

TABLE 5.23-2  
SURFACE AND UNDERGROUND EQUIPMENT

The equipment listed below was purchased from 1976 through 1984.

- Continuous Miners
- Shuttle Cars (Diesel and Electric)
- Roof Bolters
- Feeder Breakers
- Personnel Carriers (Including Jeeps and Tractors)
- Load-Haul-Dumps and Accessories
- Auxiliary Underground Mobile Equipment (Maintenance trucks, Ambulance,  
Utility trucks and Lubrication truck)
- Conveyor system
- Mobile Equipment - Surface (Dozers, Forklifts and Snow-plow)
- Power Centers
- Rockdusting Equipment
- Pumps (including Slurry and Submersible)
- Underground Trailers
- Licensed Highway Vehicles
- Compressors and Generators
- Electrical substations and transformers
- Mine Equipment - General (Lighting systems, emergency communication  
system and Auxiliary fans)
- Shop Equipment (including one 4-ton overhead crane and one 20-ton  
overhead crane)
- Miscellaneous mechanic's and electrician's tools
- Firefighting tools and fire extinguishers
- Conveyor fire suppression sprays
- Safety equipment, dust sampler, methane detection and measuring  
devices and self rescuers, self contained underground breathing  
apparatus, flame safety lamps and an atmosphere analyzer
- Surface buildings, described in Table 4.2-1
- Other improvements (fans, water system, retaining walls, drainage  
system, fencing, sewage lagoons and asphalt paving)

TABLE 5.23-2 (cont'd)

In addition to a continuing need for much of the above equipment, future utilization of longwall methods will require the following:

Longwall shears

Longwall shield supports

Face lighting and electric control for longwall

Armored face conveyors for longwall

Hydraulic power packs for the longwall

Handset yieldable prop supports

TABLE 5.25.2  
1987 SUBSIDENCE MONITORING SUMMARY

Station	Date Established	<u>ORIGINAL ESTABLISHED CONTROL</u>			Date Resurveyed	<u>1987 SURVEY CONTROL</u>			Change In Elevation
		North	East	Elevation		North	East	Elevation	
14 SS	1979	501,618.43	2,246,766.22	8 019.76	10/20/87	500,619.23	2,246,765.58	8,019.50	-0.26
15 SS	1979	499,046.40	2,250,498.62	6,877.08	10/07/87	499,046.41	2,250,498.67	6,877.09	+0.01
36 SS	1979	504,721.47	2,251,483.38	6,999.88	10/08/87	504,722.08	2,251,483.98	6,999.89	+0.01
43 SS	1979	502,867.80	2,245,882.39	7,911.52	10/21/87	502,868.32	2,245,882.18	7,911.26	-0.26
50 SS	1979	502,045.93	2,248,432.01	8,041.24	10/20/87	502,046.22	2,248,431.85	8,040.96	-0.28
54 SS	1979	505,413.97	2,245,528.85	7,955.33	10/28/87	505,414.94	2,245,528.65	7,955.03	-0.30
106 SS	1979	502,400.01	2,251,238.02	6,864.11	10/07/87	502,400.39	2,251,238.38	6,864.04	-0.07
109 SS	1979	497,675.57	2,245,618.24	7,874.96	10/20/87	497,675.95	2,245,617.51	7,874.82	-0.14
110 SS	1979	499,385.67	2,245,776.57	7,874.05	10/20/87	499,385.73	2,245,775.79	7,873.83	-0.22
3044	1983	503,050.26	2,251,423.30	6,930.90	10/07/87	503,050.86	2,251,423.83	6,930.97	+0.07
3046	1983	503,896.61	2,254,502.54	8,052.60	11/10/87	503,897.33	2,254,502.24	8,052.65	+0.05
3055	1983	505,967.71	2,248,349.81	8,095.30	11/11/87	505,968.26	2,248,348.59	8,095.33	+0.03
87-0 SS	1987	-	-	-	10/07/87	500,243.55	2,250,582.43	6,776.05	-
87-1 SS	1987	-	-	-	10/07/87	501,367.65	2,251,073.81	6,873.89	-
87-2 SS	1987	-	-	-	11/11/87	504,562.64	2,246,925.65	8,238.56	-
87-47 SS	1987	-	-	-	11/10/87	507,184.61	2,254,071.70	7,480.42	-

