

### TWENTY-SIXTH ANNUAL REPORT

OF THE

### State Inspector of Coal Mines

1938





1939



THE BRADFORD-ROBINSON PTG. CO., DENVE

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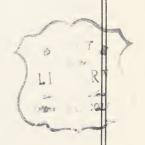
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### LETTER OF TRANSMITTAL

Denver, Colorado, April 22, 1939.

To His Excellency,

RALPH L. CARR, 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 1938.

 ${\bf Respectfully,}$ 

THOMAS ALLEN, State Inspector of Coal Mines.

### PERSONNEL OF THE COAL MINE INSPECTION DEPARTMENT

THOMAS ALLEN, Chief Inspector	Denver, Colorado
ADA R. TIBBITS, Chief Clerk	Denver, Colorado
Max M. Greenwald, Assistant Clerk	Denver, Colorado
Marjorie Robson, Assistant Clerk	Denver, Colorado
VEDA BURFORD, Safety Director	Denver, Colorado

FIELD FORCE AND DISTRICTS
Hugo H. Machin, Boulder
George C. Dalrymple, Trinidad
Finlay McCallum, Steamboat Springs
J. J. Roddy, Montrose
George H. Smith, Canon CityDistrict No. 5

### SUMMARY OF THE COAL PRODUCTION OF COLORADO FOR 1938

Number of mines licensed.	385
Tons of sub-bituminous coal produced	
Tons of semi-bituminous coal produced	
Tons of bituminous coal produced.	
Tons of anthracite coal produced	
Total number of tons of coal produced.	
Decrease, 1938	,472,496
Tons of run of mine coal produced	
Tons of lump coal produced.	
Tons of egg coal produced	
Tons of nut coal produced	
Tons of pea coal produced	
Tons of slack coal produced.	2.389,695
Percentage of slack coal produced	
Tons of coal mined by hand	
Tons of coal mined by machine.	
Number and kind of machines used: Compressed air 19: electric	, ,
415; total	434
Number of mechanical loaders	180
Number of tons of coal mined by mechanical loaders	,313,753
Tons of coal mined for shipment: By railroad, 3,926,273; By truck	
and wagon, 1,678,033; Total	5,604,306
Tons of coal used at mine for power and heat	
Tons of coal shipped out of the state	
Tons of coal made into coke	,
Tons of coke made.	,
Number of days coke ovens operated	286.5
Number of coke ovens used	284
Number of men employed at coke ovens	64
Number of miners employed, average: Pick miners, 1,755; Machine Miners, 3,820; Total	5,575
Number of men employed in and about mines (average): Under-	0.000
ground, 7,173; Surface, 1,490; Total	8,663
Number of days worked	159.8
Daily production per miner	6.5
Annual production per miner	1,035.5
Number of approved flame safety lamps used	582
Approved electric lamps used	8,969
Number of carbide lamps used	1,763
Number of pounds of carbide used (approximate)	80,725
Number of pounds of black powder used	
Number of pounds of permissible powder used	485,995
Number of pounds of dynamite used	35,952
Number of men killed: Underground, 28; Surface, 3; Total	31
Number of men injured	722
Number of men killed per thousand employed—actual number of days worked	3.57
Number of men injured per thousand employed	83.3
Number of tons of coal produced for each life lost	
Number of tons of coal produced for each non-fatal accident	7,926
Number of men employed per fatal accident	279.4
Number of men employed per non-fatal accident.	11.99
Number of widows left	24
Number of children left fatherless	34

# FINANCIAL STATEMENT FOR THE COAL MINE INSPECTION DEPARTMENT

19.38   19.3	1302		
19,195,171   \$23,8	RECEITTS:	1938	1937
PERATIE COAL MINES		\$ 22,327,71	\$ 23,833,45
ALIONE LAWS   2.00	SOAL MINES		10,195,00
Total Collections   2.00   2			103.00
T AID MANUALS  UBDIT'S ADJUSTED  UBDIT'S ADJUSTED  UGHT FORWARD JANUARY 184  TOTAL, RECEIPTS  R 43,9  TOTAL, RECEIPTS  R 43,9  TOTAL, RECEIPTS  R 43,9  R 1,027,87  R 43,9  R 44,4  R			2,00
### ### #### #### ####################	SALE OF FIRST AD MANUALS	7,50	
TOTAL RECEIPTS   \$43.9	Q.	1.2	21.77
### 1027.87 ###################################			9,768.33
27,680.02   23,0		\$ 41,027.87	\$ 43,923,55
27,680,02 23.0 2,072.81 2,072.	DISBURSEMENTS:		
ORS ORS ORS OFFER	SALARIBS (Pield & Office)	27,680,02	23,021,10
DENT INVESTIGATORS   1,152,64   3,0			
(GE, EXPENSES, SUPPLIES, REPAIRS, ETC.  116.26  1219.38  1219.38  1219.38  1219.38  1219.38  1228.56  1228.56  1229.20			210.04
TRANSPORTATION (Field Force)	HES, REPAIRS, 18TC.		3,000,49
TANNSPORTATION (Board of Examiners)	RALLIOAD TRANSPORTATION (Field Force)	219.38	82.88
### STATE (Board of Examiners)    Solution			
General of Examiners   223,20			834.81
d Force)  rd of Examiners)  1 months) 1938,  1 of Examiners)  1 of Examiners)  1 of Examiners)  1 of Examiners)  239,15  1 of Examiners)  823,89  466,24  466,24  498,90  77,99  PMENTS & EQUIPMENT Mechanics Mechanics  77,99  141,40  171,99  171,99  171,90	SE (Board of Examiners)		
rd of Examiners)  1.175.68		510.95	677.76
, 11 months) 1938, 1,175.68 1 of Examiners) 223.89 466.24 625.94 498.90 77.99 PMENTS & EQUIPMENT TOTAL DISBURSEMENTS  * 39,266.66	of Examiners)		***************************************
10,00   823.89   166.21   16	months) 1938	_	855.04
# ## ## ## ## ## ## ## ## ## ## ## ## #	Examiners)		68.65
. OFFICE SUPPLIES  125.94  125.94  198.90  177.99  PMINNTS, CExpress charges, training, Miscellaneous)  101.40  101.40  101.40  101.40  101.40  101.40  101.40			1,299.97
525.94   498.90   77.99   77			619,39
498.90 TT.99 PMIGNTS & EQUIPMIGNT Miscellaneous) 144.40 891.55 TOTAL DISBURSEMENTS	COPFICE SUPPLIES		654.77
IMENTS & EQUIPADENT  INCLUDATES CHARGES, training, Miscellaneous)  TOTAL DISBURSEMENTS  \$ 39,266.66	TELESTHONIS	498,90	486.79
DMENTS & EQUIPMENT BNT, (Express charges, training, Miscellaneous) TOTAL DISBURSEMENTS \$ 39,266,66	The second secon	77.99	73,12
ENT, (Express charges, training, Miscellaneous)  TOTAL DISBURSEMENTS \$ 39,256,66	CONTRACTOR OF STREET,		378.55
TOTAL DISBURSIONENTS \$ 39,256,66	RQUIPN	891.55	1,893,11
TOTAL DISBURSBMENTS \$ 39,256,66		And and a second	4,400.00
		\$ 39,256,66	\$ 38,456,47

### INTRODUCTION

### TWENTY-SIXTH ANNUAL REPORT

OF THE

### STATE INSPECTOR OF COAL MINES 1938

In 1938, 385 licensed mines produced 5,722,899 tons of coal, a decrease of 1,472,496 tons over 1937. An average of 8,663 men were employed, working 159.8 man-days. Tables and statistics relative to the industry, will be found within this report.

A considerable increase in safety activities has been shown throughout the State, during the past year.

In 1938, the United States Bureau of Mines awarded the following 100% First Aid certificates: Crested Butte, Kebler No. 2, Morley, Rockvale No. 3, Frederick, and the Robinson No. 4. These are the first awards of the kind that have been made since 1932, when four of these mines received the same honor—the Kebler No. 2, Rockvale No. 3, Frederick and the Robinson No. 4. The same year certificates were also granted to the Calumet No. 1 and the Calumet No. 2 mines.

The Government only issues these certificates to mines employing an average of 25 men, and there are several smaller mines whose men are 100% trained in First Aid, and are ineligible for certificates. Among these mines, the United States Vanadium, employing an average of 20 men, is trained 100%. There are at least one-half of the remaining number of mines, where the men are 50% trained.

During 1938, the Bureau granted 1,106 First Aid certificates to Colorado coal miners, each class examined by one of their instructors. Similarly, 96 Mine Rescue certificates were issued. The State Department of Coal Mining also issued certificates to those passing the Government examination; in addition to that number, 174 First Aid certificates were issued by the Department, to isolated groups that were unable to contact a Bureau examination.

Thirty-one coal mine First Aid instructors were qualified by the Bureau.

With the steady increase in the number of men and women trained in safety, there are now 2,850 holding certificates in First Aid, and 429 in Mine Rescue, all of whom received their training within the last two years.

There are 835 miners and coal mining officials who have completed the Accident Prevention classes conducted by the Bureau of Mines, during the past year.

Several thousand Colorado coal miners and their families, attended safety meetings at which the Bureau made use of silent and sound pictures.

Five additional Holmes Safety Chapters were granted charters during the year, making a total of 17 chapters, with approximately 4,000 members, in coal mining communities of the State.

Out of the 385 licensed coal mines, 236 had no accidents during the year; this is an increase of 117 mines without an accident, over the previous year.

It has been possible to arrange educational classes throughout the coal mining districts, through the cooperation of the State Board of Vocational Training. In addition to classes in First Aid and Mine Rescue Work, instructors have been furnished for classes of students preparing to take the examination for Coal Mining Officials.

This is the first year that it has been possible to give the coal miners a course in Practical Coal Mine Surveying. The Vocational Board granted seven certificates to men completing this course.

Through the sale of a "Shot Firer's Guide" and "Examination Questions and Answers'', compiled and edited by this Department, we have been able to contribute \$88.50 to the educational fund of the Vocational Board, who exclusively handles all sales of these publications. This money is used for instruction work among the coal miners.

A vocational school for coal mining is being constructed in Lafayette, Colorado, with the cooperation of the NYA and the State Board of Vocational Training, and under the direction of the local School Board

A Monthly Accident Circular recently issued by this Department, contains the number of men and days worked, and the number of accidents at each mine. The contest for the cleanest accident record for each six months' period, based upon working shifts exposure from the data mentioned, was won by the following mines in 1939:

### 1st 6 Months

### 2nd 6 Months

- Somerset 1.
- 2. Canon Monarch No. 2
- 3. City No. 1
- Calumet No. 2 4.
- 5. Pinnacle
- 6. Kebler No. 2

- 1. Morrison
- 2.
- Pryor 3.
- Somerset
- 4. Black Diamond No. 2
- 5. Cedar Canon
- 6. Kenneth

The safety plaque will become the personal property of any mine winning it four consecutive times.

The State-wide First Aid contest at the Denver Municipal Auditorium on August 26th, 1938, open to all industries, was jointly sponsored by the State Board of Vocational Training, this Department, and the entire industry. With 15 teams entered, the following teams won in the stated classes:

Class A—1. Hayden No. 3, Haybro, Routt County. 2. Public Service, Denver.

Class B—1. Clayton-Morrison, Erie, Weld County. 2. Louisville Safety Chapter, Louisville, Boulder County.

Ladies Class—1. Public Service, Denver. 2. Moffat Local Union, Oak Creek, Routt County.

Routt County held its second Annual Safety Day at Oak Creek, on July 30th, with nine teams competing. The Hayden men and the Moffat ladies won first place in their respective classes.

The following awards for heroism were made by the Joseph A. Holmes Safety Association, during the year 1938: medals presented to Albert Daniels, Carl Marino, Verdun Graham, William Peterson and Joe Zuniga, of the Hayden Mine No. 3, Routt County, for saving the life of a man pinned beneath a rock fall; medals awarded to Marvin Eisenhour, John Vendetti, and John Eisenhour, of the Griffith Mine, Fremont County, for recovering a body in a gas filled mine after an explosion.

Certificates of honor were presented by the Holmes Association, to James Miekle and Nicholas Richards of the Sterling Mine, Weld County, for long time service in promoting health and safety, and for long time employment without an accident.

Certificates of honor were given to Theo Coet and Arthur Cilinski of the Russell Mine, Weld County, for saving the life of a victim of electric shock.

The Association also presented certificates of honor for extraordinary safety achievement to the following mines: Boncarbo, Las Animas County; Somerset, Gunnison County; Morley, Las Animas County; Rockvale No. 3, Fremont County; Dix, Huerfano County; Pryor, Huerfano County; Kebler No. 2, Huerfano County. These mines received seven out of a total of 66 awards made in the 25 coal producing States in the Union, in 1938.

There were 288 men who took the examination for Coal Mining Officials; from this number the following certificates have been issued: Mine Foreman—60, Assistant Mine Foreman—15, Fireboss—158. There were only 26 failures, the remaining certificates to be granted upon the completion of a course in First Aid to the Injured, which is a requirement of all Coal Mining Officials of the State.

This examination was conducted by the Board of Examiners for the State Coal Mine Inspection Department, namely: Fred W. Whiteside, engineer, Denver; Robert Donaldson, Florence; William Roberts, Durango; Fred Gulliford, Crested Butte. The list of successful candidates will be found in this report.

The examination for Chief and Deputy Coal Mine Inspector, given by the State Civil Service Commission, was conducted by a State Board of Mining Examiners, consisting of F. W. White-

side, R. R. Vaile, and Jack Matheson of Denver, Gerald Arnold of Boncarbo, and W. S. Getchel of Colorado Springs. The examiners were appointed by the State Civil Service Commission. The list, according to rating, appears in this edition.

During the past year, 350 Shot Firer's examinations have been given by the Deputy Inspectors, and certificates issued by the State Department.

The Colorado Safety Council, Motor Vehicle Division of the Secretary of State, has issued cards of recognition to all men and women connected with the coal mining industry, who hold First Aid certificates, authorizing them to render such assistance at highway accidents throughout the State.

A WPA project sponsored by the State Coal Mine Inspection Department, and the Colorado State School of Mines at Golden, and conducted under the supervision of the State Planning Commission, is making an extensive study of the coal mining industry in the State. From this research, maps are being made to show the location, workings, geological and topographical features of each mine of record, from the earliest history of the industry in the State, up to and including the present operations. All of the essential data pertaining to the coal mining industry, is being assembled for publication.

A collection of rare, old safety lamps used in the early history of coal mining, together with several prints including the "Origin of the Safety Lamp," were presented to the State Historical Society, by this Department. In addition to the lamps and pictures, other relics of the industry are being collected, to make a more complete display of the development of coal mining and coal mining equipment, in the State Museum.

### IMPORTANT RECOMMENDATIONS MADE BY THE STATE DEPARTMENT IN 1939.

1. Weatherproof wiring for carrying electricity of more than 110 volts pressure, must not be used in any new installation underground.

All weatherproof wire which has been installed for working machinery in previous years, and which carries more than 110 volts pressure, must be so guarded that no person can come in contact with it.

2. "Plaster," "dobe shots" or "mud caps," will not be fired in any mine for any purpose. This recommendation includes all practices of placing explosives to be fired on, under, along-side of, or close to the material to be broken, and covering the explosive with loose dirt, dobe, wet dirt sand or rocks, or simply placing the explosives with no covering at all.

No blasting can be done, excepting by approved methods of ignition, with the charge fully tamped with non-combustible material, in a proper drill hole made for the purpose of placing the explosive.

### REGULATIONS FOR THE USE OF MECHANICAL LOADING DEVICES WHERE SHOOTING IS NECESSARY AT IRREGULAR INTERVALS

- 1. Shooting on shift will not be permitted in any mine where any important recommendations pertaining to general safety in the mine are made by the Chief Inspector of Coal Mines, and said recommendations are not enforced by the management.
- 2. Where group arrangement of places is used, shooting shall be at sufficient intervals of time between places to permit the smoke to be disseminated by the air current and pass the adjacent place before the shots are fired.
- 3. Places in which mechanical loaders are operated and shooting on shift is permitted, the same must be under the supervision of a certified Mine Foreman or Assistant Mine Foreman, so that visits of inspection may be made by such officials at not less intervals than twice per shift.
- 4. All shooting must be done by a certified person who is qualified as Shot Firer, Fireboss, Assistant Mine Foreman or Mine Foreman.
- 5. That all places, where mechanical devices are used, must be protected from dust hazard in a manner approved by Chief Inspector of Coal Mines.
- 6. That all places shot must be examined as soon as possible after a shooting and before loading operations are resumed.
- 7. That the use of dynamite, black or pellet powder be prohibited at the coal face.
- 8. That only electric shooting by battery of permissible powder, Cardox or other approved chemical or mechanical device be permitted, and rubber covered or properly insulated lead wires be used.
- 9. That burster shots be fired alone and that no dependent shots be allowed, and that delay caps be used when more than one shot is fired at a time.
- 10. That a sufficient supply of non-combustible tamping dirt or clay cartridges be kept on hand at all times.
- 11. That ventilation arrangements in mechanical districts and throughout the mine, meet with the approval of the Chief Inspector.
- 12. That the ventilating fan must be placed on the intake side of the working place, and so set as to prevent the return air from the place so ventilated, from reaching it.
- 13. That all workmen wear goggles, hard or safety hats, and hard toed shoes. Men at the face operating cutting machines, electric drills and other such electrical devices, must wear only hard toed high press rubber shoes, or hard toed electrician type of shoes, equally resistant to the flow of electricity.

