PROP. 042	392392.00	3870689.00	3500.00	0	0.00000	0.000E+00
63	PROP. 043	392178.00	3870689.00	3120.00	0	0.00000	0.000E+00
64	PROP. 044	392178.00	3870521.00	3020.00	0	0.00000	0.000E+00
65	PROP. 045	392010.00	3870521.00	3180.00	0	0.00000	0.000E+00
66	PROP. 046	391842.00	3870521.00	3120.00	0	0.00000	0.000E+00
67	PROP. 047	391643.00	3870520.00	3060.00	0	0.00000	0.000E+00
68	PROP. 048	391445.00	3870519.00	3030.00	0	0.00000	0.000E+00
69	PROP. 049	391247.00	3870518.00	3180.00	0	0.00000	0.000E+00
70	PROP. 050	391049.00	3870518.00	3120.00	0	0.00000	0.000E+00
71	PROP. 051	391044.00	3870310.00	3300.00	0	0.00000	0.000E+00
72	PROP. 052	391040.00	3870103.00	3140.00	0	0.00000	0.000E+00
73	PROP. 053	391036.00	3869895.00	2980.00	0	0.00000	0.000E+00
74	PROP. 054	391032.00	3869688.00	3120.00	0	0.00000	0.000E+00
75	PROP. 055	390827.00	3869681.00	3000.00	0	0.00000	0.000E+00
76	PROP. 056	390623.00	3869674.00	2920.00	0	0.00000	0.000E+00
77	PROP. 057	390419.00	3869667.00	2910.00	0	0.00000	0.000E+00
78	PROP. 058	390215.00	3869661.00	3000.00	0	0.00000	0.000E+00
79	PROP. 059	390214.00	3869865.00	3020.00	0	0.00000	0.000E+00
80	PROP. 060	390213.00	3870070.00	2930.00	0	0.00000	0.000E+00
81	PROP. 061	390212.00	3870275.00	2920.00	0	0.00000	0.000E+00
82	PROP. 062	390212.00	3870480.00	2880.00	0	0.00000	0.000E+00
83	PROP. 063	390211.00	3870677.00	2870.00	0	0.00000	0.000E+00
84	PROP. 064	390210.00	3870875.00	2860.00	0	0.00000	0.000E+00
85	PROP. 065	390209.00	3871072.00	2860.00	0	0.00000	0.000E+00
86	PROP. 066	390209.00	3871270.00	2870.00	0	0.00000	0.000E+00
87	PROP. 067	390039.00	3871272.00	2840.00	0	0.00000	0.000E+00
88	PROP. 068	389869.00	3871274.00	2840.00	0	0.00000	0.000E+00
89	PROP. 069	389700.00	3871276.00	2840.00	0	0.00000	0.000E+00
90	PROP. 070	389725.00	3871473.00	2840.00	0	0.00000	0.000E+00
91	100.0001	391600.00	3870100.00	2840.00	0	0.00000	0.000E+00
92	100.0002	391700.00	3870100.00	2840.00	0	0.00000	0.000E+00
93	100.0003	391800.00	3870100.00	2850.00	0	0.00000	0.000E+00
94	100.0004	391900.00	3870100.00	2900.00	0	0.00000	0.000E+00
95	100.0005	392000.00	3870100.00	2900.00	0	0.00000	0.000E+00
96	100.0006	392100.00	3870100.00	2870.00	0	0.00000	0.000E+00
97	100.0007	392200.00	3870100.00	2900.00	0	0.00000	0.000E+00
98	100.0008	392300.00	3870100.00	2790.00	0	0.00000	0.000E+00
99	100.0009	392400.00	3870100.00	2900.00	0	0.00000	0.000E+00
100	100.0010	392500.00	3870100.00	2880.00	0	0.00000	0.000E+00
101	100.0011	392600.00	3870100.00	2960.00	0	0.00000	0.000E+00
102	100.0012	392700.00	3870100.00	3070.00	0	0.00000	0.000E+00
103	100.0013	391600.00	3870200.00	2860.00	0	0.00000	0.000E+00
104	100.0014	391700.00	3870200.00	2880.00	0	0.00000	0.000E+00
105	100.0015	391800.00	3870200.00	2890.00	0	0.00000	0.000E+00
106	100.0016	391900.00	3870200.00	2930.00	0	0.00000	0.000E+00
107	100.0017	392000.00	3870200.00	2920.00	0	0.00000	0.000E+00
108	100.0018	392100.00	3870200.00	2910.00	0	0.00000	0.000E+00
109	100.0019	392200.00	3870200.00	2920.00	0	0.00000	0.000E+00
110	100.0020	392300.00	3870200.00	2940.00	0	0.00000	0.000E+00
111	100.0021	392400.00	3870200.00	2930.00	0	0.00000	0.000E+00
112	100.0022	392500.00	3870200.00	2950.00	0	0.00000	0.000E+00
113	100.0023	392600.00	3870200.00	2970.00	0	0.00000	0.000E+00
114	100.0024	392700.00	3870200.00	3120.00	0	0.00000	0.000E+00
115	100.0025	391600.00	3870300.00	2900.00	0	0.00000	0.000E+00
116	100.0026	391700.00	3870300.00	2920.00	0	0.00000	0.000E+00
117	100.0027	391800.00	3870300.00	2930.00	0	0.00000	0.000E+00
118	100.0028	391900.00	3870300.00	2960.00	0	0.00000	0.000E+00
119	100.0029	392000.00	3870300.00	3000.00	0	0.00000	0.000E+00
120	100.0030	392100.00	3870300.00	2960.00	0	0.00000	0.000E+00
121	100.0031	392200.00	3870300.00	2940.00	0	0.00000	0.000E+00
122	100.0032	392300.00	3870300.00	2980.00	0	0.00000	0.000E+00
123	100.0033	392400.00	3870300.00	2980.00	0	0.00000	0.000E+00
124	100.0034	392500.00	3870300.00	3020.00	0	0.00000	0.000E+00
125	100.0035	392600.00	3870300.00	3140.00	0	0.00000	0.000E+00
126	100.0036	392700.00	3870300.00	3170.00	0	0.00000	0.000E+00
127	100.0037	391600.00	3870400.00	2940.00	0	0.00000	0.000E+00
128	100.0038	391700.00	3870400.00	2950.00	0	0.00000	0.000E+00
129	100.0039	391800.00	3870400.00	2980.00	0	0.00000	0.000E+00
130	100.0040	391900.00	3870400.00	3060.00	0	0.00000	0.000E+00
131	100.0041	392000.00	3870400.00	3140.00	0	0.00000	0.000E+00
132	100.0042	392100.00	3870400.00	3020.00	0	0.00000	0.000E+00
133	100.0043	392200.00	3870400.00	2980.00	0	0.00000	0.000E+00
134	100.0044	392300.00	3870400.00	3040.00	0	0.00000	0.000E+00
135	100.0045	392400.00	3870400.00	3110.00	0	0.00000	0.000E+00
136	100.0046	392500.00	3870400.00	3280.00	0	0.00000	0.000E+00
137	100.0047	392600.00	3870400.00	3250.00	0	0.00000	0.000E+00
138	100.0048	392700.00	3870400.00	3260.00	0	0.00000	0.000E+00
139	100.0049	391600.00	3870500.00	3020.00	0	0.00000	0.000E+00

140	100.0050	391700.00	3870500.00	3040.00	0	0.00000	0.000E+00
141	100.0051	391800.00	3870500.00	3060.00	0	0.00000	0.000E+00
142	100.0052	391900.00	3870500.00	3200.00	0	0.00000	0.000E+00
143	100.0053	392000.00	3870500.00	3200.00	0	0.00000	0.000E+00
144	100.0054	392100.00	3870500.00	3060.00	0	0.00000	0.000E+00
145	100.0055	392200.00	3870500.00	3040.00	0	0.00000	0.000E+00
146	100.0056	392300.00	3870500.00	3140.00	0	0.00000	0.000E+00
147	100.0057	392400.00	3870500.00	3240.00	0	0.00000	0.000E+00
148	100.0058	392500.00	3870500.00	3320.00	0	0.00000	0.000E+00
149	100.0059	392600.00	3870500.00	3400.00	0	0.00000	0.000E+00
150	100.0060	392700.00	3870500.00	3400.00	0	0.00000	0.000E+00
151	100.0061	392200.00	3870600.00	3110.00	0	0.00000	0.000E+00
152	100.0062	392300.00	3870600.00	3280.00	0	0.00000	0.000E+00
153	100.0063	392400.00	3870600.00	3430.00	0	0.00000	0.000E+00
154	100.0064	392500.00	3870600.00	3130.00	0	0.00000	0.000E+00
155	100.0065	392600.00	3870600.00	3520.00	0	0.00000	0.000E+00
156	100.0066	392700.00	3870600.00	3390.00	0	0.00000	0.000E+00
157	250.0001	391000.00	3869500.00	3070.00	0	0.00000	0.000E+00
158	250.0002	391250.00	3869500.00	3140.00	0	0.00000	0.000E+00
159	250.0003	391500.00	3869500.00	2880.00	0	0.00000	0.000E+00
160	250.0004	391750.00	3869500.00	2730.00	0	0.00000	0.000E+00
161	250.0005	392000.00	3869500.00	2710.00	0	0.00000	0.000E+00
162	250.0006	392250.00	3869500.00	2700.00	0	0.00000	0.000E+00
163	250.0007	392500.00	3869500.00	2690.00	0	0.00000	0.000E+00
164	250.0008	392750.00	3869500.00	2660.00	0	0.00000	0.000E+00
165	250.0009	393000.00	3869500.00	2670.00	0	0.00000	0.000E+00
166	250.0010	393250.00	3869500.00	2650.00	0	0.00000	0.000E+00
167	250.0011	393500.00	3869500.00	2610.00	0	0.00000	0.000E+00
168	250.0012	391250.00	3869750.00	2890.00	0	0.00000	0.000E+00
169	250.0013	391500.00	3869750.00	2790.00	0	0.00000	0.000E+00
170	250.0014	391750.00	3869750.00	2760.00	0	0.00000	0.000E+00
171	250.0015	392000.00	3869750.00	2770.00	0	0.00000	0.000E+00
172	250.0016	392250.00	3869750.00	2760.00	0	0.00000	0.000E+00
173	250.0017	392500.00	3869750.00	2760.00	0	0.00000	0.000E+00
174	250.0018	392750.00	3869750.00	2800.00	0	0.00000	0.000E+00
175	250.0019	393000.00	3869750.00	2840.00	0	0.00000	0.000E+00
176	250.0020	393250.00	3869750.00	2720.00	0	0.00000	0.000E+00
177	250.0021	393500.00	3869750.00	2700.00	0	0.00000	0.000E+00
178	250.0022	391250.00	3870000.00	3010.00	0	0.00000	0.000E+00
179	250.0023	391500.00	3870000.00	2880.00	0	0.00000	0.000E+00
180	250.0024	391750.00	3870000.00	2810.00	0	0.00000	0.000E+00
181	250.0025	392000.00	3870000.00	2860.00	0	0.00000	0.000E+00
182	250.0026	392250.00	3870000.00	2940.00	0	0.00000	0.000E+00
183	250.0027	392500.00	3870000.00	2850.00	0	0.00000	0.000E+00
184	250.0028	392750.00	3870000.00	3040.00	0	0.00000	0.000E+00
185	250.0029	393000.00	3870000.00	2980.00	0	0.00000	0.000E+00
186	250.0030	393250.00	3870000.00	2860.00	0	0.00000	0.000E+00
187	250.0031	393500.00	3870000.00	2760.00	0	0.00000	0.000E+00
188	250.0032	391250.00	3870250.00	3140.00	0	0.00000	0.000E+00
189	250.0033	391500.00	3870250.00	2910.00	0	0.00000	0.000E+00
190	250.0034	391750.00	3870250.00	2910.00	0	0.00000	0.000E+00
191	250.0035	392000.00	3870250.00	2960.00	0	0.00000	0.000E+00
192	250.0036	392250.00	3870250.00	2940.00	0	0.00000	0.000E+00
193	250.0037	392500.00	3870250.00	2990.00	0	0.00000	0.000E+00
194	250.0038	392750.00	3870250.00	3180.00	0	0.00000	0.000E+00
195	250.0039	393000.00	3870250.00	2980.00	0	0.00000	0.000E+00
196	250.0040	393250.00	3870250.00	3000.00	0	0.00000	0.000E+00
197	250.0041	393500.00	3870250.00	2840.00	0	0.00000	0.000E+00
198	250.0042	391250.00	3870500.00	3160.00	0	0.00000	0.000E+00
199	250.0043	391500.00	3870500.00	3000.00	0	0.00000	0.000E+00
200	250.0044	391750.00	3870500.00	3040.00	0	0.00000	0.000E+00
201	250.0045	392250.00	3870500.00	3100.00	0	0.00000	0.000E+00
202	250.0046	392750.00	3870500.00	3380.00	0	0.00000	0.000E+00
203	250.0047	393000.00	3870500.00	3100.00	0	0.00000	0.000E+00
204	250.0048	393250.00	3870500.00	2880.00	0	0.00000	0.000E+00
205	250.0049	393500.00	3870500.00	2820.00	0	0.00000	0.000E+00
206	250.0050	393500.00	3870750.00	2840.00	0	0.00000	0.000E+00
207	250.0051	393500.00	3871000.00	3050.00	0	0.00000	0.000E+00
208	500.0001	386000.00	3867500.00	2840.00	0	0.00000	0.000E+00
209	500.0002	386500.00	3867500.00	2840.00	0	0.00000	0.000E+00
210	500.0003	387000.00	3867500.00	2830.00	0	0.00000	0.000E+00
211	500.0004	387500.00	3867500.00	2810.00	0	0.00000	0.000E+00
212	500.0005	388000.00	3867500.00	2800.00	0	0.00000	0.000E+00
213	500.0006	388500.00	3867500.00	2790.00	0	0.00000	0.000E+00
214	500.0007	389000.00	3867500.00	2770.00	0	0.00000	0.000E+00
215	500.0008	389500.00	3867500.00	2750.00	0	0.00000	0.000E+00
216	500.0009	390000.00	3867500.00	2740.00	0	0.00000	0.000E+00
217	500.0010	390500.00	3867500.00	2730.00	0	0.00000	0.000E+00
218	500.0011	391000.00	3867500.00	2710.00	0	0.00000	0.000E+00
219	500.0012	391500.00	3867500.00	2690.00	0	0.00000	0.000E+00
220	500.0013	392000.00	3867500.00	2670.00	0	0.00000	0.000E+00
221	500.0014	392500.00	3867500.00	2650.00	0	0.00000	0.000E+00
222	500.0015	393000.00	3867500.00	2630.00	0	0.00000	0.000E+00
223	500.0016	393500.00	3867500.00	2600.00	0	0.00000	0.000E+00
224	500.0017	394000.00	3867500.00	2590.00	0	0.00000	0.000E+00
225	500.0018	394500.00	3867500.00	2580.00	0	0.00000	0.000E+00
226	500.0019	395000.00	3867500.00	2560.00	0	0.00000	0.000E+00
227	500.0020	386000.00	3868000.00	2860.00	0	0.00000	0.000E+00
228	500.0021	386500.00	3868000.00	2860.00	0	0.00000	0.000E+00
229	500.0022	387000.00	3868000.00	2860.00	0	0.00000	0.000E+00
230	500.0023	387500.00	3868000.00	2840.00	0	0.00000	0.000E+00
231	500.0024	388000.00	3868000.00	2820.00	0	0.00000	0.000E+00
232	500.0025	388500.00	3868000.00	2800.00	0	0.00000	0.000E+00
233	500.0026	389000.00	3868000.00	2780.00	0	0.00000	0.000E+00
234	500.0027	389500.00	3868000.00	2770.00	0	0.00000	0.000E+00
235	500.0028	390000.00	3868000.00	2750.00	0	0.00000	0.000E+00
236	500.0029	390500.00	3868000.00	2740.00	0	0.00000	0.000E+00

237	500.0030	391000.00	3868000.00	2720.00	0	0.00000	0.000E+00
238	500.0031	391500.00	3868000.00	2700.00	0	0.00000	0.000E+00
239	500.0032	392000.00	3868000.00	2680.00	0	0.00000	0.000E+00
240	500.0033	392500.00	3868000.00	2660.00	0	0.00000	0.000E+00
241	500.0034	393000.00	3868000.00	2630.00	0	0.00000	0.000E+00
242	500.0035	393500.00	3868000.00	2610.00	0	0.00000	0.000E+00
243	500.0036	394000.00	3868000.00	2590.00	0	0.00000	0.000E+00
244	500.0037	394500.00	3868000.00	2580.00	0	0.00000	0.000E+00
245	500.0038	395000.00	3868000.00	2560.00	0	0.00000	0.000E+00
246	500.0039	386000.00	3868500.00	2880.00	0	0.00000	0.000E+00
247	500.0040	386500.00	3868500.00	2880.00	0	0.00000	0.000E+00
248	500.0041	387000.00	3868500.00	2870.00	0	0.00000	0.000E+00
249	500.0042	387500.00	3868500.00	2860.00	0	0.00000	0.000E+00
250	500.0043	388000.00	3868500.00	2850.00	0	0.00000	0.000E+00
251	500.0044	388500.00	3868500.00	2820.00	0	0.00000	0.000E+00
252	500.0045	389000.00	3868500.00	2800.00	0	0.00000	0.000E+00
253	500.0046	389500.00	3868500.00	2780.00	0	0.00000	0.000E+00
254	500.0047	390000.00	3868500.00	2770.00	0	0.00000	0.000E+00
255	500.0048	390500.00	3868500.00	2740.00	0	0.00000	0.000E+00
256	500.0049	391000.00	3868500.00	2730.00	0	0.00000	0.000E+00
257	500.0050	391500.00	3868500.00	2710.00	0	0.00000	0.000E+00
258	500.0051	392000.00	3868500.00	2680.00	0	0.00000	0.000E+00
259	500.0052	392500.00	3868500.00	2660.00	0	0.00000	0.000E+00
260	500.0053	393000.00	3868500.00	2620.00	0	0.00000	0.000E+00
261	500.0054	393500.00	3868500.00	2600.00	0	0.00000	0.000E+00
262	500.0055	394000.00	3868500.00	2590.00	0	0.00000	0.000E+00
263	500.0056	394500.00	3868500.00	2580.00	0	0.00000	0.000E+00
264	500.0057	395000.00	3868500.00	2565.00	0	0.00000	0.000E+00
265	500.0058	386000.00	3869000.00	2910.00	0	0.00000	0.000E+00
266	500.0059	386500.00	3869000.00	2900.00	0	0.00000	0.000E+00
267	500.0060	387000.00	3869000.00	2890.00	0	0.00000	0.000E+00
268	500.0061	387500.00	3869000.00	2880.00	0	0.00000	0.000E+00
269	500.0062	388000.00	3869000.00	2865.00	0	0.00000	0.000E+00
270	500.0063	388500.00	3869000.00	2840.00	0	0.00000	0.000E+00
271	500.0064	389000.00	3869000.00	2820.00	0	0.00000	0.000E+00
272	500.0065	389500.00	3869000.00	2800.00	0	0.00000	0.000E+00
273	500.0066	390000.00	3869000.00	2820.00	0	0.00000	0.000E+00
274	500.0067	390500.00	3869000.00	2960.00	0	0.00000	0.000E+00
275	500.0068	391000.00	3869000.00	2880.00	0	0.00000	0.000E+00
276	500.0069	391500.00	3869000.00	2720.00	0	0.00000	0.000E+00
277	500.0070	392000.00	3869000.00	2680.00	0	0.00000	0.000E+00
278	500.0071	392500.00	3869000.00	2650.00	0	0.00000	0.000E+00
279	500.0072	393000.00	3869000.00	2620.00	0	0.00000	0.000E+00
280	500.0073	393500.00	3869000.00	2600.00	0	0.00000	0.000E+00
281	500.0074	394000.00	3869000.00	2590.00	0	0.00000	0.000E+00
282	500.0075	394500.00	3869000.00	2580.00	0	0.00000	0.000E+00
283	500.0076	395000.00	3869000.00	2570.00	0	0.00000	0.000E+00
284	500.0077	386000.00	3869500.00	2920.00	0	0.00000	0.000E+00
285	500.0078	386500.00	3869500.00	2920.00	0	0.00000	0.000E+00
286	500.0079	387000.00	3869500.00	2910.00	0	0.00000	0.000E+00
287	500.0080	387500.00	3869500.00	2890.00	0	0.00000	0.000E+00
288	500.0081	388000.00	3869500.00	2880.00	0	0.00000	0.000E+00
289	500.0082	388500.00	3869500.00	2860.00	0	0.00000	0.000E+00
290	500.0083	389000.00	3869500.00	2840.00	0	0.00000	0.000E+00
291	500.0084	389500.00	3869500.00	2800.00	0	0.00000	0.000E+00
292	500.0085	390000.00	3869500.00	3340.00	0	0.00000	0.000E+00
293	500.0086	390500.00	3869500.00	2850.00	0	0.00000	0.000E+00
294	500.0087	394000.00	3869500.00	2590.00	0	0.00000	0.000E+00
295	500.0088	394500.00	3869500.00	2580.00	0	0.00000	0.000E+00
296	500.0089	395000.00	3869500.00	2570.00	0	0.00000	0.000E+00
297	500.0090	386000.00	3870000.00	2940.00	0	0.00000	0.000E+00
298	500.0091	386500.00	3870000.00	2940.00	0	0.00000	0.000E+00
299	500.0092	387000.00	3870000.00	2930.00	0	0.00000	0.000E+00
300	500.0093	387500.00	3870000.00	2900.00	0	0.00000	0.000E+00
301	500.0094	388000.00	3870000.00	2880.00	0	0.00000	0.000E+00
302	500.0095	388500.00	3870000.00	2860.00	0	0.00000	0.000E+00
303	500.0096	389000.00	3870000.00	2840.00	0	0.00000	0.000E+00
304	500.0097	389500.00	3870000.00	2820.00	0	0.00000	0.000E+00
305	500.0098	390000.00	3870000.00	2900.00	0	0.00000	0.000E+00
306	500.0099	394000.00	3870000.00	2600.00	0	0.00000	0.000E+00
307	500.0100	394500.00	3870000.00	2590.00	0	0.00000	0.000E+00
308	500.0101	395000.00	3870000.00	2570.00	0	0.00000	0.000E+00
309	500.0102	386000.00	3870500.00	2970.00	0	0.00000	0.000E+00
310	500.0103	386500.00	3870500.00	2960.00	0	0.00000	0.000E+00
311	500.0104	387000.00	3870500.00	2950.00	0	0.00000	0.000E+00
312	500.0105	387500.00	3870500.00	2910.00	0	0.00000	0.000E+00
313	500.0106	388000.00	3870500.00	2880.00	0	0.00000	0.000E+00
314	500.0107	388500.00	3870500.00	2860.00	0	0.00000	0.000E+00
315	500.0108	389000.00	3870500.00	2840.00	0	0.00000	0.000E+00
316	500.0109	389500.00	3870500.00	2820.00	0	0.00000	0.000E+00
317	500.0110	390000.00	3870500.00	2850.00	0	0.00000	0.000E+00
318	500.0111	394000.00	3870500.00	2720.00	0	0.00000	0.000E+00
319	500.0112	394500.00	3870500.00	2670.00	0	0.00000	0.000E+00
320	500.0113	395000.00	3870500.00	2590.00	0	0.00000	0.000E+00
321	500.0114	386000.00	3871000.00	2990.00	0	0.00000	0.000E+00
322	500.0115	386500.00	3871000.00	2970.00	0	0.00000	0.000E+00
323	500.0116	387000.00	3871000.00	2940.00	0	0.00000	0.000E+00
324	500.0117	387500.00	3871000.00	2910.00	0	0.00000	0.000E+00
325	500.0118	388000.00	3871000.00	2890.00	0	0.00000	0.000E+00
326	500.0119	388500.00	3871000.00	2870.00	0	0.00000	0.000E+00
327	500.0120	389000.00	3871000.00	2820.00	0	0.00000	0.000E+00
328	500.0121	389500.00	3871000.00	2840.00	0	0.00000	0.000E+00
329	500.0122	390000.00	3871000.00	2840.00	0	0.00000	0.000E+00
330	500.0123	394000.00	3871000.00	2640.00	0	0.00000	0.000E+00
331	500.0124	394500.00	3871000.00	2605.00	0	0.00000	0.000E+00
332	500.0125	395000.00	3871000.00	2590.00	0	0.00000	0.000E+00
333	500.0126	386000.00	3871500.00	3000.00	0	0.00000	0.000E+00

334	500.0127	386500.00	3871500.00	2980.00	0	0.00000	0.000E+00
335	500.0128	387000.00	3871500.00	2960.00	0	0.00000	0.000E+00
336	500.0129	387500.00	3871500.00	2930.00	0	0.00000	0.000E+00
337	500.0130	388000.00	3871500.00	2910.00	0	0.00000	0.000E+00
338	500.0131	388500.00	3871500.00	2880.00	0	0.00000	0.000E+00
339	500.0132	389000.00	3871500.00	2860.00	0	0.00000	0.000E+00
340	500.0133	389500.00	3871500.00	2840.00	0	0.00000	0.000E+00
341	500.0134	393000.00	3871500.00	2940.00	0	0.00000	0.000E+00
342	500.0135	393500.00	3871500.00	2740.00	0	0.00000	0.000E+00
343	500.0136	394000.00	3871500.00	2640.00	0	0.00000	0.000E+00
344	500.0137	394500.00	3871500.00	2610.00	0	0.00000	0.000E+00
345	500.0138	395000.00	3871500.00	2600.00	0	0.00000	0.000E+00
346	500.0139	386000.00	3872000.00	3020.00	0	0.00000	0.000E+00
347	500.0140	386500.00	3872000.00	3000.00	0	0.00000	0.000E+00
348	500.0141	387000.00	3872000.00	2970.00	0	0.00000	0.000E+00
349	500.0142	387500.00	3872000.00	2940.00	0	0.00000	0.000E+00
350	500.0143	388000.00	3872000.00	2920.00	0	0.00000	0.000E+00
351	500.0144	388500.00	3872000.00	2900.00	0	0.00000	0.000E+00
352	500.0145	389000.00	3872000.00	2880.00	0	0.00000	0.000E+00
353	500.0146	389500.00	3872000.00	2860.00	0	0.00000	0.000E+00
354	500.0147	393000.00	3872000.00	2760.00	0	0.00000	0.000E+00
355	500.0148	393500.00	3872000.00	2690.00	0	0.00000	0.000E+00
356	500.0149	394000.00	3872000.00	2650.00	0	0.00000	0.000E+00
357	500.0150	394500.00	3872000.00	2630.00	0	0.00000	0.000E+00
358	500.0151	395000.00	3872000.00	2610.00	0	0.00000	0.000E+00
359	500.0152	386000.00	3872500.00	3040.00	0	0.00000	0.000E+00
360	500.0153	386500.00	3872500.00	3020.00	0	0.00000	0.000E+00
361	500.0154	387000.00	3872500.00	2990.00	0	0.00000	0.000E+00
362	500.0155	387500.00	3872500.00	2960.00	0	0.00000	0.000E+00
363	500.0156	388000.00	3872500.00	2940.00	0	0.00000	0.000E+00
364	500.0157	388500.00	3872500.00	2910.00	0	0.00000	0.000E+00
365	500.0158	389000.00	3872500.00	2880.00	0	0.00000	0.000E+00
366	500.0159	389500.00	3872500.00	2860.00	0	0.00000	0.000E+00
367	500.0160	390000.00	3872500.00	2870.00	0	0.00000	0.000E+00
368	500.0161	392000.00	3872500.00	2920.00	0	0.00000	0.000E+00
369	500.0162	392500.00	3872500.00	2810.00	0	0.00000	0.000E+00
370	500.0163	393000.00	3872500.00	2720.00	0	0.00000	0.000E+00
371	500.0164	393500.00	3872500.00	2680.00	0	0.00000	0.000E+00
372	500.0165	394000.00	3872500.00	2660.00	0	0.00000	0.000E+00
373	500.0166	394500.00	3872500.00	2640.00	0	0.00000	0.000E+00
374	500.0167	395000.00	3872500.00	2610.00	0	0.00000	0.000E+00
375	500.0168	386000.00	3873000.00	3060.00	0	0.00000	0.000E+00
376	500.0169	386500.00	3873000.00	3040.00	0	0.00000	0.000E+00
377	500.0170	387000.00	3873000.00	3010.00	0	0.00000	0.000E+00
378	500.0171	387500.00	3873000.00	2980.00	0	0.00000	0.000E+00
379	500.0172	388000.00	3873000.00	2950.00	0	0.00000	0.000E+00
380	500.0173	388500.00	3873000.00	2920.00	0	0.00000	0.000E+00
381	500.0174	389000.00	3873000.00	2900.00	0	0.00000	0.000E+00
382	500.0175	389500.00	3873000.00	2870.00	0	0.00000	0.000E+00
383	500.0176	390000.00	3873000.00	2845.00	0	0.00000	0.000E+00
384	500.0177	390500.00	3873000.00	2820.00	0	0.00000	0.000E+00
385	500.0178	391000.00	3873000.00	2810.00	0	0.00000	0.000E+00
386	500.0179	391500.00	3873000.00	2800.00	0	0.00000	0.000E+00
387	500.0180	392000.00	3873000.00	2760.00	0	0.00000	0.000E+00
388	500.0181	392500.00	3873000.00	2740.00	0	0.00000	0.000E+00
389	500.0182	393000.00	3873000.00	2710.00	0	0.00000	0.000E+00
390	500.0183	393500.00	3873000.00	2680.00	0	0.00000	0.000E+00
391	500.0184	394000.00	3873000.00	2660.00	0	0.00000	0.000E+00
392	500.0185	394500.00	3873000.00	2640.00	0	0.00000	0.000E+00
393	500.0186	395000.00	3873000.00	2620.00	0	0.00000	0.000E+00
394	500.0187	386000.00	3873500.00	3080.00	0	0.00000	0.000E+00
395	500.0188	386500.00	3873500.00	3050.00	0	0.00000	0.000E+00
396	500.0189	387000.00	3873500.00	3020.00	0	0.00000	0.000E+00
397	500.0190	387500.00	3873500.00	2990.00	0	0.00000	0.000E+00
398	500.0191	388000.00	3873500.00	2960.00	0	0.00000	0.000E+00
399	500.0192	388500.00	3873500.00	2930.00	0	0.00000	0.000E+00
400	500.0193	389000.00	3873500.00	2900.00	0	0.00000	0.000E+00
401	500.0194	389500.00	3873500.00	2880.00	0	0.00000	0.000E+00
402	500.0195	390000.00	3873500.00	2850.00	0	0.00000	0.000E+00
403	500.0196	390500.00	3873500.00	2830.00	0	0.00000	0.000E+00
404	500.0197	391000.00	3873500.00	2800.00	0	0.00000	0.000E+00
405	500.0198	391500.00	3873500.00	2780.00	0	0.00000	0.000E+00
406	500.0199	392000.00	3873500.00	2750.00	0	0.00000	0.000E+00
407	500.0200	392500.00	3873500.00	2760.00	0	0.00000	0.000E+00
408	500.0201	393000.00	3873500.00	2720.00	0	0.00000	0.000E+00
409	500.0202	393500.00	3873500.00	2680.00	0	0.00000	0.000E+00
410	500.0203	394000.00	3873500.00	2700.00	0	0.00000	0.000E+00
411	500.0204	394500.00	3873500.00	2640.00	0	0.00000	0.000E+00
412	500.0205	395000.00	3873500.00	2620.00	0	0.00000	0.000E+00
413	500.0206	388000.00	3874000.00	2980.00	0	0.00000	0.000E+00
414	500.0207	388000.00	3874500.00	2980.00	0	0.00000	0.000E+00
415	500.0208	388000.00	3875000.00	2990.00	0	0.00000	0.000E+00
416	500.0209	388500.00	3874000.00	2940.00	0	0.00000	0.000E+00
417	500.0210	388500.00	3874500.00	2950.00	0	0.00000	0.000E+00
418	500.0211	388500.00	3875000.00	2960.00	0	0.00000	0.000E+00
419	500.0212	389000.00	3874000.00	2910.00	0	0.00000	0.000E+00
420	500.0213	389000.00	3874500.00	2920.00	0	0.00000	0.000E+00
421	500.0214	389000.00	3875000.00	2920.00	0	0.00000	0.000E+00
422	500.0215	389500.00	3874000.00	2880.00	0	0.00000	0.000E+00
423	500.0216	389500.00	3874500.00	2890.00	0	0.00000	0.000E+00
424	500.0217	389500.00	3875000.00	2900.00	0	0.00000	0.000E+00
425	500.0218	390000.00	3874000.00	2860.00	0	0.00000	0.000E+00
426	500.0219	390000.00	3874500.00	2860.00	0	0.00000	0.000E+00
427	500.0220	390000.00	3875000.00	2865.00	0	0.00000	0.000E+00
428	500.0221	390500.00	3874000.00	2830.00	0	0.00000	0.000E+00
429	500.0222	390500.00	3874500.00	2840.00	0	0.00000	0.000E+00
430	500.0223	390500.00	3875000.00	2840.00	0	0.00000	0.000E+00

431	500.0224	391000.00	3874000.00	2800.00	0	0.00000	0.000E+00
432	500.0225	391000.00	3874500.00	2810.00	0	0.00000	0.000E+00
433	500.0226	391000.00	3875000.00	2810.00	0	0.00000	0.000E+00
434	500.0227	391500.00	3874000.00	2780.00	0	0.00000	0.000E+00
435	500.0228	391500.00	3874500.00	2780.00	0	0.00000	0.000E+00
436	500.0229	391500.00	3875000.00	2780.00	0	0.00000	0.000E+00
437	500.0230	392000.00	3874000.00	2770.00	0	0.00000	0.000E+00
438	500.0231	392000.00	3874500.00	2760.00	0	0.00000	0.000E+00
439	500.0232	392000.00	3875000.00	2760.00	0	0.00000	0.000E+00
440	500.0233	392500.00	3874000.00	2760.00	0	0.00000	0.000E+00
441	500.0234	392500.00	3874500.00	2780.00	0	0.00000	0.000E+00
442	500.0235	392500.00	3875000.00	2740.00	0	0.00000	0.000E+00
443	500.0236	393000.00	3874000.00	2900.00	0	0.00000	0.000E+00
444	500.0237	393000.00	3874500.00	2900.00	0	0.00000	0.000E+00
445	500.0238	393000.00	3875000.00	2730.00	0	0.00000	0.000E+00
446	500.0239	393500.00	3874000.00	2800.00	0	0.00000	0.000E+00
447	500.0240	393500.00	3874500.00	2700.00	0	0.00000	0.000E+00
448	500.0241	393500.00	3875000.00	2700.00	0	0.00000	0.000E+00
449	500.0242	394000.00	3874000.00	2650.00	0	0.00000	0.000E+00
450	500.0243	394000.00	3874500.00	2660.00	0	0.00000	0.000E+00
451	500.0244	394000.00	3875000.00	2680.00	0	0.00000	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, RM10 * OUTPUT OF AMI/SBCARCO ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 45

*** PATHWAY-SPECIFIC DATA ***

*** RISK LEVELS ***
 Significant risk level 1.00E-06
 Zone of impact risk level 1.00E-07
 Significant hazard index for acute exposure 0.50
 Significant hazard index for chronic exposure 0.50

*** INHALATION PATHWAY ***
 Respiration rate (RR) (m3/d) 20.0
 Average body weight (ABW) (kg) 70.0

*** MULTIPATHWAY POLLUTANTS ***
 Number of multipathway pollutants 27
 Symbol and identification number

- Arsenic	As	10
- Beryllium	Be	17
- Cadmium	Cd	22
- Chlorobenzene	CBZ	29
- Chromium (hex.)	Cr	36
- Dioxins/Dibenzofuran	TCDD	55
- 2-Chlorophenol	CSPEZ	33
- p-Dichlorobenzene	PDCB	48
- Hexachlorobenzene	HCB	74
- Hexachlorocyclohexan	HCHEX	75
- Lead	Pb	83
- Mercury	Hg	87
- NNitrosodiethylamine	NNETH	101
- NNitrosodimethylamin	NNMET	102
- NNitrosodiphenylamin	PNPHE	105
- NNitrosodibutylamin	NKBUT	103
- NNitrosodinpropylami	NNDPP	104
- NNitromethylethylamin	NNMEL	106
- NNitrosomorpholine	NNMPH	107
- NNitrosopiperidine	NNPRD	108
- NNitrosopyrrolidine	NNPLD	109
- Naphthalene	NAETH	110
- PAH	PAH	130
- Polychlor. biphenyls	PCB	129
- Pentachlorophenol	PENTA	155
- 2,4,6Trichlorophenol	TC246	147
- 2,4,5Trichlorophenol	TC245	157

*** SOIL ***
 Vertical rate of deposition (Dep_rate) (m/s)

- Arsenic	0.00
- Beryllium	0.00
- Cadmium	0.00
- Chlorobenzene	0.00
- Chromium (hex.)	0.00
- Dioxins/Dibenzofuran	0.00
- 2-Chlorophenol	0.00
- p-Dichlorobenzene	0.00
- Hexachlorobenzene	0.00
- Hexachlorocyclohexan	0.00
- Lead	0.00
- Mercury	0.00
- NNitrosodiethylamine	0.00
- NNitrosodimethylamin	0.00
- NNitrosodiphenylamin	0.00
- NNitrosodibutylamin	0.00
- NNitrosodinpropylami	0.00
- NNitromethylethylamin	0.00
- NNitrosomorpholine	0.00
- NNitrosopiperidine	0.00
- NNitrosopyrrolidine	0.00
- Naphthalene	0.00
- PAH	0.00
- Polychlor. biphenyls	0.00
- Pentachlorophenol	0.00
- 2,4,6Trichlorophenol	0.00
- 2,4,5Trichlorophenol	0.00

Beginning of evaluation period (To) (d) 0.0
 End of evaluation period (Tf) (d) 25550.0

Soil mixing depth for human ingestion (SD) (m)	0.0100
Soil bulk density (BD) (kg/m3)	1333.0
Chemical half-life in soil (t1/2)(d) - Arsenic	1.00E+08
- Beryllium	1.00E+08
- Cadmium	1.00E+08
- Chlorobenzene	1.50E+02
- Chromium (hex.)	1.00E+08
- Dioxins/Dibenzofuran	4.38E+03
- 2-Chlorophenol	7.00E+01
- p-Dichlorobenzene	1.80E+02
- Hexachlorobenzene	2.09E+03
- Hexachlorocyclohexan	1.70E+02
- Lead	1.00E+08
- Mercury	1.00E+08
- NNitrosodiethylamine	1.80E+02
- NNitrosodimethylamin	1.80E+02
- NNitrosodiphenylamin	1.80E+02
- NNitrosodinbutylamin	1.80E+02
- NNitrosodinpropylami	1.80E+02
- NNitromethylethylamin	1.80E+02
- NNitrosomorpholine	1.80E+02
- NNitrosopiperidine	1.80E+02
- NNitrosopyrrolidine	1.80E+02
- Naphthalene	4.80E+02
- PAH	4.80E+02
- Polychlor. biphenyls	3.60E+03
- Pentachlorophenol	1.78E+02
- 2,4,6Trichlorophenol	7.00E+01
- 2,4,5Trichlorophenol	6.90E+02

*** WATER ***

Location (receptor #) of drinking water source	-1
Site-specific water surface area (SA) (m2)	-1.0
Site-specific water volume (WV) (kg)	-1.0
Site-specific number of volume changes per year (VC)	-1.0
Site-specific fraction of run-off water (ROF)	-1.0
Wash coefficient-fraction of material washed by runoff (WC)	-1.0
Site-specific watershed area impacted (WSIA) (m2)	-1.0
Site-specific average annual rainfall (RF) (m)	-1.0
Site-specific watershed run-off coefficient (ROC)	-1.0

*** VEGETATION ***

Location (receptor #) of crop source	0
Soil mixing depth (SD) for homegrown crops (m)	0.150
Interception coefficient for root crops (IFC_ROOT)	0.0
Interception coefficient for leafy crops (IFC_LEAFY)	0.20
Interception coefficient for vine crops (IFC_VINE)	0.10
Weathering constant (k) (1/d)	0.0495
Crop yield (Y) (kg/m2)	2.0
Crop growth period (T) (d)	90.0
Root uptake (UF2) - ROOT	
- Arsenic	2.00E-03
- Beryllium	4.00E-04
- Cadmium	4.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	1.00E-03
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	2.00E-03
- Mercury	2.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0
Root uptake (UF2) - LEAF	
- Arsenic	4.00E-03
- Beryllium	1.00E-03
- Cadmium	6.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	8.00E-04
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	5.00E-03
- Mercury	9.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0

Root uptake (UF2) - VINE

- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0
- Arsenic	9.00E-04
- Beryllium	2.00E-04
- Cadmium	2.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	6.00E-04
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	1.00E-03
- Mercury	3.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Octanol:water partition factor (Kow)

- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Organic carbon partition coeff (Koc)

- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0
- Fraction of organic in soil (Foc)	0.10

*** ANIMAL PRODUCTS ***

Location (receptor #) of animal farm	-1
Soil mixing depth (SD) for animal pasture (m)	0.010
Soil mixing depth (SD) for animal feed (m)	0.150
Inhalation rate (RR) (m3/d)	- Cattle/Lactating 8.00E+01
	- Pigs 7.00E+00
	- Poultry 1.00E+00
	- Goats/Sheep 6.00E+00
Water ingestion rate (WI) (kg/d)	- Cattle/Lactating 1.00E+02
	- Pigs 8.00E+00

	- Poultry	6.00E-01
	- Goats/Sheep	6.00E+00
Site-specific % water ingested from contaminated water (XSW)		0.25
Site-specific % diet provided by grazing (XG)		0.50
Site-specific % feed other than pasture locally grown (L)		1.00
Feed ingestion rate (FI) (kg/d)	- Cattle	8.00E+00
	- Lactating	1.60E+01
	- Pigs	2.00E+00
	- Poultry	3.00E-01
	- Goats/Sheep	2.00E+00
Soil ingested as % of feed ingested (Xsf)	- Cattle/Lactating	1.00E-02
	- Pigs	1.00E-02
	- Poultry	1.00E-02
	- Goats/Sheep	1.00E-02
Soil ingested as % of pasture ingested (XSp)	- Cattle/Lactating	5.00E-02
	- Pigs	3.00E-02
	- Poultry	3.00E-02
	- Goats/Sheep	7.00E-02
Transfer coefficient of contaminant from diet to meat product (Fi_meat)	- Arsenic	2.00E-03
	- Beryllium	1.00E-03
	- Cadmium	3.50E-04
	- Chlorobenzene	-1.0
	- Chromium (hex.)	9.20E-03
	- Dioxins/Dibenzofuran	4.00E-01
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	4.00E-04
	- Mercury	2.70E-02
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	5.00E-02
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	9.00E-05
	- 2,4,5Trichlorophenol	-1.0
Transfer coefficient of contaminant from diet to milk product (Fi_milk)	- Arsenic	6.20E-05
	- Beryllium	9.10E-07
	- Cadmium	1.00E-03
	- Chlorobenzene	-1.0
	- Chromium (hex.)	1.00E-05
	- Dioxins/Dibenzofuran	4.00E-02
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	2.60E-04
	- Mercury	9.70E-06
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	1.00E-02
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	4.20E-05
	- 2,4,5Trichlorophenol	-1.0
Transfer coefficient of contaminant from diet to egg product (Fi_egg)	- Arsenic	2.00E-03
	- Beryllium	1.00E-03
	- Cadmium	3.50E-04
	- Chlorobenzene	-1.0
	- Chromium (hex.)	9.20E-03
	- Dioxins/Dibenzofuran	4.00E-01
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	4.00E-04
	- Mercury	2.70E-02
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	5.00E-02
	- Pentachlorophenol	-1.0

	- 2,4,6Trichlorophenol	9.00E-05
	- 2,4,5Trichlorophenol	-1.0
Location (receptor #) of animal's water source		-1
Site-specific water surface area (SA) (m2)		1000.0
Site-specific water volume (WV) (kg)		2.00E+06
Site-specific number of volume changes per year (VC)		5.0
Site-specific fraction of run-off water (ROf)		-1.0
Wash coefficient-fraction of material washed by runoff (WC)		-1.0
Site-specific watershed area impacted (WSIA) (m2)		-1.0
Site-specific average annual rainfall (RF) (m)		-1.0
Site-specific watershed run-off coefficient (ROC)		-1.0
*** FISH PRODUCTS ***		
Location (receptor #) of fish farm/pond/lake/stream		-1
Site-specific water surface area (SA) (m2)		1.50E+05
Site-specific water volume (WV) (kg)		3.00E+08
Site-specific number of volume changes per year (VC)		5000.0
Site-specific fraction of run-off water (ROf)		-1.0
Wash coefficient-fraction of material washed by runoff (WC)		-1.0
Site-specific watershed area impacted (WSIA) (m2)		-1.0
Site-specific average annual rainfall (RF) (m)		-1.0
Site-specific watershed run-off coefficient (ROC)		-1.0
Bioconcentration factor (BCF)	- Arsenic	4.00E+00
	- Beryllium	1.90E+01
	- Cadmium	1.00E+02
	- Chlorobenzene	-1.0
	- Chromium (hex.)	2.00E+00
	- Dioxins/Dibenzofuran	5.00E+03
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	8.00E+03
	- Hexachlorocyclohexan	-1.0
	- Lead	1.55E+02
	- Mercury	5.00E+03
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	1.55E+03
	- PAH	1.55E+03
	- Polychlor. biphenyls	1.00E+05
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	5.00E+02
	- 2,4,5Trichlorophenol	-1.0
*** DERMAL ABSORPTION PATHWAY ***		
Surface area of exposed skin (SA) (cm2)		4656.0
Soil loading on skin (SL)		0.50
Fraction absorbed across skin (ABS)	- Arsenic	1.00E-03
	- Beryllium	1.00E-03
	- Cadmium	2.00E-03
	- Chlorobenzene	1.00E-01
	- Chromium (hex.)	1.00E-02
	- Dioxins/Dibenzofuran	2.00E-02
	- 2-Chlorophenol	1.00E-01
	- p-Dichlorobenzene	1.00E-01
	- Hexachlorobenzene	1.00E-01
	- Hexachlorocyclohexan	1.00E-01
	- Lead	1.00E-03
	- Mercury	1.00E-02
	- NNitrosodiethylamine	1.00E-01
	- NNitrosodimethylamin	1.00E-01
	- NNitrosodiphenylamin	1.00E-01
	- NNitrosodinbutylamin	1.00E-01
	- NNitrosodinpropylami	1.00E-01
	- NNitromethylethylamin	1.00E-01
	- NNitrosomorpholine	1.00E-01
	- NNitrosopiperidine	1.00E-01
	- NNitrosopyrrolidine	1.00E-01
	- Naphthalene	3.00E-02
	- PAH	3.00E-02
	- Polychlor. biphenyls	1.50E-01
	- Pentachlorophenol	1.00E-01
	- 2,4,6Trichlorophenol	1.00E-01
	- 2,4,5Trichlorophenol	1.00E-01
*** SOIL INGESTION PATHWAY ***		
Lifetime average soil ingestion rate per day (Is) (mg/d)		110.0
Gastrointestinal absorption factor (GI)	- Arsenic	1.00E+00
	- Beryllium	1.00E+00
	- Cadmium	1.00E+00
	- Chlorobenzene	1.00E+00
	- Chromium (hex.)	1.00E+00
	- Dioxins/Dibenzofuran	1.00E+00
	- 2-Chlorophenol	1.00E+00
	- p-Dichlorobenzene	1.00E+00
	- Hexachlorobenzene	1.00E+00
	- Hexachlorocyclohexan	1.00E+00
	- Lead	1.00E+00
	- Mercury	1.00E+00
	- NNitrosodiethylamine	1.00E+00
	- NNitrosodimethylamin	1.00E+00
	- NNitrosodiphenylamin	1.00E+00
	- NNitrosodinbutylamin	1.00E+00
	- NNitrosodinpropylami	1.00E+00

Bioavailability factors (BIO)

- NNitromethylethylamin	1.00E+00
- NNitrosomorpholine	1.00E+00
- NNitrosopiperidine	1.00E+00
- NNitrosopyrrolidine	1.00E+00
- Naphthalene	1.00E+00
- PAH	1.00E+00
- Polychlor. biphenyls	1.00E+00
- Pentachlorophenol	1.00E+00
- 2,4,6Trichlorophenol	1.00E+00
- 2,4,5Trichlorophenol	1.00E+00
- Arsenic	1.0
- Beryllium	1.0
- Cadmium	1.0
- Chlorobenzene	1.0
- Chromium (hex.)	1.0
- Dioxins/Dibenzofuran	4.30E-01
- 2-Chlorophenol	1.0
- p-Dichlorobenzene	1.0
- Hexachlorobenzene	1.0
- Hexachlorocyclohexan	1.0
- Lead	1.0
- Mercury	1.0
- NNitrosodiethylamine	1.0
- NNitrosodimethylamin	1.0
- NNitrosodiphenylamin	1.0
- NNitrosodinbutylamin	1.0
- NNitrosodinpropylami	1.0
- NNitromethylethylamin	1.0
- NNitrosomorpholine	1.0
- NNitrosopiperidine	1.0
- NNitrosopyrrolidine	1.0
- Naphthalene	1.0
- PAH	1.0
- Polychlor. biphenyls	1.0
- Pentachlorophenol	1.0
- 2,4,6Trichlorophenol	1.0
- 2,4,5Trichlorophenol	1.0

*** WATER INGESTION PATHWAY ***

Lifetime average water ingestion rate per day (Iw) (l/d)	2.0
*** FOOD INGESTION - PLANT PRODUCTS PATHWAY ***	
Site-specific fraction of root vegetable homegrown (L_Ir)	0.150
Site-specific fraction of leafy veget homegrown (L_leafy)	0.150
Site-specific fraction of vine veget homegrown (L_vine)	0.150
Daily consumption rate of root vegetable (IF_Ir) (kg/d)	0.050
Daily consumption rate of leafy veget (IF_leafy) (kg/d)	0.010
Daily consumption rate of vine veget (IF_vine) (kg/d)	0.250

*** FOOD INGESTION - ANIMAL PRODUCTS PATHWAY ***

Site-specific fraction of milk locally produced (L_Im)	0.00
Site-specific fraction of milk from cows	0.00
Site-specific fraction of milk from goats	0.00
Site-specific fraction of meat locally produced (L_Ib)	0.50
Site-specific fraction of meat from cows	0.50
Site-specific fraction of meat from pigs	0.00
Site-specific fraction of meat from poultry	0.50
Site-specific fraction of meat from goats/sheep	0.00
Site-specific fraction of eggs locally produced	1.00
Site-specific fraction of fish locally produced (L_ifi)	0.00
Daily consumption rate of milk (IF_Im) (kg/d)	0.30
Daily consumption rate of meat (IF_Ib) (kg/d)	0.10
Daily consumption rate of egg (kg/d)	0.05
Daily consumption rate of fish (IF_ifi) (kg/d)	0.023

*** MOTHER'S MILK PATHWAY ***

Beginning of exposure period for mother (d)	0.0
End of exposure period for mother (d)	9490.0
Daily breast-milk ingestion rate (DERm) (kg/d)	0.90
Frequency of exposure (F) (d)	365.0
Period of exposure (YR) (yr)	1.00
Infant average body weight (ABS) (kg)	6.50
Fraction of contaminant partitioned to mother's fat (f1)	0.90
Percent fat of mother's milk (f3)	0.040
Percent mother's weight that is fat (f2)	0.330
Contaminant half-life in mother (t1/2) (d)	
- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	2117.00
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	1460.0
- Polychlor. biphenyls	1460.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	ACETA	ACROL	As	BENZE	Be	Cd	Cz	Cu	HCBO	HCN
1	0.000E+00	0.000E+00	1.247E-02	0.000E+00	1.445E-02	4.592E-04	1.418E-04	1.076E-03	0.000E+00	7.196E+00
2	0.000E+00	0.000E+00	9.295E-03	0.000E+00	1.080E-02	3.421E-04	1.059E-04	8.028E-04	0.000E+00	4.589E+00
3	0.000E+00	0.000E+00	9.478E-03	0.000E+00	1.101E-02	3.520E-04	1.080E-04	8.186E-04	0.000E+00	4.516E+00
4	0.000E+00	0.000E+00	1.605E-02	0.000E+00	1.866E-02	5.616E-04	1.827E-04	1.385E-03	0.000E+00	8.406E+00
5	0.000E+00	0.000E+00	1.553E-02	0.000E+00	1.806E-02	5.612E-04	1.768E-04	1.340E-03	0.000E+00	8.085E+00
6	0.000E+00	0.000E+00	1.514E-02	0.000E+00	1.760E-02	5.702E-04	1.724E-04	1.307E-03	0.000E+00	7.626E+00
7	0.000E+00	0.000E+00	1.179E-02	0.000E+00	1.374E-02	4.497E-04	1.347E-04	1.018E-03	0.000E+00	4.229E+00
8	0.000E+00	0.000E+00	1.143E-02	0.000E+00	1.328E-02	4.112E-04	1.302E-04	9.873E-04	0.000E+00	4.339E+00
9	0.000E+00	0.000E+00	1.195E-02	0.000E+00	1.390E-02	4.414E-04	1.363E-04	1.033E-03	0.000E+00	4.466E+00
10	0.000E+00	0.000E+00	1.819E-02	0.000E+00	2.105E-02	6.364E-04	2.066E-04	1.570E-03	0.000E+00	1.444E+01
11	0.000E+00	0.000E+00	1.040E-02	0.000E+00	1.210E-02	3.649E-04	1.185E-04	8.979E-04	0.000E+00	7.768E+00
12	0.000E+00	0.000E+00	2.419E-02	0.000E+00	2.813E-02	8.462E-04	2.754E-04	2.088E-03	0.000E+00	2.622E+01
13	0.000E+00	0.000E+00	4.825E-02	0.000E+00	5.617E-02	2.242E-03	5.549E-04	4.164E-03	0.000E+00	1.466E+01
14	0.000E+00	0.000E+00	4.973E-02	0.000E+00	5.793E-02	2.539E-03	5.742E-04	4.292E-03	0.000E+00	1.427E+01
15	0.000E+00	0.000E+00	5.030E-02	0.000E+00	5.863E-02	2.634E-03	5.816E-04	4.342E-03	0.000E+00	1.283E+01
16	0.000E+00	0.000E+00	5.105E-02	0.000E+00	5.955E-02	2.480E-03	5.887E-04	4.407E-03	0.000E+00	1.611E+01
17	0.000E+00	0.000E+00	1.722E-02	0.000E+00	1.997E-02	6.024E-04	1.958E-04	1.486E-03	0.000E+00	1.468E+01
18	0.000E+00	0.000E+00	1.350E-02	0.000E+00	1.568E-02	4.722E-04	1.536E-04	1.165E-03	0.000E+00	1.529E+01
19	0.000E+00	0.000E+00	1.520E-02	0.000E+00	1.765E-02	5.319E-04	1.730E-04	1.312E-03	0.000E+00	1.481E+01
20	0.000E+00	0.000E+00	1.565E-02	0.000E+00	1.816E-02	5.472E-04	1.779E-04	1.350E-03	0.000E+00	1.899E+01
21	0.000E+00	0.000E+00	3.823E-02	0.000E+00	4.342E-02	1.338E-03	4.302E-04	3.297E-03	0.000E+00	3.376E+01
22	0.000E+00	0.000E+00	3.547E-02	0.000E+00	4.044E-02	1.241E-03	3.999E-04	3.060E-03	0.000E+00	3.397E+01
23	0.000E+00	0.000E+00	4.142E-02	0.000E+00	4.768E-02	1.449E-03	4.692E-04	3.574E-03	0.000E+00	3.660E+01
24	0.000E+00	0.000E+00	5.390E-02	0.000E+00	6.216E-02	1.886E-03	6.111E-04	4.651E-03	0.000E+00	3.755E+01
25	0.000E+00	0.000E+00	5.662E-02	0.000E+00	6.527E-02	1.981E-03	6.418E-04	4.885E-03	0.000E+00	3.761E+01
26	0.000E+00	0.000E+00	4.988E-02	0.000E+00	5.794E-02	1.950E-03	5.695E-04	4.305E-03	0.000E+00	4.048E+01
27	0.000E+00	0.000E+00	3.754E-02	0.000E+00	4.422E-02	1.483E-03	4.317E-04	3.241E-03	0.000E+00	2.453E+01
28	0.000E+00	0.000E+00	3.860E-02	0.000E+00	4.473E-02	1.350E-03	4.388E-04	3.331E-03	0.000E+00	2.567E+01
29	0.000E+00	0.000E+00	5.981E-02	0.000E+00	6.926E-02	2.092E-03	6.795E-04	5.161E-03	0.000E+00	2.895E+01
30	0.000E+00	0.000E+00	6.826E-02	0.000E+00	7.931E-02	2.387E-03	7.768E-04	5.891E-03	0.000E+00	3.080E+01
31	0.000E+00	0.000E+00	6.526E-02	0.000E+00	7.594E-02	2.282E-03	7.432E-04	5.632E-03	0.000E+00	3.607E+01
32	0.000E+00	0.000E+00	5.406E-02	0.000E+00	6.303E-02	1.891E-03	6.163E-04	4.666E-03	0.000E+00	4.389E+01
33	0.000E+00	0.000E+00	5.101E-02	0.000E+00	5.952E-02	2.040E-03	5.841E-04	4.403E-03	0.000E+00	4.429E+01
34	0.000E+00	0.000E+00	5.153E-02	0.000E+00	6.001E-02	1.916E-03	5.881E-04	4.448E-03	0.000E+00	4.528E+01
35	0.000E+00	0.000E+00	3.538E-02	0.000E+00	4.099E-02	1.237E-03	4.020E-04	3.053E-03	0.000E+00	4.328E+01
36	0.000E+00	0.000E+00	2.912E-02	0.000E+00	3.376E-02	1.019E-03	3.310E-04	2.513E-03	0.000E+00	4.184E+01
37	0.000E+00	0.000E+00	3.171E-02	0.000E+00	3.686E-02	1.109E-03	3.609E-04	2.737E-03	0.000E+00	3.997E+01
38	0.000E+00	0.000E+00	1.616E-02	0.000E+00	1.873E-02	5.651E-04	1.836E-04	1.394E-03	0.000E+00	3.986E+01
39	0.000E+00	0.000E+00	1.742E-02	0.000E+00	2.019E-02	6.095E-04	1.980E-04	1.504E-03	0.000E+00	4.475E+01
40	0.000E+00	0.000E+00	1.890E-02	0.000E+00	2.188E-02	6.612E-04	2.147E-04	1.631E-03	0.000E+00	4.465E+01
41	0.000E+00	0.000E+00	2.429E-02	0.000E+00	2.809E-02	6.293E-03	2.758E-04	2.096E-03	0.000E+00	3.741E+01
42	0.000E+00	0.000E+00	2.521E-02	0.000E+00	2.897E-02	1.841E-03	2.853E-04	2.175E-03	0.000E+00	2.004E+01
43	0.000E+00	0.000E+00	1.336E-02	0.000E+00	1.521E-02	1.321E-03	1.305E-04	1.152E-03	0.000E+00	2.094E+01
44	0.000E+00	0.000E+00	9.444E-03	0.000E+00	1.107E-02	3.127E-03	1.094E-04	8.183E-04	0.000E+00	2.178E+01
45	0.000E+00	0.000E+00	1.196E-02	0.000E+00	1.376E-02	4.341E-04	1.354E-04	1.032E-03	0.000E+00	2.066E+01
46	0.000E+00	0.000E+00	1.118E-02	0.000E+00	1.284E-02	4.055E-04	1.265E-04	9.644E-04	0.000E+00	1.927E+01
47	0.000E+00	0.000E+00	1.255E-02	0.000E+00	1.430E-02	1.011E-03	1.422E-04	1.084E-03	0.000E+00	1.619E+01
48	0.000E+00	0.000E+00	1.653E-02	0.000E+00	1.907E-02	7.275E-04	1.876E-04	1.427E-03	0.000E+00	1.309E+01
49	0.000E+00	0.000E+00	1.326E-02	0.000E+00	1.514E-02	1.096E-03	1.517E-04	1.146E-03	0.000E+00	1.078E+01
50	0.000E+00	0.000E+00	1.564E-02	0.000E+00	1.787E-02	1.656E-03	1.781E-04	1.354E-03	0.000E+00	9.421E+00
51	0.000E+00	0.000E+00	1.552E-02	0.000E+00	1.791E-02	2.556E-03	1.781E-04	1.344E-03	0.000E+00	9.681E+00
52	0.000E+00	0.000E+00	1.314E-02	0.000E+00	1.519E-02	1.390E-03	1.511E-04	1.137E-03	0.000E+00	9.715E+00
53	0.000E+00	0.000E+00	1.036E-02	0.000E+00	1.190E-02	4.850E-04	1.172E-04	8.937E-04	0.000E+00	1.017E+01
54	0.000E+00	0.000E+00	1.087E-02	0.000E+00	1.252E-02	1.896E-03	1.237E-04	9.391E-04	0.000E+00	1.036E+01
55	0.000E+00	0.000E+00	1.331E-02	0.000E+00	1.542E-02	1.827E-03	1.530E-04	1.152E-03	0.000E+00	8.870E+00
56	0.000E+00	0.000E+00	1.532E-02	0.000E+00	1.771E-02	1.738E-03	1.749E-04	1.325E-03	0.000E+00	8.151E+00
57	0.000E+00	0.000E+00	1.694E-02	0.000E+00	1.967E-02	6.857E-04	1.929E-04	1.463E-03	0.000E+00	7.381E+00
58	0.000E+00	0.000E+00	1.824E-02	0.000E+00	2.123E-02	6.833E-04	2.078E-04	1.575E-03	0.000E+00	7.228E+00
59	0.000E+00	0.000E+00	2.012E-02	0.000E+00	2.347E-02	1.969E-03	2.294E-04	1.738E-03	0.000E+00	7.080E+00
60	0.000E+00	0.000E+00	2.355E-02	0.000E+00	2.748E-02	9.154E-04	2.694E-04	2.035E-03	0.000E+00	6.963E+00
61	0.000E+00	0.000E+00	4.118E-02	0.000E+00	4.712E-02	1.768E-03	4.679E-04	3.559E-03	0.000E+00	6.812E+00
62	0.000E+00	0.000E+00	4.503E-02	0.000E+00	5.118E-02	1.912E-03	5.099E-04	3.891E-03	0.000E+00	6.681E+00
63	0.000E+00	0.000E+00	3.032E-02	0.000E+00	3.529E-02	1.060E-03	3.453E-04	2.619E-03	0.000E+00	6.566E+00
64	0.000E+00	0.000E+00	2.731E-02	0.000E+00	3.178E-02	2.485E-03	3.110E-04	2.357E-03	0.000E+00	6.195E+00
65	0.000E+00	0.000E+00	1.992E-02	0.000E+00	2.302E-02	1.155E-03	2.270E-04	1.721E-03	0.000E+00	6.123E+00
66	0.000E+00	0.000E+00	2.351E-02	0.000E+00	2.708E-02	9.327E-04	2.664E-04	2.031E-03	0.000E+00	6.048E+00
67	0.000E+00	0.000E+00	1.979E-02	0.000E+00	2.305E-02	8.800E-04	2.255E-04	1.710E-03	0.000E+00	5.983E+00
68	0.000E+00	0.000E+00	1.779E-02	0.000E+00	2.020E-02	3.188E-03	2.001E-04	1.534E-03	0.000E+00	6.223E+00
69	0.000E+00	0.000E+00	2.664E-02	0.000E+00	3.063E-02	1.212E-03	3.016E-04			

83	0.000E+00	0.000E+00	2.062E-02	0.000E+00	2.374E-02	7.214E-04	2.336E-04	1.779E-03	0.000E+00	1.700E+01
84	0.000E+00	0.000E+00	2.138E-02	0.000E+00	2.461E-02	7.480E-04	2.422E-04	1.845E-03	0.000E+00	2.001E+01
85	0.000E+00	0.000E+00	2.931E-02	0.000E+00	3.382E-02	1.025E-03	3.324E-04	2.529E-03	0.000E+00	2.545E+01
86	0.000E+00	0.000E+00	6.165E-02	0.000E+00	7.069E-02	2.157E-03	6.971E-04	5.319E-03	0.000E+00	4.141E+01
87	0.000E+00	0.000E+00	5.620E-02	0.000E+00	6.469E-02	1.966E-03	6.367E-04	4.849E-03	0.000E+00	3.892E+01
88	0.000E+00	0.000E+00	5.444E-02	0.000E+00	6.292E-02	1.904E-03	6.179E-04	4.698E-03	0.000E+00	4.017E+01
89	0.000E+00	0.000E+00	5.266E-02	0.000E+00	6.101E-02	1.842E-03	5.984E-04	4.545E-03	0.000E+00	3.082E+01
90	0.000E+00	0.000E+00	4.649E-02	0.000E+00	5.392E-02	1.626E-03	5.286E-04	4.012E-03	0.000E+00	3.201E+01
91	0.000E+00	0.000E+00	1.637E-02	0.000E+00	1.897E-02	5.910E-04	1.862E-04	1.414E-03	0.000E+00	5.940E+00
92	0.000E+00	0.000E+00	1.699E-02	0.000E+00	1.971E-02	6.456E-04	1.937E-04	1.468E-03	0.000E+00	5.686E+00
93	0.000E+00	0.000E+00	1.627E-02	0.000E+00	1.886E-02	6.669E-04	1.858E-04	1.405E-03	0.000E+00	5.466E+00
94	0.000E+00	0.000E+00	1.699E-02	0.000E+00	1.983E-02	6.806E-04	1.939E-04	1.467E-03	0.000E+00	5.385E+00
95	0.000E+00	0.000E+00	1.810E-02	0.000E+00	2.114E-02	6.727E-04	2.067E-04	1.563E-03	0.000E+00	5.415E+00
96	0.000E+00	0.000E+00	1.830E-02	0.000E+00	2.116E-02	6.647E-04	2.078E-04	1.580E-03	0.000E+00	5.441E+00
97	0.000E+00	0.000E+00	2.187E-02	0.000E+00	2.537E-02	7.668E-04	2.487E-04	1.888E-03	0.000E+00	5.477E+00
98	0.000E+00	0.000E+00	2.471E-02	0.000E+00	2.854E-02	8.645E-04	2.804E-04	2.132E-03	0.000E+00	5.520E+00
99	0.000E+00	0.000E+00	2.134E-02	0.000E+00	2.482E-02	7.675E-04	2.432E-04	1.843E-03	0.000E+00	5.560E+00
100	0.000E+00	0.000E+00	2.258E-02	0.000E+00	2.604E-02	7.914E-04	2.560E-04	1.948E-03	0.000E+00	5.599E+00
101	0.000E+00	0.000E+00	2.093E-02	0.000E+00	2.436E-02	1.385E-03	2.384E-04	1.806E-03	0.000E+00	5.646E+00
102	0.000E+00	0.000E+00	2.362E-02	0.000E+00	2.752E-02	8.260E-04	2.692E-04	2.040E-03	0.000E+00	5.712E+00
103	0.000E+00	0.000E+00	1.671E-02	0.000E+00	1.935E-02	6.187E-04	1.901E-04	1.444E-03	0.000E+00	5.890E+00
104	0.000E+00	0.000E+00	1.583E-02	0.000E+00	1.832E-02	6.394E-04	1.806E-04	1.369E-03	0.000E+00	5.653E+00
105	0.000E+00	0.000E+00	1.688E-02	0.000E+00	1.970E-02	6.474E-04	1.926E-04	1.458E-03	0.000E+00	5.488E+00
106	0.000E+00	0.000E+00	1.841E-02	0.000E+00	2.149E-02	1.125E-03	2.101E-04	1.590E-03	0.000E+00	5.523E+00
107	0.000E+00	0.000E+00	2.027E-02	0.000E+00	2.345E-02	9.343E-04	2.302E-04	1.749E-03	0.000E+00	5.555E+00
108	0.000E+00	0.000E+00	2.279E-02	0.000E+00	2.642E-02	7.982E-04	2.591E-04	1.967E-03	0.000E+00	5.564E+00
109	0.000E+00	0.000E+00	2.439E-02	0.000E+00	2.834E-02	9.090E-04	2.776E-04	2.105E-03	0.000E+00	5.628E+00
110	0.000E+00	0.000E+00	2.382E-02	0.000E+00	2.772E-02	1.203E-03	2.714E-04	2.057E-03	0.000E+00	5.668E+00
111	0.000E+00	0.000E+00	2.008E-02	0.000E+00	2.337E-02	1.025E-03	2.291E-04	1.736E-03	0.000E+00	5.709E+00
112	0.000E+00	0.000E+00	2.267E-02	0.000E+00	2.639E-02	1.327E-03	2.583E-04	1.957E-03	0.000E+00	5.753E+00
113	0.000E+00	0.000E+00	2.610E-02	0.000E+00	3.043E-02	1.542E-03	2.975E-04	2.253E-03	0.000E+00	5.794E+00
114	0.000E+00	0.000E+00	2.729E-02	0.000E+00	3.183E-02	9.544E-04	3.112E-04	2.357E-03	0.000E+00	5.871E+00
115	0.000E+00	0.000E+00	1.520E-02	0.000E+00	1.754E-02	6.810E-04	1.729E-04	1.314E-03	0.000E+00	5.861E+00
116	0.000E+00	0.000E+00	1.664E-02	0.000E+00	1.942E-02	9.961E-04	1.898E-04	1.437E-03	0.000E+00	5.607E+00
117	0.000E+00	0.000E+00	1.859E-02	0.000E+00	2.170E-02	1.172E-03	2.121E-04	1.605E-03	0.000E+00	5.638E+00
118	0.000E+00	0.000E+00	2.154E-02	0.000E+00	2.491E-02	1.742E-03	2.446E-04	1.859E-03	0.000E+00	5.674E+00
119	0.000E+00	0.000E+00	2.529E-02	0.000E+00	2.931E-02	2.442E-03	2.874E-04	2.183E-03	0.000E+00	5.712E+00
120	0.000E+00	0.000E+00	2.676E-02	0.000E+00	3.110E-02	1.684E-03	3.046E-04	2.310E-03	0.000E+00	5.745E+00
121	0.000E+00	0.000E+00	2.533E-02	0.000E+00	2.947E-02	1.253E-03	2.885E-04	2.188E-03	0.000E+00	5.785E+00
122	0.000E+00	0.000E+00	2.237E-02	0.000E+00	2.604E-02	1.902E-03	2.551E-04	1.933E-03	0.000E+00	5.830E+00
123	0.000E+00	0.000E+00	2.421E-02	0.000E+00	2.819E-02	1.861E-03	2.758E-04	2.090E-03	0.000E+00	5.871E+00
124	0.000E+00	0.000E+00	2.710E-02	0.000E+00	3.159E-02	1.999E-03	3.089E-04	2.339E-03	0.000E+00	5.942E+00
125	0.000E+00	0.000E+00	2.830E-02	0.000E+00	3.300E-02	9.896E-04	3.226E-04	2.444E-03	0.000E+00	5.992E+00
126	0.000E+00	0.000E+00	2.948E-02	0.000E+00	3.439E-02	1.031E-03	3.361E-04	2.546E-03	0.000E+00	6.040E+00
127	0.000E+00	0.000E+00	1.629E-02	0.000E+00	1.899E-02	1.413E-03	1.857E-04	1.407E-03	0.000E+00	5.806E+00
128	0.000E+00	0.000E+00	1.864E-02	0.000E+00	2.175E-02	1.660E-03	2.126E-04	1.610E-03	0.000E+00	5.767E+00
129	0.000E+00	0.000E+00	2.218E-02	0.000E+00	2.559E-02	2.339E-03	2.515E-04	1.914E-03	0.000E+00	5.810E+00
130	0.000E+00	0.000E+00	2.462E-02	0.000E+00	2.845E-02	8.611E-04	2.794E-04	2.126E-03	0.000E+00	5.862E+00
131	0.000E+00	0.000E+00	2.240E-02	0.000E+00	2.590E-02	9.492E-04	2.552E-04	1.935E-03	0.000E+00	5.885E+00
132	0.000E+00	0.000E+00	2.773E-02	0.000E+00	3.226E-02	2.393E-03	3.166E-04	2.395E-03	0.000E+00	5.941E+00
133	0.000E+00	0.000E+00	2.418E-02	0.000E+00	2.815E-02	2.071E-03	2.758E-04	2.090E-03	0.000E+00	5.957E+00
134	0.000E+00	0.000E+00	2.466E-02	0.000E+00	2.870E-02	9.988E-04	2.988E-04	2.128E-03	0.000E+00	6.022E+00
135	0.000E+00	0.000E+00	2.691E-02	0.000E+00	3.136E-02	9.413E-04	3.067E-04	2.323E-03	0.000E+00	6.079E+00
136	0.000E+00	0.000E+00	3.647E-02	0.000E+00	4.093E-02	1.632E-03	4.112E-04	3.152E-03	0.000E+00	6.123E+00
137	0.000E+00	0.000E+00	3.125E-02	0.000E+00	3.648E-02	1.404E-03	3.565E-04	2.700E-03	0.000E+00	6.171E+00
138	0.000E+00	0.000E+00	3.141E-02	0.000E+00	3.528E-02	1.455E-03	3.545E-04	2.715E-03	0.000E+00	6.222E+00
139	0.000E+00	0.000E+00	1.861E-02	0.000E+00	2.167E-02	2.951E-03	2.120E-04	1.608E-03	0.000E+00	5.950E+00
140	0.000E+00	0.000E+00	2.194E-02	0.000E+00	2.522E-02	8.498E-04	2.483E-04	1.893E-03	0.000E+00	5.963E+00
141	0.000E+00	0.000E+00	2.513E-02	0.000E+00	2.895E-02	8.793E-04	2.848E-04	2.171E-03	0.000E+00	5.995E+00
142	0.000E+00	0.000E+00	2.490E-02	0.000E+00	2.605E-02	1.370E-03	2.738E-04	2.154E-03	0.000E+00	6.017E+00
143	0.000E+00	0.000E+00	2.350E-02	0.000E+00	2.475E-02	1.291E-03	2.589E-04	2.032E-03	0.000E+00	6.076E+00
144	0.000E+00	0.000E+00	2.469E-02	0.000E+00	2.872E-02	9.593E-04	2.820E-04	2.134E-03	0.000E+00	6.128E+00
145	0.000E+00	0.000E+00	2.621E-02	0.000E+00	3.050E-02	1.124E-03	2.985E-04	2.262E-03	0.000E+00	6.169E+00
146	0.000E+00	0.000E+00	2.779E-02	0.000E+00	3.236E-02	9.718E-04	3.166E-04	2.398E-03	0.000E+00	6.223E+00
147	0.000E+00	0.000E+00	3.197E-02	0.000E+00	3.729E-02	1.446E-03	3.645E-04	2.761E-03	0.000E+00	6.271E+00
148	0.000E+00	0.000E+00	4.011E-02	0.000E+00	4.525E-02	1.761E-03	4.518E-04	3.466E-03	0.000E+00	6.321E+00
149	0.000E+00	0.000E+00	4.132E-02	0.000E+00	4.684E-02	1.763E-03	4.668E-04	3.570E-03	0.000E+00	6.372E+00
150	0.000E+00	0.000E+00	3.998E-02	0.000E+00	4.551E-02	1.703E-03	4.524E-04	3.454E-03	0.000E+00	6.412E+00
151	0.000E+00	0.000E+00	2.871E-02	0.000E+00	3.342E-02	1.004E-03	3.270E-04	2.478E-03	0.000E+00	6.380E+00
152	0.000E+00	0.000E+00	3.874E-02	0.000E+00	4.320E-02	1.777E-03	4.358E-04	3.348E-03	0.000E+00	6.425E+00
153	0.000E+00	0.000E+00	4.403E-02	0.000E+00	4.953E-02	1.889E-03	4.962E-04	3.804E-03	0.000E+00	6.480E+00
154	0.000E+00	0.000E+00	2.935E-02	0.000E+00	3.426E-02	1.077E-03	3.347E-04	2.533E-03	0.000E+00	6.545E+00
155	0.000E+00	0.000E+00	4.272E-02	0.000E+00	4.875E-02	1.783E-03	4.843E-04	3.691E-03	0.000E+00	6.571E+00
156	0.000E+00	0.000E+00	4.022E-02	0.000E+00	4.593E-02	1.727E-03	4.566E-04	3.476E-03	0.000E+00	6.533E+00
157	0.000E+00	0.000E+00	1.939E-02	0.000E+00	2.250E-02	7.596E-04	2.213E-04	1.675E-03	0.000E+00	8.243E+00
158	0.000E+00	0.000E+00	1.649E-02	0.000E+00	1.886E-02	7.347E-04	1.874E-04	1.425E-03	0.000E+00	7.236E+00
159	0.000E+00	0.000E+00	1.051E-02	0.000E+00	1.215E-02	4.703E-04	1.193E-04	9.070E-04	0.000E+00	6.415E+00
160	0.000E+00	0.000E+00	1.346E-02	0.000E+00	1.534E-02	4.711E-04	1.517E-04	1.161E-03	0.000E+00	5.781E+00
161	0.000E+00	0.000E+00	1.395E-02	0.000E+00	1.621E-02	5.192E-04	1.591E-04	1.205E-03	0.000E+00	5.261E+00
162	0.000E+00	0.000E+00	1.403E-02	0.000E+00	1.634E-02	5.061E-04	1.600E-04	1.212E-03	0.000E+00	4.856E+00
163	0.000E+00	0.000E+00	1.546E-02	0.000E+00	1.804E-02	5.758E-04	1.766E-04	1.336E-03	0.000E+00	4.902E+00
164	0.000E+00	0.000E+00	1.542E-02	0.000E+00						

180	0.000E+00	0.000E+00	1.704E-02	0.000E+00	1.979E-02	6.420E-04	1.943E-04	1.472E-03	0.000E+00	5.594E+00
181	0.000E+00	0.000E+00	1.697E-02	0.000E+00	1.981E-02	6.076E-04	1.937E-04	1.466E-03	0.000E+00	5.286E+00
182	0.000E+00	0.000E+00	2.145E-02	0.000E+00	2.489E-02	1.150E-03	2.439E-04	1.851E-03	0.000E+00	5.364E+00
183	0.000E+00	0.000E+00	2.269E-02	0.000E+00	2.619E-02	7.941E-04	2.574E-04	1.958E-03	0.000E+00	5.465E+00
184	0.000E+00	0.000E+00	2.076E-02	0.000E+00	2.417E-02	7.261E-04	2.365E-04	1.792E-03	0.000E+00	5.592E+00
185	0.000E+00	0.000E+00	2.749E-02	0.000E+00	3.208E-02	1.422E-03	3.135E-04	2.373E-03	0.000E+00	5.686E+00
186	0.000E+00	0.000E+00	2.692E-02	0.000E+00	3.143E-02	9.536E-04	3.072E-04	2.324E-03	0.000E+00	5.803E+00
187	0.000E+00	0.000E+00	2.521E-02	0.000E+00	2.942E-02	8.832E-04	2.875E-04	2.176E-03	0.000E+00	5.917E+00
188	0.000E+00	0.000E+00	2.126E-02	0.000E+00	2.451E-02	9.227E-04	2.410E-04	1.834E-03	0.000E+00	7.063E+00
189	0.000E+00	0.000E+00	1.369E-02	0.000E+00	1.577E-02	8.291E-04	1.553E-04	1.183E-03	0.000E+00	6.147E+00
190	0.000E+00	0.000E+00	1.678E-02	0.000E+00	1.958E-02	8.236E-04	1.914E-04	1.449E-03	0.000E+00	5.546E+00
191	0.000E+00	0.000E+00	2.315E-02	0.000E+00	2.681E-02	1.695E-03	2.630E-04	1.998E-03	0.000E+00	5.626E+00
192	0.000E+00	0.000E+00	2.456E-02	0.000E+00	2.858E-02	1.239E-03	2.798E-04	2.121E-03	0.000E+00	5.726E+00
193	0.000E+00	0.000E+00	2.507E-02	0.000E+00	2.921E-02	1.929E-03	2.856E-04	2.163E-03	0.000E+00	5.831E+00
194	0.000E+00	0.000E+00	2.921E-02	0.000E+00	3.409E-02	1.021E-03	3.331E-04	2.523E-03	0.000E+00	5.977E+00
195	0.000E+00	0.000E+00	2.671E-02	0.000E+00	3.119E-02	1.531E-03	3.049E-04	2.307E-03	0.000E+00	6.081E+00
196	0.000E+00	0.000E+00	2.641E-02	0.000E+00	3.083E-02	1.619E-03	3.019E-04	2.280E-03	0.000E+00	6.232E+00
197	0.000E+00	0.000E+00	2.337E-02	0.000E+00	2.726E-02	8.363E-04	2.666E-04	2.018E-03	0.000E+00	6.349E+00
198	0.000E+00	0.000E+00	2.552E-02	0.000E+00	2.932E-02	1.109E-03	2.888E-04	2.201E-03	0.000E+00	6.946E+00
199	0.000E+00	0.000E+00	1.585E-02	0.000E+00	1.844E-02	2.991E-03	1.805E-04	1.368E-03	0.000E+00	6.045E+00
200	0.000E+00	0.000E+00	2.403E-02	0.000E+00	2.766E-02	8.421E-04	2.722E-04	2.075E-03	0.000E+00	5.972E+00
201	0.000E+00	0.000E+00	2.641E-02	0.000E+00	3.073E-02	9.235E-04	3.007E-04	2.279E-03	0.000E+00	6.198E+00
202	0.000E+00	0.000E+00	3.966E-02	0.000E+00	4.524E-02	1.692E-03	4.497E-04	3.427E-03	0.000E+00	6.456E+00
203	0.000E+00	0.000E+00	2.567E-02	0.000E+00	2.997E-02	9.811E-04	2.936E-04	2.218E-03	0.000E+00	6.608E+00
204	0.000E+00	0.000E+00	2.093E-02	0.000E+00	2.440E-02	7.644E-04	2.389E-04	1.809E-03	0.000E+00	6.716E+00
205	0.000E+00	0.000E+00	1.912E-02	0.000E+00	2.229E-02	7.009E-04	2.180E-04	1.651E-03	0.000E+00	6.903E+00
206	0.000E+00	0.000E+00	1.617E-02	0.000E+00	1.873E-02	6.729E-04	1.841E-04	1.397E-03	0.000E+00	7.596E+00
207	0.000E+00	0.000E+00	1.479E-02	0.000E+00	1.712E-02	5.860E-04	1.686E-04	1.280E-03	0.000E+00	8.492E+00
208	0.000E+00	0.000E+00	7.650E-03	0.000E+00	8.854E-03	3.188E-04	8.723E-05	6.601E-04	0.000E+00	7.568E+00
209	0.000E+00	0.000E+00	9.925E-03	0.000E+00	1.150E-02	3.651E-04	1.130E-04	8.567E-04	0.000E+00	7.600E+00
210	0.000E+00	0.000E+00	1.099E-02	0.000E+00	1.273E-02	3.862E-04	1.249E-04	9.482E-04	0.000E+00	7.601E+00
211	0.000E+00	0.000E+00	9.459E-03	0.000E+00	1.102E-02	3.981E-04	1.085E-04	8.181E-04	0.000E+00	7.676E+00
212	0.000E+00	0.000E+00	1.245E-02	0.000E+00	1.446E-02	4.930E-04	1.422E-04	1.075E-03	0.000E+00	7.526E+00
213	0.000E+00	0.000E+00	1.439E-02	0.000E+00	1.669E-02	5.249E-04	1.638E-04	1.242E-03	0.000E+00	6.965E+00
214	0.000E+00	0.000E+00	1.133E-02	0.000E+00	1.312E-02	4.340E-04	1.288E-04	9.777E-04	0.000E+00	6.350E+00
215	0.000E+00	0.000E+00	1.466E-02	0.000E+00	1.703E-02	5.283E-04	1.670E-04	1.266E-03	0.000E+00	6.274E+00
216	0.000E+00	0.000E+00	1.400E-02	0.000E+00	1.627E-02	5.309E-04	1.594E-04	1.209E-03	0.000E+00	6.156E+00
217	0.000E+00	0.000E+00	1.484E-02	0.000E+00	1.732E-02	5.457E-04	1.690E-04	1.281E-03	0.000E+00	6.233E+00
218	0.000E+00	0.000E+00	1.323E-02	0.000E+00	1.537E-02	5.208E-04	1.507E-04	1.142E-03	0.000E+00	5.935E+00
219	0.000E+00	0.000E+00	1.702E-02	0.000E+00	1.963E-02	6.343E-04	1.933E-04	1.468E-03	0.000E+00	5.328E+00
220	0.000E+00	0.000E+00	1.015E-02	0.000E+00	1.171E-02	3.559E-04	1.151E-04	8.758E-04	0.000E+00	4.985E+00
221	0.000E+00	0.000E+00	6.046E-03	0.000E+00	7.002E-03	2.163E-04	6.874E-05	5.220E-04	0.000E+00	4.515E+00
222	0.000E+00	0.000E+00	8.303E-03	0.000E+00	9.644E-03	3.197E-04	9.475E-05	7.172E-04	0.000E+00	4.095E+00
223	0.000E+00	0.000E+00	9.791E-03	0.000E+00	1.141E-02	3.699E-04	1.119E-04	8.461E-04	0.000E+00	3.882E+00
224	0.000E+00	0.000E+00	1.059E-02	0.000E+00	1.234E-02	4.047E-04	1.210E-04	9.151E-04	0.000E+00	3.956E+00
225	0.000E+00	0.000E+00	1.071E-02	0.000E+00	1.246E-02	3.934E-04	1.221E-04	9.248E-04	0.000E+00	4.035E+00
226	0.000E+00	0.000E+00	1.195E-02	0.000E+00	1.386E-02	4.232E-04	1.359E-04	1.031E-03	0.000E+00	4.110E+00
227	0.000E+00	0.000E+00	1.129E-02	0.000E+00	1.307E-02	3.982E-04	1.282E-04	9.740E-04	0.000E+00	7.821E+00
228	0.000E+00	0.000E+00	9.656E-03	0.000E+00	1.116E-02	3.380E-04	1.096E-04	8.332E-04	0.000E+00	8.249E+00
229	0.000E+00	0.000E+00	9.876E-03	0.000E+00	1.145E-02	3.625E-04	1.124E-04	8.525E-04	0.000E+00	8.356E+00
230	0.000E+00	0.000E+00	1.179E-02	0.000E+00	1.366E-02	4.134E-04	1.339E-04	1.017E-03	0.000E+00	8.638E+00
231	0.000E+00	0.000E+00	1.034E-02	0.000E+00	1.203E-02	4.379E-04	1.185E-04	8.940E-04	0.000E+00	8.150E+00
232	0.000E+00	0.000E+00	1.371E-02	0.000E+00	1.591E-02	5.258E-04	1.564E-04	1.184E-03	0.000E+00	7.705E+00
233	0.000E+00	0.000E+00	1.499E-02	0.000E+00	1.740E-02	5.335E-04	1.706E-04	1.294E-03	0.000E+00	7.220E+00
234	0.000E+00	0.000E+00	1.318E-02	0.000E+00	1.529E-02	4.927E-04	1.499E-04	1.137E-03	0.000E+00	6.936E+00
235	0.000E+00	0.000E+00	1.482E-02	0.000E+00	1.722E-02	5.287E-04	1.687E-04	1.279E-03	0.000E+00	6.886E+00
236	0.000E+00	0.000E+00	1.551E-02	0.000E+00	1.801E-02	5.659E-04	1.766E-04	1.338E-03	0.000E+00	6.823E+00
237	0.000E+00	0.000E+00	1.376E-02	0.000E+00	1.599E-02	5.449E-04	1.568E-04	1.188E-03	0.000E+00	6.468E+00
238	0.000E+00	0.000E+00	1.700E-02	0.000E+00	1.956E-02	6.254E-04	1.928E-04	1.467E-03	0.000E+00	5.796E+00
239	0.000E+00	0.000E+00	1.004E-02	0.000E+00	1.158E-02	3.516E-04	1.139E-04	8.667E-04	0.000E+00	5.050E+00
240	0.000E+00	0.000E+00	9.030E-03	0.000E+00	1.049E-02	3.299E-04	1.029E-04	7.799E-04	0.000E+00	4.623E+00
241	0.000E+00	0.000E+00	9.566E-03	0.000E+00	1.115E-02	3.460E-04	1.091E-04	8.263E-04	0.000E+00	4.173E+00
242	0.000E+00	0.000E+00	1.132E-02	0.000E+00	1.320E-02	4.257E-04	1.293E-04	9.783E-04	0.000E+00	4.113E+00
243	0.000E+00	0.000E+00	1.101E-02	0.000E+00	1.280E-02	3.978E-04	1.255E-04	9.512E-04	0.000E+00	4.212E+00
244	0.000E+00	0.000E+00	1.370E-02	0.000E+00	1.589E-02	4.832E-04	1.558E-04	1.182E-03	0.000E+00	4.310E+00
245	0.000E+00	0.000E+00	1.552E-02	0.000E+00	1.804E-02	5.684E-04	1.769E-04	1.340E-03	0.000E+00	4.373E+00
246	0.000E+00	0.000E+00	9.572E-03	0.000E+00	1.110E-02	3.634E-04	1.091E-04	8.265E-04	0.000E+00	8.690E+00
247	0.000E+00	0.000E+00	1.164E-02	0.000E+00	1.348E-02	4.125E-04	1.323E-04	1.004E-03	0.000E+00	8.702E+00
248	0.000E+00	0.000E+00	1.165E-02	0.000E+00	1.348E-02	4.078E-04	1.323E-04	1.005E-03	0.000E+00	9.010E+00
249	0.000E+00	0.000E+00	9.642E-03	0.000E+00	1.117E-02	3.528E-04	1.097E-04	8.322E-04	0.000E+00	9.444E+00
250	0.000E+00	0.000E+00	1.266E-02	0.000E+00	1.468E-02	4.434E-04	1.439E-04	1.093E-03	0.000E+00	9.408E+00
251	0.000E+00	0.000E+00	1.112E-02	0.000E+00	1.292E-02	4.680E-04	1.273E-04	9.614E-04	0.000E+00	9.054E+00
252	0.000E+00	0.000E+00	1.540E-02	0.000E+00	1.787E-02	5.657E-04	1.754E-04	1.329E-03	0.000E+00	8.124E+00
253	0.000E+00	0.000E+00	1.473E-02	0.000E+00	1.710E-02	5.171E-04	1.676E-04	1.271E-03	0.000E+00	7.893E+00
254	0.000E+00	0.000E+00	1.614E-02	0.000E+00	1.876E-02	5.667E-04	1.837E-04	1.393E-03	0.000E+00	7.717E+00
255	0.000E+00	0.000E+00	1.590E-02	0.000E+00	1.846E-02	5.925E-04	1.812E-04	1.372E-03	0.000E+00	7.699E+00
256	0.000E+00	0.000E+00	1.430E-02	0.000E+00	1.661E-02	5.704E-04	1.629E-04	1.234E-03	0.000E+00	6.883E+00
257	0.000E+00	0.000E+00	1.654E-02	0.000E+00	1.897E-02	5.997E-04	1.872E-04	1.427E-03	0.000E+00	6.172E+00
258	0.000E+00	0.000E+00	1.018E-02	0.000E+00	1.174E-02	3.561E-04	1.154E-04	8.783E-04	0.000E+00	5.338E+00
259	0.000E+00	0.000E+00	1.035E-02	0.000E+00	1.202E-02	3.917E-04	1.180E-04	8.936E-04	0.000E+00	4.687E+00
260	0.000E+00	0.000E+00	1.161E-02	0.000E+00	1.353E-02	4.293E-04	1.326E-04	1.		

277	0.000E+00	0.000E+00	1.057E-02	0.000E+00	1.226E-02	3.769E-04	1.202E-04	9.125E-04	0.000E+00	5.359E+00
278	0.000E+00	0.000E+00	1.267E-02	0.000E+00	1.476E-02	4.572E-04	1.445E-04	1.094E-03	0.000E+00	4.644E+00
279	0.000E+00	0.000E+00	1.320E-02	0.000E+00	1.539E-02	5.082E-04	1.509E-04	1.140E-03	0.000E+00	4.643E+00
280	0.000E+00	0.000E+00	1.899E-02	0.000E+00	2.204E-02	6.657E-04	2.160E-04	1.639E-03	0.000E+00	4.781E+00
281	0.000E+00	0.000E+00	1.865E-02	0.000E+00	2.168E-02	6.760E-04	2.125E-04	1.610E-03	0.000E+00	4.916E+00
282	0.000E+00	0.000E+00	2.244E-02	0.000E+00	2.617E-02	8.076E-04	2.561E-04	1.938E-03	0.000E+00	5.035E+00
283	0.000E+00	0.000E+00	1.973E-02	0.000E+00	2.299E-02	7.106E-04	2.249E-04	1.703E-03	0.000E+00	5.195E+00
284	0.000E+00	0.000E+00	1.253E-02	0.000E+00	1.455E-02	4.752E-04	1.429E-04	1.082E-03	0.000E+00	8.808E+00
285	0.000E+00	0.000E+00	1.335E-02	0.000E+00	1.548E-02	4.856E-04	1.519E-04	1.152E-03	0.000E+00	9.540E+00
286	0.000E+00	0.000E+00	1.356E-02	0.000E+00	1.570E-02	5.023E-04	1.541E-04	1.170E-03	0.000E+00	9.952E+00
287	0.000E+00	0.000E+00	1.247E-02	0.000E+00	1.443E-02	4.370E-04	1.416E-04	1.076E-03	0.000E+00	1.051E+01
288	0.000E+00	0.000E+00	1.321E-02	0.000E+00	1.531E-02	4.625E-04	1.501E-04	1.140E-03	0.000E+00	1.127E+01
289	0.000E+00	0.000E+00	1.373E-02	0.000E+00	1.590E-02	4.802E-04	1.560E-04	1.185E-03	0.000E+00	1.191E+01
290	0.000E+00	0.000E+00	1.457E-02	0.000E+00	1.692E-02	5.095E-04	1.657E-04	1.257E-03	0.000E+00	1.147E+01
291	0.000E+00	0.000E+00	1.399E-02	0.000E+00	1.622E-02	5.249E-04	1.594E-04	1.208E-03	0.000E+00	9.772E+00
292	0.000E+00	0.000E+00	2.799E-02	0.000E+00	3.206E-02	1.246E-03	3.188E-04	2.421E-03	0.000E+00	1.020E+01
293	0.000E+00	0.000E+00	1.799E-02	0.000E+00	2.084E-02	6.292E-04	2.044E-04	1.552E-03	0.000E+00	9.681E+00
294	0.000E+00	0.000E+00	2.332E-02	0.000E+00	2.722E-02	8.497E-04	2.663E-04	2.015E-03	0.000E+00	5.426E+00
295	0.000E+00	0.000E+00	2.272E-02	0.000E+00	2.650E-02	8.106E-04	2.592E-04	1.962E-03	0.000E+00	5.645E+00
296	0.000E+00	0.000E+00	1.912E-02	0.000E+00	2.225E-02	7.424E-04	2.184E-04	1.652E-03	0.000E+00	5.768E+00
297	0.000E+00	0.000E+00	1.007E-02	0.000E+00	1.174E-02	5.647E-04	1.154E-04	8.705E-04	0.000E+00	8.265E+00
298	0.000E+00	0.000E+00	1.150E-02	0.000E+00	1.339E-02	5.492E-04	1.316E-04	9.940E-04	0.000E+00	9.784E+00
299	0.000E+00	0.000E+00	1.283E-02	0.000E+00	1.489E-02	6.270E-04	1.463E-04	1.108E-03	0.000E+00	1.035E+01
300	0.000E+00	0.000E+00	1.423E-02	0.000E+00	1.651E-02	5.111E-04	1.619E-04	1.229E-03	0.000E+00	1.102E+01
301	0.000E+00	0.000E+00	1.330E-02	0.000E+00	1.774E-02	5.372E-04	1.740E-04	1.321E-03	0.000E+00	1.172E+01
302	0.000E+00	0.000E+00	1.451E-02	0.000E+00	1.680E-02	5.074E-04	1.648E-04	1.252E-03	0.000E+00	1.296E+01
303	0.000E+00	0.000E+00	1.592E-02	0.000E+00	1.846E-02	5.567E-04	1.810E-04	1.374E-03	0.000E+00	1.400E+01
304	0.000E+00	0.000E+00	1.550E-02	0.000E+00	1.800E-02	5.420E-04	1.763E-04	1.337E-03	0.000E+00	1.203E+01
305	0.000E+00	0.000E+00	1.803E-02	0.000E+00	2.092E-02	6.363E-04	2.051E-04	1.556E-03	0.000E+00	1.200E+01
306	0.000E+00	0.000E+00	2.163E-02	0.000E+00	2.521E-02	7.959E-04	2.469E-04	1.868E-03	0.000E+00	1.676E+00
307	0.000E+00	0.000E+00	1.837E-02	0.000E+00	2.141E-02	6.819E-04	2.094E-04	1.586E-03	0.000E+00	6.403E+00
308	0.000E+00	0.000E+00	1.650E-02	0.000E+00	1.917E-02	6.259E-04	1.882E-04	1.425E-03	0.000E+00	6.459E+00
309	0.000E+00	0.000E+00	7.049E-03	0.000E+00	8.128E-03	7.211E-04	7.992E-05	6.082E-04	0.000E+00	8.925E+00
310	0.000E+00	0.000E+00	8.334E-03	0.000E+00	9.753E-03	5.936E-04	9.588E-05	7.212E-04	0.000E+00	9.581E+00
311	0.000E+00	0.000E+00	1.002E-02	0.000E+00	1.170E-02	8.004E-04	1.151E-04	8.669E-04	0.000E+00	9.921E+00
312	0.000E+00	0.000E+00	1.124E-02	0.000E+00	1.308E-02	5.674E-04	1.287E-04	9.712E-04	0.000E+00	1.140E+01
313	0.000E+00	0.000E+00	1.253E-02	0.000E+00	1.454E-02	4.719E-04	1.428E-04	1.082E-03	0.000E+00	1.238E+01
314	0.000E+00	0.000E+00	1.478E-02	0.000E+00	1.713E-02	5.222E-04	1.680E-04	1.275E-03	0.000E+00	1.368E+01
315	0.000E+00	0.000E+00	1.747E-02	0.000E+00	2.027E-02	6.111E-04	1.987E-04	1.508E-03	0.000E+00	1.563E+01
316	0.000E+00	0.000E+00	1.743E-02	0.000E+00	2.021E-02	6.096E-04	1.982E-04	1.504E-03	0.000E+00	1.676E+01
317	0.000E+00	0.000E+00	1.825E-02	0.000E+00	2.108E-02	6.385E-04	2.071E-04	1.575E-03	0.000E+00	1.499E+01
318	0.000E+00	0.000E+00	1.641E-02	0.000E+00	1.905E-02	6.193E-04	1.871E-04	1.418E-03	0.000E+00	7.241E+00
319	0.000E+00	0.000E+00	1.415E-02	0.000E+00	1.640E-02	6.101E-04	1.619E-04	1.224E-03	0.000E+00	7.275E+00
320	0.000E+00	0.000E+00	1.030E-02	0.000E+00	1.194E-02	4.725E-04	1.182E-04	8.911E-04	0.000E+00	7.543E+00
321	0.000E+00	0.000E+00	1.407E-02	0.000E+00	1.614E-02	8.464E-04	1.591E-04	1.214E-03	0.000E+00	8.507E+00
322	0.000E+00	0.000E+00	1.429E-02	0.000E+00	1.638E-02	8.461E-04	1.616E-04	1.233E-03	0.000E+00	9.401E+00
323	0.000E+00	0.000E+00	1.450E-02	0.000E+00	1.661E-02	7.525E-04	1.639E-04	1.251E-03	0.000E+00	1.056E+01
324	0.000E+00	0.000E+00	1.468E-02	0.000E+00	1.681E-02	6.044E-04	1.659E-04	1.266E-03	0.000E+00	1.087E+01
325	0.000E+00	0.000E+00	1.479E-02	0.000E+00	1.693E-02	5.177E-04	1.671E-04	1.276E-03	0.000E+00	1.242E+01
326	0.000E+00	0.000E+00	1.528E-02	0.000E+00	1.768E-02	5.346E-04	1.736E-04	1.319E-03	0.000E+00	1.443E+01
327	0.000E+00	0.000E+00	1.813E-02	0.000E+00	2.098E-02	6.341E-04	2.059E-04	1.564E-03	0.000E+00	1.657E+01
328	0.000E+00	0.000E+00	2.076E-02	0.000E+00	2.404E-02	7.263E-04	2.359E-04	1.792E-03	0.000E+00	2.240E+01
329	0.000E+00	0.000E+00	2.321E-02	0.000E+00	2.689E-02	8.117E-04	2.637E-04	2.003E-03	0.000E+00	2.231E+01
330	0.000E+00	0.000E+00	1.156E-02	0.000E+00	1.342E-02	4.874E-04	1.315E-04	9.977E-04	0.000E+00	8.794E+00
331	0.000E+00	0.000E+00	1.132E-02	0.000E+00	1.311E-02	3.971E-04	1.286E-04	9.770E-04	0.000E+00	8.920E+00
332	0.000E+00	0.000E+00	1.146E-02	0.000E+00	1.327E-02	4.063E-04	1.302E-04	9.889E-04	0.000E+00	8.468E+00
333	0.000E+00	0.000E+00	3.825E-02	0.000E+00	4.432E-02	1.338E-03	4.347E-04	3.300E-03	0.000E+00	8.282E+00
334	0.000E+00	0.000E+00	3.998E-02	0.000E+00	4.636E-02	1.399E-03	4.545E-04	3.450E-03	0.000E+00	8.885E+00
335	0.000E+00	0.000E+00	4.182E-02	0.000E+00	4.850E-02	1.463E-03	4.755E-04	3.609E-03	0.000E+00	9.650E+00
336	0.000E+00	0.000E+00	4.371E-02	0.000E+00	5.071E-02	1.529E-03	4.970E-04	3.772E-03	0.000E+00	1.072E+01
337	0.000E+00	0.000E+00	4.554E-02	0.000E+00	5.286E-02	1.593E-03	5.180E-04	3.930E-03	0.000E+00	1.236E+01
338	0.000E+00	0.000E+00	4.707E-02	0.000E+00	5.465E-02	1.646E-03	5.354E-04	4.062E-03	0.000E+00	1.481E+01
339	0.000E+00	0.000E+00	4.777E-02	0.000E+00	5.546E-02	1.671E-03	5.434E-04	4.122E-03	0.000E+00	1.748E+01
340	0.000E+00	0.000E+00	4.639E-02	0.000E+00	5.383E-02	1.623E-03	5.276E-04	4.003E-03	0.000E+00	2.313E+01
341	0.000E+00	0.000E+00	1.111E-02	0.000E+00	1.277E-02	1.343E-03	1.257E-04	9.583E-04	0.000E+00	1.086E+01
342	0.000E+00	0.000E+00	1.275E-02	0.000E+00	1.478E-02	4.589E-04	1.451E-04	1.101E-03	0.000E+00	1.127E+01
343	0.000E+00	0.000E+00	1.299E-02	0.000E+00	1.508E-02	4.967E-04	1.482E-04	1.123E-03	0.000E+00	1.106E+01
344	0.000E+00	0.000E+00	1.203E-02	0.000E+00	1.398E-02	4.924E-04	1.376E-04	1.040E-03	0.000E+00	1.021E+01
345	0.000E+00	0.000E+00	1.049E-02	0.000E+00	1.220E-02	4.530E-04	1.203E-04	9.077E-04	0.000E+00	9.505E+00
346	0.000E+00	0.000E+00	4.491E-02	0.000E+00	5.204E-02	1.701E-03	5.116E-04	3.876E-03	0.000E+00	8.474E+00
347	0.000E+00	0.000E+00	4.528E-02	0.000E+00	5.245E-02	1.729E-03	5.159E-04	3.907E-03	0.000E+00	8.832E+00
348	0.000E+00	0.000E+00	4.557E-02	0.000E+00	5.277E-02	1.638E-03	5.182E-04	3.933E-03	0.000E+00	8.582E+00
349	0.000E+00	0.000E+00	4.588E-02	0.000E+00	5.312E-02	1.638E-03	5.214E-04	3.959E-03	0.000E+00	8.059E+00
350	0.000E+00	0.000E+00	4.636E-02	0.000E+00	5.366E-02	1.642E-03	5.267E-04	4.000E-03	0.000E+00	1.127E+01
351	0.000E+00	0.000E+00	4.725E-02	0.000E+00	5.470E-02	1.662E-03	5.368E-04	4.077E-03	0.000E+00	1.294E+01
352	0.000E+00	0.000E+00	4.881E-02	0.000E+00	5.650E-02	1.709E-03	5.544E-04	4.212E-03	0.000E+00	1.469E+01
353	0.000E+00	0.000E+00	5.095E-02	0.000E+00	5.891E-02	1.782E-03	5.784E-04	4.397E-03	0.000E+00	2.185E+01
354	0.000E+00	0.000E+00	1.124E-02	0.000E+00	1.298E-02	4.460E-04	1.280E-04	9.711E-04	0.000E+00	1.568E+01
355	0.000E+00	0.000E+00	9.319E-03	0.000E+00	1.082E-02	3.812E-04	1.065E-04	8.055E-04	0.000E+00	1.386E+01
356	0.000E+00	0.000E+00	8.385E-03	0.000E+00	9.757E-03	3.480E-04	9.601E-05	7.250E-04	0.000E+00	1.269E+01
357	0.000E+00	0.000E+00	7.736E-03	0.000E+00	9.009E-03	3.225E-04	8.863E-05			

374	0.000E+00	0.000E+00	7.852E-03	0.000E+00	9.102E-03	2.836E-04	8.934E-05	6.778E-04	0.000E+00	1.093E+01
375	0.000E+00	0.000E+00	1.016E-02	0.000E+00	1.180E-02	4.160E-04	1.159E-04	8.772E-04	0.000E+00	6.777E+00
376	0.000E+00	0.000E+00	1.094E-02	0.000E+00	1.272E-02	4.146E-04	1.248E-04	9.447E-04	0.000E+00	6.794E+00
377	0.000E+00	0.000E+00	1.141E-02	0.000E+00	1.327E-02	1.210E-03	1.303E-04	9.858E-04	0.000E+00	6.698E+00
378	0.000E+00	0.000E+00	1.143E-02	0.000E+00	1.330E-02	1.274E-03	1.307E-04	9.879E-04	0.000E+00	7.931E+00
379	0.000E+00	0.000E+00	1.070E-02	0.000E+00	1.246E-02	1.180E-03	1.226E-04	9.257E-04	0.000E+00	1.085E+01
380	0.000E+00	0.000E+00	1.014E-02	0.000E+00	1.170E-02	4.935E-04	1.154E-04	8.765E-04	0.000E+00	1.320E+01
381	0.000E+00	0.000E+00	1.418E-02	0.000E+00	1.654E-02	6.455E-04	1.617E-04	1.224E-03	0.000E+00	1.523E+01
382	0.000E+00	0.000E+00	1.636E-02	0.000E+00	1.911E-02	5.915E-04	1.868E-04	1.413E-03	0.000E+00	1.824E+01
383	0.000E+00	0.000E+00	4.299E-02	0.000E+00	5.022E-02	1.503E-03	4.906E-04	3.711E-03	0.000E+00	2.334E+01
384	0.000E+00	0.000E+00	5.169E-02	0.000E+00	6.028E-02	1.811E-03	5.894E-04	4.462E-03	0.000E+00	2.541E+01
385	0.000E+00	0.000E+00	4.455E-02	0.000E+00	5.178E-02	1.561E-03	5.071E-04	3.845E-03	0.000E+00	3.226E+01
386	0.000E+00	0.000E+00	3.188E-02	0.000E+00	3.706E-02	1.115E-03	3.629E-04	2.751E-03	0.000E+00	3.139E+01
387	0.000E+00	0.000E+00	1.972E-02	0.000E+00	2.294E-02	6.898E-04	2.245E-04	1.702E-03	0.000E+00	3.157E+01
388	0.000E+00	0.000E+00	1.755E-02	0.000E+00	2.028E-02	6.141E-04	1.992E-04	1.515E-03	0.000E+00	2.155E+01
389	0.000E+00	0.000E+00	1.871E-02	0.000E+00	2.164E-02	6.545E-04	2.124E-04	1.614E-03	0.000E+00	1.711E+01
390	0.000E+00	0.000E+00	6.328E-03	0.000E+00	7.197E-03	2.437E-04	7.124E-05	5.458E-04	0.000E+00	1.465E+01
391	0.000E+00	0.000E+00	6.460E-03	0.000E+00	7.538E-03	2.673E-04	7.406E-05	5.585E-04	0.000E+00	1.274E+01
392	0.000E+00	0.000E+00	7.128E-03	0.000E+00	8.303E-03	2.824E-04	8.153E-05	6.159E-04	0.000E+00	1.149E+01
393	0.000E+00	0.000E+00	7.437E-03	0.000E+00	8.651E-03	2.867E-04	8.493E-05	6.424E-04	0.000E+00	1.084E+01
394	0.000E+00	0.000E+00	9.348E-03	0.000E+00	1.088E-02	3.552E-04	1.067E-04	8.079E-04	0.000E+00	8.299E+00
395	0.000E+00	0.000E+00	8.532E-03	0.000E+00	9.936E-03	3.448E-04	9.750E-05	7.377E-04	0.000E+00	8.454E+00
396	0.000E+00	0.000E+00	7.704E-03	0.000E+00	8.934E-03	7.305E-04	8.790E-05	6.656E-04	0.000E+00	9.625E+00
397	0.000E+00	0.000E+00	8.792E-03	0.000E+00	1.020E-02	1.327E-03	1.004E-04	7.600E-04	0.000E+00	1.038E+01
398	0.000E+00	0.000E+00	9.509E-03	0.000E+00	1.104E-02	1.058E-03	1.084E-04	8.211E-04	0.000E+00	9.173E+00
399	0.000E+00	0.000E+00	1.403E-02	0.000E+00	1.637E-02	9.251E-04	1.601E-04	1.212E-03	0.000E+00	1.207E+01
400	0.000E+00	0.000E+00	1.243E-02	0.000E+00	1.450E-02	4.981E-04	1.423E-04	1.075E-03	0.000E+00	1.276E+01
401	0.000E+00	0.000E+00	1.949E-02	0.000E+00	2.268E-02	6.818E-04	2.220E-04	1.682E-03	0.000E+00	1.283E+01
402	0.000E+00	0.000E+00	4.208E-02	0.000E+00	4.898E-02	1.472E-03	4.793E-04	3.631E-03	0.000E+00	1.192E+01
403	0.000E+00	0.000E+00	5.142E-02	0.000E+00	5.997E-02	2.140E-03	5.886E-04	4.438E-03	0.000E+00	1.202E+01
404	0.000E+00	0.000E+00	3.942E-02	0.000E+00	4.577E-02	1.401E-03	4.486E-04	3.402E-03	0.000E+00	1.737E+01
405	0.000E+00	0.000E+00	2.748E-02	0.000E+00	3.196E-02	9.611E-04	3.129E-04	2.372E-03	0.000E+00	1.853E+01
406	0.000E+00	0.000E+00	1.620E-02	0.000E+00	1.881E-02	5.665E-04	1.843E-04	1.398E-03	0.000E+00	1.776E+01
407	0.000E+00	0.000E+00	1.528E-02	0.000E+00	1.776E-02	5.345E-04	1.739E-04	1.319E-03	0.000E+00	1.720E+01
408	0.000E+00	0.000E+00	1.542E-02	0.000E+00	1.785E-02	5.394E-04	1.751E-04	1.331E-03	0.000E+00	1.701E+01
409	0.000E+00	0.000E+00	1.628E-02	0.000E+00	1.885E-02	5.695E-04	1.849E-04	1.405E-03	0.000E+00	1.446E+01
410	0.000E+00	0.000E+00	5.634E-03	0.000E+00	6.435E-03	1.972E-04	6.356E-05	4.860E-04	0.000E+00	1.271E+01
411	0.000E+00	0.000E+00	5.721E-03	0.000E+00	6.540E-03	2.002E-04	6.458E-05	4.935E-04	0.000E+00	1.167E+01
412	0.000E+00	0.000E+00	5.611E-03	0.000E+00	6.488E-03	2.064E-04	6.375E-05	4.842E-04	0.000E+00	1.050E+01
413	0.000E+00	0.000E+00	1.274E-02	0.000E+00	1.495E-02	1.364E-03	1.455E-04	1.100E-03	0.000E+00	9.642E+00
414	0.000E+00	0.000E+00	8.328E-03	0.000E+00	9.691E-03	1.238E-03	9.543E-05	7.201E-04	0.000E+00	7.932E+00
415	0.000E+00	0.000E+00	8.770E-03	0.000E+00	9.898E-03	1.044E-03	9.899E-05	7.588E-04	0.000E+00	6.655E+00
416	0.000E+00	0.000E+00	1.001E-02	0.000E+00	1.166E-02	7.637E-04	1.147E-04	8.657E-04	0.000E+00	9.259E+00
417	0.000E+00	0.000E+00	6.743E-03	0.000E+00	7.459E-03	8.374E-04	7.557E-05	5.838E-04	0.000E+00	7.495E+00
418	0.000E+00	0.000E+00	1.122E-02	0.000E+00	1.303E-02	8.763E-04	1.277E-04	9.686E-04	0.000E+00	6.566E+00
419	0.000E+00	0.000E+00	8.372E-03	0.000E+00	9.681E-03	6.925E-04	9.507E-05	7.224E-04	0.000E+00	9.180E+00
420	0.000E+00	0.000E+00	2.030E-02	0.000E+00	2.346E-02	8.159E-04	2.305E-04	1.752E-03	0.000E+00	7.436E+00
421	0.000E+00	0.000E+00	3.202E-02	0.000E+00	3.724E-02	1.158E-03	3.649E-04	2.765E-03	0.000E+00	6.928E+00
422	0.000E+00	0.000E+00	3.394E-02	0.000E+00	3.936E-02	1.190E-03	3.859E-04	2.930E-03	0.000E+00	9.765E+00
423	0.000E+00	0.000E+00	3.215E-02	0.000E+00	3.741E-02	1.312E-03	3.679E-04	2.779E-03	0.000E+00	8.290E+00
424	0.000E+00	0.000E+00	3.113E-02	0.000E+00	3.621E-02	1.091E-03	3.545E-04	2.688E-03	0.000E+00	7.449E+00
425	0.000E+00	0.000E+00	4.632E-02	0.000E+00	5.405E-02	1.624E-03	5.283E-04	4.003E-03	0.000E+00	1.004E+01
426	0.000E+00	0.000E+00	4.449E-02	0.000E+00	5.192E-02	1.692E-03	5.087E-04	3.851E-03	0.000E+00	8.729E+00
427	0.000E+00	0.000E+00	4.231E-02	0.000E+00	4.930E-02	1.767E-03	4.830E-04	3.652E-03	0.000E+00	7.742E+00
428	0.000E+00	0.000E+00	5.002E-02	0.000E+00	5.831E-02	2.214E-03	5.745E-04	4.317E-03	0.000E+00	1.005E+01
429	0.000E+00	0.000E+00	4.773E-02	0.000E+00	5.560E-02	2.122E-03	5.481E-04	4.120E-03	0.000E+00	8.755E+00
430	0.000E+00	0.000E+00	4.523E-02	0.000E+00	5.265E-02	1.960E-03	5.187E-04	3.903E-03	0.000E+00	7.929E+00
431	0.000E+00	0.000E+00	3.679E-02	0.000E+00	4.271E-02	1.321E-03	4.188E-04	3.175E-03	0.000E+00	1.110E+01
432	0.000E+00	0.000E+00	3.487E-02	0.000E+00	4.048E-02	1.257E-03	3.970E-04	3.009E-03	0.000E+00	8.533E+00
433	0.000E+00	0.000E+00	3.272E-02	0.000E+00	3.799E-02	1.182E-03	3.726E-04	2.824E-03	0.000E+00	7.705E+00
434	0.000E+00	0.000E+00	2.278E-02	0.000E+00	2.645E-02	7.968E-04	2.591E-04	1.966E-03	0.000E+00	1.422E+01
435	0.000E+00	0.000E+00	1.890E-02	0.000E+00	2.189E-02	6.612E-04	2.147E-04	1.631E-03	0.000E+00	1.126E+01
436	0.000E+00	0.000E+00	1.590E-02	0.000E+00	1.837E-02	5.562E-04	1.804E-04	1.372E-03	0.000E+00	8.968E+00
437	0.000E+00	0.000E+00	1.535E-02	0.000E+00	1.783E-02	5.370E-04	1.747E-04	1.325E-03	0.000E+00	1.450E+01
438	0.000E+00	0.000E+00	1.307E-02	0.000E+00	1.515E-02	4.690E-04	1.487E-04	1.128E-03	0.000E+00	1.171E+01
439	0.000E+00	0.000E+00	1.056E-02	0.000E+00	1.224E-02	4.682E-04	1.209E-04	9.117E-04	0.000E+00	1.035E+01
440	0.000E+00	0.000E+00	1.374E-02	0.000E+00	1.596E-02	4.806E-04	1.563E-04	1.186E-03	0.000E+00	1.359E+01
441	0.000E+00	0.000E+00	1.580E-02	0.000E+00	1.836E-02	5.524E-04	1.798E-04	1.363E-03	0.000E+00	1.218E+01
442	0.000E+00	0.000E+00	1.554E-02	0.000E+00	1.805E-02	5.438E-04	1.768E-04	1.341E-03	0.000E+00	1.021E+01
443	0.000E+00	0.000E+00	1.300E-02	0.000E+00	1.511E-02	5.659E-04	1.480E-04	1.122E-03	0.000E+00	1.380E+01
444	0.000E+00	0.000E+00	1.262E-02	0.000E+00	1.467E-02	5.611E-04	1.437E-04	1.089E-03	0.000E+00	1.167E+01
445	0.000E+00	0.000E+00	1.072E-02	0.000E+00	1.244E-02	3.767E-04	1.219E-04	9.254E-04	0.000E+00	1.048E+01
446	0.000E+00	0.000E+00	1.110E-02	0.000E+00	1.281E-02	3.886E-04	1.259E-04	9.580E-04	0.000E+00	1.314E+01
447	0.000E+00	0.000E+00	1.154E-02	0.000E+00	1.340E-02	4.046E-04	1.313E-04	9.961E-04	0.000E+00	1.151E+01
448	0.000E+00	0.000E+00	1.070E-02	0.000E+00	1.242E-02	3.877E-04	1.219E-04	9.236E-04	0.000E+00	1.035E+01
449	0.000E+00	0.000E+00	1.402E-02	0.000E+00	1.624E-02	4.905E-04	1.593E-04	1.210E-03	0.000E+00	1.281E+01
450	0.000E+00	0.000E+00	1.183E-02	0.000E+00	1.370E-02	4.143E-04	1.344E-04	1.021E-03	0.000E+00	1.140E+01
451	0.000E+00	0.000E+00	9.786E-03	0.000E+00	1.135E-02	3.435E-04	1.113E-04	8.445E-04	0.000E+00	1.045E+01

