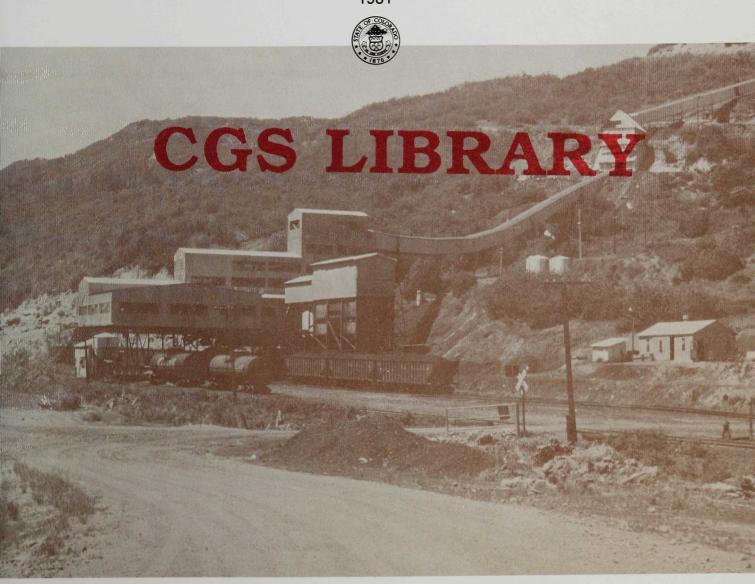
OF PERMITTED COLORADO COAL MINES, 1981

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

Colorado Geological Survey Department of Natural Resources Denver, Colorado 1981



COVER PHOTO: EDNA MINE TIPPLE, ROUTT COUNTY, COLORADO

MAP SERIES 15

DIRECTORY OF PERMITTED COLORADO COAL MINES, 1981

bу

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



Colorado Geological Survey Department of Natural Resources Denver, Colorado 80203

1981

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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.

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Mine Name <u>Chimney Rock Coal Strip</u>
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
Mine Operator Chimney Rock Coal Address P.O. Box 52A, Star Route, Pagosa Springs, CO 81147
Contacts Rade OrellTelephone 883-2293
Parent Company Perma Resources Corp.
Address 105 East Kiowa Suite 200 Colorado Springs, CO 80903
Contacts Dave Smaldone Telephone 475-7005
To repriend
General Information
Mine Type surface Mining Method strip
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
Miller at . Teder at
Geologic_Information
Geologic Unit Fruitland Fm. Geologic Age Upper Cretaceous
Geologic Unit Fruitland Fm. Geologic Age Upper Cretaceous Coal Zone(s) or Bed(s) A, B, & C
Coal Zone(s) or Ded(s) N, D, a c
Coal Thickness(es) A: 4-5' B: 11' C: 9'
Coal Interness(cs)
Dip of Bedding 12°NE Strike of Bedding N50°W
Overburden Thickness(es) over A: 74' others range 32.5'-130'
overburden internessively over it
Interburden Thickness(es) ranges: 6.7'-11.7'
111001 241 4011 111 4111 4011 4011

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	B 13244 .48 1.48 10.90	B 13230 .85 4.38 10.63 6 	C 11668 .44 5.93 18.00 5	
Coal Production 1981 Production Thru 1980 Annual Productio 1985 Projected Production Reserves/Est. Life 1 Sales: Out of State(Where 60% - To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	n 8,424 tor tion 600,000 Thru 6/81 2,472,000 tons %) 100% Arizona, 40% e	ns D tons 250,928 tons in place, 1,25 elsewhere	1,000 recoverabl	e
Additional Informatio	n and Comments	5		

Mine Name <u>Blue Ribbon</u>	
M.L.R.B. Permit No. C-047-81	
Map No. 2	
Location Information	
County Delta	
Location (Sec., T., R.) sec. 2, 1	F135 P91W
200 ac 1011 (3ec., 1., 1.) <u>3ec. 2, 1</u>	100, 1014
Coal Region Uinta	Field Somerset
Topographic Quadrangle (7 1/2') Bo	
	7.11.0
Company Information	
Mine Operator Blue Ribbon Coal Co	ompany
Address P.O. Box 58, Delta, CO 81	1416
Contacts Bruce Collins	Telephone 929-5911
Parent Company Western Associated	
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	Em. Geologic Age Cretaceous
Coal Zone(s) or Bed(s) E	Time deartogra rige
0001 2011c(3) 01 bcd(3)	
Coal Thickness(es) Average - 6'	**************************************
Dip of Bedding 3°-5°NE	Strike of Bedding N77°W
Overburden Thickness(es) 0-1500'	
,	
Interburden Thickness(es)	
· · · · · · · · · · · · · · · · · · ·	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	E 13,030 0.5 0.7 3.8 54 Bit. Steam Coal Limited			
To Whom_ In State(%) Where	n 97,013 to tion 200,000 Thru 6/81 .7 m tons %) at least 9 t and exported 5% stic heating contracts to rail	ons tons/year 317,762 tons 5% ustomers throug	gh brokers	
Additional Informatio	n and Comments			

Mine Name Orchard Valley	
M.L.R.B. Permit No. C-038-81	
Map No. 3	· · · · · · · · · · · · · · · · · · ·
<u>Location Information</u>	
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	
Coal Region Vinta	Field Somerset
Topographic Quadrangle (7 1/2') Gra	y Reservoir
Company Information Mine Operator Colorado Westmore Address P.O. Box E Paonia, CO 81428 Contacts Ronald Stucki Parent Company Westmoreland Coal Co. Address 9034 E. Easter Place Contacts Daniel J. Snyder III or Christopher K. Seglem	
General Information	
Mine Type underground	Mining Method continuous room & pillar
Mine Type underground Mine Status producing	Start-up Date 1976
No. of Employees 234	_
No. of Acres in Permit 1185.8 acre	28
	Private X
Mineral: Federal X	Private_X
Geologic Information Geologic Unit Mesaverde Group Coal Zone(s) or Bed(s) D	Geologic Age <u>Cretaceous</u>
Coal Thickness(es) 4-27'	· · · · · · · · · · · · · · · · · · ·
Dip of Bedding 2°-5° NNE	Strike of Bedding
Overburden Thickness(es) 450-1800	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam		CONFIDE	N T I A L	
Heat value (BTU/1b)				
Sulfur(%)				
Moisture(%)				
Ash(%)				
F.S.I. H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				
ricellane Lints310113				
Coal Production				
1981 Production Thru 6	5/81 469,78	3 tons		
1981 Production Thru 6 1980 Annual Production 1985 Projected Product	761,82	4 tons		
1985 Projected Product	ion 1,300,	000 tons		
cumulative production	inru b/81			
Reserves/Est. Life5	6.6 mt recove	rable reserves		
Sales: Out of State(%	%) 100% The state of the state			
<u>Where confide</u>	ential			
To Whom				
In State(%)			·	
Where		····		
To Whom Type	+			
Transportation Type Coal Available for Dom	train	<u> </u>	 	
coal Available for Doil	mestic use	110		
Additional Information	and Comment	\$		

line Name Red Canyon Mine #1
I.L.R.B. Permit No. <u>C-034-81</u> Jap No. 4
analina Tufu (1)
Ocation Information
County Delta ocation (Sec., T., R.) portions of sec. 2, 11, & 12; T13S, R95W
ocación (sec., i., k.) porcións di sec. 2, ii, a 12, iiss, kssw
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. /Fagle Mining Inc.
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 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 <u>Williams Fork Fm.</u> Geologic Age <u>Cretaceous</u>
Coal Zone(s) or Bed(s) E
Coal Thickness(es) E:4.9-7.5'
Codi inickness(es) E.4.5-7.5
Dip of Bedding about 5 1/2% Strike of Bedding S 85 E
Overburden Thickness(es) up to 700'
Interburden Thickness(es) <u>130' above D sea</u> m

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/lb) Sulfur(%)	E seam 10300 .44	E seam 10702 .47	E seam 10811 .45	E seam 10314 .51
Moisture(%) Ash(%) F.S.I.	17.41 8.36	12.48 9.75	11.39	15.76 9.34
H.G.I. Rank of Coal Use of Coal	4706.45% H ₂ Sub-bit.	0		
Methane Emissions				
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life_ 14 Sales: Out of State() Whereto the To Whom In State(%) Where To Whom Transportation Type Coal Available for Dog Additional Informatio	n 93,257 tion 350,000 Thru 6/81 2 4 years %) Westmore Japanese also some to truck to Del mestic Use	tons tons 11,538 tons land - who poss Delta ta	ibly sells	

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 Beddingabout 5 1/2%

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal	D seam 10,328 .51 8.40 16.41	D seam 10,565 .67 7.54 15.54	D seam 11,040 .65 9.76 9.82	D seam 11,051 .65 11.42 8.35
Use of Coal Methane Emissions				
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State(Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	n none ction 650,00 n Thru 6/81 10 years (%) truck to Deltomestic Use	a		

Tine Name Tomanawk Strip	
1.L.R.B. Permit No. <u>C-009-81</u>	
Map No. 6	
<u>cocation Information</u>	
CountyDelta	
Location (Sec., T., R.) portions of	: sec. 10, 15 & 16 T13S R95W
Coal Region <u>Uinta</u>	Field Grand Mesa
Topographic Quadrangle (7 1/2') <u>Hel</u>	l's Kitchen
Company Information	
Mine Operator Quinn Coal Co.	
Address P.O. Box 265 Eckert, CO 8	1418
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'
	Strike of Bedding
Overburden Thickness(es) 60'	
Interburden Thickness(es) 4-30' (A-	F)

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-F Composi 10,500 .60 13.12-14. .82 Sub-Bit. C.			
Coal Production 1981 Production Thru 1980 Annual Productio 1985 Projected Produc Cumulative Production Reserves/Est. Life Sales: Out of State(n 24,076 to tion .25 m t Thru 6/81 3 3 m tons %) 99% overs rail to coast	ns ons 19,377 tons eas - then boat	lly in winter	
Additional Informatio seams C-F being A mined a little B not at all		<u>s</u>		

Mine NameBacon 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
portrons or seed as a co, 1210, No.11
Coal Region Denver Field Colorado Springs
Topographic Quadrangle (7 1/2') Corral Bluffs
opographite quadrungic (/ 1/2) corrai biaris
Company Information
Mine OperatorNurseries Inc. of Wyoming
Address 1700 Old Engresyille Cool Mine Dood Colonede Springs CO 90000
Address 1790 Old Franceville Coal Mine Road, Colorado Springs, CO 80909 Contacts Telephone 683-2588
Contacts Telephone 683-2588 Parent Company Captsan Mining Co. Inc.
Parent Company Captsan Mining Co. Inc.
Address 1536 Cole Blvd., Suite 180, Golden, CO 80401
Contacts Rick Chilton Telephone 233-5284
<u>General Information</u>
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_ <u>Laramie Fm.</u> Geologic Age Upper Cretaceous
Coal Zone(s) or Bed(s) A & B
coal zone(3) of Dea(3) A a D
Coal Thickness(es) A: 9'-10' B: 1'-2'
coal intexhess(es) A. J-10 D. 1-2
Dip of Bedding 3°-5°NE Strike of Bedding N40°W
Overburden Thickness(es)
Intonhundon Thiolesco / co
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	Composite as rec'd 8,815 0.38 21.0 10.0 Sub-bit. C boiler fuel	Composite Dry 11,155 0.48 - 12.7		
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life M: Sales: Out of State(% Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Don Additional Information	1 38,778 tion 480,000 Thru 6/81 4 id 1986 - Nos %) 100 mestic Use	tons tons per year 2,357 confidential		

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.) KXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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'

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b)	Manley	Vento	Pine Gulch	Dirty Jack O'Lantern
Sulfur(%) Moisture(%)	.7	.4	. 5	.6
Ash(%) F.S.I.				
H.G.I.				
Rank of Coal Use of Coal	Bit Steam	Bit Steam	Bit Steam	Bit Steam
Methane Emissions				
Transportation Type raccoal Available for Dome	76,574 ion 500,000 Thru 6/81 16,517 reco) 43 Star Indus lorado rn Colorado ail loadout estic Use	tons* O tons (1982 Proj 178,847 tons* verable tries, Texas Indu Power, Kaisser C and truck no	stries ement, Martin M	Marietta Cement
Additional Information				
*Coal production rep Coal Quality on As	received Ba	sis		
Sales based on June	1981 figur	es		

Tine NameGEC_Strip	
M.L.R.B. Permit No. C-037-81	
Map No. 9	
Location Information	
County Fremont	
Location (Soc. T. D.) nontions of	24 9 25 T20C D70U
Location (Sec., T., R.) portions of	sec. 24 & 25, 1205, K/UW
Coal Region Canon City	sec. 19 & 30, T20S, R69W Field <u>Canon City</u>
Topographic Quadrangle (7 1/2') Ro	ckyalo
ropographic quadrangle (7 1/2) Ko	JK Va TE
<u>Company</u> Information	
Mine Operator GEC Minerals, Inc.	
Address P.O. Box 225, Florence, CO	81226
Address P.O. Box 225, Florence, CO Contacts L. K. Chen	Telephone 784-6891
Parent Company	
Address	
Contacts	Telephone
General Information	
Mine Type <u>surface</u> Mine Status <u>producing</u>	_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 Unit <u>Vermejo</u>	_Geologic Age <u>Upper Cretaceous</u>
Coal Zone(s) or $Bed(s)$ D , E , G , J , I	(
Coal Thickness(es) 2-4' each	
D: C D	
Dip of Bedding 2-5° WSW	_Strike of Bedding
Overburden Thickness(es) 100'	
Interhunden Thickness (as)	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Unknown 10,600 .4 11 10 HvC bit.			
To Whom In State(%) Where To Whom Transportation Type Coal Available for Don	n60,994 tionThru 6/81 27 20 m ton in p %) 30% Mexico 70%Truck_ nestic Use	tons 72,773 (Thru 5/3 Tace/10 m recove yes	31/81)	June)
Additional Information	n and Comments	<u>S</u>		

