1999 ANNUAL REPORT

WILLOW CREEK MINE

PERMIT NO. ACT/007/038

PLATEAU MINING CORPORATION

RAG

File in:
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Refer to Record No 0016 Date 03/2000
In C/0070038 3000, Incoming
For additional information

0016

PLATEAU MINING CORPORATION

COPY

Willow Creek Mine
847 NW Hwy 191
Helper, Utah 84526
(435) 472-0475
Fax: (435) 472-4780
An affiliate of RAG

March 31, 2000

Utah Coal Regulatory Program
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Attention: Pamela Grubaugh-Littig

RE: **Submittal of Annual Report for 1999, Plateau Mining Corporation, Willow Creek Mine, ACT/007/038, Folder #2, Carbon County, Utah**

Dear Ms. Grubaugh-Littig:

Enclosed please find two copies of the aforementioned. If you have any questions, please do not hesitate to contact me at (435) 472-4741.

Sincerely,

Johnny Pappas
Sr. Environmental Engineer

Enclosures

File: WCENV 2.5.2.1.8
Chrono: JP000307.LTR

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Date
03/31/2000

GENERAL INFORMATION

1.	Permit Number	ACT/007/038
2.	Mine Name	WILLOW CREEK MINE
3.	Permittee Name	PLATEAU MINING CORPORATION
4.	Operator Name (if other than Permittee)	
5.	Permit Expiration Date	APRIL 23, 2001
6.	Company Representative, Title	JOHNNY PAPPAS, SR. ENVIRONMENTAL ENGINEER
7.	Phone Number	(435)472-4741
8.	Fax Number	(435)472-4782
9.	Mailing Address	PLATEAU MINING CORPORATION
		847 NORTHWEST HIGHWAY 191
		HELPER, UTAH 84526
10.	Resident Agent, Title	C.T. CORPORATION
	Mailing Address	50 WEST BROADWAY
		SALT LAKE CITY, UTAH 84101

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IDENTIFICATION OF OTHER PERMITS

Identify other permits which are required in conjunction with mining and reclamation activities.

Permit Type	ID Number	Description	Expires on
1. MSHA Mine ID(s)	42-02113	LEGAL IDENTITY	
2. MSHA Impoundment(s)	1211-UT-09-02113-02	SCHOOLHOUSE CANYON SEDIMENT POND 013	
	1211-UT-09-02113-01	SCHOOLHOUSE CANYON REFUSE PILE	
3. NPDES/UPDES Permit(s) (water)	UTG040012		4/30/03
4. PSD (Air) Permit(s)	DAQE-037-00	APPROVAL ORDER	
5.			
6.			

CERTIFIED REPORTS

List the certified inspection reports as required by the rules and under the approved plan which must be periodically submitted to the Division. Specify whether the information is included as APPENDIX A to this Annual Report or currently ON FILE with the Division.

Certified Reports:	Reports Required?		INCLUDED or ON FILE w/DOGM?			Comments
	YES	NO	YES	NO	ON FILE	
1. Excess Spoil Piles		X				
2. Refuse Piles	X		X			
3. Impoundments	X		X			
4.						
5.						

REPORTING OF OTHER TECHNICAL DATA

List other technical data and information as required under the approved plan which must be periodically submitted to the Division. Specify whether the information is included as APPENDIX B to this Annual Report or currently ON FILE with the Division.

Technical Data:	Reports Required?		INCLUDED or ON FILE w/DOGM?			Comments
	YES	NO	YES	NO	ON FILE	
1. Climatological Data		X				
2. Subsidence Monitoring Data	X		X			
3. Vegetation Monitoring Data		X				
4. Raptor Data	X					SUBMITTED WITH PERMIT UPDATE
5. Soils Monitoring Data		X				
6. Water Monitoring Data	X					
First Quarter Report	X				X	
Second Quarter Report	X				X	
Third Quarter Report	X				X	
Fourth Quarter Report	X				X	
7. Geological/Geophysical Data		X				
8. Engineering Data		X				
9. Other Data						

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LEGAL, FINANCIAL, COMPLIANCE AND RELATED INFORMATION

Changes in administration or corporate structure can often bring about necessary changes to information found in the mining and reclamation plan. The Division is requesting that each permittee review and update the legal, financial, compliance and related information in the plan as part of the Annual Report. Provide the Department of Commerce, Annual Report of Officers, or other equivalent information as necessary to ensure that the information provided in the plan is current. Provide any other changes as necessary regarding land ownership, lease acquisitions, legal results from appeals of violations, or other changes as necessary to update information required in the mining and reclamation plan. Include any certified financial statements, audits or worksheets which may be required to meet bonding requirements. Specify whether the information is currently ON FILE with the Division or included as APPENDIX C to this Annual Report.

Legal/Financial Data:	Report Required?		INCLUDED or ON FILE w/DOGM?			Comments
	YES	NO	YES	NO	ON FILE	
1. Department of Commerce, Annual Report of Officers	X			X		UPDATE NOT DUE UNTIL SEPTEMBER
2. Other						
LIST OF OFFICERS AND DIRECTORS	X		X			WILL NEED TO AMEND MRP ACCORDINGLY

MINE MAPS

Copies of mine maps, current and up-to-date through at least December 31, 1998, are to be provided to the Division as APPENDIX D to this Annual Report in accordance with the requirements of R645-301-525.270. These map copies shall be made in accordance with 30 CFR 75.1200, as required by MSHA. Upon request, mine maps shall be kept confidential by the Division.

Map Number(s)	Map Title / Description	Confidential?
MAP 2	WILLOW CREEK MINE - 1999 PRODUCTION MAP	

OTHER INFORMATION

Please provide any comments or further information to be included as part of the Annual Report. Any other attachments are to be provided as APPENDIX E to this Annual Report.

Additional attachments to this report? ☐ **No** ☒ ☐ **Yes**

WILLOW CREEK CHANNEL STABILITY REPORT

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OIL, GAS AND MINING

APPENDIX A

Certified Reports

Excess Spoil Piles
Refuse Piles
Impoundments

as required under R645-301-514

CONTENTS

ANNUAL SEDIMENT POND CERTIFICATIONS

REFUSE PILE CERTIFICATIONS

PLATEAU MINING CORPORATION
1999 SEDIMENT POND CERTIFICATION

I hereby certify that I am a Registered Professional Engineer in the State of Utah. I certify that I have made an inspection of Sediment Ponds 2, 10, 11, 12A, 12B, 13, 14, and 15 in the Willow Creek Mine area.

All of the pond embankments appear to be stable and in good physical condition. There are no apparent structural weaknesses or other hazardous conditions. I certify that I have reviewed the documentation pertaining to Attachment A, and that to the best of my knowledge the information shown thereon is accurate.

Layne D. Jensen

Layne D. Jensen

1-17-2000
Date

REGISTERED PROFESSIONAL ENGINEER
1-17-2000
No. 189797
LAYNE D.
JENSEN
STATE OF UTAH

ATTACHMENT A
SEDIMENT POND STORAGE CAPABILITIES
INSPECTED 11/23/99

Pond No.	Decant Elevation	Sediment Storage Capacity (Ac. Ft.)	Sediment Storage Volume Used (%)	Sediment Storage Volume Remaining (Ac. Ft.)
1	6164.3	4.8	0	4.8
2	6153.8	0.05	0	0.05
10*	94.6	0.017	5	0.016
11*	97	0.81	0	0.81
12A	6101	0.16	25+	0.12
12B	6095.3	0.64	0	0.64
13**	6250.2	5.9	30+	4.13
14	95.3	0.72	25+	0.54
15	98.2	0.45	2	0.44

+ Based on estimates due to water in the bottom of the pond.
* Elevations relative to open spillway elevation of 100.0
** Open channel spillway, MSHA Pond ID-1211-UT-09-00-165-02

Cyprus Plateau Mining Corporation
Quarterly Refuse Pile Certification
First Quarter 1999

I hereby certify that I am a registered professional engineer in the State of Utah. I certify that I have made an inspection of the coal processing refuse pile at Cyprus Plateau Mining Corporations' Willow Creek Mine in Carbon County Utah. To the best of my knowledge the refuse pile has been constructed and maintained as designed. There are no apparent areas of instability, structural weakness or other hazardous conditions. The piezometer monitoring wells are dry.

