

# MINING AND MINERAL DEVELOPMENT IN THE NATIONAL PARKS

As of January 1, 1991

NPS REGION	NUMBER OF ACTIVE OPERATIONS IN PARKS		NUMBER OF ABANDONED SITES			MINING CLAIMS IN PARKS		PARKS WITH NEAR-TERM DEVELOPMENT POTENTIAL	
	Mining	Oil & Gas	Mine Sites	Mine Openings	Oil & Gas	Patented	Un-Patented	Internal	External
Alaska	6	--	449	449	12	557	980	10	14
Mid-Atlantic	5	--	197	1,153	5	0	0	4	16
Mid-West	6	95	87	162	57	0	0	6	20
National Capitol	--	--	8	20	--	0	0	2	3
North Atlantic	--	--	15	15	--	0	0	3	15
Pacific Northwest	5	--	40	69	3	18	1	4	10
Rocky Mountain	1	--	175	327	54	4	5	20	37
Southeast	8	177	164	178	210	0	0	7	31
Southwest	3	208	64	143	335	0	0	14	29
Western	2	--	935	7,679	45	173	357	13	35
TOTAL .	36	480	2,134	10,195	721	752	1,343	83	210
Change from 7/1/90	-1	+3	+80	+74	+43	0	-3	0	0

PLEASE SEE EXPLANATIONS ON BACK

# MINING AND MINERAL DEVELOPMENT IN THE NATIONAL PARKS

Contrary to popular belief, there IS mining and mineral development in our National Parks. The table on back shows the number of operations as of January 1, 1991. The following definitions will help explain the data in the table.

## Definitions

<sup>1</sup>"Mining Claims" are a result of the Mining Law of 1872 that allow citizens of the United States to enter public domain lands and locate ("stake") a claim if they discover a valuable mineral. Almost all NPS units were closed to the location of new claims when they were created. Nonetheless, there are over 2,000 mining claims in NPS units today because: (1) some units, e.g., Death Valley and Organ Pipe Cactus National Monuments, and Crater Lake and Denali National Parks remained open to location of mining claims even after the units were established; and (2) some units, when formed or expanded, e.g., Great Basin and Denali National Parks, and Wrangell-St. Elias National Park and Preserve, incorporated lands on which mining claims already existed.

<sup>2</sup>"Parks with Near-Term Development Potential" includes parks that meet one of the following criteria: there are existing mining claims or federal mineral leases; there are active, inactive, or recently terminated mineral operations; or, park managers have been informed of potential mineral development operations. External development is based on a 1985 report and includes potential operations in a 15-mile range around each park.

<sup>3</sup>"Mining" includes active operations on mining claims and nonfederal mineral operations, other than oil and gas. Active mining on claims today includes gold operations in Alaska, Death Valley, and Whiskeytown NRA. Nonfederal solid mineral operations include mining of coal, gold, sand and gravel, rock, topsoil, cinders, decomposed granite, and chert.

<sup>4</sup>"Oil and Gas" includes active nonfederal oil and gas wells in NPS units. Nonfederal mineral ownership occurs when the NPS does not acquire mineral rights in parks. As long as mineral ownership in NPS units remains nonfederal, the owners have the right to occupy, develop, or otherwise use their property. In most states the mineral owner has the right to access minerals over, across, or through the surface estate.

<sup>5</sup>"Mine Sites" in the context of abandoned mineral lands, mean individual mines, or groups of mines in proximity to each other that have been abandoned.

<sup>6</sup>"Mine Openings" are different from "mine sites" when discussing abandoned mineral lands, as one mine site can, and usually does, have more than one mine opening. Individual mine openings must be secured in order to provide for visitor safety.

If you have questions about these data, or if you would like additional information regarding mineral development in National Park Service units, please contact David B. Shaver, Chief, Mining and Minerals Branch, National Park Service, Post Office Box 25287, Denver, Colorado 80225, or call (303) 969-2090.

SUMMARY OF ACTIVE MINERAL OPERATIONS INSIDE NPS UNITS  
January 1, 1991

Page 1 of 2

The following numbers represent the best available data collected to date by the Mining and Minerals Branch. It has been collected from a variety of sources, e.g., inspections of the operations, industry and state maps, the 1986 MMB mineral activity questionnaire and personal knowledge of NPS staff members. The operations are tabulated by type of regulations that apply to the operation. These numbers will be updated semiannually. Please send any changes or corrections to Leslie Vaculik.

