

MAP SERIES 15

# DIRECTORY OF PERMITTED COLORADO COAL MINES, 1981

by

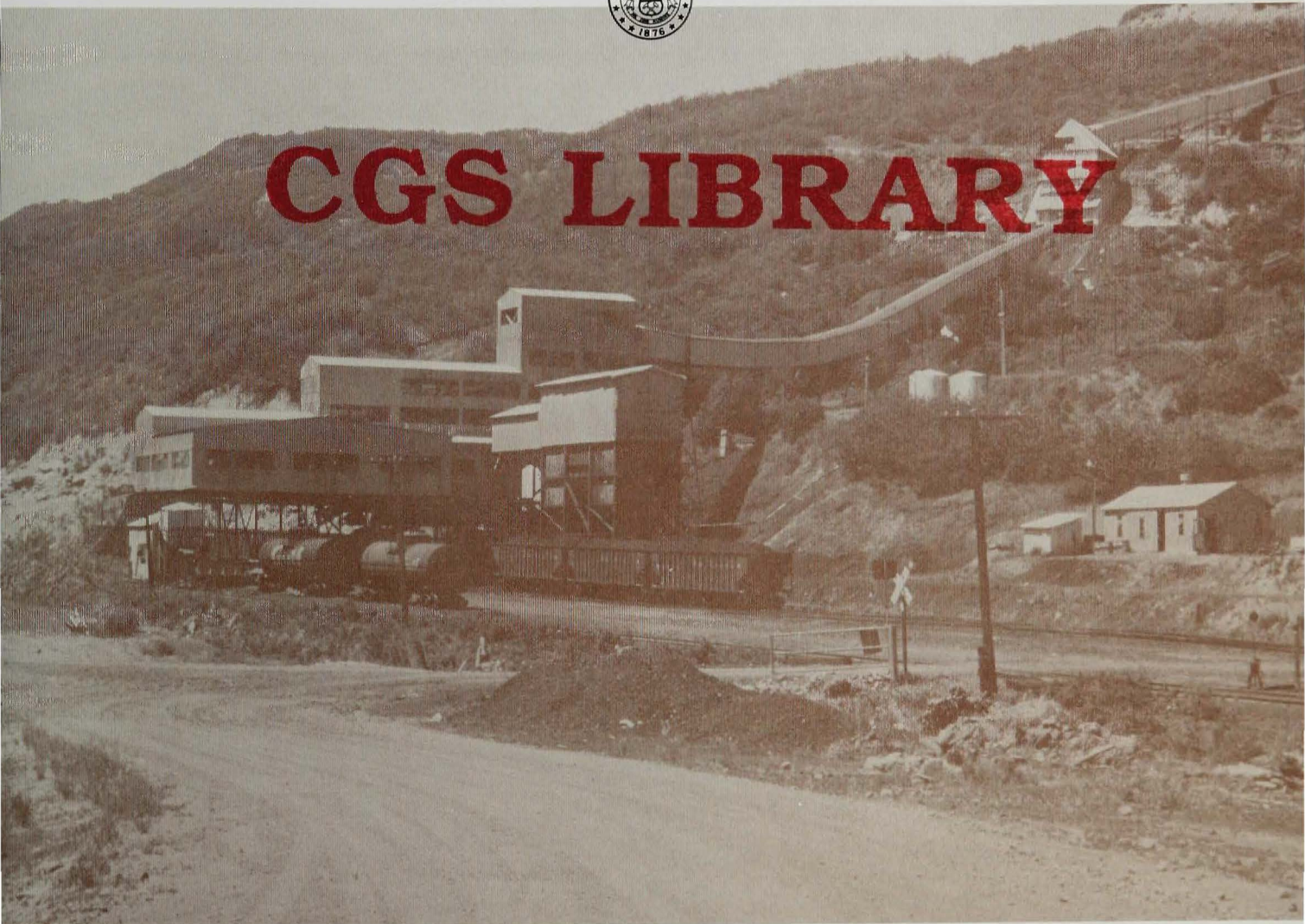
Bruce S. Kelso, L.R. Ladwig, and Linda Sitowitz

Colorado Geological Survey  
Department of Natural Resources  
Denver, Colorado

1981



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COVER PHOTO: EDNA MINE TIPPLE, ROUTT COUNTY, COLORADO

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Bruce S. Kelso, L. R. Ladwig, and Linda Sitowitz



Colorado Geological Survey  
Department of Natural Resources  
Denver, Colorado 80203

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The information and data for Map Series 15, compiled by the authors, was obtained from the following public sources: State of Colorado, Department of Natural Resources; Mined Land Reclamation Division and the Division of Mines. Additional information was also obtained by contacting individual mine personnel.

Neither the Colorado Geological Survey nor the authors of this report assume responsibility for the accuracy, completeness, or usefulness of the information herein.

## Table of Contents

<u>Map Number</u>	<u>Mine Name</u>	<u>Page</u>
1	Chimney Rock Coal Strip	1
2	Blue Ribbon	3
3	Orchard Valley	5
4	Red Canyon Mine #1	7
5	Red Canyon Mine #2	9
6	Tomahawk Strip	11
7	Bacon Mine	13
8	Dorchester #1	15
9	GEC Strip	17
10	Newlin Creek	19
11	McClane Canyon	21
12	Munger Canyon	23
13	Sunlight Mine	25
14	Bear Mine	27
15	Hawks Nest East	29
16	Hawks Nest West	31
17	Mt. Gunnison No. 1	33
18	Ohio Creek Coal Mine #2	35
19	Somerset	37
20	Colorado Coal Mine No. 1	39
21	Viking Strip (Pryor Strip)	41
22	Bourg	43
23	Canadian Strip	45
24	Marr Strip	47
25	Coal Gulch	49
26	National King Mine	51
27	Peacock Coal Mine	53
28	Shalako Mine	55
29	Allen Mine	57
30	Hellen Mine	59
31	Maxwell	61
32	Trinidad Basin	63
33	Cameo #1	65
34	Fruita Mine No. 1	67
35	Fruita Mine No. 2	69
36	Roadside Mine	71
37	Colowyo Coal Mine	73
38	Eagle No. 5	75
39	Eagle No. 9	77
40	Trapper Mine	79
41	Nucla Strip	81
42	Bear Creek	83
43	Coal Basin	85
44	Dutch Creek #1	87
45	Dutch Creek #2	89
46	L.S. Wood	91
47	North Thompson Creek No. 1	93
48	North Thompson Creek No.3	95
49	Deserado Mine	97
50	Northern No. 1	99
51	Northern No. 2	101

Contents (Cont.)

<u>Map Number</u>	<u>Mine Name</u>	<u>Page</u>
52	Northern No. 3	103
53	Rienau No. 2	105
54	Sulphur Creek	107
55	Apex No. 2	109
56	Edna Strip	111
57	Energy No. 1 and Eckman Park	113
58	Energy No. 2	115
59	Energy No. 3	117
60	Grassy Creek Coal Mine No. 1	119
61	Hayden Gulch	121
62	Meadows No. 1	123
63	Seneca II	125
64	Trout Creek No. 2	127
65	Coors Keensburg	129

Mine Name Chimney Rock Coal Strip  
M.L.R.B. Permit No. C-023-81  
Map No. 1

Location Information

County Archuleta  
Location (Sec., T., R.) portions of sec. 29 & 30, T33 1/2N, R4W,

Coal Region San Juan River Field Pagosa Springs  
Topographic Quadrangle (7 1/2') Chimney Rock

Company Information

Mine Operator Chimney Rock Coal  
Address P.O. Box 52A, Star Route, Pagosa Springs, CO 81147  
Contacts Rade Orell Telephone 883-2293  
Parent Company Perma Resources Corp.  
Address 105 East Kiowa Suite 200 Colorado Springs, CO 80903  
Contacts Dave Smaldone Telephone 475-7005

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date Nov. 1976  
No. of Employees 135 at full production  
No. of Acres in Permit 100 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Fruitland Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) A, B, & C

Coal Thickness(es) A: 4-5' B: 11' C: 9'

Dip of Bedding 12°NE Strike of Bedding N50°W  
Overburden Thickness(es) over A: 74' others range 32.5'-130'

Interburden Thickness(es) ranges: 6.7'-11.7'

<u>Coal Quality</u>	<u>Sample 1</u>	<u>Sample 2</u>	<u>Sample 3</u>	<u>Sample 4</u>
Bed or Seam	B	B	C	
Heat value (BTU/lb)	13244	13230	11668	
Sulfur(%)	.48	.85	.44	
Moisture(%)	1.48	4.38	5.93	
Ash(%)	10.90	10.63	18.00	
F.S.I.	-	6	5	
H.G.I.	-	-	-	
Rank of Coal	HvA bit.	HvA bit.	-	
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 87,897 tons

1980 Annual Production 8,424 tons

1985 Projected Production 600,000 tons

Cumulative Production Thru 6/81 250,928 tons

Reserves/Est. Life 1,472,000 tons in place, 1,251,000 recoverable

Sales: Out of State(%) 100%

Where 60% - Arizona, 40% elsewhere

To Whom \_\_\_\_\_

In State(%) \_\_\_\_\_

Where \_\_\_\_\_

To Whom \_\_\_\_\_

Transportation Type trucks

Coal Available for Domestic Use yes

Additional Information and Comments

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Mine Name Blue Ribbon  
M.L.R.B. Permit No. C-047-81  
Map No. 2

Location Information

County Delta  
Location (Sec., T., R.) sec. 2, T13S, R91W

Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Bowie

Company Information

Mine Operator Blue Ribbon Coal Company  
Address P.O. Box 58, Delta, CO 81416  
Contacts Bruce Collins Telephone 929-5911  
Parent Company Western Associated Coal Corp.  
Address 410 17th St., Denver, CO  
Contacts W. S. Tate Telephone 825-1966

General Information

Mine Type underground Mining Method room & pillar  
Mine Status producing Start-up Date 1952  
No. of Employees 36  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Upper Mbr. Mesaverde Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) E

Coal Thickness(es) Average - 6'

Dip of Bedding 3°-5°NE Strike of Bedding N77°W  
Overburden Thickness(es) 0-1500'

Interburden Thickness(es) \_\_\_\_\_



Mine Name Orchard Valley  
M.L.R.B. Permit No. C-038-81  
Map No. 3

Location Information

County Delta  
Location (Sec., T., R.) portions of sec. 7, 12, 13, 18, 19, 24, 25, 29, 30, 31, 32, T13S, R92W  
Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Gray Reservoir

Company Information

Mine Operator Colorado Westmoreland Inc.  
Address P.O. Box E Paonia, CO 81428  
Contacts Ronald Stucki Telephone 527-4135  
Parent Company Westmoreland Coal Co.  
Address 9034 E. Easter Place Englewood, CO 80112  
Contacts Daniel J. Snyder III or Christopher K. Seglem Telephone 779-0902

General Information

Mine Type underground Mining Method continuous room & pillar  
Mine Status producing Start-up Date 1976  
No. of Employees 234  
No. of Acres in Permit 1185.8 acres  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Mesaverde Group Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) D  
Coal Thickness(es) 4-27'  
Dip of Bedding 2°-5° NNE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 450-1800'  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Red Canyon Mine #1  
M.L.R.B. Permit No. C-034-81  
Map No. 4

Location Information

County Delta  
Location (Sec., T., R.) portions of sec. 2, 11, & 12; T13S, R95W  
Coal Region Uinta Field Grand Mesa  
Topographic Quadrangle (7 1/2') Cedaredge

Company Information

Mine Operator Grand Mesa Coal Co.  
Address P.O. Box 226, 1st & Columbia, Delta, CO 81416  
Contacts Larry Reschke Telephone 856-6402/874-7561  
Parent Company Tremont Coal Corp. /Eagle Mining Inc.  
Address 410 17th S. #2300 Denver 80202/P.O. Box 83 Naperville, IL 60540  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status producing Start-up Date 1916  
No. of Employees 33  
No. of Acres in Permit 450+ acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) E  
Coal Thickness(es) E:4.9-7.5'  
Dip of Bedding about 5 1/2% Strike of Bedding S 85 E  
Overburden Thickness(es) up to 700'  
Interburden Thickness(es) 130' above D seam



Mine Name Red Canyon #2  
M.L.R.B. Permit No. C-034-81  
Map No. 5

Location Information

County Delta  
Location (Sec., T., R.) portions of sec. 2, 11 & 12, T13S, R95W,  
Coal Region Uinta Field Grand Mesa  
Topographic Quadrangle (7 1/2') Cedaredge

Company Information

Mine Operator Grand Mesa Coal Co.  
Address P.O. Box 226, 1st & Columbia, Delta, CO 81416  
Contacts Larry Reschke Telephone 856-6402/874-7561  
Parent Company Tremont Coal Corp. /Eagle Mining, Inc.  
Address 410 17th St. #2300 Denver, CO 80202/P.O. Box 83 Naperville IL 60540  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status proposed Start-up Date fall 1981  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 450+  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) D bed  
Coal Thickness(es) D : 8-11  
Dip of Bedding about 5 1/2% Strike of Bedding S 85 E  
Overburden Thickness(es) up to 830'  
Interburden Thickness(es) 130' below E seam





Mine Name Tomahawk Strip  
M.L.R.B. Permit No. C-009-81  
Map No. 6

Location Information

County Delta  
Location (Sec., T., R.) portions of: sec. 10, 15 & 16 T13S R95W  
Coal Region Uinta Field Grand Mesa  
Topographic Quadrangle (7 1/2') Hell's Kitchen

Company Information

Mine Operator Quinn Coal Co.  
Address P.O. Box 265 Eckert, CO 81418  
Contacts June Crawford Telephone 856-3400  
Parent Company Texasgulf, Inc.  
Address High Ridge Park Stamford, CT 06904  
Contacts \_\_\_\_\_ Telephone (203) 358-5000

General Information

Mine Type surface Mining Method haulback  
Mine Status producing Start-up Date 1947  
No. of Employees 33  
No. of Acres in Permit 316 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Mesaverde Group Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) A, C, D, E, F  
Coal Thickness(es) A:2.5', B:4.9', C:8.7', D:7.6', E:7.2', F:13.4'  
Dip of Bedding 2.5°-4°NNE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 60'  
Interburden Thickness(es) 4-30' (A-F)

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	C-F Composite			
Heat value (BTU/lb)	10,500			
Sulfur(%)	.60			
Moisture(%)	13.12-14.79			
Ash(%)	.82			
F.S.I.				
H.G.I.				
Rank of Coal	Sub-Bit. C.			
Use of Coal				
Methane Emissions				

### Coal Production

1981 Production Thru 6/81	41,002 tons
1980 Annual Production	24,076 tons
1985 Projected Production	.25 m tons
Cumulative Production Thru 6/81	319,377 tons
Reserves/Est. Life	3 m tons
Sales: Out of State(%)	99% overseas
Where	Japan
To Whom	
In State(%)	
Where	
To Whom	

Transportation Type rail to coast - then boat  
 Coal Available for Domestic Use lump coal - locally in winter

### Additional Information and Comments

seams C-F being mined now
A mined a little
B not at all

Mine Name Bacon Mine  
M.L.R.B. Permit No. C-030-81  
Map No. 7

Location Information

County El Paso  
Location (Sec., T., R.) portions of sec. 29 & 30, T14S, R64W  
Coal Region Denver Field Colorado Springs  
Topographic Quadrangle (7 1/2') Corral Bluffs

Company Information

Mine Operator Nurseries Inc. of Wyoming  
Address 1790 Old Franceville Coal Mine Road, Colorado Springs, CO 80909  
Contacts \_\_\_\_\_ Telephone 683-2588  
Parent Company Captisan Mining Co. Inc.  
Address 1536 Cole Blvd., Suite 180, Golden, CO 80401  
Contacts Rick Chilton Telephone 233-5284

General Information

Mine Type surface Mining Method strip  
Mine Status idle Proposed Start-up Date possibly Fall 1981  
No. of Employees 11  
No. of Acres in Permit 460 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Laramie Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) A & B  
Coal Thickness(es) A : 9'-10' B : 1'-2'  
Dip of Bedding 3°-5°NE Strike of Bedding N40°W  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Composite	Composite		
Heat value (BTU/lb)	as rec'd	Dry		
Sulfur(%)	8,815	11,155		
Moisture(%)	0.38	0.48		
Ash(%)	21.0	-		
F.S.I.	10.0	12.7		
H.G.I.				
Rank of Coal	Sub-bit. C			
Use of Coal	boiler fuel			
Methane Emissions				

