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TWENTY-FOURTH ANNUAL REPORT

OF THE

State Inspector of Coal Mines

1936



1937

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LETTER OF TRANSMITTAL

Denver, Colorado, April 1, 1937.

To His Excellency,
TELLER AMMONS,
Governor of Colorado.

Sir: Herewith I have the honor to submit to you, in accordance with Section 3475 of the Compiled Laws of Colorado of an Act entitled "Coal Mining Laws," Annual Report of this department.

The period covered being the calendar year 1936.

 ${\bf Respectfully,}$

THOMAS ALLEN,

State Inspector of Coal Mines.

PERSONNEL OF THE COAL MINE INSPECTION DEPARTMENT

THOMAS ALLEN, Chief Inspector	Denver, Colo.
Ada R. Tibbits, Chief Clerk	Denver, Colo.
MAX M. GREENWALD, Assistant Clerk	Denver, Colo.
VEDA BURFORD, Safety Director	Denver, Colo.

FIELD FORCE AND DISTRICTS

- George C. Dalrymple, % La Court Hotel, Grand Junction....... District No. 4

All of the mines in Archuleta, Delta, Garfield, Gunnison, La Plata, Mesa, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco and San Miguel counties.

SUMMARY OF THE COAL PRODUCTION OF COLORADO FOR 1936

and the same of th	000
Number of mines operated	329
opened. 5: total	12
Number of mines closed, 23; abandoned, 3; total	26
Tons of sub-bituminous coal produced	128.465
Tons of bituminous coal produced	4,136,865
Tons of bituminous coal produced Tons of anthracite coal produced Total number of tons of coal produced Increase, 1936	5,455
Total number of tons of coal produced	897 176
Tons of run of mine coal produced.	1,198,826
Tons of lump coal produced	1,750,492
Tons of egg coal produced	29,472 672,331
Tons of pea coal produced.	672,331 606,299
Tons of slack coal produced.	2,588,408
Percentage of slack coal produced	51%
Tons of coal mined by hand	2,958,857
Tons of coal mined by machine.	3,886,980
Number and kind of machines used: Compressed air, 31; electric, 419; total	450
Number of mechanical loaders	83
Number of tons mined by mechanical loaders	419,906
Tons of coal mined for shipment: By railroad, 5,091,340; by trucks and wagons, 1,565,745; total	
and wagons, 1,565,745; total	6,657.085
Tons of coal used at the mine for power and heat	188,752
Tons of coal shipped out of the state	868,820
Tons of coal made into coke	657,746
Tons of coke made	398,634
Number of days coke ovens operated	312
Number of coke ovens used.	291
Number of men employed at coke ovens	74
Number of miners employed: Pick miners, 2,040; machine miners, 4,307; total	6,347
Number of men employed in and about mines (average): Underground, 7,366; Surface, 1,639	9,005
Number of days worked (man-days)	177.4
Daily production per miner.	6.1
Annual production per miner	1,078.6
Number and type of safety lamp used—flame 495; electric 7,883;	0 970
Number of carbide lamps used	8,378 2,444
Number of pounds of carbide used (approximate)	98,428
Number of pounds of black powder used	556,012
Number of pounds of permissible powder used	457,506
Number of pounds of dynamite used.	26,732
Number of men killed—underground 25, surface 4; total.	29
Number of men injured.	1,148
Number of men killed per thousand employed-actual number of	,
days worked.	3.22
Number of men killed per thousand 300 day workers	-5.44
Number of men injured per thousand employed	127.5
Number of tons of coal produced for each life lost	236,063
Number of tons of coal produced for each non-fatal accident	5,963
Number of men killed per million tons of coal produced	4.24 167.7
Number of men injured per million tons of coal produced	310.5
Number of men employed per fatal accident	7.8
Number of widows left	22
Number of children left fatherless	43
Cost of development work in mines during 1936.	
Mines reporting costs	116

NOTE—Yearly reports of 23 mines were filed too late to embody their combined production of 17,128 tons of coal in the tables of this Annual Report. However, they are included in the "Mine Directory."

STATEMENT SHOWING RECEIPTS AND DISBURSEMENTS FROM JANUARY 1 TO DECEMBER 31, 1936

RECEIPTS

Tax collected on coal mined.	\$26,533.63
License to operate coal mines.	14.610.00
Sales of copies of the coal mining laws	
Refunds	6,411.13
Total	\$47,699.81
DISBURSEMENTS	
Salaries entire department	\$23,129.31
Fatal accident investigators, per diem and expenses	
Railroad transportation	
Automobile mileage and expenses	
Board of examiners	
Printing	
Postage	
Stationery and office supplies	
Telephone service (toll calls entire department)	
Telegraph service	
Field equipment	
Hotel	
Meals	
Miscellaneous	
P. W. A.	225.17
-	
Total	
Balance on hand December 31, 1936	\$ 9,768.33

INTRODUCTION

Twenty-third Annual Report

OF THE

STATE INSPECTOR OF COAL MINES 1936

The report of the coal industry for 1936 shows a substantial increase in production over 1935. Colorado produced 6,845,837 tons of coal during the calendar year of 1936, representing an increase of 897,176 tons over the year of 1935. This tonnage was produced by 329 mines, employing an average number of 9,005 miners and other employees, who worked 177.4 man-days. There were 304 companies and individual operators reported, with very few operators working more than one mine.

Of 329 mines reporting, only 79 have railroad connection, the balance being served by trucks and wagons.

There were seven new mines opened during the year, and five old mines reoponed. The largest new mine is the New Centennial, in the Louisville district, a description of which is included in this report.

Modern machinery is being rapidly introduced into our coal mines. Tables will be found herein, showing the number and types of devices now being used.

The number killed in and around mines was 29 men, eight of whom were killed in an explosion on January 20th, 1936, at the Monarch Mine, in Boulder County. During the year there were 1,148 injuries reported.

EDUCATIONAL PROGRAM

There is a great deal of activity in educational work being conducted among the employees in and around coal mines. Operators and miners are responding in the drive for greater safety in our mines.

There are several chapters of the Holmes Safety Association in different parts of the State, with the movement toward this type of effort growing steadily. Over 1,000 men have been trained in First Aid to the Injured, in the past year.

The safety program has been extended to include the women of our coal mining areas. In Northern Colorado 96 women received training in First Aid; this work is being carried on under the supervision of this Department, and under the direction of Veda Burford.

The program among the women, in addition to the training in First Aid to the injured, includes their organization into assistance rescue groups. The purpose of these groups is to be of assistance in any disaster from the nearest women's organization, enough of them will report at the scene of the accident, to take care of the families who need assistance, and to take care of the housing and feeding of the crews engaged in rescue work.

An examination was held for mine officials in December. Out of 258 candidates, 195 men were certified to act as officials in coal mines.

WORK OF THE FIELD FORCE

The following is a summary of the work done by the field force during the year.

Total number of inspections made	947
Total number of mines inspected	430
Number of fatal accidents investigated	30
Number of inquests attended	19
Scales inspections.	9
Complaints investigated and adjusted	42
Prosecutions	None
Miles traveled by automobile	1,805
Miles traveled by railroad	1,567

Respectfully submitted,

THOMAS ALLEN,
State Inspector of Coal Mines.

NEW CENTENNIAL MINE OF BOULDER VALLEY COAL COMPANY

The New Centennial Mine is situated two and one-half miles east of Louisville and two and one-half miles south of Lafayette on the Chicago, Burlington and Quiney Railroad.

The depth of the main shaft is 280 feet, size of shaft 10'x17', size of hoisting compartments 6'3"x10'. The shaft is timbered with four, five and six inch Oregon fir. The main shaft equipment consists of two C. S. Card cages, size of hoisting cable is 11/4", two 6-foot bicycle type sheave wheels with 6-inch shaft.

The main hoist is a Vulcan two-drum hoist with 6-foot diameter drums, air and mechanical brakes and driven by a 350 h. p. motor.

The depth of the air shaft is 275 feet, size of shaft 8'x10', size of hoisting compartment 6'x8', size of quarter shaft 3'8"x8' and timbered with 4-inch Oregon fir. The airshaft equipment consists of a 6-foot single stage Jeffrey Airovane fan, a concrete duct thirty feet long from the fan to the shaft, a 30 h. p. electric hoist with a 34" rope and a steel cage. The quartershaft has a spiral stairway.

The tipple is an all-steel structure equipped to load both railroad cars and trucks, having four tracks. The tipple consists of a shaker eight feet wide capable of screening six different sizes of coal at one time. There are six storage bins, four with a capacity of fifty tons and two with a capacity of one hundred tons, a total storage of four hundred tons. These bins will store 1½" slack, 2½" slack, modified pea, pea, nut and egg coal. Besides the main shakers there are thirteen conveyors, two bucket elevators, three picking tables, one crusher and four Holmes spiralators. The tipple was designed by E. C. Horne and Company.

There is an aerial tram over the rock dump suspended between two steel towers, one is twenty-two feet high and the other one hundred and twenty-five feet high. These towers are seven hundred and fifty feet apart. The tram cable is a two-inch wire rope anchored at both ends by huge blocks of cement buried beneath the ground.

The pit cars are of steel, being nine feet, three inches from bumper to bumper, fifty-two inches wide and thirty-seven inches high, capacity about thirty-five hundred pound bed load.

The bottom of the shaft is double tracked with a capacity of fifty loads. The bottom is to be equipped with automatic cagers later on.

So far all mining has been done mechanically, consisting of seven Goodman shaker loaders and two Vulcan shaker loaders. There has been about 8,000 feet of entry driven and no rooms have been turned as yet. Top coal is being left in all entries and the bottom is brushed when necessary. All main line track will be of forty pound rails.



