

**OFFICE OF THE
ARIZONA STATE MINE
INSPECTOR
Douglas K. Martin**



**EIGHTY-SEVENTH
ANNUAL REPORT
for the CALENDAR YEAR 1998**



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MAR 30 2001



ANNUAL MESSAGE FROM
DOUGLAS K. MARTIN
ARIZONA STATE MINE INSPECTOR



The safety and health of all citizens in or around all mining sites is our prime directive. This includes the active above and below ground excavations as well as the inactive and abandoned mines. At present, there are 680 operations employing approximately 19,004 persons.

We monitor all mining operations, mills, smelters, hot plants (asphalt), batch plants (cement), aggregate plants (sand & gravel), leach plants, quarries and explosive manufacturing facilities. All statewide operations are inspected to insure safe working

conditions, adequate ventilation and sanitation, expeditious means of entry, escape and appropriate use and care of safety appliances. All machinery and equipment are inspected for the same purpose.

Tests are conducted to insure air quality, electrical continuity and elevator safety. These tests protect against gases, dust, fumes, electrical and mechanical hazards.

Protecting the environment by eliminating unnecessary degradation of both our atmosphere and landscape is being accomplished through the mine reclamation and inspection program.

We have vigorously investigated all citizen and mine employee complaints regarding safety and health hazards and responded to every serious accident, fatality and abandoned mine incident.

This agency locates, classifies, and determines the hazards associated with Arizona's estimated 100,000 abandoned/inactive mines. The program notifies mine owners of dangerous situations and requires the owner to eliminate the hazard. If the owner cannot be located or is financially unable to secure the hazard, we will erect warning signs or may construct other protective devices as necessary.

My staff, in cooperation with the Federal Mining Safety and Health Administration, conducts regular health, safety, first aid and hazard-recognition training classes. These courses are available to all miners in Arizona.

Our Abandoned Mine Division provides educational material explaining the hazards associated with vacated mines to schools, prospector clubs, associations, and the general



public. The college and university students working through our Internship Program have all expressed desires to return next year.

The interaction and reliance of other governmental agencies seeking our assistance has increased significantly:

Mining Fraud – Attorney General, Security Exchange Commission, Corporation Commission.

Emergency Rescue – Sheriff, Fire & Police Departments (There is an abandoned incident each week, a rescue approximately each month).

Crime Investigations – FBI, Police, Sheriff (An abandoned mine is an excellent place to hide a murder victim, while mine sites provide excellent cover for stolen goods and equipment).

Illegal Aliens – U.S. Customs (The tunnels under the Mexican Border must be inspected for safety prior to entry and investigation. We discovered one such structure under a cement plant).

Illegal Drugs – State & Federal D.E.A. (Mining sites provide excellent concealment for growing and processing illegal substances. These sites are usually quite remote and difficult to reach).

It is my plan to continue the improvement of the programs and services of this office so Arizona will be not only a leader in mining production, but in **SAFE PRODUCTION** as well.



INSPECTION

The inspection division continued to inspect all the Arizona mine properties and investigate any complaints received in regard to miners safety and health on the job. In addition to those responsibilities, the inspectors responded to several other activities requiring the skill and knowledge of a State Mine Inspector.

Drug tunnels discovered along the Arizona/Mexico border were inspected to insure the hand-dug passageways were safe prior to the Drug Taskforce Officers safely entering the tunnels.

Representatives from the Federal Bureau of Investigation, Arizona Department of Safety, Maricopa County Sheriffs Office and local search and rescue groups investigating the Amtrak derailment, relied on the experience and knowledge of the inspection division to ensure all safety procedures were followed at the "Hell's Gate" abandoned mine.

Tombstone continued to be a topic of concern for the safety of all involved in the elimination of caving stopes under Toughnut Street. Inspectors were dispatched several times to coordinate safety efforts and survey old abandoned mine workings. They are working as technical advisors in the efforts to eliminate the subsidence problem.

Federal mandate for underground mine rescue teams is intensive and restrictive for team membership. Inspectors are working closely with the underground mining operations to provide the specialized and technical training needed to facilitate Arizona's mine emergency needs. The Arizona State Mine Inspectors work with local and national mine rescue associations and are currently writing the surface mine emergency procedures.

1998 OPERATING MINES

The following pages contain the operating mines inspected in 1998. These figures represent 680 Companies with 19,004 workers.

Company	Mine	Type or Product	Employees	Inspections	Violations
APACHE COUNTY					
Ames Construction	Ames Portable #1	Aggregate Plant	5	0	0
Arizona DOT	Kohlberg Portable	Aggregate Plant	24	0	0
Arizona Silica Sand	Houck Operations	Silica Sand Mill	20	0	0
Engelhard Corporation	Cheto Mine	Aggregate Plant	11	0	0
Francis Day & Sons	Barth Pit	Aggregate Plant	2	0	0
Francis Day & Sons	Richville Pit	Aggregate Plant	3	0	0
SBS, Inc.	Cheto Mine 1	Aggregate Plant	4	0	0
United Desiccants	Cheto Mine	Aggregate Plant	4	0	0
		APACHE COUNTY TOTALS	73	0	0



Company	Mine	Type or Product	Employees	Inspections	Violations	
COCHISE COUNTY						
Ammon Enterprises	Ammon Courtland	Aggregate Plant	3	0	0	
CDK Contracting	Chemical Lime	Contractor	2	1	0	
Chemical Lime	Douglas Plant	Lime Quarry	52	1	0	
Granite Construction	Babacamomi Pit	Aggregate Plant	2	3	1	
Granite Construction	Portable #2	Aggregate Plant	5	0	0	
Granite Construction	Sierra Vista Plant	Aggregate Plant	11	3	1	
Huachuca Concrete	Plant #1	Aggregate Plant	6	1	3	
Huachuca Concrete	Wash Plant	Concrete Plant	6	1	0	
Maddux & Sons	ADEQ 1000503	Aggregate Plant	2	2	8	
Phelps Dodge	Copper Queen	Copper Open Pit	39	1	0	
Pyramid Mines	Benny Mine	Underground Gold & Silver	1	0	0	
Sierra Redi-Mix	Yard #2	Aggregate Plant	38	1	0	
Texas Canyon Rock	Texas Canyon Rock	Aggregate Plant	4	1	0	
UOP Molecular Sieve	Bowie Operation	Chabazite Pit	5	0	0	
Wilcox Rock & Sand	Riggs Pit	Aggregate Plant	4	2	0	
Young Block	Sierra Vista Plant	Aggregate Plant	5	1	0	
			COCHISE COUNTY TOTALS	188	14	13
COCONINO COUNTY						
Arizona DOT	Sante Fe Pit	Cinders	3	0	0	
Arizona Tufflite	White Vulcan Mine	Aggregate Plant	9	1	7	
A-Rock	Gray Mountain Pit	Aggregate Plant	12	1	6	
Blaser Corp	Black Cat Quarry	Flagstone	9	1	2	
Blaser Corp	Coconino Quarry	Flagstone	6	0	0	
Blaser Corp	Golden	Flagstone	0	0	0	
Blaser Corp	Mills Quarry	Flagstone	25	1	3	
Blaser Corp	Santa Cruz Quarry	Flagstone	9	1	2	
Coconino Cinder Sales	Wildcat Hill Pit	Cinders	4	1	0	
Coconino County	Moonset Pit	Cinders	12	2	0	
Coconino County	Sheep Hill Portable	Cinders	3	0	0	
Direct Stone Sales	Aztec Quarry	Flagstone	1	0	0	
Drake Stone Products	Cinnamon Quarry	Flagstone	6	0	0	
Drake Stone Products	Fitzgerald Quarry	Flagstone	9	0	0	
Drake Stone Products	Maywest Quarry	Flagstone	3	0	0	
Dunbar Stone	Armstrong Rose	Flagstone	6	0	0	
Dunbar Stone	Bluejay Quarry	Flagstone	3	0	0	
Dunbar Stone	Homer Quarry	Flagstone	2	0	0	
Dunbar Stone	Roeder Quarry	Flagstone	20	0	0	
Dunbar Stone	Yellow Wasp Quarry	Flagstone	0	0	0	
Elliott Stone	Diamond F	Flagstone	6	0	0	
Elliott Stone	AA Quarry	Flagstone	5	0	0	
Elliott Stone	Pearl Quarry	Flagstone	5	0	0	
Elliott Stone	Red Quarry	Flagstone	0	0	0	
Elliott Stone	Switchback Quarry	Flagstone	0	0	0	
Espee Cinder sales	Espee Pit/Perrin pit	Cinders	2	1	1	
Fann Contracting	HPO3 Portable	Contractor	4	1	18	
Flagstaff Cinder Sales	Red & Black Pit	Cinders	13	0	0	
FNF Mining Co.	Babbitt Pit Hot Plant	Asphalt Plant	6	3	16	
FNF Mining Co.	ADEQ 79-03	Aggregate Plant	2	0	0	