Coal Production

1981 Production Thru 6/81 3,579 tons  
1980 Annual Production 38,778 tons  
1985 Projected Production 480,000 tons per year  
Cumulative Production Thru 6/81 42,357  
Reserves/Est. Life Mid 1986 - Nos. confidential  
Sales: Out of State(%)  
Where  
To Whom  
In State(%) 100  
Where  
To Whom  
Transportation Type  
Coal Available for Domestic Use no

Additional Information and Comments

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Mine Name Dorchester No. 1  
M.L.R.B. Permit No. C-014-81  
Map No. 8

Location Information

County Fremont  
Location (Sec., T., R.) ~~XXXXXX~~ portions of Sec. 19, 30, T20S, R69W, and Sec. 25, 26, T20S, R70W  
Coal Region Canon City Field Canon City  
Topographic Quadrangle (7 1/2') Rockvale

Company Information

Mine Operator Dorchester Coal Co.  
Address 2795 Skyline Court, Grand Junction, CO 81501  
Contacts Leland Acre, Mgr. Telephone 245-6370  
Parent Company Dorchester Coal Co.  
Address 5735 Pineland Dr., P.O. Box 31049, Dallas, TX 75231  
Contacts \_\_\_\_\_ Telephone (214) 750-3667

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date 1979  
No. of Employees 140 by 11/81  
No. of Acres in Permit 979 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Manley, Vento, Pine Gulch, Dirty Jack O'Lantern, Red Arrow  
Coal Thickness(es) Manley: 3-5', Vento: 1-5', Pine Gulch: 3-11', Dirty Jack O'Lantern: 1-6', Red Arrow: 3-7'  
Dip of Bedding 6°W Strike of Bedding N to N25E  
Overburden Thickness(es) 0-1300'  
Interburden Thickness(es) Manly-Vento: 104', Vento-Pine Gulch: 110', Pine Gulch-Dirty Jack O'Lantern: 27', Dirty Jack O'Lantern-Red Arrow: 29'

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Manley	Vento	Pine Gulch	Dirty Jack O'Lantern
Heat value (BTU/lb)				
Sulfur(%)	.7	.4	.5	.6
Moisture(%)				
Ash(%)				
F.S.I.				
H.G.I.				
Rank of Coal	Bit	Bit	Bit	Bit
Use of Coal	Steam	Steam	Steam	Steam
Methane Emissions	---	---	---	---

### Coal Production

1981 Production Thru 6/81 79,364 tons  
 1980 Annual Production 76,574 tons\*  
 1985 Projected Production 500,000 tons (1982 Projection)  
 Cumulative Production Thru 6/81 178,847 tons\*  
 Reserves/Est. Life 8,016,517 recoverable  
 Sales: Out of State(%) 43  
 Where Texas  
 To Whom Lone Star Industries, Texas Industries  
 In State(%) 57  
 Where Colorado  
 To Whom Southern Colorado Power, Kaiser Cement, Martin Marietta  
Cement

Transportation Type rail loadout and truck  
 Coal Available for Domestic Use no

### Additional Information and Comments

\*Coal production reported is clean tons shipped  
 Coal Quality on As received Basis  
 Sales based on June 1981 figures  
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Mine Name GEC Strip  
M.L.R.B. Permit No. C-037-81  
Map No. 9

Location Information

County Fremont  
Location (Sec., T., R.) portions of sec. 24 & 25, T20S, R70W  
" " sec. 19 & 30, T20S, R69W  
Coal Region Canon City Field Canon City  
Topographic Quadrangle (7 1/2') Rockvale

Company Information

Mine Operator GEC Minerals, Inc.  
Address P.O. Box 225, Florence, CO 81226  
Contacts L. K. Chen Telephone 784-6891  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1977  
No. of Employees 23  
No. of Acres in Permit 720 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) D, E, G, J, K  
Coal Thickness(es) 2-4' each  
Dip of Bedding 2-5° WSW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 100'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Unknown			
Heat value (BTU/lb)	10,600			
Sulfur(%)	.4			
Moisture(%)	11			
Ash(%)	10			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	HvC bit.			
Use of Coal	--			
Methane Emissions	--			

<u>Coal Production</u>				
1981 Production Thru 6/81	26,655 tons (5/31/81, No report for June)			
1980 Annual Production	60,994 tons			
1985 Projected Production				
Cumulative Production Thru 6/81	272,773 (Thru 5/31/81)			
Reserves/Est. Life	20 m ton in place/10 m recoverable			
Sales: Out of State(%)	30%			
Where	New Mexico			
To Whom				
In State(%)	70%			
Where				
To Whom				
Transportation Type	Truck			
Coal Available for Domestic Use	yes			

Additional Information and Comments

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Mine Name Newlin Creek  
M.L.R.B. Permit No. C-045-81  
Map No. 10

Location Information

County Fremont  
Location (Sec., T., R.) portions of sec. 30 & 31, T20S, R69W

Coal Region Canon City Field Canon City  
Topographic Quadrangle (7 1/2') Rockvale

Company Information

Mine Operator Harrison Peltron  
Address P.O. Box 48 Florence, CO 81226  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Harrison Peltron  
Address 1208 Quail St., Denver, CO 80215  
Contacts Jim Irwin/Mike Bertoldi Telephone 234-0273

General Information

Mine Type underground Mining Method continuous/room & pillar  
Mine Status producing Start-up Date 1977  
No. of Employees 29  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Shamrock

Coal Thickness(es) 3-7'

Dip of Bedding 4°E Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 145'

Interburden Thickness(es) \_\_\_\_\_



Mine Name McClane Canyon Exploration Site  
M.L.R.B. Permit No. C-004-80  
Map No. 11

Location Information

County Garfield  
Location (Sec., T., R.) portions of sec. 15, 16, 21 & 22, T7S, R102W  
Coal Region Uinta Field Book Cliffs  
Topographic Quadrangle (7 1/2') Howard Canyon

Company Information

Mine Operator Sheridan Enterprises, Inc.  
Address P.O. Box 1555 Grand Junction, CO 81501  
Contacts \_\_\_\_\_ Telephone 245-7931  
Parent Company Sheridan Enterprises  
Address 9745 E. Hampden Ave., Suite 350 Denver, CO 80231  
Contacts Wm. Bosworth Telephone 751-0093

General Information

Mine Type underground Mining Method room & pillar  
Mine Status producing Start-up Date 1977  
No. of Employees 13  
No. of Acres in Permit 248 acres  
Surface: Federal  Private \_\_\_\_\_  
Mineral: Federal  Private \_\_\_\_\_

Geologic Information

Geologic Unit Mt. Garfield Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Cameo  
Coal Thickness(es) 17-22'  
Dip of Bedding 3% NE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-1000'  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Munger Canyon  
M.L.R.B. Permit No. C-020-81  
Map No. 12

Location Information

County Garfield  
Location (Sec., T., R.) portions of sec. 15, 16, 21, 22, T7S, R102W  
Coal Region Uinta Field Book Cliffs  
Topographic Quadrangle (7 1/2') Howard Canyon

Company Information

Mine Operator Sheridan Enterprises, Inc.  
Address P.O. Box 1555 Grand Junction, CO 81501  
Contacts \_\_\_\_\_ Telephone 245-7931  
Parent Company Sheridan Enterprises, Inc.  
Address 9745 E. Hampden Suite 350, Denver, CO 80231  
Contacts Wm. Bosworth Telephone 751-0093

General Information

Mine Type underground Mining Method room & pillar  
Mine Status idle Start-up Date 1977  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 775 acres  
Surface: Federal X Private X  
Mineral: Federal X Private \_\_\_\_\_

Geologic Information

Geologic Unit Mt. Garfield Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Cameo and Upper Carbonera  
Coal Thickness(es) Cameo: 5-26'; Carbonera: 4-7'  
Dip of Bedding 2°NE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-1500'  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Sunlight Mine  
M.L.R.B. Permit No. C-046-81  
Map No. 13

Location Information

County Garfield  
Location (Sec., T., R.) portions of: sec. 33 & 34; T7S, R89W

Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Cattle Creek

Company Information

Mine Operator Black Rock Mining Co.  
Address 1670 Broadway, Suite 3350, Denver, CO 80202  
Contacts Pres. Ray Short Telephone 832-8115  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar  
Mine Status developing Start-up Date 1901  
No. of Employees 4  
No. of Acres in Permit 3  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Lower Mesaverde Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) A, B, C, & D

Coal Thickness(es) A : 10', B : 3', C : 4', D : 8'

Dip of Bedding 42-44°W Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 370-1500'

Interburden Thickness(es) \_\_\_\_\_





Mine Name Bear Mine  
M.L.R.B. Permit No. C-033-81  
Map No. 14

Location Information

County Gunnison  
Location (Sec., T., R.) portions of: sec. 9, 16, 17, 20, 21; T13S, R90W

Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Somerset

Company Information

Mine Operator Bear Coal Co., Inc.  
Address Somerset, CO 81434  
Contacts William A. Bear Telephone 929-5775  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status producing Start-up Date 1934  
No. of Employees 68  
No. of Acres in Permit 1360 acres  
Surface: Federal  Private \_\_\_\_\_  
Mineral: Federal  Private \_\_\_\_\_

Geologic Information

Geologic Unit Mesaverde Group Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) C,D,E,F

Coal Thickness(es) C:1-8', D:0-7', E:10-20', F:2-10'

Dip of Bedding 3.5-6.25°NE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) few hundred to 1400 ft

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	C			
Heat value (BTU/lb)	12639			
Sulfur(%)	0.57			
Moisture(%)	6.12			
Ash(%)	6.55			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	bit.			
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	159,217 tons
1980 Annual Production	239,217 tons
1985 Projected Production	
Cumulative Production Thru 6/81	3,973,881
Reserves/Est. Life	49 years
Sales: Out of State(%)	bulk
Where	spot markets
To Whom	back east
In State(%)	
Where	
To Whom	
Transportation Type	truck to rail
Coal Available for Domestic Use	yes

Additional Information and Comments

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Mine Name Hawk's Nest East  
M.L.R.B. Permit No. C-016-81  
Map No. 15

Location Information

County Gunnison  
Location (Sec., T., R.) portions of sec. 1, 2, 3, 10, 11, 12, T13S R90W  
Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Somerset

Company Information

Mine Operator Hawk's Nest Mine  
Address Somerset, CO 81434  
Contacts Tom Muncy/Tony Durando Telephone 929-5815  
Parent Company Western Slope Carbon, Inc. (Northwest Coal Corp.)  
Address 315 E. 200 South P.O. Box 1526 Salt Lake City, UT 84110  
Contacts John Mason Telephone (801)534-3695

General Information

Mine Type underground Mining Method continuous & longwall  
Mine Status producing Start-up Date 1976  
No. of Employees 200  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Bowie & Paonia Mbr, Mesaverde Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) A, Lower B, Upper B, C, D, Wild Seam, E  
Coal Thickness(es) A: 3" to several feet, lower B: 6-7', Upper B: 13-14',  
C: 6-7', D: 6-14', Wild Seam: 5.5-10', E: 4'-12+'  
Dip of Bedding 3.5° Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) to 2200'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	E (raw)			
Heat value (BTU/lb)	12,400 (MAF: 14,500)			
Sulfur(%)	0.63			
Moisture(%)	6-7%			
Ash(%)	8-12%			
F.S.I.	2.5			
H.G.I.	50			
Rank of Coal	HvB bit.			
Use of Coal	steam			
Methane Emissions				

### Coal Production

1981 Production Thru 6/81	315,685 tons	(5/31/81 - no June report)
1980 Annual Production	336,141 tons	
1985 Projected Production	1-1.5 mt	
Cumulative Production Thru 6/81	1,636,702 mt	
Reserves/Est. Life	(E: 9 MT, Wild Seam: 10.3 MT, D: 11.1 MT)	
Sales: Out of State(%)	100%	
Where	Illinois & Japan	
To Whom	CILCO and spot sales	
In State(%)	0%	
Where		
To Whom		
Transportation Type	train loadout	
Coal Available for Domestic Use	yes - not at mine	

### Additional Information and Comments

Will mine only E now - later will bore through to B & C  
(Starting in 1981)

Mine Name Hawks Nest West  
M.L.R.B. Permit No. C-016-81  
Map No. 16

Location Information

County Gunnison  
Location (Sec., T., R.) portions of Sec. 1, 2, 3, 10, 11, 12, T13S, R90W  
Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Somerset

Company Information

Mine Operator Hawk's Nest Mine  
Address Somerset, CO 81434  
Contacts Tom Muncy / Tony Durando Telephone 929-5815  
Parent Company Western Slope Carbon, Inc. (Northwest Coal Co.)  
Address 315 E. 200 South / P.O. Box 1526, Salt Lake City, UT 84110  
Contacts John Mason Telephone (801) 534-3695

General Information

Mine Type underground Mining Method continuous & longwall  
Mine Status producing Start-up Date 1970  
No. of Employees 60  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Bowie & Paonia Mbr. - Mesaverde Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) A, Lower B, Upper B, C, D, Wild Seam, E  
Coal Thickness(es) A : 3" - several feet, Lower B : 6-7', Upper B : 13-14',  
C : 6-7', D : 6-14', Wild Seam : 5.5-10', E : 4'7"-12+  
Dip of Bedding 3.5° Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) to 2200'  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Mt. Gunnison No. 1  
M.L.R.B. Permit No. C-007-80  
Map No. 17

Location Information

County Gunnison  
Location (Sec., T., R.) portions of sec. 8, 9, 15, 16, 17, 18, 19, 20, 21, 27, 28, 29, 30, 31, 32, 33, T13S, R90W; and portions of sec. 3, 4, 5, 8, 9, 10, 15, 16, 21, 22, T14S, R90W  
Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Somerset and Minnesota Pass

Company Information

Mine Operator Arco Coal Company  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company ARCO Coal Co.  
Address 555 17th St. P.O. Box 5300, Denver, CO 80217  
Contacts Mr. Kuchta Telephone 575-7500

General Information

Mine Type underground Mining Method \_\_\_\_\_  
Mine Status in preparation Start-up Date 1982 - Spring  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 237 acres  
Surface: Federal  Private   
Mineral: Federal  Private

Geologic Information

Geologic Unit Mesaverde Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) F  
Coal Thickness(es) 7'  
Dip of Bedding 3-5° SW - NE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 300-1200'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam                      F  
Heat value (BTU/lb)              11,600  
Sulfur(%)                      <.5  
Moisture(%)                      --  
Ash(%)                      Low  
F.S.I.                      \_\_\_\_\_  
H.G.I.                      \_\_\_\_\_  
Rank of Coal                      bit.  
Use of Coal                      \_\_\_\_\_  
Methane Emissions                \_\_\_\_\_

Coal Production  
1981 Production Thru 6/81        none  
1980 Annual Production        none  
1985 Projected Production        1.3 m tons  
Cumulative Production Thru 6/81    none  
Reserves F seam - 26 years - 77 million tons  
Sales: Out of State(%)        \_\_\_\_\_  
      Where                      \_\_\_\_\_  
      To Whom                      \_\_\_\_\_  
      In State(%)                \_\_\_\_\_  
      Where                      \_\_\_\_\_  
      To Whom                      \_\_\_\_\_  
Transportation Type        rail  
Coal Available for Domestic Use    no

Additional Information and Comments  
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Mine Name Ohio Creek Coal Mine No. 2  
M.L.R.B. Permit No. C-002-80  
Map No. 18

Location Information

County Gunnison  
Location (Sec., T., R.) NE Sec. 16 & NW Sec. 15, T15S, R86W  
Coal Region Uinta Field Crested Butte  
Topographic Quadrangle (7 1/2') Squirrel Creek

Company Information

Mine Operator Henry L. and Opal Weaver  
Address 117 S. 8th St., Gunnison, CO 81230  
Contacts Bob Weaver Telephone 641-1560/641-0076  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar  
Mine Status producing Start-up Date 1952  
No. of Employees 15  
No. of Acres in Permit 200 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private \_\_\_\_\_

