## **APPENDIX C**

## **Assessment of Coal Lease Payment Options**

OTA examined a range of options that require payments as a precondition for lifting the section 3 disqualification from a noncomplying leaseholder. OTA used a standard engineering-accounting method to calculate the after tax net present cost of each option for two model lease tracts, an underground mine in Utah and a surface mine in the Powder River Basin of Wyoming. The tract characteristics were chosen to be representative of a lease tracts that could be used to sustain new mining operations in these regions. The trait characteristics are summarized below. The options were originally selected in May 1985, based upon various proposals that were then circulating: additional holding fees were analyzed in Fall 1985 to include the more significant payment requirements of later proposals. The revised analysis is included in Chapter 4.

The payment options are summarized below.

Delay Rental: A non-recoupable annual payment for the privilege of deferring development of the property which could be avoided by relinquishing the lease or beginning production. This payment would begin immediately and stop upon production. (These payments can be expensed or capitalized at the payor's option for tax purposes.)

Several variations of delay rental payments were costed out:

- Option 1: Acreage-based delay rental
  - (a) \$1 per acre
  - (b) \$5 per acre
- Option 2: Reserves-based delay rental, fixed rate
  - (a) \$0.0001 per ton on 1% of reserves
  - (b) \$0.001 per ton on 1% of reserves
  - (c) \$0.0001 per ton increasing annually by \$0.0001 to a cap of \$0.001
- Option 3: Reserves-based delay rental, ad valorem rate
  - (a) 0.5% of value on 1% of recoverable reserves, constant Price
  - (b) 0.5% of value on 1% of reserves with 4% annual price increase

**Minimum Royalty:** A substantially uniform annual payment in the absence of mineral production. The payment is imposed on readjustment which is assumed to occur in year 5. The payment is recoupable. For tax purposes it can be expensed in the year paid.

- Option 4: Minimum Royalty, Reserves-based, Fixed rate
  - (a) \$.0.0001 per ton on 1% of recoverable reserves
  - (b) \$0.001 per ton on 1% of recoverable reserves
- Option 5: Minimum royalty, Reserves-based, ad valorem rate
  - (a) 0.5% of value, 1% reserves, constant price
  - (b) 0.5% of value, 1% reserves, 4% annual price increase

**Advance Royalty:** Payment begins immediately and ends on production. The payment is nonrecoupable. For tax purposes, we assume it is capitalized and that cost depletion is used. (We note that it is more likely that percentage depletion might be used, it is not used here as it would not directly reflect the impact of the holding fee.)

Option 6: Advance Royalty- Reserves based - fixed rate

- (a) \$0.0001 per ton on 1% of reserves
- (b) \$0.001 per ton on 1% of reserves
- (c)\$0.0001 escalating annually by\$0.0001 to a cap of \$0.001

Option 7: Advance Royalty - Reserves based - ad valorem rate

- (a) \$0.5% of value on 1% of reserves, constant price
- (b) \$0.5% of value on 1% of reserves, 4% annual price increase

Several additional options have since been analyzed using the programs developed for this study.

## Characteristics of Tracts Used in OTA Analysis of Holding Fees

## Wyoming Lease:

Powder River Basin
Surface mine
2000 acres
200 million tons of reserves
60 foot seam
8500 BTU/lb., 0.58% sulfur, 6%ash
5 million tons per year
Recovery rate 90%
Mine life 40 years
F.O.B. mine price \$7.60 (contract)
Readjustment in year 5
Federal royalty 12.5%
Production begins in year 10

## **Utah** Lease

Uinta Region
Underground Mine
2000 acres
21.6 million tons of reserves
12 foot seam
11,500 BTU/lb., 0.5% sulfur, 9% ash
500,000 tons per year
Recovery rate 50%
Mine life 40 years
F.O.B. mine price \$26.00 (contract)
Readjustment in year 5
Federal royalty 8%
Production begins in year 10

TABLE A-2

ANALYSIS OF HOLDING FEE OPTIONS

After Tax Net Present Cost to Lessee

	WYOMI NG	UTAH
Del ay Rental   I (a) \$1/ac   I (b) \$5/ac   2(a) \$0.0001/ton	\$7,030 \$35,100 \$632	\$7,030 \$35,100 \$76
on 1% reserves 2(b) \$0.001/ton	\$6,320	\$760
on 1% reserves 2(c) escal ating \$0.0001-0.001	\$2,140	\$255
on 1% reserves 3(a) 0.5% value on 1% reserves	\$240,000	\$98,700
constant price 3(b) 0.5% value on 1% reserves	\$276,000	\$113,000
4% Annual increase		
Minimum Royalty 4(a) \$0.0001/ton on 1% reserves	\$54	\$6
4(b) \$0.001/ton	\$540	\$60
on 1% reserves 5(a) 0.5% value on 1% reserves	\$20,700	\$8,480
constant price 5(b) 0.5% value on 1% reserves 4% Annual increase	\$27,100	\$11,100
Advance Develtu		
Advance Royalty 6(a) \$0.0001/ton on 1% reserves	\$839	\$104
6(b) \$0.001/ton	\$8,390	\$1,040
on 1% reserves 6(c) escalating \$0.0001-0.001	\$2,704	\$342
on 1% reserves 7(a) <b>0.5% value</b> <b>on 1% reserves</b>	\$319,000	\$135,000
constant price 7(b) 0.5% value on 1% reserves 4% Annual increase	\$381,000	\$137,000
Mining SubComn Draft (a) \$0.001/ton/yr (b) \$0.01/ton/yr	\$632,365 \$6,323,654	%75,883 \$758,837

FEDERAL COAL LESSEES AND HEIR PARENT COMPANIES

Page No.

33837	PARENT #1	BUS. CAT.	PARENT #2	BUS. CAT.	LEASES	ACRES RE	ACRES RECOV. RES.
-		- 0			<	2532	31 85
AMCA Coal Leasing, Inc.	AMCA Resources	1001			•	777 738	1 17
Abston Construction Co.	Abston Construction Co.	coat			- •	5	
Alabama Electric Coop.	Alabama Electric Coop.	מבוונזמ בניים			- •	26	8 8
Alaska State Bank	Alaska State Bank	other				9 6	80.0
American Colloid Co.	American Colloid Co.	other				8 5	
American Minority Mining	American minority mining	othor			٠ ،	280	67 0
Ametex Corp.	Ametex Corp.	other			1 ~	280	% 5
Anchor Coal Co.	Fluor Lorp.	other intility			۰ ۸	2227	266.70
Antelope Loal Lo.	And Mining Company (20)	מנונול			۱ ۸	240	0.52
Apex Mining Company, inc.	Apex mining company, inc.	280	Hint Enterprises	280	7[	16223	61.34
AFK Land Co.	Assignation of the contract of	9. j. j.	שמור בוויפו לו ואפא	550	٣	7419	196.43
Atlantic Kichfield Co.	Attantic Richlieta to.	other other			1 4	687	135.59
Bank of America	bankamer Ica colp.	1,41,11			- 141	2425	28, 10
pasin cooperacive services	Bass of Coperatives	other.			•	20701	242.10
Bass, K. & Bass IIIusts	Days, A. & Days   Lasts	Jeon Jeon			-	2325	40.63
Baukot-Noonan, Inc.	Attach Dickfield Co	oil maior			^	2494	93.54
Detayer cleek coar co.	Interporth Corp	nat das			-	4551	215.80
מין בין סיפרון מילים	Bell - C. C. F.	individ.			-	8	0.05
	Dotton Kighit Cope Too	2 2 2 2 2 2			2	077	27.80
Big Horn coal co.	Dishapant Colls, Ille.				-	161	78
Bishopsgate Coal Corp.	Bishopsgare coar corp.	1001	400000000000000000000000000000000000000	4	- •	1,007	2 2
Black Butte Coal Co.	Peter Klewit Sons, Inc.	other	פוווטוו דמרווור כטוף.	סכוופו	- 66	12608	25.05
Blackhawk Coal Co.	American Electric Power Co.	חבונוגא			- •	0603	50.00
Bokoshe Coal Company	K & R Coal Co.	COB1				8 8	2,7
Bonsness, L.	Bonsness, L.	פואומרו			- h	00 72 / 6	20.00
Bridger Coal Co.	Pacific Power & Light Co.	utility	dano Power Co.	מניונא	n 6	3,5	327.00
Brigham Young University	Brigham Young University	other			<b>Λ</b> •	//	- 0
Bugni, A.	Bugni, A.	individ			- •	⊋ 6	9.6
Bugni, T. & R.	8∪gni, <b>A. &amp; T.</b>	individ			-,	9	9.5
CF&I Steel Corp.	Crane Co.				- (	3470	07.40
COP Coal Development Co.	COP Coal Development Co.				~ .	1480	19.39
CPS Mining Co, Inc.	CPS Mining Co, Inc.				<b>,</b> .	538	0.30
California Portland Cement Co.	California Portland Cement Co.				- 1	1548	21.36
Cameron Coal Co.	Cameron Coal Co.	coal			ν ·	7977	14.85
Capital Development Co.	Capital Development Co.	other			<b>-</b> - ,	1832	08.7
Carbon Coal	Hamilton Bros. Jt. Venture		Property Holding Co.	of A bugu other	_ ,	160	0.48
Cari International Mining Corp	Cari International Mining Corp				- •	360	1.51
Carroll County Coal Co.	Carroll County Coal Co.	other			<b></b> •	412	18.58
Chapman, R.	Chapman, R.	individ				1675	17.60
Chevron Coal Development Co.	Chevron Corp.	oil major			- •	674	9.01
China Butte Coal Co.	China Butte Coal Co.	other			- •	2974	02.73
Clinchfield Coal	Pittston Coal Co.	coal			۲,	152	0.30
Coastal States Energy Co.	The Coastal Corp.	nat gas			0L	15299	78.30
Colorado Westmoreland, Inc.	Westmoreland Coal Co	coal			• t	0443	
Colorado Yampa Coal Co.	Texaco, Inc.	oil major		6	- c	4/7	0.73
Colowyo Coal Co.	W.R. Grace & Co.	bird ,	Hanna Mining Corp	E SE	7 6	0,627	140.70
Conotton Land Co.	Cravat Coal Co.	coal			u e	1805	06
Consol Land Development	SuPort P.Bost	ם דו ני			- 72	57531	1086.24
Corp. of the Dragiding Richer	Corp of the pres ding B shop	other			'n	3045	0.00
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FEDERAL COAL LESSEES AND THEIR PARENT COMPAN ES