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Company	Mine	Type or Product	Employees	Inspections	Violations
Gillman, Inc.	Dry Lake Pit	Cinder Plant	7	0	0
Glory Enterprises	Sheep Hill Pit	Cinder Plant	3	1	8
Gordon Levin	Blue Bird	Aggregate Plant	2	0	0
Harley Gray Stone	Appletree Quarries	Flagstone	28	0	0
Harold Merritt Stone	Merritt Quarry	Flagstone	3	0	0
Homer Stone	Cucomunga Quarry	Flagstone	2	0	0
Homer Stone	Jericho Quarry	Flagstone	0	0	0
Homer Stone	Rocky 2 Quarry	Flagstone	2	0	0
Howard Gray Stone	Buff Quarry	Flagstone	8	0	0
Howard Gray Stone	Peach Quarry	Flagstone	0	0	0
Howard Gray Stone	Rosa Quarry	Flagstone	9	0	0
International Surfacing	Leupp Pit	Asphalt Rubber Plant	3	1	6
J & D Excavators	Babbitt Pit	Drilling & Blasting	3	1	0
J. C. Enterprises	Perez Quarry	Flagstone	1	0	0
J.D.M Sand and Rock	Cedar Knoll Pit	Aggregate Plant	4	1	6
J.R. Excavating	J.R. Aggregate Plant	Aggregate Plant	3	0	0
Levin Stone	Ash Fork Draw	Flagstone	2	0	0
Levin Stone	Buckskin II	Flagstone	1	0	0
Levin Stone	Fernow Quarry	Flagstone	11	0	0
Levin Stone	Hells Bells Quarry	Flagstone	8	0	0
Levin Stone	John Brown Quarry	Flagstone	8	0	0
Miller Mining	Miller Mining, Inc.	Aggregate Plant	4	0	0
Miller Stone	Stone Mountain	Cinder Plant	2	0	0
Olson Brothers Partners	Williams Cinder Pit	Cinder Plant	3	1	0
Richey Construction	Babbitt Pit	Aggregate Plant	4	1	8
Superlite Block	Darling Mine	Cinder Plant	9	1	3
Superstition Crushing	Leupp Pit	Aggregate Plant	6	1	12
Three Wins Quarries	3 Wins Quarries	Flagstone	4	0	0
United Metro Materials	Plant #33	Concrete Plant	2	0	0
United Metro Materials	Plant #35	Aggregate Plant	9	1	1
United Metro Materials	Plant #36	Aggregate Plant	3	2	0
Western Refractory	Cyprus Smelter	Contractor	15	1	0
Western States Stone	Mills Quarry	Flagstone	36	0	0
Williams Cinders	William Cinders	Aggregate Plant	4	0	0
COCONINO COUNTY TOTALS			413	26	108
GILA COUNTY					
Ace Pipe Cleaning	ASARCO Smelter	Contractor	18	1	9
Apache Materials	Apache Plant #60	Aggregate Plant	1	0	0
Apache Materials	Apache Plant #60	Concrete Plant	1	0	0
ASARCO	Hayden	Copper Smelter	401	5	74
ASARCO	Hayden	Copper Concentrator	276	0	0
Ashton Company	Cone crusher	Aggregate Plant	8	2	6
Ashton Company	ASARCO Ray Unit	Contractor	7	1	2
BHP Copper	BHP Miami Unit	Copper Mill	67	1	0
BHP Copper	Old Dominion Mine	Water	3	1	0
BHP Copper	Pinto Valley Miami	Copper Open Pit	272	1	0
Black Canyon Milling	Black Canyon Mill	Custom Milling	3	1	3
C. R. S. I.	ASARCO Ray Unit	Contractor	3	1	4
Carlota Copper	Pinto Creek	Copper Open Pit	9	0	0
CDK Contracting	ASARCO Smelter	Contractor	8	1	0



Company	Mine	Type or Product	Employees	Inspections	Violations
CDK Contracting	BHP Pinto Valley	Contractor	5	0	0
CDK Contracting	Cyprus Smelter	Contractor	35	1	0
CDK Contracting	Cyprus Sierrita	Contractor	1	0	0
Cecil Trucking	Cyprus Miami	Contractor	9	0	0
Converse Environmental	BHP Miami	Contractor	4	0	0
Cummins Southwest	Cyprus Miami	Contractor	4	0	0
Cyprus Miami Mining	Rod Plant	Copper Open Pit	106	1	2
Cyprus Miami Mining	Smelter	Copper Open Pit	302	2	11
Cyprus Miami Mining	Tankhouse	Copper Open Pit	138	1	1
Cyprus Miami Mining	Cyprus Miami	Copper Open Pit	914	1	0
E & N Mining	Cyprus Miami	Contractor	35	1	0
Empire Machinery	Cyprus Miami	Contractor	25	1	0
Fletcher's Cobre Tire	Cyprus Miami	Contractor	8	1	0
Goat Creek Mining	Goat Creek Mine	Aggregate Pit	5	1	0
Golden Environmental	North of Christmas	Contractor	1	0	0
Granite Construction	Cyprus Miami	Contractor	35	0	0
Guzman Construction	Cyprus Miami Pit	Contractor	6	1	0
Guzman Construction	Globe Plant	Aggregate Plant	3	0	0
Guzman Construction	Nugget Pit	Aggregate Plant	8	2	8
Guzman Construction	Port. Plant #3	Aggregate Plant	2	0	0
Industrial Maintenance	ASARCO Smelter	Contractor	2	1	0
J.B.S.	ASARCO Ray Unit	Contractor	6	1	1
J.T Thorpe	Cyprus Smelter	Contractor	16	1	0
JBS Industrial	ASARCO Ray	Contractor	20	1	0
Jesoco	Tonto Basin	Aggregate Plant	2	1	10
Jesoco	Tonto Basin	Asphalt Plant	2	1	15
Jonovich Plumbing	Cyprus Miami	Contractor	8	0	0
Kessen & Kessen	Copper Hills Mine	Silica Flux Pit	6	0	0
Kessen & Kessen	Cyprus Smelter	Contractor	8	1	1
Layne Christensen	Cyprus Miami	Contractor	15	0	0
Layne Christensen	BHP Copper - Miami	Contractor	3	0	0
LVI Environmental	BHP Copper - Miami	Contractor	4	0	0
Mag-Trol	ASARCO Smelter	Contractor	2	1	2
McFarland & Hullinger	Hilltop Silica Plant	Silica Flux Pit	9	2	5
Payson Concrete	Crushing Plant	Aggregate Plant	5	0	0
Payson Concrete	Tonto Pit	Aggregate Plant	9	1	1
Payson Concrete	Payson Hot Plant	Asphalt Plant	2	1	2
Payson Concrete	Payson Plant	Aggregate Plant	2	1	6
Payson Concrete	Tonto Creek Plant	Concrete Plant	1	0	1
Recovery, Inc.	Rye Creek	Aggregate Plant	11	0	0
S & M Construction	PD-Morenci	Contractor	7	0	0
S. A. S. Industrial	ASARCO Ray	Contractor	20	1	0
S. A. S. Industrial	Cyprus Miami	Contractor	57	0	0
S. A. S. Industrial	ASARCO Smelter	Contractor	42	1	1
Service Insulation	ASARCO Hayden	Contractor	18	1	0
Smithco Enterprises	ASARCO Smelter	Contractor	14	1	12
Southwest Energy	BHP Pinto Valley	Contractor	1	0	0
Southwest Energy	Cyprus Miami	Contractor	13	1	1
Star Valley Granite	Star Valley Granite	Granite Open Pit	1	1	1
Sturgeon Electric	ASARCO - Hayden	Contractor	3	0	0
Sturgeon Electric	Cyprus Miami	Contractor	11	1	0
Sun State Electric	BHP Miami	Contractor	0	0	0
Sun State Electric	BHP Pinto Valley	Contractor	3	0	0
Sun State Electric	Cyprus Smelter	Contractor	0	0	0
T.B. Contractors	ASARCO Ray	Contractor	12	1	1
The Industrial Company	ASARCO Ray	Contractor	8	2	0
The Industrial Company	Cyprus Miami	Contractor	0	0	0



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Company	Mine	Type or Product	Employees	Inspections	Violations
Williams Detroit	ASARCO Ray	Contractor	13	0	0
Yellow Hair Trading	Sleeping Beauty	Turquoise	19	0	0
GILA COUNTY			3541	52	180
TOTALS					

GRAHAM COUNTY

CKC Contracting	Airport Pit	Asphalt Hot Plant	3	0	0
CKC Materials	Airport Pit	Aggregate Plant	4	1	4
CKC Materials	Airport Pit	Concrete Plant	1	0	0
Morris, WA, S & G	Morris Pit 1	Aggregate Plant	10	2	2
Morris, WA, S & G	Safford Pit	Aggregate Plant	6	0	0
Smith & Bell Construction	Graham Pit	Concrete Plant	1	1	1
Smith & Bell Construction	Graham Pit	Aggregate Plant	1	0	0
Vista Recycling	P.D. - Morenci	Contractor	7	1	2
GRAHAM COUNTY			33	4	9
TOTALS					