- 14. That no light other than the approved flame safety lamps and the approved electric lamps be used in all the workings of the mine by all employees, excepting with the approval of the Chief Inspector, given in writing; but in no case shall open lights be used by men operating mechanical devices.
- 15. That First Aid kits properly stocked be kept close to operating units, and that a sufficient number of men be trained in "First Aid to the Injured."
- 16. That telephones be kept within a reasonable distance of the loading area.
- 17. That systematic timbering, meeting with the approval of the department, be strictly enforced. Cap pieces shall be used on all posts set.
- 18. That no conveyor or parts of machinery be suspended from the roof by hooks or bolts inserted in holes drilled for that purpose, excepting with the permission of the State Coal Mine Inspection Department.
- 19. A definite signal arrangement from face to the loader head shall be installed on all conveyor units.

### RULES AND REGULATIONS FOR SINKING SHAFTS IN COLORADO COAL MINES

### HOISTING AND SURFACE ARRANGEMENT.

Hoisting engineers shall be steady, reliable, and not less than 23 years of age. Hoists shall be of sufficient strength and set on a secure foundation. Hoists shall have brakes on the drum, capable of holding the loaded bucket in suspension at any point in the shaft. Flanges on the drum shall project not less than four inches above the rope when it is all wound on the drum.

No belt shall be used as a drive from the engine to the drum. Transmission of driving power shall only be by means of gearing or standard clutch.

No person, other than the hoistman, shall be in the hoist-room during working hours.

The hoist room must be a separate arrangement; no other work shall be done in the hoist room other than actual hoisting. No subdivision of a hoistroom shall be used for any noisy machinery work, or any arrangement permitted whereby the hoistman's attention may be attracted from his duty, or the noise shall interfere with the hoistman hearing sound signals of any kind.

The headframe shall be of substantial construction and arranged so that hoistman has a clear view of the bucket from ground level to dumping point.

The sheave wheels used for shaft sinking shall be not less than 72 times the diameter of the hoisting rope. Only new ropes of sufficient strength with a factor of safety of ten, and of the non-twisting type shall be used.

Hoisting ropes must have a socket, or not less than three clamps on a bend over connection made over a thimble for attachment to the bucket chain. A swivel joint must be part of the chain.

The chain must be heavy enough so that the weight of the slack rope between the sheave and the hoist drum will not pull the end of the rope up and over the sheave when there is no load (bucket or material) on the rope.

The hook for attaching the bucket must have a safety snap on it. No open hook shall be used.

The hoisting rope shall be supported between the sheave wheel and the drum of the hoist, to prevent undue jerking of slack rope during hoisting.

All parts of the top of the shaft other than the bucket hole must be covered excepting for ventilation arrangement. The bucket hole must have a door which must be closed to cover the hole while (1) when men are loading or unloading, (2) when tools or supplies are being loaded or unloaded, (3) when the bucket is being dumped.

The shaft top shall be fenced so that no unauthorized person may enter the area of the shaft top. No one shall visit or interfere with the shaft top man while he is working.

The ventilation shall only be by an efficient fan set at the top of the shaft. All fans must be protected from damage by shock of blasts and any other condition which might interfere with their operation.

Fans driven by gasoline or oil engine shall be set ten feet away from the shaft and shall have a belt drive of not less than five feet long, so that the engine is on the side of the fan away from the shaft. Fumes from gas or oil engines shall be piped away from the engine through a pipe not less than fifteen feet in length and away from the shaft. Fan shall run continuously, excepting that they may be stopped during the time shots are being fired.

The bucket shall not be loaded with dirt or muck, more than within three inches of the top.

Materials, appliances or tools which when loaded project over the top of the bucket, shall be securely lashed to the hoisting chain or cable. The hoistman or engineer shall stop any bucket loaded in this manner as it is coming up through the hoist hole at the surface—the top man shall signal the hoistman when to hoist above the shaft top decking.

No person shall ride on a loaded or partly loaded bucket of muck, nor shall any person ride on the bucket loaded or partly loaded with tools or supplies.

Men must ride with one leg in the empty bucket where more

than one man is riding at one time. A single man riding shall have both legs inside the bucket.

Hoist man must slow down the hoisting speed when bucket is approaching the surface landing, when hoisting muck, and must not exceed 100 feet per minute hoisting speed with men on when approaching and passing through the bucket opening at the surface.

The bucket must be steadied at the surface before being lowered and especially when men are loaded ready to be lowered into the shaft.

The empty bucket going down must be stopped fifteen feet from the bottom of the shaft and held there until signalled down by the men in the bottom, excepting when men are riding down with no one in the bottom of the shaft; in this operation the bucket may be lowered all the way down; but on the last fifteen feet from the bottom the speed shall not exceed a rate of 100 feet per minute.

The bucket being hoisted from the bottom must be raised five feet and stopped. At this point it shall be steadied by the bottom man and cleaned of anything sticking to it. After this, the bottom man will signal for hoisting to the top.

All men in the shaft bottom shall be out of the hoisting compartment when timber, equipment, or anything else which will not go inside the bucket is being lowered down the shaft. No repairs shall be made on any part of the upper portions of the shaft when sinkers are in the bottom.

### EXPLOSIVES AND BLASTING.

Explosives must not be loaded into the bucket with any supplies or equipment and no person shall ride in the bucket with explosives. Primers for explosives must be sent down in a separate bucket with no other explosives or anything else in the same bucket.

No blasting shall be done in any other way than by the use of an electric battery. The electric battery shall be operated from the shaft top only. The person firing the shots and all other persons shall be away from the shaft top and under some protecting cover while blasting is being done. No shots shall be fired from the electric lines of the power, light or signal system. All men shall be withdrawn from any part of the shaft during any blasting operation in the shaft.

The shaft must be carefully examined from top to bottom after every blast is fired. Careful examination shall be made for muddy material sticking or lodging on the timber, sides or buntons. The shaft must be examined by a proper official after any period of no work of two hours or more. Examinations shall be made for explosive gas during periods when fan is stopped and air drills not in operation.

The shaft shall be thoroughly ventilated and the smoke and fumes cleared out before men descend into the shaft after blasting.

An approved safety lamp in good working condition must be kept on hand at all times for testing purposes in the shaft.

### SIGNALS.

A well constructed signal system shall be installed. If electrically operated the wires must be carried down the shaft at the opposite end of the shaft from power lines or shot firing cables or light wires. Electric signals must have a bell and flash arrangement.

Signals, as written in Section No. 3578, or No. 130, of the Colorado Coal Mining Laws, shall be adopted and used, and shall be posted in the engine room, and at shaft top.

### Signals:

1 bell	hoist (when engine is at rest).
1 bell	,
	lower
0.1 11	men are ready to get in the bucket

Engineer shall answer three bells by slowly hoisting the bucket two or three feet and setting it back on the bottom. When men are loaded, one bell must be given to hoist. Upon receiving this signal, engineer shall hoist the bucket about three feet and hold it there until it is steadied and cleaned. Another signal of one bell must then be given for the engineer to hoist away.

Other signals may be used for special purposes, but they must not interfere with the standard code as set forth herein. These other special signals shall be posted with the regular code.

### LIGHTING.

Nothing but electric cap lamps shall be used by the sinking crew members; electric lights on a circuit may be used in the shaft bottom, but the wires on such an arrangement must be kept as a separate installation from any other circuit.

The surface arrangements must be well lighted for night shift work. The lighting shall be such that no shadows are cast on the shaft top, nor shall anything else interfere with the view of the engineer. In event that the surface lighting system fails at night, all hoisting shall cease until the lights are in working order again; excepting that should such failure of the lights be for an extended period, the working crew may be carefully hoisted from the shaft at this time, light being provided by some temporary arrangement.

### GENERAL.

Hoisting engines, headframes, ropes, cables and chains, signal systems, lighting systems, blasting installations, and all other equipment, must be examined once per day and reported safe for use.

Sinking crew members shall wear hard hats and hard toe rubber shoes or boots. An arrangement of a warm room must be installed on the surface as a First Aid Station, and a full First Aid to the Injured equipment be kept on hand.

Telephone communication must be established between the shaft site and the nearest town where medical assistance can be obtained.

Plumb bobs must be pulled up out of the shaft and set aside on the surface when not in use.

No intoxicating liquor shall be allowed anywhere near the shaft site, and no one shall be allowed to work in or around the shaft on whom the odor of liquor can be detected.

Each crew of sinkers at the shaft bottom shall be in charge of a competent and careful leader.

### SPECIAL FOR DEEPENING SHAFTS.

Where shafts are being deepened all regulations as set forth herein shall be obeyed and in addition:

All work of sinking must be covered and guarded from work being carried on above the sinking.

Appreciation is hereby shown of the cooperation of the United States Bureau of Mines, the State Board of Vocational Training, the United Mine Workers of America, the State Industrial Commission, the Employers Mutual Insurance Company, the State Planning Commission, the WPA, the coal operators and the individual miners of the State.

### WORK OF THE FIELD FORCE.

### (Deputy Inspectors)

The following is a summary of the work done by the field force of the Department, during the year 1938:

Total number of inspections made	1,250
Number of fatal accidents investigated	31
Number of general complaints adjusted	97
Number of scale inspections made	12
Total number of miles traveled by the field force.	68.682

THOMAS ALLEN,
State Inspector of Coal Mines.