REGISTERED PROFESSIONAL ENGINEER
NO. 168112
DANIEL THOMAS HURST
STATE OF UTAH

Date: 4-12-99

Daniel Thomas Hurst

Cyprus Plateau Mining Corporation
Willow Creek Mine

Quarterly Refuse Pile Certification
Second Quarter 1999

I hereby certify that I am Registered Professional Engineer in the State of Utah and that I have made an inspection of the coal processing refuse pile at Cyprus Plateau Mining Corporation's Willow Creek Mine in Carbon County, Utah. To the best of my knowledge and belief, the refuse pile has been constructed and maintained as designed. No apparent areas of instability, structural weakness, or other hazardous conditions were observed. The associated piezometers are dry.

Richard B. White, P.E.

LICENSED PROFESSIONAL ENGINEER
No. 168246
RICHARD B. WHITE
STATE OF UTAH

Date: 6 Jul 1999

Plateau Mining Corporation
Quarterly Refuse Pile Certification
Third Quarter 1999

I hereby certify that I am a registered professional engineer in the State of Utah. I certify that I have made an inspection of the coal processing refuse pile at Plateau Mining Corporations' Willow Creek Mine in Carbon County Utah. To the best of my knowledge the refuse pile has been constructed and maintained as designed. There are no apparent areas of instability, structural weakness or other hazardous conditions.

REGISTERED PROFESSIONAL ENGINEER
NO. 159412
DANIEL THOMAS HURST
STATE OF UTAH

_____ Date: 9/30/99
Daniel Thomas Hurst

PLATEAU MINING CORPORATION
WILLOW CREEK MINE
QUARTERLY REFUSE PILE CERTIFICATION
FOURTH QUARTER, 1999
INSPECTED: 12/22/99

I hereby certify that I am a Registered Professional Engineer in the State of Utah. I certify that I have made an inspection of the coal processing refuse pile at the Willow Creek Mine, in Carbon County, Utah. To the best of my knowledge and belief, the refuse pile has been constructed and maintained as designed.

There are no apparent areas of instability, structural weakness or other hazardous conditions.

Layne Jensen
Layne D. Jensen

12-23-99
Date

STATE OF UTAH
REGISTERED PROFESSIONAL ENGINEER
No. 189797
LAYNE D.
JENSEN

PLATEAU MINING CORPORATION
1999 SEDIMENT POND CERTIFICATION

I hereby certify that I am a Registered Professional Engineer in the State of Utah. I certify that I have made an inspection of Sediment Pond 001 at the Willow Creek Mine.

The pond embankment appears stable and in good physical condition. I did not observe any apparent structural weaknesses or hazardous conditions. Slope stability analyses indicate that the Pond 001 embankment does not present a hazard to Willow Creek or downstream structures. Modifications to the pond embankment have been made according to the specifications in the permit document.

The following are the sediment pond storage capabilities:

Decant Elevation	6163.7 feet
Sediment Storage Capacity	4.6 Acre-Feet
Sediment Storage Volume Used	5%
Sediment Storage Volume Remaining	4.37 Acre-Feet

Layne D. Jensen

Layne D. Jensen, P.E.

5-4-00

Date

REGISTERED PROFESSIONAL ENGINEER
No. 189797
LAYNE D. JENSEN
STATE OF UTAH

[redacted]
[redacted] - 4 2000
DIVISION OF OIL
GAS & MINING PRICE UTAH

Post-it® Fax Note 7671	Date 5/5/00 # of pages ▶ 1
To Vicki Southwick	From Peter Hess
Co./Dept. UDNR/SLO	Co. UDNR/PFO
Phone # PIC Room	Phone #
Fax #	Fax #

APPENDIX B

Reporting of Technical Data

including monitoring data, reports, maps, and other information
as required under the approved plan
or as required by the Division

in accordance with the requirements of R645-301-130 and R645-301-140.

CONTENTS

1998 SUBSIDENCE REPORT

BARN CANYON DIVERSION CGD-5

1999 SUBSIDENCE MONITORING REPORT
WILLOW CREEK MINE
ACT/007/006

INTRODUCTION

The Willow Creek Mine is owned and operated by Plateau Mining Corporation (PMC). The mine is located approximately 10 miles north of Helper, Utah, at the extreme northwest end of the Book Cliffs Coal Field. Mining commenced in the Fall of 1996 with continuous mining equipment to develop entries to the proposed longwall panels. Longwall mining began in mid-1998.

This report presents the results of the 1999 subsidence monitoring. These data are presented in accordance with the subsidence monitoring plan found in the Willow Creek Mining and Reclamation Plan, Section 4.5.2.2.

MONITORING

Subsidence monitoring consisted of collecting elevation data for those portions of the property with active mining. The monitoring network monuments were established in 1997 and are considered baseline for the monitoring data. The subsidence monitoring network is based on six control points on the Utah State Plane Coordinate System and the NAD 1927 seat level datum. From these six points, an additional 158 monitoring points were established in 1997. Drawing 1 presents the location of the monitoring points. These monitoring points were established in the field by driving reinforced rods into the ground to a depth of 3 feet and installing an aluminum cap on top of the rod, with the point number stamped into the cap.

For those sections of the mine with active mining, the monuments set in 1997 were surveyed and elevations were determined using Global Positioning methods. These values are presented in Table 1 for northing, easting and elevation. Table 1 also shows the surveyed elevations for 1998 and 1999. The differences between the 1997 and 1998 monitored elevations are shown as 1st year, the difference between the 1997 and 1999 monitored elevations are shown as the 2nd year.

The subsidence points surveyed in 1997 but not in 1999 are triangles outlined in blue and open in the center, the points surveyed in 1999 are solid triangles (refer to Drawing 1).

Several potential errors (B-37, B-38, B-20, B-21) in surveying are included in Table 1, they have been included for historic reference and will be checked during the subsidence survey in 2000.

Based on the data tabulations the subsidence data indicated that no significant subsidence has occurred associated with the Willow Creek Mine. While some indications of subsidence are possible, these readings are thought to be the results of variations in the survey equipment. All of the subsidence readings except as noted above are less than the accuracy of the survey equipment. Therefore, they may not be indicative of actual subsidence conditions.

PMC plans to survey the following subsidence points during the year 2000, if mining progresses as currently planned.

CPSS-B1 through B67,
CPSS- BC1 through BC24 and
CPSS-BA 1 through BA3 and other subsidence points as required by mining activity.