GREENLEE COUNTY

Applied Indust. Tech.	P.D.- Morenci	Contractor	4	1	0
B & W Contractors	P.D.- Morenci	Contractor	34	2	6
Bowen Machine	P.D.- Morenci	Contractor	59	1	0
Briggs-Weaver	P.D.- Morenci	Contractor	3	1	0
Brown & Root	P.D.- Morenci	Contractor	233	1	0
Burk's Valley Sanitation	P.D.- Morenci	Contractor	4	0	0
Caribou Construction	P.D.- Morenci	Contractor	5	1	1
Cecil Trucking	P.D.- Morenci	Contractor	1	1	0
Cisco Salvage	P.D.- Morenci	Contractor	7	0	0
Greenlee County	Virden Rd. Pit	Aggregate Plant	3	0	0
Industrial Tool and Supply	P.D.- Morenci	Contractor	4	1	0
Industrial Tool and Supply	P.D.- Morenci	Contractor	3	1	0
James Hamilton	P.D.- Morenci	Contractor	16	2	2
Jay's Construction	P.D.- Morenci	Contractor	27	0	0
Layne Christensen	P.D.- Morenci	Contractor	8	0	0
Morris, WA S & G	Portable Plant	Aggregate Plant	2	1	0
Oak Creek Contracting	Oak Creek Pit	Aggregate Plant	3	0	0
Phelps Dodge	Metcalf Concentrator	Copper Mill	225	0	0
Phelps Dodge	Metcalf Mine	Copper Open Pit	1283	0	0
Phelps Dodge	Morenci Mine	Concentrator	1198	1	3
Phelps Dodge	Concentrator	Copper Mill	300	1	3
Phelps Dodge	Morenci Leach Plant	Leach Plant	0	0	0
Phelps Dodge	Morenci Mine	Copper Open Pit	117	0	0
Phelps Dodge	Morenci Shops	Copper Open Pit	440	2	1
Phelps Dodge	Morenci	Copper Mill	300	1	3
Phelps Dodge	Morenci SX/EW	Copper SX/EW	314	0	0
S.E Arizona Refrigeration	P.D.- Morenci	Contractor	9	2	7
Southern Ventures	P.D.- Morenci	Contractor	2	0	0
Southwest Energy	P.D.- Morenci	Contractor	11	0	0
Spears Pipe and Welding	P.D.- Morenci	Contractor	33	1	0
St. Paul Fire Insurance	P.D.- Morenci	Contractor	6	0	0

ARIZONA STATE MINE INSPECTOR


Company	Mine	Type or Product	Employees	Inspections	Violations
Sturgeon Electric	P.D.- Morenci	Contractor	1	0	0
Stewart Brothers Drilling	P.D.- Morenci	Contractor	2	0	0
The Industrial Company	P.D.- Morenci	Contractor	2	1	0
Tipton & Tipton	Tipton Pit	Aggregate Plant	3	0	0
Westaff	P.D.- Morenci	Contractor	10	0	0
Williams	P.D.- Morenci	Contractor	18	1	1
GREENLEE COUNTY TOTALS			4690	23	27

LA PAZ COUNTY

Double J Sand and Rock	Copperstone Mill	Aggregate Plant	5	0	0
FNF Mining Co	ADEQ 71-11	Aggregate Plant	13	0	0
FNF Mining Co	Plomosa Pit	Aggregate Plant	10	1	0
Granite Construction	Goodman Wash	Asphalt Plant	0	0	0
Granite Construction	Goodman Wash	Aggregate Plant	0	0	0
La Paz County	Portable Crusher	Aggregate Plant	2	0	0
M G Quarries	Marble Quarry	Marble Quarry	1	0	0
LA PAZ COUNTY TOTALS			31	1	0

MARICOPA COUNTY

A & A Materials	A & A Plant	Granite Aggregate	3	0	0
A & A Materials	Scottsdale Screen	Aggregate Plant	3	1	6
Aggregate Products	Sand Specialities	Aggregate Plant	4	0	0
Ajax Contracting	Ajax Sand and Rock	Aggregate Plant	4	0	0
Alleco Stone	Buckeye Pit	Aggregate Plant	24	0	0
Aquarius Minerals	Aquarius XXV	Aggregate Plant	6	0	0
C & W Mining	Desert Gold Mine	Gold-Silver Mill	1	1	0
C. S. McCrossan	PE 109	Aggregate Plant	0	1	0
CalMat	Plant #12 -- Sun City	Aggregate Plant	18	2	2
CalMat	Plant #12 -- Sun City	Concrete Plant	4	1	0
CalMat	Plant #24 -- Litchfield	Concrete Plant	12	1	2
CalMat	Plant #24 -- Litchfield	Aggregate Plant	12	2	10
CalMat	Plant #32 -- Phoenix	Aggregate Plant	13	1	0
CalMat	Plant #32 -- Phoenix	Concrete Plant	0	0	0
CalMat	Plant #18	Aggregate Plant	14	1	10
CalMat	University Plant	Asphalt Plant	4	1	0
Chandler Ready Mix	Lehi Pit	Concrete Plant	33	0	0
Chandler Ready Mix	Lehi Plant	Aggregate Plant	3	1	0
Custom Boulders	LW Quarry	Aggregate Plant	4	1	4
Empire Southwest	All AZ Operations	Contractor	62	0	0
FNF Mining Co.	7th St. & Beardsley	Aggregate Plant	10	1	0
FNF Mining Co.	ADEQ 71-09	Aggregate Plant	19	0	0
FNF Mining Co.	New River Pit	Aggregate Plant	16	1	0
Fort McDowell S & G	Fort McDowell Pit #2	Aggregate Plant	28	0	0
Fort McDowell S & G	Plant #3	Aggregate Plant	44	1	2
Fort McDowell S & G	Sanner Pit	Aggregate Plant	2	0	0
Industrial Asphalt of AZ	Plant #56 - Sun City	Asphalt Plant	2	1	1
J.A. Materials	County Club Pit	Aggregate Plant	4	0	0
Kilauea Crushers	Jomax Plant	Aggregate Plant	4	1	7
Kilauea Crushers	Picacho Mine	Aggregate Plant	19	1	10
Madison Granite Supply	Madison Granite Pit	Granite Quarry	13	1	1



Company	Mine	Type or Product	Employees	Inspections	Violations
Mesa Materials	Mesa Plant	Aggregate Plant	20	1	4
Minerals Development	Superior Marble	Marble Mill	17	0	0
Morton International	Morton Salt	Salt	37	1	0
Mountain Valley	Mountain Valley	Aggregate Plant	9	1	3
MR Tanner Mining	San Tan Mine	Aggregate Plant	3	0	0
New West Materials	Hot Plant 1 & 2	Asphalt Hot Plant	13	0	0
Peoria Seven Mining	Peoria Seven Mine	Gold Placer	4	0	0
Phoenix Brick Yard	Tolleson Mine	Clay	5	1	3
Phoenix Redi- Mix	Aqua Fria Plant	Aggregate Plant	22	0	0
Phoenix Redi-Mix	Agua Fria Plant	Aggregate Plant	21	1	0
Phoenix Redi-Mix	Phoenix Redi-Pit	Concrete Plant	0	1	9
Pioneer Sand	Hassayampa Plant	Aggregate Plant	6	1	1
Pioneer Concrete	Plant #2	Aggregate Plant	9	1	3
Pioneer Concrete	Plant #35	Concrete Plant	15	1	4
Pioneer Sand	Hassayampa Pit	Aggregate Plant	4	1	0
Pioneer Sand	59th - Broadway	Aggregate Plant	24	1	3
Rainbow Enterprises	Pit & Plant #2	Aggregate Plant	6	1	7
Red Mountain Mining	Red Mountain	Aggregate Plant	15	1	0
Salt River Sand and Rock	PC - #9	Aggregate Plant	21	1	1
Salt River Sand and Rock	Dobson Plant	Aggregate Plant	124	2	5
Salt River Sand and Rock	Higley Road Plant	Aggregate Plant	13	0	0
Salt River Sand and Rock	PC - #1	Aggregate Plant	8	1	2
Salt River Sand and Rock	PC - #15	Aggregate Plant	13	1	0
Salt River Sand and Rock	PC - #3	Aggregate Plant	5	1	0
Salt River Sand and Rock	PC - #5	Aggregate Plant	9	1	0
Salt River Sand and Rock	PC - #6	Aggregate Plant	8	1	0
Salt River Sand and Rock	PC - #8	Aggregate Plant	7	1	2
Salt River Sand and Rock	Screening Plant #6	Aggregate Plant	5	0	0
Salt River Sand and Rock	Wash Plant #5	Aggregate Plant	52	0	0
Salt River Sand and Rock	PC - #7	Aggregate Plant	318	0	0
San Xavier Rock	SX Crusher	Aggregate Plant	12	0	0
Southwest Sand & Gravel	Southwest #1	Aggregate Plant	3	1	3
Sun State Rock	Plant #1	Aggregate Plant	20	1	1
Sun State Rock	Plant #3	Granite Quarry	9	1	1
Sunland Sand & Gravel	Sunland	Aggregate Plant	5	1	0
Sunward Materials	El Mirage	Asphalt Plant	3	1	0
Sunward Materials	Lehi	Aggregate Plant	8	2	3
Sunward Materials	Mesa #61	Concrete Plant	26	1	0
Sunward Materials	West Plant	Aggregate Plant	15	2	5
Sunward Materials	Plant #74	Aggregate Plant	0	0	0
Sunward Materials	Sun City Plant #77	Aggregate Plant	18	2	0
Superstition Crushing	CalMat Main Plant	ABC	9	0	0
Superstition Crushing	Chandler Blvd	Aggregate Plant	4	1	0
Superstition Crushing	PC #17	ABC	9	0	0
Superstition Mtn. Stone	Superstition Mtn. Pit	Granite Open Pit	7	1	0
TRP	The Recycle Pit	Aggregate Plant	4	1	4
United Metro Materials	Plant #12 - Glendale	Concrete Plant	5	1	0
United Metro Materials	Plant #30-1083	Asphalt Plant	1	0	0
United Metro Materials	Plant #30-1083	Concrete Plant	1	0	0
United Metro Materials	Plant #30-1083	Aggregate Plant	1	0	0
United Metro Materials	United Metro #13	Aggregate Plant	1	0	0
United Metro Materials	United Metro #29	Aggregate Plant	12	0	0
United Metro Materials	United Metro #29	Concrete Plant	1	0	0
United Metro Materials	United Metro #46	Concrete Plant	11	0	0
United Metro Materials	United Metro #46	Aggregate Plant	20	0	0
United Metro Materials	Plant #1	Concrete Plant	0	0	0
United Metro Materials	Plant #1	Aggregate Plant	1	0	0
United Metro Materials	Plant #1	Asphalt Plant	3	0	0