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SECAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 64

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

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389	1.257E-02	3.327E-02	0.000E+00	1.103E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	4.195E-03	1.116E-02	0.000E+00	3.696E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	4.369E-03	1.154E-02	0.000E+00	3.835E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	4.814E-03	1.272E-02	0.000E+00	4.225E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	5.018E-03	1.326E-02	0.000E+00	4.404E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	6.309E-03	1.667E-02	0.000E+00	5.540E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	5.761E-03	1.522E-02	0.000E+00	5.060E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	5.185E-03	1.372E-02	0.000E+00	4.555E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	5.919E-03	1.564E-02	0.000E+00	5.201E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	6.424E-03	1.697E-02	0.000E+00	5.633E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	9.487E-03	2.505E-02	0.000E+00	8.318E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	8.406E-03	2.220E-02	0.000E+00	7.381E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	1.315E-02	3.477E-02	0.000E+00	1.153E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	2.841E-02	7.507E-02	0.000E+00	2.490E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	3.476E-02	9.181E-02	0.000E+00	3.046E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	2.656E-02	7.022E-02	0.000E+00	2.329E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	1.854E-02	4.900E-02	0.000E+00	1.625E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	1.091E-02	2.886E-02	0.000E+00	9.573E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	1.030E-02	2.724E-02	0.000E+00	9.037E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	1.036E-02	2.742E-02	0.000E+00	9.095E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
409	1.094E-02	2.896E-02	0.000E+00	9.606E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
410	3.747E-03	9.954E-03	0.000E+00	3.299E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	3.808E-03	1.011E-02	0.000E+00	3.352E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
412	3.773E-03	9.984E-03	0.000E+00	3.311E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
413	8.609E-03	2.274E-02	0.000E+00	7.552E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
414	5.620E-03	1.485E-02	0.000E+00	4.937E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
415	5.778E-03	1.540E-02	0.000E+00	5.118E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
416	6.760E-03	1.786E-02	0.000E+00	5.938E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
417	4.374E-03	1.172E-02	0.000E+00	3.896E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
418	7.561E-03	2.000E-02	0.000E+00	6.634E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
419	5.623E-03	1.489E-02	0.000E+00	4.937E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
420	1.363E-02	3.609E-02	0.000E+00	1.197E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
421	2.160E-02	5.709E-02	0.000E+00	1.896E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
422	2.284E-02	6.043E-02	0.000E+00	2.005E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
423	2.169E-02	5.733E-02	0.000E+00	1.905E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
424	2.100E-02	5.551E-02	0.000E+00	1.842E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
425	3.133E-02	8.273E-02	0.000E+00	2.748E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
426	3.009E-02	7.946E-02	0.000E+00	2.644E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
427	2.859E-02	7.552E-02	0.000E+00	2.506E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
428	3.380E-02	8.928E-02	0.000E+00	2.962E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
429	3.224E-02	8.517E-02	0.000E+00	2.826E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
430	3.053E-02	8.068E-02	0.000E+00	2.677E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
431	2.478E-02	6.554E-02	0.000E+00	2.174E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	2.349E-02	6.211E-02	0.000E+00	2.060E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	2.204E-02	5.829E-02	0.000E+00	1.934E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	1.535E-02	4.058E-02	0.000E+00	1.346E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	1.271E-02	3.363E-02	0.000E+00	1.115E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
436	1.067E-02	2.825E-02	0.000E+00	9.369E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	1.034E-02	2.735E-02	0.000E+00	9.074E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	8.793E-03	2.326E-02	0.000E+00	7.716E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	7.098E-03	1.878E-02	0.000E+00	6.233E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	9.261E-03	2.449E-02	0.000E+00	8.122E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	1.065E-02	2.816E-02	0.000E+00	9.340E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	1.047E-02	2.769E-02	0.000E+00	9.187E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	8.767E-03	2.318E-02	0.000E+00	7.688E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	8.510E-03	2.250E-02	0.000E+00	7.463E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	7.219E-03	1.910E-02	0.000E+00	6.334E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	7.443E-03	1.972E-02	0.000E+00	6.538E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	7.777E-03	2.056E-02	0.000E+00	6.822E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	7.209E-03	1.906E-02	0.000E+00	6.325E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	9.428E-03	2.495E-02	0.000E+00	8.275E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	7.952E-03	2.104E-02	0.000E+00	6.979E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	6.587E-03	1.742E-02	0.000E+00	5.780E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\GQpmace.dat Output File: g:\beest\GQ\GQpmace.OUT 11/14/96 07:00:20 Page - 73

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Zn	NIXPM
1	1.638E-03	2.828E+02
2	1.221E-03	2.112E+02
3	1.245E-03	2.154E+02
4	2.108E-03	3.648E+02
5	2.040E-03	3.531E+02
6	1.989E-03	3.441E+02
7	1.348E-03	2.686E+02
8	1.502E-03	2.597E+02
9	1.570E-03	2.720E+02
10	2.390E-03	4.120E+02
11	1.367E-03	2.363E+02
12	3.178E-03	5.503E+02
13	6.338E-03	1.098E+03
14	6.533E-03	1.132E+03

15	6.608E-03	1.145E+03
16	6.707E-03	1.162E+03
17	2.262E-03	3.909E+02
18	1.773E-03	3.067E+02
19	1.997E-03	3.453E+02
20	2.055E-03	3.553E+02
21	5.019E-03	8.560E+02
22	4.657E-03	7.953E+02
23	5.440E-03	9.340E+02
24	7.079E-03	1.220E+03
25	7.436E-03	1.282E+03
26	6.552E-03	1.134E+03
27	4.933E-03	8.600E+02
28	5.070E-03	8.757E+02
29	7.855E-03	1.354E+03
30	8.966E-03	1.548E+03
31	8.572E-03	1.482E+03
32	7.102E-03	1.229E+03
33	6.701E-03	1.162E+03
34	6.769E-03	1.173E+03
35	4.647E-03	8.025E+02
36	3.825E-03	6.611E+02
37	4.166E-03	7.217E+02
38	2.122E-03	3.667E+02
39	2.289E-03	3.954E+02
40	2.483E-03	4.287E+02
41	3.191E-03	5.509E+02
42	3.311E-03	5.698E+02
43	1.754E-03	3.004E+02
44	1.241E-03	2.167E+02
45	1.570E-03	2.699E+02
46	1.468E-03	2.516E+02
47	1.648E-03	2.812E+02
48	2.170E-03	3.734E+02
49	1.741E-03	2.971E+02
50	2.054E-03	3.513E+02
51	2.038E-03	3.515E+02
52	1.726E-03	2.979E+02
53	1.360E-03	2.335E+02
54	1.428E-03	2.459E+02
55	1.748E-03	3.025E+02
56	2.012E-03	3.477E+02
57	2.225E-03	3.851E+02
58	2.396E-03	4.153E+02
59	2.643E-03	4.589E+02
60	3.094E-03	5.374E+02
61	5.407E-03	9.314E+02
62	5.912E-03	1.015E+03
63	3.982E-03	6.908E+02
64	3.587E-03	6.207E+02
65	2.616E-03	4.517E+02
66	3.088E-03	5.310E+02
67	2.600E-03	4.503E+02
68	2.335E-03	3.966E+02
69	3.498E-03	5.994E+02
70	4.171E-03	7.169E+02
71	5.681E-03	9.636E+02
72	3.229E-03	5.572E+02
73	2.169E-03	3.732E+02
74	2.736E-03	4.732E+02
75	2.158E-03	3.727E+02
76	2.211E-03	3.811E+02
77	2.445E-03	4.218E+02
78	2.420E-03	4.186E+02
79	2.713E-03	4.696E+02
80	2.797E-03	4.836E+02
81	2.577E-03	4.444E+02
82	2.440E-03	4.190E+02
83	2.708E-03	4.647E+02
84	2.808E-03	4.818E+02
85	3.849E-03	6.602E+02
86	8.096E-03	1.384E+03
87	7.381E-03	1.267E+03
88	7.150E-03	1.231E+03
89	6.917E-03	1.193E+03
90	6.107E-03	1.053E+03
91	2.150E-03	3.713E+02
92	2.232E-03	3.859E+02
93	2.136E-03	3.692E+02
94	2.232E-03	3.872E+02
95	2.378E-03	4.128E+02
96	2.404E-03	4.141E+02
97	2.873E-03	4.962E+02
98	3.246E-03	5.582E+02
99	2.803E-03	4.858E+02
100	2.965E-03	5.107E+02
101	2.749E-03	4.753E+02
102	3.103E-03	5.377E+02
103	2.194E-03	3.790E+02
104	2.080E-03	3.591E+02
105	2.218E-03	3.846E+02
106	2.418E-03	4.197E+02
107	2.662E-03	4.586E+02
108	2.994E-03	5.167E+02
109	3.203E-03	5.542E+02
110	3.129E-03	5.423E+02
111	2.638E-03	4.577E+02

112	2.978E-03	5.152E+02
113	3.428E-03	5.940E+02
114	3.585E-03	6.220E+02
115	1.996E-03	3.441E+02
116	2.187E-03	3.790E+02
117	2.442E-03	4.236E+02
118	2.830E-03	4.871E+02
119	3.321E-03	5.731E+02
120	3.515E-03	6.081E+02
121	3.327E-03	5.765E+02
122	2.938E-03	5.099E+02
123	3.180E-03	5.503E+02
124	3.560E-03	6.168E+02
125	3.717E-03	6.450E+02
126	3.872E-03	6.723E+02
127	2.140E-03	3.706E+02
128	2.449E-03	4.245E+02
129	2.913E-03	5.006E+02
130	3.233E-03	5.571E+02
131	2.941E-03	5.076E+02
132	3.642E-03	6.310E+02
133	3.177E-03	5.512E+02
134	3.239E-03	5.604E+02
135	3.536E-03	6.124E+02
136	4.787E-03	8.174E+02
137	4.106E-03	7.130E+02
138	4.122E-03	7.044E+02
139	2.444E-03	4.233E+02
140	2.881E-03	4.934E+02
141	3.301E-03	5.670E+02
142	3.263E-03	5.320E+02
143	3.079E-03	5.058E+02
144	3.244E-03	5.624E+02
145	3.443E-03	5.957E+02
146	3.650E-03	6.322E+02
147	4.199E-03	7.290E+02
148	5.264E-03	8.990E+02
149	5.424E-03	9.292E+02
150	5.248E-03	9.006E+02
151	3.771E-03	6.531E+02
152	5.083E-03	8.658E+02
153	5.779E-03	9.877E+02
154	3.855E-03	6.690E+02
155	5.609E-03	9.648E+02
156	5.281E-03	9.089E+02
157	2.547E-03	4.406E+02
158	2.165E-03	3.695E+02
159	1.380E-03	2.379E+02
160	1.767E-03	3.020E+02
161	1.833E-03	3.171E+02
162	1.843E-03	3.195E+02
163	2.031E-03	3.525E+02
164	2.026E-03	3.479E+02
165	3.129E-03	5.404E+02
166	3.383E-03	5.857E+02
167	2.848E-03	4.933E+02
168	1.802E-03	3.105E+02
169	1.503E-03	2.588E+02
170	1.966E-03	3.399E+02
171	1.932E-03	3.341E+02
172	2.160E-03	3.748E+02
173	2.128E-03	3.649E+02
174	3.094E-03	5.336E+02
175	3.012E-03	5.207E+02
176	3.194E-03	5.536E+02
177	3.419E-03	5.934E+02
178	2.174E-03	3.761E+02
179	1.627E-03	2.797E+02
180	2.238E-03	3.871E+02
181	2.229E-03	3.869E+02
182	2.817E-03	4.867E+02
183	2.980E-03	5.129E+02
184	2.727E-03	4.717E+02
185	3.611E-03	6.264E+02
186	3.536E-03	6.141E+02
187	3.312E-03	5.745E+02
188	2.792E-03	4.800E+02
189	1.798E-03	3.095E+02
190	2.204E-03	3.822E+02
191	3.041E-03	5.243E+02
192	3.226E-03	5.590E+02
193	3.293E-03	5.701E+02
194	3.837E-03	6.662E+02
195	3.509E-03	6.096E+02
196	3.469E-03	6.022E+02
197	3.070E-03	5.330E+02
198	3.351E-03	5.741E+02
199	2.082E-03	3.599E+02
200	3.156E-03	5.418E+02
201	3.469E-03	6.004E+02
202	5.206E-03	8.953E+02
203	3.372E-03	5.859E+02
204	2.750E-03	4.775E+02
205	2.512E-03	4.356E+02
206	2.124E-03	3.673E+02
207	1.942E-03	3.360E+02
208	1.005E-03	1.734E+02

209	1.304E-03	2.251E+02
210	1.443E-03	2.489E+02
211	1.243E-03	2.156E+02
212	1.635E-03	2.828E+02
213	1.890E-03	3.264E+02
214	1.488E-03	2.566E+02
215	1.926E-03	3.331E+02
216	1.840E-03	3.182E+02
217	1.949E-03	3.371E+02
218	1.738E-03	3.006E+02
219	2.235E-03	3.849E+02
220	1.333E-03	2.296E+02
221	7.941E-04	1.369E+02
222	1.091E-03	1.887E+02
223	1.286E-03	2.231E+02
224	1.391E-03	2.412E+02
225	1.406E-03	2.435E+02
226	1.569E-03	2.708E+02
227	1.482E-03	2.556E+02
228	1.268E-03	2.182E+02
229	1.297E-03	2.240E+02
230	1.548E-03	2.671E+02
231	1.358E-03	2.355E+02
232	1.801E-03	3.112E+02
233	1.969E-03	3.402E+02
234	1.731E-03	2.990E+02
235	1.946E-03	3.368E+02
236	2.037E-03	3.523E+02
237	1.808E-03	3.126E+02
238	2.232E-03	3.839E+02
239	1.319E-03	2.272E+02
240	1.186E-03	2.051E+02
241	1.257E-03	2.177E+02
242	1.488E-03	2.579E+02
243	1.447E-03	2.503E+02
244	1.799E-03	3.106E+02
245	2.038E-03	3.531E+02
246	1.257E-03	2.173E+02
247	1.529E-03	2.638E+02
248	1.530E-03	2.637E+02
249	1.266E-03	2.187E+02
250	1.663E-03	2.871E+02
251	1.461E-03	2.529E+02
252	2.023E-03	3.495E+02
253	1.935E-03	3.342E+02
254	2.119E-03	3.668E+02
255	2.088E-03	3.611E+02
256	1.878E-03	3.249E+02
257	2.172E-03	3.728E+02
258	1.337E-03	2.303E+02
259	1.359E-03	2.351E+02
260	1.526E-03	2.643E+02
261	1.480E-03	2.569E+02
262	2.095E-03	3.616E+02
263	2.243E-03	3.886E+02
264	2.633E-03	4.564E+02
265	1.601E-03	2.760E+02
266	1.450E-03	2.495E+02
267	1.436E-03	2.480E+02
268	1.718E-03	2.965E+02
269	1.409E-03	2.423E+02
270	1.786E-03	3.086E+02
271	1.586E-03	2.741E+02
272	2.303E-03	3.981E+02
273	2.287E-03	3.953E+02
274	2.025E-03	3.504E+02
275	1.948E-03	3.368E+02
276	2.046E-03	3.497E+02
277	1.388E-03	2.398E+02
278	1.664E-03	2.885E+02
279	1.734E-03	3.009E+02
280	2.495E-03	4.307E+02
281	2.449E-03	4.244E+02
282	2.948E-03	5.115E+02
283	2.592E-03	4.490E+02
284	1.646E-03	2.846E+02
285	1.753E-03	3.028E+02
286	1.781E-03	3.071E+02
287	1.638E-03	2.821E+02
288	1.735E-03	2.996E+02
289	1.803E-03	3.110E+02
290	1.913E-03	3.308E+02
291	1.837E-03	3.173E+02
292	3.675E-03	6.291E+02
293	2.362E-03	4.078E+02
294	3.064E-03	5.321E+02
295	2.985E-03	5.179E+02
296	2.511E-03	4.356E+02
297	1.322E-03	2.297E+02
298	1.511E-03	2.619E+02
299	1.685E-03	2.914E+02
300	1.870E-03	3.229E+02
301	2.010E-03	3.469E+02
302	1.905E-03	3.284E+02
303	2.091E-03	3.610E+02
304	2.035E-03	3.519E+02
305	2.368E-03	4.090E+02

306	2.841E-03	4.932E+02
307	2.413E-03	4.184E+02
308	2.167E-03	3.754E+02
309	9.258E-04	1.589E+02
310	1.095E-03	1.907E+02
311	1.316E-03	2.290E+02
312	1.476E-03	2.560E+02
313	1.645E-03	2.845E+02
314	1.941E-03	3.353E+02
315	2.295E-03	3.963E+02
316	2.289E-03	3.950E+02
317	2.397E-03	4.124E+02
318	2.156E-03	3.732E+02
319	1.859E-03	3.217E+02
320	1.353E-03	2.341E+02
321	1.848E-03	3.151E+02
322	1.877E-03	3.198E+02
323	1.904E-03	3.242E+02
324	1.927E-03	3.280E+02
325	1.943E-03	3.303E+02
326	2.007E-03	3.459E+02
327	2.381E-03	4.103E+02
328	2.727E-03	4.699E+02
329	3.048E-03	5.246E+02
330	1.519E-03	2.623E+02
331	1.487E-03	2.566E+02
332	1.505E-03	2.597E+02
333	5.023E-03	8.663E+02
334	5.251E-03	9.060E+02
335	5.493E-03	9.480E+02
336	5.741E-03	9.912E+02
337	5.982E-03	1.033E+03
338	6.183E-03	1.068E+03
339	6.274E-03	1.084E+03
340	6.093E-03	1.052E+03
341	1.458E-03	2.504E+02
342	1.675E-03	2.894E+02
343	1.707E-03	2.954E+02
344	1.581E-03	2.739E+02
345	1.378E-03	2.391E+02
346	5.899E-03	1.018E+03
347	5.947E-03	1.027E+03
348	5.986E-03	1.033E+03
349	6.026E-03	1.040E+03
350	6.089E-03	1.051E+03
351	6.205E-03	1.071E+03
352	6.410E-03	1.106E+03
353	6.692E-03	1.154E+03
354	1.476E-03	2.546E+02
355	1.224E-03	2.119E+02
356	1.101E-03	1.910E+02
357	1.016E-03	1.763E+02
358	9.484E-04	1.646E+02
359	4.673E-03	8.104E+02
360	4.669E-03	8.102E+02
361	4.651E-03	8.075E+02
362	4.612E-03	8.012E+02
363	4.543E-03	7.898E+02
364	4.458E-03	7.756E+02
365	4.374E-03	7.616E+02
366	4.274E-03	7.447E+02
367	4.349E-03	7.582E+02
368	3.609E-03	6.250E+02
369	1.922E-03	3.289E+02
370	1.137E-03	1.971E+02
371	1.326E-03	2.280E+02
372	1.224E-03	2.102E+02
373	1.125E-03	1.942E+02
374	1.031E-03	1.780E+02
375	1.334E-03	2.309E+02
376	1.437E-03	2.488E+02
377	1.499E-03	2.597E+02
378	1.501E-03	2.603E+02
379	1.406E-03	2.440E+02
380	1.332E-03	2.300E+02
381	1.863E-03	3.230E+02
382	2.149E-03	3.736E+02
383	5.648E-03	9.798E+02
384	6.790E-03	1.176E+03
385	5.852E-03	1.013E+03
386	4.188E-03	7.254E+02
387	2.591E-03	4.485E+02
388	2.306E-03	3.976E+02
389	2.457E-03	4.238E+02
390	8.308E-04	1.418E+02
391	8.487E-04	1.474E+02
392	9.364E-04	1.624E+02
393	9.769E-04	1.692E+02
394	1.228E-03	2.129E+02
395	1.121E-03	1.945E+02
396	1.012E-03	1.750E+02
397	1.155E-03	1.999E+02
398	1.249E-03	2.165E+02
399	1.843E-03	3.198E+02
400	1.633E-03	2.839E+02
401	2.561E-03	4.424E+02
402	5.527E-03	9.557E+02

403	6.755E-03	1.170E+03
404	5.178E-03	8.954E+02
405	3.610E-03	6.251E+02
406	2.127E-03	3.680E+02
407	2.007E-03	3.474E+02
408	2.025E-03	3.496E+02
409	2.138E-03	3.690E+02
410	7.398E-04	1.267E+02
411	7.511E-04	1.284E+02
412	7.370E-04	1.272E+02
413	1.673E-03	2.903E+02
414	1.094E-03	1.898E+02
415	1.151E-03	1.966E+02
416	1.315E-03	2.283E+02
417	8.846E-04	1.497E+02
418	1.474E-03	2.543E+02
419	1.100E-03	1.889E+02
420	2.667E-03	4.588E+02
421	4.206E-03	7.282E+02
422	4.459E-03	7.702E+02
423	4.223E-03	7.322E+02
424	4.089E-03	7.066E+02
425	6.085E-03	1.056E+03
426	5.844E-03	1.016E+03
427	5.558E-03	9.618E+02
428	6.570E-03	1.138E+03
429	6.270E-03	1.086E+03
430	5.941E-03	1.029E+03
431	4.833E-03	8.357E+02
432	4.580E-03	7.921E+02
433	4.298E-03	7.433E+02
434	2.992E-03	5.173E+02
435	2.483E-03	4.283E+02
436	2.088E-03	3.594E+02
437	2.017E-03	3.487E+02
438	1.716E-03	2.964E+02
439	1.387E-03	2.393E+02
440	1.805E-03	3.121E+02
441	2.075E-03	3.590E+02
442	2.041E-03	3.531E+02
443	1.708E-03	2.955E+02
444	1.658E-03	2.868E+02
445	1.408E-03	2.434E+02
446	1.458E-03	2.512E+02
447	1.516E-03	2.621E+02
448	1.406E-03	2.430E+02
449	1.842E-03	3.178E+02
450	1.553E-03	2.682E+02
451	1.285E-03	2.219E+02

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, RM10
 Input File: g:\beest\GQ\gqpmace.dat

Output File: g:\beest\GQ\GQpmACE.OUT

* OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	ACETA	ACROL	As	BENZE	Be	Cd	Cz	Cu	HCHO	HCN
1	0.000E+00	0.000E+00	3.310E-05	0.000E+00	1.904E-06	1.212E-06	2.028E-07	2.780E-06	0.000E+00	1.076E-01
2	0.000E+00	0.000E+00	4.961E-05	0.000E+00	2.494E-06	1.792E-06	3.020E-07	4.165E-06	0.000E+00	1.098E-01
3	0.000E+00	0.000E+00	4.927E-05	0.000E+00	2.457E-06	1.780E-06	2.998E-07	4.137E-06	0.000E+00	1.091E-01
4	0.000E+00	0.000E+00	6.400E-05	0.000E+00	3.405E-06	2.327E-06	3.907E-07	5.375E-06	0.000E+00	1.637E-01
5	0.000E+00	0.000E+00	6.458E-05	0.000E+00	3.440E-06	2.347E-06	3.942E-07	5.423E-06	0.000E+00	1.606E-01
6	0.000E+00	0.000E+00	5.864E-05	0.000E+00	3.185E-06	2.132E-06	3.583E-07	4.924E-06	0.000E+00	1.451E-01
7	0.000E+00	0.000E+00	5.180E-05	0.000E+00	2.757E-06	1.879E-06	3.161E-07	4.350E-06	0.000E+00	1.011E-01
8	0.000E+00	0.000E+00	5.209E-05	0.000E+00	3.046E-06	1.896E-06	3.193E-07	4.375E-06	0.000E+00	1.013E-01
9	0.000E+00	0.000E+00	5.411E-05	0.000E+00	3.296E-06	1.972E-06	3.323E-07	4.544E-06	0.000E+00	1.048E-01
10	0.000E+00	0.000E+00	6.869E-05	0.000E+00	3.726E-06	2.525E-06	4.199E-07	5.769E-06	0.000E+00	3.612E-01
11	0.000E+00	0.000E+00	2.801E-05	0.000E+00	1.558E-06	1.017E-06	1.713E-07	2.352E-06	0.000E+00	7.910E-02
12	0.000E+00	0.000E+00	1.215E-04	0.000E+00	7.191E-06	4.408E-06	7.452E-07	1.021E-05	0.000E+00	5.094E-01
13	0.000E+00	0.000E+00	5.263E-05	0.000E+00	4.083E-06	1.962E-06	3.278E-07	4.422E-06	0.000E+00	4.054E-01
14	0.000E+00	0.000E+00	5.307E-05	0.000E+00	4.118E-06	1.977E-06	3.306E-07	4.459E-06	0.000E+00	4.186E-01
15	0.000E+00	0.000E+00	5.169E-05	0.000E+00	4.034E-06	1.930E-06	3.222E-07	4.344E-06	0.000E+00	3.973E-01
16	0.000E+00	0.000E+00	5.874E-05	0.000E+00	4.532E-06	2.190E-06	3.658E-07	4.936E-06	0.000E+00	5.410E-01
17	0.000E+00	0.000E+00	3.100E-05	0.000E+00	1.772E-06	1.125E-06	1.898E-07	2.603E-06	0.000E+00	8.143E-02
18	0.000E+00	0.000E+00	4.675E-05	0.000E+00	2.931E-06	1.707E-06	2.875E-07	3.926E-06	0.000E+00	1.774E-01
19	0.000E+00	0.000E+00	4.637E-05	0.000E+00	3.303E-06	1.723E-06	2.874E-07	3.895E-06	0.000E+00	2.230E-01
20	0.000E+00	0.000E+00	6.509E-05	0.000E+00	4.498E-06	2.391E-06	4.025E-07	5.468E-06	0.000E+00	4.009E-01
21	0.000E+00	0.000E+00	4.745E-05	0.000E+00	3.914E-06	1.829E-06	2.973E-07	3.988E-06	0.000E+00	9.410E-01
22	0.000E+00	0.000E+00	4.419E-05	0.000E+00	3.989E-06	1.723E-06	2.787E-07	3.715E-06	0.000E+00	8.964E-01
23	0.000E+00	0.000E+00	4.404E-05	0.000E+00	4.065E-06	1.722E-06	2.782E-07	3.702E-06	0.000E+00	8.852E-01
24	0.000E+00	0.000E+00	4.376E-05	0.000E+00	3.979E-06	1.696E-06	2.760E-07	3.678E-06	0.000E+00	8.887E-01
25	0.000E+00	0.000E+00	4.410E-05	0.000E+00	3.873E-06	1.695E-06	2.774E-07	3.707E-06	0.000E+00	9.623E-01
26	0.000E+00	0.000E+00	4.678E-05	0.000E+00	3.322E-06	1.752E-06	2.900E-07	3.930E-06	0.000E+00	1.120E+00
27	0.000E+00	0.000E+00	4.793E-05	0.000E+00	3.075E-06	1.770E-06	2.953E-07	4.026E-06	0.000E+00	6.577E-01
28	0.000E+00	0.000E+00	5.121E-05	0.000E+00	3.195E-06	1.889E-06	3.151E-07	4.302E-06	0.000E+00	5.401E-01

29	0.000E+00	0.000E+00	6.495E-05	0.000E+00	4.267E-06	2.389E-06	4.006E-07	5.456E-06	0.000E+00	4.623E-01
30	0.000E+00	0.000E+00	6.879E-05	0.000E+00	4.668E-06	2.327E-06	4.250E-07	5.779E-06	0.000E+00	4.549E-01
31	0.000E+00	0.000E+00	7.196E-05	0.000E+00	5.043E-06	2.638E-06	4.433E-07	6.045E-06	0.000E+00	4.844E-01
32	0.000E+00	0.000E+00	7.216E-05	0.000E+00	5.258E-06	2.651E-06	4.475E-07	6.063E-06	0.000E+00	5.855E-01
33	0.000E+00	0.000E+00	7.988E-05	0.000E+00	6.029E-06	2.960E-06	4.966E-07	6.712E-06	0.000E+00	2.114E+00
34	0.000E+00	0.000E+00	8.819E-05	0.000E+00	6.794E-06	3.282E-06	5.491E-07	7.410E-06	0.000E+00	2.252E+00
35	0.000E+00	0.000E+00	9.398E-05	0.000E+00	7.278E-06	3.496E-06	5.853E-07	7.896E-06	0.000E+00	2.229E+00
36	0.000E+00	0.000E+00	9.813E-05	0.000E+00	7.372E-06	3.626E-06	6.098E-07	8.245E-06	0.000E+00	2.126E+00
37	0.000E+00	0.000E+00	9.851E-05	0.000E+00	7.194E-06	3.593E-06	6.107E-07	8.276E-06	0.000E+00	1.957E+00
38	0.000E+00	0.000E+00	9.568E-05	0.000E+00	6.666E-06	3.470E-06	5.915E-07	8.038E-06	0.000E+00	1.032E+00
39	0.000E+00	0.000E+00	1.167E-04	0.000E+00	8.403E-06	4.250E-06	7.228E-07	9.803E-06	0.000E+00	1.977E+00
40	0.000E+00	0.000E+00	1.478E-04	0.000E+00	1.095E-05	5.398E-06	9.170E-07	1.241E-05	0.000E+00	2.461E+00
41	0.000E+00	0.000E+00	2.012E-04	0.000E+00	1.693E-05	8.374E-06	1.268E-06	1.691E-05	0.000E+00	2.178E+00
42	0.000E+00	0.000E+00	3.067E-04	0.000E+00	2.823E-05	1.182E-05	1.936E-06	2.578E-05	0.000E+00	1.405E+00
43	0.000E+00	0.000E+00	2.608E-04	0.000E+00	2.088E-05	1.002E-05	1.630E-06	2.191E-05	0.000E+00	9.625E-01
44	0.000E+00	0.000E+00	2.402E-04	0.000E+00	1.085E-05	9.005E-06	1.460E-06	2.017E-05	0.000E+00	6.130E-01
45	0.000E+00	0.000E+00	2.331E-04	0.000E+00	7.174E-06	8.431E-06	1.397E-06	1.956E-05	0.000E+00	4.053E-01
46	0.000E+00	0.000E+00	1.470E-04	0.000E+00	5.420E-06	5.343E-06	8.860E-07	1.234E-05	0.000E+00	2.956E-01
47	0.000E+00	0.000E+00	2.158E-04	0.000E+00	1.003E-05	1.121E-06	1.313E-06	1.812E-05	0.000E+00	3.160E-01
48	0.000E+00	0.000E+00	2.830E-04	0.000E+00	7.484E-06	1.032E-05	1.692E-06	2.375E-05	0.000E+00	3.435E-01
49	0.000E+00	0.000E+00	3.349E-04	0.000E+00	8.783E-06	1.226E-05	2.002E-06	2.810E-05	0.000E+00	3.582E-01
50	0.000E+00	0.000E+00	3.589E-04	0.000E+00	1.022E-05	1.327E-05	2.150E-06	3.012E-05	0.000E+00	3.461E-01
51	0.000E+00	0.000E+00	1.883E-04	0.000E+00	8.211E-06	7.296E-06	1.145E-06	1.581E-05	0.000E+00	2.950E-01
52	0.000E+00	0.000E+00	1.250E-04	0.000E+00	5.962E-06	4.702E-06	7.614E-07	1.050E-05	0.000E+00	2.445E-01
53	0.000E+00	0.000E+00	9.077E-05	0.000E+00	4.443E-06	3.355E-06	5.528E-07	7.622E-06	0.000E+00	2.025E-01
54	0.000E+00	0.000E+00	7.295E-05	0.000E+00	5.948E-06	2.954E-06	4.580E-07	6.130E-06	0.000E+00	1.706E-01
55	0.000E+00	0.000E+00	7.876E-05	0.000E+00	5.091E-06	3.177E-06	4.880E-07	6.616E-06	0.000E+00	1.816E-01
56	0.000E+00	0.000E+00	8.555E-05	0.000E+00	5.686E-06	3.482E-06	5.312E-07	7.187E-06	0.000E+00	1.892E-01
57	0.000E+00	0.000E+00	9.047E-05	0.000E+00	4.594E-06	3.318E-06	5.515E-07	7.597E-06	0.000E+00	1.888E-01
58	0.000E+00	0.000E+00	1.133E-04	0.000E+00	6.012E-06	4.196E-06	6.923E-07	9.515E-06	0.000E+00	2.140E-01
59	0.000E+00	0.000E+00	1.403E-04	0.000E+00	1.125E-05	5.580E-06	8.792E-07	1.179E-05	0.000E+00	2.380E-01
60	0.000E+00	0.000E+00	1.680E-04	0.000E+00	1.360E-05	6.525E-06	1.052E-06	1.412E-05	0.000E+00	2.545E-01
61	0.000E+00	0.000E+00	2.032E-04	0.000E+00	1.588E-05	7.773E-06	1.268E-06	1.707E-05	0.000E+00	2.647E-01
62	0.000E+00	0.000E+00	2.398E-04	0.000E+00	1.870E-05	9.119E-06	1.496E-06	2.015E-05	0.000E+00	2.785E-01
63	0.000E+00	0.000E+00	2.756E-04	0.000E+00	2.297E-05	1.056E-05	1.727E-06	2.316E-05	0.000E+00	2.988E-01
64	0.000E+00	0.000E+00	2.535E-04	0.000E+00	2.122E-05	9.962E-06	1.591E-06	2.130E-05	0.000E+00	2.776E-01
65	0.000E+00	0.000E+00	2.992E-04	0.000E+00	2.245E-05	1.128E-05	1.861E-06	2.514E-05	0.000E+00	2.999E-01
66	0.000E+00	0.000E+00	3.725E-04	0.000E+00	2.401E-05	1.392E-05	2.298E-06	3.129E-05	0.000E+00	3.263E-01
67	0.000E+00	0.000E+00	5.089E-04	0.000E+00	2.447E-05	1.887E-05	3.098E-06	4.273E-05	0.000E+00	3.674E-01
68	0.000E+00	0.000E+00	5.447E-04	0.000E+00	2.377E-05	2.046E-05	3.306E-06	4.573E-05	0.000E+00	4.083E-01
69	0.000E+00	0.000E+00	5.448E-04	0.000E+00	2.506E-05	2.022E-05	3.311E-06	4.574E-05	0.000E+00	4.505E-01
70	0.000E+00	0.000E+00	5.318E-04	0.000E+00	2.529E-05	1.982E-05	3.237E-06	4.466E-05	0.000E+00	4.778E-01
71	0.000E+00	0.000E+00	3.443E-04	0.000E+00	1.964E-05	1.288E-05	2.112E-06	2.892E-05	0.000E+00	3.984E-01
72	0.000E+00	0.000E+00	2.507E-04	0.000E+00	1.680E-05	9.499E-06	1.550E-06	2.106E-05	0.000E+00	3.294E-01
73	0.000E+00	0.000E+00	1.905E-04	0.000E+00	1.072E-05	7.250E-06	1.169E-06	1.600E-05	0.000E+00	2.760E-01
74	0.000E+00	0.000E+00	1.578E-04	0.000E+00	1.269E-05	6.054E-06	9.868E-07	1.326E-05	0.000E+00	2.394E-01
75	0.000E+00	0.000E+00	1.458E-04	0.000E+00	9.166E-06	5.894E-06	9.024E-07	1.225E-05	0.000E+00	2.440E-01
76	0.000E+00	0.000E+00	1.315E-04	0.000E+00	6.684E-06	4.899E-06	8.021E-07	1.104E-05	0.000E+00	2.555E-01
77	0.000E+00	0.000E+00	1.135E-04	0.000E+00	5.730E-06	4.262E-06	6.929E-07	9.534E-06	0.000E+00	2.577E-01
78	0.000E+00	0.000E+00	9.699E-05	0.000E+00	6.891E-06	4.009E-06	6.049E-07	8.148E-06	0.000E+00	2.520E-01
79	0.000E+00	0.000E+00	1.114E-04	0.000E+00	9.381E-06	4.574E-06	7.012E-07	9.359E-06	0.000E+00	2.866E-01
80	0.000E+00	0.000E+00	1.242E-04	0.000E+00	6.032E-06	4.689E-06	7.568E-07	1.042E-05	0.000E+00	3.304E-01
81	0.000E+00	0.000E+00	1.454E-04	0.000E+00	6.301E-06	5.437E-06	8.823E-07	1.221E-05	0.000E+00	3.905E-01
82	0.000E+00	0.000E+00	1.709E-04	0.000E+00	6.420E-06	6.264E-06	1.031E-06	1.435E-05	0.000E+00	4.736E-01
83	0.000E+00	0.000E+00	1.882E-04	0.000E+00	6.819E-06	6.871E-06	1.134E-06	1.580E-05	0.000E+00	5.906E-01
84	0.000E+00	0.000E+00	2.042E-04	0.000E+00	7.231E-06	7.439E-06	1.229E-06	1.714E-05	0.000E+00	7.943E-01
85	0.000E+00	0.000E+00	2.173E-04	0.000E+00	7.557E-06	7.924E-06	1.308E-06	1.824E-05	0.000E+00	1.268E+00
86	0.000E+00	0.000E+00	2.107E-04	0.000E+00	7.785E-06	7.714E-06	1.271E-06	1.769E-05	0.000E+00	2.898E+00
87	0.000E+00	0.000E+00	1.109E-04	0.000E+00	5.866E-06	4.094E-06	6.773E-07	9.311E-06	0.000E+00	3.314E+00
88	0.000E+00	0.000E+00	7.375E-05	0.000E+00	4.677E-06	2.753E-06	4.544E-07	6.195E-06	0.000E+00	2.082E+00
89	0.000E+00	0.000E+00	5.363E-05	0.000E+00	3.813E-06	2.025E-06	3.327E-07	4.506E-06	0.000E+00	7.771E-01
90	0.000E+00	0.000E+00	5.029E-05	0.000E+00	3.845E-06	1.917E-06	3.134E-07	4.226E-06	0.000E+00	8.986E-01
91	0.000E+00	0.000E+00	2.422E-04	0.000E+00	1.055E-05	8.769E-06	1.467E-06	2.034E-05	0.000E+00	3.187E-01
92	0.000E+00	0.000E+00	2.345E-04	0.000E+00	1.042E-05	8.492E-06	1.422E-06	1.969E-05	0.000E+00	3.061E-01
93	0.000E+00	0.000E+00	2.256E-04	0.000E+00	1.039E-05	8.180E-06	1.369E-06	1.894E-05	0.000E+00	2.908E-01
94	0.000E+00	0.000E+00	2.162E-04	0.000E+00	1.064E-05	7.900E-06	1.316E-06	1.815E-05	0.000E+00	2.753E-01
95	0.000E+00	0.000E+00	2.071E-04	0.000E+00	1.064E-05	7.571E-06	1.263E-06	1.739E-05	0.000E+00	2.619E-01
96	0.000E+00	0.000E+00	1.988E-04	0.000E+00	1.043E-05	7.249E-06	1.213E-06	1.669E-05	0.000E+00	2.499E-01
97	0.000E+00	0.000E+00	1.909E-04	0.000E+00	1.082E-05	7.030E-06	1.169E-06	1.603E-05	0.000E+00	2.385E-01
98	0.000E+00	0.000E+00	1.797E-04	0.000E+00	9.956E-06	6.528E-06	1.099E-06	1.509E-05	0.000E+00	2.277E-01
99	0.000E+00	0.000E+00	1.700E-04	0.000E+00	1.079E-05	6.325E-06	1.048E-06	1.428E-05	0.000E+00	2.188E-01
100	0.000E+00	0.000E+00	1.592E-04	0.000E+00	1.040E-05	5.920E-06	9.824E-07	1.338E-05	0.000E+00	2.110E-01
101	0.000E+00	0.000E+00	1.501E-04	0.000E+00	1.136E-05	5.769E-06	9.355E-07	1.261E-05	0.000E+00	2.051E-01
102	0.000E+00	0.000E+00	1.424E-04	0.000E+00	1.328E-05	5.536E-06	8.996E-07	1.197E-05	0.000E+00	2.007E-01
103	0.000E+00	0.000E+00	2.767E-04	0.000E+00	1.189E-05	1.003E-05	1.675E-06	2.323E-05	0.000E+00	3.327E-01
104	0.000E+00	0.000E+00	2.656E-04	0.000E+00	1.186E-05	9.660E-06	1.611E-06	2.230E-05	0.000E+00	3.173E-01
105	0.000E+00	0.000E+00	2.526E-04	0.000E+00	1.183E-05	9.202E-06	1.534E-06	2.121E-05	0.000E+00	3.003E-01
106	0.000E+00	0.000E+00	2.396E-04	0.000E+00	1.223E-05	8.804E-06	1.461E-06	2.012E-05	0.000E+00	2.839E-01
107	0.000E+00	0.000E+00	2.280E-04	0.000E+00	1.211E-05	8.376E-06	1.392E-06	1.914E-05	0.000E+00	2.703E-01
108	0.000E+00	0.000E+00	2.167E-04	0.000E+00	1.205E-05	7.976E-06	1.326E-06	1.820E-05	0.000E+00	2.583E-01
109	0.000E+00	0.000E+00	2.049E-04	0.000E+00	1.228E-05	7.600E-06	1.259E-06	1.721E-05	0.000E+00	2.465E-01
110	0.000E+00	0.000								

126	0.000E+00	0.000E+00	1.531E-04	0.000E+00	1.376E-05	5.938E-06	9.649E-07	1.287E-05	0.000E+00	2.166E-01
127	0.000E+00	0.000E+00	3.882E-04	0.000E+00	1.612E-05	1.425E-05	2.349E-06	3.259E-05	0.000E+00	3.590E-01
128	0.000E+00	0.000E+00	3.620E-04	0.000E+00	1.615E-05	1.333E-05	2.197E-06	3.040E-05	0.000E+00	3.402E-01
129	0.000E+00	0.000E+00	3.288E-04	0.000E+00	1.663E-05	1.218E-05	2.005E-06	2.761E-05	0.000E+00	3.212E-01
130	0.000E+00	0.000E+00	3.040E-04	0.000E+00	2.045E-05	1.142E-05	1.880E-06	2.554E-05	0.000E+00	3.046E-01
131	0.000E+00	0.000E+00	2.781E-04	0.000E+00	2.019E-05	1.048E-05	1.727E-06	2.337E-05	0.000E+00	2.899E-01
132	0.000E+00	0.000E+00	2.541E-04	0.000E+00	1.958E-05	9.898E-06	1.586E-06	2.135E-05	0.000E+00	2.769E-01
133	0.000E+00	0.000E+00	2.311E-04	0.000E+00	1.621E-05	8.805E-06	1.433E-06	1.941E-05	0.000E+00	2.628E-01
134	0.000E+00	0.000E+00	2.151E-04	0.000E+00	1.791E-05	8.262E-06	1.348E-06	1.808E-05	0.000E+00	2.520E-01
135	0.000E+00	0.000E+00	1.999E-04	0.000E+00	1.723E-05	7.701E-06	1.256E-06	1.680E-05	0.000E+00	2.427E-01
136	0.000E+00	0.000E+00	1.865E-04	0.000E+00	1.584E-05	7.174E-06	1.171E-06	1.568E-05	0.000E+00	2.358E-01
137	0.000E+00	0.000E+00	1.728E-04	0.000E+00	1.495E-05	6.665E-06	1.086E-06	1.452E-05	0.000E+00	2.307E-01
138	0.000E+00	0.000E+00	1.603E-04	0.000E+00	1.412E-05	6.199E-06	1.009E-06	1.347E-05	0.000E+00	2.262E-01
139	0.000E+00	0.000E+00	4.941E-04	0.000E+00	2.260E-05	1.865E-05	3.005E-06	4.149E-05	0.000E+00	3.738E-01
140	0.000E+00	0.000E+00	4.542E-04	0.000E+00	2.315E-05	1.689E-05	2.771E-06	3.814E-05	0.000E+00	3.531E-01
141	0.000E+00	0.000E+00	3.894E-04	0.000E+00	2.320E-05	1.454E-05	2.392E-06	3.270E-05	0.000E+00	3.326E-01
142	0.000E+00	0.000E+00	3.359E-04	0.000E+00	2.287E-05	1.257E-05	2.078E-06	2.822E-05	0.000E+00	3.138E-01
143	0.000E+00	0.000E+00	2.987E-04	0.000E+00	2.205E-05	1.125E-05	1.857E-06	2.510E-05	0.000E+00	2.992E-01
144	0.000E+00	0.000E+00	2.692E-04	0.000E+00	2.135E-05	1.025E-05	1.681E-06	2.262E-05	0.000E+00	2.859E-01
145	0.000E+00	0.000E+00	2.456E-04	0.000E+00	2.003E-05	9.404E-06	1.537E-06	2.064E-05	0.000E+00	2.728E-01
146	0.000E+00	0.000E+00	2.271E-04	0.000E+00	1.900E-05	8.708E-06	1.423E-06	1.908E-05	0.000E+00	2.615E-01
147	0.000E+00	0.000E+00	2.107E-04	0.000E+00	1.760E-05	8.091E-06	1.321E-06	1.770E-05	0.000E+00	2.531E-01
148	0.000E+00	0.000E+00	1.955E-04	0.000E+00	1.634E-05	7.505E-06	1.225E-06	1.643E-05	0.000E+00	2.468E-01
149	0.000E+00	0.000E+00	1.818E-04	0.000E+00	1.527E-05	6.979E-06	1.140E-06	1.528E-05	0.000E+00	2.414E-01
150	0.000E+00	0.000E+00	1.684E-04	0.000E+00	1.419E-05	6.479E-06	1.056E-06	1.415E-05	0.000E+00	2.368E-01
151	0.000E+00	0.000E+00	2.593E-04	0.000E+00	2.167E-05	9.920E-06	1.625E-06	2.179E-05	0.000E+00	2.838E-01
152	0.000E+00	0.000E+00	2.408E-04	0.000E+00	1.960E-05	9.212E-06	1.507E-06	2.024E-05	0.000E+00	2.734E-01
153	0.000E+00	0.000E+00	2.243E-04	0.000E+00	1.798E-05	8.557E-06	1.402E-06	1.885E-05	0.000E+00	2.654E-01
154	0.000E+00	0.000E+00	2.052E-04	0.000E+00	1.732E-05	7.935E-06	1.288E-06	1.725E-05	0.000E+00	2.594E-01
155	0.000E+00	0.000E+00	1.945E-04	0.000E+00	1.560E-05	7.426E-06	1.216E-06	1.634E-05	0.000E+00	2.533E-01
156	0.000E+00	0.000E+00	1.781E-04	0.000E+00	1.458E-05	6.845E-06	1.115E-06	1.496E-05	0.000E+00	2.487E-01
157	0.000E+00	0.000E+00	1.648E-04	0.000E+00	1.161E-05	5.202E-06	8.471E-07	1.133E-05	0.000E+00	2.167E-01
158	0.000E+00	0.000E+00	1.383E-04	0.000E+00	1.111E-05	5.319E-06	8.651E-07	1.163E-05	0.000E+00	2.146E-01
159	0.000E+00	0.000E+00	1.354E-04	0.000E+00	6.814E-06	4.980E-06	8.251E-07	1.137E-05	0.000E+00	2.232E-01
160	0.000E+00	0.000E+00	1.318E-04	0.000E+00	6.103E-06	4.758E-06	7.998E-07	1.107E-05	0.000E+00	2.253E-01
161	0.000E+00	0.000E+00	1.252E-04	0.000E+00	5.791E-06	4.521E-06	7.599E-07	1.051E-05	0.000E+00	2.142E-01
162	0.000E+00	0.000E+00	1.192E-04	0.000E+00	5.678E-06	4.304E-06	7.239E-07	1.000E-05	0.000E+00	1.976E-01
163	0.000E+00	0.000E+00	1.145E-04	0.000E+00	5.702E-06	4.141E-06	6.967E-07	9.612E-06	0.000E+00	1.784E-01
164	0.000E+00	0.000E+00	1.066E-04	0.000E+00	5.717E-06	3.863E-06	6.507E-07	8.951E-06	0.000E+00	1.634E-01
165	0.000E+00	0.000E+00	9.593E-05	0.000E+00	5.707E-06	3.495E-06	5.885E-07	8.057E-06	0.000E+00	1.536E-01
166	0.000E+00	0.000E+00	8.463E-05	0.000E+00	5.410E-06	3.097E-06	5.211E-07	7.109E-06	0.000E+00	1.484E-01
167	0.000E+00	0.000E+00	7.567E-05	0.000E+00	4.856E-06	2.769E-06	4.660E-07	6.356E-06	0.000E+00	1.475E-01
168	0.000E+00	0.000E+00	1.695E-04	0.000E+00	8.359E-06	6.232E-06	1.032E-06	1.423E-05	0.000E+00	2.548E-01
169	0.000E+00	0.000E+00	1.697E-04	0.000E+00	7.852E-06	6.137E-06	1.030E-06	1.425E-05	0.000E+00	2.632E-01
170	0.000E+00	0.000E+00	1.624E-04	0.000E+00	7.314E-06	5.863E-06	9.844E-07	1.363E-05	0.000E+00	2.574E-01
171	0.000E+00	0.000E+00	1.524E-04	0.000E+00	7.140E-06	5.507E-06	9.252E-07	1.279E-05	0.000E+00	2.354E-01
172	0.000E+00	0.000E+00	1.432E-04	0.000E+00	7.104E-06	5.183E-06	8.715E-07	1.203E-05	0.000E+00	2.115E-01
173	0.000E+00	0.000E+00	1.336E-04	0.000E+00	7.181E-06	4.853E-06	8.160E-07	1.122E-05	0.000E+00	1.891E-01
174	0.000E+00	0.000E+00	1.190E-04	0.000E+00	7.375E-06	4.370E-06	7.318E-07	9.995E-06	0.000E+00	1.753E-01
175	0.000E+00	0.000E+00	1.035E-04	0.000E+00	7.383E-06	3.872E-06	6.416E-07	8.693E-06	0.000E+00	1.670E-01
176	0.000E+00	0.000E+00	8.960E-05	0.000E+00	6.079E-06	3.310E-06	5.537E-07	7.527E-06	0.000E+00	1.640E-01
177	0.000E+00	0.000E+00	7.946E-05	0.000E+00	5.284E-06	2.934E-06	4.905E-07	6.675E-06	0.000E+00	1.602E-01
178	0.000E+00	0.000E+00	2.272E-04	0.000E+00	1.422E-05	8.955E-06	1.404E-06	1.298E-05	0.000E+00	3.129E-01
179	0.000E+00	0.000E+00	2.204E-04	0.000E+00	9.831E-06	8.039E-06	1.337E-06	1.851E-05	0.000E+00	3.087E-01
180	0.000E+00	0.000E+00	2.065E-04	0.000E+00	9.273E-06	7.467E-06	1.252E-06	1.734E-05	0.000E+00	2.880E-01
181	0.000E+00	0.000E+00	1.887E-04	0.000E+00	9.324E-06	6.859E-06	1.149E-06	1.585E-05	0.000E+00	2.543E-01
182	0.000E+00	0.000E+00	1.740E-04	0.000E+00	1.035E-05	6.499E-06	1.069E-06	1.461E-05	0.000E+00	2.260E-01
183	0.000E+00	0.000E+00	1.523E-04	0.000E+00	9.369E-06	5.608E-06	9.363E-07	1.279E-05	0.000E+00	2.042E-01
184	0.000E+00	0.000E+00	1.330E-04	0.000E+00	1.224E-05	5.185E-06	8.400E-07	1.118E-05	0.000E+00	1.918E-01
185	0.000E+00	0.000E+00	1.116E-04	0.000E+00	9.729E-06	4.418E-06	7.030E-07	9.383E-06	0.000E+00	1.841E-01
186	0.000E+00	0.000E+00	9.556E-05	0.000E+00	7.149E-06	3.629E-06	5.946E-07	8.029E-06	0.000E+00	1.801E-01
187	0.000E+00	0.000E+00	8.426E-05	0.000E+00	5.486E-06	3.130E-06	5.197E-07	7.078E-06	0.000E+00	1.711E-01
188	0.000E+00	0.000E+00	3.194E-04	0.000E+00	1.896E-05	1.202E-05	1.963E-06	2.682E-05	0.000E+00	3.803E-01
189	0.000E+00	0.000E+00	3.070E-04	0.000E+00	1.296E-05	1.122E-05	1.858E-06	2.577E-05	0.000E+00	3.526E-01
190	0.000E+00	0.000E+00	2.766E-04	0.000E+00	1.276E-05	1.012E-05	1.680E-06	2.323E-05	0.000E+00	3.140E-01
191	0.000E+00	0.000E+00	2.399E-04	0.000E+00	1.352E-05	8.920E-06	1.470E-06	2.015E-05	0.000E+00	2.751E-01
192	0.000E+00	0.000E+00	2.042E-04	0.000E+00	1.318E-05	7.657E-06	1.259E-06	1.715E-05	0.000E+00	2.448E-01
193	0.000E+00	0.000E+00	1.713E-04	0.000E+00	1.346E-05	6.631E-06	1.070E-06	1.439E-05	0.000E+00	2.223E-01
194	0.000E+00	0.000E+00	1.451E-04	0.000E+00	1.318E-05	5.631E-06	9.152E-07	1.220E-05	0.000E+00	2.102E-01
195	0.000E+00	0.000E+00	1.204E-04	0.000E+00	1.010E-05	4.741E-06	7.561E-07	1.012E-05	0.000E+00	2.042E-01
196	0.000E+00	0.000E+00	1.045E-04	0.000E+00	8.521E-06	4.259E-06	6.562E-07	8.779E-06	0.000E+00	1.960E-01
197	0.000E+00	0.000E+00	8.872E-05	0.000E+00	5.551E-06	3.328E-06	5.465E-07	7.452E-06	0.000E+00	1.793E-01
198	0.000E+00	0.000E+00	5.195E-04	0.000E+00	2.456E-05	1.931E-05	3.161E-06	4.362E-05	0.000E+00	4.455E-01
199	0.000E+00	0.000E+00	5.093E-04	0.000E+00	2.020E-05	1.922E-05	3.082E-06	4.275E-05	0.000E+00	3.932E-01
200	0.000E+00	0.000E+00	4.215E-04	0.000E+00	2.295E-05	1.571E-05	2.579E-06	3.540E-05	0.000E+00	3.427E-01
201	0.000E+00	0.000E+00	2.363E-04	0.000E+00	1.992E-05	9.044E-06	1.482E-06	1.986E-05	0.000E+00	2.666E-01
202	0.000E+00	0.000E+00	1.623E-04	0.000E+00	1.374E-05	6.251E-06	1.018E-06	1.364E-05	0.000E+00	2.350E-01
203	0.000E+00	0.000E+00	1.336E-04	0.000E+00	1.182E-05	5.218E-06	8.415E-07	1.123E-05	0.000E+00	2.262E-01
204	0.000E+00	0.000E+00	1.097E-04	0.000E+00	6.713E-06	4.134E-06	6.754E-07	9.217E-06	0.000E+00	2.070E-01
205	0.000E+00	0.000E+00	8.935E-05	0.000E+00	5.002E-06	3.318E-06	5.473E-07	7.504E-06	0.000E+00	1.831E-01
206	0.000E+00	0.000E+00	8.626E-05	0.000E+00	4.582E-06	3.200E-06	5.271E-07	7.243E-06	0.000E+00	1.852E-01
207	0.000E+00	0.000E+00	8.062							

223	0.000E+00	0.000E+00	3.876E-05	0.000E+00	1.939E-06	1.403E-06	2.360E-07	3.255E-06	0.000E+00	8.205E-02
224	0.000E+00	0.000E+00	3.861E-05	0.000E+00	2.119E-06	1.403E-06	2.360E-07	3.243E-06	0.000E+00	8.017E-02
225	0.000E+00	0.000E+00	3.765E-05	0.000E+00	2.332E-06	1.376E-06	2.315E-07	3.163E-06	0.000E+00	8.064E-02
226	0.000E+00	0.000E+00	3.363E-05	0.000E+00	2.310E-06	1.309E-06	2.196E-07	2.993E-06	0.000E+00	7.827E-02
227	0.000E+00	0.000E+00	7.907E-06	0.000E+00	7.162E-07	3.072E-07	4.987E-08	6.647E-07	0.000E+00	2.615E-02
228	0.000E+00	0.000E+00	9.364E-06	0.000E+00	7.883E-07	3.663E-07	5.879E-08	7.869E-07	0.000E+00	3.064E-02
229	0.000E+00	0.000E+00	1.105E-05	0.000E+00	8.707E-07	4.250E-07	6.904E-08	9.288E-07	0.000E+00	3.386E-02
230	0.000E+00	0.000E+00	1.324E-05	0.000E+00	9.912E-07	5.029E-07	8.240E-08	1.113E-06	0.000E+00	4.394E-02
231	0.000E+00	0.000E+00	1.607E-05	0.000E+00	1.129E-06	6.068E-07	9.960E-08	1.350E-06	0.000E+00	5.325E-02
232	0.000E+00	0.000E+00	2.006E-05	0.000E+00	1.304E-06	7.477E-07	1.237E-07	1.685E-06	0.000E+00	7.161E-02
233	0.000E+00	0.000E+00	2.620E-05	0.000E+00	1.594E-06	9.666E-07	1.610E-07	2.201E-06	0.000E+00	8.948E-02
234	0.000E+00	0.000E+00	3.478E-05	0.000E+00	1.989E-06	1.274E-06	2.131E-07	2.921E-06	0.000E+00	1.052E-01
235	0.000E+00	0.000E+00	4.387E-05	0.000E+00	2.452E-06	1.599E-06	2.684E-07	3.684E-06	0.000E+00	1.204E-01
236	0.000E+00	0.000E+00	5.233E-05	0.000E+00	2.823E-06	1.900E-06	3.196E-07	4.395E-06	0.000E+00	1.230E-01
237	0.000E+00	0.000E+00	5.745E-05	0.000E+00	2.998E-06	2.082E-06	3.504E-07	4.825E-06	0.000E+00	1.231E-01
238	0.000E+00	0.000E+00	5.846E-05	0.000E+00	3.073E-06	2.114E-06	3.566E-07	4.909E-06	0.000E+00	1.186E-01
239	0.000E+00	0.000E+00	5.427E-05	0.000E+00	2.938E-06	1.961E-06	3.314E-07	4.557E-06	0.000E+00	1.084E-01
240	0.000E+00	0.000E+00	5.001E-05	0.000E+00	2.539E-06	1.807E-06	3.046E-07	4.199E-06	0.000E+00	1.103E-01
241	0.000E+00	0.000E+00	4.818E-05	0.000E+00	2.326E-06	1.742E-06	2.929E-07	4.045E-06	0.000E+00	1.009E-01
242	0.000E+00	0.000E+00	4.785E-05	0.000E+00	2.487E-06	1.735E-06	2.918E-07	4.018E-06	0.000E+00	9.553E-02
243	0.000E+00	0.000E+00	4.580E-05	0.000E+00	2.723E-06	1.669E-06	2.810E-07	3.847E-06	0.000E+00	9.242E-02
244	0.000E+00	0.000E+00	4.264E-05	0.000E+00	2.765E-06	1.564E-06	2.628E-07	3.582E-06	0.000E+00	9.037E-02
245	0.000E+00	0.000E+00	3.809E-05	0.000E+00	2.480E-06	1.401E-06	2.348E-07	3.200E-06	0.000E+00	8.523E-02
246	0.000E+00	0.000E+00	7.290E-06	0.000E+00	6.679E-07	2.871E-07	4.605E-08	6.128E-07	0.000E+00	2.450E-02
247	0.000E+00	0.000E+00	8.968E-06	0.000E+00	8.314E-07	3.498E-07	5.666E-08	7.338E-07	0.000E+00	3.079E-02
248	0.000E+00	0.000E+00	1.094E-05	0.000E+00	9.308E-07	4.297E-07	6.877E-08	9.198E-07	0.000E+00	3.683E-02
249	0.000E+00	0.000E+00	1.342E-05	0.000E+00	1.039E-06	5.143E-07	8.371E-08	1.128E-06	0.000E+00	4.313E-02
250	0.000E+00	0.000E+00	1.657E-05	0.000E+00	1.216E-06	6.299E-07	1.030E-07	1.392E-06	0.000E+00	5.625E-02
251	0.000E+00	0.000E+00	2.093E-05	0.000E+00	1.410E-06	7.840E-07	1.294E-07	1.758E-06	0.000E+00	7.369E-02
252	0.000E+00	0.000E+00	2.752E-05	0.000E+00	1.691E-06	1.019E-06	1.693E-07	2.312E-06	0.000E+00	1.001E-01
253	0.000E+00	0.000E+00	3.805E-05	0.000E+00	2.164E-06	1.395E-06	2.330E-07	3.195E-06	0.000E+00	1.242E-01
254	0.000E+00	0.000E+00	5.094E-05	0.000E+00	2.770E-06	1.857E-06	3.113E-07	4.278E-06	0.000E+00	1.430E-01
255	0.000E+00	0.000E+00	6.367E-05	0.000E+00	3.384E-06	2.309E-06	3.886E-07	5.347E-06	0.000E+00	1.489E-01
256	0.000E+00	0.000E+00	7.187E-05	0.000E+00	3.699E-06	2.602E-06	4.380E-07	6.035E-06	0.000E+00	1.449E-01
257	0.000E+00	0.000E+00	7.197E-05	0.000E+00	3.770E-06	2.601E-06	4.389E-07	6.043E-06	0.000E+00	1.367E-01
258	0.000E+00	0.000E+00	6.752E-05	0.000E+00	3.531E-06	2.439E-06	4.117E-07	5.670E-06	0.000E+00	1.339E-01
259	0.000E+00	0.000E+00	6.308E-05	0.000E+00	3.040E-06	2.279E-06	3.834E-07	5.297E-06	0.000E+00	1.311E-01
260	0.000E+00	0.000E+00	6.180E-05	0.000E+00	3.018E-06	2.255E-06	3.758E-07	5.189E-06	0.000E+00	1.178E-01
261	0.000E+00	0.000E+00	5.802E-05	0.000E+00	3.244E-06	2.107E-06	3.549E-07	4.872E-06	0.000E+00	1.096E-01
262	0.000E+00	0.000E+00	5.245E-05	0.000E+00	3.364E-06	1.919E-06	3.230E-07	4.405E-06	0.000E+00	1.053E-01
263	0.000E+00	0.000E+00	4.646E-05	0.000E+00	3.008E-06	1.707E-06	2.863E-07	3.903E-06	0.000E+00	1.002E-01
264	0.000E+00	0.000E+00	3.930E-05	0.000E+00	2.466E-06	1.444E-06	2.419E-07	3.301E-06	0.000E+00	9.167E-02
265	0.000E+00	0.000E+00	7.312E-06	0.000E+00	7.163E-07	2.959E-07	4.648E-08	6.148E-07	0.000E+00	2.656E-02
266	0.000E+00	0.000E+00	8.517E-06	0.000E+00	7.814E-07	3.392E-07	5.384E-08	7.159E-07	0.000E+00	2.991E-02
267	0.000E+00	0.000E+00	1.044E-05	0.000E+00	9.559E-07	4.075E-07	6.589E-08	8.773E-07	0.000E+00	3.741E-02
268	0.000E+00	0.000E+00	1.304E-05	0.000E+00	1.112E-06	5.133E-07	8.198E-08	1.096E-06	0.000E+00	4.573E-02
269	0.000E+00	0.000E+00	1.672E-05	0.000E+00	1.281E-06	6.396E-07	1.042E-07	1.405E-06	0.000E+00	5.784E-02
270	0.000E+00	0.000E+00	2.162E-05	0.000E+00	1.497E-06	8.170E-07	1.339E-07	1.816E-06	0.000E+00	7.618E-02
271	0.000E+00	0.000E+00	2.918E-05	0.000E+00	1.842E-06	1.086E-06	1.798E-07	2.451E-06	0.000E+00	1.112E-01
272	0.000E+00	0.000E+00	4.133E-05	0.000E+00	2.339E-06	1.520E-06	2.531E-07	3.471E-06	0.000E+00	1.475E-01
273	0.000E+00	0.000E+00	6.029E-05	0.000E+00	3.226E-06	2.211E-06	3.683E-07	5.063E-06	0.000E+00	1.730E-01
274	0.000E+00	0.000E+00	8.098E-05	0.000E+00	3.265E-06	3.098E-06	5.003E-07	6.802E-06	0.000E+00	1.854E-01
275	0.000E+00	0.000E+00	9.395E-05	0.000E+00	5.045E-06	3.486E-06	5.744E-07	7.890E-06	0.000E+00	1.748E-01
276	0.000E+00	0.000E+00	9.369E-05	0.000E+00	4.818E-06	3.385E-06	5.709E-07	7.867E-06	0.000E+00	1.664E-01
277	0.000E+00	0.000E+00	8.871E-05	0.000E+00	4.305E-06	3.202E-06	5.393E-07	7.449E-06	0.000E+00	1.702E-01
278	0.000E+00	0.000E+00	8.350E-05	0.000E+00	3.957E-06	3.016E-06	5.072E-07	7.011E-06	0.000E+00	1.546E-01
279	0.000E+00	0.000E+00	7.859E-05	0.000E+00	4.102E-06	2.847E-06	4.793E-07	6.600E-06	0.000E+00	1.359E-01
280	0.000E+00	0.000E+00	6.803E-05	0.000E+00	4.209E-06	2.841E-06	4.182E-07	5.714E-06	0.000E+00	1.240E-01
281	0.000E+00	0.000E+00	5.802E-05	0.000E+00	3.733E-06	2.127E-06	3.574E-07	4.873E-06	0.000E+00	1.202E-01
282	0.000E+00	0.000E+00	4.855E-05	0.000E+00	2.987E-06	1.774E-06	2.973E-07	4.061E-06	0.000E+00	1.107E-01
283	0.000E+00	0.000E+00	3.858E-05	0.000E+00	2.329E-06	1.415E-06	2.369E-07	3.240E-06	0.000E+00	9.651E-02
284	0.000E+00	0.000E+00	7.467E-06	0.000E+00	7.409E-07	2.964E-07	4.746E-08	6.278E-07	0.000E+00	2.349E-02
285	0.000E+00	0.000E+00	8.705E-06	0.000E+00	8.691E-07	3.510E-07	5.540E-08	7.319E-07	0.000E+00	3.090E-02
286	0.000E+00	0.000E+00	1.035E-05	0.000E+00	9.432E-07	4.147E-07	6.544E-08	8.703E-07	0.000E+00	3.724E-02
287	0.000E+00	0.000E+00	1.284E-05	0.000E+00	1.106E-06	4.995E-07	8.070E-08	1.079E-06	0.000E+00	4.743E-02
288	0.000E+00	0.000E+00	1.630E-05	0.000E+00	1.331E-06	6.383E-07	1.021E-07	1.369E-06	0.000E+00	5.970E-02
289	0.000E+00	0.000E+00	2.174E-05	0.000E+00	1.604E-06	8.260E-07	1.352E-07	1.827E-06	0.000E+00	8.209E-02
290	0.000E+00	0.000E+00	3.031E-05	0.000E+00	1.988E-06	1.136E-06	1.871E-07	2.546E-06	0.000E+00	1.187E-01
291	0.000E+00	0.000E+00	4.532E-05	0.000E+00	2.556E-06	1.665E-06	2.775E-07	3.806E-06	0.000E+00	1.794E-01
292	0.000E+00	0.000E+00	7.714E-05	0.000E+00	7.047E-06	2.999E-06	4.868E-07	6.484E-06	0.000E+00	2.159E-01
293	0.000E+00	0.000E+00	1.068E-04	0.000E+00	5.283E-06	3.908E-06	6.505E-07	8.970E-06	0.000E+00	2.364E-01
294	0.000E+00	0.000E+00	6.160E-05	0.000E+00	3.745E-06	2.254E-06	3.784E-07	5.174E-06	0.000E+00	1.358E-01
295	0.000E+00	0.000E+00	4.746E-05	0.000E+00	2.788E-06	1.736E-06	2.911E-07	3.986E-06	0.000E+00	1.154E-01
296	0.000E+00	0.000E+00	3.548E-05	0.000E+00	2.086E-06	1.297E-06	2.176E-07	2.980E-06	0.000E+00	9.029E-02
297	0.000E+00	0.000E+00	6.757E-06	0.000E+00	7.019E-07	2.645E-07	4.310E-08	5.682E-07	0.000E+00	2.096E-02
298	0.000E+00	0.000E+00	8.177E-06	0.000E+00	8.551E-07	3.246E-07	5.218E-08	6.876E-07	0.000E+00	2.620E-02
299	0.000E+00	0.000E+00	9.976E-06	0.000E+00	1.050E-06	4.008E-07	6.374E-08	8.388E-07	0.000E+00	3.583E-02
300	0.000E+00	0.000E+00	1.220E-05	0.000E+00	1.159E-06	4.882E-07	7.735E-08	1.026E-06	0.000E+00	4.698E-02
301	0.000E+00	0.000E+00	1.578E-05	0.000E+00	1.336E-06	6.122E-07	9.904E-08	1.326E-06	0.000E+00	6.375E-02
302	0.000E+00	0.000E+00	2.150E-05	0.000E+00	1.622E-06	8.275E-07	1.339E-07	1.806E-06	0.000E+00	8.530E-02
303	0.000E+00	0.000E+00	3.108E-05	0.000E+00	2.082E-06	1.165E-06	1.921E-07	2.6		

320	0.000E+00	0.000E+00	2.893E-05	0.000E+00	1.608E-06	1.052E-06	1.769E-07	2.430E-06	0.000E+00	8.254E-02
321	0.000E+00	0.000E+00	4.737E-06	0.000E+00	6.588E-07	2.037E-07	3.116E-08	3.987E-07	0.000E+00	2.218E-02
322	0.000E+00	0.000E+00	5.681E-06	0.000E+00	8.224E-07	2.517E-07	3.759E-08	4.782E-07	0.000E+00	2.735E-02
323	0.000E+00	0.000E+00	6.851E-06	0.000E+00	8.857E-07	2.983E-07	4.478E-08	5.764E-07	0.000E+00	3.250E-02
324	0.000E+00	0.000E+00	8.690E-06	0.000E+00	9.715E-07	3.588E-07	5.588E-08	7.308E-07	0.000E+00	3.948E-02
325	0.000E+00	0.000E+00	1.178E-05	0.000E+00	1.193E-06	4.699E-07	7.502E-08	9.906E-07	0.000E+00	5.477E-02
326	0.000E+00	0.000E+00	1.663E-05	0.000E+00	1.602E-06	6.529E-07	1.054E-07	1.398E-06	0.000E+00	8.874E-02
327	0.000E+00	0.000E+00	2.493E-05	0.000E+00	2.075E-06	9.544E-07	1.562E-07	2.095E-06	0.000E+00	1.550E-01
328	0.000E+00	0.000E+00	4.325E-05	0.000E+00	3.141E-06	1.634E-06	2.686E-07	3.634E-06	0.000E+00	3.502E-01
329	0.000E+00	0.000E+00	1.065E-04	0.000E+00	5.442E-06	3.916E-06	6.496E-07	8.944E-06	0.000E+00	1.024E+00
330	0.000E+00	0.000E+00	4.868E-05	0.000E+00	2.529E-06	1.766E-06	2.968E-07	4.087E-06	0.000E+00	1.270E-01
331	0.000E+00	0.000E+00	3.543E-05	0.000E+00	1.926E-06	1.284E-06	2.164E-07	2.975E-06	0.000E+00	9.301E-02
332	0.000E+00	0.000E+00	2.800E-05	0.000E+00	1.561E-06	1.014E-06	1.712E-07	2.351E-06	0.000E+00	6.892E-02
333	0.000E+00	0.000E+00	4.409E-06	0.000E+00	4.488E-07	1.921E-07	2.824E-08	3.707E-07	0.000E+00	1.470E-02
334	0.000E+00	0.000E+00	5.108E-06	0.000E+00	5.262E-07	2.035E-07	3.256E-08	4.295E-07	0.000E+00	1.973E-02
335	0.000E+00	0.000E+00	6.065E-06	0.000E+00	6.478E-07	2.448E-07	3.880E-08	5.100E-07	0.000E+00	2.751E-02
336	0.000E+00	0.000E+00	7.458E-06	0.000E+00	8.318E-07	3.049E-07	4.792E-08	6.272E-07	0.000E+00	3.814E-02
337	0.000E+00	0.000E+00	9.539E-06	0.000E+00	1.123E-06	3.993E-07	6.166E-08	8.023E-07	0.000E+00	5.241E-02
338	0.000E+00	0.000E+00	1.278E-05	0.000E+00	1.420E-06	5.256E-07	8.210E-08	1.074E-06	0.000E+00	7.478E-02
339	0.000E+00	0.000E+00	1.972E-05	0.000E+00	1.977E-06	7.823E-07	1.234E-07	1.658E-06	0.000E+00	1.309E-01
340	0.000E+00	0.000E+00	3.537E-05	0.000E+00	3.011E-06	1.367E-06	2.221E-07	2.973E-06	0.000E+00	3.583E-01
341	0.000E+00	0.000E+00	1.319E-04	0.000E+00	5.964E-06	4.930E-06	8.013E-07	1.107E-05	0.000E+00	2.552E-01
342	0.000E+00	0.000E+00	6.413E-05	0.000E+00	3.276E-06	2.328E-06	3.907E-07	5.385E-06	0.000E+00	1.558E-01
343	0.000E+00	0.000E+00	4.327E-05	0.000E+00	2.337E-06	1.566E-06	2.642E-07	3.634E-06	0.000E+00	1.045E-01
344	0.000E+00	0.000E+00	3.230E-05	0.000E+00	1.793E-06	1.169E-06	1.975E-07	2.713E-06	0.000E+00	7.842E-02
345	0.000E+00	0.000E+00	2.515E-05	0.000E+00	1.423E-06	9.111E-07	1.539E-07	2.112E-06	0.000E+00	6.510E-02
346	0.000E+00	0.000E+00	3.976E-06	0.000E+00	5.904E-07	1.740E-07	2.636E-08	3.347E-07	0.000E+00	1.281E-02
347	0.000E+00	0.000E+00	4.474E-06	0.000E+00	5.518E-07	2.003E-07	2.917E-08	3.764E-07	0.000E+00	1.499E-02
348	0.000E+00	0.000E+00	5.242E-06	0.000E+00	5.826E-07	2.181E-07	3.371E-08	4.409E-07	0.000E+00	1.813E-02
349	0.000E+00	0.000E+00	6.326E-06	0.000E+00	6.296E-07	2.574E-07	4.028E-08	5.319E-07	0.000E+00	2.341E-02
350	0.000E+00	0.000E+00	7.971E-06	0.000E+00	7.359E-07	3.182E-07	5.041E-08	6.700E-07	0.000E+00	3.398E-02
351	0.000E+00	0.000E+00	1.063E-05	0.000E+00	9.489E-07	4.175E-07	6.704E-08	8.938E-07	0.000E+00	5.623E-02
352	0.000E+00	0.000E+00	1.581E-05	0.000E+00	1.427E-06	6.144E-07	9.966E-08	1.328E-06	0.000E+00	9.998E-02
353	0.000E+00	0.000E+00	2.639E-05	0.000E+00	2.532E-06	1.029E-06	1.671E-07	2.219E-06	0.000E+00	2.396E-01
354	0.000E+00	0.000E+00	9.191E-05	0.000E+00	3.896E-06	3.328E-06	5.562E-07	7.716E-06	0.000E+00	2.033E-01
355	0.000E+00	0.000E+00	5.123E-05	0.000E+00	2.563E-06	1.854E-06	3.118E-07	4.301E-06	0.000E+00	1.366E-01
356	0.000E+00	0.000E+00	3.515E-05	0.000E+00	1.893E-06	1.272E-06	2.146E-07	2.952E-06	0.000E+00	1.057E-01
357	0.000E+00	0.000E+00	2.666E-05	0.000E+00	1.484E-06	9.651E-07	1.630E-07	2.239E-06	0.000E+00	8.453E-02
358	0.000E+00	0.000E+00	2.158E-05	0.000E+00	1.209E-06	7.814E-07	1.320E-07	1.812E-06	0.000E+00	6.830E-02
359	0.000E+00	0.000E+00	3.509E-06	0.000E+00	5.246E-07	1.466E-07	2.321E-08	2.954E-07	0.000E+00	1.316E-02
360	0.000E+00	0.000E+00	4.072E-06	0.000E+00	5.867E-07	1.810E-07	2.694E-08	3.428E-07	0.000E+00	1.556E-02
361	0.000E+00	0.000E+00	4.665E-06	0.000E+00	5.061E-07	1.958E-07	2.996E-08	3.923E-07	0.000E+00	1.917E-02
362	0.000E+00	0.000E+00	5.642E-06	0.000E+00	5.399E-07	2.326E-07	3.585E-08	4.743E-07	0.000E+00	2.432E-02
363	0.000E+00	0.000E+00	7.042E-06	0.000E+00	6.108E-07	2.844E-07	4.438E-08	5.918E-07	0.000E+00	3.224E-02
364	0.000E+00	0.000E+00	9.159E-06	0.000E+00	7.121E-07	3.582E-07	5.722E-08	7.696E-07	0.000E+00	4.477E-02
365	0.000E+00	0.000E+00	1.238E-05	0.000E+00	9.271E-07	4.711E-07	7.704E-08	1.040E-06	0.000E+00	6.848E-02
366	0.000E+00	0.000E+00	1.945E-05	0.000E+00	1.402E-06	7.278E-07	1.207E-07	1.634E-06	0.000E+00	1.434E-01
367	0.000E+00	0.000E+00	4.354E-05	0.000E+00	2.912E-06	1.615E-06	2.689E-07	3.658E-06	0.000E+00	5.764E-01
368	0.000E+00	0.000E+00	1.480E-04	0.000E+00	1.024E-05	5.436E-06	9.152E-07	1.243E-05	0.000E+00	1.089E+00
369	0.000E+00	0.000E+00	1.152E-04	0.000E+00	5.419E-06	4.171E-06	6.994E-07	9.669E-06	0.000E+00	3.203E-01
370	0.000E+00	0.000E+00	6.755E-05	0.000E+00	3.201E-06	2.443E-06	4.103E-07	5.671E-06	0.000E+00	1.818E-01
371	0.000E+00	0.000E+00	4.281E-05	0.000E+00	2.146E-06	1.549E-06	2.606E-07	3.595E-06	0.000E+00	1.207E-01
372	0.000E+00	0.000E+00	3.000E-05	0.000E+00	1.586E-06	1.086E-06	1.830E-07	2.519E-06	0.000E+00	8.815E-02
373	0.000E+00	0.000E+00	2.266E-05	0.000E+00	1.238E-06	8.208E-07	1.384E-07	1.903E-06	0.000E+00	6.925E-02
374	0.000E+00	0.000E+00	1.830E-05	0.000E+00	1.028E-06	6.631E-07	1.120E-07	1.537E-06	0.000E+00	5.717E-02
375	0.000E+00	0.000E+00	3.370E-06	0.000E+00	4.720E-07	1.378E-07	2.211E-08	2.836E-07	0.000E+00	1.093E-02
376	0.000E+00	0.000E+00	3.920E-06	0.000E+00	5.360E-07	1.610E-07	2.566E-08	3.298E-07	0.000E+00	1.306E-02
377	0.000E+00	0.000E+00	4.626E-06	0.000E+00	5.924E-07	2.036E-07	3.023E-08	3.892E-07	0.000E+00	1.628E-02
378	0.000E+00	0.000E+00	5.406E-06	0.000E+00	6.745E-07	2.194E-07	3.411E-08	4.344E-07	0.000E+00	2.097E-02
379	0.000E+00	0.000E+00	6.800E-06	0.000E+00	8.468E-07	2.656E-07	4.257E-08	5.714E-07	0.000E+00	2.656E-02
380	0.000E+00	0.000E+00	8.670E-06	0.000E+00	7.013E-07	3.306E-07	5.422E-08	7.286E-07	0.000E+00	3.412E-02
381	0.000E+00	0.000E+00	1.163E-05	0.000E+00	9.318E-07	4.480E-07	7.274E-08	9.775E-07	0.000E+00	5.025E-02
382	0.000E+00	0.000E+00	1.685E-05	0.000E+00	1.211E-06	6.351E-07	1.046E-07	1.415E-06	0.000E+00	1.038E-01
383	0.000E+00	0.000E+00	3.283E-05	0.000E+00	2.169E-06	1.215E-06	2.026E-07	2.758E-06	0.000E+00	2.467E-01
384	0.000E+00	0.000E+00	6.580E-05	0.000E+00	4.981E-06	2.430E-06	4.091E-07	5.529E-06	0.000E+00	6.396E-01
385	0.000E+00	0.000E+00	8.306E-05	0.000E+00	6.485E-06	3.075E-06	5.174E-07	6.979E-06	0.000E+00	1.316E+00
386	0.000E+00	0.000E+00	9.162E-05	0.000E+00	6.766E-06	3.364E-06	5.686E-07	7.697E-06	0.000E+00	1.359E+00
387	0.000E+00	0.000E+00	8.690E-05	0.000E+00	5.666E-06	3.147E-06	5.353E-07	7.300E-06	0.000E+00	5.410E-01
388	0.000E+00	0.000E+00	7.217E-05	0.000E+00	4.049E-06	2.613E-06	4.414E-07	6.061E-06	0.000E+00	2.168E-01
389	0.000E+00	0.000E+00	5.336E-05	0.000E+00	2.830E-06	1.931E-06	3.256E-07	4.481E-06	0.000E+00	1.307E-01
390	0.000E+00	0.000E+00	3.776E-05	0.000E+00	2.006E-06	1.367E-06	2.304E-07	3.171E-06	0.000E+00	9.252E-02
391	0.000E+00	0.000E+00	2.801E-05	0.000E+00	1.480E-06	1.014E-06	1.709E-07	2.352E-06	0.000E+00	6.989E-02
392	0.000E+00	0.000E+00	2.141E-05	0.000E+00	1.149E-06	7.755E-07	1.307E-07	1.798E-06	0.000E+00	5.664E-02
393	0.000E+00	0.000E+00	1.724E-05	0.000E+00	9.574E-07	6.249E-07	1.054E-07	1.448E-06	0.000E+00	4.785E-02
394	0.000E+00	0.000E+00	3.384E-06	0.000E+00	4.291E-07	1.380E-07	2.199E-08	2.847E-07	0.000E+00	1.136E-02
395	0.000E+00	0.000E+00	4.077E-06	0.000E+00	4.958E-07	1.646E-07	2.637E-08	3.430E-07	0.000E+00	1.319E-02
396	0.000E+00	0.000E+00	4.939E-06	0.000E+00	6.314E-07	2.064E-07	3.216E-08	4.156E-07	0.000E+00	1.481E-02
397	0.000E+00	0.000E+00	5.724E-06	0.000E+00	6.176E-07	2.371E-07	3.671E-08	4.813E-07	0.000E+00	1.729E-02
398	0.000E+00	0.000E+00	6.558E-06	0.000E+00	6.372E-07	2.681E-07	4.169E-08	5.513E-07	0.000E+00	2.133E-02
399	0.000E+00	0.000E+00	7.749E-06	0.000E+00	6.841E-07	3.088E-07	4.886E-08	6.513E-07	0.000E+00	2.938E-02
400	0.000E+00	0.000E+00	9.938E-06	0.000E+00	7.495E-07	3.863E-07	6.196E-08	8.3		

417	0.000E+00	0.000E+00	6.213E-06	0.000E+00	4.996E-07	2.529E-07	3.899E-08	5.221E-07	0.000E+00	2.958E-02
418	0.000E+00	0.000E+00	6.444E-06	0.000E+00	5.266E-07	2.509E-07	4.037E-08	5.415E-07	0.000E+00	2.353E-02
419	0.000E+00	0.000E+00	8.847E-06	0.000E+00	6.257E-07	3.446E-07	5.496E-08	7.433E-07	0.000E+00	4.471E-02
420	0.000E+00	0.000E+00	9.077E-06	0.000E+00	6.999E-07	3.489E-07	5.662E-08	7.627E-07	0.000E+00	3.545E-02
421	0.000E+00	0.000E+00	8.542E-06	0.000E+00	7.643E-07	3.384E-07	5.389E-08	7.180E-07	0.000E+00	3.320E-02
422	0.000E+00	0.000E+00	1.367E-05	0.000E+00	9.897E-07	5.166E-07	8.490E-08	1.149E-06	0.000E+00	6.916E-02
423	0.000E+00	0.000E+00	1.256E-05	0.000E+00	9.551E-07	4.902E-07	7.835E-08	1.055E-06	0.000E+00	6.023E-02
424	0.000E+00	0.000E+00	1.179E-05	0.000E+00	9.414E-07	4.583E-07	7.374E-08	9.906E-07	0.000E+00	5.239E-02
425	0.000E+00	0.000E+00	2.209E-05	0.000E+00	1.581E-06	8.302E-07	1.370E-07	1.856E-06	0.000E+00	1.129E-01
426	0.000E+00	0.000E+00	1.927E-05	0.000E+00	1.440E-06	7.267E-07	1.198E-07	1.619E-06	0.000E+00	8.970E-02
427	0.000E+00	0.000E+00	1.730E-05	0.000E+00	1.325E-06	6.565E-07	1.078E-07	1.454E-06	0.000E+00	7.680E-02
428	0.000E+00	0.000E+00	3.278E-05	0.000E+00	2.454E-06	1.228E-06	2.038E-07	2.754E-06	0.000E+00	1.731E-01
429	0.000E+00	0.000E+00	2.687E-05	0.000E+00	2.007E-06	1.013E-06	1.671E-07	2.258E-06	0.000E+00	1.261E-01
430	0.000E+00	0.000E+00	2.265E-05	0.000E+00	1.711E-06	8.569E-07	1.410E-07	1.903E-06	0.000E+00	9.574E-02
431	0.000E+00	0.000E+00	4.094E-05	0.000E+00	3.062E-06	1.522E-06	2.544E-07	3.440E-06	0.000E+00	2.456E-01
432	0.000E+00	0.000E+00	3.162E-05	0.000E+00	2.391E-06	1.181E-06	1.967E-07	2.657E-06	0.000E+00	1.632E-01
433	0.000E+00	0.000E+00	2.562E-05	0.000E+00	1.944E-06	9.591E-07	1.594E-07	2.153E-06	0.000E+00	1.189E-01
434	0.000E+00	0.000E+00	4.482E-05	0.000E+00	3.395E-06	1.654E-06	2.787E-07	3.766E-06	0.000E+00	2.563E-01
435	0.000E+00	0.000E+00	3.455E-05	0.000E+00	2.500E-06	1.274E-06	2.142E-07	2.903E-06	0.000E+00	1.733E-01
436	0.000E+00	0.000E+00	2.762E-05	0.000E+00	1.945E-06	1.021E-06	1.710E-07	2.320E-06	0.000E+00	1.281E-01
437	0.000E+00	0.000E+00	4.502E-05	0.000E+00	3.215E-06	1.678E-06	2.791E-07	3.782E-06	0.000E+00	2.096E-01
438	0.000E+00	0.000E+00	3.492E-05	0.000E+00	2.522E-06	1.296E-06	2.166E-07	2.934E-06	0.000E+00	1.637E-01
439	0.000E+00	0.000E+00	2.800E-05	0.000E+00	1.953E-06	1.035E-06	1.733E-07	2.352E-06	0.000E+00	1.114E-01
440	0.000E+00	0.000E+00	4.054E-05	0.000E+00	2.658E-06	1.492E-06	2.501E-07	3.406E-06	0.000E+00	1.510E-01
441	0.000E+00	0.000E+00	3.283E-05	0.000E+00	2.362E-06	1.230E-06	2.037E-07	2.758E-06	0.000E+00	1.196E-01
442	0.000E+00	0.000E+00	2.715E-05	0.000E+00	1.973E-06	1.011E-06	1.685E-07	2.281E-06	0.000E+00	9.637E-02
443	0.000E+00	0.000E+00	3.426E-05	0.000E+00	2.334E-06	1.303E-06	2.121E-07	2.878E-06	0.000E+00	1.119E-01
444	0.000E+00	0.000E+00	2.886E-05	0.000E+00	2.245E-06	1.120E-06	1.802E-07	2.425E-06	0.000E+00	9.494E-02
445	0.000E+00	0.000E+00	2.438E-05	0.000E+00	1.687E-06	9.061E-07	1.508E-07	2.048E-06	0.000E+00	7.715E-02
446	0.000E+00	0.000E+00	2.833E-05	0.000E+00	1.699E-06	1.040E-06	1.739E-07	2.379E-06	0.000E+00	8.127E-02
447	0.000E+00	0.000E+00	2.421E-05	0.000E+00	1.422E-06	8.841E-07	1.485E-07	2.033E-06	0.000E+00	7.713E-02
448	0.000E+00	0.000E+00	2.105E-05	0.000E+00	1.314E-06	7.746E-07	1.295E-07	1.768E-06	0.000E+00	6.774E-02
449	0.000E+00	0.000E+00	2.334E-05	0.000E+00	1.355E-06	8.461E-07	1.430E-07	1.960E-06	0.000E+00	6.107E-02
450	0.000E+00	0.000E+00	2.049E-05	0.000E+00	1.209E-06	7.445E-07	1.256E-07	1.721E-06	0.000E+00	6.048E-02
451	0.000E+00	0.000E+00	1.819E-05	0.000E+00	1.094E-06	6.655E-07	1.117E-07	1.528E-06	0.000E+00	5.761E-02

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.CUT 11/14/96 07:00:20 Page - 91

*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Pb	Mn	Hg	NI	NAPTH	PAH	PROPL	Se	TOL	XYLEN
1	5.860E-06	3.173E-05	0.000E+00	9.333E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	8.620E-06	4.729E-05	0.000E+00	1.389E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	8.552E-06	4.695E-05	0.000E+00	1.378E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	1.121E-05	6.115E-05	0.000E+00	1.797E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	1.131E-05	6.171E-05	0.000E+00	1.813E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	1.030E-05	5.608E-05	0.000E+00	1.648E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	9.069E-06	4.949E-05	0.000E+00	1.454E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	9.243E-06	4.998E-05	0.000E+00	1.470E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	9.661E-06	5.201E-05	0.000E+00	1.531E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	1.206E-05	6.569E-05	0.000E+00	1.930E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	4.934E-06	2.681E-05	0.000E+00	7.882E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	2.161E-05	1.167E-04	0.000E+00	3.432E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	9.792E-06	5.124E-05	0.000E+00	1.513E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	9.874E-06	5.167E-05	0.000E+00	1.526E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	9.628E-06	5.055E-05	0.000E+00	1.487E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	1.092E-05	5.717E-05	0.000E+00	1.638E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	5.483E-06	2.971E-05	0.000E+00	8.737E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	8.384E-06	4.500E-05	0.000E+00	1.325E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	8.495E-06	4.493E-05	0.000E+00	1.325E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	1.186E-05	6.297E-05	0.000E+00	1.856E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	8.934E-06	4.638E-05	0.000E+00	1.371E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	8.475E-06	4.345E-05	0.000E+00	1.287E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
23	8.486E-06	4.336E-05	0.000E+00	1.285E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
24	8.404E-06	4.304E-05	0.000E+00	1.275E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
25	8.409E-06	4.328E-05	0.000E+00	1.281E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
26	8.565E-06	4.532E-05	0.000E+00	1.337E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
27	8.628E-06	4.618E-05	0.000E+00	1.360E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
28	9.178E-06	4.928E-05	0.000E+00	1.451E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
29	1.174E-05	6.265E-05	0.000E+00	1.846E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
30	1.250E-05	6.647E-05	0.000E+00	1.959E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
31	1.314E-05	6.965E-05	0.000E+00	2.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
32	1.327E-05	7.000E-05	0.000E+00	2.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
33	1.479E-05	7.765E-05	0.000E+00	2.292E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
34	1.639E-05	8.583E-05	0.000E+00	2.535E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
35	1.748E-05	9.149E-05	0.000E+00	2.702E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
36	1.815E-05	9.537E-05	0.000E+00	2.815E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
37	1.813E-05	9.558E-05	0.000E+00	2.820E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
38	1.746E-05	9.260E-05	0.000E+00	2.730E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
39	2.142E-05	1.131E-04	0.000E+00	3.337E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
40	2.726E-05	1.435E-04	0.000E+00	4.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
41	3.803E-05	1.969E-04	0.000E+00	5.822E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	5.907E-05	3.020E-04	0.000E+00	8.945E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

43	4.881E-05	2.544E-04	0.000E+00	7.517E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	4.119E-05	2.281E-04	0.000E+00	6.690E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	3.846E-05	2.188E-04	0.000E+00	6.397E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
46	2.466E-05	1.387E-04	0.000E+00	4.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
47	3.713E-05	2.051E-04	0.000E+00	6.018E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
48	4.614E-05	2.648E-04	0.000E+00	7.733E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
49	5.436E-05	3.133E-04	0.000E+00	9.148E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
50	5.884E-05	3.363E-04	0.000E+00	9.826E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
51	3.215E-05	1.786E-04	0.000E+00	5.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
52	2.158E-05	1.190E-04	0.000E+00	3.491E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
53	1.572E-05	8.645E-05	0.000E+00	2.537E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
54	1.370E-05	7.125E-05	0.000E+00	2.106E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
55	1.419E-05	7.593E-05	0.000E+00	2.236E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
56	1.549E-05	8.260E-05	0.000E+00	2.434E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
57	1.574E-05	8.629E-05	0.000E+00	2.534E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
58	1.983E-05	1.083E-04	0.000E+00	3.181E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
59	2.627E-05	1.369E-04	0.000E+00	4.045E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
60	3.152E-05	1.640E-04	0.000E+00	4.848E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
61	3.785E-05	1.979E-04	0.000E+00	5.846E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
62	4.465E-05	2.335E-04	0.000E+00	6.897E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
63	5.199E-05	2.695E-04	0.000E+00	7.969E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
64	4.786E-05	2.480E-04	0.000E+00	7.332E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
65	5.333E-05	2.908E-04	0.000E+00	8.583E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
66	6.711E-05	3.591E-04	0.000E+00	1.058E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
67	8.793E-05	4.843E-04	0.000E+00	1.422E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
68	9.302E-05	5.165E-04	0.000E+00	1.515E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
69	9.362E-05	5.176E-04	0.000E+00	1.518E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
70	9.176E-05	5.059E-04	0.000E+00	1.485E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
71	6.089E-05	3.300E-04	0.000E+00	9.704E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
72	4.545E-05	2.421E-04	0.000E+00	7.135E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
73	3.362E-05	1.825E-04	0.000E+00	5.365E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
74	2.956E-05	1.540E-04	0.000E+00	4.551E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
75	2.616E-05	1.404E-04	0.000E+00	4.133E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
76	2.288E-05	1.254E-04	0.000E+00	3.682E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
77	1.974E-05	1.083E-04	0.000E+00	3.179E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
78	1.776E-05	9.396E-05	0.000E+00	2.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
79	2.105E-05	1.090E-04	0.000E+00	3.223E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
80	2.148E-05	1.182E-04	0.000E+00	3.469E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
81	2.482E-05	1.379E-04	0.000E+00	4.042E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
82	2.873E-05	1.613E-04	0.000E+00	4.724E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
83	3.152E-05	1.774E-04	0.000E+00	5.194E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
84	3.412E-05	1.924E-04	0.000E+00	5.630E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
85	3.625E-05	2.047E-04	0.000E+00	5.990E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
86	3.535E-05	1.988E-04	0.000E+00	5.820E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
87	1.940E-05	1.059E-04	0.000E+00	3.112E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
88	1.325E-05	7.102E-05	0.000E+00	2.091E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
89	9.822E-06	5.196E-05	0.000E+00	1.533E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
90	9.331E-06	4.892E-05	0.000E+00	1.445E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
91	4.136E-05	2.297E-04	0.000E+00	6.735E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
92	4.014E-05	2.226E-04	0.000E+00	6.527E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
93	3.877E-05	2.144E-04	0.000E+00	6.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
94	3.746E-05	2.059E-04	0.000E+00	6.044E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
95	3.608E-05	1.976E-04	0.000E+00	5.802E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
96	3.474E-05	1.898E-04	0.000E+00	5.577E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
97	3.372E-05	1.829E-04	0.000E+00	5.377E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
98	3.164E-05	1.720E-04	0.000E+00	5.056E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
99	3.055E-05	1.638E-04	0.000E+00	4.822E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	2.874E-05	1.536E-04	0.000E+00	4.524E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
101	2.781E-05	1.460E-04	0.000E+00	4.309E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
102	2.749E-05	1.403E-04	0.000E+00	4.156E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
103	4.717E-05	2.623E-04	0.000E+00	7.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
104	4.549E-05	2.521E-04	0.000E+00	7.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
105	4.350E-05	2.401E-04	0.000E+00	7.045E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
106	4.172E-05	2.286E-04	0.000E+00	6.712E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
107	3.991E-05	2.178E-04	0.000E+00	6.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
108	3.817E-05	2.074E-04	0.000E+00	6.097E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
109	3.650E-05	1.968E-04	0.000E+00	5.792E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
110	3.461E-05	1.849E-04	0.000E+00	5.447E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
111	3.248E-05	1.727E-04	0.000E+00	5.091E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
112	3.072E-05	1.620E-04	0.000E+00	4.780E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
113	2.907E-05	1.520E-04	0.000E+00	4.488E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
114	2.840E-05	1.451E-04	0.000E+00	4.299E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
115	5.496E-05	3.059E-04	0.000E+00	8.967E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
116	5.244E-05	2.906E-04	0.000E+00	8.522E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
117	4.940E-05	2.721E-04	0.000E+00								

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431	7.565E-06	3.978E-05	0.000E+00	1.174E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	5.855E-06	3.074E-05	0.000E+00	9.076E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	4.748E-06	2.492E-05	0.000E+00	7.356E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	8.302E-06	4.358E-05	0.000E+00	1.287E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	6.347E-06	3.351E-05	0.000E+00	9.886E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
436	5.049E-06	2.674E-05	0.000E+00	7.886E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	8.251E-06	4.363E-05	0.000E+00	1.287E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	6.414E-06	3.387E-05	0.000E+00	9.991E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	5.111E-06	2.710E-05	0.000E+00	7.991E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	7.324E-06	3.911E-05	0.000E+00	1.152E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	6.025E-06	3.183E-05	0.000E+00	9.389E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	4.992E-06	2.634E-05	0.000E+00	7.770E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	6.229E-06	3.312E-05	0.000E+00	9.762E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	5.372E-06	2.810E-05	0.000E+00	8.300E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	4.443E-06	2.358E-05	0.000E+00	6.952E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	5.046E-06	2.721E-05	0.000E+00	8.006E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	4.299E-06	2.323E-05	0.000E+00	6.834E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	3.773E-06	2.026E-05	0.000E+00	5.963E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	4.137E-06	2.238E-05	0.000E+00	6.583E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	3.641E-06	1.966E-05	0.000E+00	5.785E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	3.241E-06	1.747E-05	0.000E+00	5.142E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
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GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, RM10

Input File: g:\beest\GQ\gqpmace.dat

Output File: g:\beest\GQ\GQpmACE.OUT

* OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *

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*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Zn	NIXPM
1	4.247E-06	4.053E-01
2	6.363E-06	6.040E-01
3	6.319E-06	5.996E-01
4	8.210E-06	7.810E-01
5	8.284E-06	7.881E-01
6	7.523E-06	7.162E-01
7	6.645E-06	6.321E-01
8	6.683E-06	6.382E-01
9	6.942E-06	6.642E-01
10	8.812E-06	8.389E-01
11	3.593E-06	3.424E-01
12	1.559E-05	1.490E+00
13	6.755E-06	6.544E-01
14	6.811E-06	6.599E-01
15	6.635E-06	6.430E-01
16	7.540E-06	7.302E-01
17	3.977E-06	3.795E-01
18	5.998E-06	5.747E-01
19	5.950E-06	5.738E-01
20	8.352E-06	8.041E-01
21	6.092E-06	5.923E-01
22	5.674E-06	5.549E-01
23	5.655E-06	5.538E-01
24	5.618E-06	5.497E-01
25	5.662E-06	5.527E-01
26	6.004E-06	5.788E-01
27	6.150E-06	5.899E-01
28	6.571E-06	6.294E-01
29	8.334E-06	8.002E-01
30	8.827E-06	8.490E-01
31	9.234E-06	8.896E-01
32	9.261E-06	8.940E-01
33	1.025E-05	9.917E-01
34	1.132E-05	1.096E+00
35	1.206E-05	1.168E+00
36	1.259E-05	1.218E+00
37	1.264E-05	1.221E+00
38	1.228E-05	1.183E+00
39	1.497E-05	1.445E+00
40	1.896E-05	1.833E+00
41	2.583E-05	2.514E+00
42	3.938E-05	3.857E+00
43	3.347E-05	3.249E+00
44	3.081E-05	2.914E+00
45	2.988E-05	2.795E+00
46	1.885E-05	1.772E+00
47	2.768E-05	2.620E+00
48	3.628E-05	3.382E+00
49	4.293E-05	4.001E+00
50	4.601E-05	4.295E+00
51	2.415E-05	2.281E+00
52	1.604E-05	1.519E+00
53	1.164E-05	1.104E+00
54	9.363E-06	9.099E-01
55	1.011E-05	9.697E-01
56	1.098E-05	1.055E+00

57	1.161E-05	1.102E+00
58	1.454E-05	1.383E+00
59	1.801E-05	1.749E+00
60	2.157E-05	2.095E+00
61	2.608E-05	2.528E+00
62	3.077E-05	2.982E+00
63	3.538E-05	3.442E+00
64	3.254E-05	3.167E+00
65	3.840E-05	3.713E+00
66	4.780E-05	4.586E+00
67	6.528E-05	6.185E+00
68	6.986E-05	6.597E+00
69	6.988E-05	6.610E+00
70	6.821E-05	6.461E+00
71	4.418E-05	4.215E+00
72	3.217E-05	3.092E+00
73	2.444E-05	2.331E+00
74	2.026E-05	1.967E+00
75	1.871E-05	1.793E+00
76	1.686E-05	1.601E+00
77	1.456E-05	1.383E+00
78	1.245E-05	1.200E+00
79	1.430E-05	1.392E+00
80	1.593E-05	1.510E+00
81	1.865E-05	1.761E+00
82	2.192E-05	2.061E+00
83	2.413E-05	2.266E+00
84	2.618E-05	2.457E+00
85	2.787E-05	2.614E+00
86	2.702E-05	2.539E+00
87	1.422E-05	1.353E+00
88	9.463E-06	9.071E-01
89	6.883E-06	6.636E-01
90	6.455E-06	6.248E-01
91	3.107E-05	2.933E+00
92	3.008E-05	2.842E+00
93	2.894E-05	2.738E+00
94	2.773E-05	2.629E+00
95	2.656E-05	2.523E+00
96	2.550E-05	2.425E+00
97	2.449E-05	2.336E+00
98	2.305E-05	2.196E+00
99	2.182E-05	2.092E+00
100	2.043E-05	1.961E+00
101	1.927E-05	1.864E+00
102	1.828E-05	1.792E+00
103	3.549E-05	3.350E+00
104	3.407E-05	3.220E+00
105	3.239E-05	3.067E+00
106	3.074E-05	2.919E+00
107	2.925E-05	2.782E+00
108	2.780E-05	2.649E+00
109	2.629E-05	2.514E+00
110	2.460E-05	2.362E+00
111	2.294E-05	2.206E+00
112	2.143E-05	2.069E+00
113	2.002E-05	1.941E+00
114	1.892E-05	1.853E+00
115	4.141E-05	3.907E+00
116	3.926E-05	3.711E+00
117	3.667E-05	3.475E+00
118	3.435E-05	3.268E+00
119	3.240E-05	3.101E+00
120	3.013E-05	2.884E+00
121	2.799E-05	2.684E+00
122	2.600E-05	2.508E+00
123	2.413E-05	2.334E+00
124	2.273E-05	2.224E+00
125	2.116E-05	2.067E+00
126	1.966E-05	1.922E+00
127	4.978E-05	4.693E+00
128	4.644E-05	4.388E+00
129	4.217E-05	4.004E+00
130	3.901E-05	3.751E+00
131	3.570E-05	3.445E+00
132	3.261E-05	3.158E+00
133	2.965E-05	2.857E+00
134	2.761E-05	2.687E+00
135	2.566E-05	2.502E+00
136	2.395E-05	2.333E+00
137	2.218E-05	2.163E+00
138	2.058E-05	2.009E+00
139	6.338E-05	5.994E+00
140	5.826E-05	5.532E+00
141	4.996E-05	4.775E+00
142	4.310E-05	4.146E+00
143	3.834E-05	3.704E+00
144	3.455E-05	3.352E+00
145	3.153E-05	3.064E+00
146	2.915E-05	2.837E+00
147	2.704E-05	2.632E+00
148	2.509E-05	2.442E+00
149	2.334E-05	2.272E+00
150	2.162E-05	2.105E+00
151	3.328E-05	3.239E+00
152	3.091E-05	3.004E+00
153	2.879E-05	2.795E+00

154	2.635E-05	2.565E+00
155	2.497E-05	2.424E+00
156	2.286E-05	2.222E+00
157	1.731E-05	1.688E+00
158	1.776E-05	1.724E+00
159	1.737E-05	1.648E+00
160	1.690E-05	1.600E+00
161	1.606E-05	1.520E+00
162	1.528E-05	1.448E+00
163	1.468E-05	1.393E+00
164	1.367E-05	1.301E+00
165	1.231E-05	1.176E+00
166	1.086E-05	1.041E+00
167	9.709E-06	9.313E-01
168	2.175E-05	2.062E+00
169	2.177E-05	2.060E+00
170	2.082E-05	1.969E+00
171	1.955E-05	1.850E+00
172	1.837E-05	1.743E+00
173	1.714E-05	1.631E+00
174	1.527E-05	1.462E+00
175	1.328E-05	1.281E+00
176	1.150E-05	1.106E+00
177	1.020E-05	9.797E-01
178	2.915E-05	2.793E+00
179	2.827E-05	2.672E+00
180	2.649E-05	2.504E+00
181	2.421E-05	2.296E+00
182	2.232E-05	2.134E+00
183	1.954E-05	1.870E+00
184	1.708E-05	1.673E+00
185	1.433E-05	1.398E+00
186	1.226E-05	1.186E+00
187	1.081E-05	1.038E+00
188	4.098E-05	3.916E+00
189	3.937E-05	3.714E+00
190	3.548E-05	3.357E+00
191	3.078E-05	2.935E+00
192	2.620E-05	2.513E+00
193	2.199E-05	2.132E+00
194	1.863E-05	1.823E+00
195	1.546E-05	1.505E+00
196	1.341E-05	1.303E+00
197	1.138E-05	1.091E+00
198	6.664E-05	6.310E+00
199	6.531E-05	6.149E+00
200	5.407E-05	5.148E+00
201	3.033E-05	2.953E+00
202	2.084E-05	2.029E+00
203	1.715E-05	1.676E+00
204	1.408E-05	1.348E+00
205	1.146E-05	1.093E+00
206	1.106E-05	1.053E+00
207	1.035E-05	1.006E+00
208	1.037E-06	1.008E-01
209	1.191E-06	1.155E-01
210	1.402E-06	1.356E-01
211	1.656E-06	1.598E-01
212	1.991E-06	1.915E-01
213	2.492E-06	2.391E-01
214	3.185E-06	3.046E-01
215	4.108E-06	3.919E-01
216	4.899E-06	4.673E-01
217	5.654E-06	5.382E-01
218	6.056E-06	5.760E-01
219	6.254E-06	5.947E-01
220	5.860E-06	5.581E-01
221	5.387E-06	5.125E-01
222	5.001E-06	4.744E-01
223	4.972E-06	4.718E-01
224	4.954E-06	4.718E-01
225	4.831E-06	4.626E-01
226	4.572E-06	4.387E-01
227	1.015E-06	9.931E-02
228	1.202E-06	1.170E-01
229	1.419E-06	1.376E-01
230	1.699E-06	1.643E-01
231	2.062E-06	1.987E-01
232	2.574E-06	2.470E-01
233	3.362E-06	3.216E-01
234	4.462E-06	4.257E-01
235	5.628E-06	5.365E-01
236	6.714E-06	6.390E-01
237	7.370E-06	7.005E-01
238	7.500E-06	7.131E-01
239	6.962E-06	6.627E-01
240	6.415E-06	6.091E-01
241	6.180E-06	5.856E-01
242	6.139E-06	5.834E-01
243	5.876E-06	5.616E-01
244	5.471E-06	5.251E-01
245	4.888E-06	4.692E-01
246	9.360E-07	9.163E-02
247	1.151E-06	1.128E-01
248	1.405E-06	1.369E-01
249	1.722E-06	1.668E-01
250	2.127E-06	2.054E-01

251	2.685E-06	2.582E-01
252	3.531E-06	3.380E-01
253	4.881E-06	4.656E-01
254	6.535E-06	6.222E-01
255	8.168E-06	7.769E-01
256	9.219E-06	8.758E-01
257	9.232E-06	8.776E-01
258	8.662E-06	8.234E-01
259	8.092E-06	7.668E-01
260	7.927E-06	7.516E-01
261	7.443E-06	7.094E-01
262	6.730E-06	6.454E-01
263	5.961E-06	5.720E-01
264	5.043E-06	4.832E-01
265	9.390E-07	9.235E-02
266	1.094E-06	1.071E-01
267	1.340E-06	1.312E-01
268	1.674E-06	1.631E-01
269	2.146E-06	2.078E-01
270	2.775E-06	2.671E-01
271	3.744E-06	3.589E-01
272	5.302E-06	5.056E-01
273	7.734E-06	7.358E-01
274	1.039E-05	9.973E-01
275	1.205E-05	1.147E+00
276	1.202E-05	1.142E+00
277	1.138E-05	1.079E+00
278	1.071E-05	1.014E+00
279	1.008E-05	9.583E-01
280	8.729E-06	8.358E-01
281	7.444E-06	7.141E-01
282	6.204E-06	5.940E-01
283	4.949E-06	4.734E-01
284	9.589E-07	9.440E-02
285	1.118E-06	1.101E-01
286	1.329E-06	1.301E-01
287	1.648E-06	1.607E-01
288	2.092E-06	2.033E-01
289	2.790E-06	2.695E-01
290	3.890E-06	3.735E-01
291	5.815E-06	5.545E-01
292	9.904E-06	9.693E-01
293	1.370E-05	1.300E+00
294	7.904E-06	7.562E-01
295	6.089E-06	5.817E-01
296	4.552E-06	4.349E-01
297	8.678E-07	8.572E-02
298	1.050E-06	1.038E-01
299	1.281E-06	1.267E-01
300	1.567E-06	1.538E-01
301	2.025E-06	1.973E-01
302	2.759E-06	2.669E-01
303	3.989E-06	3.834E-01
304	6.270E-06	5.987E-01
305	1.141E-05	1.083E+00
306	7.953E-06	7.576E-01
307	5.684E-06	5.414E-01
308	4.211E-06	4.010E-01
309	7.073E-07	7.103E-02
310	8.799E-07	8.753E-02
311	1.113E-06	1.101E-01
312	1.425E-06	1.404E-01
313	1.847E-06	1.812E-01
314	2.552E-06	2.484E-01
315	3.769E-06	3.643E-01
316	6.268E-06	6.004E-01
317	1.361E-05	1.288E+00
318	7.276E-06	6.925E-01
319	4.966E-06	4.731E-01
320	3.711E-06	3.537E-01
321	6.089E-07	6.169E-02
322	7.302E-07	7.428E-02
323	8.804E-07	8.857E-02
324	1.116E-06	1.109E-01
325	1.513E-06	1.492E-01
326	2.136E-06	2.098E-01
327	3.200E-06	3.113E-01
328	5.551E-06	5.358E-01
329	1.366E-05	1.298E+00
330	6.244E-06	5.934E-01
331	4.544E-06	4.327E-01
332	3.591E-06	3.423E-01
333	5.662E-07	5.585E-02
334	6.560E-07	6.476E-02
335	7.790E-07	7.711E-02
336	9.579E-07	9.515E-02
337	1.225E-06	1.223E-01
338	1.641E-06	1.630E-01
339	2.532E-06	2.495E-01
340	4.541E-06	4.424E-01
341	1.692E-05	1.600E+00
342	8.225E-06	7.812E-01
343	5.551E-06	5.284E-01
344	4.144E-06	3.949E-01
345	3.226E-06	3.077E-01
346	5.112E-07	5.213E-02
347	5.749E-07	5.759E-02

348	6.733E-07	6.686E-02
349	8.124E-07	7.999E-02
350	1.023E-06	1.002E-01
351	1.365E-06	1.334E-01
352	2.029E-06	1.985E-01
353	3.389E-06	3.328E-01
354	1.179E-05	1.112E+00
355	6.571E-06	6.236E-01
356	4.509E-06	4.292E-01
357	3.420E-06	3.260E-01
358	2.769E-06	2.639E-01
359	4.512E-07	4.604E-02
360	5.235E-07	5.322E-02
361	5.992E-07	5.939E-02
362	7.245E-07	7.114E-02
363	9.040E-07	8.818E-02
364	1.176E-06	1.139E-01
365	1.589E-06	1.536E-01
366	2.496E-06	2.408E-01
367	5.588E-06	5.370E-01
368	1.899E-05	1.828E+00
369	1.477E-05	1.399E+00
370	8.663E-06	8.205E-01
371	5.491E-06	5.212E-01
372	3.849E-06	3.660E-01
373	2.906E-06	2.768E-01
374	2.348E-06	2.239E-01
375	4.331E-07	4.391E-02
376	5.037E-07	5.095E-02
377	5.945E-07	5.975E-02
378	6.940E-07	6.775E-02
379	8.729E-07	8.474E-02
380	1.113E-06	1.081E-01
381	1.493E-06	1.449E-01
382	2.162E-06	2.086E-01
383	4.213E-06	4.046E-01
384	8.446E-06	8.170E-01
385	1.066E-05	1.033E+00
386	1.176E-05	1.136E+00
387	1.115E-05	1.070E+00
388	9.258E-06	8.827E-01
389	6.844E-06	6.510E-01
390	4.844E-06	4.608E-01
391	3.593E-06	3.417E-01
392	2.746E-06	2.613E-01
393	2.212E-06	2.108E-01
394	4.348E-07	4.367E-02
395	5.238E-07	5.241E-02
396	6.347E-07	6.378E-02
397	7.351E-07	7.283E-02
398	8.421E-07	8.277E-02
399	9.948E-07	9.715E-02
400	1.276E-06	1.234E-01
401	1.898E-06	1.825E-01
402	3.385E-06	3.256E-01
403	5.490E-06	5.310E-01
404	7.145E-06	6.912E-01
405	7.927E-06	7.680E-01
406	7.721E-06	7.418E-01
407	6.726E-06	6.434E-01
408	5.397E-06	5.144E-01
409	4.220E-06	4.024E-01
410	3.349E-06	3.193E-01
411	2.682E-06	2.554E-01
412	2.138E-06	2.036E-01
413	7.328E-07	7.253E-02
414	6.392E-07	6.287E-02
415	5.974E-07	5.859E-02
416	8.700E-07	8.465E-02
417	7.975E-07	7.743E-02
418	8.271E-07	8.038E-02
419	1.135E-06	1.094E-01
420	1.165E-06	1.128E-01
421	1.097E-06	1.072E-01
422	1.755E-06	1.693E-01
423	1.612E-06	1.560E-01
424	1.513E-06	1.468E-01
425	2.835E-06	2.734E-01
426	2.473E-06	2.390E-01
427	2.220E-06	2.150E-01
428	4.207E-06	4.067E-01
429	3.449E-06	3.334E-01
430	2.907E-06	2.812E-01
431	5.254E-06	5.080E-01
432	4.059E-06	3.926E-01
433	3.289E-06	3.182E-01
434	5.753E-06	5.566E-01
435	4.435E-06	4.280E-01
436	3.544E-06	3.415E-01
437	5.778E-06	5.572E-01
438	4.482E-06	4.325E-01
439	3.593E-06	3.461E-01
440	5.202E-06	4.995E-01
441	4.213E-06	4.065E-01
442	3.484E-06	3.363E-01
443	4.397E-06	4.230E-01
444	3.704E-06	3.589E-01