THE Name NEWITH CLEEK	
M.L.R.B. Permit No. C-045-81	
Map No10	
Location_Information	
County Fremont	C 20 0 21 T20C D60U
Location (Sec., T., R.) <u>portions o</u>	T Sec. 30 & 31, 1205, R09W
Coal Region Canon City	Field Canon City
Topographic Quadrangle (7 1/2') Ro	ckyalo
Topographic Quadrangle (7 1/2)	ckvare
Company Information	
Company Information	
Mine Operator Harrison Peltron	
Address P.O. Box 48 Florence, CO 81	226
Contacts	Telephone
Parent Company Harrison Peltron	
Address 1208 Quail St., Denver, CO	80215
Contacts Jim Irwin/Mike Bertoldi	Telephone 234-0273
THE THE DET COLUMN	Terephone <u>Lot object</u>
<u>General Information</u>	
Mine Tune undergreund	Minima Makhad anakina a / 0
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 AgeUpper Cretaceous
Coal Zone(s) or Bed(s) Shamrock	_deorogic Ageopper crecaceous
coal zone(s) of bed(s) shamrock	
Coal Thickness(es) 3-7'	
Codi inickness(es)	
Dip of Bedding 4°E	C+
	_Strike of Bedding
Overburden Thickness(es) 145'	
· · · · · · · · · · · · · · · · · · ·	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%)		CONFID	ENTIAL	
Moisture(%) Ash(%) F.S.I. H.G.I.				
Rank of Coal Use of Coal Methane Emissions				
Coal Production 1981 Production Thr 1980 Annual Product	u 6/81 44,069	5 tons		
1985 Projected Prod Cumulative Producti Reserves/Est. Life	uction 70,000 on Thru 6/81 1 confidential	to 400,000 tons 71,270		
Sales: Out of Stat Where To Whom In State(%)	90%			
Where Den To Whom Transportation Type Coal Available for	ver through to (rail - truck Domestic Use yo			
Additional Informat	ion and Comments	5		

mine Name McClane Canyon Exploract	UII SILE
M.L.R.B. Permit No. <u>C-004-80</u>	
Map No11	
Location Information	
County Garfield	
Location (Sec., T., R.) portions of	sec. 15, 16, 21 & 22, T7S, R102W
Location (occ., 1., K., portions of	
Coal Region Uinta	Field Book Cliffs
Topographic Quadrangle (7 1/2') Howa	ard Canyon
. opographic quadrangic (, =,= /	
Company Information	
Mine Operator Sheridan Enterprises,	Inc.
Address P.O. Box 1555 Grand Junctic	on, CO 81501
Contacts	Telephone 245-7931
Parent Company Sheridan Enterprises	5
Address 9745 E. Hampden Ave., Suite	e 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	
	Private
Mineral: Federal X	Private
Geologic Information	
Geologic Unit Mt. Garfield Fm.	Geologic Age Upper Cretaceous
Coal Zone(s) or Bed(s) Cameo	
0 1 7 1 1 1 7 00 1	
Coal Thickness(es) 17-22'	
Din of Dodding 20 NE	Strike of Bedding
Dip of Bedding 3% NE Overburden Thickness(es) 0-1000'	_Strike of Bedding
overburden inickness(es) 0-1000	
Interburden Thickness(es)	
THE DUILGE HITCKHESS (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	Cameo 9755-11666 .5 8.6 15.0 HvC bit.			
Coal Production 1981 Production Thru 1980 Annual Productio 1985 Projected Production Reserves/Est. Life 3 Sales: Out of State(n14,200 t tionThru 6/8189 69,500 tons %) 0 N F I D E Ntruck_to_rail mestic_Use	T I A L I no		

wine wame <u>Munger Canyon</u>	<u> </u>
M.L.R.B. Permit No. <u>C-020-81</u>	
Map No. 12	
Location Information	
County Garfield	
Location (Sec., T., R.) portions o	of sec. 15, 16, 21, 22, T7S, R102W
, , , , , , , , , , , , , , , , , , , ,	
Coal Region <u>Uinta</u>	Field Book Cliffs
Topographic Quadrangle (7 1/2')	loward Canvon
Company Information	
Mine Operator Sheridan Enterprises.	Inc
Address P.O. Box 1555 Grand Junctic	on CO 81501
Contacts	Telephone 245-7931
Parent Company Sheridan Enterprises	Inc.
Address 9745 E. Hampden Suite 350.	Denver, CO 80231
	Telephone 751-0093
Contacts Wm. Bosworth	refeptione/51-0093
0	
<u>General Information</u>	M
Mine Type <u>underground</u>	Mining Method <u>room & pillar</u>
Mine Status <u>idle</u>	Start-up Date 1977
No. of Employees	
No. of Acres in Permit 775 acres	
Surface: Federal X	PrivateX
Mineral: Federal X	Private
Geologic Information	
Geologic Unit Mt. Garfield Fm.	Geologic Age Upper Cretaceous
Coal Zone(s) or Bed(s) Cameo and Up	pper Carbonera
3000 0000000000000000000000000000000000	
Coal Thickness(es) Cameo: 5-26'; (Carbonera: 4-7
Dip of Bedding 2°NE	Strike of Bedding
Overburden Thickness(es) 0-1500'	
Overburden interness(es)	
Interburden Thickness(es)	
Tiller but dell Tiller liess (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	range - all seams3894 6.7-13.9 8.7-20.6 .5 to 1.5 45 to 50 HvC bit.			
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(% Where To Whom In State(%) Where To Whom Transportation Type r Coal Available for Dom Additional Information	none ion Thru 6/81 100, 61+ million to) C O N F I D E ail estic Use no	ns/30 years		
Addressonal Información	and comments			
		· · · · · · · · · · · · · · · · · · ·		

Tine Name Sunfight Mine	
M.L.R.B. Permit No. <u>C-046-81</u>	
Map No13	
ocation Information	
CountyGarfield	
Location (Sec., T., R.) portions o	f: sec. 33 & 34; T/S, R89W
Coal Region <u>Uinta</u>	Field Carbondale
Topographic Quadrangle (7 1/2') <u>Catt</u>	le Creek
Company Information	
Mine Operator <u>Black Rock Mining Co</u>	•
Address <u>1670 Broadway, Suite 3350</u>	, Denver, CO 80202
Address 1670 Broadway, Suite 3350 Contacts Pres. Ray Short	
Daront Lombanii	
Address	
AddressContacts	Telephone
<u>General Information</u>	
Mine Type <u>underground</u>	Mining Method <u>room & pillar</u> Start-up Date <u>1901</u>
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	<u> </u>
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)	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Unknown			
Heat value (BTU/1b)	12,610			
Sulfur(%)	1.5			
Moisture(%) Ash(%)	4.0			
F.S.I.	$\frac{6.0}{1.0}$			
H.G.I.	1.0		 	
Rank of Coal	HvB bit.	· · · · · · · · · · · · · · · · · · ·		
Use of Coal	steam			
Methane Emissions				
Where 70 Whom Transportation Type Coal Available for E	ion1300 tons uctionabout 50 on Thru 6/8130 million in e(%)	0,000 tons 177,462 place / 5 mill rvice Plant \$50.00/ton		ne
Additional Informati	ion and Comment:	<u>s</u>		
		-		
			······································	
				<u> </u>

Mine Name Bear Mine	
M.L.R.B. Permit No. <u>C-033-81</u>	
Map No. 14	
Location Information	
County Gunnison	
Location (Sec. T. R.) portions o	f: sec. 9, 16, 17, 20, 21; T13S, R90W
	1. 300. 3, 10, 17, 10, 11, 1100, 8308
Coal Region Uinta	Field Somerset
Topographic Quadrangle (7 1/2') S	omerset
sopographic data angle (7 1/2)	omer sec
Company Information	
Mine Operator Bear Coal Co., Inc.	
Address Somewhat CO 81/3/	
Address Somerset, CO 81434 Contacts William A. Bear	Telephone 929-5775
Danont Company	
Parent Company	
Address	
Contacts	Telephone
<u>General Information</u>	
Mine Type <u>underground</u>	_Mining Method <u>room & pillar</u> , continuous
Mine Status producing	Start-up Date 1934
No. of Employees 68	
No. of Acres in Permit 1360 acres	-
Surface: Federal X	Private
Mineral: Federal X	Private
Geologic Information	
Geologic Unit Mesaverde Group	_Geologic Age <u>Upper C</u> retaceous
Coal Zone(s) or Bed(s) C.D.E.F	_debrogic Ageopper crecaceous
out 2011c(3) of bed(3)	
Coal Thickness(es) C:1-8', D:0-7',	F:10-20' F:2-10'
0.1 0 ; b.0 7 ;	1.10-20 , 1.2-10
Dip of Bedding 3.5-6.25°NE	Strike of Rodding
Overburden Thickness(es) few hundre	d to 1400 ft
overbaraen inteknessies/	<u>u co 1700 C</u>
Interburden Thickness(es)	
Three but dell thrickliess (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 12639 0.57 6.12 6.55 bit.			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State(on 239,217 tion Thru 6/81 49 years %) bulk markets k east truck to rai	tons 3,973,881		
Additional Information	on and Comment	<u>s</u>		

line NameHawk's_Nest_East
1.L.R.B. Permit No. C-016-81
Map No. 15
<u>ocation Information</u>
County Gunnison
ocation (Sec., T., R.) portions of sec. 1, 2, 3, 10, 11, 12, T13S R90W
100 K30W
Coal Region Uinta Field Somerset
Topographic Quadrangle (7 1/2') Somerset
sopographic quadrangle (1 1/2) Somerset
^ompany Information
Company Information
Mine Operator Hawk's Nest Mine
Address Somerset, CO 81434 Contacts Tom Muncy/Tony Durando Telephone 929-5815
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 <u>John Mason</u> Telephoné (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
rrivate x
Coologic Information
Geologic Information
Geologic Unit <u>Bowie & Paonia Mbr, Mesaverde G</u> eologic Age <u>Cretaceous</u>
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: 4'7-12+' Dip of Bedding 3.5° Strike of Bedding
Dip of Bedding 3.5° Strike of Bedding
Overburden Thickness(es)to 2200'
Interburden Thickness(es)

Tine Name <u>Hawks Nest West</u>	
M.L.R.B. Permit No. <u>C-016-81</u>	
Map No16	
Location Information	
County Gunnison	
	Sec. 1, 2, 3, 10, 11, 12, T13S, R90W
Location (sec., 1., K.) portions of	Sec. 1, 2, 3, 10, 11, 12, 1133, K30W
Coal Region Uinta	Field Somerset
Tonognophic Our description (7.1/01)	
Topographic Quadrangle (7 1/2') <u>Som</u>	<u>ierset</u>
Company Information	
Mine Operator Hawk's Nest Mine	
Address Somerset, CO 81434	
Address Somerset, CO 81434 Contacts Tom Muncy / Tony Durando	Telephone 929-5815
Parent Company Western Slope Carbon	
Address 315 E. 200 South / P.O. Box	1526 Salt Lake City UT 84110
Contacts John Mason	Telephone (801) 534-3695
concacts outh Mason	Terephone (801) 334-3093
<u>General Information</u>	
Mine Type <u>undergr</u> ound	Mining Method continuous & longwall
Mine Status producing	Start-up Date 1970
No. of Employees 60	1
No. of Acres in Permit	–
Surface: Federal X	Private X
Mineral: Federal X	Private X
milleral. rederal x	_Frivate
01 : 7 6	
<u>Geologic Information</u>	
Geologic Unit <u>Bowie & Paonia Mbr.</u> -	<u>Mesaverde Geologic Age</u> 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', 5-10', E : 4'7"-12+
$C : 6-7' \cdot D : 6-14' \cdot Wild Seam : 5.5$	-10' F · 4'7"-12+
Dip of Bedding 3.5°	Strike of Bedding
Overburden Thickness(es) to 2200'	
Overburden Hitchiess/es/	
Interburden Thickness(es)	
Tureinning inickness(es)	

<u>Coal Quality</u>	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	E (raw) about 12,40 0.63 6-7% 8-12% 2.5 50 HvB bit. steam	0 (MAF: 14,500)		
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life E - Sales: Out of State(% Where Illinoi To Whom CILCO In State(%) Where To Whom Transportation Type t Coal Available for Don	6,000 to find 1-1.5 m Thru 6/81 9 MT, Wild 100% S & Japan D and Spot Sa	ons illion tons/yr 1,307,139 tons Seam - 10.3 MT,	(for 82, 83 and D - 11.1 MT	
Additional Information	and Comment	<u>S</u>		

Mine Name <u>Mt. Gunnison No. 1</u>	
M.L.R.B. Permit No. C-007-80	
Map No	,, , , , , , , , , , , , , , , , , , ,
Location Information	
County Gunnison	
location (Sec. T. R.) nortions of	f sec 8 9 15 16 17 18 19 20
21 27 28 29 30 31 32 33 T139	f sec. 8, 9, 15, 16, 17, 18, 19, 20, S, R90W; and portions of sec.
3, 4, 5, 8, 9, 10, 15, 16, 21, 22,	TIME DONA
Coal Region Uinta	Field Somerset
Topographic Quadrangle (7 1/2') So	amount and Minnesota Pacs
ropographic quadrangle (7 1/2)	omerset and rithnesota rass
Commonwell T. C	
Company Information	
Mine Operator Arco Coal Company	
Address	
Contacts	Telephone
Parent Company ARCO Coal Co. Address 555 17th St. P.O. Box 530	
Address 555 17th St. P.O. Box 530	00, 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 X	Private X
Mineral: Federal X	Private X
- A Contract of Co	
Geologic Information	
Geologic Unit Mesaverde	Goologie Age Chatanana
Coal Zone(s) or Bed(s) F	Geologic AgeCretaceous
coal zone(s) or bed(s)	
Cool Thickness(so) 7!	
Coal Thickness(es) 7'	
Din of Dodding 2 FO CU NE	Chail C D III
Dip of Bedding 3-5° SW - NE	Strike of Bedding
Overburden Thickness(es) 300-1200'	
<u> </u>	
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	F 11,600 <.5 Low			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves F seam - 26 Sales: Out of State(Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	none ction 1.3 m to Thru 6/81 no years - 77 mi (%)	tons		
Additional Information	on and Comments	5		