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LESSEE	PARENT #1	BUS. CAT.	PARENT #2	BUS CAT	FASES	ACRES PR	ACRES RECOV DES
Cotesii Droperties Inc							
Cumberland Coal Co.	Poter Kiewit Sone 120	coal			m	3198	60.20
Davis, R.	Davis P	other	Union Pacific Corp.	other		1408	29.70
Decker Coal Co.	Pacific Power & Light Co	otiliti.	4	-	- ,	07	0.07
Denton, C.	Denton, C.	717170	Letel Niewic Solls, Inc.	otner	Λ,	14771	374.50
Divide Coal Mining Co.	Divide Coal Mining Co.	Ŭ			_ ,	8	0.30
Dorchester Coal Co.	Damson Oil Corp.				- r	200	08.0
Eastern Coal Properties, nc.	Eastern Gas & Fuel Associates				<b>~</b> •	14729	117.70
	Pacific Power & Light Co.				- r	0161	33.62
Edison Development Co.	Commonwealth Edison				7 •	48/4	30.00
Emery Energy, Inc.	Emery Energy, Inc.	coal			- •	9 1	103.00
Empire Energy Corp.	Standard Oil of Indiana, Co.	oil major			- 、	5	20.30
Energy Development Co.	Iowa Public Service Co.	utility			<b>.</b>	1155	04.67
Energy Reserves Group, Inc.	Broken Hill Proprietary Ltd.	m&m			- 、	966	S. 5
Equipment Rental Service	Equipment Rental Service	other			<b>†</b> -	<b>X C C C C C C C C C C</b>	0.10
Evans Coal Co.	Armco Steel Corp.	steel			- :	4705	3 6
Exxon Coal Resources USA, Inc.	Exxon Corp.	oil major			<u> </u>	3300	24.72
Exxon Coal USA	Exxon Corp.	oil major			<b>7</b> P	11057	0.00
FMC Corp.	FMC Corp.	nrrd			י ר	7201	1407.00
Falkirk Mining Co.	North American Coa Corp.	coal			<b>u</b> -	250	0.1.
Fannin Square Corp.	Texas Eastern Transmission	nat gas				9 5	7.7
Farrell Cooper Mining Co.	Farrell Cooper Mining Co.	coal			- 、	1910	35.62
Files, Jerry A.	Files, Jerry A.	individ			۰ ۰	10246	% 8.8
Fort Union Mine Partnership	Frontier Coal Co. USA	5			- ,	175	2.0
Frandsen, G.	Frandsen G.	individ			- •	1913	115.00
Franklin Real Estate Co.	American Electric Power Co	111111			- •	04	0.42
Freeman-United Mining Co.	General Dynamics Corp.	מנונו			- •	634	3.35
Fulton, C.	Fulton, C.	individ				, 561	0.0
Gaither, K.	Gaither, K.	20.5			•	80	0.30
Gaither, Kenneth R.	Gaither, Kenneth R.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			,	2557	9.78
Garland Coal & Mining Co.	Garland Coal & Mining Co.	P leo				5707	12.60
General Electric Holdings, no	General Electric Corp.	ייים כ			<b>4</b> 1	3084	8.60
	Gent's Flying Enterprises	9 4			<b>~</b>	2290	0.0
Geo Resources Exploration, Inc	Geo Resources Exploration 150				۷ .	160	K.
Getty Minerals Marketing, Inc.					- 1	320	0.69
Getty Mining Co.	Texaco, Inc.					6710	۶. 8.
Grand Mesa Properties Co.	Eastern Gas & Fuel Associates	other	NICOP 125		4 (	3929	51.00
Granite Creek Coal & Uranium	Granite Creek Coal & Uranium	other		nat gas	7 .	1266	20.46
Great National Corp.	Great National Corp.	other			- •	087	0.20
Greenwood Land Mining Co.	The Sun Co.	oil major			- •	041	0.14
Gulf Dil Corp.	Chevron Corp.	oit major			- <	604	0.26
HFCO, Inc.	HFCO, Inc.	Coal			ֆ•	28866	803.74
Hall, H.	Hall, H.	individ				8	6.0
Mayden Gulch West Coal Co.	W.R. Grace & Co.	nrrd	Hanna Mining Corp.	mg m		000	87.0
Helen Mining Co.	North American Coal Co.	coal			- ۸	26,90	
Miko Bell Mining & Oil Co.	Hiko Bell Mining & Oil Co.	580			ı m	6400	42.76
IBI Coal Co	TABLE BOOK TO TO TO THE TABLE	other			9	12439	30.43
Ingraham, F.	Ingraham F.	individ			ν.	9306	55.88
Intermountain Exloration Co	Intermountain Exploration Co.	ngu mgu				160	0.14
		:			_	160	0.00

FEDERAL COAL LESSEES AND THEIR PARENT COMPANIES

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BUS. CAT. PARENT #2																								Hunt Enterprises of														Pannandle Eastern Pipeline Co. nat							Westhoff Brothers, Inc. 01										
BUS. CAT.	:	1nd1v1d	individ	individ	coal	steel	0&9	other	0&9	other	individ	utility	individ	other	individ	other	individ	utility	other	individ	nrrd	other	m&m	0&9	m&m	coal	other oil moion	olt major	other	other			coal	other	utility	utility	coal	peabody	nat gas	nat gas	nat gas	other	מנונות	200	0&g	o&g utility individ	o&g utility individ utility	o&g utility individ utility peabody	o&g utility individ utility peabody	o&g utility individ utility peabody	o&g utility individ utility peabody coal	o&g utility individ utility peabody coal	o&g utility individ utility peabody coal	o&g utility individ utility peabody coal	o&g utility individ utility peabody coal
PARENT #1		Israel, J.J.		Johnson, G. & A.	K&R Coal Co.	Kaiser Steel Corp.	Quaker State Oil Refining Co.	Centurion Trust	Kerr-McGee Corp.	King Cannel Coal Co.	Kingston, C. & J.	Montana-Dakota Utilities	Kukuchka, C. & W.	Kaneb Services	Lombardi, P.	Northwest Industries. Inc.	Loveless, Robert M.	Arizona Public Service Co.	Martin, J., trustee	Martinez, A.	General Dynamics Corp.	McKinnon Marital & Resid. Tr.	Amax, Inc.	Ashland Oil Co.	Pitkin Iron Corp.	Mid-Continent Resources Corp.	Standard Equipment, Inc.	Mobil Corp.	Monolith Bortland Coment Co	Dotor Kingit Sons Inc	Mountain States Resource Forn	National King Coal		Ranchers Energy Co.	Nevada Power Co.	San Diego Gas & Electric Co.	North American Coal Corp.	Peabody Holding Co.	K-N Energy, Inc.	Internorth Corp.	Williams companies	Northwest Mutual Life Ins. Co.	montana rower to.		Petroleum International, Inc.	Petroleum International, Inc. Pacific Power & Light Co. Padilla F	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Persody Holding Co.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co. Perma Resources Corp.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co. Perma Resources Corp.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co. Perna Resources Corp.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co. Perma Resources Corp. Peter Kiewit Sons, Inc.	Petroleum International, Inc. Pacific Power & Light Co. Padilla, F. Public Service Co. of NM Peabody Holding Co. Perma Resources Corp. Peter Kiewit Sons, Inc.
LESSEE		Israel, J.J.	Jennings, James Sanders	Johnson, G. & A.	K&R Coal Co.	Kaiser Steel Corp.	Kanawha Hocking Coal & Coke	Kerr Coal Co.	Kerr-McGee Coal Co.	King Cannel Coal Co.	Kingston, C. & J.	Knife River Coal Co.	Kukuchka, C. & W.	LEECO	Lombardi, P.	Lone Star Steel Co.	Loveless, Robert M.	Malapai Resources Co.	Martin, J., trustee	Martinez, A.	Material Service Corp.	McKinnon Trusts	Meadowlark Farms, Inc.	Medicine Bow Coal Co.	Mid-Continent Limestone Co.	Mid-Continent Resources Corp.	Mining Systems Corp.	Mobil Coal Resources Co.	Mono Fower to.	Monten Portiard Cement Co.	Montana Koyatty Co.	Mational King Coal Co	National King Coal, Inc.	Neil Butte Co.	Nevada Electric Investment Co.	New Albion Resources Co.	North American Coal Co.	North Antelope Coal Co.	North Central Energy Co.	Northern Minerals Co.	Northwest Carbon Co.	Northwest Mutual Life Ins. Co.	NorthWestern Resources Co.	4 - 4 - 4	P.I.I. West Ltd.	P.1.1. West Ltd. Pacific Power & Light Co.	P.I.I. West Ltd. Pacific Power & Light Co. Paragon Resources Co.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Perbody Coal Co.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Peabody Coal Co.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Peabody Coal Co.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Peabody Coal Co. Perma Mining Corp.	P.i.i. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Peabody Coal Co. Perma Mining Corp.	P.1.1. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Perabody Coal Co. Perma Mining Corp.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Perma Mining Corp. Perer Kiewit Sons. Inc.	P.I.I. West Ltd. Pacific Power & Light Co. Padilla, F. Paragon Resources Co. Peabody Coal Co. Perma Mining Corp. Peter Kiewit Sons, Inc.

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COMPANIES
PARENT
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Phillips Petroleum Corp.  Pitkin Iron Corp.  Powder River Coal Co.  Powderhorn Properties Co.  Rasmussen, A. & V.  Read, Edwin C.  Reese, Thomas E. & Dixie  Republic Steel Corp.  Resource Development Co.	Phillips Petroleum Corp.	oil major					
					m ·	3580	268.00
	Pitkin Iron Corp. Desbody Holding Co	m&m pode control	NICOR, Inc.	nat gas	c	040	0 y
	Fastern Gas & Fue! Associates	other	NICOR DC.	nat can	<b>1</b> ~	8524	 
	Rasmussen, A. & V.	individ			. –	9	0.15
	Read, Edwin C.	individ			-	520	0.0
	Reese, Thomas E.	individ			-	8	0.00
	Republic Steel Corp.	steel			7	3536	9.50
	Pacific Power & Light Co.	utility			'n	4311	130.00
oloration & Min ng	Resource Exploration & Mining	coal			-	8	1.40
	Riebold, P.	individ			-	1675	17.60
sing, Inc.	Reliance Group Holdings, Inc.	other			-	197	0.37
	Peter Kiewit Sons, Inc.	other			ĸ	6481	35.96
	Standard Oil (Ohio) Co.	oil major			-	2571	67.14
ion Co.	Ruby Construction Co.	other			-	146	1.40
	Ryans Creek Coal Co.	coal			٠ ٨	2240	2
	Occidental Petroleum Coro.	oil major	Colorado Ute Flecto o Asso	- 1i+v	1 <	14020	110.50
	Broken Hill Proprietary Itd	m&m		4	, -	2077	9
	Santa La Industrias Co	1040			- ر	177	3.5
	alita re iliadoti leo, co.	oit maior			٧,	101	7.
	snell Uil Lorp.	Jolem 110			4	/280	2.1.50
s, Inc.	Occidental Petroleum Corp.	oll major			-	9	0.65
	Simmons, J.	מואומיו			-	8	5
	mith & Peavley Co.	coal			-	1282	K.0
ciates	Smith-Holliday Associates	other			-	80	1.25
	Eastern Gas & Fuel Associates	other	N nc.	nat gas	2	4882	55.08
	California Portland Cement Co.	oil major			-	400	0.0
Sorenson Resources Co. Sc	Sorenson Resources Co.	other			M	6400	42.76
	Pacific Power & Light Co.	utility			-	2347	243.00
	Stovall, Billy Gene	individ			-	521	0.72
	Pyro Energy Co.	5%0			2	240	0.0
pment Co.	The Sun Co.	oil major			7	15148	643.62
Swanton Energy Resources Co. Sh	Swanton Corp.	other			16	27658	360.77
Sweetwater Resources, Inc. Mo	Monsanto Corp.	nrrd			2	16432	76.60
	Texaco, Inc.	oil major			2	9417	800.50
<pre>fexas Energy Services, Inc.</pre>	Kaneb Services	other			-	4856	445.00
The Pacola Co.	The Pacola Co.	coal			•	98	9.0
Thermal Energy Co.	Washington Energy Co.	nat gas			-	5096	178.00
	Thermal Energy Co.	o&g			-	6336	38.44
Thompson Creek Coal & Coke Co. Th	Thompson Creek Coal & Coke Co.	coal			-	120	1.8
Thunder Basin Coal Co. At	Atlantic Richfield Co.	oil major			m	11690	952.10
	U.S. Steel Corp.	steel			19	20373	438.47
بغ	Union Pacific Corp.	other	Munt Enterprises	5%0	7	2568	17.90
.03	Sharon Steel Corp.	steel	-	•	M	5726	36.20
	Broken Hill Proprietary Ltd.	nrrd			52	23105	818.82
	Utah Power & Light Co.	utility			5	28309	219.88
Valencia Energy Co.	Tucson Electric Company	utility			7	9311	109.71
	Houston Natural Gas Co.	nat das			^	020	