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

Point No.	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
SS-CON-1	522,620.59	522,620.59	522,620.59	2,178,659.27	2,178,659.27	2,178,659.27	8,454.68	8,454.68	8,454.68	0.00	0.00	0.00	0.00	0.00	0.00
MAT	535,667.74	535,667.74	535,667.74	2,181,889.15	2,181,889.15	2,181,889.15	7,454.05	7,454.05	7,454.05	0.00	0.00	0.00	0.00	0.00	0.00
GENE	523,471.08	523,471.08	523,471.08	2,191,540.98	2,191,540.98	2,191,540.98	8,270.31	8,270.31	8,270.31	0.00	0.00	0.00	0.00	0.00	0.00
EAST	510,457.12	510,457.12	510,457.12	2,183,503.59	2,183,503.59	2,183,503.59	6,404.55	6,404.55	6,404.55	0.00	0.00	0.00	0.00	0.00	0.00
BC-1	510,968.15	510,968.15	510,968.15	2,176,438.10	2,176,438.10	2,176,438.10	6,164.78	6,164.78	6,164.78	0.00	0.00	0.00	0.00	0.00	0.00
BARN	510,795.10	510,795.10	510,795.10	2,177,679.20	2,177,679.20	2,177,679.20	6,266.66	6,266.66	6,266.66	0.00	0.00	0.00	0.00	0.00	0.00
CPSS-A1	522,745.86			2,187,566.89			8,197.40								
CPSS-A2	521,671.73			2,187,569.75			8,193.80								
CPSS-A3	520,768.74			2,187,896.03			8,066.11								
CPSS-A4	519,860.97			2,187,988.46			7,912.53								
CPSS-A5	519,011.36			2,187,610.47			7,916.46								
CPSS-A6	517,930.91			2,187,299.45			7,612.88								
CPSS-B1	522,746.92			2,183,319.13			8,436.73								
CPSS-B2	522,159.43	522,159.327		2,183,398.56	2,183,398.543		8,405.470	8,405.399		-0.07		-0.10		-0.02	
CPSS-B3	521,609.07	521,608.901		2,183,159.40	2,183,159.357		8,333.670	8,333.547		-0.12		-0.17		-0.04	
CPSS-B4	521,163.03	521,162.961		2,182,946.10	2,182,945.990		8,311.860	8,311.756		-0.10		-0.07		-0.11	
CPSS-B5	520,975.93	520,975.93	520,975.71	2,183,005.23	2,183,005.23	2,183,005.32	8,241.87		8,241.830		-0.04	0.00	-0.22	0.00	0.09
CPSS-B6	520,793.89	520,793.759		2,183,045.26	2,183,045.192		8,173.150	8,173.110		-0.04		-0.13		-0.07	
CPSS-B7	520,576.29	520,576.113	520,575.990	2,183,093.01	2,183,093.019	2,183,093.090	8,155.940	8,155.902	8,155.900	-0.04	-0.04	-0.18	-0.30	0.01	0.08
CPSS-B8	520,393.19	520,393.013	520,392.880	2,183,067.84	2,183,067.869	2,183,067.900	8,138.520	8,138.505	8,138.540	-0.02	0.02	-0.18	-0.31	0.03	0.06
CPSS-B9	520,193.59	520,193.457	520,193.300	2,183,013.81	2,183,013.833	2,183,013.850	8,141.510	8,141.462	8,141.480	-0.05	-0.03	-0.13	-0.29	0.02	0.04
CPSS-B10	520,106.34	520,106.179		2,182,977.42	2,182,977.447		8,150.560	8,150.494		-0.07		-0.16		0.03	
CPSS-B11	520,016.74	520,016.609	520,016.510	2,182,929.89	2,182,929.877	2,182,929.950	8,149.320	8,149.238	8,149.280	-0.08	-0.04	-0.13	-0.23	-0.01	0.06
CPSS-B12	519,919.33	519,919.205		2,182,896.04	2,182,896.030		8,127.350	8,127.282		-0.07		-0.13		-0.01	
CPSS-B13	519,838.92	519,838.824		2,182,833.93	2,182,833.922		8,131.040	8,130.861		-0.18		-0.10		-0.01	
CPSS-B14	519,743.12	519,743.001		2,182,808.51	2,182,808.539		8,113.120	8,113.062		-0.06		-0.12		0.03	
CPSS-B15	519,652.71	519,652.495		2,182,779.76	2,182,779.764		8,099.640	8,099.644		0.00		-0.22		0.00	

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

Point No.	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
CPSS-B16	519,554.72	519,554.472		2,182,757.62	2,182,757.590		8,082.020	8,082.136		0.12		-0.25		-0.03	
CPSS-B17	519,458.86	519,458.653		2,182,686.73	2,182,686.735		8,075.270	8,075.216		-0.05		-0.21		0.00	
CPSS-B18	519,348.31	519,348.113		2,182,661.62	2,182,661.698		8,065.870	8,065.733		-0.14		-0.20		0.08	
CPSS-B19	519,244.50	519,244.260	519,244.080	2,182,643.37	2,182,643.437	2,182,643.470	8,066.370	8,066.276	8,066.220	-0.09	-0.10	-0.24	-0.42	0.07	0.10
CPSS-B20	519,159.92	519,184.805	LOST	2,182,646.53	2,182,647.636	LOST	8,068.320	8,069.883	LOST	1.56	LOST	24.89	LOST	1.11	LOST
CPSS-B21	519,068.94	519,084.464	LOST	2,182,681.82	2,182,649.740	LOST	8,075.410	8,073.551	LOST	-1.86	LOST	15.52	LOST	-32.08	LOST
CPSS-B22	518,979.74	518,979.618		2,182,676.51	2,182,676.467		8,088.310	8,088.177		-0.13		-0.12		-0.04	
CPSS-B23	518,872.98	518,872.758		2,182,691.75	2,182,691.869		8,094.700	8,094.306		-0.39		-0.22		0.12	
CPSS-B24	518,770.62	518,770.520		2,182,690.49	2,182,690.520		8,118.150	8,118.070		-0.08		-0.10		0.03	
CPSS-B25	518,643.00	518,642.920	518,642.680	2,182,708.90	2,182,708.880	2,182,708.900	8,147.810	8,147.730	8,147.980	-0.08	0.17	-0.08	-0.32	-0.02	0.17
CPSS-B26	518,558.36	518,558.133	518,557.690	2,182,713.22	2,182,713.216	2,182,713.430	8,161.520	8,161.236	8,161.450	-0.28	-0.07	-0.23	-0.67	0.00	0.21
CPSS-B27	518,487.68	518,487.487		2,182,763.51	2,182,763.542		8,165.950	8,165.854		-0.10		-0.19		0.03	
CPSS-B28	518,390.47	518,390.270	518,390.060	2,182,799.71	2,182,799.850	2,182,799.680	8,174.710	8,174.680	8,174.640	-0.03	-0.07	-0.20	-0.41	0.14	-0.03
CPSS-B29	518,278.45	518,278.247	518,278.030	2,182,835.74	2,182,835.877	2,182,835.840	8,183.000	8,182.940	8,182.790	-0.06	0.21	-0.20	-0.42	0.14	0.10
CPSS-B30	518,087.41	518,087.175	518,186.670	2,182,878.18	2,182,878.195	2,182,878.420	8,182.000	8,181.946	8,182.260	-0.05	0.26	-0.23	-0.74	0.01	0.24
CPSS-B31	517,962.54	517,962.373	517,961.810	2,182,752.82	2,182,752.678	2,182,753.060	8,139.220	8,139.137	8,139.410	-0.08	0.19	-0.17	-0.73	-0.14	-0.24
CPSS-B32	517,780.02	517,779.871	517,780.140	2,182,683.40	2,182,683.272	2,182,683.120	8,120.420	8,120.350	8,120.150	-0.07	-0.27	-0.15	0.12	-0.13	-0.28
CPSS-B33	517,608.46	517,608.386		2,182,587.51	2,182,587.463		8,119.370	8,119.348		-0.02		-0.07		-0.05	
CPSS-B34	517,440.39	517,440.351		2,182,472.81	2,182,472.806		8,120.680	8,120.694		0.01		-0.04		0.00	
CPSS-B35	517,243.54	517,243.540	517,242.870	2,182,385.82	2,182,385.820	2,182,385.930	8,130.640	8,130.640	8,130.490	0.00	-0.67	0.00	-0.67	0.00	0.11
CPSS-B36	517,096.27	517,096.290	517,095.510	2,182,271.11	2,182,271.110	2,182,271.240	8,165.390	8,165.400	8,165.200	0.01	-0.76	0.02	-0.76	0.00	0.13
CPSS-B37	516,895.56	516,895.540	516,906.850	2,182,190.05	2,182,190.060	2,182,208.010	8,170.190	8,170.180	8,163.780	-0.01	-6.41	-0.02	11.29	0.01	17.96
CPSS-B38	516,694.75	516,832.611		2,182,170.65	2,182,121.592		8,175.990	8,176.355		0.36		137.86		-49.06	
CPSS-B39	516,515.56	516,515.350	516,515.700	2,182,157.41	2,182,157.240	2,182,157.190	8,160.190	8,160.030	8,160.050	-0.16	-0.14	-0.21	0.14	-0.17	-0.22
CPSS-B40	516,426.35	516,426.200	516,426.450	2,182,131.32	2,182,131.220	2,182,131.160	8,142.620	8,142.500	8,142.470	-0.12	-0.15	-0.15	0.10	-0.10	-0.16
CPSS-B41	516,330.44	516,330.400	516,330.500	2,182,107.58	2,182,107.550	2,182,107.440	8,124.840	8,142.740	8,124.670	0.00	-0.17	-0.04	0.06	-0.03	-0.14
CPSS-B42	516,216.10	516,216.070	516,216.210	2,182,097.77	2,182,097.740	2,182,097.580	8,113.930	8,113.900	8,113.900	-0.03	-0.05	-0.03	0.11	-0.03	-0.19