	·		DIRECTORY OF COAL		TATE OF COLURADO		NDING DECEMBER 3	31, 1936							
Name of Company or Operator	Name of Mine	tounts	Name of Manager or ticheral Superintendent	Post Offsic of Company	Name of Mine Superintendent	Post Office of Mine	Rally carl to Mine	Shaft	Kind of	(Opening	Length of Drift	Rock '	Punnel	Avera Thickn of Sea Feet	af a
T t. Cox Chas Meliroom W T Noskaman Rocky Mountain Fuel Co.		Archuleta Archuleta Archuleta Boulder	J.P. Peabody	Pagosa Sarings Flyke Pagosa Springs Fenver	T L Cox Chas McBroom W J Norsaman David A Kerr	Pagosa Springs Dyke Pagosa Springs Superior	None Note Note C & S	245	200	12*	250	120	1 7	5 10 2 to 4 14 to 5	
Vat Coul Mining Co Randard Poal Mine inc National Fuel Co Louisville-Infayette Coal	Vulcan Standard Monarch No. 2	Roulder Roulder Roulder	Kenneth O Wood T P Jenkins	Lafayette tafayette Donger	J W Trougetair Boy Williams	Infavette Infavette Broomfield	CBAQ CAS	115 120 130		pn				5 4 to 5	2
David Allan Black Diamond Coal Co. Pluto Coal M. Co	Hi-Way Crown Black Dlamond No. 2 Pluto No. 2	Houlder Houlder Houlder	Frank Yakes, Jr David Allan Thos P Ullton Frank E. Hodgson	Louisville Corham Lofarette Superior	Then P Rilton Frank 2 Redgeen	Louisville Lufayette Superior	C B & Q None None	No trac	et Sulani 2,510					-,	6
Domentic Cost Co Eldorado Cost Co 18gb View Cost Co Lox Cost Co	Gorliam Edgirado Eligh View Fox	Houbles Houbler Boubler Boubler	Geo C Watson Henry Richards James Wordle C C Ivaniels	barlder Corpura Corpum Corpum	John C. Nelah Denry Richards James Wardle Mine Chaed	Roulder Gorlann Gorlann No Report Submitted	None None None		1,600 180 100	30° 31° 31° 31° 31° 31° 31° 31° 31° 31° 31	444-4 144-4 144-4	-	Ē	6 6 6	6 6
N M Rusheff Ko-Z Cost Mining Co Itosa Cost Co John Matta	Gewin No. 2 Firestide New House New House	Roylder Roylder Roylder Roylder	J. W. Thomas	Gorhum Garleyllle Garlein Gorbum	N M Hushoff J W Thomas D to Edwards John Matia	Gorham Louisville Gorham Gortam	None None None		t,500 342	\$ 42 PG	diaga di hidid	100	AAA AA	3'2" to 6	6
Regal Coal Co Cracker Jack Coal Co Premier Coal Co Paramount Coal Co	Hegaj Craeker Jack Promier Paramount	Boulder Boulder Boulder	Peter Dt Glacomo	Boulder Boulder Boulder Lafayette	Chas Whilford J.A. Williams Frank Dellan Joseph Rissl	Louisville Boulder Goulder Lafayette	Note Note None None	380	100 200 1,000	15%	i bi mar amma.	364		4106	****
Tri-Slate Coal Amen Pittshurgh Coal Co Northern Coal Co Roulder Valley Coal Co	Pine Cliff Red Ash No 2 Trople Centennial	Boulder Boulder Houlder Houlder	Hugo M. Ronfund	Roulder Gorbam Boulder Donver	Itugo M Hentund D R Dayles Frank Pickard Pred Nesbit	Houlder Gorham Houlder Louisville	None None Note C It & O		1,000	/* sr@		35 80		il	9 11
Fundita Coal & Coke Co Green Valley Coal Co Hed Canon Coal Co	King Green Valley Red Canon	Delta Delta Delta Delta	John S. Bowle	Bowle Codaredge Colaredge Paonia	A It Bowle Q T Brooks Isloyd C. Patton Guy Cowls	Howte Cedaredge Cedaredge	None None None	3.40	6,700 2%1 1,200	361 636	+-			12	6
Pagnia Parmers Coal Co Independent Coal Co States Hall Coal Co Winton Coal Co Western Star Coal Co	Paonia Independent States Hed Mountain Winton Western Star	Telin Delin Delin Delin		Cedurodge Cedurodge Austin	R T. Clipp C. E Hall C A Rowering C. W. Rinehart	Cedaredge Cedaredge Austin Cedaredge	None None None None		1,200 800 800	10. 12.	1/ baddyonamp	100	25%	10 13	1 5 TO
Black Diamond Cool Co Hennett Coul Co. Barker Cool Co Beaver Valley Coul Co	Black Plamond Bennatt Barker Benner Valley	Delta Delta Officet Filtert Otherl		Cedaredge Heichking Matheon Agate Fondly	Win Chraten Hiram Allison J. M. Delrympie Henry Battain	Coduredge Holebkins Matheson Agate. Fundis	Nane None Nane None	75	Not Ite; Not Ite; Not Ite;	mrted Horted				- " 6	
Henry Battafo Guy Jordan Harry E. Blay Pikes Peak Fuel Co.	Jordan Valley Pikevlew	Elfort Elfort El Paso	W D Wade	Agate	Guy Jordan Harry E. Hlas V. H. Adansii Waller Colburn	Agate Callian Pikeview	None None None DAHGW	176	Not Iter	ported 10%				6 1	-6
Calepado Springs Co. Thomas Mintug Co Coriey Coal Co. Allitude Coal Co	City Coal Mines Liminy Comp Corley No. 3. Altitude	El Pato	II. J. Gehm W. D. Corley Thos. W. Howells	Colorado Springs Colorado Springs	Fred Sovelk Myron W Williams II. S Bennett	Colorado Springs Colorado Springs Colorado Springs Colorado Springs	None None None		1,700 2,000	6° 6%		30		\$ 10.20 \$ to \$. 6
John Sirrenan Busy Bee Coal Co Panville Conl Co Victor-American Fuel Co	New Keystone Busy Bee Climax Chandler	El Paso El Paso El Paso	Wm. F. Schlenzinger	Colorado Springs Colorado Springs Calerado Springs Denyer	John Streenan Frank Anaec James Halston A.R. Sneddon	Colorado Springe Colorado Springe Colorado Springe Chandler	None None None D. & R. G. W	16234	263 650 125	25.55 20.55 33.55	***************************************	100		4 to 14 10	Ĭ
Colorado Fuel & Iron Corp _ Gulliano & Carpine Canon Monarca Coni Co Tony Saniarelli	Rockynle No. 3 Cedar Canon Canon-Monarch Double Dick	Fremont Fremont Fremont	J. H. Rupn (M. Dept.)	Plorence	W. J. Davis J. G. Guillano Wm. H. Lloyd Tony Sanlarelli	Canon CHy Florence Florence Florence	A. T. & S. F., None, None, None		6,000 1,335 1,500 2,300	15 50	***************************************	200	######################################	5 to 6 2 6	-5
Caldirela Coal Co Canon Black Diamond Coal Co Royal Gorge Coal Co	Caidirola Canon Black Diamond Royal Gorge Griffiths	Fremont Fremont Fremont	Louis Yellico Stanley Z. Pavalsky W. R. Gemiths	Florence Canon City Canon City	Stephan Regardi Louis Yellico Stanley Payalaky Wm. McShane	Florence Canon City Canon City	None. None A T. & S. F D & R. G. W.	44.41.	2,000 1,600 350			57	98 And \$4.4.4	643 to 7	6 10
Griffitia Coal M. Co American Independent Coal Co American Independent Coal	American Independent American Independent	Fremant	D L linnsen	Florence	D. L. Hannen	Florence	None	2004	1,350	18°	************	730	***************************************	3	G
Co. Bluff Springs Leasing Co Mt. View Coal Co Nustafa Coal Co	No. 3 Bluff Springs Rucchilo Nushaft	Fremoni Fremoni Fremoni Fremoni Fremoni	D. L. Hansen Jas I. Nowell John Rocchio E. II Cribbs E. II Cribbs	Florence Florence Florence Coal Creek Coal Creek	D. L. Hadren John E. Newell Mickle Rocebio J. R. Goodman J. H. Goodman	Florence	A. T. & S. F. None None None	***** ****- *	125 720 1,600 1,600	170	FE 0-1 ++++ FE 0-1 +++++ 	225	4%	3 3 4	8 6 ***
Nushaft Coal Co. Hrookalde Coal M Co. Pawn Hollow Coal Co. Parino Coal Co	Brookside Faws Hollow Newlan Creek	Fremont Fremont Fremont .	Frank Orecchio Florian Adamic	Florence Canon City	Frank Orecchin Florian Adamie. James Pering	Plorence Canon Cily	None None None	**	1,500 700 750	12% 10 12%	\$	30	49 AARAAAA AAAA 1	6 3 % to 3	-
Bald Coal Co. Grand Prize Coal Co Canon Zenith Coal Co Florence Coal Co	Bald Grand Prite. Canon Zealth	Fremont Fremont Fremont		Canon City	James B Hald Frank Jermanee Joseph Z. Duca Martin Kalloig	Canon City Canon City Rickwale	None None None None	TTTT IN	800 600 900 200	196	4	100		3	£ 6
Canon Peacock Coal Co Canon Liberty Coal Co Little Johany Coal Co Canon Ideal Coal Co.	Canon Pracock Canon Liberty Liftle Johnny Canon Ideal	Fremont Fremont Fremont	John Lippis Louis Del Sandro	Canon City Canon City Canon City Coal Crerk	F. W. Ranson Anion Strainer Louis Del Sandro	Canon City	Nane None None	\$10 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 =	176 300 360	25 % 2 %	STOPPART - at		300	3	1-1
Canon Red Arrow Coal Co. Sam Petry. Manley Coal M. Co. Tony Scull!	Canon Red Arrow Pelry Manley Boulder Canon	Fremoni Fremoni Fremoni	Tony Sculti	Florence Florence Florence Florence	Joe Zontine Sam Petry Wm. Manley, Sr Tony Scutti	Florence Florence Canon City Florence	None None None None	92	500 500	3 % 16 %	**************************************			3 3 4 5	6 6
Canon Black Hawk Coal Co. Cleaner Imperial Coal Co. South Charles Coal Co. Moschett Coal Co.	Canon Black Rawk	Fremont Fremont Fremont Fremont Fremont	Alex Bellramo Frank Santarelli J. H. Connell Domesic Moschetti Joe James	Canon City	Alex Beltramo Frank Santare () A. J. Itale Domenick Mon (ett) Joe James	Canon City Florence Canon City Canon City Florence	None None None None	Not Sta		12.1% 6% 8% 1%	**************************************	200	Spumphishiaa Spumphishiaa Spumphishiaa	3	
Fagis Coal Co Evans Coal Co Canon King Coal Co.	Eagle Evans Conon King Bussick No. 3	Fremont Fremont Fremont	Thos, Walker = Hichard Evans - Virgil Blanchard L. W. Crenger - Hickard - Hi	Florence Coal Creek Canon Cily	Richard Evana Virgil Blanchard	Florence	None A.T. & S. F None		300 1,500 100 250	71* 6% 20%		######################################	######################################	***************************************	30
Canon Tiker Coal Co	Canon Tiger Horse Shee	Fremoni Fremont	Ira Cordray & John Holt. Robt, Donaldson	Plorence	A. R. White.	Florence	None None None	######################################	590 300	* E*	**************************************		#*************************************	3 1 3	10
Pine Guich Cont Co	Pine Golch Willie No 32 Carboneta New Castle	Frement	Paul Careatia Homer D. Ford W. E. Coles	Plorence	Paul Carcatin Jae, B. Bennelt W. E Coles	Plorence Plorence Carbonera	None	3110	400 300 2,325	3 8 % 5 8 %	**************************************	700	7%	16 16	6
South Canon Mine Leasing Co. Renry Zieseniss Liewellyn Coal Co. James Le Donne.	South Canon Zieseniss Silt Harrey Gap	Garneld Garneld Garneld	Jas. IA Ford Henry Ziesentes Ross Liewellyn	Glenwood Springs UIOc SIII	Andy Zemlock Henry Zleacniss Recs Liewellyn James Le Donne	Glenwood Springs Rille Silt Silt	D & R. G. W		500 360	15° 72° 56°	A	256	чений подержания подержания подержания подержания подержания и подержания и подержания	3	
Frank De tloy Hamend Fuel Co. Rauman Coal Co. Estes Bros Coal Co	Ohkrayt	Garfield Garfield Garfield	David Oavies	Glenwood Springs Glenwood Springs Hiffe	Prank De Boy David Davies	Glenwood Springs Glenwood Springs Ritle	None None None None	Adal: Appas	500	50°		3,000	++++++++++++++++++++++++++++++++++++++	3 4 1	6 2
Dain Skeels Stove Canon Coal Co Arthur Holmes Ingle-Itans-lingle Coal Co	Stove Canon	Garfield Garfield Garfield	Clydel, Paris	Fruita Pruita Biffe Glenwood Springa	Clyde L. Varis Arthur Holmes Ralph W. Ingle	Fruita. Fruita. Illia. Glenwood Springa	None None None None	Not Itop	1,000 1,000 erred (60	1% 7% 78%		\$275+++4A-15		6	=
Calumet Fuel Co	Someract Crested Butte Oliver Bulkley No 2	Gunnisen Gunnisen Gunnisen Gunnisen	A C. Watts. G B Rupp. E. M Oliver. Jus G Berryhill, Jr.	Pueldo	Robt. Williams, Jr H. D. Pinkney Bonald C. Oliver	Somerset Crested Butte Somerset Crested Butte	D, & R, G W D, & R, G W O, & R, G, W D, & R, G, W	1 411	2,800 3,400 2,640	7 to 10%	**************************************	150	25 %	6 to 7 5 1o 25	
Created Rutte Coal Co	Alpine Now Baldwin (Kubler) Bear	Gunnlaun Gunnlaun Gunnlaun Gunnlaun	J. P. Peabody Tony Bear and Fred Malkka	Denver Denver Denver Somerset	Jns. Palmgren Jas. Gordon	Baldwin Baldwin Somersot	U. & B. G. W D. & R. G. W.	150	3,800 100 900	145	######################################	\$400 mg kmg g g 4	20-0-1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	7 to 8 7 6	
Hr. Carlion Anthracite Co Hawka Nest Coal Co Ohio Creek Coal Co Carlion Creek Coal Co	Hichardson Hawks Nest Ohlo Creek Carbon Creek	Gunnison Gunnison Gunnison Gunnison	Gomer E Dollard. F. J. Blunt G. M. Long Wm., Waugh.	Gunnison Gunnison Gunnison	Gomer E. Dollard Clement Andlin Ike Merlow Wm, Waugh	Gunnison Gunnison Gunnison	None		700 700 2,500 600	14 % 15 % 15 % 15 % 15 % 15 % 15 % 15 %		600		3 6 6	4
Wm II Redley K. D. Coal Co. Continue Anthracite Coal	Hibkle K.D.	Gunnison Gunnison	D. L. Staples	Gunnison Paonia	D. L. Staplea	Gunnison	None		360 275 480	15%	***************************************	50	1%	3	5
Baldwin Puel Co Colorado Fuel & Iron Corp Colorado Fuel & Iron Corp Calumet Fuel Co	Baldwin Star Robinson No. 1 Kebler No. 2 Calumet No. 2	Gunnleon Hyerfano Hyerfano	James Hare G. H. Rupp G. R. Rupp Moront Helice	Bublivin Denver Denver Salt Lake City, Utah	James Hure J. L. McBrayer L. W. Ingles A. P. French	Baldwin Farr Tloga Delcarbon	D & R. G. W C. & S D. & R. G. W	****	10,200 1,400 3,100	22.07.7.2	b	**	31g @	550	6
Alamo Cost Co Gordon Cost Co Callente Cost Co Cullente Cost Co	Alama No. I Gordon Havenwood Mattland	Huerfano Ruerfano Huerfano Huerfano	tleo B Dick S. M. Thompson S. M. Thompson	Denver Walsenburg Rayenwood Havenwood	P. G. Millar S. M. Thompson S. M. Thompson	Alamo Gardon Itavenwood Havenwood	O & R G W D & R G W C & S D & H O W	No Helic		10 % 5 %		800	15%	1	
Pryor Coal Mining Co	Tollee	Ruerfano Ruerfano Huerfano Huerfano	W. H. Donovan Jno Kirkpatrick, Sr. Wm Peachey Reli Tyroer	Denver Toltee La Veta	W. H. Donovan Tony Benami Wm. Penchay	Pryor Tollec La Veta	D. & R. G. W		1,000 1,900 2,000	30%		2 ench 175		3 to 5 3 5	6
Minnequa Fuel Co Black Hawk Coal Mining Co Torrid Coal Mining Co., Red And Poal Co	Hlock Hawk Torrid No. 3 Lender No. 7	Huerfano Huerfano Huerfano	E R Jenkins Mike J. Judiscak	Walachburg Walachburg Agullac Walschburg	Robt Turner R. H. Jenkins L. J. Stone	Walsenburg Walsenburg Agullus Walsenburg	DAHGW None CAS None		1,300 350 1,700 1,200	12% 5%	- YYF7 LAAA	150	32%	· · · · · · · · · · · · · · · · · · ·	4
Major Coal Co	Major Caddell No. 3 Spanish Peak Shamrock	Huerfano Huerfano Huerfano Huerfano	Jim Cornall E4 Caddell W. A. Heam J. D. Hatcher	Waltenburg Watsenburg Tloga.	Jno, Carnall Ed Caddell, Geo, Dale,	Walsenburg Walsenburg Tinga	None None C. & S. & D. & H. G. W	+	1,300 1,300	16%	VI 1		**************************************	3 1 1	
Sam George & Sons doe Maloney Strawberry Coal Co James Murrell.	Cleorge No. 2 Nuggel Strawberry Murrell	Huerfana Unerfana Unerfana Huerfana	Sam Georga & Sons Joe Maloney Ino Foderaro Jan Marrell	La Veta Itughy Walsenburg La Veta	Geo. L. Zickefoone Joo Maloney Jno. Coderato Jaa. Murrell	Lo Veta Itaghy Walnenburg La Veta	Note Note Note Note		150 500 600 120	5 5 % 5 % 5 %	***** - ****** - ****** -*****		65 %	2	6 4
Ceachey Coal Co. Peachey Coal Co Peachey Coal Co Faultless Coal Co. Jun Kilkus Coal Co.	Niggerhead Son Octdontal	Huerfano Huerfano Huerfano Huerfano Huerfano	Wm Peachey Wm Peachey Wm Cenchey Sum Halardeta Jno. Kilkon	Un Vein Lin Vein Lin Vein Un Vein Lin Vein	Wm Peachey Wm Peachey Wm Peachey Sam Balardeta Jno, Klikum	In Veta In Veta In Veta La Veta La Veta	None None None None None	150	500 600 600 160 225	20 T		300	_	12 12 12 5	
Spring Canan Coal Co. Rinchird Coal Co. Stove Mattlyl & Sons Mortls Pittl	Spring Canon Blue Bird Bunker Hill No 1 Bunker Hill No 2	Huerfano Huerfano Huerfano Huerfano	Jan A. McCune Sam T. Taylor Joe Maitivi Arthur Dance	Walsenburg Walsenburg Hugby Arullar	Jan, A. McCuno Joe Mattivi Arthur Dannes	Walneaburg Walneaburg Hugby	None None None	240	600 200 200 200	10 % 14%		300	4%	6	6
Black IIIIIa Coal Co. Midnight Coal Co North Park Coal Co Geo M. Barnell	Black Hills Moore Mare	Huerfano Huerfano Jackwon Jackwon	Pellegrino Basal W. A. Merritt R. W. Moore Geo. M. Barnell	Walsenburg Walsenburg Coalmont Walden	W. A. Merriti Ellmer Brinker Geo. M. Barnell,	Walsenburg Walsenburg Coalmont Walden	None None L N P & W None		200 200 300 350	46 % 3 % 15 %			==.	14 to 1 30 50	6
Leyden Lögnike Co Caprock Fuel Co Jeffernon Coal Co Van Winkle Coal Co	Virginia Van Winkle,	Jeffermon Jeffermon Jeffermon Jeffermon	Harry F Nach S. M Thompson Londa Recae O S. Van Winkle	Waleshburg Littlelon Golden	E. H. Meffeaty Aug. R. Chatin G. E. Twilley G. S. Van Winkie	Leyden, via Golden Walbenburg LittleIon Golden	D&1 Note Note Note	792	650 105	14° 30'5 70° 92°	# A1 AA	12	==-,	7 10 9 12 5 10 11	0000 VAA0
I rotnako Wilaon 'alter Minhork "anilo Coal & Mining Corp. (, K. Coal Co.	Christensen Unity Castle	Jefferson Jefferson La Plata	K C Naff	Littleton Lillleton Durango	R.O Naff	Littleion Littleton Durango	None None D & R G W	No Repo	6,000	~ 6%	**************************************		7999 h.h	5	6
Senatine Coal Co Senatine Coal Co Furning Coal Co Morning Star Coal Co Lectar Cilrown	Sunshine Dyrango Morning Star Fire Clow	La Plata La Plata La Plata La Plata	T E Pierce	Dorango Dorango Dorango Dorango Dorango	Tom Owen, Jr T.E. Pierre Wm. Roberts Frank Grisenti Leonard Brown	Dumngo Dumngo Durango Durango Durango	Notice Notice D & R G W None	- ap. 1	3,700 300	36 T	2,000	526		\$ to 3 6	-6
Peerlonn t. M. Co	Peorless Valley View Excelsion Hay Guich Black Diamond	La Plata La Plata La Plata La Plata	O V Manaing	Durango Mancos Hayfield Hesperus	Thus, G. Plarce	Ourango Mancos Rayfield Hesperus	None None None None	- :	100	28 m² m²		1,000		4 4 5 5	4 10 2
Chan I; Davin Heagerie Coal Co Chan Fingling	Hunj Morning Glory	ta Plata La Plata La Plata	Jim Dilugio Frank Cardone	Durango Dayfield Reap rus Rayfield	Gluseppi Fanto	Purango Ray field Hesperns Hay field	NoneNone	-	1,600			1,000		3 5	=
Soda Springs Chal Co J B Henderson Frank Tipotach Jan. A Hierce	Note Strings Eleutorson Tipotsch Shamrock	La Plata La Plata La Plata La Plata	Frank Tipotsek Jan A. Hierce	Kline Resperus Resperus Resperus	J B Renderson	Hesperus Hesperus Huyffeld	None None None		3 Z D 4 O D	95.	1 ;		######################################	δ ξ υ 8 . Ε .	10
Frank Elletge Pioneer Fuyl Co Heat Coal Co	Hilledge Fire Chief Ideal Liensen	La Plata La Plata Earlmer	Frank Dibelge W. L. Beam A. M. Lowe	Durnogo Raybeld Carr	E C Wichard W L Beam	Durango Hayfield Carr	None None None		700 550	10 % 10 %	275		70%	5	~2 6
Willie Hose Coal Co Walter Overcomp Larimer Coal Co Colorado Fuel & Iron Corp	White Ruse Pluiser Incety Frederick	Larimer Larimer Larimer Las Anlmus	O. H. Hupp	Carr Carr Carr Denver	M Matson -	Carr Carr Carr Valdez	None None None Colo & Wyo	,	100 400 460	12% 16% Lavel	11,500			4 4 5 5	- -
Colorado Puel & Iron Corp Victor-American Evel Co. American Emelting & Hello- Ing Co. Tomple Evel Co.	Marley Delagua Den Carbo Hoodhead No. 9		Wm 12 Schlessinger II II Bubb t' II Wood	Denver Denver New York Trinidad	E. T. Raker F. C. Collater C. R. Garrett V. J. Tretter	Marley Dolagun Cakedale Brodhead	AT SF CASD DAILGW CASAD ARG W		3,800 2,000 8,200 3,500	15% 6%	*** **** ***	600		\$ 4 8	- 41 P
Vickera Coal Co Huerlann Coal Co. Thor Fuel Co Jewell Collingtes Corp	Kenneth Ludlow Thur Creaton	Las Anlmas Las Anlmas Las Anlmas Uns Anlmas	Fin Wood Frank McDormott End Wasstaff Gro H Dick	Trinidad Denver Trinidad Walsenburg	Jno Texast! Frank McDermont Eph Wagstaft Alex Shiebia	Hugley Ludlow Trinidad Aguilar	CAS CAS	=	5,000 7,800 4,300	14	-		tí¶	3 to 6	ï
Dick Coal Co Hear Caron Coal Co Pio Michell Deltono Coal Co	Dix Hear Canon No. 6	Last Ardman	theo II Dick Win G Plesled, Sr Plo Michell	Walsemburg Trinidad. Itugby Trioidad	Henry II Curric Leo Oss Plo Michell J. D. Deldose	Agunar Iton arbo Vallorno Itugby Sopris	D &R.O.W. C &S = Colo & Wyo	-	1,700 2,100	14%		250	177	1 6 8	10
W A Ream Co Home Fuel & Supply Co Jeffryes Fuel Co	Anchor Howen Jeffryen Santa Pa	Los Anlmas Los Anlmas	W. A. Hearn Gro. A. Hearn Gro. Hearn	Tiega Trinidad Trinidad	Chas Pritchard Days Lone	Tripidad Tripidad Tripidad	Polit & Wyo D & H O. W None None		2,600 Not Rep	T.		1,100		5 6 4	*
Santa Ce Coal Co Islocitoto Coal Co Megelson & Littleton Nick Higelo Joe Morasky	Senta Pe Gen Luldy Lakeview Moratky	Las Atilmas Las Animas Las Animas	G W Meggiron	Trinidad Waleschurg Trinidad Trinidad Trinidad	Thos W Twoeldale Joe Glord voo E. W Meggisco	Teinkad Agullar Teinidad Veinidad Teinblad	None None None None		1,200 145 100 30	orted		1,100	36%	2 6 5	1 6
Alog Atoyta Liberty Coal Co Trimbal Supply Coal Co. Datay Coal Co.	l'risco Lillorty Hisom Dulay	Las Anlmas Las Anlmas Las Anlmas Las Anlmas	Alex Abeyta Chas Cuasetto Ino Bahime Adam Galli	Trinidad Agulise Trinidad Agulise	Afax Abeyta Adam Galli	Trinidad Agollar Trinidad Agollar	None None None	Not Itepo	500 rted	Lovel	T 711			5 3 7 3	•
Rainbow Coal Co. Mariorano & Bon Diemetrio Sanchez W. B. Higgs	Halnbow Martorano Sabeliez Lerbox No. 9	Las Animas Las Animas Las Animas	Mike Martorano W. U. Rigger	Trinidad Sopris It mearto Trinidad	Mike Marterano W. F. Riche	Trinidad Sopris Hotelstin Trinidad	None None None	Not Hepo Not Itepo	rted #5	. 13		Tar		* * 15	¢.
W 12 Itlego Starkville Coal Co. Jno. Kezele Agullar Black Diamond Coal	Forher No. 10 Starkville Verdun	Las Animas Las Animas Las Animas	W ti titges Thes W Treeddale Juo, Kexele	Trinidad Trinidad Trinidad	W. E. Higgs Thos. W. Twooddale	Trinidad Trinidad Teinidad	None None	Nul Repo Worked O		. 1% 	-044 			3	6
Guttlerine Bowman Joe Rogerto Vm J Willon	Agulfar Wack Diamond Crystal Ulag Henhour	Lan Anthuna	Guillermo Rowman Joe Roggero	Triplitad Lamen Tripliad Tripliad	Gullicenso Rowman Joe Roggets	Trinitad Januar Trinitad Leading	None None Nation	Not Itopo	rted		***************************************	100	_	3	i i