Company	Mine	Type or Product	Employees	Inspections	Violations
United Metro Materials	Plant #11	Aggregate Plant	32	1	1
United Metro Materials	Plant #11	Asphalt Plant	5	1	0
United Metro Materials	Plant #12	Aggregate Plant	17	1	1
United Metro Materials	Plant #12	Asphalt Plant	5	1	1
United Metro Materials	Plant #15	Concrete Plant	2	0	0
United Metro Materials	Plant #17	Concrete Plant	2	1	0
United Metro Materials	Plant #2	Aggregate Plant	11	0	0
United Metro Materials	Plant #2	Concrete Plant	5	1	0
United Metro Materials	Plant #2	Asphalt Plant	4	1	0
United Metro Materials	Plant #8	Concrete Plant	6	0	0
Wickenburg Concrete	Dillard Plant	Aggregate Plant	4	1	0
Wickenburg Concrete	Monarch Pit	Aggregate Plant	2	0	0
Wickenburg Concrete	San Domingo Pit	Aggregate Plant	7	0	0
Wickenburg Concrete	San Domingo Pit	Asphalt Plant	1	0	0
MARICOPA COUNTY TOTALS			1536	68	122

MOHAVE COUNTY

Able Earth Extraction	Chloride Pit	Contractor	10	0	0
Able Earth Extraction	Valentine Pit	Landscape Rock	8	1	2
Able Earth Extraction	White Hills Mine	Contractor	7	1	2
Addwest Minerals	Gold Road Mine	Gold	25	2	5
Behling Excavating	Old Arizona	Aggregate Plant	2	1	0
Brimhall Sand & Rock	Geronimo Pit	Aggregate Plant	3	1	16
Bullhead Division	Bullhead Plant	Aggregate Plant	9	0	0
Canyon Concrete	Canyon Concrete	Concrete Plant	4	1	1
Canyon Sand	Arizona Plant	Aggregate Plant	12	1	5
CDK Contracting	Nelson Plant	Contractor	6	0	0
Chemical Lime Company	Nelson Plant	Lime Quarry	571	1	3
Chloride Mining & Milling	Chloride Mine & Mill	Gold-Silver Pit	3	1	1
Combined Metals	Mohave Mine	Gold Pit	6	0	0
Cox Rock	Lake Havasu Pit	Aggregate Plant	5	1	3
Cox Rock	Lake Havasu Pit	Asphalt Plant	4	1	3
D.L. Campbell	Campbell Redi-Mix	Concrete Plant	7	0	0
D.L. Campbell	Chenoweth Pit	Aggregate Plant	4	1	0
Desert Construction	Hualapai Pit	Asphalt Plant	5	1	3
Desert Construction	Highway 66 Plant	Aggregate Plant	4	0	0
Desert Construction	Hualapai Pit	Aggregate Plant	5	1	6
Dick Merritt	Sacramento Mine	Aggregate Plant	3	1	0
Dolan Springs Mine	Excellisor Mine	Gold-Silver Pit	0	1	0
Dunbar Stone	Hualapai Chocolate	Flagstone	3	0	0
Elbe Equipment	Cedar Pocket	Drilling & Blasting	2	1	0
Equatorial Mining	Mineral Park	Leach Plant	29	1	0
Eureka Mining	Havasu Rose	Quarry	1	2	3
FNF Mining	ADEQ 71-10	Aggregate Plant	7	0	0
FNF Mining	Geronimo Plant	Asphalt Plant	6	1	5
Freiday Construction	Portable Crusher	Aggregate Plant	3	0	0
Gold Springs Ilmenite	Gold Springs	Gold & Ilmenite	4	1	0
Guzman Construction	Shorts Pit	Aggregate Plant	4	2	2
Guzman Construction	Solomon Pit	Aggregate Plant	4	1	3
Kiewit Western	Crusher #2	Aggregate Plant	15	1	4
Kingman Redi- Mix	Airport Drive/AP	Aggregate Plant	4	1	8
Kingman Redi-Mix	Screen Plant	Aggregate Plant	3	0	0
Martinie Septic	Victoria	Aggregate Plant	2	0	0
McCall Construction	McCall Pit	Aggregate Plant	4	1	4



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Company	Mine	Type or Product	Employees	Inspections	Violations
McCormick Construction	McCormick Pit	Aggregate Plant	6	2	1
McCormick Construction	McCormick Plant	Asphalt Plant	4	1	0
McCormick Construction	Rio Lomas III	Contractor	5	0	0
Mineral Park Rock	Mineral Park Rock	Decorative Rock	8	1	1
Mohave Concrete	Havarin Ranch	Aggregate Plant	4	1	4
Mohave Concrete	Lake Havasu Plant	Aggregate Plant	3	1	4
Mohave Concrete	McConnico Mine	Aggregate Plant	3	0	0
Mohave Concrete	Oatman Rd Pit #3	Aggregate Plant	4	1	6
Mohave County	Portable Plant	Aggregate Plant	0	0	0
Mohave County	Hualapai Pit	Aggregate Plant	3	1	0
Pulice Construction	Bullhead City	Contractor	4	0	0
Red Mountain Mining	Hualapai Site	Granite Pit	2	1	0
Resized Rock	White Hills Mine	Contractor	2	1	2
Southern Arizona Paving	Aztec Quarry	Contractor	9	0	0
Southwest Energy	Cyprus Mineral Park	Contractor	0	0	0
Superstition Crushing	PC 0015	Aggregate Plant	11	1	5
Tanner Company	Plant #4088	Wash Plant	7	0	0
Tanner Company	Plant #486	Asphalt Plant	4	0	0
Thunderbird Materials	Sawmill Wash Pit	Aggregate Plant	1	2	0
Tri-R Construction	Thumb Butte	Aggregate Plant	5	1	0
United Metro Materials	#79 Bullhead City	Concrete Plant	1	0	0
United Metro Materials	#79 Bullhead City	Aggregate Plant	1	0	0
United Metro Materials	#88 Fort Mohave	Asphalt Plant	7	1	1
United Metro Materials	#88 Fort Mohave	Aggregate Plant	1	0	0
United Metro Materials	#88 Fort Mohave	Concrete Plant	1	0	0
Western Gypsum	Western Gypsum	Gypsum Open Pit	33	1	1
MOHAVE COUNTY TOTALS			931	46	106
NAVAJO COUNTY					
Brimhall Sand & Rock	Brimhall Pit	Aggregate Plant	40	1	1
Brimhall Sand & Rock	Cottonwood Wash	Concrete Plant	18	1	7
Brimhall Sand & Rock	Hard Luck pit	Aggregate Plant	13	1	1
Cholla Ready Mix	Perkins Valley Pit	Aggregate Pit	6	1	2
Cholla Redi Mix	Woodruff Butte	Aggregate Plant	6	1	0
Dyna Rock & Sand	Dyna Rock & Sand	Aggregate Plant	3	0	0
Fann Contracting	Reidhead Papermill	Concrete Plant	5	1	3
FNF Mining	ADEQ 77-02	Aggregate Plant	4	0	0
Fullhouse Cinder	First Knoll Pit	Cinders	3	0	0
Hatch Construction	4 Mile Plant & Pit	Aggregate Plant	9	1	3
Hatch Construction	4 Mile Plant & Pit	Concrete Plant	2	1	0
Navajo Count Rd Dept.	First Knoll Pit	Aggregate Pit	2	0	0
Pearce Construction	Linden Pit	Contractor	46	0	0
Perkins Cinder	Owens Pit	Cinders	4	0	0
Phelps Redi-Mix	Cottonwood Wash	Aggregate Plant	2	0	0
Reidhead Crushing	Duke's Peak	Cinders	17	1	0
Reidhead Sand & Rock	Papermill Rd. Pit	Aggregate Plant	44	1	0
Reidhead Sand & Rock	Reidhead	Aggregate Plant	9	1	0
Reidhead Sand & Rock	Taylor Farms Pit	Aggregate Plant	5	1	0
Taylor Materials	Hall Pit	Aggregate Plant	6	1	7
NAVAJO COUNTY TOTALS			244	13	24