<u>REGION/PARK</u>	<u>ACTIVE OPERATIONS ON MINING CLAIMS<sup>1</sup></u>	<u>ACTIVE NONFEDERAL OIL AND GAS WELLS<sup>2</sup></u>	<u>ACTIVE PIPELINES<sup>3</sup></u>	<u>ACTIVE NONFEDERAL MINERAL OPERATIONS OTHER THAN OIL &amp; GAS<sup>4</sup></u>	<u>TOTALS</u>
<u>Alaska Region</u>					
Bering-Land Bridge	1(gold)				1
Cape Krusenstern				2(haul road, borrow)	2
Lake Clark				1(gold)	1
Wrangell-St. Elias	1(gold)				1
Yukon-Charley				1(gold)	1
					<u>6</u>
<u>Mid-Atlantic Region</u>					
New River Gorge				1(coal)	1
Upper Delaware				4(sand & gravel)	4
					<u>5</u>
<u>Mid-West Region</u>					
Cuyahoga		95	?	2(shale, topsoil)	97
St. Croix				4(gravel)	4
					<u>101</u>
<u>Pacific-Northwest Region</u>					
Lake Chelan				1(sand & gravel)	1
Olympic				1(stone)	1
Ross Lake				3(gravel, topsoil)	3
					<u>5</u>

1 Operations regulated by 36 CFR 9A

2 Includes active and temporarily shut-in wells. Operations are regulated by 36 CFR 9B (exceptions include grandfathered operations or where access across Federal surface is not required.)

3 Includes only pipelines in parks with active oil and gas operations. Pipeline number includes major transmission lines. Individual well collection lines are counted as part of the well site.

4 Currently unregulated by NPS. Includes active and temporarily suspended operations.

SUMMARY OF ACTIVE MINERAL OPERATIONS INSIDE NPS UNITS  
January 1, 1991

<u>REGION/PARK</u>	<u>ACTIVE OPERATIONS ON MINING CLAIMS<sup>1</sup></u>	<u>ACTIVE NONFEDERAL OIL AND GAS WELLS<sup>2</sup></u>	<u>ACTIVE PIPELINES<sup>3</sup></u>	<u>ACTIVE NONFEDERAL MINERAL OPERATIONS OTHER THAN OIL &amp; GAS<sup>4</sup></u>	<u>TOTALS</u>
<u>Rocky Mountain Region</u>					
Curecanti				1(decomposed granite)	<u>1</u> 1
<u>Southeast Region</u>					
Big Cypress		33	2		35
Big South Fork		143	3		146
Chattahoochee				8(sand) & ?(gold)	8
Gulf Islands			2		2
Obed		1			<u>1</u> 192
<u>Southwest Region</u>					
Alibates		1			1
Aztec		3			3
Big Thicket		19	35	1(sand)	55
El Malpais				1(cinders)	1
Hot Springs				1(chert)	1
Jean Lafitte		1	2		3
Lake Meredith		172	7		179
Padre Island		10	5		15
Poverty Point		2			<u>2</u> 260
<u>Western Region</u>					
Death Valley	1(gold)				1
Whiskeytown	1(gold)				<u>1</u> 2
Total <u>Active</u> Operations	<u>4</u>	<u>480</u>	<u>56</u>	<u>32</u>	<u>572</u>

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# MINING CLAIMS IN NATIONAL PARK SYSTEM UNITS

(January 1991)

REGION/Park Unit	<u>PATENTED</u>	<u>UNPATENTED</u>	<u>TOTAL</u>
ALASKA REGION			
Bering Land Bridge NP	0	17	17
Denali NP&P	47	356	403
Gates of the Arctic NP&P	0	18	18
Glacier Bay NP&P	20	2	22
Katmai NP&P	0	0	0
Kenai Fjords NP	0	8	8
Lake Clark NP&P	9	9	18
Wrangell-St. Elias NP&P	466	405	871
Yukon-Charley Rivers NP	<u>15</u>	<u>165</u>	<u>180</u>
Region Totals	557	980	1,537
PACIFIC NORTHWEST REGION			
City of Rocks NR	0	1	1
North Cascades NP	15	0	15
Olympic NP	1	0	1
Ross Lake NRA	<u>2</u>	<u>0</u>	<u>2</u>
Region Totals	18	1	19
ROCKY MOUNTAIN REGION			
Bighorn Canyon NRA	0	5	5
Glacier NP	<u>4</u>	<u>0</u>	<u>4</u>
Region Totals	4	5	9
WESTERN REGION			
Death Valley NM	118	102	220
Great Basin NP	0	250	250
Grand Canyon NP	5	0	5
Joshua Tree NM	12	0	12
Lake Mead NRA	32	4	36
Saguaro NM	6	0	6
Whiskeytown NRA	<u>0</u>	<u>1</u>	<u>1</u>
Region Totals	173	357	530
NATIONAL PARK SYSTEM TOTALS	752	1,343	2,095