Mine Name Ohio Creek Coal Mine No. Z
M.L.R.B. Permit No. <u>C-002-80</u>
Map No
Location Information
County Gunnison 15 Tise 2001
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
Topographic Quadrangle (1 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
Contacts Bob Weaver Telephone 641-1560/641-0076 Parent Company
Address
Address
ContactsTelephone
Conount Information
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
<u>Geologic Information</u>
Geologic Unit Mesaverde Fm Geologic Age Cretaceous
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)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	not indicated 11840 0.6 9.7 5.4 0 HvC bit. domestic	No. 2 11580 .54 10.5 5.6		
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(5) Where To Whom In State(%) Where Soo To Whom dome Transportation Type Coal Available for Dome	n 1,448 tion about Thru 6/81 6 45 years %) 100 central Colo. estic market	tons 4,000 tons 8,069 tons	ested Butte area	
Additional Informatio	n and Comment	<u>s</u>		

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 portions of Sec. 1, 2, 3, 12, T13S,	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') Bow	1e & Somerset
Company Information Mine Operator U.S. Steel Address P.O. Box 1, Somerset, CO Contacts LLoyd Miller Parent Company U.S. Steel Mining Co Address P.O. Box 807, East Carbon, Contacts Paul Watson	Telephone 929-5115 mpany, Inc. Western District
General Information	Mining Mathad soutions of the continuous of the
Mine Type underground Mine Status producing	_Mining Method continuous, room & pillar Start-up Date 1903
No. of Employees	_3care-up bace
No. of Acres in Permit 160 acres	_
Surface: Federal X	Private X
Mineral: Federal X	Private X
Geologic Information Geologic Unit Bowie Member Coal Zone(s) or Bed(s) B - 2	_Geologic Age <u>Cretaceous</u>
Coal Thickness(es) 14'-21'	
Dip of Bedding 3-6°NE Overburden Thickness(es) 200-2000	_Strike of Bedding_ NW
Interburden Thickness(es)	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	B (range) 12,070-12,97 .53 3.8-8.2 8.6 HvC bit. coke yes - piped			
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(% Where Orem, To Whom U.S. In State(%) Where To Whom Transportation Type Coal Available for Dom Additional Information	854,697 ion Thru 6/81 28 20 million to) 100% Utah Steel train estic Use no	7 tons 3,058,969 ons		
	and comments			

Mine Name Colorado Coal Mine No. 1
M.L.R.B. Permit No. C-024-81
Map No. 20
<u>Location Information</u>
CountyHuerfano
Location (Sec., T., R.) <u>Sec. 25 & 36, T27S,</u> R67W
Coal Region Raton Field Walsenburg
Topographic Quadrangle (7 1/2') Walsenburg North and Huerfano Butte
Commons, T. C
Company Information
Mine Operator Colorado Coal Mining Co. Address P.O. Box 410, Walsenburg, CO 81089
Address P.O. Box 410, Walsenburg, CO 81089
ContactsTelephone_738-1831
Parent Company Colorado Coal Mining Co.
Address 105 E. Kiowa, Suite 200, Colorado Springs, CO 80903
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 UnitVermejo Fm Geologic Age Cretaceous
Coal Zone(s) or Bed(s) Lower Robinson, Pryor, Walsen, Lenox, Cameron
cour zone(3) or bed(3) zoner nobinson; riyor, warsen, zenox, cameron
Coal Thickness(es) 1.5-4.5'
0001 THTOKHOSS (CS) 110
Dip of Bedding 2-5° W - SW Strike of Bedding
Overburden Thickness(es) max. 200 feet
OVELDULACIT THICKHESS (ES) IIIAN. LOO LEEL
Interburden Thickness(es)
THE DULUE HITCHESS (CS)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	C O N F	IDENTIA	L	
Heat value (BTU/1b)				
Sulfur(%)				
Moisture(%)				
Ash(%)				
F.S.I.				
H.G.I.				
Rank of Coal	·····			
Use of Coal				
Methane Emissions				
Coal Production				
1981 Production Thru 6	5/81 none			
1980 Annual Production	none			
1985 Projected Product	ion			
Cumulative Production	Thru 6/81 n	one		_
Reserves/Est. Life3	32 m in place.	1.2 m recovera	able	
Sales: Out of State(%	100%	102 111 1 200721		
1.71	· ————————————————————————————————————			
To Whom				
In State(%)	·			
Where				
To Whom				
Transportation Type	wa i 1			
Coal Available for Dom	raii			
Coal Available for Doil	lestic use n	0		
Additional Information	and Commonts			
Addictonal intermactor	i and comments			
			· · · · · · · · · · · · · · · · · · ·	

Mine Name Viking Strip (Pryor Strip)
M.L.R.B. Permit No. C-031-81 Map No. 21
Trup 110.
Location Information
County <u>Huerfano</u>
Location (Sec., T., R.) portions of Sec. 18, 19, T29S, R65W, and
Sec. 13, 24, T29S, R66W
Coal Region <u>Raton</u> Field Walsenburg Topographic Quadrangle (7 1/2') Pryor
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
ContactsTelephone
<u>Ge</u> neral Information
Mine Type <u>surface</u> 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: FederalPrivateX
Geologic Information
Geologic Unit Vermejo Geologic Age Cretaceous Coal Zone(s) or Bed(s) Robinson, Walsen, Lenox, Cameron
coal zone(3) or bed(3) Robinson, warsen, 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'
The standard Third control of the COL W. COL W. COL W.
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 Heat value (BTU/lb) Sulfur(%) Moisture(%)	Cameron 13012 .89	? Lower 12772 1.01	? Lower 12493 .57 4.94	? Bottom 13226 .80 3.19
Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal	3.81 8.75	3.3 9.66	8.32	7.99
WhereTo WhomIn State(%) WhereTo WhomCon Transportation Type	n 23,514 tion depends Thru 6/81 %) 100% fidential truck and r	on market 103,545		
Coal Available for Do Additional Informatio	mestic Use	locally only		

the name bourg wife
1.L.R.B. Permit No. <u>C-021-81</u>
Map No22
<u>ocation Information</u>
County Jackson
Location (Sec., T., R.) S 1/2, SE 1/4, Sec. 7; N 1/2, NE 1/4, Sec. 18;
T9N, R78W
Cool Dogion Newth David
Coal Region North Park Field North Park
Topographic Quadrangle (7 1/2') Walden
<u>Company</u> Information
Mine Operator Walden Coal Co. Address P.O. Box 37, Walden, CO 80434
Address P.O. Box 37, Walden, CO 80434
Contacts Telephone
Parent CompanyFlatiron Companies
Address P.O. Box 229 Roulder CO 80302
Address P.O. Box 229, Boulder, CO 80302 Contacts Scott Patten Telephone 444-2151
contacts Scott Fatten Telephone 444-2131
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 Zone(s) or bed(s) Lower and opper
Coal Thickness(es) Lower: 25.5' / Upper: 16.5'
Coal Inickness(es) Lower: 25.5 / Opper. 10.5
C. C
Dip of Bedding 8°+ Strike of Bedding
Overburden Thickness(es) 0-140'
Interburden Thickness(es)80'

<u>Coal Quality</u>	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 Thre 1980 Annual Product 1985 Projected Production Cumulative Production Reserves/Est. Life Sales: Out of State Where To Whom In State(%) Where To Whom Transportation Type Coal Available for I	ion 4,000 uction 100,00 on Thru 6/81 Confidential e(%) 100% Laramie, WY	00 tons per yea 48,796		
Additional Informat	ion and Comments	<u>s</u>		

Mine Name Canadian Strip
1.L.R.B. Permit No. C-026-81
Map No. 23
ocation Information
County Jackson
ocation / Coc. T. D.) noutions of Coc. 2 10 11. TON D704
ocation (Sec., T., R.) portions of Sec. 2, 10, 11; T8N, R78W
Cool Dogion Nouth Doub
Coal Region North Park Field North Park Topographic Quadrangle (7 1/2') Gould NW and Johnny Moore Mtn.
topographic quadrangle (7 1/2) Gould NW and Johnny Moore Mth.
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
Address 12055 W. 2nd Place, P.O. Box 15265, Lakewood, CO 80215
Contacts Mike Kolin Telephone 989-1740
General Information
Mine Type <u>surface</u> Mining Method Open Pit Haulback
Mine Status <u>producing</u> 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
Deal and a To Commettee.
Geologic Information
Geologic Unit <u>Coalmont Fm</u> Geologic Age <u>Paleocene</u>
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)
· · · · · · · · · · · · · · · · · · ·

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	As received composite 10890 0.24 13.18 6.56			
Where To Whom Transportation Type Coal Available for Do	truck & rai	tons 0,567		
Additional Information	on and Comments			

Tille name mart strip	
M.L.R.B. Permit No. <u>C-006-80</u>	
Map No. 24	
· · · · · · · · · · · · · · · · · · ·	
<u>ocation</u> Information	
County Jackson	
ocation (Sec. T. R.) Sec. 15, 22	, 23, 25, 26, 35 T9N R78W; Sec 2 T8N
R78W	, 20, 20, 20, 30 13K K70K, 300 2 10K
Coal Region North Park	Field North Park
Topographic Quadrangle (7 1/2') Joh	
ropographic quadrangle (7 1/2) oon	my moore men.
Company Information	
Company Information	
Mine Operator <u>Kerr Coal Co.</u>	
Address <u>Box 773457, Steamboat Spr</u>	ings, CO _80477
Mine Operator <u>Kerr Coal Co.</u> Address <u>Box 773457, Steamboat Spr</u> Contacts <u>David Gossett</u>	Telephone 879-7310
Parent Company Kerr Coal Co.	
Parent Company <u>Kerr Coal Co.</u> Address <u>Suite 900 Three Park Central</u>	, 1515 Arapahoe, Denver, CO 80202
Contacts Brad Doores	Telephone 623-8317
	<u> </u>
<u>General</u> Information	
Mine Type surface	Mining Method bulldozers & scrapers
Mine Status producing	Start-up Date 1974
No of Employees 22	_Start-up Date1974
No. of Employees 23	
No. of Acres in Permit	
Surface: Federal	Private
Mineral: Federal	_PrivateX
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. 5	0')
0001 /// 0000 (///gr 0	
Dip of Bedding 6°	Strike of Bedding
Overburden Thickness(es) 230'	strike of beduing
overburden inickness(es) 230°	
T	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Sudduth3 11.12 10.64 sub. bit. steam			
Coal Production 1981 Production Thru 1980 Annual Producti 1985 Projected Produ Cumulative Productio Reserves/Est. Life Sales: Out of State Where confi To Whom In State(%) Where confi To Whom Transportation Type Coal Available for D Additional Informati	on 759,00 ction n Thru 6/81 3 confidential (%) 93% dential 7% dential rail - union omestic Use y	pacific		

Mine Name <u>Coal Gulch</u> M.L.R.B. Permit No. <u>C-042-81</u> Map No. <u>25</u>	
Location Information County La Plata Location (Sec., T., R.) Sec. 1 Coal Region San Juan River Topographic Quadrangle (7 1/2')	
Company Information Mine Operator Arness-McGriffin Address 1139 Main Ave., Durang Contacts Ken McGriffin, Consult Parent Company same as above Address	o, CO 81301 ant Telephone 259-1501
Contacts	Telephone
NO. OT Employees	Mining Method room & pillar Start-up Date 1977
No. of Acres in Permit 41 acre Surface: Federal Mineral: Federal	
Geologic Information Geologic Unit Menefee Fm Coal Zone(s) or Bed(s) A-1, A-	Geologic AgeCretaceous 2, B-4
Coal Thickness(es) A-1: 8', A-	2: 3', B-4: 6'
Dip of Bedding 4-5°S Overburden Thickness(es) 200-6	Strike of Bedding WSW
Interburden Thickness(es)	

<u>Coal Quality</u>	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	A-1 and B-4 13,500-14,00 0.4-0.8 3-8 4-9 3-6 HvA, HvB Bir metallurgica	t •		
To Whom	ionnone uctiondepends on Thru 6/81 40 million to e(%) truck to rail	on market 18,697 ns		
Additional Informat	ion and Comment:	<u>s</u>		
Also State acreage				

"The NameNational King Mine	
M.L.R.B. Permit No. <u>C-035-81</u>	
Map No. 26	
	
ocation Information	
County La Plata	00 01 00 TOFN D1111
_ocation (Sec., T., R.) <u>portions o</u>	f: sec. 29, 31, 32; 135N, RIIW
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, He	sperus. CO
Address 4424 County Road 120, He Contacts Mr. Hansen	Telephone 259-2416/385-4528
Parent Company none	
Address	
Contacts	Telephone
	re repriorie
General Information	
Mine Type and a man	Minima Mathadasaan 6 wills
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	_PrivateX
Mineral: Federal X	_Private
Geologic Information	
Geologic Unit Upper Menefee	_Geologic AgeCretaceous
Coal Zone(s) or Bed(s) Upper	
Coal Thickness(es) 5.5-6'	
0001 MTCKNC33(C3)	
Dip of Bedding 3°S - SW	Strike of Bedding
Overburden Thickness(es) Max - 3	nn'
overpuracii iliickiiess/es/ iidx - 3	UU
Interhunden Thickness (cs.)	
Interburden Thickness(es)	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Upper			
Heat value (BTU/1b)	13,560			
Sulfur(%)	• 3			
Moisture(%)	2.4			
Ash(%) F.S.I.	4.2			<u> </u>
H.G.I.	5.0			
Rank of Coal	Bit.			
Use of Coal	DIL.			
Methane Emissions				
= =				
Coal Production				
1981 Production Thru	6/81 60.954	1 tons		
1980 Annual Producti	on 92.963	3 tons		
1985 Projected Produ	ction 210.00	00 tons		
Cumulative Productio	n Thru 6/81 50	55.021 tons		
Reserves/Est. LifeSales: Out of State	150,000 tons	on existing lea	se	
Sales: Out of State	(%)80%			
Where New I	Mexico, Washing	gton, Utah		
To Whom				
In State(%)_	20%	 		
Where To Whom				
Transportation Type	+ nuck			
Coal Available for D	omestic Use	/es	 	
COULT AVAILABLE TO DE	omestic ose	/es		
Additional Informati	on and Commonts	_		
Addresonal informact	on and comments	2		
	· · · · · · · · · · · · · · · · · · ·			