TABLE 5.25-3  
1988 SUBSIDENCE MONITORING SUMMARY

<u>ORIGINAL ESTABLISHED CONTROL</u>					<u>1988 SURVEY CONTROL</u>		
<u>Station</u>	<u>Date Established</u>	<u>Coordinates</u>		<u>Elevation</u>	<u>Date Resurveyed</u>	<u>Elevation</u>	<u>Change In Elevation</u>
		<u>North</u>	<u>East</u>				
15 SS	1979	499,046.40	2,250,498.62	6,877.08	08/25/88	6,877.09	+0.01
36 SS	1979	504,721.47	2,251,483.38	6,999.88	08/26/88	6,999.81	-0.07
106 SS	1979	502,400.01	2,251,238.02	6,864.11	08/25/88	6,864.09	-0.02
3044	1983	503,050.26	2,251,423.30	6,930.90	08/25/88	6,930.92	+0.02
3046	1983	503,896.61	2,254,502.54	8,052.60	10/13/88	8,052.50	-0.10
3055	1983	505,967.71	2,248,349.81	8,095.30	10/13/88	8,094.95	-0.35
87-0 SS	1987	500,243.55	2,250,582.43	6,776.05	08/25/88	6,776.23	+0.18
87-1 SS	1987	501,367.65	2,251,073.81	6,873.89	08/25/88	6,873.70	-0.19
87-2 SS	1987	504,562.64	2,246,925.65	8,238.56	10/13/88	8,238.62	+0.06
87-47 SS	1987	502,184.61	2,254,071.70	7,480.42	10/13/88	7,480.32	-0.10
88-1 SS	08/03/88	504,829.39	2,250,202.17	7,289.91	-	-	-
88-2 SS	08/03/88	505,129.62	2,250,629.44	7,284.27	-	-	-
88-3 SS	08/03/88	505,379.31	2,251,047.87	7,149.07	-	-	-
88-4 SS	08/03/88	503,939.35	2,250,566.16	7,253.42	-	-	-

TABLE 5.25-4  
1989 SUBSIDENCE MONITORING SUMMARY

<u>Station</u>	<u>ORIGINAL ESTABLISHED CONTROL</u>			<u>1989 SURVEY CONTROL</u>		<u>Change In Elevation</u>	
	<u>Date Established</u>	<u>Coordinates</u>		<u>Elevation</u>	<u>Date Resurveyed</u>		<u>Elevation</u>
		<u>North</u>	<u>East</u>				
15 SS	1979	499,046.40	2,250,498.62	6,877.08	09/14/89	6877.00	-0.08
36 SS	1979	504,721.47	2,251,483.38	6,999.88	09/14/89	6999.613	-0.27
106 SS	1979	502,400.01	2,251,238.02	6,864.11	09/14/89	6863.954	-0.16
3044	1983	503,050.26	2,251,423.30	6,930.90	09/14/89	6931.047	+0.15
3046	1983	503,896.61	2,254,502.54	8,052.60	12/08/89	8052.55	-0.05
3055	1983	505,967.71	2,248,349.81	8,095.30	12/08/89	8095.22	-0.08
87-0 SS	1987	500,243.55	2,250,582.43	6,776.05	09/14/89	6776.01	-0.04
87-1 SS	1987	501,367.65	2,251,073.81	6,873.89	09/15/89	6873.86	+0.16
87-2 SS	1987	504,562.64	2,246,925.65	8,238.56	09/15/89	8238.52	-0.04
87-47 SS	1987	502,184.61	2,254,071.70	7,480.42	12/08/89	7480.28	-0.14
88-1 SS	08/03/88	504,829.39	2,250,202.17	7,289.91	09/17/89	7289.27	-0.64
88-2 SS	08/03/88	505,129.62	2,250,629.44	7,284.27	09/15/89	7283.795	-0.48
88-3 SS	08/03/88	505,379.31	2,251,047.87	7,149.07	09/15/89	7148.725	-0.35
88-4 SS	08/03/88	503,939.35	2,250,566.16	7,253.42	09/15/89	7253.004	-0.42
1001	10/14/89	506,470.79	2,252,015.42	7,007.86			