DIRECTORY OF COAL MINES IN THE STATE OF COLORADO FOR THE YEAR ENDING DECEMBER 31, 1938															
Name of Company or Operator	Name of Mine	County	Name of Manager or General Superintendent	Company Post Office	Mne Supt.	Mine Post Office	Rallroad to Mice	Shaft	Opening	Pitch	Drift	Tunnel S	Pitch	Seam	Inches
Bellino, Frank Bierce, James A Crane, Lercy II.	Bolik Shameock Columbine	Archuleta Archuleta Archuleta	Frank Bellino.  James A. Hierce Leroy R. Crane.	l'agosa Junetion	1918 Licenso	Pagosa Junction No Report Filed Bnyfield			-		Yes Yes Yes			14	3
McBroom, Clout, Rhelden, Fred Wilson, T. A. Hig "b" Coal Co. Hinck Dismond Pard Co.	Laffle Shannock  Cox  Fig "5" Slack Djaroond	Archuleta Archuleta Archuleta Houlder Houlder	The Wilson The Wilson The Wilson	Pyke	Joe Hulertson Thos. P. Hilton Wm. Andrew.	No Report Filed  l'agona Springs Bogider LAIsyelle Louisville	C. B & Q	768 280	260 120 1,300	12 %	1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·		en promote en entre de la compa	4 6 8 8	5 5
Houlder Valley Coal Co Courtler, Harris	Contennial   Lewis No. 3  Pidorado   Regal   High View	Boulder Boulder Boulder Boulder	Henry Richards Lants Guspar James Wardle.	Gorliam  Oorliam Lafeyette Gorliam Louisville	Louis Uappar James Wardle J. W. Thomas	Gorham Gorham Lafayette Gorham Loutsville		280	160 800 200 342	30 % 7 % 10 % 1 12 % 1		200	7.5	6 6 6	
(O-Z Coal Mining Co  [Aley & Mortino =  Logan, Girardo & Jameela  Louisville-Lafayetta Coal Co	Fireside. Lilley  Marnhell His-Way	Boulder Boulder Boulder Houlder	J. W. Thomas Charles Lilley.  A. W. Logan	Louisville Boulder Louisville Denver	Charles Liley  A. W. Logan  W. D. Pitchford  A. T. McLaughlin	Boulder	C. IK & Q.	348	290	19%		) · · · · · · · · · · · · · · · · · · ·	\$100 - 100 -	и 6 к	4
MeLaughiln Coal Co	Gorliam Monarch No 1 Northerb  Paramount Pine Cuff	Boulder Boulder Boulder Boulder	A T McLaughiln Roy Williams L. J. Brunton John Dala H. V. Cartwright D B Davies	Denver Englewood Lalayette Boulder Boulder	Roy Williams	Iroomfeld No Report Filed Lafayetto	C. & S	376	1,000 900 2,000	74 % 13 %	Yes	********		5 4 2	11
Pittaturgh Coal Co Plain Coal Minling Co. Premier Coal Co Rocky Mountain Puni Co	Puto No. 2	Roulder Boulder Boulder Roulder Houlder	Frank E. Hollmon Frank Delino	Boulder Boulder Denver Gotham	Frank E. Hodgion Frank Dellen David A. Kurr. D L. Edwards Andrew Wilson	Superior Superior Superior	C & 8	265	1,600	10% 105%	Yes Yes No	200	15%	2106	- f
Hack Diamond Cost Co Bowerman, J. C. 4 Sons Green Valley Coal Co	Crown Mark Diamond	Delta Delta Delta	L. R. Ives C. A. Bowerman  Ira T. Brooks A II Himes Ray Clipp	Cedaredge	1. R. Ives C. A. Bowerman. Ira T. Brooks 1938 Licenso Ray Clipp	Superior Cedaredre Austin Cedaredge No Repart Fileu Cedaredge			120 160 270	12%	Yes No	125		5 5 5	6
Independent Coal Co Jackson, R. M Juanita Coal & Coke Co., MrNrw, Paul Neigh, J. J	Independent Burtick King Gelwicks Pitzsimmuns	Delta Delta Delta Delta	J. J. Nelsh	Paonia Paonia Lozear	Paul McNew	No Report Filed Bowle Paonia Paonia Lazear	- 1 (44) 18	******	5,100 800 100	5%	Yes	76	15	11 4 8 9	
Owens, Louis	Pamery Paopla l'armers Red Canon  Western Slar States Red Mountain	Delta Delta	Lioyd L Pallon	Paonia Cedaredge Cedaredge Cedaredge	Apsel I. Balter	Paonia. Cedaredge. Cedaredge. Cedaredge.		********	1,200 500 800 800 800	5% 5%	Yes	150	**************************************	5 5 5	6 8
Slates Hall Coal Co Cramer, H. C. Barker, Coal Co Dalry mple, J. M. Jordan, Gu	Top Willing Creek	Delta Douglas Elbert Elbert	Clarence E. Hall R. C. Crarert Porrest Noakoa  J. M. Daltympte Guy Jordan	Codatedge Littleten Malheson  Agale Agale	Welland W Slates R. C. Cramer Forrest Noakes J. M. Dalrymple 1938 License	Matheson		7.5	300	30%	Yes	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	**************************************	6 	
Cark, W. J. Stander, Joe H. Altitude Diel Co. Auser, Frank Clara Helle Coal Co.	White Ash Slander Altitude Busy Rec Chrst Belle	Elbert Ellert	W J Park Joe H Slander H S Benneti Prank Ausec	Hatheson Ramah Colomdo Springs Golomdo Springs	Joe H. Stander	No Hepori Filed Hamsh Colorado Spring Colorado Spring Colorado Springs	Table 1 Annual A	120	650	30%	Yea	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	## ###################################	1 to 14	6
Colorado Sittings Co Cottonuco I Coni Co Danvillo Coal Co Prancevillo Coal Co Joins Camp Duel Co	City Coal Mine Cottonwood Cilmax  Franceville Jimny Comp	El Paso El Paso El Paso El Paso	George H. Krause Fred Sevelk Inmes Rajaton R. F. Gardley H. R. Unwin	Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs	Walter Coburn Fred Sevelk  Arch Ellfort II. R. Unwin	Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs		- +++  29-	3,300 150 125 1,000 1,500	20% 36%	Yes	7 m	· · · · · · · · · · · · · · · · · · ·	6 to 2n 3 10 4 Io 8 5	
Mandarieli, Pete Peak Fuel Co Streenin, John American Independent Coal	M M & P Pike View New Keystone	Pi Paro El Paro El Paro,	Arvilla Marriali W. D. Wado John Sireenan	Colorado Springs Colorado Springs Colorado Springs	1938 Isleense V. II Adams John Streenan	No Report Filed Colorado Springs Colorado Springs	D. & B. G. W.	173	350	26%			10 00 00 000 20 000 0 0	6 to 30	==
Paid, J. & Co. Bartalo, Joe Bloff Springs Leasing Co.	Baid Witte No. 3 American Independent No. 2	Premont Premont Premont	D. L. Hansen   Decemed) John Balt!   100 Barbato   Newell-Price & New 41	Florence Florence Florence	John Raid	Florence  Clorence  Clorence  Plorence	A.TASP		1,000 1,000 2,000 1,650	18 %	to to	215	- 30% - 6%	3 7 7	
Brookable Coal Mining Co., Inc. Caldirota Coal Co. Canon Black Diamond Coal Co. Canon Blue Illibion Coal Co.	Caldirola Canon Black Diamond Horseshoe	Fremont Fremont FremonI FremonI	Charles J. Caldirola	Florence. Florence. Florence.	Pan De Angelo.	Florence. Florence Florence	Apg	****	1,900 1,500 850	4%	MARY I LAVAPAR		### ##################################	7 10 9	 
Canon Chief Coal Co. Canon Coal Creek Coal Co. Canon Eagle Coal Co. Canon Eagle Coal Co. Canon Imperial Coal Co.	Canon Chief	Fremont Fremont Premont	Domenic Mosehetii Paul Caresiia Thoman A. Walker Louis Del Sandro A. V. Madonna	Flatence Coal Creek Canon City Coal Creek Coal Creek	Domenic Moschetti	Florence Coal Creek Coal Creek	1000 mm 1000 m		1,200 600 1,000 150 700	3° 15%	**************************************	300	20%	3 3	6 16
Canon King Coal Co Canon Liberty Coal Co. Curon Monarch Coal Co Canon National Coal Co Canon Peacock Coal Co.	Canon King Liberty Canon Monarch No. 2 Canon Montional Canon Peacock	FremonI FremonI FremonI Fremont Fremont	Ed Cox Anion Strainer, Jr. Wm. J Beer Frank Bultz Wm. McKengle (owner)	Florence Florence Florence	1928 Lirense Anton Strainer, Jr Will Linyd Mathew Grenck, 1938 License	No Report Filed Canon City  Florence Florence Mine Closed	Incomplete Report		550 1,500 600	5 °¢. 1 4 °¢	Yes	200 400	6 m 25 m	7	#4 6
Canon Rel Arrow Coal Co. Colorado Puel & Iron Corp. Corley Coal Co Dura Joseph Z. Dutch Oven Coal Co	Canon Hed Aeruw Hockvale No. 3  Corley No. 8  Canon Zenith Dutch Oven	Premont Premont Premont Premont	Adolph Florina G. H. Hopp W. D. Corley, Jv Joseph Z. Duca Joe Asherman	Colorado Springs Florence	Adolph Piorina I L McBrayer  J R Cameron. Joseph Z Duca 1938 License	Florence Canon City Florence Florence No Report Flied	A.T.ASF	**************************************	1,000 6,000 1,200 1,600	15% 15% 10%	Yes	######################################	**** *********************************	\$ 5	6.4
Prans Coal Co Prans Hollow Coni Co Giuliano-Carpina Coal Co Geiffilm Coal Mining Co. Hilland Coal Mines, Inc.	Color Tiger	Fremont Tremont Fremont Fremont	Chester Wans Florian Adamic John G. Glullane W. R. Griffiths	Canon City Florence Canon City.	Chester Wans. Florian Adamic Mike Glullano W. R. Griffiths.	Florence Canon Cily Florence Canon Cily Florence	D. & R. G. W		70 700 1,400 1,800 800	2 % 3 * 10 12 * 2 % 8 % 4 %	Yes Yes	500	33%	2 % to 1	6 6
James Brothers Kannig, Martin	Willie No. 2 White Ash No. 2 Little Johnny Majesite Maniey	Fremont Fremont Fremont Fremont Premont	John W. McCovern Jamen Brothers Martin Kattohr  John Lippie Wm. J. Borr Wm. Manley, Sr	Pur ldo Florence Rockynle, Florence Florence	Ira Cordeny	No Heport Filed Rockvale Florence No Report Filed Canon City	4	บ <sub>ั</sub>	700	6%	Yes	AA AA A-1955-		1 4 5	10
Moschetti, Tony	Canon Old Slope Rea Carban Nushaft Newton Creek	Fremoni Premoni Premoni Premoni Fremoni	Sam Petry (owner) E. B. Cribbs E. B. Cribbs James Pering	Canon City Florence Coal Creek Florence Florence	Wm Manley, Sr 1938 License Ray Halloook  Arthur Angel.,  James Perino.	No Report Filed Coal Creek			1,100 3,000 1,500 150	11% 5% 6%		300 260	20 % 16 % 20 %	3 to 4	-
Pine Guich Canl Co Royal Gorge Conl Co. Santarelli, Tony Spring Canon Conl Co	Pine Guich Royal Gorge Double Dick Spring Canon	Fremont. Fremont. Fremont.	Wm J Roer Slanley Z. Pavaleky Tony Sanlarelli Louis Del Fuen	Florence Florence Florence	Sam Polry	Florence Canon City  No Report Filed Florence	A. T. 4 S. F.	462 %	720 440 200 3,000	1 63				- · 2	10
Bartser Asphalt Corp Coles, W. P. De Boy, Frank Diamond Puel Co	Chandler Carlonera New Castle Obkrant Dlumond	Fremoni Garfield Garfield Garfield Garfield	Wn. 1) Schleavinger Homer D. Furd W E Coles  Frank De Hoy David Davies	Penver Cralg New Castle Glenwood Springs Qlenwood Springs	G. W. Shields	Chandler Mack New Castle Glenwood Springs Glenwood Springs	Uiniah	***	2,325 400 800	51.8 %	Yea	500	50	23	- 6
Fates, Richard Hans, Hill Halcumti, N. H Le Donne, James Liewellyn Coal Co	North Canon 111 1	Garfield Garfield Garfield Garfield Garfield	Richard H. Dees Bill Hone N. H. Halcomb  James Le Donne	Rute fluid Pruits Sill	Hichard H. Eslez. Bill Haas N. H. Balcomb  James Le Donne 1938 Ideone	Rine Rine Fruita Silt No Heport Elled	**************************************		150	4 70	Yes	*****	- AND 1995	<u>;</u>	5
Purnort & Hyberger Sexton-Heawlek-Exchinus South Canon Mine Leasing Co Stove Canon Coni Co. Ziesentss, Henry	Valley View Gem. South Canon Stove Canon Ziesguins	Garfield Garfield Garfield Oarfield	C S Parmort T. E. Soxton James E. Ford  Clyds I. Fnels Henry Zlesenias	Olenwood Springs Olenwood Springs Protta. Rills	1974 License T.E. Sexton Andy Zemlock Hency Zie enlag.	No Report Filed Glenwood Springs Glenwood Springs Fyulta	D, & R, G, W.	NoI repe	1	60*	WANTED TO THE STATE OF THE STAT	368	***************************************	6 to 6	800
Audin C & Sons Baldwin Fuel Co. Buge Coul & Coke Co. Bonner, Goo	Hawkshost Baldwin Star Boar Cartle Hock	Gunnlaon Gunnlaon Gunnlaon	Clement Audin James Hare Tony Hear & Pred Maikka	Somerset Samerset Gunnlage	George Bonger	Someract	D. & R. G. W.		1,000 600	6% 2% 4%	Yes Yes Yes	ADDRESS PRO	phone	1	R
Cathriet Fuel Co Carlion Creek Cost Co. Colorado Fuel & Iron Corp Crested Bulle Coal Co Edwards: George W.	Sometast Carlon Creek Crested Bulle Bulkley No. 2 Edwards	Gunulson Gunulson Gunulson Gunulson	Moroni Helper Aribui G. Smith O. H. Rupp James G. Berrybill, Jr. George W. 121wards	Sait Lake City, litah Gunnison, Denver Denver	Robert Williams, Jr. Arthur G. Smith II, D. Pinkney. John Palmgren	Momeract Gunnison Created Bulle Created Bulle Sameract	D. & H. G. W. D. & R. G. W		3,200 700 9,200 2,640 500 350	16%	A 418	700 73	\$2000 \$2000	6 to 2 5 to 2 7 to 4	1
Hodiey, W. H. Hornee Miners Association Mt. Cathon Anthrnella Co. Oliver Poul Po. Rocky Mountain Puel Co.	Hinkle Burace Burace Bitchardgon Oliver Alpine	Gunnison Gunnison Gunnison Gunnison	VY. II Hedley Fred Gulliford Jos M. Arnoll E. M. Ollver John R. Lawson	Gunnison Gunnison Dunrison Paonia	W. H. Hodley  Joe M. Armit R. C. Onyer  James Jordan	Gundson Gundson Gundson Somerset Baldwin	D, & R, G, W D, & R, G, W, D, & R, G, W, D, & H, G, W		1.000 3,500 3,500	26 et 2	Yes Yes Yes	160		10	77
Slaules, S. L. & Son	New Baldwin  G C  Tollee Big Sig	Gunntson Gunntson Huerfana Huerfana	John K. Lawson  S. L. Staples John Kilpatrick C. M. Johnson and Rect Amiday	Denver	James Jordan Tony Hanasal 1938 Liconso	Raldwin Gunnham Taltee	D. & R. G. W D. & R. G. W	***	1,000 1,400 1,750	- 125 A	Yes Yest	500		4 	6
Blue Hiaze Coal Co Butte Valley Cond Co. Caddell Coal Co Callento Coal Co	Hlacklinsk	linerfano Huerfano Huerfano Huerfano Huerfano	F. H. Jenkine Matt Perrago George B. Dick FA Caddell S. M. Thompson-	Walsenburg Pryor Walsenburg Walsenburg Ravenwood	E 11 Jenkins Mail Ferraro John T Moir Ed Caddell E. M. Thompson	Walsenburg Walsenburg Hulle Valley Walsenburg Malijand	DARGW	*****	1,200 800 2,500 1,700 3,000	11 % 11 % 12 % 1 %	Yes	130 60	72%	3 9 4 2	- G
	Ravenwood Calumet No. 2 Keblee No. 2 Robitwon No. 4 C O D No. 1	Huerlano Huerfano Huerfano Huerfano Huerfano	8 M Thompson Moroni Helper G H. Hupp C H. Hupp Philip Daran	Ravenwood Sall Lake City, Ulah Denver Denver La Veta	S. M. Thumpson A. P. French, L. W. Ingles J. L. McBrayer J. L. Duran	Ravenwood  Delearbon Tiogu Farr La Vets	C. & S D. & It. G. W D. & R. G. W C. & S D. & It. G. W	****	4,500 3,200 3,400 10,200 450	315	No Yes	300	n- 	2 6 5 6	-
Gordon Coal Co Kilkus Coal Co M.Cumo & Roseju Major Coal Co. Majorey, Joe	Gardon CODNOS New Sunnyside Major Nuggel	Huerfano Huerfano Huerfano Huerfano Huerfano	George B Dick John Klikus James McCuno John Cornali Joe Malone;	Walsenburg La Vata Walsenburg Walsenburg Hughy	P G Millar John Ki kus John Coronil Joe M doney	Walsenburg	DARGW	-	5,000 300 600 650 900	5 14 44 21 16 27 14 10 15	No Yea	1,200 75	10 % 25 %	4 1 3 2 4	6
Minnequa Fuel Co. Margan, Wim La Muryell, Innue P=chay Coal Co Peachey Coal Co	Storning Glory New Ollkyten Murcell Occidental Olo Lain	Huertano Huertano Huertano Huertano Huertano	Robl. Turner Wm L. Morgan Wm Peacher Wm Peacher	Walsenburg La Veta La Veta La Veta La Veta	Robert Turner Wm. L. Morgan Janua Murrell Wm. Penchey Wm. Penchey	Walsothurs	D & R, G W	Not repo	1,500 500 161	15%	Yes			1 10 3	- G
Peachey Coal Co Pryor Coal Mining Co Hed Ash Coal Yo Hogers Bross Romero, Leonidles	Tompkins (N)gger- head! Pryor Leader No 2 Rogers Romero	Huerlane Huerfano Huerfano Huerfano Huerfano	Win Peachey	La Veta	Wm Pagchey Rulph P Chambers Miked Andlscak E 12 Regers 1938 License	La Veta Proor Valuenburg La Vela No Report Piled	DAICOW		200 3,000 1,400 100	7 5 10 %	Yes Yes	*	MARCHARD SALES	1106	1.
Rouse Cent Mining Co Simetrick Coal Co. Snedden & Smith Bionish Peaks Coal Co Sirasberry Coal Co	Rouse Shamreck Sun Spublish Peaks Slrawberry	Huerfano Ruerfano Ruerfano Ruerfano Ruerfano Ruerfano	Sam T Taylor J. 12 Hatther Norman Smith John Pader Fo	Walsenburg Walsenburg Lea Veta Walsenburg Walsenburg	John Hores J.E. Halcher Ground Sheddon 1978 Litenbo John Foder tro	Wasenburg Walsonburg Walsenburg No Ir port Filed Walsenburg	D A IL G W		500 500 400	10 % 10 %	Yes Yes No	100	16%	5 5	-
Sular Coal Co. Tompkins, J. G. & Sons Torrid Coal Mining Co.	Premium Sam George No. 14 No. 4 Torrid No. 4	Huerfano Huerfano Huerfano	George Sudar  J. G. Tompkins Louis Drouglass (Hecelves)	Walsonburk La Veta Denser	George Sudar J G Tompkins 1935 Likense	Walnenburg La Vela N - H - port Filed	C 48		100	80°	Yes		30000	10	4
Harnell, George M Jackson, J. C North Park Co at Co Darton, Thos. P Conc. at Na. 15	Marc Suddyth Maire Strip Pit Bun Catt - k	Jackson Jackson Jackson Jefferson Jefferson	George 31 Rangell J. C. Juckson  L. C. Moors Those E. Barton	W. Men Concern Fort Collins Littleton	tlear a M. Barnell J. C. Jackson Plmer it Hrinker 127* Livens	Walden Condecy Coalmont No Hepott Filed	L N P & W.R R		150 78	10%	No Yes		-	55 50 30	-
Denver Golden Coal Co Leonomy Co. 1 Co. Left (is to Co. I Co. Leyden Edgetty Co. Vari Wirkle Co. I Co.	blest Economy Virginia Leyden	Jeffermin Jeffermin Jeffermin Jeffermin	S. M. Thompson designed Fruth C. O. Wood house Louis Resco Harry F. Nigh to S. Van W. übbe	Walsonburg Denser Littleton Littleton Denser	A II I hatin 1928   h. ope 10 Woodhouse 1 Jouin Herie E. If McClescy		i Dal. M	250 110 722 700	360	10-6	You			\$ 10.12 7 10.7	=
Batchelor & Hichardson Hiere, J. me. A. Huck Diamon I Coal Co. Hume Altred	Vars Warkle Excelsion Rhan rock  Black Diamond Darie A	Jefferson La Plata La Plata La Plata La Plata	Chas Bale tople Jathest A [Her e Louis Bodo Affec I 10 upe	Golden Layfield Bayfield Dirange Dilores	G S V h Wilkle The Lic m Jam & A, 10 r = Louts Rodo	Colden No II port Flied By fild Dur ngo   Dulars *		Zoù Not syp	000 Dollar	625	Yea Yes	* * * * * * * * * * * * * * * * * * * *	77.	14	****
Coal hing M sing to Crumple P H Day a Char e F Dill & Hogun	Cartle Ca 1 K n Soda Springs B be Jay Dill	Lat Pl th Lat II th Lat II th Lat II th	K 4 Nati J B Henderson P H Crumpley China E. Davia John Diti	Thir bigo 110 f p 15thm Rayllott, 11 n f	K C Naff F H Brights on P H Crunq lex Chas E. Dayts Cresses Bolling	Dor. ng : Heap rus Kune Las debl Dor. ngo	1  0 8		240 250 650	16 % 16 %	Yes 702 Vist	30 30		A A	1
Thir Color 10 Fire Glaw Cold Many	Direct go	Z   1   1   1   1   1   1   1   1   1	John L. Craig Let U. G.	Dur n o	Abo Holert	130r n= 1 1 - fn		Not repo	(4x)		Yes	-		2 4	