	Chas 1. Dayle Hesperia Cost Co Chas, Vingling Spita Springs Cost Co	fluit Morning Glory Sods surings Honderson	La Plata La Plata La Plata La Plata	Frank Cardone Jan T Frankan J is Hemlermon	Hesperus Its field rgine Hesperus	Frank Cardone Chas Yingling J B Henderson	Resports Unyfield Kilon Heaperus	None None None	Worked O		100		5
	J. B. Henderson Frank. Throtsch Jan. A. Hierce Frank. Elledge Ploneer Fuel, Co	Tlpatsch Shamrock Elledge Elte Chief	La Plata La Plata La Plata La Plata Larini-r	Frank Tipotach Jan A. Rierre Frank Elledge W. L. Heatn	Hesperus Bayfield Dyrange Bayfield	D C Wisland W L Beam	Hesperus Bayfield Durangs Bayfield Carr	None None None None	(00 ° 2	10°5	275	The second of th	14 10
;	Ideal Coal Co Jame Coal Co White Rose Coal Co Walter Overcamp	fdeal Hensen White Hose Puneer Baceby	Larimer Larimer Larimer	A M Lowe Jun Nogo Walter Overcamp	Carr Carr - Carr -	Jno Nogo	Carr Carr Carr Carr	None None None None	- (\$60 200 100 160	3.00	130	20 % —	1 4 6
:	Larimer Coal Co Colorado Fuel & Bron Corp Colorado Fuel & Bron Corp Colorado Fuel & Bron Corp Colorado Fuel Co. American Smelling & Hefin-	Frederick Mories Delagua	Las Animas Las Animas Las Animas	G H Hupp G H Rupp Wm, D Schlesstnifer	Denver Denver Denver New York	N. M. Watson P. T. Baker P. C. Collister C. H. Garrett	Valdes Morley Delagua	Colo & Wyo. A T & S. P C & S 13	3,500 3,000	Level 1	3,800 *******************************		5 6
	Ing Co	Hon Carbo Hrodhand No 2 Kenneth Ludlow	Las Animos Las Animos Las Animos	H. H. Rubb F. R. Wood F. H. Wood Frank McDermott	Trinidad Trinidad Irnver Trinidad	V. J. Tretter Jno. Texaset Prack McDermott Ech Wagslaff	Cokedale Brodhead Bugby Ludlow	CAS	6,200	15.4 ° 15.4 ° 4.75.	100	112	\$ 10 \$
	That Fuel Co Jewell Callicris Corp Buck Coal Co Hear Canon Coal Co	Thor Creation Dix Bear Canon No. 5	Las Animas Las Animas Las Animas	flpb Wagstaff Geo B Dick Wm G Pleated, Sr Pto Michell	Walsenburg Walsenburg Trinidad	Alex Shields Henry II Curri Leo Uta Plo Michell	Trinidad Agullar (Buyarlu Vallorno Hugby.	CAS CAS DATGW CAS	2 %n0 4,8n0 5,760 4,600	14	****** *******************************	775	1 10 4 6 6
	ppo Michelt Deldonso Cost Co W. A. Ham Co Home Fuel & Supply Co Jeffryes Fuel Co	Rapson Supriss No 1 Ametor Bowen Jeffryes	Lan Animan Lan Animan Lan Animan Lan Animan Lan Animan	J. D. Deldosso W. A. Ream Geo. A. Rease Geo. Drap	Trinidad Tioga Trinidad Trinidad	J. D. Deldoma Clina Pettelmet Dave laws	Sopels Tripbind Tripbind Tripbind	Coln & Wyo D & R, G, W None Nune	3,200 2,100 	1	1 1 magan	- : 1	3 10 5 -2 5 .
477	Santa Fe Coal Co Hurdano Coal Co Meggison & Littleton Nick Higglo Jue Morasky	Sants Fe Clern Buldy Lakeytew Moranky	Las Animas Las Animas Las Animas Las Animas Las Animas	Thos W Tweeddale . Loc (hordano 12 W Meggison 3 Dec Marsak)	Trinidad Waltenburg Trinidad Trinidad Trinidad	Then W Tweeddale Joe Glordano U. W Meggison	Telaidad Agullar Trioldad Trioldad Telaidad	None None None None None	Not Repor 1,200 1,		153	35%	6 -1 5 -3
1	Alex Abeyta Liberty Coal Co Trintilad Supply Coal Co Datey Coal Co	l'risco Liberty Bloum Dalty	Las Animas Las Animas Las Animas	Alex Abeyta Chas Cuzzetto Jno Dolinar Adam Galli Nick Ruzcetti	Trinidad Agullar Trinidad Agullar Trinidad	Alex Abeyta Adum Galli Nick Ruscolti	Trioldad Agullar Trioldad Agullar	None None None	Not Reported 500 Not Reported	5% Lovel			6 - 1 1 1 3
į	Calubaw Coal Co. Martorasio & Sob Jemetrio Sanches N 12 filips:	Hainbow Mariorano Manchoz Fortics No 9 Fortics No 10	Las Animas Las Animas Las Animas Las Animas Las Animas	Mike Martoratio	Sopri» Boncarho Trinidad Trinidad	Mike Mariorano	Trinidad Sapris Boorarbo Trinidad Trinidad	None None None None	Not Reported Not Reported	1 % T		*** *** ***	2 6
J	N. C. Riggs Starkville Conl. Co. Inc. Kerele agullur Black Dismond Conl.	Starkville Verslut Agustar Black Diamond	Las Animas Las Animas	Jno Kezele Frank Coke	Trinidad Trinidad Trinidad	Thus W. Tweeddale	Trinidad Trinidad Trinidad	None None None	Not Reported		100	7717 5557	1 1
J V	oe Rossero Fm. J. Willon	Frystal Flag Haboar Tucker Stonowall Valley	Los Animos Los Animos Los Animos Los Animos Los Animos	Gullermo Rowman Joe Hoggero A D Tucker Gus I Martin	Jansen Trinidad Trinidad Trinidad Weston	Guilli emo Howman Joe Hoggero A. D. Tucker Guad, Martin J	Jane o Tripidad Tripidad Tripidad Westen	None None None None	Not Reported Not Reported Not Reported	***************************************	185		3 1 8
1	Provinced Cod Co Serviced Co Brade Cloin Hest Cost To Carliage Cost Co	Cameo Pallsade Mt Garllold	Мева Мева Мева	W M Kerr Fred Rowley B Gearbart	Cameo Pallvade Pallvade	W. M. Kerr Jac Merlino B. Gearhart	Cameo Pallsade Pallsade	D&H, G W D&H G W None	3,300 1,000 -	\$ % \$ %	156		9 6 2 -8
	Tarke Coal Co River View Coal Co Earlield Foal Co Bildon Treasure Coal Co Hidwest Hed Arrow Coal Co	Winger River View Garneld Hilders Treasure Midwest	Menn Menn Menn Menn Menn	11 M Clarke Waller Scott Wm Hughes	Pallende Cameo Pallende Feulte Pallende	H. M. Clarke Louis Supancie Walter Scott Martin Royn Win, Hughes	Pallsade Cameo Pallsade Pallsade	None None None None None	1,500 700 700 (3	20%	**************************************	1 1 1	3 0 6
7) 1) W	Fm. Mi Ginley Olliams Coal Co Ohn McDowell Samers Mutuil Coal Co	McGIntos Williams Eliveratide Parmers No. 1	Mona Mona Mona Mona Mona		Grand Junction Grand Junction Pallsade Grand Junction	Ernest Hicks (Lossee) Morgan Williams, John McDowell, Joe Cardone	Grand Junction Grand Junction Paltunde Grand Junction	None Non None None	300	s*	165	4%	1 1 5 2 6.
T M M	Incent Frodsbam nomes Coul M Co lartin Coul Co less Co. Quality Coal Co.	Hunter Thomas Hur Clame Nearling Stoken	Mesa Mesa Mesa Mesa Mesa		Frulla Grand Junellon Pallsade Frulta Italiaside	Vincent Frodaham Joseph Worthington Richard C Martin George McMillin M. N. Hussty	Fruits Grand Junction Pallende Fruits Pallende	None None None None	- 350 600	37	200		\$ 15 \$ 10 \$ 10
J.	M. Hasty W. Mundell & Son Jaraness O. Allen Ilko Marinell	Mumbell Jarvis Marinelli Bunninger	M+ 86 M+ 86 M+ 94 M+ 94		Grand Junction Grand Junction Fruita Fruita	J. W. Mundell Clarence O. Allen Mike Marinelli Howard Boyd	Grand Junction Grand Junction Fruita Fruita	None None None None	No Report Submittee	10%	125	## ****	3 6 4 ' -3
A C	nte Skeels oxent Sodia nchur Coal Co oal Guich Coal Co	Monger Peacock Anchor Coal Gulch	Mr = Mr = Mr = i Mr = i		Gruita Grand Junction Fruita	Dale Skeets Joseph Sodja Lee L Smith F R Durham	Fruita Grand Junction Fruita Loma	None None None None	No Report Submittee	d 12%	**************************************	Aw un	4 6 1
K K	mnah Creek Farmers Mine Ass'n neg Cool Co	Potest Service Koca Shaver	Mess Moffat Moffat	Frank Bradbury	Whilewaler	S A Johnson Joe I, Knek	Whitewater Crobs Axial	Nano None None	775 600 100	9 to 14*	90	I	5 6 10 23
2, 2, 2, 2,	ce II, Pattlaon ommunity Coul Co Taconala Cost Co uy Hond ohn Bahb, Je	Pattison Community Wisconsin Watker Baker	Moffat Moffat Moffat Moffat		Axial Craig Craig Craig Craig Craig	Fred Vest Clifford A Hurd J. Schulcko Guy Rond John Rybb, Jr	Axiol Crulg Cratg Cratg Cratg	None None None None None	Not Helported	17	80 CONTRACTOR	M. 0-0-0-0 AN RAMARIS	25 3 11 6 9
Di M	E. Whithock offinik Garbella arcos Crail Co F. Hopner egg Verde Coul Co	Cantor Culch Doloren Muncos Corten Mum Verde	Moffat Monteauma Monteauma Monteauma Monteauma	A L Withite	Craig. Dolores Manior Cortex Cortez	I. E. Whitlock Domlulk Gorlo II Iloy Freeman A. F. Happer V. H. Hamilton	Craig Craig Mancos Cortez Cortez	None None None None None	Not lieperted	6%	\$00 455 800	3%	10 76
W K In Ri	Allden Cont Co ling & Mitchell dependence Coal Co lee Coal Co	Willden Litterty Hell Independence Illee Kennedy	Monteguna Montrose Montrose Montrose		Mancos Nucla Nucla Hedvale	II. A Athemorth Lyle Mitchell Win Oberding	Mancos. Nucla Nucla Hedyale.	None None None	700 125 Incomplete Hepar	1%	150		5 6 4 6 4 6
ri cc c	J. Brasley actta Cost Mining Co F. Pottard G. Hart & Son C. Betnau	Placita New Pollard Pollard Helpay	Pitkin Hie Histore Hie Histore Hie Blance	C T, Kolgley	Carbondale Mecker Mecker Mecker	S. J. Reasley G	Carbondale Meeker Meeker Meeker	None None None None	Not Reported 112 1	12%	300	**************************************	4 =
TI M M	W Pelnon homas D Foreman lin Coats han M. Hector	Johnny Boy Nine Mile Costs Hector	Ho Hanco Ro Hanco Ro Hanco		Meeker Meeker Meeker Meeker Mooker Hangely	Fred W. Relnau. Thomas D. Pareman Milo Coats	Mecker Mecker Mecker Mecker	None None None	Not Reported Not Reported		150	70.0	34
Pe Mi	or Adaly Jo Gorgor offas Coal Co syden Coal Co llorad Co llorad & l'tah Coal Co.	Twelve Mile Moffat No 1 & No. 2 Hayden No. 3	Ho Hlanco Hio Blanco Itouli Houti Routt	It W Snodkrass Homer II, Hayden. Merritt Hutton	Ho Blanco Meeker Denver Denver	Pote floater Chas E Reynolds Thos, P Greenhalgh A. C. Burt	Hangely Moker Oak Creek Ouk Creek Mt. Harris	None None	Not Benorted 55	4+4	3,000	**************************************	6 to 12
Vi Vi	ctor-American Fuel Co. ctor-American Fuel Co. cor Hiver Coal Co.	Pinnacle Wadge	Routt Houlf Houlf Hoult Hoult	Wm. E. Schlessinger Wm. E. Schlessinger John Connett John Connett	Denver Denver Denver	W. B. Odendahl H. C. Johnson Jack Sponski J. J. Roddy	Clak Creek Mt. Haeris	D & S 1, D, & S, 1, D, & S, L, D, & S, L,	250 5,000 4,500 2,000 5,000	16%	12 4400 Appen 0440 15 4404 Appen 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.1494 HE 1978 H\$\$PP\$14 Implicated	9 3 12 6 8 10 3 2
Mo Fr 10	eNell Post Corp ank Corpell Gwynn theor. Cost Co.	McNell Hulcher Knife. Seven Points	Routl Roull Houll Houtt	Floyd 11, Pool,	Denver Bear liver Phippsburg Hayden	K Nelsh (Lessne) Frank Coryell E. Gwynn John S Mills	McGregor Hear River Phippsburg Hayden	D & S L D & S L None	5,000	10%	00000000	######################################	30 10
111 Jo	ayden Valley Mutual Coul Co	Hayden Valley	Routt Routt Routt Boult	,	Hayden Bear Hiver Bear River. Oak Creek	Alex Walker Winford H. Jones John Hitchines	Hayden Bear River Bear River Oak Creek	None None None None	700 600 1,300 3	7.3	500	M	10
a Ch Tu	uth & Micheletti hu Potic, Jr ris Pasch 12 Webber orge T. Rolfes	Premium Morgan Edna Webber Rolfes	Roull Houft Rouft Houft Houtt	40. 40.	Milner Sleambest Springs Oak Creek Pagoda Hayden	Joseph Micheletti John Pollo, Jr	Milner Steamboal Springs Oak Creek Pagods Hayden	None None None None	Not Reported	13 %	200	13%	4 6 9 6 1
Ge Ka Joi He	e Sicel Coal Co inpar Webberkirch hn F Johnson sek Coal Co.	Apex Fini) Creok Johnson Hock	Routt Routt Hoult Hoult	0 V ANDON	Onk Creek Huyden, Dunkley Milner	Geo. Steel Kaspar Wobberkirch John F. Johnson, Fred Heck	Oak Creek Hayden Dunkley Alliner	Nune None None	100	7 %	50	An amenda yan amenda da am	1 6 11 5 6
W. Me Ro	EK Coal Co 31. Knowlios spilo Hogers ceky Mountain Fuel Co. ceky Mountain Fuel Co.	O K Gray Columbine,	San Miguel San Miguel Sun Miguel Weld Weld	J. H. Peabody J. H. Penbody	Norwood Norwood Denver	W H Knowllon Melwin Rogers Ed Hodgson That Clibby	Norwood Norwood Serene Frederick	None None Note C.B.&Q	Not Reported Not Reported Not Reported 300 155	# 40	**************************************	A-A-1000	2 §
Bo Na Im Cla	dional Fuel Co. uperial Cont Co. uyerial Cont Co.	Boulder Valley Puritan Imperial Clayfon	Weld Weld Weld Weld	P. M. Pelller T. E. Jenkins James Brennan H. B. Crandell	Denver Denver Denver Detver	Win Andrew Hoy Williams Elmer Davis John Sidle	Erle Erle Erle Erle	U.P.	110	# 11 Bahanan App	100 000	++++++	5 10 7 10 6
Co	ayton Cost Co to E Hussell Cost Co moulidated Cost & Coke	Merrison Hussell Baum	Weld Weld	H. H. Crandell Wm. E. Hossell Carson W. Smith	Denver Denver	John Sidle Andrew Wilson James Huchanan	Erte Frederick	U. P	205		7 2011.40 1411.40 1411.40 1411.40 1411.40 1411.40		5 -
Shi Fire Lan	Nell Cool Corp amrock Coal Co ederick Mines Co Salle Coal Co	Sterling	Weld Weld Weld Weld	Fluyd R Pool Thomas E Graham	Denver Brie Frederick Greeley	John R. McNell P. H. Powell John E. Puley Walter Casselmen	Dicono , Erle = = = = = = = = = = = = = = = = = = =	17, 1° 1° 1° 1° 1° 1° 1° None	354 100 150	- 91 H HAA	1 v		5 5 5 6
Ho We Bu Cor	Riender Conf. Co. enthumby Conf. Co., addy Conf. Co. met Conf. Co.	Robleman Watherhee Hondy Cornet	Weld Weld Weld Wold	Geo. W. Haird	La Salte F1 Lupton La Salte Exhan	dames A McFudden Ren Roblender R F. Combs A Rud Escrip Geo, Mathews	Longmont La Salla La Salla La Salla Enton	None None Note Note	110 110 140	00 00 00 00 00 00 00 00 00 00 00 00 00	+++		1 10 1 6 3 4 1
Db WI Ow	leton Coal Mines, Inc. amontol Coal Co. Ille Ash Coal Co. cl. Coal Co. Frank Bellino	Galeton 1 Diamond While Agh Owl Juanita	Weld Weld Weld Weld Archulato		finieton La Salle La Salle Laton Pagosa Junction	E E Phillips Anjon Gehring Coy Film E. W. Bingham Frank Bellino	Catelon La Salle La Salle La Salle Pagesa Junetion	None None None None	160 130 80 92	4 4	AAAA 100000 A000000		3 6 6 8 2 6 3 3
+1	Thus McBroom Louis Owen A, II Conserse A, II Blues M. M. & P. Co	Mc1(room Owen Converse Peneuck M. M. & P	Archufeta Delta Delta Delta El Paxo		Dyke Lateur Paoula Austin	Char McBruom . Louis Owen A B Converse A H Blues	Dyke Lazeaz Paofila Asistin	None None None None	500 100	******	250	- AVEA	15 6 7 16
+ 1 + 1 + 1	W S Smith Willie Haas Castle Hock Coal Co House Coal M Co	Smith Valley View Castle Rock Rouse	Garfield Clarfield Cumulson Fluction	1	Now Castle Hiffe Gunzison Walsenhurg	Pete Mandarich W. S. Smith Willie Hans L. H. Towner John Berrs	Calhao New Castle Hille Guorison Walsenburg	None None None Note D. K.H., G. W.	500	**************************************	350		3 6
++1	Redwood Mining Co. R H Linscott Friangle Conl Co. Hobert P Clinard Suashine Coal Co.	Redwood Linwort Triungle James	Huerlano La Plata Monat		Walneshurg La Veta Durango Mesker	T. F. Sweel R. B. Linncott W. H. Keck Hobert P. Clinard	Walsenburg La Veta Burango Merker	None None None None	Not Reported 90	10%	100	16.	5 4
+ 1 + 1 + 1	Ruteshine Coal Co U. S. Vansadium Corp Michael Rabej Warth L Holder Hurro Creek Coal M. Co	Sundine Erayan Ute Pleasant Valley Hurro Creek	Montrose Montrose Montrose Ouras	Hall Burwell	Nucla Uravan Montrose Montrose	A. D. Nix W. F. Murray Mb fact linbe) Worth L. Rolder	Nucla Pravan Montrose Montrose	None None None None	Not Heported Not Heported	13%	****	-	6
# 1 W)	Ella G. Slagle fones & Trachta hile River Valley Coal Co. F. Pellard;	Bright Diamond Doughast Creek McKee New Pollard	Ho Hlanco Ho Hlanco Ho Hlanco	H. W. Tyler	Ourny, Hidgwal Hangely Mecker Mecker	Cheude I. Juliuson Elin G. Slaglo L. E. Jones C. I. Elleraten F. F. Pollard	Montrose Hidgway Hangely Meeker	None None None	Not Heported	**************************************	300		3 4 11 6
(1) 1) (1) 1) (1)	amplen Coal M. Co. aller & Jones bit A Johnson ler Coal Co.	Champion Hue Spruce Big Mack	Routi Routi Routi	flency 11 Zarlengs	Mt Harris. Ouk Cresk Oak Cresk Norwood	Henry E Zarlengo Walter L Jones John A. Johnson Gene Elder	McReker M. Harrin Oak Creek Oak Creek Norwood	None None None None	Not Reported Not Reported Not Its ported		744 .		13 6 5 A 5 6
II.	orton Coal Co D Jackson	Horton Brewaler Garcia	San Miguel Premont Las Animes		Norwand Brewster Boncarbo	F II Horiya II D Jackson Benita Garcia	Norwood Browster Boncarbo	None None None	100		- 126		3 10 2 4 4 4
11e	marks + 11spresent mines	watch reported Ion late to b	withfully thole pr	roper places									