Geologic Information

Geologic Unit Mesaverde Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) C or No. 2, (Nos. 1 & 3 not mineable)  
Coal Thickness(es) 4-7'  
Dip of Bedding 3° NW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-200'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	not indicated	No. 2		
Heat value (BTU/lb)	11840	11580		
Sulfur(%)	0.6	.54		
Moisture(%)	9.7	10.5		
Ash(%)	5.4	5.6		
F.S.I.	0			
H.G.I.	--			
Rank of Coal	HvC bit.			
Use of Coal	domestic			
Methane Emissions	--			

Coal Production

1981 Production Thru 6/81 583 tons  
1980 Annual Production 1,448 tons  
1985 Projected Production about 4,000 tons  
Cumulative Production Thru 6/81 68,069 tons  
Reserves/Est. Life 45 years  
Sales: Out of State(%) \_\_\_\_\_  
Where \_\_\_\_\_  
To Whom \_\_\_\_\_  
In State(%) 100  
Where So. central Colo., Gunnison - Crested Butte area  
To Whom domestic market  
Transportation Type \_\_\_\_\_  
Coal Available for Domestic Use yes

Additional Information and Comments

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Mine Name Somerset  
M.L.R.B. Permit No. C-022-81  
Map No. 19

Location Information

County Delta and Gunnison  
Location (Sec., T., R.) portions of Sec. 34, 35, 36, T12S, R91W;  
portions of Sec. 1, 2, 3, 12, T13S, R91W; portions of Sec. 6, 7, 8,  
T13S, R90W  
Coal Region Uinta Field Somerset  
Topographic Quadrangle (7 1/2') Bowie & Somerset

Company Information

Mine Operator U.S. Steel  
Address P.O. Box 1, Somerset, CO 81434  
Contacts Lloyd Miller Telephone 929-5115  
Parent Company U.S. Steel Mining Company, Inc. Western District  
Address P.O. Box 807, East Carbon, UT 84520  
Contacts Paul Watson Telephone (801)888-4431

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date 1903  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 160 acres  
Surface: Federal  Private   
Mineral: Federal  Private

Geologic Information

Geologic Unit Bowie Member Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) B - 2  
Coal Thickness(es) 14'-21'  
Dip of Bedding 3-6°NE Strike of Bedding NW  
Overburden Thickness(es) 200-2000'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	B (range)			
Heat value (BTU/lb)	12,070-12,970			
Sulfur(%)	.53			
Moisture(%)	3.8-8.2			
Ash(%)	8.6			
F.S.I.				
H.G.I.				
Rank of Coal	HvC bit.			
Use of Coal	coke			
Methane Emissions	yes - piped out			

### Coal Production

1981 Production Thru 6/81	283,426 tons		
1980 Annual Production	854,697 tons		
1985 Projected Production			
Cumulative Production Thru 6/81	28,058,969		
Reserves/Est. Life	20 million tons		
Sales: Out of State(%)	100%		
Where	Orem, Utah		
To Whom	U.S. Steel		
In State(%)			
Where			
To Whom			
Transportation Type	train		
Coal Available for Domestic Use	no		

### Additional Information and Comments

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Mine Name Colorado Coal Mine No. 1  
M.L.R.B. Permit No. C-024-81  
Map No. 20

Location Information

County Huerfano  
Location (Sec., T., R.) Sec. 25 & 36, T27S, R67W

Coal Region Raton Field Walsenburg  
Topographic Quadrangle (7 1/2') Walsenburg North and Huerfano Butte

Company Information

Mine Operator Colorado Coal Mining Co.  
Address P.O. Box 410, Walsenburg, CO 81089  
Contacts \_\_\_\_\_ Telephone 738-1831  
Parent Company Colorado Coal Mining Co.  
Address 105 E. Kiowa, Suite 200, Colorado Springs, CO 80903  
Contacts Charles S. McNeil Telephone 475-7005

General Information

Mine Type surface Mining Method \_\_\_\_\_  
Mine Status in preparation-planning Start-up Date Fall 1981  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 951.58  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Lower Robinson, Pryor, Walsen, Lenox, Cameron

Coal Thickness(es) 1.5-4.5'

Dip of Bedding 2-5° W - SW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) max. 200 feet

Interburden Thickness(es) \_\_\_\_\_

Coal Quality

Sample 1

Sample 2

Sample 3

Sample 4

Bed or Seam

C O N F I D E N T I A L

Heat value (BTU/lb)

Sulfur(%)

Moisture(%)

Ash(%)

F.S.I.

H.G.I.

Rank of Coal

Use of Coal

Methane Emissions

Coal Production

1981 Production Thru 6/81 none

1980 Annual Production none

1985 Projected Production

Cumulative Production Thru 6/81 none

Reserves/Est. Life 32 m in place, 1.2 m recoverable

Sales: Out of State(%) 100%

Where

To Whom

In State(%)

Where

To Whom

Transportation Type rail

Coal Available for Domestic Use no

Additional Information and Comments

Mine Name Viking Strip (Pryor Strip)  
M.L.R.B. Permit No. C-031-81  
Map No. 21

Location Information

County Huerfano  
Location (Sec., T., R.) portions of Sec. 18, 19, T29S, R65W, and  
Sec. 13, 24, T29S, R66W  
Coal Region Raton Field Walsenburg  
Topographic Quadrangle (7 1/2') Pryor

Company Information

Mine Operator Viking Coal Co. (Ravenwood)  
Address 6954 Webster, Arvada, CO 80003  
Contacts Ken Churches Telephone 422-4000  
Parent Company Same  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1978  
No. of Employees 7  
No. of Acres in Permit 234 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Robinson, Walsen, Lenox, Cameron  
Coal Thickness(es) Robinson: 4-6'; Walsen: 3'; Lenox: 4-5'; Cameron: 4-5'  
Dip of Bedding 3% Strike of Bedding --  
Overburden Thickness(es) 0-50'  
Interburden Thickness(es) R-W: 60', W-L: 30', L-C: 40'

Coal Quality

	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Cameron	?	?	?
Heat value (BTU/lb)	13012	12772	12493	13226
Sulfur(%)	.89	1.01	.57	.80
Moisture(%)	3.81	3.3	4.94	3.19
Ash(%)	8.75	9.66	8.32	7.99
F.S.I.				
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 14,007 tons

1980 Annual Production 23,514

1985 Projected Production depends on market

Cumulative Production Thru 6/81 103,545

Reserves/Est. Life \_\_\_\_\_

Sales: Out of State(%) \_\_\_\_\_

Where \_\_\_\_\_

To Whom \_\_\_\_\_

In State(%) 100%

Where \_\_\_\_\_

To Whom Confidential

Transportation Type truck and rail

Coal Available for Domestic Use locally only

Additional Information and Comments

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Mine Name Bourg Mine  
M.L.R.B. Permit No. C-021-81  
Map No. 22

Location Information

County Jackson  
Location (Sec., T., R.) S 1/2, SE 1/4, Sec. 7; N 1/2, NE 1/4, Sec. 18;  
T9N, R78W  
Coal Region North Park Field North Park  
Topographic Quadrangle (7 1/2') Walden

Company Information

Mine Operator Walden Coal Co.  
Address P.O. Box 37, Walden, CO 80434  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Flatiron Companies  
Address P.O. Box 229, Boulder, CO 80302  
Contacts Scott Patten Telephone 444-2151

General Information

Mine Type surface Mining Method open pit/strip  
Mine Status producing Start-up Date 1980  
No. of Employees 7  
No. of Acres in Permit 160 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Coalmont Fm Geologic Age Paleocene  
Coal Zone(s) or Bed(s) Lower and Upper  
Coal Thickness(es) Lower: 25.5' / Upper: 16.5'  
Dip of Bedding 8°+ Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-140'  
Interburden Thickness(es) 80'

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam \_\_\_\_\_  
 Heat value (BTU/lb) \_\_\_\_\_  
 Sulfur(%) \_\_\_\_\_  
 Moisture(%) \_\_\_\_\_  
 Ash(%) \_\_\_\_\_  
 F.S.I. \_\_\_\_\_  
 H.G.I. \_\_\_\_\_  
 Rank of Coal \_\_\_\_\_  
 Use of Coal \_\_\_\_\_  
 Methane Emissions \_\_\_\_\_

Coal Production

1981 Production Thru 6/81      44,796  
 1980 Annual Production      4,000  
 1985 Projected Production      100,000 tons per year  
 Cumulative Production Thru 6/81      48,796  
 Reserves/Est. Life      Confidential  
 Sales: Out of State(%)      100%  
           Where      Laramie, WY  
           To Whom \_\_\_\_\_  
           In State(%) \_\_\_\_\_  
           Where \_\_\_\_\_  
           To Whom \_\_\_\_\_  
 Transportation Type      truck to market or rail loadout  
 Coal Available for Domestic Use      yes

Additional Information and Comments

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Mine Name Canadian Strip  
M.L.R.B. Permit No. C-026-81  
Map No. 23

Location Information

County Jackson  
Location (Sec., T., R.) portions of Sec. 2, 10, 11; T8N, R78W

Coal Region North Park Field North Park  
Topographic Quadrangle (7 1/2') Gould NW and Johnny Moore Mtn.

Company Information

Mine Operator Wyoming Fuel Company  
Address P.O. Box 782, Walden, CO 80480  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Wyoming Fuel Company  
Address 12055 W. 2nd Place, P.O. Box 15265, Lakewood, CO 80215  
Contacts Mike Kolin Telephone 989-1740

General Information

Mine Type surface Mining Method Open Pit Haulback  
Mine Status producing Start-up Date 1975  
No. of Employees 10  
No. of Acres in Permit 160 acres  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Coalmont Fm Geologic Age Paleocene  
Coal Zone(s) or Bed(s) Sudduth

Coal Thickness(es) 8-30'

Dip of Bedding 24°-35°SE to SW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-460'

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	As received composite			
Heat value (BTU/lb)	10890			
Sulfur(%)	0.24			
Moisture(%)	13.18			
Ash(%)	6.56			
F.S.I.				
H.G.I.				
Rank of Coal	sub-bit.			
Use of Coal				
Methane Emissions				

<u>Coal Production</u>	
1981 Production Thru 6/81	77,913 tons
1980 Annual Production	43,915 tons
1985 Projected Production	--
Cumulative Production Thru 6/81	600,567
Reserves/Est. Life	50,000 tons
Sales: Out of State(%)	100
Where	Midwest
To Whom	Confidential
In State(%)	
Where	
To Whom	
Transportation Type	truck & rail
Coal Available for Domestic Use	

Additional Information and Comments

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Mine Name Marr Strip  
M.L.R.B. Permit No. C-006-80  
Map No. 24

Location Information

County Jackson  
Location (Sec., T., R.) Sec. 15, 22, 23, 25, 26, 35 T9N R78W; Sec 2 T8N R78W  
Coal Region North Park Field North Park  
Topographic Quadrangle (7 1/2') Johnny Moore Mtn.

Company Information

Mine Operator Kerr Coal Co.  
Address Box 773457, Steamboat Springs, CO 80477  
Contacts David Gossett Telephone 879-7310  
Parent Company Kerr Coal Co.  
Address Suite 900 Three Park Central, 1515 Arapahoe, Denver, CO 80202  
Contacts Brad Doores Telephone 623-8317

General Information

Mine Type surface Mining Method bulldozers & scrapers  
Mine Status producing Start-up Date 1974  
No. of Employees 23  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Coalmont Fm Geologic Age Early to Mid Tertiary  
Coal Zone(s) or Bed(s) Sudduth  
Coal Thickness(es) 36-75' (Avg. 50')  
Dip of Bedding 6° Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 230'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam                      Sudduth  
Heat value (BTU/lb)                      --  
Sulfur(%)                      .3  
Moisture(%)                      11.12  
Ash(%)                      10.64  
F.S.I.                      --  
H.G.I.                      --  
Rank of Coal                      sub. bit.  
Use of Coal                      steam  
Methane Emissions                      \_\_\_\_\_

Coal Production

1981 Production Thru 6/81                      218,460 tons  
1980 Annual Production                      759,000 tons  
1985 Projected Production                      ---  
Cumulative Production Thru 6/81                      3,021,404  
Reserves/Est. Life                      confidential  
Sales: Out of State(%)                      93%  
      Where                      confidential  
      To Whom                      \_\_\_\_\_  
      In State(%)                      7%  
      Where                      confidential  
      To Whom                      \_\_\_\_\_  
Transportation Type                      rail - union pacific  
Coal Available for Domestic Use                      yes

Additional Information and Comments

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Mine Name Coal Gulch  
M.L.R.B. Permit No. C-042-81  
Map No. 25

Location Information

County La Plata  
Location (Sec., T., R.) Sec. 15, 16, 20, 22, T35N, R10W

Coal Region San Juan River Field Durango  
Topographic Quadrangle (7 1/2') Durango West

Company Information

Mine Operator Arness-McGriffin Coal Co.  
Address 1139 Main Ave., Durango, CO 81301  
Contacts Ken McGriffin, Consultant Telephone 259-1501  
Parent Company same as above  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar  
Mine Status Idle Start-up Date 1977  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 41 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Menefee Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) A-1, A-2, B-4  
Coal Thickness(es) A-1: 8', A-2: 3', B-4: 6'  
Dip of Bedding 4-5°S Strike of Bedding WSW  
Overburden Thickness(es) 200-600'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam                      A-1 and B-4  
 Heat value (BTU/lb)            13,500-14,000  
 Sulfur(%)                      0.4-0.8  
 Moisture(%)                    3-8  
 Ash(%)                         4-9  
 F.S.I.                         3-6  
 H.G.I.                         \_\_\_\_\_  
 Rank of Coal                    HvA, HvB Bit.  
 Use of Coal                    metallurgical or steam  
 Methane Emissions            \_\_\_\_\_

Coal Production  
 1981 Production Thru 6/81    none  
 1980 Annual Production    none  
 1985 Projected Production   depends on market  
 Cumulative Production Thru 6/81    18,697  
 Reserves/Est. Life    40 million tons  
 Sales: Out of State(%) \_\_\_\_\_  
        Where \_\_\_\_\_  
        To Whom \_\_\_\_\_  
        In State(%) \_\_\_\_\_  
        Where \_\_\_\_\_  
        To Whom \_\_\_\_\_  
 Transportation Type    truck to railroad  
 Coal Available for Domestic Use    yes, when operating

Additional Information and Comments  
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 Also State acreage  
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Mine Name National King Mine  
M.L.R.B. Permit No. C-035-81  
Map No. 26

Location Information

County La Plata  
Location (Sec., T., R.) portions of: sec. 29, 31, 32; T35N, R11W

Coal Region San Juan River Field Durango  
Topographic Quadrangle (7 1/2') Kline

Company Information

Mine Operator National King Coal, Inc.  
Address 4424 County Road 120, Hesperus, CO  
Contacts Mr. Hansen Telephone 259-2416/385-4528  
Parent Company none  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status producing Start-up Date 1936  
No. of Employees 53  
No. of Acres in Permit 9.28 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private \_\_\_\_\_

Geologic Information

Geologic Unit Upper Menefee Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Upper

Coal Thickness(es) 5.5-6'

Dip of Bedding 3° S - SW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) Max - 300'

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Upper			
Heat value (BTU/lb)	13,560			
Sulfur(%)	.3			
Moisture(%)	2.4			
Ash(%)	4.2			
F.S.I.	5.0			
H.G.I.				
Rank of Coal	Bit.			
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	60,954 tons
1980 Annual Production	92,963 tons
1985 Projected Production	210,000 tons
Cumulative Production Thru 6/81	565,021 tons
Reserves/Est. Life	150,000 tons on existing lease
Sales: Out of State(%)	80%
Where	New Mexico, Washington, Utah
To Whom	
In State(%)	20%
Where	
To Whom	
Transportation Type	truck
Coal Available for Domestic Use	yes

Additional Information and Comments

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Mine Name Peacock Coal Mine  
M.L.R.B. Permit No. C-040-81  
Map No. 27

Location Information

County La Plata  
Location (Sec., T., R.) portions of sec. 29 T35N, R11W

Coal Region San Juan River Field Durango  
Topographic Quadrangle (7 1/2') Hesperus

Company Information

Mine Operator Sun Belt Mining Inc.  
Address 3701 County 120, Hesperus, CO 81326  
Contacts S. D. Stephens Telephone 385-4377  
Parent Company Sun Belt Mining, Inc.  
Address 7100 Grapevine Hwy, Suite 208, Fort Worth, TX 76118  
Contacts \_\_\_\_\_ Telephone (817) 589-7026