Hosperus Coal Co Kerk W. R. M. ming W. r.C.   Co b. R. C.   14 n.	ligni Kladyke Morelig Star	Les Plays Les Plays Les Plays Les Plays	W. It Keek Inc. & Bainey Calonia W. W. Bay	Durango He perus Durango Durango	1938 License W. R. Krak W. W. Hay Thos. G. Licroe	No lieuw (Thei Ourango Durango Durango Durango			1,300		Yes Yes	14.3		14 in 4	* c • 6
Provious Coal Co Horce, F. U. Hed Cook — ckamith Coal & Coke Co.	Purious Supulibe Florito	La Plata  La Plata  La Plata	Thea G Pierce Macy Otto Secroul	Durango  Phoenix, Ariz Durango	1975 Likensa Otto Betsanl	Purango No Report Filed Durango Hesperus			6.0	6 79	Yes Yes			8 5	6.7
Horroni OHO Tipotoch Prank Trivegie Conl Co Vattry View Conl Co.	Sujarme Tipetech Triantie Valley View Fire Viet	la Plata	Frank Tipotach , H. B. Cornell O. V. Manning F. C. Wieland	Hesperia Durango Mancos liayfold	O V M nning L.C. Wieland	No lies out Filed Minneau Hayfield Hospitu			60	60	T.cz.	200	-	B	5
Wishing P. C. William A. C. Placity Conf. Co. Edeal Cost Co.	Hay Outch Rochy Ideal	La Plata Larimer Larimer	A.C. Wittse Herg & Thorson George Hackman John Nogo	Carr	George Rackinan	Carr Carr Carr			200 900 300	10%	Yes Yes Yes	Quo	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5	Ĝ G G
Nore Julia Heledorff K II Avollar Heck Hamond Coal Co.	Piote of Aguillar Black Distanced	Las Anlmas,	K II, Relidarff  Prank Coke	Cheyanne, Wyo	R, H. Rebolorii  Frank Coke.  G. O. Arnold	Trinidad Cokedale	Dared W	. an	1,200	104	Yes	100	30%	5	
American Bourling & Ite- Bolog Co Baldy Cook Co Bloar Canon Coat Co Bloar Canon Coat Co	Ronescho  Raldy   Br = Canon No. 6   Rogello	Las Animas . Las Animas . Las Animas . Las Animas .	C R. Garrell II W Megateon Wm G Pleated	New York City, N. T., Trinidad Trinidad Trinidad	12. W Meggisan Rulllernin Bowman	Trindad Vallerso Trindad Janson	C & S. Colo & Wyo.		4,500	14%	Ven Yen Yen	185		6107	14
Jawman Gollietta Hastos Jos D Coljendo Pael & Iron Corp Coljendo Pael & Iron Corp	Crystal Prospect No. 4 Prospectick Morley	Las Animus, Las Animus, Las Animus, Las Animus	G ighema Howman Joe D. Bustos G H Rupp G If Rupp Fra Curanyell	Janus n 1921 Lleense Denver In noer Trintlad	No Rejort Filed  31 M Watson  Geo B Botsfort  Herman Cornwall	Valder Morley Trintbad	STASE		3,800	16%	Yen No			5 5	6
Correspoil, Irac Dulay Cost Co Delitiono Coul Co Dirk Coul Co	Samilio Cangun  Yalay   Sopris No. 1   Dia   State Inc.	Las Animas Las Animas Las Animas Las Animas	Adam Galli John D. Deldosan George B. Dick	Aguillar Tripidad Waterologig	Adam G dill John D. Deldorso, Henta E. Currie Louis Fabec	Aguillar Trimida) Boncarbo Trimidad	CAS DARGW		1,600 1,600 6,000	143	No Tes Yeu		- ~~	6	TO Fi
Cales Leute Prace Antonio Prisco Cost Co. Garcia II olfo Giordano Coal Co	Flar Fri (a) Garela Gem	Las Animas Las Animas Las Animas Las Animas	Antonio Franza Ali Abbata Registra Jos Glordano	Tyinklad Tylnklad Dicks Agullar	Joe Glordano	Ne Report Filed Trinidad Dicks Aguilar	w68666 de 1991-	- "	650 1,400	1%	Yes Yes Yes		0.01300 000 0.01300 000	4 4 2	6
Guadagno) & Cimino Coal Co. Home Fuel & Supply Co. Huerlatto Coal Co. Intrastate Cosop Coal Auch Irons, Vin	Lakerlew Bowen Lautiny Attended n Thise Point	Las Animos Las Animos Las Animos Las Animos Las Animos	Jalin Guadagnoll G. A. Brese N. C. Andrigen Wm. Trops	Trinidad Trinidad Denver Trinidad Trinidad	David Louis Frank McDermott. 1938 License 1938 Litense	Trinidad Trinidad Liudow No Heport Filof No Heport Filod	C. & S. & D. & IC G. W.	A0000 000000000	10,000	35	Yes	****	PESPA SANDO	3	6
J. free a Puel Co. Jean II Collection Corp Keache July Lauta, Ilea	Jeffeyon Crission Forbia No. 10 Valler	Lan Apimas Lan Apimas Lan Apimas Lan Apimas	Geo Hesp George B 190), John Katsle Ben Lucia	Trinidad Walsenburg Trinidad Sopris	Geo Heap Atex Shields W E Higgs	Trinblad	CAS		1,100 5,600 300	13.5	Yes Yes Yes Yes	1	- 24	6 6 1	-6
Methall, Thes.  Martin, Gus J  Michell Pa  Morasky, doc	McLoull Stone Wall Valley Rapson Morasky	Las Animas Las Animas Las Animas Las Animas	Thos McPhail  Gyn J. Martin Plo Michell Joe Morasky	Aguilar	Plo Michell Joe Morasky	Weston Rughy Trinidad			160 3,200	15,9%	No You Yes	*******	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 3 3	10
Martin in Mike W 11 Owen Rainbow Conl Co. Riggs, W E.	Martorano Prospect No 1 Rajutow Fortwa No 2	Las Anlman	Mike Mariorano VIII, Owen Nick Ruseetti. W. E. Higgs	Soprie Trinidad Trinidad Trinidad Trinidad	Mick Hawetti _ W M Blags	Trinided	40000000000000000000000000000000000000	Not repo	\$00 5,000	15	Yes Yes	80	16%	2 1	9
Sanches Den ettle Sandoval & Garria Scappurel, Dan	Same hed Rugby No. 5 Highway	Las Anlmas Las Anlmas Las Anlmas	Demetrio Sanchez J. V. Sandoval & Henny Garcia. Thomas W. Twooldale	Boncarbo Rogby Trinidad	1935 bleense Thomas W Tweeddalo	Bonearbo  No Heport Filed Trintind	- www. (440000000, 190000 100000000000000000000000			· man vana nar f d d vana	Yes		A	6 · · · · · · · · · · · · · · · · · · ·	6
Starkyllle Coal Co Temple Puel Co., Thor Puel Co Trinidad Supply Coal Co Tweediale, Thomas W.	Starkville Rrodhead No. 9 Ther Blown Santa Ce	Las Animas, Las Animas Las Animas Las Animas Las Animas Las Animas	Thomas W Tweeddale 16 IL Wood Eph. Warstaff John Dollnar Thomas W, Tweeddale	Trinidad Trinidad Trinidad Trinidad Trinidad	Thomas W Tweeddale V. J. Tretter Eph. Warstaff John Politoar Thomas W Tweeddale	Trintdad Brodhend Trintdad Trintdad Trintdad	CASADAR, O. W.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,700 2,800 3,000	25%	Yes Yes Yes Yes	4		1 6 2 2	8 4 6
Valifer, Pollx & Partners Victor Coal Co. Victor American Fitel Co. Aguilla Tony	Hugby No. 3 Kenneth Delagon Thomas	Les Animae Las Animas Las Animas Mosa	Felix Valdez F R. Wood W E Schlessiger Stove Cattles	Hugby Tripidad Depver Grand Jonetlan	Fally Valdez. V. J. Tretter F. C. Collister. 1944 Licenso	Rugby Rugby Delagua Na Report Filed Na Report Filed	C. & S. & D. & R. G. W C. & S. E.	*****************	200 4,000 3,000	10%	Yest	800	# A A A A A A A A A A A A A A A A A A A	3 5	6
Cattles, Steve Clarke Coal Co Coal Guich Coal Co Crais, is to Produkum, Vincent	Winger Coal Colcis Peacock Hunter	Mena Mena Mena Mena Mena	It M. Ctarke George T Pickens L. L. Crair J. H. Hunter (Owner)	Protta  Paliante Loma Grand Junction 1938 License	R. M. Clarke L. L. Cinig	Pallende Loma Connd Junction	AMAZINA ADQUINATARAM ALTE MAMAZINA AMAZINA AMAZINA AMAZINA WALEBOUT WATTERFORM AMAZINA	ALL PROPERTY AT 1 II	750	16%	Yes Yes Yes	60	#	**************************************	6 9 5
Garneld Conl Co.  Genrhald Rullard & Sons Hicks, Ernest Hicks & Sons	Garfield Mt. Garfield McGluley Pallwade	Mona Mona Mona Mona	Walter Scotl  B. Gearhart Ernest Hicks Carl Hicks	Palteale Palteale Grand Junction Paltsade	Walter Scott	Pallende	WEST CONTROL OF THE STREET OF		309 2,000	12"	Yes Yes Yes Yes	160	The The State of t	3 to 6	5 6
Kannah Creek Parmera Silne Assin Kerr Coal Co.	Porest Service Cames	Mena Mena	F E. Anderson, Sec	Whitewater Cameo Grand Junction	W. M Kerr	Cameo	D, & & G. W	Not repo	2,500	5%	" Yes	500	And a series of the series of	5	2
Royae, Martin (Deceased) MrDowell, John Midweel Hed Arrow Coal Co Monarch Coal Co	Hidden Trousura Riversida Midwesi Red Arrow Williams	Missa Mesa Mesa Mesa	Mrs. Agues Kovac John McDowell Wm. Hughes R. F. Kas mond	Pallsade Pallsade Pallsade Grand Junction	Frank Morne, Jr. John McDawell	Prollu Pallande Pallande Pallande		g- 1	K00 726	134.	Yes Yes	- 1213	\$\tau_{\text{A}} \$\text{\$\exititt{\$\text{\$\exitit{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\	3	- 4 - 4
Martinelli, Mike, Martin Coal Co. Meas County Quality Coal Co. Mundell, J. W. & Son. Bocchin, Ton;	Macinelli Blue Flame Nearing Black [Mamond Farmers Mulual	Mous Mosa Mosa Mosa Mosa	Mike Marinelli Richard C. Martin George McMillin M. J. Albright Tony Rocchio	Fruita Palbado Fruita Grand Junction Grand Junction	Mike Marinelli	Prulta Patiende Profin No Report Filed Grand Junction	#21083-400-00000000000000000000000000000000	Not repo	650 780 reled 750	3 %	Yes No			5	9 6
Sipe, Sipe & Rosenberger Supancie-Price-Shodn Barmetter, A 12 Babb, John Jr	Mr Mucolo Biver View Buker Wise	Mosa Mesa Mosat Mosat	H. M. Sipe Louis Supancie A. E. Barmettler Juo, Rabb, Jr	Pallsade	H. M. Ripo. Licula Supantic 1934 Licenso Jno Babb, Jr.,	Palisade	MESONOTON TOTAL ADDIES   1	6-2	150	5%	Yes Yes	20	######################################	2 7	<b>1</b> 5
Dorgestic Coal Co Harl, G. G. & Sons Enex Coal Co Lee & Watkins	Streeter Janos Knes White Ash	Monat Monat Monat Monat	Geo C. Watson  G. G. Harl  Joe L. Kuez  H. A. Lee	Meeker	Ed C Shipley	Mecker Craig Vernal, Utah	D, & S L	######################################	600	10%	Yes Yes	100	A TOPPETAL DESIGNATION OF THE PERSON OF THE	2.5 6 9 7	8
Medlock, E. O. Morton, E. G. Chelun, C. G. Rhedys & Tomoff's,	Community Walker	Morrat Morrat Morrat Morrat	C. O. Miller (Owner) George & Levkulich C. O. Pholos (Leasor) John Pholos (Leasor)	Craig	1938 Ideense George F. Levkulich C. G. Phelan 1938 License H. L. Whicher	No Report Filed Cralg	- A	Not repo	200 200	20°	500	the ha	manan 17/11/14/99  manan malaban	7 23	-
Whicker, H. L. & Son Alasworth, H. A. Riluxio, James Kingery, Walter Mancoa Coal Co	Wisconsin Willden Na, 2 Willden No, 1  Monjexuma Mancos	Moffat Montexuma Montexuma Montezuma	H. L. Whicker H. A. Athsworth James Diluxin Walter Kingery Hoy Presman	Mancos Durango  Cortez Mancos	1938 Licenso 1938 Licenso Watter Kingers Roy Presipan	No Report Flied No Report Flied Cortez Maneus	\$ 4.4444	**************************************	500		Yes Yes	****		4	
Finos Altos Cont.Co. Spencer, George S. Withite Andy Is King, H. P.	Pines Altos Spencer Mesa Verde	Monteguna Monteguna Monteguna Monteguna	G J Anderson G S Spencer A. La Wilhite H P King	Mancos Mancos Cortex	1938 Licenso 1918 Licenso 1936 Licenso 1938 Licenso	Ne Report Filed No Heport Filed No Heport Filed No Heport Filed	10 Add 777 A SAND A 2-70 MINASON S LA SENDA MINASON	**************************************	TABLE TO SERVICE OF THE SERVICE OF T	MALE STATE OF THE	_			***********	4-95
Mitchell Larle Nix & Nix Oberviling, W. J. Patterson, James	Elberty Bell (Mitchell) Supphian Endspendence	Monitose Montrose Montrose Monitose	Lylo Mitchell A E. & C E. Nix Worth L Holder	Nucla Nucla Nucla Nucla	Lyle Michell	Nucla Nucla Nucla		Nol repo	250 110 100	2 5	Yes Yes Yes	100		6 % to 6 8 4	
Rice, Arthur U.S. Vanadium Corp	Rice If & Vanadjum Cimarren Hurro Creek Bright Diamond	Montrose Montrose Montrose Montrose Ourav	Arthur Illee   Ristr Burwell	Redvale Uravan Monitope Monitope Ridgway	Andy Voytilla.	Nucla Nontrose No Report Filed		Not repo		######################################	Yes	Not resu	**************************************	7 to 9	
McCann, J. E. Adalr, Ivor Paxter, Arthur Conte, Milo	Placita Rio Blanco Rector Conts	Pilida Hieldianco, - Gieldianco Hieldianco	J E McCann Ivor Adale Arthur Baxter MIlo Conts	Carbondale Rio Blanco Rangely Morker	J. E McCann	Carbondale tilo Blanco Rangely Macker	Crysial litter & S. J. Ry.,		900 66	**************************************	Yes Yes Yes			1 2 11 20	ii ~
Cox & Lindeman  Gozzer, Pete Jenzen, Clarence Jones & Trachtn	Johnny Boy  Twolve Milo Jensen Douglas Creek McKre	Rio Rianco Rio Rianco Rio Rianco Rio Rianco	O. K. Lindeman  Pete Gozzar  Ctarence Jensen  L. E. Jones	Mecker	t938 License	Mecker  Mecker  No Hepart Filed  Rangely  Merker	1180-1	Not tripo	200	AMERICAN AND AND AND AND AND AND AND AND AND A	No Yes	30		1+	Steres st
Mct'all & Ralwks Nail, W. R. Pollard, C. F. Rjenau, R. C. Staley, M. E.	Nino Mile  New Polkard .  Riennu White River	Rio Bianco . Rio Rianco . Rio Rianco .	John A. Rabaira	Mecker Mecker Mecker Rangely	W R. Nall	Mecker Mecker No Report FRed			300	15%	Yes Yes No			13	6
Babson Coal Co	Black Cal Block	Route	John T Mills John Connell  R. C. Jones C. E. Baker	Hear River	Wnc Morgan 1938 License C. E. Baker	Hayden. Hear River  No Report Piled Steamboat Springs	D & S. 1.	7715	3,500	1012	Yes	***************************************		\$ to 12	5
Champien Coul Co Chergo, Tom Childress, J. M	Champlen Cherro Hig Mack Rarris	Routt	Tom Cherro  J. M. Childress	Denver Oak Creek Bleamboat Springs	1938 License 1938 License	No Report Filed No Report Filed Steamboat Springs	D & S. La	Not repo	2,600	16%	***	360	\$1.000 \$1	6	79 2
Consollisted Pinnacle Coal Co. Gwynn, E. Hammond, W. C. Hayden Coal Co	Filk Creek No. 3 Seven Points Hormand Harden No. 3	Routt Boutt Houtt Boutt	12. Gwynn W C Hammond Ramsay S Harris	Denver Phippsburg Mt Harris	1938 License Wm Redehaw	Milner No Report Flied Mt. Harris Haybro	Ď. & S, I∡	365	100	75	Yes No	400	## 42	11	- 2
Hayden Valley Mutual Coal Co. Johnson, John P Jones, R. C	Hnyden Valley Mutual Johnson	Routt Routt Boutt	Frank Coryell John F Johnson R C Jones	Hayden	Frank Corvell John F Johnson R C. Jones	Hayden - Hayden - Bear Blver		A1 1 N4 0 ( )	700 350 450	₹8 % 1 0 % 2 6 %	Yes	######################################	••• •• •• •• •• •• •• •• •• •• •• •• ••	10	6
Jones, R. J. Jones, Walter L. Keystour Coal Co., Linn, David D	Reyslene Dave's Grand Baby	Routt Routt Routt Routt Routt	R. & Junes Walter L, Jones  John Connell  Dayld D Lint	Oak Creek Oak Creek Denver	Frank Andrews	Oak Creek No Report Filed Routt Haybro No Report Filed	D. & S. L.	44	3,000 200	16%	Yes	***************************************		6	-6
Maggard & Qolon Mathews, John McNell Conl Corp Moffal Coal Co. Moffat Coal Co.	Poncock Richner MacGregor Moffat No. 1 & No. 2. Oak Hills No. 2	Routi Routi Routi	O. B. Magnard John Mathewa Ployd R. Pool B. W. Snodgrass B. W. Snodgrass	Steamissat Springs Denver Denver Denver	Join Mathews Daniel Park  Comer Resse Comer Resse	Oak Creek	D. & S. L. D. & S. L. D. & S. L.	1 2+4 3+4+1 ham-dr	1,500 1,100 3,000	13 9	Yes	3,000	*** *** ******************************	6 to 12	8 6
Nottager & Walker Pollo, Juhn, Jr Postal Mining Co. Bolles, Geo. T	Bruce Walters Morgan l'ostat Argo Guici	Routt Routt	John Pollo, Jr	Mt. Huggis Steamboat Springs Oak Creek	1938 Literase John Pollo, Jr. 1939 Lileense Ocorgo T Rolles	No Report Stud Steamboat Speings No Report Steed	######################################	\$00	400	See al des d'entre contrates services See al des d'entre contrates en l'étable See al des	Yes			2	-6
Laffer, Goo T. Sheepy Cat Coul Co. Strele, George & Co Stukey, D. & R.	J D Weltber Sleepy Cat Aprix Plats Creek	Routt Boutt Routt Routt	Gratge T. Raifes George T Holtes C. A. Raker George Steele D. & R. Stukey	Oak Creek, Denver Oak Creek Steamboat Springs	George T Rolfes C A Haker George Steele	Oak Creek Hayden Oak Creek Sleamboat Springs	****	1116	250	10.5	Yes Yes	**************************************	144	12	36
Thompson, Harry T. Tow trock Cont Co. Victor-American Puel Co. Victor-American Puel Co. Zullan, Maria	Wooder Valley Tow Creek Pinnacle Wadge McCroskey	Routt Routt Routt Routt	Harry T. Thompson J. C. Harris Wm. E. Schlessinger Wm. E. Schlessinger Mario Zulian	Steamboat Springs Bear River Denver Denver	J. C. Rarris W. B. Odendabi H. C. Jubiuson Mario Zullun	Steamtont Springs. Bear lilver Oak Creek. MR. Harris Millner	D, & S, U,	300	100 250 4,600 160	53 %	Yen Yen Yes	65	VARAGE VARABLE V	( to )	6 10
Crisp, Earl M Elder, Gene Plorton Coal Co. Knowlton, W. IR	Gray Elder Borton O K	San Miguel San Miguel San Miguel San Miguel	Earl M Crisp Gene Elder W R. Knowlton	Norwood Norwood Norwood	Earl M. Crisp Geno Elder	Norwood Norwood No Report Filed Norwood	A	* *		3 %	Yes Yes				10
Netson & Hardman Owen, R. E. Spillman Coal Co Boldender Coal Co	Nelson  Keck-Reltance Spillman Relitender	San Miguel San Miguel San Miguel Weld	W. H. Nelson  R. E. Owen G. V. Austin  Ben Bohlender	Norwood	1938 Ideense John R. Anderson	Nurwood No Report Filed La Saile	10 - 1 yg	100		ENGLANDERS OF THE SECOND	Yes	\$44.00 A.5 - PART	W		7
Boulder Valley Coal Co Brundy, Hoy L Buddy Coal Co Carton Coal Co. Clayton Coal Co.	Houlder Valley Tamoc  Buddy Evans	Weld Weld	Fred Neshii Roy L. Brundy  A. "Bud" Carly George Zarlingo	Cornian	Wra. Andrew Roy L. Brundy John F. Duley	Erle Cornigh La Salle Prederick	U.P	110 369	150	20%	No	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	90 100 100 100 100 100 100 100 100 100 1	2 2 1	10
Chyten Coal Co Clayton Coal Co Cornet Poal Co Connell dated Coal & Coke Co Diamond Coal Co	Clayion	Weld Weld Weld Weld	R B. Crandell H B, Crandell George Mathews, Jr Carson W Smith	Denver Eaton Denver	John Sidet	Eric Drie Baton Dacono	U. P U. P	205	* * **********************************	100000 100000 100000 100000 100000 100000 100000	brand ad-	grant or the last	*****	, A	
Graden Coal Co Imperial Cool Co Krota Coal Po.	Offictional Graden Importat Keota La Salle	Weld Weld Weld Weld	Fred Mayer W. E. Hunsell Junce Breenan Thomas G Cowley Waller Canading	La Salle Denver Denver Grover	Fred Mayer	La Salle	U. P	225 316 300	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	000000 1000000000000000000000000000000	No No	4v va	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10	8
Leones, Frank McNell Cust Corp. National Puri Co. Park Cost Co.	Galeton Rierling Puritan Monroe	Weld Weld Weld Weld	Walter Canselman Frank Lenner Floyd R Pool Roy Williams R C. Poller	Greeley Daton Denver Denver Lunkmont	A. W Newcomb	No Report Filed Galeton Dacong Erle Longmont	U. P	105 308 124	625	30%	Yes	p. p. p	All dates to the state of the s	\$ to	1
Rocky Mountain Fuel Co ttocky Mountain Fuel Co., Rumfell, Win E. Coal Co., Shamrock Coal Co., White Ash Coal Co.	Columbine Grant Husseft Rhamrock White Ash	Weld Weld Weld Weld Weld	John R. Lawson John R. Lawson W. E. Russell Fred B. Fotelman Coy Plun	Donver Denver Denver Little	E. F. Miller	Berene Prederick Frederick Erie	C. B. & Q U P U, P U. P	200 167 218 100 75 V	625	25 %	No No No		20-14-22-0	5 to	6
						I a Salle	Colections.	104	1144444		100	Jan 271441.	1		