"The Name Peacock Coal Mine	
M.L.R.B. Permit No. <u>C-040-81</u>	
Map No. 27	
	
ocation Information	
County La Plata	
Location (Casa T. D.)	00 T2FN D11U
Location (Sec., T., R.) portions of	sec. 29 135N, RIIW
Coal Region <u>San Juan River</u>	Field Durango
Topographic Quadrangle (7 1/2') Hesp	eruserus
Company Information	
Mine Operator Sun Belt Mining Inc.	
Address 3701 County 120 Hesperus	CO 81326
Contacts S. D. Stephens Parent Company Sun Belt Mining, Inc Address 7100 Grapevine Hwy, Suite 20	Telephone 385-4377
Parent Company Sun Belt Mining Inc	
Address 7100 Granevine Hwy Suite 20	8 Fort Worth TX 76118
Contacts	Telephone (817) 589-7026
oon caces	1616bilone (017) 003-7020
<u>General</u> Information	
	M2 = 2 = = M = 4
Mine Type underground	Mining Method room & pillar
Mine Status <u>Idle</u>	Start-up Date 1922
No. of Employees 13	
No. of Acres in Permit 111 acres	
	Private X
Mineral: Federal	Private X
-	
Geologic Inf rmation	
Geologic Unit Menefee Fm	Geologic Age <u>Cretace</u> ous
Coal Zone(s) or 'ed(s) Peerless	deorogie nge oreraceous
coal zone(s) or ea(s) reeriess	
Coal Thickness(L3)	
COULT THICKINGSS (CS)	
Din of Dodding 20	Charles of Dalli
	Strike of Bedding
Overburden Thickness(es)	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Unknown 11,400-14,0 0.6-4.0 3.5-10.7 3.4-11.3 Bit. Semi-coking			
Coal Production 1981 Production Thru 1980 Annual Producti 1985 Projected Productio Cumulative Productio Reserves/Est. Life Sales: Out of State Where To Whom In State(%)	on656 ton ction n Thru 6/817 (%) omestic Use	s 6,062		

9, T35N, R11W
Durango
hone
hone 233-5284
continuous, room & pillar
early 1982
early 1302
Upper Cretaceous
ding

Coal Production 1981 Production Thru 6/81 none 1980 Annual Production none	Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
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	Heat value (BTU/lb) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I.	13,000 .8 <10.0 8.0 			
Additional Information and Comments	1981 Production Thr 1980 Annual Product 1985 Projected Prod Cumulative Producti Reserves/Est. Life Sales: Out of Stat Where Ariz To Whom In State(%) Where To Whom Transportation Type Coal Available for	ion none [uction 125,00] on Thru 6/81 n 1,015,000 tons e(%) 100% cona trucks and Domestic Use	recoverable rail spot sales		
	Addressonal Informati	Ton and Comments	<u>S</u>		

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Average of 11-samples 13,740 0.49 0.7 8.5 sub-bit metallurgical			
Coal Production 1981 Production Thru 6, 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State(%) Where To Whom In State(%) To Whom CF&I Transportation Type Un Coal Available for Dome	561,727 t ion 500,000 t Thru 6/81 17,7) 00% to CO (Captive opera nit Train estic Use n	ons ons 59,593 tons		
	and commences			

Tine Name Helen Mine		
M.L.R.B. Permit No. <u>C-043-81</u>		
Map No		
Location Information		
County Las Animas		
Location (Sec., T., R.) portions	of sec 31 32 &	36 T335 P64W
Education (Sec., 1., N.) portions	01 Sec. 31, 32 a	30, 1333, KO+W
Coal Pogion Paton Mosa	Eiold	Trinidad
Coal Region <u>Raton Mesa</u> Topographic Quadrangle (7 1/2') Si	rieiu_	Trinidad
Topographic Quadrangle (1 1/2) 51	tarkville	
Company Information	_	
Mine Operator Animas Coal Company	, Inc.	
Address P.O. Box 247, Trinidad Contacts Steven Marusich Parent Company Western Assoc. End Address P.O. Box 17485, San Anto-	, CO 81082	
Contacts <u>Steven Marusich</u>	Teleph	one 846-9251
Parent Company Western Assoc. En	ergy Corp.	
Address P.O. Box 17485, San Anto	onio, TX 78217	
Contacts	Teleph	one
	•	
<u>General</u> Information		
Mine Type underground	Mining Method	room & nillar
Mine Status producing	Start-up Date	1070
No. of Employees 3	scarc-up bace_	1979
No. of Acres in Permit 69.8 acres		
	D.:	
Surface: Federal	PrivateX	~
Mineral: Federal	PrivateX	
<u>Geologic Information</u>		Upper Cretaceous &
Geologic Unit <u>Vermejo & Raton Fm</u> Coal Zone(s) or Bed(s) <u>Upper Star</u> l	Geologic Age	Paleocene
Coal Zone(s) or Bed(s) Upper Starl	kville	
()	-	
Coal Thickness(es) 4-8'		
Dip of Bedding 3-4°W	Strike of Bedd	ina
Overburden Thickness(es)	scrike or bedd	1119
overpuruen inickness(es)		
Internation Thickness (co.)	 	
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 Emmissions	Average of 4 samples 12,173 .63 1.95 15.47 HvA, HvB, Bit. coking	•		
Sales: Out of State(%	11,742 ion about Thru 6/81 20 m ton in) 100% ka, TX ruck estic Use ye	2 tons 300,000 tons 30,887 tons place / 10 m tor		ie, 1981

line Name <u>Maxwell</u>	
1.L.R.B. Permit No. <u>C-013-81</u>	
Map No. 31	
	
<u>-ocation Information</u>	
County Las Animas	
Location (Sec., T., R.) sec. 29,	Γ33S, R67W
Coal Region Raton Mesa	Field Trinidad
Topographic Quadrangle (7 1/2') V	igil
, 3 , (
Company Information	
Mine Operator CF&I Steel Corp.	
Address Weston, CO 81091 Contacts T.J. Augustine, Gen	
Contacts Talla Augustine Gen	• Supt. Telephone 868-2761
Parent Company CF & I Steel Corp.	re repriorie
Address P.O. Box 316 Pueblo	CO 81002
Parent Company CF & I Steel Corp. Address P.O. Box 316 Pueblo Contacts J.G. Wark Mgr. Mine	s Telephone 561-6622
contacts 0.0. wark high hithe	srerephone 301-0022
Cononal Information	
General Information	Maria Maria I.
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	PrivateX
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 12	
Interburden Thickness(es)	
2.1001 Dat dell 11110kile35/65/	

<u>Coal Quality</u>	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	Average of 19 samples 12963 .4 1.6 13.0 metallurgic	al		
	on 200,959 ction 500,000 n Thru 6/81 (%) 00% CF&I Steel Cor Unit Train comestic Use n	tons tons 566,181 tons p. (Captive Ope	eration)	
Additional Information	on and Comment	<u>S</u>		

Mine Name <u>Trinidad Basin</u>	
M.L.R.B. Permit No. <u>C-048-81</u>	
Map No32	
	
<u>Location Information</u>	
County <u>Las Animas</u>	·
Location (Sec., T., R.) portions of	sec. 15, 21, 22, T31S, R65W
Coal Region <u>Raton Mesa</u>	Field Trinidad
Topographic Quadrangle (7 1/2') Del	Agua and Trinidad
Composite Course time	
Company Information	T
Mine Operator <u>Trinidad Basin Mining,</u> Address <u>P.O. Box 783, Trinidad, CO</u>	1 n C • 0 1 n C
Address P.U. Box 783, Irinidad, CU	Telephone 846-2300
Contacts Jimmy Renfro	Te repnone 840-2300
Parent Company	
AddressContacts	Telephone
Contacts	Te repnone
General Information	
	Mining Method haulback
Mine Status producing	Start-up Date 1978
No. of Employees 11	3001 C up Bucc
No. of Acres in Permit 1165 acres	
	Private
	Private X
Geologic Information	
Geologic Unit <u>Raton Fm</u> Coal Zone(s) or Bed(s) <u>Del Agua, Ca</u>	Geologic Age Cretaceous - Tertiary
Coal Zone(s) or Bed(s) Del Agua, Ca	ss = =================================
Coal Thickness(es) Del Agua: 4.5'-6.	0', Cass: 3.5'-4.5'
Dip of Bedding 2-5°W S	trike of Bedding
Overburden Thickness(es)	
Interburden Thickness(es) <u>80-100'</u>	

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	unknown 12,000+ <0.5 12-17			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State Where Tex To Whom In State(%) Where To Whom Transportation Type Coal Available for D Additional Informati	on67,752 ction n Thru 6/81 (%)100% as, Arizona truck to rail omestic Useir	7 tons 141,102 n the future		
Address of the second of the s	on and comments			

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
34, 35, T10S, R98W, Sec. 1 & 2, T11S, R98W
Coal Region <u>Vinta</u> <u>Field Grand Mesa</u>
Topographic Quadrangle (7 1/2') <u>Cameo</u>
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		C O N F I D E	N T I A L	
Heat value (BTU/1b)				
Sulfur(%)				
Moisture(%) Ash(%)				
F.S.I.				
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				
<u>Coal Production</u>				
1981 Production Thru 1980 Annual Production 1985 Projected Production Cumulative Production	6/81 <u>161,70</u>	7 tons		
1980 Annual Production	n <u>207,20</u>	8 tons		
1985 Projected Produc	tion <u>500,00</u>	0 tons		
Cumulative Production	Thru 6/81 <u>4</u>	,606,973 tons _		
Reserves/Est. Life	30 million to	<u>ns recoverable/</u>	about 4/ years_	
Sales: Out of State(% <u>) 100% </u>			
where Missis	sippi Power P	lant in Gulfpor	t, Mississippi	
To Whom South In State(%) O		ervices		
Where	/0			
To Whom	 	·····		
Transportation Type	rail	 		
Coal Available for Do	mestic Use	local snot mark	at c	
out wattable for boi		Tocal Spot mark	E (3	
Additional Information	n and Comment	S		
Mine portal - center	SW 1/4 Sec. 2	- 7		
Geological information	n obtained fr	om: West-Centr	al Colorado	
	_	Coal Envir		
		Statement	- v. 2	
		 		~
				
				
			· · · · · · · · · · · · · · · · · · ·	

Mine Name Fruita Mine No. 1
M.L.R.B. Permit No. <u>C-015-81</u>
Map No34
Location Information
County Mesa
Location (See T. D.)
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
ropographic quadrangle (7 1/2) Kuby Lee keservoir
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.
Parent Company Dorchester Gas Corp. Address P.O. Box 31049, Dallas, TX 75231
Contacts Telephone (214) 750-3667
<u>General Information</u>
Mine Type underground Mining Method continuous room & pillar
Mine Status <u>idle</u> 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
<u>Geologic Information</u>
Geologic Unit Mt. Garfield Fm & Anchor Tongue Geologica Age Cretaceous
Coal Zone(s) or Bed(s) <u>Cameo and Anchor</u>
Coal Thickness(es) Cameo: 10-25'+
Anchor: 4-6'
Dip of Bedding 3-4° Strike of Bedding N55E
Overburden Thickness(es) 0-1600'
Internal Third Comment of the Commen
Interburden Thickness(es) Cameo-Anchor: 350'

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	Bit Domestic			
	 tion			
Additional Information Federal leases were permitting done in	e approved Jui	_	00 acres. Plar	n to have

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
ropographic quadrangle (7 1/2) Kuby Lee Reservoir
<u>Company</u> 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: FederalPrivate 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(os) Campo 10 25+
Coal Thickness(es) Cameo - 10-25+'
Anchor - 4-6+ Dip of Bedding 3-4° Strike of Bedding N55E Overbunden Thickness (cs.) Anchon 0 1960'
Overburden Thickness(es) Anchor - 0-1960'
overburden interness(es) inteness of 2000
Interburden Thickness(es) Cameo-Anchor: 350'
Thorizan an interness (cs) ounce inteness to occ

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Bit Domestic			
	n 10,7: tion Thru 6/81 1: %) 0 100 Local truck) idle 6/30/81	
Additional Informatio Federal Leases were Plan to have permit	approved in	_ June 1981 for 14	4,700 acres.	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam		CONFIDE	NTIAI	
Heat value (BTU/1b)		CONTIDE	11 1 1 71 2	
Sulfur(%)				
Moisture(%)		·		
Ash(%)	-			
F.S.I.				
H.G.I.			·	
Rank of Coal				
Use of Coal		~ 		
Methane Emissions				
Coal Production		_		
1981 Production Thru 6	5/81 <u>315,67</u>	<u>3 tons</u>		
1980 Annual Production		<u>1</u>		
1985 Projected Product	tion <u>800,00</u>	<u>O tons</u>		
Cumulative Production	Thru 6/81 <u>2</u>	,140,828 tons		
Reserves/Est. Life	9 million ton	s/ about 14 year	`S	
Sales: Out of State(?				
Where Missis	ssippi Power	Plant in Gulfpor	t, Mississippi	
To Whom Southe		ervices		
In State(%)(09.			
Where				
To Whom				
Transportation Type				
Coal Available for Dor	mestic Use <u>l</u>	ocal spotmarkets		
A 1 1 1 1 2 7 7 6 1 1 1				
Additional Information		<u>s</u>		
mine portal - middle s				
Geological information	n obtained fr			
		Coal Enviro	nmental Stateme	<u>nt - V. 2</u>
				
	· · · · · · · · · · · · · · · · · · ·			
				
				<u>.</u>
		· · · · · · · · · · · · · · · · · · ·		
			·	

Mine Name Colowyo Coal Mine
M.L.R.B. Permit No. <u>C-019-81</u>
Map No. 37
<u>Location</u> Information
County Moffat
location (Soc. T. P.) portions of: soc. 13 , 22 , 23 , 24 , 26 , 27 , 33
Location (Sec., T., R.) <u>portions of: sec. 13, 22, 23, 24, 26, 27, 33, 34, T4N,R93W; portions of: sec. 2, 3, 4, 9, 10, T3N, R93W</u>
Cool Dogion Hinto Cli Sec. 2, 3, 4, 9, 10, 13N, K93W
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
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
To the first the
<u>General</u> Information
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
<u>Geologic Information</u>
Geologic Unit Williams Fork Geologic Age Upper Cretaceous
Coal Zone(s) or Bed(s) Ya and yo y Ao L Ao B C D F F
Coal Zone(s) or Bed(s) \underline{Y}_3 and \underline{Y}_2 , \underline{X} , \underline{A}_2 + \underline{A}_3 , \underline{B} , \underline{C} , \underline{D} , \underline{E} , \underline{F} ,
Coal Thickness(es) 57.8' total; Y3 + Y2: 6.8', X : 12.3,
A2 + A3 : 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'
Overburden internessies) 0-400
Interburden Thickness (co.)
Interburden Thickness(es)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Y3+Y2 10,149-10,2 .3637 16.65-18.56 4.26-5.40 Sub. bit A	.33 15.48 5.40	10,626 .34 14.45 6.27	10,984 .51 14.54 4.03
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State Where Texas To Whom In State(%) Where Color To Whom City Transportation Type Coal Available for Do	ction 2,682,0 ction 4.5 mi n Thru 6/81 7 129.5 million: (%) 80% Central Power 20% rado Springs y of Colorado train loadour omestic Use	659 tons Thion tons 11ion tons ,189,135 short tons (rec er & Light Springs t no	overable - surf	ace)