General Information

Mine Type underground Mining Method room & pillar  
Mine Status Idle Start-up Date 1922  
No. of Employees 13  
No. of Acres in Permit 111 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Menefee Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Peerless

Coal Thickness(es) \_\_\_\_\_

Dip of Bedding 3% Strike of Bedding \_\_\_\_\_

Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_

Coal Quality    Sample 1    Sample 2    Sample 3    Sample 4

Bed or Seam	Unknown
Heat value (BTU/lb)	11,400-14,000
Sulfur(%)	0.6-4.0
Moisture(%)	3.5-10.7
Ash(%)	3.4-11.3
F.S.I.	-----
H.G.I.	-----
Rank of Coal	Bit.
Use of Coal	Semi-coking
Methane Emissions	

Coal Production

1981 Production Thru 6/81	215 tons
1980 Annual Production	656 tons
1985 Projected Production	--
Cumulative Production Thru 6/81	76,062
Reserves/Est. Life	--
Sales: Out of State(%)	
Where	
To Whom	
In State(%)	
Where	
To Whom	
Transportation Type	
Coal Available for Domestic Use	

Additional Information and Comments

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Mine Name Shalako Mine  
M.L.R.B. Permit No. C-050-81  
Map No. 28

Location Information

County La Plata  
Location (Sec., T., R.) portions of sec. 27,28,29, T35N, R11W  
Coal Region San Juan River Field Durango  
Topographic Quadrangle (7 1/2') Hesperus

Company Information

Mine Operator Sackett Mining Co., Inc.  
Address 1536 Cole Blvd., Golden, CO 80401  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Sackett Mining Co., Inc.  
Address 1536 Cole Blvd., Golden, CO 80401  
Contacts Rick Chilton Telephone 233-5284

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status in preparation Start-up Date early 1982  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 280 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Menefee Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) A  
Coal Thickness(es) 6'  
Dip of Bedding 2-7°S Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) Max. 700'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam	A			
Heat value (BTU/lb)	13,000			
Sulfur(%)	.8			
Moisture(%)	<10.0			
Ash(%)	8.0			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	Bit.			
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	none
1980 Annual Production	none
1985 Projected Production	125,000/yr 1982-89
Cumulative Production Thru 6/81	none
Reserves/Est. Life	1,015,000 tons recoverable
Sales: Out of State(%)	100%
Where	Arizona
To Whom	
In State(%)	
Where	
To Whom	
Transportation Type	trucks and rail
Coal Available for Domestic Use	spot sales

Additional Information and Comments

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Mine Name Allen Mine  
M.L.R.B. Permit No. C-012-81  
Map No. 29

Location Information

County Las Animas  
Location (Sec., T., R.) Section 22 & 23, T33S, R68W

Coal Region Raton Mesa Field Trinidad  
Topographic Quadrangle (7 1/2') Vigil

Company Information

Mine Operator CF&I Steel Corp.  
Address Weston Co. 81091  
Contacts T.J. Augustine, Gen. Supt. Telephone 868-2761  
Parent Company CF&I Steel Corp.  
Address P.O. Box 316, Pueblo, CO 81002  
Contacts J.G. Wark Mgr. Mines Telephone 561-6622

General Information

Mine Type underground Mining Method Continuous room & pillar and longwall  
Mine Status producing Start-up Date 1952  
No. of Employees 500 +  
No. of Acres in Permit 155 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Raton Fm (Middle) Geologic Age Upper Cretaceous-Tertiary  
Coal Zone(s) or Bed(s) Allen

Coal Thickness(es) 4'-7'

Dip of Bedding 1% NE Strike of Bedding N-N35°W  
Overburden Thickness(es) 400' to 1200'

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Average of			
Heat value (BTU/lb)	11-samples			
Sulfur(%)	<u>13,740</u>			
Moisture(%)	<u>0.49</u>			
Ash(%)	<u>0.7</u>			
F.S.I.	<u>8.5</u>			
H.G.I.	<u>--</u>			
Rank of Coal	<u>--</u>			
Use of Coal	<u>sub-bit</u>			
Methane Emissions	<u>metallurgical</u>			

<u>Coal Production</u>	
1981 Production Thru 6/81	<u>291,214 tons</u>
1980 Annual Production	<u>561,727 tons</u>
1985 Projected Production	<u>500,000 tons</u>
Cumulative Production Thru 6/81	<u>17,759,593 tons</u>
Reserves/Est. Life	<u></u>
Sales: Out of State(%)	<u></u>
Where	<u></u>
To Whom	<u></u>
In State(%)	<u>100%</u>
Where	<u>Pueblo CO</u>
To Whom	<u>CF&amp;I (Captive operation)</u>
Transportation Type	<u>Unit Train</u>
Coal Available for Domestic Use	<u>no</u>

Additional Information and Comments

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Mine Name Helen Mine  
M.L.R.B. Permit No. C-043-81  
Map No. 30

Location Information

County Las Animas  
Location (Sec., T., R.) portions of sec. 31, 32 & 36, T33S, R64W

Coal Region Raton Mesa Field Trinidad  
Topographic Quadrangle (7 1/2') Starkville

Company Information

Mine Operator Animas Coal Company, Inc.  
Address P.O. Box 247, Trinidad, CO 81082  
Contacts Steven Marusich Telephone 846-9251  
Parent Company Western Assoc. Energy Corp.  
Address P.O. Box 17485, San Antonio, TX 78217  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar  
Mine Status producing Start-up Date 1979  
No. of Employees 3  
No. of Acres in Permit 69.8 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Vermejo & Raton Fm Geologic Age Upper Cretaceous & Paleocene  
Coal Zone(s) or Bed(s) Upper Starkville

Coal Thickness(es) 4-8'

Dip of Bedding 3-4°W Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Average of 4 samples			
Heat value (BTU/lb)	12,173			
Sulfur(%)	.63			
Moisture(%)	1.95			
Ash(%)	15.47			
F.S.I.				
H.G.I.				
Rank of Coal	HvA, HvB, Bit.			
Use of Coal	coking			
Methane Emissions				

Coal Production

1981 Production Thru 6/81 153 tons (5/31/81) no production June, 1981

1980 Annual Production 11,742 tons

1985 Projected Production about 300,000 tons

Cumulative Production Thru 6/81 30,887 tons

Reserves/Est. Life 20 m ton in place / 10 m tons recoverable

Sales: Out of State(%) 100%

Where Nebraska, TX

To Whom

In State(%)

Where

To Whom

Transportation Type truck

Coal Available for Domestic Use yes

Additional Information and Comments

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Mine Name Maxwell  
M.L.R.B. Permit No. C-013-81  
Map No. 31

Location Information

County Las Animas  
Location (Sec., T., R.) sec. 29, T33S, R67W

Coal Region Raton Mesa Field Trinidad  
Topographic Quadrangle (7 1/2') Vigil

Company Information

Mine Operator CF&I Steel Corp.  
Address Weston, CO 81091  
Contacts T.J. Augustine, Gen. Supt. Telephone 868-2761  
Parent Company CF & I Steel Corp.  
Address P.O. Box 316 Pueblo, CO 81002  
Contacts J.G. Wark Mgr. Mines Telephone 561-6622

General Information

Mine Type underground Mining Method continous, room pillar  
Mine Status producing Start-up Date 1976  
No. of Employees 160 +  
No. of Acres in Permit 141.5  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Raton Fm Geologic Age Upper Cretaceous-Tertiary  
Coal Zone(s) or Bed(s) Maxwell

Coal Thickness(es) 5-10 feet

Dip of Bedding 1% NE (pitch) Strike of Bedding N/S  
Overburden Thickness(es) 400' to 1200'

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Average of			
	19 samples			
Heat value (BTU/lb)	12963			
Sulfur(%)	.4			
Moisture(%)	1.6			
Ash(%)	13.0			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	--			
Use of Coal	metallurgical			
Methane Emissions	--			

Coal Production

1981 Production Thru 6/81	121,126 tons
1980 Annual Production	200,959 tons
1985 Projected Production	500,000 tons
Cumulative Production Thru 6/81	566,181 tons
Reserves/Est. Life	
Sales: Out of State(%)	
Where	
To Whom	
In State(%)	100%
Where	Pueblo
To Whom	CF&I Steel Corp. (Captive Operation)
Transportation Type	Unit Train
Coal Available for Domestic Use	no

Additional Information and Comments

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Mine Name Trinidad Basin  
M.L.R.B. Permit No. C-048-81  
Map No. 32

Location Information

County Las Animas  
Location (Sec., T., R.) portions of sec. 15, 21, 22, T31S, R65W

Coal Region Raton Mesa Field Trinidad  
Topographic Quadrangle (7 1/2') Del Agua and Trinidad

Company Information

Mine Operator Trinidad Basin Mining, Inc.  
Address P.O. Box 783, Trinidad, CO 81082  
Contacts Jimmy Renfro Telephone 846-2300  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method haulback  
Mine Status producing Start-up Date 1978  
No. of Employees 11  
No. of Acres in Permit 1165 acres  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Raton Fm Geologic Age Cretaceous - Tertiary  
Coal Zone(s) or Bed(s) Del Agua, Cass

Coal Thickness(es) Del Agua: 4.5'-6.0', Cass: 3.5'-4.5'

Dip of Bedding 2-5°W Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) 80-100'

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	unknown			
Heat value (BTU/lb)	12,000+			
Sulfur(%)	<0.5			
Moisture(%)	--			
Ash(%)	12-17			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	--			
Use of Coal	--			
Methane Emissions	--			

Coal Production  
 1981 Production Thru 6/81 32,345 tons  
 1980 Annual Production 67,757 tons  
 1985 Projected Production \_\_\_\_\_  
 Cumulative Production Thru 6/81 141,102  
 Reserves/Est. Life \_\_\_\_\_  
 Sales: Out of State(%) 100%  
       Where Texas, Arizona  
       To Whom \_\_\_\_\_  
       In State(%) \_\_\_\_\_  
       Where \_\_\_\_\_  
       To Whom \_\_\_\_\_  
 Transportation Type truck to rail  
 Coal Available for Domestic Use in the future

Additional Information and Comments

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Mine Name Cameo #1 Mine  
M.L.R.B. Permit No. C-041-81  
Map No. 33

Location Information

County Mesa  
Location (Sec., T., R.) portions of sec. 20, 21, 22, 23, 26, 27, 28, 29, 34, 35, T10S, R98W, Sec. 1 & 2, T11S, R98W  
Coal Region Uinta Field Grand Mesa  
Topographic Quadrangle (7 1/2') Cameo

Company Information

Mine Operator GEX Colorado, Inc.  
Address P.O. Box W, Palisade, CO 81526  
Contacts Dale Fenwick Telephone 464-7951  
Parent Company General Exploration Co.  
Address 4219 Sigma Road, Dallas, TX 75234  
Contacts Wallace E. Brown Telephone (214) 233-2911

General Information

Mine Type underground Mining Method room & pillar, longwall  
Mine Status producing Start-up Date 1979 by GEX  
No. of Employees 62  
No. of Acres in Permit 2,615 (2 mines, Cameo and Roadside)  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Mt. Garfield Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Cameo B seam  
Coal Thickness(es) 6-16'  
Dip of Bedding 5% Strike of Bedding N65W  
Overburden Thickness(es) 0-2000'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality

Sample 1

Sample 2

Sample 3

Sample 4

Bed or Seam  
Heat value (BTU/lb)  
Sulfur(%)  
Moisture(%)  
Ash(%)  
F.S.I.  
H.G.I.  
Rank of Coal  
Use of Coal  
Methane Emissions

C O N F I D E N T I A L

Coal Production

1981 Production Thru 6/81 161,707 tons  
1980 Annual Production 207,208 tons  
1985 Projected Production 500,000 tons  
Cumulative Production Thru 6/81 4,606,973 tons  
Reserves/Est. Life 30 million tons recoverable/ about 47 years  
Sales: Out of State(%) 100%  
Where Mississippi Power Plant in Gulfport, Mississippi  
To Whom Southern Company Services  
In State(%) 0%  
Where  
To Whom

Transportation Type rail  
Coal Available for Domestic Use local spot markets

Additional Information and Comments

Mine portal - center SW 1/4 Sec. 27  
Geological information obtained from: West-Central Colorado  
Coal Environmental  
Statement - v. 2



Mine Name Fruita Mine No. 1  
M.L.R.B. Permit No. C-015-81  
Map No. 34

Location Information

County Mesa  
Location (Sec., T., R.) portions of: sec. 29 & 30, T8S, R101W,

Coal Region Uinta Field Book Cliffs  
Topographic Quadrangle (7 1/2') Ruby Lee Reservoir

Company Information

Mine Operator Dorchester Coal Co.  
Address 2795 Skyline Court, Grand Junction, CO 81501  
Contacts Leland Acre, Mgr. Telephone 245-6370  
Parent Company Dorchester Gas Corp.  
Address P.O. Box 31049, Dallas, TX 75231  
Contacts \_\_\_\_\_ Telephone (214) 750-3667

General Information

Mine Type underground Mining Method continuous room & pillar  
Mine Status idle Start-up Date 1978  
No. of Employees 1  
No. of Acres in Permit 150 acres (both #1 and #2)  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Mt. Garfield Fm & Anchor Tongue Geological Age Cretaceous  
Coal Zone(s) or Bed(s) Cameo and Anchor  
Coal Thickness(es) Cameo: 10-25'+  
Anchor: 4-6'  
Dip of Bedding 3-4° Strike of Bedding N55E  
Overburden Thickness(es) 0-1600'  
Interburden Thickness(es) Cameo-Anchor: 350'



Mine Name Fruita Mine No. 2  
M.L.R.B. Permit No. C-015-81  
Map No. 35

Location Information

County Mesa  
Location (Sec., T., R.) portions of: sec. 29 & 30, T8S, R101W,  
Coal Region Uinta Field Book Cliffs  
Topographic Quadrangle (7 1/2') Ruby Lee Reservoir

Company Information

Mine Operator Dorchester Coal Co.  
Address 2795 Skyline Court, Grand Junction, CO 81501  
Contacts Leland Acre, Mgr. Telephone 245-6370  
Parent Company Dorchester Gas Corp.  
Address P.O. Box 31049, Dallas, TX 75231  
Contacts \_\_\_\_\_ Telephone (214) 750-3667

General Information

Mine Type underground Mining Method continuous room & pillar  
Mine Status idle Start-up Date 1978  
No. of Employees 3  
No. of Acres in Permit 150 acres (both #1 and #2)  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Mt. Garfield & Anchor Tongue Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Cameo & Anchor  
Coal Thickness(es) Cameo - 10-25+'  
Anchor - 4-6+'  
Dip of Bedding 3-4° Strike of Bedding N55E  
Overburden Thickness(es) Anchor - 0-1960'  
Interburden Thickness(es) Cameo-Anchor: 350'



Mine Name Roadside Mine  
M.L.R.B. Permit No. C-041-81  
Map No. 36

Location Information

County Mesa  
Location (Sec., T., R.) portions of sec. 20, 21, 22, 23, 26, 27, 28, 29, 34, 35, T10S, R98W, and sec. 1 & 2, T11S, R98W  
Coal Region Uinta Field Grand Mesa  
Topographic Quadrangle (7 1/2') Cameo

Company Information

Mine Operator GEX Colorado, Inc.  
Address P.O. Box W, Palisade, CO 81526  
Contacts Dale Fenwick Telephone 464-7951  
Parent Company General Exploration Co.  
Address 4219 Sigma Road, Dallas, TX 75234  
Contacts Wallace E. Brown Telephone (214) 233-2911

General Information

Mine Type underground Mining Method room & pillar, longwall  
Mine Status producing Start-up Date 1977 by GEX  
No. of Employees 248  
No. of Acres in Permit 2,615 acres (2 mines, Cameo and Roadside)  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Mt. Garfield Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Cameo B seam  
Coal Thickness(es) 6-16'  
Dip of Bedding 5% Strike of Bedding N65W  
Overburden Thickness(es) 0-2000'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality

Sample 1

Sample 2

Sample 3

Sample 4

Bed or Seam  
Heat value (BTU/lb)  
Sulfur(%)  
Moisture(%)  
Ash(%)  
F.S.I.  
H.G.I.  
Rank of Coal  
Use of Coal  
Methane Emissions