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

Point No.	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
CPSS-B43	516,134.90	516,134.870	516,135.070	2,182,099.32	2,182,099.260	2,182,099.180	8,116.090	8,116.040	8,115.970	-0.05	-0.12	-0.03	0.17	-0.06	-0.14
CPSS-B44	516,036.19	516,036.080	516,035.310	2,182,101.33	2,182,101.290	2,182,101.450	8,120.720	8,120.700	8,120.510	-0.02	-0.21	-0.11	-0.88	-0.04	0.12
CPSS-B45	515,928.14	515,928.070	515,927.350	2,182,127.54	2,182,127.500	2,182,127.460	8,128.410	8,128.380	8,128.240	-0.03	-0.17	-0.07	-0.79	-0.04	-0.08
CPSS-B46	515,838.21	515,838.170	515,838.100	2,182,141.47	2,182,141.400	2,182,141.330	8,141.880	8,141.750	8,141.670	-0.13	-0.21	-0.04	-0.11	-0.07	-0.14
CPSS-B47	515,728.20	515,728.140		2,182,184.80	2,182,184.710		8,163.66	8,163.640		-0.02		-0.06		-0.09	
CPSS-B48	515,647.43	515,647.400		2,182,171.32	2,182,171.280		8,144.15	8,144.080		-0.07		-0.03		-0.04	
CPSS-B49	515,533.30	515,533.220	515,533.200	2,182,160.85	2,182,160.800	2,182,160.740	8,150.65	8,150.600	8,150.380	-0.05	-0.27	-0.08	-0.10	-0.05	-0.11
CPSS-B50	515,451.22	515,451.190	515,450.380	2,182,129.57	2,182,129.550	2,182,129.680	8,154.35	8,154.310	8,153.650	-0.04	-0.70	-0.03	-0.84	-0.02	0.11
CPSS-B51	515,387.79			2,182,047.28			8,159.28								
CPSS-B52	515,329.12			2,181,969.90			8,153.27								
CPSS-B53	515,229.58			2,181,931.85			8,113.66								
CPSS-B54	515,154.24			2,181,909.79			8,084.73								
CPSS-B55	515,055.67			2,181,915.75			8,049.67								
CPSS-B56	514,951.17			2,181,895.69			8,024.18								
CPSS-B57	514,863.31			2,181,846.10			8,011.35								
CPSS-B58	514,793.73			2,181,821.30			7,995.47								
CPSS-B59	514,679.96			2,181,769.76			7,959.38								
CPSS-B60	514,605.34			2,181,721.61			7,925.85								
CPSS-B61	514,514.83			2,181,694.47			7,871.72								
CPSS-B62	514,424.47			2,181,654.82			7,870.80								
CPSS-B63	514,332.30			2,181,640.82			7,823.30								
CPSS-B64	514,143.02			2,181,610.85			7,809.020								
CPSS-B65	513,938.02			2,181,559.09			7,757.540								
CPSS-B66	513,777.42			2,181,459.09			7,761.960								
CPSS-B67	513,599.48			2,181,389.34			7,742.48								
CPSS-BA1	517,742.25	517,742.200	517,742.200	2,183,424.70	2,183,424.600	2,183,424.600	7,948.16	7,948.080	7,948.080	-0.08	-0.08	-0.05	-0.05	-0.10	-0.10
CPSS-BA2	517,469.18	517,469.100	517,469.100	2,183,680.19	2,183,680.120	2,183,680.120	7,864.92	7,864.880	7,864.880	-0.04	-0.04	-0.08	-0.08	-0.07	-0.07

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

Point No.	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
CPSS-BA3	517,261.72	517,261.680	517,261.680	2,184,339.00	2,184,339.000	2,184,339.000	7,773.450	7,773.400	7,773.400	-0.05	-0.05	-0.04	-0.04	-0.10	-0.10
CPSS-BB1	515,376.24		515,376.24	2,182,172.64		2,182,172.64	8,127.61		8,127.61		0.00		0.00		0.00
CPSS-BB2	514,561.22		514,561.22	2,183,158.51		2,183,158.51	7,860.68		7,860.68		0.00		0.00		0.00
CPSS-BC1	516,770.52		516,770.52	2,182,159.96		2,182,159.96	8,184.03		8,184.03		0.00		0.00		0.00
CPSS-BC2	516,827.72	516,827.684	516,827.720	2,182,071.50	2,182,071.540	2,182,071.500	8,161.62	8,161.558	8,161.620	-0.06	0.00	-0.04	0.00	0.04	0.00
CPSS-BC3	516,909.07		516,908.46	2,182,034.90		2,182,035.27	8,113.13		8,113.13		0.00		-0.61		0.37
CPSS-BC4	516,983.12		516,982.56	2,181,975.52		2,181,975.87	8,072.21		8,071.69		-0.52		-0.56		0.35
CPSS-BC5	517,081.70		517,081.22	2,181,947.55		2,181,947.91	8,031.56		8,031.42		-0.14		-0.48		0.36
CPSS-BC6	517,152.39		517,152.36	2,181,883.81		2,181,883.93	7,997.15		7,997.43		0.28		-0.03		0.12
CPSS-BC7	517,225.09		517,224.84	2,181,866.02		2,181,866.63	7,963.27		7,963.28		0.01		-0.25		0.61
CPSS-BC8	517,305.17		517,304.79	2,181,777.09		2,181,777.49	7,907.35		7,907.10		-0.25		0.00		0.00
CPSS-BC9	517,370.98		517,370.98	2,181,731.41		2,181,731.41	7,881.650		7,881.04		-0.61		0.00		0.00
CPSS-BC10	517,422.49			2,181,630.03			7,820.10		7,820.10		0.00		0.00		0.00
CPSS-BC11	517,504.11		517,504.11	2,181,571.76		2,181,571.76	7,785.26		7,785.26		0.00		0.00		0.00
CPSS-BC12	517,577.67			2,181,507.80			7,763.65		7,763.66		0.01		0.00		0.00
CPSS-BC13	517,653.52			2,181,444.02			7,745.51		7,745.540		0.03				
CPSS-BC14	517,735.14			2,181,375.18			7,727.34		7,727.41		0.07		0.00		0.00
CPSS-BC15	517,799.76		517,798.92	2,181,317.63		2,181,317.63	7,698.37		7,698.14		0.04		0.00		0.00
CPSS-BC16	517,896.97		517,896.45	2,181,247.92		2,181,248.04	7,654.490		7,648.42		-6.07		-0.52		0.12
CPSS-BC17	517,958.68			2,181,206.38			7,617.70				0.00		0.00		0.00
CPSS-BC18	518,036.90		518,036.30	2,181,125.80		2,181,126.08	7,591.810		7,591.88		0.07		-0.60		0.28
CPSS-BC19	518,080.98		518,080.98	2,181,056.88		2,181,056.88	7,572.010		7,572.01		0.09		-0.45		0.25
CPSS-BC20	518,128.78	518,125.041		2,180,978.42	2,180,977.791		7,547.74	7,547.656	7,547.810	-0.08	0.07	-3.74		-0.63	
CPSS-BC21	518,143.08		518,141.74	2,180,825.18		2,180,823.70	7,491.15		7,490.78		-0.37		-1.34		-1.48
CPSS-BC22	518,208.65	518,208.567	518,207.380	2,180,769.93	2,180,769.972	2,180,768.460	7,419.08	7,418.909	7,418.560	-0.17	-0.52	-0.08	-1.27	0.04	-1.47
CPSS-BC23	518,272.14	518,272.067	518,270.960	2,180,701.87	2,180,701.862	2,180,700.410	7,361.71	7,361.556	7,361.170	-0.15	-0.54	-0.07	-1.18	-0.01	-1.46
CPSS-BC24	518,365.85		518,364.65	2,180,637.47		2,180,636.00	7,314.95		7,314.51		-0.44		-1.20		-1.47