	BUS CAT.
THEIR PARENT COMPAN ES	PARENT #2
FEDERAL COAL LESSEES AND THEIR PARENT COMPAN ES	BUS. CAT.
	PARENT #1

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	FEDERAL COAL	. LESSEES AND	FEDERAL COAL LESSEES AND INEIR PARENI COMPAN ES				
LESSEE	PARENT #1	BUS. CAT.	PARENT #2	BUS CAT.	LEASES	ACRES RECOV. RES.	IV. RES.
of slandring A	Diamond Shamrock Corp.	prind			-	645	£.7
	U.R. Grace & Co.	nrrd				3863	33.00
Usestch Coal Co.	Wasatch Coal Co.	coal			-	280	0.34
tion & Develo	Washington Water Power Co.	utility			2	521	8.70
	Weaver H. & O.	individ			-	80	0.30
ins. S.	Welch, E. & Wiggins, S.	individ			-	120	÷.
	West S.	individ			•	961	12.60
	Montaga Power Co.	utility			80	13003	286.40
Userborn File 6.1 (tab. 70)	Western Fuels Association	utility			2	6441	66.33
	Uilliams Companies	nat das			4	1539	30.10
	Uilberg C.	individ			-	80	0.35
7	Single Series	individ			M	3012	10.97
	Union Pacific Corp.				-	1645	12.50
Woodsk Resources Dev. Corn.	Black Hills Power & Light Co.				•	2240	186.10
Wyoming Fuel Co.	K-N Energy, Inc.				2	997	1.94

FEDERAL COAL LESSEES
PARENT COMPANIES AND LEASEHOLDING SUBSIDIAR ES

Page No

PARENT	LESSEE	BUS. CAT.	LEASES	ACRES RE	ACRES RECOV. RES
360710300 4034	AMCA Coal Leasing Inc	1000	4	2532	71 85
Abston Construction Co.	Abston Construction Co.	coal	· -	638	1.17
Alabama Electric Coop.	Alabama Electric Coop.	utility		198	0.06
Alaska State Bank	Alaska State Bank	other	-	900	0.00
Amax, Inc.	Meadowlark Farms, Inc.	п&п	9	9038	1261.10
American Colloid Co.	American Colloid Co.	other	-	80	2.28
American Electric Power Co.	Blackhawk Coal Co.	utility	Ξ	12698	250.00
American Electric Power Co.	Franklin Real Estate Co.	utility	-	634	3.35
American Minority Mining	American Minority Mining	other	-	007	1.80
Ametex Corp.	Ametex Corp.	other	2	280	67.0
Apex Mining Company, Inc.	Apex Mining Company, Inc.	coal	2	240	0.52
Arizona Public Service Co.	Malapai Resources Co.	utility	21	40276	345.23
Armco Steel Corp.	Evans Coal Co.	steel	11	17857	54.72
Ashland Oil Co.	Ark Land Co.	989	14	16223	61.34
Ashland Oil Co.	Medicine Bow Coal Co.	689	M	7011	17.90
Atlantic Richfield Co.	Atlantic Richfield Co.	oil major	m i	7419	196.43
Atlantic Richfield Co.	Beaver Creek Coal Co.	oll major	\	5494	93.54
Atlantic Richfield Co.	Inunder Basin Coal Co.	oll major	·n ·	0.6911	952.10
BankAmerica Corp.	Bank of America	other	41	6872	135.59
Basin Cooperative Services	Basin Cooperative Services	utility	M ·	2425	28.10
Bass, R. & Bass Trusts	Bass, R. & Bass Trusts	other	<b>.</b>	20701	242.10
Baukol-Noonan, Inc.	Baukol-Noonan, Inc.	coal	•	2325	40.63
Bell, J.	Bell, J.	individ	-	<b>8</b> 0	0.05
Bishopsgate Coal Corp.	Bishopsgate Coal Corp.	coal	-	161	78.0
Black Hills Power & Light Co.	Wyodak Resources Dev. Corp.	utility	9	2240	186.10
Bonsness, L.	Bonsness, L.	individ	-	80	0.16
Brigham Young University	Brigham Young University	other	M	277	1.54
Broken Hill Proprietary Ltd.	Energy Reserves Group, Inc.	mgu mgu	4	7849	51.70
Broken Hill Proprietary Ltd.	San Juan Coal Co.	m&m	- ;	2044	00.09
Broken Hill Proprietary Ltd.	Utah International, Inc.	:	52,	23105	818.82
Bugni, A.	Bugni, A.	plyid	- •	Q (	0.00
Bugni, A. & T.	Bugn1, T. & R.	פואופטו	- (	08	00.00
COP Coal Development Co.	COP Coal Development Co.	coal	~ •	1480	19.39
	CPS Mining Co, Inc.		- •	258	0.30
California Portland Cement Co.	California Portland Lement Lo.	other oil moion	- •	248	95.17
		010	- 1	004	0.00
Cameron coar co.	Canital Development Co	other	<b>-</b>	1832	 
Cari International Mining Corp				360	1.31
Carroll County Coal Co.	Carroll County Coal Co.			412	18,38
Centurion Trust	Kerr Coal Co.	other		770	7.90
Chapman, R.	Chapman, R.	individ	-	1675	17.60
Chevron Corp.	Chevron Coal Development Co.	oil major	-	429	110.00
Chevron Corp.	Gulf Oil Corp.	oil major	07	58866	803.74
China Butte Coal Co.	China Butte Coal Co.	other	_	2974	62.73
Colorado-Ute Electric Asso.	Salt Creek Mining Co.	utility	9	14929	119.59
Commonwealth Edison	Edison Development Co.	utility	- r	990/	103.00
Corp. of the Presiding Bishop	Corp. of the Presiding Bishop	other	<b>√</b> 1 ←	5045 37.70	0.00
crane co.	כומו מועפו נסוף.	סרווטו	-	2 7	2

FEDERAL COAL LESSEES

0.48 63.64 42.76 0.00 61.34 17.90 17.90 329.80 1.50 0.07 0.30 48.70 1086.24 33.62 20.46 81.96 55.08 20.30 0.00 1489.80 11.50 0.72 5.34 115.00 6.48 12.60 8.60 0.00 1.75 0.69 0.72 0.00 0.00 55.88 ACRES RECOV. RES. 80 2557 3084 3084 561 4842 5290 160 320 280 140 98 1910 1266 8524 4882 3795 480 2200 11057 3201 10246 521 280 1913 PARENT COMPANIES AND LEASEHOLDING SUBSIDIARIES LEASES oil major oil major m&m o&g o&g o&g BUS. CAT. coal individ o&g individ individ individ individ utility individ nat gas individ individ other other Geo Resources Exploration, Inc Geo Resources Exploration, Inc other Granite Creek Coal & Uranium Granite Creek Coal & Uranium other other other other other other other other other nrrd חיות General Electric Holdings, Inc nrrd nrrd 0&9 m&m coal nrrd nrrd coal coal coal nrrd coal Emery Energy, Inc. Equipment Rental Service Exxon Coal Resources USA, Inc. Exxon Coal USA Intermountain Exloration Co. Eastern Coal Properties, Inc. Fort Union Mine Partnership Hayden Gulch West Coal Co. Hiko Bell Mining & Oil Co. Garland Coal & Mining Co. Freeman-United Mining Co. Gent's Flying Enterprises Grand Mesa Properties Co. Powderhorn Properties Co. FMC Corp. Farrell Cooper Mining Co. Consol Land Development Material Service Corp. Belco Petroleum Corp. Northern Minerals Co. Consolidation Coal Co. Medicine Bow Coal Co. Denton, C. W.K. Minerals, Inc. Divide Coal Mining Co. Great National Corp. HFCO, Inc. Union Pacific Corp. Gaither, K. Gaither, Kenneth R. Conotton Land Co. Dorchester Coal Co. 4.A. Land Company Colowyo Coal Co. Snowmass Coal Co. 3ridger Coal Co. Files, Jerry A. Anchor Coal Co. Ark Land Co. IBI Coal Co. Frandsen, G. Carbon Coal Ingraham, F Fulton, C. Davis, R. Hall, H. Eastern Gas & Fuel Associates Intermountain Exploration Co Ideal Basic Industries, Inc. Hamilton Bros. Jt. Venture Hiko Bell Mining & Oil Co. Houston Natural Gas Co. Gent's Flying Enterprises Gaither, K. Gaither, Kenneth R. Garland Coal & Mining Co. Farrell Cooper Mining Co. Files, Jerry A. Emery Energy, Inc. Equipment Rental Service General Dynamics Corp. General Dynamics Corp. General Electric Corp. Denton, C. Diamond Shamrock Corp. Divide Coal Mining Co. Frontier Coal Co. USA Great National Corp. Hanna Mining Corp. Hanna Mining Corp. Hunt Enterprises **Munt Enterprises Hunt Enterprises** Internorth Corp. Internorth Corp. Idaho Power Co. Damson Oil Corp. Cravat Coal Co. ngraham, F.  $\sim$ Exxon Corp. Exxon Corp. Fluor Corp. Frandsen G. Fulton, C. FMC Corp. Davis, R. Page No. DuPont DuPont HFCO,