### 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 1938

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Adair, Ivor	483 3,677 940 3,463 12,715	2 8 2 8 32		2
American Smelting & Refining Co	101,367 . 679 3,031 3,444 9,155	$165 \\ 7 \\ 8 \\ 8 \\ 32$		6 2 2 2 4
Babb, John, Jr Babson Coal Co Bachy Coal Co Bald Coal Co Baldwin Fuel Co	$\begin{array}{c} 273 \\ 3,831 \\ 262 \\ 2,202 \\ 1,203 \end{array}$	2 5 2 6 3		3
Baldy Coal Co	$\begin{array}{c} 8,290 \\ 265 \\ 5,583 \\ 2,151 \\ 656 \end{array}$	12 1 8 4 2		1
Barnell, George M	$\begin{array}{c} 2,993 \\ 50 \\ 484 \\ 38,044 \\ 15,979 \end{array}$	$\begin{array}{c} 5 \\ 2 \\ 1 \\ 49 \\ 23 \end{array}$		5
Bear River Coal Co	$\begin{array}{c} 27,150 \\ 270 \\ 115 \\ 9,149 \\ 1,561 \end{array}$	$\begin{array}{c} 71 \\ 1 \\ 2 \\ 13 \\ 3 \end{array}$		<u>9</u> <u>2</u> 1
Black Diamond Coal Co. (Delta)	$\begin{array}{c} 1,187 \\ 1,452 \\ 49,152 \\ 8,761 \\ 2,995 \end{array}$	$\begin{bmatrix} 3 \\ 3 \\ 62 \\ 25 \\ 9 \end{bmatrix}$		3 2
Bluff Springs Leasing Co.  Blume, Alfred	$\begin{array}{c} 17,799 \\ 850 \\ 87 \\ 2,573 \\ 245 \end{array}$	$\begin{array}{c} 41 \\ 3 \\ 2 \\ 8 \\ 2 \end{array}$		4
Boulder Valley Coal Co  Bowerman, J. C. & Son  Bowman, Guillermo  Brookside Coal Mining Co  Brundy, Roy L	294,539 751 585 3,449 279	$ \begin{array}{c} 311 \\ 6 \\ 2 \\ 11 \\ 4 \end{array} $	3	38
Buddy Coal Co  Butte Valley Coal Co Caddell Coal Co Caldirola Coal Co Caldirola Coal Co	1,380 44,763 1,136 19,384 25,918	$\begin{bmatrix} 4 \\ 83 \\ 7 \\ 30 \\ 154 \end{bmatrix}$	  1	2 3 2 3
Calumet Fuel Co	$\begin{array}{c} 269,027 \\ 26,495 \\ 6,245 \\ 10,035 \\ 200 \end{array}$	259 39 15 11 1	1 1 	5 3 1 2

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Canon Eagle Coal Co	2,073 459 4,498 996 21,711	6 2 7 4 46	1	1 1 1 2
Canon National Coal Co	1,250 515 1,944 31,558 21,865	12 5 4 15 27		1 3
Carbon Creek Coal Co Castle Coal Mining Co Champion Coal Co Childress, J. M Clara Belle Coal Co	650 11,677 691 354 15,107	3 19 5 2 23		3 2
Clark Coal Co	$\begin{array}{r} 3,461 \\ 197,112 \\ 331 \\ 460 \\ 102 \end{array}$	283 2 3 1		20
Coles, W. E	10,867 828,596 40,683 185,823 709	8 1,244 48 211 4	2	80 1 21
Consolidated Coal & Coke Co Consolidated Pinnacle Coal Co Corley Coal Co Cornwell, Ira & Son Uottonwood Coal Co	88,981 660 13,228 70 880	125 5 18 1 2	1	1
Courtier, Harris Cox & Lindeman Craig, L. L Cramer, R. C Crane, Leroy R	24,329 607 302 291 119	25 2 2 2 2 1		
Crested Butte Coal Co Crisp, Earl Crumpley, P. H Daisy Coal Co Dalrymple, J. M	24,474 476 421 1,145 1,695	29 2 3 2 4		1
Danville Coal Co	2,377 199 109 10,873 381	5 2 1 23 5		4
Diamond Coal Co Diamond Fuel Co Dick Coal Co Dill & Boglino. Diluzio, James	715 595 33,153 216 1,021	2 4 30 2 3		
Domestic Coal Co Duca, Joseph Z Duran, Philip Durango Coal Co Dutch Oven Coal Co	17,237 5,439 223 511 943	9 9 4 3 7		1
Economy Coal Co Edwards, George M Elder, Gene Eldorado Coal Co Estes, Richard	2,400 2,405 148 4,844 784	6 4 2 7 3		1

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Evans Coal Co	2,407 310 1,425 674 4,983	8 3 4 1 9		1
Frisco Coal Co	$\begin{array}{c} \textbf{1,336} \\ \textbf{385} \\ \textbf{10,577} \\ \textbf{13,990} \\ \textbf{6,098} \end{array}$	$\begin{array}{c} 4 \\ 1 \\ 21 \\ 27 \\ 9 \end{array}$	1	4
Giordano Coal Co	$\begin{array}{r} 1,364\\ 39,741\\ 23,956\\ 708\\ 34,437\end{array}$	5 49 47 1 41	1	1 2 6 3
Green Valley Coal Co	5,998 9,088 1,724 362 1,118	8 17 4 2 3		2
Halcumb, N. H	$\begin{array}{c} 440 \\ 264 \\ 1,638 \\ 130,798 \\ 16,277 \end{array}$	$\begin{array}{c} 3 \\ 1 \\ 2 \\ 179 \\ 22 \end{array}$	1	20
Hedley, William	606 183 885 2,836 2,972	2 2 3 5 6		
High View Coal Co	3,072 3,680	8 7 3 10		1
Horton Coal Co	23,648 1,521 153,860 979	71 3 169 5		5 2 13
Jackson, J. C	326 7,585 1,740 15,963 2,977	2 6 3 53 7		1 2 2 1
Johnson, John F	$ \begin{array}{r} 18\\ 405\\ 407\\ 12\\ 33,718 \end{array} $	$\begin{array}{c}1\\2\\2\\1\\44\end{array}$		2
Kattnig, Martin	397 2,144 22,481 499 54,079	$\begin{array}{c} 1 \\ 5 \\ 30 \\ 1 \\ 107 \end{array}$	1	10
Kingery, Walter Klikus, John Knez, Joe L Knowlton, W. H Kovac, Martin	$\begin{array}{c} 1,996 \\ 191 \\ 9,846 \\ 377 \\ 621 \end{array}$	7 3 6 1 6		2

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Ko-Z Coal Co La Salle Coal Co Lee & Watkins Le Donne, James Lennex, Frank	7,378 2,032 300 850 15	12 5 3 3 2		1
Leyden Lignite Co. Liley & Merlino. Linn, David D. Little Johnny Coal Co. Liewellyn Coal Co.	114,712 4,964 381 4,272 905	113 14 2 8 3	1	9 4
Logan-Girardo & Jamcola Louisville-Lafayette Coal Co. Lucia, Ben C. McBroom, Chas. McCall, Glen & John A. Rabska.	$ \begin{array}{r} 104 \\ 131,127 \\ 100 \\ 35 \\ 130 \end{array} $	138 1 1 1 2	1	21
McCann, J. E	872 883 1,856 8,243 102,959	3 5 6 17 137	2	2 8
McNew, Paul McPhail, T. P. Major Coal Co. Maloney, Joe. Mancos Coal Co.	217 150 12,186 5,457 762	$\begin{array}{c} 2\\ 3\\ 26\\ 21\\ 4 \end{array}$		1
Manley Coal Mining Co	4,787 305 3,031 36 670	14 2 5 1 3		2
Mathews, John	335 203 997 7,136 2,294	3 1 3 16 5	1	1
Minnequa Fuel Co	23,496 477 123,480 1,221 3,232	32 294 4 9		5 
Morgan, Wm. L.  Morning Star Coal Co.  Morton, R. L.  Moschetti, Tony  Mt. Carbon Anthracite Co.	335 1,955 45 1,302 1,499	2 3 1 2 5		
Mundell, J. W. & Son	261 356 1,049 158,217 406	$\begin{array}{c} 2\\ 2\\ 2\\ 2\\ 166\\ 3 \end{array}$		37
Nelson & Hardman Nix & Nix Noftsger & Walker Nogo, John North Park Coal Co	108 601 796 353 11,666	2 2 3 2 17		2
Northern Coal Co Nushaft Canon Coal Co Oberding, W. J O. K. Coal Co Oliver Coal Co	335 35,814 727 6,607 68,321	2 41 3 8 63	2	4

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Owen, Louis	317 498 112 4,906 330	2 3 1 4 6		
Park Coal Co	9,599 	14 2 6 14		1
Peerless Coal Co Perino Coal Co Petry Brothers Phelan, C. G Pierce, F. E	994 5,406 150 6,736 3,832	2 7 1 9 4		1 1 1
Pikes Peak Fuel Co Pine Cliff Coal Co Pine Gulch Coal Co Pittsburgh Coal Co Pluto Coal Mining Co	187,865 3,871 6,379 1,924 16,644	143 9 12 5 22	2	25 2 2 5 2
Pollard, C. F Pollo, John, Jr Postal Mining Co Premier Coal Co Pryor Coal Mining Co	1,284 94 426 2,316 49,149	2 2 3 4 93		1  1
Pumort & Hybarger. Rainbow Coal Co Red Ash Coal Co Reisdorff, K. H Rhodes & Tomoff's	7,204 350	15 4		7
Rice, Arthur J. Rienau, R. C. Riggs, W. E. Rinehart, C. W. Rocchio, Tony.	656 1,192 1,568 587 2,180	1 2 3 2 5		
Rocky Mountain Fuel Co	395,448 200 6,347 1,900 14,183	581 3 8 4 21	2	83  1 1
Royal Gorge Coal Co	$\begin{array}{r} 6,174\\ 77,080\\ 1,525\\ 441\\ 16,057 \end{array}$	18 101 3 3 13	1	2 9
Scappucci, Dan Serroni, Otto. Sexton-Beswick-Dobbins Shamrock Coal Co. (Huerfano). Shamrock Coal Co. (Weld).	982 3,920 851 3,289 45,326	2 7 2 4 70		3
Sipe, Sipe & Rosenberger	207 101 920 1,483 20,117	3 1 3 6 19		1
Spencer, Geo. H	2,385 513 400	3 3 2		

COMPANIES	Total Production	No. of Men Employed	No. of Fatal Accidents	Number of Non-Fatal Accidents
Staples, S. L. & Son	716 2,593 3,937 1,602 4,236	2 3 12 3 5		12
Streenan, John Strawberry Coal Co Stukey, D. & R Sudar Coal Co Supancic-Price-Skoda	3,710 1,012 122 2,394 4,840	7 5 2 5 6		1
Temple Fuel Co	$50,935 \\ 50 \\ 11,732 \\ 328 \\ 1,000$	85 1 24 1 3		3
Torrid Coal Mining Co Tow Creek Coal Co Triangle Coal Co. Trinidad Supply Coal Co Tweeddale, Thomas W	203 410 319 330	3 4 2 3		
U. S. Vanadium Corp	23,602 1,372 1,119 3,506 25,728	23 3 5 3 54		3
Victor-American Fuel Co Watts, John A Whicker, H. L. & Son White Ash Coal Co Wieland, E. C	438,254 426 114 1,200 53	850 3 1 5 3	5	69
Wilhite, Andy L. Wiltze, A. C. Wilson, T. A. Zieseniss, Henry Zulian, Mario.	637 800 173 1,422 20	5 3 2 2 2		
GRAND TOTAL	5,722,899	8,663	31	722

TABLE NO. 2

### MINE FATALITIES BY CAUSES, 1934-1938 INCLUSIVE (As Per Revised Government Form)

				YEARS		
	CAUSES	1934	1935	1936	1937	1938
Un	derground:					
1.	Falls of roof (rock, coal or draw			_		
0	slate)	8	10	3	9	12
2.	Roof fall due to car or machine knocking out post					
3.	Falls of face or rib	5	1	11	6	6
4.	Rush of coal, rock or gob	****				
5.	Other falling material or objects (not being handled by injured worker)					
6.	Falls of persons		****			
7.	Handling materials					
8.	Hand tools					
9.	Stepping on nails or other sharp					
	objects					
10.	Striking or bumping against objects					
11.	Mine cars and mine locomotives	2	3	2	3	5
12.	Explosions of gas or coal dust			8 .		
13.	Explosives (not including those in No. 12)		5	1	1	
14.	Electricity (not resulting in explosions)	3			2	3
15.	Machinery		1			2
16.	Suffocation from natural gases (not from mine fires or explosions)	1			1	
17.	Mine fires (burns, suffocations, etc.)					
18.	All other accidents underground	1	1			
	Total Underground	20	21	25	23	28
19.	Shaft and slope		2			1
20.	Falls or slides of coal or overburden				****	
Sur	face (including tipple, breaker, shops	s & vard	s)			
34.	Mine cars and mine locomotives		1		1	
35.	Railway cars and locomotives		1			
36.	Handling materials					
37.	Hand tools					
38.	Falls of persons		****			1
39.	Falling objects	••••				
40.	Machinery on surface	1				
41.	Electricity			1		
42.	Explosives			3		1
43.	All other surface accidents		1		*	
	Total Surface	1	5	4	1	3
	GRAND TOTAL	21	26	29	24	31

### NUMBER INJURED IN COAL MINES IN COLORADO DURING THE YEAR ENDED DEC. 31, 1938

### Government Classification

Time Lost—5 or More Days

### CAUSES

Una	terground	
1.	Falls of roof (rock, coal or draw slate)	179
2.	Roof falls due to car or machine knocking out post	4
3.	Falls of face or rib	60
4.	Rush of coal, rock or gob	2
5.	Other falling material or objects (not being handled by injured worker)	7
6.	Falls of persons	42
7.	Handling materials	7
8.	Hand tools	18
9.	Stepping on nails or other sharp objects	2
10.	Striking or bumping against objects	22
11.	Mine cars and mine locomotives	98
12.	Explosions of gas or coal dust.	
13.	Explosives (not including those in No. 12)	5
14.	Electricity (not resulting in explosions)	9
15.	Machinery	38
16.	Suffocation from natural gases (not from mine fires or explosions)	
17.	Mine fires (burns, suffocations, etc.)	
18.	All other accidents underground	194
	TOTAL UNDERGROUND	687
19.	Shaft and slope	
20.	Falls or slides of coal or overburden	
G	face (including tipple, breaker, shops & yards)	
34.	Mine cars and mine locomotives	9
35.	Railway cars and locomotives	
36.	Handling materials	
37.	Hand tools	
38.	Falls of persons.	
39.	Falling objects.	
40.	Machinery on surface	
41.	Electricity	
42.	Explosives	
43.	All other surface accidents	
10.	-	
	TOTAL SURFACE	
	GRAND TOTAL	722

### TABLE NO. 3

OF MINE, CHARACTER OF COAL, NUMBER OF DAYS WORKED, AVERAGE NUMBER OF MEN EMPLOYED, TOTAL NUMBER OF TONS OF COAL PRO-SHOWING BY COUNTIES, MINES OPERATED, NAME OF OPERATOR AND ADDRESS DUCED IN 1938, AND CAPACITY OF MINE PER DAY IN TONS.