Mine NameEagle No. 5	
M.L.R.B. Permit No. <u>C-044-81</u>	
Map No	
Location Information	
Location Information	
County Moffat	21 4 20 TCN DOLL
Location (Sec., T., R.) portions of	: Sec. 31 & 32, 16N, K91W
Coal Region Green River	sec. 5 & 6, T5N, R91W Field Yampa
ropographic quadrangle (7 1/2) Ko	und Bottom & Caster Gulch
Company Information	
Mine Operator Empire Energy Corn	/Mine Engineer Sam Cario
Mine Operator Empire Energy Corp. Address P.O. Box 68, Craig, CO 816 Contacts Rick Mills - Englewood	25 824-9467
Contacts Rick Mills - Englewood	Telephone 740-5110
Parent Company Amoco Minerals Com	nany
Parent Company Amoco Minerals Com Address 7000 S. Yosemite, Englewoo	d CO 80112
Contacts	Telephone
	re repriorie
General Information	
Mine Type underground	Mining Method continuous, room & pillar
Mine Status producing	Start-up Date early 1970's
No. of Employees 197	Jean C up Bucc curry 1370 3
No. of Acres in Permit 1873 acres	-
Surface: Federal X	Private X
Mineral: Federal X	Private X
Timerar: reactur	7777400
Geologic Information	
Geologic Unit Williams Fork Fm	Geologic Age Cretaceous
Coal Zone(s) or Bed(s) C E F P	
Coal Thickness(es) CONFIDEN	TIAL
· · · · · · · · · · · · · · · · · · ·	
Dip of Bedding 7-10°N	Strike of Bedding
Overburden Thickness(es) 0-900' to	
Interburden Thickness(es) C-E: 0-200	DO; E-F: 0-1900, F-P: 0-1900
· · · · · · · · · · · · · · · · · · ·	

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%)	C O N	N F I D E N T I	A L	
F.S.I. H.G.I.				
Rank of Coal Use of Coal Methane Emissions	sub Bit.			
Coal Production 1981 Production Thru 1980 Annual Productio	n 473,773	tons tons		
1985 Projected Produc Cumulative Production Reserves/Est. Life C Sales: Out of State(Where	Thru 6/81 1, 0 N F I D E N	,771,426 N T I A L		
To Whom In State(%) Where Colora To Whom				
Transportation Type Coal Available for Do)		
Additional Informatio	n and Comments	<u>s</u>		

Tine Name <u>Eagle No. 9</u>	
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
= 00 a 0 10 11 (0 a 0 1)	Sec. 5 & 6 T5N R91W
Coal Region Green River	Field Yampa
Topographic Quadrangle (7 1/2') Rou	nd Rottom & Castor Gulich
Topographic quadrangle (7 1/2) Kou	nd bottom a caster duren
Company Information	
Company Information	ina Funinasa Cam Cauia 924 0467
Mine Operator Empire Energy Corp./M	ine Engineer-Sam Carlo 824-9467
Address P.O. Box 68, Craig, CO 8162 Contacts Rick Mills - Englewood	5
Contacts Rick Mills - Englewood	Telephone 740-5110
Parent Company Amoco Minerals Compa	ny
Address 7000 S. Yosemite St., Engle	
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
<u>Geologic Information</u>	
Geologic Unit Williams Fork Fm.	_Geologic Age <u>_Cretaceous</u>
Coal Zone(s) or Bed(s) C,E,F,P	
Coal Thickness(es)	<u>T_I_A_L</u>
Dip of Bedding 7-10°N	Strike of Bedding
Overburden Thickness(es) 0-900' to	P
, , , , , , , , , , , , , , , , , , , ,	
Interburden Thickness(es) C-E: 0-2	000, E-F: 0-1900, F-P: 0-1900

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	Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions Coal Production 1981 Production 1980 Annual Production 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	Heat value (BTU/1b) Sulfur(%)	<u>CONF</u>	I D E N T I A L		
Rank of Coal 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	F.S.I.				
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	H.G.I. Rank of Coal Use of Coal Methane Emissions	sub Bit.	sub Bit.	sub Bit.	sub Bit.
	1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life C Sales: Out of State(% Where To Whom In State(%) Where Colora To Whom Transportation Type r Coal Available for Dom	ion Thru 6/81_45 O N F I D E N)yes _yes do Springs ail estic User	tons 53,631 N T I A L		
		<u> </u>			

Tine Name Trapper Mine	
M.L.R.B. Permit No. C-010-81	
Map No. 40	
Location Information	
CountyMoffat	
Location (Sec., T., R.) Portions of	Sec. 5 & 6 T5N R9OW; portions of Sec. 1,
2, 3, 4, 5 T5N R91W; portions of Sec	. 30, 31 & 32 T6N R9OW; (see Add. Info.)
Coal Region Uinta	Field Yampa
Topographic Quadrangle (7 1/2') <u>Cas</u>	tor Gulch
Company Information	
Mine Operator Utah International Ir	C •
Address Box 187, Craig, CO 81625	T. 1 L
Contacts R. C. Diederich	Telephone 824-4401
Parent CompanyAddress	
Contacts	Telephone
ourcacts	rerephone
Conounal Information	
<u>General Information</u> Mine Type surface	Mining Method strip
Mine Status producing	Start-up Date 1977
No. of Employees 220	Start-up Date 1977
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'	0 : 13 R : 4
,	
Dip of Bedding <u>16%</u>	_Strike of BeddingS-N
Overburden Thickness(es) 30-140'	
Interhunden Thickness (as) 21 En	
Interburden Thickness(es) <u>2' - 50'</u>	

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	AVERAGE 9800 .4 16 8 sub. bit			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Cumulative Production Reserves/Est. Life Sales: Out of State Where To Whom In State(%) Where Yampa To Whom Transportation Type Coal Available for D	on 2,014,37 ction 2.3 n Thru 6/81 18 68 million tons (%) 0 100% Project Power mine trucks	76 tons m tons 3,781,161 s		
Additional Informati portions of Sec. 21,			91 W	

Mine Name <u>Nucla</u> Strip	
M.L.R.B. Permit No. C-008-81	
Map No. 41	
<u>Location Information</u>	
CountyMontrose	
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') Nuc	la
Company Information	
Mine Operator <u>same as parent comp</u>	any
Address	
Contacts	Telephone
Parent Company Peabody Coal Compan	У
Address 12015 E. 46th Ave., Denver,	CO 80239
Contacts Thomas Wainwright	Telephone371-7990
General Information	
Mine Type <u>surface</u>	_Mining Method <u>strip</u>
Mine Status producing	_Start-up Date <u>1959</u>
No. of Employees 23	_
No. of Acres in Permit 393 acres	
Surface: Federal	Private X
Mineral: Federal	PrivateX
01 : 7.6	
Geologic Information	
Geologic Unit Dakota Fm	_Geologic Age <u>Cretaceous</u>
Coal Zone(s) or Bed(s) #1 & #2	
C-1 TI:-I / - \ #1 1 C 2 2	#0 F 01 7 01
Coal Thickness(es) <u>#1: 1.6'-3.3'</u>	#2: 5.9'-7.9'
D:	Chuile of Dalling NOCOU to NACOU
Dip of Bedding 1°-2° SW	_Strike of Bedding_N25°W to N45°W
Overburden Thickness(es) <u>0-100'</u>	
Intouhundan Thiokness (as)	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I.	Upper (#1) 13,126-13,21 .7 -2.5 3.4-3.7 8.95-10.3	Lower (#2) 3 10,950-11,9 .59 3.7-11.5 15.5-24.6	50	
H.G.I. Rank of Coal Use of Coal Methane Emissions	bit. steam	bit. steam		
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Cumulative Production Reserves/Est. Life Sales: Out of State Where To Whom In State(%) Where Nuclation To Whom Coll Transportation Type Coal Available for D	on 92,068 ton uction 92,00 on Thru 6/81 1, e(%) 100% orado Ute Power trucks	tons 862,494 (as of	5/81)	
Additional Informati	on and Comments			

Mine Name <u>Bear Creek (Coal Basin M</u>	lines)
M.L.R.B. Permit No. <u>C-017-81</u>	
Map No 42	
Location Information	
County Pitkin & Gunnison	
Location (Sec., T., R.) Sec. 31 & 32	7, T9S, R89W; Sec. 4, 5, 6, 7, 8, 9, 10,
11, 14, 15, 16, 17, 18, 19, 20, 21, 2	R, T9S, R89W; Sec. 4, 5, 6, 7, 8, 9, 10, 8, 29, 30, T10S R89W; Sec. 1, 12, 13,
24 & 25, TÍOS Ŕ90W	
Coal Region Uinta	Field Carbondale
Topographic Quadrangle (7 1/2') Pi	acita & Flk Knob
topographic quadrangle (7 1/2)	derea a Lik kilob
Company Information	
Mino Openator Mid Continent Dece	
Mine Operator Mid-Continent Resord Address P.O. Box 158, Cart	ources, inc.
Address P.U. Box 158, Card	ondaie, CO 81623
Contacts Doug Bowman	lelephone963-2581
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	Toal Rasin Mines)
Surface: Federal X	Private X
Mineral: Federal 15%	Private 85%
mineral. rederal 15%	rrivace 03%
Geologic Information	
Geologic Unit Williams Fork Fm	_Geologic AgeUpper Cretaceous
Coal Zone(s) or Bed(s) B	
Coal Thickness(es) 5 1/2° - 8°	0
Dip of Bedding 10-15°SW	Strike of Bedding
Overburden Thickness(es)	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	B 14,500 .5 8.4 9.0 Mv bit. coking			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State Where Production To Whom U.S In State(%) Where To Whom Transportation Type Coal Available for December 1980 Production To Whom Transportation Type Coal Available for December 1980 Production Transportation Type Coal Available for December 1980 Production Transportation Type Coal Available for December 1980 Production Thru Thru	on 5,280 ction ction n Thru 6/81 ction (%) 100% vo, Utah/Califo Steel/Kaiser train	tons 814,294 tons ornia		
Additional Information	on and Comments	<u>S</u>		

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
110S, R89W; Sec. 1, 12, 13, 24, 25, T10S, R90W
Coal Region Uinta Field Carbondale
Topographic Quadrangle (7 1/2') Placita & Elk Knob
Company Information
Company Information Mine Operator Mid Continent Resources, Inc.
AddressP.O. Box 158, Carbondale, CO 81623
Contacts Doug Bowman Telephone 963-2581
Parent Company
Address
Contacts Telephone
Conounal Information
General Information Mino Type undersound
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 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 N80°W
Overburden Thickness(es)
Interburden Thickness(es)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Average B 14,500 .5 8.4 9.0 Mv bit. coking coal			
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(% Where Provo, To Whom U.S. S In State(%) Where To Whom Transportation Type Coal Available for Dom Additional Information	130,278 ton 130,27	ons bout 1,930,493 nia Steel no	tons	

The traine bacen creek #1 (coar basin mines)
L.R.B. Permit No. C-017-81
ap No. 44
ocation Information
County Ditkin & Cunnicon
County Pitkin & Gunnison
ocation (Sec., T., R.) <u>Sec. 31 , 32 T9S R89W; Sec. 4-11, 14-21, 28-30</u> 10S R89W; Sec. 1, 12, 13, 24, 25 T10S R90W
103 ROSW; Sec. 1, 12, 13, 24, 25 105 RSUW
Coal Region Uinta Field Carbondale
opographic Quadrangle (7 1/2') Placita & Elk Knob
Name of the state
Company Information
Mine Operator Mid Continent Resources, Inc.
Address P.U. Box 158. Carbondale. CO 81623
Contacts Doug Bowman Telephone 963-2581
Parent Company
Address
Contacts Telephone
<u>General_Information</u>
Mine Type <u>underground</u> Mining Method <u>longwall</u>
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
Nineral: 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)
THE DUI GET THICKNESS (CS)
Interburden Thickness(es)
threibning introducts/cs/

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Avonago P			
Heat value (BTU/1b)	Average B 14,500			
Sulfur(%)	.5			
Moisture(%)	8			
Ash(%)	7.5			
F.S.I.	$\frac{7.5}{9.0}$			
H.G.I.	9.0			
	M. D.A			
Rank of Coal	Mv Bit.			
Use of Coal	coking			
Methane Emissions				
Coal Production				
1981 Production Thru	6/81 //5 386 +	tons		
1980 Annual Production	0/01 40,300 (LONS	 	
1005 Deciented Decien	130,333 (tons	<u></u>	
1985 Projected Production		401 000 +		
Cumulative Production	1 nru 6/816	,491,202 tons	<u>,</u>	
Reserves/Est. Life				
Sales: Out of State(
Where Provo				
To Whom US St	eel/Kaiser Ste	eel		
In State(%)				
Where				
To Whom				
Transportation Type				
Coal Available for Do	mestic Use <u>n</u>	0		
Additional Informatio				
*Explosion on 4/15/81	<u>killed 15 mir</u>	ners and shut d	own_operations.	May
reopen in Fall 1981.			-	
		· · · · · · · · · · · · · · · · · · ·		
				· · · · · · · · · · · · · · · · · · ·
				·
				
		·		

The Name Butth Creek #2 (Coal Basin Mines)
1.L.R.B. Permit No. <u>C-017-81</u>
Tap No. 45
ocation Information
County_ Pitkin & Gunnison
ocation (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
Innographic Our descript (7 1/21) Dissite & File Week
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
Contacts Doug Bowman Telephone 963-2581
Parent Company
Address
Contacts Telephone
General Information
Mine Type <u>underground</u> 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%
<u>Geologic Information</u>
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'
Jeinning Hirckness (es) about 2000
T. L. L. L. Jan Thinkson (1907)
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	Dutch Creek Middle-Avg. 14,000+ .59 9.2 8.5 Mv Bit. coking			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State(Where Prove To Whom US St In State(%) Where To Whom Transportation Type Coal Available for Do	on 181,144 ction Thru 6/81 at (%) 100% O Utah/Californ ceel/ Kaiser S	tons pout 1,954,931 tons nia Steel	tons	
Additional Informatio	on and Comments	<u>S</u>		