FEDERAL COAL LESSEES
PARENT COMPANIES AND LEASEHOLDING SUBSID ARIES

lowa Public Service Co. Energy Israel, J.J. Israel Jennings, James Sanders Jennings, Jenningston, C. & J. Kaiser Kaiser Services Corp. Kaiser Services Corp. Kaiser Kaiser Services Corp. Kaiser Kaiser Services Corp. Kaiser LEECO Kande Services Corp. Kaiser Leggeston, C. & J. Keing Kringston, C. & J. Keing Kringston, C. & J. Kokuch Lombardi, P. Lombardi, P. Lombardi, P. Lowels Marting, J., trustee Marting Mar	Energy Development Co. Israel, J.J.				,
d. 17.		utility		8683	6.90
6. Corp.	Jennings, James Sanders	individ	- •	3 9	
	Johnson, G. & A.	individ	-	<b>8</b> 0	0.20
	Bokoshe Coal Company	coal		8	0.13
	North Central Frency Co	coal		06.5 06.0	, , U5
	Ayoming Fuel Co.	nat gas	- ~	3	76.
	Kaiser Steel Corp.	steel	10	15093	86.58
	8	other	-	362	09.0
	exas Energy Services, Inc.	other	- (	4856	445.00
	Kerr-McGee Coal Co. King Compa' Coal Co.	08.9	Λ +	\$695	735.70
	King calliel coal co.	individ		120	  
	Kukuchka, C. & M.	individ		07	000
		individ	_	80	0.08
	oveless, Robert M.	individ	•-	2560	0.00
	artin, J., trustee	other	-	07	0.17
	Martinez, A.	individ	ι	70	0.14
_	McKinnon Trusts	other	v (	8672	96.52
	Wid-Continent Resources Corp.	coal	<b>Э</b> С	7479	62.50
COLL COTP.	Monolith Dortland Coment Co.	other major	v <del>-</del>	5,55 1,73	424.50
	Sweetwater Resources, Inc.	nrrd	- ~	16432	76.60
Nort	Worthwestern Resources Co.	utility	-	120	0.0
	Jestern Energy Co.	ut lity	∞	13003	286.40
	Knife River Coal Co.		<b>9</b> (	9054	145.03
ountain States Resource Corp. Mour	Mountain States Resource Corp.	_	~ 0	11387	103.37
era Pita	brand Mesa Properties to. Ditkin Iron Corn	nat gas	7 -	87 7	20.46
- 0	Pouderhorn Properties Co		- 🕻	7678	9.00
Snor	Snowmass Coal Co.	nat gas	~	4882	55.08
Nati	National King Coal Co.	coal	_	160	2.44
Nati		coal	_	180	0.00
Xev.	Nevada Electric Investment Co.	utility	∞ ·	10375	0.00
	Howe Coal Co.	other	01	12439	50.43
	Loteau Properties, Inc.	coal	v) +	3198	60.20
North American coal corp. raik	MAINTER MINING CO.	coal	- r	0 2	7.7
	North American Coal Co	1800	<b>u</b> w	2178	0.4
	One Star Steel Co	other	η α	11000	17.8
S	Northwest Mutual Life Ins. Co.	other	· -	7827	50 577
		oil major	· <b>v</b> o	14929	119.59
	Sheridan Enterprises, Inc.	oil major	-	160	0.65
	Antelope Coal Co.	utility	7	7.2.2	266.70
	Bridger Coal Co.	utility	m ı	8436	329.80
Light Co. Fden	Beckel coal co. Eden Ridge Coal Co.	utility utility	n ^	7287	30.00
	Pacific Power & Light Co.	utility	1 t	14262	78.65

	FEDERAL COAL LESSEES PAREN' COMPANIES AND LEASEHOLDING		SUBSID ARIES	S	
PARENT	LESSEE	BUS. CA.	LEASES	ACRES RE	ACRES RECOV. RES.
Pacific Power & Light Co.	Resource Development Co.	utility	5	4311	130.00
<u> </u>	Spring Creek Coal Co.	utility	(	2347	243.00
	Padilla, F.	ındıvıd	7 (	160	0.73
Panhandle Eastern Pipeline Co.	North Antelope Coal	nat gas	~ (	1360	132.15
Holding	North Antelope Coal Co.	peabody	7 7	1300	136.13
Peabody Holding Co.	Peabody Coal Co.	peabody	9 "	2600	05.100
Peabody Holding Co.	Powder River Coal Co.	peabody	٧.	0007	00.00
_	Perma Mining Corp.	coal	- ເ	2 5	00.00
, sous	Big Horn coal co.	other	<b>y</b> =	1,007	00.72
Kiewit Sons,	Black Butte toal to.	other		1,08	20.50
	Control Cost Cost	other The	- 10	14771	374.50
Kiewit Sons	Montana Royalty Co.	other	٠	0,7	00.0
Kiewit Sons.	Peter Kiewit Sons, Inc.	other	-	254	40.00
Sons,	Rosebud Coal Sales Co.	other	٣	6481	35.96
Petroleum International, Inc.	P.I.I. West Ltd.	6%9	7	6182	12.11
m Corp.	Phillips Petroleum Corp.	oil major	m	3580	268.00
Pitkin Iron Corp.	Mid-Continent Limestone Co.	m&m	~	2020	14.54
Pitkin Iron Corp.	Pitkin Iron Corp.	m&m	-	70	0.00
Pittston Coal Co.		coal	•	251	0.30
Property Holding Co. of Albuqu	_	other	- 1	160	84.0
Public Service Co. of NM	Paragon Resources Co.	utility	ı, c	10239	109.71
Pyro Energy Co.	•	06.9	7 `	240	0.90
Quaker State Oil Refining Co.	Kanawha Hocking Coal & Coke	989	۰ ۰	8/6/	347.22
Ranchers Energy Co		other	-•	3576	00.07
Rasmussen, A. & V.	Rasmussen, A. & V.	ייייייייייייייייייייייייייייייייייייייי		25.60	
Kead, Edwin C.	sead, Edwin C.	ייבי ייבי ייבי		000	300
	Divor December 100	2 10440		107	0.37
Periance Group no dings, inc.	Mar Processing, inc.	steel	- ~	3536	9.50
	Resource Exploration & Min no	coal	-	80	1.40
Riebold, P.		individ	-	1675	17.60
Ruby Construction Co.	Ruby Construction Co.	other	-	146	1.40
Ryans Creek Coal Co.	Ryans Creek Coal Co.	coal	2	2240	5.30
San Diego Gas & Electric Co.	New Albion Resources Co.	utility	51	40276	545.23
Santa Fe Industries, Co.	Santa Fe Mining Co.	other	~ 1	161	0.43
on Ste	United States Fuel Co.	steel	<b>~</b> ~	57.26	20.20
She Oi Corp.		oil major	<b>.</b>	/289	05.1.2 0.00
Simmons, J.	Simmons, J.	פואוסרו	- •	ລິເ	5 K
Smith & Peavley Co.	Smith & Peavley Co.	coal	- •	7871	0.75 25
Smith-Holliday Associates	Smith-Holladay Associates	other	- 1	0 0	7. 67
Sorenson Resources Co.	Mono Dough Co	otility itility	۲ ر	92207	27.34
Standard Equipment 100		other		1017 780	0.32
Standard Equipment, Inc.	Milling systems colp.	oil major		2571	67.14
	Empire Energy Corp.	oil major	. 4	1133	29.40
Billy Gene	Stovall, Billy Gene		-	521	0.72
	Swanton Energy Resources Co.	other	16	27658	360.77

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FEDERAL COAL LESSEES
PARENT COMPANIES AND LEASEHOLDING SUBSIDIARIES

PARENT	LESSEE	BUS. CAT.	LEASES	ACRES RE	ACRES RECOV. RES.
Texaco, Inc.	Colorado Yampa Coal Co.	oil major	-	274	0.73
Texaco, Inc.	Getty Minerals Marketing, Inc.	oi!	7	6710	75.00
Texaco, Inc.	Getty Mining Co.	oil major	4	3929	51.00
Texaco, Inc.	Texaco, Inc.	oil major	5	9417	800.50
Texas Eastern Transmission	Fannin Square Corp.	nat gas		1910	33.62
The Coastal Corp.	Coastal States Energy Co.	nat gas	10	13299	78.30
The Pacola Co.	The Pacola Co.	coal	-	960	0.00
The Sun Co.	Greenwood Land Mining Co.	oil major	-	607	0.26
The Sun Co.	Sunoco Energy Development Co.	oil major	~	15148	643.62
Thermal Energy Co.	Thermal Energy Co.	6%9	-	6336	38.44
Thompson Creek Coal & Coke Co.	_		-	120	1.00
Tucson Electric Company	Valencia Energy Co.	utility	7	9311	109.71
U.S. Steel Corp.	U.S. Steel Corp.	steel	19	20373	438.47
Union Pacific Corp.	Black Butte Coal Co.	other	-	14902	74.00
Union Pacific Corp.	Cumberland Coal Co.	other	-	1408	29.70
Union Pacific Corp.	Union Pacific Corp.	other	7	2568	17.90
Union Pacific Corp.	Winton Coal Co.	other	-	1645	12.50
Utah Power & Light Co.	Utah Power & Light Co.	utility	15	28309	219.88
W.R. Grace & Co.	Colowyo Coal Co.	nrrd	2	2590	146.70
W.R. Grace & Co.	Hayden Gulch West Coal Co.	nrrd	-	5298	63.64
W.R. Grace & Co.	W.R. Grace & Co.	nrrd	-	3863	33.00
Wasatch Coal Co.	Wasatch Coal Co.	coal	<b>-</b>	280	0.34
Washington Energy Co.	Thermal Energy Co.		-	2096	178.00
Washington Water Power Co.	Washington Irrigation & Develo	_	2	521	8.70
Weaver, H. & O.	Weaver, H. & O.	individ	-	80	0.30
Welch, E. & Wiggins, S.	Welch, E. & Wiggins, S.	individ	-	120	<del>.</del> .8
West, S.	West, S.	individ	-	961	12.60
Western Fuels Association	Western Fuels-Utah, Inc.	utility	2	6441	66.33
Westhoff Brothers, Inc.	P.I.I. West Ltd.	other	2	6182	12.11
Westmoreland Coal Co.	Colorado Westmoreland, Inc.	coal	4	6443	46.91
Wilberg, C.	Wilberg, C.	individ	-	80	0.35
Williams Companies	Northwest Carbon Co.	nat gas	-	700	14.25
Williams Companies	Western Slape Carbon, Inc.	nat gas	4	1539	30.10
Williams, Jerry	Williams, Jerry	individ	~	3012	10.97