445 3.128E-06 3.012E-01
 446 3.634E-06 3.475E-01
 447 3.106E-06 2.967E-01
 448 2.701E-06 2.587E-01
 449 2.994E-06 2.858E-01
 450 2.628E-06 2.511E-01
 451 2.334E-06 2.232E-01

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 109

**** RECEPTOR TOTAL CANCER RISK AND EXCESS BURDEN ****

RECEPTOR	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM	POPULATION	BURDEN
1	1.480E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.480E-07	0	0.000E+00
2	2.205E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.205E-07	0	0.000E+00
3	2.190E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.190E-07	0	0.000E+00
4	2.852E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.852E-07	0	0.000E+00
5	2.878E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.878E-07	0	0.000E+00
6	2.615E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.615E-07	0	0.000E+00
7	2.308E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.308E-07	0	0.000E+00
8	2.330E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.330E-07	0	0.000E+00
9	2.424E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.424E-07	0	0.000E+00
10	3.065E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.065E-07	0	0.000E+00
11	1.250E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.250E-07	0	0.000E+00
12	5.438E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.438E-07	0	0.000E+00
13	2.388E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.388E-07	0	0.000E+00
14	2.408E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.408E-07	0	0.000E+00
15	2.346E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.346E-07	0	0.000E+00
16	2.664E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.664E-07	0	0.000E+00
17	1.385E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.385E-07	0	0.000E+00
18	2.097E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.097E-07	0	0.000E+00
19	2.094E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.094E-07	0	0.000E+00
20	2.934E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.934E-07	0	0.000E+00
21	2.164E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.164E-07	0	0.000E+00
22	2.027E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.027E-07	0	0.000E+00
23	2.023E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.023E-07	0	0.000E+00
24	2.007E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.007E-07	0	0.000E+00
25	2.018E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.018E-07	0	0.000E+00
26	2.114E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.114E-07	0	0.000E+00
27	2.154E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.154E-07	0	0.000E+00
28	2.298E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.298E-07	0	0.000E+00
29	2.921E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.921E-07	0	0.000E+00
30	3.098E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.098E-07	0	0.000E+00
31	3.246E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.246E-07	0	0.000E+00
32	3.261E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.261E-07	0	0.000E+00
33	3.618E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.618E-07	0	0.000E+00
34	3.999E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.999E-07	0	0.000E+00
35	4.263E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.263E-07	0	0.000E+00
36	4.443E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.443E-07	0	0.000E+00
37	4.451E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.451E-07	0	0.000E+00
38	4.312E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.312E-07	0	0.000E+00
39	5.269E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.269E-07	0	0.000E+00
40	6.682E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.682E-07	0	0.000E+00
41	9.218E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.218E-07	0	0.000E+00
42	1.408E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.408E-06	0	0.000E+00
43	1.187E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.187E-06	0	0.000E+00
44	1.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.066E-06	0	0.000E+00
45	1.022E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.022E-06	0	0.000E+00
46	6.478E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.478E-07	0	0.000E+00
47	9.587E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.587E-07	0	0.000E+00
48	1.238E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.238E-06	0	0.000E+00
49	1.465E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.465E-06	0	0.000E+00
50	1.573E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.573E-06	0	0.000E+00
51	8.359E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.359E-07	0	0.000E+00
52	5.559E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.559E-07	0	0.000E+00
53	4.036E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.036E-07	0	0.000E+00
54	3.332E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.332E-07	0	0.000E+00
55	3.555E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.555E-07	0	0.000E+00
56	3.868E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.868E-07	0	0.000E+00
57	4.027E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.027E-07	0	0.000E+00
58	5.053E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.053E-07	0	0.000E+00
59	6.397E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.397E-07	0	0.000E+00
60	7.656E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.656E-07	0	0.000E+00
61	9.233E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.233E-07	0	0.000E+00
62	1.089E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.089E-06	0	0.000E+00
63	1.257E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.257E-06	0	0.000E+00
64	1.158E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.158E-06	0	0.000E+00
65	1.356E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.356E-06	0	0.000E+00
66	1.675E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.675E-06	0	0.000E+00
67	2.262E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.262E-06	0	0.000E+00
68	2.415E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.415E-06	0	0.000E+00
69	2.418E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.418E-06	0	0.000E+00

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RECEPTOR # 69 HAS MAXIMUM PEAK RISK OF 2.418E-06
PEAK RECEPTOR LOCATED AT (X, Y) = 391247.000 3870518.000
RECEPTOR POPULATION = 0

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RECEPTOR BURDEN = 0.000E+00

TOTAL CANCER EXCESS BURDEN FROM ALL RECEPTORS = 0.000E+00
 BURDEN COMPUTED WITH ZONE OF IMPACT RISK LEVEL = 1.000E-07

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, PM10
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT

* OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 70-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 69 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	9.160E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.160E-10
2	1.426E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.426E-09
3	6.825E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.825E-09
4	1.202E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.202E-08
5	8.513E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.513E-09
6	8.508E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.508E-09
7	3.007E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.007E-09
8	2.060E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.060E-09
9	1.380E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E-09
10	7.104E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.104E-10
11	8.007E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.007E-10
12	2.939E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.939E-10
13	1.310E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.310E-08
14	2.017E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.017E-08
15	9.620E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.620E-08
16	1.663E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.663E-07
17	1.115E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.115E-07
18	1.118E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.118E-07
19	6.421E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.421E-09
20	9.136E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.136E-09
21	4.375E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.375E-08
22	7.571E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.571E-08
23	5.059E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.059E-08
24	4.902E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.902E-08
25	4.787E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.787E-08
26	5.427E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.427E-08
27	2.089E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.089E-07
28	3.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.978E-07
29	5.332E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.332E-07
30	3.810E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.810E-08
31	3.568E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.568E-09
32	1.347E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.347E-08
33	2.194E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.194E-08
34	2.503E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.503E-08
35	2.512E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.512E-09
36	1.589E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.589E-08
37	5.912E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.912E-08
38	8.734E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.734E-08
39	9.409E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.409E-08
40	1.121E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.121E-08
41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	3.295E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.295E-09
46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	2.418E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.418E-06

RECEPTOR RISK OF 2.418E-06 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.418E-06 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07
 RECEPTOR POPULATION = 0
 RECEPTOR BURDEN = 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, PM10
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT

* OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 70-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 69 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.798E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.798E-06
BENZ	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	6.014E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.014E-08
Cd	8.494E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.494E-08
Cr	4.635E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.635E-07
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	7.489E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.489E-09
Ni	3.948E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.948E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	2.418E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.418E-06

RECEPTOR RISK OF 2.418E-06 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.418E-06 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07
RECEPTOR POPULATION = 0
RECEPTOR BURDEN = 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 122

*** 70-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 69 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.557E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.557E-07
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	7.160E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.160E-09
Cd	5.778E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.778E-09
Cr	9.459E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.459E-10
ECRO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	2.675E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.675E-08
M1	4.339E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.339E-09
PAR	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 123

*** 44-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 69 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	5.758E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.758E-10
2	8.961E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.961E-10
3	4.290E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.290E-09
4	7.553E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.553E-09
5	5.351E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.351E-09
6	5.348E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.348E-09
7	1.890E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.890E-09
8	1.295E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.295E-09
9	8.675E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.675E-10
10	4.465E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.465E-10
11	5.033E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.033E-10
12	1.848E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.848E-10
13	8.232E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.232E-09
14	1.268E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.268E-08
15	6.047E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.047E-08
16	1.045E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.045E-07
17	7.010E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.010E-08
18	7.028E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.028E-08
19	4.036E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.036E-09
20	5.743E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.743E-09
21	2.750E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.750E-08
22	4.759E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.759E-08
23	3.180E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.180E-08
24	3.081E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.081E-08
25	3.009E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.009E-08
26	3.411E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.411E-08
27	1.313E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.313E-07
28	2.501E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.501E-07
29	3.352E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.352E-07
30	2.395E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.395E-08
31	2.243E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.243E-09
32	8.466E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.466E-09
33	1.379E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.379E-08
34	1.574E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.574E-08
35	1.579E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.579E-09
36	9.986E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.986E-09
37	3.716E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.716E-08
38	5.490E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.490E-08
39	5.914E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.914E-08
40	7.046E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.046E-09
41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	2.071E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.071E-09
46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	1.520E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.520E-06

RECEPTOR RISK OF 1.520E-06 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 1.520E-06 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

44-YEAR LIFETIME RISK OF 1.520E-06 IS LOWER THAN 70-YEAR LIFETIME RISK OF 2.418E-06

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 44-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 69 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.130E-06
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	3.780E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.780E-08
Cd	5.339E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.339E-08
Cr	2.913E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.913E-07
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	4.708E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.708E-09
Ni	2.482E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.482E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	1.520E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.520E-06

RECEPTOR RISK OF 1.520E-06 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 1.520E-06 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

44-YEAR LIFETIME RISK OF 1.520E-06 IS LOWER THAN 70-YEAR LIFETIME RISK OF 2.418E-06

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 44-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 69 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.557E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.557E-07
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	7.160E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.160E-09
Cd	5.778E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.778E-09
Cr	9.459E-10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.459E-10
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	2.675E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.675E-08
Ni	4.339E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.339E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** MAXIMUM ACUTE HAZARD INDEX BY POLLUTANT ***

POLLUTANT	PEAK CONC (ug/m3)	BACKGR (ug/m3)	TOTAL (ug/m3)	REL (ug/m3)	HAZARD INDEX	RECEPTOR
ACROL	0.000E+00	0.000E+00	0.000E+00	2.500E+00	0.000E+00	0
Cu	5.891E-03	0.000E+00	5.891E-03	1.000E+01	5.891E-04	30
HCHO	0.000E+00	0.000E+00	0.000E+00	3.700E+02	0.000E+00	0
HCN	4.528E+01	0.000E+00	4.528E+01	3.300E+03	1.372E-02	34
Hg	0.000E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0
Ni	4.036E-03	0.000E+00	4.036E-03	1.000E+00	4.036E-03	30
Se	0.000E+00	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0
XYLEN	0.000E+00	0.000E+00	0.000E+00	4.400E+03	0.000E+00	0

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** RECEPTOR ACUTE HAZARD INDICES BY TOXICOLOGICAL ENDPOINTS ***

FROM ALL SOURCES AND POLLUTANTS

RECEPTOR	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
1	0.000E+00	2.180E-03	7.363E-04	0.000E+00	0.000E+00	0.000E+00	1.076E-04	0.000E+00
2	0.000E+00	1.391E-03	5.499E-04	0.000E+00	0.000E+00	0.000E+00	8.028E-05	0.000E+00

3	0.000E+00	1.369E-03	5.608E-04	0.000E+00	0.000E+00	0.000E+00	8.186E-05	0.000E+00
4	0.000E+00	2.547E-03	9.492E-04	0.000E+00	0.000E+00	0.000E+00	1.385E-04	0.000E+00
5	0.000E+00	2.450E-03	9.185E-04	0.000E+00	0.000E+00	0.000E+00	1.340E-04	0.000E+00
6	0.000E+00	2.311E-03	8.954E-04	0.000E+00	0.000E+00	0.000E+00	1.307E-04	0.000E+00
7	0.000E+00	1.281E-03	6.989E-04	0.000E+00	0.000E+00	0.000E+00	1.018E-04	0.000E+00
8	0.000E+00	1.315E-03	6.763E-04	0.000E+00	0.000E+00	0.000E+00	9.873E-05	0.000E+00
9	0.000E+00	1.347E-03	7.077E-04	0.000E+00	0.000E+00	0.000E+00	1.033E-04	0.000E+00
10	0.000E+00	4.377E-03	1.073E-03	0.000E+00	0.000E+00	0.000E+00	1.570E-04	0.000E+00
11	0.000E+00	2.354E-03	6.154E-04	0.000E+00	0.000E+00	0.000E+00	8.979E-05	0.000E+00
12	0.000E+00	7.945E-03	1.431E-03	0.000E+00	0.000E+00	0.000E+00	2.088E-04	0.000E+00
13	0.000E+00	4.443E-03	2.856E-03	0.000E+00	0.000E+00	0.000E+00	4.164E-04	0.000E+00
14	0.000E+00	4.324E-03	2.944E-03	0.000E+00	0.000E+00	0.000E+00	4.292E-04	0.000E+00
15	0.000E+00	3.886E-03	2.979E-03	0.000E+00	0.000E+00	0.000E+00	4.342E-04	0.000E+00
16	0.000E+00	4.880E-03	3.025E-03	0.000E+00	0.000E+00	0.000E+00	4.407E-04	0.000E+00
17	0.000E+00	4.449E-03	1.017E-03	0.000E+00	0.000E+00	0.000E+00	1.486E-04	0.000E+00
18	0.000E+00	4.634E-03	7.978E-04	0.000E+00	0.000E+00	0.000E+00	1.165E-04	0.000E+00
19	0.000E+00	4.486E-03	8.985E-04	0.000E+00	0.000E+00	0.000E+00	1.312E-04	0.000E+00
20	0.000E+00	5.755E-03	9.244E-04	0.000E+00	0.000E+00	0.000E+00	1.350E-04	0.000E+00
21	0.000E+00	1.023E-02	2.232E-03	0.000E+00	0.000E+00	0.000E+00	3.297E-04	0.000E+00
22	0.000E+00	1.029E-02	2.075E-03	0.000E+00	0.000E+00	0.000E+00	3.060E-04	0.000E+00
23	0.000E+00	1.109E-02	2.436E-03	0.000E+00	0.000E+00	0.000E+00	3.574E-04	0.000E+00
24	0.000E+00	1.138E-02	3.173E-03	0.000E+00	0.000E+00	0.000E+00	4.651E-04	0.000E+00
25	0.000E+00	1.140E-02	3.332E-03	0.000E+00	0.000E+00	0.000E+00	4.885E-04	0.000E+00
26	0.000E+00	1.227E-02	2.948E-03	0.000E+00	0.000E+00	0.000E+00	4.305E-04	0.000E+00
27	0.000E+00	7.433E-03	2.236E-03	0.000E+00	0.000E+00	0.000E+00	3.241E-04	0.000E+00
28	0.000E+00	7.778E-03	2.279E-03	0.000E+00	0.000E+00	0.000E+00	3.331E-04	0.000E+00
29	0.000E+00	8.772E-03	3.530E-03	0.000E+00	0.000E+00	0.000E+00	5.161E-04	0.000E+00
30	0.000E+00	9.334E-03	4.036E-03	0.000E+00	0.000E+00	0.000E+00	5.891E-04	0.000E+00
31	0.000E+00	1.093E-02	3.861E-03	0.000E+00	0.000E+00	0.000E+00	5.632E-04	0.000E+00
32	0.000E+00	1.330E-02	3.202E-03	0.000E+00	0.000E+00	0.000E+00	4.666E-04	0.000E+00
33	0.000E+00	1.342E-02	3.023E-03	0.000E+00	0.000E+00	0.000E+00	4.403E-04	0.000E+00
34	0.000E+00	1.372E-02	3.050E-03	0.000E+00	0.000E+00	0.000E+00	4.448E-04	0.000E+00
35	0.000E+00	1.322E-02	2.088E-03	0.000E+00	0.000E+00	0.000E+00	3.053E-04	0.000E+00
36	0.000E+00	1.268E-02	1.720E-03	0.000E+00	0.000E+00	0.000E+00	2.513E-04	0.000E+00
37	0.000E+00	1.211E-02	1.875E-03	0.000E+00	0.000E+00	0.000E+00	2.737E-04	0.000E+00
38	0.000E+00	1.208E-02	9.538E-04	0.000E+00	0.000E+00	0.000E+00	1.394E-04	0.000E+00
39	0.000E+00	1.356E-02	1.028E-03	0.000E+00	0.000E+00	0.000E+00	1.504E-04	0.000E+00
40	0.000E+00	1.353E-02	1.115E-03	0.000E+00	0.000E+00	0.000E+00	1.631E-04	0.000E+00
41	0.000E+00	1.134E-02	1.432E-03	0.000E+00	0.000E+00	0.000E+00	2.096E-04	0.000E+00
42	0.000E+00	6.072E-03	1.481E-03	0.000E+00	0.000E+00	0.000E+00	2.175E-04	0.000E+00
43	0.000E+00	6.346E-03	7.808E-04	0.000E+00	0.000E+00	0.000E+00	1.152E-04	0.000E+00
44	0.000E+00	6.601E-03	5.632E-04	0.000E+00	0.000E+00	0.000E+00	8.183E-05	0.000E+00
45	0.000E+00	6.261E-03	7.031E-04	0.000E+00	0.000E+00	0.000E+00	1.032E-04	0.000E+00
46	0.000E+00	5.840E-03	6.567E-04	0.000E+00	0.000E+00	0.000E+00	9.644E-05	0.000E+00
47	0.000E+00	4.905E-03	7.349E-04	0.000E+00	0.000E+00	0.000E+00	1.084E-04	0.000E+00
48	0.000E+00	3.968E-03	9.740E-04	0.000E+00	0.000E+00	0.000E+00	1.427E-04	0.000E+00
49	0.000E+00	3.266E-03	7.782E-04	0.000E+00	0.000E+00	0.000E+00	1.146E-04	0.000E+00
50	0.000E+00	2.855E-03	9.197E-04	0.000E+00	0.000E+00	0.000E+00	1.354E-04	0.000E+00
51	0.000E+00	2.934E-03	9.171E-04	0.000E+00	0.000E+00	0.000E+00	1.344E-04	0.000E+00
52	0.000E+00	2.944E-03	7.768E-04	0.000E+00	0.000E+00	0.000E+00	1.137E-04	0.000E+00
53	0.000E+00	3.082E-03	6.085E-04	0.000E+00	0.000E+00	0.000E+00	8.937E-05	0.000E+00
54	0.000E+00	3.139E-03	6.404E-04	0.000E+00	0.000E+00	0.000E+00	9.391E-05	0.000E+00
55	0.000E+00	2.688E-03	7.880E-04	0.000E+00	0.000E+00	0.000E+00	1.152E-04	0.000E+00
56	0.000E+00	2.470E-03	9.054E-04	0.000E+00	0.000E+00	0.000E+00	1.325E-04	0.000E+00
57	0.000E+00	2.237E-03	1.002E-03	0.000E+00	0.000E+00	0.000E+00	1.463E-04	0.000E+00
58	0.000E+00	2.190E-03	1.080E-03	0.000E+00	0.000E+00	0.000E+00	1.575E-04	0.000E+00
59	0.000E+00	2.146E-03	1.193E-03	0.000E+00	0.000E+00	0.000E+00	1.738E-04	0.000E+00
60	0.000E+00	2.110E-03	1.397E-03	0.000E+00	0.000E+00	0.000E+00	2.035E-04	0.000E+00
61	0.000E+00	2.064E-03	2.418E-03	0.000E+00	0.000E+00	0.000E+00	3.559E-04	0.000E+00
62	0.000E+00	2.025E-03	2.634E-03	0.000E+00	0.000E+00	0.000E+00	3.891E-04	0.000E+00
63	0.000E+00	1.990E-03	1.796E-03	0.000E+00	0.000E+00	0.000E+00	2.619E-04	0.000E+00
64	0.000E+00	1.877E-03	1.616E-03	0.000E+00	0.000E+00	0.000E+00	2.357E-04	0.000E+00
65	0.000E+00	1.855E-03	1.175E-03	0.000E+00	0.000E+00	0.000E+00	1.721E-04	0.000E+00
66	0.000E+00	1.833E-03	1.385E-03	0.000E+00	0.000E+00	0.000E+00	2.031E-04	0.000E+00
67	0.000E+00	1.813E-03	1.173E-03	0.000E+00	0.000E+00	0.000E+00	1.710E-04	0.000E+00
68	0.000E+00	1.886E-03	1.038E-03	0.000E+00	0.000E+00	0.000E+00	1.534E-04	0.000E+00
69	0.000E+00	2.107E-03	1.566E-03	0.000E+00	0.000E+00	0.000E+00	2.298E-04	0.000E+00
70	0.000E+00	2.411E-03	1.871E-03	0.000E+00	0.000E+00	0.000E+00	2.741E-04	0.000E+00
71	0.000E+00	2.450E-03	2.528E-03	0.000E+00	0.000E+00	0.000E+00	3.743E-04	0.000E+00
72	0.000E+00	2.484E-03	1.451E-03	0.000E+00	0.000E+00	0.000E+00	2.121E-04	0.000E+00
73	0.000E+00	2.494E-03	9.721E-04	0.000E+00	0.000E+00	0.000E+00	1.425E-04	0.000E+00
74	0.000E+00	2.494E-03	1.232E-03	0.000E+00	0.000E+00	0.000E+00	1.799E-04	0.000E+00
75	0.000E+00	2.793E-03	9.703E-04	0.000E+00	0.000E+00	0.000E+00	1.419E-04	0.000E+00
76	0.000E+00	2.975E-03	9.924E-04	0.000E+00	0.000E+00	0.000E+00	1.453E-04	0.000E+00
77	0.000E+00	3.199E-03	1.098E-03	0.000E+00	0.000E+00	0.000E+00	1.606E-04	0.000E+00
78	0.000E+00	3.222E-03	1.090E-03	0.000E+00	0.000E+00	0.000E+00	1.590E-04	0.000E+00
79	0.000E+00	3.447E-03	1.222E-03	0.000E+00	0.000E+00	0.000E+00	1.783E-04	0.000E+00
80	0.000E+00	3.754E-03	1.259E-03	0.000E+00	0.000E+00	0.000E+00	1.837E-04	0.000E+00
81	0.000E+00	4.111E-03	1.158E-03	0.000E+00	0.000E+00	0.000E+00	1.693E-04	0.000E+00
82	0.000E+00	4.560E-03	1.093E-03	0.000E+00	0.000E+00	0.000E+00	1.603E-04	0.000E+00
83	0.000E+00	5.152E-03	1.213E-03	0.000E+00	0.000E+00	0.000E+00	1.779E-04	0.000E+00
84	0.000E+00	6.065E-03	1.257E-03	0.000E+00	0.000E+00	0.000E+00	1.845E-04	0.000E+00
85	0.000E+00	7.713E-03	1.726E-03	0.000E+00	0.000E+00	0.000E+00	2.529E-04	0.000E+00
86	0.000E+00	1.255E-02	3.619E-03	0.000E+00	0.000E+00	0.000E+00	5.319E-04	0.000E+00
87	0.000E+00	1.179E-02	3.306E-03	0.000E+00	0.000E+00	0.000E+00	4.849E-04	0.000E+00
88	0.000E+00	1.217E-02	3.209E-03	0.000E+00	0.000E+00	0.000E+00	4.698E-04	0.000E+00
89	0.000E+00	9.340E-03	3.108E-03	0.000E+00	0.000E+00	0.000E+00	4.545E-04	0.000E+00
90	0.000E+00	9.700E-03	2.746E-03	0.000E+00	0.000E+00	0.000E+00	4.012E-04	0.000E+00
91	0.000E+00	1.800E-03	9.671E-04	0.000E+00	0.000E+00	0.000E+00	1.414E-04	0.000E+00
92	0.000E+00	1.723E-03	1.005E-03	0.000E+00	0.000E+00	0.000E+00	1.468E-04	0.000E+00
93	0.000E+00	1.656E-03	9.616E-04	0.000E+00	0.000E+00	0.000E+00	1.405E-04	0.000E+00
94	0.000E+00	1.632E-03	1.008E-03	0.000E+00	0.000E+00	0.000E+00	1.467E-04	0.000E+00
95	0.000E+00	1.641E-03	1.074E-03	0.000E+00	0.000E+00	0.000E+00	1.563E-04	0.000E+00
96	0.000E+00	1.649E-03	1.079E-03	0.000E+00	0.000E+00	0.000E+00	1.580E-04	0.000E+00
97	0.000E+00	1.660E-03	1.292E-03	0.000E+00	0.000E+00	0.000E+00	1.888E-04	0.000E+00
98	0.000E+00	1.673E-03	1.456E-03	0.000E+00	0.000E+00	0.000E+00	2.132E-04	0.000E+00
99	0.000E+00	1.685E-03	1.263E-03	0.000E+00	0.000E+00	0.000E+00	1.843E-04	0.000E+00

100	0.000E+00	1.697E-03	1.329E-03	0.000E+00	0.000E+00	0.000E+00	1.948E-04	0.000E+00
101	0.000E+00	1.711E-03	1.238E-03	0.000E+00	0.000E+00	0.000E+00	1.806E-04	0.000E+00
102	0.000E+00	1.731E-03	1.400E-03	0.000E+00	0.000E+00	0.000E+00	2.040E-04	0.000E+00
103	0.000E+00	1.785E-03	9.872E-04	0.000E+00	0.000E+00	0.000E+00	1.444E-04	0.000E+00
104	0.000E+00	1.713E-03	9.356E-04	0.000E+00	0.000E+00	0.000E+00	1.369E-04	0.000E+00
105	0.000E+00	1.663E-03	1.001E-03	0.000E+00	0.000E+00	0.000E+00	1.458E-04	0.000E+00
106	0.000E+00	1.674E-03	1.092E-03	0.000E+00	0.000E+00	0.000E+00	1.590E-04	0.000E+00
107	0.000E+00	1.683E-03	1.196E-03	0.000E+00	0.000E+00	0.000E+00	1.749E-04	0.000E+00
108	0.000E+00	1.686E-03	1.346E-03	0.000E+00	0.000E+00	0.000E+00	1.967E-04	0.000E+00
109	0.000E+00	1.705E-03	1.442E-03	0.000E+00	0.000E+00	0.000E+00	2.105E-04	0.000E+00
110	0.000E+00	1.718E-03	1.411E-03	0.000E+00	0.000E+00	0.000E+00	2.057E-04	0.000E+00
111	0.000E+00	1.730E-03	1.190E-03	0.000E+00	0.000E+00	0.000E+00	1.736E-04	0.000E+00
112	0.000E+00	1.743E-03	1.342E-03	0.000E+00	0.000E+00	0.000E+00	1.957E-04	0.000E+00
113	0.000E+00	1.756E-03	1.546E-03	0.000E+00	0.000E+00	0.000E+00	2.253E-04	0.000E+00
114	0.000E+00	1.779E-03	1.618E-03	0.000E+00	0.000E+00	0.000E+00	2.357E-04	0.000E+00
115	0.000E+00	1.776E-03	8.971E-04	0.000E+00	0.000E+00	0.000E+00	1.314E-04	0.000E+00
116	0.000E+00	1.699E-03	9.866E-04	0.000E+00	0.000E+00	0.000E+00	1.437E-04	0.000E+00
117	0.000E+00	1.708E-03	1.102E-03	0.000E+00	0.000E+00	0.000E+00	1.605E-04	0.000E+00
118	0.000E+00	1.719E-03	1.270E-03	0.000E+00	0.000E+00	0.000E+00	1.859E-04	0.000E+00
119	0.000E+00	1.731E-03	1.493E-03	0.000E+00	0.000E+00	0.000E+00	2.183E-04	0.000E+00
120	0.000E+00	1.741E-03	1.583E-03	0.000E+00	0.000E+00	0.000E+00	2.310E-04	0.000E+00
121	0.000E+00	1.753E-03	1.500E-03	0.000E+00	0.000E+00	0.000E+00	2.188E-04	0.000E+00
122	0.000E+00	1.767E-03	1.326E-03	0.000E+00	0.000E+00	0.000E+00	1.933E-04	0.000E+00
123	0.000E+00	1.779E-03	1.433E-03	0.000E+00	0.000E+00	0.000E+00	2.090E-04	0.000E+00
124	0.000E+00	1.800E-03	1.605E-03	0.000E+00	0.000E+00	0.000E+00	2.339E-04	0.000E+00
125	0.000E+00	1.816E-03	1.678E-03	0.000E+00	0.000E+00	0.000E+00	2.444E-04	0.000E+00
126	0.000E+00	1.830E-03	1.748E-03	0.000E+00	0.000E+00	0.000E+00	2.546E-04	0.000E+00
127	0.000E+00	1.759E-03	9.652E-04	0.000E+00	0.000E+00	0.000E+00	1.407E-04	0.000E+00
128	0.000E+00	1.748E-03	1.105E-03	0.000E+00	0.000E+00	0.000E+00	1.610E-04	0.000E+00
129	0.000E+00	1.761E-03	1.306E-03	0.000E+00	0.000E+00	0.000E+00	1.914E-04	0.000E+00
130	0.000E+00	1.776E-03	1.452E-03	0.000E+00	0.000E+00	0.000E+00	2.126E-04	0.000E+00
131	0.000E+00	1.783E-03	1.322E-03	0.000E+00	0.000E+00	0.000E+00	1.935E-04	0.000E+00
132	0.000E+00	1.800E-03	1.642E-03	0.000E+00	0.000E+00	0.000E+00	2.395E-04	0.000E+00
133	0.000E+00	1.805E-03	1.433E-03	0.000E+00	0.000E+00	0.000E+00	2.090E-04	0.000E+00
134	0.000E+00	1.825E-03	1.459E-03	0.000E+00	0.000E+00	0.000E+00	2.128E-04	0.000E+00
135	0.000E+00	1.842E-03	1.594E-03	0.000E+00	0.000E+00	0.000E+00	2.323E-04	0.000E+00
136	0.000E+00	1.855E-03	2.119E-03	0.000E+00	0.000E+00	0.000E+00	3.152E-04	0.000E+00
137	0.000E+00	1.870E-03	1.854E-03	0.000E+00	0.000E+00	0.000E+00	2.700E-04	0.000E+00
138	0.000E+00	1.885E-03	1.826E-03	0.000E+00	0.000E+00	0.000E+00	2.715E-04	0.000E+00
139	0.000E+00	1.803E-03	1.103E-03	0.000E+00	0.000E+00	0.000E+00	1.608E-04	0.000E+00
140	0.000E+00	1.807E-03	1.289E-03	0.000E+00	0.000E+00	0.000E+00	1.893E-04	0.000E+00
141	0.000E+00	1.817E-03	1.480E-03	0.000E+00	0.000E+00	0.000E+00	2.171E-04	0.000E+00
142	0.000E+00	1.823E-03	1.397E-03	0.000E+00	0.000E+00	0.000E+00	2.154E-04	0.000E+00
143	0.000E+00	1.841E-03	1.321E-03	0.000E+00	0.000E+00	0.000E+00	2.032E-04	0.000E+00
144	0.000E+00	1.857E-03	1.463E-03	0.000E+00	0.000E+00	0.000E+00	2.134E-04	0.000E+00
145	0.000E+00	1.869E-03	1.551E-03	0.000E+00	0.000E+00	0.000E+00	2.262E-04	0.000E+00
146	0.000E+00	1.886E-03	1.645E-03	0.000E+00	0.000E+00	0.000E+00	2.398E-04	0.000E+00
147	0.000E+00	1.900E-03	1.896E-03	0.000E+00	0.000E+00	0.000E+00	2.761E-04	0.000E+00
148	0.000E+00	1.915E-03	2.332E-03	0.000E+00	0.000E+00	0.000E+00	3.466E-04	0.000E+00
149	0.000E+00	1.931E-03	2.410E-03	0.000E+00	0.000E+00	0.000E+00	3.570E-04	0.000E+00
150	0.000E+00	1.943E-03	2.336E-03	0.000E+00	0.000E+00	0.000E+00	3.454E-04	0.000E+00
151	0.000E+00	1.933E-03	1.699E-03	0.000E+00	0.000E+00	0.000E+00	2.478E-04	0.000E+00
152	0.000E+00	1.947E-03	2.244E-03	0.000E+00	0.000E+00	0.000E+00	3.348E-04	0.000E+00
153	0.000E+00	1.964E-03	2.561E-03	0.000E+00	0.000E+00	0.000E+00	3.804E-04	0.000E+00
154	0.000E+00	1.983E-03	1.740E-03	0.000E+00	0.000E+00	0.000E+00	2.533E-04	0.000E+00
155	0.000E+00	1.991E-03	2.504E-03	0.000E+00	0.000E+00	0.000E+00	3.691E-04	0.000E+00
156	0.000E+00	2.016E-03	2.359E-03	0.000E+00	0.000E+00	0.000E+00	3.476E-04	0.000E+00
157	0.000E+00	2.498E-03	1.147E-03	0.000E+00	0.000E+00	0.000E+00	1.675E-04	0.000E+00
158	0.000E+00	2.193E-03	9.663E-04	0.000E+00	0.000E+00	0.000E+00	1.425E-04	0.000E+00
159	0.000E+00	1.944E-03	6.196E-04	0.000E+00	0.000E+00	0.000E+00	9.070E-05	0.000E+00
160	0.000E+00	1.752E-03	7.871E-04	0.000E+00	0.000E+00	0.000E+00	1.161E-04	0.000E+00
161	0.000E+00	1.594E-03	8.254E-04	0.000E+00	0.000E+00	0.000E+00	1.205E-04	0.000E+00
162	0.000E+00	1.472E-03	8.314E-04	0.000E+00	0.000E+00	0.000E+00	1.212E-04	0.000E+00
163	0.000E+00	1.485E-03	9.171E-04	0.000E+00	0.000E+00	0.000E+00	1.336E-04	0.000E+00
164	0.000E+00	1.516E-03	9.087E-04	0.000E+00	0.000E+00	0.000E+00	1.331E-04	0.000E+00
165	0.000E+00	1.540E-03	1.408E-03	0.000E+00	0.000E+00	0.000E+00	2.056E-04	0.000E+00
166	0.000E+00	1.567E-03	1.524E-03	0.000E+00	0.000E+00	0.000E+00	2.223E-04	0.000E+00
167	0.000E+00	1.594E-03	1.284E-03	0.000E+00	0.000E+00	0.000E+00	1.871E-04	0.000E+00
168	0.000E+00	2.198E-03	8.086E-04	0.000E+00	0.000E+00	0.000E+00	1.184E-04	0.000E+00
169	0.000E+00	1.933E-03	6.742E-04	0.000E+00	0.000E+00	0.000E+00	9.874E-05	0.000E+00
170	0.000E+00	1.723E-03	8.848E-04	0.000E+00	0.000E+00	0.000E+00	1.292E-04	0.000E+00
171	0.000E+00	1.570E-03	8.698E-04	0.000E+00	0.000E+00	0.000E+00	1.270E-04	0.000E+00
172	0.000E+00	1.541E-03	9.753E-04	0.000E+00	0.000E+00	0.000E+00	1.420E-04	0.000E+00
173	0.000E+00	1.566E-03	9.537E-04	0.000E+00	0.000E+00	0.000E+00	1.398E-04	0.000E+00
174	0.000E+00	1.594E-03	1.390E-03	0.000E+00	0.000E+00	0.000E+00	2.033E-04	0.000E+00
175	0.000E+00	1.624E-03	1.354E-03	0.000E+00	0.000E+00	0.000E+00	1.979E-04	0.000E+00
176	0.000E+00	1.655E-03	1.440E-03	0.000E+00	0.000E+00	0.000E+00	2.098E-04	0.000E+00
177	0.000E+00	1.686E-03	1.543E-03	0.000E+00	0.000E+00	0.000E+00	2.247E-04	0.000E+00
178	0.000E+00	2.175E-03	9.791E-04	0.000E+00	0.000E+00	0.000E+00	1.430E-04	0.000E+00
179	0.000E+00	1.898E-03	7.291E-04	0.000E+00	0.000E+00	0.000E+00	1.069E-04	0.000E+00
180	0.000E+00	1.695E-03	1.008E-03	0.000E+00	0.000E+00	0.000E+00	1.472E-04	0.000E+00
181	0.000E+00	1.602E-03	1.007E-03	0.000E+00	0.000E+00	0.000E+00	1.466E-04	0.000E+00
182	0.000E+00	1.626E-03	1.267E-03	0.000E+00	0.000E+00	0.000E+00	1.851E-04	0.000E+00
183	0.000E+00	1.656E-03	1.336E-03	0.000E+00	0.000E+00	0.000E+00	1.958E-04	0.000E+00
184	0.000E+00	1.695E-03	1.229E-03	0.000E+00	0.000E+00	0.000E+00	1.792E-04	0.000E+00
185	0.000E+00	1.723E-03	1.629E-03	0.000E+00	0.000E+00	0.000E+00	2.373E-04	0.000E+00
186	0.000E+00	1.758E-03	1.596E-03	0.000E+00	0.000E+00	0.000E+00	2.324E-04	0.000E+00
187	0.000E+00	1.793E-03	1.494E-03	0.000E+00	0.000E+00	0.000E+00	2.176E-04	0.000E+00
188	0.000E+00	2.140E-03	1.251E-03	0.000E+00	0.000E+00	0.000E+00	1.834E-04	0.000E+00
189	0.000E+00	1.863E-03	8.068E-04	0.000E+00	0.000E+00	0.000E+00	1.183E-04	0.000E+00
190	0.000E+00	1.681E-03	9.948E-04	0.000E+00	0.000E+00	0.000E+00	1.449E-04	0.000E+00
191	0.000E+00	1.705E-03	1.366E-03	0.000E+00	0.000E+00	0.000E+00	1.998E-04	0.000E+00
192	0.000E+00	1.735E-03	1.454E-03	0.000E+00	0.000E+00	0.000E+00	2.121E-04	0.000E+00
193	0.000E+00	1.767E-03	1.484E-03	0.000E+00	0.000E+00	0.000E+00	2.163E-04	0.000E+00
194	0.000E+00	1.811E-03	1.732E-03	0.000E+00	0.000E+00	0.000E+00	2.523E-04	0.000E+00
195	0.000E+00	1.843E-03	1.585E-03	0.000E+00	0.000E+00	0.000E+00	2.307E-04	0.000E+00
196	0.000E+00	1.888E-03	1.566E-03	0.000E+00	0.000E+00	0.000E+00	2.280E-04	0.000E+00

197	0.000E+00	1.924E-03	1.386E-03	0.000E+00	0.000E+00	0.000E+00	2.018E-04	0.000E+00
198	0.000E+00	2.105E-03	1.499E-03	0.000E+00	0.000E+00	0.000E+00	2.201E-04	0.000E+00
199	0.000E+00	1.832E-03	9.380E-04	0.000E+00	0.000E+00	0.000E+00	1.368E-04	0.000E+00
200	0.000E+00	1.810E-03	1.415E-03	0.000E+00	0.000E+00	0.000E+00	2.075E-04	0.000E+00
201	0.000E+00	1.878E-03	1.563E-03	0.000E+00	0.000E+00	0.000E+00	2.279E-04	0.000E+00
202	0.000E+00	1.956E-03	2.324E-03	0.000E+00	0.000E+00	0.000E+00	3.427E-04	0.000E+00
203	0.000E+00	2.002E-03	1.523E-03	0.000E+00	0.000E+00	0.000E+00	2.218E-04	0.000E+00
204	0.000E+00	2.035E-03	1.241E-03	0.000E+00	0.000E+00	0.000E+00	1.809E-04	0.000E+00
205	0.000E+00	2.092E-03	1.133E-03	0.000E+00	0.000E+00	0.000E+00	1.651E-04	0.000E+00
206	0.000E+00	2.302E-03	9.557E-04	0.000E+00	0.000E+00	0.000E+00	1.397E-04	0.000E+00
207	0.000E+00	2.573E-03	8.750E-04	0.000E+00	0.000E+00	0.000E+00	1.280E-04	0.000E+00
208	0.000E+00	2.293E-03	4.512E-04	0.000E+00	0.000E+00	0.000E+00	6.601E-05	0.000E+00
209	0.000E+00	2.303E-03	5.860E-04	0.000E+00	0.000E+00	0.000E+00	8.567E-05	0.000E+00
210	0.000E+00	2.303E-03	6.484E-04	0.000E+00	0.000E+00	0.000E+00	9.482E-05	0.000E+00
211	0.000E+00	2.326E-03	5.613E-04	0.000E+00	0.000E+00	0.000E+00	8.181E-05	0.000E+00
212	0.000E+00	2.281E-03	7.363E-04	0.000E+00	0.000E+00	0.000E+00	1.075E-04	0.000E+00
213	0.000E+00	2.111E-03	8.499E-04	0.000E+00	0.000E+00	0.000E+00	1.242E-04	0.000E+00
214	0.000E+00	1.924E-03	6.687E-04	0.000E+00	0.000E+00	0.000E+00	9.777E-05	0.000E+00
215	0.000E+00	1.901E-03	8.667E-04	0.000E+00	0.000E+00	0.000E+00	1.266E-04	0.000E+00
216	0.000E+00	1.865E-03	8.279E-04	0.000E+00	0.000E+00	0.000E+00	1.209E-04	0.000E+00
217	0.000E+00	1.889E-03	8.771E-04	0.000E+00	0.000E+00	0.000E+00	1.281E-04	0.000E+00
218	0.000E+00	1.799E-03	7.821E-04	0.000E+00	0.000E+00	0.000E+00	1.142E-04	0.000E+00
219	0.000E+00	1.615E-03	1.002E-03	0.000E+00	0.000E+00	0.000E+00	1.468E-04	0.000E+00
220	0.000E+00	1.510E-03	5.976E-04	0.000E+00	0.000E+00	0.000E+00	8.758E-05	0.000E+00
221	0.000E+00	1.368E-03	3.570E-04	0.000E+00	0.000E+00	0.000E+00	5.220E-05	0.000E+00
222	0.000E+00	1.241E-03	4.912E-04	0.000E+00	0.000E+00	0.000E+00	7.172E-05	0.000E+00
223	0.000E+00	1.176E-03	5.806E-04	0.000E+00	0.000E+00	0.000E+00	8.461E-05	0.000E+00
224	0.000E+00	1.199E-03	6.278E-04	0.000E+00	0.000E+00	0.000E+00	9.151E-05	0.000E+00
225	0.000E+00	1.223E-03	6.339E-04	0.000E+00	0.000E+00	0.000E+00	9.248E-05	0.000E+00
226	0.000E+00	1.245E-03	7.058E-04	0.000E+00	0.000E+00	0.000E+00	1.031E-04	0.000E+00
227	0.000E+00	2.370E-03	6.659E-04	0.000E+00	0.000E+00	0.000E+00	9.740E-05	0.000E+00
228	0.000E+00	2.500E-03	5.691E-04	0.000E+00	0.000E+00	0.000E+00	8.332E-05	0.000E+00
229	0.000E+00	2.532E-03	5.832E-04	0.000E+00	0.000E+00	0.000E+00	8.525E-05	0.000E+00
230	0.000E+00	2.617E-03	6.957E-04	0.000E+00	0.000E+00	0.000E+00	1.017E-04	0.000E+00
231	0.000E+00	2.470E-03	6.130E-04	0.000E+00	0.000E+00	0.000E+00	8.940E-05	0.000E+00
232	0.000E+00	2.335E-03	8.104E-04	0.000E+00	0.000E+00	0.000E+00	1.184E-04	0.000E+00
233	0.000E+00	2.188E-03	8.858E-04	0.000E+00	0.000E+00	0.000E+00	1.294E-04	0.000E+00
234	0.000E+00	2.102E-03	7.783E-04	0.000E+00	0.000E+00	0.000E+00	1.137E-04	0.000E+00
235	0.000E+00	2.087E-03	8.762E-04	0.000E+00	0.000E+00	0.000E+00	1.279E-04	0.000E+00
236	0.000E+00	2.067E-03	9.166E-04	0.000E+00	0.000E+00	0.000E+00	1.338E-04	0.000E+00
237	0.000E+00	1.960E-03	8.135E-04	0.000E+00	0.000E+00	0.000E+00	1.188E-04	0.000E+00
238	0.000E+00	1.756E-03	9.995E-04	0.000E+00	0.000E+00	0.000E+00	1.467E-04	0.000E+00
239	0.000E+00	1.530E-03	5.913E-04	0.000E+00	0.000E+00	0.000E+00	8.667E-05	0.000E+00
240	0.000E+00	1.401E-03	5.341E-04	0.000E+00	0.000E+00	0.000E+00	7.799E-05	0.000E+00
241	0.000E+00	1.264E-03	5.669E-04	0.000E+00	0.000E+00	0.000E+00	8.263E-05	0.000E+00
242	0.000E+00	1.246E-03	6.712E-04	0.000E+00	0.000E+00	0.000E+00	9.783E-05	0.000E+00
243	0.000E+00	1.277E-03	6.517E-04	0.000E+00	0.000E+00	0.000E+00	9.512E-05	0.000E+00
244	0.000E+00	1.306E-03	8.094E-04	0.000E+00	0.000E+00	0.000E+00	1.182E-04	0.000E+00
245	0.000E+00	1.325E-03	9.183E-04	0.000E+00	0.000E+00	0.000E+00	1.340E-04	0.000E+00
246	0.000E+00	2.633E-03	5.655E-04	0.000E+00	0.000E+00	0.000E+00	8.265E-05	0.000E+00
247	0.000E+00	2.637E-03	6.870E-04	0.000E+00	0.000E+00	0.000E+00	1.004E-04	0.000E+00
248	0.000E+00	2.730E-03	6.871E-04	0.000E+00	0.000E+00	0.000E+00	1.005E-04	0.000E+00
249	0.000E+00	2.862E-03	5.692E-04	0.000E+00	0.000E+00	0.000E+00	8.322E-05	0.000E+00
250	0.000E+00	2.851E-03	7.476E-04	0.000E+00	0.000E+00	0.000E+00	1.093E-04	0.000E+00
251	0.000E+00	2.744E-03	6.586E-04	0.000E+00	0.000E+00	0.000E+00	9.614E-05	0.000E+00
252	0.000E+00	2.462E-03	9.100E-04	0.000E+00	0.000E+00	0.000E+00	1.329E-04	0.000E+00
253	0.000E+00	2.392E-03	8.704E-04	0.000E+00	0.000E+00	0.000E+00	1.271E-04	0.000E+00
254	0.000E+00	2.339E-03	9.542E-04	0.000E+00	0.000E+00	0.000E+00	1.393E-04	0.000E+00
255	0.000E+00	2.333E-03	9.397E-04	0.000E+00	0.000E+00	0.000E+00	1.372E-04	0.000E+00
256	0.000E+00	2.086E-03	8.453E-04	0.000E+00	0.000E+00	0.000E+00	1.234E-04	0.000E+00
257	0.000E+00	1.870E-03	9.709E-04	0.000E+00	0.000E+00	0.000E+00	1.427E-04	0.000E+00
258	0.000E+00	1.618E-03	5.992E-04	0.000E+00	0.000E+00	0.000E+00	8.783E-05	0.000E+00
259	0.000E+00	1.420E-03	6.120E-04	0.000E+00	0.000E+00	0.000E+00	8.936E-05	0.000E+00
260	0.000E+00	1.304E-03	6.883E-04	0.000E+00	0.000E+00	0.000E+00	1.003E-04	0.000E+00
261	0.000E+00	1.336E-03	6.681E-04	0.000E+00	0.000E+00	0.000E+00	9.736E-05	0.000E+00
262	0.000E+00	1.371E-03	9.423E-04	0.000E+00	0.000E+00	0.000E+00	1.377E-04	0.000E+00
263	0.000E+00	1.396E-03	1.011E-03	0.000E+00	0.000E+00	0.000E+00	1.475E-04	0.000E+00
264	0.000E+00	1.427E-03	1.188E-03	0.000E+00	0.000E+00	0.000E+00	1.731E-04	0.000E+00
265	0.000E+00	2.631E-03	7.192E-04	0.000E+00	0.000E+00	0.000E+00	1.052E-04	0.000E+00
266	0.000E+00	2.853E-03	6.508E-04	0.000E+00	0.000E+00	0.000E+00	9.524E-05	0.000E+00
267	0.000E+00	2.903E-03	6.455E-04	0.000E+00	0.000E+00	0.000E+00	9.437E-05	0.000E+00
268	0.000E+00	3.010E-03	7.721E-04	0.000E+00	0.000E+00	0.000E+00	1.129E-04	0.000E+00
269	0.000E+00	3.091E-03	6.322E-04	0.000E+00	0.000E+00	0.000E+00	9.254E-05	0.000E+00
270	0.000E+00	3.119E-03	8.034E-04	0.000E+00	0.000E+00	0.000E+00	1.174E-04	0.000E+00
271	0.000E+00	2.877E-03	7.140E-04	0.000E+00	0.000E+00	0.000E+00	1.043E-04	0.000E+00
272	0.000E+00	2.682E-03	1.036E-03	0.000E+00	0.000E+00	0.000E+00	1.513E-04	0.000E+00
273	0.000E+00	2.675E-03	1.029E-03	0.000E+00	0.000E+00	0.000E+00	1.503E-04	0.000E+00
274	0.000E+00	2.602E-03	9.117E-04	0.000E+00	0.000E+00	0.000E+00	1.331E-04	0.000E+00
275	0.000E+00	2.257E-03	8.766E-04	0.000E+00	0.000E+00	0.000E+00	1.280E-04	0.000E+00
276	0.000E+00	1.907E-03	9.114E-04	0.000E+00	0.000E+00	0.000E+00	1.344E-04	0.000E+00
277	0.000E+00	1.624E-03	6.245E-04	0.000E+00	0.000E+00	0.000E+00	9.125E-05	0.000E+00
278	0.000E+00	1.407E-03	7.508E-04	0.000E+00	0.000E+00	0.000E+00	1.094E-04	0.000E+00
279	0.000E+00	1.407E-03	7.828E-04	0.000E+00	0.000E+00	0.000E+00	1.140E-04	0.000E+00
280	0.000E+00	1.449E-03	1.122E-03	0.000E+00	0.000E+00	0.000E+00	1.639E-04	0.000E+00
281	0.000E+00	1.490E-03	1.103E-03	0.000E+00	0.000E+00	0.000E+00	1.610E-04	0.000E+00
282	0.000E+00	1.526E-03	1.330E-03	0.000E+00	0.000E+00	0.000E+00	1.938E-04	0.000E+00
283	0.000E+00	1.574E-03	1.169E-03	0.000E+00	0.000E+00	0.000E+00	1.703E-04	0.000E+00
284	0.000E+00	2.669E-03	7.410E-04	0.000E+00	0.000E+00	0.000E+00	1.082E-04	0.000E+00
285	0.000E+00	2.891E-03	7.885E-04	0.000E+00	0.000E+00	0.000E+00	1.152E-04	0.000E+00
286	0.000E+00	3.016E-03	8.002E-04	0.000E+00	0.000E+00	0.000E+00	1.170E-04	0.000E+00
287	0.000E+00	3.185E-03	7.355E-04	0.000E+00	0.000E+00	0.000E+00	1.076E-04	0.000E+00
288	0.000E+00	3.416E-03	7.799E-04	0.000E+00	0.000E+00	0.000E+00	1.140E-04	0.000E+00
289	0.000E+00	3.609E-03	8.102E-04	0.000E+00	0.000E+00	0.000E+00	1.185E-04	0.000E+00
290	0.000E+00	3.475E-03	8.609E-04	0.000E+00	0.000E+00	0.000E+00	1.257E-04	0.000E+00
291	0.000E+00	2.961E-03	8.263E-04	0.000E+00	0.000E+00	0.000E+00	1.208E-04	0.000E+00
292	0.000E+00	3.091E-03	1.646E-03	0.000E+00	0.000E+00	0.000E+00	2.421E-04	0.000E+00
293	0.000E+00	2.934E-03	1.062E-03	0.000E+00	0.000E+00	0.000E+00	1.552E-04	0.000E+00

294	0.000E+00	1.644E-03	1.383E-03	0.000E+00	0.000E+00	0.000E+00	2.015E-04	0.000E+00
295	0.000E+00	1.711E-03	1.347E-03	0.000E+00	0.000E+00	0.000E+00	1.962E-04	0.000E+00
296	0.000E+00	1.748E-03	1.133E-03	0.000E+00	0.000E+00	0.000E+00	1.652E-04	0.000E+00
297	0.000E+00	2.504E-03	5.975E-04	0.000E+00	0.000E+00	0.000E+00	8.705E-05	0.000E+00
298	0.000E+00	2.965E-03	6.815E-04	0.000E+00	0.000E+00	0.000E+00	9.940E-05	0.000E+00
299	0.000E+00	3.137E-03	7.584E-04	0.000E+00	0.000E+00	0.000E+00	1.108E-04	0.000E+00
300	0.000E+00	3.340E-03	8.407E-04	0.000E+00	0.000E+00	0.000E+00	1.229E-04	0.000E+00
301	0.000E+00	3.550E-03	9.036E-04	0.000E+00	0.000E+00	0.000E+00	1.321E-04	0.000E+00
302	0.000E+00	3.928E-03	8.561E-04	0.000E+00	0.000E+00	0.000E+00	1.252E-04	0.000E+00
303	0.000E+00	4.241E-03	9.400E-04	0.000E+00	0.000E+00	0.000E+00	1.374E-04	0.000E+00
304	0.000E+00	3.647E-03	9.159E-04	0.000E+00	0.000E+00	0.000E+00	1.337E-04	0.000E+00
305	0.000E+00	3.638E-03	1.065E-03	0.000E+00	0.000E+00	0.000E+00	1.556E-04	0.000E+00
306	0.000E+00	1.869E-03	1.282E-03	0.000E+00	0.000E+00	0.000E+00	1.868E-04	0.000E+00
307	0.000E+00	1.940E-03	1.088E-03	0.000E+00	0.000E+00	0.000E+00	1.586E-04	0.000E+00
308	0.000E+00	1.957E-03	9.765E-04	0.000E+00	0.000E+00	0.000E+00	1.425E-04	0.000E+00
309	0.000E+00	2.704E-03	4.150E-04	0.000E+00	0.000E+00	0.000E+00	6.082E-05	0.000E+00
310	0.000E+00	2.903E-03	4.960E-04	0.000E+00	0.000E+00	0.000E+00	7.212E-05	0.000E+00
311	0.000E+00	3.007E-03	5.955E-04	0.000E+00	0.000E+00	0.000E+00	8.669E-05	0.000E+00
312	0.000E+00	3.454E-03	6.660E-04	0.000E+00	0.000E+00	0.000E+00	9.712E-05	0.000E+00
313	0.000E+00	3.752E-03	7.404E-04	0.000E+00	0.000E+00	0.000E+00	1.082E-04	0.000E+00
314	0.000E+00	4.145E-03	8.726E-04	0.000E+00	0.000E+00	0.000E+00	1.275E-04	0.000E+00
315	0.000E+00	4.735E-03	1.032E-03	0.000E+00	0.000E+00	0.000E+00	1.508E-04	0.000E+00
316	0.000E+00	5.078E-03	1.029E-03	0.000E+00	0.000E+00	0.000E+00	1.504E-04	0.000E+00
317	0.000E+00	4.542E-03	1.075E-03	0.000E+00	0.000E+00	0.000E+00	1.575E-04	0.000E+00
318	0.000E+00	2.194E-03	9.709E-04	0.000E+00	0.000E+00	0.000E+00	1.418E-04	0.000E+00
319	0.000E+00	2.204E-03	8.375E-04	0.000E+00	0.000E+00	0.000E+00	1.224E-04	0.000E+00
320	0.000E+00	2.286E-03	6.098E-04	0.000E+00	0.000E+00	0.000E+00	8.911E-05	0.000E+00
321	0.000E+00	2.578E-03	8.261E-04	0.000E+00	0.000E+00	0.000E+00	1.214E-04	0.000E+00
322	0.000E+00	2.849E-03	8.387E-04	0.000E+00	0.000E+00	0.000E+00	1.233E-04	0.000E+00
323	0.000E+00	3.140E-03	8.507E-04	0.000E+00	0.000E+00	0.000E+00	1.251E-04	0.000E+00
324	0.000E+00	3.293E-03	8.609E-04	0.000E+00	0.000E+00	0.000E+00	1.266E-04	0.000E+00
325	0.000E+00	3.764E-03	8.674E-04	0.000E+00	0.000E+00	0.000E+00	1.276E-04	0.000E+00
326	0.000E+00	4.372E-03	9.015E-04	0.000E+00	0.000E+00	0.000E+00	1.319E-04	0.000E+00
327	0.000E+00	5.022E-03	1.069E-03	0.000E+00	0.000E+00	0.000E+00	1.564E-04	0.000E+00
328	0.000E+00	6.789E-03	1.225E-03	0.000E+00	0.000E+00	0.000E+00	1.792E-04	0.000E+00
329	0.000E+00	6.761E-03	1.370E-03	0.000E+00	0.000E+00	0.000E+00	2.003E-04	0.000E+00
330	0.000E+00	2.665E-03	6.831E-04	0.000E+00	0.000E+00	0.000E+00	9.977E-05	0.000E+00
331	0.000E+00	2.703E-03	6.682E-04	0.000E+00	0.000E+00	0.000E+00	9.770E-05	0.000E+00
332	0.000E+00	2.566E-03	6.761E-04	0.000E+00	0.000E+00	0.000E+00	9.889E-05	0.000E+00
333	0.000E+00	2.510E-03	2.258E-03	0.000E+00	0.000E+00	0.000E+00	3.300E-04	0.000E+00
334	0.000E+00	2.692E-03	2.361E-03	0.000E+00	0.000E+00	0.000E+00	3.450E-04	0.000E+00
335	0.000E+00	2.924E-03	2.470E-03	0.000E+00	0.000E+00	0.000E+00	3.609E-04	0.000E+00
336	0.000E+00	3.247E-03	2.582E-03	0.000E+00	0.000E+00	0.000E+00	3.772E-04	0.000E+00
337	0.000E+00	3.745E-03	2.691E-03	0.000E+00	0.000E+00	0.000E+00	3.930E-04	0.000E+00
338	0.000E+00	4.488E-03	2.782E-03	0.000E+00	0.000E+00	0.000E+00	4.062E-04	0.000E+00
339	0.000E+00	5.296E-03	2.823E-03	0.000E+00	0.000E+00	0.000E+00	4.122E-04	0.000E+00
340	0.000E+00	7.010E-03	2.740E-03	0.000E+00	0.000E+00	0.000E+00	4.003E-04	0.000E+00
341	0.000E+00	3.292E-03	6.527E-04	0.000E+00	0.000E+00	0.000E+00	9.583E-05	0.000E+00
342	0.000E+00	3.417E-03	7.534E-04	0.000E+00	0.000E+00	0.000E+00	1.101E-04	0.000E+00
343	0.000E+00	3.351E-03	7.687E-04	0.000E+00	0.000E+00	0.000E+00	1.123E-04	0.000E+00
344	0.000E+00	3.095E-03	7.126E-04	0.000E+00	0.000E+00	0.000E+00	1.040E-04	0.000E+00
345	0.000E+00	2.880E-03	6.221E-04	0.000E+00	0.000E+00	0.000E+00	9.077E-05	0.000E+00
346	0.000E+00	2.568E-03	2.651E-03	0.000E+00	0.000E+00	0.000E+00	3.876E-04	0.000E+00
347	0.000E+00	2.676E-03	2.672E-03	0.000E+00	0.000E+00	0.000E+00	3.907E-04	0.000E+00
348	0.000E+00	2.601E-03	2.689E-03	0.000E+00	0.000E+00	0.000E+00	3.933E-04	0.000E+00
349	0.000E+00	2.442E-03	2.707E-03	0.000E+00	0.000E+00	0.000E+00	3.959E-04	0.000E+00
350	0.000E+00	3.414E-03	2.735E-03	0.000E+00	0.000E+00	0.000E+00	4.000E-04	0.000E+00
351	0.000E+00	3.920E-03	2.787E-03	0.000E+00	0.000E+00	0.000E+00	4.077E-04	0.000E+00
352	0.000E+00	4.451E-03	2.879E-03	0.000E+00	0.000E+00	0.000E+00	4.212E-04	0.000E+00
353	0.000E+00	6.623E-03	3.004E-03	0.000E+00	0.000E+00	0.000E+00	4.397E-04	0.000E+00
354	0.000E+00	4.753E-03	6.633E-04	0.000E+00	0.000E+00	0.000E+00	9.711E-05	0.000E+00
355	0.000E+00	4.199E-03	5.516E-04	0.000E+00	0.000E+00	0.000E+00	8.055E-05	0.000E+00
356	0.000E+00	3.846E-03	4.970E-04	0.000E+00	0.000E+00	0.000E+00	7.250E-05	0.000E+00
357	0.000E+00	3.492E-03	4.588E-04	0.000E+00	0.000E+00	0.000E+00	6.689E-05	0.000E+00
358	0.000E+00	3.210E-03	4.282E-04	0.000E+00	0.000E+00	0.000E+00	6.242E-05	0.000E+00
359	0.000E+00	2.610E-03	2.108E-03	0.000E+00	0.000E+00	0.000E+00	3.070E-04	0.000E+00
360	0.000E+00	2.834E-03	2.107E-03	0.000E+00	0.000E+00	0.000E+00	3.068E-04	0.000E+00
361	0.000E+00	3.070E-03	2.100E-03	0.000E+00	0.000E+00	0.000E+00	3.056E-04	0.000E+00
362	0.000E+00	3.328E-03	2.083E-03	0.000E+00	0.000E+00	0.000E+00	3.030E-04	0.000E+00
363	0.000E+00	3.631E-03	2.054E-03	0.000E+00	0.000E+00	0.000E+00	2.985E-04	0.000E+00
364	0.000E+00	4.038E-03	2.017E-03	0.000E+00	0.000E+00	0.000E+00	2.929E-04	0.000E+00
365	0.000E+00	4.626E-03	1.980E-03	0.000E+00	0.000E+00	0.000E+00	2.874E-04	0.000E+00
366	0.000E+00	5.512E-03	1.937E-03	0.000E+00	0.000E+00	0.000E+00	2.808E-04	0.000E+00
367	0.000E+00	7.276E-03	1.972E-03	0.000E+00	0.000E+00	0.000E+00	2.857E-04	0.000E+00
368	0.000E+00	9.912E-03	1.625E-03	0.000E+00	0.000E+00	0.000E+00	2.371E-04	0.000E+00
369	0.000E+00	6.459E-03	8.569E-04	0.000E+00	0.000E+00	0.000E+00	1.263E-04	0.000E+00
370	0.000E+00	5.192E-03	5.126E-04	0.000E+00	0.000E+00	0.000E+00	7.475E-05	0.000E+00
371	0.000E+00	4.463E-03	5.936E-04	0.000E+00	0.000E+00	0.000E+00	8.712E-05	0.000E+00
372	0.000E+00	3.983E-03	5.480E-04	0.000E+00	0.000E+00	0.000E+00	8.042E-05	0.000E+00
373	0.000E+00	3.621E-03	5.059E-04	0.000E+00	0.000E+00	0.000E+00	7.391E-05	0.000E+00
374	0.000E+00	3.312E-03	4.637E-04	0.000E+00	0.000E+00	0.000E+00	6.778E-05	0.000E+00
375	0.000E+00	2.054E-03	6.010E-04	0.000E+00	0.000E+00	0.000E+00	8.772E-05	0.000E+00
376	0.000E+00	2.059E-03	6.474E-04	0.000E+00	0.000E+00	0.000E+00	9.447E-05	0.000E+00
377	0.000E+00	2.030E-03	6.757E-04	0.000E+00	0.000E+00	0.000E+00	9.858E-05	0.000E+00
378	0.000E+00	2.403E-03	6.773E-04	0.000E+00	0.000E+00	0.000E+00	9.879E-05	0.000E+00
379	0.000E+00	3.289E-03	6.349E-04	0.000E+00	0.000E+00	0.000E+00	9.257E-05	0.000E+00
380	0.000E+00	4.001E-03	5.981E-04	0.000E+00	0.000E+00	0.000E+00	8.765E-05	0.000E+00
381	0.000E+00	4.616E-03	8.403E-04	0.000E+00	0.000E+00	0.000E+00	1.224E-04	0.000E+00
382	0.000E+00	5.528E-03	9.712E-04	0.000E+00	0.000E+00	0.000E+00	1.413E-04	0.000E+00
383	0.000E+00	7.073E-03	2.549E-03	0.000E+00	0.000E+00	0.000E+00	3.711E-04	0.000E+00
384	0.000E+00	7.701E-03	3.062E-03	0.000E+00	0.000E+00	0.000E+00	4.462E-04	0.000E+00
385	0.000E+00	9.775E-03	2.634E-03	0.000E+00	0.000E+00	0.000E+00	3.845E-04	0.000E+00
386	0.000E+00	9.513E-03	1.885E-03	0.000E+00	0.000E+00	0.000E+00	2.751E-04	0.000E+00
387	0.000E+00	9.567E-03	1.167E-03	0.000E+00	0.000E+00	0.000E+00	1.702E-04	0.000E+00
388	0.000E+00	6.531E-03	1.035E-03	0.000E+00	0.000E+00	0.000E+00	1.515E-04	0.000E+00
389	0.000E+00	5.186E-03	1.103E-03	0.000E+00	0.000E+00	0.000E+00	1.614E-04	0.000E+00
390	0.000E+00	4.441E-03	3.696E-04	0.000E+00	0.000E+00	0.000E+00	5.458E-05	0.000E+00

391	0.000E+00	3.861E-03	3.835E-04	0.000E+00	0.000E+00	0.000E+00	5.585E-05	0.000E+00
392	0.000E+00	3.481E-03	4.225E-04	0.000E+00	0.000E+00	0.000E+00	6.159E-05	0.000E+00
393	0.000E+00	3.284E-03	4.404E-04	0.000E+00	0.000E+00	0.000E+00	6.424E-05	0.000E+00
394	0.000E+00	2.515E-03	5.540E-04	0.000E+00	0.000E+00	0.000E+00	8.079E-05	0.000E+00
395	0.000E+00	2.562E-03	5.060E-04	0.000E+00	0.000E+00	0.000E+00	7.377E-05	0.000E+00
396	0.000E+00	2.917E-03	4.555E-04	0.000E+00	0.000E+00	0.000E+00	6.656E-05	0.000E+00
397	0.000E+00	3.147E-03	5.201E-04	0.000E+00	0.000E+00	0.000E+00	7.600E-05	0.000E+00
398	0.000E+00	2.780E-03	5.633E-04	0.000E+00	0.000E+00	0.000E+00	8.211E-05	0.000E+00
399	0.000E+00	3.657E-03	8.318E-04	0.000E+00	0.000E+00	0.000E+00	1.212E-04	0.000E+00
400	0.000E+00	3.867E-03	7.381E-04	0.000E+00	0.000E+00	0.000E+00	1.075E-04	0.000E+00
401	0.000E+00	3.889E-03	1.153E-03	0.000E+00	0.000E+00	0.000E+00	1.682E-04	0.000E+00
402	0.000E+00	3.613E-03	2.490E-03	0.000E+00	0.000E+00	0.000E+00	3.631E-04	0.000E+00
403	0.000E+00	3.641E-03	3.046E-03	0.000E+00	0.000E+00	0.000E+00	4.438E-04	0.000E+00
404	0.000E+00	5.263E-03	2.329E-03	0.000E+00	0.000E+00	0.000E+00	3.402E-04	0.000E+00
405	0.000E+00	5.614E-03	1.625E-03	0.000E+00	0.000E+00	0.000E+00	2.372E-04	0.000E+00
406	0.000E+00	5.382E-03	9.573E-04	0.000E+00	0.000E+00	0.000E+00	1.398E-04	0.000E+00
407	0.000E+00	5.212E-03	9.037E-04	0.000E+00	0.000E+00	0.000E+00	1.319E-04	0.000E+00
408	0.000E+00	5.155E-03	9.095E-04	0.000E+00	0.000E+00	0.000E+00	1.331E-04	0.000E+00
409	0.000E+00	4.382E-03	9.606E-04	0.000E+00	0.000E+00	0.000E+00	1.405E-04	0.000E+00
410	0.000E+00	3.851E-03	3.299E-04	0.000E+00	0.000E+00	0.000E+00	4.860E-05	0.000E+00
411	0.000E+00	3.537E-03	3.352E-04	0.000E+00	0.000E+00	0.000E+00	4.935E-05	0.000E+00
412	0.000E+00	3.181E-03	3.311E-04	0.000E+00	0.000E+00	0.000E+00	4.842E-05	0.000E+00
413	0.000E+00	2.922E-03	7.552E-04	0.000E+00	0.000E+00	0.000E+00	1.100E-04	0.000E+00
414	0.000E+00	2.404E-03	4.937E-04	0.000E+00	0.000E+00	0.000E+00	7.201E-05	0.000E+00
415	0.000E+00	2.017E-03	5.118E-04	0.000E+00	0.000E+00	0.000E+00	7.588E-05	0.000E+00
416	0.000E+00	2.806E-03	5.938E-04	0.000E+00	0.000E+00	0.000E+00	8.657E-05	0.000E+00
417	0.000E+00	2.271E-03	3.896E-04	0.000E+00	0.000E+00	0.000E+00	5.838E-05	0.000E+00
418	0.000E+00	1.990E-03	6.634E-04	0.000E+00	0.000E+00	0.000E+00	9.686E-05	0.000E+00
419	0.000E+00	2.782E-03	4.937E-04	0.000E+00	0.000E+00	0.000E+00	7.224E-05	0.000E+00
420	0.000E+00	2.253E-03	1.197E-03	0.000E+00	0.000E+00	0.000E+00	1.752E-04	0.000E+00
421	0.000E+00	2.100E-03	1.896E-03	0.000E+00	0.000E+00	0.000E+00	2.765E-04	0.000E+00
422	0.000E+00	2.959E-03	2.005E-03	0.000E+00	0.000E+00	0.000E+00	2.930E-04	0.000E+00
423	0.000E+00	2.512E-03	1.905E-03	0.000E+00	0.000E+00	0.000E+00	2.779E-04	0.000E+00
424	0.000E+00	2.257E-03	1.842E-03	0.000E+00	0.000E+00	0.000E+00	2.688E-04	0.000E+00
425	0.000E+00	3.041E-03	2.748E-03	0.000E+00	0.000E+00	0.000E+00	4.003E-04	0.000E+00
426	0.000E+00	2.645E-03	2.644E-03	0.000E+00	0.000E+00	0.000E+00	3.851E-04	0.000E+00
427	0.000E+00	2.346E-03	2.506E-03	0.000E+00	0.000E+00	0.000E+00	3.652E-04	0.000E+00
428	0.000E+00	3.047E-03	2.962E-03	0.000E+00	0.000E+00	0.000E+00	4.317E-04	0.000E+00
429	0.000E+00	2.653E-03	2.826E-03	0.000E+00	0.000E+00	0.000E+00	4.120E-04	0.000E+00
430	0.000E+00	2.403E-03	2.677E-03	0.000E+00	0.000E+00	0.000E+00	3.903E-04	0.000E+00
431	0.000E+00	3.363E-03	2.174E-03	0.000E+00	0.000E+00	0.000E+00	3.175E-04	0.000E+00
432	0.000E+00	2.586E-03	2.060E-03	0.000E+00	0.000E+00	0.000E+00	3.009E-04	0.000E+00
433	0.000E+00	2.335E-03	1.934E-03	0.000E+00	0.000E+00	0.000E+00	2.824E-04	0.000E+00
434	0.000E+00	4.308E-03	1.346E-03	0.000E+00	0.000E+00	0.000E+00	1.966E-04	0.000E+00
435	0.000E+00	3.413E-03	1.115E-03	0.000E+00	0.000E+00	0.000E+00	1.631E-04	0.000E+00
436	0.000E+00	2.718E-03	9.369E-04	0.000E+00	0.000E+00	0.000E+00	1.372E-04	0.000E+00
437	0.000E+00	4.395E-03	9.074E-04	0.000E+00	0.000E+00	0.000E+00	1.325E-04	0.000E+00
438	0.000E+00	3.550E-03	7.716E-04	0.000E+00	0.000E+00	0.000E+00	1.128E-04	0.000E+00
439	0.000E+00	3.137E-03	6.233E-04	0.000E+00	0.000E+00	0.000E+00	9.117E-05	0.000E+00
440	0.000E+00	4.117E-03	8.122E-04	0.000E+00	0.000E+00	0.000E+00	1.186E-04	0.000E+00
441	0.000E+00	3.691E-03	9.340E-04	0.000E+00	0.000E+00	0.000E+00	1.363E-04	0.000E+00
442	0.000E+00	3.093E-03	9.187E-04	0.000E+00	0.000E+00	0.000E+00	1.341E-04	0.000E+00
443	0.000E+00	4.181E-03	7.688E-04	0.000E+00	0.000E+00	0.000E+00	1.122E-04	0.000E+00
444	0.000E+00	3.538E-03	7.463E-04	0.000E+00	0.000E+00	0.000E+00	1.089E-04	0.000E+00
445	0.000E+00	3.176E-03	6.334E-04	0.000E+00	0.000E+00	0.000E+00	9.254E-05	0.000E+00
446	0.000E+00	3.983E-03	6.538E-04	0.000E+00	0.000E+00	0.000E+00	9.580E-05	0.000E+00
447	0.000E+00	3.489E-03	6.822E-04	0.000E+00	0.000E+00	0.000E+00	9.961E-05	0.000E+00
448	0.000E+00	3.135E-03	6.325E-04	0.000E+00	0.000E+00	0.000E+00	9.236E-05	0.000E+00
449	0.000E+00	3.881E-03	8.275E-04	0.000E+00	0.000E+00	0.000E+00	1.210E-04	0.000E+00
450	0.000E+00	3.456E-03	6.979E-04	0.000E+00	0.000E+00	0.000E+00	1.021E-04	0.000E+00
451	0.000E+00	3.167E-03	5.780E-04	0.000E+00	0.000E+00	0.000E+00	8.445E-05	0.000E+00

RECEPTOR # 34 HAS MAXIMUM ACUTE HAZARD INDEX OF 1.372E-02

OLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 137

*** ACUTE HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 34 ***

POLLUTANT	CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
ACROL	0.000E+00	0.000E+00	2.500E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	4.448E-03	0.000E+00	1.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.448E-04	0.000E+00
HCHO	0.000E+00	0.000E+00	3.700E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	4.528E+01	0.000E+00	3.300E+03	0.000E+00	1.372E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	3.050E-03	0.000E+00	1.000E+00	0.000E+00	0.000E+00	3.050E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	4.400E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM = 0.000E+00 1.372E-02 3.050E-03 0.000E+00 0.000E+00 0.000E+00 4.448E-04 0.000E+00											

OLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** ACUTE HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR # 34 ***

POLLUTANT Cu AEL (ug/m3) = 1.000E+01 BACKGR. (ug/m3) = 0.000E+00

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POLLUTANT H₂ AEL (ug/m³) = 3.000E+01 BACKGR. (ug/m³) = 0.000E+00

POLLUTANT Ni AEL (ug/m3) = 1.000E+00 BACKGR. (ug/m3) = 0.000E+00

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		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** MAXIMUM CHRONIC EXPOSURE BY POLLUTANT FROM ALL SOURCES ***

POL.	*****PATHWAY DOSE (mg/kg-d)*****									INH CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	HAZARD INDEX	REC.	
	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOT MILK	NON-INH DOSE	ACCEPTABL ORAL DOSE						
ACETA	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E+00	0.00E+00	0	
ACROL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0	
As	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	5.45E-04	0.00E+00	5.00E-01	1.09E-03	69
BENZ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.10E+01	0.00E+00	0
Ba	3.06E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-03	2.82E-05	0.00E+00	4.80E-03	5.88E-03	42
Cd	5.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	2.05E-05	0.00E+00	3.50E+00	5.85E-06	63
Cz	9.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-03	3.31E-06	0.00E+00	2.00E-03	1.66E-03	69
Cu	1.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-05	0.00E+00	2.40E+00	1.91E-05	69
HCHO	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E+00	0.00E+00	0
HCN	9.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E+00	0.00E+00	7.00E+01	4.73E-02	87
Pb	2.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	9.36E-05	0.00E+00	1.50E+00	6.24E-05	69
Mn	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-04	0.00E+00	4.00E-01	1.29E-03	69
Hg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	3.00E-01	0.00E+00	0
Ni	4.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-05	0.00E+00	2.40E-01	6.33E-05	69
NAPHT	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-03	0.00E+00	0.00E+00	1.40E+01	0.00E+00	0
Se	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-01	0.00E+00	0
TOL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E+02	0.00E+00	0
XYLEN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E+02	0.00E+00	0
Zn	2.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05	0.00E+00	3.50E+01	2.00E-06	69

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*** RECEPTOR CHRONIC HAZARD INDICES BY TOXICOLOGICAL ENDPOINTS ***
FROM ALL SOURCES AND POLLUTANTS

RECEPTOR	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
1	7.023E-05	1.686E-03	7.795E-06	1.096E-04	1.014E-04	3.907E-06	6.491E-04	6.620E-05

2	1.051E-04	1.792E-03	1.153E-05	1.630E-04	1.510E-04	5.747E-06	8.963E-04	9.921E-05
3	1.044E-04	1.780E-03	1.145E-05	1.619E-04	1.499E-04	5.701E-06	8.859E-04	9.853E-05
4	1.357E-04	2.628E-03	1.496E-05	2.110E-04	1.953E-04	7.470E-06	1.196E-03	1.280E-04
5	1.369E-04	2.585E-03	1.509E-05	2.129E-04	1.971E-04	7.539E-06	1.208E-03	1.292E-04
6	1.244E-04	2.337E-03	1.373E-05	1.935E-04	1.791E-04	6.864E-06	1.110E-03	1.173E-04
7	1.098E-04	1.678E-03	1.211E-05	1.707E-04	1.581E-04	6.046E-06	9.684E-04	1.036E-04
8	1.105E-04	1.683E-03	1.229E-05	1.725E-04	1.596E-04	6.162E-06	1.032E-03	1.042E-04
9	1.149E-04	1.742E-03	1.282E-05	1.795E-04	1.662E-04	6.441E-06	1.100E-03	1.082E-04
10	1.457E-04	5.469E-03	1.608E-05	2.268E-04	2.100E-04	8.040E-06	1.299E-03	1.374E-04
11	5.941E-05	1.256E-03	6.573E-06	9.250E-05	8.564E-05	3.289E-06	5.379E-04	5.601E-05
12	2.579E-04	7.826E-03	2.870E-05	4.026E-04	3.726E-04	1.440E-05	2.426E-03	2.431E-04
13	1.120E-04	6.031E-03	1.283E-05	1.773E-04	1.639E-04	6.528E-06	1.257E-03	1.053E-04
14	1.129E-04	6.222E-03	1.294E-05	1.788E-04	1.653E-04	6.582E-06	1.268E-03	1.061E-04
15	1.100E-04	5.912E-03	1.261E-05	1.742E-04	1.611E-04	6.419E-06	1.239E-03	1.034E-04
16	1.250E-04	7.997E-03	1.431E-05	1.978E-04	1.829E-04	7.278E-06	1.398E-03	1.175E-04
17	6.577E-05	1.303E-03	7.296E-06	1.025E-04	9.490E-05	3.655E-06	6.056E-04	6.200E-05
18	9.925E-05	2.746E-03	1.111E-05	1.554E-04	1.438E-04	5.590E-06	9.682E-04	9.349E-05
19	9.857E-05	3.396E-03	1.118E-05	1.554E-04	1.437E-04	5.663E-06	1.045E-03	9.273E-05
20	1.383E-04	6.022E-03	1.564E-05	2.176E-04	2.012E-04	7.908E-06	1.437E-03	1.302E-04
21	1.010E-04	1.366E-02	1.167E-05	1.608E-04	1.486E-04	5.956E-06	1.183E-03	9.491E-05
22	9.420E-05	1.301E-02	1.101E-05	1.509E-04	1.393E-04	5.650E-06	1.175E-03	8.839E-05
23	9.390E-05	1.285E-02	1.101E-05	1.506E-04	1.391E-04	5.657E-06	1.190E-03	8.808E-05
24	9.328E-05	1.290E-02	1.091E-05	1.494E-04	1.380E-04	5.603E-06	1.170E-03	8.751E-05
25	9.398E-05	1.395E-02	1.094E-05	1.501E-04	1.387E-04	5.606E-06	1.150E-03	8.821E-05
26	9.945E-05	1.622E-02	1.128E-05	1.568E-04	1.450E-04	5.710E-06	1.052E-03	9.357E-05
27	1.034E-04	9.613E-03	1.142E-05	1.596E-04	1.477E-04	5.752E-06	1.008E-03	9.586E-05
28	1.087E-04	7.947E-03	1.216E-05	1.703E-04	1.576E-04	6.119E-06	1.057E-03	1.024E-04
29	1.380E-04	6.899E-03	1.552E-05	2.165E-04	2.003E-04	7.824E-06	1.387E-03	1.299E-04
30	1.462E-04	6.810E-03	1.649E-05	2.297E-04	2.125E-04	8.331E-06	1.500E-03	1.376E-04
31	1.529E-04	7.247E-03	1.732E-05	2.407E-04	2.226E-04	8.763E-06	1.603E-03	1.439E-04
32	1.534E-04	8.693E-03	1.745E-05	2.420E-04	2.238E-04	8.848E-06	1.651E-03	1.443E-04
33	1.699E-04	3.056E-02	1.941E-05	2.686E-04	2.483E-04	9.857E-06	1.872E-03	1.598E-04
34	1.876E-04	3.257E-02	2.148E-05	2.970E-04	2.745E-04	1.092E-05	2.096E-03	1.764E-04
35	1.999E-04	3.228E-02	2.291E-05	3.166E-04	2.926E-04	1.165E-05	2.242E-03	1.880E-04
36	2.087E-04	3.082E-02	2.383E-05	3.298E-04	3.049E-04	1.210E-05	2.292E-03	1.963E-04
37	2.095E-04	2.841E-02	2.383E-05	3.302E-04	3.054E-04	1.208E-05	2.257E-03	1.970E-04
38	2.033E-04	1.518E-02	2.302E-05	3.197E-04	2.957E-04	1.164E-05	2.123E-03	1.914E-04
39	2.481E-04	2.878E-02	2.818E-05	3.908E-04	3.614E-04	1.428E-05	2.648E-03	2.334E-04
40	3.142E-04	3.582E-02	3.582E-05	4.958E-04	4.585E-04	1.818E-05	3.420E-03	2.955E-04
41	4.285E-04	3.203E-02	4.961E-05	6.859E-04	6.339E-04	2.535E-05	5.089E-03	4.024E-04
42	6.540E-04	2.148E-02	7.665E-05	1.048E-03	9.678E-04	3.938E-05	8.269E-03	6.135E-04
43	5.551E-04	1.494E-02	6.386E-05	8.819E-04	8.152E-04	3.254E-05	6.368E-03	5.216E-04
44	5.088E-04	9.836E-03	5.534E-05	7.878E-04	7.299E-04	2.746E-05	4.081E-03	4.805E-04
45	4.927E-04	6.829E-03	5.229E-05	7.534E-04	6.987E-04	2.564E-05	3.245E-03	4.662E-04
46	3.111E-04	4.880E-03	3.336E-05	4.779E-04	4.430E-04	1.644E-05	2.237E-03	2.941E-04
47	4.572E-04	5.483E-03	4.983E-05	7.087E-04	6.565E-04	2.476E-05	3.727E-03	4.316E-04
48	5.978E-04	6.166E-03	6.298E-05	9.117E-04	8.458E-04	3.076E-05	3.679E-03	5.660E-04
49	7.073E-04	6.607E-03	7.449E-05	1.079E-03	1.001E-03	3.638E-05	4.338E-03	6.697E-04
50	7.583E-04	6.542E-03	8.017E-05	1.159E-03	1.075E-03	3.923E-05	4.822E-03	7.178E-04
51	3.987E-04	5.059E-03	4.325E-05	6.178E-04	5.725E-04	2.144E-05	3.137E-03	3.766E-04
52	2.649E-04	4.054E-03	2.893E-05	4.110E-04	3.807E-04	1.439E-05	2.191E-03	2.501E-04
53	1.924E-04	3.301E-03	2.105E-05	2.984E-04	2.764E-04	1.048E-05	1.615E-03	1.815E-04
54	1.553E-04	2.771E-03	1.791E-05	2.478E-04	2.290E-04	9.135E-06	1.805E-03	1.459E-04
55	1.673E-04	2.951E-03	1.878E-05	2.637E-04	2.440E-04	9.463E-06	1.665E-03	1.575E-04
56	1.817E-04	3.090E-03	2.047E-05	2.870E-04	2.656E-04	1.033E-05	1.842E-03	1.711E-04
57	1.918E-04	3.104E-03	2.105E-05	2.977E-04	2.757E-04	1.049E-05	1.645E-03	1.809E-04
58	2.403E-04	3.567E-03	2.647E-05	3.738E-04	3.462E-04	1.322E-05	2.115E-03	2.266E-04
59	2.987E-04	4.040E-03	3.437E-05	4.755E-04	4.396E-04	1.751E-05	3.429E-03	2.807E-04
60	3.577E-04	4.403E-03	4.121E-05	5.690E-04	5.259E-04	2.101E-05	4.135E-03	3.361E-04
61	4.324E-04	4.708E-03	4.959E-05	6.859E-04	6.340E-04	2.524E-05	4.877E-03	4.064E-04
62	5.102E-04	5.072E-03	5.851E-05	8.090E-04	7.479E-04	2.977E-05	5.747E-03	4.795E-04
63	5.869E-04	5.528E-03	6.787E-05	9.344E-04	8.635E-04	3.466E-05	6.920E-03	5.512E-04
64	5.398E-04	5.125E-03	6.246E-05	8.609E-04	7.956E-04	3.191E-05	6.386E-03	5.069E-04
65	6.364E-04	5.647E-03	7.265E-05	1.007E-03	9.307E-04	3.688E-05	6.984E-03	5.984E-04
66	7.912E-04	6.348E-03	8.881E-05	1.242E-03	1.149E-03	4.474E-05	7.857E-03	7.451E-04
67	1.078E-03	7.536E-03	1.179E-04	1.672E-03	1.549E-03	5.862E-05	8.959E-03	1.018E-03
68	1.153E-03	8.276E-03	1.251E-04	1.784E-03	1.653E-03	6.201E-05	9.076E-03	1.089E-03
69	1.154E-03	8.881E-03	1.257E-04	1.787E-03	1.655E-03	6.241E-05	9.350E-03	1.090E-03
70	1.127E-03	9.215E-03	1.230E-04	1.747E-03	1.618E-03	6.118E-05	9.304E-03	1.064E-03
71	7.305E-04	7.246E-03	8.102E-05	1.141E-03	1.056E-03	4.059E-05	6.719E-03	6.887E-04
72	5.326E-04	5.843E-03	6.003E-05	8.380E-04	7.752E-04	3.030E-05	5.423E-03	5.014E-04
73	4.042E-04	4.803E-03	4.477E-05	6.313E-04	5.844E-04	2.242E-05	3.688E-03	3.810E-04
74	3.359E-04	4.140E-03	3.867E-05	5.338E-04	4.934E-04	1.971E-05	3.865E-03	3.156E-04
75	3.096E-04	4.145E-03	3.466E-05	4.875E-04	4.512E-04	1.744E-05	3.028E-03	2.916E-04
76	2.787E-04	4.242E-03	3.059E-05	4.331E-04	4.011E-04	1.525E-05	2.392E-03	2.629E-04
77	2.406E-04	4.193E-03	2.640E-05	3.741E-04	3.464E-04	1.316E-05	2.057E-03	2.271E-04
78	2.062E-04	4.040E-03	2.339E-05	3.270E-04	3.024E-04	1.184E-05	2.183E-03	1.940E-04
79	2.372E-04	4.604E-03	2.747E-05	3.794E-04	3.506E-04	1.404E-05	2.819E-03	2.227E-04
80	2.631E-04	5.278E-03	2.878E-05	4.085E-04	3.784E-04	1.432E-05	2.200E-03	2.483E-04
81	3.079E-04	6.230E-03	3.339E-05	4.761E-04	4.411E-04	1.654E-05	2.413E-03	2.908E-04
82	3.617E-04	7.531E-03	3.884E-05	5.562E-04	5.156E-04	1.915E-05	2.626E-03	3.419E-04
83	3.981E-04	9.279E-03	4.265E-05	6.116E-04	5.669E-04	2.101E-05	2.838E-03	3.764E-04
84	4.318E-04	1.226E-02	4.620E-05	6.629E-04	6.146E-04	2.274E-05	3.044E-03	4.084E-04
85	4.596E-04	1.908E-02	4.913E-05	7.053E-04	6.539E-04	2.417E-05	3.210E-03	4.347E-04
86	4.458E-04	4.234E-02	4.782E-05	6.853E-04	6.353E-04	2.357E-05	3.210E-03	4.215E-04
87	2.351E-04	4.784E-02	2.590E-05	3.657E-04	3.386E-04	1.293E-05	2.066E-03	2.217E-04
88	1.566E-04	3.008E-02	1.755E-05	2.456E-04	2.272E-04	8.834E-06	1.539E-03	1.475E-04
89	1.140E-04	1.134E-02	1.293E-05	1.799E-04	1.663E-04	6.548E-06	1.207E-03	1.073E-04
90	1.070E-04	1.307E-02	1.224E-05	1.695E-04	1.567E-04	6.221E-06	1.189E-03	1.006E-04
91	5.129E-04	5.639E-03	5.563E-05	7.916E-04	7.335E-04	2.757E-05	4.029E-03	4.844E-04
92	4.967E-04	5.425E-03	5.396E-05	7.672E-04	7.108E-04	2.676E-05	3.947E-03	4.691E-04
93	4.779E-04	5.168E-03	5.205E-05	7.390E-04	6.846E-04	2.585E-05	3.874E-03	4.512E-04
94	4.581E-04	4.905E-03	5.016E-05	7.103E-04	6.579E-04	2.497E-05	3.856E-03	4.323E-04
95	4.389E-04	4.673E-03	4.823E-05	6.817E-04	6.313E-04	2.406E-05	3.790E-03	4.141E-04
96	4.215E-04	4.465E-03	4.640E-05	6.550E-04	6.065E-04	2.316E-05	3.685E-03	3.976E-04
97	4.050E-04	4.268E-03	4.489E-05	6.315E-04	5.846E-04	2.248E-05	3.709E-03	3.818E-04
98	3.811E-04	4.063E-03	4.216E-05	5.934E-04	5.493E-04	2.109E-05	3.443E-03	3.594E-04

99	3.611E-04	3.896E-03	4.046E-05	5.661E-04	5.238E-04	2.037E-05	3.549E-03	3.401E-04
100	3.382E-04	3.736E-03	3.801E-05	5.309E-04	4.912E-04	1.916E-05	3.386E-03	3.185E-04
101	3.194E-04	3.614E-03	3.649E-05	5.059E-04	4.678E-04	1.854E-05	3.526E-03	3.003E-04
102	3.036E-04	3.521E-03	3.565E-05	4.870E-04	4.498E-04	1.833E-05	3.877E-03	2.847E-04
103	5.859E-04	5.993E-03	6.349E-05	9.040E-04	8.376E-04	3.145E-05	4.569E-03	5.534E-04
104	5.626E-04	5.725E-03	6.113E-05	8.692E-04	8.053E-04	3.032E-05	4.482E-03	5.313E-04
105	5.350E-04	5.424E-03	5.835E-05	8.281E-04	7.671E-04	2.900E-05	4.380E-03	5.051E-04
106	5.079E-04	5.135E-03	5.578E-05	7.888E-04	7.305E-04	2.781E-05	4.368E-03	4.792E-04
107	4.834E-04	4.889E-03	5.327E-05	7.518E-04	6.962E-04	2.660E-05	4.257E-03	4.560E-04
108	4.596E-04	4.667E-03	5.085E-05	7.161E-04	6.630E-04	2.545E-05	4.161E-03	4.333E-04
109	4.349E-04	4.448E-03	4.846E-05	6.801E-04	6.294E-04	2.433E-05	4.123E-03	4.099E-04
110	4.072E-04	4.235E-03	4.577E-05	6.396E-04	5.918E-04	2.307E-05	4.078E-03	3.834E-04
111	3.798E-04	4.039E-03	4.287E-05	5.977E-04	5.529E-04	2.165E-05	3.901E-03	3.575E-04
112	3.550E-04	3.877E-03	4.040E-05	5.611E-04	5.189E-04	2.048E-05	3.828E-03	3.339E-04
113	3.319E-04	3.745E-03	3.808E-05	5.269E-04	4.871E-04	1.938E-05	3.747E-03	3.120E-04
114	3.142E-04	3.648E-03	3.684E-05	5.038E-04	4.653E-04	1.893E-05	3.983E-03	2.947E-04
115	6.836E-04	6.387E-03	7.401E-05	1.055E-03	9.773E-04	3.664E-05	5.294E-03	6.458E-04
116	6.482E-04	6.066E-03	7.047E-05	1.002E-03	9.285E-04	3.496E-05	5.181E-03	6.121E-04
117	6.058E-04	5.718E-03	6.621E-05	9.388E-04	8.696E-04	3.293E-05	5.034E-03	5.718E-04
118	5.678E-04	5.400E-03	6.259E-05	8.835E-04	8.181E-04	3.126E-05	5.012E-03	5.556E-04
119	5.361E-04	5.154E-03	5.985E-05	8.409E-04	7.782E-04	3.007E-05	5.148E-03	5.051E-04
120	4.986E-04	4.881E-03	5.569E-05	7.808E-04	7.226E-04	2.799E-05	4.799E-03	4.697E-04
121	4.633E-04	4.624E-03	5.194E-05	7.267E-04	6.724E-04	2.615E-05	4.569E-03	4.363E-04
122	4.307E-04	4.396E-03	4.890E-05	6.802E-04	6.291E-04	2.477E-05	4.583E-03	4.052E-04
123	3.999E-04	4.194E-03	4.565E-05	6.332E-04	5.855E-04	2.318E-05	4.390E-03	3.760E-04
124	3.774E-04	4.053E-03	4.416E-05	6.053E-04	5.591E-04	2.267E-05	4.735E-03	3.541E-04
125	3.512E-04	3.913E-03	4.097E-05	5.617E-04	5.189E-04	2.101E-05	4.337E-03	3.296E-04
126	3.263E-04	3.796E-03	3.812E-05	5.223E-04	4.825E-04	1.956E-05	4.058E-03	3.062E-04
127	8.217E-04	6.868E-03	8.883E-05	1.267E-03	1.175E-03	4.395E-05	6.293E-03	7.763E-04
128	7.668E-04	6.484E-03	8.331E-05	1.185E-03	1.098E-03	4.133E-05	6.107E-03	7.241E-04
129	6.969E-04	6.068E-03	7.648E-05	1.082E-03	1.002E-03	3.812E-05	5.968E-03	6.575E-04
130	6.459E-04	5.730E-03	7.283E-05	1.016E-03	9.398E-04	3.677E-05	6.593E-03	6.081E-04
131	5.914E-04	5.406E-03	6.725E-05	9.338E-04	8.635E-04	3.408E-05	6.348E-03	5.563E-04
132	5.405E-04	5.114E-03	6.190E-05	8.577E-04	7.930E-04	3.147E-05	6.042E-03	5.081E-04
133	4.911E-04	4.804E-03	5.563E-05	7.746E-04	7.165E-04	2.815E-05	5.153E-03	4.621E-04
134	4.581E-04	4.583E-03	5.296E-05	7.294E-04	6.741E-04	2.705E-05	5.397E-03	4.302E-04
135	4.258E-04	4.382E-03	4.946E-05	6.796E-04	6.279E-04	2.531E-05	5.141E-03	3.998E-04
136	3.973E-04	4.222E-03	4.606E-05	6.334E-04	5.853E-04	2.355E-05	4.746E-03	3.731E-04
137	3.681E-04	4.086E-03	4.277E-05	5.875E-04	5.429E-04	2.189E-05	4.455E-03	3.455E-04
138	3.416E-04	3.965E-03	3.979E-05	5.459E-04	5.043E-04	2.039E-05	4.187E-03	3.206E-04
139	1.047E-03	7.558E-03	1.139E-04	1.622E-03	1.503E-03	5.657E-05	8.454E-03	9.883E-04
140	9.627E-04	7.088E-03	1.057E-04	1.496E-03	1.385E-03	5.271E-05	8.275E-03	9.084E-04
141	8.263E-04	6.512E-03	9.203E-05	1.292E-03	1.196E-03	4.619E-05	7.809E-03	7.787E-04
142	7.137E-04	6.007E-03	8.058E-05	1.123E-03	1.039E-03	4.070E-05	7.342E-03	6.718E-04
143	6.353E-04	5.633E-03	7.238E-05	1.004E-03	9.283E-04	3.672E-05	6.896E-03	5.974E-04
144	5.729E-04	5.312E-03	6.583E-05	9.092E-04	8.405E-04	3.353E-05	6.528E-03	5.383E-04
145	5.229E-04	5.018E-03	6.030E-05	8.315E-04	7.685E-04	3.076E-05	6.073E-03	4.913E-04
146	4.836E-04	4.773E-03	5.595E-05	7.702E-04	7.117E-04	2.858E-05	5.719E-03	4.542E-04
147	4.486E-04	4.579E-03	5.190E-05	7.145E-04	6.603E-04	2.651E-05	5.300E-03	4.213E-04
148	4.163E-04	4.420E-03	4.816E-05	6.630E-04	6.127E-04	2.460E-05	4.919E-03	3.910E-04
149	3.872E-04	4.280E-03	4.482E-05	6.168E-04	5.700E-04	2.290E-05	4.591E-03	3.636E-04
150	3.587E-04	4.153E-03	4.154E-05	5.716E-04	5.282E-04	2.123E-05	4.263E-03	3.369E-04
151	5.521E-04	5.240E-03	6.387E-05	8.791E-04	8.124E-04	3.262E-05	6.523E-03	5.185E-04
152	5.127E-04	5.006E-03	5.911E-05	8.152E-04	7.534E-04	3.015E-05	5.948E-03	4.817E-04
153	4.774E-04	4.816E-03	5.493E-05	7.583E-04	7.009E-04	2.799E-05	5.479E-03	4.486E-04
154	4.371E-04	4.644E-03	5.063E-05	6.968E-04	6.439E-04	2.588E-05	5.200E-03	4.105E-04
155	4.140E-04	4.507E-03	4.764E-05	6.576E-04	6.078E-04	2.428E-05	4.755E-03	3.890E-04
156	3.791E-04	4.366E-03	4.374E-05	6.031E-04	5.574E-04	2.232E-05	4.416E-03	3.561E-04
157	2.872E-04	3.713E-03	3.336E-05	4.584E-04	4.235E-04	1.707E-05	3.465E-03	2.697E-04
158	2.945E-04	3.697E-03	3.389E-05	4.680E-04	4.326E-04	1.727E-05	3.384E-03	2.767E-04
159	2.869E-04	3.797E-03	3.148E-05	4.454E-04	4.125E-04	1.569E-05	2.448E-03	2.708E-04
160	2.792E-04	3.811E-03	3.042E-05	4.317E-04	3.999E-04	1.511E-05	2.270E-03	2.636E-04
161	2.653E-04	3.623E-03	2.890E-05	4.102E-04	3.800E-04	1.436E-05	2.155E-03	2.505E-04
162	2.525E-04	3.358E-03	2.757E-05	3.908E-04	3.620E-04	1.371E-05	2.086E-03	2.383E-04
163	2.426E-04	3.064E-03	2.659E-05	3.761E-04	3.484E-04	1.325E-05	2.057E-03	2.290E-04
164	2.260E-04	2.814E-03	2.493E-05	3.514E-04	3.254E-04	1.245E-05	2.002E-03	2.132E-04
165	2.036E-04	2.628E-03	2.267E-05	3.179E-04	2.943E-04	1.138E-05	1.922E-03	1.919E-04
166	1.797E-04	2.503E-03	2.016E-05	2.816E-04	2.606E-04	1.015E-05	1.775E-03	1.693E-04
167	1.607E-04	2.450E-03	1.803E-05	2.518E-04	2.330E-04	9.081E-06	1.591E-03	1.513E-04
168	3.593E-04	4.402E-03	3.934E-05	5.573E-04	5.162E-04	1.959E-05	3.028E-03	3.390E-04
169	3.595E-04	4.522E-03	3.917E-05	5.560E-04	5.151E-04	1.946E-05	2.922E-03	3.395E-04
170	3.439E-04	4.406E-03	3.739E-05	5.313E-04	4.922E-04	1.855E-05	2.753E-03	3.247E-04
171	3.228E-04	4.048E-03	3.521E-05	4.994E-04	4.626E-04	1.750E-05	2.642E-03	3.048E-04
172	3.035E-04	3.664E-03	3.326E-05	4.705E-04	4.358E-04	1.656E-05	2.567E-03	2.864E-04
173	2.834E-04	3.304E-03	3.126E-05	4.407E-04	4.080E-04	1.562E-05	2.513E-03	2.673E-04
174	2.526E-04	3.043E-03	2.824E-05	3.954E-04	3.659E-04	1.420E-05	2.446E-03	2.380E-04
175	2.200E-04	2.855E-03	2.496E-05	3.469E-04	3.208E-04	1.264E-05	2.334E-03	2.069E-04
176	1.904E-04	2.750E-03	2.149E-05	2.993E-04	2.769E-04	1.085E-05	1.954E-03	1.792E-04
177	1.688E-04	2.649E-03	1.901E-05	2.651E-04	2.453E-04	9.592E-06	1.710E-03	1.589E-04
178	4.824E-04	5.498E-03	5.399E-05	7.584E-04	7.018E-04	2.716E-05	4.703E-03	4.544E-04
179	4.668E-04	5.400E-03	5.072E-05	7.214E-04	6.684E-04	2.516E-05	3.717E-03	4.409E-04
180	4.374E-04	5.041E-03	4.755E-05	6.758E-04	6.261E-04	2.359E-05	3.495E-03	4.131E-04
181	4.000E-04	4.481E-03	4.381E-05	6.200E-04	5.743E-04	2.181E-05	3.375E-03	3.775E-04
182	3.692E-04	4.015E-03	4.112E-05	5.774E-04	5.344E-04	2.064E-05	3.486E-03	3.480E-04
183	3.233E-04	3.606E-03	3.612E-05	5.059E-04	4.682E-04	1.816E-05	3.116E-03	3.046E-04
184	2.836E-04	3.351E-03	3.324E-05	4.547E-04	4.200E-04	1.708E-05	3.587E-03	2.661E-04
185	2.379E-04	3.142E-03	2.767E-05	3.804E-04	3.515E-04	1.417E-05	2.895E-03	2.233E-04
186	2.032E-04	3.007E-03	2.319E-05	3.215E-04	2.973E-04	1.177E-05	2.226E-03	1.911E-04
187	1.790E-04	2.826E-03	2.011E-05	2.809E-04	2.599E-04	1.014E-05	1.789E-03	1.685E-04
188	6.778E-04	6.876E-03	7.546E-05	1.060E-03	9.814E-04	3.787E-05	6.391E-03	6.387E-04
189	6.499E-04	6.412E-03	7.033E-05	1.003E-03	9.291E-04	3.482E-05	5.020E-03	6.139E-04
190	5.860E-04	5.728E-03	6.383E-05	9.066E-04	8.398E-04	3.170E-05	4.754E-03	5.532E-04
191	5.089E-04	5.013E-03	5.638E-05	7.939E-04	7.350E-04	2.823E-05	4.645E-03	4.798E-04
192	4.336E-04	4.422E-03	4.868E-05	6.806E-04	6.297E-04	2.453E-05	4.311E-03	4.083E-04
193	3.645E-04	3.956E-03	4.184E-05	5.788E-04	5.351E-04	2.130E-05	4.128E-03	3.426E-04
194	3.093E-04	3.668E-03	3.619E-05	4.954E-04	4.576E-04	1.858E-05	3.875E-03	2.902E-04
195	2.564E-04	3.467E-03	2.968E-05	4.091E-04	3.780E-04	1.516E-05	3.039E-03	2.408E-04

196	2.224E-04	3.277E-03	2.565E-05	3.550E-04	3.281E-04	1.308E-05	2.585E-03	2.089E-04
197	1.884E-04	2.963E-03	2.108E-05	2.953E-04	2.733E-04	1.061E-05	1.835E-03	1.774E-04
198	1.101E-03	8.698E-03	1.201E-04	1.706E-03	1.580E-03	5.972E-05	9.057E-03	1.039E-03
199	1.078E-03	7.897E-03	1.161E-04	1.663E-03	1.541E-03	5.737E-05	8.057E-03	1.019E-03
200	8.938E-04	6.796E-03	9.872E-05	1.393E-03	1.289E-03	4.935E-05	7.991E-03	8.429E-04
201	5.032E-04	4.889E-03	5.828E-05	8.016E-04	7.408E-04	2.978E-05	5.982E-03	4.725E-04
202	3.457E-04	4.100E-03	4.006E-05	5.511E-04	5.092E-04	2.048E-05	4.122E-03	3.246E-04
203	2.848E-04	3.843E-03	3.319E-05	4.555E-04	4.208E-04	1.701E-05	3.501E-03	2.673E-04
204	2.330E-04	3.453E-03	2.601E-05	3.649E-04	3.377E-04	1.307E-05	2.238E-03	2.195E-04
205	1.895E-04	3.019E-03	2.099E-05	2.956E-04	2.736E-04	1.050E-05	1.723E-03	1.787E-04
206	1.829E-04	3.035E-03	2.015E-05	2.846E-04	2.635E-04	1.007E-05	1.611E-03	1.725E-04
207	1.716E-04	2.971E-03	1.979E-05	2.732E-04	2.525E-04	1.009E-05	1.992E-03	1.612E-04
208	1.719E-05	4.097E-04	1.985E-06	2.738E-05	2.531E-05	1.013E-06	2.011E-04	1.615E-05
209	1.975E-05	4.398E-04	2.265E-06	3.133E-05	2.897E-05	1.153E-06	2.228E-04	1.856E-05
210	2.323E-05	5.458E-04	2.656E-06	3.678E-05	3.401E-05	1.349E-06	2.570E-04	2.184E-05
211	2.744E-05	6.572E-04	3.118E-06	4.333E-05	4.007E-05	1.580E-06	2.937E-04	2.581E-05
212	3.297E-05	8.199E-04	3.722E-06	5.188E-05	4.799E-05	1.880E-06	3.386E-04	3.104E-05
213	4.125E-05	1.051E-03	4.632E-06	6.473E-05	5.989E-05	2.334E-06	4.105E-04	3.885E-05
214	5.269E-05	1.284E-03	5.875E-06	8.238E-05	7.624E-05	2.950E-06	5.016E-04	4.965E-05
215	6.792E-05	1.432E-03	7.535E-06	1.059E-04	9.805E-05	3.775E-06	6.254E-04	6.403E-05
216	8.101E-05	1.644E-03	8.984E-06	1.263E-04	1.169E-04	4.501E-06	7.448E-04	7.637E-05
217	9.346E-05	1.686E-03	1.032E-05	1.454E-04	1.346E-04	5.158E-06	8.333E-04	8.815E-05
218	1.001E-04	1.735E-03	1.103E-05	1.556E-04	1.440E-04	5.506E-06	8.794E-04	9.442E-05
219	1.034E-04	1.690E-03	1.138E-05	1.606E-04	1.487E-04	5.684E-06	9.065E-04	9.750E-05
220	9.688E-05	1.553E-03	1.070E-05	1.507E-04	1.395E-04	5.353E-06	8.687E-04	9.136E-05
221	8.904E-05	1.497E-03	9.818E-06	1.384E-04	1.281E-04	4.905E-06	7.873E-04	8.398E-05
222	8.263E-05	1.434E-03	9.049E-06	1.281E-04	1.186E-04	4.506E-06	6.969E-04	7.798E-05
223	8.216E-05	1.347E-03	9.008E-06	1.274E-04	1.180E-04	4.488E-06	6.983E-04	7.753E-05
224	8.189E-05	1.319E-03	9.051E-06	1.275E-04	1.180E-04	4.527E-06	7.355E-04	7.723E-05
225	7.994E-05	1.322E-03	8.936E-06	1.251E-04	1.157E-04	4.494E-06	7.738E-04	7.530E-05
226	7.567E-05	1.280E-03	8.499E-06	1.187E-04	1.098E-04	4.283E-06	7.542E-04	7.126E-05
227	1.686E-05	4.098E-04	1.971E-06	2.699E-05	2.493E-05	1.012E-06	2.107E-04	1.581E-05
228	1.994E-05	4.805E-04	2.309E-06	3.181E-05	2.940E-05	1.180E-06	2.369E-04	1.873E-05
229	2.352E-05	5.342E-04	2.701E-06	3.734E-05	3.452E-05	1.375E-06	2.668E-04	2.211E-05
230	2.816E-05	6.880E-04	3.214E-06	4.456E-05	4.120E-05	1.632E-06	3.086E-04	2.648E-05
231	3.415E-05	8.336E-04	3.869E-06	5.384E-05	4.980E-05	1.958E-06	3.588E-04	3.213E-05
232	4.260E-05	1.114E-03	4.786E-06	6.687E-05	6.187E-05	2.412E-06	4.254E-04	4.011E-05
233	5.562E-05	1.397E-03	6.207E-06	8.700E-05	8.052E-05	3.118E-06	5.322E-04	5.240E-05
234	7.379E-05	1.661E-03	8.186E-06	1.151E-04	1.065E-04	4.101E-06	6.795E-04	6.956E-05
235	9.306E-05	1.918E-03	1.030E-05	1.450E-04	1.342E-04	5.156E-06	8.450E-04	8.774E-05
236	1.110E-04	1.994E-03	1.225E-05	1.726E-04	1.598E-04	6.120E-06	9.864E-04	1.047E-04
237	1.218E-04	2.018E-03	1.340E-05	1.892E-04	1.752E-04	6.689E-06	1.061E-03	1.149E-04
238	1.240E-04	1.957E-03	1.365E-05	1.925E-04	1.783E-04	6.813E-06	1.085E-03	1.169E-04
239	1.151E-04	1.794E-03	1.270E-05	1.790E-04	1.657E-04	6.350E-06	1.025E-03	1.085E-04
240	1.060E-04	1.801E-03	1.164E-05	1.644E-04	1.523E-04	5.801E-06	9.088E-04	1.000E-04
241	1.021E-04	1.659E-03	1.116E-05	1.581E-04	1.464E-04	5.552E-06	8.500E-04	9.635E-05
242	1.014E-04	1.580E-03	1.116E-05	1.575E-04	1.459E-04	5.568E-06	8.819E-04	9.571E-05
243	9.720E-05	1.527E-03	1.082E-05	1.518E-04	1.405E-04	5.432E-06	9.169E-04	9.160E-05
244	9.056E-05	1.484E-03	1.017E-05	1.420E-04	1.314E-04	5.126E-06	9.027E-04	8.528E-05
245	8.091E-05	1.390E-03	9.091E-06	1.269E-04	1.174E-04	4.582E-06	8.085E-04	7.619E-05
246	1.554E-05	3.834E-04	1.820E-06	2.493E-05	2.302E-05	9.350E-07	1.959E-04	1.458E-05
247	1.912E-05	4.811E-04	2.243E-06	3.067E-05	2.833E-05	1.153E-06	2.431E-04	1.794E-05
248	2.331E-05	5.763E-04	2.703E-06	3.721E-05	3.439E-05	1.382E-06	2.789E-04	2.189E-05
249	2.855E-05	6.773E-04	3.271E-06	4.527E-05	4.186E-05	1.664E-06	3.201E-04	2.684E-05
250	3.523E-05	8.789E-04	4.012E-06	5.569E-05	5.150E-05	2.034E-06	3.810E-04	3.314E-05
251	4.446E-05	1.148E-03	5.014E-06	6.992E-05	6.469E-05	2.531E-06	4.543E-04	4.185E-05
252	5.842E-05	1.555E-03	6.526E-06	9.144E-05	8.463E-05	3.280E-06	5.627E-04	5.504E-05
253	8.072E-05	1.945E-03	8.950E-06	1.259E-04	1.165E-04	4.483E-06	7.409E-04	7.609E-05
254	1.080E-04	2.272E-03	1.193E-05	1.681E-04	1.556E-04	5.964E-06	9.648E-04	1.019E-04
255	1.350E-04	2.413E-03	1.488E-05	2.098E-04	1.943E-04	7.431E-06	1.189E-03	1.273E-04
256	1.524E-04	2.394E-03	1.674E-05	2.365E-04	2.190E-04	8.351E-06	1.317E-03	1.437E-04
257	1.526E-04	2.276E-03	1.679E-05	2.370E-04	2.194E-04	8.383E-06	1.333E-03	1.439E-04
258	1.432E-04	2.218E-03	1.575E-05	2.223E-04	2.059E-04	7.863E-06	1.249E-03	1.350E-04
259	1.337E-04	2.156E-03	1.461E-05	2.070E-04	1.917E-04	7.269E-06	1.112E-03	1.262E-04
260	1.310E-04	1.961E-03	1.433E-05	2.029E-04	1.879E-04	7.132E-06	1.098E-03	1.236E-04
261	1.231E-04	1.828E-03	1.362E-05	1.917E-04	1.774E-04	6.819E-06	1.118E-03	1.160E-04
262	1.114E-04	1.743E-03	1.250E-05	1.745E-04	1.615E-04	6.294E-06	1.102E-03	1.049E-04
263	9.867E-05	1.643E-03	1.108E-05	1.547E-04	1.432E-04	5.584E-06	9.825E-04	9.292E-05
264	8.345E-05	1.487E-03	9.341E-06	1.307E-04	1.209E-04	4.700E-06	8.144E-04	7.861E-05
265	1.560E-05	4.130E-04	1.845E-06	2.517E-05	2.324E-05	9.517E-07	2.064E-04	1.462E-05
266	1.816E-05	4.664E-04	2.127E-06	2.914E-05	2.692E-05	1.093E-06	2.292E-04	1.703E-05
267	2.225E-05	5.823E-04	2.606E-06	3.567E-05	3.294E-05	1.338E-06	2.804E-04	2.087E-05
268	2.778E-05	7.130E-04	3.222E-06	4.436E-05	4.099E-05	1.648E-06	3.330E-04	2.608E-05
269	3.557E-05	9.025E-04	4.070E-06	5.637E-05	5.211E-05	2.069E-06	3.958E-04	3.344E-05
270	4.595E-05	1.186E-03	5.197E-06	7.240E-05	6.697E-05	2.628E-06	4.780E-04	4.324E-05
271	6.196E-05	1.721E-03	6.941E-06	9.713E-05	8.988E-05	3.493E-06	6.072E-04	5.836E-05
272	8.767E-05	2.294E-03	9.717E-06	1.367E-04	1.266E-04	4.866E-06	8.024E-04	8.265E-05
273	1.278E-04	2.743E-03	1.410E-05	1.989E-04	1.841E-04	7.042E-06	1.131E-03	1.206E-04
274	1.720E-04	3.015E-03	1.932E-05	2.704E-04	2.502E-04	9.739E-06	1.718E-03	1.620E-04
275	1.992E-04	2.920E-03	2.198E-05	3.102E-04	2.872E-04	1.098E-05	1.766E-03	1.879E-04
276	1.986E-04	2.799E-03	2.182E-05	3.082E-04	2.854E-04	1.089E-05	1.716E-03	1.874E-04
277	1.880E-04	2.831E-03	2.056E-05	2.911E-04	2.697E-04	1.023E-05	1.570E-03	1.774E-04
278	1.769E-04	2.584E-03	1.931E-05	2.738E-04	2.536E-04	9.600E-06	1.457E-03	1.670E-04
279	1.666E-04	2.295E-03	1.833E-05	2.588E-04	2.396E-04	9.150E-06	1.452E-03	1.572E-04
280	1.444E-04	2.080E-03	1.614E-05	2.259E-04	2.091E-04	8.118E-06	1.397E-03	1.361E-04
281	1.232E-04	1.980E-03	1.383E-05	1.931E-04	1.787E-04	6.966E-06	1.222E-03	1.160E-04
282	1.027E-04	1.800E-03	1.147E-05	1.606E-04	1.486E-04	5.768E-06	9.920E-04	9.671E-05
283	8.188E-05	1.553E-03	9.130E-06	1.280E-04	1.185E-04	4.586E-06	7.799E-04	7.715E-05
284	1.594E-05	3.699E-04	1.888E-06	2.570E-05	2.373E-05	9.747E-07	2.128E-04	1.493E-05
285	1.858E-05	4.815E-04	2.204E-06	3.000E-05	2.770E-05	1.138E-06	2.492E-04	1.741E-05
286	2.207E-05	5.795E-04	2.583E-06	3.542E-05	3.272E-05	1.326E-06	2.772E-04	2.071E-05
287	2.735E-05	7.363E-04	3.177E-06	4.367E-05	4.035E-05	1.625E-06	3.300E-04	2.568E-05
288	3.469E-05	9.273E-04	4.002E-06	5.525E-05	5.106E-05	2.042E-06	4.036E-04	3.259E-05
289	4.623E-05	1.272E-03	5.267E-06	7.309E-05	6.759E-05	2.672E-06	5.016E-04	4.348E-05
290	6.439E-05	1.833E-03	7.240E-06	1.011E-04	9.357E-05	3.651E-06	6.465E-04	6.062E-05
291	9.615E-05	2.768E-03	1.065E-05	1.499E-04	1.388E-04	5.334E-06	8.780E-04	9.065E-05
292	1.644E-04	3.438E-03	1.925E-05	2.635E-04	2.434E-04	9.887E-06	2.069E-03	1.543E-04