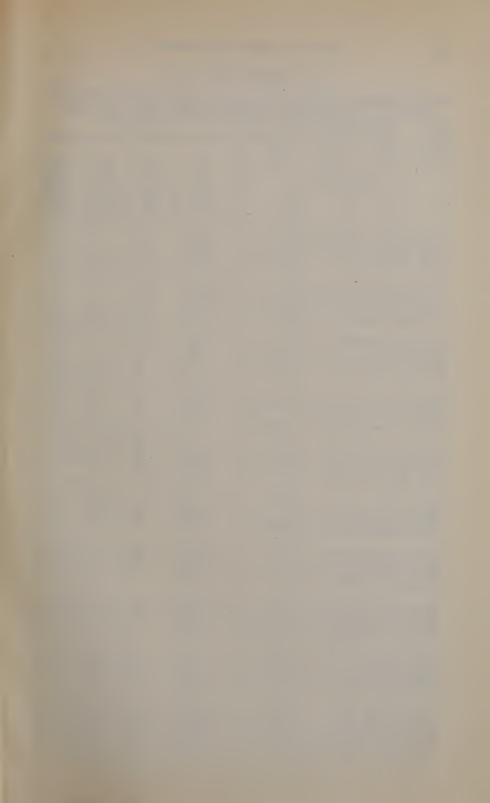


TABLE NO. 1

TABLE SHOWING, BY COMPANY AND INDIVIDUAL OPERATORS, NUMBER OF TONS PRODUCED, NUMBER OF MEN EMPLOYED AND NUMBER OF MEN INJURED FOR THE YEAR 1936

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Adair, Ivor	252 1,407 24,365 250 4,378	2 23 99 1 57		4
Altitude Fuel Co	11,416 13,560 124,966 166 105	21 25 164 3 2		10
Aztec Coal Mining Co	18,955 865 1,959 90 517	38 2 3 2 3		
Bald Coal Co	3,664 470 2,946 3,064 732	12 2 6 4 1		3
Batchelor, Chas	223 149 16,056 12,555 69,513	2 1 29 15 94	••••••	1 2 23
Beasley, S. J	333 397 2,566 727 1,269	1 2 3 3 3		1 1
Black Diamond Fuel Co	55,180 9,819 200 11,575 2,255	61 22 4 25 4	1	12 3 9
Boulder Canon Coal Co	197,218 449 577 5,560	198 2 4 14	2	33
Brown, Leonard Buddy Coal Co Busheff, N. M. Busy Bee Coal Co Caddell Coal Co	749 743 13,295 9,797 1,442	2 6 16 17 8	••••••	5
Caldirola Coal Co	22,405 53,556 296,665 410 40,781 4,872	33 124 292 2 50 9		1 2 5 3 1

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Canon Blue Ribbon Coal Co	490 465 1,650 1,128 920	2 3 2 5 4		5
Canon Liberty Coal Co	918 26,852 3,075 7,245 2,837	3 40 9 11 6	1	8
Canon Zenith Coal Co	3,387 19,975 548 344 11,683	8 13 2 2 16	1	1
Clarke Coal Co Clayton Coal Co Coal Gulch Coal Co Coats, Milo Coke, Frank	3,475 234,018 500 127 No Tonns	5 252 2 1 age Repor	 1 ted	33 1
Colorado Fuel & Iron Corp Colorado Springs Co Colorado & Utah Coal Co Community Coal Co Consolidated Coal & Coke Co	1,228,004 53,807 222,978 440 108,968	1,416 63 190 2 105	1	132 7 63 5
Cooperative Coal Association	156 11,278 5,773 76 5,667	2 24 8 1 7		6
Creager, L. W Crested Butte Coal Co Daisy Coal Co Dalrymple, J. M Danville Coal Co	244 28,017 1,121 1,043 544	36 4 2 2	•••••	2
Davis, Chas. E	1,165 222 19,392 902 1,132	2 1 40 4 6		42
Dick Coal Co	15,791 19,152 1,059 981 441	25 23 4 4 3		4
Edwards Coal Co Eldorado Coal Co Electric Coal Co Elledge, Frank Estes Bros Evans Coal Co	996 4,393 1,228 202 803 1,304	3 8 2 2 2 2 2		2

Gorbella, Domenic 389 2 Gordan Coal Co 57,739 87 5 Gozzer, Pete 128 1 Graham & McFadden 15,452 13 Grand Prize Coal Co 3,616 10 Green Valley Coal Co 5,380 4 1					
Fawn Hollow Coal Co. 503 2 2 510 503 2 505 503 2 505 503 2 505 503 2 505 503 2 505 503 2 505 503 2 505 503 2 505	COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Frisco Coal Co. 1,975 4 Frodsham, Vincent. 479 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 2 155 2 155 2 2 155 155 2 155	Florence Coal Co	3,208 503 632	11 2 2		
Gearhart, Ballard 7,188 7 Gem Coal Co	Frisco Coal Co	1,975 479 155	4 2 2		3
Guiliano & Carpine 31,378 51 1 2 Gorbella, Domenic 389 2 2 2 Gordan Coal Co 57,739 87 5 5 Gozzer, Pete 128 1 2 Grand Males McFadden 3,616 10 10 Grand Prize Coal Co 5,380 4 1 1 Green Valley Coal Co 8,180 15 3 4 1 1 Griffiths Coal Co 8,180 15 3 3 4 1 1 3 4 1 1 3 4 1 1 3 3 4 1 1 3 3 4 1 1 3 3 4 1 3 <t< td=""><td>Gearhart, Ballard</td><td>7,188 2,605 1,130</td><td>7 9 2</td><td></td><td></td></t<>	Gearhart, Ballard	7,188 2,605 1,130	7 9 2		
Grand Prize Coal Co. 3,616 10 Green Valley Coal Co. 5,380 4 1 Griffiths Coal Co. 8,180 15 3 Gunnison Anthracite Co. 3,352 22 5 Gwynn, E. 1,435 3 Hammond, Julius. 1,482 3 Hasty, M. M. 1,654 5 Hatcher, J. E. 1,495 3 Hawk's Nest Coal Co. 3,990 6 Hayden Coal Co. 170,662 202 36 Hayden Valley Mutual Coal Co. 2,540 4 Hedley, W. H. 545 2 Hendley, W. H. 545 2 Hendley, W. H. 545 2 Henderson, J. B. 1,355 3 Hicks, Ernest. 2,790 3 High View Coal Co. 1,451 3 High View Coal Co. 8,310 8 <td>Guiliano & Carpine</td> <td>31,378 389 57,739</td> <td>51 2 87</td> <td>1 </td> <td>2 5</td>	Guiliano & Carpine	31,378 389 57,739	51 2 87	1 	2 5
Hammond, Julius 1,482 3 Hasty, M. M. 1,654 5 Hatcher, J. E. 1,495 3 Hawk's Nest Coal Co. 3,990 6 Hayden Coal Co. 170,662 202 36 Hayden Valley Mutual Coal Co. 2,540 4 4 Heck Coal Co. 765 4 4 Hedley, W. H. 545 2 54 Henderson, J. B. 1,828 3 3 Hesperus Coal Co. 1,355 3 3 Hicks, Ernest. 2,790 3 3 High View Coal Co. 1,451 3 3 High View Coal Co. 8,310 8 1 Holmes, Arthur. 614 1 1 Home Fuel & Supply Co. 2,825 3 3 Hopper, A. F. 859 4 4 Huerfano Coal Co. 2,153 4 6 Imperial Coal Co. 2,153 4 6 Imperial Coal Co. 1,134 4 4	Grand Prize Coal Co	3,616 5,380 8,180	10 4 15		1 3 5
Hayden Valley Mutual Coal Co. 2,540 4 Heck Coal Co. 765 4 Hedley, W. H. 545 2 Henderson, J. B. 1,828 3 Hesperus Coal Co. 1,355 3 Hicks, Ernest. 2,790 3 Hidden Treasure Coal Co. 1,451 3 High View Coal Co. 8,310 8 1 Holmes, Arthur. 614 1 1 Home Fuel & Supply Co. 2,825 3 3 Hopper, A. F. 859 4 4 Huerfano Coal Co. 43,882 92 6 Ideal Coal Co. 2,153 4 6 Imperial Coal Co. 170,475 137 29	Hammond, JuliusHasty, M. M.	1,482 1,654	3 5 3		
Hicks, Ernest 2,790 3 Hidden Treasure Coal Co 1,451 3 High View Coal Co 8,310 8 Holmes, Arthur 614 1 Home Fuel & Supply Co 2,825 3 Hopper, A. F. 859 4 Huerfano Coal Co 43,882 92 Ideal Coal Co 2,153 4 Imperial Coal Co 170,475 137 Lydenendent Fuel Co 1134 4	Hayden Valley Mutual Coal Co Heck Coal Co Hedley, W. H	2,540 765 545	4 4 2		
Hopper, A. F	Hicks, Ernest	$2,790 \\ 1,451 \\ 8,310$	3 3 8		
Independent Fuel Co 1,134 4	Home Fuel & Supply Co	250	$9\frac{4}{2}$		
	Independent Fuel Co	500 488 5,642		1	3 5