# ARCHULETA COUNTY

Capacity of Mine Per Day, Tons	15
Total Num- ber of Tons Produced	270 173 119 35 597
Average Ko, of Men Employed	
Number of Days Worked	100 90 50 12 68.4
Character of Coal	Pagosa Junction. Sub-bituminous. Sup-bituminous. Sup-bituminous. Sup-bituminous. Sub-bituminous. Sub-bituminous.
Mine Postoffice	Pagosa Junction Pagosa Springs Bayfield Dyke.
Name of Company	Frank Bellino. T. A. Wilson Leroy Crane Chas. McBroom
Name of Mine	Bellino

### BOULDER COUNTY

1,500 1,000 800 400 450	1250 1550 550 85
170,588 131,127 82,407 51,632 49,152	24,329 16,644 13,990 9,149 8,243
163 138 167 167 60	25 22 11 11 11
285 191 135 123 278	233 2256 2260 179
Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous
Louisville Broomfield Superior Broomfield Lafayette	Gorham Superior Lafayette Boulder Gorham
Boulder Valley Coal Co Louisville-Lafayette Coal Co Rocky Mountain Fuel Co National Fuel Co Black Diamond Fuel Co	Harris Courtier
Centennial Hi-Way Molastrial Monarch No. 2 Black Diamond No. 2	Lewis No. 2 Pluto Regal Big "6" Gorham.

# BOULDER COUNTY—Continued

Liley	Z Coal Mining Co.	Louisville	Sub-bituminous	196	12	7,378	75
_	sy & Merlino	Louisville	Sub-bituminous	140	4.0	4,964	0.0
-	High View Coal Co	Gorham	Sub-bituminous	200	700	7,00,4	2 rc
Eldorado	Fidorado Coal Co.	Boulder	Sub-bituminous	229	- 6	3,871	20
	Wm E Bussell Coal Co	Superior	Sub-bituminous	9.4	17	3.412	
	Premier Coal Co.	Boulder	Sub-bituminous.	271	4	2,316	15
_	vittsburgh Coal Co.	Gorham	Sub-bituminous	27 27 41	10.	1,924	101
	Ross Coal Co.	Gorham	Sub-bituminous.	212	4º C	1,900	0.1
	Northern Coal Co	Gornam	Sub-bituminous	90	7	000	
Danamount	Paramount Coal Co	Lafavette	Sub-bituminous.	25	9	330	15
	Logan, Girardo & Jamcola	Boulder	Sub-bituminous	26	က	104	10
	00			3 00 6	107	502 506	
Number of r	of mines licensed: 22			0.007	201	000,000	

### DELTA COUNTY

2,718 1,000 5,998 50 4,906 50 2,207 50	1,730 20 1,187 10 979 35 751 100 587 15	406 317 6 217 8	56,671
4.84.08 4.84.08 6.70.4.8.01	4870001	6000	97 56,
124 2234 2577 2577	195 100 150 76	75 110 58	
Bituminous	Sub-bituminous	Semi-bituminous Bituminous Sub-bituminous	
Bowie Cedaredge Paonia Cedaredge Cedaredge	Cedaredge Cedaredge Cedaredge Austin Cedaredge	Paonia Lazear Paonia	
Juanita Coal & Coke Co Green Valley Coal Co Paonia Farmers Coal Co Lloyd L. Patton States-Hall Coal Co	States-Hall Coal Co. Black Diamond Coal Co. Independent Coal Co. J. C. Bowerman & Sons. C. W. Rinehart.	J. J. Neish Louis Owens Paul McNew	of mines licensed: 15
King. Green Valley Paonia Farmers. Red Canon. Top.	Red Mountain Black Diamond Independent. Winton Western Star	Fitzsimmons. Farmers. Gelwicks.	Number

# DOUGLAS COUNTY

Capacity of Mine Per Day, Tons	5		100			1,000 400 200 40 200 20	30 120 120 6	
Total Num- ber of Tons Produced	291		2,151	4,246		187,865 40,683 15,107 4,983 3,710	3,463 3,444 2,977 2,377 880	265,489
Average Average Average	¢.1		4401	10		143 48 23 7	∞∞1-1001	260
Number of Days Worked	140		350 136 100	234.4		209 236 2290 1990	300 310 214 201 213	227.2
Character of Coal	Sub-bituminous	Υ	Sub-bituminous Sub-bituminous Sub-bituminous	k	Y	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	
Mine Postoffice	Littleton	ELBERT COUNTY	Matheson Agate Ramah		EL PASO COUNTY	Pikeview Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs	Colorado Springs Colorado Springs Colorado Springs Colorado Springs	
Name of Company	R. C. Cramer		Barker Coal Co. J. M. Dahrymple	of mines licensed: 5		Pikes Peak Fuel Co Colorado Springs Co. Clara Belle Coal Co. Franceville Coal Co. John Streenan	Altitude Fuel Co. Frank Ausec. Jinnary Camp Fuel Co. Danville Coal Co. Cottonwood Coal Co.	of mines licensed: 11
Name of Mine	Willow Creek		Barker or Wright Beaver ValleyStander	Number		Pikeview	Altitude Busy Bee Jimmy Camp Climax Cottonwood	Number

# FREMONT COUNTY

850 500 275 100	175 200 100 100	150 75 150 40	125 38 30 75	420022 070020	1220 1220 120 120 120	15
107,154 75,639 39,741 26,495 21,711	19,730 19,384 17,799 16,084 16,057	13,228 12,715 10,035 9,088 6,379	6,245 6,174 5,439 4,787	2,4498 3,484 3,4449 2,407	22,38 22,20 22,00 1,944 1,4254 35 1,4254	1,302 1,250 1,250 996 943
260 92 449 339 46	16 30 41 255 13	18 32 117 117	118 188 174 141	7.88 11.78 8	60044	2546-73
145 214 190 288 284	216 159 181 202 259	217 196 204 181 241	194 183 189 195	157 191 251 87	161 147 211 202 136	220 204 135 94 61
Bituminous Bituminous Bituminous Bituminous	Semi-bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous	Semi-bituminous Bituminous Bituminous Bituminous Bituminous	Semi-bituminous Semi-bituminous Bituminous Bituminous Semi-bituminous
Chandler Canon City Florence F	Coal Creek	Florence	Florence Canon City Florence Florence Canon City.	Coal Creek	Florence	Plorence Florence Canon City. Canon City.
Victor-American Puel Co Colorado Fuel & Iron Corp Giuliano-Carpine Coal Co Canon Black Diamond Coal Co	Nushaft Canon Coal Co Caldirola Coal Co Bluff Springs Leasing Co Nushaft Canon Coal Co Tony Santarelli	Corley Coal Co	Canon Blue Ribbon Coal Co Royal Gorge Coal Co Joseph Z. Duca Perino Coal Co Manley Coal Co.	Canon Imperial Coal Co	Spring Canon Coal Co	Tony Moschetti Canton National Coal Co. Canon Liberty Coal Co. Dutch Oven Coal Co. Canon Peacock Coal Co.
Chandler. Rockvale No. 3. Cedar Canon Canon Black Diamond Canon Monarch No. 2.	Rex Carbon Caldirola. American Independent No. 2 Nushart. Double Dick.	Corley No. 6	Horseshoe Royal Gorge Canon Zenith Newlan Creek Manley	Canon Imperial Little Johnny Canon Tiger Brookside O. K. Canon	Spring Canon. Bald Canon Eagle Canon Red Arrow	Canon Old Slope. Canon National. Idberty. Dutch Oven.

# FREMONT COUNTY—Continued

Agriculture Mattriig Coal Creek C

# GARFIELD COUNTY

South Canon New Castle. Carbonera. Stove Canon.	South Canon Mine Leasing Co W. E. Coles Barber Asphalt Corp Stove Canon Coal Co Henry Zieseniss.	Glenwood Springs New Castle Mack	Bituminous Bituminous Bituminous Bituminous Bituminous	2298 1153 184 184	10 00 00 00 00 00 00 00 00 00 00 00 00 0	20,117 10,867 5,583 4,236 1,422	80484 0000 000
I. H. I. Silt Gem Harvey Gap North Canon	Bill Haas Llewellyn Coal Co. Sexton-Beswick-Dobbins James LeDonne.	Rifle	Bituminous Bituminous Bituminous Bituminous Bituminous	144 77 72 108 65	0000000	1,118 905 851 850 784	100
Diamond Monger Ohkraut	Diamond Fuel Co N. H. Halcumb Frank DeBoy	Glenwood Springs Fruita Glenwood Springs	BituminousBituminous	4528 4528	465-1	595 440 109	10
Number	of mines licensed: 14.			181.7	64	47,877	

# GUNNISON COUNTY

Somerset Crested Butte Oliver Alpine Bulkley No. 2	Calumet Fuel Co	Somerset. Crested Butte. Somerset. Baldwin Crested Butte.	Bituminous Bituminous Bituminous Semi-bituminous	178 153 161 104 196	151 241 63 65 29	184,552 178,884 68,321 34,079 24,474	$^{1,400}_{1,100}_{200}$
Bear New Baldwin Horace Hawks Nest Edwards	Bear Coal & Coke Co Rocky Mountain Fuel Co Horace Miners Association C, Audin & Sons George W. Edwards	Somerset. Baldwin Gunnison Somerset.	Bituminous Semi-bituminous Anthracite Bituminous	135 132 162 101 146	23 10 8 4	15,979 3,864 3,680 3,031 2,405	2 3 3 2 4 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3
Richardson Baldwin Star O. C. Carbon Creek	Mount Carbon Anthracite Co Baldwin Fuel Co S. L. Staples & Son Carbon Creek Coal Co W. H. Hedley	Gunnison Baldwin Gunnison Gunnison Gunnison	Anthracite. Bituminous. Bituminous. Bituminous.	112 145 143 164 90	ro es es es	1,203 1,203 716 650 606	10 10 10 10
Castle Rock	Geo. Bonner of mines licensed: 16	Gunnison	Bituminous	84	621	524,188	12

# HUERFANO COUNTY

Robinson No. 4 Kebler No. 2 Calumet No. 2 Pryor Alamo No. 2	Colorado Puel & Iron Corp Colorado Puel & Iron Corp Calumet Puel Co	Farr. Tioga. Delearbon Pryor. Butte Valley.	Bituminous Bituminous Bituminous Bituminous Bituminous	153 153 153 153 153	159 168 108 93 83	164,791 97,782 84,475 49,149 44,763	600 800 900 400 1,400
Gordon Morning Glory Ravenwood Rouse Major	Gordon Coal Co Minnequa Fuel Co Caliente Coal Co Rouse Coal Minig Co Major Coal Co	Walsenburg. Walsenburg. Ravenwood. Walsenburg.	Bituminous Bituminous Bituminous Bituminous Bituminous	164 186 105 131	48832 228813 6138	23,956 23,496 19,036 14,183 12,186	400 250 300 100
Toltec Blackbawk Leader No. 2 Maitland Nugget	Aztec Coal Mining Co Blackhawk Coal Mining Co Red Ash Coal Co Caliente Coal Co Joe Maloney	Toltec	Bituminous Bituminous Bituminous Bituminous	102 170 186 61 148	232 155 21 21	9,155 8,761 7,204 6,882 5,457	150 80 38 300 36

# TABLE NO. 3—Continued HUERFANO COUNTY—Continued

Capacity of Mine Per Day, Tons	98222	15 10 7 10	25 3 10	e3 e3			
Total Num- ber of Tone Produced	2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,	1,561 1,483 1,136 1,012 1,000	883018 0123018 0123018	203 200 191	595,602		
Average Average	r-440r	00-100	r001014t0	0000	1,047		-
Number of Days Worked	217 172 233 180 162	161 180 140 163	107 31 40 60 23	17 20 113	154.8		
Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous		Y	
Mine Postoffice	La Veta	Walsenburg Walsenburg Walsenburg Walsenburg La Veta	Alamo La Veta La Veta La Veta La Veta	Rugby La Veta La Veta		JACKSON COUNTY	
Name of Company	Peachey Coal Co Shamrock Coal Co Peachey Coal Co Blue Blaze Coal Co Sudar Coal Co	Big Six Coal Co. Sneddon & Smith Caddell Coal Co. Strawberry Coal Co. J. G. Tompkins & Sons.	McCune & Boscia. James Murrell. Wm. L. Morgan. Philip Duran. Peachey Coal Co.	Torrid Coal Mining CoRogers BrothersKlikus Coal Co	of mines licensed: 35	f .	
Name of Mine	Ojo Canon Shamrock Tompkins (Niggerhead). Del Carbo Premium.	Big Six Sun Caddell No. 3 Strawberry George No. 3	New Sunnyside Murrell New Oakview C. O. D. No. 1	Torrid No. 4 Rogers	Number		

200	
11,666 2,993 326 14,985	
10 2 A	
227 206 120 217.2	
Sub-bituminous Sub-bituminous Sub-bituminous	
Coalmont. Waiden Cowdrey.	
North Park Coal Co	
Moore Strip PitSudduthNumber	

## JEFFERSON COUNTY

And the second s				-			
Leyden. Caprock Virginia Van Winkle.	Leyden Lignite Co. Caprock Fuel Co. Jefferson Coal Co. Van Winkje Coal Co.	Leyden. Golden Littleton	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	352 352 306 306	113 15 6	114,712 31,558 7,585 3,506	2000 2000 2000 2000
Sconomy	Economy Coal Co.	Littleton	Sub-bituminous	275	ဖ	2,400	20
Ideal	Denver Golden Coal Co	Golden	Sub-bituminous	8.7	20	381	
Number	of mines licensed: 7			207.9	148	160,142	

## LA PLATA COUNTY

1	312000	100 20 7	20 8 8 30	100	10	
	11,677 6,607 3,920 3,832 2,144	1,955 1,1452 1,119 994 885	850 800 674 674 511 460	421 328 216 199 183	115 53 50	39,445
	087-470	00 00 01 00		812 NNN	010001	68
-	191 166 233 169	149 115 240 212 212	168 241 91 62	107 86 62 55	7.1 2.0 2.0	152.3
	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	BituminousBituminousBituminous	
	Durango	Durango	Dolores. Hesperus Falfa Durango. Hesperus	Kline. Hosperus. Durango. Bayfield. Durango.	Bayfield Bayfield	
	Castle Coal Co. O. K. Coal Co. O. G. Servoni. F. D. Pierce. W. R. Keck.	Morning Star Coal Co. Black Diamond Coal Co. Valley Yew Coal Co. Peerless Coal Co. Hesperus Coal Co.	Alfred Blume A. C. Wiltse Fire Glow Coal Mine Burango Coal Coal King Mining Co.	P. H. Crumpley. Frank Tipotsch Dill & Boglino. Charles E. Davis. John J. Henderson.	James A. Bierce E. C. Wieland Batchelor & Richardson	of mines licensed: 25
	Castle O. K. Supreme. Sunshine. Klondyke.	Morning Star Black Djamond Valley View Peerless Hunt	Peacock Hay Gulch Pire Glow	Soda Springs Tipotsch Dill Blue Jay. Ft. Lewis.	Shamrock Fire Chief Excelsior	Number

## TABLE NO. 3—Continued LARIMER COUNTY

Average No. of Men Employed Total Num- ber of Tona Produced Mine Per Mine Per	3 1,521 40 2 353 3 4 350 10 2 262 2 11 2,486
Number of Days Worked Average	217 102 66 121.9
Character of Coal	Carr
Mine Postoffice	Carr Carr Carr Carr
Name of Company	Ideal Coal Co. John Nogo. K. H. Reisdorff Bachy Coal Co. of mines licensed: 4
Name of Mine	Ideal. White Rose. Pioneer. Bachy.