The Name L. S. Wood (Coal Bas)	<u>in Mines)</u>
M.L.R.B. Permit No. <u>C-017-81</u>	
Map No. 46	
<u>Location</u> Information	
County_ Pitkin & Gunnison	
Location (Sec., T., R.) Sec. 3	1 & 32 T9S R89W; Sec. 4-11, 14-21, 28-30 25 T10S R90W
T10S R89W; Sec. 1, 12, 13, 24,	25 T10S R90W
Coal Region Uinta	Field Carbondale
Topographic Quadrangle (7 1/2')	Placita & Flk Knob
. spographito quadrangic (/ 1/2 /	Tractica a ETR KNOD
Company Information	
Mine Operator Mid Continent Re	counces. Inc
Address D.O. Poy 150 Carbonda	10 CO 01622
Address P.O. Box 158, Carbonda Contacts Doug Bowman	Telephone 963-2581
Panent Company	
Parent Company	
Address_	
Contacts	Telephone
General Information	Longwall,
Mine Type underground	Mining Method room & pillar, continuous
Mine Status <u>producing</u>	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	
5041 25H2(3) 61 254(3)	
Coal Thickness(es) 5 1/2'-8'	
0001 111 CKNC33 (C3)	
Dip of Bedding 10-15°SW	Strike of Bedding
Overburden Thickness(es)	JULINE OF DECIDING
overburden inickness(es)	
The Land The Land To Co	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/lb) Sul ur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	AVERAGE B 14,500 .5 8.4 9.0 Mv bit. coking			
Coal Production 1981 Production Thru 1980 Annual Producti 1985 Projected Produ Cumulative Productio Reserves/Est. Life Sales: Out of State Where Provo To Whom US In State(%) Where To Whom Transportation Type Coal Available for D	on 220,930 ction n Thru 6/81 (%) 100% , Utah / Cali Steel / Kais	tons 4,381,443 tons fornia er Steel		
Additional Informati	on and Comment	<u>S</u>		

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 Sea	ım		
Heat value (BTU/1b)	12,640			
Sulfur(%)	.90			
Moisture(%)	16.4			
Ash(%)	2.1			
F.S.I.				
H.G.I.				
Rank of Coal				
Use of Coal				
Methane Emissions				
nechane Emily210112		· · · · · · · · · · · · · · · · · · ·		
Cool Dwoduction				
Coal Production	/01 10 CCF +-			
1981 Production Thru 6	/81 10,665 to	ons		
1980 Annual Production	40,555 to	ns	4	
1985 Projected Product	ion <u>#1 and #3</u>	combined -	1 million tons	
Cumulative Production	inru 6/81 <u>1,1</u>	72,984 tons		
Reserves/Est. Life#	l and #3 combi	ned - 30 mil	lion tons	
Sales: Out of State(%)			
Where				
To Whom				
In State(%)				
Where				
To Whom				
Transportation Type re	a i l	- , ,		
Coal Available for Dome	estic Use			
Additional Information	and Comments			
	Geo	info from:	West Central Col Environmental St	
			Livironmental St	acement V.Z
			 	

M ne Name North Thompson Creek Mine M.L.R.B. Permit No. C-025-81 Map No. 48	No. 3
Location Information County Pitkin Location (Sec., T., R.) portions of S Coal Region Uinta Topographic Quadrangle (7 1/2') Stor	Field Carbondale
Company Information Mine Operator Snowmass Coal Co. Address P.O. Box 980, Carbondale, Contacts Stephen Self Parent Company Roaring Fork Coal Co. Address Suite 2300, 410 17th St., De Contacts	CO 81623 Telephone 963-3440 enver, CO 80202 Telephone
General Information Mine Type underground Mine Status Producing No. of Employees No. of Acres in Permit 320 acres Surface: Federal 10 Mineral: Federal 90%	Mining Method longwall Start-up Date 1955 Private X Private 10%
Geologic Information Geologic Unit Williams Fork Fm. Coal Zone(s) or Bed(s) Anderson	Geologic Age <u>Cretaceous</u>
Coal Thickness(es) 8-10' Dip of Bedding 27-30°W Overburden Thickness(es) 0-3000' Interburden Thickness(es)	Strike of Bedding
County Pitkin Location (Sec., T., R.) portions of S Coal Region Uinta Topographic Quadrangle (7 1/2') Ston Company Information Mine Operator Snowmass Coal Co. Address P.O. Box 980, Carbondale, Contacts Stephen Self Parent Company Roaring Fork Coal Co. Address Suite 2300, 410 17th St., De Contacts General Information Mine Type underground Mine Status Producing No. of Employees No. of Acres in Permit 320 acres Surface: Federal 10 Mineral: Federal 90% Geologic Information Geologic Unit Williams Fork Fm. Coal Zone(s) or Bed(s) Anderson Coal Thickness(es) 8-10' Dip of Bedding 27-30°W Overburden Thickness(es) 0-3000'	Field Carbondale ny Ridge CO 81623 Telephone 963-3440 enver, CO 80202 Telephone Mining Method longwall Start-up Date 1955 Private X Private 10% Geologic Age Cretaceous

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Anderson Average 13,745 .90 7.85 2.95			
Coal Production 1981 Production Thru 1980 Annual Productio 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	n 1,812 ton tion #1 and # Thru 6/81 7 #1 and #3 com %)	s 3 combined - 1 16,401		
Additional Informatio		— Info from - Wes	t Central Colora ironmental State	ado Coal ement V-2

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	B & B/C 10,560 .47 12.0 11.0	D 10,800 .50 12.0 8.0		
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life E Sales: Out of State(Where Utah - To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	on none ction clean - n Thru 6/81 nor 3 reserve - 13. %) 100% - power plant train	ne	5 MT	
Additional Information	on and Comments	<u>S</u>		

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
	174, 300. 21, 121, 1331
Coal Region Uinta	Field Danforth Hills
Topographic Quadrangle (7 1/2') Ve	each Gulch, Red Elephant Point
<u> </u>	
_	
Company Information	
Mine Operator Northern Coal Co. Address 740 S. Colo. Blvd. Suite 2	
Address /40 S. Colo. Blvd. Suite 2	00, Denver, CO
Contacts	felephone 753-8669
Parent Company Address	
Contacto	Talambana
contacts	rerephone
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 leas	sed lands (4 mines)
Surface: Federal	Private
Mineral: Federal	Private
Geologic Information	
Geologic Unit Williams Fork Fm	Goologic Ago Uppon Cnotacoous
Coal Zone(s) or Bed(s) FF	Geologic Age Upper Cretaceous
out zone(s) of Ded(s)	
Coal Thickness(es) 9' average	
Dip of Bedding 12° to 18° NW	Strike of Bedding
Overburden Thickness(es)	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/lb) Sulfur(%) Moisture(%) Ash(%)S.I. H.G.I.	FF 10,373 .33 18.07 4.76			
Rank of Coal Use of Coal Methane Emissions	Sub bit.			
Coal Production 1981 Production Thru 1980 Annual Producti 1985 Projected Produ Cumulative Productio Reserves/Est. Life Sales: Out of State	on <u>63,079 ton</u> ction n Thru 6/81	12,044 tons		
Where To Whom				
Transportation Type Coal Available for D	truck to rail omestic Use	some		
Additional Informati Coal different quali Will reopen if have	ty - low ash f	s - usion		

Mine Name <u>Northern No. 2</u>		
M.L.R.B. Permit No. <u>C-032-81</u>		
Map No. 51		
lanating Turker and		
<u>Location Information</u> County <u>Rio Blanco</u>		
County Rio Blanco	-17//	ron poou
Location (Sec., T., R.) <u>NE 1/4, SE</u>	1/4, Sec. 21,	12N, R93W
Coal Region Uinta	Ciald	Danforth Hills
Topographic Quadrangle (7 1/2') Ve		עמווטרנוו הוווג
ropographic quadrangle (7 1/2) ve	acn	
Company Information		
Mine Operator Northern Coal Co.		
Address 740 S. Colorado Blvd.,	Suite 200 Denve	er CO
Contacts	Telent	none 753-8669
Parent Company Northern Coal Co. Address 740 S. Colorado Blvd., Sui	te 200. Denver.	CO
Contacts	Teleph	none
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 le	ased lands (4 mi	ines)
Surface: Federal	Private	
Mineral: Federal	Private	
Geologic Information		
Geologic Unit Williams Fork Fm	Geologic Age	Upper Cretaceous
Coal Zone(s) or Bed(s) P		
7 T		·
Coal Thickness(es) 9' average		
Din of Podding 129 to 100 MU	Ctually of Did	
Dip of Bedding 12° to 18° NW	Strike of Bedo	11 ng
Overburden Thickness(es)		
Interburden Thickness(es)		
THE PALACH THICKNESS (62)		

<u>Coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I.	Unknown 10,711 .31 14.48 6.03			
H.G.I. Rank of Coal Use of Coal Methane Emissions				
IO WhomIn State(%) Where To Whom	none ion_ Thru 6/81_ n 6,170,671 to	ons (20 years) re		m tons
Transportation Type Coal Available for Dom Additional Information				

rifie Name Northern No. 3
M.L.R.B. Permit No. C-032-81
Map No52
Location Information
County Rio Blanco
Location (Sec., T., R.) NE 1/4, SE 1/4, Sec. 21, T2N, R93W
200001011 (3000, 10, 10, 11, 174, 30 174, 300, 21, 1211, 1301
Coal Region Uinta Field Danforth Hills
Topographic Quadrangle (7 1/2') Ninemile Gap
Company Information
Mine Operator (same as parent)
Address
ContactsTelephone
Parent Company Northern Coal Co.
Address 740 S. Colorado Blvd., Suite 200, Denver, CO
ContactsTelephone753-8603
General Information
Mine Type underground Mining Method room & pillar, longwall
Mine Type <u>underground</u> Mining Method <u>room & pillar, longwall</u> Mine Status <u>in permit stage</u> Start-up Date 1982 or 1983
No. of Employees
No. of Acres in Permit7,860 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
D. C. H. C. H. C. H. C. H. C. H. C. C. C. C. H. C. C. C. H. C. C. C. H. C. C. C. H. C.
Dip of Bedding 12°-18°NW Strike of Bedding
Overburden Thickness(es)
Interbunden Thickness (as)
Interburden Thickness(es)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	J 11,356 .45 12.95 3.91			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life	on none ction n Thru 6/81 34,458,225 ton (%) truck to ra omestic Use y	il loadout es - locally	coverable/113.1	mm tons

Mine Name Rienau No. 2
M.L.R.B. Permit No. <u>C-032-81</u>
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
Address 740 S. Colo. Blvd., Suite 200, Denver, CO
Contacts Mr. Spangleburg Telephone 753-8603
<u>Ge</u> neral Information
Mine Type underground Mining Method room & pillar, continuous
Mine Status <u>producing</u> 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)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	G 11,055 .42 11.64 7.42 HvC bit.			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State Where exp To Whom In State(%) Where To Whom Transportation Type Coal Available for Additional Informat	ion144,815 toruction_ uction_ on Thru 6/81_391 76.8 mm tons = e(%)100% orted truck_to_rail Domestic Use	l,786 tons in place/25.99 i loadout yes - only to l		able

Mine NameSulphur_Creek
M.L.R.B. Permit NoC-027-81
Map No54
Location Information
County <u>Rio Blanco</u>
Location (Sec., T., R.) part of Sec. 10 TIN R94W
Coal Region Uinta Field Danforth Hills
Topographic Quadrangle (7 1/2') Meeker
Company Information
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
reteptione
General Information Room & Pillar,
Mine Type Underground Mining Method 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
TTTVQCC 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)

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam	Unknown			
Heat value (BTU/1b) Sulfur(%)	9,900-10,650	J		
Moisture(%)	11.2-11.5			
Ash(%)	7.8-12.8			
F.S.I.	0			
H.G.I.	U			
Rank of Coal				
Use of Coal				
Methane Emissions				
Hechane Emissions				· · · · · · · · · · · · · · · · · · ·
Coal Production				
1981 Production Thru	6/81 none			
1980 Annual Producti	on none			
1985 Projected Produc	ction			
Cumulative Production				
Reserves/Est. Life	15.5 m. tons.	Life - 10 years	<u> </u>	
Sales: Out of State	(%)			
T - 111				
In State(%)				
1 1 1				
To Whom				
Transportation Type				
Coal Available for D	omestic Use			
Additional Informati	on and Comments	S		
Coal Quality As Rec'	u.			