C O N F I D E N T I A L

Coal Production

1981 Production Thru 6/81 315,673 tons  
1980 Annual Production 547,651  
1985 Projected Production 800,000 tons  
Cumulative Production Thru 6/81 2,140,828 tons  
Reserves/Est. Life 9 million tons/ about 14 years  
Sales: Out of State(%) 100%  
Where Mississippi Power Plant in Gulfport, Mississippi  
To Whom Southern Company Services  
In State(%) 09.  
Where  
To Whom

Transportation Type rail  
Coal Available for Domestic Use local spotmarkets

Additional Information and Comments

mine portal - middle sec. 34  
Geological information obtained from: West Central Colorado  
Coal Environmental Statement - V. 2

Mine Name Colowyo Coal Mine  
M.L.R.B. Permit No. C-019-81  
Map No. 37

Location Information

County Moffat  
Location (Sec., T., R.) portions of: sec. 13, 22, 23, 24, 26, 27, 33, 34, T4N, R93W; portions of: sec. 2, 3, 4, 9, 10, T3N, R93W  
Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Ninemile Gap

Company Information

Mine Operator Colowyo Coal Co.  
Address 5731 Hwy 13, Meeker, CO 81641  
Contacts Richard Atkinson, Dale Thompson Telephone 824-4451  
Parent Company W. R. Grace & Co. - New York; Hanna Mining Co. - Cleveland  
Address 50-50 Partnership  
Contacts I. E. McKeaver, G. A. Siler Telephone 399-0779

General Information

Mine Type surface Mining Method dragline & truck/shovel  
Mine Status producing Start-up Date 1976  
No. of Employees 307  
No. of Acres in Permit 5,165 acres  
Surface: Federal X (3%) Private X (97%)  
Mineral: Federal X Private \_\_\_\_\_

Geologic Information

Geologic Unit Williams Fork Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Y<sub>3</sub> and Y<sub>2</sub>, X, A<sub>2</sub> + A<sub>3</sub>, B, C, D, E, F,  
Coal Thickness(es) 57.8' total; Y<sub>3</sub> + Y<sub>2</sub>: 6.8', X : 12.3,  
A<sub>2</sub> + A<sub>3</sub> : 6.7', B : 5.3', C : 6.0', D : 10.1', E : 6.8', F : 5.4',  
Dip of Bedding 0-20°N Strike of Bedding E-W  
Overburden Thickness(es) 0-400'  
Interburden Thickness(es) \_\_\_\_\_





Mine Name Eagle No. 5  
M.L.R.B. Permit No. C-044-81  
Map No. 38

Location Information

County Moffat  
Location (Sec., T., R.) portions of: sec. 31 & 32, T6N, R91W  
" " : sec. 5 & 6, T5N, R91W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Round Bottom & Caster Gulch

Company Information

Mine Operator Empire Energy Corp. /Mine Engineer Sam Cario  
Address P.O. Box 68, Craig, CO 81625 824-9467  
Contacts Rick Mills - Englewood Telephone 740-5110  
Parent Company Amoco Minerals Company  
Address 7000 S. Yosemite, Englewood, CO 80112  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date early 1970's  
No. of Employees 197  
No. of Acres in Permit 1873 acres  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) C E F P

Coal Thickness(es) C O N F I D E N T I A L

Dip of Bedding 7-10°N Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-900' to P

Interburden Thickness(es) C-E: 0-2000; E-F: 0-1900, F-P: 0-1900

Coal Quality

Sample 1

Sample 2

Sample 3

Sample 4

Bed or Seam  
Heat value (BTU/lb)  
Sulfur(%)  
Moisture(%)  
Ash(%)  
F.S.I.  
H.G.I.  
Rank of Coal  
Use of Coal  
Methane Emissions

C O N F I D E N T I A L

sub Bit.

Coal Production

1981 Production Thru 6/81 235,582 tons

1980 Annual Production 473,773 tons

1985 Projected Production

Cumulative Production Thru 6/81 1,771,426

Reserves/Est. Life C O N F I D E N T I A L

Sales: Out of State(%) yes

Where

To Whom

In State(%) yes

Where Colorado Springs

To Whom

Transportation Type rail

Coal Available for Domestic Use no

Additional Information and Comments

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Mine Name Eagle No. 9  
M.L.R.B. Permit No. C-044-81  
Map No. 39

Location Information

County Moffat  
Location (Sec., T., R.) portions of: Sec. 31 & 32 T6N R91W  
" " " " Sec. 5 & 6 T5N R91W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Round Bottom & Caster Gulch

Company Information

Mine Operator Empire Energy Corp./Mine Engineer-Sam Cario 824-9467  
Address P.O. Box 68, Craig, CO 81625  
Contacts Rick Mills - Englewood Telephone 740-5110  
Parent Company Amoco Minerals Company  
Address 7000 S. Yosemite St., Englewood, CO 80112  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date 1978  
No. of Employees 55  
No. of Acres in Permit 1007 acres  
Surface: Federal X Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) C,E,F,P  
Coal Thickness(es) C O N F I D E N T I A L  
Dip of Bedding 7-10°N Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-900' to P  
Interburden Thickness(es) C-E: 0-2000, E-F: 0-1900, F-P: 0-1900

Coal Quality

Sample 1

Sample 2

Sample 3

Sample 4

Bed or Seam	C O N F I D E N T I A L			
Heat value (BTU/lb)				
Sulfur(%)				
Moisture(%)				
Ash(%)				
F.S.I.				
H.G.I.				
Rank of Coal	sub Bit.	sub Bit.	sub Bit.	sub Bit.
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	33,084 tons
1980 Annual Production	180,259 tons
1985 Projected Production	
Cumulative Production Thru 6/81	453,631
Reserves/Est. Life	C O N F I D E N T I A L
Sales: Out of State(%)	yes
Where	
To Whom	
In State(%)	yes
Where	Colorado Springs
To Whom	
Transportation Type	rail
Coal Available for Domestic Use	no

Additional Information and Comments

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Mine Name Trapper Mine  
M.L.R.B. Permit No. C-010-81  
Map No. 40

Location Information

County Moffat  
Location (Sec., T., R.) Portions of Sec. 5 & 6 T5N R90W; portions of Sec. 1, 2, 3, 4, 5 T5N R91W; portions of Sec. 30, 31 & 32 T6N R90W; (see Add. Info.)  
Coal Region Uinta Field Yampa  
Topographic Quadrangle (7 1/2') Castor Gulch

Company Information

Mine Operator Utah International Inc.  
Address Box 187, Craig, CO 81625  
Contacts R. C. Diederich Telephone 824-4401  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1977  
No. of Employees 220  
No. of Acres in Permit 8300  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) H, I, Q, R  
Coal Thickness(es) H : 4' I : 9' Q : 13' R : 4'  
Dip of Bedding 16% Strike of Bedding S-N  
Overburden Thickness(es) 30-140'  
Interburden Thickness(es) 2' - 50'

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	AVERAGE			
Heat value (BTU/lb)	9800			
Sulfur(%)	.4			
Moisture(%)	16			
Ash(%)	8			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	sub. bit			
Use of Coal	steam			
Methane Emissions	--			

Coal Production

1981 Production Thru 6/81	1,092,105 tons
1980 Annual Production	2,014,376 tons
1985 Projected Production	2.3 m tons
Cumulative Production Thru 6/81	18,781,161
Reserves/Est. Life	68 million tons
Sales: Out of State(%)	0
Where	
To Whom	
In State(%)	100%
Where	Yampa Project Power Plant
To Whom	
Transportation Type	mine trucks
Coal Available for Domestic Use	no

Additional Information and Comments

portions of Sec. 21, 25, 26, 27, 28, 29, 32 T6N R91W

Mine Name Nucla Strip  
M.L.R.B. Permit No. C-008-81  
Map No. 41

Location Information

County Montrose  
Location (Sec., T., R.) portions of Sec. 25, 31 & 36 T47N R16W

Coal Region San Juan River Field Nucla-Naturita  
Topographic Quadrangle (7 1/2') Nucla

Company Information

Mine Operator same as parent company  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Peabody Coal Company  
Address 12015 E. 46th Ave., Denver, CO 80239  
Contacts Thomas Wainwright Telephone 371-7990

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1959  
No. of Employees 23  
No. of Acres in Permit 393 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Dakota Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) #1 & #2  
Coal Thickness(es) #1: 1.6'-3.3' #2: 5.9'-7.9'  
Dip of Bedding 1°-2° SW Strike of Bedding N25°W to N45°W  
Overburden Thickness(es) 0-100'  
Interburden Thickness(es) \_\_\_\_\_





Mine Name Bear Creek (Coal Basin Mines)  
M.L.R.B. Permit No. C-017-81  
Map No. 42

Location Information

County Pitkin & Gunnison  
Location (Sec., T., R.) Sec. 31 & 32, T9S, R89W; Sec. 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 28, 29, 30, T10S R89W; Sec. 1, 12, 13, 24 & 25, T10S R90W  
Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Placita & Elk Knob

Company Information

Mine Operator Mid-Continent Resources, Inc.  
Address P.O. Box 158, Carbondale, CO 81623  
Contacts Doug Bowman Telephone 963-2581  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method continuous  
Mine Status Idle Start-up Date 1969  
No. of Employees 35  
No. of Acres in Permit 7,173 (all 5 Coal Basin Mines)  
Surface: Federal X Private X  
Mineral: Federal 15% Private 85%

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) B  
Coal Thickness(es) 5 1/2° - 8°  
Dip of Bedding 10-15°SW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Coal Basin (Coal Basin Mines)  
M.L.R.B. Permit No. C-017-81  
Map No. 43

Location Information

County Pitkin & Gunnison  
Location (Sec., T., R.) Sec. 31 & 32, T9S, R89W; Sec. 4-11, 14-21, 28-30  
T10S, R89W; Sec. 1, 12, 13, 24, 25, T10S, R90W  
Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Placita & Elk Knob

Company Information

Mine Operator Mid Continent Resources, Inc.  
Address P.O. Box 158, Carbondale, CO 81623  
Contacts Doug Bowman Telephone 963-2581  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date 1900-1909 1974 to present  
No. of Employees 115  
No. of Acres in Permit 7,173 acres (all 5 coal basin mines)  
Surface: Federal  Private   
Mineral: Federal 15% Private 85%

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) B  
Coal Thickness(es) 5 1/2 - 8°  
Dip of Bedding 10-15°SW Strike of Bedding N80°W  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Dutch Creek #1 (Coal Basin Mines)  
M.L.R.B. Permit No. C-017-81  
Map No. 44

Location Information

County Pitkin & Gunnison  
Location (Sec., T., R.) Sec. 31, 32 T9S R89W; Sec. 4-11, 14-21, 28-30  
T10S R89W; Sec. 1, 12, 13, 24, 25 T10S R90W  
Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Placita & Elk Knob

Company Information

Mine Operator Mid Continent Resources, Inc.  
Address P.O. Box 158, Carbondale, CO 81623  
Contacts Doug Bowman Telephone 963-2581  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method longwall  
Mine Status shut down\* Start-up Date 1956  
No. of Employees 95  
No. of Acres in Permit 7,173 acres (all of 5 Coal Basin mines)  
Surface: Federal X Private X  
Mineral: Federal 15% Private 85%

Geologic Information

Geologic Unit Lower Mesaverde Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) B  
Coal Thickness(es) 5 1/2'-8'  
Dip of Bedding 11-13°NW Strike of Bedding N-NE  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Average B			
Heat value (BTU/lb)	14,500			
Sulfur(%)	.5			
Moisture(%)	.8			
Ash(%)	7.5			
F.S.I.	9.0			
H.G.I.				
Rank of Coal	Mv Bit.			
Use of Coal	coking			
Methane Emissions				

Coal Production

1981 Production Thru 6/81	45,386 tons
1980 Annual Production	156,533 tons
1985 Projected Production	
Cumulative Production Thru 6/81	6,491,202 tons
Reserves/Est. Life	
Sales: Out of State(%)	100%
Where	Provo, Utah/California
To Whom	US Steel/Kaiser Steel
In State(%)	
Where	
To Whom	
Transportation Type	train
Coal Available for Domestic Use	no

Additional Information and Comments

\*Explosion on 4/15/81 killed 15 miners and shut down operations. May  
reopen in Fall 1981.

Mine Name Dutch Creek #2 (Coal Basin Mines)  
M.L.R.B. Permit No. C-017-81  
Map No. 45

Location Information

County Pitkin & Gunnison  
Location (Sec., T., R.) Sec. 31 & 32 T9S R89W; Sec. 4-11, 14-21, 28-30  
T10S R89W; Sec. 1, 12, 13, 24, 25 T10S R90W  
Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Placita & Elk Knob

Company Information

Mine Operator Mid Continent Resources, Inc.  
Address P.O. Box 158, Carbondale, CO 81623  
Contacts Doug Bowman Telephone 963-2581  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method continuous, room & pillar  
Mine Status producing Start-up Date 1965  
No. of Employees 95  
No. of Acres in Permit 7,173 (all 5 Coal Basin mines)  
Surface: Federal X Private X  
Mineral: Federal 15% Private 85%

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Dutch Creek  
Coal Thickness(es) 4-20'  
Dip of Bedding 10-15°SW Strike of Bedding N40°W  
Overburden Thickness(es) about 2500'  
Interburden Thickness(es) \_\_\_\_\_





Mine Name L. S. Wood (Coal Basin Mines)  
M.L.R.B. Permit No. C-017-81  
Map No. 46

Location Information

County Pitkin & Gunnison  
Location (Sec., T., R.) Sec. 31 & 32 T9S R89W; Sec. 4-11, 14-21, 28-30 T10S R89W; Sec. 1, 12, 13, 24, 25 T10S R90W  
Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Placita & Elk Knob

Company Information

Mine Operator Mid Continent Resources, Inc.  
Address P.O. Box 158, Carbondale, CO 81623  
Contacts Doug Bowman Telephone 963-2581  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method Longwall, room & pillar, continuous  
Mine Status producing Start-up Date 1966  
No. of Employees 145  
No. of Acres in Permit 7,173 (all 5 Coal Basin Mines)  
Surface: Federal X Private X  
Mineral: Federal 15% Private 85%

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) B  
Coal Thickness(es) 5 1/2'-8'  
Dip of Bedding 10-15°SW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
	AVERAGE			
Bed or Seam	B			
Heat value (BTU/lb)	14,500			
Sulfur (%)	.5			
Moisture (%)	--			
Ash (%)	8.4			
F.S.I.	9.0			
H.G.I.	--			
Rank of Coal	Mv bit.			
Use of Coal	coking			
Methane Emissions	_____			

### Coal Production

1981 Production Thru 6/81 140,610 tons  
 1980 Annual Production 220,930 tons  
 1985 Projected Production \_\_\_\_\_  
 Cumulative Production Thru 6/81 4,381,443 tons  
 Reserves/Est. Life \_\_\_\_\_  
 Sales: Out of State (%) 100%  
     Where Provo, Utah / California  
     To Whom US Steel / Kaiser Steel  
     In State (%) \_\_\_\_\_  
     Where \_\_\_\_\_  
     To Whom \_\_\_\_\_  
 Transportation Type train  
 Coal Available for Domestic Use no

### Additional Information and Comments

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Mine Name North Thompson Creek Mine No. 1  
M.L.R.B. Permit No. C-025-81  
Map No. 47

Location Information

County Pitkin  
Location (Sec., T., R.) portions of Sec. 31 & 35 T8S, R89W

Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Stony Ridge

Company Information

Mine Operator Snowmass Coal Co.  
Address P.O. Box 980, Carbondale, CO 81623  
Contacts Stephen Self Telephone 963-3440  
Parent Company Roaring Fork Coal Co.  
Address Suite 2300, 410 17th St., Denver, CO 80202  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method longwall  
Mine Status producing Start-up Date 1951  
No. of Employees 142  
No. of Acres in Permit 320 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal 90% Private 10%

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) A

Coal Thickness(es) 7-10'

Dip of Bedding 27-30°W Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-1500'

Interburden Thickness(es) \_\_\_\_\_

Coal Quality                          Sample 1                          Sample 2                          Sample 3                          Sample 4

Bed or Seam	Average A Seam			
Heat value (BTU/lb)	12,640			
Sulfur(%)	.90			
Moisture(%)	16.4			
Ash(%)	2.1			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	--			
Use of Coal				
Methane Emissions	--			