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
Point No.															
CPSS-C1	512,938.57			2,177,940.73			6,285.47								
CPSS-C2	513,041.29			2,177,983.90			6,289.67								
CPSS-C3	513,125.82			2,178,036.86			6,303.85								
CPSS-C4	513,191.42			2,178,090.36			6,310.41								
CPSS-C5	513,305.34			2,178,126.29			6,327.47								
CPSS-C6	513,367.03			2,178,147.59			6,336.01								
CPSS-C7	513,471.77			2,178,210.70			6,324.86								
CPSS-C8	513,563.30			2,178,239.97			6,333.04								
CPSS-C9	513,629.57			2,178,330.54			6,338.72								
CPSS-C10	513,751.84			2,178,381.02			6,350.18								
CPSS-C11	513,841.80			2,178,346.77			6,349.55								
CPSS-C12	513,941.89			2,178,395.60			6,353.91								
CPSS-C13	514,029.11			2,178,339.10			6,370.76								
CPSS-C14	514,116.46			2,178,463.79			6,387.41								
CPSS-C15	514,248.17			2,178,393.05			6,370.04								
CPSS-C16	514,315.87			2,178,358.85			6,375.13								
CPSS-C17	514,396.37			2,178,293.36			6,396.86								
CPSS-C18	514,490.99			2,178,255.39			6,399.80								
CPSS-C19	514,710.47			2,178,250.48			6,424.25								
CPSS-C20	514,872.11			2,178,280.61			6,420.51								
CPSS-C21	515,100.60			2,178,308.09			6,461.67								
CPSS-C22	515,262.10			2,178,286.25			6,455.81								
CPSS-C23	515,447.90			2,178,306.46			6,475.56								
CPSS-C24	515,643.53			2,178,268.94			6,483.13								
CPSS-C25	515,859.17			2,178,297.78			6,512.82								
CPSS-C26	515,995.70			2,178,423.16			6,519.89								
CPSS-C27	516,205.96			2,178,540.98			6,538.93								

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
Point No.															
CPSS-C28	516,393.77			2,178,566.14			6,553.64								
CPSS-C29	516,599.37			2,178,651.09			6,580.62								
CPSS-C30	516,651.40			2,178,799.44			6,596.78								
CPSS-C31	516,756.69			2,178,782.88			6,574.39								
CPSS-C32	516,818.45			2,178,778.67			6,579.77								
CPSS-C33	516,878.58			2,178,865.19			6,625.05								
CPSS-C34	516,968.52			2,178,909.54			6,626.10								
CPSS-C35	517,104.90			2,178,915.54			6,626.92								
CPSS-C36	517,183.81			2,178,974.21			6,636.39								
CPSS-C37	517,246.97			2,179,026.80			6,637.36								
CPSS-C38	517,319.03			2,179,088.06			6,659.84								
CPSS-C39	517,445.06			2,179,095.08			6,672.66								
CPSS-C40	517,556.28			2,179,095.55			6,674.98								
CPSS-C41	517,642.35			2,179,152.34			6,675.69								
CPSS-C42	517,713.40			2,179,125.98			6,691.45								
CPSS-C43	517,789.04			2,179,188.84			6,700.90								
CPSS-C44	517,888.31			2,179,220.33			6,715.09								
CPSS-C45	517,987.19			2,179,250.51			6,726.46								
CPSS-C46	518,121.30			2,179,215.39			6,729.80								
CPSS-C47	518,179.88			2,179,221.39			6,742.32								
CPSS-C48	518,307.24			2,179,297.24			6,751.54								
CPSS-C49	518,420.34			2,179,217.38			6,780.50								
CPSS-C50	518,483.99			2,179,359.70			6,790.03								
CPSS-C51	518,602.71			2,179,371.95			6,790.20								
CPSS-C52	518,689.26			2,179,409.28			6,810.51								
CPSS-C53	518,744.45			2,179,509.36			6,817.79								
CPSS-C54	518,849.78			2,179,559.70			6,835.59								

Table 1

1999 Willow Creek Mine Subsidence Monitoring Data

	Northing 1997	Northing 1998	Northing 1999	Easting 1997	Easting 1998	Easting 1999	Elevation 1997	Elevation 1998	Elevation 1999	Difference in Subsidence 1st Year	Differenece in Subsidence 2nd Year	Difference in Northing 1st Year	Difference in Northing 2nd Year	Difference in Easting 1st Year	Difference in Easting 2nd Year
Point No.															
CPSS-C55	518,942.98			2,179,515.97			6,846.68								
CPSS-C56	519,094.28			2,179,658.65			6,869.91								
LOST - Marker lost during well drilling															

CASTLE GATE

BARN CANYON DIVERSION CGD-5

MONITORING POINTS

STATION		DISTANCE FROM TOP OF PIN TO FLOW LINE				CHANGE	
	ORIG. 12/94	QUARTER 1 1995	QUARTER 2 1995	QUARTER 3 1995	QUARTER 4 1995	LAST	ACC
#1	2.68	2.69	2.70	2.69	2.66	+0.03	+0.02
#2	2.13	*1.97	2.00	1.96	1.95	+0.01	+0.18
#3	2.64	**2.40	2.40	2.40	2.36	+0.04	+0.04

STATION	QUARTER 1 1997 03/26/97	QUARTER 2 1997 06/23/97	QUARTER 3 1997 09/04/97	QUARTER 4 1997 11/19/97	LAST	ACC
#1	2.55	2.55	2.58	2.49	0.09	0.19
#2	2.00	1.6	1.88	1.99	-0.11	0.14
#3	2.35	2.37	2.50	2.62	-0.12	0.02
	QUARTER 1 1998 03/20/98	QUARTER 2 1998 05/19/98	QUARTER 3 1998 09/24/98	QUARTER 4 1998 11/18/98	LAST	ACC
#1	2.50	2.50	2.40	2.45	-0.05	0.23
#2	1.78	1.50	1.60	1.80	-0.20	0.33
#3	2.63	2.60	2.40	2.54	-0.14	-0.14
	QUARTER 1 1999 03/10/99	QUARTER 2 1999 06/28/99	QUARTER 3 1999 09/27/99	QUARTER 4 1999 11/12/99	LAST	ACC
#1	2.45	2.50	2.42	2.45	-0.03	0.23
#2	1.45	1.40	1.82	1.90	-0.08	0.23
#3	2.60	Pin Out Reset at 2.15	2.15	2.10	0.05	0.05

NOTE:

(1) *All stations were installed on 12/13/94.*

(2) *Cross-sections will be taken annually.*

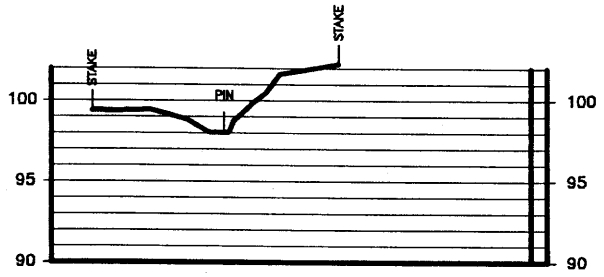
(3) *Measurements from top of pin to the flowline will be taken quarterly.*

** Increase due to Side Sluffage.*

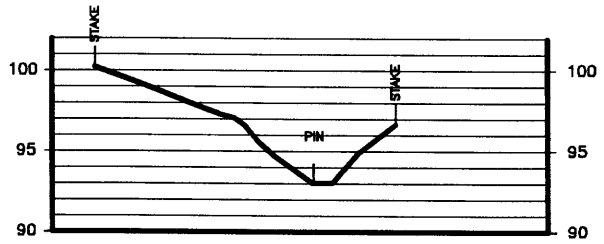
*** Reset 03/29/95 - Originally in Frozen Ground.*

UTAH REGISTERED PROFESSIONAL ENGINEER #154168 DAN. W. GUY 11/12/99

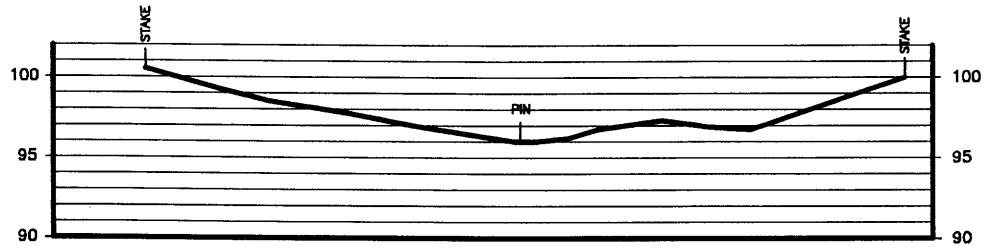
CASTLE GATE DIVERSION CGD-5 MONITORING POINTS CROSS-SECTIONS



CROSS-SECTION #3

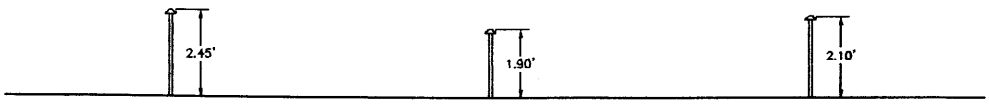


CROSS-SECTION #2



CROSS-SECTION #1

NOTE: (1) SECTION VIEW LOOKING UP FROM BARN CANYON.
(2) ELEVATIONS ARE RELATIVE.



CROSS-SECTION #1 CROSS-SECTION #2 CROSS-SECTION #3

11/12/99

APPENDIX C

Legal, Financial, Compliance and Related Information

Annual Report of Officers
as submitted to the Utah Department of Commerce

and other changes in ownership and control information
as required under R645-301-110.

CONTENTS

LIST OF OFFICERS AND DIRECTORS

April 1, 2000

PLATEAU MINING CORPORATION

(Formerly Cyprus Plateau Mining Corporation, name change 6/30/99; formerly Plateau Mining Company; name changed effective June 8, 1987)

Principal Operating Office:	847 Northwest Highway 191 Helper, UT 84526
Telephone:	435/472-0475
Incorporation:	
State	Delaware, The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801
Date	August 26, 1982
Existence	Perpetual
Qualified to Do Business In:	Colorado, Utah
Ownership - Percentage:	RAG American Coal Company (successor by merger to Cyprus Amax Coal Company 6/30/99) – 85% 9100 E. Mineral Circle, Englewood, CO 80112 Mitsubishi Development Pty Ltd. – 12%, Sept. 30, 1997 Mitsubishi International Corp. – 3%, Sept. 30, 1997
IRS Identification Number:	95-3761213

OFFICERS:

Title	Name	Social Security #	Date Assumed Office
President	John M. DeMichiei	208-40-1828	February 3, 1997
Senior Vice President, General Counsel and Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Vice President, International Sales	Tracy V. Bunderson	529-72-3300	March 1, 2000
Vice President and Treasurer	Frank J. Wood	230-74-0342	December 20, 1993/March 1, 2000
Vice President and Controller	Darrell H. Roland	233-86-6633	March 1, 2000
Vice President, Regional Sales (West)	Larry M. Deal	420-72-8611	March 1, 2000
Vice President, Operations	George A. Vajda	303-46-6591	March 1, 2000
Assistant Treasurer	Gary G. Pearson	512-36-0698	March 1, 2000
DIRECTORS:	J. M. DeMichiei	208-40-1828	September 30, 1997
	Kazuma Ishikawa	Japanese	July 15, 1998
	James F. Roberts	187-40-9345	June 30, 1999
	Frank J. Wood	230-74-0342	June 30, 1999
	Michael Henry	Australian	November 5, 1999
	John R. Tellman	315-54-6211	February 4, 2000
Operating Committee:	J. M. DeMichiei	208-40-1828	September 30, 1997
	Michael Henry	Australian	November 5, 1999
	S. Komaya	Japanese	April 18, 1998
	Dennis N. Ware	528-78-5775	September 30, 1997

April 1, 2000

PLATEAU MINING CORPORATION

Resignations (since November 1993):

Title	Name	Social Security No.	Date Resigned
President	Donald P. Brown	232-68-3739	December 20, 1993
Senior Vice President, General Counsel, and Secretary	Kevin Loughrey	521-78-0510	November 13, 1993
Senior Vice President, Operations	Donald E. Hudson	309-50-6621	December 20, 1993
Senior Vice President, Sales and Marketing	George E. Vajda	303-46-6591	December 20, 1993
Vice President, Business Development, and Controller	Joseph Caffarelli,Jr.	189-36-0297	December 20, 1993
Vice President, Materials, Maintenance & Technical Resources	W. Mark Hart	234-82-5837	December 20, 1993
Vice President, Associate General Counsel, Assistant Secretary and Director	Deborah J. Friedman	344-48-7028	December 31, 1993
Vice President and Treasurer	Dennis C. Haugh	324-32-3750	December 31, 1993
President	J. Mark Cook	306-44-6406	January 3, 1995
Assistant Secretary	Michael R. Peelish	235-72-2473	January 3, 1995
Director	Donald P. Brown	232-68-3739	December 30, 1994
Vice President, Labor, Safety and and Government Relations	Chris L. Crowl	526-84-8182	July 31, 1995
Assistant Secretary	Kathleen J. Gormley	391-62-9820	July 31, 1995
Vice President and General Manager	Keith H. Sieber	173-40-5087	February 15, 1996
Vice President, Sales and Marketing	George E. Vajda	303-46-6591	May 22, 1996
President	Randall J. Scott	522-82-2279	February 3, 1997
Vice President and General Manager	Allen P. Childs	528-78-9126	February 3, 1997
Director	Garold R. Spindler	233-74-2870	Sept. 30, 1997
Vice President	Keith H. Sieber	173-40-5087	October 17, 1997
Vice President and Treasurer	Francis J. Kane	088-52-4169	December 31, 1997
Assistant Treasurer	Farokh S. Hakimi	093-42-6402	December 31, 1997
Assistant Secretary	Morris W. Kegley	306-52-2454	July 15, 1998
Director	K. Itadani	Japanese	June 22, 1998
Director	K. Kinoshita	Japanese	July 15, 1998
Director	Masayuki Maekita	Japanese	October 1, 1998
Director	Gerald J. Malys	165-36-0198	June 30, 1999
Director	Philip C. Wolf	317-50-5623	June 30, 1999
Assistant Secretary	Greg A. Walker	262-82-8649	June 30, 1999
Vice President and Treasurer	Farokh S. Hakimi	093-42-6402	June 30, 1999
Senior Vice President	Gerald J. Malys	165-36-0198	June 30, 1999
Senior Vice President, General Counsel, and Secretary	Philip C. Wolf	317-50-5623	June 30, 1999