293	2.264E-04	3.858E-03	2.480E-05	3.511E-04	3.252E-04	1.235E-05	1.912E-03	2.137E-04
294	1.308E-04	2.219E-03	1.459E-05	2.044E-04	1.892E-04	7.331E-06	1.251E-03	1.232E-04
295	1.007E-04	1.863E-03	1.120E-05	1.572E-04	1.455E-04	5.619E-06	9.430E-04	9.492E-05
296	7.530E-05	1.450E-03	8.375E-06	1.175E-04	1.088E-04	4.201E-06	7.053E-04	7.097E-05
297	1.443E-05	3.307E-04	1.722E-06	2.335E-05	2.155E-05	8.915E-07	1.992E-04	1.351E-05
298	1.746E-05	4.120E-04	2.086E-06	2.827E-05	2.609E-05	1.081E-06	2.423E-04	1.635E-05
299	2.131E-05	5.579E-04	2.548E-06	3.453E-05	3.187E-05	1.320E-06	2.971E-04	1.995E-05
300	2.603E-05	7.272E-04	3.064E-06	4.188E-05	3.867E-05	1.577E-06	3.368E-04	2.441E-05
301	3.360E-05	9.829E-04	3.894E-06	5.359E-05	4.952E-05	1.991E-06	4.007E-04	3.155E-05
302	4.573E-05	1.316E-03	5.223E-06	7.243E-05	6.697E-05	2.653E-06	5.038E-04	4.300E-05
303	6.604E-05	1.991E-03	7.442E-06	1.038E-04	9.606E-05	3.757E-06	6.721E-04	6.217E-05
304	1.037E-04	3.348E-03	1.152E-05	1.619E-04	1.499E-04	5.777E-06	9.649E-04	9.774E-05
305	1.885E-04	4.486E-03	2.070E-05	2.931E-04	2.714E-04	1.032E-05	1.622E-03	1.778E-04
306	1.315E-04	2.302E-03	1.453E-05	2.047E-04	1.895E-04	7.268E-06	1.181E-03	1.240E-04
307	9.397E-05	1.735E-03	1.039E-05	1.463E-04	1.354E-04	5.195E-06	8.447E-04	8.861E-05
308	6.917E-05	1.335E-03	7.690E-06	1.083E-04	1.003E-04	3.845E-06	6.237E-04	6.565E-05
309	1.179E-05	3.540E-04	1.455E-06	1.945E-05	1.793E-05	7.639E-07	1.891E-04	1.101E-05
310	1.465E-05	4.071E-04	1.773E-06	2.390E-05	2.205E-05	9.238E-07	2.163E-04	1.370E-05
311	1.851E-05	5.019E-04	2.216E-06	3.001E-05	2.770E-05	1.149E-06	2.597E-04	1.733E-05
312	2.369E-05	6.770E-04	2.812E-06	3.823E-05	3.529E-05	1.453E-06	3.192E-04	2.219E-05
313	3.068E-05	9.415E-04	3.610E-06	4.931E-05	4.554E-05	1.858E-06	3.958E-04	2.877E-05
314	4.233E-05	1.408E-03	4.901E-06	6.747E-05	6.235E-05	2.504E-06	5.022E-04	3.976E-05
315	6.246E-05	2.171E-03	7.123E-06	9.879E-05	9.135E-05	3.615E-06	6.819E-04	5.874E-05
316	1.037E-04	4.153E-03	1.160E-05	1.624E-04	1.503E-04	5.835E-06	1.008E-03	9.771E-05
317	2.248E-04	6.857E-03	2.450E-05	3.479E-04	3.223E-04	1.218E-05	1.834E-03	2.122E-04
318	1.203E-04	2.193E-03	1.327E-05	1.871E-04	1.733E-04	6.631E-06	1.068E-03	1.134E-04
319	8.211E-05	1.647E-03	9.079E-06	1.278E-04	1.184E-04	4.542E-06	7.400E-04	7.743E-05
320	6.136E-05	1.310E-03	6.790E-06	9.555E-05	8.846E-05	3.397E-06	5.553E-04	5.786E-05
321	1.017E-05	3.391E-04	1.277E-06	1.691E-05	1.558E-05	6.750E-07	1.752E-04	9.475E-06
322	1.220E-05	4.175E-04	1.544E-06	2.041E-05	1.879E-05	8.192E-07	2.170E-04	1.136E-05
323	1.468E-05	4.963E-04	1.818E-06	2.429E-05	2.239E-05	9.561E-07	2.392E-04	1.370E-05
324	1.858E-05	6.042E-04	2.243E-06	3.029E-05	2.794E-05	1.167E-06	2.709E-04	1.738E-05
325	2.515E-05	8.368E-04	2.989E-06	4.063E-05	3.751E-05	1.545E-06	3.408E-04	2.356E-05
326	3.548E-05	1.344E-03	4.186E-06	5.708E-05	5.271E-05	2.157E-06	4.636E-04	3.327E-05
327	5.308E-05	2.329E-03	6.137E-06	8.450E-05	7.809E-05	3.134E-06	6.254E-04	4.985E-05
328	9.197E-05	5.200E-03	1.046E-05	1.452E-04	1.343E-04	5.301E-06	9.874E-04	8.651E-05
329	2.258E-04	1.511E-02	2.480E-05	3.507E-04	3.248E-04	1.237E-05	1.943E-03	2.130E-04
330	1.032E-04	2.034E-03	1.135E-05	1.603E-04	1.484E-04	5.663E-06	8.968E-04	9.735E-05
331	7.513E-05	1.488E-03	8.296E-06	1.169E-04	1.082E-04	4.147E-06	6.710E-04	7.085E-05
332	5.938E-05	1.111E-03	6.572E-06	9.246E-05	8.560E-05	3.289E-06	5.385E-04	5.599E-05
333	9.413E-06	2.304E-04	1.120E-06	1.529E-05	1.412E-05	5.789E-07	1.281E-04	8.818E-06
334	1.091E-05	3.055E-04	1.300E-06	1.764E-05	1.628E-05	6.726E-07	1.497E-04	1.022E-05
335	1.296E-05	4.211E-04	1.553E-06	2.102E-05	1.940E-05	8.055E-07	1.826E-04	1.213E-05
336	1.594E-05	5.794E-04	1.924E-06	2.597E-05	2.396E-05	1.001E-06	2.321E-04	1.492E-05
337	2.041E-05	7.930E-04	2.486E-06	3.343E-05	3.083E-05	1.298E-06	3.095E-04	1.908E-05
338	2.731E-05	1.127E-03	3.294E-06	4.449E-05	4.105E-05	1.713E-06	3.965E-04	2.555E-05
339	4.209E-05	1.960E-03	4.995E-06	6.793E-05	6.271E-05	2.580E-06	5.662E-04	3.944E-05
340	7.534E-05	5.280E-03	8.737E-06	1.202E-04	1.110E-04	4.468E-06	9.018E-04	7.074E-05
341	2.793E-04	4.238E-03	3.038E-05	4.325E-04	4.007E-04	1.508E-05	2.242E-03	2.638E-04
342	1.359E-04	2.515E-03	1.493E-05	2.110E-04	1.954E-04	7.444E-06	1.170E-03	1.283E-04
343	9.176E-05	1.688E-03	1.013E-05	1.427E-04	1.321E-04	5.061E-06	8.161E-04	8.654E-05
344	6.852E-05	1.266E-03	7.580E-06	1.067E-04	9.875E-05	3.793E-06	6.196E-04	6.461E-05
345	5.335E-05	1.043E-03	5.913E-06	8.312E-05	7.695E-05	2.961E-06	4.882E-04	5.030E-05
346	8.545E-06	2.017E-04	1.087E-06	1.432E-05	1.318E-05	5.778E-07	1.550E-04	7.953E-06
347	9.582E-06	2.350E-04	1.176E-06	1.582E-05	1.458E-05	6.164E-07	1.506E-04	8.949E-06
348	1.121E-05	2.833E-04	1.352E-06	1.827E-05	1.685E-05	7.030E-07	1.627E-04	1.048E-05
349	1.350E-05	3.636E-04	1.601E-06	2.181E-05	2.014E-05	8.263E-07	1.807E-04	1.265E-05
350	1.700E-05	5.220E-04	1.993E-06	2.729E-05	2.521E-05	1.024E-06	2.154E-04	1.594E-05
351	2.266E-05	8.521E-04	2.645E-06	3.628E-05	3.352E-05	1.356E-06	2.804E-04	2.127E-05
352	3.369E-05	1.501E-03	3.938E-06	5.394E-05	4.983E-05	2.021E-06	4.203E-04	3.161E-05
353	5.630E-05	3.544E-03	6.637E-06	9.050E-05	8.357E-05	3.419E-06	7.335E-04	5.278E-05
354	1.946E-04	3.317E-03	2.107E-05	3.001E-04	2.781E-04	1.043E-05	1.506E-03	1.838E-04
355	1.086E-04	2.182E-03	1.190E-05	1.683E-04	1.559E-04	5.930E-06	9.228E-04	1.025E-04
356	7.454E-05	1.669E-03	8.224E-06	1.159E-04	1.073E-04	4.110E-06	6.619E-04	7.031E-05
357	5.655E-05	1.328E-03	6.258E-06	8.804E-05	8.151E-05	3.132E-06	5.123E-04	5.332E-05
358	4.578E-05	1.073E-03	5.069E-06	7.129E-05	6.600E-05	2.537E-06	4.164E-04	4.316E-05
359	7.543E-06	2.045E-04	9.610E-07	1.261E-05	1.161E-05	5.110E-07	1.375E-04	7.019E-06
360	8.746E-06	2.415E-04	1.106E-06	1.463E-05	1.347E-05	5.864E-07	1.550E-04	8.145E-06
361	9.970E-06	2.955E-04	1.198E-06	1.623E-05	1.498E-05	6.219E-07	1.422E-04	9.331E-06
362	1.204E-05	3.734E-04	1.418E-06	1.941E-05	1.792E-05	7.305E-07	1.566E-04	1.128E-05
363	1.500E-05	4.929E-04	1.744E-06	2.402E-05	2.219E-05	8.928E-07	1.820E-04	1.408E-05
364	1.949E-05	6.814E-04	2.234E-06	3.095E-05	2.861E-05	1.137E-06	2.191E-04	1.832E-05
365	2.633E-05	1.035E-03	3.005E-06	4.166E-05	3.852E-05	1.525E-06	2.886E-04	2.476E-05
366	4.135E-05	2.137E-03	4.698E-06	6.524E-05	6.034E-05	2.380E-06	4.417E-04	3.890E-05
367	9.251E-05	8.432E-03	1.042E-05	1.454E-04	1.345E-04	5.261E-06	9.406E-04	8.709E-05
368	3.145E-04	1.623E-02	3.557E-05	4.947E-04	4.576E-04	1.798E-05	3.269E-03	2.960E-04
369	2.440E-04	5.093E-03	2.662E-05	3.775E-04	3.497E-04	1.323E-05	2.002E-03	2.303E-04
370	1.431E-04	2.900E-03	1.562E-05	2.215E-04	2.052E-04	7.766E-06	1.179E-03	1.351E-04
371	9.074E-05	1.917E-03	9.950E-06	1.407E-04	1.303E-04	4.958E-06	7.722E-04	8.562E-05
372	6.361E-05	1.394E-03	7.007E-06	9.884E-05	9.152E-05	3.499E-06	5.587E-04	6.000E-05
373	4.805E-05	1.091E-03	5.308E-06	7.476E-05	6.921E-05	2.654E-06	4.304E-04	4.531E-05
374	3.882E-05	8.993E-04	4.300E-06	6.047E-05	5.598E-05	2.152E-06	3.535E-04	3.660E-05
375	7.233E-06	1.720E-04	9.095E-07	1.200E-05	1.106E-05	4.812E-07	1.253E-04	6.740E-06
376	8.409E-06	2.050E-04	1.052E-06	1.393E-05	1.283E-05	5.558E-07	1.430E-04	7.839E-06
377	9.913E-06	2.541E-04	1.225E-06	1.640E-05	1.511E-05	6.439E-07	1.603E-04	9.253E-06
378	1.152E-05	3.244E-04	1.341E-06	1.846E-05	1.705E-05	6.871E-07	1.409E-04	1.081E-05
379	1.447E-05	4.105E-04	1.666E-06	2.303E-05	2.128E-05	8.492E-07	1.665E-04	1.360E-05
380	1.846E-05	5.270E-04	2.126E-06	2.933E-05	2.711E-05	1.084E-06	2.132E-04	1.734E-05
381	2.476E-05	7.710E-04	2.849E-06	3.934E-05	3.637E-05	1.452E-06	2.841E-04	2.326E-05
382	3.582E-05	1.560E-03	4.068E-06	5.653E-05	5.228E-05	2.061E-06	3.819E-04	3.369E-05
383	6.974E-05	3.673E-03	7.848E-06	1.095E-04	1.013E-04	3.959E-06	7.035E-04	6.562E-05
384	1.400E-04	9.437E-03	1.599E-05	2.212E-04	2.046E-04	8.124E-06	1.545E-03	1.316E-04
385	1.767E-04	1.918E-02	2.027E-05	2.798E-04	2.587E-04	1.031E-05	1.992E-03	1.661E-04
386	1.948E-04	1.983E-02	2.220E-05	3.075E-04	2.843E-04	1.126E-05	2.115E-03	1.832E-04
387	1.846E-04	8.122E-03	2.074E-05	2.893E-04	2.677E-04	1.046E-05	1.846E-03	1.738E-04
388	1.531E-04	3.423E-03	1.695E-05	2.384E-04	2.207E-04	8.487E-06	1.393E-03	1.443E-04
389	1.131E-04	2.107E-03	1.247E-05	1.758E-04	1.628E-04	6.225E-06	9.954E-04	1.067E-04

390	8.006E-05	1.492E-03	8.823E-06	1.244E-04	1.152E-04	4.406E-06	7.051E-04	7.552E-05
391	5.938E-05	1.123E-03	6.541E-06	9.226E-05	8.543E-05	3.266E-06	5.214E-04	5.601E-05
392	4.540E-05	9.056E-04	5.007E-06	7.058E-05	6.535E-05	2.502E-06	4.022E-04	4.282E-05
393	3.657E-05	7.613E-04	4.046E-06	5.693E-05	5.271E-05	2.025E-06	3.308E-04	3.448E-05
394	7.250E-06	1.781E-04	8.947E-07	1.193E-05	1.099E-05	4.697E-07	1.163E-04	6.768E-06
395	8.729E-06	2.074E-04	1.069E-06	1.430E-05	1.319E-05	5.396E-07	1.356E-04	8.154E-06
396	1.058E-05	2.347E-04	1.308E-06	1.745E-05	1.608E-05	6.871E-07	1.709E-04	9.879E-06
397	1.223E-05	2.734E-04	1.468E-06	1.989E-05	1.835E-05	7.620E-07	1.737E-04	1.145E-05
398	1.399E-05	3.349E-04	1.653E-06	2.257E-05	2.084E-05	8.520E-07	1.840E-04	1.312E-05
399	1.651E-05	4.352E-04	1.924E-06	2.644E-05	2.443E-05	9.860E-07	2.028E-04	1.550E-05
400	2.114E-05	7.840E-04	2.415E-06	3.350E-05	3.098E-05	1.226E-06	2.328E-04	1.988E-05
401	3.143E-05	1.334E-03	3.545E-06	4.944E-05	4.573E-05	1.790E-06	3.213E-04	2.958E-05
402	5.604E-05	2.346E-03	6.326E-06	8.815E-05	8.154E-05	3.196E-06	5.760E-04	5.275E-05
403	9.098E-05	4.091E-03	1.039E-05	1.438E-04	1.330E-04	5.278E-06	1.002E-03	8.554E-05
404	1.184E-04	6.350E-03	1.353E-05	1.872E-04	1.731E-04	6.874E-06	1.308E-03	1.113E-04
405	1.314E-04	6.858E-03	1.506E-05	2.080E-04	1.923E-04	7.660E-06	1.474E-03	1.235E-04
406	1.278E-04	4.912E-03	1.439E-05	2.006E-04	1.856E-04	7.260E-06	1.292E-03	1.203E-04
407	1.113E-04	2.937E-03	1.241E-05	1.739E-04	1.609E-04	6.237E-06	1.064E-03	1.048E-04
408	8.23E-05	1.883E-03	9.878E-06	1.390E-04	1.286E-04	4.944E-06	8.106E-04	8.413E-05
409	6.977E-05	1.317E-03	7.731E-06	1.087E-04	1.006E-04	3.871E-06	6.375E-04	6.578E-05
410	5.538E-05	1.036E-03	6.133E-06	8.626E-05	7.986E-05	3.070E-06	5.045E-04	5.221E-05
411	4.433E-05	8.580E-04	4.899E-06	6.898E-05	6.387E-05	2.450E-06	3.976E-04	4.181E-05
412	3.534E-05	7.103E-04	3.908E-06	5.500E-05	5.092E-05	1.955E-06	3.184E-04	3.332E-05
413	2.119E-05	3.371E-04	1.460E-06	1.984E-05	1.831E-05	7.574E-07	1.717E-04	1.141E-05
414	1.062E-05	3.233E-04	1.256E-06	1.716E-05	1.584E-05	6.479E-07	1.405E-04	9.956E-06
415	9.922E-06	3.230E-04	1.167E-06	1.600E-05	1.478E-05	6.003E-07	1.277E-04	9.305E-06
416	1.443E-05	4.880E-04	1.669E-06	2.304E-05	2.130E-05	8.523E-07	1.702E-04	1.355E-05
417	1.323E-05	4.510E-04	1.522E-06	2.109E-05	1.949E-05	7.760E-07	1.522E-04	1.243E-05
418	1.372E-05	3.655E-04	1.582E-06	2.184E-05	2.018E-05	8.073E-07	1.596E-04	1.289E-05
419	1.881E-05	6.789E-04	2.132E-06	2.971E-05	2.748E-05	1.079E-06	1.984E-04	1.769E-05
420	1.931E-05	5.478E-04	2.212E-06	3.062E-05	2.831E-05	1.125E-06	2.159E-04	1.815E-05
421	1.821E-05	5.135E-04	2.125E-06	2.917E-05	2.694E-05	1.090E-06	2.257E-04	1.708E-05
422	2.907E-05	1.050E-03	3.305E-06	4.590E-05	4.245E-05	1.675E-06	3.114E-04	2.735E-05
423	2.672E-05	9.177E-04	3.055E-06	4.237E-05	3.918E-05	1.552E-06	2.959E-04	2.512E-05
424	2.509E-05	8.023E-04	2.886E-06	3.989E-05	3.687E-05	1.470E-06	2.873E-04	2.358E-05
425	4.696E-05	1.713E-03	5.331E-06	7.408E-05	6.851E-05	2.700E-06	4.994E-04	4.418E-05
426	4.098E-05	1.369E-03	4.675E-06	6.480E-05	5.992E-05	2.373E-06	4.485E-04	3.853E-05
427	3.680E-05	1.176E-03	4.212E-06	5.830E-05	5.390E-05	2.141E-06	4.096E-04	3.460E-05
428	6.971E-05	2.623E-03	7.956E-06	1.102E-04	1.019E-04	4.039E-06	7.638E-04	6.556E-05
429	5.716E-05	1.924E-03	6.521E-06	9.038E-05	8.357E-05	3.310E-06	6.252E-04	5.375E-05
430	4.818E-05	1.471E-03	5.504E-06	7.625E-05	7.050E-05	2.796E-06	5.312E-04	4.530E-05
431	8.707E-05	3.695E-03	9.935E-06	1.376E-04	1.272E-04	5.044E-06	9.534E-04	8.188E-05
432	6.727E-05	2.475E-03	7.685E-06	1.064E-04	9.836E-05	3.904E-06	7.418E-04	6.325E-05
433	5.451E-05	1.815E-03	6.230E-06	8.623E-05	7.972E-05	3.165E-06	6.026E-04	5.125E-05
434	9.534E-05	3.865E-03	1.090E-05	1.507E-04	1.393E-04	5.535E-06	1.053E-03	8.965E-05
435	7.347E-05	2.632E-03	8.351E-06	1.158E-04	1.071E-04	4.232E-06	7.866E-04	6.911E-05
436	5.870E-05	1.956E-03	6.552E-06	9.245E-05	8.550E-05	3.366E-06	6.174E-04	5.523E-05
437	9.571E-05	3.199E-03	1.086E-05	1.509E-04	1.396E-04	5.501E-06	1.016E-03	9.004E-05
438	7.425E-05	2.248E-03	8.439E-06	1.171E-04	1.083E-04	4.276E-06	7.941E-04	6.985E-05
439	5.951E-05	1.719E-03	6.737E-06	9.369E-05	8.665E-05	3.408E-06	6.221E-04	5.600E-05
440	6.612E-05	2.341E-03	9.684E-06	1.351E-04	1.250E-04	4.883E-06	8.644E-04	8.109E-05
441	6.980E-05	1.858E-03	7.929E-06	1.101E-04	1.018E-04	4.017E-06	7.448E-04	6.566E-05
442	5.773E-05	1.500E-03	6.565E-06	9.109E-05	8.424E-05	3.328E-06	6.201E-04	5.430E-05
443	7.280E-05	1.754E-03	8.220E-06	1.147E-04	1.061E-04	4.153E-06	7.495E-04	6.853E-05
444	6.140E-05	1.488E-03	7.040E-06	9.747E-05	9.011E-05	3.581E-06	6.907E-04	5.772E-05
445	5.180E-05	1.213E-03	5.839E-06	8.154E-05	7.542E-05	2.962E-06	5.387E-04	4.875E-05
446	6.012E-05	1.289E-03	6.700E-06	9.396E-05	8.696E-05	3.364E-06	5.703E-04	5.665E-05
447	5.137E-05	1.211E-03	5.713E-06	8.019E-05	7.423E-05	2.866E-06	4.810E-04	4.842E-05
448	4.469E-05	1.063E-03	5.000E-06	6.997E-05	6.475E-05	2.515E-06	4.348E-04	4.210E-05
449	4.952E-05	9.779E-04	5.501E-06	7.723E-05	7.148E-05	2.758E-06	4.602E-04	4.667E-05
450	4.348E-05	9.565E-04	4.837E-06	6.786E-05	6.281E-05	2.427E-06	4.082E-04	4.097E-05
451	3.861E-05	9.052E-04	4.303E-06	6.033E-05	5.584E-05	2.161E-06	3.669E-04	3.638E-05

RECEPTOR # 87 HAS HIGHEST CHRONIC HAZARD INDEX OF 4.784E-02

LDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, RM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 put File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 157

*** CHRONIC HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 87 ***

POLLUTANT	ORAL DOSE (mg/kg-d)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
ACETA	0.000E+00	0.000E+00	9.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	0.000E+00	0.000E+00	2.000E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.000E-03	0.000E+00	5.000E-01	2.217E-04	2.217E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.217E-04	2.217E-04
BENZ	0.000E+00	0.000E+00	7.100E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	5.000E-03	0.000E+00	4.800E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.222E-03	0.000E+00
Cd	1.000E-03	0.000E+00	3.500E+00	0.000E+00	0.000E+00	0.000E+00	1.170E-06	0.000E+00	0.000E+00	1.170E-06	0.000E+00
Cr	5.000E-03	0.000E+00	2.000E-03	0.000E+00	0.000E+00	0.000E+00	3.386E-04	0.000E+00	0.000E+00	3.386E-04	0.000E+00
Cu	0.000E+00	0.000E+00	2.400E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.880E-06	0.000E+00
HCHO	0.000E+00	0.000E+00	3.600E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	0.000E+00	0.000E+00	7.000E+01	0.000E+00	4.734E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	4.300E-04	0.000E+00	1.500E+00	1.293E-05	1.293E-05	1.293E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	0.000E+00	0.000E+00	4.000E-01	0.000E+00	2.648E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	3.000E-04	0.000E+00	3.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	0.000E+00	0.000E+00	2.400E-01	0.000E+00	0.000E+00	1.297E-05	0.000E+00	0.000E+00	0.000E+00	1.297E-05	0.000E+00
NAPHT	4.000E-03	0.000E+00	1.400E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	5.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	0.000E+00	0.000E+00	2.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	3.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SUM = 2.351E-04 4.784E-02 2.590E-05 3.657E-04 3.386E-04 1.293E-05 2.066E-03 2.217E-04

*** CHRONIC HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR 4 87 ***

[illegible][illegible]

SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT As ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	1.123E-06	1.123E-06	0.000E+00	0.000E+00	0.000E+00	1.123E-06	1.123E-06
SOURCE #	2	7.473E-07	7.473E-07	0.000E+00	0.000E+00	0.000E+00	7.473E-07	7.473E-07
SOURCE #	3	8.983E-07	8.983E-07	0.000E+00	0.000E+00	0.000E+00	8.983E-07	8.983E-07
SOURCE #	4	1.293E-06	1.293E-06	0.000E+00	0.000E+00	0.000E+00	1.293E-06	1.293E-06
SOURCE #	5	1.820E-07	1.820E-07	0.000E+00	0.000E+00	0.000E+00	1.820E-07	1.820E-07
SOURCE #	6	3.174E-07	3.174E-07	0.000E+00	0.000E+00	0.000E+00	3.174E-07	3.174E-07
SOURCE #	7	2.067E-07	2.067E-07	0.000E+00	0.000E+00	0.000E+00	2.067E-07	2.067E-07
SOURCE #	8	3.102E-07	3.102E-07	0.000E+00	0.000E+00	0.000E+00	3.102E-07	3.102E-07
SOURCE #	9	2.991E-07	2.991E-07	0.000E+00	0.000E+00	0.000E+00	2.991E-07	2.991E-07
SOURCE #	10	3.324E-07	3.324E-07	0.000E+00	0.000E+00	0.000E+00	3.324E-07	3.324E-07
SOURCE #	11	9.925E-08	9.925E-08	0.000E+00	0.000E+00	0.000E+00	9.925E-08	9.925E-08
SOURCE #	12	1.042E-07	1.042E-07	0.000E+00	0.000E+00	0.000E+00	1.042E-07	1.042E-07
SOURCE #	13	1.554E-05	1.554E-05	0.000E+00	0.000E+00	0.000E+00	1.554E-05	1.554E-05
SOURCE #	14	1.038E-05	1.038E-05	0.000E+00	0.000E+00	0.000E+00	1.038E-05	1.038E-05
SOURCE #	15	1.287E-05	1.287E-05	0.000E+00	0.000E+00	0.000E+00	1.287E-05	1.287E-05
SOURCE #	16	1.826E-05	1.826E-05	0.000E+00	0.000E+00	0.000E+00	1.826E-05	1.826E-05
SOURCE #	17	2.586E-06	2.586E-06	0.000E+00	0.000E+00	0.000E+00	2.586E-06	2.586E-06
SOURCE #	18	4.421E-06	4.421E-06	0.000E+00	0.000E+00	0.000E+00	4.421E-06	4.421E-06
SOURCE #	19	9.669E-06	9.669E-06	0.000E+00	0.000E+00	0.000E+00	9.669E-06	9.669E-06
SOURCE #	20	6.556E-06	6.556E-06	0.000E+00	0.000E+00	0.000E+00	6.556E-06	6.556E-06
SOURCE #	21	6.480E-06	6.480E-06	0.000E+00	0.000E+00	0.000E+00	6.480E-06	6.480E-06
SOURCE #	22	1.007E-05	1.007E-05	0.000E+00	0.000E+00	0.000E+00	1.007E-05	1.007E-05
SOURCE #	23	1.526E-06	1.526E-06	0.000E+00	0.000E+00	0.000E+00	1.526E-06	1.526E-06
SOURCE #	24	2.817E-06	2.817E-06	0.000E+00	0.000E+00	0.000E+00	2.817E-06	2.817E-06
SOURCE #	25	1.355E-06	1.355E-06	0.000E+00	0.000E+00	0.000E+00	1.355E-06	1.355E-06
SOURCE #	26	4.748E-05	4.748E-05	0.000E+00	0.000E+00	0.000E+00	4.748E-05	4.748E-05
SOURCE #	27	2.825E-05	2.825E-05	0.000E+00	0.000E+00	0.000E+00	2.825E-05	2.825E-05
SOURCE #	28	2.481E-06	2.481E-06	0.000E+00	0.000E+00	0.000E+00	2.481E-06	2.481E-06
SOURCE #	29	2.561E-06	2.561E-06	0.000E+00	0.000E+00	0.000E+00	2.561E-06	2.561E-06
SOURCE #	30	4.005E-06	4.005E-06	0.000E+00	0.000E+00	0.000E+00	4.005E-06	4.005E-06
SOURCE #	31	3.000E-06	3.000E-06	0.000E+00	0.000E+00	0.000E+00	3.000E-06	3.000E-06
SOURCE #	32	1.757E-06	1.757E-06	0.000E+00	0.000E+00	0.000E+00	1.757E-06	1.757E-06
SOURCE #	33	1.623E-07	1.623E-07	0.000E+00	0.000E+00	0.000E+00	1.623E-07	1.623E-07
SOURCE #	34	1.685E-07	1.685E-07	0.000E+00	0.000E+00	0.000E+00	1.685E-07	1.685E-07
SOURCE #	35	2.655E-07	2.655E-07	0.000E+00	0.000E+00	0.000E+00	2.655E-07	2.655E-07
SOURCE #	36	1.299E-05	1.299E-05	0.000E+00	0.000E+00	0.000E+00	1.299E-05	1.299E-05
SOURCE #	37	7.528E-06	7.528E-06	0.000E+00	0.000E+00	0.000E+00	7.528E-06	7.528E-06
SOURCE #	38	7.198E-07	7.198E-07	0.000E+00	0.000E+00	0.000E+00	7.198E-07	7.198E-07
SOURCE #	39	7.510E-07	7.510E-07	0.000E+00	0.000E+00	0.000E+00	7.510E-07	7.510E-07
SOURCE #	40	1.190E-06	1.190E-06	0.000E+00	0.000E+00	0.000E+00	1.190E-06	1.190E-06
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		2.217E-04	2.217E-04	0.000E+00	0.000E+00	0.000E+00	2.217E-04	2.217E-04

POLLUTANT BENZE ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 7.100E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT B: ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 4.800E-03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 5.000E-03

POLLUTANT Cd ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.500E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1		0.000E+00	0.000E+00	0.000E+00	5.768E-09	0.000E+00	0.000E+00	5.768E-09	0.000E+00
SOURCE # 2		0.000E+00	0.000E+00	0.000E+00	3.838E-09	0.000E+00	0.000E+00	3.838E-09	0.000E+00
SOURCE # 3		0.000E+00	0.000E+00	0.000E+00	4.612E-09	0.000E+00	0.000E+00	4.612E-09	0.000E+00
SOURCE # 4		0.000E+00	0.000E+00	0.000E+00	6.639E-09	0.000E+00	0.000E+00	6.639E-09	0.000E+00
SOURCE # 5		0.000E+00	0.000E+00	0.000E+00	9.349E-10	0.000E+00	0.000E+00	9.349E-10	0.000E+00
SOURCE # 6		0.000E+00	0.000E+00	0.000E+00	1.630E-09	0.000E+00	0.000E+00	1.630E-09	0.000E+00
SOURCE # 7		0.000E+00	0.000E+00	0.000E+00	1.061E-09	0.000E+00	0.000E+00	1.061E-09	0.000E+00
SOURCE # 8		0.000E+00	0.000E+00	0.000E+00	1.592E-09	0.000E+00	0.000E+00	1.592E-09	0.000E+00
SOURCE # 9		0.000E+00	0.000E+00	0.000E+00	1.536E-09	0.000E+00	0.000E+00	1.536E-09	0.000E+00
SOURCE # 10		0.000E+00	0.000E+00	0.000E+00	1.707E-09	0.000E+00	0.000E+00	1.707E-09	0.000E+00
SOURCE # 11		0.000E+00	0.000E+00	0.000E+00	5.096E-10	0.000E+00	0.000E+00	5.096E-10	0.000E+00
SOURCE # 12		0.000E+00	0.000E+00	0.000E+00	5.352E-10	0.000E+00	0.000E+00	5.352E-10	0.000E+00
SOURCE # 13		0.000E+00	0.000E+00	0.000E+00	7.977E-08	0.000E+00	0.000E+00	7.977E-08	0.000E+00
SOURCE # 14		0.000E+00	0.000E+00	0.000E+00	5.328E-08	0.000E+00	0.000E+00	5.328E-08	0.000E+00
SOURCE # 15		0.000E+00	0.000E+00	0.000E+00	6.607E-08	0.000E+00	0.000E+00	6.607E-08	0.000E+00
SOURCE # 16		0.000E+00	0.000E+00	0.000E+00	9.376E-08	0.000E+00	0.000E+00	9.376E-08	0.000E+00
SOURCE # 17		0.000E+00	0.000E+00	0.000E+00	1.328E-08	0.000E+00	0.000E+00	1.328E-08	0.000E+00
SOURCE # 18		0.000E+00	0.000E+00	0.000E+00	2.270E-08	0.000E+00	0.000E+00	2.270E-08	0.000E+00
SOURCE # 19		0.000E+00	0.000E+00	0.000E+00	4.982E-08	0.000E+00	0.000E+00	4.982E-08	0.000E+00
SOURCE # 20		0.000E+00	0.000E+00	0.000E+00	3.378E-08	0.000E+00	0.000E+00	3.378E-08	0.000E+00
SOURCE # 21		0.000E+00	0.000E+00	0.000E+00	3.339E-08	0.000E+00	0.000E+00	3.339E-08	0.000E+00
SOURCE # 22		0.000E+00	0.000E+00	0.000E+00	5.191E-08	0.000E+00	0.000E+00	5.191E-08	0.000E+00
SOURCE # 23		0.000E+00	0.000E+00	0.000E+00	7.865E-09	0.000E+00	0.000E+00	7.865E-09	0.000E+00
SOURCE # 24		0.000E+00	0.000E+00	0.000E+00	1.451E-08	0.000E+00	0.000E+00	1.451E-08	0.000E+00
SOURCE # 25		0.000E+00	0.000E+00	0.000E+00	6.769E-09	0.000E+00	0.000E+00	6.769E-09	0.000E+00
SOURCE # 26		0.000E+00	0.000E+00	0.000E+00	2.447E-07	0.000E+00	0.000E+00	2.447E-07	0.000E+00
SOURCE # 27		0.000E+00	0.000E+00	0.000E+00	1.456E-07	0.000E+00	0.000E+00	1.456E-07	0.000E+00
SOURCE # 28		0.000E+00	0.000E+00	0.000E+00	1.278E-08	0.000E+00	0.000E+00	1.278E-08	0.000E+00
SOURCE # 29		0.000E+00	0.000E+00	0.000E+00	1.319E-08	0.000E+00	0.000E+00	1.319E-08	0.000E+00
SOURCE # 30		0.000E+00	0.000E+00	0.000E+00	2.064E-08	0.000E+00	0.000E+00	2.064E-08	0.000E+00
SOURCE # 31		0.000E+00	0.000E+00	0.000E+00	1.546E-08	0.000E+00	0.000E+00	1.546E-08	0.000E+00
SOURCE # 32		0.000E+00	0.000E+00	0.000E+00	9.053E-09	0.000E+00	0.000E+00	9.053E-09	0.000E+00
SOURCE # 33		0.000E+00	0.000E+00	0.000E+00	8.360E-10	0.000E+00	0.000E+00	8.360E-10	0.000E+00
SOURCE # 34		0.000E+00	0.000E+00	0.000E+00	8.680E-10	0.000E+00	0.000E+00	8.680E-10	0.000E+00
SOURCE # 35		0.000E+00	0.000E+00	0.000E+00	1.368E-09	0.000E+00	0.000E+00	1.368E-09	0.000E+00
SOURCE # 36		0.000E+00	0.000E+00	0.000E+00	6.691E-08	0.000E+00	0.000E+00	6.691E-08	0.000E+00
SOURCE # 37		0.000E+00	0.000E+00	0.000E+00	3.881E-08	0.000E+00	0.000E+00	3.881E-08	0.000E+00
SOURCE # 38		0.000E+00	0.000E+00	0.000E+00	3.709E-09	0.000E+00	0.000E+00	3.709E-09	0.000E+00
SOURCE # 39		0.000E+00	0.000E+00	0.000E+00	3.869E-09	0.000E+00	0.000E+00	3.869E-09	0.000E+00
SOURCE # 40		0.000E+00	0.000E+00	0.000E+00	6.130E-09	0.000E+00	0.000E+00	6.130E-09	0.000E+00
SOURCE # 41		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 42		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 43		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 44		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 45		0.000E+00	0.000E+00	0.000E+00	2.862E-08	0.000E+00	0.000E+00	2.862E-08	0.000E+00
SOURCE # 46		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	1.170E-06	0.000E+00	0.000E+00	1.170E-06	0.000E+00

POLLUTANT C= ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E-03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 5.000E-03

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1		0.000E+00	0.000E+00	0.000E+00	1.826E-06	1.826E-06	0.000E+00	1.826E-06	0.000E+00
SOURCE # 2		0.000E+00	0.000E+00	0.000E+00	1.215E-06	1.215E-06	0.000E+00	1.215E-06	0.000E+00
SOURCE # 3		0.000E+00	0.000E+00	0.000E+00	1.460E-06	1.460E-06	0.000E+00	1.460E-06	0.000E+00
SOURCE # 4		0.000E+00	0.000E+00	0.000E+00	2.101E-06	2.101E-06	0.000E+00	2.101E-06	0.000E+00
SOURCE # 5		0.000E+00	0.000E+00	0.000E+00	2.958E-07	2.958E-07	0.000E+00	2.958E-07	0.000E+00
SOURCE # 6		0.000E+00	0.000E+00	0.000E+00	5.157E-07	5.157E-07	0.000E+00	5.157E-07	0.000E+00
SOURCE # 7		0.000E+00	0.000E+00	0.000E+00	3.362E-07	3.362E-07	0.000E+00	3.362E-07	0.000E+00
SOURCE # 8		0.000E+00	0.000E+00	0.000E+00	5.045E-07	5.045E-07	0.000E+00	5.045E-07	0.000E+00
SOURCE # 9		0.000E+00	0.000E+00	0.000E+00	4.864E-07	4.864E-07	0.000E+00	4.864E-07	0.000E+00
SOURCE # 10		0.000E+00	0.000E+00	0.000E+00	5.405E-07	5.405E-07	0.000E+00	5.405E-07	0.000E+00
SOURCE # 11		0.000E+00	0.000E+00	0.000E+00	1.614E-07	1.614E-07	0.000E+00	1.614E-07	0.000E+00
SOURCE # 12		0.000E+00	0.000E+00	0.000E+00	1.695E-07	1.695E-07	0.000E+00	1.695E-07	0.000E+00
SOURCE # 13		0.000E+00	0.000E+00	0.000E+00	2.526E-05	2.526E-05	0.000E+00	2.526E-05	0.000E+00
SOURCE # 14		0.000E+00	0.000E+00	0.000E+00	1.687E-05	1.687E-05	0.000E+00	1.687E-05	0.000E+00
SOURCE # 15		0.000E+00	0.000E+00	0.000E+00	2.091E-05	2.091E-05	0.000E+00	2.091E-05	0.000E+00
SOURCE # 16		0.000E+00	0.000E+00	0.000E+00	2.967E-05	2.967E-05	0.000E+00	2.967E-05	0.000E+00
SOURCE # 17		0.000E+00	0.000E+00	0.000E+00	4.201E-06	4.201E-06	0.000E+00	4.201E-06	0.000E+00
SOURCE # 18		0.000E+00	0.000E+00	0.000E+00	7.183E-06	7.183E-06	0.000E+00	7.183E-06	0.000E+00
SOURCE # 19		0.000E+00	0.000E+00	0.000E+00	1.417E-05	1.417E-05	0.000E+00	1.417E-05	0.000E+00
SOURCE # 20		0.000E+00	0.000E+00	0.000E+00	9.611E-06	9.611E-06	0.000E+00	9.611E-06	0.000E+00
SOURCE # 21		0.000E+00	0.000E+00	0.000E+00	9.502E-06	9.502E-06	0.000E+00	9.502E-06	0.000E+00
SOURCE # 22		0.000E+00	0.000E+00	0.000E+00	1.477E-05	1.477E-05	0.000E+00	1.477E-05	0.000E+00
SOURCE # 23		0.000E+00	0.000E+00	0.000E+00	2.239E-06	2.239E-06	0.000E+00	2.239E-06	0.000E+00
SOURCE # 24		0.000E+00	0.000E+00	0.000E+00	4.131E-06	4.131E-06	0.000E+00	4.131E-06	0.000E+00
SOURCE # 25		0.000E+00	0.000E+00	0.000E+00	3.884E-06	3.884E-06	0.000E+00	3.884E-06	0.000E+00
SOURCE # 26		0.000E+00	0.000E+00	0.000E+00	6.962E-05	6.962E-05	0.000E+00	6.962E-05	0.000E+00
SOURCE # 27		0.000E+00	0.000E+00	0.000E+00	4.143E-05	4.143E-05	0.000E+00	4.143E-05	0.000E+00
SOURCE # 28		0.000E+00	0.000E+00	0.000E+00	3.638E-06	3.638E-06	0.000E+00	3.638E-06	0.000E+00
SOURCE # 29		0.000E+00	0.000E+00	0.000E+00	3.755E-06	3.755E-06	0.000E+00	3.755E-06	0.000E+00
SOURCE # 30		0.000E+00	0.000E+00	0.000E+00	5.873E-06	5.873E-06	0.000E+00	5.873E-06	0.000E+00
SOURCE # 31		0.000E+00	0.000E+00	0.000E+00	4.400E-06	4.400E-06	0.000E+00	4.400E-06	0.000E+00
SOURCE # 32		0.000E+00	0.000E+00	0.000E+00	2.576E-06	2.576E-06	0.000E+00	2.576E-06	0.000E+00
SOURCE # 33		0.000E+00	0.000E+00	0.000E+00	2.378E-07	2.378E-07	0.000E+00	2.378E-07	0.000E+00
SOURCE # 34		0.000E+00	0.000E+00	0.000E+00	2.470E-07	2.470E-07	0.000E+00	2.470E-07	0.000E+00
SOURCE # 35		0.000E+00	0.000E+00	0.000E+00	3.893E-07	3.893E-07	0.000E+00	3.893E-07	0.000E+00
SOURCE # 36		0.000E+00	0.000E+00	0.000E+00	1.904E-05	1.904E-05	0.000E+00	1.904E-05	0.000E+00
SOURCE # 37		0.000E+00	0.000E+00	0.000E+00	1.104E-05	1.104E-05	0.000E+00	1.104E-05	0.000E+00
SOURCE # 38		0.000E+00	0.000E+00	0.000E+00	1.055E-06	1.055E-06	0.000E+00	1.055E-06	0.000E+00

POLLUTANT HCN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 7.000E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

POLLUTANT Pb ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 1.500E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 4.300E-04

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SOURCE #	13	1.102E-06	1.102E-06	1.102E-06	1.102E-06	0.000E+00	1.102E-06	0.000E+00	0.000E+00
SOURCE #	14	7.361E-07	7.361E-07	7.361E-07	7.361E-07	0.000E+00	7.361E-07	0.000E+00	0.000E+00
SOURCE #	15	9.127E-07	9.127E-07	9.127E-07	9.127E-07	0.000E+00	9.127E-07	0.000E+00	0.000E+00
SOURCE #	16	1.295E-06	1.295E-06	1.295E-06	1.295E-06	0.000E+00	1.295E-06	0.000E+00	0.000E+00
SOURCE #	17	1.834E-07	1.834E-07	1.834E-07	1.834E-07	0.000E+00	1.834E-07	0.000E+00	0.000E+00
SOURCE #	18	3.135E-07	3.135E-07	3.135E-07	3.135E-07	0.000E+00	3.135E-07	0.000E+00	0.000E+00
SOURCE #	19	4.923E-07	4.923E-07	4.923E-07	4.923E-07	0.000E+00	4.923E-07	0.000E+00	0.000E+00
SOURCE #	20	3.338E-07	3.338E-07	3.338E-07	3.338E-07	0.000E+00	3.338E-07	0.000E+00	0.000E+00
SOURCE #	21	3.300E-07	3.300E-07	3.300E-07	3.300E-07	0.000E+00	3.300E-07	0.000E+00	0.000E+00
SOURCE #	22	5.132E-07	5.132E-07	5.132E-07	5.132E-07	0.000E+00	5.132E-07	0.000E+00	0.000E+00
SOURCE #	23	7.773E-08	7.773E-08	7.773E-08	7.773E-08	0.000E+00	7.773E-08	0.000E+00	0.000E+00
SOURCE #	24	1.434E-07	1.434E-07	1.434E-07	1.434E-07	0.000E+00	1.434E-07	0.000E+00	0.000E+00
SOURCE #	25	3.080E-07	3.080E-07	3.080E-07	3.080E-07	0.000E+00	3.080E-07	0.000E+00	0.000E+00
SOURCE #	26	2.418E-06	2.418E-06	2.418E-06	2.418E-06	0.000E+00	2.418E-06	0.000E+00	0.000E+00
SOURCE #	27	1.439E-06	1.439E-06	1.439E-06	1.439E-06	0.000E+00	1.439E-06	0.000E+00	0.000E+00
SOURCE #	28	1.263E-07	1.263E-07	1.263E-07	1.263E-07	0.000E+00	1.263E-07	0.000E+00	0.000E+00
SOURCE #	29	1.304E-07	1.304E-07	1.304E-07	1.304E-07	0.000E+00	1.304E-07	0.000E+00	0.000E+00
SOURCE #	30	2.040E-07	2.040E-07	2.040E-07	2.040E-07	0.000E+00	2.040E-07	0.000E+00	0.000E+00
SOURCE #	31	1.528E-07	1.528E-07	1.528E-07	1.528E-07	0.000E+00	1.528E-07	0.000E+00	0.000E+00
SOURCE #	32	8.948E-08	8.948E-08	8.948E-08	8.948E-08	0.000E+00	8.948E-08	0.000E+00	0.000E+00
SOURCE #	33	8.264E-09	8.264E-09	8.264E-09	8.264E-09	0.000E+00	8.264E-09	0.000E+00	0.000E+00
SOURCE #	34	8.582E-09	8.582E-09	8.582E-09	8.582E-09	0.000E+00	8.582E-09	0.000E+00	0.000E+00
SOURCE #	35	1.353E-08	1.353E-08	1.353E-08	1.353E-08	0.000E+00	1.353E-08	0.000E+00	0.000E+00
SOURCE #	36	6.613E-07	6.613E-07	6.613E-07	6.613E-07	0.000E+00	6.613E-07	0.000E+00	0.000E+00
SOURCE #	37	3.835E-07	3.835E-07	3.835E-07	3.835E-07	0.000E+00	3.835E-07	0.000E+00	0.000E+00
SOURCE #	38	3.665E-08	3.665E-08	3.665E-08	3.665E-08	0.000E+00	3.665E-08	0.000E+00	0.000E+00
SOURCE #	39	3.824E-08	3.824E-08	3.824E-08	3.824E-08	0.000E+00	3.824E-08	0.000E+00	0.000E+00
SOURCE #	40	6.060E-08	6.060E-08	6.060E-08	6.060E-08	0.000E+00	6.060E-08	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		1.293E-05	1.293E-05	1.293E-05	1.293E-05	0.000E+00	1.293E-05	0.000E+00	0.000E+00

POLLUTANT M₁ ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 4.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	1.429E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.429E-06	0.000E+00
SOURCE #	2	0.000E+00	9.509E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.509E-07	0.000E+00
SOURCE #	3	0.000E+00	1.143E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.143E-06	0.000E+00
SOURCE #	4	0.000E+00	1.645E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.645E-06	0.000E+00
SOURCE #	5	0.000E+00	2.316E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.316E-07	0.000E+00
SOURCE #	6	0.000E+00	4.038E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.038E-07	0.000E+00
SOURCE #	7	0.000E+00	2.633E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.633E-07	0.000E+00
SOURCE #	8	0.000E+00	3.950E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.950E-07	0.000E+00
SOURCE #	9	0.000E+00	3.809E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.809E-07	0.000E+00
SOURCE #	10	0.000E+00	4.231E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.231E-07	0.000E+00
SOURCE #	11	0.000E+00	1.264E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.264E-07	0.000E+00
SOURCE #	12	0.000E+00	1.327E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.327E-07	0.000E+00
SOURCE #	13	0.000E+00	1.977E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.977E-05	0.000E+00
SOURCE #	14	0.000E+00	1.321E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.321E-05	0.000E+00
SOURCE #	15	0.000E+00	1.638E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.638E-05	0.000E+00
SOURCE #	16	0.000E+00	2.324E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.324E-05	0.000E+00
SOURCE #	17	0.000E+00	3.290E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.290E-06	0.000E+00
SOURCE #	18	0.000E+00	5.625E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.625E-06	0.000E+00
SOURCE #	19	0.000E+00	1.110E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.110E-05	0.000E+00
SOURCE #	20	0.000E+00	7.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.523E-06	0.000E+00
SOURCE #	21	0.000E+00	7.440E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.440E-06	0.000E+00
SOURCE #	22	0.000E+00	1.157E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.157E-05	0.000E+00
SOURCE #	23	0.000E+00	1.753E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.753E-06	0.000E+00
SOURCE #	24	0.000E+00	3.234E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.234E-06	0.000E+00
SOURCE #	25	0.000E+00	3.042E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.042E-06	0.000E+00
SOURCE #	26	0.000E+00	5.451E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.451E-05	0.000E+00
SOURCE #	27	0.000E+00	3.244E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.244E-05	0.000E+00
SOURCE #	28	0.000E+00	2.848E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.848E-06	0.000E+00
SOURCE #	29	0.000E+00	2.940E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.940E-06	0.000E+00
SOURCE #	30	0.000E+00	4.599E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.599E-06	0.000E+00
SOURCE #	31	0.000E+00	3.444E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.444E-06	0.000E+00
SOURCE #	32	0.000E+00	2.017E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.017E-06	0.000E+00
SOURCE #	33	0.000E+00	1.862E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.862E-07	0.000E+00
SOURCE #	34	0.000E+00	1.934E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.934E-07	0.000E+00
SOURCE #	35	0.000E+00	3.048E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.048E-07	0.000E+00
SOURCE #	36	0.000E+00	1.490E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.490E-05	0.000E+00
SOURCE #	37	0.000E+00	8.646E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.646E-06	0.000E+00
SOURCE #	38	0.000E+00	8.264E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.264E-07	0.000E+00
SOURCE #	39	0.000E+00	8.623E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.623E-07	0.000E+00
SOURCE #	40	0.000E+00	1.366E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.366E-06	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	2.648E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.648E-04	0.000E+00

POLLUTANT H₂ ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 3.000E-04

CV CNS IMMUN KIDN LIVER REPRO RESP SKIN

POLLUTANT N1 ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.400E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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POLLUTANT NAPTH ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 1.400E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 4.000E-03

POLLUTANT Se ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GO\gcmace.dat Output File: g:\beest\GO\GOMPACT.OUT 11/14/96 07:00:20 Page - 177

POLLUTANT Zn ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.500E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GO\GQMACE.dat Output File: g:\beest\GO\GQMACE.OUT 11/14/96 07:00:20 Page - 179

*** SUMMARY OF MAXIMUM PREDICTED RISKS ***

CANCER RISK ASSESSMENT

SIGNIFICANT RISK LEVEL = 1.000E-06
 IMPACT ZONE RISK LEVEL = 1.000E-07
 MAXIMUM PEAK RISK = 2.418E-06
 PREDICTED AT RECEPTOR # 69
 TOTAL EXCESS BURDEN = 0.000E+00

59 RECEPTORS WITH RISK EXCEEDING SIGNIFICANT RISK LEVEL OF 1.000E-06

42	43	44	45	48	49	50	62	63	64
65	66	67	68	69	70	71	72	91	92
93	103	104	105	106	107	115	116	117	118
119	120	127	128	129	130	131	132	133	139
140	141	142	143	144	145	146	151	152	153
178	188	189	190	191	198	199	200	201	

ACUTE EXPOSURE TO NON-CANCER POLLUTANTS

SIGNIFICANT HAZARD INDEX = 0.5000
 MAXIMUM HAZARD INDEX FOR AN ENDPOINT = 0.0137
 PREDICTED AT RECEPTOR # 34

0 RECEPTORS WITH HAZARD INDEX .GE. 0.5000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

CHRONIC EXPOSURE TO NON-CANCER POLLUTANTS

SIGNIFICANT HAZARD INDEX = 0.5000
 MAXIMUM HAZARD INDEX FOR AN ENDPOINT = 0.0478
 PREDICTED AT RECEPTOR # 87

0 RECEPTORS WITH HAZARD INDEX .GE. 0.5000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, PM10 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqpmace.dat Output File: g:\beest\GQ\GQpmACE.OUT 11/14/96 07:00:20 Page - 181

*** END OF ACE2588 SIMULATION ***

APPENDIX J

***** A C E 2 5 8 8 --- ASSESSMENT OF CHEMICAL EXPOSURE FOR AB 2588 --- VERSION 93288 *****

*** A MULTI-SOURCE, MULTI-POLLUTANT, MULTI-PATHWAY RISK ASSESSMENT MODEL
DEVELOPED BY APPLIED MODELING INC. AND SANTA BARBARA COUNTY APCD ***

Distributed and Maintained by CAPCOA

*** INPUT MODELING PARAMETERS ***

DISPERSION MODELING OPTION = 1
 RISK ASSESSMENT OPTION = 0
 NONCANCER ACUTE OPTION = 1
 DIAGNOSTIC PRINT OUTPUT OPTION = 0
 NUMBER OF RECEPTORS = 451
 NUMBER OF SOURCES = 46
 NUMBER OF POLLUTANTS = 22
 NUMBER OF DISPERSION MODELING HOURS = 8760
 NUMBER OF DISPERSION MODELING DAYS = 365

IDODIS = 1 ==> ISCST DISPERSION MODELING WITH SEQUENTIAL METEOROLOGY
 ANNUAL CONCENTRATIONS COMPUTED AS AVERAGES OF 1-HOUR CONC.

IDORISK = 0 ==> FULL MODEL RUN FOR RISK ASSESSMENT FROM ALL SOURCES AT ALL RECEPTORS

IDOACU = 1 ==> NONCANCER ACUTE EXPOSURE PERFORMED

IDOPRT = 0 ==> DIAGNOSTIC PRINT OUTPUT NOT CREATED

IDENTIFICATION NUMBERS OF MODELED POLLUTANTS:

1 3 10 13 17 22 36 38 70 79 83 85 87 111 110
 130 134 137 145 151 152 998

*** POLLUTANT-SPECIFIC DATA ***

NAME	SYMBOL	NUM	UNIT	RISK	POTENCY	ACUTE	AEI	CHRONIC	AEI	ORAL	DOSE	CHRONIC TOX ENDPOINTS								ACUTE TOX ENDPOINTS							
				(ug/m3)-1	(mg/kg-d)-1	(ug/m3)	(ug/m3)	(mg/kg-d)				CV	CN	IM	KI	LI	RP	RE	SK	CV	CN	IM	KI	LI	RP	RE	EY
Acetaldehyde	ACETA	1		2.70E-06	0.00E+00	0.00E+00	9.00E+00	0.00E+00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Acrolein	ACROL	3		0.00E+00	0.00E+00	2.50E+00	2.00E-02	0.00E+00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Arsenic	As	10		3.30E-03	1.70E+00	0.00E+00	5.00E-01	1.00E-03	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Benzene	BENZE	13		2.90E-05	0.00E+00	0.00E+00	7.10E+01	0.00E+00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beryllium	Be	17		2.40E-03	4.30E+00	0.00E+00	4.80E-03	5.00E-03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Cadmium	Cd	22		4.20E-03	0.00E+00	0.00E+00	3.50E+00	1.00E-03	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Chromium (hex.)	Cr	36		1.40E-01	4.20E-01	0.00E+00	2.00E-03	5.00E-03	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Copper	Cu	38		0.00E+00	0.00E+00	1.00E+01	2.40E+00	0.00E+00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Formaldehyde	HCHO	70		6.00E-06	0.00E+00	3.70E+02	3.60E+00	0.00E+00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Hydrogen cyanide	HCN	79		0.00E+00	0.00E+00	3.30E+03	7.00E+01	0.00E+00	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Lead	Pb	83		8.00E-05	0.00E+00	0.00E+00	1.50E+00	4.30E-04	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Manganese	Mn	85		0.00E+00	0.00E+00	0.00E+00	4.00E-01	0.00E+00	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Mercury	Hg	87		0.00E+00	0.00E+00	3.00E+01	3.00E-01	3.00E-04	1	1	0	1	1	0	0	1	0	1	0	0	1	0	1	1	0	0	0
Nickel	Ni	111		2.60E-04	0.00E+00	1.00E+00	2.40E-01	0.00E+00	0	0	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Naphthalene	NAPTH	110		0.00E+00	0.00E+00	0.00E+00	1.40E+01	4.00E-03	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycyclic arom. HC	PAH	130		1.70E-03	1.15E+01	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Propylene	PROPL	134		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium	Se	137		1.40E-04	0.00E+00	2.00E+00	5.00E-01	0.00E+00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Toluene	TOL	145		0.00E+00	0.00E+00	0.00E+00	2.00E+02	0.00E+00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Xylene	XYLEN	151		0.00E+00	0.00E+00	4.40E+03	3.00E+02	0.00E+00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0
Zinc	Zn	152		0.00E+00	0.00E+00	0.00E+00	3.50E+01	0.00E+00	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Nonionic PM10	NIXPM	998		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF MODELED POLLUTANTS = 22

NUMBER OF CARCINOGENIC POLLUTANTS = 11

1 10 13 17 22 36 70 83 111 130
 137

NUMBER OF MULTIPATHWAY POLLUTANTS = 8

10 17 22 36 83 87 110 130

NUMBER OF POLLUTANTS WITH ACUTE NON-CANCER RISK = 8

3 38 70 79 87 111 137 151

MAXIMUM NUMBER OF ACUTE TOXICOLOGICAL ENDPOINTS = 3

NUMBER OF POLLUTANTS WITH CHRONIC NON-CANCER RISK = 19

1 3 10 13 17 22 36 38 70 79
 83 85 87 111 110 137 145 151 152
 MAXIMUM NUMBER OF CHRONIC TOXICOLOGICAL ENDPOINTS = 5
 REQUIRED TOTAL ARRAY SIZE = 947848 WORDS

*** INPUT SOURCE EMISSION RATES ****

FOR SOURCE # 1 DRILLING PIT1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.401E-07	4.287E-06	4.096E-07	2.848E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.258E-07	2.586E-06	5.608E-08	3.899E-03
Cd	22	1.948E-08	1.546E-07	1.472E-08	1.023E-03
Cr	36	3.168E-09	2.514E-08	2.662E-09	1.851E-04
Cu	38	4.530E-08	3.595E-07	3.447E-08	2.396E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.884E-07	1.495E-06	8.714E-08	6.058E-03
Mn	85	4.961E-07	3.937E-06	4.169E-07	2.898E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.647E-08	1.307E-07	1.246E-08	8.663E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	6.922E-08	5.494E-07	5.264E-08	3.660E-03
NTXPM	998	6.336E-03	5.029E-02	5.325E-03	3.702E+02

FOR SOURCE # 2 DRILLING PIT2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.401E-07	4.287E-06	4.096E-07	2.848E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.258E-07	2.586E-06	5.608E-08	3.899E-03
Cd	22	1.948E-08	1.546E-07	1.472E-08	1.023E-03
Cr	36	3.168E-09	2.514E-08	2.662E-09	1.851E-04
Cu	38	4.530E-08	3.595E-07	3.447E-08	2.396E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.884E-07	1.495E-06	8.714E-08	6.058E-03
Mn	85	4.961E-07	3.937E-06	4.169E-07	2.898E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.647E-08	1.307E-07	1.246E-08	8.663E-04
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	6.922E-08	5.494E-07	5.264E-08	3.660E-03
NTXPM	998	6.336E-03	5.029E-02	5.325E-03	3.702E+02

FOR SOURCE # 3 DRILLING PIT3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.850E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.079E-06	1.650E-05	1.577E-06	1.096E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.254E-06	9.952E-06	2.159E-07	1.501E-02
Cd	22	7.501E-08	5.953E-07	5.668E-08	3.941E-03
Cr	36	1.220E-08	9.683E-08	1.025E-08	7.126E-04
Cu	38	1.744E-07	1.384E-06	1.327E-07	9.226E-03

HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	7.253E-07	5.756E-06	3.355E-07	2.333E-02
Mn	85	1.910E-06	1.516E-05	1.605E-06	1.116E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.342E-08	5.033E-07	4.797E-08	3.335E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.665E-07	2.115E-06	2.027E-07	1.409E-02
NTXPM	998	2.439E-02	1.936E-01	2.050E-02	1.425E+03

FOR SOURCE # 4 DRILLING PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.725E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.552E-06	2.025E-05	1.935E-06	1.345E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.539E-06	1.221E-05	2.650E-07	1.842E-02
Cd	22	9.205E-08	7.306E-07	6.956E-08	4.836E-03
Cr	36	1.497E-08	1.188E-07	1.258E-08	8.746E-04
Cu	38	2.140E-07	1.698E-06	1.629E-07	1.133E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.901E-07	7.064E-06	4.118E-07	2.863E-02
Mn	85	2.344E-06	1.860E-05	1.970E-06	1.370E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.783E-08	6.177E-07	5.887E-08	4.093E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.270E-07	2.595E-06	2.487E-07	1.729E-02
NTXPM	998	2.994E-02	2.376E-01	2.516E-02	1.749E+03

FOR SOURCE # 5 DRILLING PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.210E-07	6.516E-06	6.226E-07	4.329E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	4.952E-07	3.930E-06	8.525E-08	5.927E-03
Cd	22	2.961E-08	2.350E-07	2.238E-08	1.556E-03
Cr	36	4.815E-09	3.821E-08	4.047E-09	2.814E-04
Cu	38	6.886E-08	5.465E-07	5.239E-08	3.642E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.863E-07	2.272E-06	1.325E-07	9.212E-03
Mn	85	7.540E-07	5.984E-06	6.337E-07	4.406E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.504E-08	1.987E-07	1.894E-08	1.317E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.052E-07	8.349E-07	8.002E-08	5.563E-03
NTXPM	998	9.630E-03	7.643E-02	8.093E-03	5.627E+02

FOR SOURCE # 6 DRILLING PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.210E-07	6.516E-06	6.226E-07	4.329E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	4.952E-07	3.930E-06	8.525E-08	5.927E-03
Cd	22	2.961E-08	2.350E-07	2.238E-08	1.556E-03
Cr	36	4.815E-09	3.821E-08	4.047E-09	2.814E-04
Cu	38	6.886E-08	5.465E-07	5.239E-08	3.642E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.863E-07	2.272E-06	1.325E-07	9.212E-03
Mn	85	7.540E-07	5.984E-06	6.337E-07	4.406E-02

Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.504E-08	1.987E-07	1.894E-08	1.317E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.052E-07	8.349E-07	8.002E-08	5.563E-03
NTXPM	998	9.630E-03	7.643E-02	8.093E-03	5.627E+02

FOR SOURCE # 7 BLASTING PIT1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	3.348E-06	2.328E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	4.623E-07	3.214E-02
Cd	22	3.017E-05	2.394E-04	1.203E-07	8.364E-03
Cr	36	9.891E-06	7.850E-05	2.178E-08	1.514E-03
Cu	38	7.451E-05	5.913E-04	2.817E-07	1.958E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	7.140E-07	4.964E-02
Mn	85	1.549E-03	1.229E-02	3.411E-06	2.371E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.019E-07	7.084E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	4.303E-07	2.992E-02
NTXPM	998	1.978E+01	1.570E+02	4.356E-02	3.028E+03

FOR SOURCE # 8 BLASTING PIT2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	3.348E-06	2.328E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	4.623E-07	3.214E-02
Cd	22	3.017E-05	2.394E-04	1.203E-07	8.364E-03
Cr	36	9.891E-06	7.850E-05	2.178E-08	1.514E-03
Cu	38	7.451E-05	5.913E-04	2.817E-07	1.958E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	7.140E-07	4.964E-02
Mn	85	1.549E-03	1.229E-02	3.411E-06	2.371E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.019E-07	7.084E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	4.303E-07	2.992E-02
NTXPM	998	1.978E+01	1.570E+02	4.356E-02	3.028E+03

FOR SOURCE # 9 BLASTING PIT3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	1.289E-05	8.962E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	1.780E-06	1.238E-01
Cd	22	3.017E-05	2.394E-04	4.633E-07	3.221E-02
Cr	36	9.891E-06	7.850E-05	8.385E-08	5.830E-03
Cu	38	7.451E-05	5.913E-04	1.085E-06	7.543E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	2.749E-06	1.911E-01
Mn	85	1.549E-03	1.229E-02	1.313E-05	9.128E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	3.925E-07	2.729E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	1.657E-06	1.152E-01
NTXPM	998	1.978E+01	1.570E+02	1.677E-01	1.166E+04

FOR SOURCE # 10 BLASTING PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	1.582E-05	1.100E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	2.184E-06	1.518E-01
Cd	22	3.017E-05	2.394E-04	5.686E-07	3.953E-02
Cr	36	9.891E-06	7.850E-05	1.029E-07	7.154E-03
Cu	38	7.451E-05	5.913E-04	1.331E-06	9.254E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	3.374E-06	2.346E-01
Mn	85	1.549E-03	1.229E-02	1.611E-05	1.120E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	4.817E-07	3.349E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	2.033E-06	1.413E-01
NTXPM	998	1.978E+01	1.570E+02	2.058E-01	1.431E+04

FOR SOURCE # 11 BLASTING PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	5.089E-06	3.538E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	7.026E-07	4.885E-02
Cd	22	3.017E-05	2.394E-04	1.829E-07	1.272E-02
Cr	36	9.891E-06	7.850E-05	3.310E-08	2.301E-03
Cu	38	7.451E-05	5.913E-04	4.282E-07	2.977E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	1.085E-06	7.543E-02
Mn	85	1.549E-03	1.229E-02	5.184E-06	3.604E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.550E-07	1.078E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.134E-04	9.000E-04	6.547E-07	4.547E-02
NTXPM	998	1.978E+01	1.570E+02	6.621E-02	4.603E+03

FOR SOURCE # 12 BLASTING PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.630E-04	6.849E-03	5.089E-06	3.538E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.017E-03	8.071E-03	7.026E-07	4.885E-02
Cd	22	3.017E-05	2.394E-04	1.829E-07	1.272E-02
Cr	36	9.891E-06	7.850E-05	3.310E-08	2.301E-03
Cu	38	7.451E-05	5.913E-04	4.282E-07	2.977E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.882E-04	4.668E-03	1.085E-06	7.543E-02
Mn	85	1.549E-03	1.229E-02	5.184E-06	3.604E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.143E-05	4.082E-04	1.550E-07	1.078E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Zn	152	1.134E-04	9.000E-04	6.540E-07	4.547E-02
NTXPM	998	1.978E+01	1.570E+02	6.621E-02	4.603E+03

FOR SOURCE # 13 TRKLOAD PIT1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	4.530E-06	3.595E-05	6.078E-06	4.226E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	5.339E-06	4.237E-05	8.323E-07	5.786E-02
Cd	22	1.583E-07	1.256E-06	2.185E-07	1.519E-02
Cr	36	5.192E-08	4.121E-07	3.951E-08	2.747E-03
Cu	38	3.911E-07	3.104E-06	5.115E-07	3.556E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.087E-06	2.450E-05	1.293E-06	8.989E-02
Mn	85	8.130E-06	6.452E-05	6.187E-06	4.301E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.700E-07	2.143E-06	1.849E-07	1.285E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.953E-07	4.725E-06	7.812E-07	5.431E-02
NTXPM	998	1.038E-01	8.238E-01	7.901E-02	5.493E+03

FOR SOURCE # 14 TRKLOAD PIT2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	4.530E-06	3.595E-05	6.078E-06	4.226E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	5.339E-06	4.237E-05	8.323E-07	5.786E-02
Cd	22	1.583E-07	1.256E-06	2.185E-07	1.519E-02
Cr	36	5.192E-08	4.121E-07	3.951E-08	2.747E-03
Cu	38	3.911E-07	3.104E-06	5.115E-07	3.556E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.087E-06	2.450E-05	1.293E-06	8.989E-02
Mn	85	8.130E-06	6.452E-05	6.187E-06	4.301E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.700E-07	2.143E-06	1.849E-07	1.285E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.953E-07	4.725E-06	7.812E-07	5.431E-02
NTXPM	998	1.038E-01	8.238E-01	7.901E-02	5.493E+03

FOR SOURCE # 15 TRKLOAD PIT3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.850E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.744E-05	1.384E-04	2.340E-05	1.627E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.055E-05	1.631E-04	3.204E-06	2.228E-01
Cd	22	6.096E-07	4.838E-06	8.411E-07	5.848E-02
Cr	36	1.999E-07	1.587E-06	1.521E-07	1.057E-02
Cu	38	1.506E-06	1.195E-05	1.969E-06	1.369E-01
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.189E-05	9.437E-05	4.979E-06	3.462E-01
Mn	85	3.130E-05	2.484E-04	2.382E-05	1.656E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.039E-06	8.246E-06	7.118E-07	4.949E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.292E-06	1.819E-05	3.008E-06	2.091E-01
NTXPM	998	3.998E-01	3.173E+00	3.042E-01	2.115E+04

FOR SOURCE # 16 TRKLOAD PIT4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.725E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.140E-05	1.698E-04	2.872E-05	1.997E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.523E-05	2.002E-04	3.932E-06	2.734E-01
Cd	22	7.482E-07	5.938E-06	1.032E-06	7.175E-02
Cr	36	2.453E-07	1.947E-06	1.867E-07	1.298E-02
Cu	38	1.848E-06	1.467E-05	2.417E-06	1.680E-01
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.459E-05	1.158E-04	6.110E-06	4.248E-01
Mn	85	3.842E-05	3.049E-04	2.923E-05	2.032E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.276E-06	1.013E-05	8.736E-07	6.074E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.813E-06	2.233E-05	3.691E-06	2.566E-01
NTXPM	998	4.906E-01	3.894E+00	3.733E-01	2.595E+04

FOR SOURCE # 17 TRKLOAD PIT5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	6.885E-06	5.464E-05	9.239E-06	6.423E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	8.115E-06	6.440E-05	1.265E-06	8.795E-02
Cd	22	2.407E-07	1.910E-06	3.321E-07	2.309E-02
Cr	36	7.891E-08	6.263E-07	6.005E-08	4.175E-03
Cu	38	5.945E-07	4.718E-06	7.774E-07	5.405E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.693E-06	3.725E-05	1.966E-06	1.367E-01
Mn	85	1.236E-05	9.810E-05	9.404E-06	6.538E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.104E-07	3.257E-06	2.810E-07	1.954E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	9.049E-07	7.182E-06	1.187E-06	8.252E-02
NTXPM	998	1.578E-01	1.252E+00	1.201E-01	8.350E+03

FOR SOURCE # 18 TRKLOAD PIT6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.520E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	6.885E-06	5.464E-05	9.239E-06	6.423E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	8.115E-06	6.440E-05	1.265E-06	8.795E-02
Cd	22	2.407E-07	1.910E-06	3.321E-07	2.309E-02
Cr	36	7.891E-08	6.263E-07	6.005E-08	4.175E-03
Cu	38	5.945E-07	4.718E-06	7.774E-07	5.405E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.693E-06	3.725E-05	1.966E-06	1.367E-01
Mn	85	1.236E-05	9.810E-05	9.404E-06	6.538E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.104E-07	3.257E-06	2.810E-07	1.954E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	9.049E-07	7.182E-06	1.187E-06	8.252E-02
NTXPM	998	1.578E-01	1.252E+00	1.201E-01	8.350E+03

FOR SOURCE # 19 HAUL 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.500E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.531E-06	4.390E-05	3.197E-06	2.223E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.027E-08	1.609E-07	1.172E-08	8.148E-04
Cd	22	1.995E-07	1.583E-06	1.153E-07	8.016E-03
Cr	36	3.244E-08	2.575E-07	1.875E-08	1.304E-03
Cu	38	4.639E-07	3.682E-06	2.681E-07	1.864E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.450E-07	6.706E-06	4.885E-07	3.396E-02
Mn	85	5.080E-06	4.032E-05	2.936E-06	2.041E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.476E-07	1.171E-06	8.532E-08	5.932E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.088E-07	5.625E-06	4.097E-07	2.848E-02
NTXPM	998	6.488E-02	5.149E-01	3.750E-02	2.607E+03

FOR SOURCE # 20 HAUL 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.500E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.531E-06	4.390E-05	3.197E-06	2.223E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.027E-08	1.609E-07	1.172E-08	8.148E-04
Cd	22	1.995E-07	1.583E-06	1.153E-07	8.016E-03
Cr	36	3.244E-08	2.575E-07	1.875E-08	1.304E-03
Cu	38	4.639E-07	3.682E-06	2.681E-07	1.864E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.450E-07	6.706E-06	4.885E-07	3.396E-02
Mn	85	5.080E-06	4.032E-05	2.936E-06	2.041E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.476E-07	1.171E-06	8.532E-08	5.932E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.088E-07	5.625E-06	4.097E-07	2.848E-02
NTXPM	998	6.488E-02	5.149E-01	3.750E-02	2.607E+03

FOR SOURCE # 21 HAUL 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 9.625E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.129E-05	1.690E-04	1.231E-05	8.558E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	7.806E-08	6.195E-07	4.512E-08	3.137E-03
Cd	22	7.681E-07	6.096E-06	4.440E-07	3.087E-02
Cr	36	1.249E-07	9.913E-07	7.219E-08	5.019E-03
Cu	38	1.786E-06	1.417E-05	1.032E-06	7.175E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.253E-06	2.582E-05	1.881E-06	1.308E-01
Mn	85	1.956E-05	1.552E-04	1.131E-05	7.863E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.682E-07	4.510E-06	3.285E-07	2.284E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.729E-06	2.166E-05	1.577E-06	1.096E-01
NTXPM	998	2.498E-01	1.983E+00	1.444E-01	1.004E+04

FOR SOURCE # 22 HAUL 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.181E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.613E-05	2.074E-04	1.511E-05	1.051E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.580E-08	7.603E-07	5.538E-08	3.850E-03
Cd	22	9.426E-07	7.481E-06	5.449E-07	3.788E-02
Cr	36	1.533E-07	1.217E-06	8.860E-08	6.160E-03
Cu	38	2.192E-06	1.740E-05	1.267E-06	8.809E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.993E-06	3.169E-05	2.308E-06	1.605E-01
Mn	85	2.400E-05	1.905E-04	1.387E-05	9.643E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.974E-07	5.535E-06	4.031E-07	2.803E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.349E-06	2.658E-05	1.936E-06	1.346E-01
NTXPM	998	3.065E-01	2.433E+00	1.772E-01	1.232E+04

FOR SOURCE # 23 HAUL 5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.800E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.407E-06	6.672E-05	4.860E-06	3.379E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.082E-08	2.446E-07	1.781E-08	1.238E-03
Cd	22	3.032E-07	2.406E-06	1.753E-07	1.219E-02
Cr	36	4.931E-08	3.913E-07	2.850E-08	1.981E-03
Cu	38	7.051E-07	5.596E-06	4.076E-07	2.834E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.284E-06	1.019E-05	7.425E-07	5.162E-02
Mn	85	7.721E-06	6.128E-05	4.463E-06	3.103E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.243E-07	1.780E-06	1.297E-07	9.017E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.077E-06	8.548E-06	6.228E-07	4.330E-02
NTXPM	998	9.861E-02	7.826E-01	5.700E-02	3.963E+03

FOR SOURCE # 24 HAUL 6
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.800E+04 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.407E-06	6.672E-05	4.860E-06	3.379E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.082E-08	2.446E-07	1.781E-08	1.238E-03
Cd	22	3.032E-07	2.406E-06	1.753E-07	1.219E-02
Cr	36	4.931E-08	3.913E-07	2.850E-08	1.981E-03
Cu	38	7.051E-07	5.596E-06	4.076E-07	2.834E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.284E-06	1.019E-05	7.425E-07	5.162E-02
Mn	85	7.721E-06	6.128E-05	4.463E-06	3.103E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.243E-07	1.780E-06	1.297E-07	9.017E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.077E-06	8.548E-06	6.228E-07	4.330E-02
NTXPM	998	9.861E-02	7.826E-01	5.700E-02	3.963E+03

FOR SOURCE # 25 BAGHOUSE 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.230E-06	6.532E-05	1.253E-05	8.711E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	9.700E-06	7.698E-05	1.477E-05	1.027E+00

Cd	22	2.877E-07	2.283E-06	4.379E-07	3.044E-02
Cr	36	9.433E-08	7.487E-07	1.436E-07	9.984E-03
Cu	38	1.421E-06	1.128E-05	1.082E-06	7.522E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.609E-06	4.452E-05	8.538E-06	5.936E-01
Mn	85	1.477E-05	1.172E-04	2.249E-05	1.564E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	9.810E-07	7.786E-06	7.466E-07	5.191E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.082E-06	8.587E-06	1.646E-06	1.144E-01
NTXPM	998	3.773E-01	2.994E+00	2.872E-01	1.997E+04

FOR SOURCE # 26 TRU-WST 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	8.597E-06	6.823E-05	1.023E-05	7.112E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.013E-05	8.040E-05	3.749E-08	2.606E-03
Cd	22	3.005E-07	2.385E-06	3.689E-07	2.565E-02
Cr	36	9.854E-08	7.821E-07	5.998E-08	4.170E-03
Cu	38	7.423E-07	5.891E-06	8.578E-07	5.964E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.860E-06	4.651E-05	1.563E-06	1.087E-01
Mn	85	1.543E-05	1.225E-04	9.393E-06	6.530E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.124E-07	4.067E-06	2.729E-07	1.897E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.130E-06	8.968E-06	1.311E-06	9.115E-02
NTXPM	998	1.094E-01	8.683E-01	1.200E-01	8.343E+03

FOR SOURCE # 27 TRU-WST 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.727E-05	1.371E-04	2.054E-05	1.428E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.035E-05	1.615E-04	7.531E-08	5.236E-03
Cd	22	6.037E-07	4.791E-06	7.410E-07	5.152E-02
Cr	36	1.979E-07	1.571E-06	1.205E-07	8.378E-03
Cu	38	1.491E-06	1.183E-05	1.723E-06	1.198E-01
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.177E-05	9.341E-05	3.139E-06	2.182E-01
Mn	85	3.100E-05	2.460E-04	1.887E-05	1.312E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.029E-06	8.167E-06	5.482E-07	3.811E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.270E-06	1.802E-05	2.633E-06	1.831E-01
NTXPM	998	2.198E-01	1.744E+00	2.410E-01	1.676E+04

FOR SOURCE # 28 TRU-WST 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.466E-06	4.338E-05	6.503E-06	4.521E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.443E-06	5.113E-05	2.384E-08	1.657E-03
Cd	22	1.911E-07	1.517E-06	2.346E-07	1.631E-02
Cr	36	6.265E-08	4.972E-07	3.814E-08	2.652E-03
Cu	38	4.720E-07	3.746E-06	5.454E-07	3.792E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00

HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.726E-06	2.957E-05	9.935E-07	6.907E-02
Mn	85	9.811E-06	7.787E-05	5.973E-06	4.153E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.258E-07	2.586E-06	1.735E-07	1.206E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.184E-07	5.702E-06	8.333E-07	5.793E-02
NTXPM	998	6.958E-02	5.522E-01	7.628E-02	5.303E+03

FOR SOURCE # 29 TRU-WST 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.024E-05	8.127E-05	1.218E-05	8.468E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.207E-05	9.579E-05	4.466E-08	3.105E-03
Cd	22	3.580E-07	2.841E-06	4.394E-07	3.055E-02
Cr	36	1.174E-07	9.317E-07	7.145E-08	4.967E-03
Cu	38	8.842E-07	7.017E-06	1.022E-06	7.105E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	6.980E-06	5.540E-05	1.861E-06	1.294E-01
Mn	85	1.838E-05	1.459E-04	1.119E-05	7.780E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	6.103E-07	4.844E-06	3.251E-07	2.260E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.346E-06	1.068E-05	1.561E-06	1.085E-01
NTXPM	998	1.303E-01	1.034E+00	1.429E-01	9.935E+03

FOR SOURCE # 30 TRU-WST 5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.010E-05	1.595E-04	2.391E-05	1.662E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.369E-05	1.880E-04	8.765E-08	6.094E-03
Cd	22	7.026E-07	5.576E-06	8.625E-07	5.996E-02
Cr	36	2.304E-07	1.829E-06	1.402E-07	9.747E-03
Cu	38	1.735E-06	1.377E-05	2.005E-06	1.394E-01
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.370E-05	1.087E-04	3.653E-06	2.540E-01
Mn	85	3.608E-05	2.863E-04	2.196E-05	1.527E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.198E-06	9.508E-06	6.381E-07	4.436E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.642E-06	2.097E-05	3.064E-06	2.130E-01
NTXPM	998	2.558E-01	2.030E+00	2.805E-01	1.950E+04

FOR SOURCE # 31 DOZING WASTE 1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.684E-05	1.337E-04	1.922E-06	1.336E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.171E-08	4.898E-07	7.045E-09	4.898E-04
Cd	22	6.073E-07	4.820E-06	6.932E-08	4.819E-03
Cr	36	9.874E-08	7.837E-07	1.127E-08	7.835E-04
Cu	38	1.412E-06	1.121E-05	1.612E-07	1.121E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.572E-06	2.041E-05	2.936E-07	2.041E-02
Mn	85	1.546E-05	1.227E-04	1.765E-06	1.227E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Ni	111	4.493E-07	3.566E-06	5.129E-08	3.566E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.158E-06	1.713E-05	2.463E-07	1.712E-02
NTXPM	998	1.975E-01	1.567E+00	2.254E-02	1.567E+03

FOR SOURCE # 32 DOZING WASTE 2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.382E-05	2.684E-04	3.860E-06	2.684E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.240E-07	9.841E-07	1.415E-08	9.838E-04
Cd	22	1.220E-06	9.683E-06	1.392E-07	9.678E-03
Cr	36	1.983E-07	1.574E-06	2.264E-08	1.574E-03
Cu	38	2.836E-06	2.251E-05	3.238E-07	2.251E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.167E-06	4.101E-05	5.898E-07	4.101E-02
Mn	85	3.106E-05	2.465E-04	3.546E-06	2.465E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	9.025E-07	7.163E-06	1.030E-07	7.161E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.334E-06	3.440E-05	4.947E-07	3.439E-02
NTXPM	998	3.967E-01	3.148E+00	4.528E-02	3.148E+03

FOR SOURCE # 33 DOZING WASTE 3
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.070E-05	8.492E-05	1.222E-06	8.496E-02
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	3.924E-08	3.114E-07	4.479E-09	3.114E-04
Cd	22	3.861E-07	3.064E-06	4.408E-08	3.065E-03
Cr	36	6.278E-08	4.983E-07	7.167E-09	4.983E-04
Cu	38	8.978E-07	7.125E-06	1.025E-07	7.126E-03
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.636E-06	1.298E-05	1.867E-07	1.298E-02
Mn	85	9.832E-06	7.803E-05	1.122E-06	7.801E-02
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	2.857E-07	2.267E-06	3.261E-08	2.267E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	1.372E-06	1.089E-05	1.566E-07	1.089E-02
NTXPM	998	1.256E-01	9.968E-01	1.433E-02	9.963E+02

FOR SOURCE # 34 DOZING WASTE 4
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.005E-05	1.591E-04	2.289E-06	1.591E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	7.351E-08	5.834E-07	8.392E-09	5.834E-04
Cd	22	7.234E-07	5.741E-06	8.258E-08	5.741E-03
Cr	36	1.176E-07	9.333E-07	1.343E-08	9.337E-04
Cu	38	1.682E-06	1.335E-05	1.920E-07	1.335E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	3.064E-06	2.432E-05	3.498E-07	2.432E-02
Mn	85	1.842E-05	1.462E-04	2.103E-06	1.462E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	5.352E-07	4.248E-06	6.109E-08	4.247E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.570E-06	2.040E-05	2.934E-07	2.040E-02
NTXPM	998	2.352E-01	1.867E+00	2.685E-02	1.867E+03

FOR SOURCE # 35 DOZING WASTE 5
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.936E-05	3.124E-04	4.493E-06	3.124E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.443E-07	1.145E-06	1.647E-08	1.145E-03
Cd	22	1.420E-06	1.127E-05	1.621E-07	1.127E-02
Cr	36	2.309E-07	1.833E-06	2.635E-08	1.832E-03
Cu	38	3.301E-06	2.620E-05	3.769E-07	2.620E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	6.014E-06	4.773E-05	6.865E-07	4.773E-02
Mn	85	3.615E-05	2.869E-04	4.127E-06	2.869E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.050E-06	8.333E-06	1.199E-07	8.336E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	5.044E-06	4.003E-05	5.758E-07	4.003E-02
NTXPM	998	4.617E-01	3.664E+00	5.271E-02	3.665E+03

FOR SOURCE # 36 WIND EROSION1
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.156E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	2.830E-06	2.246E-05	2.906E-06	2.020E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.037E-08	8.230E-08	1.065E-08	7.404E-04
Cd	22	1.021E-07	8.103E-07	1.048E-07	7.286E-03
Cr	36	1.660E-08	1.317E-07	1.704E-08	1.185E-03
Cu	38	2.374E-07	1.884E-06	2.437E-07	1.694E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	4.324E-07	3.432E-06	4.440E-07	3.087E-02
Mn	85	2.599E-06	2.063E-05	2.669E-06	1.856E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	7.552E-08	5.994E-07	7.755E-08	5.392E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	3.627E-07	2.879E-06	3.724E-07	2.589E-02
NTXPM	998	3.320E-02	2.635E-01	3.409E-02	2.370E+03

FOR SOURCE # 37 WIND EROSION2
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 4.331E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.685E-06	4.512E-05	5.837E-06	4.058E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.084E-08	1.654E-07	2.140E-08	1.488E-03
Cd	22	2.050E-07	1.627E-06	2.105E-07	1.463E-02
Cr	36	3.334E-08	2.646E-07	3.423E-08	2.380E-03
Cu	38	4.768E-07	3.784E-06	4.895E-07	3.403E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	8.685E-07	6.893E-06	8.918E-07	6.200E-02
Mn	85	5.221E-06	4.144E-05	5.361E-06	3.727E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.517E-07	1.204E-06	1.558E-07	1.083E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.285E-07	5.782E-06	7.480E-07	5.200E-02

NTXPM 998 6.668E-02 5.292E-01 6.847E-02 4.760E+03

FOR SOURCE # 38 WIND EROSION3
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.371E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	1.799E-06	1.428E-05	1.848E-06	1.285E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	6.596E-09	5.235E-08	6.773E-09	4.709E-04
Cd	22	6.490E-08	5.151E-07	6.664E-08	4.633E-03
Cr	36	1.055E-08	8.373E-08	1.084E-08	7.536E-04
Cu	38	1.509E-07	1.198E-06	1.550E-07	1.078E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	2.749E-07	2.182E-06	2.823E-07	1.963E-02
Mn	85	1.653E-06	1.312E-05	1.697E-06	1.180E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	4.802E-08	3.811E-07	4.931E-08	3.428E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	2.306E-07	1.830E-06	2.368E-07	1.646E-02
NTXPM	998	2.111E-02	1.675E-01	2.167E-02	1.507E+03

FOR SOURCE # 39 WIND EROSION4
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 2.569E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	3.371E-06	2.675E-05	3.461E-06	2.406E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	1.236E-08	9.810E-08	1.269E-08	8.823E-04
Cd	22	1.216E-07	9.651E-07	1.249E-07	8.684E-03
Cr	36	1.977E-08	1.569E-07	2.030E-08	1.411E-03
Cu	38	2.827E-07	2.244E-06	2.903E-07	2.018E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	5.150E-07	4.087E-06	5.288E-07	3.676E-02
Mn	85	3.096E-06	2.457E-05	3.179E-06	2.210E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	8.996E-08	7.140E-07	9.237E-08	6.422E-03
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	4.320E-07	3.429E-06	4.436E-07	3.084E-02
NTXPM	998	3.954E-02	3.138E-01	4.060E-02	2.823E+03

FOR SOURCE # 40 WIND EROSION5
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.041E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	6.616E-06	5.251E-05	6.794E-06	4.723E-01
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	2.425E-08	1.925E-07	2.490E-08	1.731E-03
Cd	22	2.387E-07	1.894E-06	2.451E-07	1.704E-02
Cr	36	3.881E-08	3.080E-07	3.985E-08	2.771E-03
Cu	38	5.549E-07	4.404E-06	5.698E-07	3.961E-02
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	1.011E-06	8.024E-06	1.038E-06	7.217E-02
Mn	85	6.077E-06	4.823E-05	6.240E-06	4.338E-01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	1.766E-07	1.402E-06	1.813E-07	1.260E-02
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	8.479E-07	6.729E-06	8.706E-07	6.053E-02
NTXPM	998	7.761E-02	6.160E-01	7.969E-02	5.540E+03

FOR SOURCE # 41 ORE_PAD1

OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 5.993E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	2.040E-01	1.619E+00	2.040E-01	1.418E+04
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 42 ORE PAD2
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 3.188E+05 DEPOSITION ADJUST. FACTOR = 2.50000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	1.085E-01	8.611E-01	1.085E-01	7.543E+03
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 43 MERCURY RETORT
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 44 ADSORPTION
OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE	ANNUAL RATE
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		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	1.134E-03	9.000E-03	1.847E-03	1.284E+02
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NIXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 45 FURNACE
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	1.467E-05	1.164E-04	5.225E-07	3.633E-02
Cr	36	1.389E-07	1.102E-06	4.948E-09	3.440E-04
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NIXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

FOR SOURCE # 46 DIESEL TANK
 OPERATING HOURS = 8760.00 SURFACE AREA (m2) = 1.000E+00 DEPOSITION ADJUST. FACTOR = 1.00000

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NIXPM	998	0.000E+00	0.000E+00	0.000E+00	0.000E+00

*** INPUT FACILITY-WIDE EMISSION RATES ***

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR RATE		ANNUAL RATE	
		(g/s)	(lb/hr)	(g/s)	(lb/yr)
ACETA	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	10	5.533E-03	4.392E-02	2.980E-04	2.072E+01

BENZE	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	17	6.262E-03	4.970E-02	3.371E-05	2.344E+00
Cd	22	2.084E-04	1.654E-03	1.124E-05	7.814E-01
Cr	36	6.231E-05	4.945E-04	1.908E-06	1.326E-01
Cu	38	4.779E-04	3.793E-03	2.506E-05	1.742E+00
HCHO	70	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	79	3.136E-01	2.489E+00	3.143E-01	2.185E+04
Pb	83	3.655E-03	2.900E-02	6.020E-05	4.186E+00
Mn	85	9.736E-03	7.727E-02	2.980E-04	2.072E+01
Hg	87	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	111	3.229E-04	2.563E-03	8.865E-06	6.163E-01
NAPTH	110	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	152	7.264E-04	5.765E-03	3.828E-05	2.661E+00
NTXPM	998	1.239E+02	9.832E+02	3.806E+00	2.646E+05

*** INPUT POLLUTANT BACKGROUND CONCENTRATIONS (ug/m3) ****

POLLUTANT NAME	POLLUTANT NUMBER	1-HOUR BACKG.	ANNUAL BACKG.
ACETA	1	0.000E+00	0.000E+00
ACROL	3	0.000E+00	0.000E+00
As	10	0.000E+00	0.000E+00
BENZE	13	0.000E+00	0.000E+00
Ba	17	0.000E+00	0.000E+00
Cd	22	0.000E+00	0.000E+00
Cr	36	0.000E+00	0.000E+00
Cu	38	0.000E+00	0.000E+00
HCHO	70	0.000E+00	0.000E+00
HCN	79	0.000E+00	0.000E+00
Pb	83	0.000E+00	0.000E+00
Mn	85	0.000E+00	0.000E+00
Hg	87	0.000E+00	0.000E+00
Ni	111	0.000E+00	0.000E+00
NAPTH	110	0.000E+00	0.000E+00
PAH	130	0.000E+00	0.000E+00
PROPL	134	0.000E+00	0.000E+00
Se	137	0.000E+00	0.000E+00
TOL	145	0.000E+00	0.000E+00
XYLEN	151	0.000E+00	0.000E+00
Zn	152	0.000E+00	0.000E+00
NTXPM	998	0.000E+00	0.000E+00

LDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 put File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 35

*** INPUT RECEPTOR DATA ***

RECEPTOR #	RECEPTOR NAME	X-COORD	Y-COORD	ELEVATION	POPULATION	GARDEN FRAC	SCREEN X/Q
1	RES 24-1	389400.00	3868050.00	2760.00	0	0.00000	0.000E+00
2	RES 20-1	392550.00	3868000.00	2650.00	0	0.00000	0.000E+00
3	RES 20-2	392600.00	3868000.00	2650.00	0	0.00000	0.000E+00
4	RES 13-1	390250.00	3868800.00	2760.00	0	0.00000	0.000E+00
5	RES 13-2	390300.00	3868750.00	2760.00	0	0.00000	0.000E+00
6	RES 13-3	390300.00	3868500.00	2760.00	0	0.00000	0.000E+00
7	RES 16-1	393500.00	3868200.00	2610.00	0	0.00000	0.000E+00
8	RES 16-2	393750.00	3868300.00	2600.00	0	0.00000	0.000E+00
9	RES 16-3	393800.00	3868450.00	2590.00	0	0.00000	0.000E+00
10	RES 12-1	389750.00	3870450.00	2820.00	0	0.00000	0.000E+00
11	RES 9-1	395050.00	3870600.00	2590.00	0	0.00000	0.000E+00
12	RES 5-1	392200.00	3872600.00	2840.00	0	0.00000	0.000E+00
13	RES 31-1	390800.00	3873450.00	2810.00	0	0.00000	0.000E+00
14	RES 31-2	390750.00	3873400.00	2810.00	0	0.00000	0.000E+00
15	RES 31-3	390700.00	3873400.00	2820.00	0	0.00000	0.000E+00
16	RES 31-4	390650.00	3873200.00	2820.00	0	0.00000	0.000E+00
17	RES 32-1	393500.00	3873700.00	2710.00	0	0.00000	0.000E+00
18	RES 32-2	392450.00	3873750.00	2740.00	0	0.00000	0.000E+00
19	RES 32-3	391950.00	3873950.00	2760.00	0	0.00000	0.000E+00
20	RES 32-4	391900.00	3873400.00	2780.00	0	0.00000	0.000E+00
21	PROP.001	389750.00	3871670.00	2840.00	0	0.00000	0.000E+00
22	PROP.002	389759.00	3871788.00	2850.00	0	0.00000	0.000E+00
23	PROP.003	389778.00	3871908.00	2850.00	0	0.00000	0.000E+00
24	PROP.004	389803.00	3872019.00	2850.00	0	0.00000	0.000E+00
25	PROP.005	389826.00	3872073.00	2850.00	0	0.00000	0.000E+00
26	PROP.006	389928.00	3872271.00	2850.00	0	0.00000	0.000E+00
27	PROP.007	390027.00	3872472.00	2850.00	0	0.00000	0.000E+00
28	PROP.008	390083.00	3872582.00	2835.00	0	0.00000	0.000E+00
29	PROP.009	390203.00	3872720.00	2830.00	0	0.00000	0.000E+00
30	PROP.010	390252.00	3872758.00	2830.00	0	0.00000	0.000E+00
31	PROP.011	390352.00	3872832.00	2820.00	0	0.00000	0.000E+00
32	PROP.012	390434.00	3872889.00	2820.00	0	0.00000	0.000E+00
33	PROP.013	390669.00	3872895.00	2820.00	0	0.00000	0.000E+00
34	PROP.014	390904.00	3872902.00	2820.00	0	0.00000	0.000E+00
35	PROP.015	391139.00	3872908.00	2820.00	0	0.00000	0.000E+00
36	PROP.016	391374.00	3872915.00	2820.00	0	0.00000	0.000E+00
37	PROP.017	391609.00	3872921.00	2810.00	0	0.00000	0.000E+00

38	PROP. 018	391844.00	3872928.00	2790.00	0	0.00000	0.000E+00
39	PROP. 019	391844.00	3872735.00	2850.00	0	0.00000	0.000E+00
40	PROP. 020	391845.00	3872543.00	2900.00	0	0.00000	0.000E+00
41	PROP. 021	391845.00	3872351.00	3000.00	0	0.00000	0.000E+00
42	PROP. 022	391846.00	3872159.00	3175.00	0	0.00000	0.000E+00
43	PROP. 023	392046.00	3872165.00	3100.00	0	0.00000	0.000E+00
44	PROP. 024	392246.00	3872172.00	2975.00	0	0.00000	0.000E+00
45	PROP. 025	392446.00	3872178.00	2825.00	0	0.00000	0.000E+00
46	PROP. 026	392647.00	3872185.00	2860.00	0	0.00000	0.000E+00
47	PROP. 027	392658.00	3871975.00	3090.00	0	0.00000	0.000E+00
48	PROP. 028	392670.00	3871765.00	2900.00	0	0.00000	0.000E+00
49	PROP. 029	392682.00	3871555.00	2925.00	0	0.00000	0.000E+00
50	PROP. 030	392694.00	3871346.00	2950.00	0	0.00000	0.000E+00
51	PROP. 031	392887.00	3871350.00	3000.00	0	0.00000	0.000E+00
52	PROP. 032	393080.00	3871355.00	2950.00	0	0.00000	0.000E+00
53	PROP. 033	393273.00	3871360.00	2875.00	0	0.00000	0.000E+00
54	PROP. 034	393467.00	3871365.00	3025.00	0	0.00000	0.000E+00
55	PROP. 035	393467.00	3871139.00	3000.00	0	0.00000	0.000E+00
56	PROP. 036	393467.00	3870914.00	3000.00	0	0.00000	0.000E+00
57	PROP. 037	393467.00	3870689.00	2760.00	0	0.00000	0.000E+00
58	PROP. 038	393252.00	3870689.00	2830.00	0	0.00000	0.000E+00
59	PROP. 039	393037.00	3870689.00	3020.00	0	0.00000	0.000E+00
60	PROP. 040	392822.00	3870689.00	3110.00	0	0.00000	0.000E+00
61	PROP. 041	392607.00	3870689.00	3440.00	0	0.00000	0.000E+00
62	PROP. 042	392392.00	3870689.00	3500.00	0	0.00000	0.000E+00
63	PROP. 043	392178.00	3870689.00	3120.00	0	0.00000	0.000E+00
64	PROP. 044	392178.00	3870521.00	3020.00	0	0.00000	0.000E+00
65	PROP. 045	392010.00	3870521.00	3180.00	0	0.00000	0.000E+00
66	PROP. 046	391842.00	3870521.00	3120.00	0	0.00000	0.000E+00
67	PROP. 047	391643.00	3870520.00	3060.00	0	0.00000	0.000E+00
68	PROP. 048	391445.00	3870519.00	3030.00	0	0.00000	0.000E+00
69	PROP. 049	391247.00	3870518.00	3180.00	0	0.00000	0.000E+00
70	PROP. 050	391049.00	3870518.00	3120.00	0	0.00000	0.000E+00
71	PROP. 051	391044.00	3870310.00	3300.00	0	0.00000	0.000E+00
72	PROP. 052	391040.00	3870103.00	3140.00	0	0.00000	0.000E+00
73	PROP. 053	391036.00	3869895.00	2980.00	0	0.00000	0.000E+00
74	PROP. 054	391032.00	3869688.00	3120.00	0	0.00000	0.000E+00
75	PROP. 055	390827.00	3869681.00	3000.00	0	0.00000	0.000E+00
76	PROP. 056	390623.00	3869674.00	2920.00	0	0.00000	0.000E+00
77	PROP. 057	390419.00	3869667.00	2910.00	0	0.00000	0.000E+00
78	PROP. 058	390215.00	3869661.00	3000.00	0	0.00000	0.000E+00
79	PROP. 059	390214.00	3869865.00	3020.00	0	0.00000	0.000E+00
80	PROP. 060	390213.00	3870070.00	2930.00	0	0.00000	0.000E+00
81	PROP. 061	390212.00	3870275.00	2920.00	0	0.00000	0.000E+00
82	PROP. 062	390212.00	3870480.00	2880.00	0	0.00000	0.000E+00
83	PROP. 063	390211.00	3870677.00	2870.00	0	0.00000	0.000E+00
84	PROP. 064	390210.00	3870875.00	2860.00	0	0.00000	0.000E+00
85	PROP. 065	390209.00	3871072.00	2860.00	0	0.00000	0.000E+00
86	PROP. 066	390209.00	3871270.00	2870.00	0	0.00000	0.000E+00
87	PROP. 067	390039.00	3871272.00	2840.00	0	0.00000	0.000E+00
88	PROP. 068	389869.00	3871274.00	2840.00	0	0.00000	0.000E+00
89	PROP. 069	389700.00	3871276.00	2840.00	0	0.00000	0.000E+00
90	PROP. 070	389725.00	3871473.00	2840.00	0	0.00000	0.000E+00
91	100.0001	391600.00	3870100.00	2840.00	0	0.00000	0.000E+00
92	100.0002	391700.00	3870100.00	2840.00	0	0.00000	0.000E+00
93	100.0003	391800.00	3870100.00	2850.00	0	0.00000	0.000E+00
94	100.0004	391900.00	3870100.00	2900.00	0	0.00000	0.000E+00
95	100.0005	392000.00	3870100.00	2900.00	0	0.00000	0.000E+00
96	100.0006	392100.00	3870100.00	2870.00	0	0.00000	0.000E+00
97	100.0007	392200.00	3870100.00	2900.00	0	0.00000	0.000E+00
98	100.0008	392300.00	3870100.00	2790.00	0	0.00000	0.000E+00
99	100.0009	392400.00	3870100.00	2900.00	0	0.00000	0.000E+00
100	100.0010	392500.00	3870100.00	2880.00	0	0.00000	0.000E+00
101	100.0011	392600.00	3870100.00	2960.00	0	0.00000	0.000E+00
102	100.0012	392700.00	3870100.00	3070.00	0	0.00000	0.000E+00
103	100.0013	391600.00	3870200.00	2860.00	0	0.00000	0.000E+00
104	100.0014	391700.00	3870200.00	2880.00	0	0.00000	0.000E+00
105	100.0015	391800.00	3870200.00	2890.00	0	0.00000	0.000E+00
106	100.0016	391900.00	3870200.00	2930.00	0	0.00000	0.000E+00
107	100.0017	392000.00	3870200.00	2920.00	0	0.00000	0.000E+00
108	100.0018	392100.00	3870200.00	2910.00	0	0.00000	0.000E+00
109	100.0019	392200.00	3870200.00	2920.00	0	0.00000	0.000E+00
110	100.0020	392300.00	3870200.00	2940.00	0	0.00000	0.000E+00
111	100.0021	392400.00	3870200.00	2930.00	0	0.00000	0.000E+00
112	100.0022	392500.00	3870200.00	2950.00	0	0.00000	0.000E+00
113	100.0023	392600.00	3870200.00	2970.00	0	0.00000	0.000E+00
114	100.0024	392700.00	3870200.00	3120.00	0	0.00000	0.000E+00
115	100.0025	391600.00	3870300.00	2900.00	0	0.00000	0.000E+00
116	100.0026	391700.00	3870300.00	2920.00	0	0.00000	0.000E+00
117	100.0027	391800.00	3870300.00	2930.00	0	0.00000	0.000E+00
118	100.0028	391900.00	3870300.00	2960.00	0	0.00000	0.000E+00
119	100.0029	392000.00	3870300.00	3000.00	0	0.00000	0.000E+00
120	100.0030	392100.00	3870300.00	2960.00	0	0.00000	0.000E+00
121	100.0031	392200.00	3870300.00	2940.00	0	0.00000	0.000E+00
122	100.0032	392300.00	3870300.00	2980.00	0	0.00000	0.000E+00
123	100.0033	392400.00	3870300.00	2980.00	0	0.00000	0.000E+00
124	100.0034	392500.00	3870300.00	3020.00	0	0.00000	0.000E+00
125	100.0035	392600.00	3870300.00	3140.00	0	0.00000	0.000E+00
126	100.0036	392700.00	3870300.00	3170.00	0	0.00000	0.000E+00
127	100.0037	391600.00	3870400.00	2940.00	0	0.00000	0.000E+00
128	100.0038	391700.00	3870400.00	2950.00	0	0.00000	0.000E+00
129	100.0039	391800.00	3870400.00	2980.00	0	0.00000	0.000E+00
130	100.0040	391900.00	3870400.00	3060.00	0	0.00000	0.000E+00
131	100.0041	392000.00	3870400.00	3140.00	0	0.00000	0.000E+00
132	100.0042	392100.00	3870400.00	3020.00	0	0.00000	0.000E+00
133	100.0043	392200.00	3870400.00	2980.00	0	0.00000	0.000E+00
134	100.0044	392300.00	3870400.00	3040.00	0	0.00000	0.000E+00

135	100.0045	392400.00	3870400.00	3110.00	0	0.000000	0.000E+00
136	100.0046	392500.00	3870400.00	3280.00	0	0.000000	0.000E+00
137	100.0047	392600.00	3870400.00	3250.00	0	0.000000	0.000E+00
138	100.0048	392700.00	3870400.00	3260.00	0	0.000000	0.000E+00
139	100.0049	391600.00	3870500.00	3020.00	0	0.000000	0.000E+00
140	100.0050	391700.00	3870500.00	3040.00	0	0.000000	0.000E+00
141	100.0051	391800.00	3870500.00	3060.00	0	0.000000	0.000E+00
142	100.0052	391900.00	3870500.00	3200.00	0	0.000000	0.000E+00
143	100.0053	392000.00	3870500.00	3200.00	0	0.000000	0.000E+00
144	100.0054	392100.00	3870500.00	3060.00	0	0.000000	0.000E+00
145	100.0055	392200.00	3870500.00	3040.00	0	0.000000	0.000E+00
146	100.0056	392300.00	3870500.00	3140.00	0	0.000000	0.000E+00
147	100.0057	392400.00	3870500.00	3240.00	0	0.000000	0.000E+00
148	100.0058	392500.00	3870500.00	3320.00	0	0.000000	0.000E+00
149	100.0059	392600.00	3870500.00	3400.00	0	0.000000	0.000E+00
150	100.0060	392700.00	3870500.00	3400.00	0	0.000000	0.000E+00
151	100.0061	392200.00	3870600.00	3110.00	0	0.000000	0.000E+00
152	100.0062	392300.00	3870600.00	3280.00	0	0.000000	0.000E+00
153	100.0063	392400.00	3870600.00	3430.00	0	0.000000	0.000E+00
154	100.0064	392500.00	3870600.00	3130.00	0	0.000000	0.000E+00
155	100.0065	392600.00	3870600.00	3520.00	0	0.000000	0.000E+00
156	100.0066	392700.00	3870600.00	3390.00	0	0.000000	0.000E+00
157	250.0001	391000.00	3869500.00	3070.00	0	0.000000	0.000E+00
158	250.0002	391250.00	3869500.00	3140.00	0	0.000000	0.000E+00
159	250.0003	391500.00	3869500.00	2880.00	0	0.000000	0.000E+00
160	250.0004	391750.00	3869500.00	2730.00	0	0.000000	0.000E+00
161	250.0005	392000.00	3869500.00	2710.00	0	0.000000	0.000E+00
162	250.0006	392250.00	3869500.00	2700.00	0	0.000000	0.000E+00
163	250.0007	392500.00	3869500.00	2690.00	0	0.000000	0.000E+00
164	250.0008	392750.00	3869500.00	2660.00	0	0.000000	0.000E+00
165	250.0009	393000.00	3869500.00	2670.00	0	0.000000	0.000E+00
166	250.0010	393250.00	3869500.00	2650.00	0	0.000000	0.000E+00
167	250.0011	393500.00	3869500.00	2610.00	0	0.000000	0.000E+00
168	250.0012	391250.00	3869750.00	2890.00	0	0.000000	0.000E+00
169	250.0013	391500.00	3869750.00	2790.00	0	0.000000	0.000E+00
170	250.0014	391750.00	3869750.00	2760.00	0	0.000000	0.000E+00
171	250.0015	392000.00	3869750.00	2770.00	0	0.000000	0.000E+00
172	250.0016	392250.00	3869750.00	2760.00	0	0.000000	0.000E+00
173	250.0017	392500.00	3869750.00	2760.00	0	0.000000	0.000E+00
174	250.0018	392750.00	3869750.00	2800.00	0	0.000000	0.000E+00
175	250.0019	393000.00	3869750.00	2840.00	0	0.000000	0.000E+00
176	250.0020	393250.00	3869750.00	2720.00	0	0.000000	0.000E+00
177	250.0021	393500.00	3869750.00	2700.00	0	0.000000	0.000E+00
178	250.0022	391250.00	3870000.00	3010.00	0	0.000000	0.000E+00
179	250.0023	391500.00	3870000.00	2880.00	0	0.000000	0.000E+00
180	250.0024	391750.00	3870000.00	2810.00	0	0.000000	0.000E+00
181	250.0025	392000.00	3870000.00	2860.00	0	0.000000	0.000E+00
182	250.0026	392250.00	3870000.00	2940.00	0	0.000000	0.000E+00
183	250.0027	392500.00	3870000.00	2850.00	0	0.000000	0.000E+00
184	250.0028	392750.00	3870000.00	3040.00	0	0.000000	0.000E+00
185	250.0029	393000.00	3870000.00	2980.00	0	0.000000	0.000E+00
186	250.0030	393250.00	3870000.00	2860.00	0	0.000000	0.000E+00
187	250.0031	393500.00	3870000.00	2760.00	0	0.000000	0.000E+00
188	250.0032	391250.00	3870250.00	3140.00	0	0.000000	0.000E+00
189	250.0033	391500.00	3870250.00	2910.00	0	0.000000	0.000E+00
190	250.0034	391750.00	3870250.00	2910.00	0	0.000000	0.000E+00
191	250.0035	392000.00	3870250.00	2960.00	0	0.000000	0.000E+00
192	250.0036	392250.00	3870250.00	2940.00	0	0.000000	0.000E+00
193	250.0037	392500.00	3870250.00	2990.00	0	0.000000	0.000E+00
194	250.0038	392750.00	3870250.00	3180.00	0	0.000000	0.000E+00
195	250.0039	393000.00	3870250.00	2980.00	0	0.000000	0.000E+00
196	250.0040	393250.00	3870250.00	3000.00	0	0.000000	0.000E+00
197	250.0041	393500.00	3870250.00	2840.00	0	0.000000	0.000E+00
198	250.0042	391250.00	3870500.00	3160.00	0	0.000000	0.000E+00
199	250.0043	391500.00	3870500.00	3000.00	0	0.000000	0.000E+00
200	250.0044	391750.00	3870500.00	3040.00	0	0.000000	0.000E+00
201	250.0045	392250.00	3870500.00	3100.00	0	0.000000	0.000E+00
202	250.0046	392750.00	3870500.00	3380.00	0	0.000000	0.000E+00
203	250.0047	393000.00	3870500.00	3100.00	0	0.000000	0.000E+00
204	250.0048	393250.00	3870500.00	2880.00	0	0.000000	0.000E+00
205	250.0049	393500.00	3870500.00	2820.00	0	0.000000	0.000E+00
206	250.0050	393500.00	3870750.00	2840.00	0	0.000000	0.000E+00
207	250.0051	393500.00	3871000.00	3050.00	0	0.000000	0.000E+00
208	500.0001	386000.00	3867500.00	2840.00	0	0.000000	0.000E+00
209	500.0002	386500.00	3867500.00	2840.00	0	0.000000	0.000E+00
210	500.0003	387000.00	3867500.00	2830.00	0	0.000000	0.000E+00
211	500.0004	387500.00	3867500.00	2810.00	0	0.000000	0.000E+00
212	500.0005	388000.00	3867500.00	2800.00	0	0.000000	0.000E+00
213	500.0006	388500.00	3867500.00	2790.00	0	0.000000	0.000E+00
214	500.0007	389000.00	3867500.00	2770.00	0	0.000000	0.000E+00
215	500.0008	389500.00	3867500.00	2750.00	0	0.000000	0.000E+00
216	500.0009	390000.00	3867500.00	2740.00	0	0.000000	0.000E+00
217	500.0010	390500.00	3867500.00	2730.00	0	0.000000	0.000E+00
218	500.0011	391000.00	3867500.00	2710.00	0	0.000000	0.000E+00
219	500.0012	391500.00	3867500.00	2690.00	0	0.000000	0.000E+00
220	500.0013	392000.00	3867500.00	2670.00	0	0.000000	0.000E+00
221	500.0014	392500.00	3867500.00	2650.00	0	0.000000	0.000E+00
222	500.0015	393000.00	3867500.00	2630.00	0	0.000000	0.000E+00
223	500.0016	393500.00	3867500.00	2600.00	0	0.000000	0.000E+00
224	500.0017	394000.00	3867500.00	2590.00	0	0.000000	0.000E+00
225	500.0018	394500.00	3867500.00	2580.00	0	0.000000	0.000E+00
226	500.0019	395000.00	3867500.00	2560.00	0	0.000000	0.000E+00
227	500.0020	386000.00	3868000.00	2860.00	0	0.000000	0.000E+00
228	500.0021	386500.00	3868000.00	2860.00	0	0.000000	0.000E+00
229	500.0022	387000.00	3868000.00	2860.00	0	0.000000	0.000E+00
230	500.0023	387500.00	3868000.00	2840.00	0	0.000000	0.000E+00
231	500.0024	388000.00	3868000.00	2820.00	0	0.000000	0.000E+00