PIMA COUNTY

A & A Materials	Apache Granite Pit	Granite Open Pit	3	0	0
ABC Sand & Gravel	ABC Sand & Gravel	Aggregate Plant	3	0	0
Able Earth Extraction	Bonita Pit	Aggregate Plant	9	0	0
Arizona Portland Cement	Rillito Mill	Concrete Plant	138	1	0
Arizona Portland Cement	Rillito Quarry	Limestone Quarry	24	1	0
Arizona Portland Cement	Twin Peaks	Aggregate Plant	1	0	0
ASARCO	Mission Mill	Copper Mill	223	1	0
ASARCO	Mission South Mill	Copper Mill	84	1	0
ASARCO	Mission	Copper	83	1	2
	Underground	Underground			
ASARCO	Mission Pit	Copper Open Pit	568	1	2
B & R Materials Company	Harrison-Escalante	Aggregate Plant	23	1	0
C. S. McCrossan	PE 148	Aggregate Plant	7	1	1
CDK Contracting	APC Rillito	Contractor	1	0	0
Cecil Trucking	ASARCO Mission	Contractor	9	0	0
Cecil Trucking	Cyprus Sierrita	Contractor	1	0	0
Cimetta Engineering	All AZ Operations	Contractor	26	0	0
Clay Mine Adobe	Clay Mine Adobe	Aggregate Plant	4	1	0
Cummins Southwest	ASARCO Misson	Contractor	9	0	0
Cyprus Sierrita	Sierrita Mill	Copper Mill	486	0	0
Cyprus Sierrita	Sierrita Pit	Copper Open Pit	192	0	0
Fletcher's Cobre Tire	Cyprus Sierrita	Contractor	5	0	0
Georgia Marble	Santa Rita Mine	Limestone Quarry	15	1	6
Georgia Marble	Georgia Marble	Marble Mill	4	1	0
Golden Green Placer	Golden Green Placer	Gold Placer	4	1	0
Granite Construction	Tangerine Road Pit	Aggregate Plant	10	1	0
Granite Construction	Swan Road Pit	Aggregate Plant	27	1	0
Jenott Mining	Red Granite Pit	Aggregate Plant	6	1	0
Jim Bush S & G	Portable Screen	Aggregate Plant	2	0	0
Kalamazoo Materials	ASARCO Silver Bell	Contractor	0	0	0
Kempton's Acme S & G	Acme Plant	Aggregate Plant	6	1	2
L.A. Downey & Sons	Downey & Sons	Aggregate Plant	4	0	0
Layne Christensen	Silver Bell Mine	Contractor	1	0	0
Layne Christensen	Cyprus Sierrita	Contractor	4	0	0
Mountain Power Electrical	ASARCO Mission	Contractor	8	0	0
Oracle Ridge Mining	Oracle Ridge Mill	Copper	3	1	0
Oracle Ridge Mining	Oracle Ridge Mine	Copper	5	1	0
		Underground			
Parson's Steel Erectors	Arizona Portland	Contractor	8	0	0
Phelps Dodge Mining	New Cornelia	Copper Open Pit	32	1	0
Phoenix Brick Yard	Pantano Mine	Clay	7	1	7
Recwest	Gray Rock Pit	Aggregate Plant	5	1	0
San Xavier Rock	Cortaro Plant I	Concrete Plant	3	1	0
San Xavier Rock	Cortaro Plant II	Concrete Plant	2	1	0
San Xavier Rock	Cortaro Plant #23	Asphalt Plant	4	1	0
San Xavier Rock	Cortaro Plant #23	Wash Plant	18	1	0
San Xavier Rock	Plant #25	Concrete Plant	1	1	0
San Xavier Rock	PortableCrusher #2	Aggregate Plant	7	1	0
San Xavier Rock	Portable Crusher #3	Aggregate Plant	11	2	3
San Xavier Rock	Portable Screen	Aggregate Plant	4	1	0
San Xavier Rock	Valencia Plant #21	Concrete Plant	3	1	0
San Xavier Rock	Valencia Plant #21	Wash Plant	5	1	0
San Xavier Rock	Portable Crusher	Aggregate Plant	5	1	0
Sierrita Mining	McGee Ranch	Contractor	8	0	0
Silver Bell Mining	Silver Bell	Copper Open Pit	112	1	2
Southwest Energy	ASARCO Mission	Contractor	1	0	0
Southwest Energy	ASARCO Ray Mine	Contractor	2	0	0
Southwest Energy	ASARCO Silverbell	Contractor	5	0	0

ARIZONA STATE MINE INSPECTOR



Company	Mine	Type or Product	Employees	Inspections	Violations
Fort McDowell S & G	Florence	Aggregate Plant	4	0	0
Frontier - Kemper	San Manuel	Contractor	145	1	0
Gold Bond Building	Feldman Gypsum	Gypsum Plant	4	2	0
Harborlite	Harborlite Mill	Perlite Mill	13	1	1
Industrial Maintenance	ASARCO Hayden	Contractor	8	1	0
Industrial Motor & Control	ASARCO Hayden	Contractor	4	1	0
Industrial Motor & Control	Magma San Manuel	Contractor	6	0	0
Layne Christensen	Cyprus Tohono	Contractor	2	0	0
Layne Christensen	ASARCO Ray	Contractor	2	0	0
Layne Christensen	ASARCO Santa Cruz	Contractor	3	0	0
Layne Christensen	BHP San Manuel	Contractor	1	0	0
Layne Christensen	BHP Superior	Contractor	1	0	0
McFarland & Hullinger	Bobbitt Silica	Smelter Feeds	6	2	7
National Gypsum	Feldman Gypsum	Contractor	4	0	0
Omya	MDI Quarry	Marble Plant	5	1	1
Phoenix Cinders	Queen Creek Plant	Decorative Rock	6	1	0
Phoenix Cinders	Phoenix Cinders Pit	Decorative Rock	11	0	0
Pinal Gypsum	Collidge Plant	Gypsum Plant	3	1	1
Pinal Gypsum	White Cross Mine	Gypsum Plant	2	0	0
Pioneer Sand	Portable crusher #54	Aggregate Plant	4	0	0
Raisebor	San Manuel	Contractor	46	0	0
Road Machinery	ASARCO Ray Mine	Contractor	33	1	0
Rock Solid	Coolidge Pit	Aggregate Plant	5	2	0
S. A. S. Industrial	ASARCO Ray Mine	Contractor	10	0	0
S. A. S. Industrial	BHP San Manuel	Contractor	12	1	0
San Xavier Rock & Sand	Plant #26	Concrete Plant	5	0	0
San Xavier Rock & Sand	Crusher #3	Aggregate Plant	17	1	0
Silica Mines	Silica Mine	Flux	20	1	1
Southwest Energy	Cyprus Tohono	Contractor	0	0	0
Sturgeon Electric	Cyprus Tohono	Contractor	1	0	0
Sunward Materials	Queen Creek #75	Mill	4	0	0
Sunward Materials	Queen Creek #75	Aggregate Plant	15	1	0
Superior Companies	Gypsum Pit	Gypsum Plant	6	2	0
Thiessen Team USA	Clark Pit	Shotcrete	3	1	2
Treasure Chest Granite	Treasure Chest	Decorative Rock	11	1	0
United Metro Materials	United Metro #46	Asphalt Plant	11	1	0
United Metro Materials	Plant #41	Aggregate Plant	24	0	0
United Metro Materials	Plant #41	Concrete Plant	4	0	0
United Metro Materials	Plant #41	Asphalt Plant	3	0	0
United Metro Materials	Plant #47	Aggregate Plant	2	1	0
United Metro Materials	Plant #47	Concrete Plant	1	2	0
United Metro Materials	Plant #48	Aggregate Plant	17	0	0
United Metro Materials	Plant #48	Concrete Plant	4	0	0
United Metro Materials	Plant #49	Aggregate Plant	15	0	0
United Metro Materials	Plant #49	Asphalt Plant	1	0	0
United Metro Materials	Plant #49	Concrete Plant	1	1	0
Vroom Engineering	ASARCO Ray	Contractor	2	0	0
Walker Butte Granite	Walker Butte	Granite Plant	5	1	1
Westaff	BHP Superior	Contractor	1	0	0
Westaff	BHP San Manuel	Contractor	5	0	0
Western HydroVac	San Manuel Smelter	Contractor	1	1	0
PINAL COUNTY			3182	51	45
TOTALS					