DEVELOPMENT S A US OF FEDERAL COAL LEASES

Page No. 02/03/86

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## DEVELOPMENT STATUS OF FEDERAL COAL LEASES

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· ;			ls Utah,		ls Utah,	gy Corp.			gy Corp.	ة.	Corp.	Corp.								als Ma	pe Carl	pe Carl	Western Slope Carbon,	pe Carl	National King Coal Co	Salt Creek Mining	Mining	Mining	Mining	Mining	Mining		Northern Minerals	Northern Minerals	Minerals	Minerals	Minerals	Richfield Co	Richfield	Richfield		ار د	ng Coal,
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	ACRES DEV.		2552	259	260	367	43	41	685	827	280	8	8	43	2215	263	450	1790	405	1145	241	280	819	189	<b>3</b>	5446	2357	2560	2483	2560	2523	2	896	88	1000	320	160	1243	4836	1340	2413	5469	180
		<u>a</u>	1/82	1/82	1/82	%/	99/1	1/49	1/81	1/62	3/25	5/30	2/47	7,73	1/63	1/78	1/78	62/1	62/1	1/45	73	62/	5/31	1/50	7.7	89/	89/	89/	89/	88/	88/	08  /80	/67	/9/	/9/	<b>%</b> /	:/33	/65	/67	/34	/58	/58	/81
	DATE	ISSUED	06/01/82	08/01/82	06/01/82	01/01/66	01/01/66	12/01/49	07/01/81	06/01/62	04/23/25	05/06/30	06/10/47	06/01/75	11/01/63	07/01/78	11/01/78	07/10/20	09/01/79	03/01/45	12/01/73	10/01/79	02/25/31	12/01/50	09/11/41	05/01/68	05/01/68	05/01/68	05/01/68	05/01/68	05/01/68	07/01/80	09/01/67	06/01/67	06/01/67	02/01/66	01/12/33	06/01/65	09/01/62	08/30/34	06/01/58	06/01/58	11/01/81
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	BLOCK OR MINE NAME					×	×	×	×						Complex	Complex	Complex	Complex	Complex	Energy Fuels Complex	st	st	East	East																	Creek	Creek	g Coal
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	BLOCK		Deserado	Deserado	Deserado	Eagle	Eagle	Eagle	Eagle	Edna Strip	Edna Strip	Edna Strip	Edna Strip	Energy	Energy	Energy	Energy	Energy	Energy	Energy	Hawksn	Hawksnest	Hawksnest	Hawksnest	King Coal	Loma	Loma	Loma	Lomac	Loma		Marr	Meeker Area	Meeker Area	Meeker Area	Meeker Area	Meeker Area			Mt. Gu	N. Tho	N. Tho	National King Coa
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	SERIAL		C8424	c0126669	<b>C8425</b>	C0126480	C0127865	0056298	<b>c30656</b>	C021601	0033327	0041478	0053710	C0128433	<b>c081330</b>	c16284	C20900	252644	222676	0052547	<b>C17130</b>	C27103	0042921	0056724	P058300	00125436	c0125437	0125438	20125439	0125515	0125516	C22777	C1545	C28358	228359	2076713	0044240	501117192	C1362	0044569	508172	508173	:29125
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### DEVELOPMENT STATUS OF FEDERAL COAL LEASES

STATI	E SERIAL	BLOCK OR MINE NAME	DATE I SSUED	ACRES DEV. STATUS	LESSEE #1	PCT NO. LESSEES	DATE H ACQUIRED A	HOW ACQUI RED		SEC. 3
CO	c069942 C25079	Ohio Creek No.2 Orchard Valley	04/01/62 03/01/78	80 AA 310 AA	Weaver, H. & O. Colorado Westmoreland, Inc.	100 1 100 1	05/01/76 ii 03/01/78 d	len	08/04/86 YI	0
CO	c27432	Orchard Valley	09/01/79	854 AA	Colorado Westmoreland, Inc.	100 1	09/01/79 d		09/01/89 0	
CO	c37210	Orchard Valley	05/01/84	4999 AA	Colorado Westmoreland, Inc.	100 1	05/01/84 de		05/01/94 0	
CO	C078049 C19885	Roadside	08/01/66	810 AA 125 AA	Powderhorn Properties Co.	100 1	12/01/84 ii		12/01/94 YI	
CO	C19885 C088199	Seneca 2 Seneca 2	06/01/79 07/01/63	2280 AA	Peabody Coal Co. Peabody Coal Co.	100 1 100 1	06/01/79 de 07/01/63 de		08/04/86 Y	
CO	C086654	Seneca 2 (##7)	07/01/63	160 AA	Peabody Coal Co.	100 1	07/01/63 d		08/04/86 YI	
CO	C0333301	Somerset	01/07/60	625 AA	U.S. Steel Corp.	100 1	07/01/60 d		08/04/86 YI	
CO	c033301	Somerset	07/01/64	1548 AA	U.S. Steel Corp.	100 1	03/15/60 d		08/04/86 Y	
CO	D052504	Somerset	08/19/44	3470 AA	U.S. Steel Corp.	100 1	03/01/56 ii		08/04/86 YI	
CO	c36446	Somerset	05/01/84	79 AA	U.S. Steel Corp.	100 1	05/01/84 d		05/01/94 0	
CO	C25948	Trapper	06/01/80	85 AA	Utah International, Inc.	100 1	06/01/80 de		06/01/90 Y	
CO	c07518	Trapper	06/01/58	2566 AA	General Electric Holdings, Inc	100 1	06/01/58 d		08/04/86 YI	
CO	C07519	Trapper	06/01/58	1372 AA	General Electric Holdings, Inc	100 1	06/01/58 d		08/04/86 YI	
CO	C079641	Trapper	10/01/62	1352 AA	General Electric Holdings, Inc	100 1	10/01/62 d	en	08/04/86 YI	М
CO	c813	Trapper	04/01/70	160 AA	Utah International, Inc.	100 1	03/01/70 d	en	08/04/86 YI	M
CO	C0127833	Fruita	07/01/81	5087 PN	Dorchester Coal Co.	100 1	07/01/81 de	en	07/01/91 0	00
CO	C0127832	Fruita	07/01/81	4522 PN	Dorchester Coal Co.	100 1	07/01/81 de	en	07/01/91 0	00
CO	c0127834	Fruita	07/01/81	5120 PN	Dorchester Coal Co.	100 1	07/01/81 de		07/01/91 0	
CO	C081251	Seneca 2W	05/01/65	2519 PN	Material Service Corp.	100 1	05/01/65 de		08/04/86 QI	
CO	c081258	Seneca 2W	05/01/65	2323 PN	Material Service Corp.	100 1	05/01/65 d		08/04/86 QI	
CO	C0114093	Seneca 2W	05/01/64	1320 PN	Peabody Coal Co.	100 1	05/01/64 de	en	08/04/86 QI	M
CO	c0112685	Denver Basin	12/01/67	640 R	Peabody Coal Co.	100 1		·e l	//0	-
CO	C0112686	Denver Basin	12/01/67	640 R	Peabody Coal Co.	100 1		el	//0	-
CO	c0112687	Denver Basin	12/01/67	644 R	Peabody Coal Co.	100 1		·e l	//0	
CO	C0126477	Denver Basin	12/01/67	760 R	Peabody Coal Co.	100 1		el	//0	-
CO	D057166	Jackson Co.	06/21/51	173 R	Monolith Portland Cement Co.	100 1		el	/ / 0	
CO	c012765	Thompson Creek	06/01/60	<b>498</b> R	Garland Coal & Mining Co.	100 1		el	/ / 0	
CO	C012894	Cardinal	02/01/56	634 UP	Franklin Real Estate Co.	100 1	06/01/75 ir		08/04/86 N	
CO	C028875	Chapman & Riebo(d	11/01/31	1675 UN	Riebold, P.	50 2			08/04/86 NI	
CO	C0125485	Coal Basin West(#28)	01/01/65	200 UN	U.S. Steel Corp.	100 1	07/01/65 se		08/04/86 NI	
CO	C030344	Coal Basin West(#28)	05/01/60	<b>517</b> UN	U.S. Steel Corp.	100 1	<b>05/01/60</b> de		08/04/86 NI	
CO	c12638	Coal Basin West(#28)	01/01/65	315 UN	U.S. Steel Corp.	100 1	05/01/71 d		08/04/86 NI	
CO	C12639	Coal Basin West(#28)	12/01/66	800 UN	U.S. Steel Corp. U.S. Steel Corp.	100 1 100 1	05/01/71 <b>d</b>		08/04/86 NI	
CO	c1894 C7852	Coal Basin West(#28)	12/01/66	<b>120</b> UN	U.S. Steel Corp.	100 1	06/01/67 se		08/04/86 NI 08/04/86 NI	
	C7852 C030346	Coal Basin West(#28)	12/01/66	160 UN	U.S. Steel Corp.	100 1	11/01/68 se		08/04/86 NI	
CO CO	c7853	Coal Basin West(#28)	05/01/60	640 UN 717 UN	U.S. Steel Corp.	100 1	11/01/68 se		08/04/86 N I	
CO	c037277	Coal Basin West(#28)	01/01/65	717 UN 1471 <b>UP</b>	Mid-Continent Limestone Co.	100 1	10/01/68 Se		08/04/86 NI	
CO	C059420	Coal Canyon	10/01/62	308 UN	Mid-Continent Limestone Co.	100 1	01/01/62 de		08/04/86 NI	
CU	0037420	Coal Canyon	10/01/65	300 UN	mid-Continent Linestone CO.	100 1	01/01/09 Q	CII	00/04/00 IVI	ivi