232	500.0025	388500.00	3868000.00	2800.00	0	0.00000	0.000E+00
233	500.0026	389000.00	3868000.00	2780.00	0	0.00000	0.000E+00
234	500.0027	389500.00	3868000.00	2770.00	0	0.00000	0.000E+00
235	500.0028	390000.00	3868000.00	2750.00	0	0.00000	0.000E+00
236	500.0029	390500.00	3868000.00	2740.00	0	0.00000	0.000E+00
237	500.0030	391000.00	3868000.00	2720.00	0	0.00000	0.000E+00
238	500.0031	391500.00	3868000.00	2700.00	0	0.00000	0.000E+00
239	500.0032	392000.00	3868000.00	2680.00	0	0.00000	0.000E+00
240	500.0033	392500.00	3868000.00	2660.00	0	0.00000	0.000E+00
241	500.0034	393000.00	3868000.00	2630.00	0	0.00000	0.000E+00
242	500.0035	393500.00	3868000.00	2610.00	0	0.00000	0.000E+00
243	500.0036	394000.00	3868000.00	2590.00	0	0.00000	0.000E+00
244	500.0037	394500.00	3868000.00	2580.00	0	0.00000	0.000E+00
245	500.0038	395000.00	3868000.00	2560.00	0	0.00000	0.000E+00
246	500.0039	386000.00	3868500.00	2880.00	0	0.00000	0.000E+00
247	500.0040	386500.00	3868500.00	2880.00	0	0.00000	0.000E+00
248	500.0041	387000.00	3868500.00	2870.00	0	0.00000	0.000E+00
249	500.0042	387500.00	3868500.00	2860.00	0	0.00000	0.000E+00
250	500.0043	388000.00	3868500.00	2850.00	0	0.00000	0.000E+00
251	500.0044	388500.00	3868500.00	2820.00	0	0.00000	0.000E+00
252	500.0045	389000.00	3868500.00	2800.00	0	0.00000	0.000E+00
253	500.0046	389500.00	3868500.00	2780.00	0	0.00000	0.000E+00
254	500.0047	390000.00	3868500.00	2770.00	0	0.00000	0.000E+00
255	500.0048	390500.00	3868500.00	2740.00	0	0.00000	0.000E+00
256	500.0049	391000.00	3868500.00	2730.00	0	0.00000	0.000E+00
257	500.0050	391500.00	3868500.00	2710.00	0	0.00000	0.000E+00
258	500.0051	392000.00	3868500.00	2680.00	0	0.00000	0.000E+00
259	500.0052	392500.00	3868500.00	2660.00	0	0.00000	0.000E+00
260	500.0053	393000.00	3868500.00	2620.00	0	0.00000	0.000E+00
261	500.0054	393500.00	3868500.00	2600.00	0	0.00000	0.000E+00
262	500.0055	394000.00	3868500.00	2590.00	0	0.00000	0.000E+00
263	500.0056	394500.00	3868500.00	2580.00	0	0.00000	0.000E+00
264	500.0057	395000.00	3868500.00	2565.00	0	0.00000	0.000E+00
265	500.0058	386000.00	3869000.00	2910.00	0	0.00000	0.000E+00
266	500.0059	386500.00	3869000.00	2900.00	0	0.00000	0.000E+00
267	500.0060	387000.00	3869000.00	2890.00	0	0.00000	0.000E+00
268	500.0061	387500.00	3869000.00	2880.00	0	0.00000	0.000E+00
269	500.0062	388000.00	3869000.00	2865.00	0	0.00000	0.000E+00
270	500.0063	388500.00	3869000.00	2840.00	0	0.00000	0.000E+00
271	500.0064	389000.00	3869000.00	2820.00	0	0.00000	0.000E+00
272	500.0065	389500.00	3869000.00	2800.00	0	0.00000	0.000E+00
273	500.0066	390000.00	3869000.00	2820.00	0	0.00000	0.000E+00
274	500.0067	390500.00	3869000.00	2960.00	0	0.00000	0.000E+00
275	500.0068	391000.00	3869000.00	2880.00	0	0.00000	0.000E+00
276	500.0069	391500.00	3869000.00	2720.00	0	0.00000	0.000E+00
277	500.0070	392000.00	3869000.00	2680.00	0	0.00000	0.000E+00
278	500.0071	392500.00	3869000.00	2650.00	0	0.00000	0.000E+00
279	500.0072	393000.00	3869000.00	2620.00	0	0.00000	0.000E+00
280	500.0073	393500.00	3869000.00	2600.00	0	0.00000	0.000E+00
281	500.0074	394000.00	3869000.00	2590.00	0	0.00000	0.000E+00
282	500.0075	394500.00	3869000.00	2580.00	0	0.00000	0.000E+00
283	500.0076	395000.00	3869000.00	2570.00	0	0.00000	0.000E+00
284	500.0077	386000.00	3869500.00	2920.00	0	0.00000	0.000E+00
285	500.0078	386500.00	3869500.00	2920.00	0	0.00000	0.000E+00
286	500.0079	387000.00	3869500.00	2910.00	0	0.00000	0.000E+00
287	500.0080	387500.00	3869500.00	2890.00	0	0.00000	0.000E+00
288	500.0081	388000.00	3869500.00	2880.00	0	0.00000	0.000E+00
289	500.0082	388500.00	3869500.00	2860.00	0	0.00000	0.000E+00
290	500.0083	389000.00	3869500.00	2840.00	0	0.00000	0.000E+00
291	500.0084	389500.00	3869500.00	2800.00	0	0.00000	0.000E+00
292	500.0085	390000.00	3869500.00	3340.00	0	0.00000	0.000E+00
293	500.0086	390500.00	3869500.00	2850.00	0	0.00000	0.000E+00
294	500.0087	394000.00	3869500.00	2590.00	0	0.00000	0.000E+00
295	500.0088	394500.00	3869500.00	2580.00	0	0.00000	0.000E+00
296	500.0089	395000.00	3869500.00	2570.00	0	0.00000	0.000E+00
297	500.0090	386000.00	3870000.00	2940.00	0	0.00000	0.000E+00
298	500.0091	386500.00	3870000.00	2940.00	0	0.00000	0.000E+00
299	500.0092	387000.00	3870000.00	2930.00	0	0.00000	0.000E+00
300	500.0093	387500.00	3870000.00	2900.00	0	0.00000	0.000E+00
301	500.0094	388000.00	3870000.00	2880.00	0	0.00000	0.000E+00
302	500.0095	388500.00	3870000.00	2860.00	0	0.00000	0.000E+00
303	500.0096	389000.00	3870000.00	2840.00	0	0.00000	0.000E+00
304	500.0097	389500.00	3870000.00	2820.00	0	0.00000	0.000E+00
305	500.0098	390000.00	3870000.00	2900.00	0	0.00000	0.000E+00
306	500.0099	394000.00	3870000.00	2600.00	0	0.00000	0.000E+00
307	500.0100	394500.00	3870000.00	2590.00	0	0.00000	0.000E+00
308	500.0101	395000.00	3870000.00	2570.00	0	0.00000	0.000E+00
309	500.0102	386000.00	3870500.00	2970.00	0	0.00000	0.000E+00
310	500.0103	386500.00	3870500.00	2960.00	0	0.00000	0.000E+00
311	500.0104	387000.00	3870500.00	2950.00	0	0.00000	0.000E+00
312	500.0105	387500.00	3870500.00	2910.00	0	0.00000	0.000E+00
313	500.0106	388000.00	3870500.00	2880.00	0	0.00000	0.000E+00
314	500.0107	388500.00	3870500.00	2860.00	0	0.00000	0.000E+00
315	500.0108	389000.00	3870500.00	2840.00	0	0.00000	0.000E+00
316	500.0109	389500.00	3870500.00	2820.00	0	0.00000	0.000E+00
317	500.0110	390000.00	3870500.00	2850.00	0	0.00000	0.000E+00
318	500.0111	394000.00	3870500.00	2720.00	0	0.00000	0.000E+00
319	500.0112	394500.00	3870500.00	2670.00	0	0.00000	0.000E+00
320	500.0113	395000.00	3870500.00	2590.00	0	0.00000	0.000E+00
321	500.0114	386000.00	3871000.00	2990.00	0	0.00000	0.000E+00
322	500.0115	386500.00	3871000.00	2970.00	0	0.00000	0.000E+00
323	500.0116	387000.00	3871000.00	2940.00	0	0.00000	0.000E+00
324	500.0117	387500.00	3871000.00	2910.00	0	0.00000	0.000E+00
325	500.0118	388000.00	3871000.00	2890.00	0	0.00000	0.000E+00
326	500.0119	388500.00	3871000.00	2870.00	0	0.00000	0.000E+00
327	500.0120	389000.00	3871000.00	2820.00	0	0.00000	0.000E+00
328	500.0121	389500.00	3871000.00	2840.00	0	0.00000	0.000E+00

3	500.0122	390000.00	3871000.00	2840.00	0	0.00000	0.000E+00
4	500.0123	394000.00	3871000.00	2640.00	0	0.00000	0.000E+00
5	500.0124	394500.00	3871000.00	2605.00	0	0.00000	0.000E+00
6	500.0125	395000.00	3871000.00	2590.00	0	0.00000	0.000E+00
7	500.0126	386000.00	3871500.00	3000.00	0	0.00000	0.000E+00
8	500.0127	386500.00	3871500.00	2980.00	0	0.00000	0.000E+00
9	500.0128	387000.00	3871500.00	2960.00	0	0.00000	0.000E+00
10	500.0129	387500.00	3871500.00	2930.00	0	0.00000	0.000E+00
11	500.0130	388000.00	3871500.00	2910.00	0	0.00000	0.000E+00
12	500.0131	388500.00	3871500.00	2880.00	0	0.00000	0.000E+00
13	500.0132	389000.00	3871500.00	2860.00	0	0.00000	0.000E+00
14	500.0133	389500.00	3871500.00	2840.00	0	0.00000	0.000E+00
15	500.0134	393000.00	3871500.00	2940.00	0	0.00000	0.000E+00
16	500.0135	393500.00	3871500.00	2740.00	0	0.00000	0.000E+00
17	500.0136	394000.00	3871500.00	2640.00	0	0.00000	0.000E+00
18	500.0137	394500.00	3871500.00	2610.00	0	0.00000	0.000E+00
19	500.0138	395000.00	3871500.00	2600.00	0	0.00000	0.000E+00
20	500.0139	386000.00	3872000.00	3020.00	0	0.00000	0.000E+00
21	500.0140	386500.00	3872000.00	3000.00	0	0.00000	0.000E+00
22	500.0141	387000.00	3872000.00	2970.00	0	0.00000	0.000E+00
23	500.0142	387500.00	3872000.00	2940.00	0	0.00000	0.000E+00
24	500.0143	388000.00	3872000.00	2920.00	0	0.00000	0.000E+00
25	500.0144	388500.00	3872000.00	2900.00	0	0.00000	0.000E+00
26	500.0145	389000.00	3872000.00	2880.00	0	0.00000	0.000E+00
27	500.0146	389500.00	3872000.00	2860.00	0	0.00000	0.000E+00
28	500.0147	393000.00	3872000.00	2760.00	0	0.00000	0.000E+00
29	500.0148	393500.00	3872000.00	2690.00	0	0.00000	0.000E+00
30	500.0149	394000.00	3872000.00	2650.00	0	0.00000	0.000E+00
31	500.0150	394500.00	3872000.00	2630.00	0	0.00000	0.000E+00
32	500.0151	395000.00	3872000.00	2610.00	0	0.00000	0.000E+00
33	500.0152	386000.00	3872500.00	3040.00	0	0.00000	0.000E+00
34	500.0153	386500.00	3872500.00	3020.00	0	0.00000	0.000E+00
35	500.0154	387000.00	3872500.00	2990.00	0	0.00000	0.000E+00
36	500.0155	387500.00	3872500.00	2960.00	0	0.00000	0.000E+00
37	500.0156	388000.00	3872500.00	2940.00	0	0.00000	0.000E+00
38	500.0157	388500.00	3872500.00	2910.00	0	0.00000	0.000E+00
39	500.0158	389000.00	3872500.00	2880.00	0	0.00000	0.000E+00
40	500.0159	389500.00	3872500.00	2860.00	0	0.00000	0.000E+00
41	500.0160	390000.00	3872500.00	2870.00	0	0.00000	0.000E+00
42	500.0161	392000.00	3872500.00	2920.00	0	0.00000	0.000E+00
43	500.0162	392500.00	3872500.00	2810.00	0	0.00000	0.000E+00
44	500.0163	393000.00	3872500.00	2720.00	0	0.00000	0.000E+00
45	500.0164	393500.00	3872500.00	2680.00	0	0.00000	0.000E+00
46	500.0165	394000.00	3872500.00	2660.00	0	0.00000	0.000E+00
47	500.0166	394500.00	3872500.00	2640.00	0	0.00000	0.000E+00
48	500.0167	395000.00	3872500.00	2610.00	0	0.00000	0.000E+00
49	500.0168	386000.00	3873000.00	3060.00	0	0.00000	0.000E+00
50	500.0169	386500.00	3873000.00	3040.00	0	0.00000	0.000E+00
51	500.0170	387000.00	3873000.00	3010.00	0	0.00000	0.000E+00
52	500.0171	387500.00	3873000.00	2980.00	0	0.00000	0.000E+00
53	500.0172	388000.00	3873000.00	2950.00	0	0.00000	0.000E+00
54	500.0173	388500.00	3873000.00	2920.00	0	0.00000	0.000E+00
55	500.0174	389000.00	3873000.00	2900.00	0	0.00000	0.000E+00
56	500.0175	389500.00	3873000.00	2870.00	0	0.00000	0.000E+00
57	500.0176	390000.00	3873000.00	2845.00	0	0.00000	0.000E+00
58	500.0177	390500.00	3873000.00	2820.00	0	0.00000	0.000E+00
59	500.0178	391000.00	3873000.00	2810.00	0	0.00000	0.000E+00
60	500.0179	391500.00	3873000.00	2800.00	0	0.00000	0.000E+00
61	500.0180	392000.00	3873000.00	2760.00	0	0.00000	0.000E+00
62	500.0181	392500.00	3873000.00	2740.00	0	0.00000	0.000E+00
63	500.0182	393000.00	3873000.00	2710.00	0	0.00000	0.000E+00
64	500.0183	393500.00	3873000.00	2680.00	0	0.00000	0.000E+00
65	500.0184	394000.00	3873000.00	2660.00	0	0.00000	0.000E+00
66	500.0185	394500.00	3873000.00	2640.00	0	0.00000	0.000E+00
67	500.0186	395000.00	3873000.00	2620.00	0	0.00000	0.000E+00
68	500.0187	386000.00	3873500.00	3080.00	0	0.00000	0.000E+00
69	500.0188	386500.00	3873500.00	3050.00	0	0.00000	0.000E+00
70	500.0189	387000.00	3873500.00	3020.00	0	0.00000	0.000E+00
71	500.0190	387500.00	3873500.00	2990.00	0	0.00000	0.000E+00
72	500.0191	388000.00	3873500.00	2960.00	0	0.00000	0.000E+00
73	500.0192	388500.00	3873500.00	2930.00	0	0.00000	0.000E+00
74	500.0193	389000.00	3873500.00	2900.00	0	0.00000	0.000E+00
75	500.0194	389500.00	3873500.00	2880.00	0	0.00000	0.000E+00
76	500.0195	390000.00	3873500.00	2850.00	0	0.00000	0.000E+00
77	500.0196	390500.00	3873500.00	2830.00	0	0.00000	0.000E+00
78	500.0197	391000.00	3873500.00	2800.00	0	0.00000	0.000E+00
79	500.0198	391500.00	3873500.00	2780.00	0	0.00000	0.000E+00
80	500.0199	392000.00	3873500.00	2750.00	0	0.00000	0.000E+00
81	500.0200	392500.00	3873500.00	2760.00	0	0.00000	0.000E+00
82	500.0201	393000.00	3873500.00	2720.00	0	0.00000	0.000E+00
83	500.0202	393500.00	3873500.00	2680.00	0	0.00000	0.000E+00
84	500.0203	394000.00	3873500.00	2700.00	0	0.00000	0.000E+00
85	500.0204	394500.00	3873500.00	2640.00	0	0.00000	0.000E+00
86	500.0205	395000.00	3873500.00	2620.00	0	0.00000	0.000E+00
87	500.0206	388000.00	3874000.00	2980.00	0	0.00000	0.000E+00
88	500.0207	388000.00	3874500.00	2980.00	0	0.00000	0.000E+00
89	500.0208	388000.00	3875000.00	2990.00	0	0.00000	0.000E+00
90	500.0209	388500.00	3874000.00	2940.00	0	0.00000	0.000E+00
91	500.0210	388500.00	3874500.00	2950.00	0	0.00000	0.000E+00
92	500.0211	388500.00	3875000.00	2960.00	0	0.00000	0.000E+00
93	500.0212	389000.00	3874000.00	2910.00	0	0.00000	0.000E+00
94	500.0213	389000.00	3874500.00	2920.00	0	0.00000	0.000E+00
95	500.0214	389000.00	3875000.00	2920.00	0	0.00000	0.000E+00
96	500.0215	389500.00	3874000.00	2880.00	0	0.00000	0.000E+00
97	500.0216	389500.00	3874500.00	2890.00	0	0.00000	0.000E+00
98	500.0217	389500.00	3875000.00	2900.00	0	0.00000	0.000E+00
99	500.0218	390000.00	3874000.00	2860.00	0	0.00000	0.000E+00

426	500.0219	390000.00	3874500.00	2860.00	0	0.00000	0.000E+00
427	500.0220	390000.00	3875000.00	2865.00	0	0.00000	0.000E+00
428	500.0221	390500.00	3874000.00	2830.00	0	0.00000	0.000E+00
429	500.0222	390500.00	3874500.00	2840.00	0	0.00000	0.000E+00
430	500.0223	390500.00	3875000.00	2840.00	0	0.00000	0.000E+00
431	500.0224	391000.00	3874000.00	2800.00	0	0.00000	0.000E+00
432	500.0225	391000.00	3874500.00	2810.00	0	0.00000	0.000E+00
433	500.0226	391000.00	3875000.00	2810.00	0	0.00000	0.000E+00
434	500.0227	391500.00	3874000.00	2780.00	0	0.00000	0.000E+00
435	500.0228	391500.00	3874500.00	2780.00	0	0.00000	0.000E+00
436	500.0229	391500.00	3875000.00	2780.00	0	0.00000	0.000E+00
437	500.0230	392000.00	3874000.00	2770.00	0	0.00000	0.000E+00
438	500.0231	392000.00	3874500.00	2760.00	0	0.00000	0.000E+00
439	500.0232	392000.00	3875000.00	2760.00	0	0.00000	0.000E+00
440	500.0233	392500.00	3874000.00	2760.00	0	0.00000	0.000E+00
441	500.0234	392500.00	3874500.00	2780.00	0	0.00000	0.000E+00
442	500.0235	392500.00	3875000.00	2740.00	0	0.00000	0.000E+00
443	500.0236	393000.00	3874000.00	2900.00	0	0.00000	0.000E+00
444	500.0237	393000.00	3874500.00	2900.00	0	0.00000	0.000E+00
445	500.0238	393000.00	3875000.00	2730.00	0	0.00000	0.000E+00
446	500.0239	393500.00	3874000.00	2800.00	0	0.00000	0.000E+00
447	500.0240	393500.00	3874500.00	2700.00	0	0.00000	0.000E+00
448	500.0241	393500.00	3875000.00	2700.00	0	0.00000	0.000E+00
449	500.0242	394000.00	3874000.00	2650.00	0	0.00000	0.000E+00
450	500.0243	394000.00	3874500.00	2660.00	0	0.00000	0.000E+00
451	500.0244	394000.00	3875000.00	2680.00	0	0.00000	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 44

*** PATHWAY-SPECIFIC DATA ***

*** RISK LEVELS ***
 Significant risk level 1.00E-06
 Zone of impact risk level 1.00E-07
 Significant hazard index for acute exposure 0.50
 Significant hazard index for chronic exposure 0.50
 *** INHALATION PATHWAY ***
 Respiration rate (RR) (m3/d) 20.0
 Average body weight (ABW) (kg) 70.0

*** MULTIPATHWAY POLLUTANTS ***
 Number of multipathway pollutants 27
 Symbol and identification number

- Arsenic	As	10
- Beryllium	Be	17
- Cadmium	Cd	22
- Chlorobenzene	CBZ	29
- Chromium (hex.)	Cr	36
- Dioxins/Dibenzofuran	TCDD	55
- 2-Chlorophenol	CPHE2	33
- p-Dichlorobenzene	PDCB	48
- Hexachlorobenzene	HCB	74
- Hexachlorocyclohexan	HCHEX	75
- Lead	Pb	83
- Mercury	Hg	87
- NNitrosodiethylamine	NNETH	101
- NNitrosodimethylamin	NNMET	102
- NNitrosodiphenylamin	PNEPE	105
- NNitrosodinbutylamin	NNBUT	103
- NNitrosodinpropylami	NNDPF	104
- NNitromethylethylamin	NNMEL	106
- NNitrosomorpholine	NNMPH	107
- NNitrosopiperidine	NNFRD	108
- NNitrosopyrrolidine	NNPLD	109
- Naphthalene	NAPTH	110
- PAH	PAH	130
- Polychlor. biphenyls	PCB	129
- Pentachlorophenol	PENTIA	155
- 2,4,6Trichlorophenol	TC246	147
- 2,4,5Trichlorophenol	TC245	157

*** SOIL ***
 Vertical rate of deposition (Dep_rate) (m/s)

- Arsenic	0.02
- Beryllium	0.02
- Cadmium	0.02
- Chlorobenzene	0.02
- Chromium (hex.)	0.02
- Dioxins/Dibenzofuran	0.02
- 2-Chlorophenol	0.02
- p-Dichlorobenzene	0.02
- Hexachlorobenzene	0.02
- Hexachlorocyclohexan	0.02
- Lead	0.02
- Mercury	0.02
- NNitrosodiethylamine	0.02
- NNitrosodimethylamin	0.02
- NNitrosodiphenylamin	0.02
- NNitrosodinbutylamin	0.02
- NNitrosodinpropylami	0.02
- NNitromethylethylamin	0.02
- NNitrosomorpholine	0.02
- NNitrosopiperidine	0.02
- NNitrosopyrrolidine	0.02
- Naphthalene	0.02
- PAH	0.02

- Polychlor. biphenyls	0.02
- Pentachlorophenol	0.02
- 2,4,6Trichlorophenol	0.02
- 2,4,5Trichlorophenol	0.02
Beginning of evaluation period (To) (d)	0.0
End of evaluation period (Tf) (d)	25550.0
Soil mixing depth for human ingestion (SD) (m)	0.0100
Soil bulk density (BD) (kg/m3)	1333.0
Chemical half-life in soil (t1/2)(d)	
- Arsenic	1.00E+08
- Beryllium	1.00E+08
- Cadmium	1.00E+08
- Chlorobenzene	1.50E+02
- Chromium (hex.)	1.00E+08
- Dioxins/Dibenzofuran	4.38E+03
- 2-Chlorophenol	7.00E+01
- p-Dichlorobenzene	1.80E+02
- Hexachlorobenzene	2.09E+03
- Hexachlorocyclohexan	1.70E+02
- Lead	1.00E+08
- Mercury	1.00E+08
- NNitrosodiethylamine	1.80E+02
- NNitrosodimethylamin	1.80E+02
- NNitrosodiphenylamin	1.80E+02
- NNitrosodinbutylamin	1.80E+02
- NNitrosodinpropylami	1.80E+02
- NNitromethylethylamin	1.80E+02
- NNitrosomorpholine	1.80E+02
- NNitrosopiperidine	1.80E+02
- NNitrosopyrrolidine	1.80E+02
- Naphthalene	4.80E+02
- PAH	4.80E+02
- Polychlor. biphenyls	3.60E+03
- Pentachlorophenol	1.78E+02
- 2,4,6Trichlorophenol	7.00E+01
- 2,4,5Trichlorophenol	6.90E+02

*** WATER ***

Location (receptor #) of drinking water source	-1
Site-specific water surface area (SA) (m2)	-1.0
Site-specific water volume (WV) (kg)	-1.0
Site-specific number of volume changes per year (VC)	-1.0
Site-specific fraction of run-off water (ROf)	-1.0
Wash coefficient-fraction of material washed by runoff (WC)	-1.0
Site-specific watershed area impacted (WSIA) (m2)	-1.0
Site-specific average annual rainfall (RF) (m)	-1.0
Site-specific watershed run-off coefficient (ROC)	-1.0

*** VEGETATION ***

Location (receptor #) of crop source	0
Soil mixing depth (SD) for homegrown crops (m)	0.150
Interception coefficient for root crops (IFC_ROOT)	0.0
Interception coefficient for leafy crops (IFC_LEAFY)	0.20
Interception coefficient for vine crops (IFC_VINE)	0.10
Weathering constant (k) (1/d)	0.0495
Crop yield (Y) (kg/m2)	2.0
Crop growth period (T) (d)	90.0
Root uptake (UF2) - ROOT	

- Arsenic	2.00E-03
- Beryllium	4.00E-04
- Cadmium	4.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	1.00E-03
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	2.00E-03
- Mercury	2.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Root uptake (UF2) - LEAF

- Arsenic	4.00E-03
- Beryllium	1.00E-03
- Cadmium	6.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	8.00E-04
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	5.00E-03
- Mercury	9.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0

Root uptake (UF2) - VINE

- NNitrosodipropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0
- Arsenic	9.00E-04
- Beryllium	2.00E-04
- Cadmium	2.00E-02
- Chlorobenzene	-1.0
- Chromium (hex.)	6.00E-04
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	1.00E-03
- Mercury	3.00E-02
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodibutylamin	-1.0
- NNitrosodipropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Octanol:water partition factor (Kow)

- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodibutylamin	-1.0
- NNitrosodipropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Organic carbon partition coeff (Koc)

- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	-1.0
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodibutylamin	-1.0
- NNitrosodipropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	-1.0
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	-1.0
- 2,4,5Trichlorophenol	-1.0

Fraction of organic in soil (Foc)

*** ANIMAL PRODUCTS ***

Location (receptor #) of animal farm

Soil mixing depth (SD) for animal pasture (m)

Soil mixing depth (SD) for animal feed (m)

-1

0.010

0.150

Inhalation rate (RR) (m3/d)	- Cattle/Lactating	8.00E+01
	- Pigs	7.00E+00
	- Poultry	1.00E+00
	- Goats/Sheep	6.00E+00
Water ingestion rate (WI) (kg/d)	- Cattle/Lactating	1.00E+02
	- Pigs	8.00E+00
	- Poultry	6.00E-01
	- Goats/Sheep	6.00E+00
Site-specific % water ingested from contaminated water (ISW)		0.25
Site-specific % diet provided by grazing (IG)		0.50
Site-specific % feed other than pasture locally grown (L)		1.00
Feed ingestion rate (FI) (kg/d)	- Cattle	8.00E+00
	- Lactating	1.60E+01
	- Pigs	2.00E+00
	- Poultry	3.00E-01
	- Goats/Sheep	2.00E+00
Soil ingested as % of feed ingested (ISf)	- Cattle/Lactating	1.00E-02
	- Pigs	1.00E-02
	- Poultry	1.00E-02
	- Goats/Sheep	1.00E-02
Soil ingested as % of pasture ingested (ISp)	- Cattle/Lactating	5.00E-02
	- Pigs	3.00E-02
	- Poultry	3.00E-02
	- Goats/Sheep	7.00E-02
Transfer coefficient of contaminant from diet to meat product (Fi_meat)	- Arsenic	2.00E-03
	- Beryllium	1.00E-03
	- Cadmium	3.50E-04
	- Chlorobenzene	-1.0
	- Chromium (hex.)	9.20E-03
	- Dioxins/Dibenzofuran	4.00E-01
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	4.00E-04
	- Mercury	2.70E-02
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	5.00E-02
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	9.00E-05
	- 2,4,5Trichlorophenol	-1.0
Transfer coefficient of contaminant from diet to milk product (Fi_milk)	- Arsenic	6.20E-05
	- Beryllium	9.10E-07
	- Cadmium	1.00E-03
	- Chlorobenzene	-1.0
	- Chromium (hex.)	1.00E-05
	- Dioxins/Dibenzofuran	4.00E-02
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	2.60E-04
	- Mercury	9.70E-06
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0
	- NNitrosopiperidine	-1.0
	- NNitrosopyrrolidine	-1.0
	- Naphthalene	-1.0
	- PAH	-1.0
	- Polychlor. biphenyls	1.00E-02
	- Pentachlorophenol	-1.0
	- 2,4,6Trichlorophenol	4.20E-05
	- 2,4,5Trichlorophenol	-1.0
Transfer coefficient of contaminant from diet to egg product (Fi_egg)	- Arsenic	2.00E-03
	- Beryllium	1.00E-03
	- Cadmium	3.50E-04
	- Chlorobenzene	-1.0
	- Chromium (hex.)	9.20E-03
	- Dioxins/Dibenzofuran	4.00E-01
	- 2-Chlorophenol	-1.0
	- p-Dichlorobenzene	-1.0
	- Hexachlorobenzene	-1.0
	- Hexachlorocyclohexan	-1.0
	- Lead	4.00E-04
	- Mercury	2.70E-02
	- NNitrosodiethylamine	-1.0
	- NNitrosodimethylamin	-1.0
	- NNitrosodiphenylamin	-1.0
	- NNitrosodinbutylamin	-1.0
	- NNitrosodinpropylami	-1.0
	- NNitromethylethylamin	-1.0
	- NNitrosomorpholine	-1.0

- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	-1.0
- PAH	-1.0
- Polychlor. biphenyls	5.00E-02
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	9.00E-05
- 2,4,5Trichlorophenol	-1.0
Location (receptor #) of animal's water source	-1
Site-specific water surface area (SA) (m2)	1000.0
Site-specific water volume (WV) (kg)	2.00E+06
Site-specific number of volume changes per year (VC)	5.0
Site-specific fraction of run-off water (ROf)	-1.0
Wash coefficient-fraction of material washed by runoff (WC)	-1.0
Site-specific watershed area impacted (WSIA) (m2)	-1.0
Site-specific average annual rainfall (RF) (m)	-1.0
Site-specific watershed run-off coefficient (ROC)	-1.0
*** FISH PRODUCTS ***	
Location (receptor #) of fish farm/pond/lake/stream	-1
Site-specific water surface area (SA) (m2)	1.50E+05
Site-specific water volume (WV) (kg)	3.00E+08
Site-specific number of volume changes per year (VC)	5000.0
Site-specific fraction of run-off water (ROf)	-1.0
Wash coefficient-fraction of material washed by runoff (WC)	-1.0
Site-specific watershed area impacted (WSIA) (m2)	-1.0
Site-specific average annual rainfall (RF) (m)	-1.0
Site-specific watershed run-off coefficient (ROC)	-1.0
Bioconcentration factor (BCF)	
- Arsenic	4.00E+00
- Beryllium	1.90E+01
- Cadmium	1.00E+02
- Chlorobenzene	-1.0
- Chromium (hex.)	2.00E+00
- Dioxins/Dibenzofuran	5.00E+03
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	8.00E+03
- Hexachlorocyclohexan	-1.0
- Lead	1.55E+02
- Mercury	5.00E+03
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0
- NNitrosopyrrolidine	-1.0
- Naphthalene	1.55E+03
- PAH	1.55E+03
- Polychlor. biphenyls	1.00E+05
- Pentachlorophenol	-1.0
- 2,4,6Trichlorophenol	5.00E+02
- 2,4,5Trichlorophenol	-1.0
*** DERMAL ABSORPTION PATHWAY ***	
Surface area of exposed skin (SA) (cm2)	4656.0
Soil loading on skin (SL)	0.50
Fraction absorbed across skin (ABS)	
- Arsenic	1.00E-03
- Beryllium	1.00E-03
- Cadmium	2.00E-03
- Chlorobenzene	1.00E-01
- Chromium (hex.)	1.00E-02
- Dioxins/Dibenzofuran	2.00E-02
- 2-Chlorophenol	1.00E-01
- p-Dichlorobenzene	1.00E-01
- Hexachlorobenzene	1.00E-01
- Hexachlorocyclohexan	1.00E-01
- Lead	1.00E-03
- Mercury	1.00E-02
- NNitrosodiethylamine	1.00E-01
- NNitrosodimethylamin	1.00E-01
- NNitrosodiphenylamin	1.00E-01
- NNitrosodinbutylamin	1.00E-01
- NNitrosodinpropylami	1.00E-01
- NNitromethylethylamin	1.00E-01
- NNitrosomorpholine	1.00E-01
- NNitrosopiperidine	1.00E-01
- NNitrosopyrrolidine	1.00E-01
- Naphthalene	3.00E-02
- PAH	3.00E-02
- Polychlor. biphenyls	1.50E-01
- Pentachlorophenol	1.00E-01
- 2,4,6Trichlorophenol	1.00E-01
- 2,4,5Trichlorophenol	1.00E-01
*** SOIL INGESTION PATHWAY ***	
Lifetime average soil ingestion rate per day (Is) (mg/d)	110.0
Gastrointestinal absorption factor (GI)	
- Arsenic	1.00E+00
- Beryllium	1.00E+00
- Cadmium	1.00E+00
- Chlorobenzene	1.00E+00
- Chromium (hex.)	1.00E+00
- Dioxins/Dibenzofuran	1.00E+00
- 2-Chlorophenol	1.00E+00
- p-Dichlorobenzene	1.00E+00
- Hexachlorobenzene	1.00E+00
- Hexachlorocyclohexan	1.00E+00
- Lead	1.00E+00

Bioavailability factors (BIO)

- Mercury	1.00E+00
- NNitrosodiethylamine	1.00E+00
- NNitrosodimethylamin	1.00E+00
- NNitrosodiphenylamin	1.00E+00
- NNitrosodinbutylamin	1.00E+00
- NNitrosodinpropylami	1.00E+00
- NNitromethylethylamin	1.00E+00
- NNitrosomorpholine	1.00E+00
- NNitrosopiperidine	1.00E+00
- NNitrosopyrrolidine	1.00E+00
- Naphthalene	1.00E+00
- PAH	1.00E+00
- Polychlor. biphenyls	1.00E+00
- Pentachlorophenol	1.00E+00
- 2,4,6Trichlorophenol	1.00E+00
- 2,4,5Trichlorophenol	1.00E+00
- Arsenic	1.0
- Beryllium	1.0
- Cadmium	1.0
- Chlorobenzene	1.0
- Chromium (hex.)	1.0
- Dioxins/Dibenzofuran	4.30E-01
- 2-Chlorophenol	1.0
- p-Dichlorobenzene	1.0
- Hexachlorobenzene	1.0
- Hexachlorocyclohexan	1.0
- Lead	1.0
- Mercury	1.0
- NNitrosodiethylamine	1.0
- NNitrosodimethylamin	1.0
- NNitrosodiphenylamin	1.0
- NNitrosodinbutylamin	1.0
- NNitrosodinpropylami	1.0
- NNitromethylethylamin	1.0
- NNitrosomorpholine	1.0
- NNitrosopiperidine	1.0
- NNitrosopyrrolidine	1.0
- Naphthalene	1.0
- PAH	1.0
- Polychlor. biphenyls	1.0
- Pentachlorophenol	1.0
- 2,4,6Trichlorophenol	1.0
- 2,4,5Trichlorophenol	1.0

*** WATER INGESTION PATHWAY ***

Lifetime average water ingestion rate per day (Iw) (l/d) 2.0

*** FOOD INGESTION - PLANT PRODUCTS PATHWAY ***

Site-specific fraction of root vegetable homegrown (L_Ir)	0.150
Site-specific fraction of leafy veget homegrown (L_leafy)	0.150
Site-specific fraction of vine veget homegrown (L_vine)	0.150
Daily consumption rate of root vegetable (IF Ir) (kg/d)	0.050
Daily consumption rate of leafy veget (IF leafy) (kg/d)	0.010
Daily consumption rate of vine veget (IF Vine) (kg/d)	0.250

*** FOOD INGESTION - ANIMAL PRODUCTS PATHWAY ***

Site-specific fraction of milk locally produced (L_Im)	0.00
Site-specific fraction of milk from cows	0.00
Site-specific fraction of milk from goats	0.00
Site-specific fraction of meat locally produced (L_Ib)	0.50
Site-specific fraction of meat from cows	0.50
Site-specific fraction of meat from pigs	0.00
Site-specific fraction of meat from poultry	0.50
Site-specific fraction of meat from goats/sheep	0.00
Site-specific fraction of eggs locally produced	1.00
Site-specific fraction of fish locally produced (L_Ifi)	0.00
Daily consumption rate of milk (IF Im) (kg/d)	0.30
Daily consumption rate of meat (IF Ib) (kg/d)	0.10
Daily consumption rate of egg (kg/d)	0.05
Daily consumption rate of fish (IF Ifi) (kg/d)	0.023

*** MOTHER'S MILK PATHWAY ***

Beginning of exposure period for mother (d)	0.0
End of exposure period for mother (d)	9490.0
Daily breast-milk ingestion rate (DERm) (kg/d)	0.90
Frequency of exposure (F) (d)	365.0
Period of exposure (YR) (yr)	1.00
Infant average body weight (ABS) (kg)	6.50
Fraction of contaminant partitioned to mother's fat (f1)	0.90
Percent fat of mother's milk (f3)	0.040
Percent mother's weight that is fat (f2)	0.330
Contaminant half-life in mother (t1/2) (d)	-1.0
- Arsenic	-1.0
- Beryllium	-1.0
- Cadmium	-1.0
- Chlorobenzene	-1.0
- Chromium (hex.)	-1.0
- Dioxins/Dibenzofuran	2117.00
- 2-Chlorophenol	-1.0
- p-Dichlorobenzene	-1.0
- Hexachlorobenzene	-1.0
- Hexachlorocyclohexan	-1.0
- Lead	-1.0
- Mercury	-1.0
- NNitrosodiethylamine	-1.0
- NNitrosodimethylamin	-1.0
- NNitrosodiphenylamin	-1.0
- NNitrosodinbutylamin	-1.0
- NNitrosodinpropylami	-1.0
- NNitromethylethylamin	-1.0
- NNitrosomorpholine	-1.0
- NNitrosopiperidine	-1.0

- NNitrosopyrrolidine -1.0
 - Naphthalene -1.0
 - PAH 1460.0
 - Polychlor. biphenyls 1460.0
 - Pentachlorophenol -1.0
 - 2,4,6Trichlorophenol -1.0
 - 2,4,5Trichlorophenol -1.0

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET. TSP
 Input File: g:\best\GQ\gqtspace.dat

* OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Output File: g:\best\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 55

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	ACETA	ACROL	As	BENZE	Be	Cd	Cr	Cu	ECNO	HCN
1	0.000E+00	0.000E+00	1.111E-02	0.000E+00	1.470E-02	4.823E-04	1.467E-04	1.130E-03	0.000E+00	7.196E+00
2	0.000E+00	0.000E+00	9.722E-03	0.000E+00	1.097E-02	3.573E-04	1.092E-04	8.396E-04	0.000E+00	4.589E+00
3	0.000E+00	0.000E+00	9.902E-03	0.000E+00	1.119E-02	3.671E-04	1.113E-04	8.552E-04	0.000E+00	4.516E+00
4	0.000E+00	0.000E+00	1.667E-02	0.000E+00	1.892E-02	5.836E-04	1.875E-04	1.437E-03	0.000E+00	8.406E+00
5	0.000E+00	0.000E+00	1.626E-02	0.000E+00	1.830E-02	5.889E-04	1.814E-04	1.402E-03	0.000E+00	8.085E+00
6	0.000E+00	0.000E+00	1.572E-02	0.000E+00	1.784E-02	5.959E-04	1.769E-04	1.356E-03	0.000E+00	7.626E+00
7	0.000E+00	0.000E+00	1.218E-02	0.000E+00	1.391E-02	4.638E-04	1.378E-04	1.053E-03	0.000E+00	4.229E+00
8	0.000E+00	0.000E+00	1.195E-02	0.000E+00	1.349E-02	4.296E-04	1.342E-04	1.032E-03	0.000E+00	4.339E+00
9	0.000E+00	0.000E+00	1.243E-02	0.000E+00	1.411E-02	4.582E-04	1.400E-04	1.074E-03	0.000E+00	4.446E+00
10	0.000E+00	0.000E+00	1.922E-02	0.000E+00	2.144E-02	6.730E-04	2.144E-04	1.657E-03	0.000E+00	1.444E+01
11	0.000E+00	0.000E+00	1.085E-02	0.000E+00	1.227E-02	3.803E-04	1.218E-04	9.354E-04	0.000E+00	7.768E+00
12	0.000E+00	0.000E+00	2.502E-02	0.000E+00	2.850E-02	8.757E-04	2.819E-04	2.158E-03	0.000E+00	2.622E+01
13	0.000E+00	0.000E+00	4.991E-02	0.000E+00	5.687E-02	2.301E-03	5.678E-04	4.305E-03	0.000E+00	1.466E+01
14	0.000E+00	0.000E+00	5.137E-02	0.000E+00	5.862E-02	2.597E-03	5.870E-04	4.431E-03	0.000E+00	1.427E+01
15	0.000E+00	0.000E+00	5.193E-02	0.000E+00	5.931E-02	2.692E-03	5.942E-04	4.480E-03	0.000E+00	1.283E+01
16	0.000E+00	0.000E+00	5.266E-02	0.000E+00	6.021E-02	2.537E-03	6.011E-04	4.542E-03	0.000E+00	1.611E+01
17	0.000E+00	0.000E+00	1.799E-02	0.000E+00	2.029E-02	6.298E-04	2.017E-04	1.511E-03	0.000E+00	1.468E+01
18	0.000E+00	0.000E+00	1.404E-02	0.000E+00	1.591E-02	4.916E-04	1.578E-04	1.221E-03	0.000E+00	1.529E+01
19	0.000E+00	0.000E+00	1.584E-02	0.000E+00	1.792E-02	5.546E-04	1.779E-04	1.366E-03	0.000E+00	1.481E+01
20	0.000E+00	0.000E+00	1.630E-02	0.000E+00	1.844E-02	5.704E-04	1.830E-04	1.405E-03	0.000E+00	1.899E+01
21	0.000E+00	0.000E+00	4.210E-02	0.000E+00	4.476E-02	1.477E-03	4.590E-04	3.625E-03	0.000E+00	3.376E+01
22	0.000E+00	0.000E+00	3.907E-02	0.000E+00	4.174E-02	1.370E-03	4.269E-04	3.364E-03	0.000E+00	3.397E+01
23	0.000E+00	0.000E+00	4.472E-02	0.000E+00	4.896E-02	1.567E-03	4.943E-04	3.853E-03	0.000E+00	3.660E+01
24	0.000E+00	0.000E+00	5.676E-02	0.000E+00	6.328E-02	1.988E-03	6.329E-04	4.892E-03	0.000E+00	3.755E+01
25	0.000E+00	0.000E+00	5.944E-02	0.000E+00	6.636E-02	2.082E-03	6.632E-04	5.124E-03	0.000E+00	3.761E+01
26	0.000E+00	0.000E+00	5.151E-02	0.000E+00	5.865E-02	2.008E-03	5.822E-04	4.443E-03	0.000E+00	4.048E+01
27	0.000E+00	0.000E+00	3.788E-02	0.000E+00	4.456E-02	1.495E-03	4.352E-04	3.270E-03	0.000E+00	2.453E+01
28	0.000E+00	0.000E+00	4.019E-02	0.000E+00	4.518E-02	1.407E-03	4.501E-04	3.466E-03	0.000E+00	2.567E+01
29	0.000E+00	0.000E+00	6.323E-02	0.000E+00	7.033E-02	2.214E-03	7.045E-04	5.450E-03	0.000E+00	2.895E+01
30	0.000E+00	0.000E+00	7.169E-02	0.000E+00	8.051E-02	2.510E-03	8.024E-04	6.181E-03	0.000E+00	3.080E+01
31	0.000E+00	0.000E+00	6.821E-02	0.000E+00	7.702E-02	2.388E-03	7.655E-04	5.882E-03	0.000E+00	3.607E+01
32	0.000E+00	0.000E+00	5.625E-02	0.000E+00	6.378E-02	1.969E-03	6.321E-04	4.852E-03	0.000E+00	4.389E+01
33	0.000E+00	0.000E+00	5.257E-02	0.000E+00	6.017E-02	2.096E-03	5.962E-04	4.535E-03	0.000E+00	4.429E+01
34	0.000E+00	0.000E+00	5.324E-02	0.000E+00	6.073E-02	1.977E-03	6.014E-04	4.593E-03	0.000E+00	4.528E+01
35	0.000E+00	0.000E+00	3.703E-02	0.000E+00	4.169E-02	1.296E-03	4.148E-04	3.193E-03	0.000E+00	4.364E+01
36	0.000E+00	0.000E+00	3.039E-02	0.000E+00	3.432E-02	1.064E-03	3.409E-04	2.620E-03	0.000E+00	4.184E+01
37	0.000E+00	0.000E+00	3.266E-02	0.000E+00	3.734E-02	1.143E-03	3.686E-04	2.817E-03	0.000E+00	3.997E+01
38	0.000E+00	0.000E+00	1.687E-02	0.000E+00	1.903E-02	5.906E-04	1.892E-04	1.455E-03	0.000E+00	3.986E+01
39	0.000E+00	0.000E+00	1.820E-02	0.000E+00	2.052E-02	6.371E-04	2.041E-04	1.569E-03	0.000E+00	4.475E+01
40	0.000E+00	0.000E+00	1.977E-02	0.000E+00	2.226E-02	6.923E-04	2.215E-04	1.705E-03	0.000E+00	4.465E+01
41	0.000E+00	0.000E+00	2.541E-02	0.000E+00	2.859E-02	6.325E-03	2.846E-04	2.191E-03	0.000E+00	3.741E+01
42	0.000E+00	0.000E+00	2.658E-02	0.000E+00	2.949E-02	1.871E-03	2.955E-04	2.291E-03	0.000E+00	2.004E+01
43	0.000E+00	0.000E+00	1.576E-02	0.000E+00	1.560E-02	1.388E-03	1.581E-04	1.334E-03	0.000E+00	2.094E+01
44	0.000E+00	0.000E+00	1.390E-02	0.000E+00	1.121E-02	3.145E-03	1.128E-04	1.180E-03	0.000E+00	2.178E+01
45	0.000E+00	0.000E+00	1.683E-02	0.000E+00	1.406E-02	6.000E-04	1.416E-04	1.428E-03	0.000E+00	2.066E+01
46	0.000E+00	0.000E+00	1.667E-02	0.000E+00	1.317E-02	5.949E-04	1.336E-04	1.413E-03	0.000E+00	1.927E+01
47	0.000E+00	0.000E+00	2.227E-02	0.000E+00	1.476E-02	1.464E-03	1.770E-04	1.910E-03	0.000E+00	1.619E+01
48	0.000E+00	0.000E+00	2.076E-02	0.000E+00	1.950E-02	9.680E-04	1.964E-04	1.756E-03	0.000E+00	1.309E+01
49	0.000E+00	0.000E+00	2.091E-02	0.000E+00	1.570E-02	1.388E-03	1.637E-04	1.769E-03	0.000E+00	1.078E+01
50	0.000E+00	0.000E+00	1.750E-02	0.000E+00	1.861E-02	1.948E-03	1.924E-04	1.517E-03	0.000E+00	9.421E+00
51	0.000E+00	0.000E+00	1.673E-02	0.000E+00	1.839E-02	2.810E-03	1.874E-04	1.451E-03	0.000E+00	9.681E+00
52	0.000E+00	0.000E+00	1.406E-02	0.000E+00	1.553E-02	1.598E-03	1.580E-04	1.218E-03	0.000E+00	9.715E+00
53	0.000E+00	0.000E+00	1.267E-02	0.000E+00	1.218E-02	6.150E-04	1.230E-04	1.073E-03	0.000E+00	1.017E+01
54	0.000E+00	0.000E+00	1.179E-02	0.000E+00	1.281E-02	2.066E-03	1.299E-04	1.017E-03	0.000E+00	1.036E+01
55	0.000E+00	0.000E+00	1.407E-02	0.000E+00	1.574E-02	1.994E-03	1.589E-04	1.220E-03	0.000E+00	8.370E+00
56	0.000E+00	0.000E+00	1.624E-02	0.000E+00	1.810E-02	1.912E-03	1.821E-04	1.407E-03	0.000E+00	8.151E+00
57	0.000E+00	0.000E+00	1.762E-02	0.000E+00	1.998E-02	7.160E-04	1.983E-04	1.522E-03	0.000E+00	7.381E+00
58	0.000E+00	0.000E+00	1.881E-02	0.000E+00	2.150E-02	7.112E-04	2.123E-04	1.624E-03	0.000E+00	7.228E+00
59	0.000E+00	0.000E+00	2.066E-02	0.000E+00	2.372E-02	2.118E-03	2.337E-04	1.786E-03	0.000E+00	7.080E+00
60	0.000E+00	0.000E+00	2.411E-02	0.000E+00	2.778E-02	9.355E-04	2.741E-04	2.085E-03	0.000E+00	6.963E+00
61	0.000E+00	0.000E+00	4.416E-02	0.000E+00	4.891E-02	1.874E-03	4.934E-04	3.820E-03	0.000E+00	6.812E+00
62	0.000E+00	0.000E+00	4.877E-02	0.000E+00	5.314E-02	2.045E-03	5.398E-04	4.216E-03	0.000E+00	6.681E+00
63	0.000E+00	0.000E+00	3.122E-02	0.000E+00	3.570E-02	1.093E-03	3.525E-04	2.698E-03	0.000E+00	6.566E+00
64	0.000E+00	0.000E+00	2.838E-02	0.000E+00	3.219E-02	2.578E-03	3.191E-04	2.447E-03	0.000E+00	6.195E+00
65	0.000E+00	0.000E+00	2.688E-02	0.000E+00	2.353E-02	1.391E-03	2.651E-04	2.324E-03	0.000E+00	6.123E+00
66	0.000E+00	0.000E+00	2.530E-02	0.000E+00	2.775E-02	1.250E-03	2.800E-04	2.185E-03	0.000E+00	6.048E+00
67	0.000E+00	0.000E+00	2.174E-02	0.000E+00	2.336E-02	1.225E-03	2.378E-04	1.872E-03	0.000E+00	5.983E+00
68	0.000E+00	0.000E+00	2.009E-02	0.000E+00	2.107E-02	3.486E-03	2.177E-04	1.729E-03	0.000E+00	6.223E+00
69	0.000E+00	0.000E+00	3.001E-02	0.000E+00	3.150E-02	1.530E-03	3.192E-04	2.596E-03	0.000E+00	6.953E+00
70	0.000E+00	0.000E+00	3.405E-02	0.000E+00	3.754E-02	1.356E-03	3.793E-04	2.934E-03	0.000E+00	7.957E+00
71	0.000E+00	0.000E+00	5.007E-02	0.000E+00	5.139E-02	2.035E-03	5.371E-04	4.330E-03	0.000E+00	8.086E+00
72	0.000E+00	0.000E+00	2.585E-02	0.000E+00	2.898E-02	1.038E-03	2.902E-04	2.229E-03	0.000E+00	8.199E+00
73	0.000E+00	0.000E+00	1.760E-02	0.000E+00	1.947E-02	2.134E-03	1.959E-04	1.517E-03	0.000E+00	8.231E+00
74	0.000E+00	0.000E+00	2.182E-02	0.000E+00	2.458E-02	9.119E-04	2.454E-04	1.885E-03	0.000E+00	8.229E+00
75	0.000E+00	0.000E+00	1.730E-02	0.000E+00	1.939E-02	2.039E-03	1.932E-04	1.493E-03	0.000E+00	9.217E+00
76	0.000E+00	0.000E+00	1.782E-02	0.000E+00	1.985E-02	1.052E-03	1.986E-04	1.536E-03	0.000E+00	9.818E+00

77	0.000E+00	0.000E+00	1.958E-02	0.000E+00	2.194E-02	9.497E-04	2.189E-04	1.688E-03	0.000E+00	1.056E+01
78	0.000E+00	0.000E+00	1.916E-02	0.000E+00	2.172E-02	2.044E-03	2.154E-04	1.652E-03	0.000E+00	1.063E+01
79	0.000E+00	0.000E+00	2.143E-02	0.000E+00	2.435E-02	2.311E-03	2.412E-04	1.848E-03	0.000E+00	1.138E+01
80	0.000E+00	0.000E+00	2.218E-02	0.000E+00	2.509E-02	1.318E-03	2.491E-04	1.913E-03	0.000E+00	1.239E+01
81	0.000E+00	0.000E+00	2.074E-02	0.000E+00	2.313E-02	1.178E-03	2.314E-04	1.788E-03	0.000E+00	1.357E+01
82	0.000E+00	0.000E+00	2.000E-02	0.000E+00	2.191E-02	7.008E-04	2.212E-04	1.723E-03	0.000E+00	1.505E+01
83	0.000E+00	0.000E+00	2.228E-02	0.000E+00	2.434E-02	7.809E-04	2.461E-04	1.920E-03	0.000E+00	1.700E+01
84	0.000E+00	0.000E+00	2.307E-02	0.000E+00	2.521E-02	8.085E-04	2.549E-04	1.988E-03	0.000E+00	2.001E+01
85	0.000E+00	0.000E+00	3.182E-02	0.000E+00	3.473E-02	1.152E-03	3.513E-04	2.742E-03	0.000E+00	2.545E+01
86	0.000E+00	0.000E+00	6.731E-02	0.000E+00	7.265E-02	2.359E-03	7.393E-04	5.797E-03	0.000E+00	4.141E+01
87	0.000E+00	0.000E+00	6.043E-02	0.000E+00	6.605E-02	2.117E-03	6.677E-04	5.206E-03	0.000E+00	3.892E+01
88	0.000E+00	0.000E+00	5.781E-02	0.000E+00	6.403E-02	2.025E-03	6.428E-04	4.982E-03	0.000E+00	4.017E+01
89	0.000E+00	0.000E+00	5.555E-02	0.000E+00	6.198E-02	1.945E-03	6.198E-04	4.789E-03	0.000E+00	3.082E+01
90	0.000E+00	0.000E+00	4.929E-02	0.000E+00	5.504E-02	1.726E-03	5.501E-04	4.249E-03	0.000E+00	3.201E+01
91	0.000E+00	0.000E+00	1.726E-02	0.000E+00	1.933E-02	6.228E-04	1.931E-04	1.491E-03	0.000E+00	5.940E+00
92	0.000E+00	0.000E+00	1.787E-02	0.000E+00	2.008E-02	6.770E-04	2.005E-04	1.545E-03	0.000E+00	5.686E+00
93	0.000E+00	0.000E+00	1.714E-02	0.000E+00	1.922E-02	6.983E-04	1.926E-04	1.482E-03	0.000E+00	5.466E+00
94	0.000E+00	0.000E+00	1.750E-02	0.000E+00	2.004E-02	8.918E-04	1.978E-04	1.511E-03	0.000E+00	5.385E+00
95	0.000E+00	0.000E+00	1.861E-02	0.000E+00	2.135E-02	8.681E-04	2.107E-04	1.608E-03	0.000E+00	5.415E+00
96	0.000E+00	0.000E+00	1.944E-02	0.000E+00	2.157E-02	8.819E-04	2.163E-04	1.676E-03	0.000E+00	5.441E+00
97	0.000E+00	0.000E+00	2.294E-02	0.000E+00	2.578E-02	9.048E-04	2.568E-04	1.978E-03	0.000E+00	5.477E+00
98	0.000E+00	0.000E+00	2.643E-02	0.000E+00	2.914E-02	9.260E-04	2.932E-04	2.278E-03	0.000E+00	5.520E+00
99	0.000E+00	0.000E+00	2.210E-02	0.000E+00	2.518E-02	7.946E-04	2.492E-04	1.909E-03	0.000E+00	5.560E+00
100	0.000E+00	0.000E+00	2.396E-02	0.000E+00	2.659E-02	8.406E-04	2.666E-04	2.065E-03	0.000E+00	5.599E+00
101	0.000E+00	0.000E+00	2.185E-02	0.000E+00	2.468E-02	1.453E-03	2.453E-04	1.884E-03	0.000E+00	5.646E+00
102	0.000E+00	0.000E+00	2.450E-02	0.000E+00	2.787E-02	8.574E-04	2.759E-04	2.117E-03	0.000E+00	5.712E+00
103	0.000E+00	0.000E+00	1.768E-02	0.000E+00	1.975E-02	6.514E-04	1.976E-04	1.528E-03	0.000E+00	5.890E+00
104	0.000E+00	0.000E+00	1.680E-02	0.000E+00	1.873E-02	6.989E-04	1.882E-04	1.453E-03	0.000E+00	5.653E+00
105	0.000E+00	0.000E+00	1.741E-02	0.000E+00	1.991E-02	7.992E-04	1.966E-04	1.503E-03	0.000E+00	5.488E+00
106	0.000E+00	0.000E+00	1.894E-02	0.000E+00	2.171E-02	1.353E-03	2.142E-04	1.636E-03	0.000E+00	5.523E+00
107	0.000E+00	0.000E+00	2.152E-02	0.000E+00	2.389E-02	1.126E-03	2.395E-04	1.855E-03	0.000E+00	5.555E+00
108	0.000E+00	0.000E+00	2.397E-02	0.000E+00	2.686E-02	9.465E-04	2.680E-04	2.068E-03	0.000E+00	5.564E+00
109	0.000E+00	0.000E+00	2.539E-02	0.000E+00	2.875E-02	1.032E-03	2.853E-04	2.191E-03	0.000E+00	5.628E+00
110	0.000E+00	0.000E+00	2.465E-02	0.000E+00	2.811E-02	1.297E-03	2.780E-04	2.129E-03	0.000E+00	5.668E+00
111	0.000E+00	0.000E+00	2.075E-02	0.000E+00	2.371E-02	1.104E-03	2.346E-04	1.795E-03	0.000E+00	5.709E+00
112	0.000E+00	0.000E+00	2.361E-02	0.000E+00	2.673E-02	1.400E-03	2.654E-04	2.037E-03	0.000E+00	5.753E+00
113	0.000E+00	0.000E+00	2.696E-02	0.000E+00	3.076E-02	1.609E-03	3.041E-04	2.326E-03	0.000E+00	5.794E+00
114	0.000E+00	0.000E+00	2.810E-02	0.000E+00	3.217E-02	9.834E-04	3.175E-04	2.428E-03	0.000E+00	5.871E+00
115	0.000E+00	0.000E+00	1.628E-02	0.000E+00	1.799E-02	9.261E-04	1.814E-04	1.409E-03	0.000E+00	5.861E+00
116	0.000E+00	0.000E+00	1.720E-02	0.000E+00	1.962E-02	1.244E-03	1.940E-04	1.485E-03	0.000E+00	5.607E+00
117	0.000E+00	0.000E+00	1.915E-02	0.000E+00	2.192E-02	1.422E-03	2.165E-04	1.654E-03	0.000E+00	5.638E+00
118	0.000E+00	0.000E+00	2.294E-02	0.000E+00	2.539E-02	1.971E-03	2.450E-04	1.977E-03	0.000E+00	5.674E+00
119	0.000E+00	0.000E+00	2.663E-02	0.000E+00	2.980E-02	2.626E-03	2.976E-04	2.297E-03	0.000E+00	5.712E+00
120	0.000E+00	0.000E+00	2.788E-02	0.000E+00	3.155E-02	1.826E-03	3.132E-04	2.406E-03	0.000E+00	5.745E+00
121	0.000E+00	0.000E+00	2.624E-02	0.000E+00	2.989E-02	1.364E-03	2.958E-04	2.266E-03	0.000E+00	5.785E+00
122	0.000E+00	0.000E+00	2.309E-02	0.000E+00	2.641E-02	1.993E-03	2.611E-04	1.998E-03	0.000E+00	5.830E+00
123	0.000E+00	0.000E+00	2.518E-02	0.000E+00	2.855E-02	1.935E-03	2.831E-04	2.172E-03	0.000E+00	5.871E+00
124	0.000E+00	0.000E+00	2.798E-02	0.000E+00	3.193E-02	2.070E-03	3.156E-04	2.413E-03	0.000E+00	5.942E+00
125	0.000E+00	0.000E+00	2.911E-02	0.000E+00	3.335E-02	1.019E-03	3.290E-04	2.515E-03	0.000E+00	5.992E+00
126	0.000E+00	0.000E+00	3.021E-02	0.000E+00	3.473E-02	1.057E-03	3.420E-04	2.610E-03	0.000E+00	6.040E+00
127	0.000E+00	0.000E+00	1.691E-02	0.000E+00	1.921E-02	1.686E-03	1.903E-04	1.459E-03	0.000E+00	5.806E+00
128	0.000E+00	0.000E+00	1.927E-02	0.000E+00	2.198E-02	1.935E-03	2.174E-04	1.664E-03	0.000E+00	5.767E+00
129	0.000E+00	0.000E+00	2.379E-02	0.000E+00	2.614E-02	2.617E-03	2.635E-04	2.050E-03	0.000E+00	5.810E+00
130	0.000E+00	0.000E+00	2.622E-02	0.000E+00	2.904E-02	1.066E-03	2.915E-04	2.264E-03	0.000E+00	5.862E+00
131	0.000E+00	0.000E+00	2.369E-02	0.000E+00	2.642E-02	1.222E-03	2.651E-04	2.046E-03	0.000E+00	5.885E+00
132	0.000E+00	0.000E+00	2.875E-02	0.000E+00	3.272E-02	2.521E-03	3.246E-04	2.483E-03	0.000E+00	5.941E+00
133	0.000E+00	0.000E+00	2.498E-02	0.000E+00	2.856E-02	2.167E-03	2.823E-04	2.161E-03	0.000E+00	5.957E+00
134	0.000E+00	0.000E+00	2.567E-02	0.000E+00	2.907E-02	1.052E-03	2.885E-04	2.213E-03	0.000E+00	6.022E+00
135	0.000E+00	0.000E+00	2.781E-02	0.000E+00	3.171E-02	9.733E-04	3.136E-04	2.399E-03	0.000E+00	6.079E+00
136	0.000E+00	0.000E+00	4.028E-02	0.000E+00	4.285E-02	1.767E-03	4.421E-04	3.484E-03	0.000E+00	6.123E+00
137	0.000E+00	0.000E+00	3.341E-02	0.000E+00	3.682E-02	1.523E-03	3.669E-04	2.892E-03	0.000E+00	6.171E+00
138	0.000E+00	0.000E+00	3.468E-02	0.000E+00	3.702E-02	1.552E-03	3.815E-04	3.001E-03	0.000E+00	6.222E+00
139	0.000E+00	0.000E+00	1.986E-02	0.000E+00	2.196E-02	3.251E-03	2.179E-04	1.710E-03	0.000E+00	5.950E+00
140	0.000E+00	0.000E+00	2.391E-02	0.000E+00	2.589E-02	1.195E-03	2.630E-04	2.060E-03	0.000E+00	5.963E+00
141	0.000E+00	0.000E+00	2.716E-02	0.000E+00	2.967E-02	1.200E-03	3.000E-04	2.344E-03	0.000E+00	5.995E+00
142	0.000E+00	0.000E+00	3.351E-02	0.000E+00	2.952E-02	1.669E-03	3.386E-04	2.893E-03	0.000E+00	6.017E+00
143	0.000E+00	0.000E+00	3.062E-02	0.000E+00	2.773E-02	1.541E-03	3.133E-04	2.646E-03	0.000E+00	6.076E+00
144	0.000E+00	0.000E+00	2.559E-02	0.000E+00	2.917E-02	9.913E-04	2.893E-04	2.213E-03	0.000E+00	6.128E+00
145	0.000E+00	0.000E+00	2.727E-02	0.000E+00	3.090E-02	1.183E-03	3.065E-04	2.352E-03	0.000E+00	6.169E+00
146	0.000E+00	0.000E+00	2.871E-02	0.000E+00	3.273E-02	1.036E-03	3.237E-04	2.476E-03	0.000E+00	6.223E+00
147	0.000E+00	0.000E+00	3.386E-02	0.000E+00	3.766E-02	1.589E-03	3.711E-04	2.930E-03	0.000E+00	6.271E+00
148	0.000E+00	0.000E+00	4.413E-02	0.000E+00	4.714E-02	1.905E-03	4.834E-04	3.815E-03	0.000E+00	6.321E+00
149	0.000E+00	0.000E+00	4.488E-02	0.000E+00	4.864E-02	1.890E-03	4.956E-04	3.880E-03	0.000E+00	6.372E+00
150	0.000E+00	0.000E+00	4.323E-02	0.000E+00	4.723E-02	1.819E-03	4.790E-04	3.738E-03	0.000E+00	6.412E+00
151	0.000E+00	0.000E+00	2.966E-02	0.000E+00	3.381E-02	1.038E-03	3.344E-04	2.559E-03	0.000E+00	6.380E+00
152	0.000E+00	0.000E+00	4.308E-02	0.000E+00	4.529E-02	1.931E-03	4.706E-04	3.726E-03	0.000E+00	6.425E+00
153	0.000E+00	0.000E+00	4.814E-02	0.000E+00	5.147E-02	2.035E-03	5.290E-04	4.160E-03	0.000E+00	6.480E+00
154	0.000E+00	0.000E+00	3.003E-02	0.000E+00	3.455E-02	1.101E-03	3.401E-04	2.591E-03	0.000E+00	6.545E+00
155	0.000E+00	0.000E+00	4.594E-02	0.000E+00	5.051E-02	1.898E-03	5.108E-04	3.971E-03	0.000E+00	6.571E+00
156	0.000E+00	0.000E+00	4.319E-02	0.000E+00	4.764E-02	1.833E-03	4.817E-04	3.737E-03	0.000E+00	6.653E+00
157	0.000E+00	0.000E+00	2.030E-02	0.000E+00	2.289E-02	7.919E-04	2.284E-04	1.754E-03	0.000E+00	

174	0.000E+00	0.000E+00	2.486E-02	0.000E+00	2.776E-02	8.713E-04	2.775E-04	2.143E-03	0.000E+00	5.259E+00
175	0.000E+00	0.000E+00	2.391E-02	0.000E+00	2.702E-02	8.500E-04	2.685E-04	2.064E-03	0.000E+00	5.358E+00
176	0.000E+00	0.000E+00	2.306E-02	0.000E+00	2.865E-02	8.779E-04	2.829E-04	2.162E-03	0.000E+00	5.462E+00
177	0.000E+00	0.000E+00	2.665E-02	0.000E+00	3.066E-02	9.428E-04	3.019E-04	2.301E-03	0.000E+00	5.563E+00
178	0.000E+00	0.000E+00	1.732E-02	0.000E+00	1.954E-02	2.568E-03	1.949E-04	1.497E-03	0.000E+00	7.179E+00
179	0.000E+00	0.000E+00	1.325E-02	0.000E+00	1.461E-02	6.340E-04	1.470E-04	1.142E-03	0.000E+00	6.264E+00
180	0.000E+00	0.000E+00	1.785E-02	0.000E+00	2.013E-02	6.709E-04	2.006E-04	1.542E-03	0.000E+00	5.594E+00
181	0.000E+00	0.000E+00	1.747E-02	0.000E+00	2.002E-02	6.254E-04	1.976E-04	1.509E-03	0.000E+00	5.286E+00
182	0.000E+00	0.000E+00	2.247E-02	0.000E+00	2.528E-02	1.283E-03	2.517E-04	1.938E-03	0.000E+00	5.364E+00
183	0.000E+00	0.000E+00	2.416E-02	0.000E+00	2.674E-02	8.467E-04	2.685E-04	2.082E-03	0.000E+00	5.465E+00
184	0.000E+00	0.000E+00	2.164E-02	0.000E+00	2.448E-02	7.574E-04	2.431E-04	1.866E-03	0.000E+00	5.592E+00
185	0.000E+00	0.000E+00	2.822E-02	0.000E+00	3.238E-02	1.485E-03	3.191E-04	2.435E-03	0.000E+00	5.686E+00
186	0.000E+00	0.000E+00	2.752E-02	0.000E+00	3.171E-02	9.750E-04	3.120E-04	2.377E-03	0.000E+00	5.803E+00
187	0.000E+00	0.000E+00	2.586E-02	0.000E+00	2.969E-02	9.063E-04	2.926E-04	2.231E-03	0.000E+00	5.917E+00
188	0.000E+00	0.000E+00	2.274E-02	0.000E+00	2.507E-02	1.182E-03	2.523E-04	1.960E-03	0.000E+00	7.063E+00
189	0.000E+00	0.000E+00	1.473E-02	0.000E+00	1.619E-02	1.061E-03	1.633E-04	1.274E-03	0.000E+00	6.147E+00
190	0.000E+00	0.000E+00	1.732E-02	0.000E+00	1.978E-02	1.060E-03	1.955E-04	1.495E-03	0.000E+00	5.546E+00
191	0.000E+00	0.000E+00	2.446E-02	0.000E+00	2.728E-02	1.882E-03	2.729E-04	2.109E-03	0.000E+00	5.626E+00
192	0.000E+00	0.000E+00	2.542E-02	0.000E+00	2.898E-02	1.342E-03	2.867E-04	2.196E-03	0.000E+00	5.726E+00
193	0.000E+00	0.000E+00	2.598E-02	0.000E+00	2.955E-02	2.001E-03	2.926E-04	2.241E-03	0.000E+00	5.831E+00
194	0.000E+00	0.000E+00	2.995E-02	0.000E+00	3.442E-02	1.048E-03	3.389E-04	2.587E-03	0.000E+00	5.977E+00
195	0.000E+00	0.000E+00	2.729E-02	0.000E+00	3.148E-02	1.603E-03	3.096E-04	2.358E-03	0.000E+00	6.081E+00
196	0.000E+00	0.000E+00	2.701E-02	0.000E+00	3.110E-02	1.708E-03	3.067E-04	2.331E-03	0.000E+00	6.232E+00
197	0.000E+00	0.000E+00	2.394E-02	0.000E+00	2.755E-02	8.566E-04	2.713E-04	2.068E-03	0.000E+00	6.349E+00
198	0.000E+00	0.000E+00	2.775E-02	0.000E+00	3.015E-02	1.427E-03	3.057E-04	2.391E-03	0.000E+00	6.946E+00
199	0.000E+00	0.000E+00	1.660E-02	0.000E+00	1.869E-02	3.277E-03	1.860E-04	1.432E-03	0.000E+00	6.045E+00
200	0.000E+00	0.000E+00	2.606E-02	0.000E+00	2.838E-02	1.189E-03	2.874E-04	2.249E-03	0.000E+00	5.972E+00
201	0.000E+00	0.000E+00	2.739E-02	0.000E+00	3.112E-02	9.588E-04	3.083E-04	2.363E-03	0.000E+00	6.198E+00
202	0.000E+00	0.000E+00	4.267E-02	0.000E+00	4.692E-02	1.800E-03	4.749E-04	3.690E-03	0.000E+00	6.456E+00
203	0.000E+00	0.000E+00	2.625E-02	0.000E+00	3.026E-02	1.002E-03	2.983E-04	2.269E-03	0.000E+00	6.608E+00
204	0.000E+00	0.000E+00	2.152E-02	0.000E+00	2.471E-02	7.874E-04	2.438E-04	1.861E-03	0.000E+00	6.716E+00
205	0.000E+00	0.000E+00	1.965E-02	0.000E+00	2.253E-02	7.263E-04	2.221E-04	1.696E-03	0.000E+00	6.903E+00
206	0.000E+00	0.000E+00	1.695E-02	0.000E+00	1.908E-02	7.034E-04	1.903E-04	1.466E-03	0.000E+00	7.396E+00
207	0.000E+00	0.000E+00	1.564E-02	0.000E+00	1.749E-02	7.695E-04	1.753E-04	1.357E-03	0.000E+00	8.492E+00
208	0.000E+00	0.000E+00	8.260E-03	0.000E+00	9.029E-03	3.309E-04	9.127E-05	7.117E-04	0.000E+00	7.568E+00
209	0.000E+00	0.000E+00	1.042E-02	0.000E+00	1.170E-02	3.828E-04	1.168E-04	8.989E-04	0.000E+00	7.600E+00
210	0.000E+00	0.000E+00	1.159E-02	0.000E+00	1.295E-02	4.079E-04	1.294E-04	9.994E-04	0.000E+00	7.601E+00
211	0.000E+00	0.000E+00	9.806E-03	0.000E+00	1.117E-02	4.105E-04	1.112E-04	8.492E-04	0.000E+00	7.676E+00
212	0.000E+00	0.000E+00	1.302E-02	0.000E+00	1.468E-02	5.136E-04	1.466E-04	1.125E-03	0.000E+00	7.526E+00
213	0.000E+00	0.000E+00	1.509E-02	0.000E+00	1.696E-02	5.501E-04	1.692E-04	1.302E-03	0.000E+00	6.965E+00
214	0.000E+00	0.000E+00	1.198E-02	0.000E+00	1.336E-02	4.549E-04	1.337E-04	1.033E-03	0.000E+00	6.350E+00
215	0.000E+00	0.000E+00	1.528E-02	0.000E+00	1.728E-02	5.504E-04	1.717E-04	1.318E-03	0.000E+00	6.274E+00
216	0.000E+00	0.000E+00	1.457E-02	0.000E+00	1.651E-02	5.554E-04	1.638E-04	1.257E-03	0.000E+00	6.156E+00
217	0.000E+00	0.000E+00	1.545E-02	0.000E+00	1.749E-02	5.673E-04	1.737E-04	1.332E-03	0.000E+00	6.233E+00
218	0.000E+00	0.000E+00	1.377E-02	0.000E+00	1.559E-02	5.614E-04	1.549E-04	1.188E-03	0.000E+00	5.935E+00
219	0.000E+00	0.000E+00	1.806E-02	0.000E+00	2.006E-02	6.717E-04	2.014E-04	1.557E-03	0.000E+00	5.328E+00
220	0.000E+00	0.000E+00	1.077E-02	0.000E+00	1.196E-02	3.779E-04	1.199E-04	9.281E-04	0.000E+00	4.985E+00
221	0.000E+00	0.000E+00	6.431E-03	0.000E+00	7.134E-03	2.301E-04	7.161E-05	5.549E-04	0.000E+00	4.515E+00
222	0.000E+00	0.000E+00	8.667E-03	0.000E+00	9.800E-03	3.327E-04	9.759E-05	7.489E-04	0.000E+00	4.095E+00
223	0.000E+00	0.000E+00	1.013E-02	0.000E+00	1.156E-02	3.821E-04	1.145E-04	8.761E-04	0.000E+00	3.882E+00
224	0.000E+00	0.000E+00	1.097E-02	0.000E+00	1.250E-02	4.181E-04	1.240E-04	9.480E-04	0.000E+00	3.956E+00
225	0.000E+00	0.000E+00	1.114E-02	0.000E+00	1.263E-02	4.089E-04	1.254E-04	9.624E-04	0.000E+00	4.035E+00
226	0.000E+00	0.000E+00	1.260E-02	0.000E+00	1.409E-02	4.466E-04	1.408E-04	1.087E-03	0.000E+00	4.110E+00
227	0.000E+00	0.000E+00	1.193E-02	0.000E+00	1.331E-02	4.210E-04	1.331E-04	1.028E-03	0.000E+00	7.821E+00
228	0.000E+00	0.000E+00	1.033E-02	0.000E+00	1.139E-02	3.620E-04	1.146E-04	8.901E-04	0.000E+00	8.249E+00
229	0.000E+00	0.000E+00	1.036E-02	0.000E+00	1.164E-02	3.799E-04	1.161E-04	8.939E-04	0.000E+00	8.356E+00
230	0.000E+00	0.000E+00	1.240E-02	0.000E+00	1.389E-02	4.354E-04	1.386E-04	1.069E-03	0.000E+00	8.638E+00
231	0.000E+00	0.000E+00	1.076E-02	0.000E+00	1.221E-02	4.530E-04	1.218E-04	9.317E-04	0.000E+00	8.150E+00
232	0.000E+00	0.000E+00	1.436E-02	0.000E+00	1.617E-02	5.492E-04	1.614E-04	1.240E-03	0.000E+00	7.705E+00
233	0.000E+00	0.000E+00	1.572E-02	0.000E+00	1.768E-02	5.593E-04	1.761E-04	1.355E-03	0.000E+00	7.220E+00
234	0.000E+00	0.000E+00	1.379E-02	0.000E+00	1.553E-02	5.157E-04	1.546E-04	1.189E-03	0.000E+00	6.936E+00
235	0.000E+00	0.000E+00	1.540E-02	0.000E+00	1.746E-02	5.493E-04	1.732E-04	1.328E-03	0.000E+00	6.886E+00
236	0.000E+00	0.000E+00	1.614E-02	0.000E+00	1.828E-02	5.886E-04	1.816E-04	1.392E-03	0.000E+00	6.823E+00
237	0.000E+00	0.000E+00	1.432E-02	0.000E+00	1.622E-02	5.881E-04	1.611E-04	1.235E-03	0.000E+00	6.468E+00
238	0.000E+00	0.000E+00	1.815E-02	0.000E+00	2.004E-02	6.667E-04	2.017E-04	1.564E-03	0.000E+00	5.796E+00
239	0.000E+00	0.000E+00	1.066E-02	0.000E+00	1.184E-02	3.734E-04	1.186E-04	9.184E-04	0.000E+00	5.050E+00
240	0.000E+00	0.000E+00	9.459E-03	0.000E+00	1.066E-02	3.452E-04	1.062E-04	8.168E-04	0.000E+00	4.623E+00
241	0.000E+00	0.000E+00	9.934E-03	0.000E+00	1.129E-02	3.591E-04	1.119E-04	8.581E-04	0.000E+00	4.173E+00
242	0.000E+00	0.000E+00	1.173E-02	0.000E+00	1.336E-02	4.403E-04	1.325E-04	1.014E-03	0.000E+00	4.113E+00
243	0.000E+00	0.000E+00	1.150E-02	0.000E+00	1.299E-02	4.151E-04	1.292E-04	9.930E-04	0.000E+00	4.212E+00
244	0.000E+00	0.000E+00	1.444E-02	0.000E+00	1.616E-02	5.095E-04	1.613E-04	1.245E-03	0.000E+00	4.310E+00
245	0.000E+00	0.000E+00	1.609E-02	0.000E+00	1.830E-02	5.889E-04	1.814E-04	1.390E-03	0.000E+00	4.373E+00
246	0.000E+00	0.000E+00	1.002E-02	0.000E+00	1.128E-02	3.795E-04	1.126E-04	8.651E-04	0.000E+00	8.690E+00
247	0.000E+00	0.000E+00	1.224E-02	0.000E+00	1.372E-02	4.339E-04	1.369E-04	1.055E-03	0.000E+00	8.702E+00
248	0.000E+00	0.000E+00	1.235E-02	0.000E+00	1.374E-02	4.327E-04	1.376E-04	1.064E-03	0.000E+00	9.010E+00
249	0.000E+00	0.000E+00	1.012E-02	0.000E+00	1.136E-02	3.698E-04	1.134E-04	8.725E-04	0.000E+00	9.444E+00
250	0.000E+00	0.000E+00	1.328E-02	0.000E+00	1.492E-02	4.656E-04	1.487E-04	1.145E-03	0.000E+00	9.408E+00
251	0.000E+00	0.000E+00	1.164E-02	0.000E+00	1.313E-02	4.863E-04	1.313E-04	1.006E-03	0.000E+00	9.054E+00
252	0.000E+00	0.000E+00	1.612E-02	0.000E+00	1.815E-02	5.915E-04	1.809E-04	1.391E-03	0.000E+00	8.124E+00
253	0.000E+00	0.000E+00	1.544E-02	0.000E+00	1.737E-02	5.425E-04	1.730E-04	1.332E-03	0.000E+00	7.893E+00
254	0.000E+00	0.000E+00	1.674E-02	0.000E+00	1.901E-02	5.885E-04	1.884E-04	1.4		

271	0.000E+00	0.000E+00	1.268E-02	0.000E+00	1.424E-02	5.109E-04	1.426E-04	1.096E-03	0.000E+00	9.495E+00
272	0.000E+00	0.000E+00	1.829E-02	0.000E+00	2.066E-02	6.487E-04	2.054E-04	1.577E-03	0.000E+00	8.831E+00
273	0.000E+00	0.000E+00	1.818E-02	0.000E+00	2.052E-02	6.367E-04	2.039E-04	1.568E-03	0.000E+00	8.829E+00
274	0.000E+00	0.000E+00	1.602E-02	0.000E+00	1.817E-02	1.325E-03	1.802E-04	1.382E-03	0.000E+00	8.586E+00
275	0.000E+00	0.000E+00	1.546E-02	0.000E+00	1.748E-02	5.635E-04	1.738E-04	1.334E-03	0.000E+00	7.449E+00
276	0.000E+00	0.000E+00	1.708E-02	0.000E+00	1.837E-02	6.095E-04	1.872E-04	1.471E-03	0.000E+00	6.293E+00
277	0.000E+00	0.000E+00	1.112E-02	0.000E+00	1.247E-02	3.964E-04	1.244E-04	9.392E-04	0.000E+00	5.359E+00
278	0.000E+00	0.000E+00	1.310E-02	0.000E+00	1.495E-02	4.728E-04	1.479E-04	1.132E-03	0.000E+00	4.644E+00
279	0.000E+00	0.000E+00	1.359E-02	0.000E+00	1.557E-02	5.222E-04	1.540E-04	1.175E-03	0.000E+00	4.643E+00
280	0.000E+00	0.000E+00	1.997E-02	0.000E+00	2.239E-02	7.006E-04	2.234E-04	1.722E-03	0.000E+00	4.781E+00
281	0.000E+00	0.000E+00	1.928E-02	0.000E+00	2.198E-02	6.985E-04	2.175E-04	1.665E-03	0.000E+00	4.916E+00
282	0.000E+00	0.000E+00	2.307E-02	0.000E+00	2.645E-02	8.301E-04	2.610E-04	1.993E-03	0.000E+00	5.035E+00
283	0.000E+00	0.000E+00	2.042E-02	0.000E+00	2.326E-02	7.306E-04	2.302E-04	1.762E-03	0.000E+00	5.195E+00
284	0.000E+00	0.000E+00	1.309E-02	0.000E+00	1.477E-02	4.953E-04	1.472E-04	1.131E-03	0.000E+00	8.808E+00
285	0.000E+00	0.000E+00	1.402E-02	0.000E+00	1.574E-02	5.097E-04	1.571E-04	1.210E-03	0.000E+00	9.540E+00
286	0.000E+00	0.000E+00	1.432E-02	0.000E+00	1.598E-02	5.324E-04	1.599E-04	1.235E-03	0.000E+00	9.952E+00
287	0.000E+00	0.000E+00	1.327E-02	0.000E+00	1.471E-02	4.657E-04	1.476E-04	1.144E-03	0.000E+00	1.051E+01
288	0.000E+00	0.000E+00	1.383E-02	0.000E+00	1.556E-02	4.848E-04	1.549E-04	1.193E-03	0.000E+00	1.127E+01
289	0.000E+00	0.000E+00	1.449E-02	0.000E+00	1.619E-02	5.076E-04	1.618E-04	1.250E-03	0.000E+00	1.191E+01
290	0.000E+00	0.000E+00	1.519E-02	0.000E+00	1.716E-02	5.319E-04	1.705E-04	1.310E-03	0.000E+00	1.147E+01
291	0.000E+00	0.000E+00	1.469E-02	0.000E+00	1.649E-02	5.499E-04	1.647E-04	1.267E-03	0.000E+00	9.772E+00
292	0.000E+00	0.000E+00	3.146E-02	0.000E+00	3.312E-02	1.371E-03	3.438E-04	2.721E-03	0.000E+00	1.020E+01
293	0.000E+00	0.000E+00	1.890E-02	0.000E+00	2.121E-02	6.618E-04	2.114E-04	1.630E-03	0.000E+00	9.681E+00
294	0.000E+00	0.000E+00	2.390E-02	0.000E+00	2.750E-02	8.702E-04	2.709E-04	2.065E-03	0.000E+00	5.426E+00
295	0.000E+00	0.000E+00	2.334E-02	0.000E+00	2.678E-02	8.328E-04	2.641E-04	2.016E-03	0.000E+00	5.645E+00
296	0.000E+00	0.000E+00	1.976E-02	0.000E+00	2.256E-02	7.655E-04	2.236E-04	1.710E-03	0.000E+00	5.768E+00
297	0.000E+00	0.000E+00	1.037E-02	0.000E+00	1.188E-02	5.887E-04	1.179E-04	8.982E-04	0.000E+00	8.265E+00
298	0.000E+00	0.000E+00	1.193E-02	0.000E+00	1.357E-02	5.668E-04	1.349E-04	1.031E-03	0.000E+00	9.784E+00
299	0.000E+00	0.000E+00	1.338E-02	0.000E+00	1.512E-02	6.472E-04	1.506E-04	1.155E-03	0.000E+00	1.035E+01
300	0.000E+00	0.000E+00	1.493E-02	0.000E+00	1.677E-02	5.358E-04	1.672E-04	1.287E-03	0.000E+00	1.102E+01
301	0.000E+00	0.000E+00	1.611E-02	0.000E+00	1.804E-02	5.659E-04	1.801E-04	1.389E-03	0.000E+00	1.172E+01
302	0.000E+00	0.000E+00	1.537E-02	0.000E+00	1.711E-02	5.384E-04	1.713E-04	1.325E-03	0.000E+00	1.296E+01
303	0.000E+00	0.000E+00	1.649E-02	0.000E+00	1.876E-02	5.842E-04	1.868E-04	1.439E-03	0.000E+00	1.400E+01
304	0.000E+00	0.000E+00	1.615E-02	0.000E+00	1.826E-02	5.653E-04	1.813E-04	1.393E-03	0.000E+00	1.203E+01
305	0.000E+00	0.000E+00	1.888E-02	0.000E+00	2.124E-02	7.811E-04	2.116E-04	1.628E-03	0.000E+00	1.200E+01
306	0.000E+00	0.000E+00	2.222E-02	0.000E+00	2.351E-02	8.171E-04	2.317E-04	1.921E-03	0.000E+00	6.167E+00
307	0.000E+00	0.000E+00	1.892E-02	0.000E+00	2.165E-02	7.078E-04	2.137E-04	1.633E-03	0.000E+00	6.403E+00
308	0.000E+00	0.000E+00	1.714E-02	0.000E+00	1.946E-02	6.489E-04	1.933E-04	1.482E-03	0.000E+00	6.459E+00
309	0.000E+00	0.000E+00	7.619E-03	0.000E+00	8.322E-03	7.418E-04	8.416E-05	6.564E-04	0.000E+00	8.925E+00
310	0.000E+00	0.000E+00	8.507E-03	0.000E+00	9.846E-03	6.189E-04	9.732E-05	7.380E-04	0.000E+00	9.581E+00
311	0.000E+00	0.000E+00	1.029E-02	0.000E+00	1.183E-02	8.218E-04	1.173E-04	8.918E-04	0.000E+00	9.921E+00
312	0.000E+00	0.000E+00	1.163E-02	0.000E+00	1.325E-02	5.860E-04	1.318E-04	1.006E-03	0.000E+00	1.140E+01
313	0.000E+00	0.000E+00	1.307E-02	0.000E+00	1.476E-02	4.913E-04	1.470E-04	1.128E-03	0.000E+00	1.238E+01
314	0.000E+00	0.000E+00	1.547E-02	0.000E+00	1.741E-02	5.471E-04	1.734E-04	1.334E-03	0.000E+00	1.368E+01
315	0.000E+00	0.000E+00	1.830E-02	0.000E+00	2.059E-02	6.408E-04	2.050E-04	1.578E-03	0.000E+00	1.563E+01
316	0.000E+00	0.000E+00	1.836E-02	0.000E+00	2.055E-02	6.430E-04	2.052E-04	1.583E-03	0.000E+00	1.676E+01
317	0.000E+00	0.000E+00	1.950E-02	0.000E+00	2.153E-02	6.831E-04	2.165E-04	1.680E-03	0.000E+00	1.499E+01
318	0.000E+00	0.000E+00	1.712E-02	0.000E+00	1.937E-02	6.448E-04	1.927E-04	1.480E-03	0.000E+00	7.241E+00
319	0.000E+00	0.000E+00	1.488E-02	0.000E+00	1.672E-02	6.360E-04	1.676E-04	1.289E-03	0.000E+00	7.275E+00
320	0.000E+00	0.000E+00	1.085E-02	0.000E+00	1.217E-02	4.921E-04	1.224E-04	9.400E-04	0.000E+00	7.543E+00
321	0.000E+00	0.000E+00	1.574E-02	0.000E+00	1.664E-02	8.663E-04	1.712E-04	1.355E-03	0.000E+00	8.507E+00
322	0.000E+00	0.000E+00	1.603E-02	0.000E+00	1.690E-02	8.668E-04	1.742E-04	1.380E-03	0.000E+00	9.401E+00
323	0.000E+00	0.000E+00	1.632E-02	0.000E+00	1.715E-02	7.722E-04	1.771E-04	1.405E-03	0.000E+00	1.036E+01
324	0.000E+00	0.000E+00	1.658E-02	0.000E+00	1.737E-02	6.219E-04	1.796E-04	1.427E-03	0.000E+00	1.087E+01
325	0.000E+00	0.000E+00	1.677E-02	0.000E+00	1.751E-02	5.884E-04	1.814E-04	1.443E-03	0.000E+00	1.242E+01
326	0.000E+00	0.000E+00	1.684E-02	0.000E+00	1.802E-02	5.909E-04	1.818E-04	1.449E-03	0.000E+00	1.443E+01
327	0.000E+00	0.000E+00	1.919E-02	0.000E+00	2.136E-02	6.722E-04	2.139E-04	1.655E-03	0.000E+00	1.657E+01
328	0.000E+00	0.000E+00	2.203E-02	0.000E+00	2.448E-02	7.714E-04	2.453E-04	1.898E-03	0.000E+00	2.240E+01
329	0.000E+00	0.000E+00	2.487E-02	0.000E+00	2.749E-02	8.712E-04	2.762E-04	2.143E-03	0.000E+00	2.231E+01
330	0.000E+00	0.000E+00	1.211E-02	0.000E+00	1.363E-02	5.075E-04	1.357E-04	1.045E-03	0.000E+00	8.794E+00
331	0.000E+00	0.000E+00	1.191E-02	0.000E+00	1.334E-02	4.182E-04	1.332E-04	1.027E-03	0.000E+00	8.920E+00
332	0.000E+00	0.000E+00	1.206E-02	0.000E+00	1.350E-02	4.279E-04	1.348E-04	1.040E-03	0.000E+00	8.468E+00
333	0.000E+00	0.000E+00	4.041E-02	0.000E+00	4.511E-02	1.416E-03	4.510E-04	3.484E-03	0.000E+00	8.282E+00
334	0.000E+00	0.000E+00	4.216E-02	0.000E+00	4.715E-02	1.476E-03	4.709E-04	3.635E-03	0.000E+00	8.885E+00
335	0.000E+00	0.000E+00	4.400E-02	0.000E+00	4.932E-02	1.541E-03	4.920E-04	3.794E-03	0.000E+00	9.650E+00
336	0.000E+00	0.000E+00	4.590E-02	0.000E+00	5.154E-02	1.607E-03	5.137E-04	3.958E-03	0.000E+00	1.072E+01
337	0.000E+00	0.000E+00	4.776E-02	0.000E+00	5.370E-02	1.672E-03	5.349E-04	4.118E-03	0.000E+00	1.236E+01
338	0.000E+00	0.000E+00	4.933E-02	0.000E+00	5.551E-02	1.727E-03	5.526E-04	4.253E-03	0.000E+00	1.481E+01
339	0.000E+00	0.000E+00	5.012E-02	0.000E+00	5.638E-02	1.755E-03	5.613E-04	4.321E-03	0.000E+00	1.748E+01
340	0.000E+00	0.000E+00	4.898E-02	0.000E+00	5.488E-02	1.715E-03	5.475E-04	4.222E-03	0.000E+00	2.313E+01
341	0.000E+00	0.000E+00	1.571E-02	0.000E+00	1.308E-02	1.570E-03	1.321E-04	1.329E-03	0.000E+00	1.086E+01
342	0.000E+00	0.000E+00	1.339E-02	0.000E+00	1.505E-02	4.816E-04	1.500E-04	1.156E-03	0.000E+00	1.127E+01
343	0.000E+00	0.000E+00	1.358E-02	0.000E+00	1.533E-02	5.175E-04	1.527E-04	1.173E-03	0.000E+00	1.106E+01
344	0.000E+00	0.000E+00	1.255E-02	0.000E+00	1.420E-02	5.107E-04	1.416E-04	1.086E-03	0.000E+00	1.021E+01
345	0.000E+00	0.000E+00	1.091E-02	0.000E+00	1.239E-02	4.630E-04	1.236E-04	9.455E-04	0.000E+00	9.505E+00
346	0.000E+00	0.000E+00	4.712E-02	0.000E+00	5.290E-02	1.780E-03	5.285E-04	4.063E-03	0.000E+00	8.474E+00
347	0.000E+00	0.000E+00	4.753E-02	0.000E+00	5.333E-02	1.809E-03	5.330E-04	4.098E-03	0.000E+00	8.832E+00
348	0.000E+00	0.000E+00	4.786E-02	0.000E+00	5.366E-02	1.720E-03	5.356E-04	4.126E-03	0.000E+00	8.582E+00
349	0.000E+00	0.000E+00	4.819E-02	0.000E+00	5.402E-02	1.720E-03	5.391E-04	4.155E-03	0.000E+00	8.059E+00
350	0.000E+00	0.000E+00	4.870E-02	0.000E+00	5.458E-02	1.726E-03	5.447E-04	4.199E-03	0.000E+00	1.127E+01
351	0.000E+00	0.000E+00	4.963E-02	0.000E+00	5.563E-02	1.747E-03	5.550E-04	4.2		

368	0.000E+00	0.000E+00	2.839E-02	0.000E+00	3.236E-02	9.937E-04	3.200E-04	2.449E-03	0.000E+00	3.271E+01
369	0.000E+00	0.000E+00	1.597E-02	0.000E+00	1.727E-02	5.597E-04	1.754E-04	1.375E-03	0.000E+00	2.132E+01
370	0.000E+00	0.000E+00	1.247E-02	0.000E+00	1.020E-02	4.450E-04	1.011E-04	1.056E-03	0.000E+00	1.713E+01
371	0.000E+00	0.000E+00	1.078E-02	0.000E+00	1.189E-02	3.777E-04	1.196E-04	9.291E-04	0.000E+00	1.473E+01
372	0.000E+00	0.000E+00	1.002E-02	0.000E+00	1.099E-02	3.510E-04	1.108E-04	8.632E-04	0.000E+00	1.315E+01
373	0.000E+00	0.000E+00	9.045E-03	0.000E+00	1.009E-02	3.258E-04	1.007E-04	7.794E-04	0.000E+00	1.195E+01
374	0.000E+00	0.000E+00	8.275E-03	0.000E+00	9.259E-03	2.987E-04	9.253E-05	7.138E-04	0.000E+00	1.093E+01
375	0.000E+00	0.000E+00	1.060E-02	0.000E+00	1.198E-02	4.190E-04	1.193E-04	9.153E-04	0.000E+00	6.777E+00
376	0.000E+00	0.000E+00	1.138E-02	0.000E+00	1.290E-02	4.303E-04	1.282E-04	9.829E-04	0.000E+00	6.794E+00
377	0.000E+00	0.000E+00	1.184E-02	0.000E+00	1.346E-02	1.259E-03	1.336E-04	1.024E-03	0.000E+00	6.698E+00
378	0.000E+00	0.000E+00	1.185E-02	0.000E+00	1.349E-02	1.341E-03	1.339E-04	1.025E-03	0.000E+00	7.931E+00
379	0.000E+00	0.000E+00	1.109E-02	0.000E+00	1.264E-02	1.245E-03	1.257E-04	9.604E-04	0.000E+00	1.085E+01
380	0.000E+00	0.000E+00	1.070E-02	0.000E+00	1.196E-02	5.299E-04	1.198E-04	9.253E-04	0.000E+00	1.320E+01
381	0.000E+00	0.000E+00	1.458E-02	0.000E+00	1.670E-02	7.110E-04	1.647E-04	1.258E-03	0.000E+00	1.523E+01
382	0.000E+00	0.000E+00	1.673E-02	0.000E+00	1.931E-02	6.047E-04	1.899E-04	1.447E-03	0.000E+00	1.824E+01
383	0.000E+00	0.000E+00	4.413E-02	0.000E+00	5.067E-02	1.544E-03	4.993E-04	3.808E-03	0.000E+00	2.334E+01
384	0.000E+00	0.000E+00	5.353E-02	0.000E+00	6.098E-02	1.877E-03	6.034E-04	4.618E-03	0.000E+00	2.541E+01
385	0.000E+00	0.000E+00	4.626E-02	0.000E+00	5.250E-02	1.622E-03	5.203E-04	3.989E-03	0.000E+00	3.226E+01
386	0.000E+00	0.000E+00	3.287E-02	0.000E+00	3.754E-02	1.150E-03	3.708E-04	2.835E-03	0.000E+00	3.139E+01
387	0.000E+00	0.000E+00	2.042E-02	0.000E+00	2.324E-02	7.147E-04	2.300E-04	1.761E-03	0.000E+00	3.157E+01
388	0.000E+00	0.000E+00	1.848E-02	0.000E+00	2.067E-02	6.470E-04	2.064E-04	1.593E-03	0.000E+00	2.155E+01
389	0.000E+00	0.000E+00	1.972E-02	0.000E+00	2.205E-02	6.906E-04	2.202E-04	1.700E-03	0.000E+00	1.711E+01
390	0.000E+00	0.000E+00	9.125E-03	0.000E+00	7.459E-03	3.256E-04	7.628E-05	7.731E-04	0.000E+00	1.465E+01
391	0.000E+00	0.000E+00	8.529E-03	0.000E+00	7.622E-03	3.043E-04	7.550E-05	7.228E-04	0.000E+00	1.274E+01
392	0.000E+00	0.000E+00	8.002E-03	0.000E+00	8.407E-03	2.909E-04	8.340E-05	6.782E-04	0.000E+00	1.149E+01
393	0.000E+00	0.000E+00	7.726E-03	0.000E+00	8.770E-03	2.970E-04	8.717E-05	6.675E-04	0.000E+00	1.084E+01
394	0.000E+00	0.000E+00	9.694E-03	0.000E+00	1.103E-02	3.930E-04	1.095E-04	8.386E-04	0.000E+00	8.299E+00
395	0.000E+00	0.000E+00	8.838E-03	0.000E+00	1.007E-02	4.372E-04	9.992E-05	7.651E-04	0.000E+00	8.454E+00
396	0.000E+00	0.000E+00	8.070E-03	0.000E+00	9.088E-03	7.942E-04	9.074E-05	6.975E-04	0.000E+00	9.625E+00
397	0.000E+00	0.000E+00	9.182E-03	0.000E+00	1.037E-02	1.408E-03	1.034E-04	7.944E-04	0.000E+00	1.038E+01
398	0.000E+00	0.000E+00	9.817E-03	0.000E+00	1.121E-02	1.164E-03	1.108E-04	8.475E-04	0.000E+00	9.173E+00
399	0.000E+00	0.000E+00	1.442E-02	0.000E+00	1.654E-02	1.019E-03	1.632E-04	1.246E-03	0.000E+00	1.207E+01
400	0.000E+00	0.000E+00	1.279E-02	0.000E+00	1.469E-02	5.981E-04	1.453E-04	1.108E-03	0.000E+00	1.276E+01
401	0.000E+00	0.000E+00	2.043E-02	0.000E+00	2.297E-02	7.153E-04	2.289E-04	1.762E-03	0.000E+00	1.283E+01
402	0.000E+00	0.000E+00	4.390E-02	0.000E+00	4.958E-02	1.537E-03	4.928E-04	3.786E-03	0.000E+00	1.192E+01
403	0.000E+00	0.000E+00	5.316E-02	0.000E+00	6.065E-02	2.188E-03	6.019E-04	4.585E-03	0.000E+00	1.202E+01
404	0.000E+00	0.000E+00	4.104E-02	0.000E+00	4.645E-02	1.459E-03	4.612E-04	3.539E-03	0.000E+00	1.737E+01
405	0.000E+00	0.000E+00	2.842E-02	0.000E+00	3.238E-02	9.946E-04	3.202E-04	2.451E-03	0.000E+00	1.853E+01
406	0.000E+00	0.000E+00	1.684E-02	0.000E+00	1.908E-02	5.895E-04	1.893E-04	1.452E-03	0.000E+00	1.776E+01
407	0.000E+00	0.000E+00	1.585E-02	0.000E+00	1.801E-02	5.546E-04	1.783E-04	1.367E-03	0.000E+00	1.720E+01
408	0.000E+00	0.000E+00	1.617E-02	0.000E+00	1.816E-02	5.662E-04	1.809E-04	1.394E-03	0.000E+00	1.701E+01
409	0.000E+00	0.000E+00	1.713E-02	0.000E+00	1.919E-02	5.997E-04	1.914E-04	1.476E-03	0.000E+00	1.446E+01
410	0.000E+00	0.000E+00	7.590E-03	0.000E+00	6.634E-03	2.707E-04	6.775E-05	4.633E-04	0.000E+00	1.271E+01
411	0.000E+00	0.000E+00	7.402E-03	0.000E+00	6.749E-03	2.641E-04	6.887E-05	4.627E-04	0.000E+00	1.167E+01
412	0.000E+00	0.000E+00	7.019E-03	0.000E+00	6.613E-03	2.504E-04	6.601E-05	5.948E-04	0.000E+00	1.050E+01
413	0.000E+00	0.000E+00	1.312E-02	0.000E+00	1.502E-02	1.458E-03	1.485E-04	1.134E-03	0.000E+00	9.642E+00
414	0.000E+00	0.000E+00	8.640E-03	0.000E+00	9.836E-03	1.317E-03	9.792E-05	7.481E-04	0.000E+00	7.932E+00
415	0.000E+00	0.000E+00	9.822E-03	0.000E+00	1.038E-02	1.101E-03	1.073E-04	8.508E-04	0.000E+00	6.655E+00
416	0.000E+00	0.000E+00	1.035E-02	0.000E+00	1.183E-02	8.224E-04	1.174E-04	8.962E-04	0.000E+00	9.259E+00
417	0.000E+00	0.000E+00	7.875E-03	0.000E+00	8.002E-03	9.093E-04	8.466E-05	6.827E-04	0.000E+00	7.495E+00
418	0.000E+00	0.000E+00	1.187E-02	0.000E+00	1.323E-02	9.349E-04	1.324E-04	1.023E-03	0.000E+00	6.566E+00
419	0.000E+00	0.000E+00	9.039E-03	0.000E+00	9.875E-03	7.668E-04	9.988E-05	7.788E-04	0.000E+00	9.180E+00
420	0.000E+00	0.000E+00	2.169E-02	0.000E+00	2.391E-02	8.714E-04	2.406E-04	1.869E-03	0.000E+00	7.436E+00
421	0.000E+00	0.000E+00	3.331E-02	0.000E+00	3.778E-02	1.204E-03	3.750E-04	2.878E-03	0.000E+00	6.928E+00
422	0.000E+00	0.000E+00	3.558E-02	0.000E+00	4.002E-02	1.249E-03	3.985E-04	3.069E-03	0.000E+00	9.765E+00
423	0.000E+00	0.000E+00	3.337E-02	0.000E+00	3.799E-02	1.355E-03	3.776E-04	2.886E-03	0.000E+00	8.290E+00
424	0.000E+00	0.000E+00	3.265E-02	0.000E+00	3.670E-02	1.146E-03	3.657E-04	2.817E-03	0.000E+00	7.449E+00
425	0.000E+00	0.000E+00	4.793E-02	0.000E+00	5.470E-02	1.681E-03	5.407E-04	4.144E-03	0.000E+00	1.004E+01
426	0.000E+00	0.000E+00	4.599E-02	0.000E+00	5.264E-02	1.746E-03	5.208E-04	3.991E-03	0.000E+00	8.729E+00
427	0.000E+00	0.000E+00	4.400E-02	0.000E+00	4.988E-02	1.817E-03	4.955E-04	3.795E-03	0.000E+00	7.742E+00
428	0.000E+00	0.000E+00	5.173E-02	0.000E+00	5.898E-02	2.275E-03	5.877E-04	4.462E-03	0.000E+00	1.005E+01
429	0.000E+00	0.000E+00	4.943E-02	0.000E+00	5.628E-02	2.183E-03	5.612E-04	4.263E-03	0.000E+00	8.755E+00
430	0.000E+00	0.000E+00	4.689E-02	0.000E+00	5.332E-02	2.020E-03	5.315E-04	4.044E-03	0.000E+00	7.929E+00
431	0.000E+00	0.000E+00	3.830E-02	0.000E+00	4.336E-02	1.375E-03	4.306E-04	3.303E-03	0.000E+00	1.110E+01
432	0.000E+00	0.000E+00	3.627E-02	0.000E+00	4.109E-02	1.307E-03	4.079E-04	3.128E-03	0.000E+00	8.533E+00
433	0.000E+00	0.000E+00	3.404E-02	0.000E+00	3.856E-02	1.230E-03	3.828E-04	2.935E-03	0.000E+00	7.705E+00
434	0.000E+00	0.000E+00	2.375E-02	0.000E+00	2.684E-02	8.312E-04	2.666E-04	2.048E-03	0.000E+00	1.422E+01
435	0.000E+00	0.000E+00	1.991E-02	0.000E+00	2.228E-02	6.973E-04	2.224E-04	1.717E-03	0.000E+00	1.126E+01
436	0.000E+00	0.000E+00	1.694E-02	0.000E+00	1.874E-02	5.935E-04	1.882E-04	1.460E-03	0.000E+00	8.968E+00
437	0.000E+00	0.000E+00	1.599E-02	0.000E+00	1.809E-02	5.596E-04	1.796E-04	1.379E-03	0.000E+00	1.450E+01
438	0.000E+00	0.000E+00	1.370E-02	0.000E+00	1.540E-02	4.917E-04	1.535E-04	1.182E-03	0.000E+00	1.171E+01
439	0.000E+00	0.000E+00	1.118E-02	0.000E+00	1.245E-02	4.903E-04	1.256E-04	9.646E-04	0.000E+00	1.035E+01
440	0.000E+00	0.000E+00	1.431E-02	0.000E+00	1.620E-02	5.010E-04	1.608E-04	1.234E-03	0.000E+00	1.359E+01
441	0.000E+00	0.000E+00	1.640E-02	0.000E+00	1.861E-02	5.741E-04	1.845E-04	1.415E-03	0.000E+00	1.218E+01
442	0.000E+00	0.000E+00	1.616E-02	0.000E+00	1.831E-02	5.660E-04	1.816E-04	1.394E-03	0.000E+00	1.021E+01
443	0.000E+00	0.000E+00	1.352E-02	0.000E+00	1.532E-02	5.964E-04	1.520E-04	1.166E-03	0.000E+00	1.380E+01
444	0.000E+00	0.000E+00	1.312E-02	0.000E+00	1.488E-02	6.000E-04	1.475E-04	1.131E-03	0.000E+00	1.167E+01
445	0.000E+00	0.000E+00	1.121E-02	0.000E+00	1.263E-02	3.940E-04	1.257E-04	9.664E-04	0.000E+00	1.048E+01
446	0.000E+00	0.000E+00	1.175E-02	0.000E+00	1.307E-02	4.116E-04	1.309E-04	1.012E-03	0.000E+00	1.314E+01
447	0.000E+00	0.000E+00	1.205E-02	0.000E+00	1.360E-02	4.227E-04	1.352E-04	1.039E-03	0.000E+00	1.151E+01
448	0.000E+00	0.000E+00	1.117E-02	0.000E+00	1.261E-02	4.045E-04	1.255E-04			

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Pb	Mn	Bg	NI	NAPTH	PAH	PROPL	Se	TOL	XYLEN
1	8.597E-03	2.296E-02	0.000E+00	7.600E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	6.406E-03	1.708E-02	0.000E+00	5.664E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	6.530E-03	1.740E-02	0.000E+00	5.773E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	1.103E-02	2.936E-02	0.000E+00	9.725E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	1.067E-02	2.840E-02	0.000E+00	9.408E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	1.041E-02	2.770E-02	0.000E+00	9.174E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	8.101E-03	2.152E-02	0.000E+00	7.147E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	7.874E-03	2.099E-02	0.000E+00	6.960E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	8.225E-03	2.189E-02	0.000E+00	7.266E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	1.255E-02	3.357E-02	0.000E+00	1.111E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	7.160E-03	1.908E-02	0.000E+00	6.318E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	1.660E-02	4.415E-02	0.000E+00	1.463E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	3.314E-02	8.809E-02	0.000E+00	2.919E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	3.414E-02	9.074E-02	0.000E+00	3.007E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	3.454E-02	9.176E-02	0.000E+00	3.041E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	3.505E-02	9.310E-02	0.000E+00	3.083E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	1.185E-02	3.159E-02	0.000E+00	1.046E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	9.280E-03	2.471E-02	0.000E+00	8.185E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	1.046E-02	2.786E-02	0.000E+00	9.225E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	1.076E-02	2.866E-02	0.000E+00	9.491E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	2.650E-02	7.189E-02	0.000E+00	2.371E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	2.468E-02	6.686E-02	0.000E+00	2.206E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
23	2.788E-02	7.741E-02	0.000E+00	2.558E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
24	3.705E-02	9.911E-02	0.000E+00	3.279E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
25	3.884E-02	1.039E-01	0.000E+00	3.437E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
26	3.418E-02	9.087E-02	0.000E+00	3.011E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
27	2.578E-02	6.790E-02	0.000E+00	2.254E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
28	2.641E-02	7.049E-02	0.000E+00	2.334E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
29	4.121E-02	1.103E-01	0.000E+00	3.650E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
30	4.707E-02	1.257E-01	0.000E+00	4.160E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
31	4.497E-02	1.199E-01	0.000E+00	3.970E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
32	3.719E-02	9.899E-02	0.000E+00	3.279E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
33	3.502E-02	9.299E-02	0.000E+00	3.082E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
34	3.538E-02	9.402E-02	0.000E+00	3.115E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
35	2.435E-02	6.496E-02	0.000E+00	2.151E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
36	2.003E-02	5.339E-02	0.000E+00	1.768E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
37	2.174E-02	5.772E-02	0.000E+00	1.913E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
38	1.111E-02	2.963E-02	0.000E+00	9.811E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
39	1.199E-02	3.196E-02	0.000E+00	1.058E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
40	1.300E-02	3.468E-02	0.000E+00	1.148E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
41	1.670E-02	4.456E-02	0.000E+00	1.475E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	1.728E-02	4.628E-02	0.000E+00	1.531E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	9.188E-03	2.477E-02	0.000E+00	8.181E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	6.497E-03	1.767E-02	0.000E+00	5.759E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	8.256E-03	2.217E-02	0.000E+00	7.330E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
46	7.759E-03	2.092E-02	0.000E+00	6.911E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
47	8.748E-03	2.673E-02	0.000E+00	8.481E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
48	1.145E-02	3.073E-02	0.000E+00	1.018E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
49	9.307E-03	2.529E-02	0.000E+00	8.380E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
50	1.102E-02	2.989E-02	0.000E+00	9.931E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
51	1.080E-02	2.902E-02	0.000E+00	9.659E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
52	9.114E-03	2.445E-02	0.000E+00	8.128E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
53	7.161E-03	1.926E-02	0.000E+00	6.367E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
54	7.514E-03	2.024E-02	0.000E+00	6.700E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
55	9.208E-03	2.461E-02	0.000E+00	8.193E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
56	1.060E-02	2.836E-02	0.000E+00	9.431E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
57	1.165E-02	3.102E-02	0.000E+00	1.029E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
58	1.252E-02	3.325E-02	0.000E+00	1.102E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
59	1.380E-02	3.660E-02	0.000E+00	1.216E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
60	1.614E-02	4.278E-02	0.000E+00	1.421E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
61	2.867E-02	7.678E-02	0.000E+00	2.550E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
62	3.124E-02	8.404E-02	0.000E+00	2.788E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
63	2.078E-02	5.520E-02	0.000E+00	1.833E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
64	1.877E-02	4.998E-02	0.000E+00	1.655E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
65	1.434E-02	4.152E-02	0.000E+00	1.366E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
66	1.631E-02	4.385E-02	0.000E+00	1.453E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
67	1.375E-02	3.724E-02	0.000E+00	1.229E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
68	1.252E-02	3.409E-02	0.000E+00	1.124E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
69	1.355E-02	4.999E-02	0.000E+00	1.651E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
70	2.204E-02	5.915E-02	0.000E+00	1.956E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
71	3.069E-02	8.412E-02	0.000E+00	2.785E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
72	1.695E-02	4.527E-02	0.000E+00	1.498E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
73	1.142E-02	3.062E-02	0.000E+00	1.013E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
74	1.436E-02	3.830E-02	0.000E+00	1.271E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
75	1.134E-02	3.029E-02	0.000E+00	1.004E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
76	1.162E-02	3.110E-02	0.000E+00	1.029E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
77	1.283E-02	3.428E-02	0.000E+00	1.135E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
78	1.267E-02	3.373E-02	0.000E+00	1.117E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
79	1.419E-02	3.777E-02	0.000E+00	1.251E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
80	1.464E-02	3.901E-02	0.000E+00	1.292E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
81	1.354E-02	3.623E-02	0.000E+00	1.199E-03						

91	1.131E-02	3.021E-02	0.000E+00	1.002E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
92	1.174E-02	3.133E-02	0.000E+00	1.040E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
93	1.124E-02	3.002E-02	0.000E+00	9.962E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
94	1.166E-02	3.096E-02	0.000E+00	1.027E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
95	1.242E-02	3.296E-02	0.000E+00	1.094E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
96	1.264E-02	3.388E-02	0.000E+00	1.121E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
97	1.507E-02	4.022E-02	0.000E+00	1.332E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
98	1.711E-02	4.592E-02	0.000E+00	1.518E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
99	1.467E-02	3.900E-02	0.000E+00	1.294E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	1.559E-02	4.175E-02	0.000E+00	1.381E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
101	1.441E-02	3.841E-02	0.000E+00	1.272E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
102	1.624E-02	4.321E-02	0.000E+00	1.434E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
103	1.156E-02	3.091E-02	0.000E+00	1.026E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
104	1.097E-02	2.934E-02	0.000E+00	9.742E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
105	1.159E-02	3.078E-02	0.000E+00	1.021E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
106	1.263E-02	3.353E-02	0.000E+00	1.113E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
107	1.400E-02	3.751E-02	0.000E+00	1.241E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
108	1.371E-02	4.197E-02	0.000E+00	1.390E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
109	1.678E-02	4.468E-02	0.000E+00	1.481E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
110	1.637E-02	4.351E-02	0.000E+00	1.444E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
111	1.381E-02	3.667E-02	0.000E+00	1.219E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
112	1.560E-02	4.156E-02	0.000E+00	1.376E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
113	1.792E-02	4.762E-02	0.000E+00	1.578E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
114	1.873E-02	4.972E-02	0.000E+00	1.650E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
115	1.056E-02	2.832E-02	0.000E+00	9.405E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
116	1.143E-02	3.038E-02	0.000E+00	1.008E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
117	1.276E-02	3.388E-02	0.000E+00	1.124E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
118	1.489E-02	3.993E-02	0.000E+00	1.321E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
119	1.743E-02	4.660E-02	0.000E+00	1.543E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
120	1.841E-02	4.905E-02	0.000E+00	1.626E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
121	1.741E-02	4.630E-02	0.000E+00	1.536E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
122	1.537E-02	4.083E-02	0.000E+00	1.357E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
123	1.665E-02	4.434E-02	0.000E+00	1.469E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
124	1.860E-02	4.943E-02	0.000E+00	1.638E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
125	1.941E-02	5.152E-02	0.000E+00	1.710E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
126	2.019E-02	5.355E-02	0.000E+00	1.778E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
127	1.120E-02	2.980E-02	0.000E+00	9.879E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
128	1.281E-02	3.404E-02	0.000E+00	1.129E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
129	1.536E-02	4.127E-02	0.000E+00	1.364E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
130	1.703E-02	4.565E-02	0.000E+00	1.513E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
131	1.547E-02	4.138E-02	0.000E+00	1.372E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
132	1.907E-02	5.071E-02	0.000E+00	1.683E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
133	1.663E-02	4.165E-02	0.000E+00	1.467E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
134	1.696E-02	4.518E-02	0.000E+00	1.496E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
135	1.847E-02	4.911E-02	0.000E+00	1.627E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
136	2.535E-02	6.870E-02	0.000E+00	2.278E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
137	2.140E-02	5.694E-02	0.000E+00	1.890E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
138	2.188E-02	5.924E-02	0.000E+00	1.966E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
139	1.281E-02	3.412E-02	0.000E+00	1.132E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
140	1.526E-02	4.119E-02	0.000E+00	1.360E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
141	1.746E-02	4.698E-02	0.000E+00	1.556E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
142	1.828E-02	5.230E-02	0.000E+00	1.721E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
143	1.703E-02	4.837E-02	0.000E+00	1.594E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
144	1.699E-02	4.517E-02	0.000E+00	1.501E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
145	1.803E-02	4.801E-02	0.000E+00	1.590E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
146	1.907E-02	5.069E-02	0.000E+00	1.679E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
147	2.191E-02	5.811E-02	0.000E+00	1.929E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
148	2.773E-02	7.518E-02	0.000E+00	2.491E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
149	2.859E-02	7.714E-02	0.000E+00	2.558E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
150	2.770E-02	7.457E-02	0.000E+00	2.474E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
151	1.970E-02	5.237E-02	0.000E+00	1.735E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
152	2.687E-02	7.307E-02	0.000E+00	2.422E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
153	3.042E-02	8.232E-02	0.000E+00	2.728E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
154	2.009E-02	5.326E-02	0.000E+00	1.766E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
155	2.965E-02	7.956E-02	0.000E+00	2.640E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
156	2.795E-02	7.496E-02	0.000E+00	2.489E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
157	1.337E-02	3.564E-02	0.000E+00	1.183E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
158	1.156E-02	3.143E-02	0.000E+00	1.040E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
159	7.259E-03	1.943E-02	0.000E+00	6.428E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
160	9.374E-03	2.536E-02	0.000E+00	8.369E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
161	9.617E-03	2.563E-02	0.000E+00	8.497E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
162	9.649E-03	2.566E-02	0.000E+00	8.518E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
163	1.061E-02	2.817E-02	0.000E+00	9.356E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
164	1.071E-02	2.883E-02	0.000E+00	9.526E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
165	1.641E-02	4.382E-02	0.000E+00	1.451E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
166	1.769E-02	4.704E-02	0.000E+00	1.559E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
167	1.489E-02	3.960E-02	0.000E+00	1.312E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
168	9.476E-03	2.537E-02	0.000E+00	8.392E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
169	7.910E-03	2.119E-02	0.000E+00	7.009E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
170	1.032E-02	2.752E-02	0.000E+00	9.123E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
171	1.014E-02	2.705E-02	0.000E+00	8.968E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