Coal Production  
1981 Production Thru 6/81 10,665 tons  
1980 Annual Production 40,555 tons  
1985 Projected Production #1 and #3 combined - 1 million tons  
Cumulative Production Thru 6/81 1,172,984 tons  
Reserves/Est. Life #1 and #3 combined - 30 million tons  
Sales: Out of State(%)  
      Where \_\_\_\_\_  
      To Whom \_\_\_\_\_  
      In State(%) \_\_\_\_\_  
      Where \_\_\_\_\_  
      To Whom \_\_\_\_\_  
Transportation Type rail  
Coal Available for Domestic Use \_\_\_\_\_

Additional Information and Comments  
\_\_\_\_\_  
Geo info from: West Central Colorado Coal  
                                    Environmental Statement V.2  
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Mine Name North Thompson Creek Mine No. 3  
M.L.R.B. Permit No. C-025-81  
Map No. 48

Location Information

County Pitkin  
Location (Sec., T., R.) portions of Sec. 31 & 35 T8S R89W

Coal Region Uinta Field Carbondale  
Topographic Quadrangle (7 1/2') Stony Ridge

Company Information

Mine Operator Snowmass Coal Co.  
Address P.O. Box 980, Carbondale, CO 81623  
Contacts Stephen Self Telephone 963-3440  
Parent Company Roaring Fork Coal Co.  
Address Suite 2300, 410 17th St., Denver, CO 80202  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method longwall  
Mine Status Producing Start-up Date 1955  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 320 acres  
Surface: Federal 10 Private X  
Mineral: Federal 90% Private 10%

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Anderson  
Coal Thickness(es) 8-10'  
Dip of Bedding 27-30°W Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-3000'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Anderson			
Heat value (BTU/lb)	Average			
Sulfur(%)	13,745			
Moisture(%)	.90			
Ash(%)	7.85			
F.S.I.	2.95			
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 234 tons  
1980 Annual Production 1,812 tons  
1985 Projected Production #1 and #3 combined - 1 million tons  
Cumulative Production Thru 6/81 716,401  
Reserves/Est. Life #1 and #3 combined - 30 million tons  
Sales: Out of State(%) \_\_\_\_\_  
Where \_\_\_\_\_  
To Whom \_\_\_\_\_  
In State(%) \_\_\_\_\_  
Where \_\_\_\_\_  
To Whom \_\_\_\_\_  
Transportation Type rail  
Coal Available for Domestic Use \_\_\_\_\_

Additional Information and Comments

Geo Info from - West Central Colorado Coal  
Environmental Statement V-2

Mine Name Deserado Mine  
M.L.R.B. Permit No. C-018-81  
Map No. 49

Location Information

County Rio Blanco  
Location (Sec., T., R.) portions of Sec. 1,2,3,4,10,11;T2N,R101W,  
Sec. 22,23,26,27,28,32,33,34,35,36;T3N,R101W  
Coal Region Green River Field Lower White River  
Topographic Quadrangle (7 1/2') Rangely NE & Cactus Reservoir

Company Information

Mine Operator Western Fuels-Utah, Inc.  
Address 405 Urban, #305, Lakewood, CO 80228  
Contacts Don Deardorff Telephone 988-9626  
Parent Company Western Fuels-Utah, Inc.  
Address 1835 K St. NW, Suite 412, Washington, DC 20006  
Contacts \_\_\_\_\_ Telephone (202) 223-8703

General Information

Mine Type underground Mining Method longwall, room & pillar  
Mine Status in preparation Start-up Date mid 1982  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal  Private   
Mineral: Federal  Private

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) B, B/C & D  
Coal Thickness(es) B: 6.4', B/C: 6-12', D: 4.5-10'  
Dip of Bedding 0-70° Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	B & B/C	D		
Heat value (BTU/lb)	10,560	10,800		
Sulfur(%)	.47	.50		
Moisture(%)	12.0	12.0		
Ash(%)	11.0	8.0		
F.S.I.				
H.G.I.				
Rank of Coal	sub bit.	sub bit.		
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 none  
 1980 Annual Production none  
 1985 Projected Production clean - 777,400 tons  
 Cumulative Production Thru 6/81 none  
 Reserves/Est. Life B reserve - 13.67 MT D - 17.25 MT  
 Sales: Out of State(%) 100%  
       Where Utah - power plant  
       To Whom  
       In State(%)  
       Where  
       To Whom  
 Transportation Type train  
 Coal Available for Domestic Use no

Additional Information and Comments

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Mine Name Northern No. 1  
M.L.R.B. Permit No. C-032-81  
Map No. 50

Location Information

County Rio Blanco  
Location (Sec., T., R.) NE 1/4 SE 1/4, Sec. 21, T2N, R93W

Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Veach Gulch, Red Elephant Point

Company Information

Mine Operator Northern Coal Co.  
Address 740 S. Colo. Blvd. Suite 200, Denver, CO  
Contacts \_\_\_\_\_ Telephone 753-8669  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status Idle Start-up Date 1979  
No. of Employees 7  
No. of Acres in Permit 7860 in leased lands (4 mines)  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private \_\_\_\_\_

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) FF

Coal Thickness(es) 9' average

Dip of Bedding 12° to 18° NW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	FF			
Heat value (BTU/lb)	10,373			
Sulfur(%)	.33			
Moisture(%)	18.07			
Ash(%)	4.76			
F.S.I.				
H.G.I.				
Rank of Coal	Sub bit.			
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 5,800 tons (5/31/81) no production in June  
 1980 Annual Production 63,079 tons  
 1985 Projected Production  
 Cumulative Production Thru 6/81 12,044 tons  
 Reserves/Est. Life 6,646,683 tons recoverable/15.7 mm tons in place  
 Sales: Out of State(%) if reopened - will be out of state  
       Where  
       To Whom  
       In State(%)  
       Where  
       To Whom  
 Transportation Type truck to rail  
 Coal Available for Domestic Use some

Additional Information and Comments

Coal different quality - low ash fusion  
 Will reopen if have buyers

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Mine Name Northern No. 2  
M.L.R.B. Permit No. C-032-81  
Map No. 51

Location Information

County Rio Blanco  
Location (Sec., T., R.) NE 1/4, SE 1/4, Sec. 21, T2N, R93W

Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Veach

Company Information

Mine Operator Northern Coal Co.  
Address 740 S. Colorado Blvd., Suite 200, Denver, CO  
Contacts \_\_\_\_\_ Telephone 753-8669  
Parent Company Northern Coal Co.  
Address 740 S. Colorado Blvd., Suite 200, Denver, CO  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method room & pillar & longwall  
Mine Status permit stage Start-up Date 1982 or 1983  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 7860 in leased lands (4 mines)  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private \_\_\_\_\_

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) P

Coal Thickness(es) 9' average

Dip of Bedding 12° to 18° NW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_



Mine Name Northern No. 3  
M.L.R.B. Permit No. C-032-81  
Map No. 52

Location Information

County Rio Blanco  
Location (Sec., T., R.) NE 1/4, SE 1/4, Sec. 21, T2N, R93W

Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Ninemile Gap

Company Information

Mine Operator (same as parent)  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_  
Parent Company Northern Coal Co.  
Address 740 S. Colorado Blvd., Suite 200, Denver, CO  
Contacts \_\_\_\_\_ Telephone 753-8603

General Information

Mine Type underground Mining Method room & pillar, longwall  
Mine Status in permit stage Start-up Date 1982 or 1983  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 7,860 in leased lands (4 mines)  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private \_\_\_\_\_

Geologic Information

Geologic Unit Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) P  
Coal Thickness(es) 14' average  
Dip of Bedding 12°-18°NW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	J			
Heat value (BTU/lb)	11,356			
Sulfur(%)	.45			
Moisture(%)	12.95			
Ash(%)	3.91			
F.S.I.				
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	none
1980 Annual Production	none
1985 Projected Production	
Cumulative Production Thru 6/81	
Reserves/Est. Life	34,458,225 tons (26 years) recoverable/113.1 mm tons in place
Sales: Out of State(%)	
Where	
To Whom	
In State(%)	
Where	
To Whom	
Transportation Type	truck to rail loadout
Coal Available for Domestic Use	yes - locally

Additional Information and Comments

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Mine Name Rienau No. 2  
M.L.R.B. Permit No. C-032-81  
Map No. 53

Location Information

County Rio Blanco  
Location (Sec., T., R.) sec. 29, T2N, R93W

Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Rattlesnake Mesa

Company Information

Mine Operator Northern Coal Co.  
Address P.O. Box 2140, Meeker, CO  
Contacts Tim Nunn/Rich Skvarch Telephone \_\_\_\_\_  
Parent Company Northern Coal Co.  
Address 740 S. Colo. Blvd., Suite 200, Denver, CO  
Contacts Mr. Spangleburg Telephone 753-8603

General Information

Mine Type underground Mining Method room & pillar, continuous  
Mine Status producing Start-up Date 1965  
No. of Employees 80  
No. of Acres in Permit 7860 in leased lands (4 mines)  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal \_\_\_\_\_ Private \_\_\_\_\_

Geologic Information

Geologic Unit Mesaverde Group Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) G

Coal Thickness(es) 13.1'

Dip of Bedding 20°N Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	G			
Heat value (BTU/lb)	11,055			
Sulfur(%)	.42			
Moisture(%)	11.64			
Ash(%)	7.42			
F.S.I.	_____			
H.G.I.	_____			
Rank of Coal	HvC bit.			
Use of Coal	_____			
Methane Emissions	_____			

<u>Coal Production</u>	
1981 Production Thru 6/81	78,884 tons
1980 Annual Production	144,815 tons
1985 Projected Production	_____
Cumulative Production Thru 6/81	391,786 tons
Reserves/Est. Life	76.8 mm tons in place/25.99 mm tons recoverable
Sales: Out of State(%)	100%
Where	exported
To Whom	_____
In State(%)	_____
Where	_____
To Whom	_____
Transportation Type	truck to rail loadout
Coal Available for Domestic Use	yes - only to local area

Additional Information and Comments

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Mine Name Sulphur Creek  
M.L.R.B. Permit No. C-027-81  
Map No. 54

Location Information

County Rio Blanco  
Location (Sec., T., R.) part of Sec. 10 T1N R94W

Coal Region Uinta Field Danforth Hills  
Topographic Quadrangle (7 1/2') Meeker

Company Information

Mine Operator Sulphur Creek Mine, Inc.  
Address Box 130, Meeker, CO 81641  
Contacts Roger Patel Telephone 878-9931  
Parent Company William H. Lackey and Assoc., Inc.  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type Underground Mining Method Room & Pillar, blast & haul out  
Mine Status Idle Start-up Date ?  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 7.28 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Williams Fk. & Iles Fm. Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Fairfield, Major & Sulphur Creek  
Coal Thickness(es) Fairfield: 6.9'-12' / Major: 5-10';  
Sulphur Creek: 5.5'-6.5'  
Dip of Bedding 17°NW Strike of Bedding N11°E  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
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Bed or Seam	Unknown			
Heat value (BTU/lb)	9,900-10,650			
Sulfur(%)	.5-.7			
Moisture(%)	11.2-11.5			
Ash(%)	7.8-12.8			
F.S.I.	0			
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81 none

1980 Annual Production none

1985 Projected Production \_\_\_\_\_

Cumulative Production Thru 6/81 \_\_\_\_\_

Reserves/Est. Life 15.5 m. tons. Life - 10 years

Sales: Out of State(%) \_\_\_\_\_

Where \_\_\_\_\_

To Whom \_\_\_\_\_

In State(%) \_\_\_\_\_

Where \_\_\_\_\_

To Whom \_\_\_\_\_

Transportation Type rail

Coal Available for Domestic Use \_\_\_\_\_

Additional Information and Comments

Coal Quality As Rec'd. \_\_\_\_\_

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Mine Name Apex No. 2  
M.L.R.B. Permit No. C-011-81  
Map No. 55

Location Information

County Routt  
Location (Sec., T., R.) portions of Sec. 21 & 22; T4N, R86W

Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Rattlesnake Butte

Company Information

Mine Operator Sunland Mining Corp.  
Address P.O. Box 55, Oak Creek, CO 80467  
Contacts David R. Canning (V.P.) Telephone 736-8181  
Parent Company \_\_\_\_\_  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type underground Mining Method Room & Pillar/continuous  
Mine Status Idle Start-up Date 1965  
No. of Employees 12  
No. of Acres in Permit 240 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private \_\_\_\_\_

Geologic Information

Geologic Unit Iles Fm (Lower Mesaverde) Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Lower Pinnacle

Coal Thickness(es) 4'

Dip of Bedding 7° Strike of Bedding N50W  
Overburden Thickness(es) 450'

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	As Rec'd	Dry		
	Lower Pinnacle			
Heat value (BTU/lb)	11,758	12,894		
Sulfur(%)	0.6	0.7		
Moisture(%)	8.8			
Ash(%)	6.82	7.48		
F.S.I.	1			
H.G.I.	38.1			
Rank of Coal	bit.			
Use of Coal	steam			
Methane Emissions				

Coal Production

1981 Production Thru 6/81	1,637 tons
1980 Annual Production	4,257 tons
1985 Projected Production	
Cumulative Production Thru 6/81	165,567
Reserves/Est. Life	1,222,000 tons
Sales: Out of State(%)	
Where	
To Whom	
In State(%)	99% - 1980
Where	
To Whom	
Transportation Type	customer's trucks
Coal Available for Domestic Use	yes

Additional Information and Comments

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Mine Name Edna Strip  
M.L.R.B. Permit No. C-001-80  
Map No. 56

Location Information

County Routt  
Location (Sec., T., R.) Portions of Sec. 19, 30, 31, T5N, R85W; portions of Sec. 36, T5N, R86W; portions of Sec. 7, 18, 19 T4N, R85W; (see Addit. Info.)  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Oak Creek, Rattlesnake Butte, & Cow Creek

Company Information

Mine Operator Pittsburg & Midway Coal  
Address P.O. Box 176, Oak Creek, CO 80457  
Contacts John Hinton-Denver-750-3505 Telephone Mr. F.H. Haller-Oak Creek-736-8111  
Parent Company Gulf Oil Corp.  
Address 1720 So. Bellaire St., Denver, CO 80222  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1945  
No. of Employees 97  
No. of Acres in Permit 4360 acres  
Surface: Federal \_\_\_\_\_ Private \_\_\_\_\_  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Williams Fork Fm. Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Lennox, Wadge & Wolfcreek  
Coal Thickness(es) Lennox - 3-4'; Wadge - 5-11'; Wolfcreek - 13.5'  
mining Wadge only  
Dip of Bedding about 8-14°W-NW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) Lennox - 0-50'; Wadge - 0-90'; Wolfcreek - 0-200+'  
Interburden Thickness(es) Lennox-Wadge: 35-40'  
Wadge-Wolfcreek: about 100'

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam  
Heat value (BTU/lb)  
Sulfur(%)  
Moisture(%)  
Ash(%)  
F.S.I.  
H.G.I.  
Rank of Coal  
Use of Coal  
Methane Emissions

C O N F I D E N T I A L

Coal Production  
1981 Production Thru 6/81 488,868  
1980 Annual Production 1,026,389  
1985 Projected Production plan to continue at present level of 1.1 MT/year  
Cumulative Production Thru 6/81 18,024,587  
Reserves/Est. Life  
Sales: Out of State(%) yes, no breakdown  
    Where  
    To Whom  
    In State(%) yes  
    Where  
    To Whom  
Transportation Type railroad  
Coal Available for Domestic Use no

Additional Information and Comments

portions of Sec. 12, 13, 14, 23, 24, 25, T4N R86W

Mine Name Energy No. 1  
M.L.R.B. Permit No. 79-177  
Map No. 57

Location Information

County Routt  
Location (Sec., T., R.) Sec. 7, 8, 9, 10, 16, 17, 18, 19, 24, 30, T4N R86W  
Sec. 12, 13, 14, 23, 24, 25, 26, T4N R87W, Sec. 19, 20, 21, 28, 29, 30, 31,  
32, 33, 34, T5N R86W, Sec. 24, 25, 36, T5N R87W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Mt. Harris, Milner, Dunckly & Rattlesnake Butte

Company Information

Mine Operator Getty Mineral Resources Company  
Address P.O. Box 772129, Steamboat Springs, CO 80477  
Contacts Gary W. Myers/Jim Cooper Telephone 879-3800  
Parent Company Getty Oil Company  
Address \_\_\_\_\_  
Contacts J.D. Spaulding Telephone 213/739-2733