**SUMMARY OF ABANDONED MINE LANDS ON NPS LANDS**  
**January 1, 1991**

<u>Region</u>	<u>NPS Units Affected</u>	<u>Sites</u>	<u>Abandoned Mine Hazards/Openings</u>	<u>Abandoned Oil and Gas Wells</u>
Alaska	11	449	449	12
Mid-Atlantic	12	197	1,153	5
Midwest	14	87	162	57
National Capital	3	8	20	
North Atlantic	3	15	15	
Pacific Northwest	7	40	69	3
Rocky Mountain	22	175	327	54
Southeast	13	164	178	210
Southwest	15	64	143	335
Western	24	935	7,679	46
<b>NPS TOTAL</b>	<b>124</b>	<b>2,134</b>	<b>10,195</b>	<b>722</b>

**ABANDONED MINE LANDS INVENTORY BY REGION AND PARK**

<u>Region</u>	<u>Sites</u>	<u>Abandoned Mine Hazards/Openings</u>	<u>Abandoned Oil and Gas Wells</u>
<b>Alaska Region Total:</b>	<b>449</b>	<b>449</b>	<b>12</b>
1. Bering Land Bridge, AK	1	1	
2. Cape Krusenstern, AK	1	1	
3. Denali, AK	25	25	
4. Gates of the Arctic, AK	?	?	
5. Glacier Bay, AK	2	2	
6. Kenai Fjords, AK	6	6	
7. Klondike Gold Rush, AK	1	1	
8. Kobuk Valley, AK	2	2	
9. Noatak, AK	1	1	
10. Wrangell-St. Elias, AK	404	404	12
11. Yukon-Charley Rivers, AK	6	6	
<b>Mid-Atlantic Region Total:</b>	<b>197</b>	<b>1,153</b>	<b>5</b>
1. Allegheny Portage Railroad, PA	4	17	
2. Colonial, VA	1	1	
3. Delaware Water Gap, PA	29	35	
4. Fort Necessity, PA	?	?	
5. Fredericksburg-Spotsylvania, VA	2	2	
6. Friendship Hill, PA	3	16	3
7. Gauley River, WV	TBD <sup>1</sup>		
8. New River Gorge, WV	116	1,034	2
9. Shenandoah, VA	3	9	
10. Steamtown, PA	1 <sup>2</sup>	1	
11. Upper Delaware, NY	30	30	
12. Valley Forge, PA	8	8	

<sup>1</sup>New acquisition; inventory is pending. Inventory will be funded by Office of Surface Mining.

<sup>2</sup>The entire park is underlain by numerous mine workings (5 coal seams). The upper workings are 18 feet below the surface.