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Company	Mine	Type or Product	Employees	Inspections	Violations
PORTABLE MINING EQUIPMENT					
FNF Construction Inc.	# 61	Asphalt Hot Plant	2	0	0
FNF Construction Inc.	# 84	Asphalt Hot Plant	2	0	0
FNF Construction Inc.	# 85	Asphalt Hot Plant	1	0	0
FNF Mining Co.	71-14	Aggregate Plant	10	0	0
Granite Construction	ADEQ 1000437	Aggregate Plant	8	0	0
Granite Construction	Tucson Portable #4	Contractor	2	0	0
Granite Construction	All AZ Operations	Contractor	10	0	0
Guzman Construction	PC-E10070	Aggregate Plant	0	0	0
Salt River Sand and Rock	Cedar Rapids	Aggregate Plant	1	0	0
Salt River Sand and Rock	Crusher #16	Aggregate Plant	3	0	0
Salt River Sand and Rock	Wash Plant #2780	Aggregate Plant	1	0	0
Salt River Sand and Rock	Wash Plant #7	Aggregate Plant	4	0	0
Superstition Crushing	Yuma	Wash Plant	4	0	0
Wheeler Construction	Dixileta Pit	Aggregate Plant	4	1	1
		PORTABLE MINING EQUIPMENT	52	1	1
SANTA CRUZ COUNTY					
JD's Sand and Gravel	Todd Pit	Aggregate Plant	3	0	0
Padilla Sand & Gravel	Agua Fria Pit	Aggregate Plant	6	0	0
Rio Rico Rock & Sand	Rio Rico Rock	Aggregate Plant	4	0	0
San Xavier Rock	Catalina Plant #26	Wash Plant	4	0	0
San Xavier Rock	Plant #25	Wash Plant	3	0	0
San Xavier Rock	Nogales #28	Concrete Plant	1	0	0
San Xavier Rock	Nogales #28	Wash Plant	3	0	0
		SANTA CRUZ COUNTY TOTALS	24	0	0
YAVAPAI COUNTY					
Alvorado Mining	Alvorado Mine	Decorative Rock	4	1	0
Apache Stone & Supply	Apache Rainbow	Decorative Rock	3	1	0
Apache Stone & Supply	Blue Bell Quarry	Decorative Rock	4	1	14
Arizona Sand & Gravel	Arizona	Aggregate Plant	4	1	6
Asphalt Paving	Screening Plant	Aggregate Plant	3	1	11
Asphalt Paving	Earth Products Pit	Asphalt Plant	5	1	7
B & B Materials	McGuireville Pit	Aggregate Plant	1	1	7
Blaser Corp.	Lizard Quarry	Flagstone Quarry	0	0	0
Blaser Corp.	Montezuma	Flagstone Quarry	36	0	0
Blaser Corp.	Ross Quarry	Flagstone Quarry	2	0	0
C. S. McCrossan	Goswick Pit	Aggregate Plant	3	1	2
Chino Valley Materials	Schiabie Pit	Contractor	1	1	0
Cominco American	UV Joint Project	Contractor	5	1	0
Cummins Southwest	Cyprus Bagdad	Contractor	2	0	0
Cyprus Copper	Bagdad Mine	Copper Open Pit	355	1	1
Cyprus Copper	Concentrator	Copper Mill	163	0	0
Cyprus Copper	Cyprus Bagdad Mill	Copper Mill	161	1	3
Cyprus Copper	Bagdad	Copper SX-EW	35	1	0
DCRS (US), Ltd.	Senate Mill	Contractor	6	1	0
Dewey Stone	Lone Star Mine	Stone	1	1	7



Company	Mine	Type or Product	Employees	Inspections	Violations
Drake Stone	M.C. Canyon	Flagstone	0	0	0
Drake Stone	Rock House	Flagstone	31	0	0
Dunbar Stone	Antolini/Antelope	Flagstone	1	0	0
Dunbar Stone	Lynx	Flagstone	0	0	0
Dunbar Stone	Paulden Sand	Aggregate Plant	5	1	2
Dunbar Stone	Paulden Sand	Concrete Plant	4	3	10
Dunbar Stone	Perkins Pit	Aggregate Plant	4	2	15
E.N. Respondek	Prescott Granite	Aggregate Plant	3	0	0
Earth Products	Prescott Valley	Aggregate Plant	24	2	11
Empire Machinery	Cyprus Bagdad	Contractor	25	1	0
Eureka Rock	Eureka Rock	Aggregate Pit	2	1	0
Fletcher's Cobre Tire	Cyprus Bagdad	Contractor	5	1	0
FNF Mining Co.	Cherry Pit/Plant	Asphalt Plant	6	1	8
G & S Sand & Rock	Star Placer Pit	Aggregate Plant	3	1	1
Gooch Welding	Phoenix Cement	Contractor	3	1	0
Granite Mtn. Materials	Dosie Pit	Aggregate Plant	2	2	0
Guzman Construction	Crookton Road Pit	Aggregate Plant	11	1	5
Guzman Construction	Portable Crusher #4	Aggregate Plant	17	0	0
Guzman Construction	PC #2 E-10025	Aggregate Plant	4	0	0
Harley Gray Stone	Mary Lee	Flagstone Quarry	2	0	0
Harley Gray Stone	Nine Strike	Flagstone Quarry	2	0	0
Harley Gray Stone	Oak	Flagstone Quarry	4	0	0
Harley Gray Stone	Red Quarries	Flagstone Quarry	11	0	0
Hoss & Son	Star Placer Pit	Aggregate Plant	2	1	4
Idea Inc.	United Verde Mine	Contractor	3	1	0
Ironite Products	Ironite Mill	Soil Supplement	38	1	2
Material Delivery	Dewey Pit	Decorative Rock	2	1	8
McDonald Brothers	McDonald Pit	Aggregate Plant	0	0	0
MCO Mine Service	United Verde Mine	Contractor	12	1	0
Mile High Transportation	Paulden Pit	Aggregate Plant	4	0	0
Mineco, Inc.	Mineco	Open Pit	2	0	0
Northern Arizona	Dewey Mine	Flagstone Quarry	2	0	0
Northfork Enterprises	Northfork Pit	Aggregate Plant	2	2	8
Pacific Industrial Pipeline	Arizona S & G	Aggregate Plant	4	0	0
Phoenix Cement	Gypsum Mine	Concrete Plant	3	1	0
Phoenix Cement	Phx. Cement Plant	Cement Mill	172	0	0
Phoenix Cement	Phx. Cement Plant	Concrete Plant	138	1	0
PM Mining	Santa Maria	Gold Placer	1	0	0
Purple Passion Mine	Purple Passion Mine	Amethyst	3	0	0
		Underground			
S. A. S. Industrial	Chemical Lime	Contractor	0	0	0
S. A. S. Industrial	Cyprus Bagdad	Contractor	0	0	0
Salt River Sand and Rock	Chino Project	Aggregate Plant	6	1	8
Santa Maria River	Santa Marie	Gold & Silver	0	1	0
		Underground			
Southwest Energy	Cyprus Bagdad	Explosives	2	1	0
Sturgeon Electric	Cyprus Bagdad	Contractor	1	0	0
Superior Materials	Plant #55	Aggregate Plant	18	0	0
Titan Energy	Phx. Cement Plant	Explosives	7	1	0
Town of Chino Valley	Old Home Manor	Aggregate Plant	2	1	0
United Metro Materials	Cherry Pit/Plant #56	Concrete Plant	1	1	0
United Metro Materials	Cherry Pit/Plant #56	Aggregate Plant	17	1	0
United Metro Materials	Yavapai Materials	Asphalt Plant	2	1	1
United Verde Materials	United Verde	Aggregate Plant	6	0	0
Valley Concrete	Clarkdale Pit	Aggregate Plant	8	1	4
Valley Concrete	Clarkdale Pit	Concrete Plant	3	1	1
Valley Concrete	Clarkdale Pit	Asphalt Plant	3	1	2
Vastco	Del Rio Pit	Aggregate Plant	2	1	0



Company	Mine	Type or Product	Employees	Inspections	Violations
Yavapai Materials	Airport Pit	Aggregate Plant	20	0	0
Yavapai Materials	Yavapai Material	Aggregate Plant	17	1	1
YAVAPAI COUNTY TOTALS			1466	54	149

YUMA COUNTY

David Martin Excavation	Patagonia Pit	Aggregate Plant	8	0	0
Don Kelland Materials	Blaisdale	Aggregate Plant	12	0	0
H & S Developers	Fortuna Pit 1	Aggregate Plant	6	1	4
Kelland Materials	Blaisdale Hot Plant	Asphalt Plant	13	0	0
Kelland Materials	Roll II	Aggregate Plant	10	1	0
Kelland Materials	Roll Plant	Aggregate Plant	9	1	0
Mountain Gravel	Portable Crusher	Aggregate Plant	5	0	0
T. Warnock Trucking	North Gila Pit	Aggregate Plant	1	0	0
Tanner Company	Plant 180	Aggregate Plant	92	0	0
Tanner Company	Plant 180	Asphalt Plant	3	0	0
Tanner Company	Plant 186	Aggregate Plant	21	1	0
Tanner Company	Plant 2088	Aggregate Plant	2	0	0
W & L	W & L Plant #2	Aggregate Plant	9	1	0
Wellton-Mohawk Irrigation	Antelope Quarry	Rip/Rap	3	0	0
Wellton-Mohawk Irrigation	Dome Gravel Pit	Aggregate	2	0	0
Wellton-Mohawk Irrigation	Mohawk Quarry	Rip/Rap	3	0	0
Yuma County	North Gila Plant	Aggregate Plant	4	0	0
YUMA COUNTY TOTALS			203	5	4