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382	1.122E-02	2.971E-02	0.000E+00	9.876E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
383	2.947E-02	7.819E-02	0.000E+00	2.592E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
384	3.553E-02	9.449E-02	0.000E+00	3.130E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	3.062E-02	8.148E-02	0.000E+00	2.699E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	2.186E-02	5.807E-02	0.000E+00	1.924E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	1.354E-02	3.602E-02	0.000E+00	1.193E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
388	1.209E-02	3.232E-02	0.000E+00	1.070E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
389	1.290E-02	3.449E-02	0.000E+00	1.141E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	4.411E-03	1.195E-02	0.000E+00	3.942E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	4.434E-03	1.176E-02	0.000E+00	3.912E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	4.896E-03	1.301E-02	0.000E+00	4.322E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	5.114E-03	1.361E-02	0.000E+00	4.517E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	6.429E-03	1.710E-02	0.000E+00	5.682E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	5.868E-03	1.560E-02	0.000E+00	5.188E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	5.309E-03	1.416E-02	0.000E+00	4.700E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	6.056E-03	1.614E-02	0.000E+00	5.362E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	6.327E-03	1.734E-02	0.000E+00	5.752E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	9.622E-03	2.554E-02	0.000E+00	8.472E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	8.543E-03	2.266E-02	0.000E+00	7.544E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	1.342E-02	3.584E-02	0.000E+00	1.186E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	2.895E-02	7.717E-02	0.000E+00	2.555E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	3.533E-02	9.389E-02	0.000E+00	3.111E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	2.711E-02	7.220E-02	0.000E+00	2.391E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	1.886E-02	5.015E-02	0.000E+00	1.662E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	1.113E-02	2.964E-02	0.000E+00	9.818E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	1.050E-02	2.793E-02	0.000E+00	9.252E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	1.061E-02	2.834E-02	0.000E+00	9.380E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
409	1.122E-02	2.998E-02	0.000E+00	9.923E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
410	3.909E-03	1.061E-02	0.000E+00	3.493E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	3.987E-03	1.079E-02	0.000E+00	3.560E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
412	3.869E-03	1.034E-02	0.000E+00	3.421E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
413	8.743E-03	2.321E-02	0.000E+00	7.708E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
414	5.732E-03	1.524E-02	0.000E+00	5.070E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
415	6.151E-03	1.671E-02	0.000E+00	5.547E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
416	6.885E-03	1.829E-02	0.000E+00	6.086E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
417	4.786E-03	1.315E-02	0.000E+00	4.364E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
418	7.749E-03	2.073E-02	0.000E+00	6.864E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
419	5.810E-03	1.564E-02	0.000E+00	5.169E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
420	1.404E-02	3.768E-02	0.000E+00	1.246E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
421	2.204E-02	5.867E-02	0.000E+00	1.946E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
422	2.339E-02	6.240E-02	0.000E+00	2.067E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
423	2.214E-02	5.886E-02	0.000E+00	1.956E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
424	2.145E-02	5.726E-02	0.000E+00	1.897E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
425	3.186E-02	8.467E-02	0.000E+00	2.812E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
426	3.064E-02	8.136E-02	0.000E+00	2.713E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
427	2.910E-02	7.749E-02	0.000E+00	2.566E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
428	3.436E-02	9.134E-02	0.000E+00	3.026E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
429	3.280E-02	8.721E-02	0.000E+00	2.889E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
430	3.108E-02	8.268E-02	0.000E+00	2.739E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
431	2.530E-02	6.738E-02	0.000E+00	2.232E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	2.397E-02	6.383E-02	0.000E+00	2.114E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	2.249E-02	5.990E-02	0.000E+00	1.984E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	1.567E-02	4.175E-02	0.000E+00	1.383E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	1.303E-02	3.484E-02	0.000E+00	1.153E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
436	1.099E-02	2.948E-02	0.000E+00	9.749E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	1.056E-02	2.812E-02	0.000E+00	9.313E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	9.001E-03	2.402E-02	0.000E+00	7.953E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	7.294E-03	1.952E-02	0.000E+00	6.464E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	9.452E-03	2.518E-02	0.000E+00	8.338E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	1.086E-02	2.889E-02	0.000E+00	9.570E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	1.068E-02	2.845E-02	0.000E+00	9.422E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	8.938E-03	2.380E-02	0.000E+00	7.883E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	8.677E-03	2.310E-02	0.000E+00	7.651E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	7.379E-03	1.968E-02	0.000E+00	6.516E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	7.658E-03	2.049E-02	0.000E+00	6.781E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	7.943E-03	2.117E-02	0.000E+00	7.011E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	7.363E-03	1.963E-02	0.000E+00	6.501E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	9.667E-03	2.583E-02	0.000E+00	8.548E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	8.140E-03	2.172E-02	0.000E+00	7.192E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	6.746E-03	1.801E-02	0.000E+00	5.963E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 73

*** PREDICTED PEAK 1-HOUR CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Zn	NTXPM
1	1.721E-03	2.918E+02
2	1.276E-03	2.174E+02
3	1.300E-03	2.216E+02
4	2.188E-03	3.738E+02
5	2.134E-03	

7	1.599E-03	2.746E+02
8	1.568E-03	2.672E+02
9	1.631E-03	2.793E+02
10	2.522E-03	4.261E+02
11	1.424E-03	2.424E+02
12	3.285E-03	5.627E+02
13	6.553E-03	1.122E+03
14	6.745E-03	1.156E+03
15	6.819E-03	1.169E+03
16	6.914E-03	1.185E+03
17	2.361E-03	4.020E+02
18	1.844E-03	3.146E+02
19	2.079E-03	3.545E+02
20	2.139E-03	3.649E+02
21	5.519E-03	9.089E+02
22	5.122E-03	8.445E+02
23	5.866E-03	9.796E+02
24	7.448E-03	1.261E+03
25	7.801E-03	1.323E+03
26	6.762E-03	1.159E+03
27	4.977E-03	8.669E+02
28	5.276E-03	8.944E+02
29	8.296E-03	1.398E+03
30	9.408E-03	1.594E+03
31	8.954E-03	1.522E+03
32	7.384E-03	1.258E+03
33	6.902E-03	1.184E+03
34	6.991E-03	1.198E+03
35	4.860E-03	8.267E+02
36	3.989E-03	6.799E+02
37	4.288E-03	7.369E+02
38	2.215E-03	3.772E+02
39	2.389E-03	4.069E+02
40	2.595E-03	4.417E+02
41	3.335E-03	5.679E+02
42	3.487E-03	5.897E+02
43	2.035E-03	3.152E+02
44	1.800E-03	2.208E+02
45	2.179E-03	2.812E+02
46	2.156E-03	2.643E+02
47	2.877E-03	3.192E+02
48	2.681E-03	3.895E+02
49	2.700E-03	3.186E+02
50	2.294E-03	3.778E+02
51	2.194E-03	3.695E+02
52	1.844E-03	3.113E+02
53	1.637E-03	2.442E+02
54	1.544E-03	2.568E+02
55	1.847E-03	3.142E+02
56	2.130E-03	3.621E+02
57	2.313E-03	3.958E+02
58	2.470E-03	4.241E+02
59	2.713E-03	4.677E+02
60	3.167E-03	5.472E+02
61	5.793E-03	9.844E+02
62	6.396E-03	1.077E+03
63	4.099E-03	7.053E+02
64	3.725E-03	6.355E+02
65	3.508E-03	5.239E+02
66	3.319E-03	5.561E+02
67	2.850E-03	4.678E+02
68	2.633E-03	4.275E+02
69	3.913E-03	6.305E+02
70	4.467E-03	7.477E+02
71	6.558E-03	1.056E+03
72	3.393E-03	5.750E+02
73	2.309E-03	3.886E+02
74	2.864E-03	4.881E+02
75	2.270E-03	3.854E+02
76	2.338E-03	3.949E+02
77	2.570E-03	4.357E+02
78	2.515E-03	4.291E+02
79	2.814E-03	4.807E+02
80	2.912E-03	4.961E+02
81	2.722E-03	4.595E+02
82	2.623E-03	4.381E+02
83	2.923E-03	4.869E+02
84	3.026E-03	5.044E+02
85	4.174E-03	6.928E+02
86	8.826E-03	1.457E+03
87	7.926E-03	1.322E+03
88	7.585E-03	1.276E+03
89	7.289E-03	1.231E+03
90	6.468E-03	1.092E+03
91	2.265E-03	3.845E+02
92	2.345E-03	3.990E+02
93	2.250E-03	3.822E+02
94	2.298E-03	3.946E+02
95	2.444E-03	4.205E+02
96	2.551E-03	4.295E+02
97	3.010E-03	5.112E+02
98	3.468E-03	5.811E+02
99	2.901E-03	4.978E+02
100	3.143E-03	5.304E+02
101	2.868E-03	4.877E+02
102	3.216E-03	5.505E+02
103	2.320E-03	3.933E+02

104	2.205E-03	3.736E+02
105	2.285E-03	3.921E+02
106	2.487E-03	4.276E+02
107	2.824E-03	4.754E+02
108	3.146E-03	5.331E+02
109	3.333E-03	5.689E+02
110	3.236E-03	5.554E+02
111	2.724E-03	4.690E+02
112	3.100E-03	5.279E+02
113	3.540E-03	6.060E+02
114	3.690E-03	6.344E+02
115	2.136E-03	3.603E+02
116	2.258E-03	3.868E+02
117	2.515E-03	4.319E+02
118	3.010E-03	5.057E+02
119	3.495E-03	5.916E+02
120	3.660E-03	6.244E+02
121	3.445E-03	5.906E+02
122	3.032E-03	5.222E+02
123	3.306E-03	5.635E+02
124	3.673E-03	6.291E+02
125	3.823E-03	6.576E+02
126	3.967E-03	6.840E+02
127	2.220E-03	3.790E+02
128	2.530E-03	4.334E+02
129	3.120E-03	5.219E+02
130	3.440E-03	5.794E+02
131	3.109E-03	5.265E+02
132	3.774E-03	6.468E+02
133	3.280E-03	5.646E+02
134	3.369E-03	5.742E+02
135	3.652E-03	6.252E+02
136	5.279E-03	8.812E+02
137	4.379E-03	7.313E+02
138	4.546E-03	7.604E+02
139	2.603E-03	4.342E+02
140	3.136E-03	5.191E+02
141	3.562E-03	5.947E+02
142	4.374E-03	6.545E+02
143	3.998E-03	6.108E+02
144	3.360E-03	5.773E+02
145	3.580E-03	6.103E+02
146	3.769E-03	6.455E+02
147	4.434E-03	7.422E+02
148	5.784E-03	9.639E+02
149	5.885E-03	9.887E+02
150	5.670E-03	9.557E+02
151	3.895E-03	6.670E+02
152	5.644E-03	9.378E+02
153	6.310E-03	1.055E+03
154	3.944E-03	6.791E+02
155	6.026E-03	1.019E+03
156	5.666E-03	9.610E+02
157	2.664E-03	4.542E+02
158	2.420E-03	3.967E+02
159	1.461E-03	2.466E+02
160	1.939E-03	3.209E+02
161	1.914E-03	3.263E+02
162	1.909E-03	3.272E+02
163	2.090E-03	3.596E+02
164	2.185E-03	3.637E+02
165	3.280E-03	5.564E+02
166	3.501E-03	5.993E+02
167	2.946E-03	5.038E+02
168	1.908E-03	3.221E+02
169	1.596E-03	2.688E+02
170	2.058E-03	3.502E+02
171	2.022E-03	3.443E+02
172	2.222E-03	3.821E+02
173	2.309E-03	3.830E+02
174	3.262E-03	5.515E+02
175	3.139E-03	5.356E+02
176	3.290E-03	5.641E+02
177	3.500E-03	6.032E+02
178	2.274E-03	3.875E+02
179	1.738E-03	2.917E+02
180	2.343E-03	3.992E+02
181	2.294E-03	3.942E+02
182	2.949E-03	5.009E+02
183	3.170E-03	5.331E+02
184	2.840E-03	4.835E+02
185	3.705E-03	6.370E+02
186	3.614E-03	6.238E+02
187	3.395E-03	5.841E+02
188	2.984E-03	5.006E+02
189	1.933E-03	3.248E+02
190	2.274E-03	3.898E+02
191	3.210E-03	5.421E+02
192	3.338E-03	5.726E+02
193	3.411E-03	5.827E+02
194	3.933E-03	6.778E+02
195	3.584E-03	6.193E+02
196	3.547E-03	6.114E+02
197	3.144E-03	5.425E+02
198	3.639E-03	6.042E+02
199	2.178E-03	3.698E+02
200	3.417E-03	5.692E+02

201	3.596E-03	6.143E+02
202	5.597E-03	9.475E+02
203	3.448E-03	5.956E+02
204	2.826E-03	4.876E+02
205	2.580E-03	4.437E+02
206	2.225E-03	3.796E+02
207	2.053E-03	3.495E+02
208	1.083E-03	1.805E+02
209	1.368E-03	2.321E+02
210	1.521E-03	2.573E+02
211	1.287E-03	2.211E+02
212	1.709E-03	2.912E+02
213	1.981E-03	3.363E+02
214	1.572E-03	2.654E+02
215	2.006E-03	3.419E+02
216	1.913E-03	3.264E+02
217	2.028E-03	3.460E+02
218	1.808E-03	3.085E+02
219	2.370E-03	4.000E+02
220	1.413E-03	2.385E+02
221	8.438E-04	1.420E+02
222	1.138E-03	1.942E+02
223	1.330E-03	2.283E+02
224	1.440E-03	2.469E+02
225	1.462E-03	2.499E+02
226	1.654E-03	2.796E+02
227	1.565E-03	2.644E+02
228	1.355E-03	2.271E+02
229	1.360E-03	2.309E+02
230	1.627E-03	2.757E+02
231	1.413E-03	2.420E+02
232	1.885E-03	3.206E+02
233	2.063E-03	3.502E+02
234	1.811E-03	3.078E+02
235	2.021E-03	3.452E+02
236	2.119E-03	3.615E+02
237	1.880E-03	3.208E+02
238	2.381E-03	4.005E+02
239	1.398E-03	2.361E+02
240	1.242E-03	2.113E+02
241	1.304E-03	2.230E+02
242	1.540E-03	2.639E+02
243	1.509E-03	2.573E+02
244	1.894E-03	3.205E+02
245	2.113E-03	3.619E+02
246	1.316E-03	2.238E+02
247	1.606E-03	2.723E+02
248	1.620E-03	2.732E+02
249	1.328E-03	2.254E+02
250	1.743E-03	2.959E+02
251	1.528E-03	2.606E+02
252	2.116E-03	3.597E+02
253	2.027E-03	3.441E+02
254	2.198E-03	3.756E+02
255	2.175E-03	3.709E+02
256	1.954E-03	3.334E+02
257	2.340E-03	3.914E+02
258	1.414E-03	2.391E+02
259	1.418E-03	2.420E+02
260	1.582E-03	2.706E+02
261	1.524E-03	2.624E+02
262	2.203E-03	3.730E+02
263	2.321E-03	3.980E+02
264	2.720E-03	4.662E+02
265	1.693E-03	2.857E+02
266	1.544E-03	2.593E+02
267	1.505E-03	2.556E+02
268	1.806E-03	3.059E+02
269	1.504E-03	2.522E+02
270	1.867E-03	3.175E+02
271	1.665E-03	2.829E+02
272	2.401E-03	4.089E+02
273	2.386E-03	4.063E+02
274	2.104E-03	3.592E+02
275	2.030E-03	3.460E+02
276	2.239E-03	3.711E+02
277	1.459E-03	2.475E+02
278	1.721E-03	2.951E+02
279	1.784E-03	3.072E+02
280	2.621E-03	4.440E+02
281	2.531E-03	4.344E+02
282	3.029E-03	5.212E+02
283	2.681E-03	4.588E+02
284	1.719E-03	2.928E+02
285	1.841E-03	3.122E+02
286	1.879E-03	3.175E+02
287	1.741E-03	2.928E+02
288	1.815E-03	3.085E+02
289	1.902E-03	3.215E+02
290	1.994E-03	3.397E+02
291	1.928E-03	3.271E+02
292	4.123E-03	6.734E+02
293	2.481E-03	4.208E+02
294	3.138E-03	5.416E+02
295	3.065E-03	5.275E+02
296	2.595E-03	4.463E+02
297	1.362E-03	2.348E+02

298	1.566E-03	2.685E+02
299	1.757E-03	2.995E+02
300	1.959E-03	3.327E+02
301	2.114E-03	3.580E+02
302	2.017E-03	3.400E+02
303	2.190E-03	3.718E+02
304	2.120E-03	3.612E+02
305	2.478E-03	4.209E+02
306	2.918E-03	5.032E+02
307	2.484E-03	4.268E+02
308	2.251E-03	3.856E+02
309	9.994E-04	1.664E+02
310	1.117E-03	1.940E+02
311	1.351E-03	2.336E+02
312	1.527E-03	2.622E+02
313	1.716E-03	2.925E+02
314	2.031E-03	3.451E+02
315	2.402E-03	4.080E+02
316	2.410E-03	4.077E+02
317	2.558E-03	4.293E+02
318	2.247E-03	3.844E+02
319	1.953E-03	3.332E+02
320	1.424E-03	2.425E+02
321	2.063E-03	3.357E+02
322	2.101E-03	3.413E+02
323	2.139E-03	3.467E+02
324	2.173E-03	3.514E+02
325	2.197E-03	3.546E+02
326	2.206E-03	3.584E+02
327	2.519E-03	4.247E+02
328	2.890E-03	4.867E+02
329	3.263E-03	5.465E+02
330	1.590E-03	2.700E+02
331	1.563E-03	2.649E+02
332	1.583E-03	2.683E+02
333	5.303E-03	8.956E+02
334	5.533E-03	9.357E+02
335	5.775E-03	9.779E+02
336	6.025E-03	1.021E+03
337	6.269E-03	1.064E+03
338	6.474E-03	1.099E+03
339	6.578E-03	1.116E+03
340	6.428E-03	1.088E+03
341	2.029E-03	2.620E+02
342	1.758E-03	2.987E+02
343	1.782E-03	3.042E+02
344	1.647E-03	2.819E+02
345	1.433E-03	2.459E+02
346	6.184E-03	1.050E+03
347	6.238E-03	1.058E+03
348	6.281E-03	1.065E+03
349	6.325E-03	1.073E+03
350	6.392E-03	1.084E+03
351	6.513E-03	1.105E+03
352	6.728E-03	1.141E+03
353	7.035E-03	1.192E+03
354	1.936E-03	2.645E+02
355	1.418E-03	2.183E+02
356	1.179E-03	1.960E+02
357	1.051E-03	1.807E+02
358	9.805E-04	1.686E+02
359	4.796E-03	8.244E+02
360	4.781E-03	8.229E+02
361	4.751E-03	8.190E+02
362	4.698E-03	8.112E+02
363	4.615E-03	7.983E+02
364	4.515E-03	7.824E+02
365	4.417E-03	7.669E+02
366	4.303E-03	7.489E+02
367	4.378E-03	7.628E+02
368	3.728E-03	6.388E+02
369	2.094E-03	3.481E+02
370	1.612E-03	2.015E+02
371	1.414E-03	2.377E+02
372	1.314E-03	2.199E+02
373	1.186E-03	2.002E+02
374	1.086E-03	1.838E+02
375	1.391E-03	2.373E+02
376	1.494E-03	2.553E+02
377	1.555E-03	2.663E+02
378	1.555E-03	2.669E+02
379	1.456E-03	2.504E+02
380	1.405E-03	2.388E+02
381	1.914E-03	3.287E+02
382	2.197E-03	3.800E+02
383	5.795E-03	9.959E+02
384	7.029E-03	1.201E+03
385	6.072E-03	1.037E+03
386	4.315E-03	7.411E+02
387	2.681E-03	4.588E+02
388	2.425E-03	4.112E+02
389	2.588E-03	4.383E+02
390	1.180E-03	1.511E+02
391	1.103E-03	1.504E+02
392	1.035E-03	1.661E+02
393	1.014E-03	1.735E+02
394	1.273E-03	2.183E+02

395	1.160E-03	1.994E+02
396	1.059E-03	1.805E+02
397	1.205E-03	2.061E+02
398	1.289E-03	2.211E+02
399	1.894E-03	3.257E+02
400	1.679E-03	2.902E+02
401	2.682E-03	4.543E+02
402	5.763E-03	9.795E+02
403	6.980E-03	1.194E+03
404	5.387E-03	9.191E+02
405	3.731E-03	6.392E+02
406	2.211E-03	3.774E+02
407	2.080E-03	3.557E+02
408	2.122E-03	3.605E+02
409	2.248E-03	3.810E+02
410	9.816E-04	1.337E+02
411	9.572E-04	1.362E+02
412	9.077E-04	1.313E+02
413	1.722E-03	2.963E+02
414	1.134E-03	1.949E+02
415	1.287E-03	2.131E+02
416	1.358E-03	2.340E+02
417	1.031E-03	1.679E+02
418	1.557E-03	2.625E+02
419	1.186E-03	1.971E+02
420	2.845E-03	4.767E+02
421	4.373E-03	7.475E+02
422	4.670E-03	7.938E+02
423	4.381E-03	7.519E+02
424	4.286E-03	7.265E+02
425	6.293E-03	1.080E+03
426	6.039E-03	1.042E+03
427	5.777E-03	9.841E+02
428	6.792E-03	1.162E+03
429	6.489E-03	1.110E+03
430	6.156E-03	1.052E+03
431	5.028E-03	8.579E+02
432	4.761E-03	8.128E+02
433	4.468E-03	7.627E+02
434	3.117E-03	5.313E+02
435	2.613E-03	4.424E+02
436	2.223E-03	3.735E+02
437	2.099E-03	3.579E+02
438	1.799E-03	3.054E+02
439	1.467E-03	2.478E+02
440	1.879E-03	3.204E+02
441	2.153E-03	3.678E+02
442	2.121E-03	3.621E+02
443	1.775E-03	3.029E+02
444	1.722E-03	2.941E+02
445	1.471E-03	2.503E+02
446	1.541E-03	2.606E+02
447	1.582E-03	2.692E+02
448	1.466E-03	2.497E+02
449	1.936E-03	3.281E+02
450	1.626E-03	2.764E+02
451	1.349E-03	2.288E+02

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\qtspace.dat Output File: g:\beest\GQ\Qqtspace.OUT 11/14/96 07:44:58 Page - 82

*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	ACETA	ACROL	As	BENZE	Be	Cd	Cr	Cu	HCHO	HCN
1	0.000E+00	0.000E+00	7.239E-05	0.000E+00	3.944E-06	2.627E-06	4.423E-07	6.079E-06	0.000E+00	1.076E-01
2	0.000E+00	0.000E+00	1.096E-04	0.000E+00	5.270E-06	3.953E-06	6.660E-07	9.202E-06	0.000E+00	1.098E-01
3	0.000E+00	0.000E+00	1.089E-04	0.000E+00	5.191E-06	3.927E-06	6.614E-07	9.141E-06	0.000E+00	1.091E-01
4	0.000E+00	0.000E+00	1.408E-04	0.000E+00	7.126E-06	5.092E-06	8.572E-07	1.182E-05	0.000E+00	1.637E-01
5	0.000E+00	0.000E+00	1.420E-04	0.000E+00	7.204E-06	5.138E-06	8.652E-07	1.193E-05	0.000E+00	1.606E-01
6	0.000E+00	0.000E+00	1.289E-04	0.000E+00	6.673E-06	4.664E-06	7.858E-07	1.083E-05	0.000E+00	1.451E-01
7	0.000E+00	0.000E+00	1.142E-04	0.000E+00	5.800E-06	4.129E-06	6.958E-07	9.593E-06	0.000E+00	1.011E-01
8	0.000E+00	0.000E+00	1.146E-04	0.000E+00	6.402E-06	4.147E-06	7.007E-07	9.622E-06	0.000E+00	1.013E-01
9	0.000E+00	0.000E+00	1.189E-04	0.000E+00	6.927E-06	4.305E-06	7.283E-07	9.983E-06	0.000E+00	1.048E-01
10	0.000E+00	0.000E+00	1.509E-04	0.000E+00	7.754E-06	5.487E-06	9.200E-07	1.267E-05	0.000E+00	3.612E-01
11	0.000E+00	0.000E+00	6.166E-05	0.000E+00	3.279E-06	2.230E-06	3.762E-07	5.177E-06	0.000E+00	7.910E-02
12	0.000E+00	0.000E+00	2.668E-04	0.000E+00	1.516E-05	9.641E-06	1.633E-06	2.241E-05	0.000E+00	5.094E-01
13	0.000E+00	0.000E+00	1.142E-04	0.000E+00	8.511E-06	4.177E-06	7.087E-07	9.591E-06	0.000E+00	4.054E-01
14	0.000E+00	0.000E+00	1.151E-04	0.000E+00	8.585E-06	4.211E-06	7.147E-07	9.672E-06	0.000E+00	4.186E-01
15	0.000E+00	0.000E+00	1.121E-04	0.000E+00	8.405E-06	4.106E-06	6.964E-07	9.421E-06	0.000E+00	3.973E-01
16	0.000E+00	0.000E+00	1.276E-04	0.000E+00	9.458E-06	4.668E-06	7.916E-07	1.072E-05	0.000E+00	5.410E-01
17	0.000E+00	0.000E+00	6.810E-05	0.000E+00	3.722E-06	2.462E-06	4.160E-07	5.719E-06	0.000E+00	8.143E-02
18	0.000E+00	0.000E+00	1.023E-04	0.000E+00	6.142E-06	3.707E-06	6.275E-07	8.590E-06	0.000E+00	1.774E-01
19	0.000E+00	0.000E+00	1.012E-04	0.000E+00	6.909E-06	3.696E-06	6.249E-07	8.497E-06	0.000E+00	2.230E-01

20	0.000E+00	0.000E+00	1.419E-04	0.000E+00	9.434E-06	5.158E-06	8.753E-07	1.192E-05	0.000E+00	4.009E-01
21	0.000E+00	0.000E+00	1.035E-04	0.000E+00	8.160E-06	3.846E-06	6.451E-07	8.695E-06	0.000E+00	9.410E-01
22	0.000E+00	0.000E+00	9.621E-05	0.000E+00	8.317E-06	3.595E-06	6.035E-07	8.086E-06	0.000E+00	8.964E-01
23	0.000E+00	0.000E+00	9.588E-05	0.000E+00	8.483E-06	3.588E-06	6.024E-07	8.058E-06	0.000E+00	8.852E-01
24	0.000E+00	0.000E+00	9.326E-05	0.000E+00	8.311E-06	3.549E-06	5.978E-07	8.006E-06	0.000E+00	8.887E-01
25	0.000E+00	0.000E+00	9.606E-05	0.000E+00	8.094E-06	3.565E-06	6.013E-07	8.072E-06	0.000E+00	9.623E-01
26	0.000E+00	0.000E+00	1.022E-04	0.000E+00	6.960E-06	3.746E-06	6.312E-07	8.583E-06	0.000E+00	1.120E+00
27	0.000E+00	0.000E+00	1.050E-04	0.000E+00	6.450E-06	3.826E-06	6.452E-07	8.819E-06	0.000E+00	6.577E-01
28	0.000E+00	0.000E+00	1.122E-04	0.000E+00	6.701E-06	4.087E-06	6.886E-07	9.426E-06	0.000E+00	5.401E-01
29	0.000E+00	0.000E+00	1.419E-04	0.000E+00	8.946E-06	5.160E-06	8.728E-07	1.192E-05	0.000E+00	4.623E-01
30	0.000E+00	0.000E+00	1.501E-04	0.000E+00	9.782E-06	5.456E-06	9.249E-07	1.261E-05	0.000E+00	4.549E-01
31	0.000E+00	0.000E+00	1.368E-04	0.000E+00	1.056E-05	5.694E-06	9.677E-07	1.317E-05	0.000E+00	4.844E-01
32	0.000E+00	0.000E+00	1.571E-04	0.000E+00	1.101E-05	5.709E-06	9.716E-07	1.320E-05	0.000E+00	5.855E-01
33	0.000E+00	0.000E+00	1.736E-04	0.000E+00	1.262E-05	6.335E-06	1.076E-06	1.459E-05	0.000E+00	2.114E+00
34	0.000E+00	0.000E+00	1.917E-04	0.000E+00	1.424E-05	7.009E-06	1.190E-06	1.611E-05	0.000E+00	2.252E+00
35	0.000E+00	0.000E+00	2.043E-04	0.000E+00	1.528E-05	7.467E-06	1.268E-06	1.716E-05	0.000E+00	2.229E+00
36	0.000E+00	0.000E+00	2.132E-04	0.000E+00	1.548E-05	7.768E-06	1.321E-06	1.791E-05	0.000E+00	2.126E+00
37	0.000E+00	0.000E+00	2.140E-04	0.000E+00	1.510E-05	7.751E-06	1.324E-06	1.798E-05	0.000E+00	1.957E+00
38	0.000E+00	0.000E+00	2.084E-04	0.000E+00	1.401E-05	7.528E-06	1.285E-06	1.750E-05	0.000E+00	1.032E+00
39	0.000E+00	0.000E+00	2.539E-04	0.000E+00	1.768E-05	9.192E-06	1.570E-06	2.133E-05	0.000E+00	1.977E+00
40	0.000E+00	0.000E+00	3.213E-04	0.000E+00	2.307E-05	1.165E-05	1.989E-06	2.699E-05	0.000E+00	2.461E+00
41	0.000E+00	0.000E+00	4.368E-04	0.000E+00	3.563E-05	1.686E-05	2.735E-06	3.670E-05	0.000E+00	2.178E+00
42	0.000E+00	0.000E+00	6.659E-04	0.000E+00	5.931E-05	2.475E-05	4.184E-06	5.596E-05	0.000E+00	1.405E+00
43	0.000E+00	0.000E+00	5.706E-04	0.000E+00	4.396E-05	2.117E-05	3.552E-06	4.794E-05	0.000E+00	9.625E-01
44	0.000E+00	0.000E+00	5.313E-04	0.000E+00	2.294E-05	1.950E-05	3.219E-06	4.460E-05	0.000E+00	6.130E-01
45	0.000E+00	0.000E+00	5.177E-04	0.000E+00	1.522E-05	1.869E-05	3.100E-06	4.344E-05	0.000E+00	4.053E-01
46	0.000E+00	0.000E+00	3.273E-04	0.000E+00	1.148E-05	1.184E-05	1.969E-06	2.747E-05	0.000E+00	2.956E-01
47	0.000E+00	0.000E+00	4.809E-04	0.000E+00	2.113E-05	1.767E-05	2.915E-06	4.037E-05	0.000E+00	3.160E-01
48	0.000E+00	0.000E+00	6.325E-04	0.000E+00	1.588E-05	2.292E-05	3.775E-06	5.307E-05	0.000E+00	3.435E-01
49	0.000E+00	0.000E+00	7.479E-04	0.000E+00	1.863E-05	2.715E-05	4.463E-06	6.276E-05	0.000E+00	3.582E-01
50	0.000E+00	0.000E+00	7.994E-04	0.000E+00	2.164E-05	2.916E-05	4.780E-06	6.708E-05	0.000E+00	3.461E-01
51	0.000E+00	0.000E+00	4.195E-04	0.000E+00	1.731E-05	1.563E-05	2.540E-06	3.521E-05	0.000E+00	2.950E-01
52	0.000E+00	0.000E+00	2.777E-04	0.000E+00	1.257E-05	1.020E-05	1.685E-06	2.331E-05	0.000E+00	2.445E-01
53	0.000E+00	0.000E+00	2.011E-04	0.000E+00	9.369E-06	7.330E-06	1.221E-06	1.688E-05	0.000E+00	2.025E-01
54	0.000E+00	0.000E+00	1.609E-04	0.000E+00	1.248E-05	6.120E-06	1.003E-06	1.352E-05	0.000E+00	1.706E-01
55	0.000E+00	0.000E+00	1.740E-04	0.000E+00	1.069E-05	6.606E-06	1.071E-06	1.461E-05	0.000E+00	1.816E-01
56	0.000E+00	0.000E+00	1.890E-04	0.000E+00	1.193E-05	7.209E-06	1.166E-06	1.588E-05	0.000E+00	1.892E-01
57	0.000E+00	0.000E+00	2.002E-04	0.000E+00	9.685E-06	7.271E-06	1.217E-06	1.681E-05	0.000E+00	1.888E-01
58	0.000E+00	0.000E+00	2.507E-04	0.000E+00	1.267E-05	9.147E-06	1.527E-06	2.105E-05	0.000E+00	2.140E-01
59	0.000E+00	0.000E+00	3.094E-04	0.000E+00	2.360E-05	1.167E-05	1.927E-06	2.600E-05	0.000E+00	2.380E-01
60	0.000E+00	0.000E+00	3.695E-04	0.000E+00	2.849E-05	1.378E-05	2.301E-06	3.105E-05	0.000E+00	2.545E-01
61	0.000E+00	0.000E+00	4.431E-04	0.000E+00	3.281E-05	1.641E-05	2.752E-06	3.723E-05	0.000E+00	2.647E-01
62	0.000E+00	0.000E+00	5.206E-04	0.000E+00	3.840E-05	1.923E-05	3.232E-06	4.374E-05	0.000E+00	2.785E-01
63	0.000E+00	0.000E+00	6.042E-04	0.000E+00	4.812E-05	2.239E-05	3.768E-06	5.077E-05	0.000E+00	2.988E-01
64	0.000E+00	0.000E+00	5.567E-04	0.000E+00	4.454E-05	2.088E-05	3.475E-06	4.678E-05	0.000E+00	2.776E-01
65	0.000E+00	0.000E+00	6.562E-04	0.000E+00	4.691E-05	2.414E-05	4.066E-06	5.513E-05	0.000E+00	2.999E-01
66	0.000E+00	0.000E+00	8.217E-04	0.000E+00	5.037E-05	3.010E-05	5.050E-06	6.902E-05	0.000E+00	3.263E-01
67	0.000E+00	0.000E+00	1.126E-03	0.000E+00	5.155E-05	4.112E-05	6.838E-06	9.459E-05	0.000E+00	3.674E-01
68	0.000E+00	0.000E+00	1.208E-03	0.000E+00	5.018E-05	4.436E-05	7.310E-06	1.014E-04	0.000E+00	4.083E-01
69	0.000E+00	0.000E+00	1.208E-03	0.000E+00	5.274E-05	4.412E-05	7.320E-06	1.014E-04	0.000E+00	4.505E-01
70	0.000E+00	0.000E+00	1.180E-03	0.000E+00	5.325E-05	4.318E-05	7.160E-06	9.907E-05	0.000E+00	4.778E-01
71	0.000E+00	0.000E+00	7.615E-04	0.000E+00	4.100E-05	2.791E-05	4.653E-06	6.395E-05	0.000E+00	3.984E-01
72	0.000E+00	0.000E+00	5.545E-04	0.000E+00	3.525E-05	2.044E-05	3.415E-06	4.657E-05	0.000E+00	3.294E-01
73	0.000E+00	0.000E+00	4.213E-04	0.000E+00	2.588E-05	1.556E-05	2.575E-06	3.538E-05	0.000E+00	2.760E-01
74	0.000E+00	0.000E+00	3.477E-04	0.000E+00	2.661E-05	1.289E-05	2.163E-06	2.921E-05	0.000E+00	2.394E-01
75	0.000E+00	0.000E+00	3.219E-04	0.000E+00	1.926E-05	1.224E-05	1.980E-06	2.704E-05	0.000E+00	2.440E-01
76	0.000E+00	0.000E+00	2.906E-04	0.000E+00	1.404E-05	1.063E-05	1.768E-06	2.440E-05	0.000E+00	2.555E-01
77	0.000E+00	0.000E+00	2.507E-04	0.000E+00	1.201E-05	9.206E-06	1.525E-06	2.105E-05	0.000E+00	2.577E-01
78	0.000E+00	0.000E+00	2.136E-04	0.000E+00	1.438E-05	8.209E-06	1.323E-06	1.795E-05	0.000E+00	2.520E-01
79	0.000E+00	0.000E+00	2.454E-04	0.000E+00	1.959E-05	9.401E-06	1.534E-06	2.062E-05	0.000E+00	2.866E-01
80	0.000E+00	0.000E+00	2.747E-04	0.000E+00	1.261E-05	1.011E-05	1.668E-06	2.306E-05	0.000E+00	3.304E-01
81	0.000E+00	0.000E+00	3.225E-04	0.000E+00	1.318E-05	1.182E-05	1.950E-06	2.707E-05	0.000E+00	3.905E-01
82	0.000E+00	0.000E+00	3.798E-04	0.000E+00	1.346E-05	1.379E-05	2.286E-06	3.188E-05	0.000E+00	4.736E-01
83	0.000E+00	0.000E+00	4.183E-04	0.000E+00	1.432E-05	1.516E-05	2.515E-06	3.511E-05	0.000E+00	5.906E-01
84	0.000E+00	0.000E+00	4.538E-04	0.000E+00	1.521E-05	1.643E-05	2.727E-06	3.809E-05	0.000E+00	7.943E-01
85	0.000E+00	0.000E+00	4.826E-04	0.000E+00	1.592E-05	1.748E-05	2.899E-06	4.051E-05	0.000E+00	1.268E+00
86	0.000E+00	0.000E+00	4.673E-04	0.000E+00	1.641E-05	1.696E-05	2.812E-06	3.922E-05	0.000E+00	2.898E+00
87	0.000E+00	0.000E+00	2.446E-04	0.000E+00	1.231E-05	8.911E-06	1.490E-06	2.054E-05	0.000E+00	3.314E+00
88	0.000E+00	0.000E+00	1.619E-04	0.000E+00	9.782E-06	5.927E-06	9.940E-07	1.359E-05	0.000E+00	2.082E+00
89	0.000E+00	0.000E+00	1.173E-04	0.000E+00	7.949E-06	4.317E-06	7.245E-07	9.851E-06	0.000E+00	7.771E-01
90	0.000E+00	0.000E+00	1.098E-04	0.000E+00	8.014E-06	4.061E-06	6.814E-07	9.227E-06	0.000E+00	8.986E-01
91	0.000E+00	0.000E+00	5.373E-04	0.000E+00	2.231E-05	1.940E-05	3.249E-06	4.511E-05	0.000E+00	3.187E-01
92	0.000E+00	0.000E+00	5.201E-04	0.000E+00	2.205E-05	1.878E-05	3.147E-06	4.366E-05	0.000E+00	3.061E-01
93	0.000E+00	0.000E+00	4.998E-04	0.000E+00	2.197E-05	1.806E-05	3.028E-06	4.196E-05	0.000E+00	2.908E-01
94	0.000E+00	0.000E+00	4.783E-04	0.000E+00	2.245E-05	1.735E-05	2.905E-06	4.016E-05	0.000E+00	2.753E-01
95	0.000E+00	0.000E+00	4.578E-04	0.000E+00	2.244E-05	1.661E-05	2.785E-06	3.844E-05	0.000E+00	2.619E-01
96	0.000E+00	0.000E+00	4.393E-04	0.000E+00	2.201E-05	1.591E-05	2.674E-06	3.688E-05	0.000E+00	2.499E-01
97	0.000E+00	0.000E+00	4.212E-04	0.000E+00	2.279E-05	1.533E-05	2.573E-06	3.538E-05	0.000E+00	2.385E-01
98	0.000E+00	0.000E+00	3.964E-04	0.000E+00	2.100E-05	1.434E-05	2.419E-06	3.329E-05	0.000E+00	2.277E-01
99	0.000E+00	0.000E+00	3.745E-04	0.000E+00	2.269E-05	1.369E-05	2.300E-06	3.145E-05	0.000E+00	2.188E-01
100	0.000E+00	0.000E+00	3.505E-04	0.000E+00	2.187E-05	1.281E-05	2.155E-06	2.944E-05	0.000E+00	2.110E-01
101	0.000E+00	0.000E+00								

117	0.000E+00	0.000E+00	6.331E-04	0.000E+00	2.903E-05	2.300E-05	3.842E-06	5.316E-05	0.000E+00	3.103E-01
118	0.000E+00	0.000E+00	5.920E-04	0.000E+00	3.009E-05	2.158E-05	3.607E-06	4.971E-05	0.000E+00	2.936E-01
119	0.000E+00	0.000E+00	5.572E-04	0.000E+00	3.246E-05	2.074E-05	3.419E-06	4.680E-05	0.000E+00	2.808E-01
120	0.000E+00	0.000E+00	5.178E-04	0.000E+00	3.033E-05	1.899E-05	3.176E-06	4.349E-05	0.000E+00	2.673E-01
121	0.000E+00	0.000E+00	4.805E-04	0.000E+00	2.928E-05	1.761E-05	2.952E-06	4.036E-05	0.000E+00	2.545E-01
122	0.000E+00	0.000E+00	4.455E-04	0.000E+00	3.048E-05	1.550E-05	2.755E-06	3.743E-05	0.000E+00	2.433E-01
123	0.000E+00	0.000E+00	4.132E-04	0.000E+00	2.963E-05	1.534E-05	2.562E-06	3.472E-05	0.000E+00	2.336E-01
124	0.000E+00	0.000E+00	3.884E-04	0.000E+00	3.376E-05	1.465E-05	2.438E-06	3.264E-05	0.000E+00	2.269E-01
125	0.000E+00	0.000E+00	3.604E-04	0.000E+00	3.062E-05	1.343E-05	2.258E-06	3.029E-05	0.000E+00	2.211E-01
126	0.000E+00	0.000E+00	3.343E-04	0.000E+00	2.867E-05	1.246E-05	2.096E-06	2.810E-05	0.000E+00	2.166E-01
127	0.000E+00	0.000E+00	3.177E-04	0.000E+00	3.410E-05	3.132E-05	5.204E-06	7.235E-05	0.000E+00	3.590E-01
128	0.000E+00	0.000E+00	3.028E-04	0.000E+00	3.413E-05	2.921E-05	4.860E-06	6.740E-05	0.000E+00	3.402E-01
129	0.000E+00	0.000E+00	2.777E-04	0.000E+00	3.511E-05	2.655E-05	4.426E-06	6.110E-05	0.000E+00	3.212E-01
130	0.000E+00	0.000E+00	6.708E-04	0.000E+00	4.294E-05	2.463E-05	4.132E-06	5.635E-05	0.000E+00	3.046E-01
131	0.000E+00	0.000E+00	6.116E-04	0.000E+00	4.225E-05	2.249E-05	3.782E-06	5.138E-05	0.000E+00	2.899E-01
132	0.000E+00	0.000E+00	5.589E-04	0.000E+00	4.111E-05	2.087E-05	3.471E-06	4.696E-05	0.000E+00	2.769E-01
133	0.000E+00	0.000E+00	5.082E-04	0.000E+00	3.407E-05	1.879E-05	3.139E-06	4.269E-05	0.000E+00	2.628E-01
134	0.000E+00	0.000E+00	4.723E-04	0.000E+00	3.755E-05	1.752E-05	2.945E-06	3.969E-05	0.000E+00	2.520E-01
135	0.000E+00	0.000E+00	4.381E-04	0.000E+00	3.604E-05	1.628E-05	2.738E-06	3.682E-05	0.000E+00	2.427E-01
136	0.000E+00	0.000E+00	4.065E-04	0.000E+00	3.284E-05	1.509E-05	2.538E-06	3.416E-05	0.000E+00	2.358E-01
137	0.000E+00	0.000E+00	3.767E-04	0.000E+00	3.104E-05	1.401E-05	2.355E-06	3.166E-05	0.000E+00	2.307E-01
138	0.000E+00	0.000E+00	3.492E-04	0.000E+00	2.931E-05	1.300E-05	2.186E-06	2.935E-05	0.000E+00	2.262E-01
139	0.000E+00	0.000E+00	1.095E-03	0.000E+00	4.768E-05	4.032E-05	6.640E-06	9.197E-05	0.000E+00	3.738E-01
140	0.000E+00	0.000E+00	1.005E-03	0.000E+00	4.876E-05	3.575E-05	6.116E-06	8.442E-05	0.000E+00	3.531E-01
141	0.000E+00	0.000E+00	8.607E-04	0.000E+00	4.879E-05	3.152E-05	5.270E-06	7.229E-05	0.000E+00	3.326E-01
142	0.000E+00	0.000E+00	7.385E-04	0.000E+00	4.777E-05	2.707E-05	4.551E-06	6.204E-05	0.000E+00	3.138E-01
143	0.000E+00	0.000E+00	6.551E-04	0.000E+00	4.604E-05	2.409E-05	4.055E-06	5.504E-05	0.000E+00	2.992E-01
144	0.000E+00	0.000E+00	5.912E-04	0.000E+00	4.478E-05	2.184E-05	3.676E-06	4.968E-05	0.000E+00	2.859E-01
145	0.000E+00	0.000E+00	5.394E-04	0.000E+00	4.202E-05	1.998E-05	3.359E-06	4.532E-05	0.000E+00	2.728E-01
146	0.000E+00	0.000E+00	4.976E-04	0.000E+00	3.973E-05	1.845E-05	3.104E-06	4.181E-05	0.000E+00	2.615E-01
147	0.000E+00	0.000E+00	4.602E-04	0.000E+00	3.662E-05	1.707E-05	2.870E-06	3.867E-05	0.000E+00	2.531E-01
148	0.000E+00	0.000E+00	4.259E-04	0.000E+00	3.386E-05	1.580E-05	2.656E-06	3.579E-05	0.000E+00	2.468E-01
149	0.000E+00	0.000E+00	3.951E-04	0.000E+00	3.152E-05	1.466E-05	2.465E-06	3.320E-05	0.000E+00	2.414E-01
150	0.000E+00	0.000E+00	3.660E-04	0.000E+00	2.929E-05	1.359E-05	2.284E-06	3.075E-05	0.000E+00	2.368E-01
151	0.000E+00	0.000E+00	3.385E-04	0.000E+00	2.733E-05	1.250E-05	2.105E-06	2.877E-05	0.000E+00	2.338E-01
152	0.000E+00	0.000E+00	3.129E-04	0.000E+00	2.575E-05	1.148E-05	1.948E-06	2.725E-05	0.000E+00	2.304E-01
153	0.000E+00	0.000E+00	2.879E-04	0.000E+00	2.370E-05	1.050E-05	1.805E-06	2.599E-05	0.000E+00	2.274E-01
154	0.000E+00	0.000E+00	2.640E-04	0.000E+00	2.175E-05	9.675E-06	1.675E-06	2.410E-05	0.000E+00	2.249E-01
155	0.000E+00	0.000E+00	2.407E-04	0.000E+00	1.987E-05	8.857E-06	1.557E-06	2.261E-05	0.000E+00	2.223E-01
156	0.000E+00	0.000E+00	2.181E-04	0.000E+00	1.761E-05	7.941E-06	1.441E-06	2.047E-05	0.000E+00	2.197E-01
157	0.000E+00	0.000E+00	1.970E-04	0.000E+00	1.545E-05	6.941E-06	1.241E-06	1.856E-06	0.000E+00	2.176E-01
158	0.000E+00	0.000E+00	1.766E-04	0.000E+00	1.339E-05	6.022E-06	1.104E-06	1.656E-06	0.000E+00	2.156E-01
159	0.000E+00	0.000E+00	1.573E-04	0.000E+00	1.148E-05	5.189E-06	9.820E-07	1.482E-06	0.000E+00	2.136E-01
160	0.000E+00	0.000E+00	1.391E-04	0.000E+00	9.733E-06	4.451E-06	8.496E-07	1.292E-06	0.000E+00	2.116E-01
161	0.000E+00	0.000E+00	1.229E-04	0.000E+00	8.166E-06	3.824E-06	7.403E-07	1.139E-06	0.000E+00	2.096E-01
162	0.000E+00	0.000E+00	1.087E-04	0.000E+00	6.807E-06	3.246E-06	6.343E-07	9.904E-07	0.000E+00	2.076E-01
163	0.000E+00	0.000E+00	9.607E-05	0.000E+00	5.697E-06	2.777E-06	5.496E-07	8.542E-07	0.000E+00	2.056E-01
164	0.000E+00	0.000E+00	8.467E-05	0.000E+00	4.807E-06	2.409E-06	4.782E-07	7.482E-07	0.000E+00	2.036E-01
165	0.000E+00	0.000E+00	7.447E-05	0.000E+00	4.067E-06	2.074E-06	4.067E-07	6.482E-07	0.000E+00	2.016E-01
166	0.000E+00	0.000E+00	6.547E-05	0.000E+00	3.447E-06	1.774E-06	3.572E-07	5.682E-07	0.000E+00	1.996E-01
167	0.000E+00	0.000E+00	5.747E-05	0.000E+00	2.927E-06	1.524E-06	3.122E-07	4.982E-07	0.000E+00	1.976E-01
168	0.000E+00	0.000E+00	5.047E-05	0.000E+00	2.507E-06	1.304E-06	2.722E-07	4.382E-07	0.000E+00	1.956E-01
169	0.000E+00	0.000E+00	4.447E-05	0.000E+00	2.187E-06	1.134E-06	2.372E-07	3.982E-07	0.000E+00	1.936E-01
170	0.000E+00	0.000E+00	3.947E-05	0.000E+00	1.927E-06	1.004E-06	2.122E-07	3.632E-07	0.000E+00	1.916E-01
171	0.000E+00	0.000E+00	3.447E-05	0.000E+00	1.707E-06	8.94E-07	1.872E-07	3.282E-07	0.000E+00	1.896E-01
172	0.000E+00	0.000E+00	3.047E-05	0.000E+00	1.507E-06	7.94E-07	1.672E-07	2.932E-07	0.000E+00	1.876E-01
173	0.000E+00	0.000E+00	2.647E-05	0.000E+00	1.307E-06	6.94E-07	1.472E-07	2.632E-07	0.000E+00	1.856E-01
174	0.000E+00	0.000E+00	2.247E-05	0.000E+00	1.107E-06	6.04E-07	1.272E-07	2.332E-07	0.000E+00	1.836E-01
175	0.000E+00	0.000E+00	1.947E-05	0.000E+00	9.67E-07	5.34E-07	1.102E-07	2.032E-07	0.000E+00	1.816E-01
176	0.000E+00	0.000E+00	1.647E-05	0.000E+00	8.37E-07	4.64E-07	9.72E-08	1.732E-07	0.000E+00	1.796E-01
177	0.000E+00	0.000E+00	1.347E-05	0.000E+00	7.27E-07	4.04E-07	8.42E-08	1.532E-07	0.000E+00	1.776E-01
178	0.000E+00	0.000E+00	1.047E-05	0.000E+00	6.17E-07	3.44E-07	7.22E-08	1.332E-07	0.000E+00	1.756E-01
179	0.000E+00	0.000E+00	8.97E-06	0.000E+00	5.37E-07	2.94E-07	6.22E-08	1.132E-07	0.000E+00	1.736E-01
180	0.000E+00	0.000E+00	7.77E-06	0.000E+00	4.67E-07	2.54E-07	5.42E-08	9.92E-08	0.000E+00	1.716E-01
181	0.000E+00	0.000E+00	6.57E-06	0.000E+00	4.07E-07	2.14E-07	4.72E-08	8.72E-08	0.000E+00	1.696E-01
182	0.000E+00	0.000E+00	5.37E-06	0.000E+00	3.47E-07	1.74E-07	4.02E-08	7.52E-08	0.000E+00	1.676E-01
183	0.000E+00	0.000E+00	4.17E-06	0.000E+00	2.87E-07	1.44E-07	3.42E-08	6.32E-08	0.000E+00	1.656E-01
184	0.000E+00	0.000E+00	3.07E-06	0.000E+00	2.27E-07	1.14E-07	2.82E-08	5.22E-08	0.000E+00	1.636E-01
185	0.000E+00	0.000E+00	1.87E-06	0.000E+00	1.67E-07	8.4E-08	1.72E-08	3.12E-08	0.000E+00	1.616E-01
186	0.000E+00	0.000E+00	1.27E-06	0.000E+00	1.07E-07	5.4E-08	1.12E-08	2.02E-08	0.000E+00	1.596E-01
187	0.000E+00	0.000E+00	8.7E-07	0.000E+00	7.3E-08	4.0E-08	8.2E-09	1.42E-08	0.000E+00	1.576E-01
188	0.000E+00	0.000E+00	6.5E-07	0.000E+00	5.1E-08	2.8E-08	6.0E-09	1.02E-08	0.000E+00	1.556E-01
189	0.000E+00	0.000E+00	4.3E-07	0.000E+00	3.3E-08	1.8E-08	4.0E-09	7.0E-09	0.000E+00	1.536E-01
190	0.000E+00	0.000E+00	3.1E-07	0.000E+00	2.1E-08	1.2E-08	2.6E-09	4.6E-09	0.000E+00	1.516E-01
191	0.000E+00	0.000E+00	1.9E-07	0.000E+00	1.3E-08	7.0E-09	1.5E-09	2.8E-09	0.000E+00	1.496E-01
192	0.000E+00	0.000E+00	1.1E-07	0.000E+00	7.3E-09	4.0E-09	8.6E-10	1.6E-09	0.000E+00	1.476E-01
193	0.000E+00	0.000E+00	6.5E-08	0.000E+00	4.3E-09	2.4E-09	5.2E-10	9.6E-10	0.000E+00	1.456E-01
194	0.000E+00	0.000E+00	4.3E-08	0.000E+00	2.8E-09	1.6E-09	3.4E-10	6.4E-10	0.000E+00	1.436E-01
195	0.000E+00	0.000E+00	2.7E-08	0.000E+00	1.7E-09	1.0E-09	2.1E-10	4.0E-10	0.000E+00	1.416E-01
196	0.000E+00	0.000E+00	1.5E-08	0.000E+00	1.0E-09	5.6E-10	1.2E-10	2.2E-10	0.000E+00	1.396E-01
197	0.000E+00	0.000E+00	8.5E-09	0.000E+00	5.6E-10	3.2E-10	6.8E-11	1.3E-10	0.000E+00	1.376E-01
198	0.000E+00	0.000E+00	5.1E-09	0.000E+00	3.3E-10	1.9E-10	4.1E-11	7.6E-11	0.000E+00</	

214	0.000E+00	0.000E+00	5.415E-05	0.000E+00	3.090E-06	1.971E-06	3.316E-07	4.548E-06	0.000E+00	8.204E-02
215	0.000E+00	0.000E+00	7.011E-05	0.000E+00	3.805E-06	2.543E-06	4.283E-07	5.888E-06	0.000E+00	9.015E-02
216	0.000E+00	0.000E+00	8.376E-05	0.000E+00	4.552E-06	3.034E-06	5.116E-07	7.034E-06	0.000E+00	1.030E-01
217	0.000E+00	0.000E+00	9.695E-05	0.000E+00	5.013E-06	3.506E-06	5.909E-07	8.141E-06	0.000E+00	1.041E-01
218	0.000E+00	0.000E+00	1.040E-04	0.000E+00	5.249E-06	3.756E-06	6.331E-07	8.730E-06	0.000E+00	1.065E-01
219	0.000E+00	0.000E+00	1.074E-04	0.000E+00	5.417E-06	3.877E-06	6.540E-07	9.019E-06	0.000E+00	1.029E-01
220	0.000E+00	0.000E+00	1.006E-04	0.000E+00	5.277E-06	3.630E-06	6.134E-07	8.447E-06	0.000E+00	9.431E-02
221	0.000E+00	0.000E+00	9.258E-05	0.000E+00	4.744E-06	3.340E-06	5.640E-07	7.774E-06	0.000E+00	9.157E-02
222	0.000E+00	0.000E+00	8.619E-05	0.000E+00	4.063E-06	3.110E-06	5.234E-07	7.236E-06	0.000E+00	8.812E-02
223	0.000E+00	0.000E+00	8.563E-05	0.000E+00	4.084E-06	3.092E-06	5.203E-07	7.190E-06	0.000E+00	8.205E-02
224	0.000E+00	0.000E+00	8.507E-05	0.000E+00	4.451E-06	3.076E-06	5.187E-07	7.143E-06	0.000E+00	8.017E-02
225	0.000E+00	0.000E+00	8.266E-05	0.000E+00	4.892E-06	2.997E-06	5.068E-07	6.942E-06	0.000E+00	8.064E-02
226	0.000E+00	0.000E+00	7.814E-05	0.000E+00	4.845E-06	2.840E-06	4.802E-07	6.563E-06	0.000E+00	7.827E-02
227	0.000E+00	0.000E+00	1.689E-05	0.000E+00	1.449E-06	6.306E-07	1.059E-07	1.420E-06	0.000E+00	2.615E-02
228	0.000E+00	0.000E+00	2.010E-05	0.000E+00	1.597E-06	7.532E-07	1.254E-07	1.689E-06	0.000E+00	3.064E-02
229	0.000E+00	0.000E+00	2.379E-05	0.000E+00	1.766E-06	8.835E-07	1.478E-07	1.998E-06	0.000E+00	3.386E-02
230	0.000E+00	0.000E+00	2.854E-05	0.000E+00	2.013E-06	1.054E-06	1.767E-07	2.398E-06	0.000E+00	4.394E-02
231	0.000E+00	0.000E+00	3.473E-05	0.000E+00	2.299E-06	1.279E-06	2.143E-07	2.917E-06	0.000E+00	5.325E-02
232	0.000E+00	0.000E+00	4.351E-05	0.000E+00	2.665E-06	1.593E-06	2.674E-07	3.655E-06	0.000E+00	7.161E-02
233	0.000E+00	0.000E+00	5.709E-05	0.000E+00	3.280E-06	2.079E-06	3.497E-07	4.795E-06	0.000E+00	8.948E-02
234	0.000E+00	0.000E+00	7.613E-05	0.000E+00	4.127E-06	2.764E-06	4.651E-07	6.393E-06	0.000E+00	1.052E-01
235	0.000E+00	0.000E+00	9.628E-05	0.000E+00	5.121E-06	3.487E-06	5.876E-07	8.085E-06	0.000E+00	1.204E-01
236	0.000E+00	0.000E+00	1.151E-04	0.000E+00	5.922E-06	4.163E-06	7.016E-07	9.668E-06	0.000E+00	1.230E-01
237	0.000E+00	0.000E+00	1.266E-04	0.000E+00	6.306E-06	4.572E-06	7.704E-07	1.063E-05	0.000E+00	1.231E-01
238	0.000E+00	0.000E+00	1.289E-04	0.000E+00	6.477E-06	4.650E-06	7.844E-07	1.082E-05	0.000E+00	1.186E-01
239	0.000E+00	0.000E+00	1.196E-04	0.000E+00	6.203E-06	4.314E-06	7.288E-07	1.004E-05	0.000E+00	1.084E-01
240	0.000E+00	0.000E+00	1.105E-04	0.000E+00	5.364E-06	3.985E-06	6.715E-07	9.274E-06	0.000E+00	1.103E-01
241	0.000E+00	0.000E+00	1.066E-04	0.000E+00	4.907E-06	3.846E-06	6.466E-07	8.947E-06	0.000E+00	1.009E-01
242	0.000E+00	0.000E+00	1.056E-04	0.000E+00	5.233E-06	3.815E-06	6.426E-07	8.868E-06	0.000E+00	9.553E-02
243	0.000E+00	0.000E+00	1.007E-04	0.000E+00	5.719E-06	3.645E-06	6.161E-07	8.455E-06	0.000E+00	9.242E-02
244	0.000E+00	0.000E+00	9.352E-05	0.000E+00	5.804E-06	3.396E-06	5.748E-07	7.855E-06	0.000E+00	9.037E-02
245	0.000E+00	0.000E+00	8.354E-05	0.000E+00	5.205E-06	3.038E-06	5.136E-07	7.016E-06	0.000E+00	8.523E-02
246	0.000E+00	0.000E+00	1.552E-05	0.000E+00	1.343E-06	5.833E-07	9.737E-08	1.304E-06	0.000E+00	2.450E-02
247	0.000E+00	0.000E+00	1.915E-05	0.000E+00	1.682E-06	7.126E-07	1.202E-07	1.609E-06	0.000E+00	3.079E-02
248	0.000E+00	0.000E+00	2.349E-05	0.000E+00	1.888E-06	8.812E-07	1.467E-07	1.974E-06	0.000E+00	3.683E-02
249	0.000E+00	0.000E+00	2.891E-05	0.000E+00	2.111E-06	1.072E-06	1.794E-07	2.429E-06	0.000E+00	4.313E-02
250	0.000E+00	0.000E+00	3.580E-05	0.000E+00	2.477E-06	1.322E-06	2.214E-07	3.007E-06	0.000E+00	5.625E-02
251	0.000E+00	0.000E+00	4.536E-05	0.000E+00	2.880E-06	1.664E-06	2.792E-07	3.810E-06	0.000E+00	7.369E-02
252	0.000E+00	0.000E+00	5.992E-05	0.000E+00	3.473E-06	2.186E-06	3.672E-07	5.032E-06	0.000E+00	1.001E-01
253	0.000E+00	0.000E+00	8.325E-05	0.000E+00	4.481E-06	3.023E-06	5.084E-07	6.991E-06	0.000E+00	1.242E-01
254	0.000E+00	0.000E+00	1.119E-04	0.000E+00	5.780E-06	4.052E-06	6.820E-07	9.394E-06	0.000E+00	1.430E-01
255	0.000E+00	0.000E+00	1.401E-04	0.000E+00	7.100E-06	5.064E-06	8.534E-07	1.177E-05	0.000E+00	1.489E-01
256	0.000E+00	0.000E+00	1.584E-04	0.000E+00	7.785E-06	5.721E-06	9.637E-07	1.330E-05	0.000E+00	1.449E-01
257	0.000E+00	0.000E+00	1.587E-04	0.000E+00	7.951E-06	5.725E-06	9.658E-07	1.332E-05	0.000E+00	1.367E-01
258	0.000E+00	0.000E+00	1.490E-04	0.000E+00	7.459E-06	5.372E-06	9.066E-07	1.251E-05	0.000E+00	1.339E-01
259	0.000E+00	0.000E+00	1.396E-04	0.000E+00	6.422E-06	5.034E-06	8.467E-07	1.172E-05	0.000E+00	1.311E-01
260	0.000E+00	0.000E+00	1.366E-04	0.000E+00	6.362E-06	4.932E-06	8.295E-07	1.147E-05	0.000E+00	1.178E-01
261	0.000E+00	0.000E+00	1.278E-04	0.000E+00	6.823E-06	4.621E-06	7.799E-07	1.073E-05	0.000E+00	1.096E-01
262	0.000E+00	0.000E+00	1.151E-04	0.000E+00	7.069E-06	4.174E-06	7.067E-07	9.663E-06	0.000E+00	1.053E-01
263	0.000E+00	0.000E+00	1.019E-04	0.000E+00	6.318E-06	3.704E-06	6.263E-07	8.560E-06	0.000E+00	1.002E-01
264	0.000E+00	0.000E+00	8.631E-05	0.000E+00	5.178E-06	3.137E-06	5.296E-07	7.249E-06	0.000E+00	9.167E-02
265	0.000E+00	0.000E+00	1.559E-05	0.000E+00	1.442E-06	5.939E-07	9.835E-08	1.311E-06	0.000E+00	2.656E-02
266	0.000E+00	0.000E+00	1.817E-05	0.000E+00	1.573E-06	6.868E-07	1.141E-07	1.527E-06	0.000E+00	2.991E-02
267	0.000E+00	0.000E+00	2.231E-05	0.000E+00	1.934E-06	8.348E-07	1.400E-07	1.875E-06	0.000E+00	3.741E-02
268	0.000E+00	0.000E+00	2.800E-05	0.000E+00	2.259E-06	1.052E-06	1.749E-07	2.353E-06	0.000E+00	4.573E-02
269	0.000E+00	0.000E+00	3.606E-05	0.000E+00	2.608E-06	1.336E-06	2.237E-07	3.030E-06	0.000E+00	5.784E-02
270	0.000E+00	0.000E+00	4.685E-05	0.000E+00	3.058E-06	1.726E-06	2.889E-07	3.935E-06	0.000E+00	7.618E-02
271	0.000E+00	0.000E+00	6.349E-05	0.000E+00	3.782E-06	2.322E-06	3.896E-07	5.332E-06	0.000E+00	1.112E-01
272	0.000E+00	0.000E+00	9.041E-05	0.000E+00	4.834E-06	3.288E-06	5.520E-07	7.593E-06	0.000E+00	1.475E-01
273	0.000E+00	0.000E+00	1.325E-04	0.000E+00	6.723E-06	4.813E-06	8.072E-07	1.113E-05	0.000E+00	1.730E-01
274	0.000E+00	0.000E+00	1.782E-04	0.000E+00	1.103E-05	6.600E-06	1.096E-06	1.497E-05	0.000E+00	1.854E-01
275	0.000E+00	0.000E+00	2.072E-04	0.000E+00	1.062E-05	7.566E-06	1.263E-06	1.740E-05	0.000E+00	1.748E-01
276	0.000E+00	0.000E+00	2.067E-04	0.000E+00	1.017E-05	7.457E-06	1.257E-06	1.736E-05	0.000E+00	1.664E-01
277	0.000E+00	0.000E+00	1.962E-04	0.000E+00	9.099E-06	7.074E-06	1.191E-06	1.647E-05	0.000E+00	1.702E-01
278	0.000E+00	0.000E+00	1.848E-04	0.000E+00	8.355E-06	6.666E-06	1.120E-06	1.551E-05	0.000E+00	1.546E-01
279	0.000E+00	0.000E+00	1.735E-04	0.000E+00	8.644E-06	6.266E-06	1.056E-06	1.457E-05	0.000E+00	1.359E-01
280	0.000E+00	0.000E+00	1.494E-04	0.000E+00	8.856E-06	5.412E-06	9.162E-07	1.255E-05	0.000E+00	1.240E-01
281	0.000E+00	0.000E+00	1.273E-04	0.000E+00	7.848E-06	4.621E-06	7.819E-07	1.069E-05	0.000E+00	1.202E-01
282	0.000E+00	0.000E+00	1.062E-04	0.000E+00	6.278E-06	3.859E-06	6.514E-07	8.921E-06	0.000E+00	1.107E-01
283	0.000E+00	0.000E+00	8.479E-05	0.000E+00	4.892E-06	3.080E-06	5.194E-07	7.121E-06	0.000E+00	9.651E-02
284	0.000E+00	0.000E+00	1.593E-05	0.000E+00	1.498E-06	6.009E-07	1.005E-07	1.339E-06	0.000E+00	2.349E-02
285	0.000E+00	0.000E+00	1.859E-05	0.000E+00	1.758E-06	7.068E-07	1.174E-07	1.563E-06	0.000E+00	3.090E-02
286	0.000E+00	0.000E+00	2.217E-05	0.000E+00	1.905E-06	8.401E-07	1.391E-07	1.863E-06	0.000E+00	3.724E-02
287	0.000E+00	0.000E+00	2.756E-05	0.000E+00	2.239E-06	1.029E-06	1.722E-07	2.316E-06	0.000E+00	4.743E-02
288	0.000E+00	0.000E+00	3.508E-05	0.000E+00	2.708E-06	1.315E-06	2.185E-07	2.948E-06	0.000E+00	5.970E-02
289	0.000E+00	0.000E+00	4.701E-05	0.000E+00	3.278E-06	1.736E-06	2.909E-07	3.949E-06	0.000E+00	8.209E-02
290	0.000E+00	0.000E+00	6.592E-05	0.000E+00	4.081E-06	2.419E-06	4.053E-07	5.537E-06	0.000E+00	1.187E-01
291	0.000E+00	0.000E+00	9.917E-05	0.000E+00	5.281E-06	3.605E-06	6.054E-07	8.328E-06	0.000E+00	1.794E-01
292	0.000E+00	0.000E+00	1.671E-04	0.000E+00	1.440E-05	6.237E-06	1.048E-06	1.404E-05	0.000E+00	2.159E-01
293	0.000E+00	0.000E+00	2.358E-04	0.000E+00	1.109E-05	8.556E-06	1.432E-06	1.980E-05	0.000E+00	2.364E-01
294	0.000E+00	0.000E+00	1.354E-04	0.000E+00	7.879E-06	4.911E-06	8.295E-07	1.1		

311	0.000E+00	0.000E+00	1.850E-05	0.000E+00	1.871E-06	7.024E-07	1.174E-07	1.555E-06	0.000E+00	3.233E-02
312	0.000E+00	0.000E+00	2.375E-05	0.000E+00	2.274E-06	8.949E-07	1.501E-07	1.997E-06	0.000E+00	4.381E-02
313	0.000E+00	0.000E+00	3.088E-05	0.000E+00	2.780E-06	1.162E-06	1.943E-07	2.596E-06	0.000E+00	6.128E-02
314	0.000E+00	0.000E+00	4.288E-05	0.000E+00	3.421E-06	1.595E-06	2.675E-07	3.603E-06	0.000E+00	9.220E-02
315	0.000E+00	0.000E+00	6.370E-05	0.000E+00	4.499E-06	2.351E-06	3.945E-07	5.352E-06	0.000E+00	1.426E-01
316	0.000E+00	0.000E+00	1.068E-04	0.000E+00	6.308E-06	3.898E-06	6.551E-07	8.971E-06	0.000E+00	2.752E-01
317	0.000E+00	0.000E+00	2.344E-04	0.000E+00	1.033E-05	8.511E-06	1.421E-06	1.968E-05	0.000E+00	4.466E-01
318	0.000E+00	0.000E+00	1.252E-04	0.000E+00	6.429E-06	4.546E-06	7.631E-07	1.051E-05	0.000E+00	1.356E-01
319	0.000E+00	0.000E+00	8.532E-05	0.000E+00	4.497E-06	3.092E-06	5.205E-07	7.164E-06	0.000E+00	1.031E-01
320	0.000E+00	0.000E+00	6.370E-05	0.000E+00	3.384E-06	2.304E-06	3.887E-07	5.349E-06	0.000E+00	8.254E-02
321	0.000E+00	0.000E+00	1.008E-05	0.000E+00	1.345E-06	3.958E-07	6.567E-08	8.483E-07	0.000E+00	2.218E-02
322	0.000E+00	0.000E+00	1.209E-05	0.000E+00	1.682E-06	4.822E-07	7.917E-08	1.018E-06	0.000E+00	2.735E-02
323	0.000E+00	0.000E+00	1.461E-05	0.000E+00	1.810E-06	5.773E-07	9.454E-08	1.229E-06	0.000E+00	3.250E-02
324	0.000E+00	0.000E+00	1.858E-05	0.000E+00	1.983E-06	7.148E-07	1.186E-07	1.563E-06	0.000E+00	3.948E-02
325	0.000E+00	0.000E+00	2.528E-05	0.000E+00	2.440E-06	9.556E-07	1.599E-07	2.125E-06	0.000E+00	5.477E-02
326	0.000E+00	0.000E+00	3.581E-05	0.000E+00	3.289E-06	1.343E-06	2.256E-07	3.010E-06	0.000E+00	8.874E-02
327	0.000E+00	0.000E+00	5.399E-05	0.000E+00	4.283E-06	2.001E-06	3.367E-07	4.537E-06	0.000E+00	1.550E-01
328	0.000E+00	0.000E+00	9.433E-05	0.000E+00	6.522E-06	3.473E-06	5.834E-07	7.924E-06	0.000E+00	3.502E-01
329	0.000E+00	0.000E+00	2.350E-04	0.000E+00	1.141E-05	8.543E-06	1.429E-06	1.973E-05	0.000E+00	1.024E-01
330	0.000E+00	0.000E+00	1.074E-04	0.000E+00	5.332E-06	3.883E-06	6.538E-07	9.021E-06	0.000E+00	1.270E-01
331	0.000E+00	0.000E+00	7.804E-05	0.000E+00	4.060E-06	2.819E-06	4.758E-07	6.553E-06	0.000E+00	9.301E-02
332	0.000E+00	0.000E+00	6.161E-05	0.000E+00	3.289E-06	2.225E-06	3.760E-07	5.173E-06	0.000E+00	6.825E-02
333	0.000E+00	0.000E+00	9.424E-06	0.000E+00	9.118E-07	3.725E-07	5.977E-08	7.922E-07	0.000E+00	1.470E-02
334	0.000E+00	0.000E+00	1.092E-05	0.000E+00	1.070E-06	4.127E-07	6.916E-08	9.183E-07	0.000E+00	1.973E-02
335	0.000E+00	0.000E+00	1.297E-05	0.000E+00	1.320E-06	4.932E-07	8.238E-08	1.090E-06	0.000E+00	2.751E-02
336	0.000E+00	0.000E+00	1.595E-05	0.000E+00	1.699E-06	6.105E-07	1.017E-07	1.341E-06	0.000E+00	3.814E-02
337	0.000E+00	0.000E+00	2.042E-05	0.000E+00	2.301E-06	7.907E-07	1.309E-07	1.717E-06	0.000E+00	5.241E-02
338	0.000E+00	0.000E+00	2.742E-05	0.000E+00	2.914E-06	1.053E-06	1.749E-07	2.306E-06	0.000E+00	7.478E-02
339	0.000E+00	0.000E+00	4.256E-05	0.000E+00	4.075E-06	1.604E-06	2.690E-07	3.577E-06	0.000E+00	1.309E-01
340	0.000E+00	0.000E+00	7.692E-05	0.000E+00	6.251E-06	2.863E-06	4.805E-07	6.464E-06	0.000E+00	3.583E-01
341	0.000E+00	0.000E+00	2.932E-04	0.000E+00	1.258E-05	1.074E-05	1.776E-06	2.461E-05	0.000E+00	2.552E-01
342	0.000E+00	0.000E+00	1.417E-04	0.000E+00	6.914E-06	5.122E-06	8.614E-07	1.189E-05	0.000E+00	1.558E-01
343	0.000E+00	0.000E+00	9.534E-05	0.000E+00	4.929E-06	3.442E-06	5.810E-07	8.005E-06	0.000E+00	1.045E-01
344	0.000E+00	0.000E+00	7.109E-05	0.000E+00	3.780E-06	2.567E-06	4.338E-07	5.970E-06	0.000E+00	7.842E-02
345	0.000E+00	0.000E+00	5.531E-05	0.000E+00	2.998E-06	1.998E-06	3.377E-07	4.645E-06	0.000E+00	6.510E-02
346	0.000E+00	0.000E+00	8.469E-06	0.000E+00	1.221E-06	3.354E-07	5.558E-08	7.128E-07	0.000E+00	1.281E-02
347	0.000E+00	0.000E+00	9.549E-06	0.000E+00	1.128E-06	3.828E-07	6.159E-08	8.032E-07	0.000E+00	1.499E-02
348	0.000E+00	0.000E+00	1.122E-05	0.000E+00	1.191E-06	4.331E-07	7.155E-08	9.433E-07	0.000E+00	1.813E-02
349	0.000E+00	0.000E+00	1.358E-05	0.000E+00	1.286E-06	5.186E-07	8.584E-08	1.142E-06	0.000E+00	2.341E-02
350	0.000E+00	0.000E+00	1.717E-05	0.000E+00	1.504E-06	6.492E-07	1.079E-07	1.443E-06	0.000E+00	3.398E-02
351	0.000E+00	0.000E+00	2.296E-05	0.000E+00	1.945E-06	8.611E-07	1.438E-07	1.929E-06	0.000E+00	5.623E-02
352	0.000E+00	0.000E+00	3.419E-05	0.000E+00	2.941E-06	1.276E-06	2.144E-07	2.873E-06	0.000E+00	9.998E-02
353	0.000E+00	0.000E+00	5.724E-05	0.000E+00	5.255E-06	2.139E-06	3.605E-07	4.811E-06	0.000E+00	2.396E-01
354	0.000E+00	0.000E+00	2.040E-04	0.000E+00	8.241E-06	7.368E-06	1.232E-06	1.712E-05	0.000E+00	2.033E-01
355	0.000E+00	0.000E+00	1.131E-04	0.000E+00	5.410E-06	4.085E-06	6.874E-07	9.499E-06	0.000E+00	1.366E-01
356	0.000E+00	0.000E+00	7.744E-05	0.000E+00	3.992E-06	2.796E-06	4.719E-07	6.503E-06	0.000E+00	1.057E-01
357	0.000E+00	0.000E+00	5.866E-05	0.000E+00	3.127E-06	2.118E-06	3.579E-07	4.926E-06	0.000E+00	8.453E-02
358	0.000E+00	0.000E+00	4.747E-05	0.000E+00	2.547E-06	1.714E-06	2.897E-07	3.986E-06	0.000E+00	6.830E-02
359	0.000E+00	0.000E+00	7.514E-06	0.000E+00	1.078E-06	2.905E-07	4.926E-08	6.324E-07	0.000E+00	1.316E-02
360	0.000E+00	0.000E+00	8.745E-06	0.000E+00	1.207E-06	3.490E-07	5.722E-08	7.360E-07	0.000E+00	1.556E-02
361	0.000E+00	0.000E+00	1.005E-05	0.000E+00	1.037E-06	3.896E-07	6.397E-08	8.450E-07	0.000E+00	1.917E-02
362	0.000E+00	0.000E+00	1.218E-05	0.000E+00	1.107E-06	4.679E-07	7.678E-08	1.024E-06	0.000E+00	2.432E-02
363	0.000E+00	0.000E+00	1.523E-05	0.000E+00	1.253E-06	5.792E-07	9.532E-08	1.280E-06	0.000E+00	3.224E-02
364	0.000E+00	0.000E+00	1.985E-05	0.000E+00	1.464E-06	7.433E-07	1.233E-07	1.668E-06	0.000E+00	4.477E-02
365	0.000E+00	0.000E+00	2.686E-05	0.000E+00	1.913E-06	9.926E-07	1.664E-07	2.257E-06	0.000E+00	6.848E-02
366	0.000E+00	0.000E+00	4.236E-05	0.000E+00	2.910E-06	1.553E-06	2.618E-07	3.558E-06	0.000E+00	1.434E-01
367	0.000E+00	0.000E+00	9.534E-05	0.000E+00	6.100E-06	3.480E-06	5.870E-07	8.008E-06	0.000E+00	5.764E-01
368	0.000E+00	0.000E+00	3.231E-04	0.000E+00	2.157E-05	1.174E-05	1.993E-06	2.714E-05	0.000E+00	1.089E+00
369	0.000E+00	0.000E+00	2.549E-04	0.000E+00	1.146E-05	9.206E-06	1.545E-06	2.140E-05	0.000E+00	3.203E-01
370	0.000E+00	0.000E+00	1.495E-04	0.000E+00	6.764E-06	5.396E-06	9.064E-07	1.255E-05	0.000E+00	1.818E-01
371	0.000E+00	0.000E+00	9.456E-05	0.000E+00	4.530E-06	3.414E-06	5.746E-07	7.939E-06	0.000E+00	1.207E-01
372	0.000E+00	0.000E+00	6.615E-05	0.000E+00	3.344E-06	2.389E-06	4.028E-07	5.554E-06	0.000E+00	8.815E-02
373	0.000E+00	0.000E+00	4.989E-05	0.000E+00	2.607E-06	1.802E-06	3.042E-07	4.189E-06	0.000E+00	6.925E-02
374	0.000E+00	0.000E+00	4.025E-05	0.000E+00	2.162E-06	1.454E-06	2.457E-07	3.380E-06	0.000E+00	5.717E-02
375	0.000E+00	0.000E+00	7.254E-06	0.000E+00	9.722E-07	2.775E-07	4.721E-08	6.104E-07	0.000E+00	1.093E-02
376	0.000E+00	0.000E+00	8.451E-06	0.000E+00	1.105E-06	3.239E-07	5.487E-08	7.110E-07	0.000E+00	1.306E-02
377	0.000E+00	0.000E+00	9.995E-06	0.000E+00	1.222E-06	3.967E-07	6.462E-08	8.408E-07	0.000E+00	1.628E-02
378	0.000E+00	0.000E+00	1.170E-05	0.000E+00	9.747E-07	4.461E-07	7.332E-08	9.835E-07	0.000E+00	2.097E-02
379	0.000E+00	0.000E+00	1.473E-05	0.000E+00	1.125E-06	5.510E-07	9.167E-08	1.237E-06	0.000E+00	2.656E-02
380	0.000E+00	0.000E+00	1.877E-05	0.000E+00	1.446E-06	6.941E-07	1.168E-07	1.577E-06	0.000E+00	3.412E-02
381	0.000E+00	0.000E+00	2.522E-05	0.000E+00	1.927E-06	9.372E-07	1.569E-07	2.119E-06	0.000E+00	5.026E-02
382	0.000E+00	0.000E+00	3.676E-05	0.000E+00	2.512E-06	1.352E-06	2.272E-07	3.088E-06	0.000E+00	1.038E-01
383	0.000E+00	0.000E+00	7.172E-05	0.000E+00	4.514E-06	2.615E-06	4.412E-07	6.024E-06	0.000E+00	2.467E-01
384	0.000E+00	0.000E+00	1.431E-04	0.000E+00	1.041E-05	5.215E-06	8.872E-07	1.203E-05	0.000E+00	6.396E-01
385	0.000E+00	0.000E+00	1.805E-04	0.000E+00	1.360E-05	6.584E-06	1.121E-06	1.517E-05	0.000E+00	1.316E+00
386	0.000E+00	0.000E+00	1.990E-04	0.000E+00	1.420E-05	7.231E-06	1.232E-06	1.672E-05	0.000E+00	1.359E+00
387	0.000E+00	0.000E+00	1.898E-04	0.000E+00	1.191E-05	6.853E-06	1.167E-06	1.594E-05	0.000E+00	5.410E-01
388	0.000E+00	0.000E+00	1.587E-04	0.000E+00	8.522E-06	5.729E-06	9.684E-07	1.332E-05	0.000E+00	2.168E-01
389	0.000E+00	0.000E+00	1.176E-04	0.000E+00	5.968E-06	4.246E-06	7.162E-07	9.875E-06	0.000E+00	1.307E-01
390	0.000E+00	0.000E+00	8.325E-05	0.000E+00	4.231E-06	3.006E-06	5.070E-07	6.990E-06	0.000E+00	9.252E-02
391	0.000E+00	0.000E+00	6.175E-05	0.000E+00	3.120E-06	2.230E-06	3.760E-07	5.		

408	0.000E+00	0.000E+00	9.245E-05	0.000E+00	4.939E-06	3.340E-06	5.642E-07	7.763E-06	0.000E+00	1.185E-01
409	0.000E+00	0.000E+00	7.232E-05	0.000E+00	3.906E-06	2.613E-06	4.416E-07	6.073E-06	0.000E+00	8.180E-02
410	0.000E+00	0.000E+00	5.745E-05	0.000E+00	3.089E-06	2.077E-06	3.507E-07	4.824E-06	0.000E+00	6.429E-02
411	0.000E+00	0.000E+00	4.603E-05	0.000E+00	2.410E-06	1.663E-06	2.807E-07	3.865E-06	0.000E+00	5.346E-02
412	0.000E+00	0.000E+00	3.667E-05	0.000E+00	1.935E-06	1.325E-06	2.237E-07	3.080E-06	0.000E+00	4.446E-02
413	0.000E+00	0.000E+00	1.231E-05	0.000E+00	1.256E-06	4.801E-07	7.835E-08	1.035E-06	0.000E+00	2.175E-02
414	0.000E+00	0.000E+00	1.077E-05	0.000E+00	1.005E-06	4.142E-07	6.799E-08	9.049E-07	0.000E+00	2.103E-02
415	0.000E+00	0.000E+00	1.010E-05	0.000E+00	9.014E-07	3.907E-07	6.362E-08	8.491E-07	0.000E+00	2.112E-02
416	0.000E+00	0.000E+00	1.470E-05	0.000E+00	1.164E-06	5.578E-07	9.180E-08	1.236E-06	0.000E+00	3.199E-02
417	0.000E+00	0.000E+00	1.353E-05	0.000E+00	1.028E-06	5.163E-07	8.429E-08	1.137E-06	0.000E+00	2.958E-02
418	0.000E+00	0.000E+00	1.401E-05	0.000E+00	1.084E-06	5.231E-07	8.724E-08	1.177E-06	0.000E+00	2.353E-02
419	0.000E+00	0.000E+00	1.929E-05	0.000E+00	1.288E-06	7.208E-07	1.192E-07	1.621E-06	0.000E+00	4.471E-02
420	0.000E+00	0.000E+00	1.971E-05	0.000E+00	1.442E-06	7.317E-07	1.223E-07	1.656E-06	0.000E+00	3.545E-02
421	0.000E+00	0.000E+00	1.848E-05	0.000E+00	1.573E-06	6.959E-07	1.158E-07	1.553E-06	0.000E+00	3.320E-02
422	0.000E+00	0.000E+00	2.971E-05	0.000E+00	2.040E-06	1.094E-06	1.837E-07	2.496E-06	0.000E+00	6.916E-02
423	0.000E+00	0.000E+00	2.723E-05	0.000E+00	1.963E-06	1.019E-06	1.689E-07	2.287E-06	0.000E+00	6.023E-02
424	0.000E+00	0.000E+00	2.552E-05	0.000E+00	1.934E-06	9.526E-07	1.587E-07	2.144E-06	0.000E+00	5.239E-02
425	0.000E+00	0.000E+00	4.797E-05	0.000E+00	3.262E-06	1.762E-06	2.964E-07	4.030E-06	0.000E+00	1.129E-01
426	0.000E+00	0.000E+00	4.176E-05	0.000E+00	2.967E-06	1.537E-06	2.586E-07	3.508E-06	0.000E+00	8.970E-02
427	0.000E+00	0.000E+00	3.747E-05	0.000E+00	2.725E-06	1.383E-06	2.324E-07	3.148E-06	0.000E+00	7.680E-02
428	0.000E+00	0.000E+00	7.108E-05	0.000E+00	5.081E-06	2.607E-06	4.403E-07	5.972E-06	0.000E+00	1.731E-01
429	0.000E+00	0.000E+00	5.826E-05	0.000E+00	4.145E-06	2.143E-06	3.608E-07	4.894E-06	0.000E+00	1.261E-01
430	0.000E+00	0.000E+00	4.908E-05	0.000E+00	3.531E-06	1.809E-06	3.042E-07	4.123E-06	0.000E+00	9.574E-02
431	0.000E+00	0.000E+00	8.882E-05	0.000E+00	6.371E-06	3.246E-06	5.502E-07	7.462E-06	0.000E+00	2.456E-01
432	0.000E+00	0.000E+00	6.854E-05	0.000E+00	4.961E-06	2.510E-06	4.248E-07	5.758E-06	0.000E+00	1.632E-01
433	0.000E+00	0.000E+00	5.549E-05	0.000E+00	4.027E-06	2.035E-06	3.440E-07	4.662E-06	0.000E+00	1.189E-01
434	0.000E+00	0.000E+00	9.744E-05	0.000E+00	7.079E-06	3.549E-06	6.039E-07	8.186E-06	0.000E+00	2.563E-01
435	0.000E+00	0.000E+00	7.513E-05	0.000E+00	5.202E-06	2.735E-06	4.644E-07	6.311E-06	0.000E+00	1.733E-01
436	0.000E+00	0.000E+00	6.005E-05	0.000E+00	4.041E-06	2.189E-06	3.706E-07	5.044E-06	0.000E+00	1.281E-01
437	0.000E+00	0.000E+00	9.825E-05	0.000E+00	6.722E-06	3.594E-06	6.070E-07	8.253E-06	0.000E+00	2.096E-01
438	0.000E+00	0.000E+00	7.619E-05	0.000E+00	5.260E-06	2.782E-06	4.709E-07	6.400E-06	0.000E+00	1.463E-01
439	0.000E+00	0.000E+00	6.109E-05	0.000E+00	4.066E-06	2.227E-06	3.768E-07	5.131E-06	0.000E+00	1.114E-01
440	0.000E+00	0.000E+00	8.861E-05	0.000E+00	5.560E-06	3.223E-06	5.449E-07	7.442E-06	0.000E+00	1.510E-01
441	0.000E+00	0.000E+00	7.161E-05	0.000E+00	4.929E-06	2.626E-06	4.427E-07	6.016E-06	0.000E+00	1.196E-01
442	0.000E+00	0.000E+00	5.919E-05	0.000E+00	4.111E-06	2.164E-06	3.660E-07	4.972E-06	0.000E+00	9.637E-02
443	0.000E+00	0.000E+00	7.500E-05	0.000E+00	4.874E-06	2.770E-06	4.624E-07	6.300E-06	0.000E+00	1.119E-01
444	0.000E+00	0.000E+00	6.295E-05	0.000E+00	4.675E-06	2.348E-06	3.912E-07	5.289E-06	0.000E+00	9.494E-02
445	0.000E+00	0.000E+00	5.317E-05	0.000E+00	3.514E-06	1.943E-06	3.279E-07	4.466E-06	0.000E+00	7.715E-02
446	0.000E+00	0.000E+00	6.214E-05	0.000E+00	3.556E-06	2.258E-06	3.805E-07	5.218E-06	0.000E+00	8.127E-02
447	0.000E+00	0.000E+00	5.305E-05	0.000E+00	2.968E-06	1.923E-06	3.245E-07	4.455E-06	0.000E+00	7.713E-02
448	0.000E+00	0.000E+00	4.604E-05	0.000E+00	2.737E-06	1.675E-06	2.824E-07	3.867E-06	0.000E+00	6.774E-02
449	0.000E+00	0.000E+00	5.123E-05	0.000E+00	2.845E-06	1.851E-06	3.132E-07	4.302E-06	0.000E+00	6.107E-02
450	0.000E+00	0.000E+00	4.489E-05	0.000E+00	2.528E-06	1.623E-06	2.746E-07	3.769E-06	0.000E+00	6.048E-02
451	0.000E+00	0.000E+00	3.981E-05	0.000E+00	2.280E-06	1.444E-06	2.438E-07	3.343E-06	0.000E+00	5.761E-02

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 91

*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Pb	Mn	Hg	Ni	NAPTH	PAH	PROPL	Se	TOL	XYLEN
1	1.272E-05	6.924E-05	0.000E+00	2.035E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	1.894E-05	1.043E-04	0.000E+00	3.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	1.879E-05	1.036E-04	0.000E+00	3.039E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	2.448E-05	1.342E-04	0.000E+00	3.941E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	2.471E-05	1.355E-04	0.000E+00	3.978E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	2.249E-05	1.230E-04	0.000E+00	3.614E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	1.988E-05	1.089E-04	0.000E+00	3.199E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	2.020E-05	1.097E-04	0.000E+00	3.225E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	2.108E-05	1.140E-04	0.000E+00	3.354E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	2.630E-05	1.440E-04	0.000E+00	4.229E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	1.079E-05	5.891E-05	0.000E+00	1.731E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	4.715E-05	2.556E-04	0.000E+00	7.517E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	2.108E-05	1.109E-04	0.000E+00	3.273E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	2.126E-05	1.118E-04	0.000E+00	3.301E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	2.073E-05	1.090E-04	0.000E+00	3.216E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	2.353E-05	1.239E-04	0.000E+00	3.656E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	1.197E-05	6.514E-05	0.000E+00	1.915E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	1.822E-05	9.824E-05	0.000E+00	2.891E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	1.840E-05	9.778E-05	0.000E+00	2.883E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	2.570E-05	1.370E-04	0.000E+00	4.037E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	1.931E-05	1.008E-04	0.000E+00	2.979E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	1.828E-05	9.431E-05	0.000E+00	2.791E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
23	1.831E-05	9.412E-05	0.000E+00	2.786E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
24	1.814E-05	9.343E-05	0.000E+00	2.765E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
25	1.816E-05	9.400E-05	0.000E+00	2.780E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
26	1.857E-05	9.875E-05	0.000E+00	2.911E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
27	1.877E-05	1.010E-04	0.000E+00	2.972E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
28	1.998E-05	1.078E-04	0.000E+00	3.171E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
29	2.547E-05	1.366E-04	0.000E+00	4.023E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
30	2.709E-05	1.448E-04	0.000E+00	4.264E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
31	2.845E-05	1.515E-04	0.000E+00	4.464E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
32	2.870E-05	1.521E-04	0.000E+00	4.485E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

33	3.192E-05	1.684E-04	0.000E+00	4.969E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
34	3.539E-05	1.862E-04	0.000E+00	5.495E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
35	3.775E-05	1.985E-04	0.000E+00	5.858E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
36	3.918E-05	2.067E-04	0.000E+00	6.100E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
37	3.914E-05	2.072E-04	0.000E+00	6.112E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
38	3.780E-05	2.013E-04	0.000E+00	5.932E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
39	4.634E-05	2.457E-04	0.000E+00	7.246E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
40	5.894E-05	3.114E-04	0.000E+00	9.186E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
41	8.206E-05	4.266E-04	0.000E+00	1.261E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	1.273E-04	6.540E-04	0.000E+00	1.936E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	1.060E-04	5.553E-04	0.000E+00	1.640E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	9.063E-05	5.037E-04	0.000E+00	1.477E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	8.509E-05	4.854E-04	0.000E+00	1.419E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
46	5.463E-05	3.083E-04	0.000E+00	9.022E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
47	8.218E-05	4.561E-04	0.000E+00	1.337E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
48	1.027E-04	5.911E-04	0.000E+00	1.726E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
49	1.214E-04	6.988E-04	0.000E+00	2.040E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
50	1.306E-04	7.482E-04	0.000E+00	2.186E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
51	7.119E-05	3.970E-04	0.000E+00	1.164E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
52	4.763E-05	2.637E-04	0.000E+00	7.734E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
53	3.461E-05	1.911E-04	0.000E+00	5.608E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
54	2.993E-05	1.566E-04	0.000E+00	4.626E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
55	3.110E-05	1.673E-04	0.000E+00	4.924E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
56	3.394E-05	1.820E-04	0.000E+00	5.359E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
57	3.461E-05	1.905E-04	0.000E+00	5.593E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
58	4.359E-05	2.390E-04	0.000E+00	7.020E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
59	5.739E-05	3.010E-04	0.000E+00	8.887E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
60	6.867E-05	3.597E-04	0.000E+00	1.062E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
61	8.174E-05	4.302E-04	0.000E+00	1.270E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
62	9.596E-05	5.054E-04	0.000E+00	1.491E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
63	1.130E-04	5.892E-04	0.000E+00	1.741E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
64	1.042E-04	5.430E-04	0.000E+00	1.605E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
65	1.203E-04	6.559E-04	0.000E+00	1.876E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
66	1.469E-04	7.901E-04	0.000E+00	2.325E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
67	1.934E-04	1.070E-03	0.000E+00	3.139E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
68	2.051E-04	1.144E-03	0.000E+00	3.351E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
69	2.063E-04	1.145E-03	0.000E+00	3.358E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
70	2.023E-04	1.120E-03	0.000E+00	3.286E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
71	1.335E-04	7.280E-04	0.000E+00	2.139E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
72	9.966E-05	5.340E-04	0.000E+00	1.573E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
73	7.384E-05	4.027E-04	0.000E+00	1.183E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
74	6.452E-05	3.382E-04	0.000E+00	9.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
75	5.732E-05	3.092E-04	0.000E+00	9.097E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
76	5.024E-05	2.766E-04	0.000E+00	8.117E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
77	4.330E-05	2.386E-04	0.000E+00	7.002E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
78	3.876E-05	2.064E-04	0.000E+00	6.082E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
79	4.591E-05	2.394E-04	0.000E+00	7.073E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
80	4.719E-05	2.610E-04	0.000E+00	7.656E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
81	5.467E-05	3.051E-04	0.000E+00	8.941E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
82	6.347E-05	3.579E-04	0.000E+00	1.047E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
83	6.967E-05	3.938E-04	0.000E+00	1.152E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
84	7.543E-05	4.269E-04	0.000E+00	1.249E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
85	8.011E-05	4.538E-04	0.000E+00	1.328E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
86	7.801E-05	4.402E-04	0.000E+00	1.288E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
87	4.251E-05	2.332E-04	0.000E+00	6.847E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
88	2.887E-05	1.555E-04	0.000E+00	4.577E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
89	2.130E-05	1.133E-04	0.000E+00	3.340E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
90	2.021E-05	1.066E-04	0.000E+00	3.144E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
91	9.126E-05	5.087E-04	0.000E+00	1.491E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
92	8.853E-05	4.927E-04	0.000E+00	1.444E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
93	8.543E-05	4.741E-04	0.000E+00	1.390E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
94	8.240E-05	4.548E-04	0.000E+00	1.334E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
95	7.929E-05	4.360E-04	0.000E+00	1.280E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
96	7.629E-05	4.187E-04	0.000E+00	1.229E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
97	7.392E-05	4.027E-04	0.000E+00	1.184E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
98	6.937E-05	3.787E-04	0.000E+00	1.113E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
99	6.631E-05	3.599E-04	0.000E+00	1.059E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	6.281E-05	3.372E-04	0.000E+00	9.929E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
101	6.057E-05	3.198E-04	0.000E+00	9.435E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
102	5.959E-05	3.060E-04	0.000E+00	9.060E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
103	1.041E-04	5.811E-04	0.000E+00	1.703E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
104	1.003E-04	5.581E-04	0.000E+00	1.636E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
105	9.580E-05	5.309E-04	0.000E+00	1.557E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
106	9.171E-05	5.046E-04	0.000E+00	1.481E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
107	8.763E-05	4.804E-04	0.000E+00	1.411							

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421	3.500E-06	1.809E-05	0.000E+00	5.352E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
422	5.408E-06	2.873E-05	0.000E+00	8.469E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
423	4.999E-06	2.640E-05	0.000E+00	7.788E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
424	4.727E-06	2.481E-05	0.000E+00	7.325E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
425	8.718E-06	4.636E-05	0.000E+00	1.367E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
426	7.646E-06	4.045E-05	0.000E+00	1.193E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
427	6.890E-06	3.635E-05	0.000E+00	1.072E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
428	1.303E-05	6.888E-05	0.000E+00	2.032E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
429	1.067E-05	5.644E-05	0.000E+00	1.665E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
430	9.007E-06	4.758E-05	0.000E+00	1.404E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
431	1.629E-05	8.609E-05	0.000E+00	2.540E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	1.259E-05	6.646E-05	0.000E+00	1.961E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	1.020E-05	5.382E-05	0.000E+00	1.588E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	1.791E-05	9.451E-05	0.000E+00	2.788E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	1.370E-05	7.268E-05	0.000E+00	2.143E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
436	1.089E-05	5.800E-05	0.000E+00	1.709E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	1.787E-05	9.498E-05	0.000E+00	2.800E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	1.388E-05	7.369E-05	0.000E+00	2.173E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	1.106E-05	5.897E-05	0.000E+00	1.738E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	1.589E-05	8.529E-05	0.000E+00	2.511E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	1.304E-05	6.926E-05	0.000E+00	2.042E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	1.080E-05	5.727E-05	0.000E+00	1.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	1.353E-05	7.232E-05	0.000E+00	2.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	1.162E-05	6.114E-05	0.000E+00	1.804E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	9.618E-06	5.131E-05	0.000E+00	1.512E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	1.099E-05	5.955E-05	0.000E+00	1.751E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	9.354E-06	5.080E-05	0.000E+00	1.493E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	8.190E-06	4.420E-05	0.000E+00	1.301E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	9.023E-06	4.903E-05	0.000E+00	1.441E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	7.922E-06	4.299E-05	0.000E+00	1.264E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	7.043E-06	3.816E-05	0.000E+00	1.122E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
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GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET. TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 100

*** PREDICTED ANNUAL CONCENTRATIONS (ug/m3) FROM ALL SOURCES ***

RECEPTOR	Zn	NIXPM
1	9.288E-06	8.843E-01
2	1.406E-05	1.332E+00
3	1.396E-05	1.323E+00
4	1.806E-05	1.714E+00
5	1.822E-05	1.730E+00
6	1.654E-05	1.571E+00
7	1.466E-05	1.391E+00
8	1.470E-05	1.401E+00
9	1.525E-05	1.456E+00
10	1.936E-05	1.839E+00
11	7.910E-06	7.523E-01
12	3.423E-05	3.265E+00
13	1.465E-05	1.416E+00
14	1.477E-05	1.428E+00
15	1.439E-05	1.391E+00
16	1.637E-05	1.582E+00
17	8.736E-06	8.319E-01
18	1.312E-05	1.255E+00
19	1.298E-05	1.249E+00
20	1.821E-05	1.750E+00
21	1.328E-05	1.288E+00
22	1.235E-05	1.204E+00
23	1.231E-05	1.202E+00
24	1.223E-05	1.193E+00
25	1.233E-05	1.200E+00
26	1.311E-05	1.261E+00
27	1.347E-05	1.290E+00
28	1.440E-05	1.376E+00
29	1.821E-05	1.745E+00
30	1.926E-05	1.849E+00
31	2.012E-05	1.935E+00
32	2.016E-05	1.942E+00
33	2.228E-05	2.151E+00
34	2.461E-05	2.378E+00
35	2.622E-05	2.534E+00
36	2.736E-05	2.640E+00
37	2.746E-05	2.647E+00
38	2.674E-05	2.570E+00
39	3.259E-05	3.138E+00
40	4.123E-05	3.977E+00
41	5.607E-05	5.448E+00
42	8.548E-05	8.352E+00
43	7.323E-05	7.092E+00
44	6.815E-05	6.433E+00
45	6.638E-05	6.200E+00

46	4.197E-05	3.937E+00
47	6.167E-05	5.825E+00
48	8.109E-05	7.549E+00
49	9.589E-05	8.925E+00
50	1.025E-04	9.556E+00
51	5.380E-05	5.071E+00
52	3.562E-05	3.368E+00
53	2.579E-05	2.441E+00
54	2.065E-05	2.000E+00
55	2.232E-05	2.136E+00
56	2.426E-05	2.325E+00
57	2.568E-05	2.433E+00
58	3.216E-05	3.053E+00
59	3.972E-05	3.844E+00
60	4.743E-05	4.593E+00
61	5.687E-05	5.495E+00
62	6.681E-05	6.454E+00
63	7.755E-05	7.525E+00
64	7.145E-05	6.935E+00
65	8.422E-05	8.122E+00
66	1.054E-04	1.009E+01
67	1.445E-04	1.367E+01
68	1.549E-04	1.460E+01
69	1.549E-04	1.463E+01
70	1.513E-04	1.431E+01
71	9.770E-05	9.297E+00
72	7.115E-05	6.820E+00
73	5.405E-05	5.142E+00
74	4.462E-05	4.320E+00
75	4.131E-05	3.949E+00
76	3.727E-05	3.532E+00
77	3.217E-05	3.047E+00
78	2.742E-05	2.636E+00
79	3.151E-05	3.057E+00
80	3.524E-05	3.333E+00
81	4.136E-05	3.897E+00
82	4.871E-05	4.571E+00
83	5.365E-05	5.029E+00
84	5.819E-05	5.452E+00
85	6.189E-05	5.796E+00
86	5.993E-05	5.622E+00
87	3.138E-05	2.978E+00
88	2.077E-05	1.986E+00
89	1.505E-05	1.447E+00
90	1.410E-05	1.361E+00
91	6.892E-05	6.497E+00
92	6.670E-05	6.292E+00
93	6.411E-05	6.055E+00
94	6.136E-05	5.808E+00
95	5.872E-05	5.568E+00
96	5.635E-05	5.347E+00
97	5.404E-05	5.144E+00
98	5.086E-05	4.837E+00
99	4.805E-05	4.596E+00
100	4.497E-05	4.307E+00
101	4.232E-05	4.084E+00
102	4.000E-05	3.908E+00
103	7.875E-05	7.421E+00
104	7.554E-05	7.127E+00
105	7.175E-05	6.781E+00
106	6.798E-05	6.444E+00
107	6.462E-05	6.135E+00
108	6.136E-05	5.836E+00
109	5.797E-05	5.530E+00
110	5.416E-05	5.188E+00
111	5.046E-05	4.842E+00
112	4.709E-05	4.536E+00
113	4.396E-05	4.249E+00
114	4.135E-05	4.038E+00
115	9.192E-05	8.658E+00
116	8.704E-05	8.214E+00
117	8.120E-05	7.681E+00
118	7.594E-05	7.210E+00
119	7.149E-05	6.826E+00
120	6.643E-05	6.345E+00
121	6.165E-05	5.898E+00
122	5.717E-05	5.501E+00
123	5.303E-05	5.115E+00
124	4.986E-05	4.864E+00
125	4.627E-05	4.507E+00
126	4.292E-05	4.183E+00
127	1.105E-04	1.040E+01
128	1.030E-04	9.714E+00
129	9.334E-05	8.845E+00
130	8.608E-05	8.255E+00
131	7.848E-05	7.555E+00
132	7.173E-05	6.928E+00
133	6.522E-05	6.269E+00
134	6.062E-05	5.881E+00
135	5.624E-05	5.467E+00
136	5.218E-05	5.067E+00
137	4.836E-05	4.702E+00
138	4.483E-05	4.364E+00
139	1.405E-04	1.326E+01
140	1.290E-04	1.222E+01
141	1.104E-04	1.053E+01
142	9.476E-05	9.092E+00

143	8.407E-05	8.100E+00
144	7.588E-05	7.341E+00
145	6.923E-05	6.708E+00
146	6.386E-05	6.197E+00
147	5.907E-05	5.731E+00
148	5.467E-05	5.304E+00
149	5.072E-05	4.921E+00
150	4.698E-05	4.560E+00
151	7.297E-05	7.081E+00
152	6.751E-05	6.539E+00
153	6.262E-05	6.059E+00
154	5.779E-05	5.610E+00
155	5.399E-05	5.223E+00
156	4.981E-05	4.826E+00
157	3.812E-05	3.705E+00
158	3.909E-05	3.784E+00
159	3.839E-05	3.637E+00
160	3.743E-05	3.536E+00
161	3.557E-05	3.360E+00
162	3.382E-05	3.198E+00
163	3.246E-05	3.075E+00
164	3.017E-05	2.865E+00
165	2.709E-05	2.584E+00
166	2.384E-05	2.281E+00
167	2.130E-05	2.039E+00
168	4.810E-05	4.553E+00
169	4.821E-05	4.554E+00
170	4.615E-05	4.356E+00
171	4.328E-05	4.090E+00
172	4.063E-05	3.847E+00
173	3.785E-05	3.595E+00
174	3.361E-05	3.212E+00
175	2.914E-05	2.803E+00
176	2.522E-05	2.420E+00
177	2.237E-05	2.145E+00
178	6.453E-05	6.167E+00
179	6.270E-05	5.915E+00
180	5.872E-05	5.542E+00
181	5.355E-05	5.070E+00
182	4.924E-05	4.696E+00
183	4.304E-05	4.111E+00
184	3.740E-05	3.651E+00
185	3.136E-05	3.051E+00
186	2.688E-05	2.592E+00
187	2.376E-05	2.275E+00
188	9.082E-05	8.659E+00
189	8.742E-05	8.233E+00
190	7.862E-05	7.426E+00
191	6.797E-05	6.468E+00
192	5.768E-05	5.522E+00
193	4.828E-05	4.669E+00
194	4.064E-05	3.964E+00
195	3.386E-05	3.287E+00
196	2.942E-05	2.850E+00
197	2.508E-05	2.398E+00
198	1.478E-04	1.397E+01
199	1.449E-04	1.362E+01
200	1.196E-04	1.137E+01
201	6.651E-05	6.457E+00
202	4.531E-05	4.399E+00
203	3.763E-05	3.663E+00
204	3.106E-05	2.966E+00
205	2.532E-05	2.409E+00
206	2.447E-05	2.323E+00
207	2.283E-05	2.211E+00
208	2.225E-06	2.155E-01
209	2.561E-06	2.473E-01
210	3.015E-06	2.908E-01
211	3.572E-06	3.435E-01
212	4.309E-06	4.132E-01
213	5.410E-06	5.177E-01
214	6.948E-06	6.627E-01
215	8.995E-06	8.562E-01
216	1.075E-05	1.023E+00
217	1.244E-05	1.182E+00
218	1.334E-05	1.266E+00
219	1.378E-05	1.308E+00
220	1.290E-05	1.227E+00
221	1.188E-05	1.128E+00
222	1.106E-05	1.047E+00
223	1.098E-05	1.040E+00
224	1.091E-05	1.037E+00
225	1.061E-05	1.013E+00
226	1.003E-05	9.600E-01
227	2.169E-06	2.114E-01
228	2.580E-06	2.502E-01
229	3.053E-06	2.950E-01
230	3.663E-06	3.530E-01
231	4.457E-06	4.281E-01
232	5.583E-06	5.343E-01
233	7.325E-06	6.990E-01
234	9.767E-06	9.297E-01
235	1.235E-05	1.175E+00
236	1.477E-05	1.403E+00
237	1.624E-05	1.541E+00
238	1.653E-05	1.569E+00
239	1.534E-05	1.457E+00

240	1.417E-05	1.343E+00
241	1.367E-05	1.293E+00
242	1.355E-05	1.285E+00
243	1.292E-05	1.232E+00
244	1.200E-05	1.149E+00
245	1.072E-05	1.027E+00
246	1.992E-06	1.943E-01
247	2.458E-06	2.400E-01
248	3.015E-06	2.927E-01
249	3.710E-06	3.582E-01
250	4.594E-06	4.422E-01
251	5.820E-06	5.579E-01
252	7.688E-06	7.339E-01
253	1.068E-05	1.016E+00
254	1.435E-05	1.363E+00
255	1.798E-05	1.706E+00
256	2.032E-05	1.927E+00
257	2.035E-05	1.931E+00
258	1.911E-05	1.813E+00
259	1.790E-05	1.693E+00
260	1.753E-05	1.659E+00
261	1.639E-05	1.560E+00
262	1.476E-05	1.413E+00
263	1.308E-05	1.252E+00
264	1.107E-05	1.059E+00
265	2.002E-06	1.961E-01
266	2.333E-06	2.275E-01
267	2.864E-06	2.793E-01
268	3.594E-06	3.490E-01
269	4.628E-06	4.466E-01
270	6.012E-06	5.770E-01
271	8.146E-06	7.786E-01
272	1.160E-05	1.103E+00
273	1.700E-05	1.614E+00
274	2.287E-05	2.189E+00
275	2.658E-05	2.525E+00
276	2.652E-05	2.514E+00
277	2.516E-05	2.381E+00
278	2.370E-05	2.241E+00
279	2.226E-05	2.111E+00
280	1.917E-05	1.832E+00
281	1.633E-05	1.563E+00
282	1.363E-05	1.302E+00
283	1.088E-05	1.038E+00
284	2.045E-06	2.005E-01
285	2.387E-06	2.342E-01
286	2.846E-06	2.775E-01
287	3.538E-06	3.436E-01
288	4.503E-06	4.361E-01
289	6.033E-06	5.810E-01
290	8.459E-06	8.099E-01
291	1.272E-05	1.210E+00
292	2.145E-05	2.091E+00
293	3.025E-05	2.864E+00
294	1.737E-05	1.658E+00
295	1.339E-05	1.277E+00
296	1.001E-05	9.542E-01
297	1.847E-06	1.817E-01
298	2.237E-06	2.202E-01
299	2.733E-06	2.692E-01
300	3.354E-06	3.280E-01
301	4.355E-06	4.227E-01
302	5.968E-06	5.753E-01
303	8.675E-06	8.314E-01
304	1.372E-05	1.307E+00
305	2.515E-05	2.383E+00
306	1.753E-05	1.667E+00
307	1.253E-05	1.191E+00
308	9.278E-06	8.818E-01
309	1.504E-06	1.504E-01
310	1.875E-06	1.858E-01
311	2.375E-06	2.341E-01
312	3.050E-06	2.994E-01
313	3.965E-06	3.877E-01
314	5.504E-06	5.340E-01
315	8.175E-06	7.879E-01
316	1.370E-05	1.309E+00
317	3.007E-05	2.840E+00
318	1.606E-05	1.526E+00
319	1.095E-05	1.041E+00
320	8.171E-06	7.772E-01
321	1.296E-06	1.307E-01
322	1.554E-06	1.574E-01
323	1.877E-06	1.881E-01
324	2.387E-06	2.362E-01
325	3.246E-06	3.189E-01
326	4.598E-06	4.501E-01
327	6.931E-06	6.723E-01
328	1.211E-05	1.165E+00
329	3.014E-05	2.857E+00
330	1.378E-05	1.307E+00
331	1.001E-05	9.514E-01
332	7.904E-06	7.519E-01
333	1.210E-06	1.189E-01
334	1.403E-06	1.379E-01
335	1.666E-06	1.643E-01
336	2.049E-06	2.028E-01

337	2.623E-06	2.607E-01
338	3.522E-06	3.485E-01
339	5.465E-06	5.365E-01
340	9.874E-06	9.592E-01
341	3.760E-05	3.549E+00
342	1.817E-05	1.723E+00
343	1.223E-05	1.162E+00
344	9.120E-06	8.675E-01
345	7.096E-06	6.754E-01
346	1.089E-06	1.106E-01
347	1.227E-06	1.224E-01
348	1.441E-06	1.425E-01
349	1.744E-06	1.711E-01
350	2.204E-06	2.151E-01
351	2.947E-06	2.870E-01
352	4.389E-06	4.279E-01
353	7.349E-06	7.194E-01
354	2.616E-05	2.464E+00
355	1.451E-05	1.375E+00
356	9.934E-06	9.437E-01
357	7.525E-06	7.158E-01
358	6.089E-06	5.794E-01
359	9.658E-07	9.814E-02
360	1.124E-06	1.138E-01
361	1.291E-06	1.274E-01
362	1.564E-06	1.530E-01
363	1.955E-06	1.901E-01
364	2.548E-06	2.461E-01
365	3.448E-06	3.324E-01
366	5.436E-06	5.231E-01
367	1.223E-05	1.173E+00
368	4.146E-05	3.984E+00
369	3.269E-05	3.090E+00
370	1.917E-05	1.813E+00
371	1.213E-05	1.149E+00
372	8.485E-06	8.055E-01
373	6.400E-06	6.083E-01
374	5.164E-06	4.913E-01
375	9.322E-07	9.410E-02
376	1.086E-06	1.094E-01
377	1.284E-06	1.285E-01
378	1.502E-06	1.462E-01
379	1.890E-06	1.829E-01
380	2.409E-06	2.333E-01
381	3.237E-06	3.133E-01
382	4.717E-06	4.538E-01
383	9.203E-06	8.818E-01
384	1.837E-05	1.773E+00
385	2.317E-05	2.241E+00
386	2.554E-05	2.463E+00
387	2.436E-05	2.333E+00
388	2.035E-05	1.937E+00
389	1.509E-05	1.432E+00
390	1.068E-05	1.014E+00
391	7.921E-06	7.519E-01
392	6.051E-06	5.747E-01
393	4.866E-06	4.628E-01
394	9.373E-07	9.374E-02
395	1.130E-06	1.126E-01
396	1.369E-06	1.371E-01
397	1.588E-06	1.567E-01
398	1.819E-06	1.782E-01
399	2.152E-06	2.095E-01
400	2.775E-06	2.676E-01
401	4.140E-06	3.970E-01
402	7.369E-06	7.070E-01
403	1.192E-05	1.150E+00
404	1.551E-05	1.497E+00
405	1.722E-05	1.665E+00
406	1.686E-05	1.617E+00
407	1.473E-05	1.407E+00
408	1.186E-05	1.128E+00
409	9.278E-06	8.830E-01
410	7.370E-06	7.014E-01
411	5.905E-06	5.613E-01
412	4.705E-06	4.473E-01
413	1.582E-06	1.560E-01
414	1.382E-06	1.355E-01
415	1.297E-06	1.267E-01
416	1.887E-06	1.831E-01
417	1.737E-06	1.680E-01
418	1.798E-06	1.741E-01
419	2.476E-06	2.379E-01
420	2.530E-06	2.442E-01
421	2.372E-06	2.311E-01
422	3.813E-06	3.669E-01
423	3.494E-06	3.371E-01
424	3.275E-06	3.169E-01
425	6.156E-06	5.921E-01
426	5.359E-06	5.166E-01
427	4.809E-06	4.642E-01
428	9.123E-06	8.797E-01
429	7.477E-06	7.208E-01
430	6.299E-06	6.076E-01
431	1.140E-05	1.099E+00
432	8.796E-06	8.488E-01
433	7.122E-06	6.873E-01

434 1.251E-05 1.207E+00
 435 9.642E-06 9.282E-01
 436 7.706E-06 7.408E-01
 437 1.261E-05 1.213E+00
 438 9.778E-06 9.412E-01
 439 7.839E-06 7.531E-01
 440 1.137E-05 1.089E+00
 441 9.190E-06 8.845E-01
 442 7.596E-06 7.314E-01
 443 9.624E-06 9.236E-01
 444 8.080E-06 7.808E-01
 445 6.823E-06 6.553E-01
 446 7.972E-06 7.606E-01
 447 6.807E-06 6.488E-01
 448 5.907E-06 5.645E-01
 449 6.572E-06 6.262E-01
 450 5.759E-06 5.490E-01
 451 5.108E-06 4.873E-01

ABOVE CONCENTRATIONS DO NOT INCLUDE THE FOLLOWING BACKGROUND CONCENTRATIONS:

0.000E+00 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACEZ588 MODEL VERS. 93288 *
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**** RECEPTOR TOTAL CANCER RISK AND EXCESS BURDEN ****