## LAS ANIMAS COUNTY

2,000 1,250 1,500 1,000	3200 3200 3200 3200 3200	100 554 80 200 40
243,290 152,011 101,367 68,210 50,935	38,044 33,153 25,728 15,9648	11,732 10,873 8,290 7,136
456 273 165 143 85	57.75 57.75 53.14 53.14 53.14	4821 4831 8
133 140 167 19 140	200- 186 111 59 76	138 167 160 98 189
Bituminous	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous.
Valdez. Delugua. Boncarbo. Morley. Brodhead.	Vallorso Boncarbo Rugby Ludlow Aguilar	Trinidad Trinidad Trinidad Rugby.
Colorado Fuel & Iron Corp. Victor-American Fuel Co. American Smelting & Ref. Co. Colorado Fuel & Iron Corp. Temple Fuel Co.	Bear Canon Coal Co.  Dick Coal Co. Vickers Coal Co. Huckano Coal Co. Jewell Collieries Corp.	Thor Fuel Co. Deldosso Coal Co. Baldy Coal Co. Micheli, Pio. Aguilar Black Diamond Coal Co.
Frederick Delagua. Boncarbo. Morley. Brothed	Bear Canon No. 6 Dix Kenneth Ludlow Jewell	Thor. Sopris No. 1 Baldy Rapson Aguilar Black Diamond.

# LAS ANIMAS COUNTY—Continued

### MESA COUNTY

## TABLE NO. 3—Continued MESA COUNTY—Continued

Capacity of Mine Per Day, Tons	152272	100	100	
Total Xum- ber of Tons Produced	2,031 2,834 2,836 2,294 2,180	1,856 1,221 997 679 621	331 305 302 261 201	67,550
Average Average	ಬವಾಬಾವಾ	04mr9	2000000	135
Number of Days Worked	152 221 200 162 199	166 236 186 135	102 999 63 80	172.1
Character of Coal	Bituminous	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	
Mine	Palisade Palisade Grand Junction Palisade Grand Junction	Palisade Grand Junction Fruita Grand Junction Fruita	Loma. Fruita Grand Junction Grand Junction Palisade.	
Name of Company	Martin Coal Co Hicks & Sons. Ernest Hicks Midwest Red Arrow Coal Co Tony Rocchio.	John McDowell Monarch Coal Co. Mesa County Quality Coal Co. Tony Aquilla. Martin Kovac (Deceased)	Coal Gulch Coal Co Mike Marinelli L. Craige J. W. Mundell & Son Sipe, Sipe & Rosenberger	of mines licensed: 24
Name of Mine	Blue Flame Palisade McGinley Midwest Feed Arrow. Farmers Mutual	Riverside Williams Worling Thomas Hidden Treasure	Coal Gulch Marinelli Peacock Black Diamond Mt. Lincoln	Number

### MOFFAT COUNTY

-	17,237 300 9,846 6,736 50 1,638 25 656
	090000
-	295 2255 2955 1137
	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.
	Axial Craig Axial Meeker Craig
	Domestic Coal Co. Knez Coal Co. C. G. Phelan. G. G. Hart & Sons. A. B. Barmettler
	Streeter Knez M. Streeter James Baker

# MOFFAT COUNTY—Continued

Number	John Babb, Jr. E. O. Medlock. H. L. Whieker & Son K. L. Morton. of mines licensed: 11	Vernat, Utah Craig Craig Lay Craig	Bituminous Bituminous Bituminous Bituminous Bituminous	30 30 91 70 40 208.8	36 111233	273 273 203 1114 45 37,048	9
	M	MONTEZUMA COUNTY	YTY				
Montezuma. Willden No. 2 Mancos Corlez (Mesa Verde)	Walter Kingery James Diluzio H. A. Ainsworth Mancos Coal Co Andy L. Wilhite	Cortez Durango Mancos Cortez	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	260 1115 132 180 61 164.4	P. 8. 83 ± 70   12	1,996 1,021 1,021 762 637 637 5,356	10
	N	MONTROSE COUNTY	ΤΥ				
U. S. Vanadtum	U. S. Vanadium Corp	Nucla Nucla Redvate Nucla Nucla Montrose	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	38 200 140 140 140 200 200 20 20 20 20 20 20 20 20 20 20	03 00 00 00 00 00 00 00 00 00 00 00 00 0	23,602 656 601 477 426 40 659	65 10 10
		OURAY COUNTY		_			
Bright DiamondNumber	Islla Slagleof mines licensed: 2	Ridgway	Sub-bituminous	3.0	1	101	1 1 1 0 0 0 0

## TABLE NO. 3—Continued PITKIN COUNTY

Capacity of Mine Per Day, Tons	2 50		2 2 10 9 7	3 2 2 2 2 2 2 2 2	2   4		3 2,000 0 4,000 0 1,000 9 1,000
Total Num- ber of Tons Produced	872		1,284 1,192 1,049 708 607	513 484 483 130 102	6,564		185,823 130,798 119,340 112,360 66,729
Average Ko. of Men Employed	60		2022	m-00-	1 19		211 179 246 201 116
Number of Days Worked	126		220 300 179 230	103 103 100 100 82	110		11 120 120 120 120 120 120 120 120 120 1
Character of Coal	Bituminous	VTY	Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous	_	Bituminous Bituminous Bituminous Bituminous Bituminous
Mine Postoffice	Carbondale	RIO BLANCO COUNTY	Meeker	Rangely Rangely Rio Blanco Weeker Meeker	Rangely	ROUTT COUNTY	Mt. Harris Haybro Oak Creek Oak Creek Mt. Harris
Name of Company	J. E. McCann	RI	C. F. Pollard R. C. Tdenau W. R. Nall Pete Gozzer Cox & Lindeman.	M. E. Staley Arthur Baxter Ivor Adair McCall & Rabska Milo Coats	Jones & Trachtaof mines licensed: 12		Colorado & Utah Coal Co
Name of Mine	Placita		New Pollard Ricnau Nine Mile Twelve Mile Johnny Boy.	White River Rector Rio Blanco McKee Coats	Douglas CreekNumber		Harris

## ROUTT COUNTY—Continued

880 800 800 800 800 800 800	300 40 15	10 25 20 10	20	10	9		100
54,079 27,150 16,277 12,569 5,600	4,140 3,831 1,602 7920 796	747 691 660 426 410	33821 33821 3362 4484	3335 1224 122 94 50	20 18	141,760	498 476 377 148 108
107 71 222 122	<u>4</u> ∞госос	ньююю4	20222	60 H 20 H 30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,274	10 6691633
108 69 310 205 271	30- 210- 140- 104- 119-	148 28 32 80 123	106 70 120 127 455	120 120 38 50 20	9 6	114.3	74 120 50 60 74.2
Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous	ТТ	Bituminous. Bituminous. Bituminous. Bituminous. Bituminous.
Routt Bear River Hayden MacGregor Oak Creek	Oak Creek Hayden Oak Creek Hayden Mt. Harris	Oak Creek Mt. Harris Milher Oak Creek Bear River	Oak Creek. Bear River Haybro Phippslurg. Steamboat Springs	Oak Creek. Mt. Harris. Steamboat Springs Steamboat Springs Steamboat Springs	Milner Hayden	SAN MIGUEL COUNTY	Norwood Norwood Norwood Norwood Redvale
Keystone Coal Co. Bear River Coal Co. Hayden Valley Mutual Coal Co. McNeil Coal Corp. Geo, T, Rolfes.	Moffat Coal Co Babson Coal Co George Steele & Co Sleepy Cat Coal Co Noftsger & Walker	Geo. T. Rolfes. Champion Coal Co. Consolidated Pinnacle Coal Co. Postal Mining Co. Tow Creek Coal Co.	R. J. Jones R. C. Jones David D. Linn E. Gwynn J. M. Childress.	John Mathews. W. C. Hammond D. & R. Stukey. John Pollo, Jr. Harry T. Thompson.	Mario Zulian John F. Johnson		R. E. Owen Earl M. Crisp. W. H. Knowlton. Gene Elder. Nelson & Hardman. of mines licensed: 7.
Keystone. Bear River. Hayden Valley. MacGregor. Argo Gulch.	Oak Hills No. 2 Babson Apex Sleepy Cat. Bruce Walters	Webber Champion Elk Creek No. 3 Postal Tow Creek	Edna. Jones. Dave's Grand Baby. Seven Points. Big Mack	Richneg Hammond Fish Creek Morgan Wonder Valley	McCroskey Johnson	Tagrinous VI	Keck-Reliance

## TABLE NO. 3—Continued WELD COUNTY

the state of the s					CONTRACTOR DESCRIPTION AND ADDRESS OF THE PERSON NAMED IN COLUMN NAMED IN COLU	The state of the s	***
Name of Mine	Name of Company	Mine Postoffice	Character of Coal	Number of Days Worked	Average Mo. of Men Employed	Total Number of Total Such to Total Consideration Total Constant Constant Total Constant Constant Total Constant C	Capacity of Mine Per Day, Tons
Jolumbine Imperial Sauder Valley Sayton	Rocky Mountain Fuel Co Imperial Coal Co Boulder Valley Coal Co Clayton Coal Co National Fuel Co	Serene. Brie Brie Brie Brie	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	280 191 139 170	239 169 148 132 106	193,832 153,860 1123,951 110,025 106,585	$\begin{array}{c} 800 \\ 1,200 \\ 1,500 \\ 1,000 \\ 1,900 \end{array}$
Sterling Baum Morrison Grant Russell	McNeil Coal Corp. Consolidated Coal & Coke Co Clayton Coal Co Rocky Mountain Fuel Co.	Dacono Dacono Frie Frederick Frederick	Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.	151 151 155 168 168	2222 2022 2022 2022 2022 2022	90,390 88,981 87,087 81,266 73,668	1,000 1,000 1,500 650 600
Shamrock. Graden. Evans. Monroe.	Shamroek Coal Co. Graden Coal Co. Carbon Coal Co. Park Coal Co. Bohlender Coal Co.	Brie Dacono Frederick Longmont La Salle.	Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.	1110 1149 1168 305	70 27 14 18	45,326 34,437 21,865 9,599 2,573	300 300 300 75
La Salle Buddy White Ash Diamond	La Salle Coal Co. Buddy Coal Co. White Ash Coal Co. Diamond Coal Co. Comet Coal Co.	Greeley La Salle. La Salle. La Salle. Eaton	Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous. Sub-bituminous.	236 174 140 163 150	10410614	2,032 1,380 1,200 715 709	25 25 25 25
Tamoc Galeton	Roy L. Brundy Frank Lennex	CornishGaleton	Sub-bituminous	105	401	279	ಗುಣ
Number	of mines licensed: 23			174.1	1,566	1,229,775	
Total	number of mines licensed: 385			159.8	8,663	5,722,899	

### SHOWING INCREASE AND DECREASE OF COAL PRODUCTION BY COUNTIES—1937-1938

Counties	1937	1938	Increase	Decrease
Archuleta	117	597	480	
Boulder	528,142	593,596	65,454	
Delta	69,182	56,671		12,511
Douglas		291	291	
Elbert	5,940	4,246		1,694
El Paso	293,325	265,489		27,836
Fremont	499,571	473,906		25,665
Garfield	53,359	47,877		5,482
Gunnison	660,286	524,188		136,098
Huerfano	770,515	595,602		174,913
Jackson	24,073	14,985		9,088
Jefferson	179,046	160,142		18,904
La Plata	42,985	39,445		3,540
Larimer	2,524	2,486		38
Las Animas	1,429,531	820,216		609,315
Mesa	79,638	67,550		12,088
Moffat	20,146	37,048	16,902	
Montezuma	4,099	5,356	1,257	
Montrose	12,812	26,529	13,717	
Ouray		101	101	+
Pitkin	1,284	872		412
Rio Blanco	5,484	6,564	1,080	
Routt	1,022,131	747,760		274,371
San Miguel	985	1,607	622	
Weld	1,490,220	1,229,775		260,445
TOTAL	7,195,395	5,722,899	99,904	1,572,400
Decrease, 1938				1,472,496

### COAL PRODUCTION IN PREPARED SIZES BY COUNTIES—1938

County	Mine Run	Lump	Egg	Nut	Pea	Slack	Total
Archuleta	597						597
Boulder	50,623	119,467	87,623	36,596	12,870	286,417	593,596
Delta	5,717	17,556		11,580	1,479	20,339	56,671
Douglas	291						291
Elbert	510	802	257	1,095	575	1,007	4,246
El Paso	114,376	25,212	10,437	3,953	6,420	105,091	265,489
Fremont	101,429	149,861	4,582	79,536	8,575	129,923	473,906
Garfield	22,308	9,432		5,041	226	10,870	47,877
Gunnison	147,980	69,557	7,360	38,971	3,176	257,144	524,188
Huerfano	141,286	70,227	27,647	55,277	12,592	288,573	595,602
Jackson	5,492	4,441		4,516		536	14,895
Jefferson	65,578	8,141	5,214	7,421	6,010	67,778	160,142
La Plata	19,696	7,208	95	4,601	1,650	6,195	39,445
Larimer	759	1,016	30		397	284	2,486
Las Animas	422,598	21,983	17,486	14,883	4,837	338,429	820,216
Mesa	24,669	21,670		7,207	3,429	10,575	67,550
Moffat	8,847	15,514		3,180	240	9,267	37,048
Montezuma	4.112	828		216	144	56	5,356
Montrose	4,034			559		21,936	26,529
Ouray	101						101
Pitkin	872						872
Rio Blanco	2,919	1,896		1,277	99	373	6,564
Routt	183,162	205,980	37,892	92,279	6,743	221,704	747,760
San Miguel	1,411	127		36	33		1,607
Weld	38,315	370,009	97,203	17,137	93,913	613,198	1,229,775
Total	1,367,682	1,120,927	295,826	385,361	163,408	2,389,695	5,722,899

### COKE PRODUCED IN 1938 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	135	54,721	Las Animas	135	54,721
Colorado Fuel and Iron Corp  Total	$\frac{149}{284}$	$\frac{186,805}{241,526}$	Pueblo	$\frac{149}{284}$	$\frac{186,805}{241,526}$

### Remarks:

Average number of days worked	286.5
Average number of men employed at the coke ovens	64
Number of tons of coal made into coke	398 681

### COAL PRODUCTION IN COLORADO FROM 1873 TO 1938, INCLUSIVE

Year		Tons	Year	Tons
1873		69,977	1906	
1874		87,372	1907	10,965,640
1875		98,838	1908	9,773,007
1876		117,666	1909	10,722,490
1877		160,000	1910	12,104,887
1878		200,630	1911	10,197,595
1879		322,732	1912	11,016,948
1880		375,000	1913	9,268,939
1881		706,744	1914	8,201,423
1882		1,161,479	1915	8,715,397
1883		1,220,593	1916	10,522,185
1884		1,130,024	1917	12,515,305
1885		1,398,796	1918	12,658,055
1886		1,436,211	1919	10,406,543
1887		1,791,735	1920	12,514,693
1888		2,185,477	1921	9,141,947
1889		, ,	1922	10,003,610
1890		, ,	1923	10,336,735
1891			1924	10,501,088
1892		3,771,234	1925	10,440,387
1893	•••	. ,	1926	10,616,760
1894		3,021,028	1927	9,781,580
1895	*======	3,339,495	1928	9,921,585
1896		3,371,633	1929	9,934,064
1897	***************************************	3,565,660	1930	8,238,094
1898		-,	1931	6,604,063
1899	***************************************		1932	6,616,525
1900		, ,	1933	5,284,872
1901		, ,	1934	5,251,003
1902	••••••	7,522,923	1935	5,948,661
1903	•	7,775,302	1936	6,845,837
1904	•••••	6,776,551	1937	7,215,916
1905		8,989,631	1938	5,722,899

### TOTAL NUMBER OF TONS OF COAL SHIPPED BY THE COAL MINES OF COLORADO DURING 1938; BY TRUCK, WAGON, RAILROAD OR USED FOR STEAM OR HEAT

Counties	Tons of Coal Shipped by Railroad	Tons of Coal Shipped by Trucks and Wagons	Used at Mine for Power and Heat	Total Tons of Coal Produced
Archuleta		597		597
Boulder	199,789	383,200	10,607	593,596
Delta	30,387	22,282	4,002	56,671
Douglas	00,001	291	1,002	291
Elbert		4,096	150	4.246
Dibert		1,000	100	4,240
El Paso	41,163	220,302	4,024	265,489
Fremont	174,569	297,257	2,080	473,906
Garfield	7,091	40,546	240	47,877
Gunnison	483,764	27,902	12,522	524,188
Huerfano	523,349	70,344	1,909	595,602
Jackson	9,784	4,657	544	14,985
Jefferson	106,478	51,520	2,144	160,142
La Plata	10,784	28,281	380	39,445
Larimer	10,704	2,483	3	2,486
Las Animas	740,225	67,518	12,473	820,216
111111111111111111111111111111111111111	. 10,220	01,010	12,110	020,210
Mesa	231	66,665	654	67,550
Moffat		37,048		37,048
Montezuma	***************************************	5,356		5,356
Montrose		26,529		26,529
Ouray		101		101
Pitkin		872		872
Rio Blanco		6,462		6,462
Routt	679,166	37,887	30.707	747,760
San Miguel		1,312		1,312
Weld	919,493	274,128	36,154	1,229,775
Total	3,926,273	1,678,033	118,593	5,722,899