REPORTABLE ACCIDENTS

Type	Company	Reportable Accidents
Caught Between	Addwest Minerals, Inc. Gold Road Mine Underground	1
	ASARCO Hayden Smelter	1
	ASARCO Mission Mill	3
	BHP Copper Inc San Manuel Mine	1
	Vroom Engineering & Mfg.- Cyprus Sierrita Surface	1
Fall of Person	ASARCO Hayden Smelter	2
	ASARCO Mission Unit Pit	1
	BHP Copper Inc. Pinto Valley Mill / Preparation Plant	1
	BHP Copper Inc San Manuel Mine Underground	2
	BHP Copper Inc San Manuel Mine Surface @ Underground	1
	Flagstaff Cinder Sales, Inc. Red & Black Pit	1
	Phelps Dodge Morenci Concentrator	1
Fall to Ground	Addwest Minerals, Inc. Gold Road Mine Underground	1
	ASARCO Inc. Hayden Smelter	1
	Phelps Dodge Morenci Mine	1
Falling Object	BHP Copper, Inc. San Manuel Mine Underground	1
Flying Objects	Arizona Portland Cement Co. Rillito Mill	1
	ASARCO Ray Complex #7 Rod Mill	1
	BHP Copper, Inc. San Manuel Underground	2
	Cyprus Miami Mining Corp. Smelter	1
	Pioneer Concrete of Arizona, Inc. Plant 5	1
	Walker Butte Granite Open Pit Mine	1
	Lifting	ASARCO Mission San Xavier, Eisenhower
ASARCO Mission Surface @ Underground		1
ASARCO Mission Unit Pit		1
BHP Copper Inc. San Manuel Underground		2
Cyprus Miami Mining Corp. Smelter		1
Equatorial Mining North America, Inc. Equatorial Mineral Park		1
Vroom Engineering & Mfg.- Arizona Portland Cement		1
Slip	ASARCO Mission Mill	1
	ASARCO Mission Unit Pit 30 North Mill Control Room	1
	ASARCO Mission Unit Pit	1
	BHP Copper Inc. San Manuel Underground	2
	Cyprus Tohono Corp. Leach Pad	1
	Equatorial Mining North America, Inc. Equatorial Mineral Park	1
	Southwest Energy Inc. ASARCO Ray Complex	1
Struck Against	BHP Copper, Inc. San Manuel Underground	1
	Cyprus Miami Mining Corp Rod Plant	1
	Phelps Dodge Morenci Mine	1

**Struck By**

Addwest Minerals, Inc. Gold Road Mine Underground	1
Arizona Portland Cement Co. Rillito Mill	1
ASARCO Mission Unit Pit	1
BHP Copper Inc. San Manuel Underground	5
BHP Copper Inc. San Manuel Surface @ Underground	1
D.L. Campbell Co. Chenoweth Aggregate Plant	1
Phelps Dodge Morenci Concentrator	1
Phelps Dodge Metcalf Mine Open Pit	1

Tripped

ASARCO Mission Unit Pit	1
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Other

ASARCO Hayden Smelter	1
ASARCO Mission Mill	2
ASARCO Mission South Mill	1
ASARCO Mission Unit Pit	3
BHP Copper Inc. San Manuel Underground	3
BHP Copper Inc. San Manuel Surface @ Underground	2
Cyprus Miami Mining Corp Smelter	3
Cyprus Sierrita Corp Sierrita Mill	1
Cyprus Tohono Corp. Tankhouse	1
Equatorial Mining North America, Inc. Equatorial Mineral Park	1
Flagstaff Cinder Sales, Inc. Red & Black Pit	1
H & S Developers, Inc. Fortuna Pit 1	1
Phelps Dodge Morenci Mine	11
Silver Bell Mining, LLC Silver Bell	1

TOTAL REPORTABLE ACCIDENTS 1998 90



FATAL ACCIDENTS

Fatal of Mr. Arlo Wade

Mr. Arlo Wade was fatally injured on March 4, 1998 at approximately 8:30 PM by fall of ground at Broken Hill Properties (BHP) San Manuel Mine. The incident occurred while working with two other miners installing steel ground support sets on the 3570 Level, Panel-12, number 21-transfer raise station position. The ground had loosened by secondary blasting and approximately ten tons of rock fell and buried Mr. Wade. The official cause of death was "Traumatic Asphyxiation". Three violations from the Arizona Mine code were issued to the operator with three additional recommendations.

Fatal of Mr. Peter R. Sierra

Mr. Peter R. Sierra died from asphyxia due to the inhalation of mine tailings at the Phelps Dodge, Morenci mine. On Sunday, August 9, 1998, Mr. Sierra responded to a broken feeder line located at the West Side of the number 4 tailing impoundment. A co-worker found Mr. Sierra sitting next to a slurry valve with the tailing solution running over him.

Mr. Sierra had a history of hypertensive heart disease and it is believed that a heart attack might have been the indirect cause leading him to collapse on the tailings pond runoff. There were no witnesses to the accident. No violations were observed in the investigation of this incident.

Fatal of Mr. Anton H. Bisjak Jr.

Mr. Anton Bisjak Jr. was fatally injured on September 18, 1998 at 3:15 PM. The incident occurred at the Dunbar Stone Company's, Perkins Pit, located 4 miles east of Chino Valley on Perkinsville Road. Mr. Bisjak was operating a Caterpillar 950 front-end loader transferring crushed aggregates from one stockpile to another. The loader had no operable brakes and went over the side of an unbermed highwall. The loader was equipped with seat belts in the cab but did not have roll over protection.

Evidence at the scene indicated Mr. Bisjak tried to stop the loader by dragging the bucket prior to going over the high wall. The loader fell 15 feet landing on its top, crushing and killing the victim. There were no witnesses to the accident.

Four violations from the Arizona State Mine Code were issued to the operator.



EDUCATION AND TRAINING

Arizona State Mine Inspector's Education and Training division provides mine health and safety training throughout the state of Arizona, primarily at small operations without a full time safety-training professional. Contractors, who work on mine properties, contact this office for their training. Instructors offer a variety of classes dependant upon the federal requirements and the needs of the students. Safety training often carries over from the workplace to home, where employees can recognize and eliminate domestic hazards. All new miner training and refresher training includes First Aid, *a lifesaving skill that is used on and off the work place.*

Training is conducted statewide, at both mine sites and in various towns. In addition to providing training, the Education and Training division maintains a lending library of training tapes and printed materials to the mining community for use in their safety training programs.

Education and Training coordinates activities and assembles programs and speakers for the annual May Instructor Refresher Course and the October International Mine Safety and Health Conference.

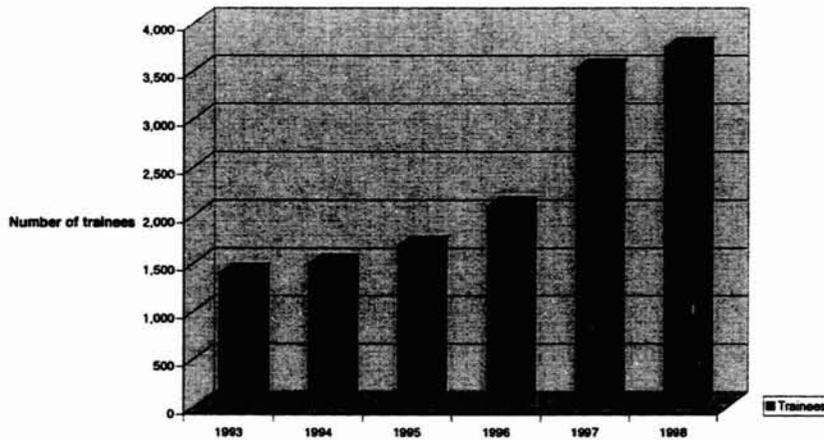
Number of Miners and Mine Contractors Trained	3,754
Number of Instructors Trained and Certified as MSHA Instructors	53
Number that Attend the Instructor Refresher Seminar	154
Number that Attend the International Mine Health and Safety Conference	194
Number trained in First Aid	334
Number trained in Mine Rescue	49
1998 TOTAL TRAINED	4,538



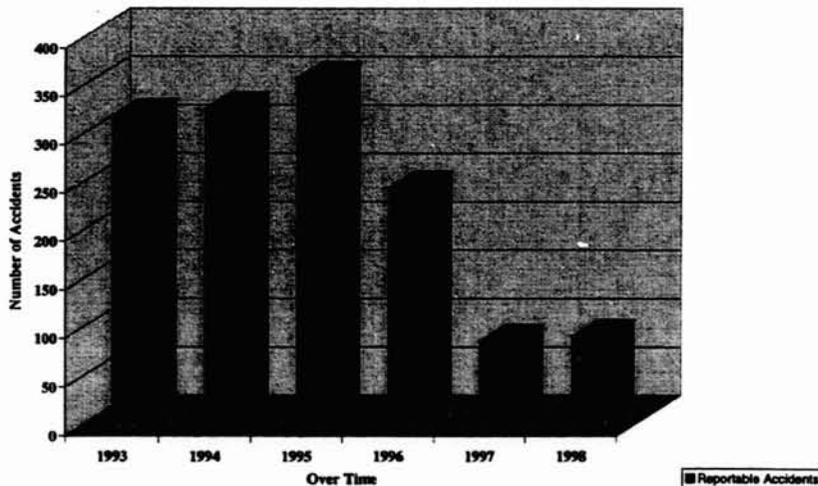
CHART COMPARISON – TOTAL TRAINEES VS ACCIDENTS

The average increase of New Miner Trainees from 1996 over the past three years, 1997-1999, was 85%. This correlates with the decrease in Reportable Mining Accidents as reflected in the following graphs. These graphs provide a direct correlation between the number of miners trained, relating to the number of accidents, illustrating that as the number of New Miner Trainees increase, the number of reportable accidents decrease.