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
porcions of seed Li a LL, The Room
Coal Region Green River Field Yampa
Topographic Quadrangle (7 1/2') Rattlesnake Butte
. opographite quadrangle (1 1/2) <u>Raccleshake bucce</u>
Company Information
Mine Operator Sunland Mining Corp.
Address P.O. Poy 55 Oak Crook CO 20167
Address P.O. Box 55, Oak Creek, CO 80467
Contacts David R. Canning (V.P.) Telephone 736-8181
Parent Company
Address
ContactsTelephone
<u>General Information</u>
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
TTTVQCC
Geologic Information
Goologic Unit Ilos Em (Loyon Mosayanda) Coologia Aga Unnan Cuatagana
Geologic Unit Iles Fm (Lower Mesaverde) Geologic Age Upper Cretaceous Coal Zone(s) or Bed(s) Lower Pinnacle
coal zone(s) or bed(s) Lower Finnacie
Coal Thickness(es) 4'
Codi inickness(es) 4
Dip of Bedding 7° Strike of Bedding N50W
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 Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	As Rec'd Lower Pinnac 11,758 0.6 8.8 6.82 1 38.1 bit. steam	Dry cle 12,894 0.7 7.48		
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Do	n 4,257 to tion Thru 6/81 16 1,222,000 tons %) 99% - 1980 customer's to mestic Use yo	ons 55,567 s rucks es		

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 Parent Company Gulf Oil Corp. Creek-736-8111 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
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) <u>Lennox-Wadge: 35-40'</u> Wadge-Wolfcreek: about 100'

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I.		CONFIDE	NTIAL	
H.G.I. Rank of Coal Use of Coal Methane Emissions				
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(% Where To Whom In State(%) Where To Whom Transportation Type Coal Available for Dom	1,026,38 ion_plan_to Thru 6/81_1)yes, no b es railroad	continue at pres .8,024,587	sent level of 1.	1 MT/year
Additional Information portions of Sec. 12, 1				
portions of sec. 12, 1	3, 14, 23, 2	.4, 23, 14N NOOW		

Mine NameEnergy 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, 15N R86W, Sec. 24, 25, 3	, 10, 16, 17, 18, 19, 24, 30, T4N R86W R87W, Sec. 19, 20, 21, 28, 29, 30, 31, 6, T5N R87W
Codi Region Green River	Field Yampa
Topographic quadrangle (7 1/2) Mt. H	arris, Milner, Dunckly & Rattlesnake Butte
Company Information	
Mine Operator Getty Mineral Resource Address P.O. Box 772129, Steamboat Contacts Gary W. Myers/Jim Cooper	es Company
Address P.O. Box 772129, Steamboat	Springs, CO 80477
Contacts Gary W. Myers/Jim Cooper	Telephone 879-3800
Parent Company <u>Getty Uil Company</u>	
Address	Telephone 213/739-2733
Contacts J.D. Spaulding	rerephone213//39-2/33
General Information	
Mine Type surface	Mining Method strip-dragline
Mine Status <u>producing</u>	Start-up Date 1962
No. of Employees 267	_
No. of Acres in Permit	
Surface: Federal X Mineral: Federal X	Private X Private X
rineral. rederal x	_rrivatex
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°+	Ctuile of Dadding NEON
Dip of Bedding 5°+ Overburden Thickness(es) 0-140'	_Strike of BeddingN5°W
0 ver bur den Till (kniess (es) 0-140	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Wadge 11321 .41 10.64 6.64 sub bit. steam none	Wadge 11282 .40 10.50 7.68 sub bit. steam none		
Sales: Out of State(Where <u>Decatu</u> To Whom <u>Illi</u> In State(%) Where <u>Denv</u>	n 3,337,6 tion N/A Thru 6/81 22 Confidential %) 33% r, Illinois nois Power Con 67% er, CO lic Service Co rail spur fro mestic Use no	ompany of Colora	ado rado	
	in and comments			

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. 7.8.9.1	0 16 17 18 10 24 30 TAN DRGW Sec 12
13 14 23 24 25 26 TAN PROMISSION 19	0,16,17,18,19,24,30 T4N R86W, Sec. 12, 20,21,28,29,30,31,32,33,34,T5N, R86W,
Sec. 24,25,36 T5N R87W	20,21,20,29,30,31,32,33,34,13N, KOOW,
Coal Region Green River	Field Verms Cool Field
	Field Yampa Coal Field
	Harris, Milner, Dunckley, and
<u> </u>	lesnake Butte
Company Information	
Company Information	
Mine Operator Getty Mineral Resource	es company
Address P.O. Box 772129, Steamboat	Springs, CU 804//
Contacts Gary W. Myers/Jim Cooper	Telephone879-3800
Parent Company Getty Oil Company	
Address	7.1.1.010.7720.0720
Contacts J.D. Spaulding	Telephone 213/739-2733
General Information	
Mine Type surface	_Mining Method <u>strip-dragline</u>
Mine Status Idle	Start-up Date 1972
No. of Employees	_
No. of Acres in Permit	
Surface: Federal X	Private_X
Mineral: Federal X	Private X
Geologic Information	
Geologic Unit_Williams Fork	_Geologic Age Cretaceous
Coal Zone(s) or Bed(s) Fish Creek S	eam
Coal Thickness(es) 3-4'	
Dip of Bedding 5°+	Strike of Bedding N5°W
Overburden Thickness(es) 0-80'	<u> </u>
· ,	
Interburden Thickness(es)	

Mine Name <u>Energy No. 3</u>	
M.L.R.B. Permit No. C-036-81	······································
Map No. 59	
	•
Location Information	
County Routt	
Location (Sec. T. R.) portions of	Soc 1 2 12 13 24 TSN D86W
Location (Sec., T., R.) portions of Sportions of Sec. 18 & 19, T5N, R85W Coal Region Green River	5ec. 1, 2, 12, 13, 24, 13N, KOOW
Coal Region Green Pivon	Field Vampa
Topographic Quadrangle (7 1/2') Cow	Chook
ropographic quadrangle (7 1/2) COW	creek
Company Information	
Company Information	^
Mine Operator Getty Mineral Resource	es Company
Address P.O. Box 772129, Steamboat	Springs, CU 804//
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	Strip/Continuous
Mine Type surface & underground	Mining Method 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
rineral. Tederal	rrivaceX
Coologie Information	
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
	surface mine
100-800' for	underground mine
Interburden Thickness(es)	

<u>Coal Quality</u>	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	Wadge 11000 0.5 10.0 6.5 sub-bit. Steam			
Sales: Out of State(% Where Decatu To Whom Illi In State(%) 6 Where Denver	270,312 tor zion N/A Thru 6/81 2, confidential 3) 33% ar, IL nois Power Co 7% CO c Service Con cail spur from nestic Use No	,441,988 o. npany of Colora n Milner	do	

The Name Grassy Creek Coal Mine No. 1
1.L.R.B. Permit NoC-039-81
Map No60
ocation Information
CountyRoutt
Location (Sec., T., R.) portions of: sec. 20, 21, 28, 29, 31 & 32,
T5N, R87W
Coal Region <u>Green River</u> Field <u>Yampa</u> Topographic Quadrangle (7 1/2') <u>Mount Harris & Dunckley</u>
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
ContactsTelephone(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
rrivate
Coologia Information
Geologic Information
Geologic Unit <u>Iles Fm</u> Geologic Age <u>Cretaceous</u>
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)
over bur den Tillekness (CS)
Interhunden Thickness (es)
Interburden Thickness(es)

Mine Name <u>Hayden Gulch</u>	
M.L.R.B. Permit No. C-003-80	
Map No. 61	
	
Location Information	
County Routt	
Location (Sec., T., R.) portions of portions of: sec. 10, 14, 15, 22, 23	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') Haye	den Gulch & Havden
Company Information	
Mine Operator H.G. Coal Co.	
Address 5731 State Highway #13, Med	eker. CO 81641
Address 5731 State Highway #13, Med Contacts Mr. E.K. Olsen	Telephone 824-4451
Parent Company W.R. Grace & Co.	
Address 3400 First Intl. Bldg Dalla	as. TX 75270
Contacts T. R. Fowler	Telephone (214)658-1053
	7616phone <u>\Z117030-1033</u>
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
- Treat at Treat at	
Geologic Information	
Geologic Unit Williams Fork	Geologic Age Upper Cretaceous
Coal Zone(s) or Bed(s) 5 beds	deorogic Age opper cretaceous
odd zone(s) or bed(s) 5 beds	
Coal Thickness(es) 22' total	
odd Threkhess(es) ZZ total	
Dip of Bedding 5°NE	Strike of Bedding
Overburden Thickness(es) 9-50'	Strike of bedaing
overburden interness(es)	
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	composite average 9,978 .43 17.5 6.24 Sub. bit.			
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life 7 Sales: Out of State(% Where Texas & To Whom In State(%) Where To Whom Transportation Type Coal Available for Dom Additional Information	552,62 ion to 850 Thru 6/81 1 -10 m tons () 80% Midwest - G trucks estic Use y	6 tons ,000 tons a year ,233,140 strippable) ulf Area		

mine Name Meadows No. 1	
M.L.R.B. Permit No. C-029-81	
Map No62	
Location Information	
County Routt	
Location (Sec., T., R.) portions of	sec. 11, 14, 23, 24, 25, 26,
ION, RO/W	
Coal Region Green River	Field Yampa
Topographic Quadrangle (7 1/2') Mili	ner
, , , , , , , , , , , , , , , , , , ,	
Company Information	
Company Information Mine Operator Sun Coal Co.	
Address P.O. Box 26, Milner, CO 804	77
Contacts	Telephone 276-3746
Parent Company Sun Coal Co.	Terephone 270-3740
Address 1536 Cole Blvd., Golden, Co	0 80//01
Contacts Rick Chilton	Telephone 233-5284
Concaces Rick Chileon	rerephone 233-3204
Gananal Information	
General Information	Minima Malada and a salada a
Mine Type surface Mine Status idle	Mining Method scrapers and dozers
No. of Employees	Start-up Date 1977
	_
No. of Acres in Permit 199 acres Surface: Federal	Dustriation
Mineral: Federal	Private X
mineral: rederal	PrivateX
Coologia Information	
Geologic Information	Carloria Ana Custoscous
Geologic Unit Iles Fm	_Geologic Age <u>Cretaceous</u>
Coal Zone(s) or Bed(s) Pinnacle	
C. 1 Ti i / \ C 7 0 51	
Coal Thickness(es) 6.7-8.5'	
Din of Dadding 10% Will	
Dip of Bedding 18% WNW	Strike of Bedding
Overburden Thickness(es) 40-50'	
T. I. I. T	
Interburden Thickness(es)	

<u>coal Quality</u>	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%)	Pinnacle 11,145-11,19 .3947 12.18-13.07	90		
Ash(%) F.S.I. H.G.I.	4.54-5.06			
Rank of Coal Use of Coal Methane Emissions	HvC bit.			
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State Where To Whom In State(%) Where	on 27,940 ction n Thru 6/81 50 140,000 tons	08,847		
To Whom Transportation Type Coal Available for Do	rail omestic Uses	some		
Additional Information	on and Comments	<u>5</u>		

Mine Name Seneca II	
M.L.R.B. Permit No. C-005-80 Map No. 63	
map No. 53	
Location Information	
County Routt	
Location (Sec., T., R.) portions o	f: sec. 27, 34, 35, 36; T6N, R87W
Location (Sec., T., R.) portions of portions of: sec. 1, 2, 3, 11, 12, 13	3; T5N, R87W
coal Region Green River	Field Yampa
Topographic Quadrangle (7 1/2') Mili	ner, Mt. Harris
0	
Company Information	
Mine Operator Seneca Coals, Ltd.	
Address 12015 E. 46th Ave., Suite 60 Contacts Thomas J. Wainwright	00, Denver, CO 80239
Contacts Inomas J. Wainwright	1elephone 3/1-/990
Parent Company Western Utility Cor Address	p./Peabody Coal (joint venture)
Contacts	Talanhana
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/os Walf Crook . 161	Mada a Ol Lamay a Al
Coal Thickness(es) Wolf Creek: 16'	, wadge: 9 , Lennox: 4
Dip of Bedding 6° to 19°	Strike of Bedding
Overburden Thickness(es)	_ SCITINE OF BEGUING
2.c. 241 dell 1111cklie32/62/	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I.	Wolf Creek 12,090 0.52 10.3	Wadge 11,950 0.53 9.8 9.5	Lennox 11,860 2.51 13.6	
H.G.I. Rank of Coal Use of Coal Methane Emissions	Bit.	Bit.	Bit.	
Coal Production 1981 Production Thru 6 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life Sales: Out of State(% Where To Whom In State(%) Where Hayder To Whom Colo Transportation Type Coal Available for Dom Additional Information	1,//8, ion 1.6 MT Thru 6/81 1 32 MT 5) 100% Station Powe brado Ute Elec truck nestic Use	916 tons Y 2,399,888 r Plant tricity, Hayde	n Plant	

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 <u>Green River</u> Topographic Quadrangle (7 1/2') <u>Mil</u>	Field Yampa ner
Company Information Mine Operator Sun Coal Co., Inc. Address P.O. Box 26, Milner, CO 8 Contacts Parent Company Sun Coal Co., Inc. Address 1536 Cole Blvd., Golden, Contacts Rick Chilton	Telephone276-3746
General Information Mine Type underground Mine Status in preparation No. of Employees No. of Acres in Permit 7.5 acres Surface: Federal	_Mining Method <u>room & pillar</u> _Start-up Date <u>mid 1982</u>
Mineral: Federal	_PrivateX Private_X
Geologic Information Geologic Unit Iles Fm Coal Zone(s) or Bed(s) Blacksmith	Geologic Age <u>Cretaceous</u>
Coal Thickness(es)_6.4	
Dip of Bedding 18% WNW Overburden Thickness(es) 0-1500'	_Strike of Bedding
Interburden Thickness(es)	