April 1, 2000

PLATEAU MINING CORPORATION

Resignations (since November 1993):

Title	Name	Social Security No.	Date Resigned
Director of Tax	J. David Flemming	301-48-5865	June 30, 1999
Assistant Secretary	Sharon J. Fetherhuff	503-50-3540	June 30, 1999
Assistant Secretary	Dale E. Huffman	557-86-5790	June 30, 1999
Assistant Treasurer	J. M. Coyner	227-60-6113	June 30, 1999
Senior Vice President, Sales and Marketing	Nicholas P. Moros	042-40-2347	August 11, 1999
Director	N. P. Moros	042-40-2347	August 11, 1999
Director	Satoki Shimazaki	Japanese	November 5, 1999
Assistant Secretary	Susan E. Chetlin	210-46-8811	December 8, 1999
Vice President, Sales and Marketing	Patrick J. Panzarino	134-38-7821	December 8, 1999
Controller	Frank J. Wood	230-74-0342	March 1, 2000
Vice President and Treasurer	J. Alan Link	232-92-6300	April 1, 2000

APPENDIX D

Mine Maps

as required under R645-301-525.270.

CONTENTS

MAP NO.2 SHOWING 1999 MINING

APPENDIX E

Other Information

in accordance with the requirements of R645-301 and R645-302.

CONTENTS

WILLOW CREEK CHANNEL STABILITY REPORT

WILLOW CREEK STREAM CHANNEL MONITORING AND REVEGETATION ACTIVITIES

SWCA INC. ENVIRONMENTAL CONSULTANTS
230 South 500 East, Suite 230 · Salt Lake City, Utah 84102-2015
(801) 322-4307 · FAX (801) 322-4308

March 27, 2000

Mr. Johnny Pappas
Plateau Mining Corporation
847 Northwest Highway 191
Helper, UT 84526

Re: Special Condition No. 12 on U.S. Army Corps of Engineers Permit No. 199450397

Dear Mr. Pappas:

This letter serves as an assessment of the function and stability of the relocated Willow Creek stream channel, as required by Special Condition No. 12 of U.S. Army Corps of Engineers Permit No. 199450397. SWCA provided similar assessments to Cyprus Plateau in 1997, 1998 and 1999 (SWCA 1997, SWCA 1998, SWCA, 1999). SWCA (1997) included a summary of SWCA's involvement in the Willow Creek stream relocation project.

1999 Regional Hydrologic Summary

The USGS discontinued it's gage on the Price River in September, 1998, therefore we have no data regarding 1999 flows.

Willow Creek Stability Assessment

Based on a site inspection of Willow Creek conducted on July 14, 1999 by SWCA, the relocated channel was stable and functional. Three years after the channel reconstruction, the channel was successfully conveying flow and no streambank or channel structural failure was noticeable. The channel continues to remain a step-pool complex.

The rockdams and habitat features built in the relocated stretch of Willow Creek appear to have held up well after the 1997 and 1998 peak discharges.

Sincerely,

Bill McDavitt

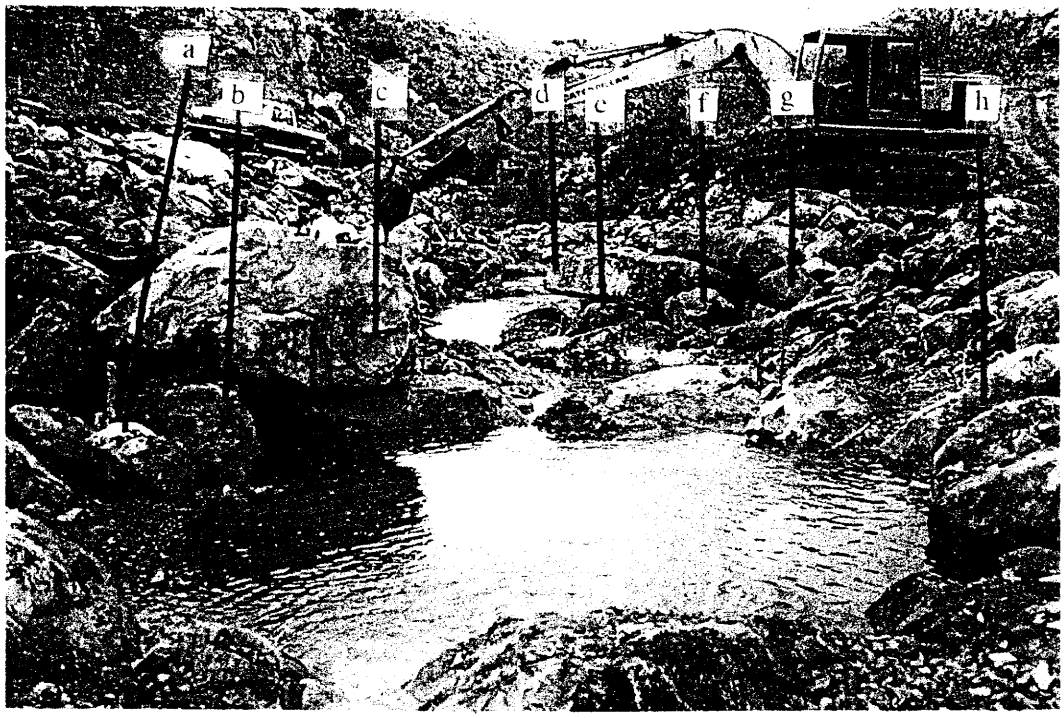
Bill McDavitt
Hydrologist
SWCA, Inc. Environmental Consultants

Memos Referenced

SWCA, Inc. 1999. Special Condition No. 12 on U.S. Army Corps of Engineers Permit No. 199450397. Memo from Howard Gross, SWCA, Inc. Environmental Consultants (Salt Lake City), to Johnny Pappas, Cyprus Plateau Mining Corp., dated March 12, 1999.

SWCA, Inc. 1998. Special Condition No. 12 on U.S. Army Corps of Engineers Permit No. 199450397. Memo from Howard Gross, SWCA, Inc. Environmental Consultants (Salt Lake City), to Johnny Pappas, Cyprus Plateau Mining Corp., dated March 5, 1998.

SWCA, Inc. 1997. Special Condition No. 12 on U.S. Army Corps of Engineers Permit No. 199450397. Memo from Howard Gross, SWCA, Inc. Environmental Consultants (Salt Lake City), to Ben Grimes, Cyprus Plateau Mining Corp., dated January 16, 1997.