<u>Region</u>	<u>Sites</u>	<u>Abandoned Mine Hazards/Opening</u> s	<u>Abandoned Oil and Gas Wells</u>
<b>Midwest Region Total:</b>	<b>87</b>	<b>162</b>	<b>57</b>
1. Apostle Islands, WI	4	9	
2. Cuyahoga Valley, OH	23	31	57
3. George Washington Carver, MO	1	6	
4. Indiana Dunes, IN	3	6	
5. Isle Royale, MI	14	35	
6. Lincoln Boyhood, IN	1	1	
7. Lower St. Croix, WI	6	10	
8. Mound City, OH	1	1	
9. Ozark, MO	1	1	
10. Pictured Rocks, MI	2	2	
11. St. Croix, WI	6	15	
12. Scotts Bluff, NE	1	1	
13. Sleeping Bear Dunes, MI	9	19	
14. Voyageurs, MN	13	22	
15. Wilson's Creek, MO	2	3	
<b>National Capital Region Total:</b>	<b>8</b>	<b>20</b>	
1. C&O Canal, MD	2	4	
2. National Capital Parks- East, DC	4	4	
3. Prince William Forest, VA	2	12	
<b>North Atlantic Region Total:</b>	<b>15</b>	<b>15</b>	
1. Acadia, ME	13	13	
2. Cape Code, MA	1	1	
3. Saratoga, NY	1	1	
<b>Pacific Northwest Region Total:</b>	<b>40</b>	<b>69</b>	<b>3</b>
1. City of Rocks, ID	1	1	
2. Coulee Dam, WA	?	?	
3. Craters of the Moon, ID	1	3	
4. Lake Chelan, WA	?	?	
5. Mount Rainier, WA	2	2	
6. North Cascades, WA	23	47	
7. Olympic, WA	3	3	3
8. Ross Lake, WA	10	13	
<b>Rocky Mountain Region Total:</b>	<b>175</b>	<b>327</b>	<b>54</b>
1. Arches, UT	?	?	
2. Bighorn Canyon, WY	15	23	
3. Black Canyon, CO	1	1	
4. Bryce Canyon, UT	1	1	
5. Canyonlands, UT	7	46	14
6. Capitol Reef, UT	22	55	1
7. Colorado, CO	5	9	
8. Curecanti, CO	4	4	
9. Dinosaur, CO/UT	1	9	
10. Fort Laramie, WY	1	1	
11. Fossil Butte, WY			1
12. Glacier, MT	11	13	10
13. Glen Canyon, UT	11	30	26
14. Grand Teton, WY	39	41	
15. Grant-Kohrs Ranch, MT	1	1	
16. Great Sand Dunes, CO	2	7	
17. John D. Rockefeller Parkway, WY	1	1	
18. Mesa Verde, CO			1
19. Rocky Mountain, CO	5	28	
20. Theodore Roosevelt, ND	1	1	
21. Timpanogos Cave, UT	4	4	
22. Yellowstone, WY	40	40	
23. Zion, UT	3	12	1

<u>Region</u>	<u>Sites</u>	<u>Abandoned Mine Hazards/Openings</u>	<u>Abandoned Oil and Gas Wells</u>
<b>Southeast Region Total:</b>	<b>164</b>	<b>178</b>	<b>210</b>
1. Andersonville, GA	1	1	
2. Big Cypress, FL			48
3. Big South Fork, TN/KY	125	125	146
4. Blue Ridge Parkway, VA	1	1	
5. Chickamauga/Chattanooga, GA	1	4	
6. Cumberland Gap, VA	1	2	
7. Everglades, FL	17	17	5
8. Great Smoky Mountains, NC/TN	2	11	
9. Horseshoe Bend, AL	2	2	
10. Kings Mountain, SC	1	1	
11. Mammoth Cave	7	7	10
12. Natchez Trace Parkway, AL/MS/TN	3	3	
13. Obed, TN	3	4	1
<b>Southwest Region Total:</b>	<b>64</b>	<b>143</b>	<b>335</b>
1. Amistad, TX	1	1	
2. Aztec Ruins, NM			1
3. Big Bend, TX	14	35	
4. Big Thicket, TX			116
5. Buffalo River, AR	23	69	
6. Chaco Culture, NM	2	2	18
7. Chickasaw, OK	1	1	11
8. El Malpais, NM	6	6	
9. Guadalupe Mountains, TX	1	11	4
10. Hot Springs, AR	9	9	
11. Jean Lafitte, LA			45
12. Lake Meredith, TX	6	8	65
13. Padre Island, TX			65
14. Poverty Point, LA			10
15. Wupatki/Sunset Crater, AZ	1	1	
<b>Western Region Total:</b>	<b>935</b>	<b>7679</b>	<b>46</b>
1. Channel Islands, CA			16
2. Chiricahua, AZ	3	14	
3. Coronado, AZ	5	35	
4. Death Valley, CA	183	4,600	
5. Fort Bowie, AZ	5	16	
6. Golden Gate, CA	6	9	
7. Grand Canyon, AZ	16	37	
8. Great Basin, NV	6	85	
9. Joshua Tree, CA	413	2,000	
10. Kings Canyon, CA	4	4	
11. Lake Mead, AZ/NV	<43	<300	
12. Lassen Volcanic, CA	3	3	1 <sup>3</sup>
13. Lava Beds, CA	2	2	
14. Organ Pipe Cactus, AZ	12	160	
15. Petrified Forest, AZ			1
16. Pinnacles, CA	1	6	
17. Point Reyes, CA	25	25	
18. Redwood, CA	18	18	
19. Saguaro, AZ	137	282	
20. Santa Monica Mtns., CA			28
21. Sequoia, CA	6	6	
22. Tuzigoot, AZ	1	1	
23. Whiskeytown, CA	36	42	
24. Yosemite, CA	10	34	

<sup>3</sup>Geothermal well.