### TONS SHIPPED OUT OF THE STATE

Boulder	325	Larimer	100
Delta	5,640	Las Animas	185,686
Elbert	100	Rio Blanco	400
Fremont	77,793	Routt	281,430
Gunnison	69,447	Weld	1,100
Huerfano1	62,282		
Jackson	7,972	Total	792,275

# MECHANICAL LOADING IN COLORADO IN 1938

Conveyors  Mainline or Entry Conveyors ors, Number and Type Shovels, Xo. and Type Of Mechanical Loaders Loaders Total Ton- ical Devices froil Devices Production of Mine Production of Mine Of Mine		102,459 1	62,359 82,407		3,412 3,412	1 1 131,127	51,632 51,632	126,496 187,865	1,482 21,711	1 3,491 13,228	7,413 19,384	26,495	6,379
Chain Con- veyors, Short Face Type Room Conveyors					:				!		. :		
Mobile or Track Type			!		:	:	:	67	!		-	:	:
Number of Mechanical Loaders Shaker Sype	10		1	1 1	1 1	16 15	ro	4	. 1	2 1	1	1 1	1 1
County, Company, Mine	Boulder County Black Diamond Fuel Co.	Boulder Valley Coal Co. Centennial Mine	Rocky Mountain Fuel Co. Industrial Mine	r Mine.	:	Louisville-Lafayette Coal Co. Hi-Way Mine	National Fuel Co. Monarch No. 2 Mine	El Paso County Pikes Peak Fuel Co. Pike View Mine	Fremont County Canon Monarch Fuel Co. Canon Monarch Mine	The Corley Coal Co. Corley No. 6 Mine	Caldirola Coal Co. Caldirola Mine	ĸΩ.	Pine Gulch Coal Co. Pine Gulch Mine

MECHANICAL LOADING IN COLORADO IN 1938—Continued

	Mobile or Track Type Chain Con- veyors, Short Face Type Conveyors Mainline or Entry Conveyors Mondiff Shovels, Number and Type of Mechan- Inge Loaded by Mechan- ical Devices ical Devices of Mine Total			1,944 1,944	2 16,870 75,639	2 14,798 19,730	12 8 56,330 107,154	•	1 1,292 184,552	2 18,004 178,884	2 35,796 68,321	3 42,075 84,475	4 22,477 44,763	10,577	17,237
	Entry		:	!		!	00					!	:		
	Воош		;	1	:	-	12			-	-		-		61
	Chain Con- veyors, Short Face Type		:	-	-				-	:	-	!		!	
			:		-	-!	-		П		61			!	
	Бракег Туре	-	<b>-</b>	1	2	61	:		1	61	-	ಣ	4		
	Number of Alechanical		<del>-</del>		23	67	20		Ħ	67	67	ಣ	4		6.0
The second secon	County, Company, Mine		Canon Red Arrow Coal Co.	Min	Rockvale No. 3 Mine	0.7	Victor-American Fuel Co. Chandler Mine	Gunnison County		Color Fuel & Iron Corp.	Oliver Coal Co. Oliver Mine	Huerfano County Calumet Fuel Co. Calumet No. 2 Mine	Gordon Coal Co. Gordon Mine	Mesa County Garfield Coal Co. Garfield Mine	Moffat County Domestic Coal Co. Streefer Mine

# MECHANICAL LOADING IN COLORADO IN 1938—Continued

Conveyors  Belt Convey- ors, Number and Type Shovels, No. and Type of Mechanical Loaders  Total Ton- ical Devices ical Devices of Mine of Mine of Mine	6 129,506 185,823	9,140 130,798	18,655 54,079	78,510 119,340	1 112,360 112,360	66,729 66,729		32,863 90,390	10,000 153,860	26,451 193,832	9,269 87,087	41,400 73,668	8,293 21,865	9,319 45,326	1 6 1 1,313,753 2,921,540 3 6 1 018,039 9,603,486
Conveyors Mainline or				1 0 1	4 2			:	-	:	-			-	28 14
Chain Con- veyors, Short Face Type		-	-	5 1	:	-			-	:	:		-		
Mobile or Track Type	63	1	i	:	1	-		:		1			\$1		2 - 2
Shaker Type	9	2	4		∞	∞		ಣ	П	∞	4	4	:	1	112
Number of Mechanical Loaders	15	ಣ	4	16	16	10		e0	-	00	4	4	67	1	180
County, Company, Mine	Routt County Colo. & Utah Coal Co. Harris Mine		Reystone Coal Co.	nd No.	Victor-American Fuel Co. Vietor-American Fuel Co.	r act	Weld County	McNell Coal Corp. Sterling Mine	Imperial Mine Rocky Mountain Enel Co		Morrison Mine Wm F Bussell Coal Co		Shamrock Coal Co	Shamrock Mine	GRAND TOTAL, 1938

## FATAL ACCIDENTS—1938

County Cause Las Animas.Fall of roof (rock) FremontFall of roof (draw slate) El PasoFall of roof (slate) FremontHandling explosives Routt	3.8.	WeldCaught between top of motor and cross bar motor and cross bar air shaft.  HuerfanoFall into an abandoned air shaft.  HuerfanoFall on moving machinery.  El PasoFall of roof (rock)  FremontFall of roof (rock)  FremontFall of face coal remontFall of face coal remon	and root
Mine Delagua Chandler Pikeview Bagle Corley No. 6 Hi-Way Ravenwood	e e ennial. utte.	NCNeil	
Company  Victor-American Fuel Co  Victor-American Fuel Co  Fagle Coal Co  Victor-American Fuel Co  Victor-American Fuel Co  Corley Coal Co  Louisville-Lafayette Coal Co  Caliente Coal Co  Gordon Coal Co  Caliente Coal Co	Pro Micheli.  Rocky Mountain Fuel Co.  Rocky Mountain Fuel Co.  C. F. & I. Corp.  Hayden Coal Co.  Boulder Valley Coal Co.  Victor-American Fuel Co.  Regal Coal Co.	McNeil Coal Corp.  Calumet Fuel Co.  Boulder Valley Coal Co.  Pikes Peak Fuel Co.  Canon Black Diamond Coal Co.  Nushaft Canon Coal Co.  Little Johnny Coal Co.  Keystone Coal Co.  Little Johnny Coal Co.  Keystone Coal Co.  Keystone Coal Co.  Keystone Coal Co.  McNeil Coal Corp.	
Name Arthur W. Brown Tony Dinardi Peter Bond Alfred Walker Frank Bergant Charles R. Ryan Walter Merciez Claude Thomas	Louis Assala  Louis Assala  Dan Hodson  Tony Sporich  John D. Smolis  Claude Clark  Apton Calegoj  Ferdinand Cornish  Frank Casslas	Sept. 29James Pafford	
Date 1. Jan. 12 2. Jan. 18 3. Feb. 4. Feb. 22 5. Feb. 22 7. Feb. 25 8. Feb. 25 9. Mar. 1	10. Apr. 21.  11. May 16.  12. June 16.  13. June 18.  14. July 15.  15. Aug. 24.  16. Sept. 1.  17. Sept. 14.  18. Sept. 25.  19. Sept. 26.  20. Sept. 26.		

### TWENTY-FIVE CERTIFIED FOR COAL MINE INSPECTOR

Examination given for Chief and Deputy Coal Mine Inspector, by State Civil Service Commission, on Apr. 7, 8 and 9, 1938, and conducted by the State Board of Coal Mine Examiners, appointed by the Civil Service Commission, namely: F. W. Whiteside, R. R. Vaile, and Jack Matheson of Denver; Gerald Arnold of Boncarbo, Colo., and W. S. Getchel of Colorado Springs, Colo.

George H. Smith, Canon City
John J. Roddy, Montrose
George C. Dalrymple, Trinidad
A. R. Sneddon, Chandler
Andrew Campbell, Tioga
James Hamilton, Colorado Springs
David A. Kerr, Superior
Daniel Park, McGregor
Robert Dalrymple, Denver
John T. Williams, Canon City
William Peachey, La Veta
James F. Schweiger, Lafayette
Robert J. Campbell, Cedaredge

William J. Aitken, Denver Eugene W. Machin, Frederick Thomas Warburton, Boncarbo Arthur E. Thompson, Louisville Arthur C. Brown, Paonia Douglas C. Clark, Oak Creek Clifford S. Dawe, Segundo Daniel R. Ratkovich, Trinidad John J. Neish, Denver Reese T. Roberts, Canon City James A. McCune, Walsenburg Archibald Bowman, Morley

### SUCCESSFUL CANDIDATES IN THE EXAMINATION FOR COAL MINE OFFICIALS—1938

### MINE FOREMAN

Barnell, Geo. M., Walden Bey, William W., Durango Bixler, Everett A., Durango Bowerman, Chester A., Austin Burgess, Thomas, Louisville Cahill, Raymond V., Vallorso Cartwright, H. V., Boulder Chatin, August H., Arvada Dalrymple, J. M., Agate Daniels, William, Oak Creek Dewey, Joseph, Erie Elliott, Robert, Colorado Springs Falco, Adolph, Florence Faycosh, Joe, Frederick Giuliano, Mike, Coal Creek Hadden, Willis, Palisade Hambly, Edward C., Englewood Harris, William J., Louisville Hayner, William F., Jr., Dacono Haynes, Maurice, Clifton Hyatt, Wesley, Castlegate, Utah Jackson, John, Frederick Johns, Thomas B., Frederick Kerr, David W., Louisville Kissell, Clarence, Cameo Kissell, Chester, Routt Knez, Joe L., Craig Krizmanich, Tony, Crested Butte Lakovich, Joe, Jr., Louisville Largo, Tony, Louisville Mahaffey, Mitchell, Mt. Harris McCallum, C. N., Erie McCurdy, W. B., Oak Creek McDowell, James, Palisade Miller, Thelbert W., Erie Monks, John Thomas, Lafayette Oberto, Tony, Canon City Odendahl, Walter B., Oak Creek Orr, John L., Crested Butte Otava, Earl G., Longmont Parry, William R., Mt. Harris Pierce, Calvin L., Durango Pinkney, Harry D., Crested Butte Rolka, Stanley, Oak Creek Romero, Carmen, Louisville Rooney, Morris, Arvada Rotar, John, Louisville Sabatino, Frank, Canon City Somerville, William R., Palisade Stiers, Charlie J., Palisade Tate, Nick, Canon City Vancil, Martin, Longmont Varley, Frank, Louisville Walker, Leroy W., Florence Williams, William, Lafayette Wilson, Andrew, Frederick Wilson, David K., Haybro Young, Adam, Florence Zavilla, Mike, Rockvale Zemlock, Andy, Glenwood Springs

### ASSISTANT MINE FOREMAN

Beer, Lloyd, Florence
Bujaci, John, Florence
Carlson, Gunnar S., Routt
Gillespie, Charles R., Tioga
Harris, Sam, Brodhead
Jermance, Raymond B., Canon City
Kerr, John W., Superior
Krist, Joe F., Walsenburg
Mudra, Joe, Oak Creek
Pasterski, John M., Louisville
Williams, John M., Delagua
Strainer, A., Jr., Canon City
Swallow, George W., Erie

### FIREBOSS

Allen, Clarence, Louisville Bald, James D., Florence Berardi, Charles, Florence Berardi, Frank A., Louisville Berta, Joe J., Canon City Berta, Tony L., Canon City Bodo, Louis, Durango Bodycomb, Thomas, Walsenburg Brennan, Charles H., Erie Brown, James M., Walsenburg Bruno, Michael, Superior Caddell, William, Walsenburg Calerich, John M., Frederick Caranta, Barney, Jr., Durango Cartwright, John L., Lafayette Cary, Harlan J., Mt. Harris Ciochetti, Nello E., Firestone Coleman, Charles, Palisade Conway, John W., Louisville Cordray, Ira, Florence DeCino, Tom, Frederick Delauro, James, Florence DeNovellis, Tony, Lafayette DiFrancia, Daniel, Superior DiFrancia, Nick, Superior Dinisi, Charles G., Walsenburg Early, A. (Bud), Greeley Egnatoff, Costa, Baldwin Elliott, Archie, Colorado Springs Elliott, Thomas, Colorado Springs Evezich, Paul, Frederick Faycosh, Ernest, Frederick Ferderber, Mike, Walsenburg Ferina, Martin, Arvada Ferkovich, Phillip, Walsenburg Fultz, Benjamin F., Louisville Furlong, Edward F., Walsenburg Gatti, Joe, Coal Creek Gilmore, Robert Lee, Palisade Giordano, Michael A., Walsenburg Giordano, Michele, Walsenburg Gomez, Manuel, Haybro Gonzales, Hilario, Colorado Springs Graham, Thomas W., Louisville

### SUCCESSFUL CANDIDATES IN THE EXAMINATION FOR COAL MINE OFFICIALS—1938—Continued

FIREBOSS-Continued

Green, John Robert, Lafayette Gregory, James F., La Veta Guadagnoli, Emilio, Colo. Springs Guerrierri, Gene, Crested Butte Gutfelder, Louis F., Jr., Louisville Hall, James H., Denver Hallo, Joe, Florence Hamilton, Colin, Walsenburg Hamilton, Colin, Florence Hawks, Homer, Colorado Springs Hicks, Dale, Palisade Hicks, John, Louisville Hindman, Charles, Louisville Hocheder, Frank J., Louisville Hutchin, Everrett C., Durango Hyden, W. W., Boulder Irons, Sam, Haybro Johnson, Lawrence A., Longmont Kasper, Eugene, Oak Creek Kattnig, Martin, Rockvale Kissell, Harold James, Cameo Komaroski, Louis, Walsenburg Korfanta, Henry, Oak Creek Kosarek, Ernest, Pryor Kostenbader, William, Erie Krizmanich, George, Crested Butte Lamberson, Earl, Florence Landis, Emmet, Erie Laub, Roy, Walden Lewis, David, Canon City Lewis, John, Coal Creek Linn, Thomas B., Oak Creek Littrell, O. H., Canon City Littrell, Robert F., Canon City Lonsdale, W. H., McGregor Lyons, Joseph M., Louisville Machin, Walter E., Superior Marinelli, Mike, Fruita Martella, Toney, Louisville Martinelli, Jack, Walsenburg Mascitelli, Ben, Florence Mathews, George, Jr., Greeley McFerguson, Sam, McGregor McHugh, Henry L., Louisville McLeod, W. S., Pikeview Mellen, Guy W., Crested Butte Metz, William C., Broomfield Miklaucie, Joe, Ravenwood Millar, Dave, Walsenburg Miller, Ralph, Oak Creek Miller, William, Walsenburg Milosevich, Dan, Oak Creek Naranjo, John, Tioga O'Holleran, Pearl, Palisade Oldham, Melvyn W., Oak Creek

FIREBOSS—Continued

O'Neil, John, Farr Orecchio, Joe, Tioga Page, John W., Arvada Palumbo, Pasqual, Brookside Paterson, William, Haybro Paulovich, Marion, Oak Creek Petrick, Joseph S., Leyden Phillip, Steve, Jr., Walsenburg Pickens, George T., Fruita Porta, Charles, Lafayette Powers, John, Delcarbon Puckett, Cecil D., Oak Creek Rice, Harbert V., Longmont Ritz, George, Walsenburg Rivera, John B., Lafayette Roark, William, Walsenburg Roberts, Joe, Durango Rossi, John, Canon City Rotar, Thomas E., Louisville Savada, Paul, Pinnacle Schmelzer, Edward, Jr., Louisville Scholes, Edward W., Tioga Scholes, Roy, Tioga Schuster, John, Mt. Harris Sheader, Charles F., Denver Sheader, Joseph H., Lafayette Simeone, Louis, Rockvale Simpson, Fred E., Longmont Simvoulos, George, McGregor Smith, H. G., Colorado Springs Sneddon, Walter, Chandler Snyder, Edward M., Tioga Spock, Joseph, Walsenburg Sterk, Paul J., Tioga Styduhar, Rudolph, Walsenburg Styduhar, Tony, Walsenburg Tafoya, Victor, Lafayette Tate, Nick, Canon City Templeton, Oswald, Walsenburg Tomsic, Frank, Walsenburg Tosetto, Carl, Canon City Valko, John, Walsenburg Walsh, Edward H., Frederick Watson, James T., Louisville Watson, Thomas, Louisville Westley, A. E., New Castle Wilkinson, Joseph, Louisville Williams, Stanley, Oak Creek Wist, Emil, Somerset Wist, Eugene, Paonia Zink, Albert, Walsenburg Zinko, Otto, Walsenburg Zulian, Victor, Mt. Harris Zuniga, Joseph D., Haybro