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Jewell Collieries Corp	48,499 107 428 45,650 200	75 2 1 51 2	1	6
Keck, W. R Kerr Coal Co Keystone Coal Co Kezele, Jno. & Sons King & Mitchell	869 23,000 69,698 187 1,099	3 33 92 2 2		14
Klikus, Jno	278 2,359 296 4,173 3,244	2 3 3 10 9		3
Le Donne, Jas	947 137,433 990 3,127 1,019	$\begin{array}{c} 2\\112\\2\\10\\7\end{array}$		18
Llewellyn Coal Co Louisville-Lafayette Coal Co Lowe Coal Co Major Coal Co Maloney, Joe	986 133,800 465 5,947 4,099	159 3 13 11	1	29
Mancos Coal Co	1,494 9,800 212 3,633 1,090	3 18 3 7 4		1 5 1 3
Mattivi, Steve & Sons	400 41 7,565 1,240 884	3 1 6 4 2		
McNeil Coal Corp	93,971 10,181 1,000 14,559 1,417	85 12 6 23 4		12
Midwest Red Arrow Coal Co	1,526 23,891 211,652 2,508 3,182	5 31 283 5 4	2	5 42 2
Mortorano & Sons	634 2,340 2,103 4,922 922	3 8 10 2		1 1

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Murrell, Jas National Fuel Co Neish, Wm. H Northern Coal Co North Park Coal Co	186 208,820 9,590 786 22,376	1 242 10 6 29	8	29 2 3
Nossaman, W. J	100 25,737 188 895 4,025	1 44 2 2 8		2
Oliver Coal Co	76,579 123 175 2,892 3,050	75 2 5 8 3		7 1
Paramount Coal Co	947 671 3,087 12,691 998	5 2 2 38 2		3
Perino Coal Co	871 481 2,577 195,798 823	2 2 2 155 29		1 25
Pioneer Coal Co	423 569 1,789 1,652 19,735	2 2 5 3 25		4
Pollard, C. F Pollo, John, Jr Premier Coal Co Pryor Coal Mining Co Rainbow Coal Co	2,812 684 5,615 60,904 205	3 1 8 95 2		5
Rauman, Chas	134 13,177 309 11,832 3,557	$\frac{2}{67}$ $\frac{1}{22}$ $\frac{2}{7}$		3 9 1
Regal Coal Co	5,469 183 1,032 101 2,295	12 1 2 1 3	1	1
Riggs, W. E Ritchneg, Jno Rocky Mountain Fuel Co Rogers, Melvin Roggero, Joe	$\begin{array}{r} 921 \\ 60 \\ 485,503 \\ 400 \\ 327 \end{array}$	$\begin{array}{c} 5\\1\\60\\8\\3\\2\end{array}$		106
Rolfes, Geo. T	6,858 1,774 12,007 70,314 1,456	10 5 22 72 3		2 15

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Santa Fe Coal Co	390 24,510 62,203 127 151	2 30 65 2 3		1
South Canon Mine Leasing Co	20,758 1,821 1,065 16,955 412	15 9 3 44 2		3
Starkville Coal Co	2,109 3,452 409 5,870 1,025	4 6 2 6 3		
Streenan, John	3,568 3,539 3,361 83 73,837	8 5 3 4 116	2	1 4 16
Thomas Coal Co	1,997 5,543 12,884 376 13,745	$\begin{array}{c} 4 \\ 13 \\ 20 \\ 1 \\ 21 \end{array}$		1 8 8
Trinidad Supply Coal Co	351 1,470 132 22,217 1,725	2 5 3 29 3		2 1 11
Van Winkle Coal Co	3,699 75,812 569,310 225 70	3 103 865 1 1	1	15 149
Western Star Coal Co	564 509 346 118 356	1 4 1 1		
Willden Coal Co Williams Coal Co Wilson & Volshin Wilton, Wm. G Winton Coal Co	1,415 1,064 351 533 2,384	2 2 2 2 2 4		
Wisconsin Coal Co	262 1,830 240 1,172	2 6 2 2		
Totals	6,845,837	9,005	29	1,148

TABLE NO. 2

NUMBER INJURED IN COAL MINES DURING THE CALENDAR YEARS ENDING DECEMBER 31, 1932-1936

		Perr	Permanent	ent		Pe	rma	Permanent	ب			rem	POR	TEMPORARY DISABILITY	DIS	ABII	TIL		-					
		Dis	Total Disability A	ity		_ 	Partial isabilit B	Partial Disability B		Mo	re T	me L han	Time Lost More Than 14 Days	lys	Le	Time Lost Less Than 14 Days	Time Lost Than 14	st 4 Day	z z		Tota	Total Injuries	ries	
	1932	1933	₹61	1936	1932	1933	1934	1932	9861	1932	1933	₹61	1932	9861	1932	1933	₹61	1932	9861	1932	£861	₹86I	1932	9861
Underground: 1. Falls of roof (coal,								-		1 0 7	1 90	1 90	-	6	- u			u		0	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E T	6
						: :	·			02	54	94		98	5.8	47	0 89	4 8	45	129	101	127	137	131
tives	1	-	-	-			<u>ස</u>		1	130	150	139	132	159	84	09	44	80	93	215	213	186	214	253
burning gas. Coal - dust explos	i,				-;-				i	က	F		-	H	П	-			-	ro	67		-	67
(including gas and dust combined) 6. Explosives 7. Suffocation from mine	-41				1 1		- ! !	-		9	87	.00	12	1		Т		T	1	9	က	63	H4	22
8. Electricity 9. Animals 10. Mining machines	1 : 1							2	: : : co	20.9	16	18272	401	1221	18 27	1001	275	422	107	272	2657	1044 1044	%3.1 %1.0 %1.0 %1.0 %1.0 %1.0 %1.0 %1.0 %1	1 55 3 1 1 2 2 3 1 1 2 2 3 1 1 2 3 1 1 1 2 3 1 1 1 1
11. Mine fires (burned, suffocated, etc.)	::				-:-	1 3	100		:07	183	160	:	:		170				171	354	352	290	365	350
02						- 1 11				27 11.02	1	1		1 1	67	67			-	യ ന	22	-		
Total number in-	11	11		: 1	:		: 1	: 1	:]	07 0					11 3					67	-		67	
Jured in mine			\top	77	-	11	وا	o	٥	286	573	289	603	644	422	371	266	409	413 1	1,015	955	861	1,019	1,063

On	On Surface:	_																								
17.	17. Mine cars and mine locomotives	:	-	- !		-			-	_	2	9	12	12	10	22	7	9	11	7	10	13	18	24		~
19.	Electricity Machinery		11		111	: :				; ;	16	17	$\frac{1}{20}$	9	16	-100	9	3	6	9	24	26	23	17	600	
20.	Boiler explosions or bursting steam																									
21.	21. Railway cars and lo-		-	:	:	-			:	:	2		_	4	1	-	-	1	23		ಚಿ	-	63	9	1	
66	Comotives		-	-	-	-		1	-	;	16	9.1	100	17	250	7	, c			63.7			21	•	20,	
	5	11			:	: 1	: 1	:	- 1	: 1	07	77	00	•	1	_ '	67	13	67	14	30	46	55	4.7	36	
	Total number in-																									
	surface		- 1			-			4	۲,	41	44	7.1	39	54	26	43	30	51	30	68	8.7	101	95		
	Grand Total			_		:	3 11	9	6	2	627	617	099	642	869	448	414	296	460	443	1,083	1,042	962	1,114	1,148	1.00
		١	I																							

PERMANENT TOTAL DISABILITY. Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis or other condition permanently incapacitating workman from doing any work of a gainful occupation. Ą.

PERMANENT PARTIAL DISABILITY. Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, and dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability. B,

In this column include only accidents which cause a loss of time more than the balance of the day or shift upon which the accident occurred. ರ

TABLE NO. 3
MINE FATALITIES BY CAUSES, 1932-1936

				Years		
	CAUSES	1932	1933	1934	1935	1936
Und	lerground:			}		
.1	Falls of roof (coal, rock, etc.)	8	7	8	10	3
2.	Falls of face or pillar coal	4	3	5	1	11
3.	Mine cars and locomotives	9	3	2	3	2
4.	Gas explosives and burning gas	1			4	
5.	Coal-dust explosions (including					
	gas and dust combined)					8
6.	Explosives	1			1	1
7.	Suffocation from mine gases	2	2	1		
8.	Electricity (shock or burns)	1	2	3	****	
9.	Animals	1				••••
10.	Mining machines				1	
11.	Mine fires (burned, suffocated, etc.)	••••				
12.	Other causes			1	1	
Sha	ft:					
13.	Falling down shafts or slopes	1		i	2	
14.						
15.	-					
16.	Other causes					
		-				-
	Total underground	28	17	20	23	25
Sur	face:					
17.	Mine cars and mine locomotives				1	
18.	Electricity (shock or burns)					1
19.	Machinery		1	1		
20.	Boiler explosions or bursting steam pipes					
21.	Railway cars and locomotives				1	
22.	Other causes	1	2		1	3
	Total	1	3	1	3	4
	10ta1		-	-	-	_
	Grand Total	29	20	21	26	29



TABLE NO. 4

SHOWING BY COUNTIES, MINES OPERATED, NAME OF OPERATOR AND ADDRESS OF MINE, CHARACTER OF COAL, NUMBER OF DAYS WORKED, AVERAGE NUMBER OF MEN EMPLOYED, TOTAL NUMBER OF TONS OF COAL PRO-DUCED IN 1936, AND CAPACITY OF MINE PER DAY IN TONS.

ARCHULETA COUNTY

Capacity of Mine Per Days, Tons	
Total Num- ber of Tone beouced	100 76 41 217
Average No. of Men Employed	1111
Number of Days Worked	60 35 23 39.3
Character of Coal	Sub-bituminous. Sub-bituminous. Sub-bituminous.
Mine Postoffice	Pagosa Springs Sub-bituminous Dyke Springs Sub-bituminous
Name of Company	W. J. Nossaman. T. L. Cox Chas. McBroom of Mines Operated: 3
Name of Mine	Nossaman

BOULDER COUNTY

800 800 700 125	100 100 125	80 80 80 80
133,800 98,958 57,741 55,180 22,217	19,735 19,152 16,955 10,3595	8,310 9,617 5,469 6,160
159 176 106 61 29	22 24 16 15	8 7 112 29
286 151.6 189.5 298 189	2335 2937 1975	192.5 273 259 211 90
Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous
Broomfield Superior Broomfield Broulder Lafayette	Superior Gorham Lafayette Gorham Gorham	Gorham Boulder Boulder Louisville
Louisville-Lafayette Coal Co Rocky Mountain Fuel Co National Fuel Co Black Diamond Fuel Co Valcoal Mining Co	Pluto Coal Mining Co Domestic Coal Co Standard Mines, Inc N. M. Busheff Fox Coal Co	High View Coal Co. Cracker Jack Coal Co. Premier Coal Co. Regal Coal Co.
Hi-Way Industrial Monarch No. 2 Black Dlamond No. 2 Vulcan	Pluto No. 2 Gorham Standard Lewis No. 2 Fox	High-View Gracker Jack Premier Regal Centennial

BOULDER COUNTY—Continued

4,378 4,378 1,773 1,774 1,774 1,090 1,000		45 650 5,380 5,380 3,4557 3,050 3,050 1,334 1,334 1,334 1,334 1,334 1,034 1,034 1,000		2.946 1.043 1.043 10 200 149 4.766
70 H C C C C C C C C C C C C C C C C C C		10 10 14 15 10 10 10 10 10 10 10 10 10 10 10 10 10		9871741
154 193 222 242 242 196 106 204.4		165 265 205 205 211 183 168 178 178 176 66		183 140 139 90 74
Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	7	Bituminous. Sub-bituminous.	Y	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous
Gorham Gorham Louisville Gorham Gorham Eoulder Lafayette Boulder.	DELTA COUNTY	Bowie Cedaredge Cedaredge Cedaredge Paonia Austin Cedaredge Cedaredge Cedaredge Cedaredge Hotchkiss	ELBERT COUNTY	Matheson Agate Agate Calhan Fondis
Eldorado Coal Co David Allan Ko-Z Coal Mining Co Pittsburgh Coal Co Ross Coal Co Tri-State Coal Assn John D. Matta Paramount Coal Co Northern Coal Co of Mines Operated: 24		Juanita Coal & Coke Co Green Valley Coal Co Red Canon Coal Co States Hall Coal Co Paonia Farmers Coal Co Winton Coal Co Independent Fuel Co Black Diamond Coal Co Western Star Coal Co E. E. Campbell		Barker Coal Co. J. M. Dalrymple. Guy Jordan. Harry E. Blay. H. G. Battaia. of Mines Operated: 5
Eldora Crown Fireside Red Ash No. 2 New Ross Pine Cliff New Red Ash Paramount Tropic.		King		Barker Beaver Valley Jordan Jordan Fondley Number

TABLE NO. 4—Continued EL PASO COUNTY

Capacity of Mine Per Days, Tons	1,000 400 54 150 100 100 100	850 150 160 80 65	125
Total Num- ber of Tons Produced	195,798 53,807 11,416 11,278 9,797 5,543 5,543 5,44 5,44 5,44 5,44 5,44 5,	2000 2000	12,441 11,575 9,800 8,180
No. of Men Employed	155 633 221 17 17 18 88 803	20 00 00 00 00 00 00 00 00 00 00 00 00 0	128221
Number of Days Worked	22 22 22 22 22 22 22 22 22 22 22 22 22	2225.8 2225.8 2225.8 2524.8 2311.8 201.8 2	60 178 204 237 237 211
Character of Coal	Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.	Bituminous Semi-bituminous	Semi-bituminous Bituminous Bituminous Bituminous
Mine	Pikeview Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs	Chandler B Canon City B Plorence S Plorence	Canon City Canon City Canon City
Name of Company	Pikes Peak Fuel Co. Colorado Springs Co. Attitude Fuel Co Gorley Coal Co Busy Bee Coal Co Thomas Mining Company John Streenan	Victor-American Fuel Co-Colorado Fuel & Iron Corp. Calonan Black Diamond Coal Co. Gullano & Carpine. Canon Monarch Coal Co. Caldirola Coal Co. Nushaft Coal Co. Nushaft Coal Co. Nushaft Coal Co.	American Independent Coal Co. Royal Gorge Coal Co. Bluff Springs Leasing Co. Maniey Coal Co. Griffiths Coal Co.
Name of Mine	Pikeview City Coal Mines Altitudo. 3 Busy Bee. Jimmy Camp New Keystone Cilmax	Chandler Rockale No. 3 Rockale No. 3 Canon Black Diamond Canon Monarch Double Dick Rex Carbon Rex Carbon American Independent No. 1	American Independent No. 3 Royal Gorge Bluff Springs Manley Griffiths

FREMONT COUNTY—Continued

3.2 4 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	255 30	15 23 30	10 10 25	3	го
7,245 5,560 4,922 4,872 3,127	3,616 3,664 3,075 3,208	2,340 2,837 1,821 1,650 1,304	1,128 920 918 871 823	503 490 465 481 490	244 244 244 497,296
111 14 10 10	10 12 8 8 9	11 9 6 23	2 2 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	61 4 63 67 61	600 00 00 00 00 00 00 00 00 00 00 00 00
218 155 182 133 208	163 218 170 196 173	144 96 113 179	216 165 121 143 100	173 28 184 155 100	106 165 166 111 186.7
Bituminous	Bituminous	Semi-bituminous Semi-bituminous Semi-bituminous Bituminous	Bituminous	Bituminous	Semi-bituminous
Florence. Florence. Florence Canon City.	Canon City. Florence Canon City Florence Canon City	Canon City	Florence	Rockvale Florence Canon City. Florence	Florence Florence Florence Rockvale
Canon Red Arrow Coal Co Brookside Coal Mining Co Mountain View Coal Co Canon Black Hawk Coal Co	Grand Prize Coal Co J. Baid Coal Co Canon Zenith Coal Co. Canon Peacock Coal Co Fawn Hollow Coal Co	Moschetti Coal Co Canon Tiger Coal Co South Chandler Coal Co Canon Ideal Coal Co	Canon Imperial Coal Co. Canon King Coal Co. Canon Liberty Coal Co. Perino Coal Co.	Florence Coal Co	Eagle Coal Co
Canon Red Arrow Brookside Mt. View (Rocchio) Canon Black Hawk Little Johnny	Grand Prize	Moschetti Canon Tiger So. Chandler (Cuckoo) Canon Ideal Evans (Bluff Springs	Canon Imperial Canon King Canon Liberty Newlan Creek Pine Gulch	Florence Boulder Canon Canon Coal Creek Petry. Horse Shoc.	Eagle

TABLE NO. 4—Continued GARFIELD COUNTY

Capacity of Mine Per Days, Tons	100 20 60 60 85 20	20 10 88	10	
Total Num- ber of Tons besonbord	20,758 7,565 6,203 1,172	1,132 986 947 803 614	500 222 134	46,906
Average Mo. of Men Employed	10 00 C C C C C C C C C C C C C C C C C	699999	∞−ø/	928
Number of Days Worked	333 255 162 2333.5	87 172 189 160 119	100 98 59	239.9
Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	BituminousBituminous	
Mine Postoffice	Glenwood Springs New Castle. Mack Fruita Rifle.	Glenwood Springs. Silt Silt Riffe Riffe	Glenwood Springs Glenwood Springs	
Name of Company	South Canon Mine Leasing Co W. G. McDonald Barber Coal Co., Inc Stove Canon Coal Co Henry Ziesenlss.	Diamond Fuel Co	I. H. I. Frank Deboy. Rauman Coal Co.	of Mines Operated: 13
Name of Mine	South Canon New Castle. Carbonera Stove Canon. Zieseniss.	Diamond Silt Harvey Cap Estes. North Rife	I. H. I. Ohkraut Rauman	Number