RECEPTOR	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM	POPULATION	BURDEN
1	3.229E-07	1.939E-08	9.053E-07	0.000E+00	3.745E-07	0.000E+00	0.000E+00	1.622E-06	0	0.000E+00
2	4.865E-07	2.910E-08	1.359E-06	0.000E+00	5.624E-07	0.000E+00	0.000E+00	2.437E-06	0	0.000E+00
3	4.831E-07	2.888E-08	1.348E-06	0.000E+00	5.581E-07	0.000E+00	0.000E+00	2.418E-06	0	0.000E+00
4	6.260E-07	3.751E-08	1.751E-06	0.000E+00	7.248E-07	0.000E+00	0.000E+00	3.140E-06	0	0.000E+00
5	6.318E-07	3.787E-08	1.768E-06	0.000E+00	7.317E-07	0.000E+00	0.000E+00	3.169E-06	0	0.000E+00
6	5.738E-07	3.444E-08	1.608E-06	0.000E+00	6.653E-07	0.000E+00	0.000E+00	2.881E-06	0	0.000E+00
7	5.081E-07	3.037E-08	1.418E-06	0.000E+00	5.870E-07	0.000E+00	0.000E+00	2.544E-06	0	0.000E+00
8	5.114E-07	3.072E-08	1.434E-06	0.000E+00	5.933E-07	0.000E+00	0.000E+00	2.570E-06	0	0.000E+00
9	5.315E-07	3.201E-08	1.495E-06	0.000E+00	6.181E-07	0.000E+00	0.000E+00	2.676E-06	0	0.000E+00
10	6.717E-07	4.005E-08	1.870E-06	0.000E+00	7.740E-07	0.000E+00	0.000E+00	3.356E-06	0	0.000E+00
11	2.747E-07	1.651E-08	7.707E-07	0.000E+00	3.189E-07	0.000E+00	0.000E+00	1.381E-06	0	0.000E+00
12	1.192E-06	7.211E-08	3.367E-06	0.000E+00	1.392E-06	0.000E+00	0.000E+00	6.023E-06	0	0.000E+00
13	5.164E-07	3.161E-08	1.476E-06	0.000E+00	6.096E-07	0.000E+00	0.000E+00	2.634E-06	0	0.000E+00
14	5.208E-07	3.187E-08	1.488E-06	0.000E+00	6.146E-07	0.000E+00	0.000E+00	2.656E-06	0	0.000E+00
15	5.075E-07	3.102E-08	1.449E-06	0.000E+00	5.983E-07	0.000E+00	0.000E+00	2.586E-06	0	0.000E+00
16	5.769E-07	3.527E-08	1.647E-06	0.000E+00	6.802E-07	0.000E+00	0.000E+00	2.940E-06	0	0.000E+00
17	3.037E-07	1.830E-08	8.543E-07	0.000E+00	3.534E-07	0.000E+00	0.000E+00	1.530E-06	0	0.000E+00
18	4.579E-07	2.776E-08	1.296E-06	0.000E+00	5.358E-07	0.000E+00	0.000E+00	2.318E-06	0	0.000E+00
19	4.556E-07	2.766E-08	1.292E-06	0.000E+00	5.337E-07	0.000E+00	0.000E+00	2.309E-06	0	0.000E+00
20	6.383E-07	3.899E-08	1.821E-06	0.000E+00	7.523E-07	0.000E+00	0.000E+00	3.250E-06	0	0.000E+00
21	4.698E-07	2.820E-08	1.317E-06	0.000E+00	5.441E-07	0.000E+00	0.000E+00	2.359E-06	0	0.000E+00
22	4.392E-07	2.638E-08	1.232E-06	0.000E+00	5.087E-07	0.000E+00	0.000E+00	2.207E-06	0	0.000E+00
23	4.383E-07	2.633E-08	1.230E-06	0.000E+00	5.077E-07	0.000E+00	0.000E+00	2.202E-06	0	0.000E+00
24	4.351E-07	2.619E-08	1.223E-06	0.000E+00	5.050E-07	0.000E+00	0.000E+00	2.189E-06	0	0.000E+00
25	4.377E-07	2.639E-08	1.232E-06	0.000E+00	5.088E-07	0.000E+00	0.000E+00	2.205E-06	0	0.000E+00
26	4.602E-07	2.784E-08	1.300E-06	0.000E+00	5.373E-07	0.000E+00	0.000E+00	2.325E-06	0	0.000E+00
27	4.707E-07	2.834E-08	1.323E-06	0.000E+00	5.472E-07	0.000E+00	0.000E+00	2.370E-06	0	0.000E+00
28	5.025E-07	3.021E-08	1.411E-06	0.000E+00	5.834E-07	0.000E+00	0.000E+00	2.527E-06	0	0.000E+00
29	6.367E-07	3.858E-08	1.801E-06	0.000E+00	7.446E-07	0.000E+00	0.000E+00	3.221E-06	0	0.000E+00
30	6.745E-07	4.103E-08	1.916E-06	0.000E+00	7.917E-07	0.000E+00	0.000E+00	3.423E-06	0	0.000E+00
31	7.057E-07	4.307E-08	2.012E-06	0.000E+00	8.310E-07	0.000E+00	0.000E+00	3.591E-06	0	0.000E+00
32	7.083E-07	4.328E-08	2.022E-06	0.000E+00	8.350E-07	0.000E+00	0.000E+00	3.608E-06	0	0.000E+00
33	7.844E-07	4.813E-08	2.248E-06	0.000E+00	9.282E-07	0.000E+00	0.000E+00	4.009E-06	0	0.000E+00
34	8.571E-07	5.322E-08	2.485E-06	0.000E+00	1.026E-06	0.000E+00	0.000E+00	4.432E-06	0	0.000E+00
35	9.242E-07	5.683E-08	2.654E-06	0.000E+00	1.096E-06	0.000E+00	0.000E+00	4.731E-06	0	0.000E+00
36	9.629E-07	5.935E-08	2.772E-06	0.000E+00	1.144E-06	0.000E+00	0.000E+00	4.939E-06	0	0.000E+00
37	9.650E-07	5.952E-08	2.780E-06	0.000E+00	1.148E-06	0.000E+00	0.000E+00	4.952E-06	0	0.000E+00
38	9.374E-07	5.761E-08	2.691E-06	0.000E+00	1.111E-06	0.000E+00	0.000E+00	4.797E-06	0	0.000E+00
39	1.144E-06	7.045E-08	3.290E-06	0.000E+00	1.359E-06	0.000E+00	0.000E+00	5.864E-06	0	0.000E+00
40	1.450E-06	8.948E-08	4.179E-06	0.000E+00	1.725E-06	0.000E+00	0.000E+00	7.444E-06	0	0.000E+00
41	1.991E-06	1.224E-07	5.715E-06	0.000E+00	2.358E-06	0.000E+00	0.000E+00	1.019E-05	0	0.000E+00
42	3.045E-06	1.854E-07	8.662E-06	0.000E+00	3.574E-06	0.000E+00	0.000E+00	1.547E-05	0	0.000E+00
43	2.587E-06	1.553E-07	7.251E-06	0.000E+00	2.996E-06	0.000E+00	0.000E+00	1.299E-05	0	0.000E+00
44	2.352E-06	1.385E-07	6.465E-06	0.000E+00	2.679E-06	0.000E+00	0.000E+00	1.163E-05	0	0.000E+00
45	2.268E-06	1.317E-07	6.149E-06	0.000E+00	2.552E-06	0.000E+00	0.000E+00	1.110E-05	0	0.000E+00
46	1.440E-06	8.425E-08	3.932E-06	0.000E+00	1.631E-06	0.000E+00	0.000E+00	7.087E-06	0	0.000E+00
47	2.130E-06	1.227E-07	5.726E-06	0.000E+00	2.374E-06	0.000E+00	0.000E+00	1.035E-05	0	0.000E+00
48	2.763E-06	1.590E-07	7.419E-06	0.000E+00	3.081E-06	0.000E+00	0.000E+00	1.342E-05	0	0.000E+00
49	3.267E-06	1.876E-07	8.755E-06	0.000E+00	3.636E-06	0.000E+00	0.000E+00	1.584E-05	0	0.000E+00
50	3.498E-06	2.010E-07	9.380E-06	0.000E+00	3.895E-06	0.000E+00	0.000E+00	1.697E-05	0	0.000E+00
51	1.856E-06	1.078E-07	5.032E-06	0.000E+00	2.086E-06	0.000E+00	0.000E+00	9.082E-06	0	0.000E+00
52	1.231E-06	7.222E-08	3.371E-06	0.000E+00	1.397E-06	0.000E+00	0.000E+00	6.072E-06	0	0.000E+00
53	8.921E-07	5.276E-08	2.463E-06	0.000E+00	1.020E-06	0.000E+00	0.000E+00	4.428E-06	0	0.000E+00
54	7.306E-07	4.297E-08	2.007E-06	0.000E+00	8.296E-07	0.000E+00	0.000E+00	3.610E-06	0	0.000E+00
55	7.812E-07	4.612E-08	2.153E-06	0.000E+00	8.911E-07	0.000E+00	0.000E+00	3.872E-06	0	0.000E+00
56	8.501E-07	5.005E-08	2.337E-06	0.000E+00	9.669E-07	0.000E+00	0.000E+00	4.204E-06	0	0.000E+00
57	8.890E-07	5.280E-08	2.465E-06	0.000E+00	1.021E-06	0.000E+00	0.000E+00	4.427E-06	0	0.000E+00

58	1.115E-06	6.614E-08	3.088E-06	0.000E+00	1.279E-06	0.000E+00	0.000E+00	5.548E-06	0	0.000E+00
59	1.403E-06	8.266E-08	3.860E-06	0.000E+00	1.596E-06	0.000E+00	0.000E+00	6.942E-06	0	0.000E+00
60	1.676E-06	9.915E-08	4.630E-06	0.000E+00	1.914E-06	0.000E+00	0.000E+00	8.319E-06	0	0.000E+00
61	2.005E-06	1.191E-07	5.563E-06	0.000E+00	2.300E-06	0.000E+00	0.000E+00	9.987E-06	0	0.000E+00
62	2.355E-06	1.403E-07	6.551E-06	0.000E+00	2.708E-06	0.000E+00	0.000E+00	1.175E-05	0	0.000E+00
63	2.745E-06	1.637E-07	7.647E-06	0.000E+00	3.160E-06	0.000E+00	0.000E+00	1.371E-05	0	0.000E+00
64	2.531E-06	1.507E-07	7.038E-06	0.000E+00	2.908E-06	0.000E+00	0.000E+00	1.263E-05	0	0.000E+00
65	2.963E-06	1.765E-07	8.244E-06	0.000E+00	3.408E-06	0.000E+00	0.000E+00	1.479E-05	0	0.000E+00
66	3.684E-06	2.176E-07	1.016E-05	0.000E+00	4.204E-06	0.000E+00	0.000E+00	1.826E-05	0	0.000E+00
67	4.995E-06	2.918E-07	1.362E-05	0.000E+00	5.644E-06	0.000E+00	0.000E+00	2.455E-05	0	0.000E+00
68	5.341E-06	3.113E-07	1.453E-05	0.000E+00	6.025E-06	0.000E+00	0.000E+00	2.621E-05	0	0.000E+00
69	5.348E-06	3.111E-07	1.452E-05	0.000E+00	6.019E-06	0.000E+00	0.000E+00	2.620E-05	0	0.000E+00
70	5.230E-06	3.033E-07	1.416E-05	0.000E+00	5.869E-06	0.000E+00	0.000E+00	2.556E-05	0	0.000E+00
71	3.396E-06	1.987E-07	9.278E-06	0.000E+00	3.843E-06	0.000E+00	0.000E+00	1.672E-05	0	0.000E+00
72	2.490E-06	1.463E-07	6.829E-06	0.000E+00	2.826E-06	0.000E+00	0.000E+00	1.229E-05	0	0.000E+00
73	1.879E-06	1.113E-07	5.198E-06	0.000E+00	2.152E-06	0.000E+00	0.000E+00	9.340E-06	0	0.000E+00
74	1.576E-06	9.301E-08	4.343E-06	0.000E+00	1.796E-06	0.000E+00	0.000E+00	7.808E-06	0	0.000E+00
75	1.444E-06	8.539E-08	3.987E-06	0.000E+00	1.650E-06	0.000E+00	0.000E+00	7.166E-06	0	0.000E+00
76	1.291E-06	7.657E-08	3.575E-06	0.000E+00	1.480E-06	0.000E+00	0.000E+00	6.422E-06	0	0.000E+00
77	1.114E-06	6.604E-08	3.083E-06	0.000E+00	1.277E-06	0.000E+00	0.000E+00	5.540E-06	0	0.000E+00
78	9.638E-07	5.668E-08	2.647E-06	0.000E+00	1.095E-06	0.000E+00	0.000E+00	4.762E-06	0	0.000E+00
79	1.117E-06	6.518E-08	3.043E-06	0.000E+00	1.258E-06	0.000E+00	0.000E+00	5.484E-06	0	0.000E+00
80	1.219E-06	7.169E-08	3.347E-06	0.000E+00	1.387E-06	0.000E+00	0.000E+00	6.024E-06	0	0.000E+00
81	1.425E-06	8.355E-08	3.900E-06	0.000E+00	1.617E-06	0.000E+00	0.000E+00	7.025E-06	0	0.000E+00
82	1.671E-06	9.770E-08	4.560E-06	0.000E+00	1.891E-06	0.000E+00	0.000E+00	8.221E-06	0	0.000E+00
83	1.839E-06	1.074E-07	5.012E-06	0.000E+00	2.079E-06	0.000E+00	0.000E+00	9.037E-06	0	0.000E+00
84	1.994E-06	1.163E-07	5.429E-06	0.000E+00	2.252E-06	0.000E+00	0.000E+00	9.792E-06	0	0.000E+00
85	2.120E-06	1.235E-07	5.765E-06	0.000E+00	2.391E-06	0.000E+00	0.000E+00	1.040E-05	0	0.000E+00
86	2.056E-06	1.200E-07	5.600E-06	0.000E+00	2.323E-06	0.000E+00	0.000E+00	1.010E-05	0	0.000E+00
87	1.088E-06	6.460E-08	3.016E-06	0.000E+00	1.249E-06	0.000E+00	0.000E+00	5.417E-06	0	0.000E+00
88	7.252E-07	4.335E-08	2.024E-06	0.000E+00	8.372E-07	0.000E+00	0.000E+00	3.630E-06	0	0.000E+00
89	5.282E-07	3.166E-08	1.479E-06	0.000E+00	6.113E-07	0.000E+00	0.000E+00	2.650E-06	0	0.000E+00
90	4.966E-07	2.978E-08	1.391E-06	0.000E+00	5.748E-07	0.000E+00	0.000E+00	2.492E-06	0	0.000E+00
91	2.374E-06	1.406E-07	6.564E-06	0.000E+00	2.719E-06	0.000E+00	0.000E+00	1.180E-05	0	0.000E+00
92	2.299E-06	1.363E-07	6.363E-06	0.000E+00	2.636E-06	0.000E+00	0.000E+00	1.143E-05	0	0.000E+00
93	2.212E-06	1.313E-07	6.132E-06	0.000E+00	2.540E-06	0.000E+00	0.000E+00	1.102E-05	0	0.000E+00
94	2.122E-06	1.262E-07	5.890E-06	0.000E+00	2.439E-06	0.000E+00	0.000E+00	1.058E-05	0	0.000E+00
95	2.034E-06	1.211E-07	5.654E-06	0.000E+00	2.341E-06	0.000E+00	0.000E+00	1.015E-05	0	0.000E+00
96	1.953E-06	1.164E-07	5.437E-06	0.000E+00	2.251E-06	0.000E+00	0.000E+00	9.757E-06	0	0.000E+00
97	1.878E-06	1.121E-07	5.234E-06	0.000E+00	2.166E-06	0.000E+00	0.000E+00	9.390E-06	0	0.000E+00
98	1.766E-06	1.057E-07	4.935E-06	0.000E+00	2.042E-06	0.000E+00	0.000E+00	8.849E-06	0	0.000E+00
99	1.678E-06	1.003E-07	4.684E-06	0.000E+00	1.938E-06	0.000E+00	0.000E+00	8.400E-06	0	0.000E+00
100	1.572E-06	9.411E-08	4.394E-06	0.000E+00	1.817E-06	0.000E+00	0.000E+00	7.878E-06	0	0.000E+00
101	1.491E-06	8.903E-08	4.157E-06	0.000E+00	1.718E-06	0.000E+00	0.000E+00	7.455E-06	0	0.000E+00
102	1.425E-06	8.480E-08	3.960E-06	0.000E+00	1.636E-06	0.000E+00	0.000E+00	7.106E-06	0	0.000E+00
103	2.712E-06	1.604E-07	7.489E-06	0.000E+00	3.103E-06	0.000E+00	0.000E+00	1.346E-05	0	0.000E+00
104	2.605E-06	1.543E-07	7.203E-06	0.000E+00	2.984E-06	0.000E+00	0.000E+00	1.295E-05	0	0.000E+00
105	2.478E-06	1.471E-07	6.865E-06	0.000E+00	2.843E-06	0.000E+00	0.000E+00	1.233E-05	0	0.000E+00
106	2.354E-06	1.400E-07	6.535E-06	0.000E+00	2.706E-06	0.000E+00	0.000E+00	1.173E-05	0	0.000E+00
107	2.241E-06	1.335E-07	6.231E-06	0.000E+00	2.579E-06	0.000E+00	0.000E+00	1.118E-05	0	0.000E+00
108	2.131E-06	1.271E-07	5.935E-06	0.000E+00	2.456E-06	0.000E+00	0.000E+00	1.065E-05	0	0.000E+00
109	2.019E-06	1.206E-07	5.631E-06	0.000E+00	2.330E-06	0.000E+00	0.000E+00	1.010E-05	0	0.000E+00
110	1.894E-06	1.132E-07	5.284E-06	0.000E+00	2.185E-06	0.000E+00	0.000E+00	9.476E-06	0	0.000E+00
111	1.768E-06	1.057E-07	4.935E-06	0.000E+00	2.041E-06	0.000E+00	0.000E+00	8.849E-06	0	0.000E+00
112	1.656E-06	9.893E-08	4.620E-06	0.000E+00	1.910E-06	0.000E+00	0.000E+00	8.284E-06	0	0.000E+00
113	1.551E-06	9.262E-08	4.325E-06	0.000E+00	1.788E-06	0.000E+00	0.000E+00	7.756E-06	0	0.000E+00
114	1.472E-06	8.772E-08	4.097E-06	0.000E+00	1.692E-06	0.000E+00	0.000E+00	7.349E-06	0	0.000E+00
115	3.165E-06	1.869E-07	8.723E-06	0.000E+00	3.614E-06	0.000E+00	0.000E+00	1.569E-05	0	0.000E+00
116	3.002E-06	1.776E-07	8.291E-06	0.000E+00	3.435E-06	0.000E+00	0.000E+00	1.490E-05	0	0.000E+00
117	2.807E-06	1.664E-07	7.771E-06	0.000E+00	3.218E-06	0.000E+00	0.000E+00	1.396E-05	0	0.000E+00
118	2.634E-06	1.565E-07	7.307E-06	0.000E+00	3.025E-06	0.000E+00	0.000E+00	1.312E-05	0	0.000E+00
119	2.494E-06	1.482E-07	6.919E-06	0.000E+00	2.863E-06	0.000E+00	0.000E+00	1.242E-05	0	0.000E+00
120	2.317E-06	1.382E-07	6.452E-06	0.000E+00	2.669E-06	0.000E+00	0.000E+00	1.158E-05	0	0.000E+00
121	2.153E-06	1.287E-07	6.009E-06	0.000E+00	2.486E-06	0.000E+00	0.000E+00	1.078E-05	0	0.000E+00
122	2.008E-06	1.199E-07	5.599E-06	0.000E+00	2.315E-06	0.000E+00	0.000E+00	1.004E-05	0	0.000E+00
123	1.867E-06	1.115E-07	5.205E-06	0.000E+00	2.151E-06	0.000E+00	0.000E+00	9.334E-06	0	0.000E+00
124	1.774E-06	1.054E-07	4.923E-06	0.000E+00	2.033E-06	0.000E+00	0.000E+00	8.837E-06	0	0.000E+00
125	1.643E-06	9.789E-08	4.572E-06	0.000E+00	1.888E-06	0.000E+00	0.000E+00	8.201E-06	0	0.000E+00
126	1.525E-06	9.098E-08	4.249E-06	0.000E+00	1.755E-06	0.000E+00	0.000E+00	7.620E-06	0	0.000E+00
127	3.803E-06	2.239E-07	1.045E-05	0.000E+00	4.332E-06	0.000E+00	0.000E+00	1.881E-05	0	0.000E+00
128	3.551E-06	2.096E-07	9.783E-06	0.000E+00	4.053E-06	0.000E+00	0.000E+00	1.760E-05	0	0.000E+00
129	3.232E-06	1.913E-07	8.931E-06	0.000E+00	3.699E-06	0.000E+00	0.000E+00	1.605E-05	0	0.000E+00
130	3.013E-06	1.783E-07	8.325E-06	0.000E+00	3.444E-06	0.000E+00	0.000E+00	1.496E-05	0	0.000E+00
131	2.757E-06	1.637E-07	7.643E-06	0.000E+00	3.160E-06	0.000E+00	0.000E+00	1.372E-05	0	0.000E+00
132	2.529E-06	1.503E-07	7.021E-06	0.000E+00	2.902E-06	0.000E+00	0.000E+00	1.260E-05	0	0.000E+00
133	2.288E-06	1.367E-07	6.385E-06	0.000E+00	2.640E-06	0.000E+00	0.000E+00	1.145E-05	0	0.000E+00
134	2.145E-06	1.278E-07	5.966E-06	0.000E+00	2.465E-06	0.000E+00	0.000E+00	1.070E-05	0	0.000E+00
135	1.994E-06	1.187E-07	5.542E-06	0.000E+00	2.290E-06	0.000E+00	0.000E+00	9.944E-06	0	0.000E+00
136	1.848E-06	1.102E-07	5.146E-06	0.000E+00	2.126E-06	0.000E+00	0.000E+00	9.230E-06	0	0.000E+00
137	1.715E-06	1.022E-07	4.775E-06	0.000E+00	1.972E-06	0.000E+00	0.000E+00	8.564E-06	0	0.000E+00
138	1.591E-06	9.493E-08	4.433E-06	0.000E+00	1.831E-06	0.000E+00	0.000E+00	7.951E-06	0	0.000E+00
139	4.851E-06	2.835E-07	1.324E-05	0.000E+00	5.486E-06	0.000E+00	0.000E+00	2.386E-05	0	0.000E+00
140	4.466E-06	2.617E-07	1.222E-05	0.000E+00	5.061E-06	0.000E+00	0.000E+00	2.201E-05	0	0.000E+00
141	3.846E-06	2.265E-07	1.057E-05	0.000E+00	4.378E-06	0.000E+00	0.000E+00	1.902E-05	0	0.000E+00
142	3.319E-06	1.968E-07	9.187E-06	0.000E+00	3.800E-06	0.000E+00	0.000E+00	1.650E-05	0	0.000E+00
143	2.956E-06	1.760E-07	8.218E-06	0.000E+00	3					

155	1.906E-06	1.136E-07	5.307E-06	0.000E+00	2.193E-06	0.000E+00	0.000E+00	9.519E-06	0	0.000E+00
156	1.761E-06	1.048E-07	4.892E-06	0.000E+00	2.022E-06	0.000E+00	0.000E+00	8.779E-06	0	0.000E+00
157	1.351E-06	7.971E-08	3.723E-06	0.000E+00	1.538E-06	0.000E+00	0.000E+00	6.692E-06	0	0.000E+00
158	1.381E-06	8.168E-08	3.814E-06	0.000E+00	1.577E-06	0.000E+00	0.000E+00	6.853E-06	0	0.000E+00
159	1.329E-06	7.927E-08	3.701E-06	0.000E+00	1.532E-06	0.000E+00	0.000E+00	6.642E-06	0	0.000E+00
160	1.292E-06	7.688E-08	3.589E-06	0.000E+00	1.486E-06	0.000E+00	0.000E+00	6.444E-06	0	0.000E+00
161	1.228E-06	7.302E-08	3.409E-06	0.000E+00	1.412E-06	0.000E+00	0.000E+00	6.121E-06	0	0.000E+00
162	1.168E-06	6.957E-08	3.248E-06	0.000E+00	1.345E-06	0.000E+00	0.000E+00	5.831E-06	0	0.000E+00
163	1.123E-06	6.697E-08	3.127E-06	0.000E+00	1.294E-06	0.000E+00	0.000E+00	5.611E-06	0	0.000E+00
164	1.046E-06	6.261E-08	2.923E-06	0.000E+00	1.210E-06	0.000E+00	0.000E+00	5.242E-06	0	0.000E+00
165	9.431E-07	5.669E-08	2.647E-06	0.000E+00	1.095E-06	0.000E+00	0.000E+00	4.741E-06	0	0.000E+00
166	8.325E-07	5.028E-08	2.348E-06	0.000E+00	9.707E-07	0.000E+00	0.000E+00	4.201E-06	0	0.000E+00
167	7.440E-07	4.501E-08	2.102E-06	0.000E+00	8.689E-07	0.000E+00	0.000E+00	3.760E-06	0	0.000E+00
168	1.664E-06	9.908E-08	4.626E-06	0.000E+00	1.915E-06	0.000E+00	0.000E+00	8.304E-06	0	0.000E+00
169	1.664E-06	9.900E-08	4.622E-06	0.000E+00	1.914E-06	0.000E+00	0.000E+00	8.299E-06	0	0.000E+00
170	1.592E-06	9.451E-08	4.412E-06	0.000E+00	1.828E-06	0.000E+00	0.000E+00	7.926E-06	0	0.000E+00
171	1.494E-06	8.887E-08	4.149E-06	0.000E+00	1.718E-06	0.000E+00	0.000E+00	7.451E-06	0	0.000E+00
172	1.405E-06	8.377E-08	3.911E-06	0.000E+00	1.619E-06	0.000E+00	0.000E+00	7.019E-06	0	0.000E+00
173	1.313E-06	7.843E-08	3.662E-06	0.000E+00	1.516E-06	0.000E+00	0.000E+00	6.568E-06	0	0.000E+00
174	1.172E-06	7.026E-08	3.281E-06	0.000E+00	1.357E-06	0.000E+00	0.000E+00	5.880E-06	0	0.000E+00
175	1.023E-06	6.148E-08	2.871E-06	0.000E+00	1.187E-06	0.000E+00	0.000E+00	5.142E-06	0	0.000E+00
176	8.831E-07	5.335E-08	2.492E-06	0.000E+00	1.030E-06	0.000E+00	0.000E+00	4.458E-06	0	0.000E+00
177	7.827E-07	4.726E-08	2.207E-06	0.000E+00	9.123E-07	0.000E+00	0.000E+00	3.949E-06	0	0.000E+00
178	2.254E-06	1.328E-07	6.202E-06	0.000E+00	2.567E-06	0.000E+00	0.000E+00	1.116E-05	0	0.000E+00
179	2.162E-06	1.281E-07	5.980E-06	0.000E+00	2.477E-06	0.000E+00	0.000E+00	1.075E-05	0	0.000E+00
180	2.025E-06	1.201E-07	5.609E-06	0.000E+00	2.323E-06	0.000E+00	0.000E+00	1.008E-05	0	0.000E+00
181	1.852E-06	1.103E-07	5.148E-06	0.000E+00	2.132E-06	0.000E+00	0.000E+00	9.242E-06	0	0.000E+00
182	1.715E-06	1.022E-07	4.771E-06	0.000E+00	1.974E-06	0.000E+00	0.000E+00	8.563E-06	0	0.000E+00
183	1.501E-06	8.982E-08	4.194E-06	0.000E+00	1.735E-06	0.000E+00	0.000E+00	7.520E-06	0	0.000E+00
184	1.331E-06	7.924E-08	3.701E-06	0.000E+00	1.528E-06	0.000E+00	0.000E+00	6.640E-06	0	0.000E+00
185	1.113E-06	6.668E-08	3.114E-06	0.000E+00	1.286E-06	0.000E+00	0.000E+00	5.580E-06	0	0.000E+00
186	9.460E-07	5.693E-08	2.659E-06	0.000E+00	1.099E-06	0.000E+00	0.000E+00	4.760E-06	0	0.000E+00
187	8.305E-07	4.991E-08	2.331E-06	0.000E+00	9.637E-07	0.000E+00	0.000E+00	4.175E-06	0	0.000E+00
188	3.163E-06	1.855E-07	8.662E-06	0.000E+00	3.586E-06	0.000E+00	0.000E+00	1.560E-05	0	0.000E+00
189	3.010E-06	1.776E-07	8.290E-06	0.000E+00	3.435E-06	0.000E+00	0.000E+00	1.491E-05	0	0.000E+00
190	2.714E-06	1.608E-07	7.508E-06	0.000E+00	3.110E-06	0.000E+00	0.000E+00	1.349E-05	0	0.000E+00
191	2.362E-06	1.406E-07	6.564E-06	0.000E+00	2.717E-06	0.000E+00	0.000E+00	1.178E-05	0	0.000E+00
192	2.016E-06	1.205E-07	5.625E-06	0.000E+00	2.327E-06	0.000E+00	0.000E+00	1.009E-05	0	0.000E+00
193	1.704E-06	1.017E-07	4.747E-06	0.000E+00	1.962E-06	0.000E+00	0.000E+00	8.514E-06	0	0.000E+00
194	1.445E-06	8.625E-08	4.028E-06	0.000E+00	1.663E-06	0.000E+00	0.000E+00	7.223E-06	0	0.000E+00
195	1.200E-06	7.177E-08	3.352E-06	0.000E+00	1.385E-06	0.000E+00	0.000E+00	6.008E-06	0	0.000E+00
196	1.041E-06	6.201E-08	2.896E-06	0.000E+00	1.197E-06	0.000E+00	0.000E+00	5.196E-06	0	0.000E+00
197	8.755E-07	5.222E-08	2.438E-06	0.000E+00	1.009E-06	0.000E+00	0.000E+00	4.375E-06	0	0.000E+00
198	5.108E-06	2.973E-07	1.388E-05	0.000E+00	5.753E-06	0.000E+00	0.000E+00	2.504E-05	0	0.000E+00
199	4.985E-06	2.914E-07	1.360E-05	0.000E+00	5.639E-06	0.000E+00	0.000E+00	2.452E-05	0	0.000E+00
200	4.152E-06	2.439E-07	1.139E-05	0.000E+00	4.716E-06	0.000E+00	0.000E+00	2.050E-05	0	0.000E+00
201	2.355E-06	1.403E-07	6.552E-06	0.000E+00	2.707E-06	0.000E+00	0.000E+00	1.175E-05	0	0.000E+00
202	1.604E-06	9.568E-08	4.468E-06	0.000E+00	1.846E-06	0.000E+00	0.000E+00	8.014E-06	0	0.000E+00
203	1.336E-06	7.925E-08	3.701E-06	0.000E+00	1.529E-06	0.000E+00	0.000E+00	6.645E-06	0	0.000E+00
204	1.083E-06	6.444E-08	3.009E-06	0.000E+00	1.245E-06	0.000E+00	0.000E+00	5.401E-06	0	0.000E+00
205	8.800E-07	5.230E-08	2.442E-06	0.000E+00	1.011E-06	0.000E+00	0.000E+00	4.385E-06	0	0.000E+00
206	8.488E-07	5.034E-08	2.350E-06	0.000E+00	9.732E-07	0.000E+00	0.000E+00	4.223E-06	0	0.000E+00
207	8.070E-07	4.740E-08	2.213E-06	0.000E+00	9.152E-07	0.000E+00	0.000E+00	3.983E-06	0	0.000E+00
208	7.866E-08	4.710E-09	2.200E-07	0.000E+00	9.088E-08	0.000E+00	0.000E+00	3.942E-07	0	0.000E+00
209	9.026E-08	5.408E-09	2.525E-07	0.000E+00	1.044E-07	0.000E+00	0.000E+00	4.526E-07	0	0.000E+00
210	1.061E-07	6.379E-09	2.979E-07	0.000E+00	1.231E-07	0.000E+00	0.000E+00	5.335E-07	0	0.000E+00
211	1.254E-07	7.536E-09	3.519E-07	0.000E+00	1.455E-07	0.000E+00	0.000E+00	6.303E-07	0	0.000E+00
212	1.508E-07	9.054E-09	4.228E-07	0.000E+00	1.748E-07	0.000E+00	0.000E+00	7.575E-07	0	0.000E+00
213	1.890E-07	1.136E-08	5.307E-07	0.000E+00	2.194E-07	0.000E+00	0.000E+00	9.505E-07	0	0.000E+00
214	2.420E-07	1.454E-08	6.789E-07	0.000E+00	2.808E-07	0.000E+00	0.000E+00	1.216E-06	0	0.000E+00
215	3.126E-07	1.878E-08	8.771E-07	0.000E+00	3.629E-07	0.000E+00	0.000E+00	1.571E-06	0	0.000E+00
216	3.735E-07	2.248E-08	1.049E-06	0.000E+00	4.341E-07	0.000E+00	0.000E+00	1.880E-06	0	0.000E+00
217	4.315E-07	2.590E-08	1.209E-06	0.000E+00	5.004E-07	0.000E+00	0.000E+00	2.167E-06	0	0.000E+00
218	4.623E-07	2.773E-08	1.295E-06	0.000E+00	5.359E-07	0.000E+00	0.000E+00	2.321E-06	0	0.000E+00
219	4.776E-07	2.867E-08	1.339E-06	0.000E+00	5.540E-07	0.000E+00	0.000E+00	2.399E-06	0	0.000E+00
220	4.479E-07	2.698E-08	1.260E-06	0.000E+00	5.212E-07	0.000E+00	0.000E+00	2.256E-06	0	0.000E+00
221	4.118E-07	2.476E-08	1.156E-06	0.000E+00	4.784E-07	0.000E+00	0.000E+00	2.071E-06	0	0.000E+00
222	3.823E-07	2.282E-08	1.065E-06	0.000E+00	4.411E-07	0.000E+00	0.000E+00	1.912E-06	0	0.000E+00
223	3.800E-07	2.266E-08	1.058E-06	0.000E+00	4.381E-07	0.000E+00	0.000E+00	1.899E-06	0	0.000E+00
224	3.788E-07	2.267E-08	1.058E-06	0.000E+00	4.380E-07	0.000E+00	0.000E+00	1.898E-06	0	0.000E+00
225	3.698E-07	2.226E-08	1.039E-06	0.000E+00	4.298E-07	0.000E+00	0.000E+00	1.861E-06	0	0.000E+00
226	3.503E-07	2.111E-08	9.858E-07	0.000E+00	4.076E-07	0.000E+00	0.000E+00	1.765E-06	0	0.000E+00
227	7.708E-08	4.633E-09	2.164E-07	0.000E+00	8.934E-08	0.000E+00	0.000E+00	3.874E-07	0	0.000E+00
228	9.132E-08	5.473E-09	2.556E-07	0.000E+00	1.056E-07	0.000E+00	0.000E+00	4.580E-07	0	0.000E+00
229	1.077E-07	6.449E-09	3.012E-07	0.000E+00	1.245E-07	0.000E+00	0.000E+00	5.398E-07	0	0.000E+00
230	1.288E-07	7.735E-09	3.612E-07	0.000E+00	1.493E-07	0.000E+00	0.000E+00	6.471E-07	0	0.000E+00
231	1.563E-07	9.385E-09	4.383E-07	0.000E+00	1.812E-07	0.000E+00	0.000E+00	7.851E-07	0	0.000E+00
232	1.951E-07	1.171E-08	5.469E-07	0.000E+00	2.262E-07	0.000E+00	0.000E+00	9.799E-07	0	0.000E+00
233	2.552E-07	1.533E-08	7.159E-07	0.000E+00	2.961E-07	0.000E+00	0.000E+00	1.283E-06	0	0.000E+00
234	3.395E-07	2.038E-08	9.516E-07	0.000E+00	3.937E-07	0.000E+00	0.000E+00	1.705E-06	0	0.000E+00
235	4.290E-07	2.577E-08	1.203E-06	0.000E+00	4.979E-07	0.000E+00	0.000E+00	2.156E-06	0	0.000E+00
236	5.123E-07	3.075E-08	1.436E-06	0.000E+00	5.941E-07	0.000E+00	0.000E+00	2.573E-06	0	0.000E+00
237	5.626E-07	3.373E-08	1.575E-06	0.000E+00	6.518E-07	0.000E+00	0.000E+00	2.823E-06	0	0.000E+00
238	5.728E-07	3.439E-08	1.606E-06	0.000E+00	6.645E-07	0.000E+00	0.000E+00	2.877E-06	0	0.000E+00
239	5.321E-07	3.203E-08	1.496E-06	0.000E+00	6.188E-07	0.000E+00	0.000E+00	2.679E-06	0	0.000E+00
240	4.904E-07	2.								

252	2.679E-07	1.608E-08	7.508E-07	0.000E+00	3.106E-07	0.000E+00	0.000E+00	1.345E-06	0	0.000E+00
253	3.711E-07	2.226E-08	1.039E-06	0.000E+00	4.300E-07	0.000E+00	0.000E+00	1.863E-06	0	0.000E+00
254	4.979E-07	2.984E-08	1.393E-06	0.000E+00	5.766E-07	0.000E+00	0.000E+00	2.498E-06	0	0.000E+00
255	6.232E-07	3.737E-08	1.745E-06	0.000E+00	7.222E-07	0.000E+00	0.000E+00	3.128E-06	0	0.000E+00
256	7.038E-07	4.217E-08	1.969E-06	0.000E+00	8.149E-07	0.000E+00	0.000E+00	3.530E-06	0	0.000E+00
257	7.053E-07	4.234E-08	1.977E-06	0.000E+00	8.181E-07	0.000E+00	0.000E+00	3.542E-06	0	0.000E+00
258	6.621E-07	3.975E-08	1.856E-06	0.000E+00	7.681E-07	0.000E+00	0.000E+00	3.326E-06	0	0.000E+00
259	6.185E-07	3.688E-08	1.722E-06	0.000E+00	7.129E-07	0.000E+00	0.000E+00	3.090E-06	0	0.000E+00
260	6.059E-07	3.609E-08	1.685E-06	0.000E+00	6.977E-07	0.000E+00	0.000E+00	3.025E-06	0	0.000E+00
261	5.694E-07	3.413E-08	1.594E-06	0.000E+00	6.594E-07	0.000E+00	0.000E+00	2.857E-06	0	0.000E+00
262	5.156E-07	3.113E-08	1.454E-06	0.000E+00	6.010E-07	0.000E+00	0.000E+00	2.601E-06	0	0.000E+00
263	4.569E-07	2.757E-08	1.287E-06	0.000E+00	5.323E-07	0.000E+00	0.000E+00	2.304E-06	0	0.000E+00
264	3.864E-07	2.326E-08	1.086E-06	0.000E+00	4.491E-07	0.000E+00	0.000E+00	1.945E-06	0	0.000E+00
265	7.153E-08	4.247E-09	1.983E-07	0.000E+00	8.190E-08	0.000E+00	0.000E+00	3.560E-07	0	0.000E+00
266	8.302E-08	4.954E-09	2.314E-07	0.000E+00	9.555E-08	0.000E+00	0.000E+00	4.149E-07	0	0.000E+00
267	1.019E-07	6.107E-09	2.852E-07	0.000E+00	1.178E-07	0.000E+00	0.000E+00	5.110E-07	0	0.000E+00
268	1.274E-07	7.642E-09	3.569E-07	0.000E+00	1.474E-07	0.000E+00	0.000E+00	6.393E-07	0	0.000E+00
269	1.630E-07	9.791E-09	4.572E-07	0.000E+00	1.890E-07	0.000E+00	0.000E+00	8.190E-07	0	0.000E+00
270	2.107E-07	1.264E-08	5.901E-07	0.000E+00	2.440E-07	0.000E+00	0.000E+00	1.057E-06	0	0.000E+00
271	2.843E-07	1.705E-08	7.964E-07	0.000E+00	3.294E-07	0.000E+00	0.000E+00	1.427E-06	0	0.000E+00
272	4.030E-07	2.412E-08	1.126E-06	0.000E+00	4.661E-07	0.000E+00	0.000E+00	2.019E-06	0	0.000E+00
273	5.894E-07	3.521E-08	1.644E-06	0.000E+00	6.805E-07	0.000E+00	0.000E+00	2.949E-06	0	0.000E+00
274	7.997E-07	4.761E-08	2.223E-06	0.000E+00	9.197E-07	0.000E+00	0.000E+00	3.990E-06	0	0.000E+00
275	9.224E-07	5.512E-08	2.574E-06	0.000E+00	1.065E-06	0.000E+00	0.000E+00	4.616E-06	0	0.000E+00
276	9.182E-07	5.506E-08	2.571E-06	0.000E+00	1.064E-06	0.000E+00	0.000E+00	4.608E-06	0	0.000E+00
277	8.698E-07	5.193E-08	2.424E-06	0.000E+00	1.004E-06	0.000E+00	0.000E+00	4.350E-06	0	0.000E+00
278	8.186E-07	4.873E-08	2.275E-06	0.000E+00	9.421E-07	0.000E+00	0.000E+00	4.084E-06	0	0.000E+00
279	7.711E-07	4.608E-08	2.152E-06	0.000E+00	8.906E-07	0.000E+00	0.000E+00	3.859E-06	0	0.000E+00
280	6.686E-07	4.033E-08	1.883E-06	0.000E+00	7.788E-07	0.000E+00	0.000E+00	3.371E-06	0	0.000E+00
281	5.705E-07	3.446E-08	1.609E-06	0.000E+00	6.654E-07	0.000E+00	0.000E+00	2.880E-06	0	0.000E+00
282	4.753E-07	2.861E-08	1.336E-06	0.000E+00	5.525E-07	0.000E+00	0.000E+00	2.392E-06	0	0.000E+00
283	3.790E-07	2.277E-08	1.063E-06	0.000E+00	4.399E-07	0.000E+00	0.000E+00	1.905E-06	0	0.000E+00
284	7.312E-08	4.370E-09	2.041E-07	0.000E+00	8.425E-08	0.000E+00	0.000E+00	3.658E-07	0	0.000E+00
285	8.541E-08	5.082E-09	2.374E-07	0.000E+00	9.799E-08	0.000E+00	0.000E+00	4.258E-07	0	0.000E+00
286	1.012E-07	6.023E-09	2.813E-07	0.000E+00	1.162E-07	0.000E+00	0.000E+00	5.047E-07	0	0.000E+00
287	1.254E-07	7.488E-09	3.497E-07	0.000E+00	1.445E-07	0.000E+00	0.000E+00	6.270E-07	0	0.000E+00
288	1.592E-07	9.534E-09	4.452E-07	0.000E+00	1.840E-07	0.000E+00	0.000E+00	7.979E-07	0	0.000E+00
289	2.121E-07	1.274E-08	5.950E-07	0.000E+00	2.459E-07	0.000E+00	0.000E+00	1.066E-06	0	0.000E+00
290	2.957E-07	1.773E-08	8.279E-07	0.000E+00	3.424E-07	0.000E+00	0.000E+00	1.484E-06	0	0.000E+00
291	4.420E-07	2.644E-08	1.234E-06	0.000E+00	5.108E-07	0.000E+00	0.000E+00	2.214E-06	0	0.000E+00
292	7.626E-07	4.486E-08	2.095E-06	0.000E+00	8.657E-07	0.000E+00	0.000E+00	3.768E-06	0	0.000E+00
293	1.046E-06	6.229E-08	2.908E-06	0.000E+00	1.204E-06	0.000E+00	0.000E+00	5.221E-06	0	0.000E+00
294	6.053E-07	3.647E-08	1.703E-06	0.000E+00	7.042E-07	0.000E+00	0.000E+00	3.049E-06	0	0.000E+00
295	4.661E-07	2.800E-08	1.308E-06	0.000E+00	5.409E-07	0.000E+00	0.000E+00	2.343E-06	0	0.000E+00
296	3.484E-07	2.093E-08	9.775E-07	0.000E+00	4.044E-07	0.000E+00	0.000E+00	1.751E-06	0	0.000E+00
297	6.625E-08	3.984E-09	1.861E-07	0.000E+00	7.677E-08	0.000E+00	0.000E+00	3.331E-07	0	0.000E+00
298	8.027E-08	4.822E-09	2.252E-07	0.000E+00	9.292E-08	0.000E+00	0.000E+00	4.032E-07	0	0.000E+00
299	9.814E-08	5.881E-09	2.747E-07	0.000E+00	1.133E-07	0.000E+00	0.000E+00	4.920E-07	0	0.000E+00
300	1.196E-07	7.164E-09	3.346E-07	0.000E+00	1.381E-07	0.000E+00	0.000E+00	5.996E-07	0	0.000E+00
301	1.542E-07	9.235E-09	4.313E-07	0.000E+00	1.782E-07	0.000E+00	0.000E+00	7.729E-07	0	0.000E+00
302	2.100E-07	1.257E-08	5.869E-07	0.000E+00	2.426E-07	0.000E+00	0.000E+00	1.052E-06	0	0.000E+00
303	3.035E-07	1.818E-08	8.491E-07	0.000E+00	3.511E-07	0.000E+00	0.000E+00	1.522E-06	0	0.000E+00
304	4.772E-07	2.854E-08	1.333E-06	0.000E+00	5.515E-07	0.000E+00	0.000E+00	2.390E-06	0	0.000E+00
305	8.709E-07	5.155E-08	2.407E-06	0.000E+00	9.967E-07	0.000E+00	0.000E+00	4.326E-06	0	0.000E+00
306	6.087E-07	3.644E-08	1.701E-06	0.000E+00	7.040E-07	0.000E+00	0.000E+00	3.050E-06	0	0.000E+00
307	4.349E-07	2.604E-08	1.216E-06	0.000E+00	5.032E-07	0.000E+00	0.000E+00	2.180E-06	0	0.000E+00
308	3.220E-07	1.929E-08	9.005E-07	0.000E+00	3.727E-07	0.000E+00	0.000E+00	1.615E-06	0	0.000E+00
309	5.482E-08	3.249E-09	1.518E-07	0.000E+00	6.256E-08	0.000E+00	0.000E+00	2.724E-07	0	0.000E+00
310	6.772E-08	4.036E-09	1.885E-07	0.000E+00	7.776E-08	0.000E+00	0.000E+00	3.381E-07	0	0.000E+00
311	8.535E-08	5.106E-09	2.385E-07	0.000E+00	9.840E-08	0.000E+00	0.000E+00	4.274E-07	0	0.000E+00
312	1.092E-07	6.551E-09	3.060E-07	0.000E+00	1.263E-07	0.000E+00	0.000E+00	5.480E-07	0	0.000E+00
313	1.414E-07	8.489E-09	3.965E-07	0.000E+00	1.637E-07	0.000E+00	0.000E+00	7.100E-07	0	0.000E+00
314	1.948E-07	1.171E-08	5.468E-07	0.000E+00	2.258E-07	0.000E+00	0.000E+00	9.792E-07	0	0.000E+00
315	2.875E-07	1.728E-08	8.072E-07	0.000E+00	3.336E-07	0.000E+00	0.000E+00	1.446E-06	0	0.000E+00
316	4.780E-07	2.864E-08	1.338E-06	0.000E+00	5.532E-07	0.000E+00	0.000E+00	2.397E-06	0	0.000E+00
317	1.038E-06	6.138E-08	2.866E-06	0.000E+00	1.187E-06	0.000E+00	0.000E+00	5.152E-06	0	0.000E+00
318	5.572E-07	3.324E-08	1.552E-06	0.000E+00	6.425E-07	0.000E+00	0.000E+00	2.785E-06	0	0.000E+00
319	3.800E-07	2.276E-08	1.063E-06	0.000E+00	4.397E-07	0.000E+00	0.000E+00	1.905E-06	0	0.000E+00
320	2.838E-07	1.704E-08	7.957E-07	0.000E+00	3.292E-07	0.000E+00	0.000E+00	1.426E-06	0	0.000E+00
321	4.760E-08	2.807E-09	1.311E-07	0.000E+00	5.403E-08	0.000E+00	0.000E+00	2.356E-07	0	0.000E+00
322	5.735E-08	3.378E-09	1.578E-07	0.000E+00	6.500E-08	0.000E+00	0.000E+00	2.836E-07	0	0.000E+00
323	6.857E-08	4.063E-09	1.898E-07	0.000E+00	7.822E-08	0.000E+00	0.000E+00	3.406E-07	0	0.000E+00
324	8.613E-08	5.137E-09	2.400E-07	0.000E+00	9.898E-08	0.000E+00	0.000E+00	4.302E-07	0	0.000E+00
325	1.163E-07	6.964E-09	3.253E-07	0.000E+00	1.342E-07	0.000E+00	0.000E+00	5.827E-07	0	0.000E+00
326	1.641E-07	9.858E-09	4.605E-07	0.000E+00	1.901E-07	0.000E+00	0.000E+00	8.245E-07	0	0.000E+00
327	2.452E-07	1.477E-08	6.899E-07	0.000E+00	2.849E-07	0.000E+00	0.000E+00	1.235E-06	0	0.000E+00
328	4.253E-07	2.555E-08	1.193E-06	0.000E+00	4.932E-07	0.000E+00	0.000E+00	2.137E-06	0	0.000E+00
329	1.044E-06	6.198E-08	2.894E-06	0.000E+00	1.198E-06	0.000E+00	0.000E+00	5.198E-06	0	0.000E+00
330	4.775E-07	2.856E-08	1.334E-06	0.000E+00	5.520E-07	0.000E+00	0.000E+00	2.392E-06	0	0.000E+00
331	3.474E-07	2.087E-08	9.744E-07	0.000E+00	4.032E-07	0.000E+00	0.000E+00	1.746E-06	0	0.000E+00
332	2.745E-07	1.652E-08	7.716E-07	0.000E+00	3.192E-07	0.000E+00	0.000E+00	1.382E-06	0	0.000E+00
333	4.344E-08	2.591E-09	1.210E-07	0.000E+00	4.993E-08	0.000E+00	0.000E+00	2.170E-07	0	0.000E+00
334	5.028E-08	3.004E-09	1.403E-07	0.000E+00	5.790E-08	0.000E+00	0.000E+00	2.515E-07	0	0.000E+00
335	5.987E-08	3.576E-09	1.670E-07	0.000E+00	6.891E-08	0.000E+00	0.000E+00	2.994E-07	0	0.000E+00
336	7.391E-08	4.414E-09	2.062E-07	0.000E+00	8.504E-08	0.000E+00	0.000E+00	3.696E-07	0	0.000E+00
337	9.504E-08	5								

349	6.242E-08	3.730E-09	1.742E-07	0.000E+00	7.190E-08	0.000E+00	0.000E+00	3.122E-07	0	0.000E+00
350	7.848E-07	4.688E-09	2.190E-07	0.000E+00	9.042E-08	0.000E+00	0.000E+00	3.926E-07	0	0.000E+00
351	1.047E-07	6.263E-09	2.925E-07	0.000E+00	1.208E-07	0.000E+00	0.000E+00	5.243E-07	0	0.000E+00
352	1.560E-07	9.355E-09	4.369E-07	0.000E+00	1.804E-07	0.000E+00	0.000E+00	7.828E-07	0	0.000E+00
353	2.623E-07	1.576E-08	7.359E-07	0.000E+00	3.037E-07	0.000E+00	0.000E+00	1.318E-06	0	0.000E+00
354	9.007E-07	5.320E-08	2.483E-06	0.000E+00	1.029E-06	0.000E+00	0.000E+00	4.466E-06	0	0.000E+00
355	5.021E-07	3.000E-08	1.401E-06	0.000E+00	5.799E-07	0.000E+00	0.000E+00	2.513E-06	0	0.000E+00
356	3.446E-07	2.070E-08	9.667E-07	0.000E+00	4.000E-07	0.000E+00	0.000E+00	1.732E-06	0	0.000E+00
357	2.613E-07	1.574E-08	7.349E-07	0.000E+00	3.040E-07	0.000E+00	0.000E+00	1.316E-06	0	0.000E+00
358	2.115E-07	1.274E-08	5.951E-07	0.000E+00	2.462E-07	0.000E+00	0.000E+00	1.065E-06	0	0.000E+00
359	3.569E-08	2.089E-09	9.762E-08	0.000E+00	4.021E-08	0.000E+00	0.000E+00	1.756E-07	0	0.000E+00
360	4.145E-08	2.421E-09	1.131E-07	0.000E+00	4.660E-08	0.000E+00	0.000E+00	2.036E-07	0	0.000E+00
361	4.648E-08	2.748E-09	1.284E-07	0.000E+00	5.297E-08	0.000E+00	0.000E+00	2.306E-07	0	0.000E+00
362	5.585E-08	3.319E-09	1.550E-07	0.000E+00	6.400E-08	0.000E+00	0.000E+00	2.782E-07	0	0.000E+00
363	6.939E-08	4.142E-09	1.934E-07	0.000E+00	7.990E-08	0.000E+00	0.000E+00	3.468E-07	0	0.000E+00
364	8.986E-08	5.388E-09	2.516E-07	0.000E+00	1.040E-07	0.000E+00	0.000E+00	4.508E-07	0	0.000E+00
365	1.213E-07	7.310E-09	3.414E-07	0.000E+00	1.411E-07	0.000E+00	0.000E+00	6.110E-07	0	0.000E+00
366	1.909E-07	1.151E-08	5.375E-07	0.000E+00	2.221E-07	0.000E+00	0.000E+00	9.620E-07	0	0.000E+00
367	4.281E-07	2.577E-08	1.203E-06	0.000E+00	4.974E-07	0.000E+00	0.000E+00	2.155E-06	0	0.000E+00
368	1.453E-06	8.892E-08	4.153E-06	0.000E+00	1.716E-06	0.000E+00	0.000E+00	7.411E-06	0	0.000E+00
369	1.129E-06	6.714E-08	3.134E-06	0.000E+00	1.298E-06	0.000E+00	0.000E+00	5.628E-06	0	0.000E+00
370	6.623E-07	3.942E-08	1.840E-06	0.000E+00	7.622E-07	0.000E+00	0.000E+00	3.304E-06	0	0.000E+00
371	4.197E-07	2.508E-08	1.171E-06	0.000E+00	4.847E-07	0.000E+00	0.000E+00	2.100E-06	0	0.000E+00
372	2.941E-07	1.763E-08	8.234E-07	0.000E+00	3.408E-07	0.000E+00	0.000E+00	1.476E-06	0	0.000E+00
373	2.221E-07	1.334E-08	6.231E-07	0.000E+00	2.578E-07	0.000E+00	0.000E+00	1.116E-06	0	0.000E+00
374	1.794E-07	1.080E-08	5.044E-07	0.000E+00	2.087E-07	0.000E+00	0.000E+00	9.032E-07	0	0.000E+00
375	3.422E-08	2.004E-09	9.363E-08	0.000E+00	3.859E-08	0.000E+00	0.000E+00	1.684E-07	0	0.000E+00
376	3.979E-08	2.332E-09	1.090E-07	0.000E+00	4.491E-08	0.000E+00	0.000E+00	1.960E-07	0	0.000E+00
377	4.687E-08	2.749E-09	1.284E-07	0.000E+00	5.295E-08	0.000E+00	0.000E+00	2.310E-07	0	0.000E+00
378	5.336E-08	3.180E-09	1.485E-07	0.000E+00	6.135E-08	0.000E+00	0.000E+00	2.664E-07	0	0.000E+00
379	6.677E-08	4.010E-09	1.873E-07	0.000E+00	7.737E-08	0.000E+00	0.000E+00	3.354E-07	0	0.000E+00
380	8.509E-08	5.138E-09	2.399E-07	0.000E+00	9.911E-08	0.000E+00	0.000E+00	4.293E-07	0	0.000E+00
381	1.143E-07	6.904E-09	3.224E-07	0.000E+00	1.332E-07	0.000E+00	0.000E+00	5.769E-07	0	0.000E+00
382	1.656E-07	9.933E-09	4.639E-07	0.000E+00	1.917E-07	0.000E+00	0.000E+00	8.311E-07	0	0.000E+00
383	3.218E-07	1.937E-08	9.044E-07	0.000E+00	3.739E-07	0.000E+00	0.000E+00	1.619E-06	0	0.000E+00
384	6.466E-07	3.947E-08	1.844E-06	0.000E+00	7.614E-07	0.000E+00	0.000E+00	3.291E-06	0	0.000E+00
385	8.170E-07	5.013E-08	2.342E-06	0.000E+00	9.667E-07	0.000E+00	0.000E+00	4.175E-06	0	0.000E+00
386	8.980E-07	5.533E-08	2.584E-06	0.000E+00	1.067E-06	0.000E+00	0.000E+00	4.605E-06	0	0.000E+00
387	8.513E-07	5.200E-08	2.429E-06	0.000E+00	1.004E-06	0.000E+00	0.000E+00	4.335E-06	0	0.000E+00
388	7.070E-07	4.261E-08	1.990E-06	0.000E+00	8.231E-07	0.000E+00	0.000E+00	3.562E-06	0	0.000E+00
389	5.230E-07	3.139E-08	1.465E-06	0.000E+00	6.065E-07	0.000E+00	0.000E+00	2.626E-06	0	0.000E+00
390	3.703E-07	2.222E-08	1.037E-06	0.000E+00	4.293E-07	0.000E+00	0.000E+00	1.859E-06	0	0.000E+00
391	2.746E-07	1.646E-08	7.686E-07	0.000E+00	3.181E-07	0.000E+00	0.000E+00	1.378E-06	0	0.000E+00
392	2.098E-07	1.259E-08	5.878E-07	0.000E+00	2.433E-07	0.000E+00	0.000E+00	1.053E-06	0	0.000E+00
393	1.690E-07	1.016E-08	4.744E-07	0.000E+00	1.963E-07	0.000E+00	0.000E+00	8.499E-07	0	0.000E+00
394	3.413E-08	2.007E-09	9.376E-08	0.000E+00	3.866E-08	0.000E+00	0.000E+00	1.686E-07	0	0.000E+00
395	4.101E-08	2.424E-09	1.132E-07	0.000E+00	4.669E-08	0.000E+00	0.000E+00	2.033E-07	0	0.000E+00
396	4.993E-08	2.954E-09	1.380E-07	0.000E+00	5.688E-08	0.000E+00	0.000E+00	2.478E-07	0	0.000E+00
397	5.716E-08	3.408E-09	1.592E-07	0.000E+00	6.568E-08	0.000E+00	0.000E+00	2.855E-07	0	0.000E+00
398	6.503E-08	3.899E-09	1.821E-07	0.000E+00	7.517E-08	0.000E+00	0.000E+00	3.262E-07	0	0.000E+00
399	7.645E-08	4.602E-09	2.149E-07	0.000E+00	8.875E-08	0.000E+00	0.000E+00	3.847E-07	0	0.000E+00
400	9.771E-08	5.853E-09	2.733E-07	0.000E+00	1.130E-07	0.000E+00	0.000E+00	4.899E-07	0	0.000E+00
401	1.449E-07	8.672E-09	4.050E-07	0.000E+00	1.675E-07	0.000E+00	0.000E+00	7.260E-07	0	0.000E+00
402	2.580E-07	1.552E-08	7.247E-07	0.000E+00	2.996E-07	0.000E+00	0.000E+00	1.298E-06	0	0.000E+00
403	4.196E-07	2.551E-08	1.191E-06	0.000E+00	4.921E-07	0.000E+00	0.000E+00	2.129E-06	0	0.000E+00
404	5.461E-07	3.342E-08	1.561E-06	0.000E+00	6.446E-07	0.000E+00	0.000E+00	2.785E-06	0	0.000E+00
405	6.071E-07	3.715E-08	1.735E-06	0.000E+00	7.164E-07	0.000E+00	0.000E+00	3.096E-06	0	0.000E+00
406	5.898E-07	3.593E-08	1.678E-06	0.000E+00	6.933E-07	0.000E+00	0.000E+00	2.997E-06	0	0.000E+00
407	5.134E-07	3.109E-08	1.452E-06	0.000E+00	6.002E-07	0.000E+00	0.000E+00	2.596E-06	0	0.000E+00
408	4.119E-07	2.479E-08	1.157E-06	0.000E+00	4.789E-07	0.000E+00	0.000E+00	2.073E-06	0	0.000E+00
409	3.224E-07	1.942E-08	9.067E-07	0.000E+00	3.751E-07	0.000E+00	0.000E+00	1.624E-06	0	0.000E+00
410	2.561E-07	1.540E-08	7.192E-07	0.000E+00	2.976E-07	0.000E+00	0.000E+00	1.288E-06	0	0.000E+00
411	2.050E-07	1.231E-08	5.750E-07	0.000E+00	2.379E-07	0.000E+00	0.000E+00	1.030E-06	0	0.000E+00
412	1.633E-07	9.819E-09	4.585E-07	0.000E+00	1.897E-07	0.000E+00	0.000E+00	8.213E-07	0	0.000E+00
413	5.693E-08	3.401E-09	1.588E-07	0.000E+00	6.553E-08	0.000E+00	0.000E+00	2.847E-07	0	0.000E+00
414	4.944E-08	2.950E-09	1.378E-07	0.000E+00	5.688E-08	0.000E+00	0.000E+00	2.471E-07	0	0.000E+00
415	4.628E-08	2.726E-09	1.273E-07	0.000E+00	5.259E-08	0.000E+00	0.000E+00	2.289E-07	0	0.000E+00
416	6.684E-08	3.998E-09	1.867E-07	0.000E+00	7.714E-08	0.000E+00	0.000E+00	3.347E-07	0	0.000E+00
417	6.139E-08	3.629E-09	1.694E-07	0.000E+00	7.005E-08	0.000E+00	0.000E+00	3.045E-07	0	0.000E+00
418	6.354E-08	3.776E-09	1.763E-07	0.000E+00	7.287E-08	0.000E+00	0.000E+00	3.165E-07	0	0.000E+00
419	8.690E-08	5.166E-09	2.412E-07	0.000E+00	9.976E-08	0.000E+00	0.000E+00	4.330E-07	0	0.000E+00
420	8.914E-08	5.344E-09	2.495E-07	0.000E+00	1.031E-07	0.000E+00	0.000E+00	4.472E-07	0	0.000E+00
421	8.430E-08	5.051E-09	2.359E-07	0.000E+00	9.742E-08	0.000E+00	0.000E+00	4.227E-07	0	0.000E+00
422	1.339E-07	8.049E-09	3.759E-07	0.000E+00	1.554E-07	0.000E+00	0.000E+00	6.732E-07	0	0.000E+00
423	1.231E-07	7.387E-09	3.450E-07	0.000E+00	1.426E-07	0.000E+00	0.000E+00	6.180E-07	0	0.000E+00
424	1.156E-07	6.947E-09	3.244E-07	0.000E+00	1.340E-07	0.000E+00	0.000E+00	5.810E-07	0	0.000E+00
425	2.161E-07	1.302E-08	6.080E-07	0.000E+00	2.513E-07	0.000E+00	0.000E+00	1.088E-06	0	0.000E+00
426	1.885E-07	1.138E-08	5.313E-07	0.000E+00	2.196E-07	0.000E+00	0.000E+00	9.508E-07	0	0.000E+00
427	1.694E-07	1.020E-08	4.764E-07	0.000E+00	1.968E-07	0.000E+00	0.000E+00	8.528E-07	0	0.000E+00
428	3.209E-07	1.949E-08	9.103E-07	0.000E+00	3.760E-07	0.000E+00	0.000E+00	1.627E-06	0	0.000E+00
429	2.630E-07	1.593E-08	7.440E-07	0.000E+00	3.074E-07	0.000E+00	0.000E+00	1.330E-06	0	0.000E+00
430	2.217E-07	1.342E-08	6.267E-07	0.000E+00	2.589E-07	0.000E+00	0.000E+00	1.121E-06	0	0.000E+00
431	4.010E-07	2.449E-08	1.144E-06	0.000E+00	4.724E-07	0.000E+00	0.000E+00	2.042E-06	0	0.000E+00
432	3.096E-07	1.888E-08	8.820E-07	0.000E+00	3.643E-07	0.000E+00	0.000E+00	1.575E-06	0	0.000E+00
433	2.507E-07	1.528E-08	7.137E-07	0.000E+00	2.948E-07	0.000E+00	0.000E+00	1.274E-06	0	0.000E+00
434	4.401E-07									

446	2.777E-07	1.671E-08	7.804E-07	0.000E+00	3.228E-07	0.000E+00	0.000E+00	1.398E-06	0	0.000E+00
447	2.368E-07	1.426E-08	6.657E-07	0.000E+00	2.754E-07	0.000E+00	0.000E+00	1.192E-06	0	0.000E+00
448	2.061E-07	1.241E-08	5.795E-07	0.000E+00	2.396E-07	0.000E+00	0.000E+00	1.038E-06	0	0.000E+00
449	2.286E-07	1.380E-08	6.443E-07	0.000E+00	2.665E-07	0.000E+00	0.000E+00	1.153E-06	0	0.000E+00
450	2.004E-07	1.210E-08	5.649E-07	0.000E+00	2.336E-07	0.000E+00	0.000E+00	1.011E-06	0	0.000E+00
451	1.779E-07	1.071E-08	5.003E-07	0.000E+00	2.069E-07	0.000E+00	0.000E+00	8.958E-07	0	0.000E+00

RECEPTOR # 68 HAS MAXIMUM PEAK RISK OF 2.621E-05
 PEAK RECEPTOR LOCATED AT (X, Y) = 391445.000 3870519.000
 RECEPTOR POPULATION = 0
 RECEPTOR BURDEN = 0.000E+00

TOTAL CANCER EXCESS BURDEN FROM ALL RECEPTORS = 0.000E+00
 BURDEN COMPUTED WITH ZONE OF IMPACT RISK LEVEL = 1.000E-07

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 70-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 68 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	2.125E-09	1.438E-10	6.721E-09	0.000E+00	2.756E-09	0.000E+00	0.000E+00	1.175E-08
2	2.590E-09	1.752E-10	8.189E-09	0.000E+00	3.358E-09	0.000E+00	0.000E+00	1.431E-08
3	1.499E-08	1.014E-09	4.741E-08	0.000E+00	1.944E-08	0.000E+00	0.000E+00	8.286E-08
4	2.636E-08	1.817E-09	8.493E-08	0.000E+00	3.483E-08	0.000E+00	0.000E+00	1.484E-07
5	2.047E-08	1.385E-09	6.473E-08	0.000E+00	2.655E-08	0.000E+00	0.000E+00	1.131E-07
6	1.598E-08	1.081E-09	5.052E-08	0.000E+00	2.072E-08	0.000E+00	0.000E+00	8.829E-08
7	1.150E-09	7.789E-11	3.642E-09	0.000E+00	1.493E-09	0.000E+00	0.000E+00	6.363E-09
8	7.426E-10	5.030E-11	2.351E-09	0.000E+00	9.641E-10	0.000E+00	0.000E+00	4.108E-09
9	1.023E-09	6.931E-11	3.240E-09	0.000E+00	1.329E-09	0.000E+00	0.000E+00	5.662E-09
10	5.386E-10	3.648E-11	1.705E-09	0.000E+00	6.993E-10	0.000E+00	0.000E+00	2.980E-09
11	5.310E-10	3.596E-11	1.681E-09	0.000E+00	6.894E-10	0.000E+00	0.000E+00	2.938E-09
12	4.079E-10	2.763E-11	1.292E-09	0.000E+00	5.296E-10	0.000E+00	0.000E+00	2.257E-09
13	3.070E-08	2.077E-09	9.708E-08	0.000E+00	3.981E-08	0.000E+00	0.000E+00	1.697E-07
14	3.706E-08	2.507E-09	1.172E-07	0.000E+00	4.805E-08	0.000E+00	0.000E+00	2.048E-07
15	2.126E-07	1.438E-08	6.722E-07	0.000E+00	2.756E-07	0.000E+00	0.000E+00	1.175E-06
16	3.747E-07	2.534E-08	1.185E-06	0.000E+00	4.858E-07	0.000E+00	0.000E+00	2.071E-06
17	2.679E-07	1.812E-08	8.470E-07	0.000E+00	3.473E-07	0.000E+00	0.000E+00	1.480E-06
18	2.183E-07	1.476E-08	6.902E-07	0.000E+00	2.830E-07	0.000E+00	0.000E+00	1.206E-06
19	1.756E-08	9.783E-10	4.564E-08	0.000E+00	1.901E-08	0.000E+00	0.000E+00	8.318E-08
20	2.137E-08	1.191E-09	5.554E-08	0.000E+00	2.313E-08	0.000E+00	0.000E+00	1.012E-07
21	1.014E-07	5.647E-09	2.634E-07	0.000E+00	1.097E-07	0.000E+00	0.000E+00	4.802E-07
22	1.777E-07	9.902E-09	4.619E-07	0.000E+00	1.924E-07	0.000E+00	0.000E+00	8.419E-07
23	1.256E-07	6.999E-09	3.265E-07	0.000E+00	1.360E-07	0.000E+00	0.000E+00	5.951E-07
24	9.703E-08	5.407E-09	2.522E-07	0.000E+00	1.050E-07	0.000E+00	0.000E+00	4.597E-07
25	7.461E-08	3.523E-09	1.654E-07	0.000E+00	6.573E-08	0.000E+00	0.000E+00	3.093E-07
26	1.107E-07	6.167E-09	2.877E-07	0.000E+00	1.198E-07	0.000E+00	0.000E+00	5.243E-07
27	2.688E-07	1.498E-08	6.986E-07	0.000E+00	2.910E-07	0.000E+00	0.000E+00	1.273E-06
28	3.467E-07	1.932E-08	9.013E-07	0.000E+00	3.754E-07	0.000E+00	0.000E+00	1.643E-06
29	1.746E-06	9.730E-08	4.539E-06	0.000E+00	1.890E-06	0.000E+00	0.000E+00	8.273E-06
30	1.070E-07	5.962E-09	2.781E-07	0.000E+00	1.158E-07	0.000E+00	0.000E+00	5.069E-07
31	2.055E-08	1.145E-09	5.342E-08	0.000E+00	2.225E-08	0.000E+00	0.000E+00	9.737E-08
32	4.929E-08	2.746E-09	1.281E-07	0.000E+00	5.336E-08	0.000E+00	0.000E+00	2.335E-07
33	6.105E-08	3.401E-09	1.587E-07	0.000E+00	6.609E-08	0.000E+00	0.000E+00	2.892E-07
34	2.386E-07	1.329E-08	6.201E-07	0.000E+00	2.583E-07	0.000E+00	0.000E+00	1.130E-06
35	1.982E-08	1.105E-09	5.152E-08	0.000E+00	2.146E-08	0.000E+00	0.000E+00	9.391E-08
36	3.081E-08	1.717E-09	8.008E-08	0.000E+00	3.335E-08	0.000E+00	0.000E+00	1.459E-07
37	7.320E-08	4.078E-09	1.903E-07	0.000E+00	7.924E-08	0.000E+00	0.000E+00	3.468E-07
38	8.804E-08	4.906E-09	2.288E-07	0.000E+00	9.531E-08	0.000E+00	0.000E+00	4.171E-07
39	3.021E-07	1.683E-08	7.851E-07	0.000E+00	3.270E-07	0.000E+00	0.000E+00	1.431E-06
40	2.966E-08	1.652E-09	7.709E-08	0.000E+00	3.211E-08	0.000E+00	0.000E+00	1.405E-07
41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	4.605E-09	1.825E-12	8.625E-12	0.000E+00	3.471E-12	0.000E+00	0.000E+00	4.619E-09
46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	5.341E-06	3.113E-07	1.453E-05	0.000E+00	6.025E-06	0.000E+00	0.000E+00	2.621E-05

RECEPTOR RISK OF 2.621E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.621E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07
 RECEPTOR POPULATION = 0
 RECEPTOR BURDEN = 0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 70-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 68 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
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ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	3.986E-06	2.814E-07	1.330E-05	0.000E+00	5.541E-06	0.000E+00	0.000E+00	0.000E+00	2.310E-05
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	1.204E-07	2.378E-08	1.218E-06	0.000E+00	4.761E-07	0.000E+00	0.000E+00	0.000E+00	1.840E-06
Cd	1.863E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.863E-07
Cr	1.023E-06	4.187E-09	1.978E-08	0.000E+00	7.963E-09	0.000E+00	0.000E+00	0.000E+00	1.055E-06
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	1.641E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.641E-08
Ni	8.714E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.714E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	5.341E-06	3.113E-07	1.453E-05	0.000E+00	6.025E-06	0.000E+00	0.000E+00	0.000E+00	2.621E-05

RECEPTOR RISK OF 2.621E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.621E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07
 RECEPTOR POPULATION = 0
 RECEPTOR BURDEN = 0.000E+00

DEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 70-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 68 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	3.451E-07	1.655E-07	7.821E-06	0.000E+00	3.259E-06	0.000E+00	0.000E+00	1.159E-05
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ba	1.434E-08	5.995E-09	2.833E-07	0.000E+00	1.107E-07	0.000E+00	0.000E+00	4.143E-07
Cd	1.267E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.267E-08
Cr	2.089E-09	9.969E-09	4.711E-08	0.000E+00	1.896E-08	0.000E+00	0.000E+00	7.812E-08
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	5.861E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.861E-08
Ni	9.575E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.575E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

DEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 44-YEAR LIFETIME CANCER RISK BY SOURCE FOR PEAK RECEPTOR # 68 ***

SOURCE	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
1	1.336E-09	1.239E-10	5.793E-09	0.000E+00	1.774E-09	0.000E+00	0.000E+00	9.027E-09
2	1.628E-09	1.310E-10	7.060E-09	0.000E+00	2.162E-09	0.000E+00	0.000E+00	1.100E-08
3	9.425E-09	8.743E-10	4.087E-08	0.000E+00	1.251E-08	0.000E+00	0.000E+00	6.368E-08
4	1.588E-08	1.566E-09	7.321E-08	0.000E+00	2.242E-08	0.000E+00	0.000E+00	1.141E-07
5	1.287E-08	1.194E-09	5.580E-08	0.000E+00	1.709E-08	0.000E+00	0.000E+00	8.695E-08
6	1.004E-08	9.315E-10	4.355E-08	0.000E+00	1.333E-08	0.000E+00	0.000E+00	6.785E-08
7	7.229E-10	6.715E-11	3.139E-09	0.000E+00	9.611E-10	0.000E+00	0.000E+00	4.890E-09
8	4.667E-10	4.336E-11	2.027E-09	0.000E+00	6.206E-10	0.000E+00	0.000E+00	3.158E-09
9	6.432E-10	5.975E-11	2.793E-09	0.000E+00	8.552E-10	0.000E+00	0.000E+00	4.352E-09
10	3.385E-10	3.145E-11	1.470E-09	0.000E+00	4.501E-10	0.000E+00	0.000E+00	2.290E-09
11	3.337E-10	3.100E-11	1.449E-09	0.000E+00	4.437E-10	0.000E+00	0.000E+00	2.258E-09
12	2.564E-10	2.382E-11	1.113E-09	0.000E+00	3.409E-10	0.000E+00	0.000E+00	1.735E-09
13	1.930E-08	1.790E-09	8.369E-08	0.000E+00	2.562E-08	0.000E+00	0.000E+00	1.304E-07
14	2.329E-08	2.161E-09	1.010E-07	0.000E+00	3.093E-08	0.000E+00	0.000E+00	1.574E-07
15	1.336E-07	1.239E-08	5.794E-07	0.000E+00	1.774E-07	0.000E+00	0.000E+00	9.029E-07
16	2.355E-07	2.185E-08	1.021E-06	0.000E+00	3.127E-07	0.000E+00	0.000E+00	1.591E-06
17	1.684E-07	1.562E-08	7.301E-07	0.000E+00	2.236E-07	0.000E+00	0.000E+00	1.138E-06
18	1.372E-07	1.273E-08	5.949E-07	0.000E+00	1.822E-07	0.000E+00	0.000E+00	9.270E-07
19	1.104E-08	8.433E-10	3.934E-08	0.000E+00	1.230E-08	0.000E+00	0.000E+00	6.352E-08
20	1.343E-08	1.026E-09	4.788E-08	0.000E+00	1.497E-08	0.000E+00	0.000E+00	7.730E-08
21	6.371E-08	4.868E-09	2.271E-07	0.000E+00	7.099E-08	0.000E+00	0.000E+00	3.667E-07
22	1.117E-07	8.536E-09	3.982E-07	0.000E+00	1.245E-07	0.000E+00	0.000E+00	6.429E-07
23	7.895E-08	6.033E-09	2.814E-07	0.000E+00	8.798E-08	0.000E+00	0.000E+00	4.544E-07
24	6.099E-08	4.661E-09	2.174E-07	0.000E+00	6.797E-08	0.000E+00	0.000E+00	3.510E-07
25	4.690E-08	3.037E-09	1.426E-07	0.000E+00	4.185E-08	0.000E+00	0.000E+00	2.344E-07
26	6.957E-08	5.316E-09	2.480E-07	0.000E+00	7.753E-08	0.000E+00	0.000E+00	4.004E-07
27	1.689E-07	1.291E-08	6.022E-07	0.000E+00	1.883E-07	0.000E+00	0.000E+00	9.723E-07
28	2.180E-07	1.665E-08	7.769E-07	0.000E+00	2.429E-07	0.000E+00	0.000E+00	1.254E-06
29	1.098E-06	8.388E-08	3.913E-06	0.000E+00	1.223E-06	0.000E+00	0.000E+00	6.318E-06
30	6.726E-08	5.139E-09	2.397E-07	0.000E+00	7.495E-08	0.000E+00	0.000E+00	3.871E-07
31	1.292E-08	9.872E-10	4.605E-08	0.000E+00	1.440E-08	0.000E+00	0.000E+00	7.436E-08
32	3.098E-08	2.368E-09	1.104E-07	0.000E+00	3.453E-08	0.000E+00	0.000E+00	1.783E-07
33	3.837E-08	2.932E-09	1.368E-07	0.000E+00	4.276E-08	0.000E+00	0.000E+00	2.208E-07
34	1.500E-07	1.146E-08	5.346E-07	0.000E+00	1.671E-07	0.000E+00	0.000E+00	8.631E-07
35	1.246E-08	9.521E-10	4.442E-08	0.000E+00	1.388E-08	0.000E+00	0.000E+00	7.171E-08
36	1.936E-08	1.480E-09	6.903E-08	0.000E+00	2.158E-08	0.000E+00	0.000E+00	1.114E-07
37	4.601E-08	3.516E-09	1.640E-07	0.000E+00	5.127E-08	0.000E+00	0.000E+00	2.648E-07
38	5.534E-08	4.229E-09	1.973E-07	0.000E+00	6.167E-08	0.000E+00	0.000E+00	3.185E-07
39	1.899E-07	1.451E-08	6.768E-07	0.000E+00	2.116E-07	0.000E+00	0.000E+00	1.093E-06

40	1.864E-08	1.425E-09	6.645E-08	0.000E+00	2.077E-08	0.000E+00	0.000E+00	1.073E-07
41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
45	2.894E-09	1.573E-12	7.435E-12	0.000E+00	2.220E-12	0.000E+00	0.000E+00	2.906E-09
46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	3.357E-06	2.684E-07	1.253E-05	0.000E+00	3.892E-06	0.000E+00	0.000E+00	2.005E-05

RECEPTOR RISK OF 2.005E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.005E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

44-YEAR LIFETIME RISK OF 2.005E-05 IS LOWER THAN 70-YEAR LIFETIME RISK OF 2.621E-05

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 44-YEAR LIFETIME CANCER RISK BY POLLUTANT FOR PEAK RECEPTOR # 68 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	2.505E-06	2.426E-07	1.146E-05	0.000E+00	3.586E-06	0.000E+00	0.000E+00	1.779E-05
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	7.570E-08	2.222E-08	1.050E-06	0.000E+00	3.013E-07	0.000E+00	0.000E+00	1.449E-06
Cd	1.171E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.171E-07
Cr	6.433E-07	3.609E-09	1.706E-08	0.000E+00	5.093E-09	0.000E+00	0.000E+00	6.691E-07
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	1.032E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.032E-08
Ni	5.477E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.477E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM	3.357E-06	2.684E-07	1.253E-05	0.000E+00	3.892E-06	0.000E+00	0.000E+00	2.005E-05

RECEPTOR RISK OF 2.005E-05 EXCEEDS SIGNIFICANT RISK LEVEL OF 1.000E-06

RECEPTOR RISK OF 2.005E-05 EXCEEDS IMPACT ZONE RISK LEVEL OF 1.000E-07

44-YEAR LIFETIME RISK OF 2.005E-05 IS LOWER THAN 70-YEAR LIFETIME RISK OF 2.621E-05

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** 44-YEAR LIFETIME DOSE (mg/kg/d) BY POLLUTANT FOR PEAK RECEPTOR # 68 ***

POLLUTANT	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOTHER MILK	SUM
ACETA	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	3.451E-07	2.270E-07	1.073E-05	0.000E+00	3.356E-06	0.000E+00	0.000E+00	1.465E-05
BENZE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	1.434E-08	8.222E-09	3.885E-07	0.000E+00	1.115E-07	0.000E+00	0.000E+00	5.225E-07
Cd	1.267E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.267E-08
Cr	2.089E-09	1.367E-08	6.460E-08	0.000E+00	1.929E-08	0.000E+00	0.000E+00	9.965E-08
HCHO	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	5.861E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.861E-08
Ni	9.575E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.575E-09
PAH	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** MAXIMUM ACUTE HAZARD INDEX BY POLLUTANT ***

POLLUTANT	PEAK CONC (ug/m3)	BACKGR (ug/m3)	TOTAL (ug/m3)	AEL (ug/m3)	HAZARD INDEX	RECEPTOR
ACROL	0.000E+00	0.000E+00	0.000E+00	2.500E+00	0.000E+00	0
Cu	6.181E-03	0.000E+00	6.181E-03	1.000E+01	6.181E-04	30
HCHO	0.000E+00	0.000E+00	0.000E+00	3.700E+02	0.000E+00	0
HCN	4.528E+01	0.000E+00	4.528E+01	3.300E+03	1.372E-02	34

Hg	0.000E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0
Ni	4.160E-03	0.000E+00	4.160E-03	1.000E+00	4.160E-03	30
Se	0.000E+00	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0
XYLEN	0.000E+00	0.000E+00	0.000E+00	4.400E+03	0.000E+00	0

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
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*** RECEPTOR ACUTE HAZARD INDICES BY TOXICOLOGICAL ENDPOINTS ***
 FROM ALL SOURCES AND POLLUTANTS

RECEPTOR	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
1	0.000E+00	2.180E-03	7.600E-04	0.000E+00	0.000E+00	0.000E+00	1.130E-04	0.000E+00
2	0.000E+00	1.391E-03	5.664E-04	0.000E+00	0.000E+00	0.000E+00	8.396E-05	0.000E+00
3	0.000E+00	1.369E-03	5.773E-04	0.000E+00	0.000E+00	0.000E+00	8.552E-05	0.000E+00
4	0.000E+00	2.547E-03	9.725E-04	0.000E+00	0.000E+00	0.000E+00	1.437E-04	0.000E+00
5	0.000E+00	2.450E-03	9.408E-04	0.000E+00	0.000E+00	0.000E+00	1.402E-04	0.000E+00
6	0.000E+00	2.311E-03	9.174E-04	0.000E+00	0.000E+00	0.000E+00	1.356E-04	0.000E+00
7	0.000E+00	1.281E-03	7.147E-04	0.000E+00	0.000E+00	0.000E+00	1.053E-04	0.000E+00
8	0.000E+00	1.315E-03	6.960E-04	0.000E+00	0.000E+00	0.000E+00	1.032E-04	0.000E+00
9	0.000E+00	1.347E-03	7.266E-04	0.000E+00	0.000E+00	0.000E+00	1.074E-04	0.000E+00
10	0.000E+00	4.377E-03	1.111E-03	0.000E+00	0.000E+00	0.000E+00	1.657E-04	0.000E+00
11	0.000E+00	2.354E-03	6.318E-04	0.000E+00	0.000E+00	0.000E+00	9.354E-05	0.000E+00
12	0.000E+00	7.945E-03	1.463E-03	0.000E+00	0.000E+00	0.000E+00	2.158E-04	0.000E+00
13	0.000E+00	4.443E-03	2.919E-03	0.000E+00	0.000E+00	0.000E+00	4.305E-04	0.000E+00
14	0.000E+00	4.324E-03	3.007E-03	0.000E+00	0.000E+00	0.000E+00	4.431E-04	0.000E+00
15	0.000E+00	3.888E-03	3.041E-03	0.000E+00	0.000E+00	0.000E+00	4.480E-04	0.000E+00
16	0.000E+00	4.880E-03	3.085E-03	0.000E+00	0.000E+00	0.000E+00	4.542E-04	0.000E+00
17	0.000E+00	4.449E-03	1.046E-03	0.000E+00	0.000E+00	0.000E+00	1.551E-04	0.000E+00
18	0.000E+00	4.634E-03	8.185E-04	0.000E+00	0.000E+00	0.000E+00	1.211E-04	0.000E+00
19	0.000E+00	4.486E-03	9.225E-04	0.000E+00	0.000E+00	0.000E+00	1.366E-04	0.000E+00
20	0.000E+00	5.755E-03	9.491E-04	0.000E+00	0.000E+00	0.000E+00	1.405E-04	0.000E+00
21	0.000E+00	1.023E-02	2.371E-03	0.000E+00	0.000E+00	0.000E+00	3.625E-04	0.000E+00
22	0.000E+00	1.029E-02	2.206E-03	0.000E+00	0.000E+00	0.000E+00	3.364E-04	0.000E+00
23	0.000E+00	1.109E-02	2.558E-03	0.000E+00	0.000E+00	0.000E+00	3.853E-04	0.000E+00
24	0.000E+00	1.138E-02	3.279E-03	0.000E+00	0.000E+00	0.000E+00	4.892E-04	0.000E+00
25	0.000E+00	1.140E-02	3.437E-03	0.000E+00	0.000E+00	0.000E+00	5.124E-04	0.000E+00
26	0.000E+00	1.227E-02	3.011E-03	0.000E+00	0.000E+00	0.000E+00	4.443E-04	0.000E+00
27	0.000E+00	7.433E-03	2.254E-03	0.000E+00	0.000E+00	0.000E+00	3.270E-04	0.000E+00
28	0.000E+00	7.778E-03	2.334E-03	0.000E+00	0.000E+00	0.000E+00	3.466E-04	0.000E+00
29	0.000E+00	8.772E-03	3.650E-03	0.000E+00	0.000E+00	0.000E+00	5.450E-04	0.000E+00
30	0.000E+00	9.334E-03	4.160E-03	0.000E+00	0.000E+00	0.000E+00	6.181E-04	0.000E+00
31	0.000E+00	1.093E-02	3.970E-03	0.000E+00	0.000E+00	0.000E+00	5.882E-04	0.000E+00
32	0.000E+00	1.330E-02	3.279E-03	0.000E+00	0.000E+00	0.000E+00	4.852E-04	0.000E+00
33	0.000E+00	1.342E-02	3.082E-03	0.000E+00	0.000E+00	0.000E+00	4.535E-04	0.000E+00
34	0.000E+00	1.372E-02	3.115E-03	0.000E+00	0.000E+00	0.000E+00	4.593E-04	0.000E+00
35	0.000E+00	1.322E-02	2.151E-03	0.000E+00	0.000E+00	0.000E+00	3.193E-04	0.000E+00
36	0.000E+00	1.268E-02	1.768E-03	0.000E+00	0.000E+00	0.000E+00	2.620E-04	0.000E+00
37	0.000E+00	1.211E-02	1.913E-03	0.000E+00	0.000E+00	0.000E+00	2.817E-04	0.000E+00
38	0.000E+00	1.208E-02	9.811E-04	0.000E+00	0.000E+00	0.000E+00	1.455E-04	0.000E+00
39	0.000E+00	1.356E-02	1.058E-03	0.000E+00	0.000E+00	0.000E+00	1.569E-04	0.000E+00
40	0.000E+00	1.353E-02	1.148E-03	0.000E+00	0.000E+00	0.000E+00	1.705E-04	0.000E+00
41	0.000E+00	1.134E-02	1.475E-03	0.000E+00	0.000E+00	0.000E+00	2.191E-04	0.000E+00
42	0.000E+00	6.072E-03	1.531E-03	0.000E+00	0.000E+00	0.000E+00	2.291E-04	0.000E+00
43	0.000E+00	6.346E-03	8.181E-04	0.000E+00	0.000E+00	0.000E+00	1.334E-04	0.000E+00
44	0.000E+00	6.601E-03	5.759E-04	0.000E+00	0.000E+00	0.000E+00	1.180E-04	0.000E+00
45	0.000E+00	6.261E-03	7.330E-04	0.000E+00	0.000E+00	0.000E+00	1.428E-04	0.000E+00
46	0.000E+00	5.840E-03	6.911E-04	0.000E+00	0.000E+00	0.000E+00	1.413E-04	0.000E+00
47	0.000E+00	4.905E-03	8.481E-04	0.000E+00	0.000E+00	0.000E+00	1.910E-04	0.000E+00
48	0.000E+00	3.968E-03	1.018E-03	0.000E+00	0.000E+00	0.000E+00	1.756E-04	0.000E+00
49	0.000E+00	3.266E-03	8.380E-04	0.000E+00	0.000E+00	0.000E+00	1.769E-04	0.000E+00
50	0.000E+00	2.855E-03	9.931E-04	0.000E+00	0.000E+00	0.000E+00	1.517E-04	0.000E+00
51	0.000E+00	2.934E-03	9.659E-04	0.000E+00	0.000E+00	0.000E+00	1.451E-04	0.000E+00
52	0.000E+00	2.944E-03	8.128E-04	0.000E+00	0.000E+00	0.000E+00	1.218E-04	0.000E+00
53	0.000E+00	3.082E-03	6.367E-04	0.000E+00	0.000E+00	0.000E+00	1.073E-04	0.000E+00
54	0.000E+00	3.139E-03	6.700E-04	0.000E+00	0.000E+00	0.000E+00	1.017E-04	0.000E+00
55	0.000E+00	2.688E-03	8.193E-04	0.000E+00	0.000E+00	0.000E+00	1.220E-04	0.000E+00
56	0.000E+00	2.470E-03	9.431E-04	0.000E+00	0.000E+00	0.000E+00	1.407E-04	0.000E+00
57	0.000E+00	2.237E-03	1.029E-03	0.000E+00	0.000E+00	0.000E+00	1.522E-04	0.000E+00
58	0.000E+00	2.190E-03	1.102E-03	0.000E+00	0.000E+00	0.000E+00	1.624E-04	0.000E+00
59	0.000E+00	2.146E-03	1.216E-03	0.000E+00	0.000E+00	0.000E+00	1.786E-04	0.000E+00
60	0.000E+00	2.110E-03	1.421E-03	0.000E+00	0.000E+00	0.000E+00	2.085E-04	0.000E+00
61	0.000E+00	2.064E-03	2.550E-03	0.000E+00	0.000E+00	0.000E+00	3.820E-04	0.000E+00
62	0.000E+00	2.025E-03	2.788E-03	0.000E+00	0.000E+00	0.000E+00	4.216E-04	0.000E+00
63	0.000E+00	1.990E-03	1.833E-03	0.000E+00	0.000E+00	0.000E+00	2.698E-04	0.000E+00
64	0.000E+00	1.877E-03	1.655E-03	0.000E+00	0.000E+00	0.000E+00	2.447E-04	0.000E+00
65	0.000E+00	1.855E-03	1.366E-03	0.000E+00	0.000E+00	0.000E+00	2.324E-04	0.000E+00
66	0.000E+00	1.833E-03	1.453E-03	0.000E+00	0.000E+00	0.000E+00	2.185E-04	0.000E+00
67	0.000E+00	1.813E-03	1.229E-03	0.000E+00	0.000E+00	0.000E+00	1.872E-04	0.000E+00
68	0.000E+00	1.886E-03	1.124E-03	0.000E+00	0.000E+00	0.000E+00	1.729E-04	0.000E+00
69	0.000E+00	2.107E-03	1.651E-03	0.000E+00	0.000E+00	0.000E+00	2.596E-04	0.000E+00
70	0.000E+00	2.411E-03	1.956E-03	0.000E+00	0.000E+00	0.000E+00	2.934E-04	0.000E+00
71	0.000E+00	2.450E-03	2.785E-03	0.000E+00	0.000E+00	0.000E+00	4.330E-04	0.000E+00
72	0.000E+00	2.484E-03	1.498E-03	0.000E+00	0.000E+00	0.000E+00	2.229E-04	0.000E+00
73	0.000E+00	2.494E-03	1.013E-03	0.000E+00	0.000E+00	0.000E+00	1.517E-04	0.000E+00
74	0.000E+00	2.494E-03	1.271E-03	0.000E+00	0.000E+00	0.000E+00	1.885E-04	0.000E+00
75	0.000E+00	2.793E-03	1.004E-03	0.000E+00	0.000E+00	0.000E+00	1.493E-04	0.000E+00
76	0.000E+00	2.975E-03	1.029E-03	0.000E+00	0.000E+00	0.000E+00	1.536E-04	0.000E+00
77	0.000E+00	3.199E-03	1.135E-03	0.000E+00	0.000E+00	0.000E+00	1.688E-04	0.000E+00
78	0.000E+00	3.222E-03	1.117E-03	0.000E+00	0.000E+00	0.000E+00	1.652E-04	0.000E+00

79	0.000E+00	3.447E-03	1.251E-03	0.000E+00	0.000E+00	0.000E+00	1.848E-04	0.000E+00
80	0.000E+00	3.754E-03	1.292E-03	0.000E+00	0.000E+00	0.000E+00	1.913E-04	0.000E+00
81	0.000E+00	4.111E-03	1.199E-03	0.000E+00	0.000E+00	0.000E+00	1.788E-04	0.000E+00
82	0.000E+00	4.560E-03	1.145E-03	0.000E+00	0.000E+00	0.000E+00	1.723E-04	0.000E+00
83	0.000E+00	5.152E-03	1.273E-03	0.000E+00	0.000E+00	0.000E+00	1.920E-04	0.000E+00
84	0.000E+00	6.065E-03	1.319E-03	0.000E+00	0.000E+00	0.000E+00	1.988E-04	0.000E+00
85	0.000E+00	7.713E-03	1.818E-03	0.000E+00	0.000E+00	0.000E+00	2.742E-04	0.000E+00
86	0.000E+00	1.255E-02	3.823E-03	0.000E+00	0.000E+00	0.000E+00	5.797E-04	0.000E+00
87	0.000E+00	1.179E-02	3.455E-03	0.000E+00	0.000E+00	0.000E+00	5.206E-04	0.000E+00
88	0.000E+00	1.217E-02	3.329E-03	0.000E+00	0.000E+00	0.000E+00	4.982E-04	0.000E+00
89	0.000E+00	9.340E-03	3.212E-03	0.000E+00	0.000E+00	0.000E+00	4.789E-04	0.000E+00
90	0.000E+00	9.700E-03	2.851E-03	0.000E+00	0.000E+00	0.000E+00	4.249E-04	0.000E+00
91	0.000E+00	1.800E-03	1.002E-03	0.000E+00	0.000E+00	0.000E+00	1.491E-04	0.000E+00
92	0.000E+00	1.723E-03	1.040E-03	0.000E+00	0.000E+00	0.000E+00	1.545E-04	0.000E+00
93	0.000E+00	1.656E-03	9.962E-04	0.000E+00	0.000E+00	0.000E+00	1.482E-04	0.000E+00
94	0.000E+00	1.632E-03	1.027E-03	0.000E+00	0.000E+00	0.000E+00	1.511E-04	0.000E+00
95	0.000E+00	1.641E-03	1.094E-03	0.000E+00	0.000E+00	0.000E+00	1.608E-04	0.000E+00
96	0.000E+00	1.649E-03	1.121E-03	0.000E+00	0.000E+00	0.000E+00	1.676E-04	0.000E+00
97	0.000E+00	1.660E-03	1.332E-03	0.000E+00	0.000E+00	0.000E+00	1.978E-04	0.000E+00
98	0.000E+00	1.673E-03	1.518E-03	0.000E+00	0.000E+00	0.000E+00	2.278E-04	0.000E+00
99	0.000E+00	1.685E-03	1.294E-03	0.000E+00	0.000E+00	0.000E+00	1.909E-04	0.000E+00
100	0.000E+00	1.697E-03	1.381E-03	0.000E+00	0.000E+00	0.000E+00	2.065E-04	0.000E+00
101	0.000E+00	1.711E-03	1.272E-03	0.000E+00	0.000E+00	0.000E+00	1.884E-04	0.000E+00
102	0.000E+00	1.731E-03	1.434E-03	0.000E+00	0.000E+00	0.000E+00	2.117E-04	0.000E+00
103	0.000E+00	1.785E-03	1.026E-03	0.000E+00	0.000E+00	0.000E+00	1.528E-04	0.000E+00
104	0.000E+00	1.713E-03	9.742E-04	0.000E+00	0.000E+00	0.000E+00	1.453E-04	0.000E+00
105	0.000E+00	1.663E-03	1.021E-03	0.000E+00	0.000E+00	0.000E+00	1.503E-04	0.000E+00
106	0.000E+00	1.674E-03	1.113E-03	0.000E+00	0.000E+00	0.000E+00	1.636E-04	0.000E+00
107	0.000E+00	1.683E-03	1.241E-03	0.000E+00	0.000E+00	0.000E+00	1.855E-04	0.000E+00
108	0.000E+00	1.686E-03	1.390E-03	0.000E+00	0.000E+00	0.000E+00	2.068E-04	0.000E+00
109	0.000E+00	1.705E-03	1.481E-03	0.000E+00	0.000E+00	0.000E+00	2.191E-04	0.000E+00
110	0.000E+00	1.718E-03	1.444E-03	0.000E+00	0.000E+00	0.000E+00	2.129E-04	0.000E+00
111	0.000E+00	1.730E-03	1.219E-03	0.000E+00	0.000E+00	0.000E+00	1.795E-04	0.000E+00
112	0.000E+00	1.743E-03	1.376E-03	0.000E+00	0.000E+00	0.000E+00	2.037E-04	0.000E+00
113	0.000E+00	1.756E-03	1.578E-03	0.000E+00	0.000E+00	0.000E+00	2.326E-04	0.000E+00
114	0.000E+00	1.779E-03	1.650E-03	0.000E+00	0.000E+00	0.000E+00	2.428E-04	0.000E+00
115	0.000E+00	1.776E-03	9.405E-04	0.000E+00	0.000E+00	0.000E+00	1.409E-04	0.000E+00
116	0.000E+00	1.699E-03	1.008E-03	0.000E+00	0.000E+00	0.000E+00	1.485E-04	0.000E+00
117	0.000E+00	1.708E-03	1.124E-03	0.000E+00	0.000E+00	0.000E+00	1.654E-04	0.000E+00
118	0.000E+00	1.719E-03	1.321E-03	0.000E+00	0.000E+00	0.000E+00	1.977E-04	0.000E+00
119	0.000E+00	1.731E-03	1.543E-03	0.000E+00	0.000E+00	0.000E+00	2.297E-04	0.000E+00
120	0.000E+00	1.741E-03	1.626E-03	0.000E+00	0.000E+00	0.000E+00	2.406E-04	0.000E+00
121	0.000E+00	1.753E-03	1.536E-03	0.000E+00	0.000E+00	0.000E+00	2.266E-04	0.000E+00
122	0.000E+00	1.767E-03	1.357E-03	0.000E+00	0.000E+00	0.000E+00	1.998E-04	0.000E+00
123	0.000E+00	1.779E-03	1.469E-03	0.000E+00	0.000E+00	0.000E+00	2.172E-04	0.000E+00
124	0.000E+00	1.800E-03	1.638E-03	0.000E+00	0.000E+00	0.000E+00	2.413E-04	0.000E+00
125	0.000E+00	1.816E-03	1.710E-03	0.000E+00	0.000E+00	0.000E+00	2.515E-04	0.000E+00
126	0.000E+00	1.830E-03	1.778E-03	0.000E+00	0.000E+00	0.000E+00	2.610E-04	0.000E+00
127	0.000E+00	1.759E-03	9.879E-04	0.000E+00	0.000E+00	0.000E+00	1.459E-04	0.000E+00
128	0.000E+00	1.748E-03	1.129E-03	0.000E+00	0.000E+00	0.000E+00	1.664E-04	0.000E+00
129	0.000E+00	1.761E-03	1.364E-03	0.000E+00	0.000E+00	0.000E+00	2.050E-04	0.000E+00
130	0.000E+00	1.776E-03	1.513E-03	0.000E+00	0.000E+00	0.000E+00	2.264E-04	0.000E+00
131	0.000E+00	1.783E-03	1.372E-03	0.000E+00	0.000E+00	0.000E+00	2.046E-04	0.000E+00
132	0.000E+00	1.800E-03	1.683E-03	0.000E+00	0.000E+00	0.000E+00	2.483E-04	0.000E+00
133	0.000E+00	1.805E-03	1.467E-03	0.000E+00	0.000E+00	0.000E+00	2.161E-04	0.000E+00
134	0.000E+00	1.825E-03	1.496E-03	0.000E+00	0.000E+00	0.000E+00	2.213E-04	0.000E+00
135	0.000E+00	1.842E-03	1.627E-03	0.000E+00	0.000E+00	0.000E+00	2.399E-04	0.000E+00
136	0.000E+00	1.855E-03	2.278E-03	0.000E+00	0.000E+00	0.000E+00	3.484E-04	0.000E+00
137	0.000E+00	1.870E-03	1.890E-03	0.000E+00	0.000E+00	0.000E+00	2.892E-04	0.000E+00
138	0.000E+00	1.885E-03	1.966E-03	0.000E+00	0.000E+00	0.000E+00	3.001E-04	0.000E+00
139	0.000E+00	1.803E-03	1.132E-03	0.000E+00	0.000E+00	0.000E+00	1.710E-04	0.000E+00
140	0.000E+00	1.807E-03	1.360E-03	0.000E+00	0.000E+00	0.000E+00	2.060E-04	0.000E+00
141	0.000E+00	1.817E-03	1.556E-03	0.000E+00	0.000E+00	0.000E+00	2.344E-04	0.000E+00
142	0.000E+00	1.823E-03	1.721E-03	0.000E+00	0.000E+00	0.000E+00	2.893E-04	0.000E+00
143	0.000E+00	1.841E-03	1.594E-03	0.000E+00	0.000E+00	0.000E+00	2.646E-04	0.000E+00
144	0.000E+00	1.857E-03	1.501E-03	0.000E+00	0.000E+00	0.000E+00	2.213E-04	0.000E+00
145	0.000E+00	1.869E-03	1.590E-03	0.000E+00	0.000E+00	0.000E+00	2.352E-04	0.000E+00
146	0.000E+00	1.886E-03	1.679E-03	0.000E+00	0.000E+00	0.000E+00	2.476E-04	0.000E+00
147	0.000E+00	1.900E-03	1.929E-03	0.000E+00	0.000E+00	0.000E+00	2.930E-04	0.000E+00
148	0.000E+00	1.915E-03	2.491E-03	0.000E+00	0.000E+00	0.000E+00	3.815E-04	0.000E+00
149	0.000E+00	1.931E-03	2.558E-03	0.000E+00	0.000E+00	0.000E+00	3.880E-04	0.000E+00
150	0.000E+00	1.943E-03	2.474E-03	0.000E+00	0.000E+00	0.000E+00	3.738E-04	0.000E+00
151	0.000E+00	1.933E-03	1.735E-03	0.000E+00	0.000E+00	0.000E+00	2.559E-04	0.000E+00
152	0.000E+00	1.947E-03	2.422E-03	0.000E+00	0.000E+00	0.000E+00	3.726E-04	0.000E+00
153	0.000E+00	1.964E-03	2.728E-03	0.000E+00	0.000E+00	0.000E+00	4.160E-04	0.000E+00
154	0.000E+00	1.983E-03	1.766E-03	0.000E+00	0.000E+00	0.000E+00	2.591E-04	0.000E+00
155	0.000E+00	1.991E-03	2.640E-03	0.000E+00	0.000E+00	0.000E+00	3.971E-04	0.000E+00
156	0.000E+00	2.016E-03	2.489E-03	0.000E+00	0.000E+00	0.000E+00	3.737E-04	0.000E+00
157	0.000E+00	2.498E-03	1.183E-03	0.000E+00	0.000E+00	0.000E+00	1.754E-04	0.000E+00
158	0.000E+00	2.193E-03	1.040E-03	0.000E+00	0.000E+00	0.000E+00	1.595E-04	0.000E+00
159	0.000E+00	1.944E-03	6.428E-04	0.000E+00	0.000E+00	0.000E+00	9.598E-05	0.000E+00
160	0.000E+00	1.752E-03	8.369E-04	0.000E+00	0.000E+00	0.000E+00	1.274E-04	0.000E+00
161	0.000E+00	1.594E-03	8.497E-04	0.000E+00	0.000E+00	0.000E+00	1.259E-04	0.000E+00
162	0.000E+00	1.472E-03	8.518E-04	0.000E+00	0.000E+00	0.000E+00	1.256E-04	0.000E+00
163	0.000E+00	1.485E-03	9.356E-04	0.000E+00	0.000E+00	0.000E+00	1.376E-04	0.000E+00
164	0.000E+00	1.516E-03	9.526E-04	0.000E+00	0.000E+00	0.000E+00	1.435E-04	0.000E+00
165	0.000E+00	1.540E-03	1.451E-03	0.000E+00	0.000E+00	0.000E+00	2.155E-04	0.000E+00
166	0.000E+00	1.567E-03	1.559E-03	0.000E+00	0.000E+00	0.000E+00	2.301E-04	0.000E+00
167	0.000E+00	1.594E-03	1.312E-03	0.000E+00	0.000E+00	0.000E+00	1.936E-04	0.000E+00
168	0.000E+00	2.198E-03	8.392E-04	0.000E+00	0.000E+00	0.000E+00	1.253E-04	0.000E+00
169	0.000E+00	1.933E-03	7.009E-04	0.000E+00	0.000E+00	0.000E+00	1.048E-04	0.000E+00
170	0.000E+00	1.723E-03	9.123E-04	0.000E+00	0.000E+00	0.000E+00	1.353E-04	0.000E+00
171	0.000E+00	1.570E-03	8.968E-04	0.000E+00	0.000E+00	0.000E+00	1.330E-04	0.000E+00
172	0.000E+00	1.541E-03	9.946E-04	0.000E+00	0.000E+00	0.000E+00	1.462E-04	0.000E+00
173	0.000E+00	1.566E-03	1.004E-03	0.000E+00	0.000E+00	0.000E+00	1.517E-04	0.000E+00
174	0.000E+00	1.594E-03	1.438E-03	0.000E+00	0.000E+00	0.000E+00	2.143E-04	0.000E+00
175	0.000E+00	1.624E-03	1.393E-03	0.000E+00	0.000E+00	0.000E+00	2.064E-04	0.000E+00

176	0.000E+00	1.655E-03	1.468E-03	0.000E+00	0.000E+00	0.000E+00	2.162E-04	0.000E+00
177	0.000E+00	1.686E-03	1.568E-03	0.000E+00	0.000E+00	0.000E+00	2.301E-04	0.000E+00
178	0.000E+00	2.175E-03	1.009E-03	0.000E+00	0.000E+00	0.000E+00	1.497E-04	0.000E+00
179	0.000E+00	1.898E-03	7.610E-04	0.000E+00	0.000E+00	0.000E+00	1.142E-04	0.000E+00
180	0.000E+00	1.695E-03	1.040E-03	0.000E+00	0.000E+00	0.000E+00	1.542E-04	0.000E+00
181	0.000E+00	1.602E-03	1.026E-03	0.000E+00	0.000E+00	0.000E+00	1.509E-04	0.000E+00
182	0.000E+00	1.626E-03	1.305E-03	0.000E+00	0.000E+00	0.000E+00	1.938E-04	0.000E+00
183	0.000E+00	1.656E-03	1.391E-03	0.000E+00	0.000E+00	0.000E+00	2.082E-04	0.000E+00
184	0.000E+00	1.695E-03	1.261E-03	0.000E+00	0.000E+00	0.000E+00	1.866E-04	0.000E+00
185	0.000E+00	1.723E-03	1.657E-03	0.000E+00	0.000E+00	0.000E+00	2.435E-04	0.000E+00
186	0.000E+00	1.758E-03	1.621E-03	0.000E+00	0.000E+00	0.000E+00	2.377E-04	0.000E+00
187	0.000E+00	1.793E-03	1.519E-03	0.000E+00	0.000E+00	0.000E+00	2.231E-04	0.000E+00
188	0.000E+00	2.140E-03	1.306E-03	0.000E+00	0.000E+00	0.000E+00	1.960E-04	0.000E+00
189	0.000E+00	1.863E-03	8.476E-04	0.000E+00	0.000E+00	0.000E+00	1.274E-04	0.000E+00
190	0.000E+00	1.681E-03	1.015E-03	0.000E+00	0.000E+00	0.000E+00	1.495E-04	0.000E+00
191	0.000E+00	1.705E-03	1.414E-03	0.000E+00	0.000E+00	0.000E+00	2.109E-04	0.000E+00
192	0.000E+00	1.735E-03	1.489E-03	0.000E+00	0.000E+00	0.000E+00	2.196E-04	0.000E+00
193	0.000E+00	1.767E-03	1.518E-03	0.000E+00	0.000E+00	0.000E+00	2.241E-04	0.000E+00
194	0.000E+00	1.811E-03	1.762E-03	0.000E+00	0.000E+00	0.000E+00	2.587E-04	0.000E+00
195	0.000E+00	1.843E-03	1.609E-03	0.000E+00	0.000E+00	0.000E+00	2.358E-04	0.000E+00
196	0.000E+00	1.888E-03	1.589E-03	0.000E+00	0.000E+00	0.000E+00	2.331E-04	0.000E+00
197	0.000E+00	1.924E-03	1.409E-03	0.000E+00	0.000E+00	0.000E+00	2.068E-04	0.000E+00
198	0.000E+00	2.105E-03	1.581E-03	0.000E+00	0.000E+00	0.000E+00	2.391E-04	0.000E+00
199	0.000E+00	1.832E-03	9.650E-04	0.000E+00	0.000E+00	0.000E+00	1.432E-04	0.000E+00
200	0.000E+00	1.810E-03	1.490E-03	0.000E+00	0.000E+00	0.000E+00	2.249E-04	0.000E+00
201	0.000E+00	1.878E-03	1.599E-03	0.000E+00	0.000E+00	0.000E+00	2.363E-04	0.000E+00
202	0.000E+00	1.956E-03	2.454E-03	0.000E+00	0.000E+00	0.000E+00	3.690E-04	0.000E+00
203	0.000E+00	2.002E-03	1.548E-03	0.000E+00	0.000E+00	0.000E+00	2.269E-04	0.000E+00
204	0.000E+00	2.035E-03	1.267E-03	0.000E+00	0.000E+00	0.000E+00	1.861E-04	0.000E+00
205	0.000E+00	2.092E-03	1.153E-03	0.000E+00	0.000E+00	0.000E+00	1.696E-04	0.000E+00
206	0.000E+00	2.302E-03	9.875E-04	0.000E+00	0.000E+00	0.000E+00	1.466E-04	0.000E+00
207	0.000E+00	2.573E-03	9.108E-04	0.000E+00	0.000E+00	0.000E+00	1.357E-04	0.000E+00
208	0.000E+00	2.293E-03	4.723E-04	0.000E+00	0.000E+00	0.000E+00	7.117E-05	0.000E+00
209	0.000E+00	2.303E-03	6.047E-04	0.000E+00	0.000E+00	0.000E+00	8.989E-05	0.000E+00
210	0.000E+00	2.303E-03	6.707E-04	0.000E+00	0.000E+00	0.000E+00	9.994E-05	0.000E+00
211	0.000E+00	2.326E-03	5.757E-04	0.000E+00	0.000E+00	0.000E+00	8.492E-05	0.000E+00
212	0.000E+00	2.281E-03	7.587E-04	0.000E+00	0.000E+00	0.000E+00	1.125E-04	0.000E+00
213	0.000E+00	2.111E-03	8.763E-04	0.000E+00	0.000E+00	0.000E+00	1.302E-04	0.000E+00
214	0.000E+00	1.924E-03	6.925E-04	0.000E+00	0.000E+00	0.000E+00	1.033E-04	0.000E+00
215	0.000E+00	1.901E-03	8.901E-04	0.000E+00	0.000E+00	0.000E+00	1.318E-04	0.000E+00
216	0.000E+00	1.865E-03	8.494E-04	0.000E+00	0.000E+00	0.000E+00	1.257E-04	0.000E+00
217	0.000E+00	1.889E-03	9.003E-04	0.000E+00	0.000E+00	0.000E+00	1.332E-04	0.000E+00
218	0.000E+00	1.799E-03	8.028E-04	0.000E+00	0.000E+00	0.000E+00	1.188E-04	0.000E+00
219	0.000E+00	1.615E-03	1.042E-03	0.000E+00	0.000E+00	0.000E+00	1.557E-04	0.000E+00
220	0.000E+00	1.510E-03	6.209E-04	0.000E+00	0.000E+00	0.000E+00	9.281E-05	0.000E+00
221	0.000E+00	1.368E-03	3.711E-04	0.000E+00	0.000E+00	0.000E+00	5.549E-05	0.000E+00
222	0.000E+00	1.241E-03	5.057E-04	0.000E+00	0.000E+00	0.000E+00	7.489E-05	0.000E+00
223	0.000E+00	1.176E-03	5.943E-04	0.000E+00	0.000E+00	0.000E+00	8.761E-05	0.000E+00
224	0.000E+00	1.199E-03	6.428E-04	0.000E+00	0.000E+00	0.000E+00	9.480E-05	0.000E+00
225	0.000E+00	1.223E-03	6.509E-04	0.000E+00	0.000E+00	0.000E+00	9.624E-05	0.000E+00
226	0.000E+00	1.245E-03	7.298E-04	0.000E+00	0.000E+00	0.000E+00	1.087E-04	0.000E+00
227	0.000E+00	2.370E-03	6.895E-04	0.000E+00	0.000E+00	0.000E+00	1.028E-04	0.000E+00
228	0.000E+00	2.500E-03	5.934E-04	0.000E+00	0.000E+00	0.000E+00	8.901E-05	0.000E+00
229	0.000E+00	2.532E-03	6.014E-04	0.000E+00	0.000E+00	0.000E+00	8.939E-05	0.000E+00
230	0.000E+00	2.617E-03	7.185E-04	0.000E+00	0.000E+00	0.000E+00	1.069E-04	0.000E+00
231	0.000E+00	2.470E-03	6.303E-04	0.000E+00	0.000E+00	0.000E+00	9.317E-05	0.000E+00
232	0.000E+00	2.335E-03	8.353E-04	0.000E+00	0.000E+00	0.000E+00	1.240E-04	0.000E+00
233	0.000E+00	2.188E-03	9.126E-04	0.000E+00	0.000E+00	0.000E+00	1.355E-04	0.000E+00
234	0.000E+00	2.102E-03	8.014E-04	0.000E+00	0.000E+00	0.000E+00	1.189E-04	0.000E+00
235	0.000E+00	2.087E-03	8.981E-04	0.000E+00	0.000E+00	0.000E+00	1.328E-04	0.000E+00
236	0.000E+00	2.067E-03	9.407E-04	0.000E+00	0.000E+00	0.000E+00	1.392E-04	0.000E+00
237	0.000E+00	1.960E-03	8.348E-04	0.000E+00	0.000E+00	0.000E+00	1.235E-04	0.000E+00
238	0.000E+00	1.756E-03	1.043E-03	0.000E+00	0.000E+00	0.000E+00	1.564E-04	0.000E+00
239	0.000E+00	1.530E-03	6.144E-04	0.000E+00	0.000E+00	0.000E+00	9.184E-05	0.000E+00
240	0.000E+00	1.401E-03	5.506E-04	0.000E+00	0.000E+00	0.000E+00	8.168E-05	0.000E+00
241	0.000E+00	1.264E-03	5.810E-04	0.000E+00	0.000E+00	0.000E+00	8.581E-05	0.000E+00
242	0.000E+00	1.246E-03	6.873E-04	0.000E+00	0.000E+00	0.000E+00	1.014E-04	0.000E+00
243	0.000E+00	1.277E-03	6.703E-04	0.000E+00	0.000E+00	0.000E+00	9.930E-05	0.000E+00
244	0.000E+00	1.306E-03	8.364E-04	0.000E+00	0.000E+00	0.000E+00	1.245E-04	0.000E+00
245	0.000E+00	1.325E-03	9.413E-04	0.000E+00	0.000E+00	0.000E+00	1.390E-04	0.000E+00
246	0.000E+00	2.633E-03	5.827E-04	0.000E+00	0.000E+00	0.000E+00	8.651E-05	0.000E+00
247	0.000E+00	2.637E-03	7.092E-04	0.000E+00	0.000E+00	0.000E+00	1.055E-04	0.000E+00
248	0.000E+00	2.730E-03	7.127E-04	0.000E+00	0.000E+00	0.000E+00	1.064E-04	0.000E+00
249	0.000E+00	2.862E-03	5.870E-04	0.000E+00	0.000E+00	0.000E+00	8.725E-05	0.000E+00
250	0.000E+00	2.851E-03	7.708E-04	0.000E+00	0.000E+00	0.000E+00	1.145E-04	0.000E+00
251	0.000E+00	2.744E-03	6.789E-04	0.000E+00	0.000E+00	0.000E+00	1.006E-04	0.000E+00
252	0.000E+00	2.462E-03	9.370E-04	0.000E+00	0.000E+00	0.000E+00	1.391E-04	0.000E+00
253	0.000E+00	2.392E-03	8.968E-04	0.000E+00	0.000E+00	0.000E+00	1.332E-04	0.000E+00
254	0.000E+00	2.339E-03	9.773E-04	0.000E+00	0.000E+00	0.000E+00	1.444E-04	0.000E+00
255	0.000E+00	2.333E-03	9.652E-04	0.000E+00	0.000E+00	0.000E+00	1.429E-04	0.000E+00
256	0.000E+00	2.086E-03	8.675E-04	0.000E+00	0.000E+00	0.000E+00	1.284E-04	0.000E+00
257	0.000E+00	1.870E-03	1.020E-03	0.000E+00	0.000E+00	0.000E+00	1.537E-04	0.000E+00
258	0.000E+00	1.618E-03	6.220E-04	0.000E+00	0.000E+00	0.000E+00	9.287E-05	0.000E+00
259	0.000E+00	1.420E-03	6.300E-04	0.000E+00	0.000E+00	0.000E+00	9.332E-05	0.000E+00
260	0.000E+00	1.304E-03	7.051E-04	0.000E+00	0.000E+00	0.000E+00	1.041E-04	0.000E+00
261	0.000E+00	1.336E-03	6.825E-04	0.000E+00	0.000E+00	0.000E+00	1.004E-04	0.000E+00
262	0.000E+00	1.371E-03	9.730E-04	0.000E+00	0.000E+00	0.000E+00	1.448E-04	0.000E+00
263	0.000E+00	1.396E-03	1.035E-03	0.000E+00	0.000E+00	0.000E+00	1.527E-04	0.000E+00
264	0.000E+00	1.427E-03	1.214E-03	0.000E+00	0.000E+00	0.000E+00	1.789E-04	0.000E+00
265	0.000E+00	2.631E-03	7.454E-04	0.000E+00	0.000E+00	0.000E+00	1.112E-04	0.000E+00
266	0.000E+00	2.853E-03	6.773E-04	0.000E+00	0.000E+00	0.000E+00	1.014E-04	0.000E+00
267	0.000E+00	2.903E-03	6.654E-04	0.000E+00	0.000E+00	0.000E+00	9.888E-05	0.000E+00
268	0.000E+00	3.010E-03	7.972E-04	0.000E+00	0.000E+00	0.000E+00	1.186E-04	0.000E+00
269	0.000E+00	3.091E-03	6.590E-04	0.000E+00	0.000E+00	0.000E+00	9.880E-05	0.000E+00
270	0.000E+00	3.119E-03	8.267E-04	0.000E+00	0.000E+00	0.000E+00	1.227E-04	0.000E+00
271	0.000E+00	2.877E-03	7.372E-04	0.000E+00	0.000E+00	0.000E+00	1.096E-04	0.000E+00
272	0.000E+00	2.682E-03	1.065E-03	0.000E+00	0.000E+00	0.000E+00	1.577E-04	0.000E+00