General Information

Mine Type surface Mining Method strip-dragline  
Mine Status producing Start-up Date 1962  
No. of Employees 267  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal  Private   
Mineral: Federal  Private

Geologic Information

Geologic Unit Williams Fork Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Wadge Seam  
Coal Thickness(es) 7-11'  
Dip of Bedding 5°+ Strike of Bedding N5°W  
Overburden Thickness(es) 0-140'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Wadge	Wadge		
Heat value (BTU/lb)	11321	11282		
Sulfur(%)	.41	.40		
Moisture(%)	10.64	10.50		
Ash(%)	6.64	7.68		
F.S.I.	--	--		
H.G.I.	--	--		
Rank of Coal	sub bit.	sub bit.		
Use of Coal	steam	steam		
Methane Emissions	none	none		

#### Coal Production

1981 Production Thru 6/81	1,729,354
1980 Annual Production	3,337,611
1985 Projected Production	N/A
Cumulative Production Thru 6/81	22,587,951
Reserves/Est. Life	Confidential
Sales: Out of State(%)	33%
Where	Decatur, Illinois
To Whom	Illinois Power Company
In State(%)	67%
Where	Denver, CO
To Whom	Public Service Company of Colorado
Transportation Type	rail spur from Milner, Colorado
Coal Available for Domestic Use	no

#### Additional Information and Comments

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Mine Name Energy No. 2  
M.L.R.B. Permit No. 79-177  
Map No. 58

Location Information

County Routt  
Location (Sec., T., R.) Sec. 7,8,9,10,16,17,18,19,24,30 T4N R86W, Sec. 12, 13,14,23,24,25,26,T4N R87W, Sec. 19,20,21,28,29,30,31,32,33,34,T5N, R86W, Sec. 24,25,36 T5N R87W  
Coal Region Green River Field Yampa Coal Field  
Topographic Quadrangle (7 1/2') Mt. Harris, Milner, Dunckley, and Rattlesnake Butte

Company Information

Mine Operator Getty Mineral Resources Company  
Address P.O. Box 772129, Steamboat Springs, CO 80477  
Contacts Gary W. Myers/Jim Cooper Telephone 879-3800  
Parent Company Getty Oil Company  
Address \_\_\_\_\_  
Contacts J.D. Spaulding Telephone 213/739-2733

General Information

Mine Type surface Mining Method strip-dragline  
Mine Status Idle Start-up Date 1972  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit \_\_\_\_\_  
Surface: Federal  Private   
Mineral: Federal  Private

Geologic Information

Geologic Unit Williams Fork Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Fish Creek Seam  
Coal Thickness(es) 3-4'  
Dip of Bedding 5°+ Strike of Bedding N5°W  
Overburden Thickness(es) 0-80'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Fish Creek	Fish Creek		
Heat value (BTU/lb)	11,342	10,618		
Sulfur(%)	.53	.41		
Moisture(%)	13.86	15.68		
Ash(%)	9.92	4.13		
F.S.I.	--	--		
H.G.I.	--	--		
Rank of Coal	Sub. Bit.	Sub. Bit.		
Use of Coal	Steam	Steam		
Methane Emissions	None	None		

### Coal Production

1981 Production Thru 6/81 none

1980 Annual Production none

1985 Projected Production none

Cumulative Production Thru 6/81 4,366,028

Reserves/Est. Life Confidential

Sales: Out of State(%) 33% (when producing)

Where Decatur, IL

To Whom Illinois Power Company

In State(%) 67%

Where Denver, CO

To Whom Public Service of Colorado

Transportation Type rail

Coal Available for Domestic Use No

### Additional Information and Comments

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Mine Name Energy No. 3  
M.L.R.B. Permit No. C-036-81  
Map No. 59

Location Information

County Routt  
Location (Sec., T., R.) portions of Sec. 1, 2, 12, 13, 24, T5N, R86W  
portions of Sec. 18 & 19, T5N, R85W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Cow Creek

Company Information

Mine Operator Getty Mineral Resources Company  
Address P.O. Box 772129, Steamboat Springs, CO 80477  
Contacts Gary W. Myers/Jim Cooper Telephone 879-3800  
Parent Company Getty Oil Company  
Address \_\_\_\_\_  
Contacts J.D. Spaulding Telephone 213/739-2733

General Information

Mine Type surface & underground Mining Method Strip/Continuous  
Room & Pillar  
Mine Status idle Start-up Date 1975  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 1860 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Mesaverde Group Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Wadge  
Coal Thickness(es) 7-10'  
Dip of Bedding 8-14°W Strike of Bedding N5°W  
Overburden Thickness(es) 0-100' for surface mine  
100-800' for underground mine  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam	Wadge
Heat value (BTU/lb)	11000
Sulfur(%)	0.5
Moisture(%)	10.0
Ash(%)	6.5
F.S.I.	
H.G.I.	
Rank of Coal	sub-bit.
Use of Coal	Steam
Methane Emissions	None

Coal Production

1981 Production Thru 6/81 none

1980 Annual Production 270,312 tons

1985 Projected Production N/A

Cumulative Production Thru 6/81 2,441,988

Reserves/Est. Life confidential

Sales: Out of State(%) 33%

      Where Decatur, IL

      To Whom Illinois Power Co.

      In State(%) 67%

      Where Denver CO

      To Whom Public Service Company of Colorado

Transportation Type rail spur from Milner

Coal Available for Domestic Use No

Additional Information and Comments

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Mine Name Grassy Creek Coal Mine No. 1  
M.L.R.B. Permit No. C-039-81  
Map No. 60

Location Information

County Routt  
Location (Sec., T., R.) portions of: sec. 20, 21, 28, 29, 31 & 32,  
T5N, R87W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Mount Harris & Dunckley

Company Information

Mine Operator The Rockcastle Company  
Address P.O. Box AA, Hayden, CO 81639  
Contacts Wm. Heiden Telephone 203-879-7110  
Parent Company Rockcastle Company  
Address P.O. Box 1038, Janesville, WI 53545  
Contacts \_\_\_\_\_ Telephone (608) 754-2291

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1978  
No. of Employees 20  
No. of Acres in Permit 962.3 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Iles Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Pinnacle & Blacksmith

Coal Thickness(es) Pinnacle: 6-7'

Dip of Bedding 14-16°N Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_

Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Pinnacle	Blacksmith		
Heat value (BTU/lb)	11,000-11,800	11,465		
Sulfur(%)	.5-.6	.4-.7		
Moisture(%)	10.0-12.0	10.5		
Ash(%)	5.0-7.0	4.0-7.0		
F.S.I.	--	--		
H.G.I.	--	--		
Rank of Coal	--	--		
Use of Coal	--	--		
Methane Emissions	--	--		

Coal Production

1981 Production Thru 6/81 117,166 tons

1980 Annual Production 227,386

1985 Projected Production 200,000+ tons/year

Cumulative Production Thru 6/81 488,955

Reserves/Est. Life

Sales: Out of State(%) 2%

Where various locations in the Midwest

To Whom various buyers

In State(%) 98%

Where Golden

To Whom Coors

Transportation Type rail

Coal Available for Domestic Use yes

Additional Information and Comments

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Mine Name Hayden Gulch  
M.L.R.B. Permit No. C-003-80  
Map No. 61

Location Information

County Routt  
Location (Sec., T., R.) portions of: sec. 30 & 31, T5N, R88W,  
portions of: sec. 10, 14, 15, 22, 23, T6N, R88W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Hayden Gulch & Hayden

Company Information

Mine Operator H.G. Coal Co.  
Address 5731 State Highway #13, Meeker, CO 81641  
Contacts Mr. E.K. Olsen Telephone 824-4451  
Parent Company W.R. Grace & Co.  
Address 3400 First Intl. Bldg Dallas, TX 75270  
Contacts T. R. Fowler Telephone (214)658-1053

General Information

Mine Type surface Mining Method strip  
Mine Status producing Start-up Date 1979  
No. of Employees 73  
No. of Acres in Permit 1272 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Williams Fork Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) 5 beds  
Coal Thickness(es) 22' total  
Dip of Bedding 5°NE Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 9-50'  
Interburden Thickness(es) \_\_\_\_\_

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	composite average			
Heat value (BTU/lb)	9,978			
Sulfur(%)	.43			
Moisture(%)	17.5			
Ash(%)	6.24			
F.S.I.	--			
H.G.I.	--			
Rank of Coal	Sub. bit.			
Use of Coal				
Methane Emissions				

Coal Production

1981 Production Thru 6/81	301,679 tons
1980 Annual Production	552,626 tons
1985 Projected Production	to 850,000 tons a year
Cumulative Production Thru 6/81	1,233,140
Reserves/Est. Life	7-10 m tons (strippable)
Sales: Out of State(%)	80%
Where	Texas & Midwest - Gulf Area
To Whom	
In State(%)	
Where	
To Whom	
Transportation Type	trucks
Coal Available for Domestic Use	yes - 20%

Additional Information and Comments

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Mine Name Meadows No. 1  
M.L.R.B. Permit No. C-029-81  
Map No. 62

Location Information

County Routt  
Location (Sec., T., R.) portions of: sec. 11, 14, 23, 24, 25, 26,  
T6N, R87W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Milner

Company Information

Mine Operator Sun Coal Co.  
Address P.O. Box 26, Milner, CO 80477  
Contacts \_\_\_\_\_ Telephone 276-3746  
Parent Company Sun Coal Co.  
Address 1536 Cole Blvd., Golden, CO 80401  
Contacts Rick Chilton Telephone 233-5284

General Information

Mine Type surface Mining Method scrapers and dozers  
Mine Status idle Start-up Date 1977  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 199 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Iles Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Pinnacle  
Coal Thickness(es) 6.7-8.5'  
Dip of Bedding 18% WNW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 40-50'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam                      Pinnacle  
 Heat value (BTU/lb)              11,145-11,190  
 Sulfur(%)                      .39-.47  
 Moisture(%)                      12.18-13.07  
 Ash(%)                      4.54-5.06  
 F.S.I.                      \_\_\_\_\_  
 H.G.I.                      \_\_\_\_\_  
 Rank of Coal                      HVC bit.  
 Use of Coal                      \_\_\_\_\_  
 Methane Emissions                \_\_\_\_\_

Coal Production

1981 Production Thru 6/81      9,156 tons  
 1980 Annual Production        27,940  
 1985 Projected Production      \_\_\_\_\_  
 Cumulative Production Thru 6/81 508,847  
 Reserves/Est. Life              140,000 tons (2 years)  
 Sales: Out of State(%)        100%  
       Where \_\_\_\_\_  
       To Whom \_\_\_\_\_  
       In State(%) \_\_\_\_\_  
       Where \_\_\_\_\_  
       To Whom \_\_\_\_\_  
 Transportation Type              rail  
 Coal Available for Domestic Use    some

Additional Information and Comments

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Mine Name Seneca II  
M.L.R.B. Permit No. C-005-80  
Map No. 63

Location Information

County Routt  
Location (Sec., T., R.) portions of: sec. 27, 34, 35, 36; T6N, R87W  
portions of: sec. 1, 2, 3, 11, 12, 13; T5N, R87W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Milner, Mt. Harris

Company Information

Mine Operator Seneca Coals, Ltd.  
Address 12015 E. 46th Ave., Suite 600, Denver, CO 80239  
Contacts Thomas J. Wainwright Telephone 371-7990  
Parent Company Western Utility Corp./Peabody Coal (joint venture)  
Address \_\_\_\_\_  
Contacts \_\_\_\_\_ Telephone \_\_\_\_\_

General Information

Mine Type surface Mining Method draglines  
Mine Status Producing Start-up Date 1968  
No. of Employees 89  
No. of Acres in Permit 3,375  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal X Private X

Geologic Information

Geologic Unit Lower Williams Fork Fm Geologic Age Upper Cretaceous  
Coal Zone(s) or Bed(s) Wolf Creek, Wadge, Lennox  
Coal Thickness(es) Wolf Creek : 16', Wadge : 9', Lennox : 4'  
Dip of Bedding 6° to 19° Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) \_\_\_\_\_  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Trout Creek No. 2  
M.L.R.B. Permit No. C-049-81  
Map No. 64

Location Information

County Routt  
Location (Sec., T., R.) portions of sec. 11, 14 & 23, T6N, R87W  
Coal Region Green River Field Yampa  
Topographic Quadrangle (7 1/2') Milner

Company Information

Mine Operator Sun Coal Co., Inc.  
Address P.O. Box 26, Milner, CO 80477  
Contacts \_\_\_\_\_ Telephone 276-3746  
Parent Company Sun Coal Co., Inc.  
Address 1536 Cole Blvd., Golden, CO 80401  
Contacts Rick Chilton Telephone 233-5284

General Information

Mine Type underground Mining Method room & pillar  
Mine Status in preparation Start-up Date mid 1982  
No. of Employees \_\_\_\_\_  
No. of Acres in Permit 7.5 acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Iles Fm Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) Blacksmith  
Coal Thickness(es) 6.4'  
Dip of Bedding 18% WNW Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 0-1500'  
Interburden Thickness(es) \_\_\_\_\_



Mine Name Coors Keensburg  
M.L.R.B. Permit No. C-028-81  
Map No. 65

Location Information

County Weld  
Location (Sec., T., R.) portions of: sec. 25, 26, 35 & 36, T3N, R64W

Coal Region Denver Field Boulder-Weld  
Topographic Quadrangle (7 1/2') Klug Ranch, Tampa

Company Information

Mine Operator Coors Energy Co.  
Address P.O. Box 359, Keenesburg, CO 80643  
Contacts John Nelson Telephone 659-8520  
Parent Company Adolph Coors Co.  
Address P.O. Box 467, Golden, CO 80401  
Contacts Louis Gaspar Telephone 278-7030

General Information

Mine Type surface Mining Method strip  
Mine Status in preparation Start-up Date Sept. 1981  
No. of Employees 37  
No. of Acres in Permit 1525+ acres  
Surface: Federal \_\_\_\_\_ Private X  
Mineral: Federal \_\_\_\_\_ Private X

Geologic Information

Geologic Unit Laramie Formation Geologic Age Cretaceous  
Coal Zone(s) or Bed(s) No. 7  
Coal Thickness(es) 2-8'  
Dip of Bedding \_\_\_\_\_ Strike of Bedding \_\_\_\_\_  
Overburden Thickness(es) 60-160'  
Interburden Thickness(es) \_\_\_\_\_

Coal Quality                      Sample 1                      Sample 2                      Sample 3                      Sample 4

Bed or Seam                      Average of  
Heat value (BTU/lb)              9 samples  
Sulfur(%)                      8,079  
Moisture(%)                      .37  
Ash(%)                            28.33  
F.S.I.                             7.68  
H.G.I.  
Rank of Coal  
Use of Coal  
Methane Emissions

Coal Production

1981 Production Thru 6/81       none  
1980 Annual Production           none  
1985 Projected Production       500,000 tons  
Cumulative Production Thru 6/81   none  
Reserves/Est. Life       20 years  
Sales: Out of State(%)  
      Where  
      To Whom  
      In State(%)       100%?  
      Where       Golden  
      To Whom       Coors Boiler Plant  
Transportation Type       truck  
Coal Available for Domestic Use