GUNNISON COUNTY

	1,400 1,200 350 350 25	200 175 35 100 50
	247,826 210,834 76,573 38,920 890	28,017 12,555 3,990 2,103
	23.7 166 75 64	36 15 22 8
	211 208 176.4 126	176 165.5 160.5 86 104
	Bitumnious. Bitumnious. Semi-bituminous Semi-bituminous	Bituminous Bituminous Bituminous Anthracite
111000 110011100	Crested Butte Somerset Somerset Baldwin Baldwin	Crested ButteSomerset. Somerset. Crested Butte
5	Colorado Fuel & Iron Corp Calumet Fuel Co Oliver Coal Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co	Crested Butte Coal Co Baar Coal & Coke Co Hawks Nest Coal Co Gunnison Anthracite Coal Co Mt. Carbon Anthracite Co
	Crested Butte. Somerset. Oliver. Kubler.	Bulkley No. 2 Bear Hawks Nest Horace Richardson

GUNNISON COUNTY—Continued

Lone Pine Ohio Creek Carbon Creek Hinkle Baldwin-Star	Geo. M. Edwards Ohio Creek Coal Co. Carbon Creek Coal Co. W. H. Hedley. Walwin Puel Co.	Somerset Gunnison Gunnison Gunnison Baldwin	Bituminous Bituminous Bituminous Bituminous Semi-bituminous	104 148 171 101 72	നവവവവ	99 899 4448 702	15 6 10
K. D.	S. L. Staples & Son	Gunnison	Bituminous	115	2	412	
Number	Vumber of Mines Operated: 16			185.8	646	628,932	

HUERFANO COUNTY

1,000 1,000 500 400	3000	17.76	250	200
187,486 186,746 85,831 60,904 57,739	39,097 14,459 23,365 18,965 18,965	13,745 11,832 9,819 2,305 2,226	1,085 5,947 4,099 1,495	9,076 1,442 1,417 1,130 1,065
214 201 126 95	899988 890988	2002E 2021A	8 T T T 8	4 5100 4-6160
240 263 174.7 170.8	194 157 61 173 153.5	244 215 173 138	58 196 231 147	147 147 60 215 110
Bituminous	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous	Bituminous Bituminous Bituminous Bituminous
Tioga. Farr. Delcarbon Pryor. Gordon	Ravenwood Ravenwood Alamo Walsenburg	Aguilar Walsenburg Walsenburg Walsenburg	Walsenburg Walsenburg Walsenburg Walsenburg	Tioga
Colorado Fuel & Iron Corp	Callente Coal Co	Torrid Coal Mining Co Red Ash Coal Co Black Hawk Coal Co Peachey Coal Co	Peachey Coal Co- Peachey Coal Co- Major Coal Co- Joe Maloney. Shamrock Coal Co. (J. E. Hatcher)	W. A. Ream Coal Co. Caddell Coal Co. Midnight Coal Co. Sam George & Sons. Spring Canon Coal Co.
Kebler No. 2 Robinson No. 4 Calumet No. 2 Pryor Gordon	Ravenwood Maitland Alamo Morning Glory Toltec	Torrid No. 3 Leader Black Hawk Olo Canon Niggerhead	Sun Occidental Major Nugget Shamrock	Spanish Peak Caddeil Midnight George Spring Canon

1 0001 00 100 00000 00000 1 00 100 11

TABLE NO. 4—Continued HUERFANO COUNTY—Continued

	Capacity of Mine Per Days, Tons	100 100 1100		250		700 200 100 255
	-muN latoT anoT to red becondored	1,022 7,025 6,000 5,17 1,021 1,021		22,376 3,064 25,440		137,433 19,976 5,642 3,699 1,019 356
	Average No. of Men Employed	22,000,000,000,000,000,000,000,000,000,		29 4 8		112 133 3 7 10 153
	Number of Days Worked	219 200 200 120 107 1117 1117 190.4		213 150 205.3		228.5 206 294 308 129 14 213.0
Outman	Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous	Āı	Sub-bituminous Sub-bituminous	TTY	Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.
ILUMERANO COUNTI—Commueu	Mine Postoffice	Walsenburg Walsenburg Rugby Rugby La Veta La Veta La Veta Walsenburg	JACKSON COUNTY	Coalmont Walden	JEFFERSON COUNTY	Leyden via Golden Walsenburg Littleton Colden Littleton
TAIGIOTT	Name of Company	Strawberry Coal Co. Pellegrino Bassi Steve Mattivi & Sons Morris Pitti Sam Balardeta Klikus Coal Co. James Murrell Taylor Coal Co.		North Park Coal Co. George M. Barnell. of Mines Operated: 2		Leyden Lignite Co. Caprock Fuel Co. Jefferson Coal Co. Littleton Coal Co. Wild Leasing Co.
	Name of Mine	Strawberry Black Hills Bunker Hill No. 1 C. O. D. No. 1 Murrell Blue Bird Number		Moore Marr Number		Leyden No. 3 Caprock Virginia Van Winkle Christensen. Unity Number

LA PLATA COUNTY

150 440 330 330 8	10	20 20 10 10 10	10 20	
11,683 4,025 3,539 1,828 1,828	1,425 1,482 1,255 1,1669	1,059 998 981 749 376	397 4423 240 2233 202	36,901
n 0∞1046	60 60 60 60 60 60 60 60	40401	ଷଷଷଷଷ	73
268 119 217 184 196	204 198 131 196	157 141 154 1154	129 110 49 80 111	181.9
Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous Bituminous Bituminous Bituminous	
Durango Durango Durango Durango Hesperus	Mancos Hesperus Hesperus Durango Bayfield	Durango Durango Kline Durango Hesperus	Bayfield Bayfield Bayfield Durango	
Castle Coal & Mining Corp O. K. Coal Co Sunshine Coal Co Morning Star Coal Co J. B. Henderson	Valley View Coal Mining Co Julius Hammond. Hesperus Coal Co Black Diamond Coal Co J. C. Hicks.	Durango Coal Co- Peerless Coal Co- Jas. T. Durkan Leonard Brown Frank Tipotsch	James G. Bierce. Pioneer Fuel Co. Chas. Yingling. Chas. Batchelor. Frank Elledge.	of Mines Operated: 20.
Castle O. K. Sunshine Morning Star Henderson	Valley View—Hay Gulch Hay Gulch Hunt Black Diamond—Blue Jay	Durango Peerless. Soda Springs Fire Glow	Shamrock Fire Chief Morning Glory Excelsior Elledge.	Number

LARIMER COUNTY

	1
2,153 3,465 1,246 1,246 90	3,177
460-67-	11
206 101 822 75 80	130.8
Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	
Carr Carr Carr Carr	
Ideal Coal Co. Lowe Coal Co. White Rose Coal Co. Walter Overcamp.	Number of Mines Operated: 5
Renson White Rose Pioneer Bacchy	Number

TABLE NO. 4—Continued LAS ANIMAS COUNTY

Capacity of Mine Per Days, Tons	2,500 1,000 1,250 1,500	400 300 500 125 500	175 300 150 45 150	50 10 15	2 7 8 2 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12
Total Num- ber of Tons broduced	448,697 90,649 202,587 124,966 75,812	73,837 48,899 19,3982 16,056	15,791 12,884 10,181 4,101	26,500 26	1,975 1,456 1,407 1,121 1,008	066 830 800
Average No. of Men Employed	506 1255 292 164 103	116 755 240 292 29	220032 240032	ಬಲಾಬ.4	ರು ಕಟ ಟಕಕ	614
Number of Days Worked	214 92 174.7 102	118.5 189.5 116.2 190 52	109.5 240 148 223.5 39	192 195 270 168 168	202 163 157 957	171
Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous
Mine Postoffice	Valdez Morley Delagua Cokedale. Rugby	Brodhead. Aguilar Ludlow. Sopris. Vallorso.	Boncarbo Rugby Trinidad Trinidad	Trinidad Trinidad Trinidad Trinidad	Trinidad Trinidad Trinidad Trinidad	Trinidad Trinidad
Name of Company	Colorado Fuel & Iron Corp	Temple Fuel Co. Jewel Collieries Corp. Huerfano Coal Co. Deldosso Coal Co. Bear Canon Coal Co.	Dick Coal Co. Pio Micheli. Thor Fuel Co. Megrison & Littleton W. A. Ream Coal Co.	Home Fuel & Supply Co Gem Coal Co Joe Morasky Nick Figgio Starkville Coal Co	Frisco Coal Co Demetrio Sanchez. Aguilar Black Diamond Coal Co Daisy Coal Co.	Liberty Coal Co Santa Fe Coal Co
Name of Mine	Frederick Morley Delagua Boncarbo Kenneth	Brodhead No. 9————————————————————————————————————	Dix Rapson Thor Baldy Eureka	Bowen Gem Morasky Lakeview Starkville	Frisco. Sanchez Aguilar Black Diamond Dalsy	Liberty Santa Fe

LAS ANIMAS COUNTY—Continued

Forbes No. 9 Forbes No. 10 Martorano Beshoar Crystal	W. E. Riggs. W. E. Riggs. Martorano & Son. W. G. Wilton. Guillerno Bowman.	Trinidad Trinidad Sopris Trinidad Jansen.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	70 100 90 150 110	014m0101	360 6631 46334 993	10 10 40 80 10
llag Lainbow erdun. ucker	Trinidad Supply Coal Co. Joe Roffeero Rainbow Coal Co. John Kezele A. D. Tucker	Trinidad Trinidad Trinidad Trinidad	Bituminous Bituminous Bituminous Bituminous Bituminous	143 100 141 132	0000000	2221 3827 18057 18057	255
Stonewall	Arrowhead Coal Co.	Trinidad	Bituminous	09	23	105	1.0
Number	of Mines Operated: 38			160.8	1,751	1,226,426	

MESA COUNTY

20 40 50 50	100 100 30 20 20	10 25 10 10	10 10 10
23,000 7,1888 6,822 3,633 4,475	3,361 2,7892 2,790 1,997	1,654 1,526 1,451 1,240 1,064	2407822 240042 2400042
333	ೲ∞ಉರ್ಬು	101000401	222227
280 280 175 213 111	236 120 232 208 182	162 151 153 135	163 190 110 95 66
Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous
Cameo Palisade Palisade Palisade Palisade	Palisade. Palisade. Grand Junction. Grand Junction.	Palisade Palisade Fruita. Palisade Grand Junction.	Grand Junction Fruita Loma Fruita Grand Junction
Kerr Coal Co Gearhart Coal Co Garried Coal Co Martin Coal Co	River View Coal Co. Palisade Coal Co. Wm. McGinley. Farmers Mutual Coal Co.	M. M. Hasty Midwest Red Arrow Coal Co. Hidden Treasure Coal Co. John McDowell Williams Coal Co.	J. W. Mundell & Son Geo, McMillin Coal Gulch Vincent Frodsham
Cameo Mt. Garfield Garfield Blue Flame Winger.	River View Palisade McGinley Farmers No. 1 Thomas	Stokes. Midwest. Hidden Treasure. Riverside.	Mundell Nearlingh Coal Gulch Hunter Jarvis

TABLE NO. 4—Continued MESA COUNTY—Continued

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MOFFAT COUNTY

						1
Pattison (Black Glant) Lee H. Pattison		Bituminous	276	က	3,087	10
C. G. Phelan		Bituminous	182	4	2,577	30
Knez Coal Co	Craig.	Bituminous	279	က	2,359	
John Babb, Jr		Bituminous	125	2	865	က
Community Coal Co	Craig	Bituminous	122	2	440	10
Guy Bond	Craig	Bituminous	2.2	61	351	
Wisconsin Coal Mining Co			9.0	23	262	9
E. E. Whitlock	Craig	Bituminous	22	1	118	2
Number of Mines Operated: 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		173.4	19	10,059	

MONTEZUMA COUNTY

TABLE NO. 4—Continued RIO BLANCO COUNTY

Capacity of Mine Per Days, Tons	3722 200		2,000 1,5000 1,5000 1,000 800 800 60 40 150 150
Total Num- anor to red beoubour	2111 8200 8200 12112 1212		824-14 800 800 8000 8000-1 811008 8000 8000-1 800010 80000 800000 800010 80000 80000
Yo. of Men Employed	2 -11-18 808888		-2011 -2011
Number of Days Worked	163.5 2210 100 100 90 61 75 80 80 124.5		25 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Character of Coal	Bituminous		Bituminous
Mine	Meeker Meeker Meeker Meeker Weeker Ho Blanco Meeker Meeker	ROUTT COUNTY	Mt. Harris Oak Creek Oak Creek Mt. Harris Rout Bear River McGregor Oak Creek Hayden Hayden Hayden Hayden
Name of Company	C. F. Pollard. G. G. Hart & Sons. R. C. Refinau. Thomas D. Foreman. Rosa M. Rector. Ivor Adair. Fred W. Refinau. Pette Gozzer. of Mines Operated: 9		Colorado & Utah Coal Co. Moffat Coal Co. Hayden Coal Co. Victor-American Fuel Co. Koy stone Coal Co. Bear River Coal Co. McNell Coal Corp. George T. Rolfes Frank Coryell Back Cat Coal Co. Back Cat Coal Co. Hayden Valley Mutual Coal Co. Babson Coal Co.
Name of Mine	New Pollard Pollard Nine Mile Rector Rio Blanco Johnny Boy Twelve Mile Coats Number		Mortat Nos 1 and 2 Mortat Nos 3 Hayden No. 3 Finnacle Wadge. Keystone Bear River McGregor Argo Guich Rolfes. Butcher Knife Black Cat Hayden Valley. Habson Seven Points

ROUTT COUNTY-Continued

30 12 10	30		10 10		1,600 1,000 2,000 1,200 1,300	1,000 2,000 1,000 1,000	250 250 125 20
765 684 671 225	155 107 70 60 1,002,416		869 400 296 1,565		270,316 76,419 192,058 170,475 151,079	123,003 111,015 108,968 93,971 70,314	62,203 20,569 15,452 2,244 2,244
4H001H	2 1 1 1,192		mmm D		265 99 169 137	131 121 105 72	132
100 100 50 50 50	32 90 60 60 154.7		232 100 187 173.0		193.6 137.6 181 161	148 149 217.5 181 165	139 2883.5 198.55
Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous	VTY.	Bituminous Bituminous Bituminous		Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous
Milner Steamboat Springs Oak Creek Oak Creek Pagoda.	Milner Dunkley Hayden Bear River.	SAN MIGUEL COUNTY	Norwood Norwood Norwood	WELD COUNTY	Serene. Frederick Erie. Erie.	Erie Erie Dacono Dacono Frederick	Brie Frederick Longmont Greeley LaSalle
Heck Coal Co. John Pollo, Jr. Chris Pasch Geo. Steel Co. J. E. Webber	Fruth & Micheletti	SA	Keck Coal Co		Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Boulder Valley Coal Co. Imperial Coal Co. National Fuel Co.	Clayton Coal Co Clayton Coal Co Consolidated Coal & Coke Co McNeil Coal Corp W. E. Russell Coal Co	Shamrock Coal Co. Frederick Mines Co. Graham & McFadden LaSalle Coal Co. Bohlender Coal Co.
Heck. Morgan. Edna Apex.	Premium Johnson Fish Creek Ritchneg		Keck-Reliance Gray O. K. Number		Columbine Grant Boulder Valley Imperial Puritan	Clayton Morrison Baum Sterling Russell	Shamrock. Evans. Graden. LaSalle.