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DEVELOPMENT STATUS OF FEDERAL COAL LEASES

Page No. 02/03/86

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SEC. RED DATE	12	<u> </u>	08	12,	9	02	08	80	08	80	08	80	9	80	80	80	80	08	80	80	<u>ב</u>	80	80	80	07	6	02	80	80	9	80	80	80	80	80	80	80	80	80	80	03
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PCT NO. LESSEES	•		- 1	100	1001	100 1	100 1	1001	100 1	100 1	100 1	100 1	100 1	00 1	1001	100 1	00 1	100 1	100 1	00 1	100 2	100 1	00 1	100 1	100 1	100 1	50 2	100 1	50 2	100 1	100 2	100 1	100 1	100 1	100 1	100 1	100 1	100 1	100 1	100 1	100 1
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LESSEE #'		Afficial coat co.	EFCO	River Processing, Inc.	Ryans Creek Coal Co.	Kyans Creek Coal Co.	Smith & Peavley Co.	Peabody Coal Co.	Western Energy Co.	Divide Coal Mining Co.	Decker Coal Co.	Knife River Coal Co.	Spring Creek Coal Co.	Kukuchka, C. & W.	Decker Coal Co.	Decker Coal Co.	Decker Coal Co.	Decker Coal Co.	Montana Royalty Co.	Consolidation Coal Co.	Peter Kiewit Sons, Inc.	Bugni, A.	Thermal Energy Co.	Johnson, G. & A.	Shell Oil Corp.	U.S. Steel Corp.	U.S. Steel Corp.	Baukol-Noonan, Inc.	Falkirk Mining Co.	Coteau Properties, Inc.	Coteau Properties, Inc.	Coteau Properties, Inc.	Knife River Coal Co.	Basin Cooperative Services							
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DATE ISSUED	1,00,00	00/20/43	03/01/61	12/01/84	01/01/79	05/01/82	01/01/74	04/01/71	05/05/23	09/11/66	08/01/79	08/01/79	06/01/80	08/01/82	08/01/82	08/01/82	07/01/28	08/01/66	03/01/57	07/01/65	01/01/54	01/01/63	03/01/64	10/01/63	07/01/81	09/01/82	03/01/64	03/01/64	08/06/42	06/01/83	03/03/58	11/01/62	12/01/67	12/01/67	01/01/62	08/01/80	11/01/67	10/01/61	03/01/67	01/01/51	11/01/65
BLGCK OR MINE NAME			Greenwood Leero	River Processing	Rvan's Creek	Rvan's Creek	Smith-Peavley	Big Sky	Colstrip	Divide	E. Decker	Savage	Spring Creek	W. Decker	W. Decker					CX Ranch	Wolf Mountain	Bugni	Cook Mountain	Johnson	Pearl	U.S. Steel	U.S. Steel	Center	Falkirk	Freedom	Freedom	Freedom	Gascoyne	Glenharold							
SER AL		1062501	ES12444	FS30967	ES12304	ES21181	ES3615	M15965	B020989	M073109	M35734	M35735	M42381	M54712	M54711	M54713	M052647	M073093	M023207	M069782	M06770	M057934A	M061685	M057934	M37604	M54716	M46292	M061686	GF082523	M54714	B028531	M069945	M3831	M3832	M043848	M31053	M071813	M042819	M163	BLM019127	M070203
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STAT	STATE SERIAL	BLOCK OR MINE NAME	DATE	ACRES DEV.	LESSEE #1	PCT NO.	DATE HOW	M
			ISSUED	STATUS		LESSEES	S ACQUIRED ACQUIRED	DATE STATU
9	M11269	Glenharold	05/01/71	260 AA	Basin Cooperative Services	1001	03/01/84 ind	03/01/94 YM
웊	M21209	Glenharold	11/01/79	1688 AA	Basin Cooperative Services	100 1	03/01/84 ind	03/01/94 00
2	BK020273	Indian Head	10/02/22	1357 AM	North American Coal Corp.	100	07/01/57 ind	08/04/86 YD
2	M34980	Indian Head	04/01/79	441 AA	North American Coal Corp.	100 1	04/01/79 den	04/01/89 00
2	M59727	Indian Head ?	06/01/84		North American Coal Corp.	100 1	_	06/01/94 00
2	M065329	Nelson Pit	12/01/64	320 AA	Geo Resources Exploration, Inc	1001	12/01/64 den	08/04/86 ac
2	M041765	South Beulah	08/01/61	1600 AA	Knife River Coal Co.	100 1	08/01/61 den	08/04/86 YM
2	M43083	South Beulah	08/19/80	80 <b>A</b>	Knife River Coal Co.	100 1	08/19/80 den	08/19/90 00
2	M15896	Velva	05/01/71	40 AM	Consolidation Coal Co.	100 1	05/01/71 den	08/04/86 YD
2	BLM018322	Bonsness	01/01/51	80 R	Bonsness, L.	100 1	11/17/75 rel	8 / /
2	M061025	American Colloid	03/01/64	NO 08	American Colloid Co.	100 1	03/01/64 den	08/04/86 NU
2	M437	New Leipzig	03/01/69	NO 059	Knife River Coal Co.	100 1	03/01/69 den	
욮	M438	New Leipzig	03/01/69	2872 UN	Knife River Coal Co.	100 1	03/01/69 den	08/04/86 NO
오	M37829	Renner's Cove	03/01/67	322 UN	Consolidation Coal Co.	1001	09/01/77 seg	09/01/87 NO
¥	NM0186612	De Na Zin	08/01/61	2188 AA	Paragon Resources Co.	50 2	11/01/80 ind	11/01/90 YL
¥	NM0186615	De Na Zin	08/01/61		Paragon Resources Co.	50 2	11/01/80 ind	11/01/90 YL
I	NM45183	De-Na-Zin exch	09/27/84	928 AA	Paragon Resources Co.	100	09/27/84 den	09/27/94 00
¥	NM0510466	La Ventana	07/01/67	2002 AN	IBI Coal Co.	100		11/01/87 NM
¥	NM0510467	La Ventana	07/01/67		Coal	100 1		
¥	NM0510468	La Ventana	07/01/67			100		_
¥	NM0555316	La Ventana	02/01/69		Coal	1001	_	
Ŧ	NM0555317	La Ventana	12/01/64		oal	1001	_	
¥	NMO57349	McKinley	04/01/61		<u>:</u>	100		
¥	NMO57348	McKinley	04/01/61		<u>.</u>	- 00.		-
¥	NMO554844	McKinley	11/01/64		<u>0</u>	- 001		-
¥	NMO65466	McKinley	01/01/64	-	<u>.</u>	100	•	-
¥	SF071448	San Juan	06/11/40		ţ	1 00.		-
Ī	NMO45197	San Juan	11/01/61		ę,	100		-
ž	NMO45217	San Juan	11/01/61	_	ð	100		
¥	NMO45196	San Juan	11/01/61			<u> </u>		
¥	NM28093	San Juan	04/01/80		Paragon Resources Co.	, ,	_	-
¥	NM0315559	La Plata	08/01/63			- 60		07/01/92 YL
¥	NM0186613	Bisti Exchange	08/01/61		Paragon Resources Co.	2 00 5		
ĭ	SF048323	Ametex	07/19/29		Ametex Corp.	100 1		_
Ī	NM732	Ametex	02/01/67		-	- BI	•	_
ĭ	NM10931	Black Lake	11/01/70		Eastern Coal Properties Inc.	50 <b>2</b>		
¥	NM52786	Carbon	06/01/83		Carbon Coal	- 20 20 20 20 20 20 20 20 20 20 20 20 20	•	06/01/93 00
¥	SF074673	Davis	01/10/41		Davis, R.	100		Ξ.
¥	SF077115	Ingraham	02/27/44	_	Ingraham, F.	00.		08/01/87 NU
¥	SF075321	Padilla	12/11/39	120 UN	Padilla, F.	100		08/04/86 NM
Ī	SF077779	Padilla	05/01/49	NO 04	Padilla, F.	1001	05/01/49 den	08/04/86 NM

DEVELOPMENT STATUS OF FEDERAL COAL LEASES

SEC. 3 STATUS		
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SEC. 3 RED DATE	08/04/86 08/04/86 08/04/86 08/01/92 02/01/93 02/01/93 02/01/94 05/01/94 05/01/94 05/01/94 05/01/94 05/01/94 05/01/94 05/01/94 05/01/93 07/01/93 07/01/93 08/04/86 08/04/86 08/04/86 08/04/86	08/04/86 02/01/93 08/04/86 08/04/86 08/04/86
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PCT NO. LESSEES	005 001 001 001 001 001 001 001 001 001	000000
LESSEE #1 S		Lone Star Steel Co. P.I.I. West Ltd. Cari International M ning Corp Evans Coal Co. Evans Coal Co. Evans Coal Co.
ACRES DEV. STATUS		719 UN 3342 UN 360 UN 794 UN 640 UN
DATE ISSUED	05/10/44 09/01/67 01/25/35 04/08/24 10/01/53 12/01/79 08/01/56 08/01/58 05/01/65 08/01/65 08/01/65 08/01/65 08/01/62 08/01/62 08/01/63 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64 08/01/64	04/01/60 09/01/67 07/01/62 08/10/53 05/01/56
BLOCK OR MINE NAME	C   O C   C C   0	Block 23 Block 26 Block 3 Block 4 Block 4
SERIAL	SF076644 NM2457 SF066817 SF066817 SF042800 BLMC035068 NM24005 BLMC018820 NM059992 BLMC0201851 BLMC020953 NM3174 BLMC020953 NM3174 NM0557450 BLMC0205350 BLMC0205350 BLMC0205350 BLMC03135 NM033722 NM033722 NM033722 NM034521 NM0356624 NM0256624 NM0256624 NM0256624 NM0256624 NM059691 NM029891 BLM1018108 NM059891 BLM1018108 NM059891	NM059996 NM957 NM0141015 BLMC022012 BLMC028799 BLMC032224
STATE	¥¥¥¥8888888888888888888888888888888888	888888

DEVELOPMENT STATUS OF FEDERAL COAL LEASES

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\$	BLOCK	Σ	DATE 1SSUED 09/07/68		LESSEE #1 Evans Coal	PCT NO. LESSEES	DATE ACQUIRED /	
NM023555 Block 4 & 5 02/01/61 NM023556 Block 5 02/01/61	4 & 5 5	02/0 02/0	1/61	2560 UN 1687 UN	Evans Coal Co. Evans Coal Co.	100	03/01/76 ind 03/01/76 ind	08/04/86 NM 08/04/86 NM
Block 6	ı <b>v</b> 0	07/01	/52		Coal	1001		04/01/88 NU
Block 7	_	03/08/7	0 :		Coal	100 1	_	08/04/86 NM
BLMC029794 Block 8 04/01/56	<b>6</b> 0 0	04/01/	2 2	2479 UN 2551 HN	Evans Coal Co.	1001	03/01/68 ind	08/04/86 NU
Block 9	• •	10/01/5	2 9		Coal	100	-	08/04/86 NU
Bokoshe NP		05/01/8	2			1001	٠	05/01/92 00
oper NP	oper NP	02/01/8	Ŋ		Farrell Cooper Mining Co.	1001	02/01/83 den	_
. dx	. dr	02/01/8	~		Gaither, Kenneth R.	100 1		_
HFCO NP		09/01/83			HFCO, Inc.	1001	09/01/83 den	
NM44130 Lone Star NP 04/01/82		04/01/82			Lone Star Steel Co.	100	_	
02 Rees-Milton		09/52/60			Mining Systems Corp.	1001		_
2 Eden Ridge		06/01/62			Eden Ridge Coal Co.	100 1		
Eden Ridge		01/19/59			Eden Ridge Coal Co.	1001	01/19/59 den	08/04/86 NM
		06/01/57			CPS Mining Co, Inc.	100 1		_
Helen Mining		07/01/74		30 AA	Helen Mining Co.	100		-
ES13845 Helen Mining 07/01/74		07/01/74			Helen Mining Co.	1001	_	
C&W No. 1	•	11/28/41			Wasatch Coal Co.	100 1		_
Centennial Project	Project	09/01/25			Coal	100		-
8 Centennial Project	Project	08/03/42			Coal Leasing,	100 1		
1 Centennial Project	Project	02/01/56		_	Coal Leasing,	100 1		
Centennial Project		12/01/83			Coal Leasing,	100	Ξ.	
Deer Creek-Wilberg	Creek-Wilberg	08/01/6/			Power & Light	1001		
Deer Creek-Wilberg	Creek-Wilberg	10/04/46			Power & Light	100		
0 Deer Creek-Wilberg	Creek-Wilberg	02/03/45			ower & Light Co.	1001		
Deer Creek-Wilberg	Creek-Wilberg	01/03/62			the Presiding	100 1		
Deer Creek-Wilberg	Creek-Wilberg	03/01/61			the Presiding	1001		
Deer Creek-Wilberg	Creek-Wilberg	01/08/60				1001		
Deer Creek-Wilberg	Creek-Wilberg	08/01/84			McKinnon Irusts	1001		
Deer Creek-Wilberg	Creek-Wilberg	08/01/64			McKinnon Trusts	1001		
SL070645 Deer Creek-Wilberg 04/01/52	Creek-Wilberg	04/01/52			non Trus	100 1	_	
Des-Bee-Dove		01/01/57			Power &	100 1		-
SL050133 Des-Bee-Dove 08/01/33		08/01/33		80 AA		1001	07/01/76 ind	08/04/86 YM
SL066116 Des-Bee-Dove 06/01/55		06/01/55		400 <b>VA</b>	Utah Power & Light Co.	1001	09/01/77 ind	09/01/87 YM
U5287 Emery Deep 07/01/70		07/10//20	_	720 AA	Consolidation Coal Co.	50 2	07/01/70 den	08/04/86 ac
Ç	Field (#8)	06/01/6	~	2542 AA	Consolidation Coal Co.	50 2	10/01/66 par	08/04/86 ac
Figery Field (#8)	Field (#8)	06/01/6	· 🔼		Coal	50 2		
3 Emery Field (#8)	Field (#8)	06/01/65			Consolidation Coal Co.	50 2	06/01/65 den	08/04/86 ac
Figery Figerd (#8)	Field (#8)	06/01/65		2314 AA	Coal	50 2	_	
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DEVELOPMENT STATUS OF EDERAL COAL LEASES