Additional Information and Comments

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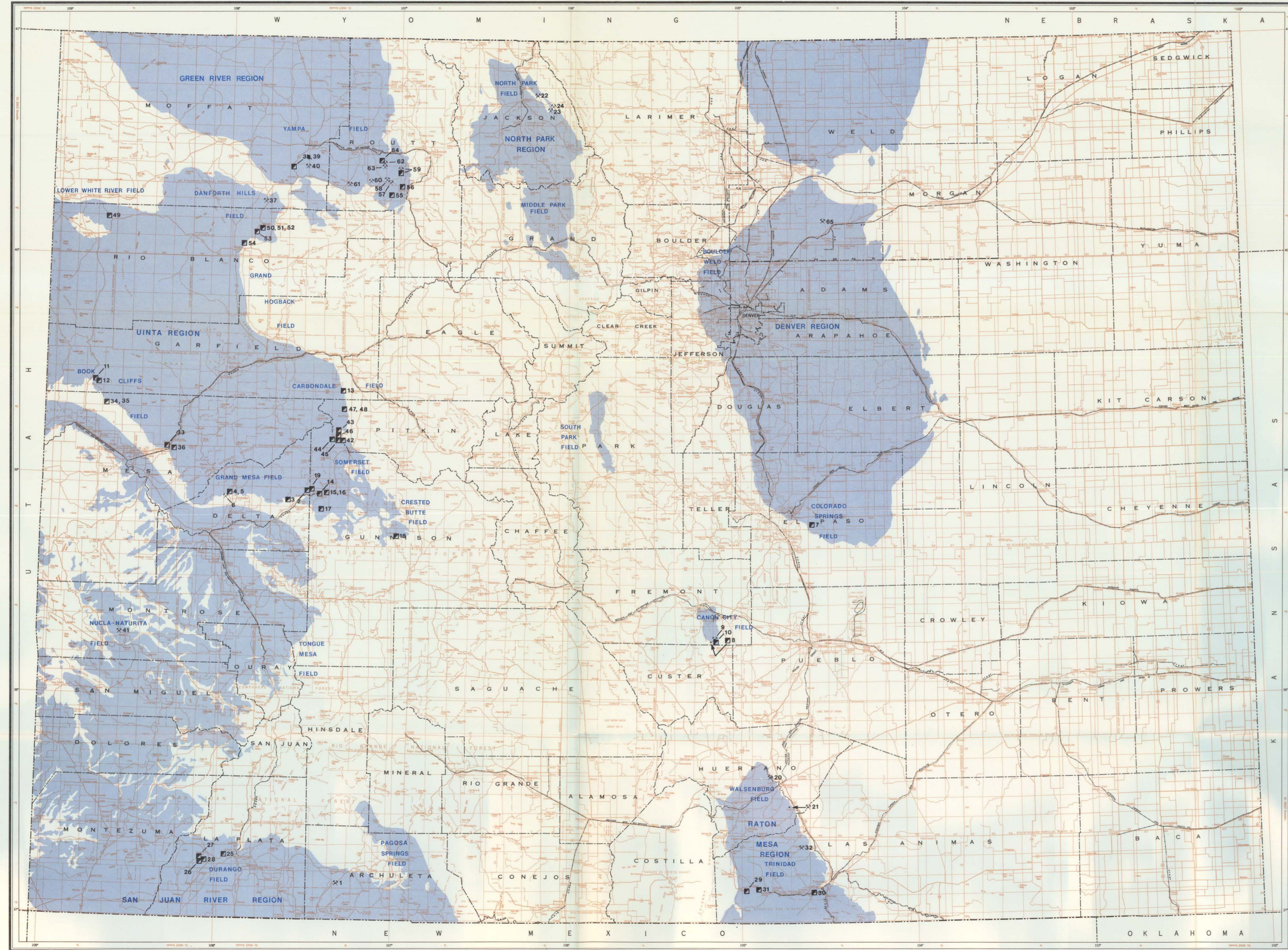
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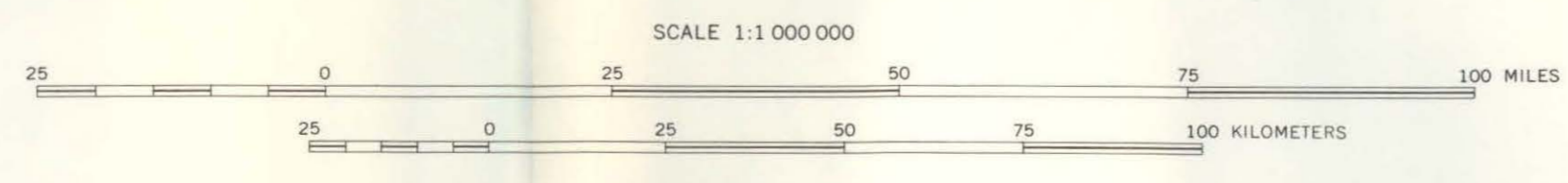
# MAP OF PERMITTED COAL MINES IN COLORADO AS OF AUGUST 1, 1981

Department of Natural Resources  
Colorado Geological Survey  
John W. Rold, Director

By Bruce S. Kelso, L.R. Ladwig, and Linda Sitowitz



BASE MAP FROM U.S.G.S.



- EXPLANATION**
- ☆ - Surface Mine
  - - Underground Mine
  - UINTA REGION** - Coal region name
  - SOMERSET FIELD** - Coal field name
  - Approximate coal region boundary
  - Railroads

### COAL MINE INFORMATION

- ARCHULETA**
- Chimney Rock Coal Strip, sec. 29,30,T33 1/2N,R4W,Fruitland Fm,Beds A,B,C,H+V bit/Production:1980: 8,424 st/1981 thru June: 87,897 st.
- DELTA**
- Blue Ribbon,sec.2T13S,R91W,Mesaverde Fm,Bed E bit/Production:1980: 97,013 st/1981 thru June: 63,617 st.
  - Orchard Valley,sec.7,12,13, " T13S,R92W,Mesaverde Grp.,Bed D,Production:1980: 761,824 st/1981 thru June: 469,783 st.
  - Red Canyon Mine #1,sec.2,11,12,T13S,R95W,Williams Fork Fm,Bed E,sub-bit/Production:1980: 93,257 st/1981 thru June: 47,313 st.
  - Red Canyon Mine #2,sec.2,11,12,T13S,R95W,Williams Fork Fm,Bed D,No production as of June 1981.
  - Tomahawk Strip,sec.10,15,16,T13S,R95W,Mesaverde Grp.,Beds A,C,D,E,F,sub-bit C/Production:1980: 24,076 st/1981 thru June: 41,002 st.
- EL PASO**
- Bacon Mine,sec.29,30,T14S,R64W,Laramie Fm,Beds A & B,sub-bit C/Production:1980: 38,778 st/1981 thru June: 3,579 st.
- FREMONT**
- Dorchester No. 1,sec.19,26,30,T20S,R69W,Vermejo Fm,Manly Vento Seams,bit/Production:1980: 76,574 st/1981 thru June: 79,364 st.
  - GEC Strip,sec.24,25,T20S,R70W,sec.19,30,T20S,R69W, Vermejo Fm,Beds D,E,G,K,H,C bit/Production:1980: 86,994 st/1981 thru May: 26,655 st.
  - Newlin Creek,sec.30,31,T20S,R69W,Vermejo Fm,Shamrock Seam,Production:1980: 102,591 st/1981 thru June: 44,065 st.
- GARFIELD**
- McClane Canyon,sec.15,16,21,22,T7S,R102W,Mt. Garfield Fm,Cameo Seams,HVC bit/Production:1980: 14,200 st/1981 thru June: 22,655 st.
  - Munger Canyon,sec.15,16,21,22,T7S,R102W,Mt. Garfield Fm,Cameo & Upper Carbonera Seams,HVC bit/Production:1980: None/1981 thru June: None.
  - Sunlight Mine,sec.33,34,T7S,R99W,Mesaverde Fm,Beds A,B,C,G,D, H+V bit/Production:1980: 1300 st/1981 thru May: 622 st.
- GUNNISON**
- Bear Mine,sec.9,16,17, " T13S,R90W,Mesaverde Grp.,Beds C,D,E,F,bit/Production:1980: 239,217 st/1981 thru June: 159,217 st.
  - Hawk's Nest East,sec.1-3, " T13S,R90W,Mesaverde Grp.,Bed E,H+V bit/Production:1980: 336,141 st/1981 thru May: 315,685 st.
  - Hawk's Nest West,sec.1-3, " T13S,R90W,Mesaverde Grp.,Bed E,H+V bit/Production:1980: 6,000 st/1981 thru May: 9,067 st.
  - Mt. Gunnison No. 1,sec.8,9,15, " T13,14S,R90W,Mesaverde Grp.,Bed F,bit/No production as of June 1981.
  - Ohio Creek Coal Mine No.2,sec. 15,16,T13S,R96W,Mesaverde Grp.,Bed C,HVC bit/Production:1980: 1,448 st/1981 thru June: 983 st.
  - Somerset,sec.34-36, " T12,13S,R90,91W,Bowie Mbr.,Bed B-2,HVC bit/Production:1980: 854,697 st/1981 thru June: 283,426 st.
- HUERFANO**
- Colorado Coal Mine No. 1,sec.25,36,T27S,R67W,Vermejo Fm,multiple beds/No production as of June 1981.
  - Viking Strip,sec.44,18,19,44,T29S,R65W,Vermejo Fm,multiple beds/Production:1980: 23,514 st/1981 thru June: 14,007 st.
- JACKSON**
- Bourg Mine,sec.7,18,T9N,R76W,Coalmont Fm,Lower & Upper beds/Production:1980: 4,000 st/1981 thru June: 44,796 st.
  - Canadian Strip,sec.2,10,11,T8N,R76W,Coalmont Fm,Sudduth Seam,sub-bit/Production:1980: 43,915 st/1981 thru June: 77,913 st/216,460 st.
  - Marr Strip,sec.15,22,23, " T9N,R76W,sec.2,T8N,R76W,Coalmont Fm,Sudduth Seam,sub-bit/Production:1980: 759,000 st/1981 thru June: LA PLATA
- LA PLATA**
- Coal Gulch,sec.15,16,20,22,T35N,R10W,Manitou Fm,Beds A-1,A-2,B-4,H+V or B bit/Production:1980: None/1981: None.
  - National King Mine,sec.29,31,32,T35N,R11W,Manitou Fm,Upper Bed,bit/Production:1980: 92,863 st/1981 thru June: 235,582 st.
  - Peacock Coal Mine,sec.29,T35N,R11W,Manitou Fm,Peerless Seam,bit/Production:1980: 656 st/1981 thru June: 215 st.
  - Shalako Mine,sec.27,28,T35N,R11W,Manitou Fm,Bed A,bit/No production as of June 1981.
- LAS ANIMAS**
- Allen Mine,sec.22 & 23,T33S,R66W,Raton Fm,Allen Seam,sub-bit/Production:1980: 561,727 st/1981 thru June: 291,214 st.
  - Helem Mine,sec.31,32,36,T33S,R64W,Vermejo & Raton Fm,Upper Starkville Seam,H+V bit/Production:1980: 11,742 st/1981 thru May: 153 st.
  - Maxwell Mine,sec.29,T33S,R67W,Raton Fm,Maxwell Seam,Production:1980: 200,959 st/1981 thru June: 121,126 st.
  - Trinidad Basin,sec.15,21,22,T31S,R65W,Raton Fm,Del Agua Seam,Production:1980: 67,757 st/1981 thru June: 32,345 st.
- MESA**
- Cameo No. 1 Mine,sec.20-23, " T10,11S,R89W,Mt. Garfield Fm,Cameo B Seam/Production:1980: 207,208 st/1981 thru June: 161,707 st.
  - Fruita Mine No. 1,sec.29,30,T8S,R101W,Mt. Garfield Fm,Cameo & Anchor Seams,bit/No production as of June 1981.
  - Fruita Mine No. 2,sec.29,30,T8S,R101W,Mt. Garfield Fm,Cameo & Anchor Seams,bit/Production:1980: 10,737 st/1981 thru May: 2,047 st.
  - Roadside Mine,sec.20-23, " T10,11S,R89W,Mt. Garfield Fm,Cameo B Seam,bit/Production:1980: 547,651 st/1981 thru June: 315,673 st.
- MOFFAT**
- Colowya Coal Mine,sec.13,22, " T3-4N,R93W,Williams Fork Fm,multiple beds,sub-bit A to HVC bit/Production:1980: 2,682,659 st/1981-June: 1,444,393 st.
  - Eagle No. 5,sec.31,32, " T5,6N,R91W,Williams Fork Fm,Beds C,E,F,F,sub-bit/Production:1980: 473,773 st/1981 thru June: 235,582 st.
  - Eagle No. 9,sec.31,32, " T5,6N,R91W,Williams Fork Fm,Beds C,E,F,F,sub-bit/Production:1980: 180,259 st/1981 thru June: 33,084 st.
  - Trapper Mine,sec.5,6, " T5,6N,R90,91W,Williams Fork Fm,Beds H,I,O,R,sub-bit/Production:1980: 2,014,376 st/1981 thru June: 1,092,105 st.
- MONTROSE**
- Nucla Strip,sec.25,31,36,T47N,R16W,Dakota Fm,Beds 1 & 2,bit/Production:1980: 92,068 st/1981 thru May: 28,323 st.
- PITKIN**
- Bear Creek,sec.31,32, " T8,9,10S,R89,90W,Williams Fork Fm,Bed B,Mv bit/Production:1980: 5,280 st/ No production in 1981.
  - Coal Basin Mine,sec.31,32, " T9,10S,R89,90W,Williams Fork Fm,Bed B,Mv bit/Production:1980: 130,278 st/1981 thru June: 69,553 st.
  - Dutch Creek #1,sec.31,32, " T9,10S,R89,90W,Mesaverde Grp.,Bed B,Mv bit/Production:1980: 156,533 st/1981 thru June: 45,386 st.
  - Dutch Creek #2,sec.31,32, " T9,10S,R89,90W,Williams Fork Fm,Bed B,Mv bit/Production:1980: 220,930 st/1981 thru June: 140,610 st.
  - L.S. Wood,sec.31,32, " T9,10S,R89,90W,Williams Fork Fm,Dutch Creek Seam,Mv bit/Production:1980: 181,144 st/1981 thru June: 120,472 st.
  - North Thompson Creek No.1,sec.31,35,T8S,R89W,Williams Fork Fm,Bed A,Production:1980: 40,555 st/1981 thru June: 10,665 st.
  - North Thompson Creek No.3,sec.31,35,T8S,R89W,Williams Fork Fm,Anderson Seam,Production:1980: 1,812 st/1981 thru June: 234 st.
- RIO BLANCO**
- Deserado Mine,sec.1-4, " T2,3N,R101W,Williams Fork Fm,Beds B,C,D,sub-bit/No production as of June 1981.
  - Northern No. 1,sec.21,T2N,R93W,Williams Fork Fm,Bed FF,sub-bit/Production:1980: 63,079 st/1981 thru May: 8,800 st.
  - Northern No. 2,sec.21,T2N,R93W,Williams Fork Fm,Bed P,No production as of June 1981.
  - Northern No. 3,sec.21,T2N,R93W,Williams Fork Fm,Bed J,No production as of June 1981.
  - Renaux No. 2,sec.29,T2N,R90W,Mesaverde Grp.,Bed G,Production:1980: 144,815 st/1981 thru June: 76,884 st.
  - Sulphur Creek,sec.10,T1N,R94W,Williams Fork & lies Fm,multiple beds/Production:1980: No production as of June 1981.
- ROUTT**
- Apex No. 2,sec.21,22,T4N,R86W,lies Fm,Lower Pinnacle/Production:1980: 4,257 st/1981 thru June: 1,637 st.
  - Edna Strip,sec.19,30,31, " T4,5N,R85,86W,Williams Fork Fm,multiple beds/Production:1980: 1,026,389 st/1981 thru June: 488,868 st.
  - Energy No. 1,sec.7-10, " T4,5N,R86,87W,Williams Fork Fm,Fish Creek Seams,sub-bit/Production:1980: 3,337,611 st/1981 thru June: 1,729,354 st.
  - Energy No. 2,sec.7-10, " T4,5N,R86,87W,Williams Fork Fm,Fish Creek Seams,sub-bit/Production:1980: None/1981 thru June: None.
  - Energy No. 3,sec.1,2,12, " T5N,R85,86W,Mesaverde Grp.,Wadge Seam,sub-bit/Production:1980: 270,312 st/1981 thru June: None.
  - Grassy Creek Coal Mine No. 1,sec.20,21,28, " T5N,R87W,lies Fm,multiple beds/Production:1980: 227,386 st/1981 thru June: 117,166 st.
  - Hayden Gulch,sec.30,31, " T5,6N,R88W,Williams Fork Fm,multiple beds,sub-bit/Production:1980: 552,626 st/1981 thru June: 301,679 st.
  - Meadows No. 1,sec.11,14,23, " T6N,R87W,lies Fm,Pinnacle Seam,HVC bit/Production:1980: 27,940 st/1981 thru June: 9,156 st.
  - Seneca II,sec.27,34-36, " T5,6N,R87W,Williams Fork Fm,multiple beds,bit/Production:1980: 1,778,916 st/1981 thru June: 575,193 st.
  - Trout Creek No. 2,sec.11,14,23,T6N,R87W,lies Fm,Blacksmith Seam,HVC bit/Not in production as of June 1981.
- WELD**
- Coors Keensburg,sec.25,26,35,36,T3N,R64W,Laramie Fm,Bed No. 7/No production as of June 1981.

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