TABLE NO. 4—Continued WELD COUNTY—Continued

Capacity of Mine Per Days, Tons	40 75 25	2	
Total Num- anoT to 19d beoubord	1,830 743 600 577	509 175	1,476,677
Average No. of Men Employed	6447 4	യശ	1,477
Number of Days Worked	265 182 90 71 151	883 30	167.3
Character of Coal	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous	
Mine Postoffice	Ft. Lupton LaSalle LaSalle Galeton Eaton	LaSalle	
Name of Company	Witherbee Coal Co Diamond Coal Co Buddy Coal Co Galeton Coal Mine, Inc Comet Coal Co	White Ash Coal Co	of Mines Operated: 22
Name of Mine	Witherbee Dlamond Suddy Saleton Comet.	White Ash	Number

GRAND TOTAL

329	177.	9,005	15,837
Number of Mines Operated	Number of Man-Days Worked	Average Number of Men Employed in and About Mines	Total Tons of Coal Produced6,845,837

PRODUCTION BY COUNTIES BY MONTHS—1936

Month	Arch- uleta	Boulder	Delta	Elbert	El Paso	Fremont	Garfield
January February March April May June July August September October November		70,787 66,008 36,576 25,951 15,907 14,311 14,834 19,634 41,638 67,668 55,251	7,360 8,955 4,680 2,832 1,758 1,599 2,857 3,944 5,935 8,094 8,447	920 834 392 188 62 21 26 208 617 583	38,581 40,784 26,919 22,312 15,129 12,248 11,375 11,790 18,086 28,858	58,627 66,427 27,691 23,801 15,095 17,633 17,567 29,014 44,199 68,055 59,008	5,903 4,643 3,302 3,109 2,077 1,812 1,631 2,308 3,862 5,422 6,486
December	217	69,841 498,406	9,847	4,766	35,892 291,751	70,179 502,064	6,351 46,906

Month	Gunnison	Huerfano	Jackson	Jefferson	La Plata	Larimer
January	58,569	81.287	2,963	16,426	4,211	621
February	55.524	91,779	2,956	18,087	3,405	599
March	33,659	56,586	1.457	14.822	3.023	293
April	47,165	49,479	1,309	12,652	2,538	262
May	34,902	45,222	323	9,100	1,487	
June	28,943	45,150	749	12,380	1,375	
July	43,093	44,022	383	11,523	1,081	
August	55,893	52,604	1.075	11,390	1,710	
September	64,800	61,098	2,350	12,755	3,034	215
October	73,818	84,106	4,758	15,775	4,441	395
November	65,621	84.388	2,966	14,805	5,280	464
December	66,945	81,300	4,151	18,409	5,316	328
Total	628,932	777,021	25,440	168,124	36,901	3,177

Month	Las Animas	Mesa	Moffat	Monte- zuma	Mont- rose	Ouray
January February March April May June July August September October November December	107,335 124,543 103,311 112,102 79,340 85,668 62,718 85,799 104,978 113,102 108,535 138,995	8,551 7,282 5,597 3,756 2,573 2,374 2,555 3,254 5,003 8,892 8,066 10,224	1,155 1,009 684 384 193 175 189 547 1,029 1,378 1,371 1,945	752 419 296 198 121 62 125 80 247 597 499	236 187 106 777 45 46 65 	95 35 31 22 46 70 34
Total	1,226,426	68,216	10,059	5,157	1,388	333

Month	Pitkin	Rio Blanco	Routt	San Miguel	Weld	Total
January February March April May June July August September October November December	210 235 136 76 50 54 170 59 74 202 201	834 647 445 303 213 144 127 117 453 470 875 2.075	121,558 143,393 51,371 38,801 25,012 40,250 37,574 72,106 103,076 127,956 115,256 126,063	177 134 120 47 143 99 72 41 88 51 101 492	204,580 228,017 121,390 79,279 38,000 42,686 44,554 49,520 98,945 179,389 175,801 214,516	791,787 865,902 492,896 426,621 286,752 307,779 296,541 400,916 572,120 794,222 744,119 866,182
Total	1,652	6,703	1,002,416	1,565	1,476,677	6,845,837

SHOWING INCREASE AND DECREASE BY COUNTIES 1935-1936

COUNTIES	1935	1936	Increase	Decrease
Archuleta	. 820	217		60:
Boulder	497,786	498,406	620	
Delta	53,449	66,308	12,859	
Elbert	7,329	4,766		2,56
El Paso	294,630	291,751		2,879
Fremont	421,164	497,296	76,132	
Garfield	37,939	46,906	8,967	
Gunnison	491,926	628,932	137,006	
Huerfano	677,417	777,021	99,604	
Jackson	24,019	25,440	1,421	
Jefferson	136,322	168,124	31,802	
La Plata	31,624	36,901	5,277	
Larimer	3,596	3,177		41
Las Animas	958,538	1,226,426	267,888	
Mesa	73,015	68,216		4,79
Moffat	6,812	10,059	3,247	
Montezuma	7,436	5,157		2,27
Montrose	2,524	1,388		1,13
Ouray	1,012	333		67
Pitkin	1,373	1,652	279	
Rio Blanco	7,219	6,703		51
Routt	802,762	1,002,416	199,654	
San Miguel	1,421	1,565	144	
Weld	1,408,528	1,476,677	68,149	
TOTAL	5,948,661	6,845,837		
Increase for 1936			8,972,265	

SHOWING BY COUNTIES PRODUCTION OF 1936 IN PREPARED SIZES

COUNTIES	Mine Run	Lump	Egg	Nut	Pea	Slack	Total
Archuleta	217						217
Boulder	46,059	117,860	4,576	52,906	24,580	252,425	498,406
Delta	1,527	28,687		17,000	1,598	17,396	66,308
Elbert	3,890	555		142	9	170	4,766
El Paso	34,065	45,115		60,907	23,297	128,367	291,751
Fremont	105,401	176,862		81,977	9,098	123,958	497,296
Garfield	21,848	6,161		5,518	577	12,802	46,906
Gunnison	186,102	107,625		25,942	101,848	207,415	628,932
Huerfano	130,483	149,467		88,702	297,148	111,221	777,021
Jackson	5,776	8,227		6,853		4,584	25,440
Jefferson	3,097	48,459		9,870	7,805	98,893	168,124
La Plata	13,952	9,688		3,406	1,959	7,896	36,901
Larimer	489	1,572		213	395	508	3,177
Las Animas	538,784	34,938		34,743	21,021	596,940	1,226,426
Mesa	32,989	17,881		6,256	3,161	8,018	68,216
Moffat	1,476	5,497		1,835	14	1,237	10,059
Montezuma	5,029	94		34			5,157
Montrose	749	282		251		106	1,388
Ouray	333						333
Pitkin	1,501					151	1,652
Rio Blanco	3,027	1,943		1,187	69	477	6,703
Routt	51,392	434,457	24,896 .	155,771	9,213	326,687	1,002,416
San Miguel	655	532		170	60	148	1,565
Weld	10,083	554,590		118,548	104,447	689,009	1,476,677
Total	1,198,924	1,750,492	29,472	672,331	606,299	2,588,408	6,845,837

COKE PRODUCED IN 1936 BY COMPANIES AND COUNTIES

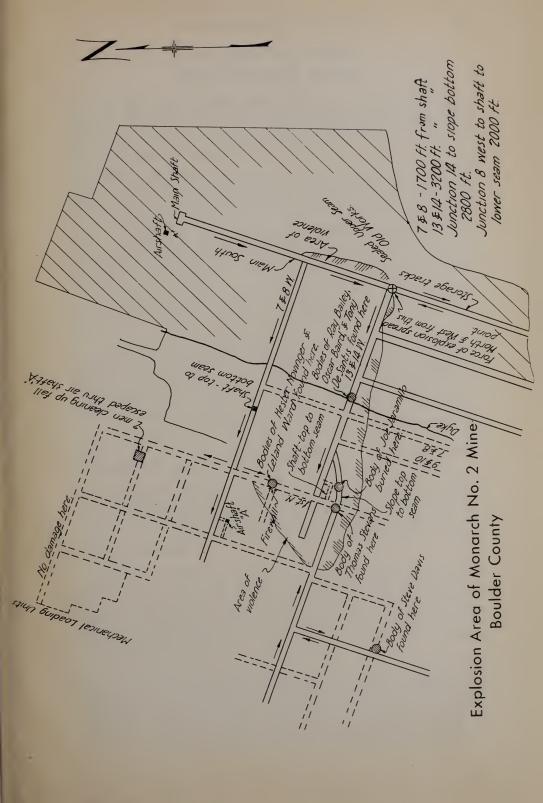
Companies	Total No. of Ovens Used	Total Tonnage	Counties	Total No. of Ovens Used	Total Tonnage
American Smelting and Refining Co	140	61,293	Las Animas_	140	61,293
Colorado Fuel and Iron Co Total	151 291	37,341 398,634	Pueblo	151 291	337,341 398,634

Remarks:

Average number of days worked	312
Average number of men employed at the coke ovens	74
Number of tons of coal made into coke65	7 746

COAL PRODUCTION IN COLORADO FROM 1873 TO 1936 INCLUSIVE

Year	Tons	Year	Tons
1873	 69,977	1905	8,989,631
1874	 87,372	1906	10,308,421
1875	 98,838	1907	10,965,640
1876	 117,666	1908	9,773,007
1877	 160,000	1909	10,722,490
1878	200,630	1910	12,104,887
1879	 322,732	1911	10,197,595
1880	 375,000	1912	11,016,948
1881	 706,744	1913	9,268,939
1882	 1,161,479	1914	8,201,423
1883	 1,220,593	1915	8,715,397
1884	 1,130,024	1916	10,522,185
1885	 1,398,796	1917	12,515,305
1886	 1,436,211	1918	12,658,055
1887	 1,791,735	1919	10,406,543
1888	 2,185,477	1920	12,514,693
1889	 2,400,629	1921	9,141,947
1890	 3,075,781	1922	10,003,610
1891	 3,512,632	1923	10,336,735
1892	 3,771,234	1924	10,501,088
1893	 3,947,056	1925	10,440,387
1894	 3,021,028	1926	10,616,760
1895	 3,339,495	1927	9,781,580
1896	 3,371,633	1928	9,921,585
1897	 3,565,660	1929	9,934,064
1898	 4,174,037	1930	8,238,094
1899	 4,826,939	1931	6,604,063
1900	 5,495,734	1932	6,616,525
1901	 6,021,405	1933	5,284,872
1902	 7,522,923	1934	5,251,003
1903	 	1935	5,948,661
1904	 6,776,551	1936	6,845,837





MONARCH NO. 2 MINE MINE EXPLOSION REPORT

An explosion happened about 6:20 A. M. on the morning of January 20, 1936, at the Monarch No. 2 mine about three miles south of Louisville in Boulder County, Colorado. The Monarch No. 2 mine is a shaft operation, shafts 300 feet deep, supplying truck and railroad business.

Call for assistance was sent out from the mine and from this office, which call was responded to by the personnel of the United States Bureau of Mines, Mr. Denny, Mr. Forbes, and Mr. Bird; and by the group of rescue men available in the Northern Lignite mines. Crews from the Public Service Company of Colorado and from the Mountain States Telephone company reported for any service they might render; county officials also offered their services and gave help handling the surface arrangements. Deputy James W. Graham of this district received a call from the mine and reported for duty; Deputy Inspector Machin of the central district and Deputy Inspector Laurie of the southern district were called and reported for duty as soon as possible.

There were ten men in the mine at the time of the explosion; two of these men, Nick Delpizzo and William Jenkins, Jr., escaped, coming out by way of the air shaft A, as shown on the plan attached as part of this report. An attempt was made by Mine Foreman Ward and Assistant Mine Foreman Davitt, and Joseph Stevens, to enter the mine by way of the air shaft A, a little time after the two miners escaped, but by this time the afterdamp was coming up the shaft. They were overcome and were rescued by other miners who were around the shaft top. The miners used makeshift loops and lines of wire and chains to hoist them out.

Smoke was issuing from the main hoisting shaft; to make rescue possible by this route, the fan was started up as a suction; in the general operation when the mine was working, the fan was used as a force fan; this action was taken probably about 8 A. M. and in a few minutes the hoisting shaft was cleared by a downcast current of air.

When the cages were moved it was found that there was an obstruction at the shaft bottom, blocking the cage passage at a distance of from 25 to 30 feet from the bottom. Deputy Inspector Graham with some men went down the shaft, and they cut a hole through the timbering from one compartment to another, and reported that men could get to the bottom of the shaft by going through the hole they cut.

Rescue crews were now fully organized and got down to the bottom from the point where the cage stopped by means of a ladder and a rope. Men were set to work to clear the debris and obstructions, and exploration was started with the fan running very slowly; the effort of the fan was not enough to overcome a natural air current going from the hoisting shaft to the air shaft A.

Preliminary exploration work with this natural ventilation was made by Deputy Inspector Graham, members of the United States Bureau of Mines, some miners, and myself. We reached the shaft on the 7th and 8th west, finding very little damage along these entries. The main damage was on the main entry haulage road some 200 feet from the shaft bottom going inbye.

After this preliminary examination the crews were withdrawn, the fan put to work forcing, thus assisting the natural ventilation. During the time spent in reversing the fan, full rescue crews were organized, including forward men and repair men. The repair men started building temporary stoppings from the shaft bottom on, as all stoppings on the main road were blown out.

No bodies were found near the shaft bottom, but seven mules were found alive in the barn, close to the shaft. By some freak they had escaped considerable violence which was evidenced by the wreckage in the vicinity of the stable.

The main line atmosphere contained carbon monoxide in quantities enough to retard exploration excepting by the use of gas masks and helmets. For this reason more work was done on the 7th and 8th West. The push on rescue work along the 7th and 8th West was made, also because of the thought that the explosion may have started in a mine fire area on the first North, driven off from the 13th and 14th. This fire had been giving trouble for some time past. Repeated short explorations were made along the main line; these explorations indicated that the explosion came from somewhere along the 13th and 14th West and not from the fire area as first supposed.

Rescue crews found two bodies, Leland Ward and Kester Novinger, on Monday, January 20, 1936, at midnight, near the fire walls where they were working at the time of the explosion and for some time before that. Three bodies, Ray Bailey, Anthony DeSantis and Oscar Baird, were found around the motor about 1,200 feet along the 13th entry. The body of Tom Stevens was found on Wednesday morning, January 22, 1936, on a motor at the junction of the first North and the main entry (see map). About midnight, January 22, 1936, the body of Tom Stevens was found in the inbye workings; his extinguished safety lamp was sitting up right beside him; tracks showed that he had walked some distance before being overcome by carbon monoxide poison.

The mine was searched by rescue crews in every direction, but no trace could be found of the last man, Joe Jaramillio. The history of the probable movements of the victims was traced, and it was an assured fact that the body of Joe Jaramillio was buried in a very heavy rock fall in the haulage tunnel on the 13th and 14th West. This fall completely closed the tunnel so that no one could get through or over it. All work was concentrated on excavation of this rock fall for the purpose of trying to recover the body of Joe Jaramillio. All work had to be done from the inbye end of the fall, as the condition on the outbye end stopped any possibility of work from that end.

Jaramillio was the barn boss, and when the explosion happened he was driving several mules ahead of him into the working places to be ready for the drivers on the day shift. All of the mules, excepting two, were accounted for, when excavation was started on the rock fall. The missing mules were found by those excavating for the body of Joe Jaramillio.

Regular crews were kept on, clearing up this rock fall until February 6, 1936, when it was decided that the conditions in the mine were too hazardous to risk any more lives trying to recover the body of Jaramillio.

On February 6, 1936, the mine was ordered abandoned and to be sealed off permanently. This work was done by sealing the air shaft A, and building concrete stoppings at a little distance away from the main air shaft and hoisting shaft.

From all the evidence available, it would appear that the explosion originated on the 13th and 14th West near the 7th and 8th South. For some reason there must have been a disarrangement of the ventilation in this area, and explosive gas which was known to exist in the 7th and 8th South, leaked out on to the main haulage road where it was ignited by a spark from the trolley wire or some electric flash from the motor trip. Dry dust on the main haulage road undoubtedly helped to propagate the explosion through the damaged area. The inner workings, which were a little moist, were undamaged excepting for the concussion caused by expansion in the explosion area.

Since the time of the explosion, with the abandonment of the original workings, the shafts have been sunk to a depth of 105 feet more for the purpose of working the area of solid coal in the lower seam around the shafts.

BRIEF DESCRIPTION OF FATAL ACCIDENTS WHICH OCCURRED IN THE COAL MINES OF COLORADO DURING THE CALENDAR YEAR 1936

January 3—JOE BOYCE, Scotch, miner, experience 25 years, age 41 years, married, three children, employed by the Moffat Coal Company at the Moffat No. 1 and No. 2 mines, Routt county, was killed by a fall of coal from rib. Deceased was making a place for a shot in a pillar which dislodged the coal which fell on him. His place was in good workmanlike condition with safety prop in place and the other timbers set at proper intervals. No one was at fault and the accident was due to the hazard of coal mining.

January 15—FRANK KARCICH, American, machine loader, experience 30 years, age 50 years, married, no children, employed by the Jewell Collieries Corp. at the Creston mine, Las Animas county, was killed by a fall of rock. Deceased and his partner had loaded seven cars of coal and cleaned up their place. He tested the roof and considered it safe so began to square a part of the face for a machine cutting when a rock fell from an invisible slip in the roof breaking even with the coal face. Props were set according to the timbering agreement and the balance of the roof was in good condition except this slip, which was about in the center of the place. RECOMMENDED: That whenever a machine place is being loaded out that props be set as the coal is loaded. The accident is classed as unforeseen and unavoidable.

January 20—TOM STEVENS, American, night boss, experience 15 years, age 33 years, married, one child, employed by the National Fuel Company at the Monarch No. 2 mine, Boulder county, and

STEVE DAVIS, Welsh, fire boss, experience 15 years, age 44 years, married, no children; and

OSCAR BAIRD, American, motorman, experience one and one-half years, age 33, married, two children; and

ANTHONY DE SANTIS, Italian, shot firer, experience 15 years, age 38 years, married, six children; and

RAY BAILEY, American, day man, experience two years, age 26 years, married, one child; and

KESTER NOVINGER, American, day man, experience four months, age 34 years, married, one child; and

LELAND WARD, American, day man, experience 12 years, age 39 years, single; and

JOE JARAMILLO, Mexican, stable boss, experience 20 years, age 49 years, married, three children. All came to their death by being caught in a gas explosion, with fine dust playing a part, in the above-mentioned mine on above-stated date. A detailed report of this explosion will be given in the 1936 Annual Report.