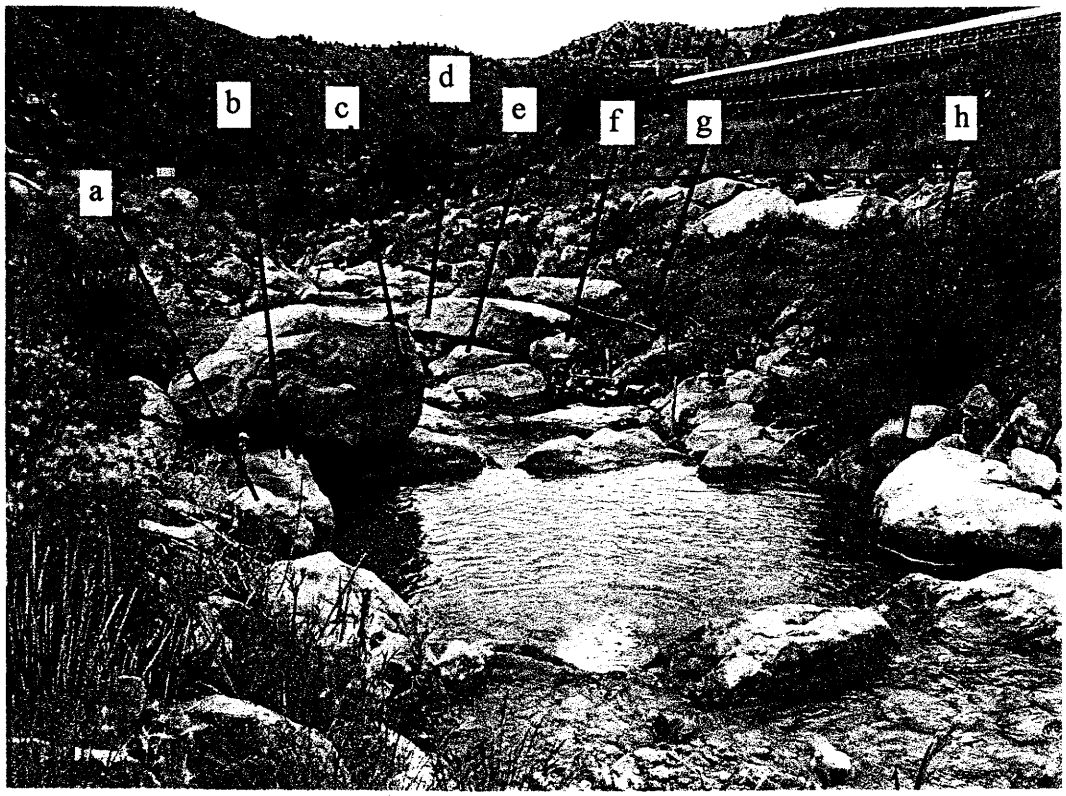


Photo A (top, July 1996) and B (bottom, June 1999). Designed habitat features in upper stretch of relocated Willow Creek, July 1996. Identified points "a" through "h" show that boulders and habitat features have remained stable for the past three years.

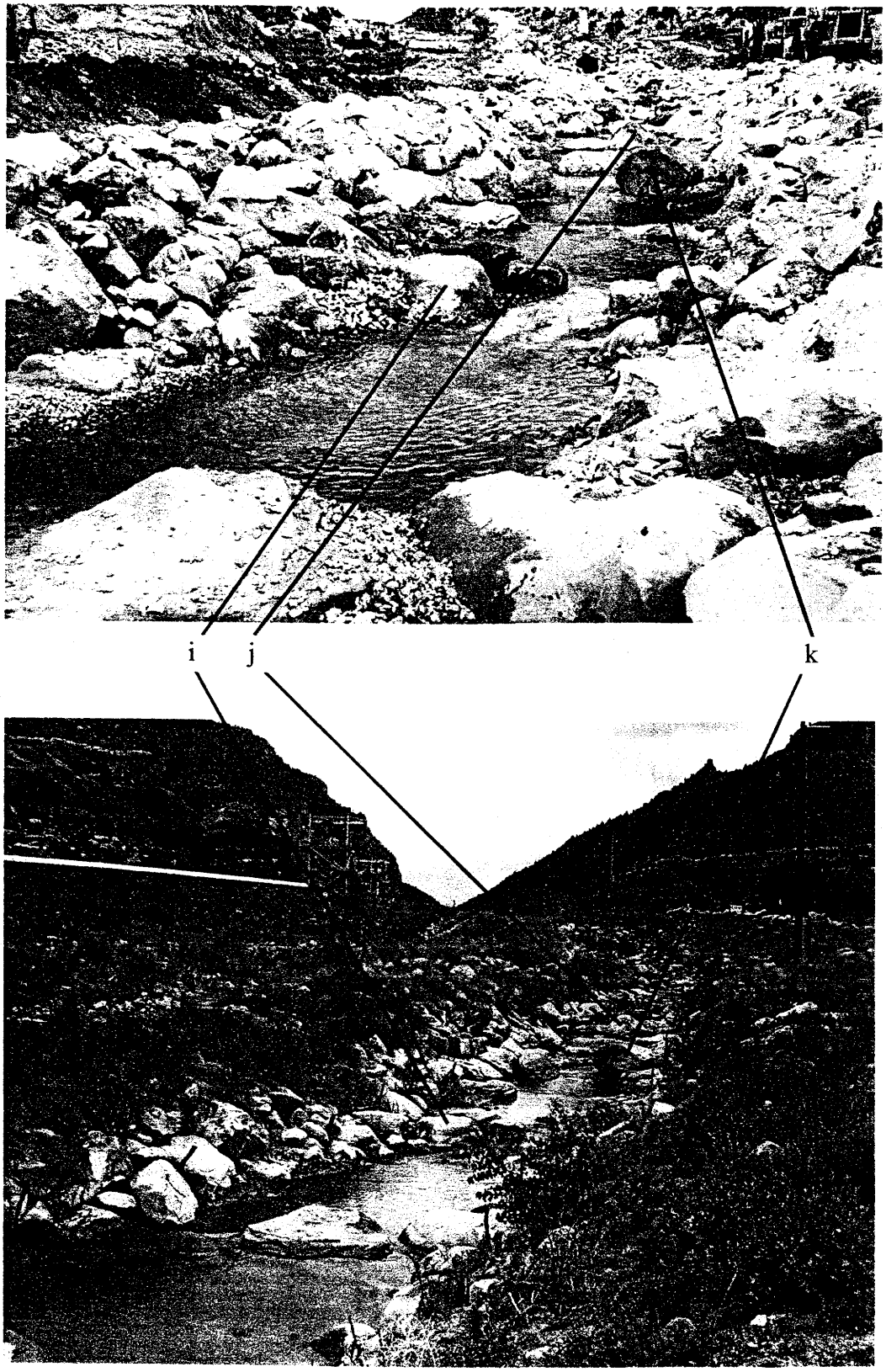


Figure 2. Photo C (top, July 1996) and D (bottom, June 1999). Designed habitat features in upper stretch of relocated Willow Creek, July 1996. Identified points "i" through "l" show that boulders and habitat features have remained stable.

Willow Creek Stream Channel Plantings and Revegetation Monitoring

During 1999, Plateau Mining Corporation planted an additional 300 willows and 200 narrow leaf cottonwoods throughout the relocated segments of the stream channel. The plantings occurred on May 13, using willow cuttings and cottonwood seedlings to augment existing populations.

The willows are doing well, however the cottonwoods did not do so well. Following the planting of the cottonwoods, they were watered weekly for a month and a half to help them get established and offset the lack of precipitation experienced during this dry period. The cottonwoods were planted higher up on the stream channel and thereby needed watering until the root system could develop and seek out the moisture. With the hot spell following the planting, the trees didn't survive.

For 2000, an additional 100 to 200 cottonwood trees will be planted and this time, planting will be in sand bars located within the stream channel. Hopefully, by planting them closer to the water source success will be much greater. Plateau will continue to put forth the effort to get the cottonwoods established within the relocated segments of the stream channel.

Vegetation establishment along the stream channel banks is progressing slowly. There is still a concern with the cheat grass, which should be evaluated during 2000. It may become necessary to consider selective herbicide application to eradicate the cheat grass and allow for native vegetation to succeed. We are presently evaluating an area that was reseeded in 1998, using a sugar treatment that may or may not have any affect on the cheat grass.

Another reason why vegetation is struggling, mostly along the northern streambank of the lower segment, may be due to the lack of growth media over the riprap. This will also be evaluated during year 2000, and if so, then additional growth media will be redistributed and reseeded. The source for the growth media will, in all likelihood, be from the Willow Creek topsoil stockpile.

Plateau will continue to work with DOGM to ensure revegetation success is achieved.