SUMMARY OF ABANDONED  
OIL AND GAS OPERATIONS  
INSIDE NPS UNITS  
January 1, 1991

The following numbers represent the best available data collected to date by the Mining and Minerals Branch. It has been collected from a variety of sources, e.g. inspections of the operations, industry and state maps, the 1986 MMB mineral activity questionnaire and personal knowledge of NPS staff members. These numbers will be updated semiannually. Please send any changes or corrections to Kean Boucher.

<u>REGION/PARK</u>	<u>ABANDONED WELLS<sup>1</sup></u>	<u>KNOWN WELLS NEEDING PLUGGING</u>	<u>INFORMATION SOURCE</u>
<u>Alaska</u>			
Wrangell-St. Elias	12		1989 Q
<u>Mid-Atlantic</u>			
Friendship Hill	3		1986 Q
New River Gorge	2		Park data
<u>Midwest</u>			
Cuyahoga	57	26	'88 inspection
<u>Pacific Northwest</u>			
Olympic	3	1	'86 Q
<u>Rocky Mountain</u>			
Canyonlands	14		1986 Q
Capital Reef	1		1986 Q
Fossil Buttes	1		RMR data
Glacier	10		1986 Q
Glen Canyon	26	2	1986 Q
Mesa Verde	1		
Zion	1		1986 Q
<u>Southeast</u>			
Big Cypress	48	2	'88 inspection
Big South Fork	146	55 <sup>2</sup>	'89 inspection
Everglades	5		1986 Q
Mammoth Cave	10	3	1988 RMP
Obed	1	1	'89 inspection
<u>Southwest</u>			
Aztec Ruins	1		'88 inspection
Big Thicket	116		'88 inspection
Chaco Culture	18		Field report
Chickasaw	11		'86 PI map
Guadalupe	4		'90 Q
Jean Lafitte	45	10	'88 inspection
Lake Meredith	65	2	'88 inspection
Padre Island	65	4	Industry map
Poverty Point	10		Industry map
<u>Western</u>			
Channel Islands	16		1986 Q
Petrified Forest	1		AZ state map
Santa Monica Mtns.	28		PI Map
<u>Totals</u>	<u>721</u>	<u>106</u>	

<sup>1</sup> Includes both adequately plugged and inadequately or open abandoned wells.

<sup>2</sup> The well count in BISO is a result of inspecting 2/3 the wells. When the BISO inspection is complete the number may double.

ACTIVE OIL AND GAS OPERATIONS IN PARKS  
January 1, 1991

<u>Park Unit</u> <u>(State)</u>	<u>Grandfathered</u> <u>Existing</u> <u>Operations</u>	<u>Post '79</u> <u>No Access</u> <u>Required</u>	<u>Currently</u> <u>Regulated</u> <u>Operations</u>	<u>Regulable</u> <u>Operations</u>	<u>Park Total</u> <u>Active</u> <u>Operations</u>	<u>Park Total</u> <u>Active</u> <u>Operators</u>
Alibates (Texas)	1 well				= 1 well	1
Aztec Ruins (New Mexico)	3 wells				= 3 wells	2
Big Cypress (Florida)	12 wells 1 pipeline		21 wells 1 pipeline		= 33 wells = 2 pipelines	2
Big South Fork (Tennessee/Kentucky)	141 wells 3 pipelines		2 wells		=143 wells = 3 pipelines	35
Big Thicket (Texas)	3 wells 35 pipelines		5 wells	11 wells*	= 19 wells = 35 pipelines	27
Cuyahoga Valley (Ohio)	16 wells	48 wells	4 wells	27 wells*	= 95 wells	19
Gulf Islands (Mississippi)	2 pipelines				= 2 pipelines	2?
Jean Lafitte (Louisiana)	1 well 2 pipelines				= 1 well = 2 pipelines	1
Lake Meredith (Texas)	93 wells 7 pipelines		59 wells	20 wells*	=172 wells = 7 pipelines	21
Obed (Tennessee)	1 well				= 1 well	1
Padre Island (Texas)	5 pipelines		8 wells	2 wells*	= 10 wells = 5 pipelines	14
Poverty Point (Louisiana)	2 wells				= 2 wells	1
Wells	273 wells	48 wells	99 wells	60 wells	=480 wells	
Pipelines	55 pipelines		1 pipeline		= 56 pipelines	
Totals	328	48	100	60	=536 Operations	126

\* May be regulable due to change in status or operator.