January 24—ERNEST BELLOTTI, American, machine loader, experience 20 years, age 54 years, married, four children,

employed by the Major Coal Company at the Major mine, Huerfano county, was killed by a fall of rock. According to evidence, deceased and his partner had loaded a car of rock and were preparing to lay the track to the face when a rock weighing about eight tons broke from a slip extending from rib to rib and to the face of the entry, striking deceased and also catching his partner. Deceased was killed instantly, his partner being seriously injured. The mine foreman stated that he had visited the place 15 minutes prior to the accident and did not observe anything unusual from his former visits. However, found that no emergency prop had been set in the entry as required by the timbering agreement. RECOMMENDED: That an emergency or center prop be used and that the entry be cross-barred every four feet and that the mine officials enforce the timbering agreement in all working places.

February 4—THOMAS RUBCIC, Slav, pick miner, experience 20 years, age 50 years, married, one child, employed by the Victor-American Fuel Company at the Delagua mine, Las Animas county, was injured on January 23 by a fall of top coal and died on the above date. Deceased was brushing down coal when a piece struck him on his right hand, causing an infection and resulted in blood poisoning setting in on his right arm and from the effects of which he died. The accident was unforeseen and is classed as unavoidable due to the hazard of the occupation.

February 27—O. L. OATMAN, American, pick miner, experience three years, age 28 years, married, two children, employed by the Jefferson Coal Company at the Virginia mine, Jefferson county, was injured by a fall of top coal and died on the above date. Deceased was pulling a pillar and was in the act of loading a car when a bump threw out about 200 pounds of coal, which fell on him, injuring him so severely that he died from the effects of it. The accident is classed as unavoidable.

March 3—CLEMENTE VILLINI, Italian, machine miner, experience 30 years, age 45 years, married, one child, employed by the Black Diamond Fuel Co. at the Black Diamond No. 2 mine. Boulder county, was killed by a premature shot. The conveyor was running at the time deceased was tamping shot. His shot wire was not attached to the battery. As a precautionary measure, the miners twist the ends of the wires together at the battery end when not in use. Deceased connected battery wire to the shot and walked about 75 feet away to shut down the conveyor when the shot went off, injuring him so seriously that he died a short time after. The accident was probably caused by a short circuit passing through a wet bottom or through the pan of the conveyor. RECOMMENDED: That the management issue a permanent order that all machinery wires be detached from the main current during shooting.

March 8—MELVIN J. BARNES. American, tipple man, experience one year, age 26 years, married, no children, employed by the Colorado & Utah Coal Co. at the Harris mine, Routt county, was struck by the handle of a box car loader on February 28 and died on above date from said injuries. Deceased was assisting

others to put a portable box car loader into a box car, the floor of which was about four inches higher than the concrete platform. Owing to the difference in height between floor of box car and platform, it took some effort to get the loader into the car. When they finally succeeded, it struck the opposite side of the car and bounced back, dropping from floor of car to the platform, the handle of which struck deceased causing injuries which resulted in his death. The accident might have been avoided had a runway taken up the space between the platform and the floor of box car.

March 30—DOMENIC CASSAI, Italian, pick miner, experience 30 years, age 57 years, widower, four children, employed by the Colorado Fuel & Iron Co. at the Robinson No. 4 mine, Huerfano county, was killed by a fall of rock. Accident occurred at face of a skip along a barrier of an entry. The mine foreman had visited the place prior to the accident and found timbers set to within two feet of face and no visible danger from the roof. Deceased and partner mined about three feet more of coal from the face when he asked his son to get a prop and while he was preparing a place to set it, a wedge shaped rock gave way from an invisible slip, striking him and causing such injuries that he died five hours later. The place was well timbered and deceased and his partners were all practical miners. The accident was unforeseen and is classed as unavoidable.

July 8-WM. F. DAVIS, American, loader, experience 25 years, age 57 years, married, six children, employed by the Boulder Valley Coal Co. at the Boulder Valley mine, Weld county, came to his death by being caught between pit car and rib. The accident occurred on a slant between the main and north entries. Driver started with an empty pit car and when he got to a turn he set the latches for the north entry. He was not holding the lines used to lead the mule, who ran away with the car and landed into the slant catching deceased and pinning him between the end of the car and a rim, crushing him so severely that he died four hours later. Deceased was not working in his regular place but left it to get a sharp pick which he had in another place. The man who drove the mule was not the regular driver but was acting in that capacity for the time. He was remiss when he did not hold the lines controlling the mule. Had he done so the accident probably would have been avoided.

August 9—JOHN E. HINKLE, German, carpenter, age 55 years, married, two children, employed by the Canon Zenith Coal Co. at the Canon Zenith mine, Fremont county, was caught under the collapsing of a slack coal storage bin and was so seriously injured that he died a few hours later. Deceased had built the bin and was testing it by having it filled with slack from a small conveyor when it tumbled with the above stated result. Deceased was considered an efficient workman, but failed to properly brace the structure and fasten it securely to the upper bars of the tipple. Had this been done, the accident probably would have been avoided.

The plan for such a structure and its installation should have been drawn by an engineer understanding the various stresses exerted on a storage bin of this type.

August 31—STEVE PAPPAS, Greek, loader, experience eight years, age 47 years, single, employed by the Boulder Valley Coal Co. at the Boulder Valley mine, Weld county, was killed by a fall of face coal. The accident occurred in a room pillar. Deceased was picking coal that had been shot and it fell from the face, striking him and crowding him against the end of a loaded car which was close to the face. Had the loaded car been dropped back from the face there would have been sufficient clearance for him to get out of the way of the fall, or, if he had used a bar instead of a pick to free the loose coal, the accident probably would have been avoided. The accident is charged to the hazard of coal mining.

September 4—FRANK INTIHAR, Austrian, utility man, experience 25 years, age 51 years, married, three grown children, employed by the Regal Coal Co. at the Regal mine, Boulder county, was killed by a fall of top coal. Deceased was standing on an entry waiting for a machine to finish cutting the place which he and his partner were going to timber, when, without warning, a fall of top coal fell from the roof killing him instantly. The mine foreman was present at the time of the accident. The accident was unforeseen and is classed as unavoidable.

September 11—ARCHIE DE JEFFY, French, loader, experience 29 years, age 41 years, married, two children, employed by the Moffat Coal Co. at the Moffat No. 2 mine, Routt county, was killed by a fall of rock while working at face of room. The place had been visited by the mine foreman three hours prior to the accident. The place was well timbered, but the top in the part where accident occurred has a lime content and is subject to sweating, thus creating a dangerous condition by loosening it to a depth of six inches in a short time after being exposed to the air, which seems to have happened in this case. The place was well timbered to within three and one-half feet of where DeJeffry was struck. Owing to the noise made by the conveyor running, it was impossible to hear the roof working, thereby deceased was unable to protect himself by leaving the place. The accident is charged to the hazard of the industry and classed as unavoidable.

September 18—ANDREW J. CARLSON, American, master mechanic, experience 16 years, age 60 years, married, two children, employed by the Colorado Fuel & Iron Co. at the Robinson No. 4 mine, Huerfano county, came to his death by electrocution. A replacement pump was temporarily installed until a larger pinion gear could be attached to the regular pump. All parts and connections to the regular pump were left intact except the suction and discharge water lines were disconnected for use on the temporary pump. The ground of the pump frame was attached to the discharge water line which was broken when this line was attached to the temporary pump. Deceased was not expert with electricity. It

was evident that he intended to remove the armature to replace the pinion gear but changed his plans and after placing three of the frame bolts back in place turned on the power to see if the gears were meshing properly. Being satisfied that they did, he crawled under the frame to place the remaining bolt in its place, but neglected to turn off the power and while doing this the insulation of the armature broke and the entire frame became charged. Deceased, being in contact with the frame and ground, was instantly killed. The accident is classed as unavoidable due to the hazard of the work performed. RECOMMENDED: That whenever working on any electrical equipment or power lines, that the power be turned off and remain off until all work is completed.

September 18-JOHN TURON, Bohemian, pick miner, experience 18 years, age 39 years, single, employed by the Colorado Fuel & Iron Co. at the Crested Butte mine, Gunnison county, was killed by a fall of top coal. Deceased and partner were working in a room pillar and had drawn pillar back to within seven feet of the last cross-cut, leaving a seven-foot stump. When the assistant mine foreman made his inspection at 9:00 a.m., three and one-half hours prior to the accident, he ordered them not to remove any more coal from the seven-foot stump at the cross-cut, but to take down the top coal along the roadway for a distance of 15 feet. This is a general practice in this pillar work. The order was not obeyed and they continued to remove part of the stump at the cross-cut, with the result that about 10 tons of top coal fell, catching deceased. burying him and causing instant death. The coal in that section of the mine is 13 feet. The rooms are driven to their destination, seven feet of coal being taken, leaving six feet of top coal for roof, top coal being recovered when pillars are being extracted. The accident might have been avoided had the order of the assistant mine foreman been obeyed.

October 12—JOHN SUTYAK, American, pick miner, experience 15 years, age 28 years, single, employed by the Clayton Coal Co. at the Clayton mine, Weld county, was killed by a fall of top coal and rock. Deceased was working in a chain pillar when his partner heard the roof breaking. He called deceased but the fall caught him before he could make his escape and killed him instantly. His partner was not hurt. The place was well timbered and did not cave at the face. The accident is classed as unavoidable.

October 14—FRANK CHIRRI, Italian, machine miner, experience 16 years, age 39 years, married, two children, employed by the Giuliano & Carpine Coal Co. at the Cedar Canon mine, Fremont county, was killed by a fall of rock. Deceased and his partner were working in an entry. The mine foreman had visited the place several hours prior to the accident and instructed them to clean up the loose coal and take down the drawslate in the usual manner, preparing the place so that the machine could undercut same. While deceased was prying down the draw rock with a five-foot steel bar, he lost his balance and fell directly under a piece of falling rock,

which injured him so seriously that he died shortly after. The accident was unforeseen and is classed as unavoidable.

November 13—THOMAS GREGORY, American, mine foreman, experience 36 years, age 50 years, single, employed by the Temple Fuel Co. at the Brodhead No. 9 mine, Las Animas county, was injured October 17 by being squeezed between motor and roof. He was taking a battery motor from one entry to another and evidently struck a low place and was injured so severely that he died from the effects on the above date. The accident is classed as unforeseen and charged to the hazard of the industry.

November 24—LEONARD COWLISHAW, American, pick miner, experience 21 years, age 41 years, married, two children, employed by the Colorado Fuel & Iron Co. at the Frederick mine, Las Animas county, was killed by a fall of rock. Deceased and his partner were working in a pillar room and had finished the pillar and called the driver to take out the six cars they had loaded. After the cars had been removed, they proceeded to remove the track, when a rock gave way. Examination showed that the cave extended over two cribs and two props, breaking off even with the pillar. Deceased was considered a good miner and the accident is classed as unforeseen. The place was visited by the fire boss at 5:00 a.m., the accident occurred at 9:30 a.m.

December 16—ARLISS KNIGHT, American, night watchman, age 57 years, married, two children, employed by the Temple Fuel Co. at the Brodhead No. 9 mine, Las Animas county, was killed by a fall of frozen dirt. Deceased was opening a prospect trench which is cut into the hillside about 10 feet, but not underground. The trench had reached the outcrop of the coal when he started to square the right side of the trench to the face of the coal. He had finished squaring the right side and also the face when the left side of the trench gave way, letting the frozen dirt which was five feet long and two feet thick fall on him, killing him almost instantly. The accident is classed as unforeseen and therefore unavoidable.

December 28—CHAS. SHORTHOUSE, American, machine loader, experience 38 years, age 61 years, widower, one adult son, employed by the Canon Monarch Coal Co., Fremont county, was killed by a fall of rock. The place was well timbered. A slip three feet thick fell on the roadway between center prop and road prop. From evidence, the accident was unforeseen and is classed as unavoidable.

SUCCESSFUL CANDIDATES IN COAL MINE OFFICIALS EXAMINATION, 1936

MINE FOREMAN

Audin, Abel
Ausec, Frank
Beebe, Arthur R.
Bennett, John
Hampton
Bergerin, Clarence
Billington, Everett
Blair, Leo
Campbell, Alex
Carsten, William F.
Casey, Ivan
Christy, Joe B.
Clair, Clarence
Cosgrove, William
Costa, Christopher L.
Courtier, Harris
Daniels, Albert
Daniels, Charles C.
Daugherty, John
Dirks, Robert
Evans, William Medi

Felthager, Joseph T. Ferguson, James Galli, Adam Green, Romie Greenhalgh, Thomas Haske, Donald Haske, Donald
Hawkins, Henry R.
Heddles, Donald F.
Hughes, David
Kasing, Jr., Joe
Kissell, Howard Earl
Knapp, C. R.
Leslie, William
McCorrell, Grant
McIlhinney, Charles
R.
Martin, Richard C.
Matheson, Jack N.
Menardi, Pete
Morrison, William

Moschetti, Paul Moschetti, Tony Naff, Theodore N. Neish, William K. Newcomb, Albert W. Palmgren, John Patton, Earl
Pisarczyk, Walter A.
Schultz, Casto F.
Schwelka, Carl J.
Scott, William C. Scott, William C.
Sherratt, Harry
Silengo, Frank
Somerville, Tom
Thomas, Quentin C.
Thompson, Arthur E.
Thorne, Gerald
Walsh, John
Welch, Sam
Worman, John

ASSISTANT MINE FOREMAN

Bacco, Albert D. Beebe, Clarence William Bennett, Jr., Harry S.

Bonicilli, Mello Evans, Chester Gardiner, Pete

Gieser, William J. Rotar, John Walker, Leroy

FIRE BOSS

Allison, Hiram
Baker, Albion
Baker, Ansel L.
Beer, Lloyd
Bellodi, Pete
Benedick, Mike
Beuchat, John
Bixler, Everett A.
Bradovich, Joe R.
Brown, Charles T.
Cahill, Raymond V.
Ceretto, Gregory W.
Coan, John
Coan, John
Coan, Leo
Coleman, Charles E.
Dale, Jr., John
David, Bruce
Denton, John Chester
Dewey, Joseph
Dollard, Gomer
Edwards, Lewis J.
Egan, John K.
Elkins, Cyril
Falagrady, Joe
Faycosh, Joe A.
Fedeli, John
Ford, Leonard C.
Franks, Charles A.
Frenchmore, Victor
Gardiner, George
Gebo, Harry
Giuliano, Mike
Gonzales, Charles
Gregory, William J.
Haddon, Earl
Haddon, Willis L.
Harris, Sam
Haynes, Jr., William
Francis
Hicks, Ernest
Hileman, Ira G.

Hodson, Daniel E.
Hutton, Richard
Jackson, John
Jerant, Frank
Jermance, Raymond
Johns, T. B.
Jones, Herschald
Jones, Ronald
Kalecik, Edward
Kasik, Robert E.
Kerr, John William
Kissell, Chester
Kissell, Clarence
Kranker, Anton Pete
Kruger, Richard
Krumpotich, Nicholas
A. Krumpotich, Nicholas A.
Lakovich, Jr., Joe Lavery, James W.
Lira, Barney McDowell, Earl McDowell, Earl McDowell, James McMillin, George Martin, Richard C.
Masse, Anthony Mathews, Hugh Metz, William R.
Micheli, Harry Miller, Thelbert Morrison, John Edwin Mudra, Joe Naylor, Joe Nelson, Carl F.
Oberto, Tony Ogden, Mack L.
Ottenschneider, Joseph F.
Owen, Jr., Tom
Pals, Angelo J.
Parry, William R.
Pasterski, John M.
Plute, John

Reary, Ben Reese, Louis Reese, Jr., Gomer Reese, Jr., Gomer Reome, Loren H. Ritter, J. F. Rocchio, Tony Romano, Carmen Rooney, Morris Rosser, Lewis Rossman, Jr., Julius Rossman, Jr., Julius F.
Ruscetti, Pete N.
Sanborn, Frank
Selak, John
Shipley, Jr., Edward
Shipley, Walter L.
Smith, A. E.
Smith, Carl
Somerville, William R.
Sterk, Paul J.
Stockman, John
Swallow, George W.
Templeton, David W.
Templeton, David W.
Thomas, Clyde
Thompson, George T.
Topping, Robert A.
Vancil, Martin
VanWert, Everett
Varley, Frank
Vaughn, Ambrose
Voytilla, Andy
Walker, Thomas A.
Watts, Marvin
Wilcox, James E.
Williams, John M.
Williams, John M.
Williams, John M.
Williams, Morgan S. Wilcox, James E. Williams, John M. Williams, Morgan S. Wilson, Arlo A. Wilson, Dirvin D. Youngman, Frank Zamborelli, August Zurich, Joseph