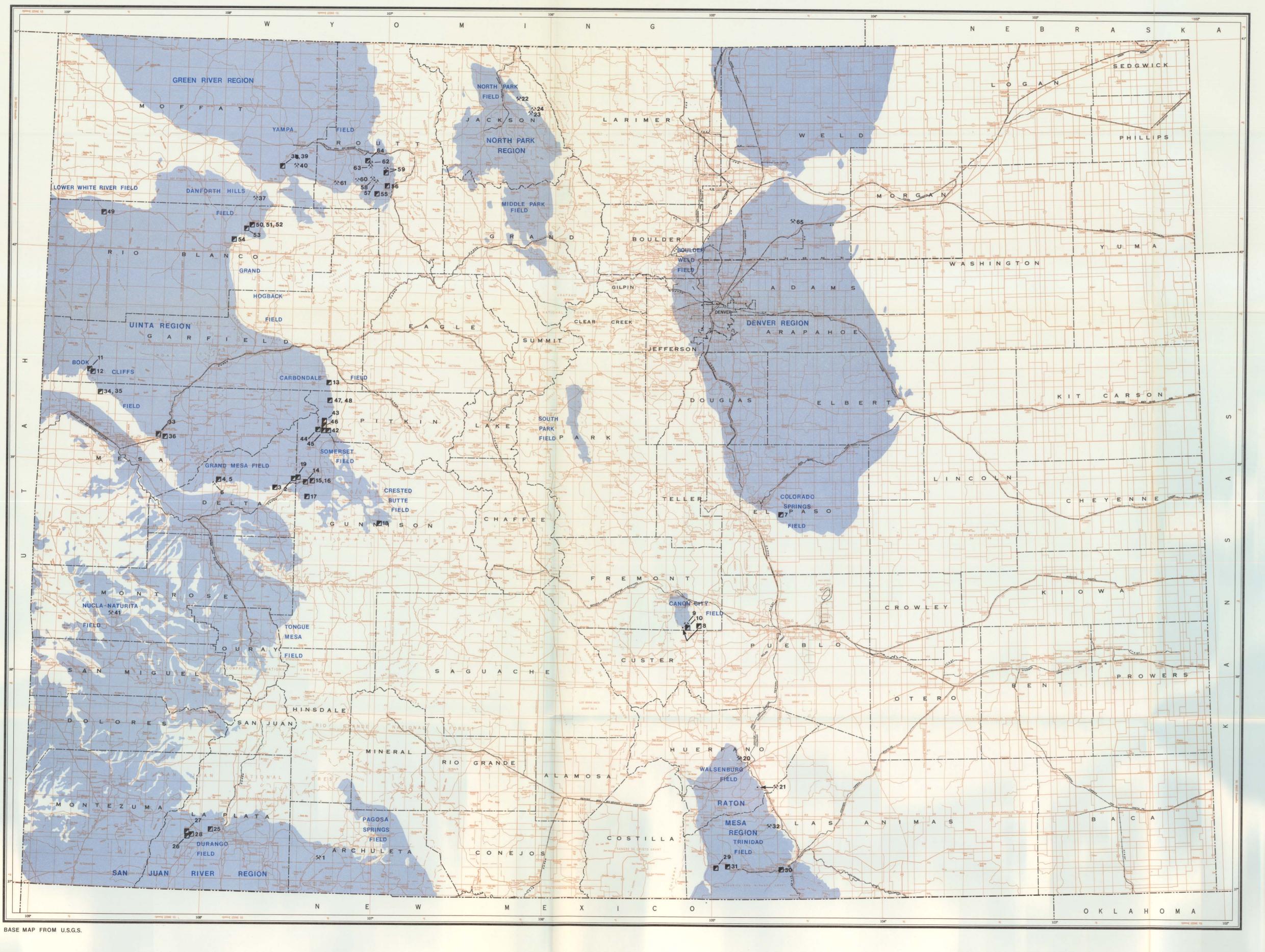
Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Blacksmith As Rec'd 11,538 .91 9.73 6.19 45.2 at 9.44 HvC bit.	Blacksmith Dry 12,782 1.01 6.85 4% moisture		
Coal Production 1981 Production Thru 1980 Annual Production 1985 Projected Production Reserves/Est. Life Sales: Out of State(** Where To Whom In State(**) Where To Whom Transportation Type Coal Available for Don Additional Information	n none tion 150,00 Thru 6/81 no 450,000 tons no %) exported rail mestic Use so	one recoverable ome		
	THE COMMETTEE			

Tine Name Coors Keensburg	
1.L.R.B. Permit No. <u>C-028-81</u>	
Map No. 65	
<u>ocation Information</u>	
County <u>Weld</u>	
Location (Sec., T., R.) portions of:	sec. 25, 26, 35 & 36, T3N, R64W
Coal Region <u>Denver</u>	Field Boulder-Weld
Topographic Quadrangle (7 1/2') Klu	g Ranch, Tampa
 	
Company Information	
Mine Operator Coors Energy Co.	
Address P.O. Box 359, Keenesburg, CO	80643
Address P.O. Box 359, Keenesburg, CO Contacts John Nelson	Telephone 659-8520
Parent Company Adolph Coors Co.	
Address P.O. Box 467, Golden, CO 804	01
Contacts Louis Gaspar	Telephone 278-7030
General Information	
Mine Type surface	Mining Method strip
Mine Status in preparation	Mining Method <u>strip</u> Start-up Date <u>Sept. 1981</u>
No. of Employees 37	
No. of Acres in Permit 1525+ acres	
	Private X
	Private X
Timerar: rederar	
Geologic Information	
Geologic Unit Laramie Formation	Goologic Age Cretaceous
Coal Zone(s) or Bed(s) No. 7	debrogic Age crecaceous
coal zone(s) or bed(s) No. 7	
Cool Thickness (co.) 2 01	
Coal Thickness(es) 2-8'	
Din of Podding	Strike of Bedding
	strike of beduing
Overburden Thickness(es) 60-160'	
Intonhouden Thistoness ()	
Interburden Thickness(es)	

Coal Quality	Sample 1	Sample 2	Sample 3	Sample 4
Bed or Seam Heat value (BTU/1b) Sulfur(%) Moisture(%) Ash(%) F.S.I. H.G.I. Rank of Coal Use of Coal Methane Emissions	Average of 9 samples 8,079 .37 28.33 7.68			
Coal Production 1981 Production Thru 6, 1980 Annual Production 1985 Projected Product Cumulative Production Reserves/Est. Life 20 Sales: Out of State(% Where To Whom In State(%) Where Golder To Whom Coors Transportation Type Coal Available for Dome	none ion 500,000 Thru 6/81 years) 100%? n Boiler Plantruck estic Use	none		

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



SCALE 1:1 000 000

EXPLANATION

☆ - Surface Mine

- Underground Mine

UINTA REGION - Coal region name

SOMERSET FIELD - Coal field name

Approximate coal region boundary

- Railroads

COAL MINE INFORMATION

ARCHULETA

1. Chimney Rock Coal Strip; sec. 29,30,T33 1/2N,R4W;Fruitland Fm;Beds A,B,C;HvA bit;Production:1980: 8,424 st;1981 thru June: 87,897 st.

- 2. Blue Ribbon;sec.,2T13S,R91W;Mesaverde Fm;Bed E;bit;Production:1980: 97,013 st;1981 thru June: 63,617 st. 3. Orchard Valley;sec.7,12,13...*,T13S,R92W;Mesaverde Grp.;Bed D;Production:1980: 761,824 st;1981 thru June: 469,783 st.
- 4. 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. 5. Red Canyon Mine #2;sec.2,11,12,T13S,R95W;Williams Fork Fm;Bed D;No production as of June 1981.
- 6. 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.

7. Bacon Mine;sec.29,30,T14SR64W;Laramie Fm;Beds A & B;sub-bit C;Production:1980: 38,778 st;1981 thru June: 3,579 st.

8. Dorchester No. 1;sec.19,25,26,30,T20S,R69W;Vermejo Fm;Manly,Vento Seams;bit;Production:1980: 76,574 st;1981 thru June: 79,364 st* 9. GEC Strip;sec.24,25,T20S,R70W,sec.19,30,T20S,R69W; Vermejo Fm;Beds D,E,G,J,K;HvC bit;Production:1980: 60,994 st;1981 thru May: 26,655 st.

10. Newlin Creek;sec.30,31,T20S,R69W;Vermejo Fm;Shamrock Seam;Production:1980: 102,591 st;1981 thru June: 44,065 st.

11. 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.

12. 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. 13. Sunlight Mine;sec.33,34,T7S,R89W;Mesaverde Fm;Beds A,B,C,&D; HvB bit;Production:1980: 1300 st;1981 thru May: 622 st.

- 14. 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.
- 15. Hawk's Nest East;sec. 1-3,...* T13S,R90W;Mesaverde Grp.;Bed E;HvB bit;Production:1980: 336,141 st;1981 thru May: 315,685 st. 16. Hawk's Nest West;sec. 1-3,...* T13S,R90W;Mesaverde Grp.;Bed E;HvB bit;Production:1980: 6,000 st;1981 thru May: 9,067 st.
- 17. Mt. Gunnison No. 1;sec. 8,9,15,...* T13,14S,R90W;Mesaverde Grp.;Bed F;bit;No production as of June 1981. 18. Ohio Creek Coal Mine No.2;sec. 15,16,T15S,R86W;Mesaverde Grp;Bed C;HvC bit;Production:1980: 1,448 st;1981 thru June: 583 st. 19. 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.

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20. Colorado Coal Mine No. 1;sec.25,36,T27S,R67W;Vermejo Fm;multiple beds;No production as of June 1981. 21. Viking Strip;sec. 13,18,19,24,T29S,R65W;Vermejo Fm;multiple beds;Production:1980: 23,514 st;1981 thru June: 14,007 st.*

- 22. Bourg Mine;sec.7,18,T9N,R78W;Coalmont Fm;Lower & Upper beds;Production:1980: 4,000 st;1981 thru June: 44,796 st.
- 23. Canadian Strip;sec.2,10,11,T8N,R78W;Coalmont Fm;Sudduth Seam;sub-bit; Production:1980: 43,915 st;1981 thru June: 77,913 st. 218,460 st. 24. Marr Strip;sec.15,22,23,...* T9N,R78W;sec.2,T8N,R78W,Coalmont Fm;Sudduth Seam;sub-bit;Production:1980: 759,000 st;1981 thru June:
- 25. Coal Gulch;sec.15,16,20,22,T35N,R10W;Menefee Fm;Beds A-1,A-2,B-4;HvA or B bit;Production:1980: None;1981: None. 26. National King Mine;sec.29,31,32,T35N,R11W;Menefee Fm;Upper Bed;bit; Production:1980: 92,963 st.;1981 thru June: 60,954 st.
- 27. Peacock Coal Mine;sec.29,T35N,R11W;Menefee Fm;Peerless Seam;bit;Production:1980: 656 st;1981 thru June: 215 st. 28. Shalako Mine;sec.27,28,29,T35N,R11W;Menefee Fm;Bed A;bit;No production as of June 1981.

LAS ANIMAS 29. Allen Mine; sec. 22 & 23, T33S, R68W; Raton Fm; Allen Seam; sub-bit; Production: 1980: 561, 727 st; 1981 thru June: 291, 214 st.

31. Maxwell Mine;sec.29,T33S,R67W;Raton Fm;Maxwell Seam;Production:1980: 200,959 st; 1981 thru June: 121,126 st. 32. Trinidad Basin;sec.15,21,22,T31S,R65W;Raton Fm;Del Aqua Seam;Production:1980: 67,757 st;1981 thru June: 32,345 st.

30. Helen Mine;sec.31,32,36,T33S,R64W;Vermejo & Raton Fms;Upper Starkville Seam;HvA,B bit;Production:1980: 11,742 st;1981 thru May: 153

- 33. Cameo No. 1 Mine;sec.20-23,...* T10,11S,R98W;Mt. Grafield Fm;Cameo B Seam;Production:1980: 207,208 st;1981 thru June: 161,707 st.
- 34. Fruita Mine No. 1;sec.29,30,T8S,R101W;Mt. Garfield Fm;Cameo & Anchor Seams;bit:No production as of June 1981. 35. 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. 36. Roadside Mine;sec. 20-23,...* T10,11S,R98W;Mt. Garfield Fm;Cameo B Seam;bit;Production:1980: 547,651 st;1981 thru June: 315,673 st.

- 37. Colowyo Coal Mine;sec.13,22,...* T3,4N,R93W;Williams Fork Fm;mult.seams;sub-bit A to HvC bit;Production:1980: 2,682,659 st;1981-June: 1,444,393 st. 38. Eagle No. 5;sec.31,32,...* T5,6N,R91W;Williams Fork Fm;Beds C,E,F,P;sub-bit;Production:1980: 473,773 st;1981 thru June: 235,582 st.
- 39. Eagle No. 9;sec.31,32,...* T5,6N,R91W;Williams Fork Fm;Beds C,E,F,P;sub-bit;Production:1980: 180,259 st;1981 thru June: 33,084 st. 40. Trapper Mine;sec.5,6,...* T5,6N,R90,91W;Williams Fork Fm;Beds H,I,Q,R;sub-bit;Production:1980: 2,014,376 st;1981 thru June: 1,092,105 st.

41. 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.

- 42. 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. 43. 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.
- 44. 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.
- 45. Dutch Creek #2;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. 46. L.S. Wood;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
- 47. 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. 48. 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.

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- 49. Deserado Mine;sec.1-4,...* T2,3N,R101W;Williams Fork Fm;Beds B,B/C,D;sub-bit;No production as of June 1981. 50. Northern No. 1;sec.21,T2N,R93W;Williams Fork Fm;Bed FF;sub-bit;Production:1980: 63,079 st;1981 thru May: 5,800 st.
- 51. Northern No. 2;sec.21,T2N,R93W;Williams Fork Fm;Bed P;No production as of June 1981.
- 52. Northern No. 3;sec.21,T2N,R93W;Williams Fork Fm;Bed J;No production as of June 1981. 53. Rienau No. 2;sec.29,T2N,R93W;Mesaverde Grp.;Bed G;Production:1980: 144,815 st;1981 thru June: 78,884 st.

54. Sulphur Creek;sec.10,T1N,R94W;Williams Fork & Iles Fms;multiple beds;Production:No production as of June 1981.

- 55. Apex No. 2;sec.21,22,T4N,R86W;lles Fm;Lower Pinnacle;Production:1980: 4,257 st;1981 thru June: 1,637 st. 56. 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.
- 57. Energy No. 1;sec.7-10,...* T4,5N,R86,87W;Williams Fork Fm;Wadge Seam;sub-bit;Production:1980: 3,337,611 st;1981 thru June: 1,729,354 st. 58. Energy No. 2;sec.7-10,...* T4,5N,R86,87W;Williams Fork Fm;Fish Creek Seam;sub-bit;Production:1980: None;1981 thru June: None.
- 59. 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. 60. Grassy Creek Coal Mine No. 1;sec.20,21,28,...* T5N,R87W;lles Fm;multiple beds;Production:1980: 227,386 st;1981 thru June: 117,166 st. 61. 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.
- 62. Meadows No. 1;sec.11,14,23,...* T6N,R87W;lles Fm;Pinnacle Seam;HvC bit;Production:1980: 27,940 st;1981 thru June: 9,156 st. 63. 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.

64. Trout Creek No. 2;sec.11,14,23,T6N,R87W;lles Fm;Blacksmith Seam;HvC bit;Not in production as of June 1981.

65. Coors Keensburg:sec.25,26,35,36,T3N,R64W;Laramie Fm;Bed No. 7;No production as of June 1981.

*Additional legal information on data sheets.

REFERENCES

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Colorado Division of Mines, 1980, A Summary of Mineral Industry Activities in Colorado, Part I: Coal, 45 p.

Department of the Interior, Bureau of Land Management, Northwest Colorado Coal Environmental Statement FES 77-1, Site Specific Analysis,

Department of the Interior, Bureau of Land Management, Proposed Development of Coal Resources in West-Central Colorado, Final

Environmental Statement, Vols. I, II, and III, FES 78-120, 1978.

Goolsby, S.M. and Reade, N.B.S., 1978, Map of Licensed Coal Mines in Colorado as of June 1, 1978, Colorado Geological Survey, Map Series 12,