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. 3 SEC. 3 E STATUS	08/04/86 QC 08/04/86 QC 08/04/86 QC 08/04/86 QC 08/04/86 QC 08/04/86 YM
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PCT NO. LESSEES	22222222222222222222222222222222222222
LESSEE #'	Consolidation Coal Co. U.S. Steel Corp. U.S. Steel Corp. Wanawha Hocking Coal & Coke Beaver Creek Coal Co. United States Fuel Co. Beaver Creek Coal Co. Beaver Creek Coal Co. Beaver Creek Coal Co. Blackhawk Coal Co. Coastal States Energy Co. Sunoco Energy Development Co. Sunoco Energy Co. Coastal States Energy Co.
ACRES DEV. STATUS	856 AA 640 AA 2497 AA 2497 AA 2577 AA 2528 AI 1528 AA 160 AI 160 AI 160 AI 160 AI 160 AI 160 AI 1160 AI 1160 AI 1160 AI 1160 AI 1160 AI 1160 AI 1160 AI 634 AI 1160 AI 634 AI 630 AA 243 AA 240 AA 2632 AA 2632 AA 2630 AA
DATE ISSUED	06/01/65 06/01/65 06/01/65 06/01/62 06/01/62 06/10/78 05/01/81 05/01/81 05/01/81 06/01/82 06/01/83 06/01/83 06/01/83 06/01/62 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63 06/01/63
BLOCK OR MINE NAME	Emery Field (#8) Emery Field (#8) Emery Field (#8) Emery Field (#8) Geneva Gordon Ck/Belina Gordon Ck/Belina Gordon Creek #2 Hiawatha Hintington Canyon Huntington Canyon Huntington Canyon Huntington Canyon Price River Complex
STATE SERIAL	00101215 00101218 00101218 0090231 0073039 \$\$L046612 \$\$L046612 \$\$L046612 \$\$L066145 047975 \$\$L066145 047975 \$\$L066983 \$\$L066983 \$\$L066983 \$\$L066983 \$\$L066983 \$\$L066983 \$\$L066983 \$\$L066583 \$\$L066522 \$\$L066522 \$\$L066522 \$\$L066583 \$\$L062633
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PCT NO. Lessees	1001	999999	000000000000000000000000000000000000000	3000000		0000
LESSEE #1	Getty Mining Co. Getty Mining Co. Getty Mining Co. Getty Mining Co.	Kaiser Steel Corp. Kaiser Steel Corp. Bell, J. Kanawha & Hocking Coal & Coke	Coastal States Energy Co. Coastal States Energy Co. Kanawha & Hocking Coal & Coke Utah Power & Light Utah Power & Light Utah International, Inc. Utah International, Inc.	International, International, International, International, International, International,	Nevada Electric Investment Co. Nevada Compony. N.A. Land Company N.A. Land Company Carroll County Coal Co. Gent's Flying Enterprises Peabody Coal Co. Deabody Coal Co.	Peabody Coal Co. Peabody Coal Co. Peabody Coal Co. Peabody Coal Co.
ACRES DEV. STATUS	1631 AA 240 AA 698 AA 1360 AA					1273 RP 1273 RP 2560 RP 2560 RP
DATE ISSUED	09/04/70 09/01/70 04/01/80 05/01/74	11/12/43 03/01/79 07/01/62 01/01/62 09/01/56		11/01/68 11/01/68 01/01/65 05/01/65 06/01/65	10/11/36 11/01/61 11/01/61 11/01/61 07/01/62 07/01/52 07/01/60 10/01/82 08/05/37 09/01/70	04/01/6/ 04/01/67 11/01/67 11/01/67
BLOCK OR MINE NAME	Star Point 182 Star Point 182 Star Point 182 Star Point 182	Sunnyside1,283 Sunnyside1,283 Trail Mt. Valley Camp (O'Connor)	Valley Camp Complex Valley Camp Complex Valley Camp Complex Wilberg (Cottonwood NP) Wilberg (Meetinghouse NP) Alton East Alton East	Alton East Alton East Alton East Alton East Alton East Alton East	Alton West Alton West Alton West Alton West Alton West B Canyon C Canyon C Canyon Rilda Canyon (#13) Rilda Canyon (#6) Emery (#10A) Kaiparowits	Kaiparowits Kaiparowits Kaiparowits Kaiparowits
SERIAL	U7949 SL031286 U37045 U13097	SL062966 U32083 U082996 U067498 U017354	U0242070 U020305 U47974 U47978 U0105404	00122675 00126916 00140770 00147999 0098774	\$105857 0060745 0060746 0065012 \$1068754 002785 0037706 047977 \$1050862 07653 \$1050855	00103132 00103133 00115656 00115657
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DEVELOPMENT STATUS OF FEDERAL COAL LEASES

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LESSEE	Peabody Coal Co. Gent's Flying Enteror se. W.K. Minerals, Inc. Utah International, Inc. Utah Power & Light Co.	Emery Energy, Inc. Sunoco Energy Development Jtah Power & Light Co. Frandsen, G. Malapai Resources Co.
	Peaboo Peaboo Gent, CCOSti Utah Nevad Nevad North Morth Morth Morth Morth Morth	Sun Uta Uta Fra
DEV. STATUS		
ACRES DEV STA		2 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ACRE	2552 1277 2550 1600 1600 1721 1721 1721 1721 1721 1721 1721 17	3795 320 120 40 2064
	L       L	-20-5
교육	03/01/67 03/01/67 04/01/67 04/01/67 04/01/67 04/01/68 03/01/68 04/01/68 04/01/68 05/01/63 05/01/53 05/01/53 05/01/53 05/01/53	12/01/81 05/01/52 04/05/30 05/10/41 11/01/65
DATE ISSUED	0337, 2017,	12/ 05/ 05/ 11/
	(#1) (#1)	
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		PRLA F197 #198 #198 S No
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BLOCK OR M.NE	Kaiparowits Kaiparowits Kaiparowits Kaiparowits Kaiparowits Kaiparowits Kaiparowits Kaiparowits Tip Top (Crandal)  Alton East Carbon Emery Ban Carbon Emery (#158)	Esclanate PRLA Eureka Energy (#2, Frandsen (#19A) Frandsen (#19B) Kaiparowits No. 1
BLC	TARE TERMINE TO COLOR THE TERMINE THE TERM	Eura Fra Fra Kaj
		<b>~</b> ~
AL.	0096476 0098477 00101141 00101141 00101141 0011354 00112583 00125833 00125833 00125833 00125833 00126450 00126450 00126450 00126451 002641 002641 002641 002631 002631 002631 002631 002631	J7958 J05067 SL048223 SL050638 J087805
SER: AL	0096476 00098786 0010114 0010114 00101114 00101114 00101115933 0012262 0012262 0012262 0012263 0012263 0012263 0012263 00122641 0026414 00264318 00264318	U7958 U05067 SL04822 SL05063 U087805
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9				DEVEL	DEVELOPMENT STATUS OF FEDERAL COAL LEASES	EASES			
STATE	STATE SERIAL	BLOCK OR MINE NAME	DATE ISSUED	ACRES DEV. STATUS	LESSEE #1	PCT NO. LESSEES	DATE HOW S ACQUIRED	SEC. 3 RED DATE	SEC. 3 STATUS
5	0087800	Kaiparowits No. 1-5	11/01/65	1945 UN	Malapai Resources Co.	33 3	11/01/65 den	08/04/86	¥
5	U087807	Kaiparowits No. 1-5	11/01/65	1920 UN	Malapai Resources Co.	33 3	11/01/65 den	08/04/86	¥
5	U087828	Kaiparowits No. 1-5	11/01/65	_	Resources		_	08/07/86	¥
5	U087833	9.	11/01/65	_	Resources			08/04/86	Į.
5	U087834	9.	11/01/65	_	Resources		-	08/04/86	<b>I</b>
₽	U087835		11/01/65	_	Resources		-	08/04/86	¥ :
5	0087836	2	11/01/65		Resources		-	08/04/86	¥ :
5	U092138	٠ چ	11/01/65		Resources			08/07/80	<b>E</b> :
5	0092139	Š.	11/01/65		Resources	555		08/04/80	<b>Z</b> :
5	0092140	2	11/01/65		Resources			08/04/80	E :
5	U092141	٠ چ	59/10/11		Resources		11/01/65 den	08/04/80	E :
5 :	0092142	٠ 2	23,707,11	NO 06/1	Kesources	200		00/50/00	E 3
5 !	0096486	2	11/01/65	NO 040	Malapai Kesources to.		11/01/65 den	00/04/00	E 3
5 5	1006706	9 9	11/01/65		Pecolifices			08/04/86	2 2
5 5	0096495	Kalparowits No. 1-5	11/01/65		Pesources			08/04/06	E 2
5 5	1006/07		11/01/65	2560 114	Resources	33.3		08/04/86	¥ 2
5 =	1006508		04/01/66		Resources			08/07/86	Σ
5 5	0059600	•	11/01/65		Resources	33 3		08/04/86	¥
5	U0101142	•	04/01/67		Malapai Resources Co.	33 3	11/01/65 den	08/04/86	¥
5	U1362	Kaiparowits PRLA	02/01/82	18325 UN	Utah Power & Light	100 1	02/01/82 den	02/01/92	8
'n	U0103107	eau	_		Consolidation Coal Co.	100 1	-	08/04/86	Ŧ
5	U0103109	Plateau	_	_	Coal	100 1		08/0//86	¥
5	U0103129	Plateau	_		Coal	100		08/04/86	¥
5	U0103130	Plateau	_		Coal	100 1		08/07/86	Ŧ
5	U0105418		_		Coal	100	-	08/04/86	¥
5	U0149373	Plateau	_	_		100 1		08/04/86	¥:
5	U098783	Kaiparowits Plateau (#	_			100	-	08/04/86	Ŧ.
5	0098784		_			001		08/04/80	E :
5	0098785					00.		08/04/80	E :
5	0098787	atean	/9/10/50 (17#)			00.	03/01/00 Ind	00/04/00	E :
5	0083000	Kane Co. (#22)	\$6,10/21		Swanton Energy Resources Co.	25	00/01/02	66/10/00	2 3
5	SL050619	King Cannel	06/01/38		King cannel coal co.	- •		00/04/00	⊋ 8
5	US0044	Kingston	07/01/83	_	Consolidation Coal Co.	1 001	_	07/01/95	8
5	U022918	Kingston (#7)	04/01/58			100 2		08/04/86	⊋ :
5	0020668	Nev. Elec. (#14A)	05/01/58		Creek Coal	100 1		08/01/93	Ŧ.
5	<b>U38727</b>	Nev. Elec. (#14A)	05/01/58		Creek	100 1		08/01/95	¥ :
5	SL066490	North Tract	12/31/47		Steel	100 1		08/04/86	¥ :
5	SL069291	North Tract	04/01/50	-	Steel	100 1		08/04/86	¥ :
5	U0126947	North Tract	12/01/63		Steel	1 001	-	08/04/80	Σ:
5	U0126948	North Tract	12/01/63	2523 UN	Kaiser Steel Corp.	1001	12/01/65 den	08/0/80	Σ