273	0.000E+00	2.675E-03	1.058E-03	0.000E+00	0.000E+00	0.000E+00	1.568E-04	0.000E+00
274	0.000E+00	2.602E-03	9.346E-04	0.000E+00	0.000E+00	0.000E+00	1.382E-04	0.000E+00
275	0.000E+00	2.257E-03	9.005E-04	0.000E+00	0.000E+00	0.000E+00	1.334E-04	0.000E+00
276	0.000E+00	1.907E-03	9.675E-04	0.000E+00	0.000E+00	0.000E+00	1.471E-04	0.000E+00
277	0.000E+00	1.624E-03	6.451E-04	0.000E+00	0.000E+00	0.000E+00	9.592E-05	0.000E+00
278	0.000E+00	1.407E-03	7.682E-04	0.000E+00	0.000E+00	0.000E+00	1.132E-04	0.000E+00
279	0.000E+00	1.407E-03	7.991E-04	0.000E+00	0.000E+00	0.000E+00	1.175E-04	0.000E+00
280	0.000E+00	1.449E-03	1.158E-03	0.000E+00	0.000E+00	0.000E+00	1.722E-04	0.000E+00
281	0.000E+00	1.490E-03	1.129E-03	0.000E+00	0.000E+00	0.000E+00	1.665E-04	0.000E+00
282	0.000E+00	1.526E-03	1.355E-03	0.000E+00	0.000E+00	0.000E+00	1.993E-04	0.000E+00
283	0.000E+00	1.574E-03	1.195E-03	0.000E+00	0.000E+00	0.000E+00	1.762E-04	0.000E+00
284	0.000E+00	2.669E-03	7.626E-04	0.000E+00	0.000E+00	0.000E+00	1.131E-04	0.000E+00
285	0.000E+00	2.891E-03	8.137E-04	0.000E+00	0.000E+00	0.000E+00	1.210E-04	0.000E+00
286	0.000E+00	3.016E-03	8.282E-04	0.000E+00	0.000E+00	0.000E+00	1.235E-04	0.000E+00
287	0.000E+00	3.185E-03	7.646E-04	0.000E+00	0.000E+00	0.000E+00	1.144E-04	0.000E+00
288	0.000E+00	3.416E-03	8.032E-04	0.000E+00	0.000E+00	0.000E+00	1.193E-04	0.000E+00
289	0.000E+00	3.609E-03	8.384E-04	0.000E+00	0.000E+00	0.000E+00	1.250E-04	0.000E+00
290	0.000E+00	3.475E-03	8.843E-04	0.000E+00	0.000E+00	0.000E+00	1.310E-04	0.000E+00
291	0.000E+00	2.961E-03	8.524E-04	0.000E+00	0.000E+00	0.000E+00	1.267E-04	0.000E+00
292	0.000E+00	3.091E-03	1.771E-03	0.000E+00	0.000E+00	0.000E+00	2.721E-04	0.000E+00
293	0.000E+00	2.934E-03	1.096E-03	0.000E+00	0.000E+00	0.000E+00	1.630E-04	0.000E+00
294	0.000E+00	1.644E-03	1.407E-03	0.000E+00	0.000E+00	0.000E+00	2.065E-04	0.000E+00
295	0.000E+00	1.711E-03	1.371E-03	0.000E+00	0.000E+00	0.000E+00	2.016E-04	0.000E+00
296	0.000E+00	1.748E-03	1.160E-03	0.000E+00	0.000E+00	0.000E+00	1.710E-04	0.000E+00
297	0.000E+00	2.504E-03	6.107E-04	0.000E+00	0.000E+00	0.000E+00	8.982E-05	0.000E+00
298	0.000E+00	2.965E-03	6.986E-04	0.000E+00	0.000E+00	0.000E+00	1.031E-04	0.000E+00
299	0.000E+00	3.137E-03	7.799E-04	0.000E+00	0.000E+00	0.000E+00	1.155E-04	0.000E+00
300	0.000E+00	3.340E-03	8.665E-04	0.000E+00	0.000E+00	0.000E+00	1.287E-04	0.000E+00
301	0.000E+00	3.550E-03	9.332E-04	0.000E+00	0.000E+00	0.000E+00	1.389E-04	0.000E+00
302	0.000E+00	3.928E-03	8.875E-04	0.000E+00	0.000E+00	0.000E+00	1.325E-04	0.000E+00
303	0.000E+00	4.241E-03	9.686E-04	0.000E+00	0.000E+00	0.000E+00	1.439E-04	0.000E+00
304	0.000E+00	3.647E-03	9.403E-04	0.000E+00	0.000E+00	0.000E+00	1.393E-04	0.000E+00
305	0.000E+00	3.638E-03	1.097E-03	0.000E+00	0.000E+00	0.000E+00	1.628E-04	0.000E+00
306	0.000E+00	1.869E-03	1.307E-03	0.000E+00	0.000E+00	0.000E+00	1.921E-04	0.000E+00
307	0.000E+00	1.940E-03	1.110E-03	0.000E+00	0.000E+00	0.000E+00	1.633E-04	0.000E+00
308	0.000E+00	1.957E-03	1.003E-03	0.000E+00	0.000E+00	0.000E+00	1.482E-04	0.000E+00
309	0.000E+00	2.704E-03	4.355E-04	0.000E+00	0.000E+00	0.000E+00	6.564E-05	0.000E+00
310	0.000E+00	2.903E-03	5.045E-04	0.000E+00	0.000E+00	0.000E+00	7.380E-05	0.000E+00
311	0.000E+00	3.007E-03	6.076E-04	0.000E+00	0.000E+00	0.000E+00	8.918E-05	0.000E+00
312	0.000E+00	3.454E-03	6.822E-04	0.000E+00	0.000E+00	0.000E+00	1.006E-04	0.000E+00
313	0.000E+00	3.752E-03	7.612E-04	0.000E+00	0.000E+00	0.000E+00	1.128E-04	0.000E+00
314	0.000E+00	4.145E-03	8.986E-04	0.000E+00	0.000E+00	0.000E+00	1.334E-04	0.000E+00
315	0.000E+00	4.735E-03	1.063E-03	0.000E+00	0.000E+00	0.000E+00	1.578E-04	0.000E+00
316	0.000E+00	5.078E-03	1.063E-03	0.000E+00	0.000E+00	0.000E+00	1.583E-04	0.000E+00
317	0.000E+00	4.542E-03	1.121E-03	0.000E+00	0.000E+00	0.000E+00	1.680E-04	0.000E+00
318	0.000E+00	2.194E-03	9.997E-04	0.000E+00	0.000E+00	0.000E+00	1.480E-04	0.000E+00
319	0.000E+00	2.204E-03	8.676E-04	0.000E+00	0.000E+00	0.000E+00	1.289E-04	0.000E+00
320	0.000E+00	2.286E-03	6.322E-04	0.000E+00	0.000E+00	0.000E+00	9.400E-05	0.000E+00
321	0.000E+00	2.578E-03	8.842E-04	0.000E+00	0.000E+00	0.000E+00	1.355E-04	0.000E+00
322	0.000E+00	2.849E-03	8.995E-04	0.000E+00	0.000E+00	0.000E+00	1.380E-04	0.000E+00
323	0.000E+00	3.140E-03	9.142E-04	0.000E+00	0.000E+00	0.000E+00	1.405E-04	0.000E+00
324	0.000E+00	3.293E-03	9.271E-04	0.000E+00	0.000E+00	0.000E+00	1.427E-04	0.000E+00
325	0.000E+00	3.764E-03	9.361E-04	0.000E+00	0.000E+00	0.000E+00	1.443E-04	0.000E+00
326	0.000E+00	4.372E-03	9.379E-04	0.000E+00	0.000E+00	0.000E+00	1.449E-04	0.000E+00
327	0.000E+00	5.022E-03	1.108E-03	0.000E+00	0.000E+00	0.000E+00	1.655E-04	0.000E+00
328	0.000E+00	6.789E-03	1.271E-03	0.000E+00	0.000E+00	0.000E+00	1.898E-04	0.000E+00
329	0.000E+00	6.761E-03	1.431E-03	0.000E+00	0.000E+00	0.000E+00	2.143E-04	0.000E+00
330	0.000E+00	2.665E-03	7.036E-04	0.000E+00	0.000E+00	0.000E+00	1.045E-04	0.000E+00
331	0.000E+00	2.703E-03	6.902E-04	0.000E+00	0.000E+00	0.000E+00	1.027E-04	0.000E+00
332	0.000E+00	2.566E-03	6.988E-04	0.000E+00	0.000E+00	0.000E+00	1.040E-04	0.000E+00
333	0.000E+00	2.510E-03	2.337E-03	0.000E+00	0.000E+00	0.000E+00	3.484E-04	0.000E+00
334	0.000E+00	2.692E-03	2.441E-03	0.000E+00	0.000E+00	0.000E+00	3.635E-04	0.000E+00
335	0.000E+00	2.924E-03	2.550E-03	0.000E+00	0.000E+00	0.000E+00	3.794E-04	0.000E+00
336	0.000E+00	3.247E-03	2.663E-03	0.000E+00	0.000E+00	0.000E+00	3.958E-04	0.000E+00
337	0.000E+00	3.745E-03	2.773E-03	0.000E+00	0.000E+00	0.000E+00	4.118E-04	0.000E+00
338	0.000E+00	4.488E-03	2.865E-03	0.000E+00	0.000E+00	0.000E+00	4.253E-04	0.000E+00
339	0.000E+00	5.296E-03	2.910E-03	0.000E+00	0.000E+00	0.000E+00	4.321E-04	0.000E+00
340	0.000E+00	7.010E-03	2.838E-03	0.000E+00	0.000E+00	0.000E+00	4.222E-04	0.000E+00
341	0.000E+00	3.292E-03	6.837E-04	0.000E+00	0.000E+00	0.000E+00	1.329E-04	0.000E+00
342	0.000E+00	3.417E-03	7.779E-04	0.000E+00	0.000E+00	0.000E+00	1.156E-04	0.000E+00
343	0.000E+00	3.351E-03	7.918E-04	0.000E+00	0.000E+00	0.000E+00	1.173E-04	0.000E+00
344	0.000E+00	3.095E-03	7.337E-04	0.000E+00	0.000E+00	0.000E+00	1.086E-04	0.000E+00
345	0.000E+00	2.880E-03	6.399E-04	0.000E+00	0.000E+00	0.000E+00	9.455E-05	0.000E+00
346	0.000E+00	2.568E-03	2.733E-03	0.000E+00	0.000E+00	0.000E+00	4.063E-04	0.000E+00
347	0.000E+00	2.676E-03	2.756E-03	0.000E+00	0.000E+00	0.000E+00	4.098E-04	0.000E+00
348	0.000E+00	2.601E-03	2.774E-03	0.000E+00	0.000E+00	0.000E+00	4.126E-04	0.000E+00
349	0.000E+00	2.442E-03	2.793E-03	0.000E+00	0.000E+00	0.000E+00	4.155E-04	0.000E+00
350	0.000E+00	3.414E-03	2.822E-03	0.000E+00	0.000E+00	0.000E+00	4.199E-04	0.000E+00
351	0.000E+00	3.920E-03	2.876E-03	0.000E+00	0.000E+00	0.000E+00	4.279E-04	0.000E+00
352	0.000E+00	4.451E-03	2.971E-03	0.000E+00	0.000E+00	0.000E+00	4.420E-04	0.000E+00
353	0.000E+00	6.623E-03	3.103E-03	0.000E+00	0.000E+00	0.000E+00	4.621E-04	0.000E+00
354	0.000E+00	4.753E-03	6.897E-04	0.000E+00	0.000E+00	0.000E+00	1.268E-04	0.000E+00
355	0.000E+00	4.199E-03	5.684E-04	0.000E+00	0.000E+00	0.000E+00	9.291E-05	0.000E+00
356	0.000E+00	3.846E-03	5.101E-04	0.000E+00	0.000E+00	0.000E+00	7.727E-05	0.000E+00
357	0.000E+00	3.492E-03	4.701E-04	0.000E+00	0.000E+00	0.000E+00	6.932E-05	0.000E+00
358	0.000E+00	3.210E-03	4.386E-04	0.000E+00	0.000E+00	0.000E+00	6.464E-05	0.000E+00
359	0.000E+00	2.610E-03	2.144E-03	0.000E+00	0.000E+00	0.000E+00	3.151E-04	0.000E+00
360	0.000E+00	2.834E-03	2.140E-03	0.000E+00	0.000E+00	0.000E+00	3.141E-04	0.000E+00
361	0.000E+00	3.070E-03	2.130E-03	0.000E+00	0.000E+00	0.000E+00	3.122E-04	0.000E+00
362	0.000E+00	3.328E-03	2.109E-03	0.000E+00	0.000E+00	0.000E+00	3.087E-04	0.000E+00
363	0.000E+00	3.631E-03	2.076E-03	0.000E+00	0.000E+00	0.000E+00	3.032E-04	0.000E+00
364	0.000E+00	4.038E-03	2.035E-03	0.000E+00	0.000E+00	0.000E+00	2.967E-04	0.000E+00
365	0.000E+00	4.626E-03	1.994E-03	0.000E+00	0.000E+00	0.000E+00	2.902E-04	0.000E+00
366	0.000E+00	5.512E-03	1.947E-03	0.000E+00	0.000E+00	0.000E+00	2.827E-04	0.000E+00
367	0.000E+00	7.276E-03	1.984E-03	0.000E+00	0.000E+00	0.000E+00	2.877E-04	0.000E+00
368	0.000E+00	9.912E-03	1.660E-03	0.000E+00	0.000E+00	0.000E+00	2.449E-04	0.000E+00
369	0.000E+00	6.459E-03	9.072E-04	0.000E+00	0.000E+00	0.000E+00	1.375E-04	0.000E+00

370	0.000E+00	5.192E-03	5.239E-04	0.000E+00	0.000E+00	0.000E+00	1.056E-04	0.000E+00
371	0.000E+00	4.463E-03	6.192E-04	0.000E+00	0.000E+00	0.000E+00	9.291E-05	0.000E+00
372	0.000E+00	3.983E-03	5.738E-04	0.000E+00	0.000E+00	0.000E+00	8.632E-05	0.000E+00
373	0.000E+00	3.621E-03	5.218E-04	0.000E+00	0.000E+00	0.000E+00	7.794E-05	0.000E+00
374	0.000E+00	3.312E-03	4.794E-04	0.000E+00	0.000E+00	0.000E+00	7.138E-05	0.000E+00
375	0.000E+00	2.054E-03	6.180E-04	0.000E+00	0.000E+00	0.000E+00	9.153E-05	0.000E+00
376	0.000E+00	2.059E-03	6.646E-04	0.000E+00	0.000E+00	0.000E+00	9.829E-05	0.000E+00
377	0.000E+00	2.030E-03	6.929E-04	0.000E+00	0.000E+00	0.000E+00	1.024E-04	0.000E+00
378	0.000E+00	2.403E-03	6.944E-04	0.000E+00	0.000E+00	0.000E+00	1.025E-04	0.000E+00
379	0.000E+00	3.289E-03	6.514E-04	0.000E+00	0.000E+00	0.000E+00	9.604E-05	0.000E+00
380	0.000E+00	4.001E-03	6.208E-04	0.000E+00	0.000E+00	0.000E+00	9.253E-05	0.000E+00
381	0.000E+00	4.616E-03	8.552E-04	0.000E+00	0.000E+00	0.000E+00	1.258E-04	0.000E+00
382	0.000E+00	5.528E-03	9.876E-04	0.000E+00	0.000E+00	0.000E+00	1.447E-04	0.000E+00
383	0.000E+00	7.073E-03	2.592E-03	0.000E+00	0.000E+00	0.000E+00	3.808E-04	0.000E+00
384	0.000E+00	7.701E-03	3.130E-03	0.000E+00	0.000E+00	0.000E+00	4.618E-04	0.000E+00
385	0.000E+00	9.775E-03	2.699E-03	0.000E+00	0.000E+00	0.000E+00	3.989E-04	0.000E+00
386	0.000E+00	9.513E-03	1.924E-03	0.000E+00	0.000E+00	0.000E+00	2.835E-04	0.000E+00
387	0.000E+00	9.567E-03	1.193E-03	0.000E+00	0.000E+00	0.000E+00	1.761E-04	0.000E+00
388	0.000E+00	6.531E-03	1.070E-03	0.000E+00	0.000E+00	0.000E+00	1.593E-04	0.000E+00
389	0.000E+00	5.186E-03	1.141E-03	0.000E+00	0.000E+00	0.000E+00	1.700E-04	0.000E+00
390	0.000E+00	4.441E-03	3.942E-04	0.000E+00	0.000E+00	0.000E+00	7.731E-05	0.000E+00
391	0.000E+00	3.861E-03	3.912E-04	0.000E+00	0.000E+00	0.000E+00	7.228E-05	0.000E+00
392	0.000E+00	3.481E-03	4.322E-04	0.000E+00	0.000E+00	0.000E+00	6.782E-05	0.000E+00
393	0.000E+00	3.284E-03	4.517E-04	0.000E+00	0.000E+00	0.000E+00	6.675E-05	0.000E+00
394	0.000E+00	2.515E-03	5.682E-04	0.000E+00	0.000E+00	0.000E+00	8.386E-05	0.000E+00
395	0.000E+00	2.562E-03	5.188E-04	0.000E+00	0.000E+00	0.000E+00	7.651E-05	0.000E+00
396	0.000E+00	2.917E-03	4.700E-04	0.000E+00	0.000E+00	0.000E+00	6.975E-05	0.000E+00
397	0.000E+00	3.147E-03	5.362E-04	0.000E+00	0.000E+00	0.000E+00	7.944E-05	0.000E+00
398	0.000E+00	2.780E-03	5.752E-04	0.000E+00	0.000E+00	0.000E+00	8.475E-05	0.000E+00
399	0.000E+00	3.657E-03	8.472E-04	0.000E+00	0.000E+00	0.000E+00	1.246E-04	0.000E+00
400	0.000E+00	3.867E-03	7.544E-04	0.000E+00	0.000E+00	0.000E+00	1.108E-04	0.000E+00
401	0.000E+00	3.889E-03	1.186E-03	0.000E+00	0.000E+00	0.000E+00	1.762E-04	0.000E+00
402	0.000E+00	3.613E-03	2.555E-03	0.000E+00	0.000E+00	0.000E+00	3.786E-04	0.000E+00
403	0.000E+00	3.641E-03	3.111E-03	0.000E+00	0.000E+00	0.000E+00	4.585E-04	0.000E+00
404	0.000E+00	5.263E-03	2.391E-03	0.000E+00	0.000E+00	0.000E+00	3.539E-04	0.000E+00
405	0.000E+00	5.614E-03	1.662E-03	0.000E+00	0.000E+00	0.000E+00	2.451E-04	0.000E+00
406	0.000E+00	5.382E-03	9.818E-04	0.000E+00	0.000E+00	0.000E+00	1.452E-04	0.000E+00
407	0.000E+00	5.212E-03	9.252E-04	0.000E+00	0.000E+00	0.000E+00	1.367E-04	0.000E+00
408	0.000E+00	5.155E-03	9.380E-04	0.000E+00	0.000E+00	0.000E+00	1.394E-04	0.000E+00
409	0.000E+00	4.382E-03	9.923E-04	0.000E+00	0.000E+00	0.000E+00	1.476E-04	0.000E+00
410	0.000E+00	3.851E-03	3.493E-04	0.000E+00	0.000E+00	0.000E+00	6.433E-05	0.000E+00
411	0.000E+00	3.537E-03	3.560E-04	0.000E+00	0.000E+00	0.000E+00	6.273E-05	0.000E+00
412	0.000E+00	3.181E-03	3.421E-04	0.000E+00	0.000E+00	0.000E+00	5.948E-05	0.000E+00
413	0.000E+00	2.922E-03	7.708E-04	0.000E+00	0.000E+00	0.000E+00	1.134E-04	0.000E+00
414	0.000E+00	2.404E-03	5.070E-04	0.000E+00	0.000E+00	0.000E+00	7.481E-05	0.000E+00
415	0.000E+00	2.017E-03	5.547E-04	0.000E+00	0.000E+00	0.000E+00	8.508E-05	0.000E+00
416	0.000E+00	2.806E-03	6.086E-04	0.000E+00	0.000E+00	0.000E+00	8.962E-05	0.000E+00
417	0.000E+00	2.271E-03	4.364E-04	0.000E+00	0.000E+00	0.000E+00	6.827E-05	0.000E+00
418	0.000E+00	1.990E-03	6.864E-04	0.000E+00	0.000E+00	0.000E+00	1.023E-04	0.000E+00
419	0.000E+00	2.782E-03	5.169E-04	0.000E+00	0.000E+00	0.000E+00	7.788E-05	0.000E+00
420	0.000E+00	2.253E-03	1.246E-03	0.000E+00	0.000E+00	0.000E+00	1.869E-04	0.000E+00
421	0.000E+00	2.100E-03	1.946E-03	0.000E+00	0.000E+00	0.000E+00	2.878E-04	0.000E+00
422	0.000E+00	2.959E-03	2.067E-03	0.000E+00	0.000E+00	0.000E+00	3.069E-04	0.000E+00
423	0.000E+00	2.512E-03	1.956E-03	0.000E+00	0.000E+00	0.000E+00	2.886E-04	0.000E+00
424	0.000E+00	2.257E-03	1.897E-03	0.000E+00	0.000E+00	0.000E+00	2.817E-04	0.000E+00
425	0.000E+00	3.041E-03	2.812E-03	0.000E+00	0.000E+00	0.000E+00	4.144E-04	0.000E+00
426	0.000E+00	2.645E-03	2.713E-03	0.000E+00	0.000E+00	0.000E+00	3.991E-04	0.000E+00
427	0.000E+00	2.346E-03	2.566E-03	0.000E+00	0.000E+00	0.000E+00	3.795E-04	0.000E+00
428	0.000E+00	3.047E-03	3.026E-03	0.000E+00	0.000E+00	0.000E+00	4.462E-04	0.000E+00
429	0.000E+00	2.653E-03	2.889E-03	0.000E+00	0.000E+00	0.000E+00	4.263E-04	0.000E+00
430	0.000E+00	2.403E-03	2.739E-03	0.000E+00	0.000E+00	0.000E+00	4.044E-04	0.000E+00
431	0.000E+00	3.363E-03	2.232E-03	0.000E+00	0.000E+00	0.000E+00	3.303E-04	0.000E+00
432	0.000E+00	2.586E-03	2.114E-03	0.000E+00	0.000E+00	0.000E+00	3.128E-04	0.000E+00
433	0.000E+00	2.335E-03	1.984E-03	0.000E+00	0.000E+00	0.000E+00	2.935E-04	0.000E+00
434	0.000E+00	4.308E-03	1.383E-03	0.000E+00	0.000E+00	0.000E+00	2.048E-04	0.000E+00
435	0.000E+00	3.413E-03	1.153E-03	0.000E+00	0.000E+00	0.000E+00	1.717E-04	0.000E+00
436	0.000E+00	2.718E-03	9.749E-04	0.000E+00	0.000E+00	0.000E+00	1.460E-04	0.000E+00
437	0.000E+00	4.395E-03	9.313E-04	0.000E+00	0.000E+00	0.000E+00	1.379E-04	0.000E+00
438	0.000E+00	3.550E-03	7.953E-04	0.000E+00	0.000E+00	0.000E+00	1.182E-04	0.000E+00
439	0.000E+00	3.137E-03	6.464E-04	0.000E+00	0.000E+00	0.000E+00	9.646E-05	0.000E+00
440	0.000E+00	4.117E-03	8.338E-04	0.000E+00	0.000E+00	0.000E+00	1.234E-04	0.000E+00
441	0.000E+00	3.691E-03	9.570E-04	0.000E+00	0.000E+00	0.000E+00	1.415E-04	0.000E+00
442	0.000E+00	3.093E-03	9.422E-04	0.000E+00	0.000E+00	0.000E+00	1.394E-04	0.000E+00
443	0.000E+00	4.181E-03	7.883E-04	0.000E+00	0.000E+00	0.000E+00	1.166E-04	0.000E+00
444	0.000E+00	3.538E-03	7.651E-04	0.000E+00	0.000E+00	0.000E+00	1.131E-04	0.000E+00
445	0.000E+00	3.176E-03	6.516E-04	0.000E+00	0.000E+00	0.000E+00	9.664E-05	0.000E+00
446	0.000E+00	3.983E-03	6.781E-04	0.000E+00	0.000E+00	0.000E+00	1.012E-04	0.000E+00
447	0.000E+00	3.489E-03	7.011E-04	0.000E+00	0.000E+00	0.000E+00	1.039E-04	0.000E+00
448	0.000E+00	3.135E-03	6.501E-04	0.000E+00	0.000E+00	0.000E+00	9.635E-05	0.000E+00
449	0.000E+00	3.881E-03	8.548E-04	0.000E+00	0.000E+00	0.000E+00	1.272E-04	0.000E+00
450	0.000E+00	3.456E-03	7.192E-04	0.000E+00	0.000E+00	0.000E+00	1.068E-04	0.000E+00
451	0.000E+00	3.167E-03	5.963E-04	0.000E+00	0.000E+00	0.000E+00	8.865E-05	0.000E+00

RECEPTOR # 34 HAS MAXIMUM ACUTE HAZARD INDEX OF 1.372E-02

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 137

*** ACUTE HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 34 ***

POLLUTANT	CONC (ug/m3)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
ACROL	0.000E+00	0.000E+00	2.500E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cu	4.593E-03	0.000E+00	1.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.593E-04	0.000E+00
HCBO	0.000E+00	0.000E+00	3.700E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	4.528E+01	0.000E+00	3.300E+03	0.000E+00	1.372E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Hg	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	3.115E-03	0.000E+00	1.000E+00	0.000E+00	0.000E+00	3.115E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	4.400E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =				0.000E+00	1.372E-02	3.115E-03	0.000E+00	0.000E+00	0.000E+00	4.593E-04	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD AC22588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 138

*** ACUTE HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR # 34 ***

POLLUTANT ACROL		AEL (ug/m3) = 2.500E+00		BACKGR. (ug/m3) = 0.000E+00							
		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE		
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

POLLUTANT Cu		AEL (ug/m3) = 1.000E+01		BACKGR. (ug/m3) = 0.000E+00							
		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE		
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.613E-09	0.000E+00		
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.603E-07	0.000E+00		
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.647E-07	0.000E+00		
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.107E-07	0.000E+00		
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.705E-07	0.000E+00		
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.229E-06	0.000E+00		
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.382E-07	0.000E+00		
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.844E-04	0.000E+00		
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.034E-04	0.000E+00		
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.425E-04	0.000E+00		

POLLUTANT ECHO AEL (ug/m3) = 3.700E+02 BACKGR. (ug/m3) = 0.000E+00

POLLUTANT HCN	AEL (ug/m3) =	3.300E+03	BACKGR. (ug/m3) =	0.000E+00
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POLLUTANT Hg	AEI (ug/m3) =	3.000E+01	BACKGR. (ug/m3) =	0.000E+00
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SUM = 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
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SUM = 0.000E+00 0.000E+00 3.115E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE

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SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SUM = 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

POLLUTANT XYLEN AEL (ug/m3) = 4.400E+03 BACKGR. (ug/m3) = 0.000E+00

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	EYE
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TS2 * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqspace.dat Output File: g:\beest\GQ\GQspace.OUT 11/14/96 07:44:58 Page - 147

*** MAXIMUM CHRONIC EXPOSURE BY POLLUTANT FROM ALL SOURCES ***

POL.	INHALE	DERMAL	SOIL	WATER	PLANTS	ANIMAL	MOT MILK	NON-INH	ACCEPTABL	INH CONC	BACKGR	AEI	HAZARD	REC.
								DOSE SUM	ORAL DOSE	(ug/m3)	(ug/m3)	(ug/m3)	INDEX	
ACETA	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E+00	0.00E+00	0
ACROL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E+02	0.00E+00	0
As	3.45E-07	1.66E-07	7.82E-06	0.00E+00	3.26E-06	0.00E+00	0.00E+00	1.12E-05	1.00E-03	1.21E-03	0.00E+00	5.00E-01	1.37E-02	68
BENZE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.10E+01	0.00E+00	0
Ba	1.69E-08	6.79E-09	3.21E-07	0.00E+00	1.25E-07	0.00E+00	0.00E+00	4.53E-07	5.00E-03	5.93E-05	0.00E+00	4.80E-03	1.24E-02	42
Cd	1.27E-08	1.20E-08	2.84E-07	0.00E+00	3.05E-07	0.00E+00	0.00E+00	6.01E-07	1.00E-03	4.44E-05	0.00E+00	3.50E+00	6.14E-04	63
Cs	2.09E-09	9.95E-09	4.70E-08	0.00E+00	1.89E-08	0.00E+00	0.00E+00	7.59E-08	5.00E-03	7.32E-06	0.00E+00	2.00E-03	3.68E-03	69
Cu	2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	2.40E+00	4.23E-05	68

73	6.389E-03	1.134E-02	1.675E-03	3.182E-03	1.293E-03	1.625E-03	7.912E-03	4.762E-03
74	5.260E-03	9.524E-03	1.406E-03	2.668E-03	1.086E-03	1.365E-03	8.225E-03	3.894E-03
75	4.880E-03	9.137E-03	1.286E-03	2.446E-03	9.943E-04	1.248E-03	6.472E-03	3.630E-03
76	4.409E-03	8.749E-03	1.150E-03	2.186E-03	8.875E-04	1.117E-03	5.130E-03	3.291E-03
77	3.805E-03	8.082E-03	9.921E-04	1.885E-03	7.658E-04	9.629E-04	4.404E-03	2.841E-03
78	3.230E-03	7.345E-03	8.552E-04	1.629E-03	6.640E-04	8.298E-04	4.637E-03	2.400E-03
79	3.697E-03	8.389E-03	9.858E-04	1.881E-03	7.700E-04	9.564E-04	5.978E-03	2.739E-03
80	4.154E-03	9.525E-03	1.076E-03	2.054E-03	8.377E-04	1.044E-03	4.708E-03	3.109E-03
81	4.869E-03	1.121E-02	1.252E-03	2.395E-03	9.793E-04	1.215E-03	5.183E-03	3.653E-03
82	5.727E-03	1.339E-02	1.462E-03	2.803E-03	1.148E-03	1.418E-03	5.664E-03	4.308E-03
83	6.305E-03	1.573E-02	1.606E-03	3.081E-03	1.263E-03	1.558E-03	6.130E-03	4.745E-03
84	6.837E-03	1.925E-02	1.740E-03	3.339E-03	1.369E-03	1.688E-03	6.582E-03	5.148E-03
85	7.267E-03	2.651E-02	1.847E-03	3.547E-03	1.455E-03	1.791E-03	6.945E-03	5.474E-03
86	7.042E-03	4.954E-02	1.795E-03	3.444E-03	1.412E-03	1.741E-03	6.936E-03	5.299E-03
87	3.713E-03	5.163E-02	9.710E-04	1.843E-03	7.480E-04	9.425E-04	4.423E-03	2.769E-03
88	2.464E-03	3.259E-02	6.534E-04	1.234E-03	4.991E-04	6.343E-04	3.275E-03	1.829E-03
89	1.787E-03	1.317E-02	4.782E-04	9.013E-04	3.637E-04	4.642E-04	2.556E-03	1.322E-03
90	1.674E-03	1.478E-02	4.503E-04	8.481E-04	3.421E-04	4.372E-04	2.515E-03	1.236E-03
91	8.147E-03	1.397E-02	2.109E-03	4.012E-03	1.631E-03	2.047E-03	8.708E-03	6.099E-03
92	7.888E-03	1.349E-02	2.045E-03	3.888E-03	1.580E-03	1.984E-03	8.524E-03	5.902E-03
93	7.586E-03	1.292E-02	1.971E-03	3.745E-03	1.520E-03	1.913E-03	8.358E-03	5.671E-03
94	7.265E-03	1.233E-02	1.895E-03	3.596E-03	1.459E-03	1.839E-03	8.303E-03	5.424E-03
95	6.957E-03	1.179E-02	1.820E-03	3.450E-03	1.398E-03	1.767E-03	8.150E-03	5.188E-03
96	6.679E-03	1.129E-02	1.751E-03	3.316E-03	1.343E-03	1.699E-03	7.920E-03	4.978E-03
97	6.407E-03	1.082E-02	1.687E-03	3.192E-03	1.292E-03	1.638E-03	7.954E-03	4.768E-03
98	6.038E-03	1.024E-02	1.590E-03	3.005E-03	1.214E-03	1.544E-03	7.391E-03	4.492E-03
99	5.701E-03	9.725E-03	1.512E-03	2.857E-03	1.155E-03	1.468E-03	7.589E-03	4.231E-03
100	5.337E-03	9.194E-03	1.419E-03	2.679E-03	1.082E-03	1.378E-03	7.237E-03	3.958E-03
101	5.017E-03	8.746E-03	1.346E-03	2.540E-03	1.027E-03	1.306E-03	7.505E-03	3.710E-03
102	4.731E-03	8.361E-03	1.286E-03	2.427E-03	9.830E-04	1.249E-03	8.205E-03	3.481E-03
103	9.305E-03	1.551E-02	2.405E-03	4.580E-03	1.863E-03	2.334E-03	9.878E-03	6.969E-03
104	8.931E-03	1.486E-02	2.314E-03	4.403E-03	1.790E-03	2.246E-03	9.678E-03	6.683E-03
105	8.490E-03	1.411E-02	2.207E-03	4.194E-03	1.703E-03	2.142E-03	9.443E-03	6.345E-03
106	8.049E-03	1.336E-02	2.103E-03	3.990E-03	1.619E-03	2.041E-03	9.394E-03	6.005E-03
107	7.656E-03	1.272E-02	2.006E-03	3.803E-03	1.541E-03	1.948E-03	9.145E-03	5.707E-03
108	7.274E-03	1.210E-02	1.913E-03	3.621E-03	1.466E-03	1.857E-03	8.929E-03	5.416E-03
109	6.874E-03	1.148E-02	1.816E-03	3.435E-03	1.389E-03	1.763E-03	8.830E-03	5.110E-03
110	6.424E-03	1.080E-02	1.706E-03	3.224E-03	1.304E-03	1.656E-03	8.714E-03	4.766E-03
111	5.986E-03	1.016E-02	1.595E-03	3.011E-03	1.217E-03	1.548E-03	8.330E-03	4.437E-03
112	5.584E-03	9.589E-03	1.494E-03	2.821E-03	1.140E-03	1.451E-03	8.159E-03	4.132E-03
113	5.211E-03	9.075E-03	1.401E-03	2.643E-03	1.069E-03	1.360E-03	7.972E-03	3.850E-03
114	4.894E-03	8.655E-03	1.331E-03	2.509E-03	1.016E-03	1.292E-03	8.420E-03	3.601E-03
115	1.085E-02	1.749E-02	2.801E-03	5.339E-03	2.174E-03	2.718E-03	1.145E-02	8.132E-03
116	1.029E-02	1.658E-02	2.664E-03	5.071E-03	2.063E-03	2.585E-03	1.118E-02	7.697E-03
117	9.605E-03	1.554E-02	2.499E-03	4.749E-03	1.929E-03	2.425E-03	1.084E-02	7.177E-03
118	8.988E-03	1.459E-02	2.353E-03	4.464E-03	1.811E-03	2.284E-03	1.076E-02	6.702E-03
119	8.461E-03	1.381E-02	2.232E-03	4.233E-03	1.717E-03	2.166E-03	1.102E-02	6.293E-03
120	7.874E-03	1.293E-02	2.082E-03	3.939E-03	1.594E-03	2.021E-03	1.027E-02	5.851E-03
121	7.313E-03	1.210E-02	1.940E-03	3.666E-03	1.482E-03	1.883E-03	9.771E-03	5.428E-03
122	6.778E-03	1.133E-02	1.811E-03	3.420E-03	1.383E-03	1.758E-03	9.771E-03	5.019E-03
123	6.286E-03	1.062E-02	1.684E-03	3.180E-03	1.286E-03	1.635E-03	9.350E-03	4.649E-03
124	5.894E-03	1.009E-02	1.598E-03	3.019E-03	1.224E-03	1.551E-03	1.005E-02	4.341E-03
125	5.475E-03	9.514E-03	1.484E-03	2.799E-03	1.133E-03	1.440E-03	9.171E-03	4.033E-03
126	5.082E-03	8.994E-03	1.379E-03	2.600E-03	1.052E-03	1.339E-03	8.565E-03	3.742E-03
127	1.303E-02	2.020E-02	3.355E-03	6.406E-03	2.613E-03	3.256E-03	1.361E-02	9.774E-03
128	1.215E-02	1.891E-02	3.143E-03	5.990E-03	2.440E-03	3.050E-03	1.318E-02	9.101E-03
129	1.103E-02	1.735E-02	2.874E-03	5.465E-03	2.222E-03	2.789E-03	1.284E-02	8.239E-03
130	1.016E-02	1.613E-02	2.688E-03	5.102E-03	2.074E-03	2.609E-03	1.408E-02	7.552E-03
131	9.278E-03	1.490E-02	2.471E-03	4.679E-03	1.899E-03	2.399E-03	1.350E-02	6.877E-03
132	8.486E-03	1.380E-02	2.273E-03	4.299E-03	1.743E-03	2.206E-03	1.287E-02	6.278E-03
133	7.735E-03	1.271E-02	2.064E-03	3.898E-03	1.576E-03	2.004E-03	1.100E-02	5.729E-03
134	7.174E-03	1.192E-02	1.934E-03	3.651E-03	1.479E-03	1.877E-03	1.147E-02	5.296E-03
135	6.653E-03	1.119E-02	1.797E-03	3.393E-03	1.375E-03	1.745E-03	1.090E-02	4.907E-03
136	6.178E-03	1.054E-02	1.668E-03	3.148E-03	1.274E-03	1.620E-03	9.984E-03	4.557E-03
137	5.726E-03	9.940E-03	1.549E-03	2.921E-03	1.182E-03	1.503E-03	9.383E-03	4.221E-03
138	5.309E-03	9.393E-03	1.439E-03	2.712E-03	1.097E-03	1.396E-03	8.811E-03	3.911E-03
139	1.652E-02	2.445E-02	4.251E-03	8.143E-03	3.334E-03	4.124E-03	1.822E-02	1.239E-02
140	1.517E-02	2.260E-02	3.929E-03	7.509E-03	3.071E-03	3.812E-03	1.779E-02	1.135E-02
141	1.301E-02	1.982E-02	3.408E-03	6.490E-03	2.646E-03	3.307E-03	1.673E-02	9.704E-03
142	1.120E-02	1.746E-02	2.967E-03	5.625E-03	2.285E-03	2.880E-03	1.561E-02	8.315E-03
143	9.952E-03	1.581E-02	2.658E-03	5.025E-03	2.036E-03	2.580E-03	1.462E-02	7.369E-03
144	8.985E-03	1.450E-02	2.414E-03	4.558E-03	1.845E-03	2.343E-03	1.389E-02	6.639E-03
145	8.198E-03	1.341E-02	2.208E-03	4.167E-03	1.687E-03	2.143E-03	1.292E-02	6.053E-03
146	7.559E-03	1.251E-02	2.039E-03	3.848E-03	1.558E-03	1.979E-03	1.212E-02	5.579E-03
147	6.992E-03	1.173E-02	1.885E-03	3.559E-03	1.441E-03	1.830E-03	1.118E-02	5.161E-03
148	6.474E-03	1.104E-02	1.746E-03	3.295E-03	1.334E-03	1.695E-03	1.034E-02	4.777E-03
149	6.007E-03	1.042E-02	1.621E-03	3.058E-03	1.237E-03	1.574E-03	9.619E-03	4.432E-03
150	5.564E-03	9.839E-03	1.502E-03	2.834E-03	1.146E-03	1.458E-03	8.931E-03	4.105E-03
151	8.640E-03	1.408E-02	2.331E-03	4.398E-03	1.780E-03	2.263E-03	1.385E-02	6.375E-03
152	7.993E-03	1.318E-02	2.152E-03	4.061E-03	1.644E-03	2.089E-03	1.255E-02	5.903E-03
153	7.415E-03	1.239E-02	1.993E-03	3.763E-03	1.523E-03	1.935E-03	1.149E-02	5.479E-03
154	6.832E-03	1.163E-02	1.841E-03	3.479E-03	1.411E-03	1.787E-03	1.103E-02	5.044E-03
155	6.394E-03	1.103E-02	1.719E-03	3.245E-03	1.313E-03	1.668E-03	9.882E-03	4.724E-03
156	5.893E-03	1.039E-02	1.585E-03	2.995E-03	1.213E-03	1.538E-03	9.279E-03	4.353E-03
157	4.491E-03	8.312E-03	1.207E-03	2.288E-03	9.317E-04	1.171E-03	7.370E-03	3.319E-03
158	4.614E-03	8.419E-03	1.235E-03	2.341E-03	9.515E-04	1.199E-03	7.201E-03	3.414E-03
159	4.552E-03	8.451E-03	1.191E-03	2.257E-03	9.136E-04	1.156E-03	5.269E-03	3.395E-03
160	4.434E-03	8.344E-03	1.154E-03	2.190E-03	8.878E-04	1.120E-03	4.897E-03	3.313E-03
161	4.213E-03	7.930E-03	1.096E-03	2.080E-03	8.436E-04	1.064E-03	4.649E-03	3.148E-03
162	4.007E-03	7.455E-03	1.045E-03	1.981E-03	8.030E-04	1.014E-03	4.495E-03	2.992E-03
163	3.848E-03	6.998E-03	1.006E-03	1.906E-03	7.719E-04	9.767E-04	4.425E-03	2.871E-03
164	3.582E-03	6.475E-03	9.417E-04	1.780E-03	7.194E-04	9.143E-04	4.298E-03	2.666E-03
165	3.221E-03	5.921E-03	8.539E-04	1.610E-03	6.488E-04	8.291E-04	4.113E-03	2.391E-03
166	2.841E-03	5.406E-03	7.584E-04	1.425E-03	5.730E-04	7.365E-04	3.792E-03	2.104E-03
167	2.540E-03	5.046E-03	6.790E-04	1.275E-03	5.120E-04	6.594E-04	3.398E-03	1.880E-03
168	5.699E-03	1.023E-02	1.488E-03	2.822E-03	1.144E-03	1.445E-03	6.519E-03	4.253E-03
169	5.710E-03	1.036E-02	1.486E-03	2.820E-03	1.143E-03	1.442E-03	6.303E-03	4.266E-03

170	5.462E-03	9.991E-03	1.418E-03	2.694E-03	1.094E-03	1.376E-03	5.943E-03	4.085E-03
171	5.125E-03	9.288E-03	1.334E-03	2.532E-03	1.027E-03	1.295E-03	5.697E-03	3.829E-03
172	4.815E-03	8.589E-03	1.258E-03	2.385E-03	9.659E-04	1.222E-03	5.525E-03	3.593E-03
173	4.490E-03	7.894E-03	1.180E-03	2.231E-03	9.026E-04	1.145E-03	5.396E-03	3.344E-03
174	3.992E-03	7.124E-03	1.059E-03	1.998E-03	8.067E-04	1.028E-03	5.233E-03	2.963E-03
175	3.464E-03	6.397E-03	9.286E-04	1.748E-03	7.045E-04	9.017E-04	4.974E-03	2.562E-03
176	3.005E-03	5.822E-03	8.055E-04	1.513E-03	6.079E-04	7.822E-04	4.170E-03	2.222E-03
177	2.665E-03	5.373E-03	7.132E-04	1.340E-03	5.388E-04	6.926E-04	3.650E-03	1.972E-03
178	7.610E-03	1.328E-02	2.001E-03	3.809E-03	1.552E-03	1.941E-03	1.008E-02	5.667E-03
179	7.414E-03	1.298E-02	1.922E-03	3.655E-03	1.485E-03	1.865E-03	8.027E-03	5.547E-03
180	6.947E-03	1.214E-02	1.802E-03	3.426E-03	1.391E-03	1.749E-03	7.547E-03	5.196E-03
181	6.344E-03	1.097E-02	1.656E-03	3.141E-03	1.273E-03	1.608E-03	7.265E-03	4.735E-03
182	5.834E-03	9.980E-03	1.539E-03	2.913E-03	1.180E-03	1.494E-03	7.463E-03	4.339E-03
183	5.109E-03	8.829E-03	1.353E-03	2.556E-03	1.033E-03	1.314E-03	6.669E-03	3.794E-03
184	4.424E-03	7.877E-03	1.202E-03	2.267E-03	9.183E-04	1.166E-03	7.598E-03	3.256E-03
185	3.721E-03	6.948E-03	1.010E-03	1.902E-03	7.678E-04	9.811E-04	6.137E-03	2.739E-03
186	3.197E-03	6.276E-03	8.607E-04	1.619E-03	6.517E-04	8.357E-04	4.738E-03	2.361E-03
187	2.825E-03	5.714E-03	7.528E-04	1.418E-03	5.716E-04	7.310E-04	3.819E-03	2.093E-03
188	1.069E-02	1.781E-02	2.791E-03	5.325E-03	2.176E-03	2.708E-03	1.371E-02	7.975E-03
189	1.032E-02	1.696E-02	2.662E-03	5.075E-03	2.068E-03	2.583E-03	1.086E-02	7.734E-03
190	9.297E-03	1.523E-02	2.413E-03	4.589E-03	1.865E-03	2.342E-03	1.025E-02	6.952E-03
191	8.049E-03	1.324E-02	2.115E-03	4.009E-03	1.625E-03	2.053E-03	9.963E-03	5.994E-03
192	6.842E-03	1.142E-02	1.816E-03	3.432E-03	1.388E-03	1.763E-03	9.215E-03	5.077E-03
193	5.721E-03	9.808E-03	1.537E-03	2.902E-03	1.174E-03	1.492E-03	8.783E-03	4.227E-03
194	4.813E-03	8.590E-03	1.308E-03	2.464E-03	9.968E-04	1.270E-03	8.171E-03	3.542E-03
195	4.017E-03	7.576E-03	1.087E-03	2.048E-03	8.271E-04	1.055E-03	6.452E-03	2.961E-03
196	3.484E-03	6.841E-03	9.383E-04	1.774E-03	7.179E-04	9.109E-04	5.489E-03	2.572E-03
197	2.973E-03	6.003E-03	7.868E-04	1.488E-03	6.025E-04	7.638E-04	3.924E-03	2.208E-03
198	1.735E-02	2.644E-02	4.459E-03	8.553E-03	3.511E-03	4.325E-03	1.950E-02	1.302E-02
199	1.704E-02	2.533E-02	4.363E-03	8.364E-03	3.424E-03	4.233E-03	1.742E-02	1.281E-02
200	1.409E-02	2.120E-02	3.666E-03	6.993E-03	2.856E-03	3.557E-03	1.715E-02	1.053E-02
201	7.871E-03	1.294E-02	2.124E-03	4.009E-03	1.623E-03	2.062E-03	1.270E-02	5.808E-03
202	5.365E-03	9.583E-03	1.449E-03	2.733E-03	1.106E-03	1.406E-03	8.646E-03	3.958E-03
203	4.444E-03	8.391E-03	1.201E-03	2.270E-03	9.215E-04	1.165E-03	7.420E-03	3.278E-03
204	3.678E-03	7.214E-03	9.705E-04	1.839E-03	7.455E-04	9.420E-04	4.789E-03	2.735E-03
205	2.998E-03	6.085E-03	7.868E-04	1.492E-03	6.052E-04	7.637E-04	3.695E-03	2.233E-03
206	2.895E-03	5.995E-03	7.567E-04	1.437E-03	5.836E-04	7.345E-04	3.459E-03	2.159E-03
207	2.686E-03	5.720E-03	7.167E-04	1.363E-03	5.562E-04	6.954E-04	4.240E-03	1.990E-03
208	2.640E-04	6.790E-04	7.129E-05	1.343E-04	5.422E-05	6.921E-05	4.141E-04	1.948E-04
209	3.040E-04	7.498E-04	8.177E-05	1.541E-04	6.219E-05	7.939E-05	4.594E-04	2.245E-04
210	3.585E-04	9.114E-04	9.642E-05	1.814E-04	7.310E-05	9.362E-05	5.308E-04	2.648E-04
211	4.246E-04	1.090E-03	1.138E-04	2.143E-04	8.635E-05	1.105E-04	6.082E-04	3.140E-04
212	5.121E-04	1.342E-03	1.366E-04	2.575E-04	1.038E-04	1.326E-04	7.041E-04	3.794E-04
213	6.436E-04	1.708E-03	1.714E-04	3.228E-04	1.301E-04	1.664E-04	8.582E-04	4.770E-04
214	8.262E-04	2.128E-03	2.190E-04	4.130E-04	1.665E-04	2.127E-04	1.057E-03	6.133E-04
215	1.070E-03	2.525E-03	2.828E-04	5.334E-04	2.150E-04	2.746E-04	1.326E-03	7.948E-04
216	1.279E-03	2.950E-03	3.384E-04	6.377E-04	2.569E-04	3.286E-04	1.586E-03	9.499E-04
217	1.478E-03	3.197E-03	3.896E-04	7.354E-04	2.967E-04	3.783E-04	1.781E-03	1.100E-03
218	1.585E-03	3.354E-03	4.171E-04	7.876E-04	3.179E-04	4.050E-04	1.883E-03	1.180E-03
219	1.638E-03	3.364E-03	4.312E-04	8.140E-04	3.284E-04	4.187E-04	1.944E-03	1.219E-03
220	1.536E-03	3.123E-03	4.060E-04	7.650E-04	3.080E-04	3.943E-04	1.864E-03	1.142E-03
221	1.413E-03	2.941E-03	3.725E-04	7.025E-04	2.832E-04	3.617E-04	1.692E-03	1.051E-03
222	1.311E-03	2.774E-03	3.428E-04	6.493E-04	2.628E-04	3.328E-04	1.500E-03	9.780E-04
223	1.302E-03	2.678E-03	3.405E-04	6.451E-04	2.612E-04	3.306E-04	1.500E-03	9.713E-04
224	1.296E-03	2.644E-03	3.411E-04	6.446E-04	2.605E-04	3.311E-04	1.574E-03	9.641E-04
225	1.262E-03	2.612E-03	3.355E-04	6.318E-04	2.545E-04	3.258E-04	1.650E-03	9.358E-04
226	1.194E-03	2.499E-03	3.185E-04	5.991E-04	2.411E-04	3.092E-04	1.607E-03	8.840E-04
227	2.577E-04	6.726E-04	7.026E-05	1.320E-04	5.316E-05	6.822E-05	4.328E-04	1.894E-04
228	3.062E-04	7.928E-04	8.287E-05	1.560E-04	6.296E-05	8.046E-05	4.881E-04	2.257E-04
229	3.624E-04	9.038E-04	9.754E-05	1.838E-04	7.418E-05	9.470E-05	5.511E-04	2.676E-04
230	4.353E-04	1.132E-03	1.169E-04	2.201E-04	8.873E-05	1.135E-04	6.388E-04	3.217E-04
231	5.298E-04	1.374E-03	1.417E-04	2.669E-04	1.076E-04	1.376E-04	7.452E-04	3.921E-04
232	6.637E-04	1.791E-03	1.766E-04	3.329E-04	1.343E-04	1.715E-04	8.878E-04	4.920E-04
233	8.710E-04	2.286E-03	2.310E-04	4.355E-04	1.756E-04	2.243E-04	1.119E-03	6.465E-04
234	1.161E-03	2.846E-03	3.068E-04	5.789E-04	2.335E-04	2.979E-04	1.439E-03	8.629E-04
235	1.469E-03	3.419E-03	3.879E-04	7.317E-04	2.950E-04	3.767E-04	1.799E-03	1.092E-03
236	1.756E-03	3.788E-03	4.625E-04	8.731E-04	3.523E-04	4.491E-04	2.109E-03	1.306E-03
237	1.929E-03	3.990E-03	5.072E-04	9.581E-04	3.868E-04	4.924E-04	2.275E-03	1.437E-03
238	1.965E-03	3.965E-03	5.172E-04	9.763E-04	3.939E-04	5.021E-04	2.328E-03	1.462E-03
239	1.826E-03	3.660E-03	4.820E-04	9.085E-04	3.659E-04	4.680E-04	2.201E-03	1.357E-03
240	1.682E-03	3.521E-03	4.413E-04	8.344E-04	3.372E-04	4.284E-04	1.955E-03	1.254E-03
241	1.620E-03	3.314E-03	4.225E-04	8.011E-04	3.246E-04	4.101E-04	1.829E-03	1.209E-03
242	1.607E-03	3.223E-03	4.213E-04	7.974E-04	3.226E-04	4.090E-04	1.892E-03	1.197E-03
243	1.536E-03	3.097E-03	4.071E-04	7.674E-04	3.094E-04	3.953E-04	1.959E-03	1.140E-03
244	1.429E-03	2.945E-03	3.815E-04	7.174E-04	2.886E-04	3.705E-04	1.924E-03	1.058E-03
245	1.276E-03	2.695E-03	3.408E-04	6.410E-04	2.578E-04	3.310E-04	1.723E-03	9.452E-04
246	2.365E-04	6.244E-04	6.446E-05	1.212E-04	4.888E-05	6.258E-05	4.001E-04	1.739E-04
247	2.920E-04	7.788E-04	7.975E-05	1.498E-04	6.036E-05	7.743E-05	4.991E-04	2.145E-04
248	3.581E-04	9.415E-04	9.706E-05	1.826E-04	7.364E-05	9.423E-05	5.750E-04	2.638E-04
249	4.407E-04	1.127E-03	1.186E-04	2.233E-04	9.007E-05	1.151E-04	6.623E-04	3.255E-04
250	5.457E-04	1.436E-03	1.463E-04	2.756E-04	1.112E-04	1.420E-04	7.908E-04	4.035E-04
251	6.918E-04	1.853E-03	1.845E-04	3.477E-04	1.402E-04	1.791E-04	9.472E-04	5.125E-04
252	9.137E-04	2.488E-03	2.423E-04	4.570E-04	1.844E-04	2.352E-04	1.181E-03	6.782E-04
253	1.269E-03	3.241E-03	3.350E-04	6.325E-04	2.553E-04	3.253E-04	1.567E-03	9.435E-04
254	1.705E-03	4.014E-03	4.489E-04	8.480E-04	3.424E-04	4.359E-04	2.054E-03	1.269E-03
255	2.136E-03	4.596E-03	5.621E-04	1.062E-03	4.285E-04	5.458E-04	2.543E-03	1.590E-03
256	2.414E-03	4.861E-03	6.339E-04	1.198E-03	4.839E-04	6.155E-04	2.824E-03	1.798E-03
257	2.420E-03	4.749E-03	6.367E-04	1.202E-03	4.849E-04	6.182E-04	2.861E-03	1.801E-03
258	2.272E-03	4.540E-03	5.978E-04	1.128E-03	4.552E-04	5.805E-04	2.685E-03	1.691E-03
259	2.122E-03	4.325E-03	5.538E-04	1.050E-03	4.251E-04	5.376E-04	2.395E-03	1.584E-03
260	2.077E-03	4.084E-03	5.421E-04	1.028E-03	4.165E-04	5.262E-04	2.361E-03	1.550E-03
261	1.947E-03	3.818E-03	5.137E-04	9.699E-04	3.916E-04	4.987E-04	2.394E-03	1.448E-03
262	1.759E-03	3.540E-03	4.696E-04	8.826E-04	3.548E-04	4.560E-04	2.352E-03	1.302E-03
263	1.558E-03	3.234E-03	4.159E-04	7.820E-04	3.145E-04	4.039E-04	2.095E-03	1.153E-03
264	1.318E-03	2.834E-03	3.506E-04	6.602E-04	2.659E-04	3.405E-04	1.738E-03	9.768E-04
265	2.365E-04	6.542E-04	6.447E-05	1.218E-04	4.937E-05	6.257E-05	4.218E-04	1.739E-04
266	2.764E-04	7.482E-04	7.512E-05	1.416E-04	5.727E-05	7.292E-05	4.687E-04	2.034E-04

267	3.399E-04	9.289E-04	9.263E-05	1.742E-04	7.027E-05	8.993E-05	5.760E-04	2.499E-04
268	4.269E-04	1.148E-03	1.158E-04	2.178E-04	8.781E-05	1.124E-04	6.871E-04	3.144E-04
269	5.501E-04	1.464E-03	1.480E-04	2.786E-04	1.123E-04	1.437E-04	8.209E-04	4.063E-04
270	7.142E-04	1.915E-03	1.907E-04	3.595E-04	1.450E-04	1.852E-04	9.960E-04	5.289E-04
271	9.680E-04	2.709E-03	2.571E-04	4.849E-04	1.956E-04	2.496E-04	1.273E-03	7.182E-04
272	1.377E-03	3.700E-03	3.630E-04	6.860E-04	2.772E-04	3.524E-04	1.695E-03	1.024E-03
273	2.017E-03	4.803E-03	5.296E-04	1.002E-03	4.053E-04	5.141E-04	2.407E-03	1.502E-03
274	2.708E-03	5.785E-03	7.178E-04	1.359E-03	5.505E-04	6.968E-04	3.662E-03	2.011E-03
275	3.154E-03	6.145E-03	8.290E-04	1.569E-03	6.343E-04	8.048E-04	3.787E-03	2.349E-03
276	3.151E-03	6.020E-03	8.279E-04	1.564E-03	6.313E-04	8.038E-04	3.687E-03	2.346E-03
277	2.985E-03	5.882E-03	7.800E-04	1.477E-03	5.978E-04	7.572E-04	3.382E-03	2.227E-03
278	2.808E-03	5.454E-03	7.316E-04	1.388E-03	5.626E-04	7.102E-04	3.140E-03	2.097E-03
279	2.641E-03	4.995E-03	6.928E-04	1.311E-03	5.301E-04	6.726E-04	3.118E-03	1.967E-03
280	2.283E-03	4.413E-03	6.080E-04	1.144E-03	4.600E-04	5.904E-04	2.985E-03	1.692E-03
281	1.946E-03	3.969E-03	5.199E-04	9.769E-04	3.926E-04	5.049E-04	2.608E-03	1.441E-03
282	1.622E-03	3.458E-03	4.313E-04	8.121E-04	3.270E-04	4.188E-04	2.119E-03	1.203E-03
283	1.294E-03	2.875E-03	3.431E-04	6.469E-04	2.608E-04	3.332E-04	1.666E-03	9.601E-04
284	2.232E-04	6.170E-04	6.638E-05	1.249E-04	5.047E-05	6.444E-05	4.363E-04	1.778E-04
285	2.823E-04	7.695E-04	7.719E-05	1.456E-04	5.896E-05	7.493E-05	5.112E-04	2.073E-04
286	3.367E-04	9.229E-04	9.130E-05	1.724E-04	6.984E-05	8.863E-05	5.689E-04	2.480E-04
287	4.192E-04	1.164E-03	1.134E-04	2.138E-04	8.643E-05	1.101E-04	6.796E-04	3.090E-04
288	5.345E-04	1.473E-03	1.443E-04	2.719E-04	1.097E-04	1.401E-04	8.348E-04	3.943E-04
289	7.172E-04	2.003E-03	1.925E-04	3.624E-04	1.461E-04	1.869E-04	1.044E-03	5.301E-04
290	1.005E-03	2.859E-03	2.674E-04	5.043E-04	2.035E-04	2.596E-04	1.354E-03	7.450E-04
291	1.510E-03	4.310E-03	3.978E-04	7.521E-04	3.040E-04	3.862E-04	1.855E-03	1.124E-03
292	2.524E-03	6.016E-03	6.797E-04	1.290E-03	5.260E-04	6.595E-04	4.296E-03	1.863E-03
293	3.584E-03	7.521E-03	9.357E-04	1.775E-03	7.192E-04	9.083E-04	4.098E-03	2.675E-03
294	2.068E-03	4.332E-03	5.496E-04	1.035E-03	4.165E-04	5.337E-04	2.674E-03	1.534E-03
295	1.593E-03	3.491E-03	4.218E-04	7.953E-04	3.206E-04	4.095E-04	2.017E-03	1.183E-03
296	1.190E-03	2.667E-03	3.153E-04	5.945E-04	2.396E-04	3.062E-04	1.507E-03	8.839E-04
297	2.194E-04	5.544E-04	6.060E-05	1.136E-04	4.574E-05	5.884E-05	4.090E-04	1.605E-04
298	2.656E-04	6.829E-04	7.335E-05	1.376E-04	5.542E-05	7.122E-05	4.978E-04	1.943E-04
299	3.242E-04	8.886E-04	8.946E-05	1.680E-04	6.778E-05	8.685E-05	6.111E-04	2.372E-04
300	3.979E-04	1.133E-03	1.087E-04	2.046E-04	8.255E-05	1.056E-04	6.937E-04	2.922E-04
301	5.168E-04	1.510E-03	1.398E-04	2.634E-04	1.063E-04	1.358E-04	8.282E-04	3.809E-04
302	7.081E-04	2.039E-03	1.899E-04	3.582E-04	1.447E-04	1.844E-04	1.047E-03	5.236E-04
303	1.030E-03	3.043E-03	2.743E-04	5.175E-04	2.089E-04	2.663E-04	1.408E-03	7.635E-04
304	1.628E-03	5.011E-03	4.297E-04	8.122E-04	3.282E-04	4.172E-04	2.039E-03	1.211E-03
305	2.972E-03	7.524E-03	7.744E-04	1.473E-03	5.988E-04	7.516E-04	3.457E-03	2.220E-03
306	2.082E-03	4.431E-03	5.482E-04	1.036E-03	4.186E-04	5.322E-04	2.532E-03	1.549E-03
307	1.488E-03	3.255E-03	3.918E-04	7.403E-04	2.990E-04	3.804E-04	1.810E-03	1.107E-03
308	1.102E-03	2.461E-03	2.902E-04	5.482E-04	2.214E-04	2.817E-04	1.336E-03	8.199E-04
309	1.774E-04	5.350E-04	4.963E-05	9.349E-05	3.793E-05	4.816E-05	3.884E-04	1.292E-04
310	2.218E-04	6.335E-04	6.150E-05	1.157E-04	4.680E-05	5.970E-05	4.445E-04	1.620E-04
311	2.815E-04	7.891E-04	7.769E-05	1.460E-04	5.894E-05	7.542E-05	5.345E-04	2.060E-04
312	3.621E-04	1.046E-03	9.956E-05	1.869E-04	7.536E-05	9.666E-05	6.589E-04	2.653E-04
313	4.709E-04	1.422E-03	1.289E-04	2.421E-04	9.755E-05	1.251E-04	8.192E-04	3.457E-04
314	6.541E-04	2.076E-03	1.773E-04	3.334E-04	1.343E-04	1.722E-04	1.044E-03	4.818E-04
315	9.720E-04	3.163E-03	2.612E-04	4.916E-04	1.981E-04	2.536E-04	1.427E-03	7.182E-04
316	1.628E-03	5.815E-03	4.317E-04	8.147E-04	3.289E-04	4.191E-04	2.129E-03	1.208E-03
317	3.552E-03	1.049E-02	9.211E-04	1.753E-03	7.133E-04	8.939E-04	3.926E-03	2.657E-03
318	1.904E-03	4.140E-03	4.999E-04	9.466E-04	3.832E-04	4.853E-04	2.291E-03	1.419E-03
319	1.300E-03	2.976E-03	3.424E-04	6.470E-04	2.613E-04	3.324E-04	1.586E-03	9.670E-04
320	9.716E-04	2.303E-03	2.565E-04	4.839E-04	1.951E-04	2.490E-04	1.189E-03	7.223E-04
321	1.524E-04	4.948E-04	4.299E-05	8.104E-05	3.296E-05	4.171E-05	3.606E-04	1.106E-04
322	1.827E-04	6.042E-04	5.179E-05	9.766E-05	3.974E-05	5.026E-05	4.472E-04	1.324E-04
323	2.214E-04	7.224E-04	6.210E-05	1.170E-04	4.745E-05	6.027E-05	4.929E-04	1.611E-04
324	2.825E-04	8.926E-04	7.825E-05	1.472E-04	5.951E-05	7.596E-05	5.591E-04	2.065E-04
325	3.850E-04	1.230E-03	1.059E-04	1.989E-04	8.026E-05	1.028E-04	7.055E-04	2.822E-04
326	5.461E-04	1.902E-03	1.497E-04	2.811E-04	1.132E-04	1.454E-04	9.639E-04	4.006E-04
327	8.246E-04	3.171E-03	2.237E-04	4.201E-04	1.690E-04	2.172E-04	1.309E-03	6.071E-04
328	1.439E-03	6.670E-03	3.860E-04	7.267E-04	2.929E-04	3.748E-04	2.083E-03	1.064E-03
329	3.567E-03	1.876E-02	9.313E-04	1.768E-03	7.175E-04	9.040E-04	4.159E-03	2.662E-03
330	1.636E-03	3.706E-03	4.294E-04	8.121E-04	3.282E-04	4.169E-04	1.926E-03	1.219E-03
331	1.191E-03	2.705E-03	3.140E-04	5.924E-04	2.389E-04	3.049E-04	1.439E-03	8.854E-04
332	9.407E-04	2.072E-03	2.487E-04	4.687E-04	1.888E-04	2.415E-04	1.154E-03	6.989E-04
333	1.434E-04	3.767E-04	3.937E-05	7.424E-05	3.000E-05	3.822E-05	2.636E-04	1.051E-04
334	1.661E-04	4.750E-04	4.567E-05	8.591E-05	3.472E-05	4.434E-05	3.083E-04	1.218E-04
335	1.972E-04	6.224E-04	5.441E-05	1.023E-04	4.135E-05	5.282E-05	3.765E-04	1.444E-04
336	2.426E-04	8.271E-04	6.723E-05	1.264E-04	5.107E-05	6.527E-05	4.793E-04	1.773E-04
337	3.103E-04	1.110E-03	8.643E-05	1.625E-04	6.571E-05	8.390E-05	6.403E-04	2.264E-04
338	4.172E-04	1.554E-03	1.156E-04	2.173E-04	8.778E-05	1.123E-04	8.222E-04	3.049E-04
339	6.483E-04	2.623E-03	1.781E-04	3.347E-04	1.350E-04	1.729E-04	1.181E-03	4.752E-04
340	1.172E-03	6.479E-03	3.179E-04	5.981E-04	2.412E-04	3.087E-04	1.897E-03	8.635E-04
341	4.427E-03	8.766E-03	1.141E-03	2.181E-03	8.917E-04	1.107E-03	4.839E-03	3.319E-03
342	2.156E-03	4.719E-03	5.650E-04	1.069E-03	4.325E-04	5.485E-04	2.515E-03	1.607E-03
343	1.455E-03	3.174E-03	3.836E-04	7.236E-04	2.917E-04	3.724E-04	1.751E-03	1.082E-03
344	1.086E-03	2.375E-03	2.870E-04	5.408E-04	2.178E-04	2.787E-04	1.328E-03	8.066E-04
345	8.449E-04	1.907E-03	2.237E-04	4.213E-04	1.696E-04	2.173E-04	1.045E-03	6.275E-04
346	1.280E-04	3.326E-04	3.644E-05	6.862E-05	2.790E-05	3.536E-05	3.201E-04	9.261E-05
347	1.450E-04	3.831E-04	4.054E-05	7.637E-05	3.091E-05	3.935E-05	3.106E-04	1.056E-04
348	1.706E-04	4.575E-04	4.723E-05	8.886E-05	3.592E-05	4.585E-05	3.361E-04	1.247E-04
349	2.067E-04	5.746E-04	5.666E-05	1.067E-04	4.309E-05	5.501E-05	3.738E-04	1.516E-04
350	2.612E-04	7.887E-04	7.111E-05	1.340E-04	5.415E-05	6.904E-05	4.467E-04	1.921E-04
351	3.495E-04	1.209E-03	9.494E-05	1.788E-04	7.221E-05	9.217E-05	5.832E-04	2.572E-04
352	5.210E-04	2.033E-03	1.419E-04	2.668E-04	1.076E-04	1.377E-04	8.779E-04	3.831E-04
353	8.728E-04	4.436E-03	2.393E-04	4.491E-04	1.810E-04	2.323E-04	1.540E-03	6.403E-04
354	3.090E-03	6.476E-03	7.974E-04	1.519E-03	6.187E-04	7.739E-04	3.257E-03	2.315E-03
355	1.722E-03	3.942E-03	4.508E-04	8.533E-04	3.452E-04	4.377E-04	1.985E-03	1.284E-03
356	1.181E-03	2.876E-03	3.115E-04	5.876E-04	2.369E-04	3.024E-04	1.420E-03	8.787E-04
357	8.958E-04	2.243E-03	2.369E-04	4.463E-04	1.797E-04	2.301E-04	1.098E-03	6.655E-04
358	7.250E-04	1.814E-03	1.919E-04	3.614E-04	1.455E-04	1.863E-04	8.918E-04	5.385E-04
359	1.131E-04	3.202E-04	3.206E-05	6.053E-05	2.473E-05	3.110E-05	2.847E-04	8.197E-05
360	1.316E-04	3.762E-04	3.710E-05	7.024E-05	2.872E-05	3.599E-05	3.213E-04	9.558E-05
361	1.522E-04	4.510E-04	4.181E-05	7.904E-05	3.211E-05	4.058E-05	2.948E-04	1.116E-04
362	1.849E-04	5.623E-04	5.036E-05	9.512E-05	3.854E-05	4.888E-05	3.253E-04	1.360E-04
363	2.317E-04	7.295E-04	6.274E-05	1.184E-04	4.786E-05	6.091E-05	3.790E-04	1.707E-04

364	3.026E-04	9.904E-04	8.148E-05	1.535E-04	6.192E-05	7.911E-05	4.578E-04	2.235E-04
365	4.104E-04	1.454E-03	1.105E-04	2.077E-04	8.356E-05	1.073E-04	6.050E-04	3.030E-04
366	6.472E-04	2.798E-03	1.739E-04	3.268E-04	1.315E-04	1.689E-04	9.314E-04	4.782E-04
367	1.455E-03	9.919E-03	3.888E-04	7.318E-04	2.947E-04	3.775E-04	2.000E-03	1.078E-03
368	4.969E-03	2.130E-02	1.344E-03	2.508E-03	1.001E-03	1.306E-03	6.970E-03	3.662E-03
369	3.871E-03	9.051E-03	1.008E-03	1.913E-03	7.758E-04	9.783E-04	4.316E-03	2.892E-03
370	2.272E-03	5.223E-03	5.919E-04	1.123E-03	4.531E-04	5.745E-04	2.541E-03	1.696E-03
371	1.439E-03	3.388E-03	3.768E-04	7.132E-04	2.885E-04	1.658E-04	1.661E-03	1.073E-03
372	1.008E-03	2.425E-03	2.632E-04	5.009E-04	2.022E-04	2.375E-04	1.199E-03	7.505E-04
373	7.611E-04	1.869E-03	2.008E-04	3.788E-04	1.527E-04	1.950E-04	9.222E-04	5.659E-04
374	6.147E-04	1.527E-03	1.626E-04	3.064E-04	1.234E-04	1.579E-04	7.567E-04	4.566E-04
375	1.092E-04	2.838E-04	3.069E-05	5.799E-05	2.369E-05	2.977E-05	2.604E-04	7.941E-05
376	1.273E-04	3.353E-04	3.569E-05	6.745E-05	2.754E-05	3.463E-05	2.975E-04	9.265E-05
377	1.508E-04	4.084E-04	4.199E-05	7.951E-05	3.244E-05	4.074E-05	3.339E-04	1.100E-04
378	1.779E-04	5.061E-04	4.819E-05	9.097E-05	3.681E-05	4.678E-05	2.937E-04	1.311E-04
379	2.246E-04	6.399E-04	6.068E-05	1.142E-04	4.602E-05	5.892E-05	3.479E-04	1.657E-04
380	2.869E-04	8.199E-04	7.778E-05	1.459E-04	5.864E-05	7.553E-05	4.461E-04	2.113E-04
381	3.856E-04	1.165E-03	1.045E-04	1.961E-04	7.879E-05	1.015E-04	5.960E-04	2.841E-04
382	5.603E-04	2.132E-03	1.500E-04	2.827E-04	1.141E-04	1.457E-04	8.054E-04	4.145E-04
383	1.095E-03	4.792E-03	2.922E-04	5.500E-04	2.215E-04	2.837E-04	1.489E-03	8.109E-04
384	2.199E-03	1.168E-02	5.972E-04	1.115E-03	4.455E-04	5.802E-04	3.270E-03	1.618E-03
385	2.780E-03	2.202E-02	7.592E-04	1.414E-03	5.629E-04	7.376E-04	4.223E-03	2.042E-03
386	3.070E-03	2.297E-02	8.373E-04	1.557E-03	6.186E-04	8.136E-04	4.487E-03	2.256E-03
387	2.917E-03	1.110E-02	7.851E-04	1.467E-03	5.859E-04	7.627E-04	3.934E-03	2.154E-03
388	2.424E-03	5.900E-03	6.415E-04	1.208E-03	4.862E-04	6.229E-04	2.982E-03	1.800E-03
389	1.793E-03	3.940E-03	4.721E-04	8.913E-04	3.596E-04	4.584E-04	2.137E-03	1.335E-03
390	1.269E-03	2.789E-03	3.342E-04	6.309E-04	2.546E-04	3.245E-04	1.514E-03	9.446E-04
391	9.412E-04	2.087E-03	2.476E-04	4.676E-04	1.888E-04	2.404E-04	1.119E-03	7.006E-04
392	7.191E-04	1.641E-03	1.894E-04	3.575E-04	1.443E-04	1.839E-04	8.620E-04	5.351E-04
393	5.789E-04	1.353E-03	1.529E-04	2.883E-04	1.162E-04	1.485E-04	7.079E-04	4.302E-04
394	1.101E-04	2.907E-04	3.065E-05	5.791E-05	2.360E-05	2.974E-05	2.418E-04	8.034E-05
395	1.331E-04	3.435E-04	3.698E-05	6.975E-05	2.836E-05	3.589E-05	2.824E-04	9.717E-05
396	1.613E-04	3.997E-04	4.513E-05	8.505E-05	3.454E-05	4.380E-05	3.563E-04	1.175E-04
397	1.879E-04	4.655E-04	5.187E-05	9.765E-05	3.949E-05	5.035E-05	3.625E-04	1.375E-04
398	2.160E-04	5.555E-04	5.922E-05	1.113E-04	4.489E-05	5.750E-05	3.842E-04	1.584E-04
399	2.560E-04	7.167E-04	6.978E-05	1.310E-04	5.273E-05	6.775E-05	4.240E-04	1.882E-04
400	3.295E-04	1.121E-03	8.846E-05	1.668E-04	6.732E-05	8.589E-05	4.889E-04	2.435E-04
401	4.913E-04	1.836E-03	1.308E-04	2.470E-04	9.977E-05	1.270E-04	6.766E-04	3.642E-04
402	8.765E-04	3.241E-03	2.342E-04	4.409E-04	1.776E-04	2.274E-04	1.212E-03	6.489E-04
403	1.425E-03	5.546E-03	3.859E-04	7.220E-04	2.890E-04	3.748E-04	2.112E-03	1.049E-03
404	1.859E-03	8.248E-03	5.058E-04	9.433E-04	3.762E-04	4.914E-04	2.764E-03	1.367E-03
405	2.064E-03	8.946E-03	5.624E-04	1.049E-03	4.183E-04	5.463E-04	3.120E-03	1.517E-03
406	2.017E-03	6.972E-03	5.424E-04	1.015E-03	4.060E-04	5.269E-04	2.748E-03	1.490E-03
407	1.758E-03	4.733E-03	4.686E-04	8.800E-04	3.532E-04	4.551E-04	2.267E-03	1.302E-03
408	1.411E-03	3.325E-03	3.731E-04	7.032E-04	2.833E-04	3.623E-04	1.732E-03	1.049E-03
409	1.105E-03	2.446E-03	2.923E-04	5.507E-04	2.217E-04	2.839E-04	1.364E-03	8.204E-04
410	8.770E-04	1.932E-03	2.319E-04	4.371E-04	1.761E-04	2.252E-04	1.081E-03	6.516E-04
411	7.023E-04	1.576E-03	1.853E-04	3.496E-04	1.409E-04	1.799E-04	8.521E-04	5.222E-04
412	5.596E-04	1.282E-03	1.478E-04	2.787E-04	1.123E-04	1.435E-04	6.819E-04	4.160E-04
413	1.874E-04	5.286E-04	5.175E-05	9.738E-05	3.933E-05	5.024E-05	3.581E-04	1.371E-04
414	1.637E-04	4.906E-04	4.480E-05	8.443E-05	3.413E-05	4.349E-05	2.933E-04	1.202E-04
415	1.528E-04	4.792E-04	4.134E-05	7.844E-05	3.194E-05	4.012E-05	2.663E-04	1.126E-04
416	2.239E-04	7.167E-04	6.053E-05	1.141E-04	4.609E-05	5.877E-05	3.561E-04	1.651E-04
417	2.050E-04	6.604E-04	5.487E-05	1.041E-04	4.232E-05	5.325E-05	3.185E-04	1.517E-04
418	2.126E-04	5.827E-04	5.712E-05	1.080E-04	4.380E-05	5.544E-05	3.339E-04	1.571E-04
419	2.930E-04	9.782E-04	7.796E-05	1.476E-04	5.985E-05	7.568E-05	4.164E-04	2.173E-04
420	3.004E-04	8.545E-04	8.080E-05	1.522E-04	6.142E-05	7.845E-05	4.522E-04	2.239E-04
421	2.815E-04	8.010E-04	7.658E-05	1.441E-04	5.815E-05	7.435E-05	4.710E-04	2.071E-04
422	4.533E-04	1.513E-03	1.216E-04	2.289E-04	9.222E-05	1.181E-04	6.530E-04	3.352E-04
423	4.152E-04	1.342E-03	1.117E-04	2.104E-04	8.481E-05	1.084E-04	6.185E-04	3.067E-04
424	3.893E-04	1.200E-03	1.051E-04	1.978E-04	7.970E-05	1.021E-04	5.997E-04	2.871E-04
425	7.327E-04	2.461E-03	1.966E-04	3.698E-04	1.488E-04	1.910E-04	1.048E-03	5.416E-04
426	6.383E-04	2.021E-03	1.720E-04	3.230E-04	1.298E-04	1.670E-04	9.390E-04	4.711E-04
427	5.722E-04	1.760E-03	1.543E-04	2.899E-04	1.167E-04	1.498E-04	8.561E-04	4.223E-04
428	1.090E-03	3.735E-03	2.948E-04	5.519E-04	2.211E-04	2.863E-04	1.605E-03	8.030E-04
429	8.920E-04	2.834E-03	2.409E-04	4.516E-04	1.812E-04	2.339E-04	1.311E-03	6.578E-04
430	7.512E-04	2.238E-03	2.029E-04	3.806E-04	1.527E-04	1.971E-04	1.113E-03	5.539E-04
431	1.365E-03	5.088E-03	3.705E-04	6.918E-04	2.762E-04	3.599E-04	2.010E-03	1.005E-03
432	1.053E-03	3.550E-03	2.857E-04	5.338E-04	2.133E-04	2.775E-04	1.561E-03	7.748E-04
433	8.520E-04	2.685E-03	2.312E-04	4.321E-04	1.727E-04	2.246E-04	1.266E-03	6.272E-04
434	1.496E-03	5.392E-03	4.058E-04	7.583E-04	3.032E-04	3.942E-04	2.224E-03	1.101E-03
435	1.152E-03	3.809E-03	3.114E-04	5.825E-04	2.332E-04	3.024E-04	1.660E-03	8.497E-04
436	9.206E-04	2.896E-03	2.481E-04	4.646E-04	1.861E-04	2.410E-04	1.302E-03	6.794E-04
437	1.505E-03	4.736E-03	4.055E-04	7.501E-04	3.048E-04	3.938E-04	2.154E-03	1.111E-03
438	1.165E-03	3.439E-03	3.137E-04	5.887E-04	2.365E-04	3.046E-04	1.681E-03	8.605E-04
439	9.339E-04	2.673E-03	2.506E-04	4.707E-04	1.892E-04	2.434E-04	1.315E-03	6.903E-04
440	1.357E-03	3.727E-03	3.635E-04	6.320E-04	2.736E-04	3.531E-04	1.836E-03	1.004E-03
441	1.096E-03	2.977E-03	2.951E-04	5.536E-04	2.223E-04	2.865E-04	1.577E-03	8.090E-04
442	9.054E-04	2.425E-03	2.438E-04	4.575E-04	1.838E-04	2.368E-04	1.311E-03	6.684E-04
443	1.144E-03	2.923E-03	3.058E-04	5.761E-04	2.322E-04	2.969E-04	1.590E-03	8.471E-04
444	9.607E-04	2.470E-03	2.591E-04	4.875E-04	1.964E-04	2.516E-04	1.459E-03	7.089E-04
445	8.135E-04	2.044E-03	2.184E-04	4.100E-04	1.646E-04	2.121E-04	1.140E-03	6.012E-04
446	9.487E-04	2.258E-03	2.518E-04	4.743E-04	1.910E-04	2.445E-04	1.215E-03	7.040E-04
447	8.100E-04	2.039E-03	2.147E-04	4.045E-04	1.629E-04	2.085E-04	1.023E-03	6.013E-04
448	7.031E-04	1.781E-03	1.871E-04	3.522E-04	1.418E-04	1.817E-04	9.216E-04	5.213E-04
449	7.831E-04	1.778E-03	2.078E-04	3.910E-04	1.572E-04	2.018E-04	9.829E-04	5.811E-04
450	6.862E-04	1.657E-03	1.822E-04	3.428E-04	1.379E-04	1.770E-04	8.687E-04	5.090E-04
451	6.080E-04	1.526E-03	1.614E-04	3.040E-04	1.224E-04	1.567E-04	7.784E-04	4.511E-04

RECEPTOR # 87 HAS HIGHEST CHRONIC HAZARD INDEX OF 5.163E-02

GOLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\Gqtspac.dat Output File: g:\beest\GQ\Gqtspac.OUT 11/14/96 07:44:58 Page - 157

*** CHRONIC HAZARD INDEX BY POLLUTANT FOR PEAK RECEPTOR # 87 ***

POLLUTANT	ORAL DOSE (mg/kg-d)	BACKGR (ug/m3)	AEL (ug/m3)	CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
ACETA	0.000E+00	0.000E+00	9.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACROL	0.000E+00	0.000E+00	2.000E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
As	1.000E-03	0.000E+00	5.000E-01	2.769E-03	2.769E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.892E-04	2.769E-03
BENZ	0.000E+00	0.000E+00	7.100E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Be	5.000E-03	0.000E+00	4.800E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.566E-03	0.000E+00
Cd	1.000E-03	0.000E+00	3.500E+00	0.000E+00	0.000E+00	0.000E+00	1.240E-04	0.000E+00	0.000E+00	2.546E-06	0.000E+00
Cr	5.000E-03	0.000E+00	2.000E-03	0.000E+00	0.000E+00	0.000E+00	7.480E-04	7.480E-04	0.000E+00	7.449E-04	0.000E+00
Cu	0.000E+00	0.000E+00	2.400E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.557E-06	0.000E+00
HCHO	0.000E+00	0.000E+00	3.600E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HCN	0.000E+00	0.000E+00	7.000E+01	0.000E+00	4.734E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb	4.300E-04	0.000E+00	1.500E+00	9.425E-04	9.425E-04	9.425E-04	9.425E-04	0.000E+00	9.425E-04	0.000E+00	0.000E+00
Mn	0.000E+00	0.000E+00	4.000E-01	0.000E+00	5.829E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.829E-04	0.000E+00
Hg	3.000E-04	0.000E+00	3.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ni	0.000E+00	0.000E+00	2.400E-01	0.000E+00	0.000E+00	2.853E-05	2.853E-05	0.000E+00	0.000E+00	2.853E-05	0.000E+00
NAPTH	4.000E-03	0.000E+00	1.400E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Se	0.000E+00	0.000E+00	5.000E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOL	0.000E+00	0.000E+00	2.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XYLEN	0.000E+00	0.000E+00	3.000E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Zn	0.000E+00	0.000E+00	3.500E+01	8.965E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.965E-07	0.000E+00
SUM = 3.713E-03 5.163E-02 9.710E-04 1.843E-03 7.480E-04 9.425E-04 4.423E-03 2.769E-03											

GOLDEN QUEEN MINING - SOLEDAD MIN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
 Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\Gqtspace.OUT 11/14/96 07:44:58 Page - 158

*** CHRONIC HAZARD INDEX BY SOURCE FOR PEAK RECEPTOR # 87 ***

POLLUTANT ACETA ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 9.000E+00 BACKGR. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE # 1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE # 46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM = 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00									

POLLUTANT ACROL ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E-02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

[illegible]

POLLUTANT As ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 5.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

		CV	CNS	MUSC	KIDN	LIVER	RETRO	RESP	SKIN	
SOURCE	#	1	1.339E-05	1.339E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.359E-06	1.339E-05
SOURCE	#	2	8.911E-06	8.911E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.570E-06	8.911E-06
SOURCE	#	3	1.071E-05	1.071E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.886E-06	1.071E-05
SOURCE	#	4	1.541E-05	1.541E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.714E-06	1.541E-05
SOURCE	#	5	2.170E-06	2.170E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.822E-07	2.170E-06
SOURCE	#	6	3.784E-06	3.784E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.664E-07	3.784E-06
SOURCE	#	7	1.174E-06	1.174E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.067E-07	1.174E-06
SOURCE	#	8	1.761E-06	1.761E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.102E-07	1.761E-06
SOURCE	#	9	1.698E-06	1.698E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.991E-07	1.698E-06
SOURCE	#	10	1.887E-06	1.887E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.324E-07	1.887E-06
SOURCE	#	11	5.635E-07	5.635E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.925E-08	5.635E-07
SOURCE	#	12	5.918E-07	5.918E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.042E-07	5.918E-07
SOURCE	#	13	1.865E-04	1.865E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.286E-05	1.865E-04
SOURCE	#	14	1.246E-04	1.246E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.195E-05	1.246E-04
SOURCE	#	15	1.545E-04	1.545E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.721E-05	1.545E-04
SOURCE	#	16	2.192E-04	2.192E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.861E-05	2.192E-04
SOURCE	#	17	3.104E-05	3.104E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.467E-06	3.104E-05
SOURCE	#	18	5.306E-05	5.306E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.347E-06	5.306E-05
SOURCE	#	19	1.220E-04	1.220E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.148E-05	1.220E-04
SOURCE	#	20	8.269E-05	8.269E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.457E-05	8.269E-05
SOURCE	#	21	8.175E-05	8.175E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.440E-05	8.175E-05
SOURCE	#	22	1.271E-04	1.271E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.239E-05	1.271E-04
SOURCE	#	23	1.926E-05	1.926E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.392E-06	1.926E-05
SOURCE	#	24	3.554E-05	3.554E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.260E-06	3.554E-05
SOURCE	#	25	8.136E-06	8.136E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.834E-06	8.136E-06
SOURCE	#	26	5.701E-04	5.701E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E-04	5.701E-04
SOURCE	#	27	3.391E-04	3.391E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.972E-05	3.391E-04
SOURCE	#	28	2.978E-05	2.978E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.245E-06	2.978E-05
SOURCE	#	29	3.074E-05	3.074E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.414E-06	3.074E-05
SOURCE	#	30	4.807E-05	4.807E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.468E-06	4.807E-05
SOURCE	#	31	1.014E-04	1.014E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.787E-05	1.014E-04
SOURCE	#	32	5.940E-05	5.940E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.046E-05	5.940E-05
SOURCE	#	33	5.486E-06	5.486E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.663E-07	5.486E-06
SOURCE	#	34	5.697E-06	5.697E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.003E-06	5.697E-06
SOURCE	#	35	8.977E-06	8.977E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.381E-06	8.977E-06
SOURCE	#	36	1.474E-04	1.474E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.597E-05	1.474E-04
SOURCE	#	37	8.550E-05	8.550E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.506E-05	8.550E-05

SOURCE #	38	8.175E-06	8.175E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.440E-06	8.175E-06
SOURCE #	39	8.525E-06	8.525E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.502E-06	8.525E-06
SOURCE #	40	1.351E-05	1.351E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.380E-06	1.351E-05
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		2.769E-03	2.769E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.892E-04	2.769E-03

[illegible]

		CY	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.364E-05	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.239E-05	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.690E-05	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.872E-05	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.452E-06	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.505E-06	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.974E-06	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.461E-06	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.303E-06	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.780E-06	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.427E-06	0.000E+00
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.499E-06	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.687E-04	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.130E-04	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.880E-04	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.507E-04	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.797E-05	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.333E-04	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.203E-06	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.562E-06	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.498E-06	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.548E-06	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.295E-06	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.389E-06	0.000E+00

SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.480E-04	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.833E-05	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.281E-05	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.003E-06	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.068E-06	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.233E-06	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.822E-06	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.995E-06	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.689E-07	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.832E-07	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.038E-07	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.914E-06	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.751E-06	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.497E-07	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.735E-07	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.085E-07	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.566E-03	0.000E+00

POLLUTANT Cd ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.500E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 1.000E-03

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	5.958E-07	0.000E+00	0.000E+00	1.211E-08	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	3.965E-07	0.000E+00	0.000E+00	8.059E-09	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	4.765E-07	0.000E+00	0.000E+00	9.686E-09	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	6.858E-07	0.000E+00	0.000E+00	1.394E-08	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	9.657E-08	0.000E+00	0.000E+00	1.963E-09	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	1.684E-07	0.000E+00	0.000E+00	3.422E-09	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	5.221E-08	0.000E+00	0.000E+00	1.061E-09	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	7.833E-08	0.000E+00	0.000E+00	1.592E-09	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	7.556E-08	0.000E+00	0.000E+00	1.536E-09	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	8.397E-08	0.000E+00	0.000E+00	1.707E-09	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	2.507E-08	0.000E+00	0.000E+00	5.096E-10	0.000E+00
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	2.633E-08	0.000E+00	0.000E+00	5.352E-10	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	8.301E-06	0.000E+00	0.000E+00	1.687E-07	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	5.545E-06	0.000E+00	0.000E+00	1.127E-07	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	6.873E-06	0.000E+00	0.000E+00	1.397E-07	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	9.751E-06	0.000E+00	0.000E+00	1.982E-07	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	1.381E-06	0.000E+00	0.000E+00	2.807E-08	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	2.361E-06	0.000E+00	0.000E+00	4.800E-08	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	5.445E-06	0.000E+00	0.000E+00	1.107E-07	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	3.692E-06	0.000E+00	0.000E+00	7.504E-08	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	3.651E-06	0.000E+00	0.000E+00	7.420E-08	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	5.675E-06	0.000E+00	0.000E+00	1.153E-07	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	8.600E-07	0.000E+00	0.000E+00	1.748E-08	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	1.587E-06	0.000E+00	0.000E+00	3.225E-08	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	2.869E-07	0.000E+00	0.000E+00	1.415E-08	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	2.545E-05	0.000E+00	0.000E+00	5.173E-07	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	1.514E-05	0.000E+00	0.000E+00	3.078E-07	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	1.330E-06	0.000E+00	0.000E+00	2.703E-08	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	1.373E-06	0.000E+00	0.000E+00	2.790E-08	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	2.147E-06	0.000E+00	0.000E+00	4.364E-08	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	4.529E-06	0.000E+00	0.000E+00	9.206E-08	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	2.652E-06	0.000E+00	0.000E+00	5.390E-08	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	2.450E-07	0.000E+00	0.000E+00	4.980E-09	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	2.544E-07	0.000E+00	0.000E+00	5.171E-09	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	4.009E-07	0.000E+00	0.000E+00	8.150E-09	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	6.583E-06	0.000E+00	0.000E+00	1.338E-07	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	3.817E-06	0.000E+00	0.000E+00	7.758E-08	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	3.649E-07	0.000E+00	0.000E+00	7.418E-09	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	3.808E-07	0.000E+00	0.000E+00	7.741E-09	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	6.034E-07	0.000E+00	0.000E+00	1.226E-08	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	5.805E-07	0.000E+00	0.000E+00	2.862E-08	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	1.240E-04	0.000E+00	0.000E+00	2.546E-06	0.000E+00

POLLUTANT Cr ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E-03 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 5.000E-03

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	3.849E-06	3.849E-06	0.000E+00	3.832E-06	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	2.561E-06	2.561E-06	0.000E+00	2.550E-06	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	3.078E-06	3.078E-06	0.000E+00	3.065E-06	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	4.430E-06	4.430E-06	0.000E+00	4.412E-06	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	6.238E-07	6.238E-07	0.000E+00	6.211E-07	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	1.088E-06	1.088E-06	0.000E+00	1.083E-06	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	3.377E-07	3.377E-07	0.000E+00	3.362E-07	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	5.066E-07	5.066E-07	0.000E+00	5.045E-07	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	4.885E-07	4.885E-07	0.000E+00	4.864E-07	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	5.428E-07	5.428E-07	0.000E+00	5.405E-07	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	1.621E-07	1.621E-07	0.000E+00	1.614E-07	0.000E+00

SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	1.702E-07	1.702E-07	0.000E+00	1.695E-07	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	5.362E-05	5.362E-05	0.000E+00	5.339E-05	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	3.581E-05	3.581E-05	0.000E+00	3.566E-05	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	4.440E-05	4.440E-05	0.000E+00	4.421E-05	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	6.301E-05	6.301E-05	0.000E+00	6.275E-05	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	8.921E-06	8.921E-06	0.000E+00	8.883E-06	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	1.525E-05	1.525E-05	0.000E+00	1.519E-05	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	3.163E-05	3.163E-05	0.000E+00	3.150E-05	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	2.145E-05	2.145E-05	0.000E+00	2.136E-05	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	2.120E-05	2.120E-05	0.000E+00	2.111E-05	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	3.296E-05	3.296E-05	0.000E+00	3.282E-05	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	4.994E-06	4.994E-06	0.000E+00	4.973E-06	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	9.215E-06	9.215E-06	0.000E+00	9.177E-06	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	8.133E-06	8.133E-06	0.000E+00	8.120E-06	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	1.478E-04	1.478E-04	0.000E+00	1.472E-04	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	8.796E-05	8.796E-05	0.000E+00	8.759E-05	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	7.723E-06	7.723E-06	0.000E+00	7.691E-06	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	7.973E-06	7.973E-06	0.000E+00	7.940E-06	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	1.247E-05	1.247E-05	0.000E+00	1.241E-05	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	2.630E-05	2.630E-05	0.000E+00	2.619E-05	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	1.541E-05	1.541E-05	0.000E+00	1.534E-05	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	1.423E-06	1.423E-06	0.000E+00	1.417E-06	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	1.478E-06	1.478E-06	0.000E+00	1.472E-06	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	2.328E-06	2.328E-06	0.000E+00	2.318E-06	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	3.823E-05	3.823E-05	0.000E+00	3.807E-05	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	2.217E-05	2.217E-05	0.000E+00	2.208E-05	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	2.120E-06	2.120E-06	0.000E+00	2.112E-06	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	2.211E-06	2.211E-06	0.000E+00	2.202E-06	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	3.504E-06	3.504E-06	0.000E+00	3.490E-06	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	4.752E-07	4.752E-07	0.000E+00	4.744E-07	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	7.480E-04	7.480E-04	0.000E+00	7.449E-04	0.000E+00

POLLUTANT Cu ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.400E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.135E-08	0.000E+00
SOURCE #	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.752E-08	0.000E+00
SOURCE #	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.307E-08	0.000E+00
SOURCE #	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.761E-08	0.000E+00
SOURCE #	5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.701E-09	0.000E+00
SOURCE #	6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.168E-08	0.000E+00
SOURCE #	7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.624E-09	0.000E+00
SOURCE #	8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.437E-09	0.000E+00
SOURCE #	9	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.245E-09	0.000E+00
SOURCE #	10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.826E-09	0.000E+00
SOURCE #	11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.740E-09	0.000E+00
SOURCE #	12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.827E-09	0.000E+00
SOURCE #	13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.760E-07	0.000E+00
SOURCE #	14	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.848E-07	0.000E+00
SOURCE #	15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.769E-07	0.000E+00
SOURCE #	16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.770E-07	0.000E+00
SOURCE #	17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.584E-08	0.000E+00
SOURCE #	18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.638E-07	0.000E+00
SOURCE #	19	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.753E-07	0.000E+00
SOURCE #	20	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.545E-07	0.000E+00
SOURCE #	21	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.515E-07	0.000E+00
SOURCE #	22	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.911E-07	0.000E+00
SOURCE #	23	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.927E-08	0.000E+00
SOURCE #	24	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.094E-07	0.000E+00
SOURCE #	25	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.098E-08	0.000E+00
SOURCE #	26	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.754E-06	0.000E+00
SOURCE #	27	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.044E-06	0.000E+00
SOURCE #	28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.165E-08	0.000E+00
SOURCE #	29	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.464E-08	0.000E+00
SOURCE #	30	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.479E-07	0.000E+00
SOURCE #	31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.122E-07	0.000E+00
SOURCE #	32	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.829E-07	0.000E+00
SOURCE #	33	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.689E-08	0.000E+00
SOURCE #	34	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.753E-08	0.000E+00
SOURCE #	35	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.763E-08	0.000E+00
SOURCE #	36	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.537E-07	0.000E+00
SOURCE #	37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.631E-07	0.000E+00
SOURCE #	38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.516E-08	0.000E+00
SOURCE #	39	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.624E-08	0.000E+00
SOURCE #	40	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.158E-08	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.557E-06	0.000E+00

POLLUTANT HCB ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.600E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

POLLUTANT HCN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 7.000E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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SOURCE #	41	0.000E+00	2.447E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	4.489E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	4.718E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		0.000E+00	4.734E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

POLLUTANT Pb ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 1.500E+00 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 4.300E-04

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	5.638E-06	5.638E-06	5.638E-06	5.638E-06	0.000E+00	5.638E-06	0.000E+00	0.000E+00
SOURCE #	2	3.752E-06	3.752E-06	3.752E-06	3.752E-06	0.000E+00	3.752E-06	0.000E+00	0.000E+00
SOURCE #	3	4.509E-06	4.509E-06	4.509E-06	4.509E-06	0.000E+00	4.509E-06	0.000E+00	0.000E+00
SOURCE #	4	6.490E-06	6.490E-06	6.490E-06	6.490E-06	0.000E+00	6.490E-06	0.000E+00	0.000E+00
SOURCE #	5	9.139E-07	9.139E-07	9.139E-07	9.139E-07	0.000E+00	9.139E-07	0.000E+00	0.000E+00
SOURCE #	6	1.593E-06	1.593E-06	1.593E-06	1.593E-06	0.000E+00	1.593E-06	0.000E+00	0.000E+00
SOURCE #	7	4.953E-07	4.953E-07	4.953E-07	4.953E-07	0.000E+00	4.953E-07	0.000E+00	0.000E+00
SOURCE #	8	7.432E-07	7.432E-07	7.432E-07	7.432E-07	0.000E+00	7.432E-07	0.000E+00	0.000E+00
SOURCE #	9	7.167E-07	7.167E-07	7.167E-07	7.167E-07	0.000E+00	7.167E-07	0.000E+00	0.000E+00
SOURCE #	10	7.965E-07	7.965E-07	7.965E-07	7.965E-07	0.000E+00	7.965E-07	0.000E+00	0.000E+00
SOURCE #	11	2.377E-07	2.377E-07	2.377E-07	2.377E-07	0.000E+00	2.377E-07	0.000E+00	0.000E+00
SOURCE #	12	2.497E-07	2.497E-07	2.497E-07	2.497E-07	0.000E+00	2.497E-07	0.000E+00	0.000E+00
SOURCE #	13	7.852E-05	7.852E-05	7.852E-05	7.852E-05	0.000E+00	7.852E-05	0.000E+00	0.000E+00
SOURCE #	14	5.245E-05	5.245E-05	5.245E-05	5.245E-05	0.000E+00	5.245E-05	0.000E+00	0.000E+00
SOURCE #	15	6.504E-05	6.504E-05	6.504E-05	6.504E-05	0.000E+00	6.504E-05	0.000E+00	0.000E+00
SOURCE #	16	9.229E-05	9.229E-05	9.229E-05	9.229E-05	0.000E+00	9.229E-05	0.000E+00	0.000E+00
SOURCE #	17	1.307E-05	1.307E-05	1.307E-05	1.307E-05	0.000E+00	1.307E-05	0.000E+00	0.000E+00
SOURCE #	18	2.234E-05	2.234E-05	2.234E-05	2.234E-05	0.000E+00	2.234E-05	0.000E+00	0.000E+00
SOURCE #	19	3.688E-05	3.688E-05	3.688E-05	3.688E-05	0.000E+00	3.688E-05	0.000E+00	0.000E+00
SOURCE #	20	2.500E-05	2.500E-05	2.500E-05	2.500E-05	0.000E+00	2.500E-05	0.000E+00	0.000E+00
SOURCE #	21	2.472E-05	2.472E-05	2.472E-05	2.472E-05	0.000E+00	2.472E-05	0.000E+00	0.000E+00
SOURCE #	22	3.842E-05	3.842E-05	3.842E-05	3.842E-05	0.000E+00	3.842E-05	0.000E+00	0.000E+00
SOURCE #	23	5.822E-06	5.822E-06	5.822E-06	5.822E-06	0.000E+00	5.822E-06	0.000E+00	0.000E+00
SOURCE #	24	1.074E-05	1.074E-05	1.074E-05	1.074E-05	0.000E+00	1.074E-05	0.000E+00	0.000E+00
SOURCE #	25	9.064E-06	9.064E-06	9.064E-06	9.064E-06	0.000E+00	9.064E-06	0.000E+00	0.000E+00
SOURCE #	26	1.724E-04	1.724E-04	1.724E-04	1.724E-04	0.000E+00	1.724E-04	0.000E+00	0.000E+00
SOURCE #	27	1.025E-04	1.025E-04	1.025E-04	1.025E-04	0.000E+00	1.025E-04	0.000E+00	0.000E+00
SOURCE #	28	9.003E-06	9.003E-06	9.003E-06	9.003E-06	0.000E+00	9.003E-06	0.000E+00	0.000E+00
SOURCE #	29	9.293E-06	9.293E-06	9.293E-06	9.293E-06	0.000E+00	9.293E-06	0.000E+00	0.000E+00
SOURCE #	30	1.453E-05	1.453E-05	1.453E-05	1.453E-05	0.000E+00	1.453E-05	0.000E+00	0.000E+00
SOURCE #	31	3.066E-05	3.066E-05	3.066E-05	3.066E-05	0.000E+00	3.066E-05	0.000E+00	0.000E+00
SOURCE #	32	1.796E-05	1.796E-05	1.796E-05	1.796E-05	0.000E+00	1.796E-05	0.000E+00	0.000E+00
SOURCE #	33	1.659E-06	1.659E-06	1.659E-06	1.659E-06	0.000E+00	1.659E-06	0.000E+00	0.000E+00
SOURCE #	34	1.723E-06	1.723E-06	1.723E-06	1.723E-06	0.000E+00	1.723E-06	0.000E+00	0.000E+00
SOURCE #	35	2.714E-06	2.714E-06	2.714E-06	2.714E-06	0.000E+00	2.714E-06	0.000E+00	0.000E+00
SOURCE #	36	4.458E-05	4.458E-05	4.458E-05	4.458E-05	0.000E+00	4.458E-05	0.000E+00	0.000E+00
SOURCE #	37	2.585E-05	2.585E-05	2.585E-05	2.585E-05	0.000E+00	2.585E-05	0.000E+00	0.000E+00
SOURCE #	38	2.471E-06	2.471E-06	2.471E-06	2.471E-06	0.000E+00	2.471E-06	0.000E+00	0.000E+00
SOURCE #	39	2.577E-06	2.577E-06	2.577E-06	2.577E-06	0.000E+00	2.577E-06	0.000E+00	0.000E+00
SOURCE #	40	4.085E-06	4.085E-06	4.085E-06	4.085E-06	0.000E+00	4.085E-06	0.000E+00	0.000E+00
SOURCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =		9.425E-04	9.425E-04	9.425E-04	9.425E-04	0.000E+00	9.425E-04	0.000E+00	0.000E+00

POLLUTANT Mn ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 4.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

		CV	CNS	IMMUN	KIDN	LIVER	REPRO	RESP	SKIN
SOURCE #	1	0.000E+00	3.001E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.001E-06	0.000E+00
SOURCE #	2	0.000E+00	1.997E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.997E-06	0.000E+00
SOURCE #	3	0.000E+00	2.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.400E-06	0.000E+00
SOURCE #	4	0.000E+00	3.454E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.454E-06	0.000E+00
SOURCE #	5	0.000E+00	4.863E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.863E-07	0.000E+00
SOURCE #	6	0.000E+00	8.479E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.479E-07	0.000E+00
SOURCE #	7	0.000E+00	2.633E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.633E-07	0.000E+00
SOURCE #	8	0.000E+00	3.950E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.950E-07	0.000E+00
SOURCE #	9	0.000E+00	3.809E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.809E-07	0.000E+00
SOURCE #	10	0.000E+00	4.231E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.231E-07	0.000E+00
SOURCE #	11	0.000E+00	1.264E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.264E-07	0.000E+00
SOURCE #	12	0.000E+00	1.327E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.327E-07	0.000E+00
SOURCE #	13	0.000E+00	4.181E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.181E-05	0.000E+00
SOURCE #	14	0.000E+00	2.792E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.792E-05	0.000E+00
SOURCE #	15	0.000E+00	3.462E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.462E-05	0.000E+00
SOURCE #	16	0.000E+00	4.912E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.912E-05	0.000E+00
SOURCE #	17	0.000E+00	6.956E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.956E-06	0.000E+00
SOURCE #	18	0.000E+00	1.189E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.189E-05	0.000E+00
SOURCE #	19	0.000E+00	2.466E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.466E-05	0.000E+00
SOURCE #	20	0.000E+00	1.672E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.672E-05	0.000E+00
SOURCE #	21	0.000E+00	1.654E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.654E-05	0.000E+00
SOURCE #	22	0.000E+00	2.569E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.569E-05	0.000E+00
SOURCE #	23	0.000E+00	3.894E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.894E-06	0.000E+00
SOURCE #	24	0.000E+00	7.185E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.185E-06	0.000E+00
SOURCE #	25	0.000E+00	6.358E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.358E-06	0.000E+00
SOURCE #	26	0.000E+00	1.152E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.152E-04	0.000E+00
SOURCE #	27	0.000E+00	6.859E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.859E-05	0.000E+00

POLLUTANT Hg ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.000E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 3.000E-04

POLLUTANT N1 ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.400E-01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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SOURCE	#	15	0.000E+00	0.000E+00	1.724E-06	1.724E-06	0.000E+00	0.000E+00	1.724E-06	0.000E+00
SOURCE	#	16	0.000E+00	0.000E+00	2.447E-06	2.447E-06	0.000E+00	0.000E+00	2.447E-06	0.000E+00
SOURCE	#	17	0.000E+00	0.000E+00	3.464E-07	3.464E-07	0.000E+00	0.000E+00	3.464E-07	0.000E+00
SOURCE	#	18	0.000E+00	0.000E+00	5.922E-07	5.922E-07	0.000E+00	0.000E+00	5.922E-07	0.000E+00
SOURCE	#	19	0.000E+00	0.000E+00	1.194E-06	1.194E-06	0.000E+00	0.000E+00	1.194E-06	0.000E+00
SOURCE	#	20	0.000E+00	0.000E+00	8.098E-07	8.098E-07	0.000E+00	0.000E+00	8.098E-07	0.000E+00
SOURCE	#	21	0.000E+00	0.000E+00	8.006E-07	8.006E-07	0.000E+00	0.000E+00	8.006E-07	0.000E+00
SOURCE	#	22	0.000E+00	0.000E+00	1.244E-06	1.244E-06	0.000E+00	0.000E+00	1.244E-06	0.000E+00
SOURCE	#	23	0.000E+00	0.000E+00	1.886E-07	1.886E-07	0.000E+00	0.000E+00	1.886E-07	0.000E+00
SOURCE	#	24	0.000E+00	0.000E+00	3.480E-07	3.480E-07	0.000E+00	0.000E+00	3.480E-07	0.000E+00
SOURCE	#	25	0.000E+00	0.000E+00	3.518E-07	3.518E-07	0.000E+00	0.000E+00	3.518E-07	0.000E+00
SOURCE	#	26	0.000E+00	0.000E+00	5.580E-06	5.580E-06	0.000E+00	0.000E+00	5.580E-06	0.000E+00
SOURCE	#	27	0.000E+00	0.000E+00	3.321E-06	3.321E-06	0.000E+00	0.000E+00	3.321E-06	0.000E+00
SOURCE	#	28	0.000E+00	0.000E+00	2.916E-07	2.916E-07	0.000E+00	0.000E+00	2.916E-07	0.000E+00
SOURCE	#	29	0.000E+00	0.000E+00	3.010E-07	3.010E-07	0.000E+00	0.000E+00	3.010E-07	0.000E+00
SOURCE	#	30	0.000E+00	0.000E+00	4.708E-07	4.708E-07	0.000E+00	0.000E+00	4.708E-07	0.000E+00
SOURCE	#	31	0.000E+00	0.000E+00	9.934E-07	9.934E-07	0.000E+00	0.000E+00	9.934E-07	0.000E+00
SOURCE	#	32	0.000E+00	0.000E+00	5.816E-07	5.816E-07	0.000E+00	0.000E+00	5.816E-07	0.000E+00
SOURCE	#	33	0.000E+00	0.000E+00	5.372E-08	5.372E-08	0.000E+00	0.000E+00	5.372E-08	0.000E+00
SOURCE	#	34	0.000E+00	0.000E+00	5.579E-08	5.579E-08	0.000E+00	0.000E+00	5.579E-08	0.000E+00
SOURCE	#	35	0.000E+00	0.000E+00	8.791E-08	8.791E-08	0.000E+00	0.000E+00	8.791E-08	0.000E+00
SOURCE	#	36	0.000E+00	0.000E+00	1.444E-06	1.444E-06	0.000E+00	0.000E+00	1.444E-06	0.000E+00
SOURCE	#	37	0.000E+00	0.000E+00	8.374E-07	8.374E-07	0.000E+00	0.000E+00	8.374E-07	0.000E+00
SOURCE	#	38	0.000E+00	0.000E+00	8.004E-08	8.004E-08	0.000E+00	0.000E+00	8.004E-08	0.000E+00
SOURCE	#	39	0.000E+00	0.000E+00	8.349E-08	8.349E-08	0.000E+00	0.000E+00	8.349E-08	0.000E+00
SOURCE	#	40	0.000E+00	0.000E+00	1.323E-07	1.323E-07	0.000E+00	0.000E+00	1.323E-07	0.000E+00
SOURCE	#	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE	#	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE	#	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE	#	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE	#	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SOURCE	#	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUM =			0.000E+00	0.000E+00	2.853E-05	2.853E-05	0.000E+00	0.000E+00	2.853E-05	0.000E+00

[illegible][illegible]

POLLUTANT TOL ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 2.000E+02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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POLLUTANT XYLEN ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.000E+02 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

POLLUTANT Zn ACCEPTABLE EXPOSURE LEVEL (ug/m3) = 3.500E+01 BACKG. (ug/m3) = 0.000E+00 ORAL DOSE (mg/kg-d) = 0.000E+00

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URCE #	31	3.271E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.271E-08	0.000E+00
URCE #	32	1.916E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.916E-08	0.000E+00
URCE #	33	1.769E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.769E-09	0.000E+00
URCE #	34	1.837E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.837E-09	0.000E+00
URCE #	35	2.895E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.895E-09	0.000E+00
URCE #	36	4.754E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.754E-08	0.000E+00
URCE #	37	2.757E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.757E-08	0.000E+00
URCE #	38	2.636E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.636E-09	0.000E+00
URCE #	39	2.749E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.749E-09	0.000E+00
URCE #	40	4.356E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.356E-09	0.000E+00
URCE #	41	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
URCE #	42	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
URCE #	43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
URCE #	44	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
URCE #	45	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
URCE #	46	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SUM =		8.965E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.965E-07	0.000E+00

OLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 179

*** SUMMARY OF MAXIMUM PREDICTED RISKS ***

CANCER RISK ASSESSMENT

SIGNIFICANT RISK LEVEL = 1.000E-06
IMPACT ZONE RISK LEVEL = 1.000E-07
MAXIMUM PEAK RISK = 2.621E-05
PREDICTED AT RECEPTOR # 68
TOTAL EXCESS BURDEN = 0.000E+00

351 RECEPTORS WITH RISK EXCEEDING SIGNIFICANT RISK LEVEL OF 1.000E-06

OLDEN QUEEN MINING - SOLEDAD MTN PROJECT - ALL RECEPTORS, 1991 MET, TSP * OUTPUT OF AMI/SBCAPCD ACE2588 MODEL VERS. 93288 *
Input File: g:\beest\GQ\gqtspace.dat Output File: g:\beest\GQ\GQtspace.OUT 11/14/96 07:44:58 Page - 180

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	214	215	216
217	218	219	220	221	222	223	224	225	226
233	234	235	236	237	238	239	240	241	242
243	244	245	251	252	253	254	255	256	257
258	259	260	261	262	263	264	270	271	272
273	274	275	276	277	278	279	280	281	282
283	289	290	291	292	293	294	295	296	302
303	304	305	306	307	308	315	316	317	318
319	320	327	328	329	330	331	332	340	341
342	343	344	345	353	354	355	356	357	358
367	368	369	370	371	372	373	383	384	385
386	387	388	389	390	391	392	402	403	404
405	406	407	408	409	410	411	425	428	429
430	431	432	433	434	435	436	437	438	439
440	441	442	443	444	445	446	447	448	449
450									

ACUTE EXPOSURE TO NON-CANCER POLLUTANTS

SIGNIFICANT HAZARD INDEX = 0.5000
MAXIMUM HAZARD INDEX FOR AN ENDPOINT = 0.0137
PREDICTED AT RECEPTOR # 34

0 RECEPTORS WITH HAZARD INDEX .GE. 0.5000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

CHRONIC EXPOSURE TO NON-CANCER POLLUTANTS

SIGNIFICANT HAZARD INDEX = 0.5000
MAXIMUM HAZARD INDEX FOR AN ENDPOINT = 0.0516
PREDICTED AT RECEPTOR # 87

0 RECEPTORS WITH HAZARD INDEX .GE. 0.5000 FOR ONE OR MORE TOXICOLOGICAL ENDPOINTS

*** END OF ACE2588 SIMULATION ***