Arizona State Mine Inspector
Safety Trainees through MSHA State Grant



Reportable Mining Accidents in Arizona





ABANDONED AND INACTIVE MINE ANNUAL PROGRAM SUMMARY

In January, Ronald Young, 64, was fatally injured when he fell approximately 60 feet down an internal shaft at the Gunsight Mine. The mine is located about four miles east of Why, Arizona, and 15 miles southeast of the town of Ajo. Young had recently purchased the Gunsight Mine with hopes of developing a tourist attraction.

According to the Pima County Sheriff's report, Young and two friends entered the mine without safety equipment, hard hats, lights or mining experience. Young, separated from his companions, went into a tunnel he had not previously explored. When his friends realized Young was missing they followed his tracks using a road flare to light the way. They discovered the internal shaft and assumed Young had fallen. They used a mobile phone to call the Pima County Sheriff's Office to report the accident. Officers responded to the call and found the victim's body sixty feet down the shaft on a ledge.

Historical records show Gunsight Mining District activity began in the late 1870's with the original patents issued in 1882-83. The Gunsight Shaft is over 640 feet deep with four intermediate levels. One large stope extends from the surface down to the 100-foot level. The town of Gunsight was once home to 1500 residents.

In the second regular session of the forty-third Legislature, Senator Rusty Bowers introduced Senate Bill 1250, the Abandoned Mined Lands Safety Fund. The Bill established a fund to consist of gifts, grants and contributions from private individuals; companies and corporations designed to ensure public safety at abandoned mines located on state lands. The Legislature would match the amount of contributions based on the preceding year's expenditures. The Arizona State Mine Inspector's Office was designated to administer the fund. This money will pay contractors for actual costs of filling, fencing or plugging openings but cannot pay administrative salaries or other costs. The Arizona State Mine Inspector's Office consults with the State Land Commissioner to prioritize the abandoned mine sites on state lands considered for abatement. The Bill passed both houses of the legislature with no opposition and was formally signed into law by Governor Hull on August 31.

In preparation for the first closure under the Abandoned Mined Lands Safety Fund, officials from Arizona State Mine Inspector's Office, the State Land Department, and Phelps Dodge Mining Corporation visited several mine sites to determine an appropriate mine for the program kick-off. Two sites were chosen for the initial closure activities, a site near Cave Creek and a large mine south of Wickenburg. Both these mines will be closed in the first half of 1999. Closures under the Fund may include fencing, filling, or bat gates.

Thirty mines were fenced by the Arizona State Mine Inspector's Office prior to the passage of the Abandoned Mine Lands Safety Fund. These included a dangerous mine near Tucson and several shafts near Salome, Tonopah and New River.



Early in 1998, the Arizona State Mine Inspector's Office and the Bureau of Land Management agreed to convert the existing abandoned mines databases into a GIS (Geographic Information Systems) accessible database compatible with ArcView. The resulting information will be used by the BLM field offices to access the abandoned mine reports as an additional data layer in existing GIS packages. An initial test area was chosen in the Cerbat Mountains northwest of Kingman, Arizona, in the northwestern part of the state.

The Abandoned Mine Program continued its tradition of professional publication by presenting two papers at the annual National Association of Abandoned Mine Land Programs conference in Albuquerque New Mexico in September. The first paper titled "Conversion of the Arizona State Mine Inspector's Office's Abandoned Mines Database into a GIS-accessible database". The Arizona State Mine Inspector's Office is the first Abandoned Mine program in the National Association of Abandoned Mine Land Programs to attempt this conversion into a much more powerful format. The second paper, titled "Subsidence Mitigation in Tombstone, Arizona," describes the subsidence emergency in Tombstone and the steps taken to alleviate the situation.

An emergency in Tombstone began in mid-July 1997 when Toughnut Street began subsiding. The Arizona State Mine Inspector, Douglas K. Martin issued a warning indicating the mine was collapsing. On January 2nd, 1998, the street began to collapse, exposing a hole three to six feet in diameter. Within days, the hole widened over twelve feet in diameter. Investigators discovered an eight-inch secondary sewer line had broken discharging raw effluent into the century old "Good Enough" mine.

Mayor Delmas E. Harper declared a state of emergency as the businesses on the south side of Allen Street were jeopardized by the loss of sewer service. Ten thousand emergency dollars were allocated to the city of Tombstone by the Cochise County Board of Supervisors. After the secondary sewer line was repaired the potential failure of the main sewer line located in the center of Toughnut Street became the next immediate problem. Rather than wait for the line to fail, a plan was needed to prevent an even bigger disaster from occurring.

Drilling to determine the path of the new sewer line, a total of eight test holes were drilled. Several of the holes intersected voids, indicating unmapped mine workings. Roughly 200 feet of the sewer line below Toughnut Street was moved 20 feet to the southwest. The new sewer line was completed by July 29th and Toughnut Street was re-opened to traffic August 15th.

In late August detectives from the Maricopa County Sheriff's Office and the Department of Public Safety contacted the Arizona State Mine Inspector's Office regarding an on-going investigation of stolen cars and a possible connection to the Amtrak Train derailment near Hyder in 1995. The cars had been dumped in a mine near Buckeye known by locals as "Hell's Gate". Track tools and what could have been an escape vehicle, were recovered from the mineshaft.



For the third consecutive year, geography students from Mesa Community College volunteered with the Arizona State Mine Inspector's Office. The students volunteered 20 hours to learn how geographly is applied in the work environment.

Since 1991, a group of retired executives in cooperation with the Arizona State Mine Inspector have posted warning signs at abandoned mines in southern Arizona. Once a week the group of nine take their own four wheel drive trucks out to locate, map and post warning sign at the abandoned mines. To date they have located over 6,000 mines in an area roughly 7,000 square miles.

Abandoned Mine Statistics Through 12/31/98

Total Sections Surveyed	908
Topographic Maps Completed	127
Approximate Acres Completed	5.12 Million
Total Number of Openings Surveyed	8,787
Total Number of Openings Surveyed, not on Previous Maps	4,581
Sites with Possible Environmental Hazards	288
Percent of Sites with Possible Environmental Hazards	3.28%
Sites with Significant Public Hazards	1,149
Percent of Sites rating as Significant Public Hazards	13.1%
Total Number Of Mines Fenced	30



MINED LAND RECLAMATION

Arizona's Mined Land Reclamation Act and Rules, requires all metalliferous mines located on private lands with surface disturbances totaling more than five acres to submit reclamation plans and financial assurance mechanisms to the State Mine Inspector for review and approval. In 1998, one new reclamation plan was submitted and nine plans were approved. Three plans are currently under review and two mines have been granted extensions of time for plan submittal. Five annual status reports were received and reviewed; nine mines were inspected to ensure compliance. A total of 160 acres of mined lands under the jurisdiction of the Mined Land Reclamation Act and Rules were reclaimed in 1998.

Members of the Reclamation Division attended the American Society for Surface Mining and Reclamation (ASSMR) Annual Meeting and the Western U.S. Mining-Impacted Watersheds: Joint Conference on Remediation and Ecological Risk Assessment Technologies. The Division also took part in the planning and award nominations for the 1999 ASSMR annual meeting to be held in Scottsdale, Arizona.

Company	Mine	Acres Reclaimed (1998)
Addwest	Gold Road	0
Arimetco	Johnson Camp	0
ASARCO	Hayden	0
	Mission	0
	Ray	0
	Santa Cruz	0
	Silver Bell	0
BHP	Florence	0
	McCabe	125
	Miami	0
	Pinto Valley	0
	San Manuel	0
	Superior	0
Carlota Copper	Carlota	0
Cyprus	Bagdad	0
	Miami	0
	Sierrita	12
	Twin Buttes	0
Equatorial	Mineral Park	23
ORMP	Oracle Ridge	0
Phelps Dodge	Ajo	0
	Morenci	0