TABLE 5.25-5  
1990 SUBSIDENCE MONITORING SUMMARY

<u>ORIGINAL ESTABLISHED CONTROL</u>					<u>1990 SURVEY CONTROL</u>		
<u>Station</u>	<u>Date Established</u>	<u>Coordinates</u>			<u>Date Resurveyed</u>	<u>Elevation</u>	<u>Change In Elevation</u>
		<u>North</u>	<u>East</u>	<u>Elevation</u>			
15 SS	1979	499,046.40	2,250,498.62	6,877.08	7-27-90	6877.05	-0.03
36 SS	1979	504,721.47	2,251,483.38	6,999.88	9-26-90	6999.70	-0.18
106 SS	1979	502,400.01	2,251,238.02	6,864.11	7-27-90	6864.01	-0.10
3044	1983	503,050.26	2,251,423.30	6,930.90	7-27-90	6931.09	+0.19
3046	1983	503,896.61	2,254,502.54	8,052.60	9-25-90	8052.63	+0.03
3055	1983	505,967.71	2,248,349.81	8,095.30	(Not Monitored in 1990)		
87-0 SS	1987	500,243.55	2,250,582.43	6,776.05	7-27-90	6776.07	+0.02
87-1 SS	1987	501,367.65	2,251,073.81	6,873.89	7-27-90	6873.89	+0.00
87-2 SS	1987	504,562.64	2,246,925.65	8,238.56	(Not Monitored in 1990)		
87-47 SS	1987	502,184.61	2,254,071.70	7,480.42	9-25-90	7480.02	-0.40
88-1 SS	08/03/88	504,829.39	2,250,202.17	7,289.91	9-26-90	7289.40	-0.51
88-2 SS	08/03/88	505,129.62	2,250,629.44	7,284.27	9-26-90	7283.89	-0.38
88-3 SS	08/03/88	505,379.31	2,251,047.87	7,149.07	9-26-90	7148.82	-0.25
88-4 SS	08/03/88	503,939.35	2,250,566.16	7,253.42	9-26-90	7253.23	-0.19
1001	10/14/89	506,470.79	2,252,015.42	7,007.86	6-15-90	7007.36	-0.50

TABLE 5.25-6

1991 SUBSIDENCE MONITORING SUMMARYORIGINAL ESTABLISHED CONTROL1991 SURVEY CONTROL

<u>Station</u>	<u>Date</u>	<u>Coordinates</u>			<u>Date</u>	<u>Change In Elevation</u>
	<u>Established</u>	<u>North</u>	<u>East</u>	<u>Elevation</u>	<u>Resurveyed</u>	
15 SS	1979	499,046.40	2,250,498.62	6,877.08	12-18-91	6877.06 -0.02
36 SS	1979	504,721.47	2,251,483.38	6,999.88	12-18-91	6999.79 -0.09
106 SS	1979	502,400.01	2,251,238.02	6,864.11	12-18-91	6863.99 -0.12
3044	1983	503,050.26	2,251,423.30	6,930.90	12-18-91	6931.18 +0.28
87-0 SS	1987	500,243.55	2,250,582.43	6,776.05	12-18-91	6676.04 -0.01
87-1 SS	1987	501,367.65	2,251,073.81	6,873.89	12-18-91	6873.89 +0.00
1001	10/14/89	506,470.79	2,252,015.42	7,007.86	06-26-91	7007.50 -0.36
91-1 SS	12/17/91	504,629.65	2,243,590.99	7,841.00		
53 SS	12/17/91*	505,450.34	2,243,510.125	8,142.59		

\*Re-surveyed from new control for Subsidence Monitoring.

TABLE 5-26-1

EXISTING SURFACE STRUCTURES  
AT SOLDIER CANYON MINE

<u>STRUCTURES</u>	<u>DATE OF CONSTRUCTION</u>	<u>TYPE OF CONSTRUCTION</u>	<u>PRESENT CONDITION</u>	<u>LOCATION</u>	<u>*PERFORMANCE STANDARDS</u>
Office Building	Nov 1977 Mar 1978	60'x100'-two story Butler (steel frame, insulated aluminum sheathing) air-cond.	Excellent	Shown on facility map	Meets standards of Sub-chapter K & R614-301-526
Warehouse, telephone switch gear, overflow storage area	Nov 1977-Mar 1978	Butler type, 60'x100' additional 50'x29'	"	Below offices	"
Original Main- tenance shop	Aug-Oct 1977	Butler type, 80'x100'	"	50' North of Office	"
New Shop	Dec 1981 Feb 1982	Butler type, 66'x29'	"	60'W of Warehouse	"
Training Room	Dec 1981 Feb 1982	Butler type 51'x29'	"	160'NW of shop in office building	"
Ambulance garage	Dec 1981	Butler type, 20'x29' gas heat	"	130'NW of shop	"
Fire fighting equipment		Hydrants, sprays and hand extinguishers	"	Mobile equip. stored adjacent to office complex	"
Water storage tank	May 1976 Jul 1976	Steel 60,000 gals. capacity	"	1050'NW of office complex	"
Coal loadout bin	Jun 1977 Jul 1977	Steel, 600 tons capacity	"	275' of office complex	"
Coal open storage	Jun 1977	10,000 tons open stockpile	"	Adjacent to loadout bin	"
Sewage lagoons & pipeline	Aug 1982	2 clay-lined cells with designed capacity	"	Two miles from office complex	"
Septic tank	Approved 6-2-82	Metal, bituminuous cover	"	Under bath- house	"
Bathhouse	Nov 1977 Mar 1978	Bulter type, 50'x80' half located over septic tank	"	Attached to office bldg.	"