DEVELOPMENT STATUS OF FEDERAL COAL LEASES

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SEC. 3 STATUS		8488
SEC. 3 RED DATE	08/04/86 08/04/86 08/04/86 01/01/94 01/01/94 01/01/94 01/01/94 01/01/94 01/01/94 01/01/89 03/01/89	08/04/86 05/01/89 08/04/86 09/01/90
DATE HOW ACQUIRED ACQUIRED		06/01/68 ind 05/01/79 ind 09/01/65 den 09/01/80 den
SEES	02/01/55 12/02/53 12/02/53 12/02/53 01/01/84 01/01/84 01/01/84 01/01/84 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79 03/01/79	0/60 0/60 0/60
PCT NO. LES	\$5555555555555555555555555555555555555	1000
LESSEE #1	Kaiser Steel Corp.  Rasmussen, A. & V.  Swanton Energy Resources Co.  Energy Reserves Group, Inc.  Energy Reserves G	Antelope Coal Co. Resource Development Co. Meadowlark Farms Meadowlark Farms
ACRES DEV. STATUS		1869 AS 40 AS 2360 AA 41 AA
DATE ISSUED	02/01/55 02/01/55 08/14/37 07/01/67 10/01/67 10/01/67 10/01/67 10/01/67 10/01/67 10/01/67 10/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67 03/01/67	12/01/66 11/22/32 09/01/65 09/01/80
BLOCK OR MINE NAME	North Tract North Tract North Tract Res & Blue Red & Bl	Antelope Antelope Belle Ayr Belle Ayr
E SER. AL	U014217 U014218 \$1049042 U0115791 U0115793 U0115793 U0115793 U0115793 U0115793 U0130986 U0130986 U0130989 U0130989 U0130985 U0140837 U0148355 U0141178 U0141178 U0141177 U0141178 U0141177 U0141177 U0141177 U0141177 U0141178 U013085 U013084 U0146654 U0146654 U0146654 U0166654	W0322255 B031719 W0317682 W72282
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DEVELOPMENT STATUS OF FEDERAL COAL LEASES

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STATE	STATE SERIAL	BLOCK OR M.NE NAME	DATE ISSUED	ACRES DEV. STATUS	LESSEE #1	PCT NO. LESSEES	DATE HOW ACQUIRED ACQUIRED	SEC. 3 DATE	SEC. 3 STATUS
<u>5</u> 2	W0240559	Arvada Boorlo Tick	09/01/63	1620 R	Gulf Oil Corp.	100 1	/ / rel 11/01/68 ind	08/70/80	88
5 5	W0220400	Boar's Tusk	03/01/70	2 0 % 2 0 %	Peabody Coal Co.	1001	•	_	8
5	W0313667	East Wyodak	10/01/65		Powder River Coal Co.	100 1	12/01/73 ind	08/04/86	8
5	E019039	Granite Creek	03/11/41	280 R	Granite Creek Coal & Uranium	100 1	/ / rel	`	2
ž	E015155	Rainbow #8	09/19/27	1752 R	Sweetwater Resources, Inc.	100 1		_	2
	W58112	Rojo Caballos	02/01/71	_	Mobil Coal Resources Co.	100 1	-	-	<b>8</b> 9
¥	M72990	Ċ	06/01/81	_	Capital Development Co.	100 1	_	_	8 ;
ž	B025369	Armstrong	05/11/30	_	Big Horn Coal Co.	100 1		08/04/80	2 :
<u>5</u>	W961	Bass	12/01/67		Bass, R. & Bass Trusts	100	_	08/04/86	2 ∓
ž	W0322794	Belco	01/01/70		Belco Petroleum Corp.	100		08/04/80	2 ∓
<u>`</u>	B037423	Blue Diamond	02/22/44		Wyodak Resource Development to				2 9
<u>`</u>	W0312917	Cherokee	04/01/67			26	04/01/0/ den	78/70/00	2 9
ׄב	W092141	Cherokee	79/10//0			- •	_		2 9
<b>&gt;</b>	W0313559	Cherokee	06/01/65	040 040 040			00/01/03 den		2 9
<b>&gt;</b>	W092140	Cherokee	29/10//0	671 UN	Kesource Development to.		07/01/62 den 03/01/82 den		2 €
<b>*</b> :	960878	Cottonical	70/10/60		Continua Burre coar co.	5			
<u> </u>	E018804	Cottonwood	03/20/30		Constant and Co.	100		_	2 ⊋
<u> </u>	#02337.5 US0061	Edison	07/01/82	7066 UN	Edison Development Co.	1001	_		8
; <u>&gt;</u>	U025663	Gulf 3	03/01/65		Gulf Oil Corp.	100 1		_	⊋
<b>5</b>	W25406	Hanna South	01/01/71	NO 059	Ark Land Co.	100 1			¥
<u>`</u>	C069111	Kowlok	12/01/45		Northwestern Resources Co.	100 1			⊋
₹	W030052	Lake DeSmet	11/01/59		Texaco, Inc.	100 1			<b>9</b>
₹	M046349	Lake DeSmet	10/01/61	_	Texaco, Inc.	100 1			2
ž	W051959	Lake DeSmet	08/01/57		Texaco, Inc.	100	_		2
'n	M030009	Lake DeSmet	12/01/55		Texaco, Inc.	100 1			<b>2</b>
₹	W0321120	Lake DeSmet	05/01/66		Texaco, Inc.	100 1			⊊ :
₹	W0313201	Long Canyon	07/01/68		Sweetwater Resources, Inc.	100 1			¥ :
ž	W075206	N. North Block	01/02/59		Gulf Oil Corp.	100 1	_		⊋ ;
<u>`</u>	W0310712	Phillips Creek 2	12/01/66	_	Pacific Power & Light Co.	100 1			⊋ 8
'n	W78633	Rocky Butte	02/01/83		Texas Energy Services, Inc.	50 2	٠.	_	8 9
ž	W0220516	Wildcat	03/01/65	1571 UN	Gulf Oil Corp.	1 001	מחו כי/ווו/וו	08/04/80	

## KEY TO ABBREVIATIONS AND ENTRIES IN OTA COAL LEASE DATA BASE

FIELD CONTENTS

STATE State where lease is located

SERIAL Lease serial number in DOI records

BLOCK OR

MINE NAME Name of Mine or Lease Block used in OTA reports

DATE ISSUED Date lease was originally issued

ACRES Acres in Lease (current as of 1982)

DEV. STATUS Development Status 1985

The-first letter is the development status of the lease or the associated mine or lease block, the second letter is the current production status Ratings:

AA = Approved SMCRA permit, mine is actively producing. AI = Approved permit, past production, mine is currently idle.

AS = Approved permit, mine scheduled to begin producing under

AN = Approved permit, no scheduled production, no contracts.

AM = Approved permit, lease reserves mined out.

PS = Pending permit, mine scheduled to produce under contract PN = Pending permit, no scheduled production, no contracts.

UN = Undeveloped no active permit review.

UP = Undeveloped, past coal production (before SMCRA).

R = Undeveloped, relinquishment approved. RP = Undeveloped, relinquishment pending. RE = Relinquished in exchange for another lease.

LESSEE #1 First lessee in DOI lease records

PCT Percent owned by Lessee #1

NO. LESSEES Number of lease owners

**DATE** 

ACQUIRED Date lease acquired by lessee #1 or corporate predecessor

HOW

ACQUIRED Method of acquisition by lessee #1 or corporate predecessor

DEN = lease issued by DOI to lessee; IND = lease assigned to lessee by unrelated entity; SEG = lease transferred by segregation of an existing lease; PAR = partial interest in lease transferred to lessee by

assignment

SEC. 3 DATE Earliest section 3 deadline applicable to lease: generally 10 years after

lease acquired by lessee or corporate predecessor in arm's-length

transaction between unrelated parties (Corporate acquisitions do not restart section 3 clock).

## SEC. 3 STATUS

Estimated section 3 Compliance Status as of section 3 date

First letter is general rating, second letter provides reason for rating.

YA = Lease likely to comply with section 3, actively producing >1% reserves.

YS = Lease likely to comply because of scheduled production and contracts.

YD = Lease likely to comply, reserves depleted.

YL = Lease likely to comply by LMU formation with other federal leases.

QM = Uncertain compliance status because of market conditions, existing regional capacity between 100 and 150% of projected demand.

QC = Uncertain compliance status because of LMU formation with nonfederal coal and lack of contracts to sustain LMU production level of 2.5%/yr.

QT = Uncertain compliance status because of lack of transportation to move coal to customers.

NM = Lease unlikely to comply because of market conditions, existing regional capacity exceeds 150% of projected demand.

NU = Lease unlikely to comply because of unfavorable development potential.

00 = Lease not rated (post-FCLAA lease, insufficient information, relinquished lease).

 ${f u.}$   ${f S.}$  GOVERNMENT PRINTING OFFICE : 1986 0 - 57-883 :  ${f QL}$  3