TABLE 5.26-J (Continued)  
 EXISTING SURFACE STRUCTURES  
 AT SOLDIER CANYON MINE

<u>STRUCTURES</u>	<u>DATE OF CONSTRUCTION</u>	<u>TYPE OF CONSTRUCTION</u>	<u>PRESENT CONDITION</u>	<u>LOCATION</u>	<u>*PERFORMANCE STANDARDS</u>
Rockdust bin & compressor	Aug 1978 Sep 1978	Steel tank	Excellent	Adjacent to Storage shed	Meets standards of Sub-chapter X & R614-301-526
Explosives magazines		Steel boxes 1 for Caps/1 for powder	"	1050'NW of office complex	"
Ventilation system	May 1976-Jul 1976	Fan #1, 500 HP	"	All intakes and exhaust fans are shown on fac. map	"
Exhaust shaft fan	Dec 1982-Nov 1983	Fan #2, 350 HP	"		
Cribwall	Jul-Aug 1980	Cement lattice	"	Protects approach to office complex	"
Fencing	Installed as needed	Cyclcose chain link	"	All surface facilities fenced except parking lot	"
Highway #53 (Soldier Creek Road) Signs & markers	Predates mine Erected 1978	Asphalt Metal	Fair Excellent	At access points and disturbed areas	"
Upper Yard storage shed	Oct 1979	Steel frame, aluminum sheathing	"	Adjacent to first substation	"
Substations-original	Mar 1976-Apr 1976	46KV Primary voltage	"	75'W of office complex	"
Second substation	Dec 1982-Nov 1983	46KV with a secondary of 13,800V and 4160V	"	1075'N of office complex	"
Sedimentation pond	Oct 1979 Nov 1979	Dirt ditch, asphalt lined ditches, rock drains, steel grill covered, half round corrugated tubing	"	Across highway 53 - REI office	"
Water Diversions	1974-1982				
Parking lot	Nov 1983	Asphalt	"	Adjacent to office complex	"

TABLE 5.26-1 (Continued)

EXISTING SURFACE STRUCTURES  
AT SOLDIER CANYON MINE

<u>STRUCTURES</u>	<u>DATE OF CONSTRUCTION</u>	<u>TYPE OF CONSTRUCTION</u>	<u>PRESENT CONDITION</u>	<u>LOCATION</u>	<u>*PERFORMANCE STANDARDS</u>
New intake rock slope	Dec 1982-Apr 1983	Concrete	Excellent	500'N of office complex	Meets standards of Sub-chapter K and R614-301-526
Belt conveyor (main)	May 1976	42" belt, steel supports 1,000 T/hr	"	Terminates at coal loadout bin	"
1500 gallon diesel tank (a full containment structure will be built in May 1991)	Jul 1976	Steel and concrete	"	Adjacent to No. 1 Fan	"
1000 gallon diesel tank	Jan 1994	Steel	"	#2 Fan site	"
4000 gallon unleaded tank with full containment	Aug 1991	Steel and concrete	"	Between maint. shop and new shop	"
8000 gallon diesel tank with full containment	Aug 1991	Steel and concrete	"	Between maint. shop and new shop	"
Upper yard storage Shed	Oct 1982	Steel frame, Alum. sheathing	"	Adjacent to rock dust bin	"
Coal storage bin control building	Jul 1977	Steel 11'x13'	"	220'N of office complex	"
Security shack	1983	Wood 8'x8'	"	Adjacent to maintenance shop	"
Stoker bin	1978	Steel 10'x10'	"	400'N of office complex	"
3 New Portals	Oct. 1989 Aug. 1991	Concrete and Steel	"	400' NE of office complex	"

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TABLE 5.26-1 (Continued)

EXISTING SURFACE STRUCTURES  
AT SOLDIER CANYON MINE

<u>STRUCTURES</u>	<u>DATE OF CONSTRUCTION</u>	<u>TYPE OF CONSTRUCTION</u>	<u>PRESENT CONDITION</u>	<u>LOCATION</u>	<u>*PERFORMANCE STANDARDS</u>
885' of Stream	Oct. 1989 Aug. 1991	8 gauge structur Steel plate 19'11"x 12'x10"	" "	In Soldier Creek stream channel	"

\* All meet standards of Suc-chapter K & R614-301-526

\*\* Resource Enterprises, Inc.'s buildings, compressor station and pipe line are not considered part of the facilities of this mine, since those facilities are operating under their own permit from B.L.M.